

Lake Simcoe Region  
Conservation Authority  

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2020 Budget Companion

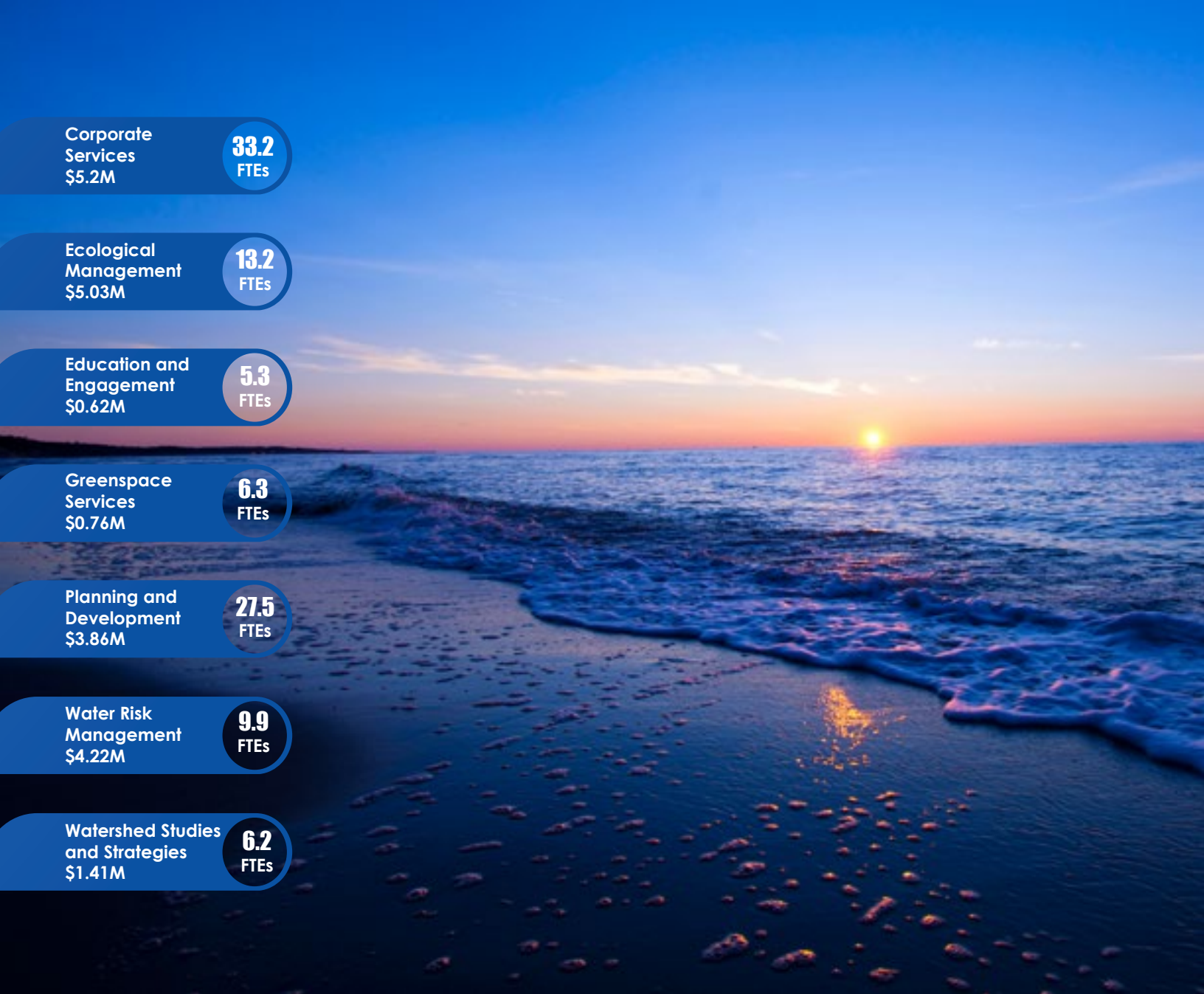


**Lake Simcoe Region**  
conservation authority



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Corporate  
Services  
\$5.2M

**33.2**  
FTEs

Ecological  
Management  
\$5.03M

**13.2**  
FTEs

Education and  
Engagement  
\$0.62M

**5.3**  
FTEs

Greenspace  
Services  
\$0.76M

**6.3**  
FTEs

Planning and  
Development  
\$3.86M

**27.5**  
FTEs

Water Risk  
Management  
\$4.22M

**9.9**  
FTEs

Watershed Studies  
and Strategies  
\$1.41M

**6.2**  
FTEs

## LSRCA Profile

We employ over 100 full-time, part-time, contract and seasonal staff across numerous professional fields. In environmental science, we employ specialists in limnology, hydrogeology, hydrology, biology, botany, soil science and more. We also have recognized experts in water resource and environmental engineering, urban and community planning, forestry, conservation and natural resource management. Our education and outreach business includes accomplished environmental scientists who are also Ontario Certified Teachers, trained in delivering formal curriculum-based education programs to school-aged children and youth. They also deliver programs to engage citizens of all ages in making a meaningful and lasting connection with Lake Simcoe and the watershed.

These teams are championed internally by an equally broad range of experts delivering strategic leadership and essential services, including business planning, human resource management, financial planning and management, geographic information systems and information technology, and corporate communications, public and media relations, design and marketing.

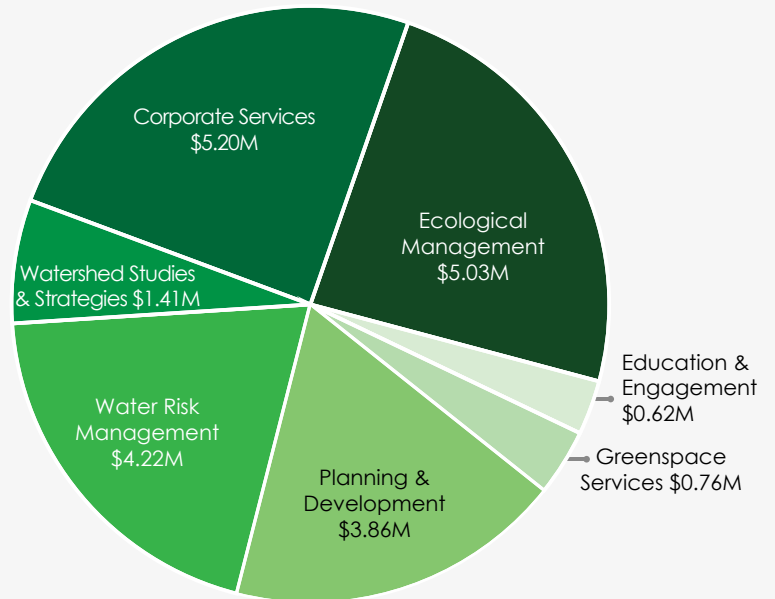
## Our Vision

We envision the Lake Simcoe watershed as a thriving environment that inspires and sustains us for generations to come.

## Our Mission

Our mission is to work with our community to protect and restore the Lake Simcoe watershed by leading research, policy and action.

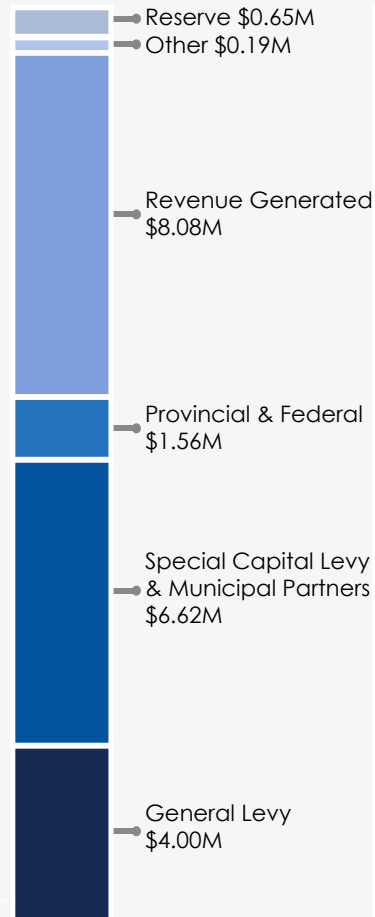
## 2020 Budget Summary \$21.10M



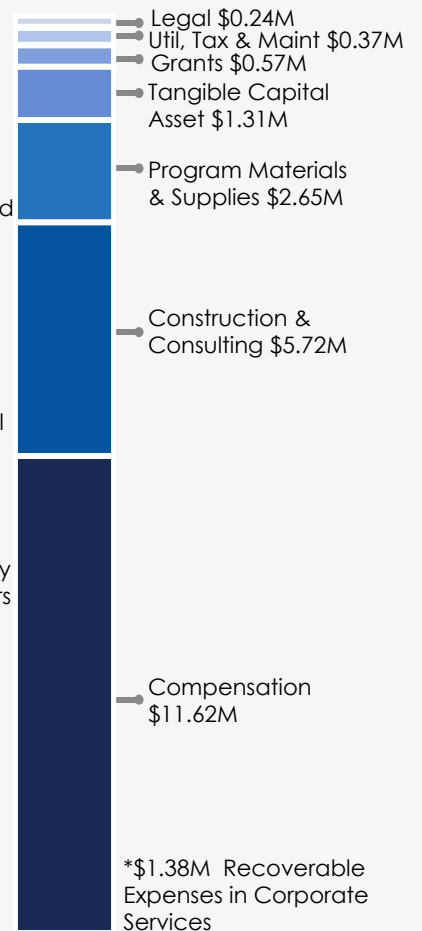
## Operating and Capital Split



## Revenue Source



## Expenditure Type



Our employees uphold our mandate under the following 7 Service Areas, which are detailed in the pages that follow:

- Corporate Services
- Ecological Management
- Education & Engagement
- Greenspace Services
- Planning & Development Services
- Water Risk Management
- Watershed Studies & Strategies

Corporate Communications  
\$0.67M

7  
FTEs

Facility Management  
\$1.67M

18  
FTEs

Financial Management  
\$0.95M

8.8  
FTEs

# Corporate Services

Governance  
\$0.64M

3  
FTEs

Human Resource Management  
\$0.48M

3  
FTEs

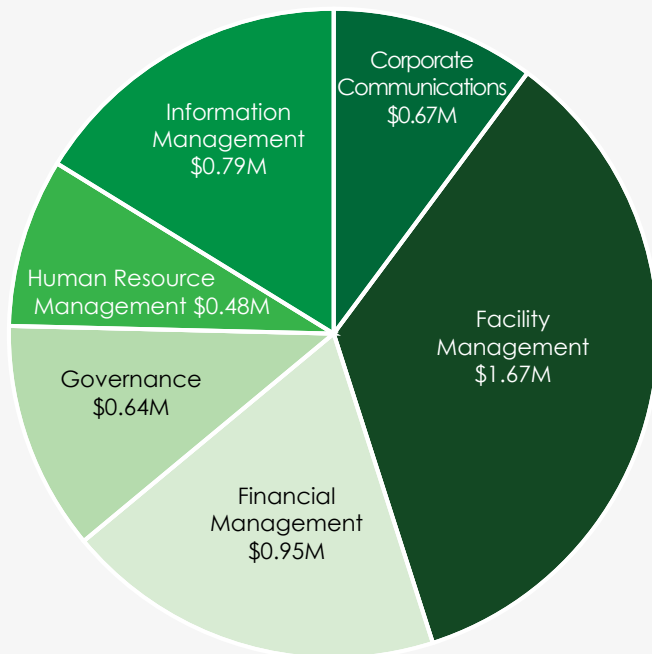
Information Management  
\$0.79M

9.6  
FTEs

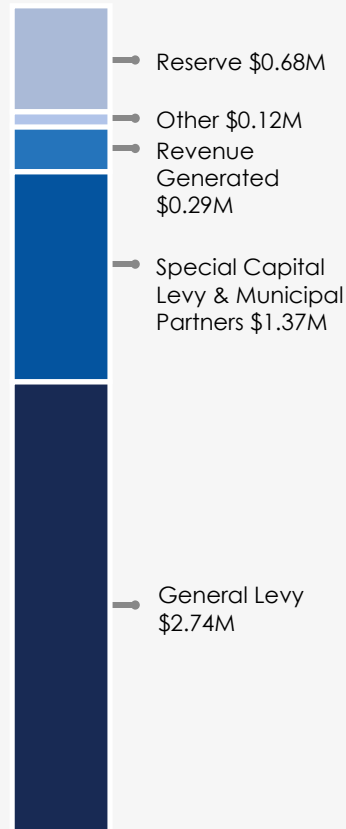
Corporate Services provides leadership and management in the delivery of services central to the successful functioning of the entire organization. Corporate Services is an enabling service, supporting the other six service areas in the organization. Corporate Services consists of the following program areas:

- Corporate Communications
- Facility Management
- Financial Management
- Governance
- Human Resource Management
- Information Management

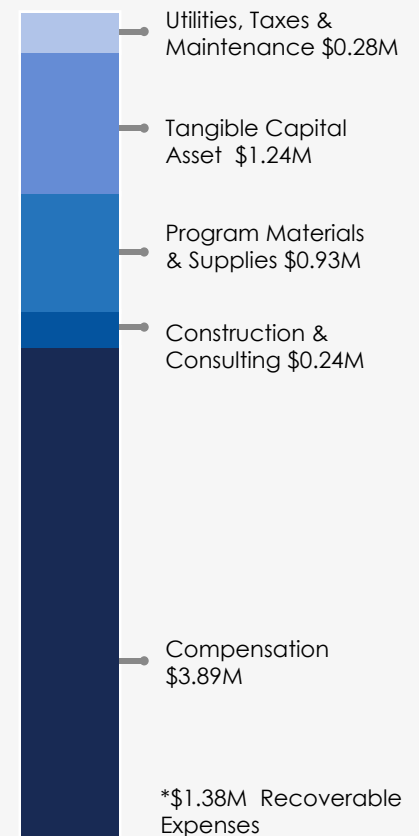
## 2020 Corporate Services Budget \$5.20M



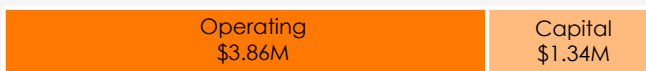
## Revenue Source



## Expenditure Type



## Operating and Capital Split



# Corporate Communications

Corporate Communications provides strategic oversight and delivers multifaceted communications designed to inform, inspire, influence and motivate municipal, provincial, federal partners and people of all ages in our watershed communities, to support the work of LSRCA and take action towards a healthier watershed.

## 2020 Focus

- Complete Corporate Communications and Engagement Strategy
- Complete AODA policy, procedures and staff training to ensure compliance with provincial Communications and Information Standard
- Implement social media strategy, building on the success of existing channels
- Continue to influence strategic, targeted communications to increase participation in external-facing programs and services
- Ensure effective communications and promotion of Lake Simcoe Conservation Foundation's capital Connect Campaign

## Outlook

- Our reputation, locally and provincially, continues to gain positive momentum in light of the provincial review of conservation authorities
- Program leads are showing a growing willingness to undertake targeted, market-focused program development, design and delivery

## Service Pressures

- The growing reliance on social media as a source of up-to-the-minute information and as a tool to quickly spread misinformation
- Interest and expectations of municipal partners for LSRCA-led and/or coordinated communications directly with their constituents on contentious, complex issues
- Challenges associated with effectively reaching audiences across the geographic, demographic and socio-economic expanse and diversity of the watershed

## Fast Facts

- 94,500 website visitors in 2019, representing an increase of over 9% compared to the previous year
- 35% increase in Facebook and 42% increase in Instagram followers in the past year

## 2019 Achievements

- Led the process to develop content, design and production of Approved Budget and Budget Companion Documents
- Completed a comprehensive Social Media Strategy and grew audiences across all platforms
- Engaged a consultant to assist with developing an AODA document compliance policy, procedures and staff training plan
- Published four issues of Conservation Matters and accompanying children's education activity
- Developed content, design and managed updates and testing for our key performance indicators website



# Facility Management

Facility Management oversees the management of all assets (buildings and infrastructure such as trails, vehicles, equipment). This includes purchases, leases, repairs, scheduled maintenance, licenses and insurance, utilities and taxes.

## 2020 Focus

- Complete renovation of the Scanlon Creek Operations Centre, and relocate the Lands and Integrated Watershed Management Divisions and equipment
- Maintain critical systems at the Nature Centre to support continued program delivery until the new Education Training Facility is constructed
- Complete upgrades to Sheppard's Bush rental buildings and our Newmarket Administrative Centre to address asset management requirements, and support energy efficiency, safety and security
- Ensure that ongoing maintenance requirements meet the standards defined through the Asset Management Plan and Physical Security Plan

## Outlook

- The recent creation of a reserve fund for Asset Management will help with proactively funding the maintenance of aging buildings and infrastructure

## Service Pressures

- Increasing costs to maintain aging buildings and associated infrastructure
- Expansion of the Scanlon Creek Operations Centre, and operation of the future Education Training Facility will require additional maintenance resources

## Fast Facts

- \$1.6M renovation of the Operations Centre includes roof replacement, improved building insulation, installation of energy efficient mechanical and electrical systems, and the redevelopment of 16,000 square feet of office, meeting and storage space

## 2019 Achievements

- Completed relocation of Lands Division team from the Scanlon Creek Operations Centre to temporary offices to support demolition and renovation activities
- Completed external review of Building Condition Assessments for Mabel Davis, Scanlon and Sheppard's Bush properties





# Financial Management

Financial management is responsible for day-to-day financial operations such as payroll and accounts payable/receivable as well as budgeting, procurement, risk management, procurement of legal services, quarterly and annual financial reporting, records management, freedom of information requests/reporting and reception services.

## 2020 Focus

- Leveraging the work of our external consultant, develop a financial plan for sustainable funding of the replacement of our assets over the short and long term
- Transition to longer term financial planning through the creation of 1 + 3 year operating budget and a 1 + 9 year capital plan and budget
- Review existing financial software and undertake research to determine if better options exist in the marketplace
- Advance Phase 1 of an e-commerce strategy

## Outlook

- Significant fiscal restraints and our drive for business excellence will continue to spur new program and process improvements and efficiencies

## Service Pressures

- Changes to Bill 108 will impact our future budgets, including how we request tax levy funding from our municipal funding partners

## 2019 Achievements

- Leveraged Federation of Canadian Municipalities funding (\$44K) to complete Building Condition Assessment reports that will inform our Asset Management Plan
- Collaborated with Human Resources to implement payroll software improvements and efficiencies
- Piloted and hosted the first Finance Roundtable, improving our engagement with our municipal funding partners

## Fast Facts

- Our updated investment policy has driven a 148% increase in annual interest revenue (2019: \$147K) since implementation
- Responded to 25 freedom of information requests in 2019

# Governance

The Chief Administrative Officer (CAO) provides expert knowledge, strategic advice and recommendations to the Board of Directors on policy, program and budget decisions. The CAO also provides operational leadership to more than 100 staff to guide and influence processes, decisions and implementation, to advance our mission.

## 2020 Focus

- Develop the 2021-2025 Strategic Plan
- Lead financial strategy to ensure supplemental funding (to the Lake Simcoe Conservation Foundation campaign) is in place to construct the new Nature Centre at Scanlon Creek Conservation Area
- Initiate innovative partnerships and approaches to mitigate flooding and to support development of a flood relief program

## Outlook

- The current and future impacts of climate change are influencing the way we design all our programs and services, making adaptation and mitigation significant areas of focus.

## Service Pressures

- Possible regulatory and mandated changes to conservation authority programs and services
- Fiscal restraints are influencing capacity to develop and deliver programs

## Fast Facts

- Under the provincial Conservation Authorities Act (CAA), our primary municipal watershed funders are the 2 upper tier regional governments (Durham & York), the 5 lower tier municipalities in the County of Simcoe (Bradford West Gwillimbury, Innisfil, New Tecumseth, Oro-Medonte, & Ramara) and the two separated cities (Barrie & Kawartha Lakes)
- We are governed by an 18-member board of directors representing those 9 funding municipalities



## 2019 Achievements

- Completed 9 additional priority activities identified in the 2016-2020 Strategic Plan, bringing the total completed to 41 of 42 activities - the final priority will be completed in 2020
- Worked with Conservation Ontario and key Conservation Authorities (CAs) to ensure essential information about the role and value of CAs was provided to the Ministry of Environment, Conservation and Parks through the consultation process for the development of the regulation under the Conservation Authorities Act
- Worked with Conservation Ontario to develop customer service guidelines for all CAs to adopt, to ensure more transparency and consistency across all 36 CAs in Ontario

# Human Resource Management

Human Resources is responsible for the effective management of people in the organization through the provision of services such as attraction and retention, health and safety, performance management, diversity, inclusion and accessibility, employee relations, learning and development, benefits and insurance administration.

## 2020 Focus

- Finalize the creation of a succession plan to evaluate, identify and develop employee talent into the future
- Continue work on the creation of a diversity and inclusion framework to support our changing needs and demographics
- Update all HR related policies and documents to ensure they are AODA compliant

## Outlook

- Attracting and retaining a diverse employee population is driving the need to implement more robust diversity and inclusion policies/practices and initiatives

## Service Pressures

- Recruitment demands resulting from potential program enhancements
- Securing talent to replace “difficult to fill” positions

## 2019 Achievements

- Implemented an internal Human Resource Information System (Human Resources and Finance) which increased efficiencies and streamlined processes
- Provided Mental Health First Aid training to all supervisory staff, to better support mental health issues among peers and employees
- Undertook pre-emptive security measures to enhance safety for our employees and visitors

## Fast Facts

- Completed 18 full-time, contract and seasonal recruitments in 2019



## Fast Facts

- Our Regulation permit tracking database/application contains almost 35,000 permit applications
- There are over 80 GIS datasets available to our municipal partners to access and download 24/7

## Information Management

Information Management is responsible for providing and managing secure, reliable and integrated information technology solutions that align with our business and strategic goals while delivering excellence in client service.

### 2020 Focus

- Increasing the use of cloud computing while providing support for our current hybrid system (private and cloud-based networks)
- Managing the design and installation of information technology infrastructure for the renovated Scanlon Operations Centre
- Continuing to develop flood inundation mapping for more areas of the watershed

### Outlook

- An effective records management system saves money on storage and improves organizational efficiency
- More and more people want improved access to our wealth of watershed information

### Service Pressures

- There has been a significant increase in provincial, municipal and public expectation for information, analysis tools, and predictive modeling
- Once data are created, they are used indefinitely for continuing program support and analysis. This means the workload only grows over time to maintain larger and more complex data holdings
- Information technology is continuously evolving, making it challenging to stay current with a limited budget and resources
- Systems/cyber security is a constant threat that must be balanced with the costs to keep our network running smoothly and protect all private data stored on our network

### 2019 Achievements

- Updated to Office 365 to prepare our staff to use the cloud environment to enhance collaboration and data sharing
- Completed flood inundation mapping for 6 storm levels (5, 10, 25, 50 and 100 year storm return period plus the Regional Storm level) for major portions of Innisfil, Bradford West Gwillimbury and York Region as well as the Lake Simcoe Shoreline, to better predict where flooding will occur
- In partnership with the Region of York, acquired Light Detection and Ranging (LIDAR) elevation mapping software to create better elevation mapping of York Region, to more accurately predict where rainfall will drain and accumulate during flooding

# Ecological Management



**6.1**  
FTEs  
**Ecosystem Science and Monitoring**  
\$0.88M

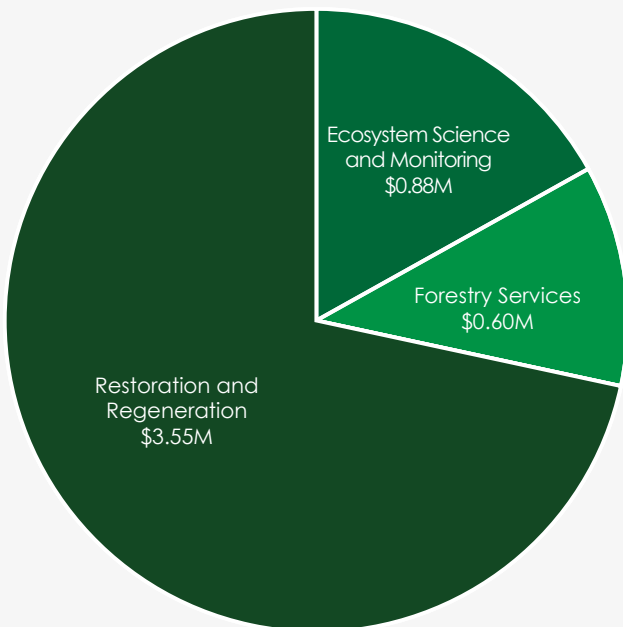
**3.5**  
FTEs  
**Forestry Services**  
\$0.60M

**3.6**  
FTEs  
**Restoration and Regeneration**  
\$3.55M

The goal of Ecological Management is to manage natural heritage systems (forest, wetlands, lakes, rivers, etc.) within the watershed. We do this through monitoring, to understand the current state of our watershed, and then by identifying and implementing restoration projects. Ecological Management consists of the following program areas:

- Ecosystem Science and Monitoring
- Forestry Services
- Restoration and Regeneration

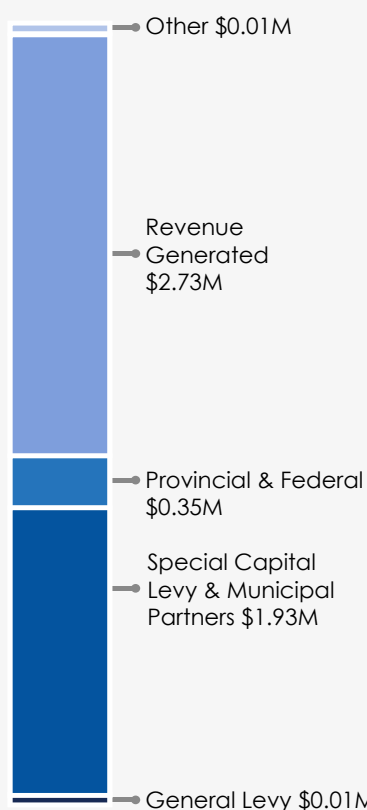
## 2020 Ecological Management Budget \$5.03M



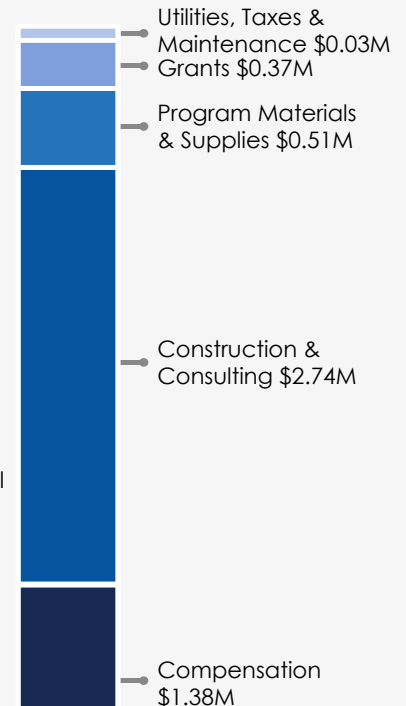
## Operating and Capital Split



## Revenue Source



## Expenditure Type



# Ecosystem Science and Monitoring

The Ecosystem Science and Monitoring program assesses the health of the Lake Simcoe nearshore zone, the status of the tributary fish and benthic macroinvertebrate populations and evaluates tributary water quality to support science-based adaptive management.

## 2020 Focus

- Continue to track the spread of starry stonewort and collaborate with national and international experts to identify management options
- Research and monitor winter salt application rates on commercial properties
- Continue to collect and analyze data to support assessment of phosphorus loads and tributary health
- Evaluate the lake monitoring program and operationalize the new annual aquatic plant and citizen science winter monitoring activities

## Outlook

- Climate change impacts make continued monitoring data evermore critical information to formulate management actions

## Service Pressures

- If provincial funding is reduced, or withdrawn, the program required to collect and calculate data to determine the phosphorus loads to Lake Simcoe will be in jeopardy
- Collecting winter lake monitoring data is challenging due to the impacts of climate change. New ways to collect reliable winter data must be developed

## Fast Facts

- The aquatic invasive starry stonewort, not present in the lake a decade ago, now makes up almost 70% of the lake plant community
- Citizen scientists collected 22 water samples
- During recent sampling in Lovers Creek, we caught the first brook trout in 10 years. We believe this is due to a recent restoration project we completed where we removed a fish barrier, providing fish with more habitat
- Over 500 tributary water quality samples are collected every year to evaluate ecological health and to calculate phosphorus loads

## 2019 Achievements

- Implemented a new citizen science-based winter lake monitoring program
- Initiated a new annual aquatic plant monitoring program on Lake Simcoe and highlighted the spread of the invasive aquatic plant called starry stonewort
- Evaluated the tributary biologic program and implemented recommendations including an increased focus on keystone species (brook trout) and major stressors (climate change, urbanization)
- Released the Lake Simcoe Phosphorus Loads Report





## 2019 Achievements

- Removed over 530 hazard trees along trails and around facilities, including 320 ash trees killed by emerald ash borer
- Planted over 44,400 trees on over 30 watershed sites, including 14,000 as part of the Cawthra Mulock Nature Reserve restoration project
- Undertook sustainable forest management activities, including tree inventory, marking and stand improvement operations on over 60 hectares at Durham Regional Forest
- Completed emergency management system enhancements at Durham Regional Forest, including signage upgrades, fire fighter training and mapping improvements

## Forestry Services

The Forestry Services program aims to implement best forest management practices that contribute to watershed and community health.

### 2020 Focus

- Continue to actively target high priority reforestation sites across the watershed with opportunities to expand and connect existing forest cover
- Establish forest cover to help achieve high quality natural heritage cover targets across the watershed, incorporating best practices to adapt for the changing climate
- Review afforestation program delivery to ensure cost-effectiveness, and expand external funding partnerships to support increased program uptake
- Strengthen relationships with forest partners and establish maintenance agreements with trail user groups

## Outlook

- Developing a strategy to guide forest management activities on our lands will ensure that management occurs in the best interests of the public, protecting and enhancing natural heritage features, and supporting recreational activities that contribute to human health benefits
- New investment by the federal government in tree planting programs to address climate change presents an opportunity to increase landowner uptake and new partnership development

## Service Pressures

- Rapid urbanization and competing land use impact available land for planting
- Increasing the amount of trees planted through the afforestation program will result in the need to expand capacity, including human resources and equipment
- Climate change, invasive species and diseases threaten forest health and canopy cover, requiring innovative and dynamic approaches to planting and forest management

## Fast Facts

- Ash trees removed from conservation areas in response to emerald ash borer infestation have been salvaged and incorporated into the renovation of the Scanlon Creek Operations Centre



# Restoration and Regeneration

The restoration and regeneration program implements natural heritage, agricultural best management practices and water course restoration projects to enhance, restore and create natural features to improve water quality, control water quantity and infiltration within the watershed.

## 2020 Focus

- Maximize environmentally beneficial projects on private land through targeted restoration with private landowners and community groups
- Identify opportunities to implement ecological offsetting projects with public landholders to achieve ecological gains
- Complete outreach with the agricultural community to implement restoration projects and environmental best management practices (ex. Goodyear Farms)

## Outlook

- Through the Ecological Offsetting program, we have new and diverse opportunities to deliver and support natural heritage restoration projects

## Service Pressures

- The current housing market conditions have had a negative impact on the timing of revenue for the offsetting program
- It is becoming increasingly challenging to petition for restoration projects with private landowners
- Additional pressures from climate change and severe weather

## 2019 Achievements

- Completed the Pangman Springs Conservation Area online pond removal and stream and wetland restoration project, Luck Property wetland and natural heritage enhancement and Cawthra Mulock Nature Reserve natural heritage restoration project
- Provided over 90 grants to private landowners and community groups through the restoration assistance

## Fast Facts

- Holland Marsh landowners stabilized over 40 hectares of soil by installing cover crops on agricultural land in 2019
- Restored 2,825 metres of streambank to improve habitat in 2019
- Our 2019 Pangman Springs project restored 400 metres of stream, added 0.4 hectares of wetland and 2,000 native trees, shrubs and live stakes





# Education & Engagement

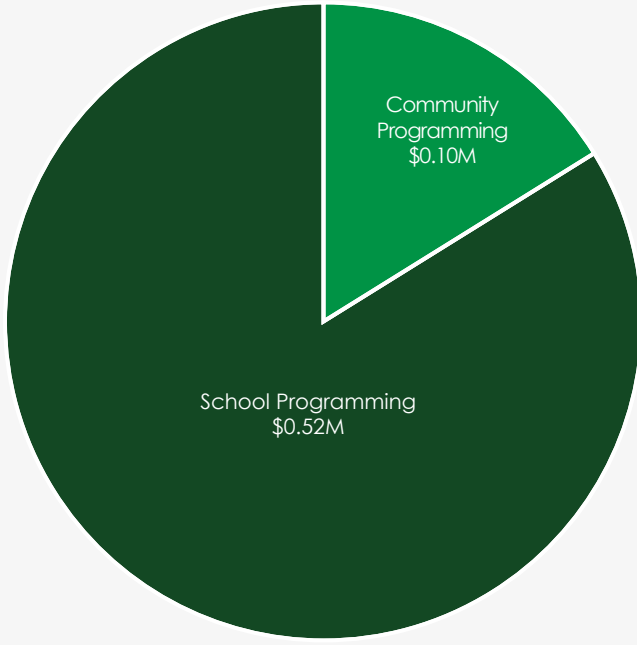
The purpose of Education and Engagement is to engage learners of all ages, interests and abilities through programmed learning experiences that raise awareness, impart knowledge, create understanding and inspire action that leads to real and lasting change. Education and Engagement consists of the following program areas:

- Community Programming
- School Programming

**11**  
FTEs  
**Community Programming**  
\$0.10M

**4.2**  
FTEs  
**School Programming**  
\$0.52M

## 2020 Education & Engagement Budget \$0.62M



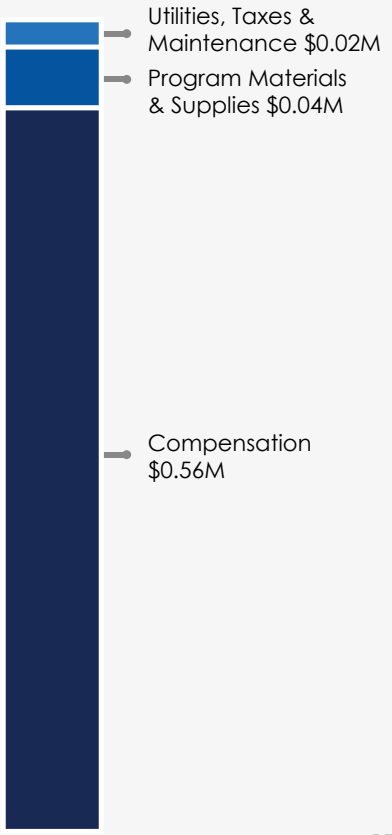
## Operating and Capital Split



## Revenue Source



## Expenditure Type



## 2019 Achievements

- Quadrupled enrolment in the Scanlon Creek Forest School program over the previous pilot year
- Collaborated with three municipalities on new library initiatives for a range of residents, including children, newcomer Canadians and seniors
- Therapy in the Woods program collaboration with Royal Victoria Regional Health Centre was recognized as a Leading Practice by Accreditation Canada



## Community Programming

Community programming provides unique learning opportunities for children, youth and adults, enhancing participants' connections to the health of the Lake Simcoe watershed in areas where they live, work and play.

### 2020 Focus

- Expansion of the Therapy in the Woods program to a second location in the Barrie area
- New program opportunities specifically targeting families and youth aged 12 to 15

### Outlook

- We will continue to design, develop and deliver innovative programs and services that align with partner and stakeholder needs
- Watershed municipalities are growing and changing, presenting opportunities for program expansion and diversification to support health and wellness outcomes, and to engage more citizens in learning and taking action to protect the Lake Simcoe watershed

## Fast Facts

- 1,925 people participated across our suite of community programs
- We supported five community events organized by partners across the Lake Simcoe watershed

## Service Pressures

- Community and municipal interests exceed our current service capacity
- Geographic expanse of watershed service area
- We have limited facilities for place-based programming
- Challenges associated with lack of online registration and payment systems

# School Programming

School Programming provides provincial curriculum-connected, experiential and engaging programs and services for students and teachers from kindergarten to grade 12.

## 2020 Focus

- Continue collaboration with First Nations partners for program redesign/development to include Indigenous knowledge and Ojibwe language that support authentic learning opportunities
- Successfully complete the final year of the grade 4 service agreement with Simcoe County District School Board and negotiate a renewed contract

## Outlook

- There is increasing local, research-based evidence of the value of outdoor learning experiences, combined with increasing demand within the education sector for programs and services that meet current trends and curriculum needs
- Replacement of the existing Nature Centre at Scanlon Creek will ensure we remain a leader in conservation education
- We are gaining recognition as a leading partner in the provision of professional training and development

## Service Pressures

- School board and private educational institution interests exceed our current service capacity
- The current Nature Centre education facility is no longer adequate for our needs
- Teacher job action and the cancellation of field trips and at-school experiences

## Fast Facts

- 3,988 students visited the Nature Centre
- 375 teachers participated in 9 professional development opportunities
- Acted as site host for Child and Nature Alliance of Canada's Forest School Practitioner Course

## 2019 Achievements

- Provided integrated learning opportunities to 65 classes of grade 4 students in Simcoe County
- Delivered several new and innovative programs which incorporated math, technology, climate change and citizen science
- Delivered a series of 3 customized outdoor learning experiences at Baldwin Conservation Area for a class of differently abled, vulnerable youth, in collaboration with restoration and land management staff



# Greenspace Services

Management  
\$0.58M

4.9  
FTEs

Property  
Services  
\$0.09M

0.5  
FTEs

Recreation  
\$0.00M

0  
FTEs

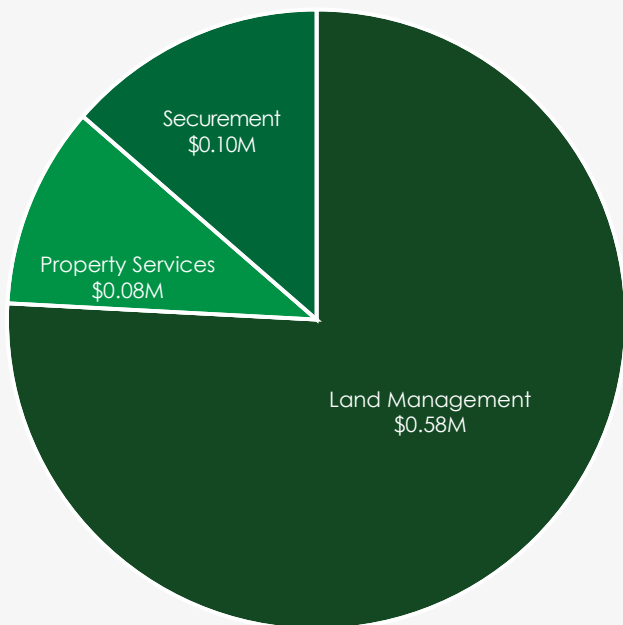
Securement  
\$0.10M

0.9  
FTEs

Greenspace Services ensures that valuable greenspace is protected and that recreational opportunities are provided in safe, well maintained natural settings, so that our watershed residents can enjoy a high quality of life. Greenspace Services consists of the following program areas:

- Land Management
- Property Services
- Recreation
- Land Securement

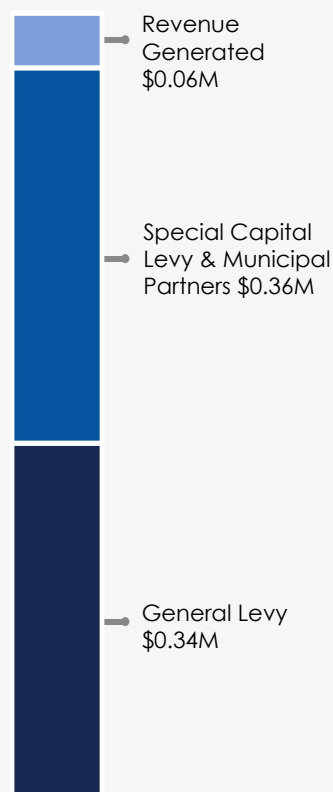
## 2020 Greenspace Services Budget \$0.76M



## Operating and Capital Split



## Revenue Source



## Expenditure Type



# Land Management

We approach land management with the goal of striking a balance between conserving the natural environment and facilitating opportunities for outdoor recreation, education and awareness.

## 2020 Focus

- Complete management plan for Thornton Bales Conservation Area and an addendum to the Scanlon Creek Conservation Area management plan, and initiate review and update of existing management plan for Rogers Reservoir Conservation Area
- Execute formal agreements with local municipalities for maintenance services at Scanlon Creek and Rogers Reservoir Conservation Areas
- Complete a signage strategy for conservation areas to support property identification, wayfinding, emergency management, and risk management
- Work to define maintenance standards, through asset management, for our land holdings and facilities

## Outlook

- As the built environment expands, there are fewer opportunities for human contact with nature in urban areas. The protection of conservation lands, as well as providing public access are critically important ways we contribute to the communities we serve. As the watershed continues to urbanize, the role of conservation lands continues to become even more critical

## Service Pressures

- Aging infrastructure (roads, trails, signage, etc.) that supports recreational activities on our lands will become a future budget pressure

## Fast Facts

- We currently own, manage, co-manage or hold easements on 36 properties – a total of 2,425 hectares of conservation land that are recognized for the natural, ecological and/or cultural value they add to the community

## 2019 Achievements

- Completed Beaver River Wetland Conservation Area Management Plan
- Completed Draff Thornton Bales Conservation Area Management Plan





## 2019 Achievements

- Removed hazardous trees around buildings at Sheppard's Bush
- Upgraded security lighting system around estate house at Sheppard's Bush

## Property Services

Through the Property Services program, we oversee lease agreements, rental contracts and provide maintenance for these facilities.

### 2020 Focus

- Complete upgrades to Sheppard's Bush rental buildings to address asset management requirements, and support energy efficiency and enhance safety and security
- Review and update all existing lease agreements as per Land Disposition Strategy

## Outlook

- Creation of an Asset Management Reserve will support maintenance of aging buildings and infrastructure

## Service Pressures

- Increasing costs to maintain aging buildings

## Fast Facts

- Properties we lease include offices for a local environmental non-governmental organization, a private residence and an outdoor education school that provides leadership skills to hundreds of inner-city kids annually

## Fast Facts

- We manage and maintain over 120 kilometres of trail for hiking, biking and general nature appreciation
- Trail counters at five conservation areas indicate more than 200,000 visits to these areas annually

## Recreation

The Recreation program provides outdoor recreational opportunities for watershed residents and visitors to improve physical and mental well-being through a wide range of safe and accessible trails and natural spaces.

### 2020 Focus

- Complete facility upgrades at conservation areas to replace aging structures, including the viewing platform at Scanlon Creek and boardwalks at Pangman Springs and Whitchurch
- Install trailhead upgrades including a new cycling station and lookout at Thornton Bales Conservation Area
- Install emergency information post system at 4 Durham Regional Forest tracts – Norton, Roseville, Timbers, Brookdale
- Implement signage upgrades and installation of safety structures, including interpretive signage at Rogers Reservoir Conservation Area

### Outlook

- Continue to seek public and private partnerships to expand offerings provided to visitors and enhance and/or rehabilitate outdoor recreation facilities and infrastructure

### Service Pressures

- As recreational activity increases at our conservation areas, liability associated with aging recreational infrastructure requires additional capital to maintain or replace these amenities
- Climate change impacts including seasonal weather changes that shift how and when visitors use conservation areas
- Expanding communities adjacent to conservation area properties contribute to higher levels of use and risk of user conflict, and need for additional management and amenities
- Managing unauthorized and/or conflicting activities on conservation area properties is challenging due to limited resources
- Revenue generated from the parks is minimal when compared to the cost of operation and maintenance

## 2019 Achievements

- Replaced over 1.7 kilometres of eroded trails with over 2 kilometres of new sustainable recreational trail at Durham Regional Forest, in partnership with Durham Mountain Biking Association
- Secured funding to improve wayfinding signage and volunteer engagement to clean up the Beaver River Wetland Trail
- Installed information signage at various conservation areas advising visitors of winter hazards and property regulations
- Installed bollards at entrances and intersections along 30+ kilometres of the Beaver River Wetland Trail to support the safety of trail users and encourage increased non-motorized use

# Land Securement

Our Land Securement program continues to seek opportunities to acquire lands through donations, easements and/or purchases for the purposes of connecting urban areas to greenspace to increase recreational opportunities and to restore, enhance or create ecological features to support the watershed's natural heritage systems.

## 2020 Focus

- Develop a Land Disposition Policy for Municipal Infrastructure and Other Project Considerations and implement the recommendations as set out in the policy
- Examine our existing property holdings and develop a Land Disposition Strategy for our Land Holdings. The strategy will provide consideration for the sale or trade of lands to better align with our mission to protect and restore the natural heritage systems of the Lake Simcoe watershed
- Continue to seek opportunities for strategic land acquisition based on the new Natural Heritage System Land Securement Project in collaboration with our Ecological Offsetting Program

## Outlook

- Costs associated with the purchase of property and the associated legal fees continue to rise
- We do not have access to a consistent source of funding, instead relying on monetary donations, grants and government funding programs

## Service Pressures

- Opportunities to secure private lands are limited by available funding sources and land management transfers
- Costs to maintain existing and new land holdings continue to increase
- Liabilities associated with public use of our lands are increasing



## 2019 Achievements

- Completed the Natural Heritage System Land Securement Project 2019-2025

## Fast Facts

- The total MPAC assessed value of our landholdings is over \$9.6 million
- Our lands provide an estimated \$15 million in ecological goods and services through carbon storage, water supply and infiltration, flood control, improved water quality and quantity, clean air, natural habitat, pollination and recreation



# Planning & Development

Development Planning  
\$2.14M

14.2  
FTEs

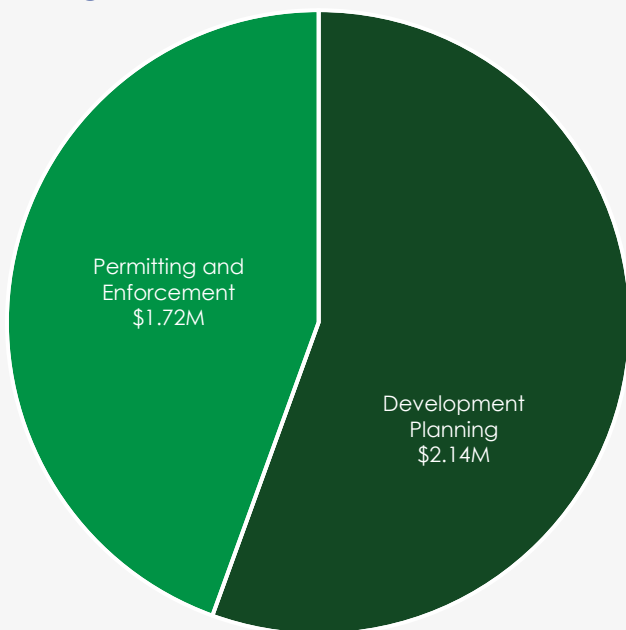
Permitting and Enforcement  
\$1.72M

13.3  
FTEs

Planning and Development Services ensures that development in the watershed progresses in a sustainable manner that will protect natural heritage features, direct development away from natural hazard lands and will protect our water resources. We follow a planning-first principle which ensures that planning permissions are in place before we consider any further approvals under the Conservation Authorities Act. Planning and Development Services consists of the following program areas:

- Development Planning
- Permitting and Enforcement

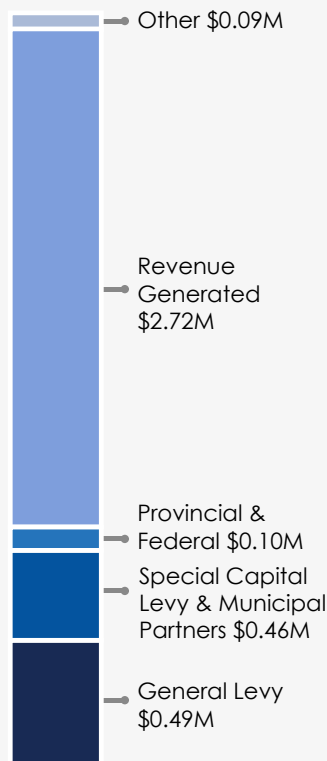
## 2020 Planning & Development Budget \$3.86M



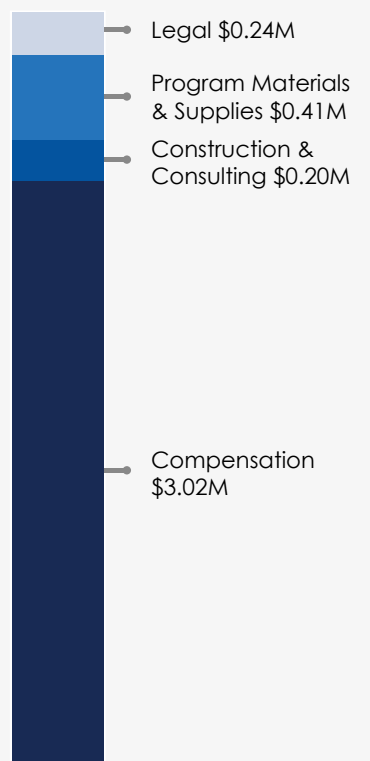
## Operating and Capital Split



## Revenue Source



## Expenditure Type



## 2019 Achievements

- Updated the Ecological Offsetting Policy, Phosphorus Offsetting Policy and Lake Simcoe Protection Plan Water Budget Policy to include project implementation direction and costing
- Undertook municipal engagement on service delivery improvements and efficiencies
- Developed and implemented comprehensive technical pre-consultation documents
- Initiated Application Submission Pre-screening Protocols with partner municipalities

## Fast Facts

- Received 822 applications made under the *Planning Act*
- Reviewed 191 hydrogeology submissions
- Reviewed 324 Natural Heritage submissions including Environmental Impact Studies, Natural Heritage Evaluations, Tree Inventory and Protection Plans, Planting/Restoration Plans and submissions in support of permit applications
- Reviewed 311 engineering submissions in support of *Planning Act*, Environmental Compliance Approval and permit applications
- Provided pre-consultation comments on 188 concept submissions between June and December

## Development Planning

The Development Planning program includes natural heritage, hydrogeology and engineering review including Environmental Compliance Approvals for Stormwater Management Facilities. The program provides proactive and innovative advice on stormwater management, groundwater and phosphorus loading and development submissions, all with a focus on sustainable development to protect natural heritage features and direct development away from natural hazard areas. Our goal is to work with our partners to build healthy and resilient communities.

## 2020 Focus

- Continue to work with our partner municipalities to identify practices to ensure timely approvals of applications made under the *Planning Act* and *Environmental Assessment Act*
- Create Offsetting Calculation Tools for our website
- Create Guidelines for Trails Impact Studies, Environmental Impact Studies and Landscape/Restoration Planting Plans
- Review Environmental Compliance Approval applications for stormwater management in conjunction with *Planning Act* application review to ensure timely approvals for development projects

## Outlook

- The Lake Simcoe watershed continues to see extensive growth pressure requiring the continued diligence of our staff to address the balance of growth, community and environment. Engaging with our municipal and development industry partners continues to be a key focus to increase efficiencies, reduce timelines and embrace new approaches such as moving to digital submissions

## Service Pressures

- Maintaining a high caliber of client service and balanced fees can be challenging due to constant fluctuations in the housing market
- Increasing growth and development in the watershed
- Quality of technical submissions
- Reduced approval timelines based on the recent changes to the *Planning Act*

# Permitting and Enforcement

The Permitting and Enforcement program implements and enforces Ontario Regulation 179/06 pursuant to the Conservation Authorities Act. Through this legislation, permission is required from the Conservation Authority prior to undertaking development within hazard lands. Hazard lands include those areas, subject to flooding and erosion, adjacent to the Lake Simcoe shoreline, in or adjacent to river or stream valleys, unstable soils, floodplains, wetlands and lands adjacent to wetlands as specified in the Regulation. Our goal is to reduce loss of life, property damage, and social disruptions resulting from natural hazards.

## 2020 Focus

- Continue to review development applications to ensure consistency with the *Conservation Authorities Act*, Ontario Regulation 179/06 and designated policies of the *Lake Simcoe Protection Act* and Plan
- Continue to enforce the *Conservation Authorities Act* to ensure public safety and litigate significant violators
- Focus on client service satisfaction through our client service strategy and customer service surveys

## Outlook

- Increasing demand for shorter wait times and enhanced client service is putting a strong emphasis on further streamlining our approvals process

## Service Pressures

- Uncertainty around legislative amendments through provincial review of conservation authorities
- As a result of clarification we received from Conservation Ontario on the issuance of Section 28 permits on Crown Land (mostly with regard to boat houses and docks), we expect permits to increase in number and complexity, as well as increasing compliance issues

## Fast Facts

- Issued 915 permits under Section 28 of the *Conservation Authorities Act*
- Responded to 3,500 general inquiries from the public
- We saw an almost 50% decrease in the number of violation notices issued for development undertaken without a permit from the previous year

## 2019 Achievements

- Obtained 9 convictions in provincial offences court for development undertaken within hazard lands without permission
- Developed and shared our newly developed customer service strategy in accordance with Conservation Ontario's Client Service and Streamlining Initiative
- All planning and permitting staff attended customer service training to ensure alignment with Conservation Ontario's Client Service and Streamlining Initiative



# Water Risk Management

Flood Management and Warning  
\$0.44M

3.1  
FTEs

Source Water Protection  
\$0.68M

1.8  
FTEs

Water Management/Restoration  
\$2.59M

2.6  
FTEs

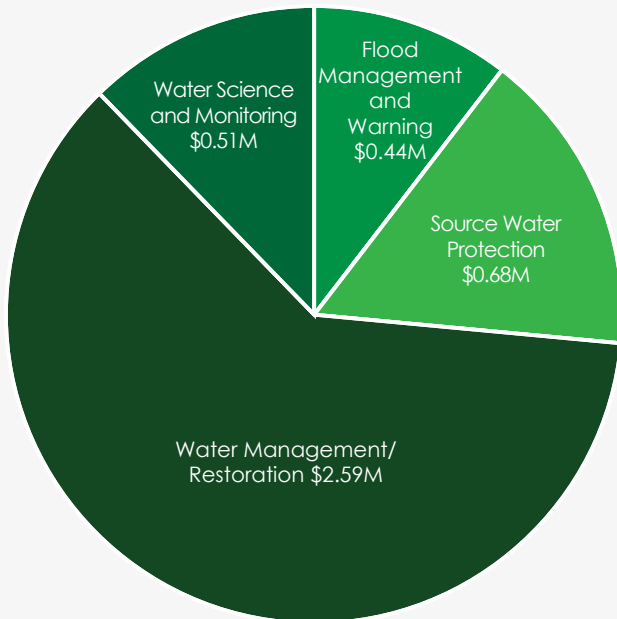
Water Science and Monitoring  
\$0.52M

2.4  
FTEs

The goal of Water Risk Management is to reduce the risks associated with water, to ensure that we have a safe, clean and adequate supply of drinking water, to undertake restoration projects to protect and manage water and to engage in research activities to inform decision making. Water Risk Management consists of the following program areas:

- Flood Management and Warning
- Source Water Protection
- Water Management/Restoration
- Water Science and Monitoring

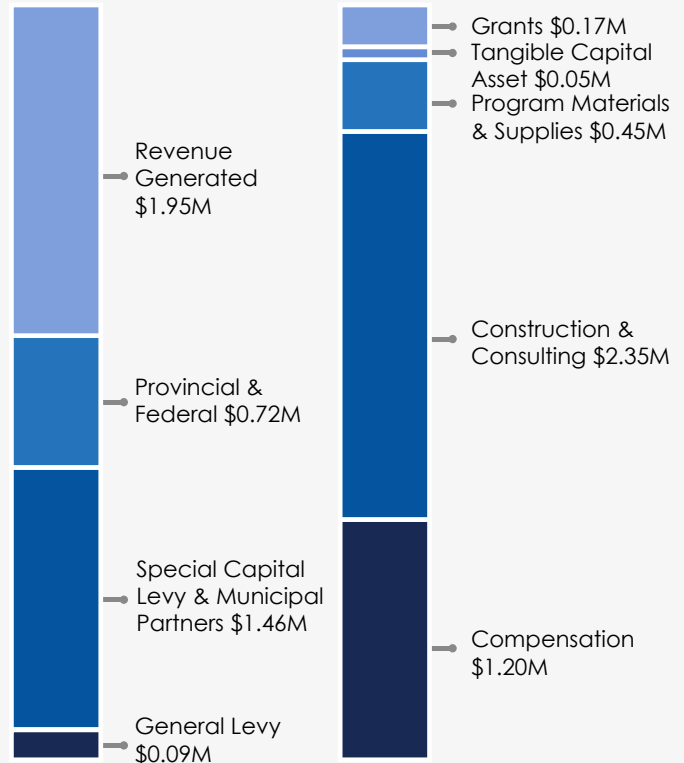
## 2020 Water Risk Management Budget \$4.22M



## Operating and Capital Split



## Revenue Source Expenditure Type



## Fast Facts

- The 2019 spring freshet (melt) resulted in extended high lake levels and drawdown time from March through May, impacting the shoreline and infrastructure of Lake Simcoe
- We have expanded our Flood Event Photo Database so that it now includes 372 pictures of flood events going back as far as February 1, 1929

# Flood Management and Warning

The goal of the Flood Management and Warning program is to reduce the risk to people, property and infrastructure (roads, bridges, etc.) from hazards due to flooding and to reduce social disruption.

## 2020 Focus

- Continue to monitor weather forecasts and watershed conditions
- Maintain and improve monitoring system and issue messages when warranted
- Expand GIS database of event photo documentation of flood prone areas of the watershed
- Complete regular inspections of dams and coordinate a structural assessment of the Pefferlaw Dam to address recommendations identified in the 2019 dam inspection report

## Outlook

- Our changing climate is creating more extreme weather events and increasing the likelihood of winter runoff flooding due to unseasonable temperatures, as well as more ice damage to our properties

## Service Pressures

- Increased pressure on staff and resources to respond to flood events
- Reduced resources due to provincial funding cuts



## 2019 Achievements

- Issued 17 flood messages
- Monitored 15 flow gauges, 5 precipitation gauges and 8 snow survey sites
- Completed regular inspections of two dams and a detailed visual inspection of the Pefferlaw Dam by an engineering consulting firm to assess potential structural/safety issues
- Updated our hazard mapping as part of annual regulation map revisions

## 2019 Achievements

- Completed our annual report to the Minister on plan implementation
- Recruited representatives to fill 15 vacant spots on the Source Protection Committee, as terms of existing members ended



## Fast Facts

- The source protection plan that came into effect in January 2015 includes 129 policies to address 22 threat types
- All of the policies that were developed to address significant drinking water threats have been, or are in the process of being implemented
- Since 2015, over 2,000 on-site sewage systems have been inspected to ensure that they are not a significant risk to municipal drinking water

## Source Water Protection

Ensure a sustainable and safe source of clean drinking water to residents, within the South Georgian Bay-Lake Simcoe Source Protection Region, by meeting our legislative requirements within the *Clean Water Act* and ensuring policies in the Source Protection Plan are implemented.

### 2020 Focus

- Undertake review and amendment to the source protection plan, as directed by ministerial order
- Complete amendments to the source protection plan to include new drinking water systems, as required by Regulation 205 of the *Safe Drinking Water Act*
- Provide orientation for 15 new Source Protection Committee members

### Outlook

- Due to legislated requirements under the *Clean Water Act*, we will need to fulfill our responsibilities, despite funding uncertainties. These requirements include being designated the lead Source Protection Authority, supporting the Source Protection Committee and reviewing and amending the Source Protection Plan

### Service Pressures

- This program was initially fully funded by the Province but there is growing uncertainty about continued funding

# Water Management/ Restoration

The Water Management/Restoration program aims to improve water quality and better manage water quantity during storm events through the implementation of low impact development and innovative stormwater pond retrofits.

## 2020 Focus

- Complete Tamarac stormwater pond retrofit and low impact development retrofit at Sheppard's Bush parking lot in Aurora
- Complete detailed design for protection of York Region infrastructure through streambank restoration in Newmarket
- Complete detailed design for Phase II of the low impact development retrofit at Ray Twinney Recreation Centre in Newmarket
- Complete low impact development retrofit project at the Victoria Woods parking lot in Barrie
- Implement the conservation authority class environmental assessment for the Alcona Flood Relief Project

## Outlook

- This newly established program provides diverse opportunities to deliver and support urban restoration projects with our member municipalities. We will continue to identify partnership opportunities with municipalities to complete low impact development retrofit projects through in-kind support and funding through the phosphorus and water balance offsetting programs

## Service Pressures

- Timing and location of offsetting payments dictates when and where projects occur
- Finding willing landowners on public lands to complete restoration projects
- Provincial policy changes that could affect programs and partner funding
- Additional pressures from climate change and severe weather

## Fast Facts

- The 2019 spring freshet (melt) resulted in extended high lake levels and drawdown time from March through May, impacting the shoreline and infrastructure of Lake Simcoe
- We have expanded our Flood Event Photo Database so that it now includes 372 pictures of flood events going back as far as February 1, 1929

## 2019 Achievements

- Completed the Upper Kidd's Creek restoration project in Barrie
- Completed the East Holland barrier removal project in Aurora
- Completed the design, permitting, and tendering of the Tamarac Green Park stormwater retrofit project in Aurora
- Provided 12 months of post-construction inspection and maintenance on a recently constructed low impact development site



## 2019 Achievements

- Completed pre-construction monitoring of two stormwater facilities as part of the York stormwater pond retrofit project
- Completed a three-year study on stormwater pond sedimentation and turbidity that will inform more efficient and realistic maintenance schedules
- Performance monitoring of a recently constructed bioswale showed a 99% reduction in storm event flows to the local creek

## Water Science and Monitoring

The Water Science and Monitoring program is essential to informing our understanding of watershed processes, identifying emerging issues, and documenting environmental trends. This information is used to allow us to adapt our management activities to achieve our mission of a healthy Lake Simcoe and watershed.

### 2020 Focus

- Commence post-construction monitoring of two stormwater facilities as part of the York stormwater pond retrofit project
- Commence performance monitoring of two low impact development features in the Town of Aurora
- Publish technical report on stormwater pond function, nutrient cycling and sedimentation rates
- Complete the hydrometric program review and implement network improvements and recommendations
- Begin implementing the Groundwater Monitoring Program review recommendations

### Outlook

- The hydro-meteorological network continues to be a key resource in the detection and assessment of local climate change impacts. With extreme weather events predicted to increase, the network is being positioned to play a greater role in responding to such events. Activities under stormwater performance monitoring continue to grow with an increased focus on low impact development and the requirement to monitor offset projects

### Service Pressures

- There are challenges around predictability and certainty of project-specific funding agreements with municipal and provincial partners

### Fast Facts

- As part of the 3-year study on stormwater pond sedimentation rates, we conducted a total of 51 sediment volume surveys on 10 stormwater ponds and over 300 water clarity measurements
- We collected a total of 216 manual soil moisture measurements on the Forest Glen Bioswale to examine water movement through the low impact development feature



# Watershed Studies & Strategies

Climate Change  
\$0.19M

1.7

FTEs

Research and Innovation  
\$0.69M

2.4

FTEs

Watershed Planning  
\$0.53M

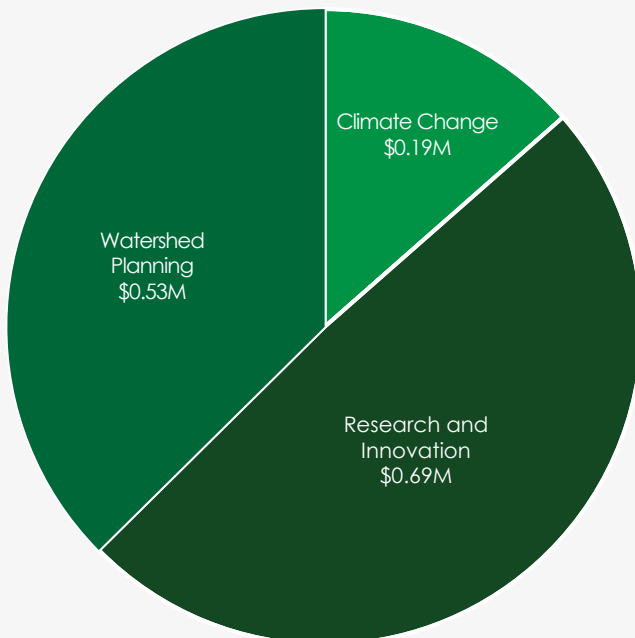
2.1

FTEs

Watershed Studies and Strategies focuses on conducting research and science to inform the decisions that we make regarding our policies, regulations and restoration works. Watershed Studies and Strategies consists of the following program areas:

- Climate Change
- Research and Innovation
- Watershed Planning

## 2020 Watershed Studies & Strategies Budget \$1.41M



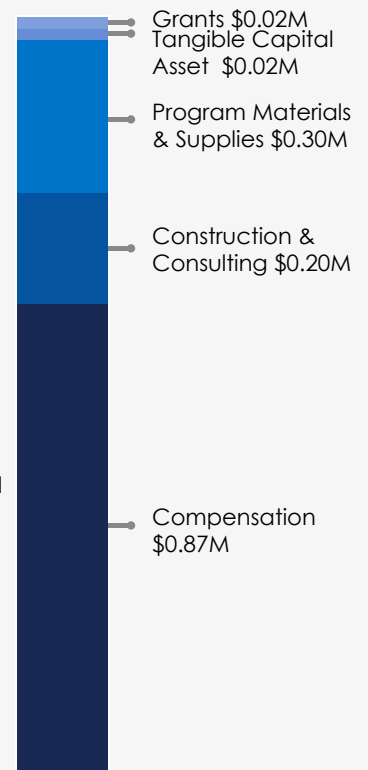
## Operating and Capital Split



## Revenue Source



## Expenditure Type



## 2019 Achievements

- Implemented several tactics in the corporate carbon reduction strategy, including completing our first annual progress report
- Completed the 2020 Climate Change Adaptation Strategy
- Developed a carbon budget for the Lake Simcoe watershed to estimate sources of greenhouse gas emissions and the rates of carbon sequestered by natural features
- Participated in numerous climate change working groups and committees to ensure collaboration with municipal, non-governmental and other partners



## Fast Facts

- We reduced our corporate carbon footprint by 7 tonnes since 2016, through upgrading our fleet to electric and hybrid vehicles and installing solar panels on the roof of our corporate head office
- An estimated 3.8 million tonnes of carbon is emitted in an average year in our watershed and 20% is sequestered in wetlands and forests
- Without significant action on climate change, average temperatures are predicted to increase by 5 degrees Celsius by 2080. Changes in temperature will be most noticeable in the winter and are expected to lead to more freezing rain events, less ice cover on the lake, and the potential for more frequent winter flood events

## Climate Change

The goal of the Climate Change program is to collect data and research to improve certainty with respect to climate change impacts and to develop climate change mitigation and adaptation strategies.

### 2020 Focus

- Complete the Lake Simcoe Climate Mitigation Strategy
- Implement additional tactics in the corporate carbon reduction strategy and begin implementing the climate adaptation and mitigation strategies
- Develop a greater leadership role in municipal climate change working groups
- Explore opportunities to include carbon sequestration in municipal community energy plans

### Outlook

- Completion of the strategies will put us in a strong position to lead climate change adaptation and mitigation within the watershed
- Establishing climate change key performance indicators will be essential to track and adapt to the actions we take

### Service Pressures

- Climate change is an area of emerging concern and action on our recommendations will likely lead to service pressures and costs

# Research and Innovation

Research and Innovation support and promote innovative management approaches to mitigate human activities that negatively impact the health and quality of Lake Simcoe and its watershed. These approaches must be outcome oriented, cost-effective, easy to implement and transferrable.

## 2020 Focus

- Complete the East Holland River Stormwater Management Optimization Study
- Identify and support solutions for better low impact development inspection and maintenance
- Deliver stormwater management inspection and maintenance prioritization service agreement
- Complete York Region low impact development co-benefits feasibility study
- Support Sustainable Technologies Evaluation Partnership (STEP) deliverables including training, tool development and other resources

## Outlook

- Stormwater management research and innovation will continue to be an important activity to ensure better stormwater management, design, implementation, and maintenance

## Service Pressures

- Finding external funding to support continued innovations

## 2019 Achievements

- Developed stormwater management pond inspection and maintenance prioritization methodology and training to municipal staff
- Secured funding to establish consistent methods for estimating environmental co-benefits for low impact development
- Completed current-state modeling report for the stormwater management optimization modeling project
- Supported uptake of new database to track locations and improve inspection and maintenance of stormwater facilities
- Supported pilot training for low impact development certification through the National Green Infrastructure Certification program
- Established a low impact development inspection and maintenance municipal working group

## Fast Facts

- In 2019 we provided low impact development, erosion and sediment control and stormwater modelling training to 165 + professionals
- STEP resources, including the Low Impact Development Treatment Train Tool and Wiki are being used regularly by practitioners in our watershed and beyond. The Treatment Train Tool was downloaded 724 times in 2019



# Watershed Planning

Watershed Planning involves identifying stressors impacting watershed health, selecting preferred solutions to address these impacts, and then monitoring progress and adapting plans to achieve desired outcomes. Watershed planning is essential to improving the health of Lake Simcoe and the watershed and is a legislated requirement of the Lake Simcoe Protection Act and Plan.

## 2020 Focus

- Undertake a review of the watershed planning program to explore ways of modernizing program delivery, to make it more responsive to new data and municipal planning needs
- Complete triple bottom line analysis of salt best management practices
- Support adoption of recommendations within the winter salt application discussion paper

## Outlook

- Long-term structure and implementation of the watershed planning function will be refined based on feedback from a program review to be completed in 2020. This will be done to ensure our service continues to help municipalities meet their watershed planning requirements under revised Provincial Policy, while also contributing to the Authority's overall objectives of integrated watershed management

## Service Pressures

- Under recently revised Provincial Policies, municipalities in the watershed are required to plan for the impacts of climate change on watersheds, and ensure that community boundary expansions, growth allocations, and water, wastewater, or stormwater management plans are in conformity with watershed planning goals. Specific guidelines for meeting those requirements are not yet clear, which raises some uncertainty about implications for our workload and budget

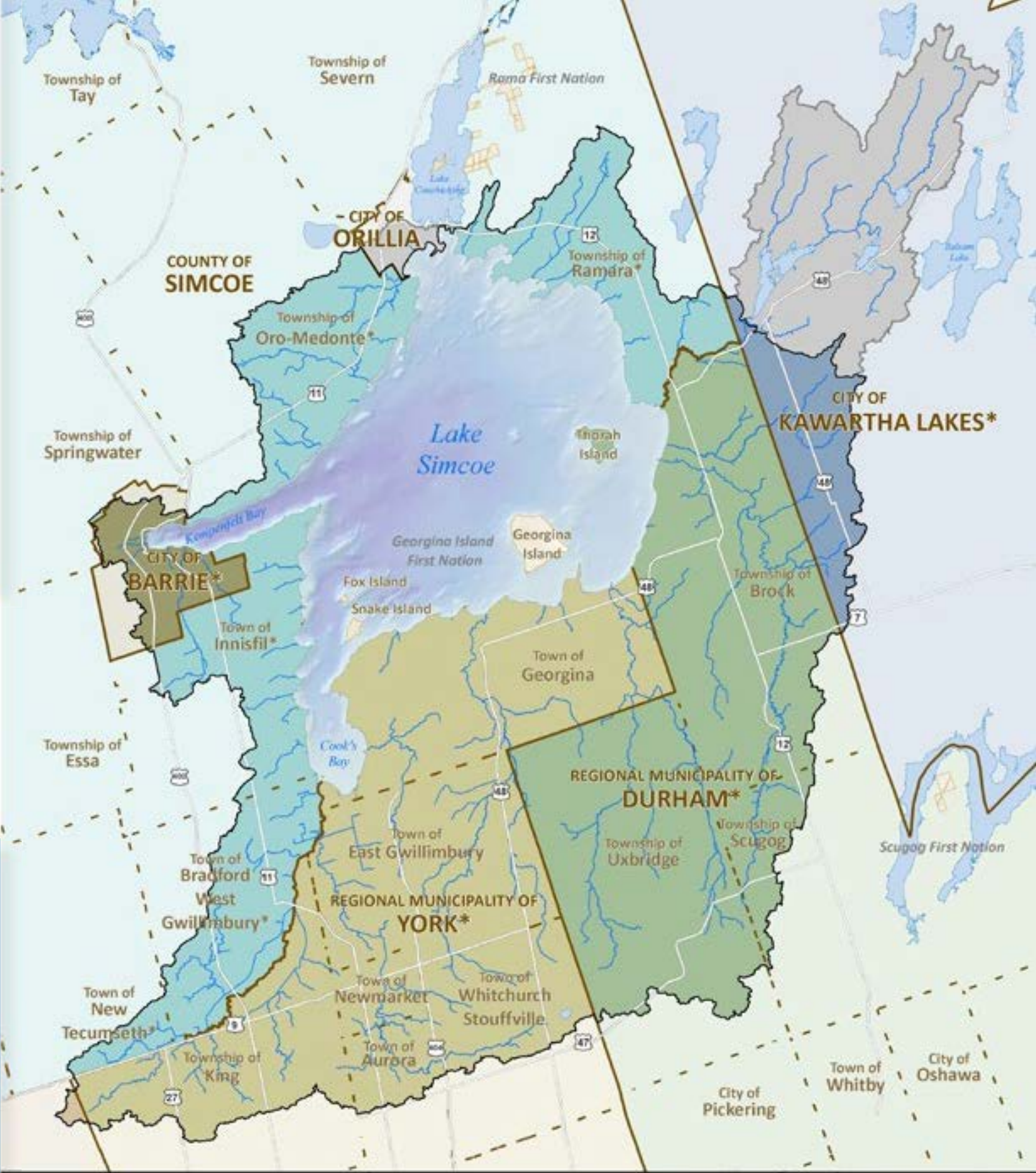
## 2019 Achievements

- Continued to coordinate implementation of watershed plan recommendations with all partners
- Established the Freshwater Roundtable, with representatives of major property owners and winter maintenance contractors in the Lake Simcoe watershed, to raise the profile of the environmental issues associated with winter salt
- Completed a discussion paper recommending approaches to reduce winter salt application on commercial parking lots
- Reviewed and commented on regional and municipal comprehensive reviews to ensure consistency with appropriate provincial, municipal and authority requirements



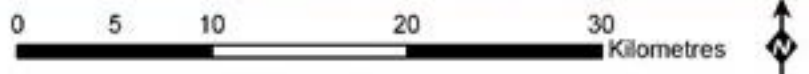
## Fast Facts

- As watershed municipalities improve their road salt management practices, such as changing from salt/sand mix to salt or Thawrox, there has been no reported change in collision rates
- Since 2010 we have completed 12 subwatershed plans for all major tributaries flowing into Lake Simcoe, as well as Georgina, Fox and Snake Islands, resulting in strategies to address stormwater management, erosion and sediment control, water quality monitoring, restoration and much more
- Over 90% of the recommendations within existing subwatershed plans have been completed or are underway



**Legend**

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



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## Afterword

This document was finalized prior to impacts from the Covid-19 pandemic and the Provincial emergency measures were instituted.

Because of the uncertainties associated with the pandemic and the length of time these altered circumstances persist, it's likely that some of the planned work outlined in the preceding pages will be impacted. Specifically, changes may impact 2020 Focus, Outlook, and Service Pressures.

As the year progresses, we will continue to track and report to our Board of Directors on how the pandemic has impacted our operation and financial position.





Lake Simcoe Region Conservation Authority (LSRCA) is the leading environmental protection agency in the Lake Simcoe watershed. For nearly 70 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.

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**Lake Simcoe Region**  
conservation authority