

2020



Essex Region Conservation
the *place* for life

Annual Report





I know that the critically important conservation work we undertake will continue to have a profound impact on the sustainability of the Windsor-Essex region.

A Message From The Chair

2020. How does one even begin to describe it? In March, the COVID-19 pandemic required our staff, like so many around the world, to rapidly transition to work from home. On behalf of the Board, I extend my sincerest appreciation to our Human Resources Manager and Application Support Technician, who were instrumental in ensuring we were able to carry on our important watershed management work without interruption.

While our dedicated team worked vigilantly to respond to the needs of our community, a collision of circumstances created additional challenges. Continued record-high water levels kept our staff on guard around the clock to monitor for flooding while we continued to receive an unprecedented number of permit and development applications to ensure the protection of new development. In November, Conservation Authorities across the province were stunned by significant changes to the Conservation Authorities act embedded in Bill 229, an

omnibus bill. These changes will have profound impacts to the delivery model of our watershed based programs and services. We were also deeply saddened by the sudden passing of Councillor John Jacobs, who represented the Municipality of Leamington on our Board of Directors since 2015. John posed thoughtful questions and was a staunch advocate for his community, and he will be missed.

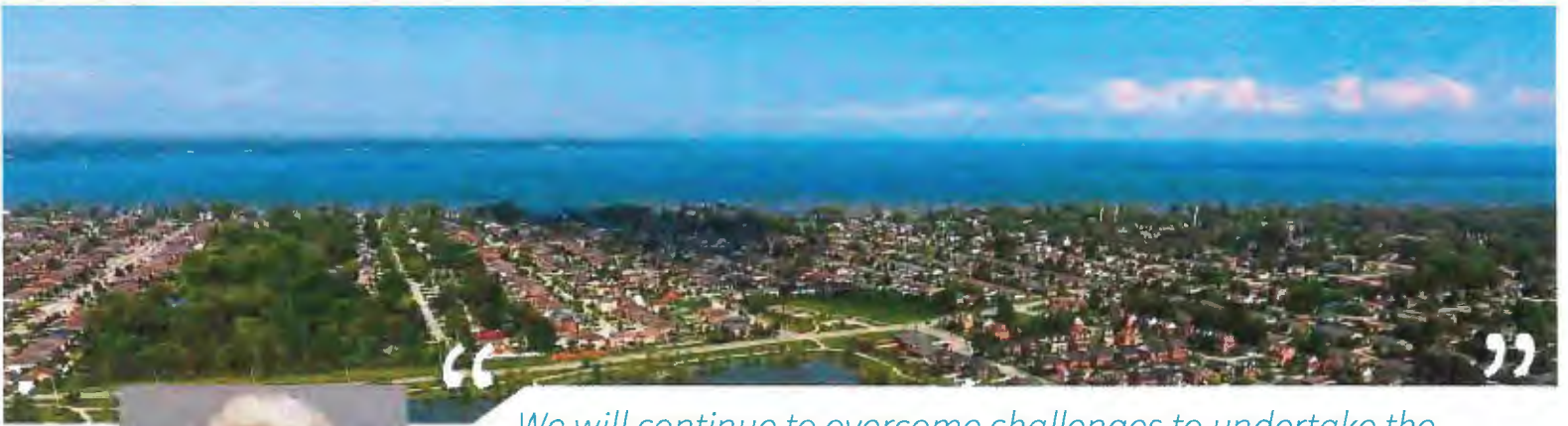
However, in spite of these challenges, there were still successes to celebrate. In partnership with the County of Essex, rapid progress took place on the Essex County Regional Energy Plan to create a roadmap to meet Federal climate change targets. Significant shoreline protection projects were initiated at Pêche Island and the John R. Park Homestead Conservation Area. Construction also began at the John R. Park Homestead Heritage Centre to provide accessible education programs, adequate exhibit space and serve as a tourism hub. Visitation to our conservation areas and trails surged as we kept them open when

nearly everything else was closed. Many community members sent notes of appreciation expressing how important these connections with nature were to their physical and mental health and well-being. It certainly reinforces that while there is much we can live without, our need for nature remains paramount.

Despite the many significant challenges of the past year, it has been my honour to serve as ERCA's Chair during this time. While navigating the continued impacts of the pandemic, the development of the regulations associated with Bill 229 and the resulting changes to our business model will be of key focus in 2021, I know that the critically important conservation work we undertake will continue to have a profound impact on the sustainability of the Windsor-Essex region.

Sincerely,

Kieran McKenzie,
Chair



We will continue to overcome challenges to undertake the important watershed-based work that is entrusted to us.

A Message From The Interim General Manager

Change is a tough taskmaster, but it can also be a strengthening process. There's no question that 2020 was a year of extraordinary changes that no one could have imagined when the calendar turned. In September, when the Board of Directors asked me to serve as Interim General Manager, I thought this highest level of responsibility would be the most significant change in my 35 year career.

Yet, 2020 had more in store. Another year of unprecedented high lake levels resulted in an extended 8-month Flood Advisory and repeated shoreline and inland flooding. Our already under-resourced team was stretched even further by this constant risk combined with a record number of permit applications. In fact, applications for permit and technical submissions have increased 75% over the past five years. Then, in December, the provincial government passed Bill 229 - Protect, Support, and Recover from COVID-19 Act (Budget Measures), 2020. This

piece of legislation encompassed more than just a budget in response to COVID-19. It included significant changes to the Conservation Authorities Act, which narrowed the objects of a conservation authority from providing "programs and services designed to further the conservation, restoration, development and management of natural resources other than gas, oil, coal and minerals" to only one of three categories: mandatory programs and services, municipal programs and services, and "other".

The mandatory programs are quite limited and currently confined to risks of natural hazards; conservation and management of lands; Drinking Water Source Protection; and other duties and responsibilities under other legislation. The regulations associated with these changes have yet to be developed, and I look forward to working with the Province to provide input to ensure that the important 'on the ground' perspectives are included.

Over the coming year, further changes are expected as we develop a transition plan in partnership with our member municipalities. While each of us has been tested this year in different ways, 2020 has shown us that humankind is a resilient beast that even during the most difficult of times can rise to amazing challenges. I look forward to the coming year with optimism that we will continue to overcome challenges to undertake the important watershed-based work that is entrusted to us.

Yours in conservation,

Tim Byrne,
Interim General Manager

Watershed Highlights

Like all Conservation Authorities, ERCA is a public sector organization that develops and delivers resource management programs that safeguard our watersheds. Governed by the Conservation Authorities Act, which is administered by the Ministry of Natural Resources and Forestry and made up of a membership of municipal representatives, Conservation Authorities deal with issues related to overall watershed management including, flood and erosion control and prevention, water quality and quantity management, regulation of development along shorelines, watercourses, and interference to wetlands, natural heritage protection, watershed stewardship, technical support for land use planning, drinking water source protection, as well as education and recreation.

In 2020, ERCA continued to implement the watershed management priorities identified in our Strategic Plan as directed by our Board of Directors. The following highlights are a snapshot of the projects and programs implemented this year to fulfill our core mandate and enrich and sustain the Essex Region as the Place for Life.



Climate Change



Great Lakes



Landscapes and Habitats



Sustainable Communities



A Strong, Resilient Organization





Climate Change

Our region continued to experience the profound impacts of our changing climate.

Our region continued to experience the profound impacts of our changing climate. We again experienced record high water levels and a Flood Advisory that extended for more than eight months. Preliminary modelling for the Regional Energy Plan tells us that the amount of energy used in the average home in Essex County is more than twice global best practice. Greenhouse gas emissions are about five times global best practices per person, and that our community currently spends over \$800M on all types of energy, most of which leaves the County. 2020 taught us that we have the capacity for radical and rapid change. We can take the lessons learned from COVID-19 and apply them to the climate crisis to change our actions and reduce greenhouse gas emissions, slow climate change and adapt to its impacts. This year, in taking action to address our changing climate, we:

Initiated the Essex County Regional Energy Plan with the County of Essex and its seven municipalities to help the community to better understand current energy consumption, identify opportunities for energy efficiency, help to meet the community's climate priorities, and strengthen the local economy.

The plan is supported by a 25-member Community Task Force, including all 7 lower tier municipalities and led by Warden Gary McNamara. It sets out ambitious targets for greenhouse gas reductions over the next 20 years.

Created a Climate Action Communications Strategy to help stakeholders at all levels understand their own energy use and greenhouse gas emissions and strategies to reduce their impact.

Completed a Forest Adaptation Strategy with the Forest Gene Conservation to review tree species choices and utilization of genetic diversity via local or non-local seed and initiated a project to incorporate climate risks into the Essex Region Natural Heritage Systems Strategy.

Monitored record high lake levels and weather conditions. As a result, the region was under some form of Flood Advisory for elevated risks of flooding and erosion from April to November. Conditions brought on over 60 separate flood advisories including a record 16 Flood Warnings.

Began a review of potential climate impacts to the agricultural sector.

Initiated the Essex Region Floodplain Prioritization Study to identify and compare relative flood risk for sub-watersheds and prioritize available funding for new and updated flood mapping.

Added a 'Shoreline Conditions Statement' as a flood message option to differentiate from 'Watershed Conditions Statements' and help improve clarity for the municipalities we serve.

Monitored 30 Climate Stations, including 18 within the City of Windsor. Initiated discussions with Lakeshore and Essex regarding siting and integrating 6 additional stations.





Great Lakes

The Great Lakes are our most significant natural resource.

The Great Lakes are our most significant natural resource. Land uses, invasive species, and our changing climate continue to negatively impact the health of our Lakes. Our 2012 – 2017 Watershed Report Card identified failing grades for surface water quality in virtually every watershed. More must be done at all levels to protect and improve water quality. Despite challenges due to COVID-19, there was no disruption to water quality monitoring.

To help protect and improve Great Lakes water quality, we:

Monitored surface water quality at 50 sites and groundwater quality at 8 sites across the region. In total, more than 2,500 water quality samples were collected to evaluate watershed health, and calculate nutrient and phosphorous concentrations and loads in partnership with Federal and Provincial agencies.

Completed 40 Risk Management Plans to address Significant Drinking Water Threats on behalf of municipalities.

Continued work on a Regional Phosphorous Management Plan with support from Environment and Climate Change Canada.

Completed over 46 agricultural Best Management Practices (BMPs) such as cover crops, Crop Nutrient Plans and buffer strips on over 1600 hectares of land, with support from Environment and Climate Change Canada, as part of the Lake Erie Action Plan to meet phosphorous reduction targets.

Utilized cross-departmental skill sets to develop new mobile tools to facilitate data collection in the field, and to manage existing data sets which will allow us to better utilize and share valuable data collected by ERCA staff.

Worked with municipal and provincial implementing bodies to implement 50 policies designed to protect our sources of drinking water.





Landscapes And Habitats

Our landscapes and habitats are among the most significant in Canada.

Unfortunately, due to physical distancing requirements, nursery stock limitations and efficiency measures, this year's spring tree planting projects were deferred until 2021. However, progress in protecting and restoring our natural environment was still made as we:

Piloted a 'hot plant' of 3600 seedlings on 5 acres in fall.

Distributed 15,000 seedlings and large stock trees to landowners in spring.

Monitored 22 restoration sites demonstrating 84% tree survival rates.

Planted 100 trees on lands owned by the Caldwell First Nation, thanks to a grant from TD Tree Days.

Continued to monitor for Oak Wilt Disease.

Completed significant shoreline protection work at the John R. Park Homestead Conservation Area to protect these conservation lands and the heritage structures, while providing lakefront access for visitors. This location has been identified as the prime publicly-owned lands from which to observe the western basin of Lake Erie.

Began construction of the Pêche Island shoreline protection project in partnership with the City of Windsor. Four large rock reefs are being constructed by barge to reduce erosion and provide fish habitat.

Continued control of invasive species at Spring Garden Natural Area.





Sustainable Communities

The COVID-19 pandemic required us all to determine what's essential in our lives.

While protection from flooding or threats to drinking water sources certainly fall within that list, many have also identified is just how important greenspaces are to our physical and mental health. We crave nature. ERCA will need to continue working with all partners to collaboratively plan sustainable communities that protect existing habitats, reduce urban sprawl, are walkable, incorporate green infrastructure and are resilient to the impacts of our changing climate. This year, we:

Evaluated 1,403 applications and issued 1,269 permits, including 296 for shoreline maintenance as a result of record high water levels in Lake St. Clair and Lake Erie.

Responded to over 1,000 Miscellaneous Development (MD) inquiries related to questions about property matters, or from prospective purchasers with questions concerning a potential property purchase.

Reviewed over 500 planning applications under the Planning Act (Zoning By-Law amendments, minor variances, consents, etc.). The review of these applications assist landowners and municipalities in reducing risks associated with flooding and erosion and protecting natural heritage, and ensures best practices for sustainable communities are being incorporated into planning and development.

Improved our web-based permit application process to facilitate development reviews.

Successfully received Water & Erosion Control Infrastructure (WECI) funding for works on the Belle River Flood Control Project.

Reviewed 9 Official Plan Amendments and secondary plans, and worked with local planning authorities on 5 Official Plan updates to ensure local planning decisions address provincial delegated authority responsibilities relative to natural hazards. Continued to advise local municipalities on natural heritage matters.

Implemented the recently completed Environmental Impact Assessment (EIA) Guidelines to ensure regional consistency with respect to Natural Heritage policies.

Recognized a surge in visitation to our conservation areas and greenways as people identified a critical need to connect with nature for their physical and mental wellbeing.

Celebrated the grand opening of the University of Windsor Alumni Association Outdoor Classroom at Holiday Beach Conservation Area for school program, Owl Prowls, scouting events, and learners of all ages.

Began construction of the John R. Park Homestead Heritage Centre to provide accessible educational and interpretive spaces and an equitable experience for all who visit, with the ability to meet all physical or developmental needs. It will also serve as a tourism hub.

Completed road and parking lot improvements at Holiday Beach Conservation Area to enhance accessibility.

Re-built the 1960's workshop at Holiday Beach Conservation Area to improve energy efficiency and functionality.

Replaced a boardwalk at Hillman Marsh Conservation Area to improve safety and student access for water quality studies.

Created and delivered 15 professional development programs for teachers to improve proficiency in using their outdoor school spaces for cross-curricular education.

Created and delivered 5 Specialist High Skills Major Programs in a virtual platform to ensure students can meet their graduation criteria.

Launched 'Outdoor School' featuring snowshoeing, Tree ID, and other nature-based outdoor exploration activities, enhanced our virtual conservation education resources, and provided Home School Field Trips to support the significant increase in at-home learners.



A Strong, Resilient **Organization**

ERCA is a sustainable, resilient and valued agency.

Since 1973, ERCA has been striving to achieve a state of sustainability for the Essex Region. 2020 brought a myriad of challenges, including a social engineering incident, which resulted in a financial loss. However, the impact on 2020 financial results was mitigated due to prudent financial planning, which had previously included the creation of a reserve fund to address sudden and unforeseeable financial losses. In October, the Board authorized the use of the Revenue Stabilization Reserve to minimize the impact on 2020 financial operations. We also:

Transitioned to a remote work environment with minimal resources to ensure seamless continuity of business operations.

Reviewed 20 Risk Assessments and implemented 18 Policies and Procedures to address Health and Safety in accordance with COVID-19 protocols.

Strengthened partnerships with First Nations communities to work more collaboratively and achieve mutual goals.

Created an online platform to provide hunting services in accordance with COVID-19 safety protocols. This new process also streamlined customer service for hunters and reduced administrative costs.

Engaged with more than 60,000 people to provide important information about conservation and sustainability.

Advocated for the Essex Region on 44 local, regional, provincial, national and international boards and committees to ensure the unique needs of our region are represented.





Commitment

To Diversity & Inclusion



This year, protests around the world and in Ontario have made us realize there is much work still to be done to address systemic racism towards Black, Indigenous and People of Colour. Like all of the 36 Conservation Authorities comprising Conservation Ontario, we believe there should be zero tolerance toward racism, prejudice and discrimination within our organization, Conservation Areas and society as a whole. We recommitted to making certain that Conservation Areas remain safe spaces for people to enjoy and participate in equally and equitably, and to ensuring inclusive dialogue with Black, Indigenous and People of Colour when it comes to informing local environmental policies and concerns.

ERCA Accountability

The following provides a three-year 'by-the-numbers' comparison of achievements. This report follows the priorities identified in our Strategic Plan, and these actions help ensure Windsor-Essex County-Pelee Island is the Place for Life.

Climate Change

		2018	2019	2020
Permits Requested		1,113	1,305	1,403
Permits Issued		992	1158	1,269
Clearances Issued		179	225	147
Request for Information Letters Issued		273	281	275
Permits to Take Water Applications		3	3	0
Appeals		18	22	8
Appeals in CA Favour		18	22	8
Violations Issued		25	38	16
Average Response Time for Permits (days)	Minor Development	9	15	16
	Major Development	12	10	17
	Alteration to Waterways	12	6	10
Number of Structures Located in Floodplain		10,000	10,000	10,000
Kilometres of Watercourses with Floodplain Mapping Completed		609	609	609
Hectares (area) digitally mapped delineating the CA Regulation Limit		38,304	38,304	38,304
Hectares (area) digitally mapped delineating the flooding hazard limit (flood plains)		38,304	38,304	38,304
Metres of shoreline protected from flooding and erosion		0	0	220m
\$ Value of Water/Infrastructure Contributions to Municipalities		10,000	0	141,000
Flood Messages / Days	Watershed Conditions	17	15 / 48 days	11/39 days
	Flood Watches	20	24 / 147 days	33/198 days
	Flood Warnings	8	12 / 25 days	16/21 days



Great Lakes

		2018	2019	2020
Water Quality Improvement Projects Implemented	Agriculture/Other (total)	30	80	75
	Detroit River Watersheds	3	7	4
	Lake Erie Watersheds	21	66	70
	Lake St. Clair Watersheds	2	7	1
Number of wells decommissioned		4	3	0
Number of landowners participating		20	16	31
Number of surface water quality monitoring stations		61	61	54
Number of ground water quality monitoring stations		8	8	8
Number of benthos monitoring stations		15	10	0



Landscapes & Habitats

	2018	2019	2020
Total Landholdings (Hectares)	1,742	1,740	1,747
Hectares of recreational land owned and managed	1056.8	1056.8	1056.8
Total hectares under forest management plans	44.39	44.39	44.39
Total Taxes for CA Landholdings	\$70,227	\$92,186	\$91,385
Land Acquisition in Reporting Year (in acres)	7	0	17
Value of acquisitions (Fair Market Value)	\$426,000	N/A	\$112,734
Total Acres of Habitat Restored	143	31	6
Number and Acres of Trees	109,105 trees 96 acres	57,560 30 acres	23,054 5 acres*
Number and Acres of Wetlands	6 wetlands 31 acres	1 wetland 0.6 acres	0
Number and Acres of Prairie	5 sites 16 acres	0	1 site 1.5 acres
Number of landowners involved in restoration	191	217	170
Trees planted by volunteers	3,259	6,217	300
Native plants planted by volunteers	1,600	30	0

*COVID-19 challenges resulted in spring projects being rescheduled until 2021.



Sustainable Communities

	2018	2019	2020
Planning Services—transactions/year	850	811	673
Kilometres of Trails owned, managed & developed	98	98	98
Number of volunteers	2,185	2,057	149
Number of outreach events	30	32	7
Number of schoolyard naturalization projects	2	1	0
ERCA hosted special events	24	22	8*
Number of schools	72	75	N/A
Number of unique education programs	256	307	37*
Number of students	9,958	14,588	N/A*
Number of public meetings/workshops	22	28	14
Day Use Visitors to JRPH (estimated)	11,910	11,625	N/A**
Day Use Visitors to HBCA (estimated)	9,600	10,800	N/A**
Number of seasonal campsites purchased	72	72	72

*While COVID-19 impacted field trips and gatherings, a number of virtual education and engagement opportunities were launched, including Earth-E Month, which reached 114,930 people and resulted in 61,243 engagements

** As fees were waived and sites unstaffed for much of the year, statistics were not collected, although parking lot census data indicated a significant surge in use.

A Strong, Resilient Organization

	2018	2019	2020
Area of CA Jurisdiction	1,681.3 km ²	1,681.3 km ²	1,681.3 km ²
Watershed Population	323,793	322,715	321,341
Staff—Permanent and Long-Term Contract	39	38	41
Staff—Special Grant and Short-Term Full-Time Equivalent Contract	12	10	2
Average Full Time Staff Length of Service	9	10	9.49
Number of Local Committees, Boards and Advisory Panels with ERCA representation	28	24	24
Number of Provincial Committees, Boards and Advisory Panels with ERCA representation	28	26	20
Number of research studies with ERCA involvement	12	7	5
Number of unique visitors to our website	65,528*	71,918	80,829
Number of Facebook followers	3,168	4,011	4,339
Number of Twitter followers	2,896	3,159	3,397
Number of Instagram followers (launched October 2016)	1,061	1,313	1,595
Number of Youtube video views	2,400 views 75 hrs	3,500 views 130.9 hrs	7,472 views 333.6 hrs

2020 Financial Review

Projected Funding by Source \$9.17M



Municipal Levies	\$3,386,667
Municipal Special Project Contributions	\$1,284,575
Self-generated Revenues and Fees	\$1,181,738
Federal Grants	\$932,310
Other / ERCF Grants	\$711,608
Internal Recoveries / Dept Chargebacks	\$650,865
Reserve Transfers	\$396,750
Provincial Special Project Grants	\$373,563
Provincial Transfer Payments (S.39 & DWSP)	\$155,417
Interest / In Kind / Sundry	\$92,247



Projected Use of Funds by Expense

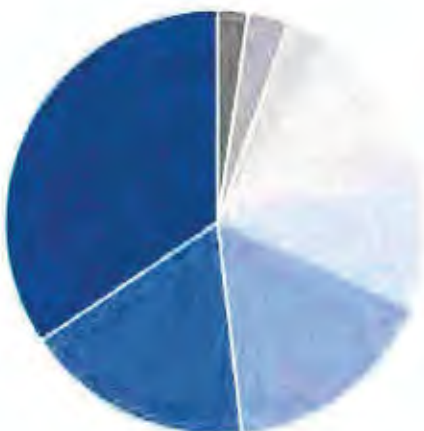
\$9.17M



Compensation	\$3,677,548
Construction & Engineering Contracts	\$2,825,850
Supplies & Materials	\$963,224
Internal Chargebacks & Recoveries	\$650,608
Rent, Taxes, & Utilities	\$297,383
Extraordinary Loss (Social Engineering)	\$292,742
Transfer to 2021 Projects	\$215,250
Insurance, Audit, Legal & Professional Services	\$189,500
Vehicle / Equipment Replacement	\$53,635

Projected Use of Funds by Function

\$9.17M



Conservation Services	\$3,151,335
Watershed Management Services	\$1,596,347
Capital Projects	\$1,502,843
Watershed Research Services	\$1,083,965
Corporate and Shared Services	\$1,009,300
Community Outreach	\$313,958
Extraordinary Loss (Social Engineering)	\$292,742
Transfer to 2021 Activities / Projects	\$215,250