



2023

BUDGET

Central Lake Ontario Conservation Authority

Approved by Auth. Res. #43/23. Dated May 15, 2023.



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History

On July 17, 1958, Central Lake Ontario Conservation Authority was established by an Order-in-Council under the *Conservation Authorities Act*. It was formed by the Ontario Government at the request of the municipalities located within the area of jurisdiction.

As watercourses transcend municipal boundaries, all Conservation Authorities are established on the basis of natural watershed boundaries. A watershed is defined as an area of land that is drained by a river or creek. Similar to the branch of a tree, creeks empty into streams, which then empty into larger streams, eventually forming one main trunk. Within this system, everything is connected to everything else. In other words, actions which take place at the top of the system can and do affect those downstream.

Today, the province's 36 Conservation Authorities are regarded as world leaders in conservation, environmental protection, and flood control. Together Authorities own more than 407,550 acres (165,000 hectares) of land, including areas in the Oak Ridges Moraine, Carolinian zone, as well as Provincially Significant Wetlands and areas protecting important flora and fauna. Conservation Authorities operate in watersheds in which 90 per cent of the provincial population reside. Managing Ontario's watershed resources is a major undertaking that calls upon Conservation Authorities and their staff to work collaboratively with landowners, developers, educators, multi levels of government, professionals, and the general public.

The Central Lake Ontario Watershed

Central Lake Ontario Conservation Authority's (CLOCA's) jurisdiction is based upon the watershed boundaries of four major watercourses draining an area of over 627 sq. km. The four major watercourses which begin with their headwaters in the Oak Ridges Moraine are from west to east Lynde Creek, Oshawa Creek, Black/ Harmony/ Farewell Creeks, and Bowmanville/ Soper Creeks. There are 17 additional watersheds which include Warbler, Cranberry, Whitby Shores, Heyden-shore, Pump House, Corbett Creek, Pringle Creek, McLaughlin Bay, Robinson Creek, Burk, Tooley, Osborne, Darlington, St. Marys, Westside, Bennett Creek and Rickard. The Municipalities within CLOCA's watershed include the Regional Municipality of Durham, City of Pickering, Town of Ajax, Township of Uxbridge, Township of Scugog, Town of Whitby, City of Oshawa, and the Municipality of Clarington.

A diverse landscape exists within CLOCA's jurisdiction which includes urban and rural settlements (hamlets), agriculture and natural areas. For the most part, the highly urbanized area is situated within the southern portion of the watershed, leaving the northern portion dominated by rural land uses and significant undeveloped natural areas.

There are three major physiographic features within CLOCA's watershed being the Lake Ontario waterfront, Lake Iroquois Beach, and the Oak Ridges Moraine. Each of these distinctive landscape features contribute to the overall ecological functions that support healthy watersheds in CLOCA's jurisdiction.

Our Watershed

Region-wide Initiatives

- Coastal Wetlands Monitoring
- Conservation Authorities
- Moraine Coalition
- Groundwater Monitoring and Assessment
- Oak Ridges Moraine Groundwater Program

Watershed-wide Initiatives

- Environmental Planning and Permitting
- Fisheries Management Plans
- Flood Forecasting and Warning System
- Natural Hazard Policy and Mapping
- Groundwater Monitoring Wells
- Natural Heritage Land Securement
- Source Water Protection
- Terrestrial and Wildlife Monitoring
- Watershed Stewardship and Restoration
- Water Quality and Stream Flow Monitoring
- Watershed Planning
- Environmental Education and Community Engagement Programs
- Conservation Areas that help maintain core natural heritage systems across the region for wildlife viewing and hiking opportunities



Mandate of Conservation Authorities

Established under the *Conservation Authorities Act R.S.O. 1990*, a Conservation Authority's mandate is to establish and undertake programs and services that further the conservation, restoration, development, and management of natural resources in watersheds.

Member Municipalities

Durham Region
Town of Ajax
Municipality of Clarington
City of Oshawa
City of Pickering
Township of Scugog
Township of Uxbridge
Town of Whitby

Watershed Population

Approximately 380,000

Our Business

- Watershed Studies
- Natural Areas Protection
- Municipal Plan Input and Review
- Natural Hazard Management
- Conservation Education
- Source Water Protection
- Floodplain/Valleyland Protection
- Land Management and Operations
- Watershed Stewardship



Our Vision

Healthy watersheds for today and tomorrow.

Our Mission

Advancing watershed health through engagement, science and conservation.

Governance

Central Lake Ontario Conservation Authority is governed by a Board of Directors comprised of Councillors from the member municipalities, and one resident member, appointed by a municipality. Through the Region of Durham each of the municipalities appoints Councillors to represent their jurisdictions. The number of representatives per municipality is determined by the population of the municipality within the watershed.

The Central Lake Ontario Conservation Authority Board of Directors meets monthly at CLOCA's Administrative office at 100 Whiting Avenue, Oshawa. The Board considers and approves all projects of the Conservation Authority and makes policy decisions related to the ongoing management, governance, and future direction of the organization.

Member Structure

2023 Board of Directors

Chair

Mayor Elizabeth Roy

Town of Whitby



Vice-Chair

Councillor Bob Chapman

City of Oshawa



Marilyn Crawford, Town of Ajax

Sami Elhajjeh, Municipality of Clarington

Bruce Garrod, Township of Uxbridge

Ron Hooper, Resident Representative

Rick Kerr, City of Oshawa

Chris Leahy, Town of Whitby

Tito-Dante Marimpietri, City of Oshawa

Ian McDougall, Township of Scugog

Rhonda Mulcahy, Town of Whitby

John Neal, City of Oshawa

David Pickles, City of Pickering

Corinna Traill, Municipality of Clarington

Steve Yamada, Town of Whitby

Human Resources

Chris Darling, Chief Administrative Officer

Directors

Rose Catulli, Corporate Services

Jamie Davidson, Watershed Planning and Natural Heritage

Chris Jones, Planning and Regulation

Perry Sisson, Engineering and Field Operations

Staff

Todd Backus, *Resource Technician – Lead Hand*

Lucy Benham, *Senior Water Resources Engineer*

Brandi Boardman, *Executive/Accounting Administrator*

Meagan Breems, *Digital Communications Associate*

Lisa-Beth Bulford, *Development Planning Lead*

Jeff Burgess, *Water Resources Engineer*

Andrew Caky, *Senior Systems Development Specialist*

Eric Cameron, *Infrastructure Planner/Enforcement Officer*

Godofredo Carpio, *Hydrogeologist*

Doris Cheng, *Development Planning Lead*

Alex Cooper, *Resource Technician – Field*

Andrew Cuning, *Financial Services Coordinator*

Ben DeWaal, *Resource Technician – Field*

Erin Dick, *Service, Information and Records Coordinator*

Karen Gaudet, *Payroll/Accounts Payable Administrator*

Cathy Grant, *Education Instructor*

Cara Gregory, *Coordinator, Conservation Education*

Breanna Hall, *Education Associate*

Lisa Hastings, *Communications Specialist*

John Hetherington, *Regulation and Provincial Offences Officer*

Dan Hope, *Conservation Lands and Education Manager*

Louie Jakupi, *Senior Water Resources Engineer*

Ian Kelsey, *Aquatic Ecologist*

Erin Kerr, *Terrestrial Biologist*

Alex Kissel, *Terrestrial Biologist*

David Krupicz, *Systems Development Specialist*

Sylwia Kubrak, *Senior GIS Specialist*

Kathy Luttrell, *Natural Heritage Ecologist*

Jason Maas, *Resource Technician - Field*

Annie Miller, *GIS Technician*

Bryan Mistak, *Senior GIS Analyst*

Dan Moore, *Aquatic Biologist*

Roy Mosher, *Restoration Coordinator*

Matthew Murphy, *Resource Technician – Field*

Serem Nejad, *Development Planner*

Heather Pankhurst, *Wetland Biologist*

Jackie Scott, *Wildlife Biologist*

Yvonne Storm, *Community Events Coordinator*

Leena Vaja, *Executive Assistant/Health and Safety Administrator*

Holly Whittington, *Environmental Engineering Technician*

Nathan Williams, *Web Application Developer*

Rod Wilmot, *Information Management and Technology Manager*

Oak Ridges Moraine Groundwater Program (ORMGP)

Mike Doughty, *Intermediate Hydrogeologist*

Richard Gerber, *Senior Hydrogeologist*

Steve Holysh, *Senior Hydrogeologist*

Mason Marchildon, *Integrated Groundwater*

Management Engineer

Britt Smith, *Groundwater Management Analyst*

Budget Presentation

The Budget format is organized into Central Lake Ontario Conservation Authority's (CLOCA's) Program Units. Each unit is intended to reflect all associated (direct and measurable) costs and revenues.

Watershed Management and Health Monitoring

Program costs and revenues required to develop and implement the watershed management framework and associated strategies that guide a responsible approach to natural systems protection, restoration, and use. Also included in this unit is the operation and maintenance of the flood forecasting system, watershed planning, monitoring and restoration programs, a number of restoration projects across the watershed supported by federal, provincial and other partner grants, and capital projects that include watershed action plans, source protection planning, various groundwater studies and research and a number of provincial grant contracts administered by CLOCA. Our Stewardship programs focus on public and private lands, contributing to improving watershed health and function.

Oak Ridges Moraine Groundwater Program (ORMGP)

As part of an ongoing contribution, CLOCA administers a number of contracts on behalf of a partnership of five municipalities (the Regions of Durham, Peel, York and recently Halton, as well as the City of Toronto) and 10 Conservation Authorities (the nine Conservation Authorities that formerly constituted the Oak Ridges Moraine-focused Conservation Authorities Moraine Coalition, plus Conservation Halton (beginning in 2021)). Five staff for this initiative are housed in rental offices within the Toronto and Region Conservation Authority's office.

Environmental Plan Review and Regulation Services

Program costs and revenues associated with the provision of plan input to municipalities for development applications. Plan input includes the review and analysis of planning applications as these applications may impact on natural hazards and water resources, as well as reviews of project studies under the *Environmental Assessment Act* in relation to natural hazards and water resources. Included in this unit are updates to floodplain mapping and the ongoing identification and associated data management for natural hazards. The Program also includes the implementation of *Ontario Regulation 42/06 (Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses)*, compliance, enforcement, and prosecutions, which are required in order to ensure the integrity of the Authority's natural hazards management program under the *Conservation Authorities Act* and the regulations made thereunder. Finally, this program unit includes the development and maintenance of policy and procedural directions for efficient and effective environmental plan review and regulation services, as well as developing policy responses to related provincial directions.

Community Engagement

Stewardship, Outreach and Education programs include the direct costs, revenues and partnerships associated with the development and delivery of a suite of environmental programs that broaden CLOCA's relationships with the community. Outreach events like the Annual Purple Woods Maple Syrup Festival and seasonal hikes allow us to showcase our Conservation Areas and establish partnerships with the community. Our education programs target Grades 1 to 12, incorporating curriculum-learning outcomes to ensure we are relevant to the four school boards we service.

Land Management

Program costs and revenues associated with assets owned or managed by CLOCA and provide greenspace for residents of Durham Region. Also includes land acquisition and development of Conservation Areas, land management planning and special projects in Conservation Areas.

Corporate Services

Corporate Services includes corporate communications, management and non-direct program specific costs, governance, head office operations, audit, legal, human resources, health and safety and the costs of GIS/IT support, Information Management Systems, and the continuous improvement of the Enterprise GIS for the dissemination, integration, and analysis of data throughout the organization. Our corporate communication products include managing an active website and ongoing creation and updating of printed, electronic, social media and Conservation Area signage.

Vehicles and Equipment

Costs and revenues associated with new acquisitions and the operation of the motor pool, and equipment required for the on-going work of CLOCA. Internal charges are made to the various projects and programs for the use of vehicles and equipment.



Budget Assumptions

1

Wages and Benefits

- As approved by Board of Directors on November 16, 2021.

2

Regional Operating Levy

- As approved by Durham Region Council on March 29, 2023.

3

Ministry of Natural Resources and Forestry (MNR) Transfer Payments

- MNR transfer payments for natural hazard management reported in the budget continue to reflect the 50 per cent reduction in payments which took effect in 2019.

4

Ontario Government Funding

- Will continue the Source Water Protection initiative.

5

User Fees

- CLOCA fees for administration, plan review and regulation, community outreach and Conservation Areas/facility fees are based on a fee schedule approved by the Board of Directors on November 23, 2022.

6

Miscellaneous

- CLOCA supports the Oak Ridges Moraine Groundwater Program across the Greater Toronto Area (GTA) by providing payroll and administrative services.
- CLOCA utilizes government employment grants wherever feasible.



**Central Lake Ontario Conservation Authority
Consolidated Statement of Operations**

Revenue	2023 Budget	2022 Budget	2022 Actual	2021 Actual
General Levy	4,380,990	4,274,135	4,274,135	4,169,890
Municipal Special Levy	819,500	930,000	881,467	405,269
MNRF Transfer Payment	64,445	64,445	64,445	64,445
Federal Grants	189,065	73,100	118,130	88,712
Provincial Grants	50,000	150,000	176,182	35,000
Other Revenue	804,300	1,097,860	1,239,503	1,109,064
Other Grants	-	50,000	51,000	50,000
Reserve Transfer	207,565	(70,460)	(65,679)	(16,877)
Deferred Revenue	37,000	-	54,758	(45,729)
Interest Earned	131,775	20,850	119,342	14,443
Administrative Services	50,000	44,750	44,750	40,847
Environmental Plan Review & Regulation Services				
Plan Review Fees	1,000,000	925,000	898,007	789,904
Regulations 42/06 Permit	425,000	425,000	508,018	502,885
Property Inquiry Fee	30,000	30,000	29,260	44,095
Map Sales	10,000	10,000	12,010	10,420
Community Engagement				
Education Fees	50,000	66,000	7,553	500
Maple Syrup Tours	7,000	-	-	-
Admission Fees - Purple Woods Maple Syrup Festival	72,000	-	-	-
Maple Syrup Sales	45,000	13,300	13,335	-
Maple Syrup Sales - Office	4,000	7,000	4,291	8,756
Product Sales	18,000	4,170	4,202	1,049
CLOCA Days Pancake Sales	52,185	-	-	-
Land Management				
Pay & Display	157,000	226,000	169,313	305,090
Seasons Passes	100,000	75,000	101,546	99,145
Donations	109,600	113,000	62,440	94,226
Property Rental	72,085	71,640	72,566	84,712
Facility Rental Fees	29,000	-	26,526	1,156
Commercial Rent Signs	7,200	7,200	7,233	7,235
Rental Recovery	156,850	137,250	147,312	114,856
Oak Ridges Moraine Groundwater Program				
Federal Grant			5,000	
Other Revenue	875,000	875,000	897,400	875,035
Website/Portal Access Fee HST Included	80,000	60,000	77,184	79,740
Deferred Revenue	49,850		(87,410)	(105,890)
Interest Earned	3,300		1,095	253
	10,087,710	9,680,240	9,914,915	8,828,230

Cost and Expenditures	2023 Budget	2022 Budget	2022 Actual	2021 Actual
Salaries, Wages & Benefits				
Salary & Wages	4,967,800	4,597,150	4,551,391	4,375,865
Wages -PWMSF	15,000	-	-	-
Wages Summer Student Program	171,900	104,100	112,279	31,689
Benefits	1,335,700	1,247,815	1,163,744	1,162,627
Future Benefit Expense	3,300	-	-	-
Members Per Diems	8,500	8,500	7,400	7,950
Administration				
Office Supplies/Postage/Promotion	7,265	7,970	8,612	5,578
Staff Mileage	9,550	12,800	4,623	5,760
Administration Expense	50,000	44,750	44,750	40,000
Course Registration	56,600	44,200	26,639	10,749
Publications & Subscriptions	53,080	36,750	42,834	25,302
Printing	3,500	5,000	2,657	1,684
Software	91,100	85,825	87,473	88,232
Services	802,645	571,865	531,722	705,444
Cellular	20,100	16,570	19,287	16,382
Travel	5,450	4,605	3,858	1,677
Payroll Processing Fees	8,700	7,600	8,202	7,237
Legal Fees	175,000	95,000	239,484	92,894
Audit Fees	44,500	32,000	39,633	30,413
Bank Service Charges	23,350	24,600	23,754	25,679
Insurance	168,845	168,545	168,260	129,330
Donation	20,000	400	200	600
Materials & Supplies	147,725	314,900	222,598	241,355
Water Quality Testing	36,700	36,700	30,029	25,536
Uniform Purchases	8,700	7,100	6,642	7,509
Consultant	-	-	-	204
Conservation Ontario Levy	35,550	34,160	34,059	33,606
Utilities				
Telephone	15,750	15,875	14,903	14,690
Hydro	34,700	33,200	27,996	24,402
Alarm	4,175	4,175	4,576	3,953
Water	4,000	4,600	3,885	3,840
Gas	14,500	12,500	11,993	9,102
Property Taxes	63,150	53,885	52,534	38,546
Land Management				
Pay & Display Software Monitoring Fees	6,550	6,000	6,482	5,953
Equipment Rental	14,000	15,100	14,382	13,994
Capital Assets/Equipment	641,040	546,110	664,234	932,996
Small Tools	2,000	2,000	2,260	501
Land Acquisition	745,000	1,180,000	1,184,070	-
Vehicles & Equipment				
Vehicle Purchases	-	75,000	74,039	69,175
Vehicle Rental	9,000	5,500	5,755	-
Fuel	44,215	41,100	38,404	30,112
Licence	2,250	2,240	2,163	2,163
Vehicle Recovery	144,600	125,000	138,238	105,940
Equipment Recovery	12,250	12,250	9,062	8,915
Other				
Office Services (Rent-ORMGP)	16,600	16,600	16,600	16,540
Transportation (GW Festival)	7,500	15,500	-	-
Purchases for Resale (PWMS Festival)	14,000	3,500	3,175	764
Bulk for Resale (PWMS Festival)	7,570	1,200	(680)	1,656
Pancake Group Expenses	14,300	-	-	-
	10,087,710	9,680,240	9,654,200	8,356,550
Surplus(Deficit) from Operations	(0)	(0)	260,713	471,680

Watershed Management and Health Monitoring

Program Operations

Program Operations provides comprehensive watershed health monitoring, watershed planning, and watershed management programs and service that support the development and implementation of overarching strategies for natural heritage system protection, restoration, and use. Staff with expertise in the fields of environmental engineering, ecology, hydrogeology, aquatics, wetland and wildlife biology, and forestry facilitate the development of programs and plans that prepare our watersheds and communities for anticipated future changes in the jurisdiction and address present day needs, issues, and opportunities in a responsible and relevant fashion.

The organization accomplishes its watershed management objectives through respectful consultation and partnership with stakeholders and all levels of government, providing input into the protection and responsible management of natural heritage features, developing planning tools to protect and grow the natural heritage system and protect and understand the water resource system, undertaking a long-term annual monitoring program that assesses changes in watershed health over time, and maintaining current and historical datasets for terrestrial, aquatic, wetland, and wildlife resources.

Low water and base flow surveys are building on an existing information base to ensure the best information is available. Monitoring, data collection and analysis enables trends to be documented and characterized, and indicators of watershed health to be assessed on an ongoing basis.

OTHER PROGRAMS

Water Monitoring Network/Forecasting/Flood Warning

The Central Lake Ontario Conservation Authority's Water Monitoring Network is a collection of stream gauges, rain gauges, air and water temperature probes, groundwater monitoring wells, snow measurement sites and surface water and groundwater quality sites. This Water Monitoring Network and the valuable information collected from it, helps us better understand and predict the impacts of land use activities on water. This knowledge allows us to make informed decisions about the management and protection of our water resource system. Central Lake Ontario Conservation Authority partners with Water Survey Canada and the Ontario Ministry of Natural Resources and Forestry for the flood forecasting and warning program and the Ministry of the Environment, Conservation and Parks for the Provincial Water Quality Monitoring Network and Provincial Groundwater Monitoring Network to reduce duplication and offset program costs. The data is catalogued and analyzed to help us develop effective watershed-wide management programs and policies like the Flood Forecasting and Warning System, Low Water Response and Source Water Protection.

Each year we review the location of monitoring equipment and its effectiveness in recording the required data and replace outdated and inoperable equipment. Staff from the Engineering and IT/GIS departments also continue to advance several projects related to the flood forecasting and warning program. These projects are improving the automation of data retrieval from the gaugestations, data management, and reporting.

In 2019, CLOCA joined the Eastern Conservation Authorities Hub and gained access to the WISKI database for water monitoring data. This system is used provincially and provides efficient and consistent data retrieval and storage of information from our stream and precipitation gauges, groundwater wells, and stream water quality program.

Related information including gauge data and floodplain information is also being made more accessible to staff, municipal partners, and the general public through improvements to CLOCA's Web products. Early Warning Systems are in place and will send email alerts to appropriate staff to advise of significant rainfall or water levels nearing flood conditions at various gauging stations, and the public are invited to subscribe to our flood forecasting and warning program and receive direct messages.

Hazard Studies, Hazard Mapping and the National Disaster Mitigation Program

Between 2019 and 2022, CLOCA received funding through the National Disaster Mitigation Program (NDMP) to complete floodplain mapping, flood risk assessments, Lake Ontario shoreline hazard master plan and risk assessment, and flood warning system improvements. Although the NDMP program is now finished, CLOCA has been accepted for grant funding through the new federal Flood Hazard Information and Mapping Program for floodplain mapping study of the Lynde Creek. The current Lynde Creek floodplain mapping has become outdated with the multiple stream crossings of the Highway 407, Highway 412, Highway 401 changes and improvements, Victoria Street crossing, and significant urban development in the watershed. The grant will provide CLOCA with 50 per cent of the project cost

Central Lake Ontario Conservation Authority will also be working with the Municipality of Clarington to complete a flood study for portions of the Robinson and Tooley Creek watersheds. The floodplains of these watersheds are complicated by railway and highway crossings that create flood spill zones. Detailed modelling will be required to determine the most appropriate flood limits and regulation limits for future development applications.

Integrated Watershed Monitoring Program

Central Lake Ontario Conservation Authority's Integrated Watershed Monitoring Program focuses on key indicators of watershed health and provides critical information for many CLOCA programs including natural hazard management, watershed planning, Conservation Area management, restoration and stewardship, education, and communication.

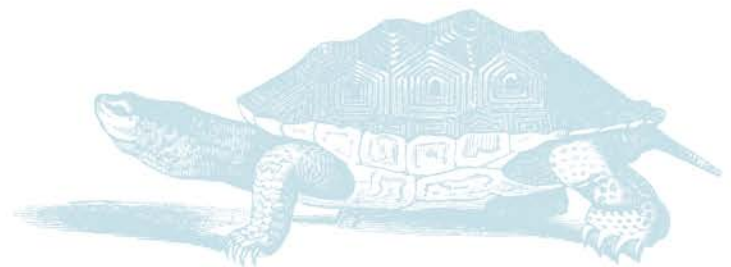
Long-term annual monitoring enables CLOCA to identify changes, whether incidental or persistent, in the quality and condition of the health of the watershed. Monitoring results are analyzed annually, with updates and historical data made accessible to the public through the Watershed Monitoring StoryMap on CLOCA's website. The StoryMap provides an excellent overview of watershed health in an easy to digest format by presenting complex monitoring results in a multimedia format that uses maps, text and images.

The year 2023 marks five years since the redesigned Integrated Watershed Monitoring Program was initiated. Work is underway to complete a five-year review of the program to ensure that indicators and monitoring efforts are still adequately answer the key question of "How is watershed health changing over time?"

Water quality and aquatic monitoring includes benthos sampling using the Ontario Benthos Bio-monitoring Network (OBBN) protocol, fish sampling in accordance with the Ontario Stream Assessment Protocol, seine netting, spring and fall spawning surveys, identification and inventory of in-stream barriers, and the collection of temperature data using portable temperature loggers to evaluate in-stream thermal regime. This monitoring is expected to continue at full capacity in 2023.

The turtle monitoring project initiated in 2019 will continue in 2023 as resources allow. This multi-year project will provide greater detail regarding the presence and absence of these species at risk across CLOCA's jurisdiction. Data collected through this program will enable CLOCA to assess population trajectories of Painted and Snapping Turtles in particular. This work may also provide insight into movement patterns and population characteristics, survivorship, sex ratios, and range sizes of turtles. The outcome of this monitoring will be the development of management strategies, where possible, that will help local turtle populations persist and thrive within CLOCA's jurisdiction.

Other supplemental monitoring will be undertaken throughout the jurisdiction as opportunities allow. Bird, amphibian, forest, and other terrestrial monitoring also provide indications of watershed health and are also integral to the CLOCA Integrated Watershed Monitoring Program. Long-term monitoring of these conservation targets will continue through 2023. As in past years, work will also continue with invasive species monitoring and programming throughout the jurisdiction, with an emphasis on conducting invasive species management projects within CLOCA Conservation Areas. This invasive species management work is one example of monitoring informing watershed planning, which in turn results in the implementation of projects that work to directly improve watershed health.



Provincial Groundwater Monitoring Network

Groundwater well monitoring equipment is checked regularly to ensure proper functioning and data is collected, reviewed, and analyzed quarterly providing input to the ORMGP shared database as well as the provincial online database. Through the ORMGP-CAMC (Conservation Authorities Moraine Coalition) municipal/Conservation Authority initiative, the data is available to the regional staff and support both municipal Works and Health departments groundwater analyses and programs. Data from monitoring wells support groundwater characterization and water budget modelling activities. Processed data are also provided to the Region in response to private citizen inquiries.

Central Lake Ontario Conservation Authority currently maintains 15 wells under the Provincial Groundwater Monitoring Network (PGMN).

These monitoring wells provide continuous water level data recorded hourly by the installed level loggers.

Water quality samples are also collected and analyzed annually from these wells. These analyses were conducted twice a year since the start of the program in 2002 until 2010. In 2011, with this established solid baseline, water quality sampling shifted to once a year. Provincial Groundwater Monitoring Network wells have over 15 years of water level and quality records.

The Ministry of the Environment, Conservation and Parks (MECP) is working to make groundwater data records more accessible and is moving to a standard provincial (WISKI) database that will be accessible to the Conservation Authority partners and the public.

In 2023, MECP will provide CLOCA with telemetry equipment for one well monitoring site. This technology will allow for remote retrieval of water level data and more accessible data monitoring.

Durham Region Coastal Wetland Monitoring Program

Long-term monitoring of 18 coastal wetlands across Durham Region will continue in 2023 at full capacity. The program is coordinated and implemented by CLOCA; however, a range of stakeholders, including Environment and Climate Change Canada, neighbouring Conservation Authorities and local volunteers assist with some aspects of the data collection. The information and data gained through monitoring of these wetlands provides valuable information to assess watershed and coastal wetland health in Durham Region. This monitoring program provides feedback on restoration and management actions undertaken, like the work at Cranberry Marsh and Second Marsh, and provides significant data from which projects such as the McLaughlin Bay Restoration Strategy, Lynde Shores and Bowmanville Marsh restoration plans rely upon.

To continue the momentum in this program work, CLOCA is collaborating with Federal and Provincial ministries and other stakeholders to develop management strategies for a number of these coastal wetlands, and it is expected that community consultation will likely be a major component of the 2023 work plan for these planning documents.

These reports document and synthesize monitoring information collected to date, providing an assessment of wetland health to help direct future management recommendations.

Watershed Planning

Central Lake Ontario Conservation Authority's Watershed Plans for Lynde Creek, Oshawa Creek, Black / Harmony / Farewell Creeks, and Bowmanville / Soper Creeks were updated, and Board approved in 2020. These updated plans recognize the recent urban, rural and natural environment conditions present in the watershed, consider potential future growth, planning policy requirements, climate change and present specific recommendations to protect CLOCA's natural watershed resources.

The updated watershed plans are being used by CLOCA, municipalities, planning authorities, agencies, and other stakeholders as a definitive tool to guide decisions concerning the effective management of watershed resources in response to a changing environment. As part of these updates, CLOCA implemented a refined, science-based framework for watershed planning. This framework provides a systematic, comprehensive, and consistent process that links actions to results and ultimate outcomes.

Work towards implementation of Watershed Plan recommendations will continue through 2023 with the initiation, completion, or update of a number of Watershed Action Plans, including Wildlife Corridor Protection and Enhancement Plan, Restoration Prioritization Tool, implementation of a restoration and stewardship program across the jurisdiction, and a Natural Heritage System Climate Change Vulnerability Assessment among others.

Staff will also initiate the development of a Watershed-Based Resource Management Strategy, a Land Inventory, and a Conservation Area Strategy. These three documents must be developed by all Conservation Authorities prior to the end of 2024, as required by the recently updated *Conservation Authorities Act* and associated regulations.

Source Water Protection Plans

The Source Water Protection (SWP) initiative commenced in 2005, following recommendations made by Justice O'Connor after the Walkerton drinkingwater tragedy in May 2000. Conservation Authorities received funding from the Province of Ontario to complete technical Assessment Reports (ARs) and a SWP Plan based on the findings presented in the AR.

The Central Lake Ontario Source Protection Authority's (CLOSPA) AR was completed and approved by the Province in November of 2011. Work on the SWP Plan started in 2011 and included several rounds of consultation with municipalities and various affected stakeholders. The Source Protection Plan (SPP) was approved by the Ministry of Environment and Climate Change on August 14, 2015 and took effect on December 31, 2015.

The SPP consists of several policies to manage or eliminate significant threats to drinking water sources that were identified in the provincially approved Assessment Reports. Staff of the Credit Valley, Toronto and Region, Central Lake Source Protection Region (CTCSPR) have been working with member municipalities since 2012, consulting on the plan and holding workshops and meetings to assist with the understanding and implementation of the plan.

The CTC and CLOSPA staff will continue during the implementation period to work with municipal and other personnel to ensure they fully understand their responsibilities under the SPP and to provide support and tools, as necessary. The CTC and CLOSPA staff will continue their work on the CTC SPR Data Portal with the migration of content from Toronto and Region Source Protection Authority to CLOCA's cloud-based content management system.

The portal will provide a centralized location to house, search and retrieve all of the CTC SPR's related documents, reports, correspondence, and spatial information. In addition, the portal will provide mapping and access to metadata and spatial information.

Climate Change

Central Lake Ontario Conservation Authority is working on several fronts to advance our scientific and adaptation knowledge with respect to climate change. In keeping with recommendations and actions identified through the watershed plan review and update process, CLOCA will be taking a more detailed examination of the impacts of climate change on watershed processes, including identifying climate change adaptation practices that will help lessen these impacts.

In partnership with Durham Region, CLOCA has been working in a leadership capacity with the flooding and natural heritage sector to advance climate change adaptation work identified in Towards Resilience. This work includes understanding and using the results generated through the updated climate change ensemble model for Durham Region, incorporation of climate change considerations into municipal and regional plans, policies, and operational plans, and initiating the development of a climate resilient natural heritage system by understanding climate impacts on natural features and functions and addressing them accordingly.

Central Lake Ontario Conservation Authority and the Region of Durham continue to work with University of Toronto to research the impact of climate change on rainfall and design parameters for stormwater infrastructure and floodplain mapping.

A report with research findings and recommendations for incorporating climate change into our business will be provided in 2023. Central Lake Ontario Conservation Authority staff also continue to participate on provincial initiatives to modernize guidance for both riverine floodplain mapping and shoreline hazard mapping. Incorporating climate change into hazard determination is an important component of the provincial guide updates.

Central Lake Ontario Conservation Authority will be working closely with Durham Region and other partners to ensure the updated modelling information will inform climate change-related programs throughout 2023 and into the future.



Oshawa Second Marsh Management Planning and Implementation

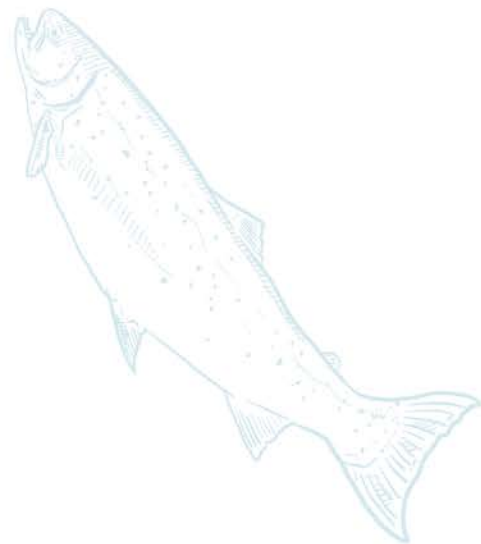
Central Lake Ontario Conservation Authority, as a member of the Second Marsh Steering Committee, continues to provide input and guidance into the management of Oshawa Second Marsh by drawing on its intimate knowledge of the marsh that comes from its annual monitoring and the extensive data sets generated through the Durham Region Coastal Wetland Monitoring Program. Central Lake Ontario Conservation Authority staff will also support, and guide restoration activities developed through the steering committee.

Watershed Restoration Program: Planning and Implementation

Central Lake Ontario Conservation Authority uses a range of tools and frameworks developed through the watershed planning process to support strategic prioritization of restoration opportunities across its jurisdiction (the CLOCA Natural Heritage System, Restoration Prioritization Plan Mapping Tool, Wildlife Corridor Protection and Enhancement Plan, Conservation Area management plans, etc.) and ensure restoration projects are designed and implemented in such a way that they achieve measurable gains in watershed health (the Conservation and Restoration Planning Framework).

With these and other important tools and strategies guiding decision making CLOCA will be working to further build its restoration program through 2023. Building on successful implementation of restoration projects on both private lands and CLOCA conservation lands in 2022, CLOCA will be looking to further enhance its suite of program offerings in 2023 with the addition of other service categories to its Stewardship and Restoration Program guidelines, and is working with municipal partners and other stakeholders to identify restoration sites within the urban environment that enhance the resilience of our watersheds and communities to climate change.

Staff are constantly seeking additional external funding sources to help with the implementation of these other service categories so that the financial burden on private and government landowners is minimized. Central Lake Ontario Conservation Authority will continue to support efforts to increase forest cover throughout the jurisdiction, and already is aiming to coordinate the planting of 20,000 trees on private properties in the spring of 2023. It is expected that uptake by private landowners for this and other types of stewardship will continue to grow with dedicated marketing and communications in 2023 and beyond.



Durham Region – Conservation Authority Collaborative: Tree Planting Program

Central Lake Ontario Conservation Authority has continued to work closely with five Durham Region Conservation Authorities and the Region of Durham to deliver a coordinated and consistent tree-planting program across the Region with a goal to increase the number of trees being planted on both public and private lands through to 2024. This program is an example of climate action being achieved through the implementation of nature-based solutions, and assists both the Region and Conservation Authorities efforts to achieve climate change adaptation and watershed health goals and objectives. Funding support for landowner outreach, marketing and communications is being provided in part by the Region, with the remainder of funding being sought from external partners. The full suite of marketing and communications tools developed by the collaborative through the project have been put to work by all partners, and are generating new relationships with interested landowners and new planting projects.

Funding for the tree-planting component of the program will continue to be sought by the Conservation Authorities through existing programs, including those delivered by Forests Ontario, Trees for Life, and other tree-planting funders.

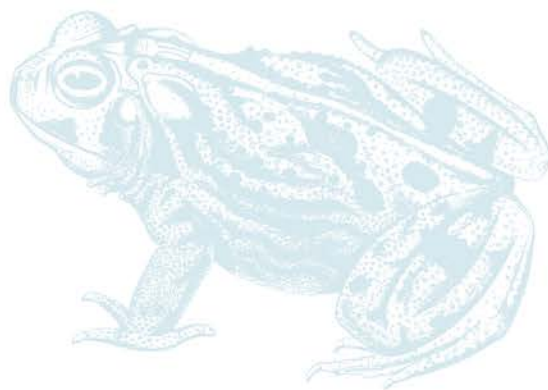
Stewardship

RBC SMART Watersheds

Funded by RBC's Tech for Nature program, CLOCA's enhancing our existing water monitoring program, creating a technology-based ecosystem in areas of our watershed that we require more data information. The program has enhanced our data collection, providing more defensible information to guide our decisions around water quality and quantity.

In 2021, CLOCA implemented year two of the program, establishing nine creek monitoring stations within the designated community hubs. All monitoring stations are located in areas with suitable public access infrastructure. All creek monitoring stations are integrated in the SMART Watersheds Portal for visualization and data entry. In 2022, CLOCA worked with our municipal partners to facilitate public access and signage and aim to have this completed in 2023. The nine water quality monitoring kits are ready for deployment and pilot community engagement program once public access has been facilitated.

As part of the program, a total of six weather stations were installed within the community hubs and the data is available through the SMART Watersheds Portal. The Weather Watch program was launched on CLOCA's website, and a full complement of pilot community engagement activities were developed and delivered in 2021. Program funding will continue into 2022 and 2023.



Well Decommissioning Program

Central Lake Ontario Conservation Authority re-introduced the Well Decommissioning Program in 2017, providing technical and financial assistance to landowners in our jurisdiction. An abandoned well can allow for surface runoff to flow directly to local and regional aquifers, potentially carrying organic waste, fertilizers, chemical residues including pesticides and petroleum products to groundwater. Uptake for this program has been limited to date; however with the private land stewardship program generating more contacts with landowners in the jurisdiction, we anticipate more opportunities to offer and promote this program.

Clarington Trees for Rural Roads

The Clarington Trees for Rural Roads program has planted more than 8,000 trees along rural roads in the municipality since it began in 2012. The program has many benefits aside from improving the aesthetics of the rural countryside, it increases tree canopy and provides wildlife habitat.

We continued to partner with the Municipality of Clarington in 2022 to deliver this program with the Ganaraska Conservation Authority. In 2022, CLOCA approved 18 projects. Landowner pick-up returned to in person in 2022 following pandemic restrictions over the last couple of years. Applications from eligible landowners are now being accepted for the 2023 program.

Forest Tending and Management

Central Lake Ontario Conservation Authority staff completed a review and update of CLOCA's Managed Forest Plan in 2020. The updated plan was approved by the Ministry of Natural Resources and Forestry and guides the management of these forested lands until 2030, while also providing a 75 per cent reduction in property taxes for approved parcels.

Forest management activities on CLOCA lands can include invasive species control, plantation management (competition control, infill planting, scheduled timber harvest and improvement cuts), hazard tree removal, and wildlife habitat establishment among others. This program, and the associated property tax break, is also available to eligible private landowners. CLOCA has developed a new fee-based service to help landowners develop a managed forest plan and submit a MFTIP application to the MNRF. Several landowners benefited from this service in 2022, and staff are in discussions with several more landowners in 2023.

Invasive Species Management

Central Lake Ontario Conservation Authority continues to implement its Invasive Species Management Strategy within our conservation land holdings and in partnership with municipalities and stakeholders. With a focus on prevention, detection, response and management, the 2023 work plan will:

- continue implementing the Roger's Tract Invasive Species Management Plan; continue managing, monitoring, and mapping invasive species at Conservation Areas according to priority;
- continue to implement pilot projects in partnership with watershed stakeholders as opportunities align with funding and priority invasive species; and,
- continue to participate in virtual or in-person outreach initiatives to develop more community engagement and communication products for enhancing invasive species awareness.

Watershed Management

	2023 Budget	2022 Budget	2022 Actual	2021 Actual
Revenue				
General Levy	998,280	1,059,885	912,191	899,300
Municipal Special Levy	260,000	150,000	112,386	50,269
Grants/Transfer Payments				
MNRF Transfer Payment	28,500	28,500	28,500	28,500
Federal Grants	148,565	14,700	111,462	80,450
Provincial Grants	50,000	-	-	-
Other Grants	-	50,000	50,000	50,000
Self-Generated				
Other Revenue	211,400	218,010	353,299	223,875
Deferred Revenue	37,000	-	(1,978)	(62,634)
Donations				12,500
	1,733,745	1,521,095	1,565,860	1,282,260

	2023 Budget	2022 Budget	2022 Actual	2021 Actual
Cost and Expenditures				
Salaries & Wages	823,500	851,550	880,934	804,540
Wages - Summer Student Program	100,200	75,100	70,975	11,597
Benefits	227,700	230,800	232,098	212,654
Operating Expenses				
Travel	1,400	1,950	904	191
Staff Mileage	2,250	3,000	1,046	1,337
Course Registration	6,000	5,500	3,370	1,146
Postage	200	200	1,048	367
Materials & Supplies	31,950	41,500	24,308	23,512
Publications & Subscriptions	10,680	4,050	13,435	576
Software	20,400	18,550	17,381	14,865
Services	344,145	124,600	110,300	124,758
Cellular	7,230	4,360	6,776	6,245
Uniform Purchases	2,300	2,000	1,270	-
Telephone	2,100	2,100	1,840	1,790
Insurance	1,350	1,125	1,123	965
Water Sample Testing	36,000	36,000	29,970	25,005
Equipment Purchases	76,840	86,110	134,420	37,700
Fuel	1,600	1,000	1,485	-
Vehicle Rental	9,000	5,500	5,755	-
Vehicle Recovery	28,900	26,100	27,424	15,012
	1,733,745	1,521,095	1,565,860	1,282,260

Oak Ridges Moraine Groundwater Program (ORMGP)

As part of an ongoing contribution, CLOCA administers a number of contracts on behalf of a partnership of five municipalities (the Regions of Durham, Peel, York and recently Halton, as well as the City of Toronto) and 10 Conservation Authorities (the nine Conservation Authorities that formerly constituted the Oak Ridges Moraine focused Conservation Authorities Moraine Coalition, plus Conservation Halton (beginning in 2021). Five staff for this initiative are housed in rental offices within the Toronto and Region Conservation Authority's office.

ORM Groundwater Study

This 22-year long partnership between the Regions of Durham, York, Peel, the City of Toronto, and their associated Conservation Authorities continues to provide technical hydrogeological support to the 15 agencies partnered in the program, as well as some 20 consulting firms that have signed agreements with ORMGP.

In 2023, work will continue on a number of initiatives related to one of the four current program areas: 1) database, 2) geology, 3) modelling, and/or 4) website. The following reflect some of the new/ongoing initiatives for 2023:

- Continue to provide technical expertise to the partner agencies as requested.
- Increasing the metadata available on the website to give users more background information on how different products on the website were produced.
- Generate additional training opportunities, both through video links and in-person sessions.
- Continued growth of the program database with incorporation of new boreholes and temporal data (water levels, pumping, chemistry, climate data, streamflow data).
- Continued development of the Delft Forecasting and Early Warning System (FEWS), allowing for more effective storage and use of large grid-based data.
- Expansion of the Dynamic Database Snapshot maps for posting on website – these will provide dynamic maps of specific data exports that can be viewed offline and explored for valuable insights into the flow systems across the study area (e.g., summary of baseflow analyses for SW stations in the study area).
- Finalization, of the Oak Ridges focused Groundwater eBook as the only Canadian contribution to an international effort to make groundwater knowledge more accessible on the Internet.
- Continued work on the Areas of Concern mapping with work scheduled for Whitchurch-Stouffville and Uxbridge.

- Continued improvement in the program website with:
 - new/updated mapping (e.g., updated water budget mapping using the Delft-FEWS system; mapping of losing and gaining stream reaches, integrated planning focused mapping, groundwater variability mapping);
 - continued additions of consultant borehole logs as accessible PDF files; and,
 - improvement of analysis tools (e.g., work continues on improving hydrograph analyses; improved chemistry data graphing, linking groundwater levels to climate and pumping records, characterizing / grouping monitoring locations in terms of their hydrogeological setting and water level responses).
- Work on incorporating temporal data to Halton Region and other municipal wells.
- Continue the adjustments and re-interpretation of the geology and hydrogeology across the ORMGP study area by incorporating new data and updated information from external studies (e.g., Ontario Geological Survey study in Simcoe County).
- Collection and incorporation of geotechnical and hydrogeological reports and associated high-quality data across the program study area.
- Increase awareness of the program's website with an aim of attracting new partnerships with consultants and other smaller municipalities to foster greater use of the program's data and information.



ORMGP - Oak Ridges Moraine Groundwater Program

Revenue	2023 Budget	2022 Budget	2022 Actual	2021 Actual
Federal Grants	-	-	5,000	-
Provincial Grants	-	-	-	35,000
Other Revenue	875,000	875,000	897,401	875,035
Deferred Revenue	49,850	-	(87,410)	(105,890)
Interest Earned	3,300	-	1,095	255
Website/Portal Access Fee	80,000	60,000	77,184	79,740
	1,008,150	935,000	893,270	884,140

Cost and Expenditures	2023 Budget	2022 Budget	2022 Actual	2021 Actual
Salaries & Wages	641,000	614,000	593,449	597,988
Benefits	144,300	143,000	143,086	148,427
Future Benefit Expense	3,300	-	-	-
Staff Mileage	2,000	2,000	1,113	1,155
Administration Expense	20,000	17,000	17,000	15,000
Course Registration	15,000	3,000	283	1,172
Postage	-	35	-	27
Materials & Supplies	-	-	430	462
Publications & Subscriptions	4,000	4,000	4,743	4,069
Software	35,000	35,000	31,725	34,577
Services	84,000	60,000	54,327	20,190
Fuel	4,000	4,000	1,534	1,204
Telephone	3,500	3,500	3,053	3,055
Cellular	3,500	3,500	4,024	2,843
Travel	2,000	-	824	358
Insurance	3,200	4,000	3,667	3,504
Audit Fees	5,000	4,000	4,000	3,600
Bank Service Charges	500	225	854	204
Licence	250	240	-	-
Payroll Processing Fees	1,000	900	793	837
Office Services	16,600	16,600	16,600	16,540
Equipment Purchases	20,000	20,000	11,764	28,928
	1,008,150	935,000	893,270	884,140

Environmental Plan Review and Regulation Services

Program Operations - Municipal Plan Review

The purpose is to promote CLOCA's watershed resource management interests through the provision of technical analysis and comments on land-use planning proposals, development applications, and public infrastructure projects.

Complementary work includes the continuous review and updating of natural hazard limits associated with flood plains, stream erosion, steep slopes, meander belts and Lake Ontario shoreline including associated planning and procedural policy directions.

2023 Program:

- Renewing the partnership with the Region of Durham and other watershed municipalities to provide Plan review advice on watershed management, and natural hazard planning and the implementation of the 'One-Window' MOU with the Ministry of Municipal Affairs and Housing regarding hazard lands in response to *Bill 23*.
- Provide policy input and commentary in relation to the anticipated changes to the *Provincial Policy Statement*, the *Growth Plan for the Greater Golden Horseshoe* and draft implementing regulations anticipated from the province.
- Consistent with previous years, it is anticipated that CLOCA will review and provide comments on over 200 planning applications and supporting technical reports of various scales and locations.

- Implementation of the updated Fee Schedule for Planning Services including efficient revenue collection and alignment of service needs with staff capacity to maintain quality of service.
- Subject to the timing of provincial policy changes, update CLOCA's Policy and Procedural Document for Regulation and Plan Review to update policy directions, streamline and add clarity wherever possible.
- CLOCA staff will continue to support watershed and partner interests through working groups/committees with municipal and development representatives dealing with Official Plan reviews, Master Environmental Servicing Plans, sub-watershed planning, storm water management and environmental issues, including but not limited to:
 - Municipality of Clarington - Clarington Comprehensive Zoning By-law review and Secondary Plans.
 - City of Oshawa - Northwood Planning Area, Kedron Planning Area, and Columbus Sub-watershed Study and Part II Planning Study.
 - Town of Whitby - Brooklin Secondary Plan and Implementing Servicing and subdivision plans.
 - Region of Durham Official Plan Update and Provincial Plan Conformity.

- Integrate climate change considerations into day-to-day review of development applications with an emphasis on promoting resilience through effective flood control, thermal mitigation, and low-impact development stormwater management techniques, landscape design for vegetation protection zones and stream corridor enhancement opportunities.
- Ensure timely responses for application review in line with Conservation Ontario guidelines and assess performance against Strategic Plan Implementation performance measures while building staff capacity.
- Transition archived planning files to electronic format accessible through CLOCA's electronic records management platform.

- On-going review and maintenance of guidelines to provide consistent standards for the administration of Conservation Authority's Regulation, *Ontario Regulation 42/06*.
- Support implementation of the finalized Provincial Excess Soil Management Framework regulations including liaison with municipal planning and engineering staff.

Program Operations - Regulations

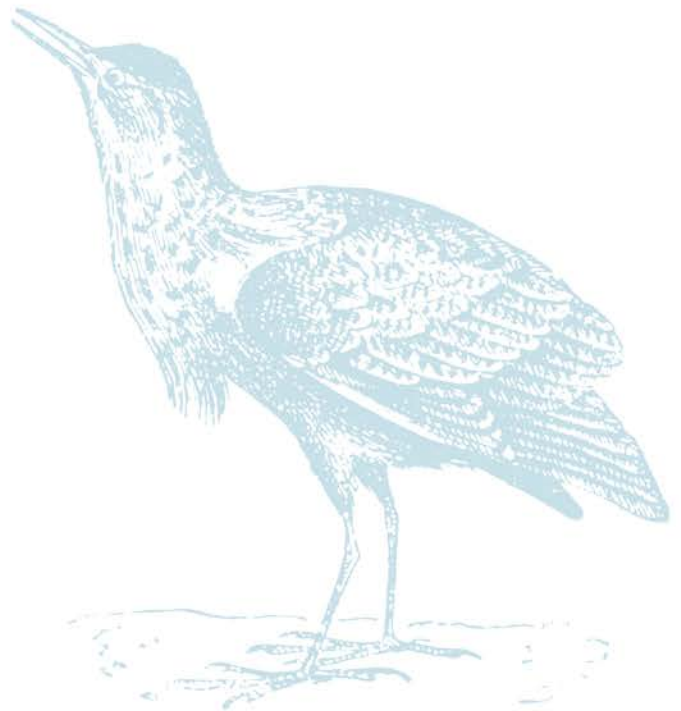
The Regulations program is designed to protect both the public and property from flood and erosion hazards as well as wetlands and watercourses through the review and permitting of applications for Development, Interference with Wetlands and Alterations to Shorelines and Watercourses (*Conservation Authorities Act - Ontario Regulation 42/06*).

2023 Program:

- Provide policy input and commentary in relation to the anticipated changes to the *Section 28* development regulation from the province.
- Consistent with previous years, it is anticipated that CLOCA will review and make decisions on over 200 permit applications.
- Implementation of the updated Fee Schedule for Regulation Services including efficient revenue collection.
- On-going enforcement and court appearances.

Studies

Central Lake Ontario Conservation Authority will continue to review and provide comments on a number of special studies and environmental assessments for proposed infrastructure within our watershed to ensure protection of natural resources and address natural hazards.



Environmental Plan Review & Regulation Services

	2023 Budget	2022 Budget	2022 Actual	2021 Actual
Revenue				
General Levy	623,140	369,640	382,815	277,380
Grants/Transfer Payments				
MNRF Transfer Payment	25,000	25,000	25,000	25,000
Map Sales	10,000	10,000	12,010	10,420
Property Inquiry Fee	30,000	30,000	29,260	44,095
Regulations 42/06 Permit	425,000	425,000	508,018	502,885
Plan Review Fees	1,000,000	925,000	898,007	789,905
	2,113,140	1,784,640	1,855,110	1,649,685

	2023 Budget	2022 Budget	2022 Actual	2021 Actual
Cost and Expenditures				
Salaries & Benefits				
Salaries & Wages	1,449,300	1,232,000	1,207,370	1,165,157
Benefits	388,200	344,000	296,052	325,844
Office Administration				
Travel	500	500	-	20
Staff Mileage	3,300	5,500	1,698	2,287
Course Registration	4,000	4,000	890	554
Postage	-	-	16	183
Materials & Supplies	600	600	925	31
Publications & Subscriptions	10,000	12,000	4,179	5,761
Software	4,000	4,000	3,931	4,870
Services	3,000	500	5,006	9,686
Uniform Purchases	1,000	1,000	808	-
Cellular	1,640	1,640	1,704	1,518
Insurance	67,100	72,400	72,360	47,702
Legal Fees	160,000	80,000	233,720	70,960
Bank Service Charges	10,000	10,000	9,616	8,789
Equipment Purchases	10,000	10,000	16,672	6,290
Vehicle Recovery	500	6,500	162	33
	2,113,140	1,784,640	1,855,110	1,649,685

Community Engagement

Education

For the past 34 years, CLOCA has delivered formal and informal education programs to ensure environmental literacy for students and CLOCA's watershed community.

In Your Watershed

Central Lake Ontario Conservation Authority's suite of innovative, hands-on, curriculum-based education programs inform and raise awareness about the value of healthy watersheds, educating diverse audiences from Grades K-12 about CLOCA. Central Lake Ontario Conservation Authority services the Durham, Durham Catholic, Peterborough Victoria Northumberland, Clarington Catholic and Kawartha Pine Ridge District School Boards, various Montessori schools, private schools, home-school families and some Toronto District School Board schools. We were happy to begin offering in-person field trips again in the Fall of 2022, in addition to our 'In Your Backyard' program and were pleased to have reached over 600 students. The option of virtual programs remains available for teachers and students in the virtual classroom.

Spring 2023 programming will see the addition of several new primary/junior curriculum-based programs related to watershed health. We will also be introducing Specialist High School Major Certification programs for a \$35 per student fee. The construction of a nature-based, free-play space at Enniskillen Conservation Area was completed in the Fall of 2022 and is available for teachers to book for their visiting class.

Bring Back the Salmon

Central Lake Ontario Conservation Authority initiated a program with Ontario Power Generation (OPG) to deliver the Stream of Dreams program to schools within our watershed. After a programming pause due to the pandemic, CLOCA's education team is moving forward with this program in partnership with OPG and the Ontario Federation of Anglers and Hunters (OFAH) for the Bring Back the Salmon Program. Conservation education staff will be delivering the Stream of Dreams program to a Grade 5/6 class from Central Public School in Bowmanville and will also be partnering to help with activities on the day of the salmon release into the Bowmanville Creek.

Durham Children's Watershed Festival

The Region of Durham continues as the Festival Event Sponsor in 2023, providing core funding to cover operational costs associated with delivery since 2014. This program is returning to its usual format as a week-long festival at Camp Samac for Grade 4 students. It will be held in the Spring this year, instead of the Fall, and will run from May 29 to June 2, 2023. Funding was secured in 2021 to incorporate Indigenous teachings, programs, and story-telling that will continued to be offered in person in 2023.

Summer Programs

Since 2016, the YMCA of Greater Toronto has delivered a summer camp from the Education Centre at Enniskillen Conservation Area. The camp operates for nine weeks during July and August. Revenues generated through this program assist CLOCA in maintaining and upgrading the building and the facility.

Community Engagement

Conservation Area Trail Stewards (CATS)

The Conservation Area Trail Stewardship (CATS) Program was initiated at Lynde Shores Conservation Area in 2020, with 11 volunteers completing their onsite and online training. Since then, it has expanded to include all eight of our Conservation areas with 50 new CATS volunteers in the Fall of 2021, and intakes offered again in the Fall of 2022. The program has been steadily increasing in popularity and provides us with 'eyes and ears' in our Conservation Areas often when they are at their busiest.

Conservation Areas' Library Program

The Conservation Areas' Library Program initiated in 2018 continued to expand in 2021 with the development of Back2Nature backpack kits, complete with wildlife and plant identification guides, and snowshoes to add to the borrowing programs in Whitby, Oshawa, and Clarington. This complements the free parking passes currently offered by these same libraries. CLOCA also continues to deliver StoryWalks™ in our Conservation Areas in partnership with local libraries.

A Weather Watch and Water Watch citizen science program was created in 2022 and will be delivered in 2023, to engage volunteers in collecting data on water quality and actively take an interest in local weather conditions as part of an effort to prepare our community in adapting to climate change. Central Lake Ontario Conservation Authority's Conservation Education staff gave an interactive presentation on the importance of wetlands in your watershed and the many animals and plants that they provide a home for. Participants enjoyed a close up and personal and/or hands-on experience with our two education animals; a Midland Painted Turtle and an Eastern Garter Snake.

Hemlock Woolly Adelgid Awareness and Engagement Workshop (Dec. 3, 2022 and Jan. 19, 2023)

With support from the Invasive Species Centre through their Invasive Species Microgrant, CLOCA was able to raise public awareness of an invasive insect threatening Ontario's forests; the Hemlock Woolly Adelgid. The workshop was split into two parts, an in-person event and a virtual event. There were 17 community members registered for this event.

Evening Snowshoe (February 17, 2023)

This event provided members of the local community the opportunity to experience snowshoeing on the trails of Enniskillen Conservation Area at night, guided by candlelight. Those who did not have their own snowshoes, had the opportunity to borrow a pair from CLOCA.

Purple Woods Maple Syrup Festival and Sugar Bush

The Purple Woods Maple Syrup Festival returned to an 'in-person' event and ran in March/April 2023. The Heritage Store was open once again for the purchase of CLOCA's fresh maple syrup and maple syrup products. Wagon Rides, maple taffy, traditional Indigenous methods and CLOCA's methods of sugar-making and a pioneer station were just a few of the stops enjoyed by participants. Registration for the maple syrup education program was welcomed back and quickly sold out.



Community Engagement

	2023 Budget	2022 Budget	2022 Actual	2021 Actual
Revenue				
General Levy	207,975	321,865	465,600	453,490
General Levy - Children's Watershed Festival	56,570	55,190	55,190	53,845
Deferred Revenue	-	-	(22,866)	16,905
Donations				2,550
Donations - Children's Watershed Festival	30,000	40,000	-	29,175
Self-Generated Revenue				
Education Fees	50,000	66,000	7,553	500
Maple Syrup Tours	7,000	-	-	-
Admission/PWMSF	72,000	-	-	-
Maple Syrup Sales	45,000	13,300	13,335	-
Maple Syrup Sales - Office	4,000	7,000	4,291	8,756
Pancake Sales	19,600	-	2,438	-
Product Sales/PWMSF	18,000	4,170	4,168	1,049
CLOCA Days Pancake Sales	52,185	-	-	-
Other Revenue	-	-	20,305	9,430
Other Grants	-	-	1,000	-
Administrative Services	-	-	-	850
	562,330	507,525	551,015	576,550

	2023 Budget	2022 Budget	2022 Actual	2021 Actual
Cost and Expenditures				
Salaries & Wages	317,000	318,500	380,710	401,460
Wages - Purple Woods Maple Syrup Festival	15,000	-	-	-
Benefits	81,700	92,500	101,279	114,645
Office Administration				
Office Supplies/Postage/Printing	75	100	220	175
Materials & Supplies	1,350	6,700	15,213	30,335
Staff Mileage	400	600	-	35
Uniform Purchases	-	500	643	-
Promotion	165	100	2,262	380
Travel	-	100	70	15
Cellular	540	550	347	475
Publications & Subscriptions	200	2,850	5,692	2,581
Equipment/Capital Assets	1,450	-	2,180	1,490
Services	12,850	850	9,613	3,739
Donation	19,600	-	-	-
Software	-	500	73	500
Course Registration	1,000	1,100	1,780	55
Insurance	580	1,255	-	980
Bank Service Charges	-	-	35	865
Vehicle/Equipment Recovery	1,500	7,400	1,513	3,165
Purple Woods Maple Syrup Festival	54,920	17,100	17,885	5,975
Durham Children's Watershed Festival	54,000	56,820	11,500	9,680
	562,330	507,525	551,015	576,550

Land Management

Central Lake Ontario Conservation Authority owns over 2,700 hectares of land within its watershed jurisdiction that includes valley lands, provincially significant wetlands, natural areas, forests, as well as flood plain lands. The natural value of these properties, and the public investment in these lands, is protected through CLOCA's Land Management Program.

Program Operations

Program operational costs include inspections following CLOCA's Conservation Areas Risk Management Policy; facility repair, trail maintenance, and hazard tree work required to maintain public infrastructure for eight public Conservation Areas and 45 kilometers of trail. Inspections and hazard tree management will continue for all public use portions of our landholdings.

Conservation Area Development

In 2023, Conservation Area development will focus on replacement of failing washroom facilities at Enniskillen Conservation Area and Long Sault Conservation Area.

Hazard tree removal and trail restoration will also continue at Long Sault Conservation Area, where extensive forest wind damage has necessitated trail closures.

Roger's Tract Culvert Replacement and Wetland Naturalization Project

Part of the Crow's Pass Conservation Area land assembly, the Rogers Tract is located within the extreme headwaters of the Nonquon River watershed. The cold-water tributaries on this property support sensitive aquatic species like Brook Trout. Starting in 2020, CLOCA has been systematically completing a series of fish passage improvement and naturalization projects around the property.

Staff worked with Ducks Unlimited Canada (DUC) to complete a wetland naturalization project on the Roger's Tract in 2022. This property includes a rare and provincially significant bog and fen wetland. The project resulted in the removal of a water-level control structure and associated berm that was installed by DUC in partnership with the previous owners of the property approximately 25 years ago. Wetland monitoring data collected by CLOCA over the last several years suggests the wetland's health is being compromised by the water-level control.

The goal of the project was to restore natural hydrology to the wetland feature, restore fish passage to the wetland, and reduce negative thermal impacts to the downstream cold-water tributary. This project was funded wholly by DUC with provincial grants; however, CLOCA supplied significant technical support and guidance to ensure the project goals were met within the appropriate construction timing windows. Post construction monitoring in 2023 and beyond will determine if additional restoration work is required in this wetland feature.

The main driveway into the Rogers Tract provides access to the two rental houses on the property and is the primary entrance for the maintenance activities that are carried out across the rest of the property. This driveway has deteriorated in recent years and is now at its end of life. The driveway will be resurfaced in 2023 to ensure good access to the property and its tenants. Ongoing upkeep of the rental houses will be considered in 2023, subject to budget availability.

Invasive species monitoring and some control work will be continued through 2023. Invasive species control within plantations will continue in 2023 to ensure aggressive species are kept in check following the 2021 forest management work.

Property Management

Costs and revenues associated with ownership of land or buildings, taxes, insurance, maintenance and servicing of landholdings and facilities.

Acquisition Opportunities

Central Lake Ontario Conservation Authority continues to pursue land acquisition opportunities and funding opportunities in accordance with CLOCA's Land Acquisition Strategy, with an emphasis on implementing the Lake Iroquois Beach Securement Strategy and completing acquisition in important gaps within our Conservation Areas.

In 2022, CLOCA acquired a 102-acre property contiguous with Stephen's Gulch Conservation Area. Staff successfully secured over 50 per cent of the acquisition costs through federal grants, with most remaining costs being approved for funding through the Region of Durham. Staff also initiated the acquisition of another parcel contiguous with Long Sault Conservation Area in the fall of 2022. Fifty per cent of the acquisition costs have been secured from Environment Climate Change Canada, with the remaining funds approved being approved by Region of Durham from their Greenspace Acquisition reserve and from CLOCA's acquisitions reserve. This parcel is expected to close in March 2023.

Purple Woods

The Derecho windstorm of May 2022 caused extensive damage to the Purple Woods forest and maple syrup infrastructure, and a significant effort was made to restore the system for operation before the 2023 Maple Syrup Festival. The Maple Syrup Festival facilities have been greatly improved over recent years, and staff continue to replace and extend the tap lines with modern collection tubing in the sugar maple bush.

Storoshchuk Restoration

Restoration of the abandoned aggregate pit on the Storoshchuk Tract in Enniskillen Conservation Area will continue throughout 2023. The purpose of this restoration project is to restore the valley wall and return the terrain to its original form, eliminating the hazards associated with the eroding slopes, improving vegetation communities and habitat connectivity. This work will continue to be undertaken by a local contractor and monitored by CLOCA.

Conservation Area Strategy Development

Central Lake Ontario Conservation Authority's lands support and help to sustain Durham Region's critical natural resources including water, aquatic, terrestrial and wildlife habitats. These are the same areas that Durham residents visit to enjoy and experience nature.

Continued increases in population will result in an increase in the number of visitors to CLOCA's Conservation Areas. The infrastructure and development necessary to support this growth will significantly impact our watershed resources. As such, CLOCA must be confident that our Conservation Areas adequately protect the Region's critical natural resources and that these areas can continue to provide appropriate recreational and educational needs. Central Lake Ontario Conservation Authority staff have been working on development of a Conservation Area Strategy. This Plan will provide general guidance to current and future decisions with respect to land needs and management needs for the next 50 years and guidance to the preparation of individual Conservation Area management plans.

While this Conservation Area planning process was initiated a few years ago, its development was temporarily paused in anticipation of changes to the Conservation Authorities Act and associated regulations. Development of a Conservation Area Strategy and a Land Inventory are now mandatory requirements for all Conservation Authorities by the end of 2024, and so CLOCA's process is being reorganized and aligned to comply with these requirements.



CA Land Management

Revenue	2023 Budget	2022 Budget	2022 Actual	2021 Actual
General Levy	712,915	753,720	666,785	574,653
Municipal Special Levy	529,500	740,000	729,081	315,000
Other Grants Federal	6,300	56,300	4,568	8,262
Other Grants Provincial	-	150,000	176,182	-
Other Revenue	492,500	811,150	771,721	796,795
Reserve Transfer	207,565	(70,460)	13,021	(16,877)
Deferred Revenue	-	-	79,600	-
Interest Earned	7,635	850	2,440	515
Pay & Display	157,000	226,000	169,313	305,090
Seasons Passes	100,000	75,000	101,546	99,146
Donations	60,000	73,000	60,000	50,000
Property Rental	72,085	71,640	72,566	84,712
Facility Rental Fees	29,000	-	26,459	1,156
Commercial Rent Signs	7,200	7,200	7,233	7,233
	2,381,700	2,894,400	2,880,515	2,225,685

Cost and Expenditures	2023 Budget	2022 Budget	2022 Actual	2021 Actual
Salaries & Wages	536,600	559,800	508,473	498,827
Wages - Summer Student Program	41,700	29,000	41,304	20,091
Benefits	151,000	158,700	136,514	137,014
Staff Mileage	250	700	532	841
Administration Expense	30,000	27,750	27,750	25,000
Course Registration	4,000	4,000	2,089	-
Postage	-	-	15	107
Materials & Supplies	84,225	234,300	151,064	175,572
Publications & Subscriptions	600	600	52	196
Software	-	1,775	-	1,771
Services	165,950	210,915	238,608	458,014
Water Sample Testing	700	700	59	532
Uniform Purchases	3,500	2,500	3,468	-
Telephone	1,850	1,775	1,804	1,643
Hydro	14,700	13,200	12,170	9,257
Alarm	1,375	1,375	1,365	1,178
Gas	7,000	6,000	5,105	3,684
Cellular	3,850	3,600	3,803	2,713
Travel	700	700	1,659	906
Property Taxes	54,650	47,885	44,510	35,269
Insurance	15,450	14,250	14,206	11,828
Audit Fees	3,500	2,000	3,049	2,579
Bank Service Charges	9,850	9,225	10,286	10,988
Land Acquisition	745,000	1,180,000	1,184,070	-
Permit/Approval Fees	-	-	300	-
Pay & Display Software Monitoring	6,550	6,000	6,482	5,953
Equipment	381,250	292,500	368,489	727,281
Equipment Rental	-	100	380	-
Vehicle Recovery	106,700	74,300	104,136	85,958
Equipment Recovery	10,750	10,750	8,772	8,485
	2,381,700	2,894,400	2,880,515	2,225,686

Vehicles and Equipment

Usage of CLOCA vehicles and equipment are charged back to projects and programs at a rate intended to cover the cost of operations.

Electric Vehicle Charging Stations

Central Lake Ontario Conservation Authority is participating with the Region of Durham and have received approval from Natural Resources Canada for grant funding for the installation of electrical vehicle charging stations at the CLOCA main office. The Zero Emission Vehicle Infrastructure Program will fund 50 per cent of the cost, with CLOCA proposing to install charging stations for the corporate fleet in the garage and vehicle compound.

Vehicles and Equipment				
	2023 Budget	2022 Budget	2022 Actual	2021 Actual
Revenue				
General Levy	(38,650)	62,400	40,335	60,710
Municipal Special Levy	30,000	-	-	-
Federal Grants	30,000	-	-	-
Other Revenue	-	-	4,070	-
Rental Recovery	156,850	137,250	147,312	114,855
	178,200	199,650	191,717	175,565
Cost and Expenditures				
Salaries & Wages	5,400	11,500	5,668	9,440
Benefits	1,600	3,400	1,625	2,632
Materials & Supplies	3,300	3,300	1,828	2,069
Services	27,000	27,000	28,717	22,626
Fuel	38,500	36,000	35,386	28,908
Small Tools	2,000	2,000	2,242	500
Insurance	21,900	21,750	21,855	21,880
Licence	2,000	2,000	1,663	1,664
Equipment Purchases	75,000	15,000	17,534	14,888
Vehicle Purchases	-	75,000	74,039	69,175
Vehicle Recovery	1,500	2,700	1,161	1,783
	178,200	199,650	191,717	175,565

Corporate Services

Program Operations

Corporate Services includes general direction, coordination, and implementation of all approved CLOCA programs and policies, member services, governance, financial management and reporting, budgets, corporate records, Geomatics and Information Management Systems, health and safety, human resources, payroll and administration support for all programs.

Governance

With the recent changes to the Conservation Authorities Act and associated regulations, in 2022 staff will be making some procedural changes to increase transparency and accountability such as posting of additional information on our website, changes to our budgetary procedural, amendments to our Administrative Procedural By-law and submitting quarterly progress reports to the Ministry of Environment, Conservation and Parks.

Desktop Hardware and Software Upgrades and Maintenance

This includes the costs for ongoing licensing of software and the purchase of hardware to replace aging/outdated components.

Server/Network Infrastructure Upgrades and Maintenance

Central Lake Ontario Conservation Authority has a heavy operational dependency on Information Technology, including Wide and Local Area Networks (WANs and LANs), database servers, Intranet, Internet, and email. The potential loss of operational control of essential IT services has the potential to have a negative impact on the flow of information

and data that staff, and stakeholders depend on daily. Central Lake Ontario Conservation Authority will continue work on the development and implementation of its hybrid cloud business continuity plan to lay the foundation for future expansion of the information technology infrastructure. In 2023, specific network infrastructure and licensing acquisitions are planned to secure the availability of all applications and services to users.

Conservation Authority's Application Development Shared Services Agreement

Central Lake Ontario Conservation Authority, along with Conservation Halton, Mississippi Valley, Ganaraska Region, Kawartha Region and Otonabee Region Conservation Authorities have implemented a coordinated shared services application development program. Central Lake Ontario Conservation Authority has been acting as the lead agency providing planning, development, operation, and maintenance support for the Conservation Authority Content Management System (CACMS), Reference Library, Vehicle Bookings, and their future applications. The shared services agreement helps to standardize application development and business processes amongst the participating Conservation Authorities and ensure sustainability. In 2023, Saugeen Valley Conservation Authority will be onboarding into the system.

Central Lake Ontario Conservation Authority Data Portal

Central Lake Ontario Conservation Authority will continue its work on the data portal and tool development for staff, partners, and the public to provide a gateway for exploring and retrieving information about CLOCA's watersheds.

This portal directs you to various interactive mapping, reporting and data download tools to help partners and the public find the information they need.

The data portal leverages the information stored in the Water Information System and CLOCA's spatial data repository.

Central Lake Ontario Conservation Authority's Open Data community is where users can explore and download data, use, and build innovative apps to solve important local issues, and analyze information to share with the community.

Migration to Water Information System (WISKI)

Continuation to enhance CLOCA's water and climate monitoring system (WISKI) to gain efficiencies in data collection, manipulation, and interpretation. The system will continue to expand to incorporate other business areas to facilitate data maintenance, analysis, and dissemination of CLOCA's monitoring information network. Central Lake Ontario Conservation Authority is participating in the Ontario Job Creation Partnership program in 2023 to help augment staff resources and assist in the migration to the WISKI platform.

Office Environmental Monitoring

Central Lake Ontario Conservation Authority continues to work through environmental site monitoring and risk assessments for contaminated land surrounding the administration office. An Environmental Risk Assessment is being completed over a period of three years to satisfy both the *Environmental Protection Act* and the Public Sector Accounting requirements.

Corporate Communications

This includes the operating costs associated with communications, to ensure the public and partners are informed about CLOCA's programs and services.

Central Lake Ontario Conservation's 2023 communications' products continue to build media relations, marketing CLOCA's corporate services, accomplishments and new products; developing Conservation Area signage; design and production of corporate publications, brochures, reports, and fact sheets; producing the CLOCA Annual Report; maintaining and updating CLOCA's website; social media postings; developing new online services; servicing the communication needs of all CLOCA departments with branding, editing and publication services; supporting external community environmentally themed programs and projects with partners and stakeholders.

In 2023 a focus will be on developing a Conservation Areas' guide, combining all current guides into one resource (print and digital); updating CLOCA's Conservation Areas' kiosk signage panels, trail markers and trailheads in compliance with AODA requirements. The kiosk panels will feature updated, easy-to-read trail maps, which can also be found on the Avenza Maps app—where users can download trail maps of CLOCA's Conservation Areas (at no cost). Once downloaded, these maps can be used offline and will track visitors' location on the trails using their device's GPS. Offline location helps visitors stay on track, on the trail, and out of restricted areas.

In 2023, CLOCA will have finalized and launched an updated corporate website, brought into AODA compliance to ensure CLOCA resources and corporate information are accessible to all.

Seasonal e-Newsletter

Central Lake Ontario Conservation Authority continued to deliver the quarterly e-newsletter for each season to an opted-in database of over 4,000 individuals. The e-newsletters are well received and offer CLOCA another tool to engage a broad audience in showcasing the work CLOCA performs across all departments.

Main Office Capital Improvements

Engineering and Operations Gate Repair

Gates for the vehicle compound will be altered to provide greater gate spans and improve access for vehicles.

Exterior Lighting

Central Lake Ontario Conservation Authority will replace an aged parking lot security light on a deteriorating wood pole with energy efficient security lighting for the office and parking area.

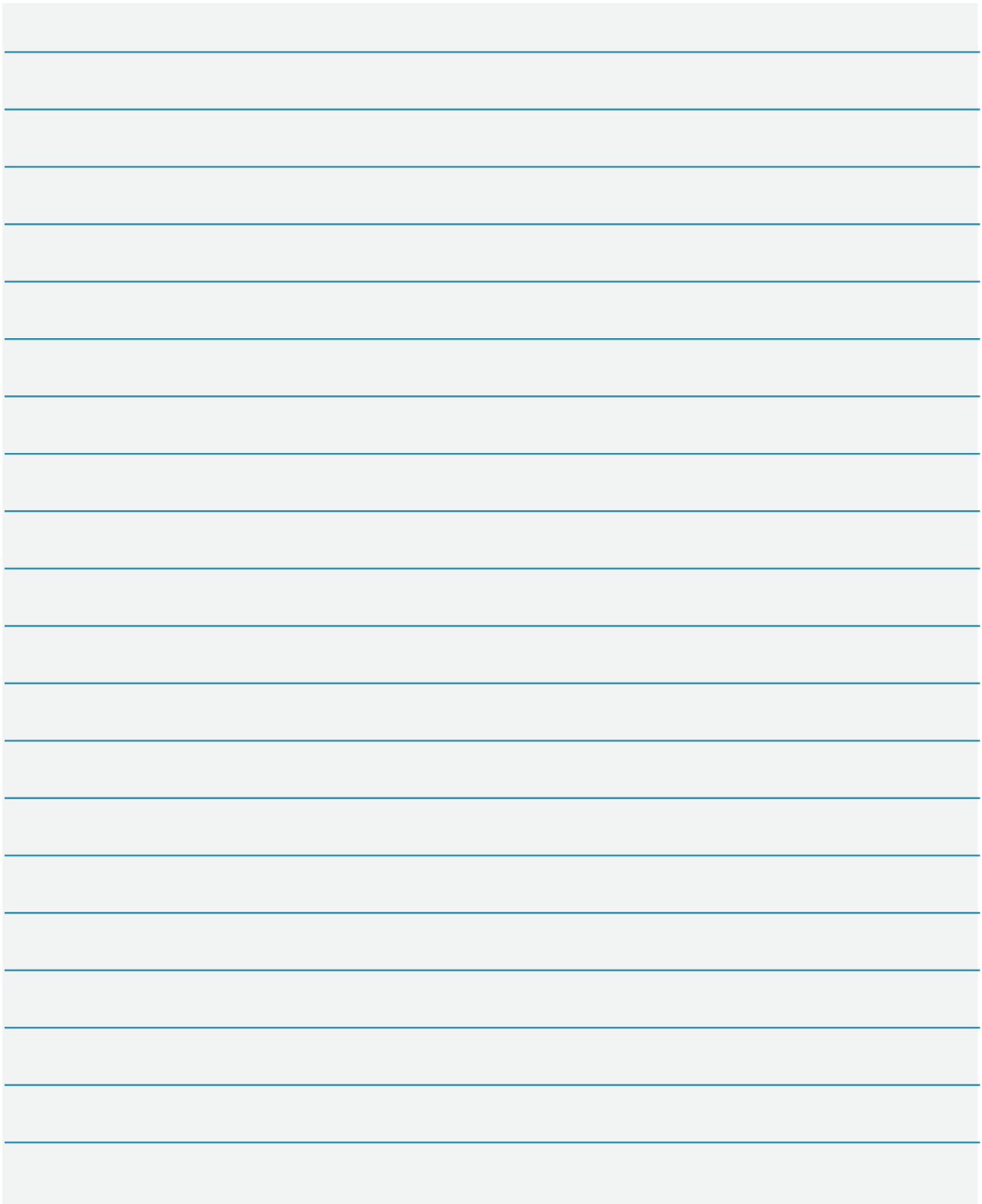


Corporate Services

Revenue	2023 Budget	2022 Budget	2022 Actual	2021 Actual
General Levy	1,820,760	1,651,435	1,411,694	1,378,830
Municipal Special Levy	-	40,000	40,000	40,000
MNRFF Transfer Payment	10,945	10,945	10,945	10,945
Other Grants Federal	4,200	2,100	2,100	
Other Revenue	100,400	68,700	90,209	78,962
Interest Earned	124,140	20,000	116,902	13,928
Administrative Services	50,000	44,750	44,750	40,000
	2,110,445	1,837,930	1,716,600	1,562,665

Cost and Expenditures	2023 Budget	2022 Budget	2022 Actual	2021 Actual
Salaries & Wages	1,225,000	1,009,800	974,786	898,450
Benefits	341,200	275,415	252,978	221,411
Members Per Diems	8,500	8,500	7,400	7,950
Office Supplies	2,000	4,785	1,534	2,125
Postage	3,000	2,525	2,847	2,628
Printing	3,500	5,000	2,438	1,520
Promotion	1,800	225	407	(245)
Uniform Purchases	1,900	1,100	452	7,509
Travel	2,200	2,355	634	292
Cellular	3,120	2,700	2,514	2,589
Course Registration	26,500	26,500	18,090	7,557
Bank Service Charges	2,000	5,000	1,898	4,833
Payroll Processing Fees	7,700	6,700	7,409	6,400
Publications & Subscriptions	24,400	12,900	13,905	11,371
Services	121,500	113,000	81,546	58,095
Materials & Supplies	17,700	17,200	13,345	6,805
Equipment Rental	14,000	15,000	14,002	13,994
Capital Assets/Equipment	75,000	116,000	113,196	116,417
Property Taxes	8,500	6,000	8,024	3,276
Utilities	42,600	42,400	38,017	35,383
Insurance	58,175	53,765	53,794	42,363
Legal Fees	15,000	15,000	5,763	21,934
Audit Fees	36,000	26,000	32,585	24,233
Software	31,700	26,000	34,364	31,646
Donation	400	400	200	100
Vehicle/Equipment Recovery	1,500	9,500	413	422
Conservation Ontario Levy	35,550	34,160	34,059	33,606
	2,110,445	1,837,930	1,716,600	1,562,665

Notations



A vertical rectangular area with a light gray background and horizontal blue lines, resembling a notepad or a form for taking notes. The lines are evenly spaced and extend across the width of the area.



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