

Central Lake Ontario Conservation 2018 Budget



Approved by Auth. Res. #49/18, dated May 15, 2018



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History

On July 17, 1958, Central Lake Ontario Conservation 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

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 3 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.



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Welcome



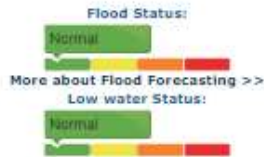
Conservation Board Agendas & Minutes

Volunteers Needed
Ontario BioBlitz
May 11, 12 & 13
Heber Down CA



Public Festival
May 12 (11am - 5pm)
Info & Registration
ontariobioblitz.ca

Central Lake Ontario Conservation Authority was established in 1958. Our mandate is to establish and undertake programs to promote the conservation, restoration, development and management of natural resources in partnership with local Municipalities and the Province.



* Accessibility Standards

LATEST NEWS

Follow Us!



- Employment Opportunity**
Water Resources Engineer
(PDF)
- Info: Port Darlington**
Shoreline & Flood Damage
Centre Study
- New Publication**
CLOCA
- 2017 Year In Review** (pdf)

Visit our 60th anniversary webpage for more events!

SHOWCASE

2018 Watershed Report Cards

New Conservation Watershed Report Cards Reveal Stressed Conditions In Our Watersheds. [\(News Release PDF\)](#)

Central Lake Ontario Conservation's Watershed Report Card



Help Plant A Wildflower Meadow!

Sat., May 5th
9:00am to Noon
Heber Down CA
(5000 Cochrane St. Entrance)

Register & Details!



Available Online!

CLOCA Conservation Areas Annual Parking Pass

For only \$80 a year (tax inc.) enjoy the conservation areas within CLOCA. All proceeds go back into the CA's. *(Air freshener not included.)*



Are you In a CLOCA Regulated Area?

Use our [regulation area search tool](#) to find out!



"Healthy watersheds for today and tomorrow."



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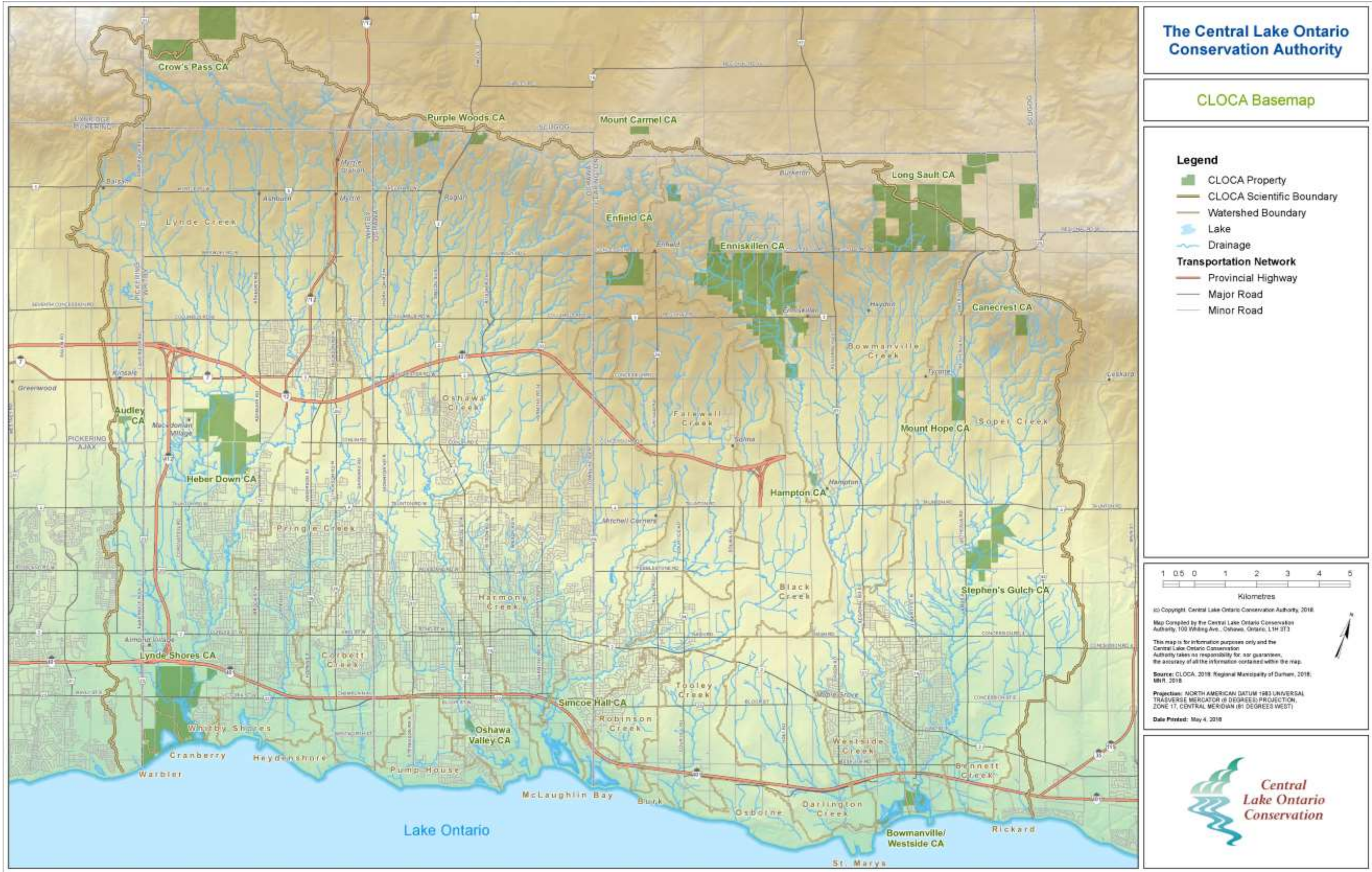
CLOCA Watershed Map

Region-Wide Initiatives

- Coastal Wetlands Monitoring
- Conservation Authorities Moraine Coalition
- Groundwater Strategy/Groundwater Monitoring and Assessment
- YPDT Groundwater Program

Watershed-Wide Initiatives

- Environmental Planning & Permitting
- Fisheries Management Plans
- Flood Forecasting and Warning System
- Natural Hazard Policy & Mapping
- Groundwater Monitoring Wells
- Natural Heritage Land Securement
- Source Water Protection
- Terrestrial & Wildlife Monitoring
- Watershed Stewardship
- Water Quality & Stream Flow Monitoring
- Watershed Planning
- Environmental Education & Community Outreach Programs
- Conservation Areas for Wildlife Viewing and Hiking Opportunities



Mandate of Conservation Authorities

Established under the Conservation Authorities Act R.S.O. 1990, a CA's mandate is to establish and undertake programs designed to further the conservation, restoration, development and management of natural resources.

Member Municipalities

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

CLOCA Watershed

Population

Approximately 368,000

Our Business is

Watershed Studies
Natural Areas Protection
Municipal Plan Input & Review
Flood Warning
Public Information
Conservation Education
Source Water Protection
Volunteer Services
Floodplain/Valleyland Protection
Land Management and Operations
Watershed Stewardship

Vision

“Healthy watersheds for today and tomorrow.”

Our Mission

“Advancing watershed health through engagement, science and conservation.”

Governance

Central Lake Ontario Conservation is governed by a Board of Directors comprised of Councillors from the member municipalities. 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 Board of Directors meets on a monthly basis at the Conservation Authority's Administrative office at 100 Whiting Avenue. 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 conservation authority.

Membership Structure

2018 Board of Directors

Chair: Don Mitchell, Town of Whitby

Vice Chair: Adrian Foster, Municipality of Clarington

John Aker, City of Oshawa

Dave Barton, Township of Uxbridge

Shaun Collier, Town of Ajax

Joe Drumm, Town of Whitby

Derrick Gleed, Town of Whitby

Ron Hooper, Municipality of Clarington

Joe Neal, Municipality of Clarington

John Neal, City of Oshawa

David Pickles, City of Pickering

Nester Pidwerbecki, City of Oshawa

Tom Rowett, Town of Scugog

Elizabeth Roy, Town of Whitby



Human Resources

Chris Darling, Chief Administrative Officer

◆ Directors ◆

Heather Brooks, Watershed Planning & Natural Heritage

Rose Catulli, Corporate Services

Chris Jones, Planning & Regulation

Patricia Lowe, Community Engagement

Perry Sisson, Engineering & Field Operations

◆ Staff ◆

Ted Aikins, Development Planner

Todd Backus, Resource Technician - Lead Hand

Lucy Benham, Water Resources Engineer

Brandi Boardman, Administrative/Accounting Assistant

Meagan Breems, Education Assistant

Jeff Burgess, Water Resources Engineer

Andrew Caky, Database Developer/Administrator

Josie Calabrese, Financial Services Coordinator

Eric Cameron, Infrastructure Planner/Enforcement Officer

Godofredo Carpio, Hydrogeologist

Connie Ciulla, Service, Information & Records Coordinator

Andrew Cunning, Payroll Accounting Clerk

Jamie Davidson, Conservation Areas Planner

Ben DeWaal, Resource Technician – Field

Stefanie Penney, Development Planner

Gord Geissberger, Communication & Marketing Coordinator

Cathy Grant, Education Instructor

Marnie Guindon, Planning & Regulation Officer

John Hetherington, Regulation & Provincial Offences Officer

Harry Hirschfeld, Resource Technician – Field

Dan Hope, Land Management & Operations Supervisor

Ian Kelsey, Aquatic Biologist

David Krupicz, Environmental & Admin. Application

Sylwia Kubrak, Senior GIS Specialist

Kathy Luttrell, Natural Heritage Ecologist

Jason Maas, Resource Technician - Field

Bryan Mistak, GIS Technician

Dan Moore, Aquatic Ecologist

Heather Pankhurst, Wetland Biologist

Jackie Scott, Terrestrial Biologist

Diana Shermet, Terrestrial Biologist/Ecologist

Margaret Stauffer, Administrative Assistant

Yvonne Storm, Education Instructor

Holly Whittington, Environmental Engineering Tech

Rod Wilmot, GIS/Systems Supervisor

◆ External Contracts ◆

Mike Doughty, Intermediate Hydrogeologist – YPDT*

Richard Gerber, Groundwater Specialist – YPDT*

Steve Holysh, Senior Hydrogeologist – YPDT*

Mason Marchildon, Water Resources Engineer –YPDT*

Britt Smith, Groundwater Management Analyst-YPDT*

**YPDT – York, Peel, Durham, Toronto Groundwater Program*

Budget Presentation

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

- A. Watershed Management & Health Monitoring - Program costs and revenues required to develop the framework and management strategy to provide a rational approach to natural systems protection, restoration and use. Also included in this unit is the operation and maintenance of the flood forecasting system, the watershed monitoring program, a number of restoration projects across the watershed supported by federal and provincial grants, and capital projects such as watershed plans, source protection planning, Oak Ridges Moraine Conservation Plan, various groundwater studies and research and a number of provincial contracts administered by CLOCA.
- B. External Contracts (York, Peel, Durham & Toronto Groundwater Program) - As part of an ongoing contribution, CLOCA administers a number of contracts on behalf of the Conservation Authorities Moraine Coalition and the Regions of Durham, Peel and York and the City of Toronto. Five staff (YPDT staff) for this initiative are housed in rental offices within the TRCA office at Highway 407 and Jane St.
- C. Environmental Plan Review & 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, natural heritage resources and water resources as well as circulations under the Environmental Assessment Act. 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), which is required in order to ensure the integrity of the Authority's flood plain 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.
- D. Community Engagement Stewardship, Outreach, Education and Communication 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. Our stewardship programs focus on public and private lands contributing to improving watershed health and function. 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 4 school boards we service. Our communication products include managing an active website and ongoing creation and updating of printed, electronic, social media and Conservation Area signage.
- E. Land Management - Program costs and revenues associated with assets owned or managed by the Authority and provide green space for residents of Durham Region. Also includes land acquisition and development of conservation areas, land management planning and special projects in conservation areas.

- F. Vehicles and Equipment - Costs and revenues associated with new acquisitions and the operation of the Authority's motor pool, and equipment required for the on-going work of the Authority. Internal charges are made to the various projects and programs for the use of vehicles and equipment.
- G. Corporate Services - Corporate Services Includes management and non-direct program specific costs, head office operations, audit, legal, human resources, health and safety and the costs of GIS/IT support, Information Management Systems and the development of Enterprise GIS to improve the movement of data throughout the organization.

BUDGET ASSUMPTIONS

Wages & Benefits

- As approved by Board of Directors on November 18, 2014.

Regional Operating Levy

- As approved by Durham Region Council on February 5, 2018.

MNRF Transfer Payments

- MNRF transfer payments reported in the budget have been flat-lined since 1996.

Ontario Government Funding

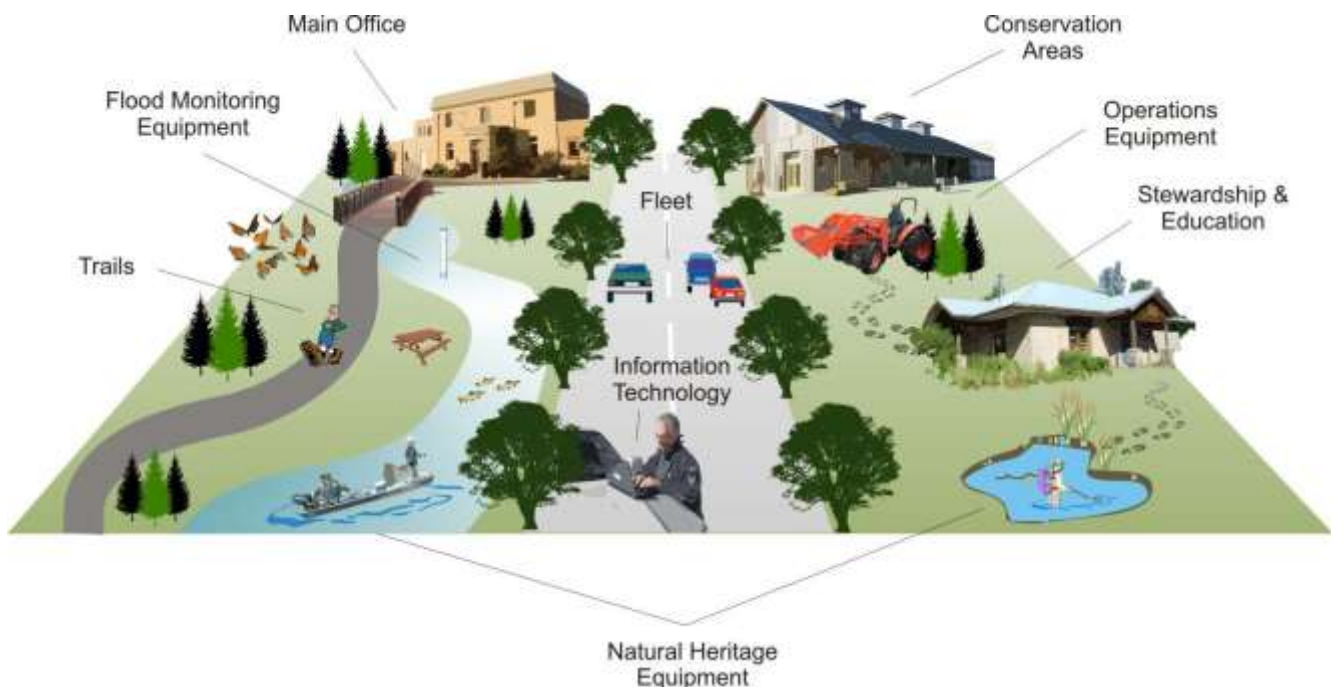
- Will continue the Source Water Protection initiative.

User Fees

- Authority 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 21, 2017.

Miscellaneous

- The Authority supports the York Peel Durham Toronto Groundwater Program across the GTA by providing payroll and administrative services.
- The Authority utilizes government employment grants wherever feasible.



CENTRAL LAKE ONTARIO CONSERVATION 2018 BUDGET

Central Lake Ontario Conservation Authority				
Consolidated Statement of Operations				
	2018 Budget	2017 Budget	2017 Actual	2016 Actual
Revenue				
General Levy	3,822,155	3,728,933	3,728,933	3,637,985
Municipal Special Levy	207,500	50,000	50,000	52,340
MNR Transfer Payment	125,000	125,000	124,833	124,833
Other Grants Federal	37,900	339,840	226,687	125,654
Other Grants Provincial	10,200	6,200	6,196	11,953
Other Revenue	1,008,200	1,076,825	1,232,400	1,187,867
Other Grants	6,000	14,875	-	22,270
Reserve Transfer	(22,600)	50,080	8,771	(62,007)
Deferred Revenue	214,495	91,023	50,314	25,506
Interest Earned	20,750	12,150	32,856	20,182
Insurance Proceeds	-	-	3,200	-
Administrative Services	27,000	16,500	33,712	30,380
Maple Syrup Sales	35,000	35,500	35,795	32,410
Honour Box	-	-	71	625
Merchandise Sales	13,500	13,500	13,999	19,507
Maple syrup sales office	6,500	6,500	6,961	7,422
Pay & Display	117,500	117,230	117,809	131,841
Seasons Passes	13,000	11,000	16,855	16,482
Gate Fees	55,000	39,000	40,273	40,707
Donations	111,000	115,750	117,792	235,086
Community Pancake sales	26,670	25,000	30,662	28,285
Cloca Days Pancake sales	3,800	9,000	3,973	3,472
Property Rental	58,015	61,725	58,015	67,797
Facility Rental Fees	8,000	7,000	18,216	11,748
Commercial Rent Signs	7,200	7,400	7,233	6,932
Education Fees Elementary	66,000	60,000	72,277	59,592
Secondary School Fees HS	-	-		
Maple Syrup Tours	10,000	10,000	12,272	10,763
Map Sales	5,000	4,000	9,190	6,850
Property Inquiry Fee	20,000	15,925	25,010	23,700
Sandbox Demo	-	-	400	-
Consulting Revenue	25,000	-	-	-
Regulations 42/06 Permit	380,000	275,000	376,055	321,835
Plan Review Fees	785,000	530,000	781,535	521,632
Fill Sites Large Application Fees	75,000	105,000	47,880	116,640
Rental Recovery	108,650	108,650	111,271	91,210
	7,386,435	7,068,606	7,401,446	6,931,496

CENTRAL LAKE ONTARIO CONSERVATION 2018 BUDGET

Central Lake Ontario Conservation Authority
Consolidated Statement of Operations

Cost and Expenditures	2018 Budget	2017 Budget	2017 Actual	2016 Actual
Salaries & Wages	4,168,300	3,887,630	3,855,555	3,630,312
Wages Seasonal (PWMS Festival)	23,050	18,500	19,558	21,177
Wages Special Employment (Summer Students)	144,100	112,150	142,121	121,144
Benefits	1,126,700	1,054,620	1,048,086	979,395
Office Supplies	6,600	6,600	4,620	7,531
Future Benefit Expense	20,000	5,000	5,000	20,000
Staff Mileage	17,900	17,850	15,797	15,561
Administration Expense	27,000	12,750	32,779	29,452
Course Registration	50,700	55,300	29,451	36,711
Members Per Diems	8,500	8,500	7,200	6,750
ACAO Levy	31,125	29,575	29,571	28,298
Postage	2,390	2,550	1,918	2,249
Materials & Supplies	161,075	225,875	129,997	154,032
Publications & Subscriptions	40,745	33,740	27,920	20,536
Printing	12,000	12,000	8,441	10,218
Software	58,200	43,275	50,345	59,844
Services	445,470	438,965	423,728	395,361
Fuel	31,700	31,120	28,370	25,180
Promotion	1,100	4,050	1,525	1,039
Transportation	14,000	12,000	13,877	9,157
Small Tools	3,000	4,000	1,566	2,334
Water Sample Testing	27,500	6,000	30,190	6,294
Uniform Purchases	5,300	5,750	6,781	5,339
Telephone	15,825	11,775	16,049	10,652
Hydro	41,650	43,950	36,234	41,311
Alarm	3,975	3,925	3,862	3,190
Water	4,500	4,500	4,150	4,148
Gas	12,000	13,000	11,377	10,582
Cellular	20,605	18,305	18,230	16,449
Travel	30,110	22,010	27,976	18,103
Taxes	41,720	50,900	39,394	32,587
Insurance	72,215	69,115	69,967	67,293
Legal Fees	65,000	55,000	65,696	27,348
Audit Fees	24,500	22,870	22,038	26,305
Bank Service Charges	9,210	6,890	8,863	7,123
Licence	2,000	1,750	1,834	1,557
Land Acquisition	-	-	-	75,260
Permit/Approval Fees	-	-	550	4,575
Donation	7,200	7,180	8,739	23,693
Payroll Processing Fees	8,300	8,000	8,015	7,755
Pay & Display Software Monitoring Fees	4,645	3,300	3,340	2,249
Construction Contracts	61,300	241,500	313,674	83,481
Consultant	-	-	-	13,890
Office Services	16,250	17,050	16,249	15,343
Purchases for Resale	10,000	12,000	9,733	9,260
Equipment	294,325	218,135	257,737	259,584
Vehicle Purchases	49,000	47,900	53,953	46,772
Equipment Rental	23,300	22,400	22,408	14,999
Equipment Recovery	98,600	98,600	100,714	80,482
Equipment Recovery	10,050	10,050	10,557	10,729
Bulk for Resale	14,700	15,700	10,299	6,986
Pancake Group Expenses	19,000	15,000	19,144	14,632
	7,386,435	7,068,605	7,075,178	6,524,250
Surplus(Deficit) from Operations	-	1	326,268	407,246

Watershed Management & Health Monitoring

PROGRAM OPERATIONS

Program Operations provide overall watershed management and watershed health monitoring in order to develop a framework and management strategy for natural systems protection, restoration and use. Expertise provided by CLOCA staff in the fields of environmental engineering, ecology, hydrogeology, fish, wetland and wildlife biology, and forestry enable the development of programs and plans to prepare for anticipated future changes in the watershed and deal with the issues that are presented in the day-to-day operations of the Authority.

The Authority accomplishes its watershed objectives through involvement in various committees with stakeholders and all levels of government, providing input to the protection of natural heritage features, expanding the natural heritage database for terrestrial, fisheries, 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 watershed health to be assessed.

OTHER PROGRAMS

Flood Forecasting/Flood Warning

The Central Lake Ontario Conservation Authority's (CLOCA) 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 resources. CLOCA partners with the Ontario Ministry of Natural Resources and Forestry for the flood forecasting and warning program and the Ministry of Environment and Climate Change 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 our state of the art Flood Forecasting and Warning System, Low Water Response and Source Water Protection programs.

Each year we review the location of monitoring equipment and its effectiveness in recording the required data. In 2018, CLOCA will continue to will work with Water Survey Canada (Environment Canada) to develop a new water level station on the Harmony Creek.

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 gauge stations, data management, and reporting. 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. An Early Warning System, developed in 2017 through National Disaster Management Funding, will be made operational in 2018. This system will send email alerts to appropriate staff to advise of water levels nearing flood conditions at various gauging stations.

HAZARD MAPPING**Biennial Lake Ontario Shoreline Surveys**

The Lake Ontario Shoreline Monitoring Program is a continuation of the original Canada/Ontario Great Lakes Erosion Monitoring Program that was carried out from 1973-1981 by Fisheries and Oceans Canada. Following the termination of this program in 1982 the Ministry of Natural Resources and Forestry, in partnership with the Conservation Authorities, continued to monitor the sites located within their jurisdiction.

Every other year, surveys are completed at 8 bluff features along the Lake Ontario shoreline within CLOCA's watershed. These surveys provide insight on the erosion processes that continually work against these shoreline features.



The survey data is plotted against previous years, and biennial erosion rates are calculated. The extensive period of record is important to provide significance to the data, and to provide long term trends. On average, the shoreline surveys show that our bluffs erode at an average rate of about .15 metres per year. Obviously, not all years are equal, and shorelines can be static for some period of time, or move significantly after one single storm event.

Through our Regulation 42/06, CLOCA regulates any development within the erosion hazard of Lake Ontario. The shoreline surveys provide data to help in the determination of the hazard limit, and are useful when explaining the hazard of shoreline erosion to watershed residents.

CLOCA tested digital laser scanning technology in 2016, and will continue to research and test new methods for completing shoreline surveys including drone surveys, and advanced survey techniques. CLOCA is communicating with other Lake Ontario shoreline Authorities to share experiences and expertise.

Integrated Watershed Monitoring

CLOCA's monitoring program provides key information for many Authority Programs including plan review, watershed planning, conservation area management, stewardship, education and communication. Continued monitoring enables the Authority to identify changes, whether incidental or long term, in the quality and condition of the health of the watershed. In 2016, CLOCA identified a need to adapt the monitoring program to increase efficiencies, ensure continued relevancy, maximize integration, and ensure relevance. As a result, monitoring sites of the various disciplines were assimilated at a jurisdictional scope. This new monitoring program got underway in 2017, and will continue annually. In 2018, the results of the 2017 monitoring program will be shared with the public using the web-based ESRI Story Map application. Using this tool, the 2017 findings are combined with maps, text, images and multi-media content making for an easy to use source of information highlighting watershed health.

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. In addition to the supplemental monitoring that will be undertaken in other watersheds, CLOCA will be supporting MNRF in monitoring the impacts following the 2014 manure spill in Lynde Creek on the endangered minnow, Red Side Dace. Surface water quality (chemical) monitoring will continue in 2018, further augmenting the Authority's information and water quality database.



Bird and amphibian data collection will continue and terrestrial monitoring plots will be maintained or established in accordance with the new integrated monitoring program. Work will continue on invasive species monitoring and programming with an emphasis on conducting projects to manage invasive species within our Conservation Areas.

Citizen Science

Consistent with advancing CLOCA's Strategic Plan, the Authority is participating in the Ontario BioBlitz which will be held in Durham Region in 2018. A BioBlitz event brings together taxonomic experts, citizen scientists and the general public to inventory species over a 24 hour period. In 2018, a spring BioBlitz event will be held at Heber Down Conservation Area and additional, guided events may be held throughout the summer and fall. At these events, participants record their findings and experts verify the information. Hosting this event at Heber Down will allow CLOCA to gain a broader understanding of the biodiversity at this Conservation Area and within the Lynde Creek Watershed.

Groundwater Well Maintenance and Testing

Groundwater well monitoring equipment is checked regularly to ensure proper functioning and data is collected, reviewed and analyzed quarterly providing input to the YPDT shared database as well as the provincial online database. Through the YPDT- CAMC municipal/ C.A. 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.

CLOCA 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. PGMN wells have over 15 years of water level and quality records.

MOECC is working to make groundwater data records more accessible and is moving to a standard provincial database that will be accessible to the Conservation Authority partners and the public.

Coastal Wetlands Monitoring

Monitoring of 18 coastal wetlands will continue in 2018. A number of stakeholders including Environment Canada, neighbouring Conservation Authorities and local volunteers assist with 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 captures the response and success of restoration and management actions undertaken like the work at Cranberry Marsh and Carruthers Marsh, and provides significant data from which projects such as the McLaughlin Bay Restoration Strategy, Lynde Shores and Bowmanville Marsh restoration plans rely upon. In 2018, CLOCA staff will continue to prepare Wetland Conditions and Management Reports for a number of the coastal wetlands. These reports document and synthesize monitoring information collected to date, providing an assessment of wetland health to help direct future management recommendations.



Watershed Planning

In recognition of the future significant changes that were anticipated within CLOCA's watersheds since 2012, CLOCA's Watershed Plans recommended that an update be carried out in 5 years. In 2018, with funding support from the Region of Durham, this update will get underway starting with identification of watershed changes and assessment of the impacts these changes have had on watershed health. A focus will also be placed assessing future impacts of climate change on watershed health and the preparation of climate change policies, recommendations, and identification of adaptation and mitigation mechanisms. With the release of the Provincial Watershed Planning Guidance document, consultation with CLOCA's municipal partners will be undertaken to ensure CLOCA's watershed planning framework fulfills our municipal partner's needs.

Implementation of watershed plan recommendations through the preparation of action plans will continue in 2018 and will include finalization of the Imperviousness Action Plan, the Natural Heritage Restoration Plan

and the Climate Change Action Plan. CLOCA staff will continue to work with the Region and local municipalities to seek endorsement of Watershed Plans through the incorporation of Watershed Plan recommendations into Municipal Official Plans.

Source Water Protection Plans

The Source Water Protection (SWP) initiative commenced in 2005, following recommendations made to Judge O'Connor after the Walkerton drinking water 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. CLOSPA's 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 (CTC SPR) 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. The portal will provide a centralized location to house, search and retrieve all of the CTC's related documents, reports, correspondence and spatial information. In addition, the portal will provide mapping and access to metadata and spatial information. CLOSPA has also been tasked with rolling up the threats information for the CTC SPR into a central repository for archiving and reporting purposes.



Climate Change

CLOCA is working on a number of fronts to advance our scientific and adaptation knowledge with respect to climate change. CLOCA will be undertaking a climate change adaptation plan which will support and guide the adoption and use of appropriate climate change policies within CLOCA's own policies and procedures. CLOCA is also working with Durham Region in their continued advancement of climate change adaptation planning, specifically for the flooding and natural heritage sectors.

Lynde Shores – Shisko Wetland Restoration

CLOCA staff has been involved in the development of the concept plan and preliminary design drawings for the Shisko Wetland Restoration. Located south of Victoria, east of Halls Road, a seasonally wet area was identified as the preferred location for a wetland restoration project required as part of the required compensation for widening of Victoria Road through the Lynde Shores Conservation Area. In 2018, CLOCA will continue being involved in reviewing detailed design and providing oversight on construction of this wetland feature.

In an effort to further enhance wetland and aquatic habitat functions CLOCA will pursue additional opportunities to expand upon this wetland feature.

McLaughlin Bay Restoration

Work continues on implementing the restoration of McLaughlin Bay. Funding has been received to undertake a habitat improvement project along the western edge of the Bay. This restoration which will get underway in 2018 will improve water quality by reducing erosion and improving riparian vegetation and habitat. In participation with UOIT, CLOCA is undertaking a study to assess the amount of Zooplankton/Phytoplankton in the Bay. Completion of this study in 2018 will help to identify if a biological imbalance exists, information which will further inform restoration actions at McLaughlin Bay. These projects have received support from GM Headquarters, Ontario Parks, City of Oshawa and Friends of Second Marsh.



Oshawa Second Marsh Management Plan

With funding support from the City of Oshawa, CLOCA will participate in the preparation of a management plan for Oshawa Second Marsh. The original management plan is over 20 years old and has been beneficial in directing restoration and management activities. Yet this marsh continues to be significantly influenced by anthropogenic inputs, invasive species, climate change, and Lake Ontario water level regulation. To address these and potential future threats, an update to the management plan is necessary. This work will identify new adaptive management techniques and tools which will help to ensure the marsh and its habitat remains healthy, diverse and productive.



CLOCA Restoration Priorities Plan

When completed later this year, the CLOCA Restoration Priorities Plan is a mapping tool that will identify and prioritize restoration opportunities which will improve and strengthen CLOCA's natural heritage system and overall watershed health. The development of this tool will utilize CLOCA's NHS mapping, ELC mapping and watershed healthy indicators and can be used at a watershed scale or at the site level. The information supporting this mapping will be continuously updated consistent with regular updates of CLOCA's mapping and will be available publically, supporting watershed stakeholder and municipal restoration initiatives.

Corbett Creek Marsh Restoration

In an effort to improve conditions in Corbett Creek Marsh, CLOCA will be continuing efforts to engage the Town of Whitby, Thickson Woods Land Trust and others in the preliminary development of measures to support management and restoration efforts. Work will begin in 2018 to map phragmites communities in publically accessible areas within the Corbett Creek watershed and in the marsh.

CENTRAL LAKE ONTARIO CONSERVATION 2018 BUDGET

Watershed Management				
	2018 Budget	2017 Budget	2017 Actual	2016 Actual
Revenue				
General Levy	894,835	812,225	827,670	781,805
Municipal Special Levy	72,500	-	-	-
MNR Transfer Payment	45,000	45,000	45,000	45,000
Other Grants Federal	19,300	114,040	112,458	65,284
Other Grants Provincial	10,200	6,200	6,196	6,114
Other Revenue	86,900	106,000	110,670	125,947
Other Grants	-	14,875	-	22,270
Deferred Revenue	11,830	11,840	27,331	21,732
Donations	-	-	-	4,400
Secondary School Fees	-	-	1,428	1,049
	1,140,565	1,110,180	1,130,754	1,073,601
	2018 Budget	2017 Budget	2017 Actual	2016 Actual
Cost and Expenditures				
Salaries & Wages	688,500	681,000	660,484	647,962
Wages Special Employment (summer students)	74,400	71,500	84,117	80,425
Benefits	201,250	190,400	189,878	182,279
Staff Mileage	3,800	3,800	3,799	3,422
Course Registration	7,600	7,600	4,523	6,785
Postage	250	250	97	364
Materials & Supplies	18,900	12,825	14,255	14,701
Publications & Subscriptions	2,695	1,390	2,202	1,907
Software	10,200	3,300	9,879	10,571
Services	35,380	52,150	48,603	41,470
Fuel	600	-	914	-
Promotion	-	-	79	-
Water Sample Testing	27,400	6,000	29,826	5,902
Uniform Purchases	-	-	-	107
Telephone	1,500	1,500	1,341	1,400
Cellular	5,305	4,955	5,371	4,560
Travel	3,310	2,210	6,460	2,956
Insurance	400	375	374	601
Equipment Purchases	29,775	41,725	33,772	47,694
Equipment Rental	8,000	7,800	6,849	-
Vehicle Recovery	21,300	21,400	27,932	20,496
	1,140,565	1,110,180	1,130,754	1,073,601

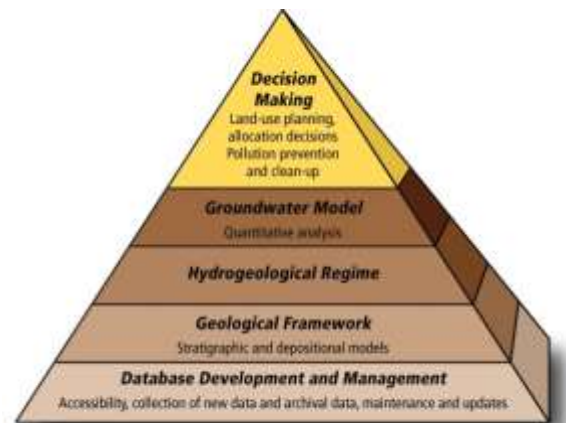
External Contracts – YPDT (York, Peel, Durham & Toronto Groundwater Study)

As part of an ongoing contribution, CLOCA administers a number of contracts on behalf of the Conservation Authorities Moraine Coalition and the Regions of Durham, Peel and York and the City of Toronto. Five staff (YPDT staff) for this initiative are housed in rental offices within the TRCA office at Highway 407 and Jane St. A review of the projects are summarized as follows:

ORM (YPDT) Groundwater Study

This ongoing 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 13 agencies partnered in the program. In 2018, work will continue on a number of initiatives including:

- Working with new consultant partners to improve program's data and information;
- Continued growth of the program database;
- Continued improvement in the program website with new tools available (e.g. for evaluating long term climate trends, for linking groundwater levels to climate and pumping records, clipping data from the website for export, etc.);
- Development of additional tools to manage the transfer of data from external partners to the master database on the program's Citrix platform;
- Working with City of Toronto to incorporate geotechnical and hydrogeological reports and data into the program's systems;
- Submission of professional papers on hydrogeology of the Yonge Street Aquifer and on wetland modelling;
- Continued work on 'model harmonization' with initial focus on updating the authoritative geological layering across the study area – but also to include incorporation of updated information from numerical model studies (i.e. data enhancements, hydrological/hydrogeological insights, etc.);
- Collection and incorporation of high quality data from select monitoring sites across the program study area;
- Continue to provide technical expertise to the partner agencies as requested.



External Contracts - YPDT

	2018 Budget	2017 Budget	2017 Actual	2016 Actual
Revenue				
Other Revenue	832,300	769,025	832,002	847,336
Deferred Revenue	69,300	73,075	22,455	4,700
Insurance Proceeds	-	-	3,200	-
Consulting Revenue	25,000	-	-	-
	926,600	842,100	857,657	852,036

	2018 Budget	2017 Budget	2017 Actual	2016 Actual
Cost and Expenditures				
Wages Contract	572,450	534,800	538,920	495,552
Benefits	134,100	126,800	130,384	124,963
Future Benefit Expense	20,000	5,000	5,000	20,000
Staff Mileage	3,000	3,000	1,522	1,578
Administration Expense	10,000	12,750	15,779	12,927
Course Registration	6,000	8,000	6,626	2,843
Postage	40	50	32	4
Materials & Supplies	6,500	2,000	6,505	2,705
Publications & Subscriptions	4,500	3,500	4,320	3,226
Software	20,000	20,000	14,585	28,647
Services	80,750	78,000	81,321	73,168
Fuel	4,000	4,000	3,685	3,264
Telephone	3,100	50	5,277	438
Cellular	3,500	3,500	3,275	3,195
Travel	21,400	12,000	14,738	9,782
Insurance	1,835	1,625	1,602	1,567
Legal Fees	-	-	695	432
Audit Fees	3,000	2,870	2,870	2,205
Bank Service Charges	175	155	158	142
Donation	-	-	103	-
Payroll Processing Fees	1,000	750	767	716
Office Services	16,250	17,050	16,249	15,343
Equipment Purchases	15,000	6,000	3,064	49,224
Vehicle Recovery	-	200	181	116
	926,600	842,100	857,657	852,036

Environmental Plan Review & Regulation Services

PROGRAM OPERATIONS - MUNICIPAL PLAN REVIEW

The purpose is to promote the Authority'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.

2018 Program:

- Continuing Memorandum of Understanding (MOU) partnership with the Region of Durham to provide plan review advice on watershed management, natural heritage and natural hazard planning and the implementation of the 'One-Window' MOU with the Ministry of Municipal Affairs regarding hazard lands.
- Consistent with previous years, it is anticipated that the Authority 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.
- Initiate review of CLOCA's Policy and Procedural Document for Regulation and Plan Review to update policy directions and to streamline and add clarity wherever possible including conformity with the recently completed provincial review of the Greenbelt Plan, Growth Plan for the Greater Golden Horseshoe and Oak Ridges Moraine Conservation Plan.
- Authority staff will continue to support CLOCA's 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.
 - Town of Whitby – Brooklin Secondary Plan and Implementing Servicing and Block Planning
 - 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 storm water management techniques, landscape design for vegetation protection zones and stream corridor enhancement opportunities.
- Ensure timely responses for application review and assess performance against Strategic Plan Implementation performance measures while building staff capacity.
- Transition archived planning files to electronic format accessible through CLOCA's CADIMS platform.

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 & Alterations to Shorelines & Watercourses (Conservation Authorities Act - Ontario Regulation 42/06).

2018 Program:

- Approval and maintenance of Ontario Regulation 42/06 mapping as required.
- Consistent with previous years, it is anticipated that the Authority 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.
- On-going review and maintenance of guidelines to provide consistent standards for the administration of the Authority's Regulation, Ontario Regulation 42/06.
- Review and provide advice on the finalized Provincial Excess Soil Management Framework and subsequent implementation actions including liaison with municipal planning and engineering staff.

STUDIES

CLOCA 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.

Hazard Studies

CLOCA staff will continue to update digital erosion hazard mapping for stream and valley systems. The erosion hazards include valley features, steep slope allowances, stream erosion allowances, and meander belts; all natural hazards that are used in the determination of our Regulation Limits. The completion of the digital erosion hazards will assist applicants with determining the applicable hazards on property.

National Disaster Mitigation Program

Under the National Disaster Mitigation Program (NDMP), CLOCA receives 50% federal funding for flood mitigation projects. In 2018, CLOCA will be working with the City of Oshawa in the updating of the Oshawa Creek/Goodman Creek Two Zone Flood Study, and will be working with the Ganaraska and Lower Trent Region Conservation Authorities on a Lake Ontario Shoreline Management Plan.

Environmental Plan Review & Regulation Services

	2018 Budget	2017 Budget	2017 Actual	2016 Actual
Revenue				
General Levy	183,765	309,310	7,300	41,377
MNR Transfer Payment	62,000	62,000	62,000	62,000
Other Grants Federal	-	-	505	6,595
Other Revenue	-	76,800	90,663	7,284
Deferred Revenue	58,200	-	528	-
Map Sales	5,000	4,000	9,190	6,850
Property Inquiry Fee	20,000	15,925	25,010	23,700
Regulations 42/06 Permit	380,000	275,000	376,055	321,835
Plan Review Fees	785,000	530,000	781,535	521,632
Fill Sites Large Application Fees	75,000	105,000	47,880	116,640
	1,568,965	1,378,035	1,400,667	1,107,912

	2018 Budget	2017 Budget	2017 Actual	2016 Actual
Cost and Expenditures				
Salaries & Wages	1,119,300	990,500	996,452	832,013
Benefits	307,200	273,700	274,138	222,511
Staff Mileage	7,500	7,000	6,820	6,491
Course Registration	5,000	8,000	3,955	3,105
Postage	-	-	14	13
Materials & Supplies	600	1,100	1,231	672
Publications & Subscriptions	12,600	10,200	3,417	1,558
Software	9,500	8,875	6,664	3,159
Services	25,000	5,600	22,570	-
Promotion	-	-	45	-
Telephone	1,000	-	-	-
Cellular	2,300	1,660	2,069	1,432
Travel	1,500	4,100	1,380	1,683
Insurance	23,265	23,100	23,078	22,341
Legal Fees	50,000	40,000	55,072	9,699
Vehicle Recovery	4,200	4,200	3,761	3,235
	1,568,965	1,378,035	1,400,667	1,107,912

Community Engagement



STEWARDSHIP

The stewardship program costs and revenues are those associated with staff resources necessary to provide services and/or technical assistance to private and public landowners and environmental organizations on call to action projects contributing to improvements in overall watershed health. Through the watershed planning process, natural heritage strategy, fisheries and resource management plans, the Authority makes recommendations where specific stewardship initiatives would result in achieving watershed targets. Technical assistance is provided and partner funding sought for implementing priority stewardship projects. In 2017, the majority of stewardship projects focused on tree planting with 80,484 trees planted to restore 42 hectares of land. This trend for tree planting for Stewardship will continue in 2018, as current corporate partners have indicated they value the success of our accomplishments to date.

Well Decommissioning Program

CLOCA re-introduced the Well Decommissioning Program in 2017 providing technical and financial assistance to landowners in our jurisdiction. Wells provide a direct link from land surfaces to the water bearing subsurface zones that represent the source water for other wells and local creeks in the watershed. 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. In 2017, four landowner visits and technical advice were provided and 1 well decommissioned. Information about the service, application and brochure have been distributed to municipalities and residents through public events.

Increasing Watershed Tree Cover

We continue to recreate missing forests and strengthen existing ones providing a well-connected natural heritage system to store carbon while contributing to overall biodiversity for a variety of wildlife. In the spring we planted 80,484 trees in headwater areas of the Bowmanville and Soper Creek Watersheds associated with 407 compensation, RBC Earth Day Event and planting with the 1st Enniskillen Scouts. In the fall, we planted 900 native trees and shrubs in partnership with TD Tree Days at Heber Down, Purple Woods and Enniskillen Conservation Areas for a total of 41.95 hectares of land reforested.

The Clarington Rural Roads Tree Program has planted 4,500 trees along rural roads in the municipality since it began in 2012. This year more than 47 residents participated with the planting of an additional 688 trees. The program has many benefits aside from improving the aesthetics of the rural countryside, it increases tree canopy and provides wildlife habitat.

Home Improvement Program (HIP)

CLOCA staff will continue to work with schools, volunteers, community organizations and naturalists groups to build and install a variety of habitat features including bird and insect boxes, pollinator gardens and turtle nesting protection structures at Conservation Areas, school yards and parkland. As well we work with corporations to make improvements to our Conservation Areas which includes working on trails, signage, bridges, fencing and planting native plants. In 2017, we installed another 25 blue bird boxes at the Carruthers tract. In 2018 we will be constructing a bee hotel at the Enniskillen Education Centre in partnership with Courtice Secondary School and Ontario Power Generation Darlington Nuclear.

Invasive Species Management

CLOCA continues to implement its Invasive Species Management Strategy within our conservation land holdings. With a focus on prevention, detection, response and management the 2018 work plan will:

- implement components of the Rogers Tract Invasive Species Management Plan;
- continue mapping invasive species in CLOCA's conservation areas;
- map phragmites communities in the Corbett Creek watershed and Corbett Creek Marsh;
- continue managing several of CLOCA's invasive species management pilot projects; and
- work with the Ontario Federation of Anglers and Hunters to hire a hit squad student to conduct outreach within CLOCA's watersheds

EDUCATION

For the past 29 years, Central Lake Ontario Conservation Authority (CLOCA) has delivered formal and informal education programs to ensure environmental literacy for students and constituents in our jurisdiction. The following is a summary of our accomplishments for the 2016/17 school year.

In Your Watershed

In partnership with our four local school boards, we are now in our 29th year of offering curriculum based outdoor environmental programs to elementary grades. The *In Your Watershed* (IYW), consists of 16 year round and seasonal programs to more than 6,100 students in the 2016/17 school year. We continue to partner in a number of community programs like *Farm Connections*, where kids get to be a farmer for the day, with more than 1,200 grade 3 students attending the 3 day program and 900 family members at the evening public open house. We also host the YMCA Environmental Camp and Ontario Power Generation's Tuesdays on the Trail at the Enniskillen Education Centre, engaging 1,300 participants in the summer of 2017.



For the second year in a row, we delivered the Wetland Centre of Excellence Mentorship Program sponsored by Ducks Unlimited Canada and the Ontario Trillium Foundation where we reached 23 elementary and 6 high school classes. Efforts are being made by the partners and school boards to fund this program in future years.

Durham Children’s Watershed Festival (Formerly the Durham Children’s Groundwater Festival)

In 2017 we celebrated the Festival's 20th anniversary and Canada's 150th anniversary, with a "Next Generation" focus. A name change replaced the word "groundwater" with "watershed" to better connect participants to all water resources and their importance to human health and ecosystem function. The Festival was held at Camp Samac with 3,846 grade four students and 774 teachers and adult volunteers attending. Contributions from sponsors cover 75 per cent of operating costs, which makes attendance fees affordable. A total of 10 sponsors were on board in 2017 and recognized through a VIP lunch during the Festival.



A first ever free public evening was held with participants given an opportunity to participate in the regular day time activities plus some very special offerings including the edible aquifer from Oak Ridges Moraine Land Trust; wild animals from Soper Creek Wildlife Rescue; the AR Sandbox; a Chief Topleaf presentation; CLOCA staff guided tours to view the salmon migration; and a snow plow from the Municipality of Durham Fleet Division that demonstrated the “Low Salt Diet – Protect the Watershed” activity.

Summer Programs

The YMCA of Greater Toronto implemented year two of its outdoor environmental summer camp from the Enniskillen Education Centre. The camp operates for 9 weeks during July and August. With the exception of 6 Tuesdays during the summer, which is reserved for the OPG Tuesdays on the Trail program, they have exclusive access to the Education Centre. Revenues generated through this program assist us in maintaining and upgrading the building and the facility. We estimate 2,999 people participate in both summer programs in 2017.

OUTREACH

With our partners, we hosted 18 programs and events, provided 21 corporate and community presentations, attended 6 community events, delivered 5 curriculum based education programs to 12,067 students, produced 5 corporate communication products, engaged 1,501 volunteers and we hosted 2,299 people in our summer camp programs in partnership with the YMCA GTA and OPG Darlington.

Shaping Our Watersheds

Our Augmented Reality Sandbox has been replaced with a more portable model that is easily calibrated and delivered off site to meet the increasing demand for this unique activity. The sand is contained in a box to simulate a watershed, and comes to life when the 3D projector creates actual real-time contours and coloured shading to project a landscape on the sand. The sand is manipulated by hand to create wetlands, creeks, valleys, flood, and rain events, all with a very graphic visual sense of how water moves in our watershed. The model was shared at a number of events in 2017 including at the Durham Children's Watershed Festival as an Activity Centre, UOIT Science Rendezvous, CACIS 2017, Centre for Inland Waters DFO Open House reaching a total of 3,300 general public and agency staff.



Watershed Wilderness Nature Hikes

In 2018 staff will continue to offer hands-on events, with a special Celebrate 60 Saturdays events offered over the 4 seasons at different Conservation Areas to engage our watershed families. In 2017, we hosted our annual Family Snowshoe in February and our first ever Duck Day in May in partnership with Ducks Unlimited Canada and Ontario Trillium Foundation. Over 100 visitor's attended the event where they learned how to be better stewards of our wetlands. Visitors received a close up, personal look at turtles and other critters brought by Speaking of Wildlife and the Ontario Turtle Conservation Centre. Each family received a pond exploration kit which consisted of a bucket, net, magnifying glass and identification cards. The YMCA of Greater Toronto Area was also present with activities for the public.

In 2017, we continued to partner with Ontario Shores Mental Health Sciences Centre, the Canadian Mental Health Association and Conservation Ontario, hosting a series of outdoor hikes for youth in our watershed. The program is called Mood Walks and promotes physical and mental wellness by creating new opportunities for young people to get active and get outside.



Purple Woods Maple Syrup Festival and Sugar Bush

For 43 years CLOCA and their many community partners have contributed to the successful delivery of the annual Maple Syrup Festival at the Purple Woods Conservation Area. With over 10,000 visitors in attendance, and more than 1,300 litres of syrup produced the Festival surpassed many milestones in 2018 and continues to be a major regional attraction for Durham residents. A highlight for 2018 was lots of sunshine, continued sponsorship and dedicated community volunteers.

Corporate Heroes

CLOCA staff championed a successful nomination for Ducks Unlimited Canada in 2017 to receive a Durham Environmental Advisory Committee Award in recognition of their numerous wetland restoration projects, fundraising initiatives, public use and education programs in Durham Region in partnership with Central Lake Ontario Conservation and many watershed community stakeholders over the past 18 years. This year we nominated Farm Connections and Ontario Federation of Anglers and Hunters for continuing to support health watersheds.

CORPORATE COMMUNICATION

This includes the operating costs associated with communications to ensure that the public and partners are informed about CLOCA's programs and services. Products and services will include building media relations; marketing our programs and accomplishments; developing Conservation Area signage; design and production of corporate publications, brochures, report cards, reports, and fact sheets; producing the CLOCA annual Year in Review; maintaining and updating our website; social media; developing new online services; servicing the communication needs of all CLOCA departments with design and publication services; supporting external community environmentally themed programs and projects with partners and stakeholders. In 2018 a review of our corporate website will be a priority as well as developing a product plan to support the CLOCA Strategic Plan action items.

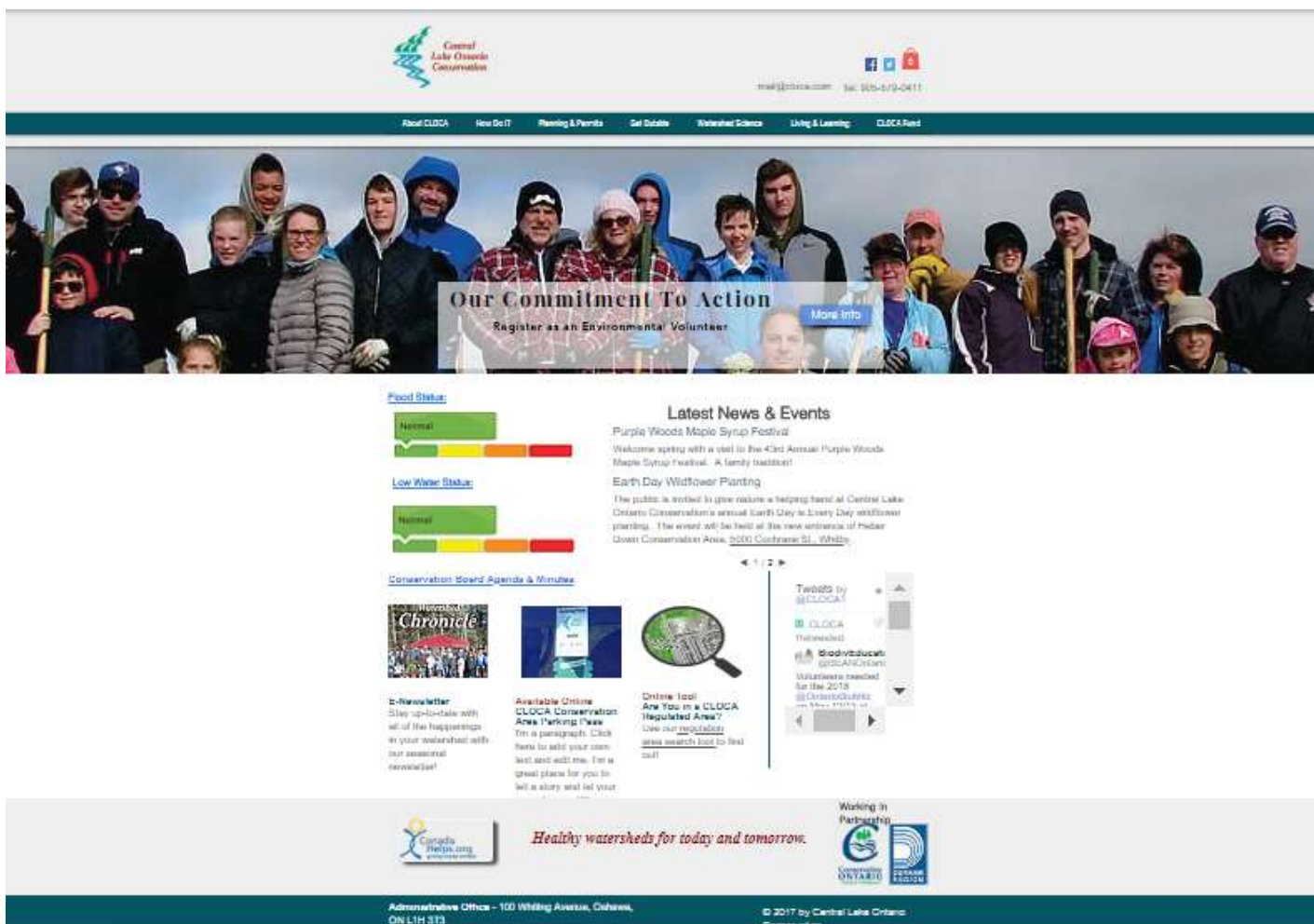
CLOCA Chronicle E-Newsletter

There were four issues of the CLOCA Chronicle issued in 2017 to our mailing list of 2,000. The e-newsletters continue to be well received and offers us another tool to engage a broad audience in showcasing the work we do across all departments. We anticipate issuing 4 e-newsletters in 2018.

Webpage Update

After more than 13 years, our communications staff are updating our website to make it more mobile friendly, meet accessibility standards and make document searching much easier. The new software requires no coding and will make it easier for staff to update their programs and services. The new website will allow us to more opportunities to track and report on website traffic.

Draft text is being worked on and Communications staff will be meeting department staff to finalize content in the first half of 2018.



Community Engagement

	2018 Budget	2017 Budget	2017 Actual	2016 Actual
Revenue				
General Levy	447,645	419,780	415,121	384,167
Municipal Special Levy	50,000	50,000	50,000	50,000
Other Grants Provincial	-	-	-	5,838
Other Revenue	1,000	13,250	41,817	77,705
Deferred Revenue	3,165	3,165	-	(3,164)
Administrative Services	-	-	933	928
Maple Syrup Sales	35,000	35,500	35,795	32,410
Merchandise Sales	13,500	13,500	13,929	19,475
Maple syrup sales- Office	6,500	6,500	6,961	7,422
Gate Fees	55,000	39,000	40,273	40,707
Donations	45,000	45,000	40,017	56,389
Community Pancake sales	26,670	25,000	30,662	28,285
Cloca Days Pancake sales	3,800	9,000	3,973	3,472
Education Fees Elementary	66,000	60,000	70,738	58,543
Secondary School Fees HST Applicable	-	-	111	-
Maple Syrup Tours	10,000	10,000	12,272	10,763
	763,280	729,695	762,602	772,940

	2018 Budget	2017 Budget	2017 Actual	2016 Actual
Cost and Expenditures				
Salaries & Wages	462,450	435,030	450,995	437,149
Wages Seasonal (PW Maple Syrup Festival)	23,050	18,500	19,558	21,177
Benefits	124,450	122,070	122,956	121,505
Office Supplies	100	100	538	-
Staff Mileage	650	350	776	1,285
Course Registration	1,300	2,900	287	1,630
Postage	100	250	32	151
Materials & Supplies	17,100	15,750	45,414	73,611
Publications & Subscriptions	7,100	5,100	7,563	3,798
Software	-	-	385	392
Services	50,765	50,165	34,835	50,148
Fuel	100	120	9	11
Promotion	900	3,850	476	650
Transportation	14,000	12,000	13,877	9,157
Uniform Purchases	-	450	-	-
Gas	-	-	-	224
Cellular	1,800	1,750	1,484	1,462
Travel	200	200	68	81
Insurance	415	430	396	377
Bank Service Charges	2,500	2,000	2,643	2,066
Donation (Pancake Program)	6,800	6,580	8,306	8,353
Purchases for Resale	10,000	12,000	9,671	9,227
Equipment Purchases	200	2,700	3,764	1,526
Vehicle Recovery	5,100	6,200	7,659	4,941
Equipment Recovery	500	500	1,466	2,402
Bulk for Resale	14,700	15,700	10,299	6,986
Pancake Group Expenses	19,000	15,000	19,144	14,632
	763,280	729,695	762,602	772,940

Land Management

The Central Lake Ontario Conservation Authority owns over 2,433 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 the Authority's Land Management Program.

PROGRAM OPERATIONS

Program operational costs include maintenance of our lands including removal of thickets to preserve grassland habitats, and removal of non-native invasive plants. Scheduled inspections following our Conservation Areas Risk Management Policy direct our activities in facility repair, trail maintenance, and hazard tree work required to maintain public infrastructure for 8 public Conservation Areas and 45 kilometers of trail.

The Emerald Ash Borer continues to have a devastating impact on our natural areas with hundreds of dead and declining ash trees requiring removal to protect the public. Hazard tree assessments and removal programs will continue for all public use portions of our landholdings.

Conservation Areas Planning and Development

In 2018, Conservation Area Planning work will focus on the on-going implementation of restoration projects at Lynde Shores and Heber Down Conservation Areas. At Heber Down CA, landscaping work will be completed for the newly established Cochrane Street entrance to complete the accessible trail and picnic area portions of the site.





Lynde Shores Conservation Area
CLOCA will be constructing a new public entrance for the Lynde Shores Conservation Area. The entrance will be located on Halls Road, and will relieve overcrowding of the Victoria Street entrance. The new facilities will include a larger parking lot, information kiosk, washroom and trail connections. An accessible trail will be built with funding support from the Enabling Accessibility Fund administered by Employment and Social Development Canada.

Rogers Tract

At the Rogers Tract, work will be initiated to investigate and develop restoration plans for the main ponds. This work will include the submission of permit applications to responsible agencies, including the Ministry of Natural Resources. These 2 on-line ponds were constructed by the previous owner in the 1960s for recreational purposes. The ponds are barriers to aquatic movement and have thermal impacts on downstream temperatures. Restoration plans will focus on naturalization of the pond areas to a stream channel with healthy riparian vegetation. This restoration work will have positive improvements to the aquatic habitat and thermal regime.

Property Management

Costs and revenues associated with ownership of land or buildings, taxes, insurance, maintenance and servicing of landholdings and facilities. At the Administration Office, minor office renovations are planned, and annual building maintenance will include replacement of worn carpet and painting. Exterior landscaping and property security improvements are also planned.

Acquisition Opportunities

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

Purple Woods

Our 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 maple bush.

Storoshchuk Restoration

Restoration of the abandoned aggregate pit on the Storoshchuk Tract in Enniskillen Conservation Area will get underway in 2018. 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 be undertaken by a local contractor and monitored by CLOCA.

Conservation Landholdings Master Plan Development

CLOCA'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 a rise 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. CLOCA staff will develop a Conservation Landholdings Master Plan over the next 2 years. This plan will guide current and future decisions with respect to land needs and management needs for the next 50 years. Consultant services with a focus on facilitation of public and agency engagement will be utilized to support this project.

CA Land Management				
	2018 Budget	2017 Budget	2017 Actual	2016 Actual
Revenue				
General Levy	767,340	697,387	766,042	661,400
Municipal Special Levy	85,000	0	-	2,340
Other Grants Federal	17,400	224,600	112,527	31,486
Other Revenue	48,000	71,750	85,907	39,797
Other Grants	6,000	0	-	-
Reserve Transfer	(22,600)	50,080	(12,647)	(52,181)
Deferred Revenue	10,000	2,943		2,238
Property Rental	58,015	61,725	58,015	67,797
Facility Rental Fees	8,000	7,000	18,216	11,748
Commercial Rent Signs	7,200	7,400	7,233	6,932
Honour Box			71	625
Pay & Display Parking	117,500	117,230	117,809	131,841
Interest Earned	750	150	1,246	713
Seasons Passes	13,000	11,000	16,855	16,482
Donations	66,000	70,750	77,500	174,022
	1,181,605	1,322,015	1,248,774	1,095,240

CA Land Management

Cost and Expenditures	2018 Budget	2017 Budget	2017 Actual	2016 Actual
Wages Permanent	496,700	434,000	426,378	425,912
Wages Special Employment	49,700	40,650	39,613	40,719
Benefits	142,200	126,050	119,598	119,288
Staff Mileage	500	500	900	824
Administration Expense	17,000	-	17,000	16,525
Course Registration	8,800	8,800	3,306	3,011
Postage	-	-	99	78
Materials & Supplies	99,475	175,725	39,198	42,969
Publications & Subscriptions	1,500	1,500	1,742	1,164
Services	111,250	120,100	110,098	77,681
Promotion			60	30
Water Sample Testing	100		364	392
Telephone	1,725	1,725	1,639	1,672
Hydro	16,650	16,950	13,274	13,822
Alarm	1,375	1,375	1,340	1,340
Gas	6,000	7,000	5,348	4,781
Cellular	5,300	5,300	5,032	4,737
Travel	800	800	988	876
Taxes	40,100	49,150	37,774	30,890
Insurance	6,800	6,545	6,527	3,145
Legal Fees	-	-	-	10,110
Audit Fees	1,500	-	1,476	5,597
Bank Service Charges	1,835	735	1,483	1,025
Land Acquisition	-	-	-	75,260
Permit/Approval Fees	-	-	550	4,322
Donation	-	-	-	14,740
Construction Contracts	61,300	241,500	313,674	83,481
Consultant	-	-	-	13,890
Pay & Display Software Monitoring Fees	4,645	3,300	3,340	2,249
Equipment Purchases	42,200	17,560	36,571	44,484
Equipment Rental	100	100	366	427
Vehicle Recovery	55,000	53,600	52,302	41,716
Equipment Recovery	9,050	9,050	8,735	8,081
	1,181,605	1,322,015	1,248,774	1,095,240

Vehicles and Equipment

VEHICLES & EQUIPMENT

Usage of Authority vehicles and equipment are charged back to Authority projects and programs at a rate intended to cover the cost of operations. Included in the 2018 budget is the replacement of two vehicles and replacement of an off road utility vehicle for the Conservation Area program.

Vehicles & Equipment				
	2018 Budget	2017 Budget	2017 Actual	2016 Actual
Revenue				
General Levy	51,450	54,550	43,613	58,205
Reserve Transfer	-		30,000	-
Rental Recovery	108,650	108,650	111,271	91,210
	160,100	163,200	184,884	149,415
Cost and Expenditures				
Salaries & Wages	10,500	10,400	7,984	9,522
Benefits	3,100	3,100	2,235	2,699
Materials & Supplies	3,600	3,600	2,543	3,014
Services	21,000	25,000	19,368	22,889
Fuel	27,000	27,000	23,762	21,904
Small Tools	3,000	4,000	1,568	2,334
Insurance	10,850	11,100	10,898	10,431
Licence	2,000	1,750	1,734	1,557
Equipment Purchases	28,350	27,650	58,417	26,975
Vehicle Purchases	49,000	47,900	53,953	46,772
Vehicle Recovery	1,700	1,700	2,422	1,319
	-	-	-	-
	160,100	163,200	184,884	149,415

Corporate Services

PROGRAM OPERATIONS

Corporate Services includes general direction, coordination and implementation of all approved Authority 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.

Desktop Hardware and Software Upgrades / 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

CLOCA has a heavy operational dependency on Information Technology, including Wide and Local Area Networks (WAN's and LAN's), database servers, intranet, internet and e-mail. 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.

CLOCA will continue work on the development and implementation of its business continuity plan to lay the foundation for future expansion of the information technology infrastructure. In 2018, 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

CLOCA, along with Mississippi Valley, Ganaraska Region, Kawartha Region and Otonabee Region Conservation Authorities have implemented a coordinated shared services application development project. CLOCA 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 other future applications. The shared services agreement is helping to standardize application development and business processes amongst the participating Conservation Authorities and ensure sustainability.

CLOCA Data Portal

CLOCA will continue its work on the data portal implementation for staff, partners and the public to provide a gateway for exploring and retrieving information about the Authority’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 will leverage the information stored in Watershed CARE and the Authority’s spatial data repository.



The Central Lake Ontario Conservation's (CLOCA) 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. CLOCA supports the idea that certain data should be freely available to everyone to use and republish as they wish, without restrictions.

Urban and Regional Information Systems Associations Ontario Gold Best Web GIS Award

(CLOCA) received the Gold Best Web GIS Award this week from the Urban and Regional Information Systems Association (URISA) Ontario. The URISA Ontario supports GIS professionals at all stages of their careers with essential training and resources to foster excellence and grow the GIS profession across the province. As part of their commitment to recognize a variety of achievements and challenges, URISA Ontario has developed an annual awards program in recognition of leaders in the geospatial industry. Under the Best Challenge Awards, CLOCA received the Gold Best Web GIS Award for our Oak Ridges Moraine Groundwater Program website. The award recognized the website for its ability to demonstrate advanced internet/intranet mapping services that enable publishing and sharing of geographic information through the integration of multiple business systems.



Watershed CARE (Collect, Analyse, Report, Educate)

Continue to enhance CLOCA's water and climate monitoring system (Watershed CARE) to include more frequent data acquisition, visual data editing capabilities, and improvements in reliability and efficiency of data collection. The system will continue to expand to incorporate other business areas to facilitate data maintenance, analysis and dissemination of the Authority's monitoring information network.

Office Environmental Monitoring

CLOCA 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 Environmental Protection Act and Public Sector Accounting requirements.

Corporate Services				
	2018 Budget	2017 Budget	2017 Actual	2016 Actual
Revenue				
General Levy	1,477,120	1,435,680	1,342,919	1,303,784
MNR Transfer Payment	18,000	18,000	17,833	17,833
Other Grants Federal	1,200	1,200	1,197	22,289
Other Revenue	40,000	40,000	71,341	89,799
Reserve Transfer	-	-	(8,582)	(9,827)
Deferred Revenue	62,000	-	-	-
Interest Earned	20,000	12,000	31,610	19,469
Administrative Services	27,000	16,500	32,779	29,452
Merchandise Sales	-	-	69	33
Donations	-	-	275	275
Sandbox Demo	-	-	400	-
	1,645,320	1,523,380	1,489,842	1,473,108

Corporate Services

Cost and Expenditures	2018 Budget	2017 Budget	2017 Actual	2016 Actual
Salaries & Wages	818,400	801,900	783,223	782,053
Wages Special Employment (summer Students)	20,000		9,312	
Benefits	214,400	212,500	209,096	206,300
Office Supplies	6,500	6,500	4,082	7,531
Staff Mileage	2,450	3,200	1,979	1,961
Course Registration	22,000	20,000	10,755	19,337
Members Per Diems	8,500	8,500	7,200	6,750
ACAO Levy	31,125	29,575	29,571	28,298
Postage	2,000	2,000	1,644	1,639
Materials & Supplies	14,900	14,875	20,850	16,360
Publications & Subscriptions	12,350	12,050	8,675	8,883
Printing	12,000	12,000	8,441	10,218
Software	18,500	11,100	18,831	17,075
Services	121,325	107,950	106,942	130,005
Promotion	200	200	865	359
Uniform Purchases	5,300	5,300	6,781	5,232
Telephone	8,500	8,500	7,792	7,144
Hydro	25,000	27,000	22,959	27,489
Alarm	2,600	2,550	2,522	1,850
Water	4,500	4,500	4,150	4,148
Gas	6,000	6,000	6,029	5,577
Cellular	2,400	1,140	999	1,064
Travel	2,900	2,700	4,440	2,724
Taxes	1,620	1,750	1,620	1,697
Insurance	28,650	25,940	27,093	25,681
Legal Fees	15,000	15,000	9,930	10,257
Audit Fees	20,000	20,000	17,693	18,503
Bank Service Charges	4,700	4,000	4,570	3,891
Permit/Approval Fees	-	-	-	253
Donation	400	600	330	600
Payroll Processing Fees	7,300	7,250	7,248	7,039
Purchases for Resale	-	-	62	33
Equipment	178,800	122,500	122,150	89,681
Equipment Rental	15,200	14,500	15,193	14,572
Vehicle Recovery	11,300	11,300	6,457	8,659
Equipment Recovery	500	500	358	246
	1,645,320	1,523,380	1,489,842	1,473,108

