



22

2022 Annual Report



Kettle Creek
Conservation Authority

Connecting People with Nature: Introducing Deer Ridge Conservation Area

Ted and Duggie Gill donated 46 acres of Carolinian forest and meadow habitat to create the Deer Ridge Conservation Area – a gift to the community that will protect important forest habitat and environmental features in perpetuity. Deer Ridge Conservation Area is the first land acquisition for the Authority since the 1970's and KCCA's only conservation area in Southwold Township making Deer Ridge an important addition to the Authority's landholdings.

The creation of a new conservation area is a multi-year undertaking. In this first year, biological inventories were undertaken to collect baseline data of the property's flora and fauna and an existing trail network was modified for public access. Signage and fencing were also installed to safeguard the area's biodiversity. The Authority will open the 1.7 km trail that meanders through interior forest and overlooks Dodd Creek in 2023.

Visitors will hopefully hear the fluted call of the Wood Thrush or catch a glimpse of the colourful Scarlet Tanager that call the area home and perennial wildflowers such as the Green Dragon. Donations like this are integral to Canada's target to protect 25 percent of the nation's lands and waters by 2025. KCCA wishes to recognize the generosity of Ted and Duggie Gill and the funding support from Environment and Climate Change Canada's "Canadian Nature Fund" for making this project a reality.



Deer Ridge Conservation Area

2022 HIGHLIGHTS

KCCA named to Middlesex County Warden's Honour Roll

Warden Alison Warwick named Kettle Creek Conservation Authority to the Middlesex County Warden's Honour Roll in 2022. KCCA was recognized for its contributions to making the community a better place including the introduction of an accessible dock at Lake Whittaker Conservation Area.



Alison Warwick, Chair
Municipality of
Thames Centre



Dennis Crevits, Vice Chair
Municipality of
Central Elgin



Accessible dock at Lake Whittaker Conservation Area

FLOOD FORECASTING



Port Stanley, December 31, 2022

KCCA staff use a network of stream gauges, precipitation gauges, weather stations and lake level recorders to monitor water levels and flows throughout the watershed. KCCA issued seven Lake Erie shoreline messages and 12 riverine messages to the watershed community in 2022.

KCCA retained a professional engineer to assist with updating its 30-year-old Port Stanley Lakeshore Flooding Look-Up Tables using the best available data including LiDAR topography, beach bathymetry and Provincial Great Lakes storm surge forecasting models. A new tool was developed that assists KCCA staff in rapidly evaluating lakeshore flooding potential and issuing Lake Erie high water outlooks, watches and warnings.

Several projects were completed at the Dalewood Dam with financial assistance from the Water and Erosion Control Infrastructure (WECI) program, including the installation of new safety grates over each bay, vegetation removal along the embankments and the installation of stone on the upstream embankments to mitigate erosion. In addition, KCCA worked closely with structural engineers to monitor the spillway and wingwalls to collect assessment data for anticipated concrete repairs.

For up-to-date flood information, visit the KCCA website kettlecreekconservation.on.ca to register to receive automatic flood related emails, or connect with KCCA on social media.

173.8CMS
Max flow in
Kettle Creek
(Feb. 17, 2022)

93.76%
Max ice cover
in Lake Erie
(Jan. 31, 2022)

44mm
Max daily rain
(Aug. 21, 2022)

PLANNING REGULATIONS

Thanks to a streamlined process and focus on exceptional customer service, KCCA issued 48 Permits and 24 Site Clearances in 2022 within 21-days of receipt of a complete application, meeting the provincial service standard by 100 percent.

Following the recommendations of the Port Stanley Coastal Risk Assessment, KCCA retained a professional engineer to assist with the creation of a new development guide in 2022 to replace the prior 2006 Port Stanley Beach Management Plan for new development requirements within the Lake Erie Flood Uprush Area in Port Stanley. The new development guide established an updated flood elevation and will assist landowners with requirements for floodproofing standards that must be incorporated into the design of new buildings and structures as part of KCCA application requirements.

An online screening map was developed in 2022 and will officially launch on KCCA's website in 2023. The webmap will allow landowners to search for their address and determine if their property is within a regulated area. Landowners affected by the regulation can then contact staff to inquire about application requirements and processes.



Collecting bathymetric
survey data in Kettle Creek



Storm Water Management (SWM)
Pond Inspection and Maintenance Training course

ENVIRONMENTAL MONITORING



Snapping Turtle release at Dalewood Conservation Area

KCCA received \$9,415 in funding from Fisheries and Oceans Canada (DFO) to classify 15 municipal drains. Municipal drains are classified into several categories to facilitate the review and approval of drain maintenance activities with respect to fish and fish habitat. Staff conducted electrofishing surveys at 15 sites throughout the watershed. Sixteen species of fish were identified including Smallmouth Bass, Northern Hogsucker, Blacknose Dace and one sensitive species, the Golden Redhorse. Staff also identified several new species, not previously collected through this project, including Gizzard Shad and Spotfin Shiner.

A total of 203 snapping turtles and 12 painted turtle hatchlings were released back into the Dalewood Reservoir during the summer. The eggs were recovered from nests in danger of being destroyed and incubated at the Upper Thames River Conservation Authority with the help of their species at risk team. All eight native species of turtles in Ontario are designated as Species at Risk.

In partnership with the City of St. Thomas, KCCA conducted monthly surface water monitoring from April to November at Lake Margaret to monitor the health of the lake. Samples were analyzed for bacteria, nutrients, general chemistry and phytoplankton. Sampling also occurred in 2016 and 2019 with 2022 results remaining consistent with the previous years.

In preparation for the 2023 Watershed Report Card, KCCA's forest layer was digitized using 2020 aerial photography acquired through Southwestern Ontario Orthophotography Project (SWOOP). This exercise will allow KCCA to report more accurately on watershed forest conditions for the report card.

**16 species of
fish identified
in 15 municipal
drains**

**30 benthic
samples
collected and
analyzed**

**215 turtle
eggs
collected
(2 species)**

TREE PLANTING & FORESTRY

Over 50,000 tree and shrub seedlings were planted throughout the watershed including 3,190 seedlings sold through the Greening Communities program to landowners in the municipalities of Central Elgin, St. Thomas, Southwold and Malahide who require smaller quantities of trees. In partnership with the Municipality of Central Elgin, KCCA planted 200 large stock trees along Central Elgin roadsides.

Staff led volunteer tree planting events for students from Central Elgin Collegiate Institute and Kettle Creek Public School totalling 1,400 trees planted. In addition, KCCA received funding from the TD Friends of the Environment Foundation to support a community planting event in September where 200 potted trees and shrubs were planted along the north shore of Lake Margaret in St. Thomas.

Selective harvest operations were initiated in 51 acres of deciduous forest at Lake Whittaker Conservation Area to promote forest health and regeneration. Trees were marked under good forestry practices and harvested in January 2022.



Shrub planting along the Lake Margaret shoreline



Machine tree planting in Central Elgin



Students plant seedlings at
Bucke Conservation Area

STEWARDSHIP



Progress of a 2020 wetland creation project

Three wetland creation projects were implemented -- two in the Municipality of Central Elgin and one in the Municipality of Middlesex Centre. In addition, 1.5 acres of tallgrass prairie was established on marginal farmland to benefit pollinator species.

The Elgin Clean Water Program (ECWP), administered by KCCA, funded 26 projects in 2022. Since 2012, the ECWP has awarded \$793,905 in grants to 290 projects totaling over \$3,360,000 in total project costs that directly benefit the environment conditions of Elgin County.

With funding from the Municipality of Central Elgin Environmental Committee, KCCA led the planting of 2,000 wildflower plugs with assistance from students from Éva Circé-Côté French Immersion Public School to naturalize a 0.5 acre municipal site.

The Kettle Creek Environmental Youth Corps (EYC) gained meaningful volunteer experience in the environmental field through the planting of 1,000 wildflower plugs in a naturalized area adjacent to the Dalewood Glen Condos in St. Thomas, assisting with the removal of woody invasive species in the day use area of Dalewood Conservation Area and helping to develop a new 1 kilometre trail at Dan Patterson Conservation Area.



Wildflower planting by Éva Circé-Côté students

INVASIVE SPECIES MANAGEMENT

KCCA was awarded \$10,000 from the Invasive Phragmites Control Fund to manage phragmites in the reservoir at Dalewood Conservation Area and on private properties throughout the watershed.

In addition, KCCA received \$23,512.11 in funding from the Great Lakes Local Action Fund to manage invasive shrubs, trees, and plants around Lake Margaret in St. Thomas. The project will also focus on planting native plant species to restore areas where the invasive species management work was completed.

Authority staff treated approximately ten acres of woody invasive species such as European Buckthorn, Autumn Olive, and Honeysuckle. An additional 17 acres of invasive phragmites was removed from the watershed, which equates to roughly the size of 12.5 football fields.



Before: Phragmites removal at Dalewood Conservation Area



CONSERVATION LANDS

KCCA's campgrounds were back to full operating capacity following years of Pandemic restrictions. Long weekends at Lake Whittaker and Dalewood Conservation Areas were busy with all 378 campsites fully booked. Combined the campgrounds welcomed 3,473 new visitors, a testament of the growing desire for outdoor recreation. Several infrastructure upgrades were also completed in 2022, including resurfacing floors in the bathrooms at both campgrounds.

Additional improvements were made to enhance access to Lake Whittaker's waterfront. The Government of Ontario's Community Building Fund, administered through the Ontario Trillium Foundation, provided \$71,700 in funding to install an accessible dock and two additional fishing platforms. With a vision of providing barrier free access to the waterfront, the accessible dock features an easy-launch system allowing users to launch canoes or kayaks with support and stability regardless of water levels. These enhancements provide people of all ages and abilities access to the Lake.



New dock at Lake Whittaker Conservation Area



Painted Turtle



Dan Patterson Conservation Area
trail extension

EDUCATION & OUTREACH



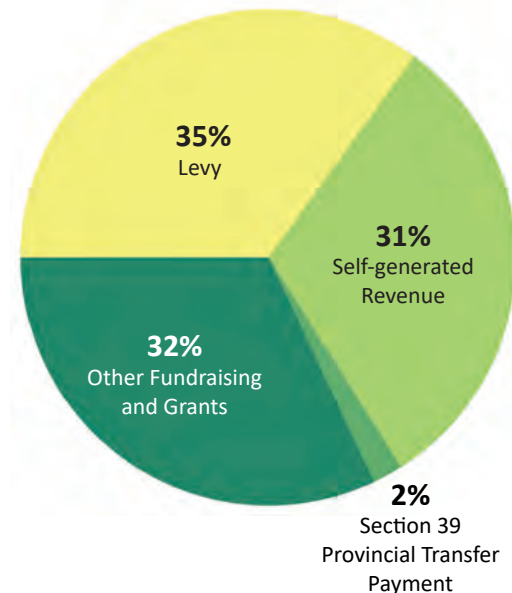
The Carolinian Forest Festival returned to in-person learning in 2022. Teachers were keen to bring students back to the Festival as registration was at capacity within a day with over 3,500 students placed on the waiting list. Over 2,000 grades 6 and 7 students from 24 schools attended the Festival, learning about forest ecosystems, biodiversity and climate change through hands-on activities linked to the Ontario Curriculum.

The Festival also relied on the support of over 130 high school students from three schools including students from the East Elgin Environmental Leadership Program and the Thames Valley District School Board's H-ELP Program.

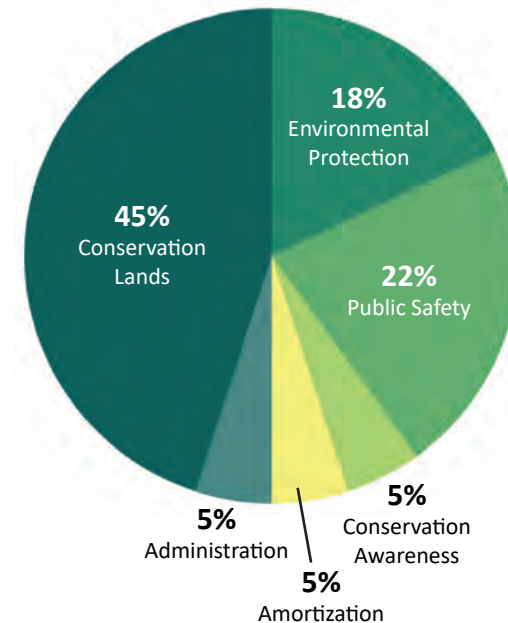
The Festival continues to be a field trip of choice for teachers with feedback such as "Students loved being outdoors and learning about nature in a true context."

FINANCIAL SUMMARY

2022 Revenues



2022 Expenses



As part of the implementation of changes to the *Conservation Authorities Act*, KCCA worked to meet the requirements outlined in Ontario Regulation 687/21. An inventory of programs and services was completed to help guide discussions with member municipalities to formulate cost apportioning agreements ahead of the January 1, 2024 deadline and guide the implementation of other mandatory deliverables by December 31, 2024.

Three quarterly progress reports were issued detailing the progress to date including:

- Consultation with member municipalities on the Inventory of Programs and Services
- Adoption of a comprehensive Fee Policy and Fee Schedules
- Addition of a Governance Section to the KCCA website
- Updates to the Land Acquisition and Disposition Policy

KCCA's website was completely redesigned with a fresh, modern look and improved navigation making it easier for visitors to find key information and learn more about KCCA and its programs. The new site features a responsive design that adjusts to different screen sizes and devices, making it adaptable for use on desktop computers, tablets and smartphones. Since the launch, the website has drawn over 34,000 unique visitors. KCCA's social media platforms continued to grow in 2022, reaching over 126,000 people. KCCA's Facebook page grew by 29 percent with 3,313 followers and continues to act as an important engagement and communication tool.

KCCA continues to embrace a more paperless work environment. KCCA pivoted its accounting software to a cloud-based alternative reducing software upgrade costs and allowing for additional integration of paperless applications.



Lake Whittaker Conservation Area

2022 Board of Directors

Alison Warwick, *Chair*, Municipality of Thames Centre

Dennis Crevits, *Vice-Chair*, Municipality of Central Elgin

Dominique Giguère, Township of Malahide

Stephen Harvey, Municipality of Middlesex Centre

Jim Herbert, City of St. Thomas

Grant Jones, Township of Southwold

Bill Mackie, City of London

Elizabeth Peloza, City of London

Steve Peters, City of St. Thomas

Ralph Winfield, City of London



KCCA Board and Staff at Deer Ridge Conservation Area

Our Partners/Donors List

Thank you to the following for their financial and in-kind donations to Kettle Creek Conservation Authority in 2022.

ALUS Elgin • Anthony and Marisa Reati • Canadian Tire Employee Fund • City of London • City of St. Thomas • Dianne and Wayne Garrett • Ducks Unlimited • Elgin Clean Water Program • Elgin County • Environment and Climate Change Canada's "Canada Nature Fund" • Elgin-St. Thomas Community Foundation • Forests Ontario • Forever Legacy Foundation • George and Sharon Wilson • Green Lane Community Trust Fund • Herb and Glenda Pepper • Huron Tractor St. Thomas • Invasive Species Centre • Jeff Page • John Cook • Kettle Creek Environmental Trust • London District Catholic School Board • Lower Thames Valley Conservation Authority • MECP Great Lakes Local Action Fund • Ministry of Agriculture, Food and Rural Affairs • Ministry of Environment, Conservation and Parks • Municipality of Central Elgin • Municipality of Middlesex Centre • Municipality of Thames Centre • Ontario Power Generation • Ontario Trillium Foundation • St. Thomas Field Naturalist Club • Susan Monaghan • TD Friends of the Environment Foundation • Ted and Duggie Gill • Thames Valley District School Board • The Drum Studio • The Swag-Guy.com • Township of Malahide • Township of Southwold • Vince Circelli

Please notify our office of any errors or omissions.

2022 Staff

Elizabeth VanHooren

General Manager/Secretary Treasurer

Mike Buis

Jennifer Dow

Joe Gordon

Jessica Kirschner

Brandon Lawler

Jeff Lawrence

Marianne Levogiannis

Rob Lindsay

Betsy McClure

Scott Pinnell



Eastern Tiger Swallowtail

2022

ANNUAL REPORT



Kettle Creek
Conservation Authority

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