



Kettle Creek
Conservation Authority

2024

Annual Report





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Land Acknowledgement

Kettle Creek Conservation Authority wishes to acknowledge the treaty and traditional lands originally occupied by the Indigenous First Nations peoples of the Anishinabek, Attiwoonderonk and Haudenosaunee Nations. KCCA strives to build meaningful relationships with Indigenous communities and recognizes the importance of respecting these treaties and lands.



Flood Forecasting and Warning

The Flood Forecasting and Warning Program is a vital component of KCCA's efforts to safeguard communities, infrastructure, and the environment from the impacts of flooding. KCCA utilizes meteorological data, hydrological models, and cutting-edge technology to provide timely and accurate flood forecasts, early warnings, and actionable information to reduce flood risks and enhance preparedness. In 2024, KCCA issued nine riverine flood messages.

Structural engineers continued to monitor the spillway and wingwalls of the 103-year-old Dalewood Dam. Based on recommendations in the 2023 Options Assessment Report, staff began navigating the Environmental Assessment process to determine which of the three viable options (major rehabilitation, dam replacement at a reduced capacity or dam removal) would be the best direction for the aging infrastructure.

KCCA, in partnership with Central Elgin, was successful in obtaining \$48,057 in funding from the Community Emergency Preparedness Grant. Key components of the project included the installation of a new HOBO cellular weather station at the Port Stanley Arena that will support weather data collection for monitoring storm surge and riverine flooding. In addition, real-time WiFi-enabled cameras were installed at key locations in Port Stanley that will be instrumental in monitoring flood events and ice jams, keeping staff safe during flood and emergency events.





Planning and GIS

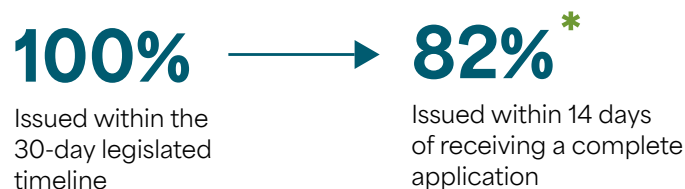
On April 1, 2024, Ontario Regulation 41/24: Prohibited Activities, Exemptions and Permits came into effect and replaced the former Ontario Regulation 181/06. KCCA introduced a new permit application package and made necessary changes to policies and procedures to meet the new legislative and regulatory requirements. These changes included timelines associated with the permitting process, and the requirement that all Conservation Authorities prepare an annual report detailing permit statistics and compliance with Ontario Regulation 41/24.

In 2024, KCCA issued all permits within the legislated timelines. A total of 48 permits were issued - 28 minor and 20 major. Major permits include complex projects such as large subdivisions, while minor permits generally pose a lower risk to the control of flooding and erosion, dynamic beaches or unstable soil due to the project size, location or required technical documentation.

Major Permits



Minor Permits



* Exceeding the Conservation Ontario *Client Service Standard*

Additionally, KCCA updated floodplain mapping for a 24-square-kilometre section of the Dodd Creek subwatershed. This project was supported by the Flood Hazard Identification and Mapping Program (FHIMP) which is lead by Natural Resources Canada in partnership with Environment and Climate Change Canada and Public Safety Canada. The updated floodplain mapping will enhance mitigation planning, inform land-use planning decisions along watercourses, and support municipal emergency response programs.

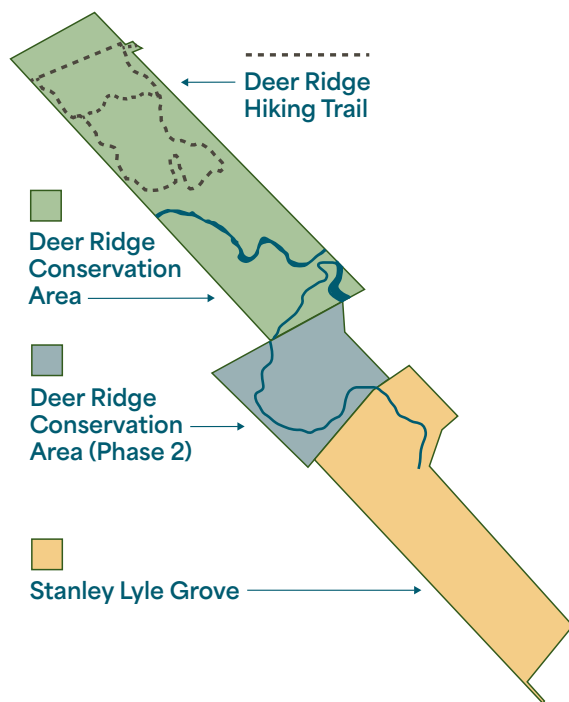
Watershed Highlight - A Lasting Legacy

In 2022, Ted and Duggie Gill donated 46 acres of Carolinian forest and meadow habitat, forming the Deer Ridge Conservation Area, KCCA's first Conservation Area in Southwold Township. Concerned about encroaching development, the Gills chose to protect the land in perpetuity by donating through Environment and Climate Change Canada's Ecological Gifts Program.

In 2024, the Gills expanded their contribution by donating an additional 15.58 acres, bringing the total protected area at Deer Ridge Conservation Area to 61.5 acres. While most of the land will be preserved as an environmentally significant area, the public has access to a 1.7-kilometre hiking trail.



Ted and Duggie Gill



Inspired by his neighbour's donation, Jim Lyle and family also made a lasting contribution by donating 35 acres adjacent to Deer Ridge Conservation Area in 2024. This land will be known as the Stanley Lyle Grove and managed for conservation purposes. Initially purchased in 1874 by David Lyle and known originally as Hope Farm, the land remained in the Lyle family for 150 years. Jim and his brother John are the last generation to farm these lands. Their decision to donate the property reflects their deep respect for the land and a desire to restore it to its natural state.

Restoration efforts are already underway on the three parcels of land. In fall 2024, three new wetlands were created, woody invasive species are being removed from woodlots and hillsides and phragmites control measures have occurred.

Over the next two years, over 10,000 trees will be planted on former agricultural lands at the Stanley Lyle Grove, connecting existing forested areas and establishing a thriving wildlife corridor. These efforts will protect critical habitat and contribute to a healthier watershed.

Land donations like these play a crucial role in Canada's goal to protect 25% of its lands and waters by 2025. This achievement would not have been possible without the generosity of the Gill and Lyle families and the financial support of Environment and Climate Change Canada's Canada Nature Fund coordinated by Conservation Ontario.



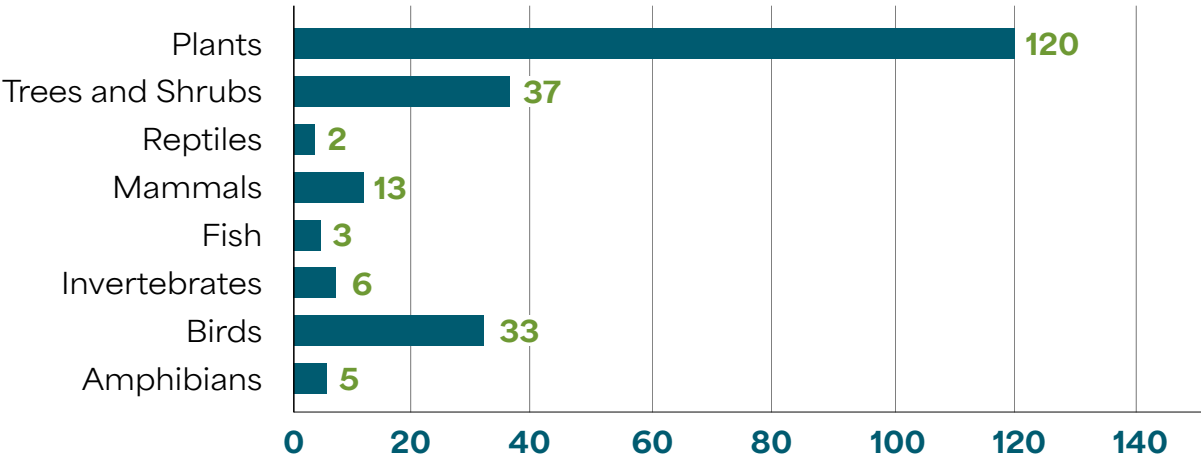
Jim and John Lyle



Life Science Inventory - Deer Ridge (Phase 2)

A comprehensive four-season Life Science Inventory for the Deer Ridge Conservation Area (Phase 2) was completed in 2024. The survey confirmed the presence of seven natural vegetation communities and at least 219 species within the area. Among these, six Species at Risk (SAR) were identified, including three endangered bat species - Little Brown Myotis, Northern Myotis, and Eastern Small-footed Myotis. Additionally, three species were classified as Special Concern: Barn Swallow, Eastern Wood-Pewee, and Monarch. The inventory also documented five other provincially rare (S1-S3) species - Field Thistle, Tufted Titmouse, Burrowing Crayfish, Eastern Red Bat, and Northern Hoary Bat.

Plant and Wildlife Species Observed at Deer Ridge





Environmental Monitoring

KCCA tracks key indicators of watershed health such as surface water quality, groundwater quality, forest and wetland health, and biodiversity, through its environmental monitoring program.

Surface water quality monitoring continues to show elevated nutrient levels, particularly phosphorus, exceeding provincial standards. In 2024, 91.25% of the 80 samples analyzed for total phosphorus surpassed the Provincial Water Quality Objective of 0.02mg/L - a target set by the Ministry of Environment, Conservation and Parks to prevent nuisance algal growth in lakes and streams.

KCCA secured \$9,502 in funding from Fisheries and Oceans Canada (DFO) to continue the Municipal Drain Classification project. This initiative classifies municipal drains into various categories to facilitate the review and approval of drain maintenance activities with respect to fish and fish habitat. Using a protocol developed by DFO, which accounts for fish species, the presence of aquatic species at risk, and permanency of flow, KCCA staff conducted electrofishing surveys at 13 sites throughout the watershed. Several species were identified, including Blacknose Dace, Fathead Minnow and Johnny Darter. This marks KCCA's ninth year participating in this program, with 31 fish species identified across 135 sampling locations to date.





Tree Planting and Forestry

KCCA maintained its commitment to tree planting in 2024, overseeing the distribution and planting of over 42,000 native trees and shrubs. Survival assessments conducted on sites planted by KCCA's tree planting crew revealed a 90% survival rate after the first year.

Through the Greening Communities program, 63 landowners in Central Elgin, St. Thomas, Southwold and Malahide purchased 3,340 seedlings to plant on their properties. KCCA also continued its partnership with Fanshawe College, planting 2,024 seedlings in recognition of the graduating class of 2024. BTN Nurseries, through a partnership with Trees for Life, provided KCCA with 200 potted large stock trees at no cost to be planted across the watershed.

In September, KCCA hosted a TD Tree Days planting event at Dan Patterson Conservation Area, where over 50 community volunteers planted 300 potted trees and shrubs, helping to transition a fallow area back to woodland.

Forests Canada's 50 Million Tree Program continued to support KCCA's tree planting efforts by funding 8,100 trees planted across eight sites, while a new partnership between Tree Canada and Conservation Ontario provided funding to plant 10,000 tree and shrub seedlings across three properties.





Invasive Species Management

In 2024, KCCA managed invasive plant species across public, private, and Authority-owned properties throughout the watershed.

Staff secured a \$2,500 microgrant from the Invasive Species Action Fund to manage spotted knapweed and woody invasive species at Kirk-Cousins Management Area. This project is part of a larger multi-year initiative to restore the southern portion of the property to meadow habitat. In addition, KCCA hosted a volunteer event where four classes of geography students from Regina Mundi Catholic College manually cut and removed European Buckthorn, Glossy Buckthorn, Autumn Olive, and invasive Honeysuckle from immature forest areas on the property.

KCCA partnered with a group of volunteers from the 31st St. Thomas Scouts and Ventures to pull garlic mustard at Pinafore Park in St. Thomas. KCCA staff also continued its efforts combatting the spread of invasive phragmites across the watershed. Staff treated 20.8 acres of phragmites, with 1.7 acres receiving their first treatment and 19.1 acres undergoing secondary mop-up treatments to ensure effective control.



Stewardship

Wetlands were created on five properties across the watershed through partnerships with Elgin Stewardship Council, ALUS Elgin, and Ducks Unlimited. KCCA's stewardship staff worked with Brahm and Kaitlyn Perl, Central Elgin farmers, to develop a restoration plan for two marginal agricultural fields totaling 11 acres. As part of the project, two wetland cells were excavated, 3.5 acres of tallgrass prairie were established, and 5,350 trees were planted. The site was showcased on the Elgin Stewardship Council Summer Tour.

The Elgin Clean Water Program, administered by KCCA, provided \$72,086 in funding to 22 projects across Elgin County in 2024. Since its launch in 2012, the program has funded 340 projects, with total project costs exceeding \$3.93 million. Elgin County and the Green Lane Community Trust Fund provide annual funding to the program.

With support from the Ontario Ministry of Agriculture, Food and Agribusiness, KCCA partnered with Catfish Creek and Long Point Region Conservation Authorities to raise awareness and increase adoption of Best Management Practices (BMPs) aimed at reducing sediment and nutrients from farmland.

The Kettle Creek Environmental Youth Corps (EYC) gained meaningful volunteer experience in environmental conservation through the planting of 1,000 wildflower plugs at Dalewood Conservation Area and 500 tree seedlings at the KCCA Administration Centre. Youth Corps members also helped to remove woody invasive species and assisted with trail maintenance on KCCA properties.



Conservation Lands

KCCA's campgrounds had another record-breaking year in 2024. Dalewood and Lake Whittaker Conservation Areas remained popular tourist destinations welcoming over 22,523 visitors and booking 36,108 camping nights. Infrastructure improvements included electrical upgrades at both campgrounds.

Thanks to a generous \$200,000 donation from the Estate of Sam Bennett, a long-time neighbour of Lake Whittaker, four cabins are being introduced to the Lakeshore camping area. Drainage improvements and site preparations were completed in 2024 to ensure the cabins will be ready for rental in the 2025 season.



KCCA received a \$10,000 donation from Helen Nichol, in memory of her son James David Kirk, to support improvements to Kirk-Cousins Management Area. Upgrades were completed in 2024 including regrading the parking lot, and a new rock seating and picnic area was added for visitors to enjoy. Additionally, a viewing platform was installed, offering a scenic vantage point of the wetlands.

KCCA's hiking trails continue to see high usage with 62,404 users in 2024.



371 watercraft
rentals



3,836 day use
passes sold



2,785 bags of
firewood sold



Education and Outreach

For the first time since 2017, the St. Thomas-Elgin Children's Water Festival returned to Pinafore Park in St. Thomas. Over 3,200 students from 23 schools learned about water protection, science and conservation through hands-on activities linked to the Ontario Curriculum. The Festival relied on the support of over 350 volunteers, including 229 high school students. Teacher feedback was overwhelmingly positive, with one remarking, *"Every single one of my students was able to engage and really immerse themselves in the learning."*

In October 2024, the Carolinian Forest Festival welcomed 1,852 grade 6 and 7 students from 23 schools across the Thames Valley and London District Catholic School Boards. The Festival featured 37 activity stations designed to teach students about local forest ecosystems, biodiversity and climate change, including the introduction of four new activity stations to ensure that the messaging and learning at the Festival remains relevant.



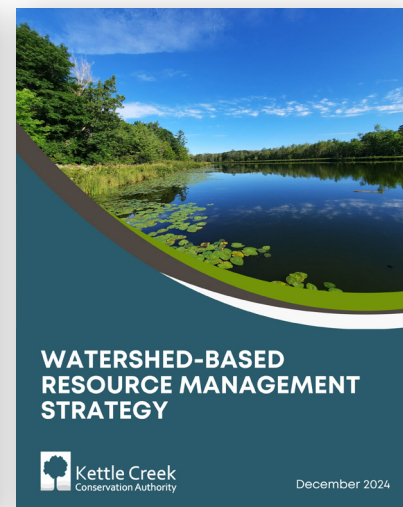


Corporate Services

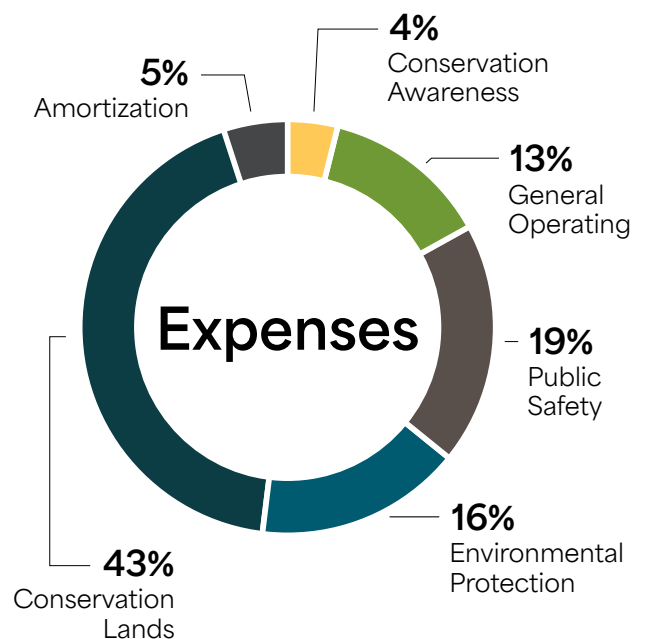
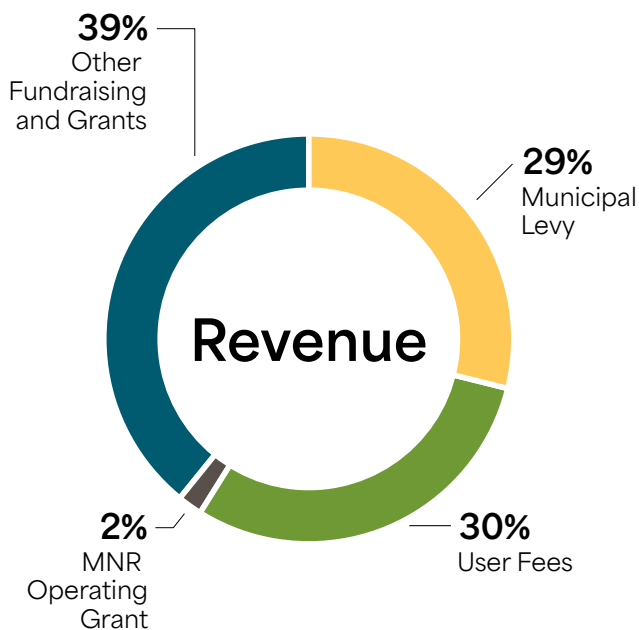
December 31, 2024 marked the deadline for *Conservation Authorities Act* deliverables and KCCA successfully met all requirements. Key accomplishments included the completion of the Watershed-based Resource Management Strategy, the Conservation Areas Strategy, and the Land Inventory.

Continuing its transition to a more paperless work environment, KCCA completed a document management project that archived over 5,000 paper documents, photographs, large-scale maps and historical aerial imagery. As part of the project, a Records Retention Policy was also introduced.

KCCA's social media presence saw significant growth in 2024, reaching over 238,000 people, a 110% increase over 2023. KCCA's Facebook page grew to 3,931 followers with 16,051 visits and 5,900 interactions, reinforcing its role as an important engagement and communication tool. The most popular post of the year was the announcement of the 35-acre land donation by the Lyle family to form the Stanley Lyle Grove. This post alone reached 23,800 unique users.



Financial Summary



Full financial statements are available online at www.kettlecreekconservation.on.ca

Our Partners & Donors

AA Sanitation • ALUS • BTN Nurseries • Belmont Swans • City of London • City of St. Thomas • Conservation Ontario • Delta Power • Dianne Bond • Ducks Unlimited • Elgin Clean Water Program • Elgin County • Elgin Federation of Agriculture • Elgin Stewardship Council • Emergency Management Ontario • Environment and Climate Change Canada • Estate of Sam Bennett • Fanshawe College • Ferguson RV • Fisheries and Oceans Canada • Forests Canada • Green Lane Community Trust Fund • Hollandia Gardens • Huron Tractor • Invasive Species Centre • Jack Stelpstra • Jim Lyle • John & Debbie's Gas Bar Ltd • Kettle Creek Environmental Trust • Kettle Valley Pioneers • Laemers Excavating • London District Catholic School Board • Municipality of Central Elgin • Municipality of Middlesex Centre • Municipality of Thames Centre • Natural Resources Canada • Ontario Ministry of Agriculture, Food and Agribusiness • Ontario Ministry of Natural Resources • Paula Schummer • Pete Sorrill • Public Safety Canada • Ron's Auto Service • Southwestern Public Health • St. Thomas Field Naturalist Club • TD Friends of the Environment Foundation • Ted & Duggie Gill • Ted Knezic • Thames Valley District School Board • Township of Malahide • Township of Southwold • Toyota Motor Manufacturing Canada • Tree Canada • Unifor Local 27 • Unifor Local 88 • Wendy Labelle • Winnie & Rob Robicheau

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