



# GRAND Actions

The Grand River watershed newsletter



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## What's Inside:

### Special edition 2017

This 12-page edition includes items normally in *The Grand*.

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### Cover photo

This photo was taken during the June flood on the Grand River at Wilson Flats, upstream of West Montrose.

Photo by A Kaastra



[www.grandriver.ca](http://www.grandriver.ca)



## Seeking a fine balance between flooding and drought

By Janet Baine

GRCA Communications Specialist

**B**alancing the two extremes of flooding and drought is fraught with challenges for reservoir managers.

People don't think much about flooding until it happens, as it did June 23. Extreme flows early that morning resulted in flooding in the Grand River watershed. It brought back memories of the flood of 1974, and rightly so. An unprecedented 120 mm of rainfall fell across the northern watershed, an amount of rain that had not fallen that quickly in June, since record-keeping began in 1950.

"The flow at Marsville was the highest since 1972 and the flow at Shand Dam was the highest since 1948," said Dwight Boyd, Director of Engineering for the GRCA. He was awoken in

the wee hours of the night by the senior operator on call and, along with other GRCA staff, got to work very early that morning.

"If the dams weren't there, the water would have been even higher. There seems to be a misconception among some people that we can control a flood completely, and we can't," he said.

The watershed was impacted from top to bottom with many flooded roads, parks, fields and properties in some communities. It took two weeks before the Grand River system settled back to normal for this time of year.

"Each flood is different. We can learn a lot from each major flood event, and this will help us prepare for the next one," Boyd said.

The Grand River watershed is not alone in facing these challenges. Canadians in communities from British Columbia to Nova Scotia were in the news this May, telling their

Grand River Conservation Authority



Photo by Lara Fox

This is the Grand River at Galt during the flood in June. Flows were 900 cubic metres per second, compared with normal summer low flow of only 15 cms at this location.

stories of flooded basements, financial loss and hardship while news cameras rolled. Conservation authorities and water management agencies were challenged by the intensely wet weather that month. The Grand River watershed got more than double the usual amount of rain and experienced a significant storm during the second week of the month, but luckily got off lightly with minimal flooding. Little did we know that weeks later we would be hit far harder with extreme rainfall that did not appear in any Environment Canada weather forecast.

### Climate change

Climate change brings intense and unprecedented weather events that are not

always in the forecast, even with better weather forecasting technology.

The impact of flooding can be minimized by dams, but it can't be eliminated. In fact, research at the Intact Centre for Climate Adaptation at the University of Waterloo has found flooding is increasing in severity and frequency across Canada due to intense weather. As a result, the centre is developing a flood proofing program for homeowners to minimize the likelihood of flooding around their home. It is also working on programs for companies and communities and recommends that large investors consider flood hazards before they invest.

But climate change also results in extremely dry conditions. The Grand River watershed experienced this last summer and

fall, when people called the GRCA to ask what was happening to the reservoir water and where it had gone.

Everyone loved the hot sunny weather last summer, but as this lingered for many months, having enough water to meet the needs of all communities and all water users in the Grand River watershed was a challenge.

Last July the reservoirs provided 95 per cent of the water in the Grand River at Doon and south Kitchener and 60 per cent of the water at Galt. With that demand on the reservoirs, it's no surprise that campers were shocked to find reservoirs at record lows toward the end of the season.

The entire Grand River watershed remained in a Level 2 Low Water condition



Photo by Janet Baine

Visitors to Guelph Lake reservoir last fall were shocked to find old roads visible that are normally covered by a few feet of water.

## June 23 timeline

**3:13 a.m.** Duty officer received a voice alarm indicating 25 mm of rainfall at Luther Marsh and he then notified the GRCA senior dam operator.

**4:17 a.m.** Senior dam operator dispatched dam operators to major water control structures.

**5:40 a.m.** The GRCA's flood operations centre opened and began notifying municipal flood coordinators in the northern Grand River watershed about significant rainfall and flooding.

Flood coordinators then began notifying residents and closing roads that were at risk of flooding.

**9:15 a.m.** GRCA staff completed a flood forecast assessment and issued Flood Message #1. During the week, eight flood messages were issued.

until this spring, when early rainfall helped restore groundwater levels. At Level 2, the water users on municipal and private systems were asked to voluntarily reduce consumption by 20 per cent.

## Multipurpose dams and reservoirs

GRCA dams and reservoirs serve a dual purpose: flood risk management and river flow augmentation. "These are two competing, but equally important purposes," said Boyd. "If the sole purpose of the dams and reservoirs was to manage floods, they would ideally be empty. If the sole purpose was flow augmentation, they would ideally be full."

Given their dual purpose, the operation of these dams and reservoirs is highly complex, and managing these two competing needs across the watershed is a delicate balancing act. In addition, GRCA reservoir managers also consider water quality, the ecological needs of the aquatic system and the recreational use of the waterways, whenever possible.

"People view the river system very differently based on where they live and how they interact with it," said Boyd. "After an event like this, we all must take a step back from the river and look at ways we can work together to ensure the safety of watershed residents and the health of the watershed remains paramount."

# Learning how nature stops flooded basements in the City of Waterloo

Through a recent project, GRCA staff worked with geographical information system (GIS) software to find out how much water is stored in low-lying spots above the City of Waterloo.

This knowledge helps the GRCA and city planners understand how much of a benefit natural low-lying areas are to the city downstream.

Digital elevation mapping (DEM) was used to find all the low-lying areas in the upper Laurel Creek watershed (parts of Wellesley and Wilmot townships). These are the seasonal ponds and farm fields that flood after a heavy rainfall or snowmelt.

New technology allows the GIS software to measure the size of the depressions, including their depth. This means their storage capacity can be calculated to find out how much water is stored in each one of these low spots.

"We have always known about these areas and how they can help to naturally mitigate flooding. But now, very detailed data sources allow us to quantify how much water they actually hold," said Gus Rungis, Senior

Engineer of Water Control Infrastructure at the GRCA. "So if these areas were drained or paved over, we would have to deal with a lot of extra water during a large rainfall event that is currently handled by nature."

## A second Laurel reservoir

For the study, hundreds of ponds and depressions were found by Rungis and Jeff Pitcher, GRCA Water Information Specialist. These can hold enough water to fill about 1,000 Olympic-size swimming pools. One of the ponds they found was so big that it alone could hold back water that would fill 40 Olympic-size swimming pools.

If this water made it to developed areas, it could amount to a lot of potentially flooded basements.

A thousand Olympic-sized swimming pools, or 2.5 million cubic metres of water, is about the same capacity as Laurel Creek Reservoir itself. This reservoir went into operation in the spring of 1967, allowing the urban areas of the City of Waterloo to grow.

"Increasing our understanding of issues like this leads to better water management," said Rungis.

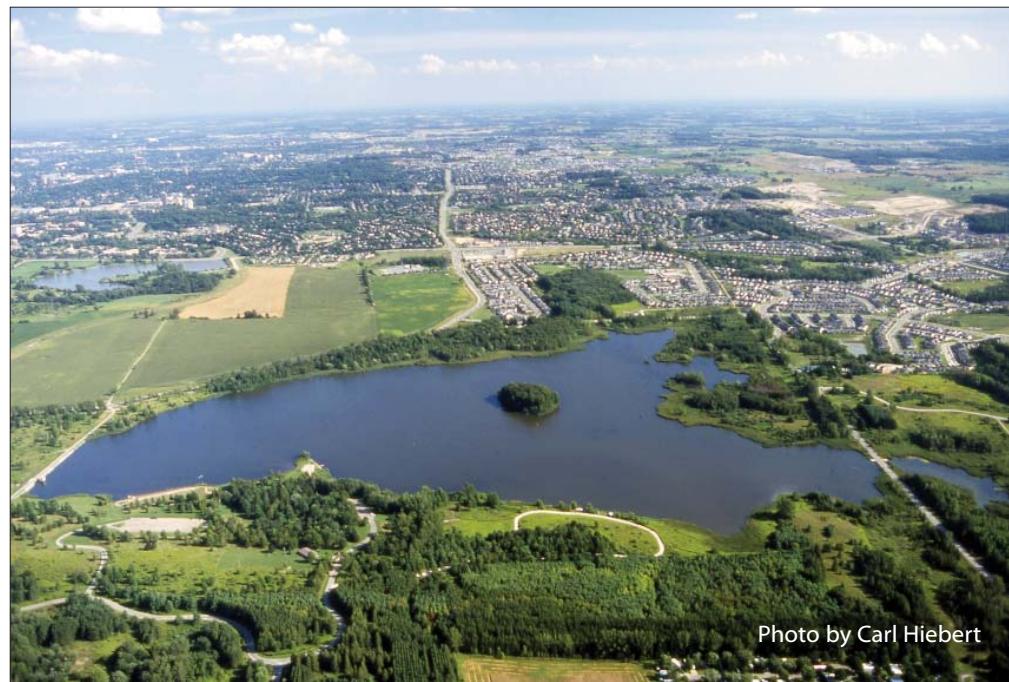


Photo by Carl Hiebert

A GRCA study has found that hundreds of ponds and depressions on the land above the City of Waterloo hold back just as much water after a heavy rain as Laurel Creek Reservoir (above).

# Top priorities for 2017 GRCA budget

In 2017, the GRCA will spend about \$31 million on programs that protect water quality, reduce flood damages, protect natural areas, support responsible development and provide outdoor recreation and environmental education.

## GRCA revenue sources

Municipalities are contributing \$11 million in general municipal levy to the GRCA this year, about 36 per cent of the total budget. The municipal levy works out to about \$10.60 per resident. When compared with last year, this is a 2.5 per cent increase.

Government grants of about \$4 million represent about 13 per cent of the budget. This includes \$800,000 from municipalities towards the Rural Water Quality program.

The remainder is primarily provincial grants, which include funding of over \$800,000 for the Source Protection Program.

The GRCA also receives about \$300,000 from the federal government. Approximately \$220,000 of this funding this year is in support of Canada 150 projects.

The GRCA generates \$14.6 million (about 47 per cent) of its own revenue through sources such as camping fees, park admissions, nature centre programs, hydro sales, property rentals, tree sales, planning permits and donations raised by the Grand River Conservation Foundation. Here are some budget highlights.

## Drinking Water Source Protection

The GRCA will continue to work on the development and implementation of a

Drinking Water Source Protection Plan for each of the four watersheds in the Lake Erie Source Protection Region, including the Grand River watershed, under the Clean Water Act, 2006. All four Source Protection Plans are in effect. Beyond supporting municipalities and other agencies in implementing the plans, the focus is to undertake water quantity risk assessment studies, develop water quantity policies, update water quality vulnerability assessments and develop an annual progress reporting framework.

## Emerald Ash Borer

The GRCA will continue to address the impacts of Emerald Ash Borer on GRCA lands. About \$400,000 will be spent this year responding to damage caused by the invasive insect. Most of the money will go to remove hazardous trees in the areas where the infestation is the highest.

## Rural Water Quality Program

About \$800,000 is expected to be available to farmers to help them undertake projects to protect water quality on their land, including tree planting, erection of fences along water courses, construction of manure storage tanks and other projects. The money comes from municipalities within the Grand River watershed, while the GRCA manages the program.

## Grand River Parks

The GRCA operates 11 active parks in the Grand River watershed, offering a wide array of activities including camping, fishing, swimming, hiking and skiing. These parks are user-supported through gate admission, equipment rental fees and camping revenues and receive no tax dollars to support their operation. Following two very successful operating seasons, the parks will be focused on infrastructure reinvestment in 2017. This reinvestment will primarily focus on projects that will enhance the visitor experience, including improved washroom facilities, playgrounds, pavilions and access control gates at park entrances.



There were smiles all around June 6 when the last planting project for spring 2017 was done. The wet spring bodes well for tree survival, but it delayed some plantings, such as this windbreak made up of 400 Norway spruce in Haldimand. All together, about 175,000 trees were planted by the GRCA this spring.

# 2017 work on water control structures

To the average person, it can be a surprise to notice a suddenly dry reservoir, as happened last year, or to learn about a major and unexpected flood, as happened in June, 2017.

But rivers ebb and flow all the time, and the reservoir system helps regulate the flows so residents can all carry about their daily life without thinking too much about the waterways.

The Grand, Conestogo and Speed are working rivers, with flood control dams that help to even out the river flows to minimize flooding and also bring sufficient water to communities during dry months.

Dykes and flood walls are in place along the Grand River and they also hold back water to minimize flood damage. This year, the GRCA expects to spend close to \$1.5 million on flood infrastructure maintenance projects.

The GRCA has about 30 dams including seven major reservoirs to maintain, as well as dikes and other infrastructure.

## Shand, Laurel and Guelph dams

About \$100,000 will be spent on backup generators and fuel system upgrades to meet current code requirements. Work on Guelph Dam will also include design and fabrication of a bulkhead to isolate the discharge valve for repair work.

## Conestogo Dam

Detailed design of the gate electrical gain heater (these keep the gate from freezing) and control system, as well as an update of the emergency preparedness plan. The cost is estimated at \$85,000.

## Laurel Dam

About \$60,000 will be spent completing the final phase of the dam safety study and gate operating system refurbishments.

## Woolwich Dam

About \$425,000 will be spent to refurbish the gates, replace gate control equipment, finalize hazard potential classification and develop an emergency preparedness plan.

## Caledonia Dam

About \$40,000 will be spent to install new

stop log gains and a new set of stop logs.

## Dunnville Dam

The dam fish ladder will be redesigned at an approximate cost of \$25,000.

## Wellesley Dam

About \$55,000 will be spent to complete the design and tender documents for future concrete repairs and to refurbish the gate.

## Wellington Street Dam

About \$30,000 will be spent to complete the design of a rehabilitation plan for the superstructure.

## Brantford Dike

Approximately \$45,000 will be spent to initiate toe repairs of the concrete slab and to redesign the dike through the abandoned railway line which requires manual placement of stop logs to complete the dike.

## Cambridge Dike

Repairs of two sections of the river wall will be completed at an approximate cost of \$330,000.

# Looking back on 2016

The year 2016 was busy for the GRCA, with many projects undertaken and completed and many weather issues with which to contend.

The parks had a banner a year due to a hot, sunny summer, resulting in a record number of visitors. Two parks now have automated gates — Shadé's Mills in Cambridge and Brant Park in Brantford. Rockwood, Shadé's, Belwood and Luther Marsh were all open year-round. Winter programming in early 2017 was not as successful due to warm weather and not much snow. A very cold December (when the parks were not open) gave way to a warm January, when few of the favourite winter activities were on offer. An increasing number of park visitors are buying annual memberships, which comes with a bonus coupon booklet.

It took several months for GRCA forestry staff to clean up after an ice storm in March 2016, but by July all the closed properties had reopened. During 2017, the dying ash trees in parts of the watershed had reached



Photos by Anne Loeffler

In 2014 native flowers were seeded in a hydro corridor on GRCA land in Cambridge. The plants are doing very well this year. They are attracting Monarch butterflies and are also a source of seeds used by GRCA staff for other plantings.



Minister of Natural Resources and Forestry Kathryn McGarry announced proposed changes to the Conservation Authorities Act June 14 at the GRCA head office.

peak mortality due to the Emerald Ash Borer infestation that has hit Canada.

More **outdoor education programs** extended into the Grand River Parks during the summer. At the same time, summer camp opportunities for kids increased in both 2016 and 2017. Apps' Mill Nature Centre has been upgraded, and camps are being offered at Taquanyah Nature Centre for the first time in many years. The full listing of available camps is online at

[www.grandriver.eventbrite.ca](http://www.grandriver.eventbrite.ca).

**Great weather** for the parks also put a strain on local water resources, because dry conditions persisted for most of the summer. This was a challenge for local agricultural operations and gardeners, as well as water managers.

In early 2017, the GRCA hired WSP Consultants to carry out an environmental assessment and design for a proposed hydro generating station at **Parkhill Dam** in

Cambridge. Completion of an environmental assessment and the design of a plan are the first stage in this project, which has been accepted under the Independent Electricity System Operator's Feed-in-Tariff Program. Currently, it's expected that the full project will take about five years to complete, with a new plant being commissioned between 2021 and 2022. The GRCA operates three other hydro generating stations at Shand Dam, Conestogo Dam and Guelph Dam. The amount of hydro generated by the GRCA makes the organization energy neutral.

## Conservation Foundation

In 2016, the Grand River Conservation Foundation provided nearly \$1.27 million for many types of projects related to the GRCA. Over the course of the year, donations that ranged from \$5 to \$250,000 were given out. The projects that benefited from these funds include the winter program expansion, the learning grounds at the future site of the new Guelph Lake Nature Centre, park trail improvements, an amphitheatre and natural playground at Shade's Mills, memorial trees and many more. The Foundation's expense rate in 2016 was about 13 per cent, showing donors that it is efficient. In a competitive charitable environment, that's great news.

## Colombian exchange students visit Laurel Creek

More than 100 exchange students went to camp for a day in May and early June at Laurel Creek Nature Centre as part of their experience while visiting Canada.

The students enjoyed a full camp experience with nature games and activities as well as a campfire lunch.

The exchange was organized through the Waterloo Catholic District School Board and was part of a short-term immersion program for these students.

"I would like to thank you for the amazing experience you provided to our international students. They have now done something really Canadian, as they described it themselves," said Jessica Morales, the school board's International Education Program Coordinator, adding that the board would like to do this regularly.



# Shift in water quality program at Grand River Parks beaches

By Janet Baine  
GRCA Communications Specialist

The long-time collaboration between the GRCA and local health units on water quality testing at beaches is continuing, and has taken a new turn.

Decades of beach testing has given health officials and the GRCA a clear picture of the factors that increase the risk of illness for swimmers. The partners are now focusing their efforts on educating people about those risks, so that the public can make informed decisions for themselves and their families.

"Awareness is the key to ensuring people don't get sick. They need to take precautions during certain conditions," said Sandra Cooke, Senior Water Quality Supervisor at the GRCA.

## Big new signs

Big new signs have been installed at the GRCA's nine beaches at Belwood Lake, Conestogo Lake, Elora Quarry, Guelph Lake (two beaches), Laurel Creek, Pinehurst Lake, Shade's Mills and Rockwood. The signs explain the conditions that lead to an elevated risk of water-borne illness. They also outline ways that beach-goers can help keep the beaches clean. A smaller version of

the sign are at each park gatehouse and flyers are available.

## Prevent illness

Swimmers can prevent illness by not swallowing water at the beach. Beach visitors should also wash their hands or use hand sanitizer after swimming or playing in the sand, because wet sand on a hot summer day can contain elevated levels of bacteria.

Since 1973, the GRCA and the three watershed health units (Wellington-Dufferin-Guelph Public Health, Region of Waterloo Public Health and the Brant County Health Unit) have worked together to test water at beaches during July and August. The lab test results that followed water sampling didn't become available until a day or two after the water sample was taken. If the result showed an elevated level of bacteria, then the health unit would post a sign at the beach to let people know of the potential health risk.

But due to laboratory culturing of the water samples taken, results were received 24 to 48 hours from the sampling time. This meant that the results did not provide up-to-date information for swimmers with respect to determining risk level. For example, a beach may have been 'posted' with levels in excess of the provincial guideline, when in reality the conditions had improved. Or at greater risk, a beach may not have been 'posted' when in fact the water quality had worsened since the sample was taken, possibly providing park patrons with a false sense of safety.

"Water quality in natural bodies of water can change rapidly," explains Aldo Franco, Manager of Health Protection and Investigation for Region of Waterloo Public Health. "The sampling process available to public health does not allow us to communicate timely or relevant information about water quality to the community. By increasing awareness of the conditions that can impact water quality, the public is able to make informed decisions on whether or not they wish to enter the water at the beach."

GRCA staff will continue to take water quality samples every other week during July and August. While this data is not useful in identifying public health risk when swimming in natural moving water bodies, it will be used to determine long-term trends in the water quality at GRCA swimming areas over time. GRCA staff will also continue to do a daily beach check.

Rainfall can cause fecal material from wildlife or pets to run off into streams and reservoirs. It can also stir up the water, creating cloudy conditions. When there is a significant rainfall (one to two inches or 25 to 50 mm), it is advised to refrain from swimming for 24 to 48 hours, until clear conditions return. A rainfall chart related to the beaches and more information is posted online, so people can check this information before visiting a park beach at [www.grandriver.ca/beaches](http://www.grandriver.ca/beaches).



Photo by Jen Yates

## Conditions that can increase bacteria levels at beaches

- Heavy rainfall of 25 to 50 mm (one to two inches) within 24 to 48 hours results in runoff that washes bacteria from the land into streams, rivers and lakes.
- If the water is so cloudy that you can't see your feet in waist-deep water, it means the sand and silt has been stirred up and bacteria levels may be higher.
- High wind and waves can stir up sand and silt and increase bacteria levels.
- Lots of birds or other wildlife nearby means their droppings may contaminate the water.
- Dead fish, algae, scum or debris can be seen in the water.

People have information to assess the risks of swimming and can make their own decisions.

A long-time goose relocation program helps keep these animals away from the beaches. They are moved during the moulting period when they are unable to fly, but once they can fly again some of the geese return to the parks.

While beach closures are rare, a beach will be closed and swimming will be prohibited due to a chemical or sewage spill, or the presence of blue-green algae — bacteria that can be harmful to humans and animals.

### Help keep beaches clean

There are a number of ways people can help keep beaches at Grand River Parks clean to improve water quality in our swimming areas. These include:

- Don't feed wildlife or birds.
- Don't use soap, shampoo or other bathing products in the water.
- Use appropriate washroom facilities.
- Place all garbage in designated bins, or take it with you.

### Public health unit contacts

- For Guelph Lake, Rockwood, Elora Gorge, Belwood Lake and Conestogo Lake, contact the Wellington-Dufferin-Guelph Public Health at 1-800-265-7293.
- For Shade's Mills and Laurel Creek, contact the Region of Waterloo Public Health at 519-575-4400.
- For Pinehurst Lake, contact the Brant County Health Unit at 519-753-4937.

# 50 years ago - Dutch elm disease and a fledgling GRCA

By Janet Baine

GRCA Communications Specialist

Things were very different in water management in the Grand River watershed back in 1967 when Canada's centennial celebrations were underway and the GRCA was finding its footing.

Only one year earlier, the GRCA's two predecessor agencies, the Grand River Conservation Commission (formed in 1934) and the Grand Valley Conservation Authority (formed in 1948) had joined together to form the Grand River Conservation Authority (GRCA).

The fledgling organization operated under special legislation for two years, until January 1969, when it continued under the Conservation Authorities Act of 1968.

### Pioneers of water management

"The people in the valley of the Grand are the pioneers of water management and control in Ontario," wrote Mac Coutts, the first general manager of the GRCA in the 1967 Annual Report. "The initial plans for control works started in the early 1930s, resulting in the construction of the Shand Dam in 1942. The Luther Dam was established in 1954 and the Conestogo Dam was completed in 1959. Studies and reports

have been continually expanded, resulting in The Water Control Plan 1966."

Dutch elm disease hit the Grand River watershed 50 years ago and dead elm trees were cut down during the winter of 1967. They were cut into logs and boards at a GRCA sawmill.

That year, the GRCA planted more than 500,000 trees. About 240,000 seedlings were planted on GRCA land, and an additional 292,000 trees were planted on private properties through a program that provided free crew and machine planting.

Funding for tree planting goes up and down, and tree planting numbers reflect that. In addition, now we plant more species and undertake more types of habitat restoration.

In 1967, Belwood nursery produced 172,000 seedlings and a small nursery at Pinehurst was closed that year. Now, the GRCA's only tree nursery is at Burford.

The GRCA operated three major and 14 smaller dams and reservoirs on the Grand River and its tributaries, according to the 1967 Annual Report. The three big ones were Shand (1942), Luther (1952) and Conestogo (1958) dams. Laurel Creek Reservoir was used for the first time during the spring of 1967 and planning for Shade's Mills was underway. Major dams at Woolwich and Guelph came later.

At the end of 1967, GRCA land holdings totalled more than 25,000 acres, including about 5,400 acres of agreement forests managed by the Ontario Department of Lands and Forests.

The GRCA didn't operate any nature centres in 1967, but the idea was starting to be discussed. The annual report says, "there is great potential in the watershed for educators to take advantage of the conservation areas for outdoor classrooms."

Only the year before, in 1966, the agency that regulated municipal sewage discharge to the rivers was formed leading to major water quality improvements. That agency merged with the Department of the Environment in 1972 to become today's Ontario Ministry of Environment and Climate Change.



While 50 years ago GRCA staff were struggling with Dutch elm disease, now they are working hard to reduce the hazards related to dying ash trees that have been attacked by Emerald Ash Borer insects.



Staff at Rockwood Park were in the spirit of celebration during Canada Day for Canada's 150th anniversary and were dressed for the occasion.

## Earth Day launch for GRCA's celebration of Canada 150 in 2017

The GRCA kicked off its Canada 150 celebration on Earth Day — April 22 — at the Guelph Rotary Forest, where a maple grove shaped like a maple leaf was planted in honour of the 150th anniversary of Confederation.

The celebration is continuing for 150 days and includes various activities, promotion of GRCA programs and initiatives throughout the watershed, and as a number of events at Grand River Parks and nature centres. The GRCA is sharing Canada 150 information through its Twitter (GrandRiverParks and GrandRiverCA) and Facebook (GrandRiverConservation) accounts, as well as its website and publications.

The Grand River watershed is rich in Canadian history. In 1994, the Grand River was designated as a Canadian Heritage River for its cultural history and outstanding cultural values. Aspects of the Canadian Heritage River will be highlighted, as well as ways to learn about and enjoy nature in the watershed.

Each spring, the GRCA and its partners plant trees across the watershed. The Guelph Rotary Forest is located at Guelph Lake Park and this year is its 10th anniversary. It is a

joint venture with the Guelph Rotary Club and other partners. About 4,000 trees were planted there on Earth Day, including the maple grove.

Full details of events are available at [www.grandriver.ca/events](http://www.grandriver.ca/events) and you can subscribe to receive a weekly email about the type of events that interest you.



Photo by Matt Quinn

Learn about natural heritage at one of our parks events.

## Communications audit – opportunities for stakeholder input

At the GRCA, we value the trust of our stakeholders and are committed to openness and accountability.

We strive for clear and respectful communication with our partners and with members of the public in order to build a better understanding of GRCA programs, services, projects and watershed challenges.

As part of our commitment to open communication, we work to keep stakeholders up-to-date on what's happening at the GRCA through our website, social media channels and a number of publications. In 2016, we conducted a review of three GRCA publications: GRCA Current, Grand Actions and The Grand. The review included a survey, and we thank all those who provided us with their feedback.

We are now expanding the scope of the review and taking a more thorough look at all of our communications practices. In May 2017, the GRCA hired Enterprise Canada to undertake a comprehensive Communications and Marketing Review. The overall goal of the review is to perform an organization-wide audit of current communications and marketing practices for the GRCA as well as the Grand River Conservation Foundation (GRCF).

### Research underway

The audit will include a review of both internal and external communications in order to identify strengths and weaknesses, and to develop specific recommendations and action steps to strengthen and enhance the GRCA's communication processes.

The research phase of the project is now underway and questionnaires are being developed to gather input from all stakeholders. Information about the audit and ways to provide your input will be shared on our website, social media channels and in our publications in the coming months. Any questions about the audit may be directed to Lisa Stocco, GRCA Manager of Communications at [lstocco@grandriver.ca](mailto:lstocco@grandriver.ca).

# Youth Outdoors Day now open for registration

Kids can now register for Youth Outdoors Day which takes place each September at Luther Marsh Wildlife Management Area, north of Fergus.

Now in its 16th year, this volunteer-run event received a 2016 Watershed Award from the Grand River Conservation Authority.

"We want to ignite that spark of passion that is inside kids and show them good environmental stewardship and what wildlife conservation is all about," says Joel Pegg, the coordinator of this event. "We want kids to put down their phones and electronics, step outside and enjoy the outdoors."

Youth Outdoors Day started in 2001 with about 50 kids going to a handful of learning stations to find out about aspects of the outdoors. Now, 250 young people attend along with a parent.

The goal is to introduce kids (ages 9 to 15) to the great outdoors through fun and interactive activities. The list of hands-on activities grows each year to give kids an opportunity to experience nature so that they develop a life-long passion for the

outdoors and an understanding of stewardship. They can learn about butterfly banding, fish identification and how to use a crossbow.

The event was an initiative of the Guelph office of the Ministry of Natural Resources and Forestry (MNRF) where Pegg works as a conservation officer, but it is now run by volunteers. Pegg gives credit for the success of the event to "the small yet mighty" planning committee that also includes Adam Storer, Tony Vanderheide, Sharon Grose, O.J. MacDonald and Mike DeWitt. The 150 volunteers who help out on the day of the event have very specialized skills that they want to pass on to the younger generation.

## Popular event

Youth Outdoors Day has become so popular that there is a waiting list to attend. Register online early at [www.youthoutdoorsday.org](http://www.youthoutdoorsday.org). Preference is given to registrants who are attending for the first time. Pegg estimates that 85 to 90 per cent of attendees are urban kids who are



Kids explore many aspects of nature at this September event.

exposed to many outdoor interests and skills for the first time. While many are local, some parents will bring their kids quite a distance to attend.

Pegg remembers meeting a family from Windsor who got up at 3:30 a.m. to drive their three kids three-and-a-half hours to Luther Marsh for the day, and they found that the drive was well worth it.

This event was the first of its kind, and Pegg is pleased that it is a model for similar programs in other areas, including the Get Outdoors Youth for Conservation program in Peterborough and another event near Owen Sound.

Fifty sponsors provide all the materials, lunch and prizes, so that no one has to pay to attend.

"The dedicated and passionate volunteers have made this program successful. They enjoy showcasing their interest and welcome the opportunity to share it with young people," says Robert Messier, a long-time volunteer and also an ecologist with the GRCA. "The event helps increase awareness and exposure to recreational opportunities. It also helps facilitate mutual respect and awareness of outdoor interests, profiling common objectives between everyone and the resource managers who take care of our watershed resources."

For more information about the awards, check [www.grandriver.ca/awards](http://www.grandriver.ca/awards).



Kids nine to 15 years old learn about the outdoors at Youth Outdoors Day each year at Luther Marsh. Register early, because this event is popular and fills up.

# Grade 4 students bring gifts for Shade's Mills Nature centre

*The wonderful world of nature is outside the classroom door, and this is why nature centres operated by the Grand River Conservation Authority work closely with teachers, schools and school boards to teach students about nature.*

**By Janet Baine**  
Communications Specialist

A class of Grade 4 students from Brantford Christian School sat in the outdoor classroom at Shade's Mills Nature Centre at the end of the school year, each bearing a unique gift.

Earlier in the school year they had come to learn about species at risk and they took what they learned to heart.

"I always try to let them know that they can help," explained GRCA Interpretive Program Guide Rhonda Sage, who taught the students during their visit. "I want to make them feel it isn't a lost cause for these species, and even a Grade 4 student can make a difference, no matter how big or small the action is. I hope the day inspires something inside that will stay with them."

That is exactly what happened with this class. Back at school, the students told their

teacher Jannette Mazereeuw that they wanted to do something to make a difference. Then one student, Cohen Mulder, came up with the idea that each student could create a poster about an at-risk species and display the posters so that other people would learn about these species, too. Each student created a unique poster about a different species — from snakes and salamanders to drooping trilliums and short-eared owls.

"The students spent a lot of time and included information about what the species look like, what their habitat is like, why they are endangered, and an action plan on how to help species at risk. We are over the moon and so excited to come back to the nature centre with the posters," said Mazereeuw when she returned with her class.

The students brought a second set of posters to be displayed at Apps' Mill Nature Centre near Brantford.

Nature centre staff, including Sage, are specialists who love nature and enjoy sharing their very specialized knowledge with kids every day. A visit to a nature centre allows students to walk through many different habitats and see plants and animals in their



Each student presented a poster about a species at risk to the nature centre.

home environment. Each centre also has its own set of nature specimens such as nests, animals and stories. Kids also love the nature games and activities that have been specially developed to make learning about nature fun and educational.

During their second visit with Sage, the students hung their posters for others to see. They were then led on a nature hike through different habitats and saw a Baltimore oriole fly from its big oval nest high up in the trees. They also played a nature game and hid in a forest, still as mice.

"When I heard that they took what I taught them that first day and initiated making posters to bring awareness about the species at risk to their school, I was thrilled! This is all you wish for when you spend such a short period of time with a class. That spark of curiosity and call to take action," Sage said.

- Teachers can contact a GRCA nature centre directly, or visit [www.grandriver.ca/SchoolPrograms](http://www.grandriver.ca/SchoolPrograms) to learn more about the curriculum-based programs suitable for students in all grades.
- During the summer, many nature programs are provided by the nature centre staff at parks — check [www.grandriver.ca/events](http://www.grandriver.ca/events) to see and subscribe to event listings.
- Nature centres offer nature-based summer camps. Registration and descriptions are available online at [www.grandriver.eventbrite.ca](http://www.grandriver.eventbrite.ca).



Photo by Janet Baine

Students in the new outdoor classroom at Shade's Mills returned to present posters about species at risk to share what they had learned.

# Remembering Gil Henderson

Gil Henderson — a man of many accomplishments with a strong connection to the GRCA — passed away in January, 2017.

In addition to his significant contribution to protecting the natural environment, he was a veteran of the Second World War and a four-time Olympian in trapshooting.

His conservation accomplishments extended over 50 years. In the 1960s, Henderson and his wife, Molly, amassed 900 acres of farmland in Brant County and worked with Ducks Unlimited Canada to protect the many wetlands on the property. It was often used by government and the conservation authority as an example for other landowners, by showing how to fence off wetlands to livestock and leaving vegetative buffers around the edges.

Henderson worked with Harry Lumsden to reintroduce trumpeter swans in Ontario. When the project began in 1982, there were no wild trumpeter swans in the province. Just 14 years later, the species was no longer considered to be at risk. Many pairs are now

nesting at the Brant County farm.

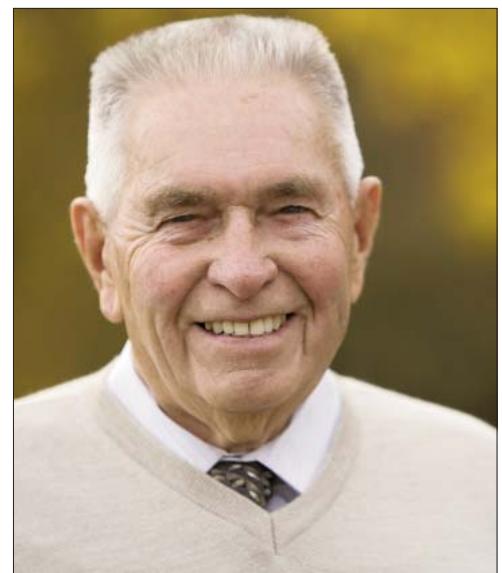
He established more than 300 bluebird boxes and cared for a purple martin colony.

In 1999, Molly became terminally ill and it was at that time that the couple secured their legacy by donating 400 acres of farmland in St. George to the Tim Horton Children's Foundation. Tim Horton Onondaga Farms ensures that Gil and Molly's efforts to educate kids about environment stewardship are still being met.

Henderson also served as a director of the Grand River Conservation Foundation for 16 years.

He received many awards for his work, including a GRCA Watershed Award in 2000 and another in 2004 in connection with the Tim Horton's camp, a Latornell Pioneer award in 2010 and a Lieutenant-Governor's Ontario Heritage Award in 2011.

Henderson's legacy continues on, through the trees he planted and the wildlife habitat he created, and in the thousands of kids who attend Onondaga Farms camp every year to learn about the outdoors.



Gil Henderson

## About Grand Actions:

*This newsletter is produced several times a year by the Grand River Conservation Authority.*

### More information:

Current and back issues as well as complete subscription information is available online at [www.grandriver.ca/GrandActions](http://www.grandriver.ca/GrandActions).

### Submission deadlines:

The 15th of February, April, June, August, October and December. Submissions may be edited for length or style. Photos and event information is also welcome. We do our best to publish items, but we are not able to guarantee publication.

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## THE GRAND CALENDAR

### Pinehurst Discovery Day Sept. 10

Discover one of our most beautiful parks at a free open house event. There will be lots of fun activities for everyone to get up close and personal with critters, plant wildflowers, learn to geocache, bring home some nature crafts and more. Adventurous visitors won't want to miss the scavenger hunt, free canoe rentals, visiting a fire truck and police cruiser, and the chance to catch a fish. Park admission and events are free. There will be a variety of food trucks on site should you work up an appetite (payment required for food trucks). Volunteer helpers will also be needed for this event.

### Youth Outdoors Day Sept. 16

Register now for a fun-filled day of outdoor activities at Luther Marsh Wildlife Management Area in Grand Valley. This annual event is free to youth nine to 15 but registration is limited, so sign up in advance. Details and registration available online at

[www.youthoutdoorsday.com](http://www.youthoutdoorsday.com).

### Run for the Toad Sept. 30

This 25- and 50-km trail race is in its 15th year at Pinehurst Lake. Runners and walkers representing many provinces and states participate in this event, which is Canada's biggest trail event. Register online at [www.runforthetoad.com](http://www.runforthetoad.com).

### Grand River Spey Clave Oct. 3-4

This unique fishing event takes place at Brant Park and explores this style of fishing. Details available on [www.grandriverspey.ca](http://www.grandriverspey.ca). This event is both days 8 a.m. to 5 p.m. The cost is park admission (free with Grand River Parks Membership) and \$10 per day or \$15 for a weekend pass.

For updates and more events, as well as to subscribe to receive certain types of events, please visit the GRCA's online calendar at [www.grandriver.ca/events](http://www.grandriver.ca/events).