

# GRAND

THE GRAND STRATEGY NEWSLETTER

# ACTIONS

Volume 14, Number 5 - Nov-Dec 2009



Grand River  
Conservation  
Authority



The Grand:  
A Canadian  
Heritage River

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Paul Emerson speaks at  
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## The Grand-Erie connection

The often overlooked connection between the Grand River and Lake Erie was the focus of the ninth annual Grand River watershed Water Forum held in September.

Entitled *Great Lakes ~ Great Links: A Grand Connection*, the forum brought about 300 people to hear 11 leaders in the environmental field talk about aspects of the very complex relationship between the smallest and most heavily populated Great Lake and the biggest Canadian river that flows into it.

The Grand River contributes about 40 per cent of the phosphorus that goes into the eastern end of Lake Erie. Phosphorus is an important nutrient, but an overabundance of it is harmful to the southern Grand River and the lake. It is an area that warrants the attention of scientists and the commitment of decision-makers. They must work together and find the resources to ensure the complexity of these challenges are both understood and acted on, the 300 people who attended the forum heard.

"It's like having a city of a million people sitting right at the mouth of the river. All its activities, all its sins so to speak, impact the lake," Paul Emerson, CAO of the GRCA told the 300



people gathered for the forum.

"We've got some great reports, but if we don't support them with action, we haven't done anything to improve one drop of water going into the lake," he said.

This event continues to be an important gathering of water experts, water managers and interested public in the Grand River watershed and beyond. A brief synopsis of the presenters and what they said follows, but the presentations are posted on [www.grandriver.ca](http://www.grandriver.ca) in the Water Forum section.

As always, the event ended with Ontario's Environmental Commissioner, Gord Miller, summing up the presentations from the day. "Resources, commitment and governance are needed to tackle the very important part of the ecosystem," he said. "We have the people and the capacity to do it; we just have to energize and capitalize them and turn them loose. So that's the



*Each year Gord Miller, the Ontario Environmental Commissioner, listens carefully to the presentations and then gives a summary that is both informative and amusing.*

message I have taken from this.”

**Peter Annin**, author of *The Great Lakes Water Wars* was the kick-off speaker for the morning program. Based on his research, Annin believes that the world is entering a period of tension driven by water scarcity and climate change. This will put increased pressure on water-rich areas like the Great Lakes. The Great Lakes nourish over 40 million people in the United States and Canada as well as support unique and fragile ecosystems. The regional economy is the world’s third largest (over \$2 trillion) and much of that economy is water dependent. To protect the Great Lakes, Annin contends that while the United States and Canada have developed a modern world-class water management system for the Great Lakes, careful monitoring is needed to ensure that management goals and objectives are being met.

**Jim Vollmershausen**, Regional Director General for Environment Canada (Ontario Region), said that in 2008, the overall status of the Great Lakes ecosystem was assessed as mixed

because some conditions were good, while others were poor. Trends were also varied with some conditions improving and others declining. Watersheds influence the Great Lakes and sometimes contribute excessive nutrients and high levels of suspended solids. Changes to river systems, such as building dams prevent fish access and change river morphology and sediment movement. Wetland loss and degradation, channel alterations and pollution also degrade habitats. Vollmershausen noted that water quality in the southern Grand River is poor and stressed the importance of continuing to work cooperatively to address concerns.

**Dr. Gail Krantzberg**, professor and director of the McMaster Centre for Engineering and Public Policy suggested that our ability to enhance and sustain the Great Lakes depends on how well we can collectively achieve sustainable communities throughout the Great Lakes basin. She also felt that the Great Lakes Agreement needs to be revised to ensure civic engagement and human steward-

ship as well as more accountability and better governance.

**John Stager**, Ontario’s Chief Drinking Water Inspector, noted that more than 85 per cent of Ontario’s population relies on the Great Lakes for drinking water. He spoke about how the provincial government is protecting drinking water through the new Clean Water Act. The Grand River Source Protection Authority is a leader in source protection and one of the most committed and effective supporters of early actions to protect source water, he said.

**Dr. Bruce Mitchell**, professor and associate provost at the University of Waterloo, said that water resources are characterized by change, complexity, uncertainty and conflict. The Global Water Partnership suggests that integrated water resource management means coordinated development and management of water, land and related resources, in order to maximize the economic and social welfare in a fair way without compromising ecosystem sus-



*Sarah Glover is the recipient of the 2009 S.C. Johnson Environmental Scholarship. She has completed her 3rd year at the University of Guelph in Environmental Science.*





*Peter Annin, Journalist and author of The Great Lakes Water Wars, opened the water forum which focused on the Grand's connection to Lake Erie.*

tainability. But doing this is difficult. Mitchell provided an overview of 12 considerations to help bridge the gaps between strategy, plan and action.

During the lunch break, participants visited over 40 displays promoting water services, innovative technologies and conservation and water management programs in the Grand River watershed.

Minister of Natural Resources, **Donna Cansfield**, introduced the afternoon program. She spoke about some collaborative efforts to address river and Great Lakes health which are being undertaken by her ministry in conjunction with other partners, including the GRCA. An important agreement between the province and the federal government — the Canada Ontario Agreement Respecting the Great Lakes Ecosystem Basin (COA) expires in March 2010, she noted.

**Paul Emerson**, GRCA chief administrator, provided an overview of the 2009 Watershed Report. He noted that over the past century, the natural balance between the Grand River and Lake Erie have been broken as a result of dams, weirs and changes to the landscape. This has degraded water quality,

changed water flows and river dynamics and decreased biodiversity. Emerson stressed that the health of Lake Erie depends on the health of the rivers flowing into it and that a renewed collaboration between partners will help re-establish broken ecological links.

This was followed by a three-part presentation by GRCA staff on behalf of many partners about the strong influence the Grand River and Lake Erie have on each other. **Dwight Boyd**, senior water resources engineer, **Sandra Cooke**, senior water quality supervisor and **Warren Yerex**, retired supervisor of aquatic resources, explored future management options for sustaining and improving river and lake health. This presentation concluded that an ecosystem approach is needed — if we fix the land, we fix the river and if we fix the river, we fix the lake.

Collaborations and partnerships are key to doing this: we need a shared vision, pooling of resources and commitment to targeted upstream action. These presentations are posted in the Water Forum section of [www.grandriver.ca](http://www.grandriver.ca).

## 75 years of improving water quality

By Janet Baine  
Communications Specialist

**S**eventy-five years ago, water quality in the Grand River watershed was at an all time low.

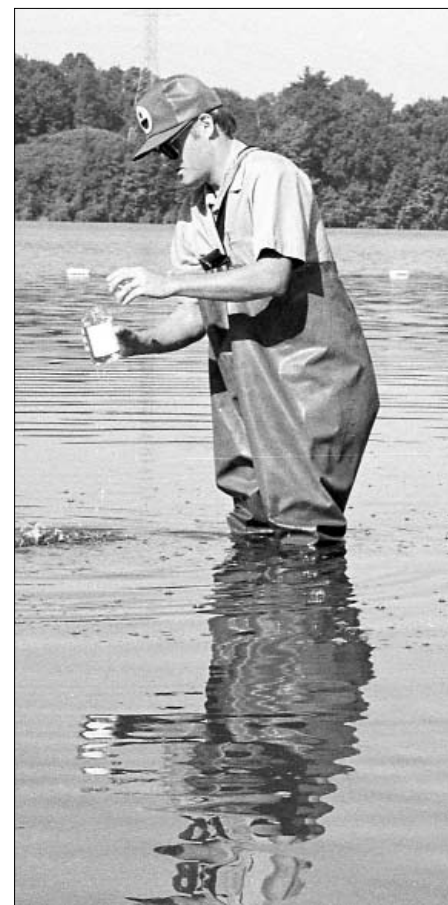
In the 19th century, residents chopped down the trees transforming forests to farmland. They drained the wetlands and built communities next to the river. They then let their untreated sewage drain directly into the waterways. During summers when there was no rain, water quality was especially poor.

By 1936, a Maclean's Magazine arti-

cle said the Grand River fishery had become a memory, with trout and bass replaced by carp and suckers. Turning all of that around has taken generations and the challenges continue today.

The first solution to poor water quality was building a network of dams between 1942 and 1976. These hold back water in reservoirs during the spring and release it during the dry summer months. A common saying at the time was "dilution to pollution is the solution." The reservoirs now provide up to 85 per cent of the flow in the Grand River through Kitchener and Waterloo during the summer and 90 per cent of the flow in the Speed River through Guelph.

But it turned out that dilution was only part of the solution. More significant was the work done to keep contaminants out of the river in the first place.



*Over four decades of water sampling resulted in data that shows some improvements in water quality.*



*Water quality improvements over several decades have increase recreational opportunities on the Grand River, although many local residents remain unaware of these improvements.*

In 1966, the Ontario Water Resources Commission, the predecessor of the Ministry of Environment, began regulating municipal sewage treatment and industrial discharges into waterways.

Municipalities have made tremendous strides in wastewater treatment. Guelph has a history of being ahead of the pack. Improvements to the city's wastewater plant and its operating procedures have helped transform the Speed River. It is no longer weed-choked, murky and bereft of aquatic life; instead it is a quiet oasis where hikers can enjoy the scenery as waterfowl swoop in for a visit.

However, water quality still remains a concern and in some parts of the watershed, population pressures have led to a decline in quality.

The Grand River is one of the most intensively monitored and researched rivers in Canada. The three universities within the watershed all study the waterways. Solving water quality problems means knowing what is going into the waterways and how changes on the land change the river.

### Testing started in 1964

Monthly water sampling by the province for phosphorus, nitrogen and metals began in 1964. In 1971, this evolved into a partnership between the

province, which does the lab work, and the GRCA, which collects the water samples. Now called the Provincial Water Quality Monitoring Program, water is sampled eight times a year for 20 parameters at 36 sites.

By the late 1970s, technology had advanced and continuous water quality monitoring began. This was a breakthrough. It is used for decision-making, to assess and improve river health and it is also an early warning for drinking water intakes.

There are now seven stations that measure water temperature, pH, conductivity, and dissolved oxygen every 10 minutes, 24 hours a day. Since 2000, this information has been posted on the GRCA website.

Water quality data is also incorporated into the Grand River Simulation Model (GRSM) — a complex computer simulation that uses data about river conditions, the 28 municipal wastewater treatment plants and the river's biological processes. The model can predict how a proposed change, such as a sewage treatment upgrade, will impact water quality.

"This is a very important decision support tool, when you consider the growing population and the high cost of

upgrades," said Sandra Cooke, supervisor of water quality at the GRCA. It helps municipalities, which are responsible for wastewater treatment, find the balance between costs and benefit when they undertake upgrades.

Waterloo Region is set to spend \$648 million on wastewater treatment upgrades over the next decade and a simulation model will help the region make better decisions about these upgrades and their potential impact on water quality.

GRSM was on the leading edge of technology when it was first developed by the Ministry of Environment in 1976. It has been refined over the years as technology and understanding of water quality in the Grand River increases. It is now the responsibility of the GRCA and remains the only simulation model developed in Canada.

The fishery that was only a memory in 1936 has been revived. Trout and bass are back. The Grand is now known as a world-class fishery.

But there's more to the fishery than sport. Fish are to the rivers what canaries are to coal mines — their number, range, health, size and variety tell scientists to what degree waterways are life-giving, which is good for both





*Sophisticated equipment inside a water quality station automatically samples water at regular intervals, such as every 15 minutes. It is used for focused short-term monitoring, such as during a storm and spring floods. Other equipment measures key indicators that are posted in real-time in the River Data section of [www.grandriver.ca](http://www.grandriver.ca).*

aquatic species and people.

This success is only part of the story, because in other parts of the watershed, the challenges of a growing population and thriving economy are immense.

Since 1966, the number of people in the Grand River watershed has grown from 400,000 to nearly a million. This means that even though watershed residents, businesses, farmers and municipalities are more careful with the water resources, the growing population puts growing demands on them. As a result, the water is used much more intensively than ever before. Water quality samples show that as the river flows south towards Lake Erie, the water quality deteriorates. In fact, a federal report in 2008 found the lower Grand is the third foulest river in Ontario. This is a challenge for the future that was explored at Water Forum.

# 10 years of improving Wellington's water quality

Wellington County landowners have completed nearly 1,200 projects worth over \$11-million through the Rural Water Quality program, which celebrated its 10th anniversary in October.

"If you take care of the land, the land will take care of the water," said Tracey Ryan, supervisor of conservation services. "Rural landowners in Wellington have been excellent partners in building green infrastructure."

The goal of the program is to help landowners make changes on the land that will improve the water quality in Wellington County and Guelph, also benefiting all the communities downstream. For every dollar spent by the Rural Water Quality program, landowners are contributing nearly \$3.

Over 70 people gathered Oct. 28 for a landowner appreciation lunch and bus tour to see some successful projects. This event was co-sponsored by the County of Wellington, City of Guelph and the Wellington Federation of



## MILESTONES

Agriculture.

The Rural Water Quality program was initiated in Waterloo a year before it came to Wellington County. It then moved into Brant County in 2002. Now, all of Wellington County and nearly the entire Grand River watershed is covered through this innovative program.

In Wellington, there are over a dozen partners including local municipalities, farm organization and stewardship councils. All five of the conservation authorities that have part of their watersheds in Wellington County also participate.

The GRCA received an Award of Excellence for outstanding partnership with business from the Foundation for Rural Living for this program.

Some of Wellington County's



*Anne and Bill Kabbes are part of the Wellington Guelph Rural Water Quality Program that has celebrated its 10th anniversary.*

landowners have received Grand River Watershed Awards in recent years for their work, including River's Edge Goat Dairy in Arthur (2008), Ignatius Jesuit Centre of Guelph (2007), Vlad Jelinek and Arnold VerVoort (2005).

Some have had their efforts featured in fact sheets including the Friends of Mill Creek, River's Edge Goat Dairy and the Kabbes family.

### Wellington RWQ successes

- 81 fencing projects restrict 3,846 livestock access to waterways
- 40 km of watercourse fenced
- 162 hectares of fragile land retired
- 76 projects to divert clean water away from barn yards
- 120 manure storage facilities
- 136 wells upgraded to current regulations
- 188 wells decommissioned by licensed well contractor
- 55 fuel and storage facilities improved
- 27 erosion control projects



### LOOK WHO'S TAKING ACTION

## RBC Blue Water grant expands RWQP

The GRCA is expanding its programs for rural property owners, thanks to a \$100,000 grant from the RBC Blue Water Project to the Grand River Conservation Foundation.

The RBC Leadership Grant will help the GRCA provide advice to rural landowners — both farm and non-farm — on how to protect water quality on their land.

“When it comes to rural water quality, one of our biggest challenges is meeting public demand,” said Tracey Ryan, the GRCA’s supervisor of conservation

services. “People want to protect their waterways — it’s simply a matter of having the resources to do so.”

“With two-year support from the RBC Blue Water Fund, the GRCA will now be able to reach all rural landowners with advice and provide financial support for them to protect their part of the Grand River watershed,” said Ryan.

The grant will increase capacity in the Rural Water Quality and rural non-farm programs. It will be used to broaden outreach activities such as landowner contact and to hold a series of workshops for rural non-farm residents. It will allow the GRCA to extend the reach of the Rural Water Quality Program to parts of the watershed where it’s not currently in place, such as Dufferin and Haldimand counties.

Rural non-farm participants will be introduced to the *Rural Landowner Stewardship Guide* which will help them evaluate the effect their property and actions have on the environment. They’ll receive advice on the value of upgrading wells, improving septic systems and planting trees for windbreaks. Some landowners may be eligible to apply for grants to undertake these projects. Five workshops are planned over the next year.

RBC has committed \$50 million to its Blue Water Project to provide grants over 10 years to support initiatives that foster a culture of water stewardship. The program is designed to make measurable, meaningful differences to communities and the environment.

“RBC is proud to support watershed management, conservation and water treatment through our Blue Water program,” said Jane Black, RBC regional vice-president of greater Waterloo. “We want to make sure the Grand River watershed continues to provide ecosystem services, such as drinking water supply, a critical habitat for plants and animals and an area of natural beauty for many years to come.”

# Honour Roll Award for Peter Krause

By Janet Baine  
GRCA Communications Specialist

The top honour at the 2009 Grand River Conservation Awards went to Peter Krause for 21 years of passionate commitment to the Grand River.

Lorraine Bergstrand, former GRCA vice-chair and Haldimand County mayor, noted in her nomination that Krause’s commitment to environmental conservation has been displayed locally, nationally and internationally.

“Peter was a visionary, a diligent worker, a solutions-oriented leader,” she wrote on her nomination form.

Krause became a GRCA board member in 1986 and he remained on the board until two years ago. He quickly rose to leadership positions, serving as chair of the GRCA for nine years. He also chaired Conservation Ontario, a provincial organization that represents all conservation authorities across the



Peter Krause is the 2009 Honour Roll award recipient.



province. He was the GRCA's representative in Australia in 2000, when it received the Thies Riverprize, an award for the best-managed river in the world.

"I could not have represented a better organization and a more committed, passionate staff and I was fortunate as well to have a very supportive board during my time as chairman," Krause said in an interview.

A second nominator, GRCA board member Lynne Woolstencroft, said that "throughout his over two decades of service, Peter advocated for the river, for its habitat, for the parks, for the cleaning up of the river so that fish and birds could be reintroduced and thrive."

The GRCA undertook many new initiatives during the time Krause chaired the board. These include the Grand River Fisheries Management Plan, the first plan in the province that encompassed not only the entire Grand but also all its tributaries. The plan was completed in 1998 and received an award from the Department of Fisheries and Oceans in May. The Rural Water Quality program got underway around the same time with the goal of making changes on the land to improve the water quality and benefit everyone downstream.

"The time that I spent with the GRCA and particularly the last nine years were interesting times," Krause recalled.

When he led the Walkerton Inquiry, Justice Dennis O'Connor visited the GRCA and heard about the way conservation authorities worked as partners on water management issues. He brought this model to the attention of the province, which adopted it as part of the Clean Water Act. Krause was chair of Conservation Ontario at that time and he was later named to the provincial advisory committee charged with developing a framework for source water protection. He was also a founding director of what is now called the Walkerton Clean Water Centre.

Since going to Brisbane in 2000, Krause has remained a river advocate on the international scene. He has spoken at

the conference several times and is serving as a director of the International Rivers Foundation, the organization that awarded the RiverPrize in 2000. This year the Lake Simcoe Region Conservation Authority received the award and was the second Canadian river to be recognized in this way.

Honour Roll awards are not given out by the GRCA every year. This award was one of six awards given out on Oct. 3 to groups and individuals who have undertaken projects to enhance the natural environment in the Grand River watershed. A story will appear on each watershed award recipient throughout 2010.

### Videos on YouTube

YouTube links to short videos about each of the award recipients including Peter Krause are posted on [www.grandriver.ca](http://www.grandriver.ca) in the Watershed Awards section. Five Watershed Awards were awarded to: Tom Sitak, a teacher in Brantford; Murray Schlueter of Wellesley for his work with bluebirds; Blount Canada of Guelph for corporate greening; Norm Lundvall of Guelph for conservation fundraising; and Trout Unlimited's Speed River Chapter for stream restoration.

## Six School grants

Each year the GRCA and the Grand River Conservation Foundation present Community Conservation Grants to help schools undertake schoolyard naturalization projects and educational activities.

The money for these grants comes from two foundation endowment funds: the Thies Riverprize Fund and the Grand Champions Fund. The Thies fund was established with the GRCA's monetary award when it was named the world's top watershed management agency in 2000. The Grand Champions Fund holds the foundation's endowment donations. This is the sixth year that these grants have been given out.

Six schools are receiving \$500 for school yard naturalization projects. These projects will take place over the coming year.

### Six schools to receive grants

- Grand Valley Public School
- Eramosa Public School, Rockwood
- Brant Avenue School, Guelph
- Williamsburg Public School, Kitchener
- Sacred Heart School, Paris
- Mt. Pleasant School, Brantford



*The 2009 Grand River Conservation Award recipients prepare to cut the cake and help celebrate the GRCA's 75th anniversary at the Open House Oct. 3. From left are Les Kuczynski (Blount Canada in Guelph), Paul Emerson (CAO of the GRCA), Norm Lundvall (Guelph), Peter Krause (Honour Roll recipient), Alan Dale (chair of GRCA board), Tom Sitak (Brantford), Mike Emeneau (the Speed River Chapter of Trout Unlimited), and Murray Schlueter (Wellesley).*

# Guelph saves water, money

The City of Guelph's water strategy will reduce water use and spending on water infrastructure over the next 10 years.

City council endorsed new water reduction goals, agreed to form a public advisory committee on water issues and enhance public education.

"Local residents and businesses do an excellent job of conserving water, and the recommendations in this strategy will help support those efforts even



Karen Farbridge

more," said Mayor Karen Farbridge. "It is much more cost effective to use our current supply more efficiently than it is to add new local supply. This strategy will help ensure we

have the water resources we need into the future."

The strategy recommends new and enhanced rebates for water efficient toilets, washing machines, humidifiers, outdoor water timers, rain barrels, grey water reuse systems and rainwater harvesting systems.

The goal of the water strategy update is to identify preferred program, policy and resource alternatives to best meet the water reduction goals. It also sets out program forecasts, support staff and resources to meet the water reduction goals.

The city already has reduced daily

water use of 53 million litres per day by 7.7 per cent since 2006. The new strategy is expected to reduce an additional 8.7 million litres of water per day by 2019. This will bring the city's water savings up to 19.7 per cent.

The city is taking an approach that is consistent with the Water Soft Path to water conservation — an innovative water management tool that was presented at Water Forum last year by Oliver Brandes of the POLIS Project on Ecological Governance at the University of Victoria. The idea is to set water reduction goals first and then find a way to meet the goals, as Guelph has done.

"Although the GRCA is piloting the Water Soft Path approach in Fergus-Elora, Guelph has already embraced most of the soft path concepts in their conservation strategy," says James Etienne, Senior Water Resources Engineer with the GRCA.

Water conservation is the most cost-effective way to enhance water supplies and wastewater treatment capacity. Guelph anticipates that water use reduc-

tion will defer infrastructure spending of \$44 million for water and wastewater, while the water reduction plan will cost just over \$20 million.

A public advisory committee of 14 people worked with staff and the project consultant, Resource Management Strategies Inc., on the 10 year plan.

## Shand dam hydro upgrades complete

A new hydroelectric generating plant has been installed at the GRCA's Shand Dam, near Fergus, and is generating enough electricity to meet the needs of about 600 homes.

The new plant, which cost about \$1.3 million, went into operation in mid-July and is producing about 690 kilowatts (kw) of electricity. It replaced a 19-year-old unit that failed in 2006.

The new plant is more efficient than the old one and over the course of a year will generate about 30 per cent more electricity. The plant will pay for itself in about six years and has a 25-year life expectancy.



View from the top of Shand Dam which now produces enough electricity to meet the needs of 600 homes.

### Guelph's water reduction targets:

- ◆ 10 per cent (5,300 m<sup>3</sup>/day) water use reduction by 2010
- ◆ 15 per cent (7,950 m<sup>3</sup>/day) water use reduction by 2017
- ◆ 20 per cent (10,600 m<sup>3</sup>/day) water reduction by 2025
- ◆ To use less water per capita than any comparable Canadian city





*Richard Proulx uses absorbent pads to clean up a simulated chemical during a mock spill exercise at the spills workshop held in Brantford.*

In addition to the Shand plant, the GRCA also has turbines at its Conestogo Dam, near Drayton, and the Guelph Dam, near Guelph. The Conestogo plant, which was also upgraded in 2006, generates about 550 kw. The 23-year-old Guelph plant produces about 110 kw.

Combined, the three plants produce just over 1,350 kw of electricity, enough to power about 1,200 homes. The GRCA sells the electricity to the Ontario electricity system, producing about \$450,000 in revenue a year which is used to cover operating and maintenance costs, as well as repay the investment in new equipment. After those costs are deducted, the net profit of about \$120,000 a year is used to help finance the environmental work of the GRCA.

The water powering the turbines is released from the reservoirs to maintain flows in the Grand, Conestogo and Speed rivers. The improved efficiency of the Shand and Conestogo plants means they can generate greater amounts of electricity in low flow periods.

The Shand plant could be further upgraded to increase its maximum output by about 30 per cent, but before that could be done the Hydro One grid in the area would have to be upgraded.

The GRCA is also investigating a plan to install a generating plant at its Parkhill Dam in Cambridge.

## Spills workshop in Brantford

A training workshop to help industries and businesses learn how to prevent and respond to chemical spills was held in Brantford on Oct. 27-28.

The workshop provided over 20 participants from more than half a dozen businesses with information on spills prevention, proper clean up, legal liabilities and related topics.

The workshop was offered by the City of Brantford and the GRCA as part of the Source Protection Planning Program under the Clean Water Act.

The first day was an in-class session that introduced participants to a wide range of spills prevention topics from a host of industry experts.

Acute Environmental Services and the Brantford Fire Department led the second day of the workshop, providing hands-on realistic spills response tasks. They assessed and dealt with simulation spills in real-time with all the appropriate equipment.

Similar workshops are being considered in other areas. For more information, contact Cam Linwood [clinwood@grandriver.ca](mailto:clinwood@grandriver.ca) or check [www.grandriver.ca](http://www.grandriver.ca) for upcoming workshops in the spring.

## Best practices in wastewater treatment at training sessions

Great strides have been made to better understand and report wastewater bypasses and spills within the Grand River watershed this year.

Municipal Water Managers in the Grand River watershed released a report in August called, *Best Practices: Municipal Wastewater Treatment Plant Bypass and Spill Prevention and Reporting in the Grand River Watershed*.

The 12 watershed municipalities that own and operate sewage facilities undertook the report, coordinated by the GRCA. They reviewed Ministry of Environment data on spills between 2002 and 2006, finding there were 136 events.

Most important, the report identified best practices and included 13 recommendations. The first recommendation was to create a new sewage discharge notification form so that spills and bypasses would be reported consistently. All the recommendations are intended to improve information management and communication and to reduce the frequency and severity of spills and bypasses in the watershed.

Six workshops were held this fall at the Cambridge headquarters of the GRCA for more than 120 wastewater operators. The content of the workshops was developed jointly by the Ministry of the Environment, Ontario Clean Water Agency and the GRCA.

Feedback from the workshops was overwhelmingly positive. "Good idea, long overdue" and "good to discuss issues with other operators within the same watershed" were on the evaluation forms.

"Many of the comments confirmed the need to engage operators on a more routine basis," said Sandra Cooke, senior water quality supervisor with the GRCA. The new Sewage Discharge Notification Form was well received and there was a lot of support for a consis-

tent spill and bypass reporting process, she said.

Most of the material from the workshop was also presented to Ministry of the Environment staff at the Guelph District office for information and feedback. These presentations are also going to be made to staff at the Spills Action Centre so that they can start to incorporate the new spill and bypass reporting procedures into their standard operating procedures for the Grand River watershed.

Feedback from the operators is being incorporated into a revised Sewage Discharge Notification Form which will be released in early December for the one-year pilot.

The material from the workshop has been submitted to the Ministry of the Environment for Director Approval for 0.5 Continuing Education credits for the operators.

### 136 spills and bypasses between 2002-2006

- 36 per cent were weather-related
- 14 per cent power failure
- 16 per cent equipment failure
- 10 per cent maintenance and repairs
- 10 per cent damaged or blocked sewers
- 18 per cent unknown causes



## WHAT'S HAPPENING?

### E. Pauline Johnson exhibit at Woodland Cultural Centre

By L.M. VanEvery

Some refer to E. Pauline Johnson as one of the first new women. Some call her a poetic genius. However she is described, Johnson was definitely a pioneer in many ways.

*Faithfully Yours, E. Pauline Johnson* is an exhibit that opened in August and runs until Dec. 24 at the Woodland



*A young E. Pauline Johnson poses with her canoe paddle.*

*Photo courtesy of Chiefswood*

Cultural Centre in Brantford.

Planning for the exhibit began in 2004. There are over 250 artifacts that are on display and tell the story of Pauline's life from her birthplace at Chiefswood to her final resting place in Vancouver.

Johnson travelled the rails alone at a time when women did no such thing. She commented on social and political issues of the day. She not only wrote poetry but performed her original works as well. She was a woman of strong character and generous talent who led a life of adventure and performance.

*Faithfully Yours, E. Pauline Johnson*, the first exhibit dedicated to her, is curated by Thomas V. Hill. It tells the story of Johnson's life with many artifacts not seen before.

"Pauline has made a contribution to Canadian literature and is a source of inspiration to artists, painters, sculptors, writers and media artists," Hill said. "She was brought up in Iroquoian society which would have given women a political role. She began to think of the role of women politically and historically in Canada and most of her poems

reflect that."

Dr. Carole Gerson, an English professor at Simon Fraser University, began researching Pauline Johnson's work 10 years ago and is a contributor to the exhibit catalogue with her essay entitled, *The Many Voices of Pauline*.

"She was stunningly beautiful and amazingly talented," said Gerson. "She was a very elegant and gracious woman, ahead of her time. There was something quite magical about her life."

Gerson said Johnston's work is undervalued. "My students are surprised at how good it is and they don't know about her at all." As for her place in Canadian literature, Gerson said, "she finally has her place. It took a lot. Pauline now is really important as the breakthrough person."

As a performer, Johnson made a dramatic impact on history. Initially known as an "Indian Princess" whose poetry and public performances embodied romantic stereotypes of "Indianness," Johnson used her platform to promote positive images of the cultures and history of the First Nations in Canada. In addition to her well known books of poetry for which she has earned lasting fame, she contributed many articles to newspapers and magazines in Canada and Britain about issues affecting her people, especially the role of women in society.

"Perhaps her greatest contribution is that she was a positive role model of Indian womanhood at a time when the popular image was all too often negative," said Dr. Trudy Nicks, ethno-historian at the Royal Ontario Museum (ROM). Dr. Nicks is a contributor to the exhibit catalogue with her essay, "Objects and Encounters" which details the Chiefswood collection at the ROM. "The exhibit brings together personal and family objects, photographs and archival documents that provide a sense of the world that inspired the performances that earned Pauline fame in her lifetime and the writings that still capture our imagination to this day," Nicks



said. Johnson retired to Vancouver in 1906. As one of the only people granted permission to be buried at Stanley Park in Vancouver, Johnson was a woman of national importance when she died in 1913.

## Cambridge heritage day workshop Feb 12

The theme for the 2010 Heritage Day Workshop on Feb. 12, 2010 is *Beyond 20/20 Vision: A New Lens for Heritage, Arts and Culture*.

The 2010 workshop is to be held at the Cambridge Centre for the Arts. It will celebrate the links among heritage, arts and culture and their significance to a community's well-being and prosperity. Each plays an equally important role in making communities within the Grand River watershed unique, vibrant and exciting places in which to thrive.

While the spotlight is on the City of Cambridge, there are rich examples of cultural heritage throughout the whole Grand River valley.

The workshop is held in a different part of the watershed each year with a focus on an aspect of Grand River heritage. It is hosted by the Heritage Working Group of The Grand Strategy.

The 13th annual workshop will feature community leaders, interactive sessions, tours and opportunities for hands-on learning.

A registration form will be available on the GRCA's website, [www.grandriver.ca](http://www.grandriver.ca); the City of Cambridge website at [www.cambridge.ca](http://www.cambridge.ca); or the Region of Waterloo website at [www.region.waterloo.on.ca](http://www.region.waterloo.on.ca) by early December. If you would like additional information, please contact Barbara Veale at 519-621-2763 ext. 2274 or [bveale@grandriver.ca](mailto:bveale@grandriver.ca); or Valerie Spring 519-740-4650 ext. 4580 or [springv@cambridge.ca](mailto:springv@cambridge.ca).

There is no cost for registration but donations to help support the event will be gratefully received. Registration is limited. Participants must be pre-registered to attend the event.

## 'Tis the season to give green gifts

This holiday season, consider giving the gift of a strong and resilient natural world by making a donation to the Grand River Conservation Foundation.

Whether it is for family, friends or someone you appreciate in your community, a gift in support of tree planting, trails and special natural places is unique and will be appreciated for generations to come.

A \$30 contribution will cover the costs to plant a tree in your area. Or, spend \$20 to help keep our trail systems in top shape for the community. The recipient of your gift will receive a beautiful personalized card from the GRCF, and you will receive a charitable tax receipt.

Give by visiting [www.grcf.ca](http://www.grcf.ca), calling Doina Hartley toll-free at (877) 29-GRAND (877-294-7263) or e-mailing [dhartley@grandriver.ca](mailto:dhartley@grandriver.ca).

Please order by Dec. 18 to ensure that your gift card will arrive before the holidays.

## 75th anniversary at GRCA headquarters

The GRCA marked its 75th anniversary with a public open house Oct. 3 at its head office in Cambridge.

"This event was a real success. We haven't held an open house for many years," said Dave Schultz, communications manager. "Individuals and families came out to learn about the GRCA and our partners."

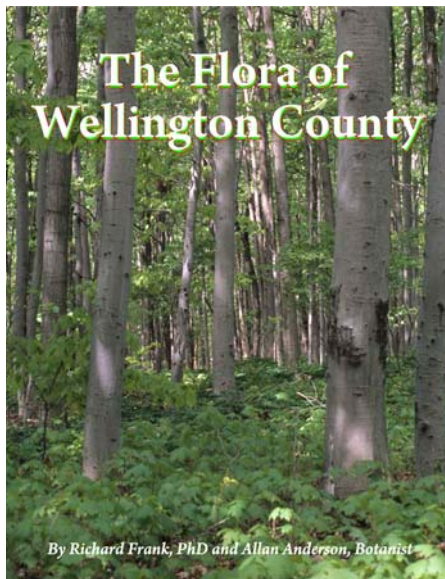
The open house ran from 10 a.m. to 3 p.m. and about 200 people attended to participate in numerous activities and also visit displays from the GRCA and several conservation organizations.

A highlight was a presentation by two photographers from the Waterloo Region Record who showed images from their project *A Year on The Grand*. Matt McCarthy and David Bebee have been photographing the river throughout the year.

The open house was followed by the presentation of the 2009 Watershed Awards to individuals and organizations who have undertaken work to improve the Grand River watershed.



Senior water resources engineer Dwight Boyd gives a tour of the control room at the GRCA to members of the public during an open house held Oct. 3 to commemorate the 75th anniversary. This was one of many activities during the day.



## New book about Wellington's flora

The most recent publication from the Wellington County Historical Society was released in October and is called *The Flora of Wellington County*.

It was written by Dr. Richard Frank who holds a doctorate from the University of Guelph and is retired from the OMAF Pesticide Laboratory, and Allan Anderson, a botanist who spent his career at the University of Guelph. It has taken almost a decade to prepare the book, which examines the county's flora with detail.

Written in three sections, the book includes charts in each section. The first covers pre-settlement, including geology, landforms and climatic conditions, as well as First Nations use of plants. Part two details the destruction of the forest, plotting changes in soil and local climate and the loss of wetlands. Native flora were devastated and largely replaced by introduced crop plants and alien plants and weeds. The natural environment



### NOW AVAILABLE

declined and continued to decline into the 1950s.

Part three looks at the surviving landscape, 1970-2005. The authors examine the regeneration of unsuitable, cleared land; reforested areas; and environmentally sensitive areas. It sells for \$28 and is available at the Wellington Museum and Archives and the Bookshelf in Guelph.

### We missed an issue

We didn't send a September-October issue of *Grand Actions* this year. Two of our five 2009 issues including this one, are 12 pages, instead of eight. This means the same number of pages, but one less mailing.

## About Grand Actions

This newsletter is produced bi-monthly by the Grand River Conservation Authority on behalf of the partners in *The Grand Strategy*. Current and back issues are available online at: [www.grandriver.ca](http://www.grandriver.ca).

### For information on

#### *The Grand Strategy* contact:

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### For newsletter submissions or a free newsletter subscription, contact:

Janet Baine, GRCA  
Phone: 519-621-2763, Ext. 2302  
E-mail: [jbaine@grandriver.ca](mailto:jbaine@grandriver.ca)

Deadlines for submissions are the 15th of February, April, June, August, October and December. Submissions may be edited for length or style.

Tax deductible donations and sponsorships toward the cost of producing this newsletter are always welcome.

This publication is printed on Rolland Enviro100, an FSC certified, environmentally-friendly paper. The paper is manufactured using 100% post-consumer fibre and is processed chlorine-free using biogas energy.



## The Grand Strategy Calendar

**The 16th Annual Environmental Sciences Symposium, Saturday, Jan. 16, University of Guelph.** The 2010 symposium will explore the current market system's relationship to the environment. The symposium is called *EnviroNomics: Problem or Solution?* The discussions will showcase both the strengths and the weaknesses of the traditional economic model in relation to the environment, as well as the potential for innovation and alternatives. For more information and to register, visit [www.uoguelph.ca/~envsymp](http://www.uoguelph.ca/~envsymp).

**29th Annual Guelph Organics Conference, University of Guelph, Jan. 30-31.** This conference provides a comprehensive program of over 30 workshops, an organic expo and sampling fair. For more information visit [www.guelphorganicsconf.ca](http://www.guelphorganicsconf.ca) or call 519-824-4120 ext. 56205.

**13th Annual Heritage Day Workshop and Celebration, Cambridge Centre for the Arts, Friday, Feb. 12, 8:30 a.m. to 4 p.m.** The theme of the workshop is *Beyond 20/20 Vision: A New Lens for Heritage, Arts and Culture*. The event is free and donations are welcome. Registration and program information is posted on [www.grandriver.ca](http://www.grandriver.ca), [www.cambridge.ca](http://www.cambridge.ca) and [www.region.waterloo.on.ca](http://www.region.waterloo.on.ca).

**Note: Events at the GRCA's conservation areas and nature centres are listed in the calendar section at [www.grandriver.ca](http://www.grandriver.ca).**



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# GRAND ACTIONS

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Let us know...

Please complete this form and return it in the postage-paid, self-addressed envelope.

Name: \_\_\_\_\_

Organization (if applicable): \_\_\_\_\_

Title (if applicable): \_\_\_\_\_

Address: \_\_\_\_\_

Postal Code: \_\_\_\_\_

Phone: \_\_\_\_\_

E-mail: \_\_\_\_\_

☐ Please keep mailing Grand Actions to me.

☐ I prefer to be notified by e-mail at the time a new issue is posted to the GRCA website.

Please remember to include your email address. Note: The newsletter is available in PDF format in colour for downloading, printing or forwarding.

☐ Please take me off the Grand Actions mailing list.

Comments and Suggestions:

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☐ I am enclosing a voluntary donation of \$\_\_\_\_\_ to go toward the cost of newsletter publication and distribution. Please make cheque payable to the **Grand River Conservation Foundation** and note on the cheque that your donation is for the Grand Actions fund. The foundation is a legally separate organization which channels funds to GRCA projects. All donations will receive a tax receipt (Registered Charity #11894 6045 RR0001). The foundation will have your contact information and adheres to Imagine Canada's Ethical Fundraising and Accountability Code. The website is [www.grcf.ca](http://www.grcf.ca).

We appreciate your donations!

Thank you for helping us to keep our costs down and our mailing list up-to-date by ensuring that each copy of Grand Actions is well-read. E-mail subscribers help save paper and postage. The newsletter can be downloaded from the "newsletters" section of our website [www.grandriver.ca](http://www.grandriver.ca). For more information e-mail [jbaine@grandriver.ca](mailto:jbaine@grandriver.ca) or call 519-621-2763, ext. 2302.

Thank you!



13<sup>th</sup> Annual Grand River Watershed Heritage Day Workshop & Celebration  
Friday, February 12, 2010 – Cambridge Centre for the Arts  
60 Dickson Street, Cambridge, Ontario (beside New City Hall)

Arts • Culture • Heritage

**Beyond 20/20 Vision:  
A New Lens for Arts, Culture and Heritage (ACH)**

**Prologue**

8:30-9:00 a.m.      **Registration & Coffee**

**Act I – Moderator Mike Farwell, 570 News Radio**

9:15-10:30 a.m.      Tim Jackson, Waterloo Region Prosperity Council – *ACH in Waterloo Region ~ Transformational Thinking*  
Anna Bradford & Patti Tombs, City of Hamilton – *What's Love Got to Do With It? ~ Municipal Cultural Mapping*

**Intermission**

10:30-11:00 a.m.      **Refreshment Break**

**Act II**

11:00-12:00 p.m.      **Concurrent Interactive Sessions – The Personal Art of Heritage I**

- |  |  |
|--|--|
| A. Go Walkabout in Galt – Heritage Cambridge                         | D. Drawing the Line – Hugh Thompson                            |
| B. The Art of City Hall – Heather Franklin ( <i>max. 20 people</i> ) | E. Written in Stone – Gary Kirkham                             |
| C. Take Your Best Shot – Peter Ross                                  | F. The Art of the Artifact: Is It Worth Saving? – Julian Smith |

**Intermission**

12:00-1:00 p.m.      **Lunch at Wesley United Church**

**Act III – Moderator Nancy Richards, CTV Southwestern Ontario**

1:00-2:30 p.m.      Alex Mustakas, Artistic Director, Drayton Entertainment – *A Vibrant Community and the Arts*  
Edwin Outwater, Music Director, Kitchener-Waterloo Symphony – *A Community of Musicians*  
Cheryl Ewing, Cheryl A. Ewing Consulting – *Putting Steam Into Our Communities*

**Act IV**

2:45-3:45 p.m.      **Concurrent Interactive Sessions – The Personal Art of Heritage II**

- |  |   |
|--|---|
| G. Go Walkabout in Galt – Heritage Cambridge | J. Written in Stone – Gary Kirkham          |
| H. Take Your Best Shot– Peter Ross           | K. Give Highland A Fling – Sandra Proudfoot |
| I. Drawing the Line – Hugh Thompson          | L. Show Off – Moira McCarthy                |

**Epilogue**

3:45 p.m.      **Reception at Wesley United Church**

**Registration**

*Registration is free but space is limited. **All participants must be preregistered for the event and concurrent sessions.***

Registrations will be accepted until **Friday, February 5, 2010** or until the registration is at capacity. Donations will be gratefully received at the event.

To register, please return the completed form or send the appropriate information to Cathy Smith at the City of Cambridge:

**Email:** [smithcathy@cambridge.ca](mailto:smithcathy@cambridge.ca) **Phone:** 519-740-4650 ext. 4649 **Fax:** 519-622-6184 **Address:** 50 Dickson St. P.O. Box 669, Cambridge, ON N1R 5W8

Registration forms and concurrent session detailed descriptions are available at [www.cambridge.ca](http://www.cambridge.ca); [www.grandriver.ca](http://www.grandriver.ca); or [www.region.waterloo.on.ca](http://www.region.waterloo.on.ca)

<b>Name:</b> _____		<b>Organization (if applicable):</b> _____	
<b>Address:</b> _____		<b>Postal Code:</b> _____	
<b>Phone:</b> _____	<b>Fax:</b> _____	<b>E-mail:</b> _____	
<b>Morning Concurrent Sessions:</b>	<b>1<sup>st</sup> choice</b>	<b>2<sup>nd</sup> choice</b>	<b>3<sup>rd</sup> choice</b>
<b>Afternoon Concurrent Sessions:</b>	<b>1<sup>st</sup> choice</b>	<b>2<sup>nd</sup> choice</b>	<b>3<sup>rd</sup> choice</b>

Please check if you will be staying for lunch      ☐

**Note:** While we will try to accommodate your 1<sup>st</sup> choice, space is limited and session participants will be allocated to sessions on a first-come, first-served basis.

**Sponsored by:** City of Cambridge, Region of Waterloo, Cambridge Centre for the Arts, Cambridge Arts Guild,  
Grand River Conservation Authority, The Grand Strategy Heritage Working Group



Support a healthy  
landscape, clean air  
and great natural places...



Give

green

this

Holiday  
Season!

**GIVING GREEN** is a great choice for that hard to buy for person – and it's an investment in our natural world for generations to come! Your holiday gift of:

- ☒ \$30 will cover the cost to **plant a tree** in your Grand River valley community; or
- ☒ \$20 will help **care for the GRCA's natural areas and trail systems**, which are free to the public and add so much to our quality of life.

Each donor will receive a thank you letter, tax receipt and a beautiful holiday card. (Or, we can send the holiday card directly to the recipient so that it arrives in time for the holidays.)

**It's easy to give:**

Click [www.grcf.ca](http://www.grcf.ca)

Call 1-877-29-GRAND or

E-mail the Foundation at [dhartley@grandriver.ca](mailto:dhartley@grandriver.ca)

Please note that orders must be placed by  
December 18, 2009. Charitable receipts will be  
issued for donations.

The Grand River Conservation Foundation supports priority programs of the Grand River Conservation Authority. These programs enrich the natural values of the Grand River watershed and encourage people to enjoy and learn from the outdoors.

