



CAT TALES

SPRING/SUMMER 2008 ISSUE

In This Issue

Our focus in this issue is drinking water source protection.

Learn more about what we've been working on. You can also participate in the process by attending one of our open houses this May.

- Read about our open houses on page 1.
- On page 2 you can learn the basics about drinking water source protection and the work plan that the Source Protection Committee is preparing.
- Maps and data management are essential for any resource management organization. Learn more on page 4.
- The Sydenham Intake Protection Zone Study and available stewardship funding is featured on page 5. Lake Ontario and St. Lawrence Intake Protection Zones are on page 10.
 - What is a water budget? Why is it important? See page 8.
- Find out what's in and under our watershed (think groundwater) on page 9.
- Don't forget all of our usual features – the Creature Feature on page 2, What's Happening on pages 6 and 7, and Foundation News on page 11.
- No major flooding this spring in the Cataraqui Region. Story on page 4.
 - Is your spruce tree stressed out? See page 10.
- We've also got new fee schedules for permits (page 10), news from the Friends (page 12), meet the newcomers (page 11) and more!

Cataraqui Source Protection Committee Consults the Public



The Cataraqui Source Protection Committee is developing a plan to ensure that clean sources of drinking water are available now and in the future. Both Gananoque (left) and Brockville (above) use the St. Lawrence River as the source of their municipal drinking water.

The Cataraqui source protection team is moving full speed ahead. Our next step is to develop what is called a *terms of reference* in the *Clean Water Act*. This is basically a work plan that outlines what will be studied and examined over the next several years as we work towards preparing a plan to protect our local drinking water sources. At the end of this process in 2012, we will have a source protection plan in place to protect our drinking water sources. This plan will mainly be focused on municipal drinking water sources.

In preparing our work plan, we want to know what you think. Are there areas that you think need closer examination? Where do you think we will need new municipal drinking water systems in the future? Do you agree with the directions that we are proposing to take?

We have scheduled three public open

houses in May. Open houses are scheduled from 6:00 to 8:30 p.m. with a presentation at 7:00 p.m.

- **Thursday, May 15** - Little Cataraqui Creek Conservation Area Outdoor Centre, 1655 Perth Rd. (Division Street just 2 km north of Hwy. 401, Kingston)
- **Wednesday, May 21** - Spring Valley Hall, 4103 County Road 29, just north of Brockville
- **Thursday, May 22** - Bath Fire Hall, 241 Church Street, Bath

You are welcome to attend any of these open houses, talk to our staff and the Source Protection Committee members about our work plan and learn more about drinking water source protection.

If you're not able to attend the meetings, you can also see our draft work plan on our website and at our Administration Office.

Our office is located at 1641 Perth Road in Little Cataraqui Creek Conservation Area, Division Street exit just north of Highway 401. The office is open from 8:30 a.m. to 4:30 p.m. Monday through Friday. Our website is available 24 hours a day at www.cataraqueiregion.on.ca.

Comments on the draft work plan are welcome and must be received by Thursday, May 29.

Questions about the work plan can be directed to project manager Rob McRae at (613) 546-4228 ext. 224 or robmcrae@cataraquiregion.on.ca. We also have a toll-free number for folks within the 613 area code – 1-877-956-CRCA.

We hope that you will take the time to review our plans as this will help us with the next stages of our work to protect drinking water.



Cataraqui Region
Conservation Authority
P.O. Box 160,
Glenburnie, Ontario
K0H 1S0

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Creature Feature

Red Fox (*Vulpes vulpes*)

Red foxes (*Vulpes vulpes*) are clever opportunists. So say books and people who study foxes. Conservation Authority staff considered the accuracy behind this judgment this spring through observation.

"Red foxes . . . (appropriate) the burrows of other small mammals – such as the groundhog – for dens where their cubs can be born," asserts an excellent reference work entitled ***Mammals of the Canadian Wild*** by Adrian Forsyth, published by Camden House Publishing Ltd.

Little Cataraqui Creek Conservation Area has a resident, matriarch groundhog who summers in a burrow beside the administration building. She has a winter burrow a few meters away. But before she could shift back to summer quarters this spring, along comes the fox family that appropriates her vacant summer digs.

Earlier this month, five fox kits emerged, not red as you might expect, but grey. Their

main feature is startling, china-blue eyes that open at nine days. Fox kits are weaned at one month.

Some compared the kits' appearances to a cross between puppies and kittens and they are just as playful, wrestling and tumbling in front of the den while Ms. Fox is off hunting.

Then one day the family disappeared. The speculation is that Ms. Fox relocated her brood, possibly because of the adoring attention directed at the kits.

Two days later, the groundhog returned to repossess of her summer burrow. Ah . . . the cycle of life.

Red foxes have three distinct colour phases but the phase most are familiar with is the red phase. Much of the animal's fur is reddish yet the feet sport black stockings. The lips, chest and stomach are white and the tail is white-tipped.

Red foxes measure 90 to 110 cm in

total length with the tail occupying 35 to 45 cm of that. Shoulder height is 38 to 41 cm and the weight range is 3.6 to 6.8 kg.

Litters usually number five, as in the case of the Little Cataraqui Creek Conservation Area family, although they may include up to 10.

Young foxes mature at 10 months. The young disperse at the end of summer after three or four months of hunting and survival instruction by the parents. Some red fox pairs are monogamous and the males may help with family duties. With the exception of the mating season, these foxes are solitary creatures that hunt alone, mostly at night. They mark their home range boundaries using scent and urine.

Foxes are beneficial because of their mouse-catching skill. These opportunistic omnivores prey on small rodents up to rabbit-size, frogs, insects, birds, snakes and some plant materials. In season, they eat fruit such as wild grapes and other berries.

Attributing human characteristics to animals is a human failing and science frowns at it. That disclaimer out of the way,



Two fox kits emerge from an appropriated groundhog burrow.

literature accords the fox such qualities as: intelligence, cunning, good looks and a quiet dignity.

Observing a fox hunting is to admire a skilled predator. They stalk their prey then leap, stiff-legged, into the air to land on the unsuspecting victim. Some suggest their hunting style is almost feline.

Fox rabies was a serious and persistent problem for Ontario since 1954. However, science and government collaborated to immunize wild foxes by dropping bait packages containing rabies vaccine from specially equipped aircraft that disperse the bait over a wide area. The bait pack is a mixture of fats, wax and flavouring. The incidence of fox rabies has declined.

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Cataraqui Region Conservation Authority

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An adult red fox pauses alertly while on the hunt.



The Basics About Drinking Water Source Protection

Our drinking water comes from two main sources - surface water and groundwater. Surface water includes lakes, rivers, streams and wetlands. Groundwater is water that is located underground below the earth's surface.

Drinking water source protection is simply protecting water resources such as lakes, rivers and groundwater from contamination or overuse. Under the *Clean Water Act* communities are required to develop plans to protect their drinking water sources.

The primary reason to protect our drinking water sources is to protect public health.

Other benefits of protecting water include:

- not having to find new drinking water sources when old ones become contaminated
- avoiding the need to clean up contaminated water
- reducing the cost of water treatment
- ensuring a long-term supply of clean water and
- providing a healthy environment for fish and wildlife populations.

A source protection plan is a locally

developed plan that outlines ways to protect the quality and quantity of municipal drinking water sources. The plan represents an agreement among the local community about the ways to protect our water quality and water supplies. (For information about the process and the timing see the article below.)

Source protection plans are going to focus on protecting sources of municipal drinking water. We are concentrating our efforts on protecting the areas called *Intake Protection Zones* (IPZ) and *Wellhead Protection Areas* (WHPA) that supply municipal drinking water systems. A bit of an explanation about what these are is needed.

Municipal water systems that use a surface water source, like a river or lake, have an intake pipe that draws the water from the source and brings it to a water treatment plant. An *Intake Protection Zone* or IPZ is the area around the end of the intake pipe where activities in the water or on nearby land have the potential to affect the quality of water that flows into the intake pipe. As an example, if a gas station was located near a water intake, there is potential for a gas spill or a leaking storage tank to affect the water going into a municipal system.

In the Cataraqui Source Protection Area (CSPA) we have nine Intake Protection Zones to study and to develop plans to protect.

The other source of municipal drinking water is groundwater obtained through a well. The CSPA only has three municipal systems that use groundwater.

A *wellhead* is the part of the well that you see above the ground. Most look like a pipe with a cap on it. A *Wellhead Protection Area* (WHPA) is the area around the wellhead where land uses or activities on the land have the potential to affect the quality of water flowing into the municipal well. Using the gas station example again, there is potential for pollution from either a spill or a leaking underground storage tank to pollute the well.

The focus of our studies and our plans right now is on these two areas. As plans progress and the Ministry of Environment develops its guidelines further we will also be examining highly vulnerable areas including significant recharge areas and highly vulnerable aquifers. Watch for more on these in upcoming issues of *Cat Tales*.



This map shows the locations of municipal drinking water intakes and wellheads in the Cataraqui Source Protection Area. Our current studies and plans are focusing on these areas.

The findings of the Sydenham Intake Protection Zone Study, including this map, were presented at a public open house held in April.



Cataraqui Source Protection Committee Releases Work Plan for Public Comment

Ontario's *Clean Water Act, 2006* and accompanying regulations, inspired by the drinking water contamination tragedy at Walkerton and other issues, aspire to protect health and safety through clean and plentiful source water for human consumption. Source protection plans will be prepared on a local basis to guide actions by municipalities, the province, property owners, and others to reduce or eliminate threats to drinking water sources.

Nineteen source protection areas or regions have been established across Ontario. The Cataraqui Source Protection Area has been established in southeastern Ontario. It includes the jurisdiction of the Cataraqui Region Conservation Authority (CRCA) plus the Township of Frontenac Islands and some additional areas along the St. Lawrence River.

Each area or region has two groups collaborating to implement the provisions in the *Act*. Locally, the first is the Cataraqui Source Protection Authority (SPA). This is composed of 17 members of the CRCA plus a member from the Township of Frontenac Islands. The second group is the Cataraqui Source Protection Committee

(SPC). This includes a provincially appointed chair, 15 others appointed by the SPA from the community, plus three non-voting members representing the SPA, health units and Ontario's environment ministry. The SPA keeps the process on track; the SPC conducts research and writes the source protection plan for provincial review. Both groups are responsible for consulting with local communities throughout the process.

The SPC has written a first draft of its proposed work plan which is called a *terms of reference* (ToR) under the *Clean Water Act*. The full document is available at www.cataraquiregion.on.ca or in the CRCA administration office. It guides and defines research and planning, assigns roles and responsibilities, establishes timelines and estimates funding. The ToR is subject to public comment and it must be approved by the Minister of the Environment. It can be amended later to reflect new regulatory obligations or technical information.

The SPC's mission statement, included in the ToR, stresses cooperation with local communities and Ontario's government

to protect water quality and quantity. This happens through consensus-based decisions reached in an open and consultative manner. That involves the region's 200,000 residents in all or parts of 12 municipalities in three counties spanning 3,600 sq km of the Source Protection Area.

The Cataraqui Source Protection Area is geographically complex. It includes 12 major watersheds draining into Lake Ontario or the St. Lawrence River. About three-quarters of the area's residents live in areas served by municipal residential drinking water systems. Outside these areas, a significant number of private systems are at risk from bacterial contamination.

The ToR outlines specific considerations for future assessment activities within the Cataraqui Source Protection Area. Protecting the source water for all municipal residential drinking water systems is the primary goal. Research has started on 10 of the 12 existing municipal residential systems. Vulnerable groundwater areas on the broader landscape are also being considered. Other drinking water systems may be included later under certain conditions.

Initial research about local drinking water threats and issues is expected to be complete by 2010. Work on the source protection plan will begin in 2009 by looking at existing policies and programs; a proposed plan must be submitted to the province by 2012. The cost of the research and planning is covered by the province. Up to \$5.5 million may be spent on local activities by 2012.

The draft ToR sets out a schedule for public consultation meetings. The first round of meetings will be held in May (see page 1 for details).

Written comments may be submitted on or before May 29 to:

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robmcrae@cataraquiregion.on.ca



Major Flooding Avoided in the Cataraqui Region this Spring

Early 2008 was busy for the flood forecasting and warning staff of the Cataraqui Region Conservation Authority (CRCA).

"Significant snow cover held a near-record amount of water in the snowpack in many parts of our jurisdiction," says CRCA Watershed Management Coordinator Mara Shaw. "More than 150 mm of water equivalent in the snow in Delta and Brockville was only surpassed in 1971."

Kingston, Loyalist Township and Napanee had less snow (under 100 mm water equivalent) and quite a bit of evaporation of the snowpack so they were not as affected by the spring melt as areas to the north and east, although streams rose to flood low lying areas like Unity Road and Bur Brook Road in Kingston.

March passed without significant melt. On March 29, up to 30 mm of rain was forecast with temperatures rising to 8-12C.

The CRCA issued a High Water Safety Bulletin on April 4 as rain arrived and water levels, already high, rose. Dams were operated by CRCA staff and regional dam operators: Fortis Properties, Ontario Ministry of Natural Resources (MNR) and Parks Canada to control levels on area lakes, reservoirs and rivers, says Ms. Shaw.

Communication between co-operating water managers increased to ensure that dams were operated in harmony and that the media, municipalities and residents received a consistent and clear message about flood risk.

On April 11 a Water Level Bulletin was issued for Brockville as snowmelt caused the Mac Johnson Reservoir water level to rise. Continual dam operations, preceding and following this bulletin, maintained water levels below flood conditions.

On April 12 a Flood Advisory was issued for specific parts of the

Gananoque River and Cataraqui River systems. Water levels were high on the lakes and connecting channels in both watersheds. With the 30 mm rain on April 11 and April 12 and continued snowmelt, there was concern that water would rise sufficiently on the Cataraqui River system that the dam at Morton would need to be opened, spilling excess water into the Gananoque system. That would have caused flooding in that system.

With careful dam operations by MNR, Parks Canada and Fortis Properties and the start of a dry, warm and windy period (increasing evaporation of the remaining snowpack), flooding was avoided within the Cataraqui Region in contrast to surrounding regions. It now appears that the threat of flooding has passed, although many lakes in the region, such as Charleston Lake, are slow to recede.

On April 15, two CRCA staff flew the watershed, cataloguing

the approach of elevated water levels to near-shore homes and other structures. The data and photographic images have been compiled with the water levels on each water body for future flood forecasting use.



Sydenham Lake: This shows a part of the village of Sydenham on April 15.



The ice was still in parts of Loughborough Lake and other inland lakes on April 15.

This aerial image shows a portion of the town of Odessa on April 15.



Information Management: The Foundation of Our Conservation Efforts

The Cataraqui Region Conservation Authority is fortunate to have two full-time staff dedicated to the challenging tasks of collecting, analyzing, mapping, storing information about natural resources in local watersheds. Travis York (Geomatics Technician) and Erin Lockridge (GIS Technician) work together to prepare data sharing agreements, databases, maps, reports, and special projects. Erin and Travis work as members of our drinking water source protection team, but they contribute to the entire CRCA organization and our partners.

Effective work in conservation needs good information about the local natural resources we have. We need to know about the amount and quality of existing resources, so that we can priori-

tize our efforts. For example, it is helpful to identify locations with a low percentage of forest cover, since that may be a good area in which to plant additional trees. The answers to such questions often come from the analysis of data in a geographic information system, or "GIS".

The CRCA was one of the first organizations to make use of a GIS in southeastern Ontario. Beginning in the early 1990s we provided assistance to local municipalities as they began to explore the benefits of managing information in a digital format.

Since the beginning work on drinking water source protection in 2004, the Conservation Authority and Government of Ontario have made significant investments in our GIS capabilities. We now use a file server to store and manage an extensive library of data, we make use of sophisticated software to analyse data and produce maps, and we can generate large colour prints.

The ability to print large maps and drawings allows us to share our research findings at public meetings and special events.

One of the greatest benefits of a GIS is that it allows information and maps to be easily revised over time. This is important for tools such as floodplain maps, which are updated from time to time to reflect the latest information and scientific methods.

Information about natural resources comes from a variety of sources. The Conservation Authority holds a membership in the Ontario Geospatial Data Exchange, which includes a library of data that has been generated by senior governments. We also share data with our member municipalities and with non-governmental organizations. Individual citizens sometimes assist us by participating in volunteer monitoring networks that contribute to our shared understanding of local conditions.

The proper management of

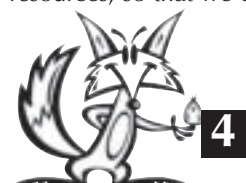
information is an important component of what we do. Sometimes our work requires that we collect and manage private information about individual people, properties, and businesses. The CRCA is bound by freedom of information and protection of privacy legislation, and we use appropriate protocols and security technology to

safeguard this private information.

Information management using a GIS has become a central aspect of conservation work at the CRCA. It enables us to store and manage information for the benefit of local communities, and it improves our effectiveness in protecting natural resources for future generations.



This land use map is a sample of one of the many maps compiled and prepared by CRCA GIS technicians.



Sydenham Intake Protection Zone Study Findings Presented at Open House



The Sydenham Water Treatment Plant is the newest plant in the Cataraqui Source Protection Area. It has been operating since July 2006.

The community of Sydenham, north of Kingston, draws its drinking water from Sydenham Lake. The lake water is then treated at the recently constructed drinking water treatment facility near Point Park. This drinking water intake is the only municipal residential supply in the Cataraqui Source Protection Area (CSPA) that uses surface water from a small inland lake. The other eight intakes in the CSPA take water from Lake Ontario or the St. Lawrence River.

The purpose of this intake protection zone study is to determine where the

water that supplies the Sydenham drinking water treatment plant comes from and how quickly it reaches the intake. We also are determining what threats and issues located nearby could impact the water. Finally, we will identify what should be done to protect the drinking water source. The work is being completed by XCG Consultants Limited in Kingston under the direction of the Cataraqui Region Conservation Authority, in cooperation with South Frontenac Township with input from Kingston Frontenac Lennox and Addington Public Health.

How the study is conducted is prescribed by the Ontario Ministry of the Environment. For example, Intake Protection Zone (IPZ) 1 is a one km radius around the intake pipe. IPZ 2 is the area where water flows during a two-hour time period.

In order to figure out water flows in Sydenham Lake and determine where IPZ 2 is located, hydrodynamic modelling and water quality sampling was completed. The modelling found that water movement is dictated by the wind and that it flows very slowly in the vicinity of the drinking water intake. It flows at a maximum of about one

kilometre in nearly six hours. This means that IPZ 1 does not need to be expanded. In other words, a one km radius around the pipe is a large enough protection zone for the intake because the water does not move quickly.

The water quality sampling that we did found some parameters that exceed water quality standards. Most of these were in tributaries to Sydenham Lake. It should be noted that higher concentrations are expected in tributaries and that parameters that exceeded guidelines are generally high throughout the CSPA.

To date much of the work is complete and was presented at an open house in Sydenham on April 9, 2008 where participants also had an opportunity to tour the drinking water treatment plant. The public open house was preceded by a presentation of the study findings to South Frontenac Township Council. Approximately 25 municipal councillors, Source Protection Committee members, staff and members of the public attended the open house.

The study will be finished once further information and technical instructions are released from the Ontario Ministry of the

Environment. It is anticipated that the work will be done by the end of 2008.



Water movement in the Sydenham Lake was studied using a drogue. It's a device similar to a buoy with a tracking device to measure its movement. From these measurements, water movement under different wind and current conditions can be calculated.

(below) CRCA staff Nicole Irvine (left) and Rob McRae (second from left) speak with members of the public at the Sydenham open house held on April 9.



Early Actions Stewardship Funding

The Ontario Drinking Water Stewardship Program was established under the *Clean Water Act*, 2006. The program provides subsidies for people in areas that may be affected by the *Clean Water Act* to undertake projects that will help protect municipal residential drinking water supplies.

The first phase of the program referred to as early actions funding is now active. Of the \$7 million provided throughout the province the Cataraqui Source Protection Area (CSPA) received approximately \$40,000. There is another \$21 million that will be allocated until 2010.

Currently properties within 100 meters of municipal well supplies and 200 m of municipal intakes are eligible to participate. More specifically properties surrounding:

- Cana well in Kingston Mills
- Lansdowne wells
- Millor Manor Apartments in Mallorytown

- Greater Napanee (A.L. Dafoe) intake
- Bath intake;
- Amherstview intake;
- Sydenham intake; and
- Brockville intake are included.

Property owners in these areas have been/will be contacted by mail to describe the program and to invite participation. Funds are limited and will be allocated on a first-come, first-served basis.

The types of projects that are eligible for funding include:

- well upgrades
- decommissioning of old wells
- septic system inspections and upgrades (including tank pump outs)
- runoff and erosion protection
- pollution prevention reviews for small to medium sized businesses
- land conservation.

Any of the above projects will help to reduce the risk of contaminating drinking water

supplies. For example, planting a buffer strip along the shoreline will slow overland flow and trap and filter sediments before they reach the water body. Municipal water treatment facilities can operate better when there is less sediment in the water.

An extension was recently granted, so that now applications can be received until September 15, 2008, as long as projects are finished no later than September 30, 2008.

There is also an opportunity for retroactive funding. If any eligible project was completed after September 19, 2006 it is eligible for partial reimbursement and an application should be submitted to the Cataraqui Region Conservation Authority.

For more information please contact Holly Evans by phone at (613) 546-4228 ext. 290 or toll-free (613 area code) 1-877-956-CRCA (2722) ext. 290 or by e-mail at hevans@cataraquiregion.on.ca.

Well Aware Program Now Offered by Hearthmakers

For those of you who supply your own drinking water from a well, there is a new program available in the Kingston, Frontenac and Lennox and Addington areas. It's called *Well Aware* and it's being offered by Hearthmakers Energy Cooperative.

The program, developed by Green Communities Canada, educates well owners about groundwater basics, well construction and maintenance, plugging and sealing unused wells, common contaminants, drinking water protection, and water testing.

You can even book a visit to your property where a trained person will help you with a guided self-assessments of your well. The assessment is a confidential, non-regulatory service that will assist you in competently assessing your well and the quality and quantity of your well water. The assessment will help you understand what to look for, determine what actions you can take yourself, and when to call a licensed well contractor for assistance.

To book your Well Aware visit contact Brianna Rustige, Well Aware Program Coordinator at Hearthmakers Energy Co-op by phone at (613) 547-8122 or toll-free at 1-866-547-8122 or by e-mail at brustige@hearthmakers.org. More information is also available on the following websites www.hearthmakers.org and www.wellaware.ca.



Spring and summer are ideal for visiting our conservation areas! Hike the trails at Gould Lake, Lemoine Point, Little Cataraqui Creek or Parrott's Bay Conservation Areas. Cycle the Cataraqui Trail. Birdwatch at Mac Johnson Wildlife Area. Cool off with a refreshing swim at Lyn Valley, Lemoine Point or Gould Lake Conservation Areas. Want more information about our conservation areas? Call our office or visit our website at www.cataraquiregion.on.ca.

Fees

Gould Lake and Little Cataraqui Creek Conservation Areas daily entry fee:

- \$4.00 per person for adults and children over 12
- \$2.00 per person for children 12 and under
- Maximum fee of \$10.00 per car.

A \$60.00 annual vehicle pass provides you

with unlimited opportunities to enjoy our facilities. It's a great value!

During July and August, entry fees to Little Cataraqui Creek Conservation Area are reduced to \$3.00 per car.

All other conservation areas and boat ramps have donation boxes. Please make a contribution each time you visit.

Some of our programs have additional fees and require advance registration.

Hours of Operation

Conservation Areas are open from:

- 7:30 A.M. to dusk daily
- **Little Cataraqui Creek Outdoor Centre**
- 8:30 A.M. to 4:30 P.M. Monday to Friday
- Closed weekends from May until September. Available for room rentals.

General information about upcoming programs and events is available on our

information hotline at (613) 546-4228 ext. 500 or on our website at www.cataraquiregion.on.ca.

Little Cataraqui Creek Conservation Area

Garden Maintenance

Saturday, June 7

Saturday, July 5

Saturday, September 6
(8:30 – 10:30 a.m.)

Rain dates:

Sunday, June 8; Sunday, July 6; Sunday, September 7
(8:30 – 10:30 a.m.)

Come out and help us keep the Outdoor Centre gardens looking great. We are starting early in the morning before it gets too warm.

Meet at the Outdoor Centre and bring your own gardening gloves, trowels, and garden



Brown Bag Seniors' Programs

Spring Wildflowers

Thursday, May 15
(10:00 a.m.)

Meet at the Kingslake Plaza at 10:00 a.m. to carpool to the Queen's Biology Station on Opinicon Lake. Bring lunch, drinking water and sunscreen. Don't forget your camera.

Cataraqui Trail Hike

Thursday, June 19
(10:00 a.m.)

Meet at 10:00 a.m. at Shopper's Drug Mart across from the Kingston Centre. We'll carpool to Sydenham to hike on the Cataraqui Trail along the shore of Sydenham Lake. Lunch will be at Burega's on Loughborough Lake. Bring lunch, drinking water, insect repellent and sunscreen.

There are no seniors' programs during July and August. They resume in September.

Lemoine Point Conservation Area

Volunteer at Native Plant Nursery

Every Wednesday
(9:00 a.m.)

Interested in plants and volunteering? The Native Plant Nursery needs you! If you can spare some time, be at the Native Plant Nursery on Wednesday mornings beginning at 9:00 a.m.

Spring Walk

Saturday, May 24
(1:00 to 3:00 p.m.)

Celebrate the 10th Anniversary of the Friends of Lemoine Point with a spring walk. There will be six points of interest along the 1.5 km self-guided walk including wildflowers, marsh life, forest management, invasive species, native plant nursery and reforestation. Come out and see the interesting conservation projects being done by the Friends and the CRCA.

At 2:00 p.m., there will be a wheelchair accessible walk along the service road.



Gould Lake Conservation Area

Cool off at Gould Lake Conservation Area this summer with a refreshing swim or go for a paddle in a canoe or kayak.



There are also 20 km of hiking trails maintained by the Rideau Trail for you to enjoy, many with spectacular views of the lake.

Pack a picnic lunch to enjoy in our day use area and make a day of it.

CRCA staff are available at Gould Lake on weekends from Victoria Day to Canada Day. From July 1 to Labour Day staff are available from Wednesday to Sunday and all Statutory Holidays. Visit our website for details.

Daily admission fees apply or buy an annual pass and visit us often!

Summer Camp

Registration forms for our summer camps are available at the CRCA Administration Office, Little Cataraqui Creek

Outdoor Centre and on our website. The Little Cataraqui Creek Outdoor Centre is home base for our camps.

Nature Explorers Camp

Ages 6 to 11
Weekly from July 7 to August 22
8:30 A.M. to 4:30 P.M.

LITTLE CATARAQUI CREEK AND GOULD LAKE CONSERVATION AREAS

Cost is \$160 per week per child.

Have a great summer exploring nature and learning outdoor skills with our enthusiastic and qualified instructors. Each week has a different theme with activities, games and guest speakers. Two days each week is spent at Gould Lake Conservation Area!

Before and after care is available at the Little Cataraqui Creek Outdoor Centre for an additional charge of \$40.00 per week. Space is limited to 24 campers per session.



Canoe, Kayak and Pedal Boat Rentals

Explore the cool clear waters at Gould Lake Conservation Area or the reservoir and wetlands at Little Cataraqui Creek Conservation Area.

Rental rates begin at \$7.00 per hour. Rentals include paddles, lifejackets and safety kits.



Gould Lake Conservation Area

Rent canoes, kayaks or pedal boats.

Rentals are available on weekends from Victoria Day to Canada Day. From July 1 to Labour Day - Open Wednesday to Sunday and all Statutory Holidays. Visit our website for more details and hours of operation.

Little Cataraqui Creek Conservation Area

From early May to mid-September, canoe and kayak rentals are available at the CRCA Administration Office. The Administration Office is open Monday to Friday from 8:30 A.M. to 4:30 P.M.

Public Open Houses Drinking Water Source Protection

The Cataraqui Source Protection Committee is hosting a series of open houses to get your ideas and suggestions on our work plan for drinking water source protection.

The open houses are scheduled from **6:00 to 8:30 p.m.** with a presentation at **7:00 p.m.** Please drop by one of our open houses, talk to our staff and Source Protection Committee members about our work plan and learn about drinking water source protection.

- **Thursday, May 15, 2008** - Little Cataraqui Creek Conservation Area Outdoor Centre, 1655 Perth Rd. (Division Street just 2 km north of Hwy. 401, Kingston)
- **Wednesday, May 21, 2008** - Spring Valley Hall, 4103 County Road 29, just north of Brockville
- **Thursday, May 22, 2008** - Bath Fire Hall, 241 Church Street, Bath

You can also view and make comments on the draft work plan by visiting the CRCA office from 8:30 a.m. to 4:30 p.m. Monday to Friday or by visiting the CRCA website at www.cataraquiregion.on.ca. The deadline for comments is Thursday, May 29, 2008.



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What is a Water Budget?

Can you imagine taking care of your family without knowing your budget? Knowing how much money is coming in each month, how much you need to spend on various essentials, and how much you can reasonably save for a rainy day? Not knowing would be an invitation to disaster because of the temptation to overspend.

The same holds true for taking care of our local water resources. Specialists in the Source Water Protection program are, for the first time, accounting for and tracking the amounts of water we have to work with in our watersheds. How much water do we get from rain and snow? Where is the water? How does it travel through the watershed? How much is stored under-

ground and where? How much do we lose in evaporation and through plants? How much water is now being taken from our rivers, streams, lakes and groundwater reserves? What are the trends?

And it's just like the household budget. The amount coming in to start the process (your income) must equal the total of everything going out (your expenses) plus any change in storage (your savings). Generally, the amount of precipitation equals the amount evaporated or transpired (through plants) plus the surface and groundwater flow out plus any water takings and any change in storage in groundwater, soil moisture or surface volume.

By analysing all this existing informa-

tion, water specialists will soon understand the "big picture" of our water supplies. More work has to be done to understand local important details such as how each municipal drinking water source gets replenished and how long it takes, seasonal shortages and normal in-stream ecological needs for water, how changing climate may affect our municipal water supplies, how much we need for future drinking needs and how much can be used for other purposes.

With this basic information in hand, your local Source Protection Committee (made up of local citizens) will be better equipped to guide the development of a Source Protection Plan for municipal water

systems.

A water budget is one of the main tools needed to effectively manage our water resources into the future. To learn more about managing source water protection, contact your local source protection group:

Cataraqui Source Protection Area — www.cataraqueiregion.on.ca
Mississippi-Rideau Source Protection Region — www.mrsourcewater.ca
Quinte Source Protection Region — www.quintesourcewater.ca
Raisin-South Nation Source Protection Region — www.yourdrinkingwater.ca

Developing a Water Budget for the Cataraqui Source Protection Area

The CRCA is currently working on a water budget for the jurisdiction of the CRCA and Cataraqui Source Protection Area (CSPA). Just like the average checking account, the precipitation represents the deposits to the account and any water usage represents withdrawals to the account. As most people know, when withdrawals are greater than deposits, there are repercussions.

In the CSPA, a *Conceptual Water Budget* was completed in March 2007, which looked at the water deposits and withdrawals on the watershed scale, over the course of an average year. We are currently working on a follow-up *Tier One Water Budget* that considers the deposits and withdrawals on a sub-watershed scale (e.g. Wilton Creek Sub-Watershed) over the course of an average month within the average year. The *Tier One Water Budget* was initiated in December 2007 and a draft report will be available in May 2008.

From the *Conceptual Water Budget*, we learned that the CSPA does not have a stressed budget. If compared against the bank

account, there is enough water in an average year for the amount of water currently needed in the CSPA. In the average year, we receive 950 mm of precipitation (rain, snow, hail, etc.) and 975 mm are accounted for by evaporation (500mm), stream flow (450mm) and water usage (25mm). Even though we use 25mm more than we receive, we are still considered a low-stress area.

Intuitively, the *Tier One Water Budget* shows that we have more water in the spring, while summer and early fall is the dry period. Unfortunately, the dry period coincides with the greatest water usage. So, we know that we have enough water throughout the year, we need to use water when availability is high – just like your bank account!

The *Tier One Water Budget* focuses mainly on municipal water systems that don't use the St. Lawrence River or Lake Ontario as a water source. In the CSPA we have three such municipal water systems: one in Sydenham, Lansdowne, and the Cana Subdivision within the City of Kingston.

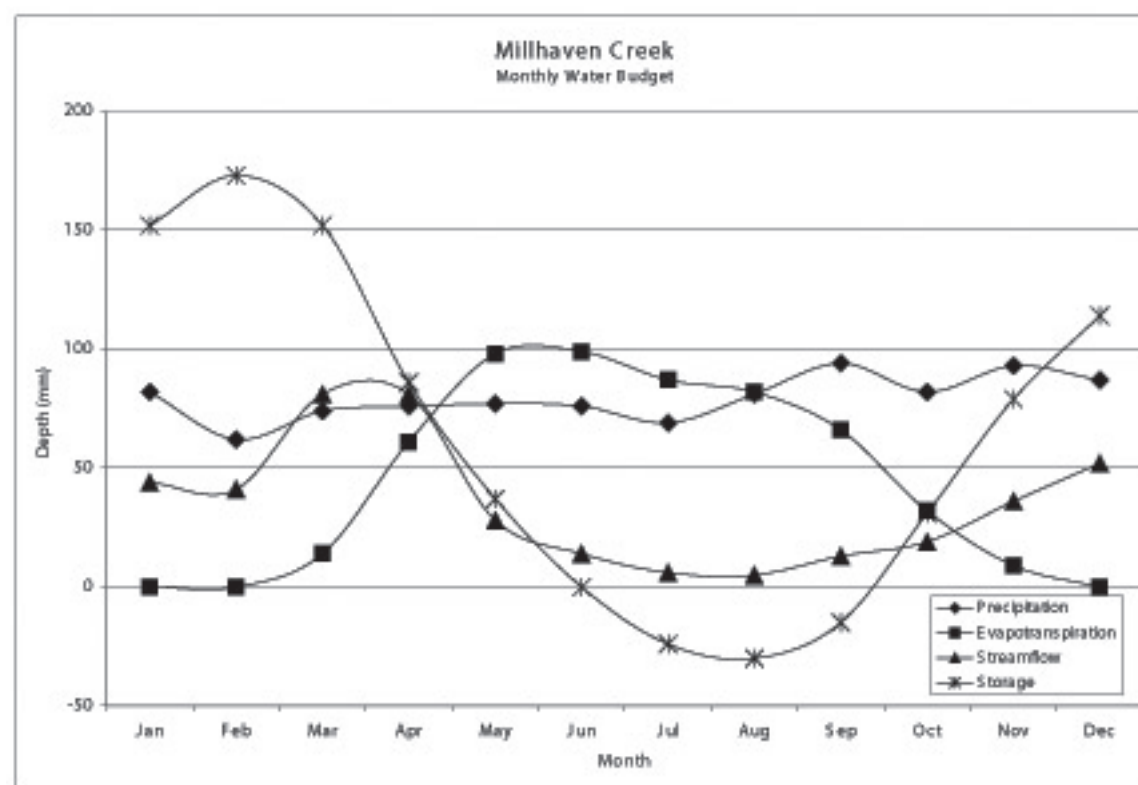
Sydenham uses a surface water source while Lansdowne and the Cana Subdivision use a groundwater source for local water users. Within the three municipal systems, the supply and demand is examined and consequently

rated as low, medium or high significance of "stress". If any of our systems is considered medium or high "stress", then the CRCA will complete a more detailed study, called a *Tier 2 Water Budget*,

which would entail a continuous daily model of water deposits and withdrawals to a municipal system. It has not been determined whether any municipal water system in the CSPA will need a *Tier*

2 Water Budget.

Making sure that there is enough water "in the bank" is just one of the many things to consider in preparing a source protection plan.



The monthly water budget for our sample creek, Millhaven, shows the fluctuations of precipitation, evapotranspiration, stream flow and storage over the course of a year. As expected, stream flow is lowest and evaporation is highest during the summer months.



Watershed Characterization Report Completed



This map shows the major land-forms of the Frontenac Axis and the limestone plain in the Cataraqui Source Protection Area.

The Watershed Characterization Report is a background study for drinking water source protection. It provides a description of the natural and human-made characteristics within the Cataraqui Source Protection Area (CSPA). The CSPA covers the geographical area of the Cataraqui Region Conservation Authority (Napanee to Brockville and north to Newboro) with the addition of the Frontenac Islands

(Howe and Wolfe Islands).

It provides information on physical geography, water quality and quantity, population distribution, land use and potential threats to sources of drinking water. It provides the necessary base information for comparison to judge future changes within the watershed and to help us determine future direction for our drinking water studies and plans.

The document was compiled and written by the Cataraqui Drinking Water Source Protection Team, with some assistance from consultants.

Data collection for this report began in spring 2005 with drafts being produced in December 2006 and May 2007. The final draft of the document was delivered to the Ontario Ministry of Environment in April 2008.

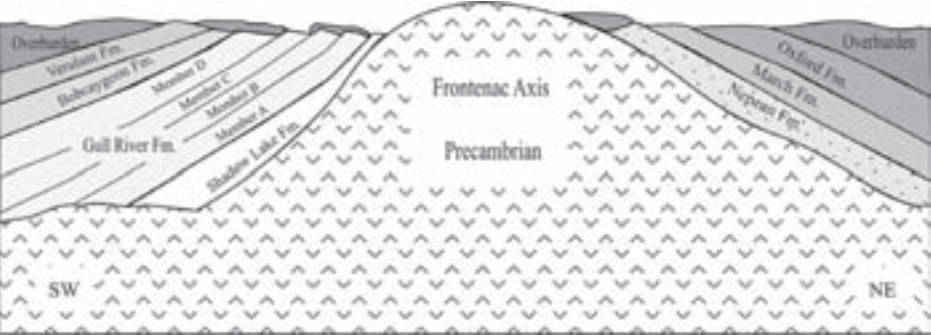
Although the Watershed Characterization Report was prepared for the Ministry of the Environment, it will ultimately be used by municipalities, community stakeholders and the public. Copies will be made available for viewing at the CRCA Administration Office.

The Watershed Characterization is the first task under Drinking Water Source Protection Initiative. Work continues toward the Source Water Assessment Report and Protection Plans (locally developed, science based reports to protect drinking water sources).

Interesting Facts about the Cataraqui Source Protection Area (CSPA) from the Watershed Characterization Report

- a large part of the CSPA is characterized by shallow soil cover over bedrock
- there is less than 10 per cent wetland cover which is recommended for ecosystem health
- woodland cover varies from 30 per cent in the west to over 60 per cent in the Frontenac Axis
- there are 13 threatened and endangered species in the CSPA
- 199,000 people live in the CSPA with most living in the two largest urban centres – Kingston and Brockville
- about 80 per cent of the population uses surface water for drinking

Studies of Groundwater Sources Underway



This illustration shows a cross-section view of the map shown above.

The CSPA is a very geologically diverse area. The rocks range from flat lying limestones to the hilly terrain of the Frontenac Axis. Above these rocks, much of the CSPA is covered by only a limited amount of soil cover that can act as a protective barrier to the underlying rocks.

In the CSPA, approximately 46,000 people rely on groundwater that flows through these rock aquifers for their water supplies. The source water protection team at the CSPA has been very busy collecting information about the state of groundwater within our region.

Two studies were completed to assess the general, large-scale groundwater conditions. In 2001, a groundwater study was completed in the United Counties of Leeds and Grenville and a complimentary study was recently completed (2007) in the Western Cataraqui Region. The reports

assessed the regional groundwater flow systems, completed preliminary mapping of highly vulnerable areas, and evaluated the human impact on the groundwater quality. In 2007, a supplementary groundwater study was completed for Frontenac Islands (Wolfe and Howe Islands) since the islands are part of the Cataraqui Source Protection Area (CSPA), but not the CRCA.

Subsequently, preliminary wellhead protection area studies were completed on two municipal systems in the CSPA, one in Lansdowne and the other in the Cana Subdivision, within the City of Kingston. Wellhead protection area studies will help us to determine the best ways to protect the land surrounding a municipal well from contamination, since any contaminant on the ground has the potential to enter a drinking water well.

In addition to the on-going wellhead protection area studies in Lansdowne and the Cana Subdivision, we will be completing another study at the Miller Manor retirement home in Mallorytown. The wells at the residence service 17 units and are classified as a municipal drinking water system by the Ministry of the Environment.

From all the work completed in the groundwater and wellhead protection area studies, it is apparent that groundwater in

the CSPA is extremely vulnerable to contamination due to extensive shallow soils over a rock aquifer. In a fractured rock aquifer, the fracture can act as a high speed conduit that can carry contamination further distances than a typical sand aquifer that is covered by a protective clay layer. A groundwater vulnerability analysis report has been initiated to further investigate the vulnerability of the entire CSPA. It is scheduled to be completed later this year.



Drilling boreholes was one of the ways to determine what is happening with the groundwater in the Lansdowne area. Lansdowne is one of the few communities in the Cataraqui Source Protection Area that relies on groundwater for its municipal water supply.

Studying Intake Protection Zones Along Lake Ontario and the St. Lawrence River



A data gathering device called a drogue is prepared for launch into Lake Ontario. The drogue gathers information on currents and winds which is then used to determine water flows into the municipal intakes along Lake Ontario and the St. Lawrence River.

There are both large-scale and local studies of Lake Ontario and the St. Lawrence River that are being conducted to help delineate Intake Protection Zones at municipal water intakes.



is set out by the Ministry of the Environment and is a one km radius around the water intake. IPZ-2 is a two-hour time of travel delineation that has to be determined based on the data that we have collected in the field.

We are now starting to look at possible threats to these water intakes, including potential sources of contamination within these IPZs.

The completion date for this work is fall 2008. The study findings will be presented at upcoming open houses in September.

Most of the larger urban areas in the Cataraqui Source Protection Area (CSPA) are located along the Lake Ontario/St. Lawrence River shoreline. That's where most of our municipal water intakes are also located. In spring 2006, we began the task of delineating the Intake Protection Zones (IPZ) for the eight intakes in this area. These include:

- two in the Town of Greater Napanee (A.L. Dafoe and Sandhurst Shores)
- two in Loyalist Township (Bath and Amherstview)
- two in Kingston (Kingston Central and Point Pleasant)
- one in Gananoque and
- one in Brockville.

The hydrodynamic study is being done by the Centre for Water and the Environment at Queen's University in conjunction with the National Water Research Institute at Environment Canada, Burlington.

The study used similar techniques to the study done in Sydenham, but on a larger scale. Field data on water currents and water temperature was gathered at four locations in 2006 and 2007. Drogues using satellite tracking provided data on currents and winds experienced on the lake and the river.

There are actually two studies underway – one of all of Lake Ontario at a large scale and a more detailed study of the CSPA. The large scale study is nearly complete. The more detailed study is about half-done.

The purpose of the studies is to determine where the eight municipal intakes draw their water from.

There are two IPZs that must be delineated. The first is set out by the Ministry of the Environment and is a one km radius around the water intake. IPZ-2 is a two-hour time of travel delineation that has to be determined based on the data that we have collected in the field.

Spruce Trees Showing Signs of Stress

You may have noticed spruce trees in our area with dead branches near the base of the stem, or entirely in decline. It would appear that these trees are suffering from a disease called Cytospora Canker (*Leucostoma kunzei*). Generally, this disease does not in itself kill an entire tree. However when coupled with the stress trees encounter from drought, or as in

our case, successive annual drought conditions, the weakened tree is more susceptible to infections by insects and diseases (like Cytospora canker)

and can be the "straw that breaks the camel's back". Trees are significantly weakened by one condition and insects and diseases, being opportunistic, attack the stressed tree with the results often being tree mortality!

According to a publication called "*Field Guide to Tree Diseases of Ontario*" (C. Davis and T. Meyer), this type of disease primarily attacks Balsam fir and Colorado spruce; but also occasionally attacks Black, Red, White and Norway spruces along with Eastern White pine. Symptoms typically are individual branches turning an off-green color initially, followed by turning completely brown and dying. Also, branches closer to the ground are usually the ones that are affected first. Trees are usually at

CRCA Simplifies Cost Recovery Fee Schedule for Permits

The Cataraqui Region Conservation Authority (CRCA) has simplified its schedule of fees charged for regulating development work relating to public safety around natural hazards, effective May 1.

"In a nutshell, we grouped some categories together to reduce the number of fees," explains CRCA Development Officer Andrew Schmidt. "What the schedule covers is everything we regulate, from putting in a dock to large developments."

This includes shoreline work, houses, additions, grading, disruption of a watercourse and work adjacent to a wetland. These activities are regulated by the CRCA under the *Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation* (Ontario Regulation 148-06). The regulation protects people and property from natural hazards and the Conservation Authority is empowered to issue permits under its provisions.

"It deals with natural hazards," explains Mr. Schmidt. "The reason for the fees is that we don't receive any money from the province for this even though we are mandated to do it under the *Conservation Authorities Act*."

Fees range from a low \$120 for legal inquiries not requiring a site inspection up to \$1,370 for a subdivision or condominium development.

"It's a cost recovery program, we're not making money," says Mr. Schmidt, "we're just recovering our costs."

The CRCA's old fee schedule contained seven categories.



CRCA Development Officer Andrew Schmidt

"We reduced that from seven to five so that was one of the big reasons for the changes -- to make the fee schedule a little less confusing," says Mr. Schmidt. "We've also added a minor authorization category that is intended to streamline the process for minor works in regulated areas."

To learn more, go to the CRCA website at www.cataraqueiregion.on.ca. If you are unsure whether you need a CRCA permit for development work around watercourses or hazard lands, contact Mr. Schmidt at (613) 546-4228 ext. 244 or toll free in 613 area code, 1-877-956-CRCA (2722). His e-mail address is aschmidt@cataraquiregion.on.ca.

least 20 years old.

Since healthy trees are much more capable of fending off pathogens, one option is to fertilize trees and periodically water them when drought-like conditions exist. Fertilizer spikes are the best option for fertilizing individual trees. Those trees that are esthetically important to you, for example, would be the perfect candidates for both watering and fertilizing. Usually garden centres sell these spikes, and will give you information on the proper type and instructions on how to apply them. Pruning the dead branches is also a good idea.

In a plantation setting, fertilizing and watering are generally not feasible.

However, you can certainly address those trees, if infection is evident, by pruning the dead branches at the bole of the tree, being careful not to tear the bark on the main stem while pruning. Between cuts, it is suggested that you sterilize the saw blade with bleach or alcohol, to lessen the chance of infecting other parts of the tree with the disease. The pruned branches should be gathered and burned, if possible. Pruning should only take place during dry weather.

For more information on this disease, or other pathogens and insects that infect trees, please visit the Natural Resources Canada website at www.cfs.nrcan.gc.ca.



Foundation News

Foundation Annual General Meeting May 27

The Cataraqui Conservation Foundation will hold its annual general meeting at 4:00 p.m. on May 27 at Little Cataraqui Creek Conservation Area.

"We are a membership organization and it's the time the board of directors reports to the membership on the running of the Foundation during the past year," explains Foundation President, Dr. John Morse.

The meeting will include a review of the past year's activities, a presentation of the financial report and a report from a nominating committee for directors and officers for the following year.

As well, the Foundation is anticipating a revision of its bylaws to be presented for discussion.

Also, the Foundation will name this year's winner of its conservation award. The winner is selected by directors Stewart Fyfe, Graham Lodge and President Morse and will be recognized during the event.

Foundation Donates Funds to CRCA Summer Camp

In other news, the Foundation agreed to a request from the Cataraqui Region Conservation Authority (CRCA) to provide \$2,000 to the day camp program.

"This will fund eight spaces as well as

supply additional funds for equipment," says the Foundation president.

Yearly contributions from the Foundation play a significant role in the CRCA's summer day camp program. The Foundation raises funds for CRCA activities such as conservation education or the acquisition of environmentally sensitive land. For example, the Foundation raised \$213,000 last year toward the acquisition of a part of the Bayview wetland.

A New Location for Foundation Gala

The Foundation's signature fund-raising event is its November dinner and auction. This year, it will shift to the Vimy Officers' Mess because this venue is larger.

"Last year we had to turn people away," says Dr. Morse to explain the shift.

He adds that this year's fund-raising goal is \$40,000.

The gala serves as a social background against which the Foundation raises funds. It is a highlight on November's calendar. Attendance is by invitation but if you don't get an invitation and would like to attend, call the Foundation at (613) 546-4228 ext. 231 and leave a message.

New Members Welcome

The Foundation is seeking new members through a membership committee chaired by Don Workman.



This photo shows silent auction action at last year's gala.

"We're always seeking new members," says Dr. Morse.

Membership benefits include invitations to the gala and other events like the annual general meeting plus a subscription to *Cat Tales*, the CRCA newsletter. You can also purchase a discounted CRCA annual pass valid for a year's admission to Little Cataraqui Creek and Gould Lake Conservation Areas.

Tour of CRCA Lands

In other Foundation news, 13 hardy souls set out on April 29 to view some of the CRCA lands and other areas of interest in and around Kingston.

"We visited the Little Cataraqui Creek valley lands including the Knox Farm and Bell's Swamp," said Foundation director Betty Boone. "The K & P Trail was part of the trip, and it took some driving and walking to appreciate the extent of this lovely walkway."

"Lemoine Point near the Kingston Airport was as always breathtaking in its beauty and scope," says Ms. Boone. "It is fortunate for the citizens who enjoy the walkways and the native plants and wildflowers along its many paths that the CRCA was able to acquire this property. It is a

gem." The Bayview Wetland, the most recent purchase, was a highlight. Most Foundation members had not seen it and were surprised at how large it is. The Foundation raised \$213,000 of the \$1 million price tag to acquire 700 acres.

Stormwater and floodplain ponds were observed in both residential and industrial areas ... a much better solution to flooding than the concrete culverts built in the 50's.

"Dalton Avenue was the last stop on the tour. The recent development in this area has pretty much eliminated the wetlands that once existed here," notes Ms. Boone.

"I would be remiss if I didn't thank the CRCA's Jason Hynes and Steve Knechtel for arranging transportation and being guides for the day," says Ms. Boone. "Both are passionate about our land holdings and the future of environmentally sensitive lands."



Bill Warwick and John Morse were photographed during a tour of sites in the Kingston area.

Two newcomers join the CRCA staff

Two new employees have joined the Cataraqui Region Conservation Authority (CRCA).

Sara Jane O'Neill is the Development Technician replacing Tyler Graham. She reviews permit applications submitted under **Ontario Regulation 148/06 - Development, Interference with Wetlands and Alterations to Shorelines and Watercourses**.

Sara received her Bachelor of Science (Honours) in biology from Queen's University in 2003. She took courses at Selkirk College in Castlegar, BC, for surveying, ecological classification and plant and soil identification in 2004. In 2005 she entered a Master's program at the University of Calgary in the Faculty of Environmental Design for Planning.

Sara's previous employment included work as a community planner for Urban Systems in Richmond, BC, an engineering and planning consulting firm.

"I was most recently employed with Kawartha Conservation as an environmental planning technician," says Sara.

Meanwhile Biologist Carolyn Bonta is filling in for Tom Beaubiah while he takes parental leave. She is an Ottawa native who earned a BSc (Honours) from Carleton University and an MSc Zoology from the University of Western Ontario.

"My passion is ecology and conservation," she says. "Since graduation, I've been based out of Kingston and have done a mix of office and field work for various organizations and at several sites in southern Ontario."

"As a consultant, I've worked for Ducks Unlimited, Environment Canada and the CRCA. I spent three years as a Biologist/Assistant Planner at Lower Trent Conservation, involved in partnership projects with Ducks Unlimited, the Ministry of the Environment and the Bay of Quinte RAP team."

In late 2004, Carolyn returned to Kingston

to spend four months as a species at risk biologist with Ministry of Natural Resources (MNR). After working for MNR, she moved to Ontario Parks to work as a planner.

"On the side, I've done volunteer work for CRCA, City of Kingston (Kingston Environmental Advisory Forum, Communities in Bloom), Kingston Field Naturalists (KFN) (resource inventories), and others."

Carolyn updated the life science inventory of the CRCA's Mac Johnson Wildlife Area in 2005 as part of a master plan review.

In 2006, she spearheaded a community planting day as part of the urban streams buffer project. Last spring, Carolyn gathered fisheries information and assembled it into a database for lakes in the western half of CRCA's watershed. Also last year, she was a community representative on the Lemoine Point Advisory Committee.



Development Technician Sara O'Neill (above)



Biologist Carolyn Bonta



Friends of Lemoine Point Plan Active Anniversary Celebration

The Friends of Lemoine Point Conservation Area are planning an active spring and summer season and everyone is invited to participate.

The group is planning a spring walk to celebrate its 10th anniversary on May 24. The event is named *Spring at Lemoine Point Walk* and it lasts from 1:00 to 3:00 p.m. It is intended to attract new as well as current users and members of the Friends. The walk will feature six stations staffed by interpreters who will focus on: wildflowers, marsh life, managing the forest, invasive species, the native plant nursery and reforestation.

The self-guided walk covers a circular 1.5 km route leaving from, and returning to, the north parking lot by the Coverdale Drive entrance.

At 2:00 p.m., for those unable to negotiate trails and fields, there will be a guided walk along the wheelchair-accessible service road south of the parking lot. Participants will look for wildflowers, invasive species and other features of the conservation area at a pace geared to participants.



This photo shows some of the Lemoine Point Native Plant Nursery volunteers.

Invasive Species Control

Volunteers are always needed to help with controlling invasive species at Lemoine Point Conservation Area. The Friends have a routine developed last year which focuses on:

- clearing garlic mustard in May and June
- monitoring dog-strangling vine in July and August and clearing affected areas
- clearing European buckthorn saplings in August and September and asking the CRCA to cut European buckthorn trees in October
- planning to work outwards from the north parking lot to create large invasive species-free zones

If you are interested in helping out, please call Chris Hargreaves at (613) 389-8993.

Native Plant Nursery Survives Rodent Assault

Meanwhile the nursery is open and the volunteers discovered that stock survived the winter with only minor rodent damage. Next, they will dig up maples and oaks to meet sales requests and the spring heritage forest planting event.

If you are interested in volunteering, meet at the nursery on Wednesday mornings at 9:00 a.m.



Township to discuss CRCA jurisdiction expansion over islands

The Township of Leeds and the Thousand Islands (LTI) will consider asking the Cataraqui Region Conservation Authority (CRCA) to expand its jurisdiction to include the township's 953 islands.

"The issue is that the CRCA jurisdiction now extends only 300 meters offshore," explains CRCA Watershed Management Coordinator Mara Shaw. "It looks like LTI is going to want us to extend our jurisdiction."

Ms. Shaw addressed LTI's municipal council on April 30. She responded to questions from councillors and members of the public including the Thousand Islands Area Residents Association. The proposal has garnered support from Ontario's Ministry of Natural Resources (MNR) and the federal Department of Fisheries and Oceans (DFO).

There is a precedent for CRCA jurisdiction expansion. Loyalist Township asked in 1999 to expand CRCA jurisdiction to include Amherst Island.

The implications for LTI are significant. The 953 islands have 250 km of shoreline and occupy 19 square kilometres in area. To place that in perspective, the CRCA currently has jurisdiction over 250 km of Lake Ontario/St. Lawrence River shoreline.

If the expansion takes place, benefits will flow to the township and its residents. Now there is a difference in the application of development regulations between the islands and mainland. Jurisdictional expansion would eliminate that and level the playing field.

The advantages? Anyone with a development application now requires multiple reviews. For example a dock application is reviewed by the CRCA, that also acts for DFO, and the MNR as well as the township. If CRCA jurisdiction is expanded, the applicant will apply only to CRCA that will circulate the application to relevant agencies.

Jurisdictional expansion would mean that the CRCA regulation that



The Thousand Islands International Bridge crosses the St. Lawrence River in the Township of Leeds and the Thousand Islands, touching down on several of the islands. The Township is in discussions with the CRCA about the possibility of extending CRCA jurisdiction to the islands.

protects development from natural hazards will be applied on the islands as well as on the mainland.

Now the ball is in the municipality's court. The issue will be raised for a decision at a future council meeting. If there is support, LTI's council formally will ask the CRCA then establish a joint meeting to formalize the decision.

Friends of Mac Johnson Wildlife Area Continue to Make Improvements

The Friends of Mac Johnson Wildlife Area are continuing to assist the CRCA with improvements to Mac Johnson Wildlife Area. The most recent completed project is the upgrading of the public washrooms at the north entrance. The floors were resurfaced, the walls were painted and low flow toilets were installed making the washrooms clean, bright and efficient. Thanks go to the Brockville Community Foundation who provided a grant for the materials. Labour was provided by CRCA staff and the Friends.

In 2007, the Friends helped the CRCA replace a number of signs, kiosks and trail markers throughout the property. Most of the signs were in disrepair and a number of the trail markers had been vandalized, making it difficult for newcomers to find their way around the property. Now with the help of the Friends and funds from INVISTA, it's much easier to navigate the property.

On the wish list for this year is the replacement of the skating shelter. The Friends are evaluating whether the existing structure can be repaired or whether it needs to be replaced.

Also on the list is a new osprey platform. It was scheduled to be replaced over the winter, but due to unsafe ice conditions, it had to be postponed. Despite a wicked lean, it's still being used by the ospreys.



Despite threatening weather and black flies, visitors enjoyed the Spring Open House at Mac Johnson Wildlife Area. The tractor-drawn wagon rides were a hit.

Still Time to Register for Summer Camp

There's still time to register your children for Nature Explorers Camp, but spaces are going fast. As we go to press, two of our weeks are already full and the others are filling up quickly.

Since 1993, the CRCA has offered summer day camps. Although our camps have changed over the years, we have maintained a focus on learning about nature and the outdoors. Our summer camps are run by enthusiastic and well-qualified instructors. All of our 2007 camp staff are returning for the 2008 season.

Nature Explorers Camp is a week-long day camp for children aged six to 11. It is a great way for your children to learn about nature and the outdoors. The camp runs weekly from July 7 to August 22. Home base for the Nature Explorers Camp is the Outdoor Centre at Little Cataraqui Creek Conservation Area. Each session features two weekly trips to Gould Lake Conservation Area. Choose from one of the following seven theme weeks:

- July 7 to 11 Eco Heroes
- July 14 to 18 Wet and Wild - sorry this week is full!
- July 21 to 25 Natural Defences
- July 28 to August 1 Nature Invaders
- August 5 to 8 Wilderness Artists
- August 11 to 15 Home Sweet Home
- August 18 to 22 Wildlife CSI - sorry this week is full!

Cost is \$160.00 per week per child. Regular camp hours are 8:30 a.m. to 4:30 p.m. Before and after care from 8:00 a.m. to 5:00 p.m. is available at the Outdoor Centre at an additional cost of \$40.00 per week.

The Nature Explorers Camp registration form is available at the CRCA Administration Office, the Little Cataraqui Creek Conservation Area Outdoor Centre or on the CRCA website.