



# Another productive summer and autumn for the Petitcodiac Watershed Alliance!



With the sampling season behind us, it's now time to summarize all the hard work we have completed this summer. Since March 2007, the Petitcodiac Watershed Alliance (PWA) has performed monthly sampling of 25 sites located within the Petitcodiac and Memramcook watersheds. We are currently compiling data and the report will be available by March 2008. So far, the numbers seem to be pretty similar to previous years, which indicates a certain stability in our watersheds.

The PWA also completed an inventory of the culverts located within Jonathan Creek. We are currently writing a report detailing the findings of the inventory for the Jonathan Creek Committee. The main goal of this project is to ensure that fish passage is possible. We will move forward with Step 2 of the program in 2008. This step consists of classifying the

physical barriers to fish passage in Jonathan Creek, in terms of the extent of the barrier (i.e. complete, semi-complete, minimal, etc.). Step 3 will take place in 2009, with the restoring, repairing or replacing of the troublesome culverts.

We have also been working with one local golf course, in order to develop best management practices. We are currently analyzing



the "current practices questionnaire" completed by the superintendent of the golf course. We will shortly be working together to implement some more environmentally friendly practices. A best management practices handbook will also be produced, which should help them implement some beneficial changes.

Finally, a site restoration took place along Fox Creek this past September. For more details, please see the featured article in "Current News" (pages 1, 2 and 3).

If you would like to get involved with our group, we would love to have you! We are always looking for field, office or fundraising help. Please contact us for more details. Call 384-3369 or email us at :

petitcodiac@rogers.com

**Photo: Jonathan Creek Culvert Inventory (JC-16), 05/10/2007.**

**Did you know ?**



The Petitcodiac River's ecosystem is the most threatened in Canada!

## Fox Creek tree planting Rehabilitation project (written by Émilie Godbout-Beaulieu)

On September 29th, 2007, more than forty people came out to the banks of Fox Creek to help us plant trees. Volunteers from all backgrounds worked to dig, plant and water the 25 trees (1.5 to 2 m in height) and 16 shrubs

the PWA had ordered.

The main goal of the project was to stabilize the banks of the stream, which has been subject to serious erosion and siltation problems. During the past decade, the city of

Dieppe has grown dramatically. The numerous residential developments in the area, which infringe on the shore of Dieppe's only stream, ... **(cont. p. 2)**

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### Quote of the Day

We never know the worth of water till the well is dry.

~Thomas Fuller, *Gnomologia*, 1732

## Water Water everywhere? (written by Luc Richard)

Water, it's such an important part of our world. Water covers 71% of the earth's surface and is essential to all known forms of life. Terrestrial water is found in oceans, seas, lakes, rivers, aquifers, ice caps, glaciers, swamps and in air vapours. Salt water makes up 97% of the earth's water, while usable fresh water makes up the rest. Humans can only use 0.3% of the world's water for drinking, the rest of the fresh water is locked up in the ground or in glaciers and ice caps (USGS). Yet, we humans tend to treat this natural resource as if it's limitless. The fact is that fresh clean reliable drinking water is not limitless, it is a finite resource and its stocks are dwindling. Population growth has dramatically increased water usage and man-made population has destroyed many of our water resources. We Canadians are fond of the fact that we possess more fresh water than any other country in the world (20% of the earth's freshwater) however, we possess only 7% of the earth's *renewable* freshwater (Environment Canada). Furthermore the growing Canadian metropolitan population and the rising water usage are stressing available water supplies. Interestingly, more than half of our water resources are located north of the Arctic Circle, while 84% of the Canadian population inhabit the Southern part of the country, this makes accessing water difficult and expensive. In addition, current global climate change will continue to stress our available freshwater resources.

We Canadians are some of the thirstiest water users in the world. We consume on



average 343 litres (L) of clean drinking water per person per day. This water is used for cleaning, drinking, cooking, lawn watering, etc. This is a lot of water, to put it into perspective, our friends in Britain and France use only 150 L a day! Locally, we the residents of Greater Moncton, obtain our drinking water from Turtle Creek, which is located in the Petitcodiac watershed. We on average consume 340 L of clean drinking water per day (City of Moncton Engineering Department). This is an extraordinarily large amount of water and as responsible citizens we need to lower our water usage. So let's look at how individuals can help save our limited water resources and save money.

- ? Install water efficient (dual flush) toilets and low flow shower heads and faucets
- ? Take shorter showers
- ? Turn the tap water off while brushing your teeth, shaving, or washing your face
- ? Fix leaky faucets and toilets (a leaky toilet can waste 200 000 L of water in a year)
- ? Install grey water systems (used water from laundry, sinks, etc.)
- ? Install rainwater tank or rain barrel. This water can be used for garden and lawn watering
- ? To reduce losses due to evaporation, water lawn and garden early in the morning (after the dew has dried)
- ? Set sprinklers to water the lawn, not

sidewalks and driveways.

? Use low-angle or pulsating sprinklers that produce large, fat droplets of water. Sprinklers that spray the water high into the air or produce a mist or fine spray lose much of the water through evaporation.

? Use water-wise plants. Native and adaptive plants will use less water and be resistant to local plant diseases and pests.

? Put a layer of mulch around trees and plants. Chunks of bark, peat moss or gravel slows down evaporation

? When washing a car, use a bucket and sponge (this can save 300 L)

? Only use washing machine and dishwasher when full

? Purchase water efficient appliances (look for product ratings)

? Insulate your water pipes. You'll get hot water faster plus avoid wasting water while it heats up

? Use a pool cover when the pool is not in use. This will cut down on evaporation losses and will keep it cleaner and warmer. Check equipment such as filtration systems and water inlets on a regular basis for signs of leaks.

? Use a broom instead of a hose to clean driveways and sidewalks

These are all easy solutions to help us lower our water usage, without dramatically changing our lifestyles. Remember, we can all make a difference!

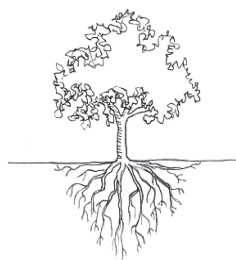
**Photo: Memramcook River**

## Fox Creek tree planting Rehabilitation project

(cont. from p. 1)...

have lead to significant increases in the amount of sediment entering the creek. The water quality data that we have been collecting since 1997, shows that suspended sediment levels are regularly above local historic levels. To address the siltation problem, the PWA (along with the financial support of the New Brunswick Wildlife Trust Fund and Mountain Equipment Co-op) carried out a re-

habilitation project along the shore of Fox Creek, near the intersection between Melanson and Bourque Roads. The trees and shrubs that



were planted will help reduce erosion as well as trap silt before it enters the creek. Tree and shrub roots stabilize and

retain soil, they also provide a wind and precipitations barrier. These trees will also provide shelter to the terrestrial wildlife and provide important shade for the marine wildlife!

Finally, the tree planting enabled us to reclaim some green space that had been lost to residential development.

The trees that were planted were selected very carefully. ... (cont. p. 3)

## Fox Creek tree planting Rehabilitation project (continued)

(cont...)

they are all native to the area, which gives them a greater chance of survival. These native species will be acclimatized to the area and thus be able to permanently root themselves. They will therefore offer a long-term solution to the erosion and sedimentation problems observed at Fox Creek.

We were also pleased to see a good turnout by the local media. By promoting the goals of the project to the community, the local media helped ensure the success of the project. In addition to the attendance of the medias, the Deputy Mayor of Dieppe, M. Francis LeBlanc, also lent the PWA and the volunteers a hand. The city of Dieppe also provided great support to the project, by providing employees as well as many tools and equipment essential for the tree

planting.

Because of the help of all the volunteers and the city officials, the rehabilitation project was a great success. A big THANK YOU to all of you who came out to give us a hand. We hope that this project will lead to similar activities in the Petitcodiac and Memramcook watersheds. Hope to see you there!

### Water Fact

Canadians are using an average of **1,600 m<sup>3</sup> per year!** That is almost **four** times what the average Swede uses and **eight** times as much as the average Dane! Canada water consumption per capita is **65% above** the OECD average! (OECD, 2001)



Photo:

Left - **Émilie Godbout-Beaulieu (Project Coordinator)** and **Dieppe's Deputy Mayor, M. Francis LeBlanc** gladly helping to restore the Fox Creek

Top - **Volunteers helping with the Tree planting**

Right - **Fox Creek (siltation)**



## Upcoming events

5 December: International Volunteer day, a big THANK YOU to all of our volunteers! :)

[www.volunteer.ca/volcan/eng/content/dec5/about.php](http://www.volunteer.ca/volcan/eng/content/dec5/about.php)

8 December: International Day of Action for Climate Change! Kiosks at 11 am and public march leaving from Moncton City Hall at 1 pm! See

your local news for events happening near you!

25 December: Happy Holidays! Remember to bring reusable cloth bags when doing your shopping!

1 January: What is your green resolution? Happy New Year!



**Mathieu-Martin students working hard during the Fox Creek's Tree Planting**



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*To achieve a healthy environment for the  
greater good of the Petitcodiac Watershed*

**Find us on the web !**  
**[www.petitcodiacwatershed.org](http://www.petitcodiacwatershed.org)**



**Become a Friend of the Watershed!**

**Membership form**

Petitcodiac Watershed Alliance 2007

Check should be made payable to **PWMG-GSBP Inc.**  
and sent to:

Petitcodiac Watershed Alliance  
PO Box 23046  
Moncton, NB  
E1A 6S8

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

Organization/ Job Title (optional) \_\_\_\_\_

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

Tel: \_\_\_\_\_

E-mail: \_\_\_\_\_ (very important)

**Fees:**

- \* **Fish Friend** \$20, Includes quarterly newsletter, occasional updates
- \* **River Rescuer** \$50, Includes quarterly newsletter, updates, members only mug
- \* **Watershed Supporter** \$100, Includes quarterly newsletter, updates, annual report (State of the Watershed), members only t-shirt "Are you using the right protection for your watershed?"
- \* **Corporate/ Watershed Supporter** \$250+, all of the above plus announcement on our regularly visited website

\*\* all memberships include voting privileges at our Annual General Meeting

