

# Kensington North Watershed News

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## Flagship Project

At our Annual Meeting in April 2012, President Ches Boutilier announced that KNWSA would select a project that goes beyond our normal budget and efforts, a larger scale project that deserves extra attention. The project that has been selected by the KNWSA Board from a list of potential candidates is the broken dam and poor fish passage structure in Burlington, where the Spring Valley Brook meets the Southwest River.

The site was chosen for its high need of attention, its visibility, and the large results that can be expected for a reasonable cost. The project is being broken into 3 parts: part one, removing the broken dam structure, part two, improving the fish passage for small fish and more species of fish (currently it is accessible only to large trout), and part three, reshaping the berms and dykes that formerly made up a series of aquaculture ponds. The cost of rebuilding the dam was dismissed as being too costly and too difficult to get the environmental permits for construction. The goal is to return the area to a more natural state and improve habitat for fish, waterfowl, and other wildlife.

The project, just recently selected by the KNWSA Board, is now undergoing design completion which will be required for acquiring permits for working in the buffer zone. As the permits are acquired, fundraising will begin. We look forward to funding and participation from government, the KNWSA community, and corporate sponsors, all of whom will be required to complete this project.



## Pheasants Forever

In the past few weeks, eleven Ring Neck Pheasants have been released in the Clermont Conservation Area. The pheasants have been supplied by Charlottetown chapter of Pheasants Forever, a national group promoting the naturalization of Ring Necks. The birds were trapped in Windsor, Nova Scotia. They are being helped along by KNWSA volunteers who are keeping feeding stations supplied while they get established.

The project is the dream of Bruce Gillespie, the former manager of the Indian River Watershed (prior to the formation of KNWSA). Pheasants Forever exists mainly due to the volunteer work of Carl Hansen from Charlottetown.



*Left to right – Bruce Gillespie, Carl Hansen & Lewie Sutherland*

These beautiful birds will help raise awareness of wildlife throughout our watersheds. Keep a watch out for the colourful males, and the large grey, brown and white females. They could migrate to anywhere in the Kensington North area.

## Did you know that....

Sutherland Creek and MacIntyres Creek are now part of the Kensington North Watersheds Association.

## Our Funders

The following are our major funding partners. Their support is crucial for KNWSA.

### PEI Watershed Management Fund

- Provides core funding

### EcoAction (Environment Canada)

- Current project is based on reducing the impact of nutrients in our waters

### PEI Wildlife Conservation Fund

- Funds silt trap maintenance, labour, supplies, aimed at improving fish and wildlife habitat

### PEI Employment Agency

- Important funding for labour

### Canada Summer Jobs

- Student labour

### Greening Spaces Program

- Provided over 6200 trees and shrubs in 2012

### Syngenta Canada

- Contributed to our core program of stream restoration and tree planting

## In Kind Supporters

The following individuals, businesses and departments provide services free of charge that are essential to our organization:

### IR Geomatics Services

- Mapping solutions to our many needs

### Malpeque Bay Credit Union

- Provides the C.U. Board Room for our board and executive meetings

### Gordon Coffin

- Reviewed our books for accuracy

### Agriculture and Agri-Food Canada

- Technical assistance for the bio-filter project

### PEI Dept. of Transportation and Infrastructure Renewal

- Productive interaction on controlling siltation from clay roads

### PEI Dept. of Environment, Labour & Justice

- Technical assistance on a wide range of issues

### PEI Dept. of Agriculture and Forestry

- Technical assistance on a wide range of issues

And last but not at all least, the **Volunteers** from our KNWSA community - River monitors, drivers, tree planters, message takers and land stewards

**Many thanks go out to our local Corporate Sponsors**, who are taking a special interest in our work.

Anne of Green Gables Museum, Cavendish Farms, Cousins Seed Cleaning, Durdles Bookkeeping and Taxes, Grahams Seep Sea Fishing, Gull Point Fisheries, Indian River Farms, K'town Auto Parts, Kensington Agricultural Services, L & C Fisheries, Malpeque Bay Credit Union, Melvin and Linda Paynter, Spring Valley Farms, Sterling Murphy Trucking, Thompson Backhoeing and Trucking and the Town of Kensington

Please check our website, **knwsa.com**, for more information and links.



*New tree planting at Tuplin Creek*

## The Last Year, in a Nutshell

In the past twelve months, activity in Kensington North has included:

- planting over 6500 2 or 3 year old trees and shrubs in riparian zones and hedgerows
- Constructed 2 new silt traps and cleaned out 5 existing ones (KNWSA manages 15 silt trapping locations)
- A total of 6.8 km of initial stream restoration (more difficult) was carried out, along with 28.4 km of stream maintenance (repeat visit from previous years, less difficult) in several different watersheds
- Material from the demolition of Darnley Bridge

was distributed for the construction of private stream crossings

- A group of stakeholders, mostly farmers, has completed a plan to reduce nitrates in three watersheds in the Southwest River
- Our Board has met 5 times and our executive an additional 5 times. Budgets and financial reports are continually scrutinized. Policies are being developed, planning is continuous



*Eaglet banding & blood testing, Indian River*

- Public awareness is maintained through newsletters, websites, and a Facebook page
- 10 different people helped us with summer employment, led by Dave Allen and Garreth Ashley
- Education with youth continues with the grade 6 class Environmental Day, and the grade 8 science class "Adopt-A-River"
- Public Tree Planting Day in October in Long River with 35 volunteers
- Intense water testing in 7 locations for one year, to create a base line reference for years to come
- Coastal Erosion Monitoring has taken place at 13 locations, taking precise measurements of different locations along the capes to be used for future reference
- A group of eleven River Monitors has been formed to record anoxia and other climate data in our estuaries
- 2 big beach cleanups were done again this year, from Princetown to French River
- Numerous other activities and projects for education, nitrates, stream enhancement, organization development. Please check our Website (knwsa.com) and join our Facebook page for more information



*Coastal erosion monitoring*

## **Become a member**

- Regular - \$10 Voting member 1 yr., 3 yr. for \$25
- Corporate - \$100 Non-voting member
- Junior - \$2 Under 19 non-voting membership

Payable : Kensington North Watersheds Assoc.  
P.O. Box 187  
Kensington, P.E.I.  
C0B 1M0

### KNWSA Membership Form

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

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

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

Email: \_\_\_\_\_

More info: 432-4988 or visit [www.knwsa.com](http://www.knwsa.com)



*Stream restoration*



## BioReactor Captures Nitrates

A new concept to capture nitrates is being tried in the Baltic River watershed in Darnley. A bio-reactor has been constructed on the end of a tile drainage system on Hickey Farms. The bioreactor is a filter of woodchips on the end of the tile drain line, before it exits into the watercourse. A tile drainage system is used to remove excessive amounts of water in some fields, where water may drain slower than it does in other areas, thus delaying planting in the spring, and becoming problematic during a wetter than normal growing season. The water leaving a tile drain may contain a high concentration of nitrates. Because of the concentration of nitrate-laden water into a single flow, it presents possibilities to capture and remove the nitrates before they enter our waterways.



The Darnley Bio-Filter is a pit lined with plastic, the same heavy plastic used as a vapour barrier in home construction, and then filled with wood chips. The water from the tile drain enters the pit, and microbial activity in the pit removes 50 to 80 % of the nitrates in the water. The pit can remain functional for 20 years or more.

The bio-reactor is not a solution for every nitrate situation, or even every tile drain situation. It can

be a small part of the greater solution to reducing nitrates in surface water further downstream. The lessons we learn from this bioreactor may help the development of other types of biofilter applications, similar to the Cavendish Wetlands in Clermont.

Nitrates in groundwater and surface water can be traced to a number of sources, including septic fields, manure, and chemical fertilizer. Nitrates pose a small risk to human health, and a greater risk to the health of our estuaries, where our fresh water streams enter the salt water rivers and bays.

Kensington North has a committee of devoted stakeholders, many of whom are major farmers from our area, who are working toward a solution to excessive nitrates in the groundwater and surface water in the Spring Valley Brook, Tuplin Creek, Durant Creek and Eel Creek watersheds that drain into the Southwest River. The committee's work will hopefully be concluded and ready for review by local residents later this winter. The bio-reactor is one small step for a watershed, and one great step for mankind towards reducing the impact of nitrates.

