



Wheatley River Improvement Group

February, 2012

AGM - Wed. March 14, 7:00 p.m, Wheatley River Hall

Can anoxic events be predicted by light, temperature and nutrient levels?

Guest speaker Vernon Rodd, M.Sc. P.Ag., Research Scientist at Agriculture Canada will report on his work here last summer.

WHO SHOULD ATTEND

Everyone who lives here and cares about the health of our river.



WRIG Needs Board Members

Our bylaws say that we need to replace directors whose terms are ending. If you would like to join the WRIG board and make a difference in the health of our watershed, we ask you to contact the Nominating Committee at Tracy@wheatleyriver.ca.

State of the River

A regular feature reporting on the health of our river.

Pilot Nitrate Reduction Report Posted at www.wheatleyriver.ca

The full draft report can be found online. Here are the highlights:

THE PROCESS

Phase 1: Stakeholder Meetings

A year ago (Feb-Mar, 2011), thirteen Wheatley River watershed residents, representing a broad cross section of stakeholders, participated in an intensive series of meetings to develop strategies focused on long term nitrate reduction in our watershed.

Phase 2: Setting Targets

In December, 2011, a committee drawn from the original stakeholder group met to pursue the strategic recommendations and agree on a quantitative target for nitrate load that would reduce anoxic events to approximately one every two years. Based on information provided by Dept. of Environment (see chart), it was agreed that an appropriate goal for nitrate reduction would be 6.26 kg N/ha/yr.

Watershed Nutrient Loads Required to Meet Potential Nitrate Targets
Wheatley River

Current Load	Potential Targets			
	Drinking Water	Estuary Targets		
		Certain Anoxic Events (4-5 every 5 Years)	Likely Anoxic Events (2.4 every 5 Years)	Possible but Unlikely Anoxic Events
12.52 kg N/ha/yr	12.5 kg N/ha/yr	7.89 kg N/ha/yr	6.26 kg N/ha/yr	4.76 kg N/ha/yr
Reduction Needed for Suggested Target	0.02 kg N/ha/yr (0.16%)	4.63 kg N/ha/yr (37%)	6.26 kg N/ha/yr (50%)	7.76 kg N/ha/yr (62%)

A list of modeling requests for different scenarios suggested by the nitrate reduction strategies was prepared and forwarded to the Department of Environment.

When the results of this modeling exercise are available, stakeholders will convene once again to review the findings and determine next steps.

SHARED VALUES

Early in the process stakeholders identified the following shared values:

- We believe the Wheatley River Watershed can support a prosperous community sharing a healthy ecosystem.
- Everyone living on the Wheatley River Watershed must have access to a safe, healthy ground water supply now and into the future.
- We respect, and acknowledge, the interdependence of all community stakeholders.

OBJECTIVES/STRATEGIES

Eight strategies are outlined in the report, along with recommended timing and success measures for each, as well as suggestions on how to get this all done:

#1: Increased and improved water monitoring

We need more thorough data collection to provide a better assessment of the current state of the water system and to monitor changes and improvements as strategies are implemented.

#2: Land use

alternatives/reforestation

After careful assessment, it may turn out that the best solution for reducing nitrate losses from some areas could be to convert sensitive land to a less nitrate-intensive use.



#3: Enhanced environmentally friendly incentive programs

Existing incentives already promote and encourage management practices that minimize environmental impact, including nitrate losses. There is much support for continuing and improving these.

#4: More environmentally friendly farm practices

Research needs to be conducted, on an ongoing basis, into alternative farming practices such as plowing strategies / timing, crop alternatives, use and support of compatible crops, and the difference, if any, made by organic farming.

#5: Improved water flow into and through the estuary

Flow rate of watercourses impact the ability of the watershed to flush nitrates.

#6: Reduction of nitrate losses from residential development

Residential nitrate losses are the second highest source of nitrate in the watershed. The number of lots eligible for residential development needs to be looked at, along with septic waste management.

#7: Improved manure management

A system to manage manure usage in the watershed could greatly reduce nitrate losses from this known source.

#8: Enhance natural wetlands and construction of engineered wetlands

The nitrogen uptake of the ecological systems within a wetland offer promising potential for preventing release of nitrates into downstream watercourses.

#9: Removal of sea lettuce through harvesting

In addition to potential benefits from the sale of the harvested sea lettuce, or its use as a composting material, the removal of the sea lettuce from the estuary may serve as a stop-gap solution in response to the algal blooms that lead to anoxic events in the estuary.



Excellent Brookfield Gardens!

Minister of Agriculture George Webster presented the Gilbert

R. Clements Award for Excellence in Environmental Farm Planning to Gerald, Eddie and Travis Dykerman (left to right in the photo) at the Federation of Agriculture's 2012 annual meeting held January 27 at Confederation Centre. The citation for this prestigious award spoke of Brookfield Gardens as a key stakeholder representing the agriculture industry within the Wheatley River Watershed in our Nitrate Reduction Pilot Project. Acting as ambassadors for their industry is nothing new for the Dykermans. They have been featured on CBC-TV Compass, CBC Radio, Chef Michael Smith's "Food



*"Gordie and crew."
Photo: Brookfield
Gardens*

Country", and Loblaws/Atlantic SuperStore TV spots. Now producing close to 300 acres of vegetables in an environmentally sustainable manner, Brookfield Gardens deserves this recognition. They make us proud, as do all of the producers who operate here in our watershed and help take care of it.

Introducing WRIG Coordinator



Norman Dewar with his trusty watershed kit and 1991 Jetta Diesel, which has taken him 640,000 km so far.

Norman Dewar joined WRIG in October, 2011, as our Watershed Coordinator. Norman brings a lot of agriculture and watershed knowledge to our group. He farmed in West Prince for over 20 years and got involved in watershed management through a chance invitation to work with the

Central Queens Wildlife Federation (CQWF) 3 years ago. He admits when CQWF hired him he knew nothing about watershed management but with his strong science (he has a BSc from Dalhousie) and his lifelong interest in the environment, it was a perfect match.

Since then, Norman has worked for Cornwall and Area Watershed Group and still is the part time coordinator for Ellen's Creek Watershed Group. "Wheatley River is an amazing watershed and I'm really looking forward to working with everyone to make it even better." Norman says. Norman lives in Charlottetown with his wife, Dorothy, and his 2 year old son, Tiernan.

Norman can be reached at norman@wheatleyriver.ca or 902-569-9115 if you have any thoughts or concerns about our watershed or if you have a stream on your property, you'd like to have him take a look at, he would be very pleased to do so.

Islanders Hail the Winter of 2012



Delayed fortuitously by a week during which winter snows blanketed the forests of Hazel Grove, PEI's second Winter Woodlot Tour attracted **over 750 visitors** on Saturday, Feb. 4. Plaudits to organizers, Wheatley River Improvement Group, Hunter Clyde Watershed Group and PEI Model Forest Network Partnership. Also on duty were the PEI Department of Agriculture and Forestry, Jackie Waddell from Island Nature Trust, Island Falconry Services, 4-H, Caseleys Tents, Island

EMS, Ralph Bernard and his horses, and a dedicated bunch of volunteers. There was maple sap tapping, woodsman skills, wildlife displays, live falconry (who knew?), chainsaw maintenance, non-timber forest products, commercial forest maintenance, snowshoeing and even hot cider. What a great reminder of the importance of forests to the riparian zone eco-system!



Photos: Andrew Lush, Hunter Clyde Watershed Group

WheatleyHunterClyde: The Partnership

WRIG welcomed Andrew Lush and Phil Pineau from neighbouring Hunter Clyde Watershed Group to our February Board meeting, where Chair Jim Kemp echoed the value of the partnership we have been building. As well as collaborating on the smash hit Winter Woodlot Tour, the two groups have

worked together on a number of projects to engage local residents and students in Grades 6, 7 and 8 (French and English) in the effort to protect our watersheds and improve our water. Both groups agree that this needs to continue and together we are committed to making it so.

WRIG/UPEI Collaboration

Last fall, WRIG collaborated with students from UPEI's Watershed Ecology Course (Biology 462), on two research studies. Beverly Ward (who headed up our excellent 2011 summer crew) and Madeline Hill completed a riparian health assessment of a stretch of the Chapel Creek.



Chapel Creek Watershed, Rustico, PEI

Riparian assessments can provide a good understanding of the health of a stream and help to focus resources for later management or improvement. This study assessed the health of the riparian zone of a 2.5 km stretch of Chapel Creek watershed in Rustico, using the PEI Riparian Health Assessments User's Guide.

The student researchers walked the entire length of the creek, scoring various habitat parameters on a weighted scale. Out of 16 reaches assessed, 9 were classified as "healthy" and 7 as "healthy with problems", which is a very positive classification. "There are sections of Chapel Creek that are some of the best I've have seen anywhere on PEI due to the excellent land stewardship of property owners and farmers along the Creek, and they should be commended for their efforts", says Norman Dewar, WRIG Watershed Coordinator.

In a second project, Calvin Hick and Tyler Barnard completed an inventory of the tree, shrub and undergrowth species on a section of the same Chapel Creek. Starting at the estuary, and working upstream, all woody plant species were counted and identified approximately every fifty meters on each side of the stream in both the floodplain and the upland zones. Both studies will provide WRIG with baseline information that will aid in improving the riparian zone along the stream.

Biology 462 is taught by UPEI professors Dr. Donna Giberson and Dr. James (WRIG Chair Jim) Kemp.



Summer Employment: This Could be You

Field Crew Supervisor

- You will organize summer field projects, including remedial stream work, planting trees, riparian assessments, water quality monitoring and public communication.
- You will manage a crew of 2 to 3 and sometimes more, reporting to WRIG Coordinator and Board.
- You have a year or more of post-secondary education, preferably in environmental sciences or similar.
- You have a vehicle and a license to drive it and you like working outside.
- You are aged 18 to 30 and are registered with the PEI Employment Development Agency.
- You have leadership experience and like to work independently.

Field Crew

- You will work with Field Crew Supervisor as above.
- You are 15+ years of age, have completed Grade 10 and are registered with the PEI Employment Development Agency.
- You have a strong interest in the environment and like working outdoors.

Please e-mail your resumé to Tracy@WheatleyRiver.ca.

Visit WRIG online at www.WheatleyRiver.ca.

Please Consider Joining Our Membership



Individual or Family \$10.00
Corporate or Supporting \$50.00
Simply clip this out and mail it to:

The Wheatley River Improvement Group
215 Buffalo Road, Rustico
Hunter River, PE
CoA 1No

Name _____
Address _____
Telephone _____
Email - Would you like to be notified about upcoming WRIG meetings and events?
YES _____ No Thanks _____

Please visit us online at...
www.WheatleyRiver.ca



WRIG is always open at www.wheatleyriver.ca

Click in anytime.

WRIG Newsletter is edited in Oyster Bed by Eric C. Riordon