



WATERSTRIDER

Clean Annapolis River Project

Toward an ecologically healthy Annapolis River watershed



Photo credit: Doug Glenen

Monik Richard, the new face of CARP

Article by Nicole Oliver, CARP board member

On December 6th Monik Richard began as the new executive director of CARP. She agreed to answer a few questions about herself so that our members have the chance to learn a little more about her.

Q. What is your background?

A. I am originally from Moncton NB but have lived in the valley since 2004. As a child growing up in an urban setting, I always liked being outdoors and begged my mother to let me go behind the marshy water treatment plant in our neighbourhood to try to catch frogs (she never did let me since there was a big fence to keep intruders away).

However, I never fully appreciated the value and importance of nature and of the environment until I studied Environmental Technology at the NBCC Bathurst campus. This two year technical program started a life long commitment to the protection of the environment and a passion in restoration, conservation and environmental education.

I pursued my education with an environmental sciences degree at Mount Allison University and ongoing conservation biology graduate studies at Acadia University. All my work experiences have been in the field of environmental sciences since receiving that NBCC diploma. I feel I owe the program and their teachers a lot, since

without it I would not be where I am today.

Q. What do you feel is CARP's greatest strength/asset?

A. I feel CARP's greatest strength is its positive reputation in the non-profit environmental world and in the watershed community. This reputation was created inch by inch through 20 years of dedicated staff (notably lead by CARP's past ED, Stephen Hawboldt) and excellent projects in watershed science.

Q. What issues or projects would you like to see CARP become more involved in?

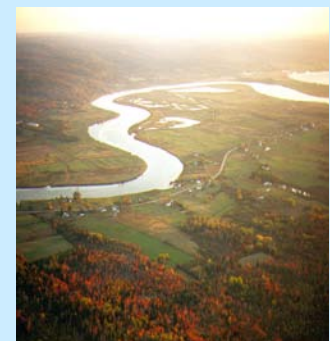
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Clean Annapolis River Project is a charitable, community-based organization dedicated to restoring and protecting the ecological health of the Annapolis River watershed through science, leadership, and community engagement.

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Do not follow where the path may lead. Go instead where there is no path and leave a trail.

Ralph Waldo Emerson

River Guardians 2010 Season Summary

Article by Chelsae Postma, Ecological Restoration Technician

The 19th season of the Annapolis River Guardians wrapped up on October 10, 2010. Over the span of the program more than 3,600 samples have been collected on water quality parameters such as: *E. coli*, temperature, dissolved oxygen, pH, nutrients, total suspended solids (TSS) and turbidity.

Analyses of these characteristics help to determine the health of our river and tell us whether it provides viable habitat to support fish and other aquatic life. Currently, there are eight River Guardian sites along the Annapolis River from Bridgetown to Aylesford.

E. coli amounts for 2010 were similar to 2009, though slightly higher as there was significant rainfall in both seasons, carrying more bacteria into the waterways. There continues to be an unknown source in the Aylesford area leading from the sampling site on Victoria Road.

Oxygen levels below 60%

saturation can cause stress to cold-water fish. In 2010, the average dissolved oxygen saturation was 84%, which is one percent lower than the 2009 value of 85% saturation. The lowest oxygen levels were recorded from the Victoria Road sampling site in Aylesford.

Water temperature exceeding 20°C can cause stress for fish species such as trout and salmon. Above 24°C, mortality can occur.

Data analysis from July, August, and September 2010 indicated 40% of the temperature measurements exceeded 20°C. The average summer temperature for 2010 was 18.9°C, which is 1.1°C warmer than the 2009 summer average.

pH may have adverse effects on freshwater organisms if outside the recommended range of 6.0-9.5. For the 2010 season, all values fell within this pH objective.

Nutrients, such as nitrogen and phosphorus, are present naturally in freshwater ecosystems. They are currently measured in Wilmot and Millville by Environment Canada.

In 2010, one of the eight samples was above the recommendation, whereas all 2009 values were acceptable. Four out of eight samples fell below the 0.030 mg/L guideline for phosphorus in 2010 compared to four out of six samples in 2009.

In 2010, 17% of the biweekly **turbidity** readings were above the 10 NTU objective, which increased from 13% in 2009.

In 2008-2009, **total suspended solids (TSS)** was measured biweekly with other water quality parameters. In 2010, CARP staff collected samples only after heavy precipitation to measure peak sediment levels in the river. Because of the nature of TSS testing, the data is not comparable to the previous year.

Overall, the health of the Annapolis River for 2010 is comparable to the 2009 season. Still, there is need for improvement. *E. coli* bacteria levels and high summer temperatures are the main areas of concern. Getting these parameters to meet the guidelines would greatly enhance the health of the Annapolis River.

Table 1. Water Quality Index for various sampling sites along the Annapolis River

Site	WQI	WATER QUALITY INDEX SCORE				
		0 Poor Water Quality		Excellent Water Quality 100		
Aylesford Rd.	81					
Aylesford	56					
Kingston	62					
Wilmot	76					
Middleton	63					
Lawrencetown	64					
Paradise	63					
Bridgetown	62					
WQI		0-44	45-64	65-79	80-94	95-100
Water Condition		POOR • Almost constant threat • Usually not at desirable levels	MARGINAL • Frequent threat, • Often not at desirable levels	FAIR • Occasional threat • Not always at desirable levels	GOOD • Minor degree of threat • Usually at desirable levels	EXCELLENT • Absence of threat • Almost pristine

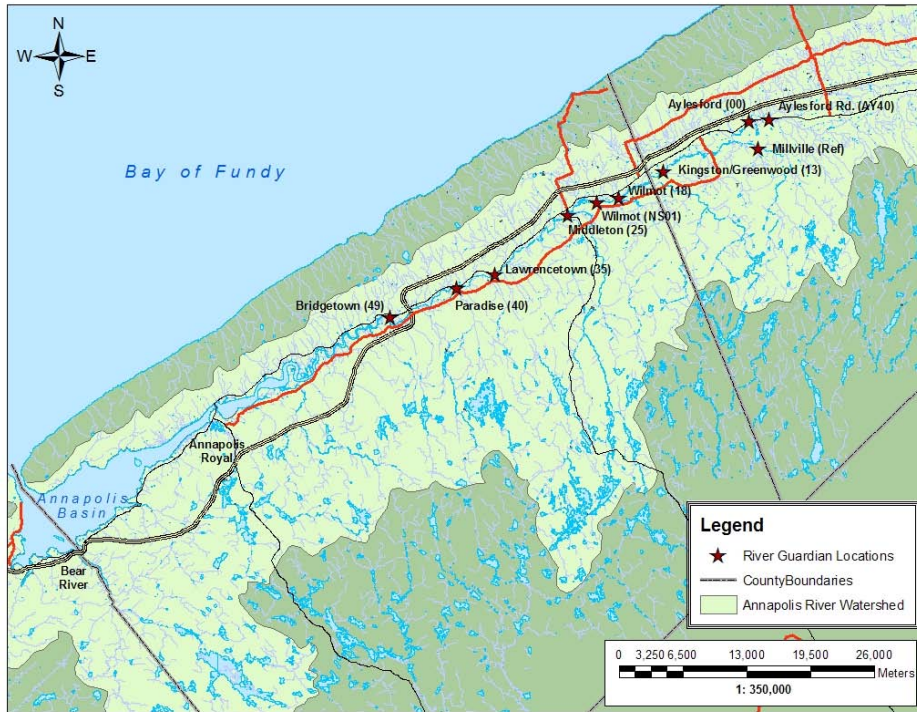


Figure 1. Annapolis River Watershed with sampling sites indicated by a red star.

The River Guardians Program is a volunteer-based citizen science program. CARP would like to extend its thanks to all who participated in the last 19 years. Without your commitment to improving the health of the Annapolis River, this program would not be possible.

We are looking for River Guardians for the following sampling sites: Wilmot, Kingston and Aylesford Road. If you would like to become a River Guardian please contact us at:

Toll free: 1-888-547-4344
 Email: carp@annapolisriver.ca
 In person: 151 Victoria Street,
 Annapolis Royal, NS

Past reports are available in hard copy at the office and on the website at: www.annapolisriver.ca

Please be generous

CARP is a non-profit organization and a registered charity. Please consider making a donation to support CARP's important work in our watershed. For ways to give please contact the office:

Toll free: 1-888-547-4344
 Email: carp@annapolisriver.ca

Monik Richard

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A. I would like to see CARP gain a greater number of dedicated volunteers and create a volunteer outreach and retention strategy within the watershed for all projects as community capacity building is such an important tool in sustainability. I also feel restoration work within the watershed, such as the Clementsport Dam removal project, are important as not only do they help restore the health of the watershed, but they show CARP's commitment to the river's health in a measurable and talked about way. I want more people to know about CARP, know what we do

*THANK YOU to the
 Volunteers of 2010!*

Wendy Courtice
 Claire Diggins
 Adrian deMontfort
 Chelsea Fougère
 Matthew Guy
 Daren Parks
 Tami Parks
 Lori Scott

for work and become involved at a grassroots level.

Q. What are you passionate about?

A. I have a passion for environmental education, community stewardship and since my graduate field work on the endangered Blanding's turtle, I will always have a keen interest in all species at risk.

Q. If you could be a tree or animal what would you be and why?

A. That's a good question! Although I would love to live a long mellow life like a turtle or a maple tree, I would miss motherhood and educating too much. I would likely choose a bird or a mammal species that rears her young and helps teach them and my other animal friends how to respect and nurture nature.

Please feel free to contact Monik at monikrichard@annapolisriver.ca

Become a volunteer and check out our social media!

The Annapolis River Guardians Monitoring Program is looking for volunteers! Guardians are needed in Aylesford, Wilmot and Kingston areas. Call us at 1-888-547-4344 or email carp@annapolisriver.ca

Website: The CARP website has undergone several updates. Check us out at www.annapolisriver.ca

Facebook: CARP is now on Facebook! Make sure to show your support and 'like' us!

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A beautiful winter scene taken by
Becky Cliche

Home Improvement for Any Time of Year!

Are you a homeowner looking to add a little equity to your property?

Take the environmental approach!

EnerGuide for Homes



During this time of year, any draughts in your house are easily felt by you and your pocketbook. The EnerGuide for Homes program is a great way to make your home more energy efficient and save you money in the long run.

A trained auditor will come to your home and complete an assessment. You will then receive a detailed report with a list of recommendations you can implement. A list of government grants and rebates will be referred to as part of your report. You will have 18 months to complete renovations to be eligible to receive your rebates.

Once you have finished the recommended renovations to your home, the auditor will return and do a second audit to determine how efficient your home has become. The total cost of this service is \$150 (no HST).

Environmental Home Assessment Program (EHAP)



Environmental Home Assessment Program

EHAP is a great program to help take care of your home and family. This free program assesses your well. And provides you with valuable knowledge and tips on how to maintain your oil tank and septic system.

By participating in this program you are eligible to receive a \$50 rebate towards pumping your septic system out. An EHAP assessment must be done first to receive the rebate.

If your septic system is in need of repair, you may also be eligible to apply for up to \$3000 in grants to repair your malfunctioning system. You are required to participate in the EHAP program before you can apply for the septic system repair grant.

Please contact David Heath to take advantage of these excellent programs!

Toll free: 1-888-547-4344

Email: ehap@annapolisriver.ca

Web: www.annapolisriver.ca

Employment Opportunity!

CARP is looking for general labourers for approximately 8 weeks in early April, planting willow stakes in Wilmot. The applicant should be capable of manual labour, willing to work overtime when necessary, in all types of weather and have access to a reliable vehicle.

Applications welcome until positions are filled. Please send your resume to Levi Cliche, Manager of Program Delivery. levicliche@annapolisriver.ca, fax: (902) 532-3038

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Quarterly newsletter of the
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Contributions welcome:

CARP, PO Box 395
Annapolis Royal, NS
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carp@annapolisriver.ca

Contribution deadlines:

Spring: 1 April
Summer: 1 June
Autumn: 1 September
Winter: 1 December

Membership:

Adult \$7 Family \$10
Student \$5 Other \$25