

***“Honor the sacred.  
Honor the Earth, our Mother.  
Honor the Elders.  
Honor all with whom we  
share the Earth:-  
Four-leggeds, two-leggeds,  
winged ones,  
Swimmers, crawlers,  
plant and rock people.  
Walk in balance and beauty.”  
Native American Elder***



# Bay of Quinte

## Remedial Action Plan

Healthy Bay • Healthy Community

### Annual Report 2013

Painting by Barbara Chappelle

## OFFICE UPDATES

### **ADMINISTRATION**

- Maintained BQRAP office – communications, technical, and administrative
- Budget management, agreements, contracts, proposals, reports
- Coordinated monitoring, technical, and science projects on the Bay of Quinte
- Developed delisting workplan - approved by Restoration Council
- Organized and held Municipal Workshop
- Filled a position to assist with the Septic Inspection Program

### **MEETINGS**

- 5 Restoration Council meetings
- 1 Delisting Steering Committee meeting
- Numerous conference calls and emails with Technical Working Groups
- 2 Phosphorus Modelling meetings
- 3 Habitat Enhancement Program meetings
- 2 Algae monitoring meetings
- 6 BQRAP administration meetings

### **TECHNICAL PROJECTS AND MONITORING**

- Project Quinte ecosystem monitoring at long-term offshore stations
- Water sample collection for algal communities and toxin analysis in tributaries and open water locations in bay
- Annual offshore fish population monitoring
- Monitoring of aquatic invertebrates, water quality, and submerged aquatic vegetation in fifteen coastal wetlands in the Bay of Quinte
- Monitoring of nearshore fish communities
- Monitoring water temperatures for Fish Habitat model
- Phosphorus model completed for the Bay – initiated work on watershed phosphorus model
- Coordinate the development of Residential Sewage Assessment Program including hiring staff and completing risk assessment
- Continued development of Natural Heritage Strategy including meetings with all municipalities
- Coordinating and tracking progress of Technical Working Groups in BUI criteria development/confirmation and status
- Beach Monitoring
- Septic Stewardship Program
- Habitat Enhancement Program
- Community Wildlife Monitoring Program

### **CONFERENCES**

- Areas of Concern Conference

### **COMMUNICATIONS**

- Photo Contest with a Twist 2
- Bay of Quinte Interpreted - 6 week gallery show
- Participated in the Hastings County Plowing Match, Trenton Woodlot Conference, Quinte Farm Show, Quinte Home Show
- Displays and presentations to community stakeholders and the public
- Produced Annual Report
- 12 monthly e-newsletters
- BQRAP advertising - Quinte Mall, Quinte Sports Centre (arena boards)
- Radio campaigns - Photo Contest, Habitat Enhancement Program, Marsh Monitoring
- Interviews with local newspaper and on radio
- Print ads - EMC, Picton Gazette, Napanee Beaver, Intelligencer, recreation guides
- 9 press releases
- Continued updating of BQRAP website
- BQRAP on Facebook and Twitter - digital campaign on benefits of aquatic plants
- Promoted drinking water taste & odour survey
- Osprey cam updates
- Holiday skates in Quinte West and Belleville
- Direct mail campaign for Septic Program
- Planning for Country Living 101 Infomart
- BUI Videos
- Maintained BQRAP online library
- Information requests – university & college students, teachers, public

### **RESTORATION COUNCIL**

Lower Trent Conservation • Quinte Conservation • Environment Canada • Ontario Ministry of the Environment • Ontario Ministry of Natural Resources • Fisheries and Oceans Canada • Ontario Ministry of Agriculture, Food and Rural Affairs • Mohawks of the Bay of Quinte • CFB Trenton

### **STAFF**

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### **ADMINISTRATION OFFICE**

Bay of Quinte Remedial Action Plan  
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## WHAT IS A BENEFICIAL USE IMPAIRMENT?

A Beneficial Use Impairment is a condition that interferes with the enjoyment of a water use.

## 2013 STATUS SUMMARY BENEFICIAL USE IMPAIRMENTS

### BENEFICIAL USE STATUS: IMPAIRED

- BUI 1 Restriction on fish and wildlife consumption
- BUI 8 Eutrophication or undesirable algae
- BUI 9 Restrictions on drinking water or taste and odour problems
- BUI 13 Degradation of phytoplankton and zooplankton populations

### BENEFICIAL USE STATUS: IMPAIRED PENDING FURTHER ANALYSIS

- BUI 10 Beach closures
- BUI 11 Degradation of aesthetics

### BENEFICIAL USE STATUS: IMPAIRED PENDING REDESIGNATION

- BUI 3 Degradation of fish and wildlife populations
- BUI 4 Fish tumours and other deformities
- BUI 6 Degradation of benthos
- BUI 7 Restrictions on dredging activities
- BUI 14 Loss of fish and wildlife habitat

The process for redesignating the status of BUIs 3, 4, 6, 7, and 14 has started. The criteria to change the status of these BUIs has been met. Now, final reports will be written then sent for peer review, followed by public consultation, then submitted to our federal and provincial partners for review, and finally they will be sent to the International Joint Commission with the recommendation of changing the status of the BUIs to Unimpaired.

## PROGRAMS AND UPDATES

### HABITAT ENHANCEMENT PROGRAM



This year, the Bay of Quinte Remedial Action Plan's (BQRAP) Habitat Enhancement Program (HEP) provided funding assistance and technical support to thirteen landowners around the Bay of Quinte. The program allocated funding for: 5 livestock fencing projects, 3 plant buffer zones, 2 shoreline naturalizations, 2 well projects, and a habitat pond creation project for a cost of just over \$44,000. These projects will improve water quality and enhance, protect or restore habitat for fish and wildlife, keeping the Bay of Quinte a vibrant and healthy ecosystem.

### COMMUNITY WILDLIFE MONITORING PROGRAM



Every year, the Bay of Quinte Remedial Action Plan needs volunteers to monitor frogs and birds in local wetlands, as these species are great indicators of wetland health. Quinte area naturalist and columnist, Terry Sprague and the BQRAP host a Marsh Monitoring evening that teaches local volunteers about both frog and bird monitoring. Terry mentors the volunteers through their season of monitoring and the results are sent to Bird Studies Canada to provide data for long-term population trends.

### DRINKING WATER TASTE AND ODOUR SURVEY

The Bay of Quinte Remedial Action Plan and Quinte Conservation conducted a Municipal Drinking Water Taste and Odour Survey. Residents who live in the Bay of Quinte area, and get their drinking water from a municipal supply, were asked to complete an online survey. The results will be used to determine if one of the measures for BUI 9 (Restrictions of drinking water or taste and odour problems) has been achieved.

### PHOSPHORUS MODELS

In 2013, the BQRAP completed the linked watershed phosphorus loads and in-bay phosphorus level models. Together, these models will provide the RAP with the information it needs to develop a Phosphorus Management Strategy for the Bay. This document will guide future management actions which will ensure the Bay doesn't return to the conditions that required a Remedial Action Plan.

### ALGAE WATCH PROGRAM

Monitoring continues year-round. Water samples are collected and analyzed for general chemistry which includes nutrients such as phosphorus, algal toxins, and algae species identification.

### NATURAL HERITAGE STRATEGY

Over the past year, Lower Trent Conservation and BQRAP staff completed a Natural Heritage Strategy for the Bay of Quinte. A Natural Heritage System is a way of connecting natural features and areas on the landscape by preserving the linkages between the areas, so you don't end up with isolated pockets, but rather a network of interconnected natural areas. The strategy has been presented to most of the municipal stakeholders surrounding the Bay. We are awaiting their comments regarding the plan, and hope they will incorporate it into their Official Plans.

### STORMWATER RETROFIT PLANNING

Quinte Conservation and the BQRAP continued efforts in 2013 to implement retrofit stormwater management facilities in urban areas. The Environmental Assessment for the Herchimer Avenue outfall in Belleville was completed and recommended installing an advanced oil-grit separator to treat stormwater runoff before it discharges to the Bay. Planning for the next two projects is underway and may include treatment of stormwater from Picton and Belleville.

This project started with a photo contest (Photo Contest with a Twist 2) and we received 185 entries. The photos were judged and 12 winning photos selected, not an easy task. Then, 19 area artists were asked to interpret the photos in the medium and style of their choice. It's really interesting to see how different people view the same image. There was a six week gallery show at the John M. Parrott Gallery at the Belleville Public Library called Bay of Quinte Interpreted, showcasing the winning photos and the interpretations. The next Photo Contest with a Twist and Bay of Quinte Interpreted will be held in 2015.

Here are several of the photos and the interpretations.

Three of the winning photos

Artist's Interpretations



End of Day - Victoria Harbour  
Photographer - Julie Eckert



Interpretation by Barbara Chappelle



Interpretation by Audrey Thomas



Reflections  
Photographer - Steve Cooper



Interpretation by Doris Scott



Interpretation by Angela Wiggins



New Guard  
Photographer - Mark Hopper



Interpretation by Pat Werden



Interpretation by  
Norman K. Fieldhouse

## SEPTIC STEWARDSHIP PROGRAM

### Be Septic Savvy

Save money with the Septic Stewardship Program

Do you know what's going on in your back yard?



The Bay of Quinte Remedial Action Plan (RAP) is implementing a Septic Stewardship Program for homeowners with shoreline property on the Bay of Quinte. This is a voluntary educational program providing homeowners with a free checkup of their septic system (tank and leaching bed), and helpful advice on the care and maintenance of the system.

This program pays to have your septic tank/holding tank pumped out as part of the checkup, this is a savings of 200.00 - 250.00 dollars.

Our septic team will provide you with information on how to maintain your septic system, adding to the longevity of the system. A failing septic system can add excess phosphorus to nearby waterbodies causing algal blooms and excess plant growth. As well, bacteria from a failing septic system can cause localized health impacts for homeowners and their neighbours. Participants in the program will receive a personalized report on their system and free water efficiency devices.

As a homeowner with a septic system you can help keep the Bay healthy by ensuring your septic system is functioning properly.

To book your septic stewardship site visit, contact:

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[www.bqrap.ca](http://www.bqrap.ca)



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In 2013, the BQRAP initiated a new Septic Stewardship Program. This is a voluntary educational program providing homeowners with a free checkup of their septic system (tank and leaching bed), and helpful advice on the care and maintenance of the system. As well, the program pays to have the septic tank/holding tank pumped out as part of the checkup. In 2013, the septic team completed 31 site visits.