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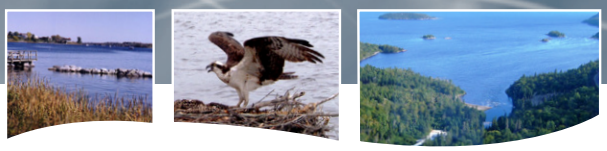

ACTION

News on the Great Lakes Action Plan for Areas of Concern

Welcome to the very first issue of ACTION. This newsletter will provide you with news and information on the Great Lakes Action Plan for Areas of Concern.

Find out more about current activities, restoration projects and recent successes. Do you know what the Great Lakes Action Plan is? What defines an Area of Concern or Remedial Action Plan? What is "delisting"? Before you get started, take a moment to check out some answers and definitions below.

WHAT IS…

THE GREAT LAKES ACTION PLAN?

The Great Lakes Action Plan (GLAP) is a Government of Canada program that works to restore environmental quality in Great Lakes Areas of Concern. It works towards fulfilling Canada's commitments under the Canada-U.S. Great Lakes Water Quality Agreement. The GLAP supports the science and actions needed to restore natural habitats, water quality and sediment quality in Canada's Areas of Concern on the Great Lakes. Since 1989, the program has supported more than $363 million in restoration projects! Budget 2010 renewed the GLAP at $8 million per year, ongoing, to continue clean-up efforts in the Great Lakes Areas of Concern.

WHAT IS…

AN AREA OF CONCERN?

Area of Concern (AOC) is the term used for "hotspots" in the Great Lakes; places where the environment has been degraded to the point where it affects the ecosystem in that area of the lake, or affects the use and enjoyment of the lake. In the mid-1980s, under the Canada-U.S. Great Lakes Water Quality Agreement, Canada and the U.S. identified 43 AOCs around the Great Lakes. Three Canadian AOCs, Severn Sound, Collingwood Harbour and Wheatley Harbour, have been restored. Of the remaining 39 areas listed, 9 are in Canada, 25 in the U.S., and the remaining 5 are shared by both countries. Some of the problems in these AOCs include beach postings, loss of fish and wildlife habitat, and restrictions on the amount of fish people can eat.

WHAT IS…

A REMEDIAL ACTION PLAN?

For each AOC in the Great Lakes, stakeholders have developed a Remedial Action Plan that identifies the challenges in the AOC and how to address them. The governments of Canada and Ontario work collaboratively with conservation authorities, municipalities, Aboriginal communities, environmental groups, industry and other partners to develop and implement these plans.

Canada

Wheatley Harbour
© Ministry of Natural Resources
Photo: Jason Mortlock

RECENT ACHIEVEMENTS...

WHEATLEY HARBOUR AOC IS OFF THE LIST!

The Wheatley Harbour AOC encompassed a small confined harbour on the north shore of Lake Erie and the adjacent Muddy Creek wetland. The Muddy Creek watershed is approximately 10 square kilometres, and the land use in this area is mostly agricultural. Although not technically part of the AOC, the watershed contributed to some of the environmental challenges and therefore was a focus in the Remedial Action Plan.

In 1987, numerous environmental problems were present in Wheatley Harbour and resulted in its designation as an AOC. Among these problems were high PCB levels, contaminated sediments, high phosphorus concentrations, poor water clarity, bacterial contamination and habitat loss.

Environment Canada and other members of the Remedial Action Plan team, along with local industry and community groups, supported the implementation of many actions, such as the restoration of the Muddy Creek wetland, to clean up Wheatley Harbour. As a result, the local ecosystem was restored and in April 2010, Wheatley Harbour was officially removed from the list of Great Lakes Areas of Concern! This was a significant milestone for everyone involved in restoring the health of the Great Lakes.

Today, Wheatley Harbour is healthier than it has been in the last several decades. Monitoring indicates that fish and wildlife populations are healthy and diverse, and are considerably more abundant than in 1987.

Wheatley Harbour may no longer be on the active list of Great Lakes hotspots, but it certainly has not been forgotten. Continued hard work and long-term monitoring are essential to ensure that the improvements that were made to the environment are maintained. The goal is not only to restore environmental quality in Wheatley Harbour, but also to protect and sustain it for years to come.

Muddy Creek
© Ministry of Natural Resources
Photo: Jason Mortlock

DID YOU KNOW?

Since 1989, the Great Lakes Sustainability Fund has provided over $800 000 in funding towards projects focused on implementing remedial actions to clean-up and restore the Wheatley Harbour AOC. Examples of these projects include: large scale habitat restoration such as reforestation and wetland creation; educating landowners on rural Best Management Practices and assisting in implementing them; and providing technical and financial support to residents living in the Muddy Creek watershed to conduct restoration projects.

ABOUT THE GREAT LAKES SUSTAINABILITY FUND

As a component of the Great Lakes Action Plan, the Great Lakes Sustainability Fund (GLSF) was established by the Government of Canada, to support partnerships with other agencies and local community stakeholders to advance the Remedial Action Plans that have been developed for each of Canada's remaining Areas of Concern.

Through the Great Lakes Sustainability Fund, Environment Canada is providing technical and financial support to projects (up to one-third of the total cost) that focus on implementing remedial actions in three key priority areas: fish and wildlife habitat rehabilitation and stewardship; contaminated sediment assessment and remediation; and innovative approaches to improving municipal wastewater effluent quality. Emphasis is placed on meeting the goals that are set under the Canada-Ontario Agreement Respecting the Great Lakes Ecosystem.

If you have an idea for a restoration project in an AOC or would like more information about the GLSF, please visit **www.ec.gc.ca/raps-pas** or contact the GLSF team at **glsf@ec.gc.ca**.

WHAT IS... the GLWQA? And the COA?

The Great Lakes Water Quality Agreement (GLWQA) outlines the Government of Canada's commitment to work with the United States to restore and maintain the chemical, physical and biological integrity of the waters of the Great Lakes Basin Ecosystem. The Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem – or COA for short – establishes an action plan and clear roles and responsibilities between the Government of Canada and the Province of Ontario to help Canada meet its commitments under the GLWQA.

JACKFISH BAY AOC: ON THE ROAD TO RECOVERY

The Jackfish Bay AOC, located on the north shore of Lake Superior, used to experience severely impaired water quality due to the discharges from a pulp and paper mill in nearby Terrace Bay. The mill had been operating since the 1940s, when environmental regulations for wastewater quality were not as strict as they are today. Jackfish Bay was designated an AOC in 1987 because of the negative effects the mill's contaminated wastewater was having on fish, fish habitat, sediment quality and the aesthetics of the bay and nearby Blackbird Creek.

In the 1990s, the provincial and federal governments set new limits for pulp and paper wastewater. Today, mill wastewater must meet strict requirements and cannot be lethal to fish and aquatic insects. As a result, the waters of Jackfish Bay are no longer toxic to fish and the health of the local fish population has improved.

With the major concerns addressed, Environment Canada and other members of the Remedial Action Plan team have recently recognized Jackfish Bay as an Area in Recovery.

In an Area in Recovery,

all priority remedial actions in the AOC have been completed, but the environment needs more time to recover naturally. Government agencies continue to monitor environmental conditions to confirm that recovery is occurring. A monitoring plan is put in place to guide the collection of data. In the event that the recovery is not occurring as expected, the agencies may consider additional remedial actions. In 1999, Spanish Harbour was the first Canadian AOC to be recognized as an Area in Recovery.

Blackbird Creek

Fish monitoring in Jackfish Bay AOC

Jackfish Bay

MAKING GREAT PROGRESS IN THE ST. LAWRENCE RIVER AOC

The St. Lawrence River AOC includes a stretch of the St. Lawrence River approximately 80 kilometres long, from the Moses-Saunders power dam (just upstream of Cornwall, Ontario) to the eastern outlet of Lake St. Francis, in Quebec.

The Cornwall waterfront has been the location of industrial activities for over 100 years. Water, sediment, and fish contaminated with mercury, PCBs, and other metals are the result of the long-standing degraded nature of this AOC. Though the vast majority of contamination sources have been eliminated, the legacy of these contaminants continues to impact the AOC's aquatic environment.

To restore and protect the St. Lawrence River AOC, the governments of Canada and the United States were tasked with developing and implementing independent Remedial Action Plans in partnership with their respective local communities.

Substantial progress has been made in addressing the environmental challenges in the AOC, particularly in the areas of fish and wildlife habitat protection and restoration, reduction of runoff from rural non-point sources, and reduction of discharges from municipal and industrial sources. Accomplishments include the Cornwall Pollution Control Plan, the decommissioning of the industrial sites on the river, the development of fisheries management plans for the river, tributaries, and Lake St. Francis, many nearshore zone and wetland restoration/habitat enhancement projects, and the development and implementation of the Cornwall Sediment Management Strategy.

The Cornwall Sediment Management Strategy

The Cornwall Sediment Management Strategy is a long-term management plan for historically contaminated sediments in three zones of the St. Lawrence River at Cornwall. Continued natural recovery, administrative controls and long-term environmental monitoring are all part of this strategy, developed through a science-based consensus of community partners, environmental groups, and federal/provincial, municipal, and Mohawk governments. For more information, please visit: www.rrca.on.ca/view.php?id=40

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Today, the St. Lawrence River at Cornwall has recovered, and all priority actions for delisting have been completed. Fish and wildlife populations are rebounding, and the river is home to a very productive and diverse community of aquatic life. Ospreys, once in jeopardy, are nesting in the region again – a sure sign that the environment is recovering. Environment Canada and other members of the Remedial Action Plan team have been seeking input from the local public and stakeholders on whether or not the Canadian section of the St. Lawrence River AOC is ready to be delisted (removed from the list of Great Lakes Areas of Concern).

St. Lawrence River

DID YOU KNOW?

Since 1989, Environment Canada, through the Great Lakes Sustainability Fund, has provided over $3.6 million in funding towards projects that focus on implementing remedial actions to clean-up and restore the St. Lawrence River AOC. Examples of these projects include: wetland creation at Charlottenburg Park; aquatic assessment of the Best Management Practices for cattle restriction; implementation of the Natural Habitat Strategy; Lake St. Francis tributary restoration; bacteria contamination assessment and remediation; fish habitat rehabilitation; and septic re-inspection program.

Mythical kings take flight over the mighty St. Lawrence River

Ospreys (*Pandion haliaetus*) or "fish eagles" are large birds of prey found throughout North America. Named after Pandion, a Greek king of Athens who was transformed into an eagle, this species occupies the top of the aquatic food web.

With a diet consisting almost entirely of fish, osprey usually live near ocean coasts and by the shorelines of large lakes and rivers. If you live near Lake St. Francis, you may have noticed their large stick nests high up in dead trees, on navigation aids or on several of the artificial nest platforms installed in the area.

Unfortunately, osprey populations declined dramatically in Ontario between 1950 and 1970 as a result of the widespread use of pesticides, particularly DDT, which caused the thinning and breakage of eggshells. With the banning of DDT in 1974, many areas have begun to see a recovery of this species.

With the financial support of Environment Canada's Great Lakes Sustainability Fund and other contributing partners, the Raisin River Conservation Authority has been monitoring the local population in the St. Lawrence AOC since 2005. At that time, a target of five consecutive years of successful osprey reproduction was established.

The Raisin Region Conservation Authority has been visiting nest sites weekly between May and August, and making note of the presence of adults and number of young that are present. In 2008, there were nine active nesting pairs identified within the AOC, and these resulted in a total of seven young being produced. These results are encouraging! Monitoring has continued throughout 2010, and a long-term plan will be developed to keep an eye on the recovery of the St. Lawrence River AOC through the population surveys of this important indicator species.

Osprey

For more information on Areas of Concern in the Great Lakes, please visit www.ec.gc.ca/raps-pas or email us at raps.pas@ec.gc.ca

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