



Industry

# Environmental Issues



Safe Drinking Water



Sedimentation and Erosion Control



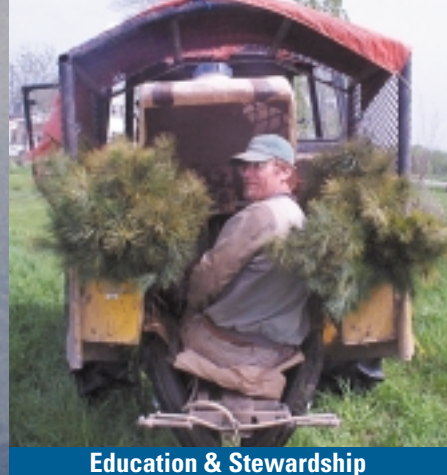
Innovative Technologies



Best Management Practices



# Taking Action



Education & Stewardship



Recreation and Tourism

In 1987, Canada and the United States signed a joint agreement whereby each country pledged their commitment to restore and protect the environmental integrity of the Niagara River. In order to do this, separate Canadian and US Remedial Action Plans (RAP) were developed. This update focuses on the Canadian RAP for the Niagara River.

The first task of the RAP was to examine the environmental problems in the Niagara River Area of Concern (AOC).

Over the years, poor land management and stewardship as well as industrial, agricultural, and urban practices have resulted in a variety of water quality related problems.

These problems include toxic chemical discharges from industrial facilities, contaminated sediment, combined sewer overflows, habitat degradation, and non-point source pollution, including urban and rural runoff.

Once the problems were identified, a strategy was developed to provide remedial options and recommendations necessary to restore environmental health and achieve restoration goals.

The remedial action plan process has been a consultative, consensus building process involving numerous participants from many walks of life.

This process has allowed local residents to have direct input into environmental decisions affecting their community.

Considerable progress has been made, and with the continuing support of the local community, we will see the job through.

## The following RAP documents are available through the Niagara Peninsula Conservation Authority:

*The RAP stage I report:*  
Environmental Conditions and Problem Definition, 1993.

*The RAP stage II report:*  
The Cleanup Connection Recommended Plan, 1995.

*The RAP Implementation Annex, 2000.*

# The Niagara River

Straddling the Canadian-United States International Border, the Niagara River is more than just the major interconnecting waterway between Lake Erie and Lake Ontario. The river which is about 12,000 years old (a microsecond in geological time) houses the second largest Falls in the world and attracts over 12 million people annually.

One fifth of all the freshwater in the world, supplying a source of drinking water for over 25 million people, travels down this 58 kilometer stretch of river before draining into Lake Ontario.

Water is a precious resource. Our health and well-being depend on it. Since the early 1900's, the Niagara River has shown signs of significant water pollution problems. Increased population, industry and agriculture have put severe pressures on Great Lakes Water Quality. The river was subject to excessive levels of pollutants such as high levels of bacteria, oil, phosphorus, chloride, phenol, and mercury. During and after World War II, an increasing array of compounds were discharged from chemical plants into the river.

The governments of Canada and the United States share the desire to understand and correct water pollution problems in the Niagara River. In partnership with local communities, governments are working on both sides of the border to develop clean-up plans to help restore and protect water quality.



Recognizing that much more needs to be done, the Niagara Peninsula Conservation Authority (NPCA), in partnership with The Ontario Ministry of the Environment and Environment Canada, developed a strategic Implementation Work Plan as part of the Niagara River RAP.

This plan identifies outstanding actions needed to address the remaining environmental problems in the Niagara River basin.

Actions identified in the Work Plan address the Canadian Niagara River ecosystem and focus on efforts to:

- Reduce and eliminate toxic contaminant and industrial discharges
- Improve sediment and benthos quality
- Reduce nutrient and bacteria loadings
- Improve surface and groundwater quality
- Protect and restore fish and wildlife habitat
- Improve and sustain Niagara River recreational and scenic resources
- Reduce and eliminate non-point sources of pollutants
- Improve education and stewardship programs

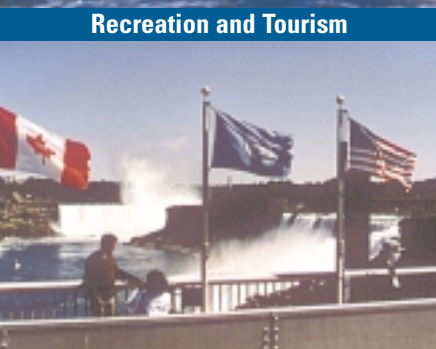
## Program Success Story

### Non-point Source (NPS) Pollution Program:

The Niagara Peninsula Conservation Authority has been actively involved in an NPS program since 1994. This grass roots program assists local landowners with stewardship projects in order to improve local water quality problems. Currently, we have completed 135 water quality improvement projects with a total project cost of \$2.9 million dollars. Over \$1.1 million dollars of cash and 'in-kind' contributions has been contributed to this program from participating landowners.

As a result, forest cover in the AOC has been increased by 90 hectares, over 21 kilometers of stream-side riparian habitat has been re-established, and nearly 7 hectares of wetland has been restored. There has been substantial pollutant load reductions from livestock fencing and manure storage improvement projects.

The success of this project and the participation of local landowners has allowed the Conservation Authority to move the RAP process forward in terms of meeting our non-point source related responsibilities.



Partnerships



Water Quality Monitoring



Habitat Protection & Restoration



Land Use Monitoring



Wildlife Protection





Contaminated Sediment Removal

# The Commitment Continues



Fish & Flow Barrier Remediation



Septic System Upgrades



Rigid Discharge Standards



Sanitary Sewer Upgrades

The RAP partners are committed to providing strong leadership in the wise use and stewardship of our natural resources to achieve and maintain a healthy and sustainable environment.

In order to move towards a clean and healthy Niagara River, a number of targeted actions are necessary:

- Continued reduction of urban pollution and persistent toxic loadings to water courses through the binational participation in the Niagara River Toxics Management Plan (NRTMP)
- Continued reduction of rural non-point sources of pollution through landowner compensation programs for Best Management Practices
- Protection and restoration strategies to encourage landowners to increase forest, wetland, and riparian cover
- Strategies to remove barriers to fish passage, flow movement, sediment delivery and nutrient cycling.
- Continued monitoring and reporting to measure success

The Conservation Authority has long recognized the importance of partnerships to assist in addressing the challenges facing the ongoing restoration efforts within the Niagara River AOC. Our strength lies in the number of organizations, community groups, area residents and all levels of government that contribute to our success.

The continued involvement and cooperation of these partnerships and the commitment of the local community to the restoration process will provide added strength to these initiatives.

## Program Success Story

### Niagara River Toxics Management Plan (NRTMP):

In February 1987, Environment Canada, the U.S. Environmental Protection Agency, the Ontario Ministry of the Environment and the New York State Department of Environmental Conservation formed the NRTMP. The goal of this program was to reduce the concentrations of toxic pollutants in the Niagara River.

Significant reductions in the loading of toxic chemicals to the Niagara River have been achieved to date. Actions to remediate hazardous waste sites have resulted in a reduction of potential inputs to the river from these sites. This program is a great example of two countries pulling together and working in cooperation to improve and protect our shared water resources.



## Partners In Action

The Niagara Peninsula Conservation Authority in partnership with the provincial and federal governments coordinates the implementation of the Niagara River RAP.

### Get Involved!

To successfully restore and protect the Niagara River everyone's involvement, including all governments, local agencies, organizations, industry, and the public is critical.

Land stewardship is something that everyone can participate in to improve the health of our natural environment. The Conservation Authority has funding grants available to landowners living within the Niagara River drainage area, which includes all of the Welland River. This landowner grant incentive program has a number of eligible project items that focus on implementing best management practices for agriculture, habitat creation and preservation of sensitive lands.

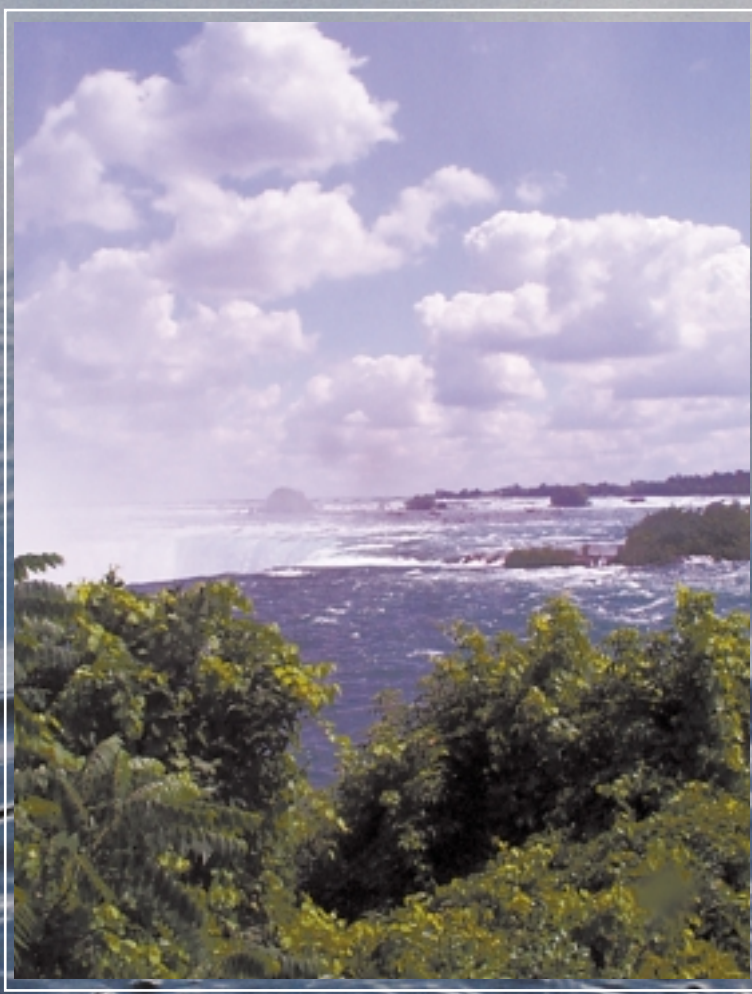
The Conservation Authority has a number of volunteer and education programs that everyone can be a part of. You can make a difference in your community, and we encourage you to get involved.

The Niagara Peninsula Conservation Authority wishes to acknowledge our watershed partners for their contribution in the implementation of Niagara River Remedial Action Plan projects and activities.

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# The Niagara River Update



## Niagara River Remedial Action Plan