



Environment
Canada

Environnement
Canada

www.ec.gc.ca



Data Sources and Methods for the Restoring the Great Lakes Areas of Concern Indicator

October 2014

Suggested citation for this document: Environment Canada (2014) Canadian Environmental Sustainability Indicators: Data Sources and Methods for the Restoring the Great Lakes Areas of Concern Indicator. Consulted *on day Month, year*. Available at: www.ec.gc.ca/indicateurs-indicators/default.asp?lang=en&n=564BCF44-1.

ISBN: 978-1-100-25036-6
Cat. No.: En4-144/4-2014E-PDF

Unless otherwise specified, you may not reproduce materials in this publication, in whole or in part, for the purposes of commercial redistribution without prior written permission from Environment Canada's copyright administrator. To obtain permission to reproduce Government of Canada materials for commercial purposes, apply for Crown Copyright Clearance by contacting:

Environment Canada
Inquiry Centre
10 Wellington Street, 23rd Floor
Gatineau QC K1A 0H3
Telephone: 819-997-2800
Toll Free: 1-800-668-6767 (in Canada only)
Fax: 819-994-1412
TTY: 819-994-0736
Email: enviroinfo@ec.gc.ca

Photos: © Environment Canada

© Her Majesty the Queen in Right of Canada, represented by the Minister of the Environment, 2014

Aussi disponible en français

1 Introduction

The Restoring the Great Lakes Areas of Concern indicator (www.ec.gc.ca/indicateurs-indicators/default.asp?lang=en&n=E08EA691-1) is part of the Canadian Environmental Sustainability Indicators (CESI) program (www.ec.gc.ca/indicateurs-indicators/default.asp?lang=En&n=47F48106-1), which provides data and information to track Canada's performance on key environmental sustainability issues. This indicator also measures progress towards the goals and targets of the Federal Sustainable Development Strategy (www.ec.gc.ca/dd-sd/default.asp?lang=En&n=CD30F295-1).

2 Description and rationale of the Restoring the Great Lakes Areas of Concern indicator

2.1 Description

The Restoring the Great Lakes Areas of Concern indicator compares progress towards the restoration of the 17 Canadian Areas of Concern (AOCs) by reporting the number of beneficial uses (BU) listed as Impaired or Requires further assessment for each AOC's stage 1 report, the progress assessment in 2003 and the latest progress assessment in 2014.

- An impaired BU indicates a change in the chemical, physical or biological integrity of an area of the Great Lakes sufficient to reduce human use of the lakes.
- A BU listed as Requires further assessment needs further scientific study to determine whether the BU is impaired or not.

Having a BU listed as Impaired or Requires further assessment suggests the health of the Area of Concern is still impaired.

A BU's status is determined by monitoring and conducting scientific studies in the AOC and comparing the findings to reference sites and quantifiable targets documented in the Remedial Action Plan (RAP) and other update reports.

2.2 Rationale

The Great Lakes basin is Canada's most populated region supporting nine of Canada's 20 largest cities. This large population, and the industry, agricultural and urban development it supports, places a strain on the lakes' abilities to support viable ecosystems. The 1987 revision of the Canada - United States Great Lakes Water Quality Agreement (GLWQA) identified 43 AOCs in Canadian and American waters of the Great Lakes. All Canadian AOCs, except the Port Hope AOC, have a RAP to guide restoration and protection efforts targeting specific BUs.¹ The RAPs are developed and implemented in three stages.

- Stage 1 identifies which of 14 BUs identified in the GLWQA are classified as Impaired, Requires further assessment or Not impaired and the sources and causes of the problem. For more information on what the beneficial uses are, please see: Environment Canada (2011) Canadian Great Lakes Areas of Concern - Status of Beneficial Use Impairments Overview (www.ec.gc.ca/Publications/default.asp?lang=En&xml=464B7CDC-7248-4B0B-93CC-295D73C76E34).

¹ For more information on what the beneficial uses are, please see: Environment Canada (2011) Canadian Great Lakes Areas of Concern - Status of Beneficial Use Impairments Overview. (PDF; 1.8 MB) Retrieved on 15 July, 2014. Available from: www.ec.gc.ca/Publications/default.asp?lang=En&xml=464B7CDC-7248-4B0B-93CC-295D73C76E34

- Stage 2 establishes the goals, objectives and actions required to restore the ecosystem to a healthy state. Once all recommended actions have been implemented, the AOC either
 - becomes an Area in Recovery (AiR) or
 - enters Stage 3 to move toward being declared restored.

An AiR is an area originally identified as an Area of Concern where, based on community and government consensus, all scientifically-feasible and economically-reasonable actions have been implemented and additional time is required for the environment to recover. When monitoring confirms an area achieves the criteria for the BU to be considered restored, it enters stage 3.

- During Stage 3, progress toward restoration and protection efforts in the AOC is measured against the objectives outlined in the Stage 2 report to ensure the local goals and targets have been met. When the BUs are considered unimpaired, Stage 3 is complete and the AOC is declared restored.

Under the 2012 GLWQA, RAPs will be periodically updated to reflect restoration progress. Canada:

- will remove an impaired BU designation when established criteria have been met;
- may elect to identify an AOC as an Area in Recovery when all actions identified in a RAP have been implemented and monitoring shows recovery is progressing as anticipated; and
- will remove the AOC or Area in Recovery designation when environmental monitoring confirms BU restoration criteria have been met.

The Port Hope AOC does not have a RAP. It follows a separate program under the guidance of Natural Resources Canada because of the nature of the BU impairment at this site.

2.3 Recent changes to the indicator

No methodological change has been made to the indicator since its last publication in 2012.

3 Data

3.1 Data source

Data were gathered from progress reports, RAPs and stage reports for all 17 Canadian AOCs (Table 1). The 2014 data were obtained from Environment Canada's Areas of Concern office. In 2003 and 2010, progress reports summarizing the status of all BUs for all Canadian AOCs for those two years were released by Environment Canada. For BUs classified as **Impaired and Requires further assessment** prior to 2003, summary tables or lists provided in RAPs and update reports were consulted.

The RAP reports prepared for each AOC with their reference and release date are presented in table 1.

Table 1. Canada's 17 Areas of Concern and their associated Remedial Action Plan reports.

AOC name	Report	Reference	Notes
Bay of Quinte Available from: www.bqrap.ca	Stage 1 Available from: www.bqrap.ca/publications/documentlibrary/	Environment Ontario, Environment Canada, Fisheries and Oceans Canada, Ontario Ministry of Natural Resources, Ontario Ministry of Agriculture and Food (1990)	Released July 1990
	Stage 2 Available from: www.bqrap.ca/about/ouraccomplishments/	Bay of Quinte RAP Coordinating Committee, Bay of Quinte Public Advisory Committee (1993)	Released September 1993
	Update Available from: www.bqrap.ca/publications/documentlibrary/	Murray German Consulting (2006)	Released September 2006
Collingwood Harbour	Stage 1	Environment Ontario, Environment Canada (1989)	Released March 1989
	Stage 2	Collingwood Harbour RAP Team, Public Advisory Committee (1992)	Released August 1992
	Stage 3	Collingwood Harbour Action Team, Public Advisory Committee (1994)	Released June 1994
Detroit River Available from: www.detroitriver.ca/index.php?id=116	Stage 1 Available from: www.epa.gov/glnpo/aoc/detroit/pdfs/1991_DetroitRiverRAPStg1.pdf	Ontario Ministry of the Environment, Michigan Department of Natural Resources (1991)	Released 1991
	Update Available from: www.detroitriver.ca/assets/files/2006%20BUI%20Assessment%20-%20FINAL.pdf	Leney J, Haffner GD (2006) Great Lakes Institute for Environmental Research.	Released December 2006
	Stage 2 Available from: www.detroitriver.ca/assets/files/Detroit%20River	Green ND <i>et al.</i> (2010) Detroit River Canadian Cleanup.	Released 2010

	r%20Canadian%20Stage%202%20Remedial%20Action%20Plan%20FINAL%20DIGITAL.pdf		
	BUI Redesignation Report	Detroit River Canadian Cleanup (2011)	Released 2011
Hamilton Harbour Available from: www.hamiltonharbour.ca/index.php?page=index&p=w	Stage 1 Available from: www.hamiltonharbour.ca/index.php?page=document_library	Ontario Ministry of the Environment, Environment Canada, Fisheries and Oceans Canada, Ontario Ministry of Agriculture and Food, Royal Botanical Gardens, Ontario Ministry of Natural Resources (1992)	Released October 1992
	Stage 2 Available from: www.hamiltonharbour.ca/index.php?page=document_library	Hamilton Harbour Remedial Action Plan Technical Team and Stakeholders, Public Advisory Committee (1992)	Released November 1992
	Update Available from: www.hamiltonharbour.ca/index.php?page=document_library	Hamilton Harbour Remedial Action Plan Stakeholder Forum (2002)	Released 2003
Jackfish Bay Available from: www.ec.gc.ca/raps-pas/default.asp?lang=En&n=0653EC7A-1	Stage 1 Available from: www.ec.gc.ca/raps-pas/default.asp?lang=En&n=0653EC7A-1	Ontario Ministry of the Environment, Environment Canada, Ontario Ministry of Natural Resources, Department of Fisheries and Oceans Canada (1991a)	Released September 1991
	Stage 2 Available from: www.ec.gc.ca/raps-pas/default.asp?lang=En&n=0653EC7A-1	Jackfish Bay Remedial Action Plan Team, Jackfish Bay Public Advisory Committee (1998)	Released February 1998
	Update	Jackfish Bay Remedial Action Plan Stage 2 Update: Area in Recovery Status Report 1 for Jackfish Bay	Released May 2010

		(2010)	
Niagara River Available from: www.npca.ca/watershed-management/niagara-river-remedial-action-plan/	Stage 1 Available from: www.npca.ca/watershed-management/niagara-river-remedial-action-plan/	Ontario Ministry of the Environment and Energy, Environment Canada, Ontario Ministry of Natural Resources, Fisheries and Oceans Canada (1993)	Released September 1993
	Stage 2 Available from: www.npca.ca/watershed-management/niagara-river-remedial-action-plan/	Ministry of Environment and Energy, Niagara River Restoration Council (1995)	Released April 1995
	Update Available from: www.npca.ca/watershed-management/niagara-river-remedial-action-plan/	Niagara River (Ontario) RAP Coordinating Committee (2009)	Released December 2009
Nipigon Bay Available from: www.ec.gc.ca/raps-pas/default.asp?lang=En&n=62865611-1	Stage 1 Available from: www.ec.gc.ca/raps-pas/default.asp?lang=En&n=62865611-1	Ontario Ministry of the Environment, Environment Canada, Ontario Ministry of Natural Resources, Department of Fisheries and Oceans Canada (1991b)	Released September 1991
	Stage 2 Available from: www.ec.gc.ca/raps-pas/default.asp?lang=En&n=62865611-1	Nipigon Bay Remedial Action Plan Team, Nipigon Bay Public Advisory Committee (1995)	Released October 1995
Peninsula Harbour Available from: www.ec.gc.ca/raps-pas/	Stage 1 Available from: www.ec.gc.ca/raps-pas/default.asp	Ontario Ministry of the Environment, Environment Canada, Ontario Ministry of Natural Resources, Department of Fisheries and Oceans Canada (1991c)	Released September 1991

pas/default.asp?lang=En&n=BC4B3E0-1	?lang=En&n=BC4BB3E0-1		
	Stage 2	Taillon K (2010) Environment Canada, personal communication.	Draft report; not released. Status of each BU is from 2000.
Port Hope Harbour		Not applicable.	The evolution of the BU impairment is reported in the 2003, 2010, 2012 and 2014 progress reports.
St. Clair River Available from: www.ec.gc.ca/raps-pas/default.asp?lang=En&n=FB15DE20-1	Stage 1 Available from: www.friendsofstclair.ca/www/raps/reports.html	St. Clair River RAP Team, Ontario Ministry of the Environment, Michigan Department of Natural Resources (1991)	Released December 1991
	Stage 2 Available from: www.friendsofstclair.ca/www/raps/reports.html	St. Clair River RAP Team, St. Clair River BPAC, Ontario Ministry of Environment and Energy, Michigan Department of Natural Resources (1995)	Released March 1995
	Update Available from: www.friendsofstclair.ca/www/raps/reports.html	Geomatics International Inc (1998)	Released February 1998
	Summary Available from: www.friendsofstclair.ca/www/raps/reports.html	Mayne G (2005) Environment Canada.	Summary table with data from three previous reports Released 2005
	Update Available from: www.friendsofstclair.ca/www/raps/reports.html	Briggs T, Kok S, Lafrance C and White A (2012) St. Clair River Area of Concern Canadian Remedial Action Plan Implementation Committee Work Plan 2007-2010: Summary of Accomplishments.	Released June 2012
St. Lawrence River Available from:	Stage 1 Available from: www.rrca.on.ca	St. Lawrence RAP Team (1992)	Released August 1992

www.rrca.on.ca/view.php?id=39	/view.php?id=105		
	Stage 2 Available from: www.rrca.on.ca/view.php?id=105	Raisin Region Conservation Authority (undated)	Report not available online. BU impairment status on website. Report released 1997
	Stage 3 Available from: www.rrca.on.ca/view.php?id=105	Raisin Region Conservation Authority (2010)	Draft of RAP Stage 3, Section 3. Report not available online.
St. Marys River Available from: www.ssmrca.ca/st-marys-river	Stage 1 Available from: www.ssmrca.ca/st-marys-river/remedial-action-plan	Ontario Ministry of the Environment, Michigan Department of Natural Resources (1992)	Released March 1992
	Stage 2 Available from: www.ssmrca.ca/st-marys-river/remedial-action-plan	Environment Canada, United States Environmental Protection Agency, Ontario Ministry of Environment, Michigan Department of Environmental Quality (2002)	Released December 2002
Severn Sound Available from: www.severnsound.ca/index.htm	Stage 1	Environment Ontario, Environment Canada, Ontario Ministry of Natural Resources Huronia District, Ontario Ministry of Agriculture and Food (1988)	Released September 1988
	Stage 2	Environment Canada, Ontario Ministry of Environment and Energy, Ontario Ministry of Natural Resources, Ontario Ministry of Agriculture and Food, Department of Fisheries and Oceans (1993)	Released April 1993
	Stage 3 Available from: www.calendar.county.simcoe.on.ca/partners/midland/media/files/stage3reportsec.pdf	Environment Canada, Ontario Ministry of Environment and Energy (2002)	Released June 2002

Spanish Harbour	Stage 1	Taillon K (2010) Environment Canada, personal communication.	Released 1993
	Stage 2	Taillon K (2010) Environment Canada, personal communication.	Released 1999
Thunder Bay Available from: www.ec.gc.ca/raps-pas/default.asp?lang=En&n=C11B1AD-1	Stage 1	Taillon K (2010) Environment Canada, personal communication.	Released 1991
	Stage 2	Vander Wal J, Cullis K, Chase M. Morash M, Cano T (2004) Lake Superior Programs Office.	Released May 2004
Toronto and Region Available from: www.torontorap.ca	Stage 1	Environment Canada, Environment Ontario, Ministry of Natural Resources, Metropolitan Toronto and Region Conservation Area (1989)	Released May 1989
	Stage 2	Metro Toronto and Region RAP Team (1994)	Released 1994
	Update	Toronto and Region Conservation Authority (2010)	BU status in report is from 2007. Released 2010
Wheatley Harbour	Stage 1 and 2	Zaranko Environmental Assessment Services, The Citizens of Wheatley Harbour (1998)	Released March 1998
	Stage 3	Ontario Ministry of the Environment, Environment Canada, Essex Region Conservation Authority, Ontario Ministry of Natural Resources, Essex County Stewardship Network (2010)	Released January 2010

<p>All AOCs</p> <p>Available from: www.ec.gc.ca/raps-pas/default.asp?lang=En&n=A290294A-1 </p>	Progress Report	Environment Canada (2003)	Released 2003
	<p>Progress Report</p> <p>Available from: www.ec.gc.ca/Publications/default.asp?lang=En&xml=A0CA45AA-4987-40E1-8037-5B6A6657ABB9 </p>	Environment Canada (2010)	Released 2011
	Progress Report	Gee J (2014) Environment Canada, personal communication.	Draft report; not released. BU statuses are from 2014.

3.2 Spatial coverage

The Restoring the Great Lakes Areas of Concern indicator covers results for Canada's 17 AOCs covering the four Canadian Great Lakes, their connecting rivers, and the St. Lawrence River at Cornwall.

3.3 Temporal coverage

Data coverage for this indicator begins with Severn Sound's Stage 1 report published in 1988 and includes data up to 2014. The other AOCs released their Stage 1 reports between 1989 and 1993 with the majority being released in 1991. Wheatley Harbour released a combined Stage 1 and 2 report in 1998. Only the 2003 and 2014 progress reports were considered for Port Hope.

3.4 Data completeness

The indicator covers all published results for all Canadian AOCs.

3.5 Data timeliness

The data presented in the indicator are the most current available.

4 Methods

The total number of Bus listed as Impaired or Requires further assessment was counted for all RAPs and update reports for the 17 AOCs.

The number of BUs listed as Impaired or Requires further assessment varies for many reasons:

- A BU listed as Not impaired in a report can be reclassified as Requires further assessment based on subsequent monitoring and research.
- An impaired BU can be redesignated as Restored if all delisting requirements for that BU impairment have been met or if the assessment determines the BU was never impaired.
- A BU can be delisted if the impairment is found lake-wide and not solely within the geographic extent of the AOC, and sources within the AOC are controlled. The impairment

can also be delisted if the conditions are shown to be the result of natural conditions and not human influences. As a result, it is possible for an AOC to be delisted and still have impaired BUs.

5 Caveats and limitations

As the BU status are gathered from the RAPs and update reports published by the groups working to delist the AOCs, status can only change when new reports are published. As a result, this situation does not represent the continuous nature of the rehabilitation process and creates staggered, inconsistent status changes. With progress reports being released every two years, the staggered change is less evident.

The reporting process is different for each AOC and, as a result, data availability differs among AOCs. For most AOCs the only available data are from their Stages 1 and 2 reports and the 2003, 2010, 2012 and 2014 Progress Reports. The Bay of Quinte has two update reports, equalling six data sources. Metro Toronto and St. Clair River have five reports each. Hamilton Harbour and Port Hope Harbour both have fewer than four data sources. Port Hope Harbour follows a separate program under the guidance of Natural Resources Canada, and therefore only has updates from the Progress Reports. Hamilton Harbour released both its Stages 1 and 2 reports in 1992 and released an update report in 2002.

6 References and further reading

6.1 References

Adams M (2010) Jackfish Bay Remedial Action Plan Stage 2 Update: Area in Recovery Status Report 1 for Jackfish Bay. Retrieved in October 2012. Available from: www.academia.edu/343062/Jackfish_Bay_Remedial_Action_Plan._Stage_2_Update_Area_in_Recovery_Status_Report_1_for_Jackfish_Bay.

Bay of Quinte RAP Coordinating Committee, Bay of Quinte Public Advisory Committee (1993) Bay of Quinte Stage 2 Report: Time to Act. Retrieved in October 2010. Available from: www.bqrap.ca/publications/documentlibrary/details.cfm?id=225

Brigg T, Kok S, Lafrance C, and White A (2012) St. Clair River Area of Concern Canadian Remedial Action Plan Implementation Committee Work Plan 2007-2010 Report of Accomplishments. Ontario Ministry of the Environment, Environment Canada, and St. Clair Region Conservation Authority. Retrieved in October 2012. Available from: www.friendsofstclair.ca/www/pdf/resources/WorkPlanAccomplishments%20-%20LowRez.pdf

Collingwood Harbour Action Team, Public Advisory Committee (1994) Collingwood Harbour RAP Stage 3 Document: Right on Target.

Collingwood Harbour RAP Team, Public Advisory Committee (1992) Collingwood Harbour Remedial Action Plan Stage 2 Report - A Strategy for Restoring the Collingwood Ecosystem and Delisting Collingwood Harbour as an Area of Concern.

Detroit River Canadian Cleanup (2011) Re-designation Report: Assessment of the Tainting of Fish and Wildlife Flavour (BUI #2) in the Detroit River Canadian Area of Concern. Windsor, Ontario, Canada.

Hamilton Harbour Remedial Action Plan Technical Team and Stakeholders, Public Advisory Committee (1992) Remedial Action Plan for Hamilton Harbour – Goals, Options and Recommendations, Volume 2 – Main Report. (PDF; 14.8 MB) Retrieved in October 2010. Available from: www.hamiltonharbour.ca/index.php?page=document_library&category_id=21

Environment Canada (2003) Canada's RAP Progress Report 2003. Retrieved in October 2010. Available from: www.ec.gc.ca/raps-pas/default.asp?lang=En&xml=D91BD30F-DDC9-4009-ABE0-B3B560EF5324

Environment Canada. (2011) Canadian Great Lakes Areas of Concern - Status of Beneficial Use Impairments Overview. Retrieved on 15 July 2014. Available from: www.ec.gc.ca/Publications/default.asp?lang=En&xml=464B7CDC-7248-4B0B-93CC-295D73C76E34

Environment Canada, Environment Ontario, Ministry of Natural Resources, Metropolitan Toronto and Region Conservation Area (1989) Toronto and Region Stage 1: Environmental Conditions and Problem Definition (Reprint). Retrieved in October 2010. Available from: www.torontorap.ca/dotAsset/64923.pdf

Environment Canada, United States Environmental Protection Agency, Ontario Ministry of Environment, Michigan Department of Environmental Quality (2002) St. Marys River Stage 2: Remedial Strategies for Ecosystem Restoration.

Environment Canada, Ontario Ministry of Environment and Energy (2002) Severn Sound Remedial Action Plan Stage 3 Report The Status of Restoration And Delisting of Severn Sound as an Area of Concern. (PDF; 4.9 MB) Retrieved in October 2010. Available from: www.calendar.county.simcoe.on.ca/partners/midland/media/files/stage3reportsec.pdf

Environment Canada, Ontario Ministry of Environment and Energy, Ontario Ministry of Natural Resources, Ontario Ministry of Agriculture and Food, Department of Fisheries and Oceans (1993) Severn Sound Remedial Action Plan Stage 2 Report – A Strategy for Restoring the Severn Sound Ecosystem and Delisting Severn Sound as an Area of Concern.

Environment Ontario, Environment Canada (1989) Stage 1 Collingwood Harbour Remedial Action Plan: Environmental Conditions and Problem Definition.

Environment Ontario, Environment Canada, Fisheries and Oceans Canada, Ontario Ministry of the Natural Resources, Ontario Ministry of Agriculture and Food (1990) Bay of Quinte Remedial Action Plan Stage 1: Environmental Setting and Problem Definition. Retrieved in October 2010. Available from: www.bqrap.ca/publications/documentlibrary/details.cfm?id=7

Environment Ontario, Environment Canada, Ontario Ministry of Natural Resources Huronia District, Ontario Ministry of Agriculture and Food (1988) Severn Sound Remedial Action Plan Part 1: Environmental Conditions and Problem Definition.

Geomatics International Inc. (1998) St. Clair River Stage 1 1997 Update. Retrieved in October 2010. Available from: www.friendsofstclair.ca/www/rap/reports.html

Green ND, Cargnelli L, Briggs T, Drouin R, Child M, Esbjerg J, Valiante M, Henderson T, McGregor D, and Munro D (Eds.) (2010) Detroit River Canadian Remedial Action Plan: Stage 2 Report. Retrieved in October 2012. Available from: www.detroitriver.ca/assets/files/Detroit%20River%20Canadian%20Stage%202%20Remedial%20Action%20Plan%20FINAL%20DIGITAL.pdf

Hamilton Harbour Remedial Action Plan Stakeholder Forum (2002) RAP for Hamilton Harbour Report Stage 2 Update. Retrieved in October 2012. Available from: www.hamiltonharbour.ca/rap/reports-chapterlistings.htm#S2U

International Joint Commission (2011) Restoring Beneficial Uses in Areas of Concern. Retrieved in October 2010. Available from: www.ijc.org/rel/boards/annex2/buis.htm

Jackfish Bay Remedial Action Plan Team, Jackfish Bay Public Advisory Committee (1998) Jackfish Bay Stage 2: Remedial Strategies for Ecosystem Restoration.

Lake Superior Programs Office, Vander Wal J, Cullis K, Chase M, Morash M, Cano T (2004) Thunder Bay Stage 2: Remedial Strategies for Ecosystem Restoration.

Leney J, Haffner GD, Great Lakes Institute for Environmental Research (2006) 2006 Status of Beneficial Use Impairments in the Detroit River. Retrieved in October 2010. Available from: www.detroitriver.ca/assets/files/2006%20BUI%20Assessment%20-%20FINAL.pdf

Mayne G, Environment Canada (2005) St. Clair River Volume 1 - Synthesis Report Environmental Conditions and Implementation Actions (1998-2003). Retrieved in October 2010. Available from: www.friendsofstclair.ca/www/rap/reports.html

Metro Toronto and Region RAP Team (1994) Toronto and Region Stage 2: Clean Waters, Clear Choices - Recommendations for Actions. Retrieved in October 2010. Available from: torontorap.ca/dotAsset/64921.pdf

Ministry of Environment and Energy, Niagara River Restoration Council (1995) Niagara River Stage 2 Report - The Cleanup Connection.

Murray German Consulting (2006) Bay of Quinte Remedial Action Plan Restoration Council Work Plan: 2006-2010. Retrieved in October 2010. Available from: www.bqrap.ca/publications/documentlibrary/details.cfm?id=15

Niagara River (Ontario) RAP Coordinating Committee (2009) Niagara River Remedial Action Plan Stage 2 Update.

Nipigon Bay Remedial Action Plan Team, Nipigon Bay Public Advisory Committee (1995) Nipigon Bay Stage 2: Remedial Strategies for Ecosystem Restoration.

Ontario Ministry of the Environment, Environment Canada, Essex Region Conservation Authority, Ontario Ministry of Natural Resources, Essex County Stewardship Network (2010) Wheatley Harbour Remedial Action Plan Stage 3 (Final Draft).

Ontario Ministry of the Environment, Environment Canada, Fisheries and Oceans Canada, Ontario Ministry of Agriculture and Food, Royal Botanical Gardens, Ontario Ministry of Natural Resources (1992) Hamilton Harbour Stage 1 Report: Environmental Conditions and Problem Definition. Retrieved in October 2010. Available from: www.hamiltonharbour.ca/rap/documents/reports/Stage1_Oct1992/Whole_Report_HH%20RAP_Stage1_Oct1992.pdf

Ontario Ministry of the Environment, Environment Canada, Ontario Ministry of Natural Resources, Department of Fisheries and Oceans Canada (1991a) Jackfish Bay Remedial Action Plan Stage 1: Environmental Conditions and Problem Definition.

Ontario Ministry of the Environment, Environment Canada, Ontario Ministry of Natural Resources, Department of Fisheries and Oceans Canada (1991b) Nipigon Bay Remedial Action Plan Stage 1: Environmental Conditions and Problem Definition.

Ontario Ministry of the Environment, Environment Canada, Ontario Ministry of Natural Resources, Department of Fisheries and Oceans Canada (1991c) Peninsula Harbour Remedial Action Plan Stage 1: Environmental Conditions and Problem Definition.

Ontario Ministry of the Environment, Michigan Department of Natural Resources (1991) Detroit River Remedial Action Plan Stage 1. Retrieved in October 2010. Available from: www.epa.gov/mwg-internal/de5fs23hu73ds/progress?id=eARUp1eBBh

Ontario Ministry of the Environment, Michigan Department of Natural Resources (1992) St. Marys River Remedial Action Plan Stage 1: Environment Conditions and Problem Definitions.

Ontario Ministry of the Environment and Energy, Environment Canada, Ontario Ministry of Natural Resources, Fisheries and Oceans Canada (1993) Niagara River Remedial Action Plan Stage 1: Environmental Conditions and Problem Definitions.

Ontario Ministry of the Environment, Environment Canada, Ontario Ministry of Natural Resources, Department of Fisheries and Oceans (1991) Thunder Bay Area of Concern Remedial Action Plan Stage 1: Environmental Conditions and Problem Definition.

Raisin Region Conservation Authority (2010) St. Lawrence River (Cornwall) Area of Concern RAP Draft Reports Section 3: Restoration and Rehabilitation Status. Retrieved in October 2010. Available from: www.rrca.on.ca/_files/file/RAP/RAP-Draft-Stage-3-Section-3.pdf

Raisin Region Conservation Authority. Undated. St. Lawrence River (Cornwall) Area of Concern Stage 2 Report.

St. Clair River RAP Team, Ontario Ministry of the Environment, Michigan Department of Natural Resources (1991) St. Clair River Environmental Conditions and Problem Definitions: Remedial Action Plan Stage 1. Retrieved in October 2010. Available from: www.friendsofstclair.ca/www/rap/reports.html

St. Clair River RAP Team, St. Clair River BPAC, Ontario Ministry of Environment and Energy, Michigan Department of Natural Resources (1995) St. Clair River Water Use Goals, Remedial Measures and Implementation Strategy (Stage 2). Retrieved in October 2010. Available from: www.friendsofstclair.ca/www/rap/reports.html

St. Lawrence RAP Team (1992) St. Lawrence River Remedial Action Plan for the Cornwall-Lake St. Francis Area Stage 1 Report: Environmental Conditions and Problem Definitions. Retrieved in October 2010. Available from: www.rrca.on.ca/view.php?id=105

Toronto and Region Conservation Authority (2010) Toronto and Region Update on Actions: 2007-2010. (PDF; 5.9 MB) Retrieved in October 2010. Available from: www.torontorap.ca/dotAsset/82205.pdf

Zaranko Environmental Assessment Services, The Citizens of Wheatley Harbour (1998) Wheatley Harbour Stage 1/Stage 2 Final Report: Environmental Conditions and Problem Definition - Delisting Strategy.

www.ec.gc.ca

Additional information can be obtained at:

Environment Canada

Inquiry Centre

10 Wellington Street, 23rd Floor

Gatineau, QC K1A 0H3

Telephone: 1-800-668-6767 (in Canada only) or 819-997-2800

Fax: 819-994-1412

TTY: 819-994-0736

Email: Enviroinfo@ec.gc.ca