

Revisions to the UTRSPA Assessment Report – Section 8
 Similar revisions will be made to the LTVSPA and SCRSPA ARs

White Cells- original text

Grey cells- new text

Yellow highlight- area of original text to be changed

Bright Green highlight- area of new text

Section 8– Great Lakes

Section	Page	Text	Reason For Change
8.3.1	8-4	<p>The Great Lakes Water Quality Agreement (<i>GLWQA</i>), first signed in 1972 and renewed in 1978, expresses the commitment of Canada and the United States to restore and maintain the chemical, physical and biological integrity of the Great Lakes Basin Ecosystem and includes a number of objectives and guidelines to achieve these goals. In 1987, a Protocol was signed to help develop and implement Remedial Action Plans (<i>RAPs</i>) and Lakewide Management Plans (<i>LaMPs</i>). <i>RAPs</i> focus on the geographic Areas of Concern (<i>AOCs</i>), which are identified under the Canada-Ontario Agreement Respecting Great Lakes Water Quality described in Section 8.2.2.</p> <p><i>LaMPs</i> are designed to improve the environmental quality of the open waters of each of the Great Lakes. In accordance with the <i>GLWQA</i>, the goal of the Lake Erie <i>LaMP</i> is to restore and protect the beneficial uses of Lake Erie, with a focus on the beneficial-use impairments listed in the Agreement. Ecosystem objectives specific to Lake Erie are established to guide <i>LaMP</i> efforts toward defined endpoints. In 1994, nine conservation authorities created a co-operative agreement to combine the strengths of their individual, long-term community partnerships across the Lake Erie Basin, and improve the ability to work with provincial and federal governments. The group established is called the Federation of Conservation Authorities of Lake Erie, or <i>FOCALERie</i>, and is comprised of the Essex Region, Lower Thames Valley, Upper Thames River, St. Clair Region, Catfish Creek, Kettle Creek, Long Point Region, Grand River and Niagara Peninsula Conservation Authorities. <i>FOCALERie</i> supports the Lake Erie <i>LaMP</i> through projects such as public involvement and Lake Erie basin geographic information system compilation and updates. The City of London and neighbouring communities in the <i>UTRSPA</i> receive water from Lake Huron and Lake Erie intakes located outside the SPA. It is important to note that <i>FOCALERie</i> provides a mechanism for Conservation Authorities including the Upper Thames River CA to deal with other, broader Great Lakes concerns and to coordinate watershed planning and implementation activities at a scale beyond their individual watershed boundaries.</p> <p>As mentioned before, the Thames River originates in the <i>UTRSPA</i> and continues to flow through the <i>LTVSPA</i> where it outlets into Lake St. Clair, which in turn outlets into Lake Erie. The Great Lakes Water Quality Agreement (<i>GLWQA</i>) has been considered in the Lower Thames Valley Source Protection Area Assessment Report. Under the Great Lakes Water Quality Agreement, the Four Agency Management Committee established a framework for binational coordination of environmental issues on Lake St. Clair (U.S. Environmental Protection Agency, Environment Canada, Ontario Ministry of Environment, Michigan Department of Environmental Quality. 2004). It is called the Lake St. Clair Management Plan. Lake St. Clair intakes in the Essex Region SPA supply some communities in the Lower Thames Valley Source Protection Area.</p>	Update status of agreement
Proposed revision		Negotiations to amend the <i>GLWQA</i> were launched in early 2010. On February 12, 2013, the Governments of Canada and the United States ratified the Great Lakes Water Quality Agreement of 2012.	

	<p>The Agreement facilitates binational action on threats to water quality and ecosystem health. Under the Great Lakes Water Quality Agreement, the governments of Canada and the United States agreed “to restore and maintain the chemical, physical, and biological integrity of the waters of the Great Lakes Basin Ecosystem”. This is accomplished in part through the development and implementation of binational Lakewide Management and Action Plans (LAMPs) for each lake. Through the development of issue related strategies, the LAMP will identify actions required to restore and protect the lakes and evaluate the effectiveness of those actions.</p> <p>The Thames-Sydenham and Region Source Protection Region is straddled by Lakes Erie and Huron. Lake Erie's ecosystem and economy are threatened by algal blooms that have become a regular occurrence throughout the Western basin of the lake during summer months, leading to poor aesthetics, recreational beach closures and reduced tourism revenue. The blooms are attributed primarily to excessive nutrient inputs from urban and rural land uses. In addition, Lake Erie water quality is affected by habitat loss and degradation and the introduction of non-native aquatic and terrestrial plant species. The top priority for Lake Erie Lakewide Action and Management Plan (LAMP) partners is to address excess algal blooms by reducing nutrient inputs to the lake. The Lake Erie LAMP is coordinated by a committee of water quality and natural resource managers from both Canada and the United States, with participation from federal, provincial, state and local governments that have a role in implementation.</p> <p>Although no formal Lakewide Management Plan exists for Lake Huron, the Lake Huron Binational Partnership was formed in 2002 to meet commitments in the Canada-United States Great Lakes Water Quality Agreement for lakewide management. The Partnership facilitates information sharing, sets priorities, and coordinates binational environmental protection and restoration activities. The U.S. Environmental Protection Agency, Environment Canada, Michigan Departments of Natural Resources and Environmental Quality, and the Ontario Ministries of Environment and Natural Resources form the core of the Partnership. The Lake Huron Binational Partnership focuses on key priorities and on the ground actions that help to improve and protect the overall quality of Lake Huron including controlling non-point source pollution and improving fish spawning and nursery habitat.</p>	
8.3.1	<p>A Lakewide Management Plan is yet to be established for Lake Huron. In 2004, a report was prepared entitled Lake Huron Bi-national Partnership Action Plan and is described based on information from http://www.epa.gov/glnpo/lakehuron/LH%202004.pdf. This plan does provide an overview of issues and recommends actions to address these issues. The approach to Lake Huron differs from the Lake-wide Management Plans (LaMPs) of Lakes Superior, Michigan, Erie and Ontario in that there has been no systematic assessment of beneficial use impairments, identification of causes, definition of critical pollutants, determination of chemical sources and loadings, and release of a report for comment. The alternative approach focuses on areas of obvious importance, such as identified Areas of Concern, tackles these as priorities in the first action plans, and will expand over time to include other activities that investigate the less severe or obvious issues in the lake. Through the GLWQA, three Areas of Concern in the Lake Huron basin are identified none of which are in the UTRSPA. Under the Action Plan, three priority issues - contaminants in fish and wildlife; biodiversity and ecosystem change; fish and wildlife habitat - were given priority for immediate action while other issues will be tracked and added as the Partnership pursues this process of updating and expanding activities over time. Other Lake Huron concerns include: low water levels, botulism, cormorant populations, blue-green algae blooms, aquaculture, the spread of exotic non-native species such as the Common Reed Grass (<i>Australius phragmites</i>), emerging contaminants and global climate change. The 2008-2010 Action Plan tracks progress on issues identified in</p>	Update status of agreement

		the previous cycle, including contaminants in fish, changes in food web structure and protection of critical habitat, and has been expanded to address emerging issues, such as observed increases in nearshore algae and diseases such as botulism (http://www.epa.gov/glnpo/huron.html).	
Proposed Revision		<p>Areas of Concern (AOC) are locations within the Great Lakes identified as having experienced high levels of environmental harm. Under the 1987 Great Lakes Water Quality Agreement between Canada and the United States, 43 such areas were identified, 12 of which were Canadian and 5 of which were shared binationally. The 2012 Great Lakes Water Quality Agreement reaffirms both countries' commitments to restoring water quality and ecosystem health in Great Lakes Areas of Concern. The St. Clair River, a binational AOC is located within the Thames-Sydenham and Region Source Protection Region.</p> <p>In order to improve the environmental conditions of the AOC, a Remedial Action Plan (RAP) has been developed for the St. Clair River. The St. Clair River RAP is a partnership between Canadian and U.S. federal governments, provincial (Ontario) and state (Michigan) governments, with cooperation from the public and stakeholders through the St. Clair Binational Public Advisory Committee. Environment Canada and the Ontario Ministry of the Environment and Climate Change are the lead government agencies for the Canadian side of the St. Clair River Remedial Action Plan. The St. Clair Region Conservation Authority is working with these agencies to assist in the local implementation of the plan.</p>	
8.3.2		The Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem	Future update
		<i>This agreement has been negotiated but has not received final sign off. This text should be revised following final signoff</i>	

