Great Lakes Water Quality Agreement

Protocol Amending the Agreement Between Canada and the United States of America on Great Lakes Water Quality, 1978, as Amended on October 16, 1983, and on November 18, 1987

Signed September 7, 2012
Entered into force February 12, 2013

Canada

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THE GOVERNMENT OF CANADA AND THE GOVERNMENT OF THE UNITED STATES OF AMERICA (the "Parties"),

RECOGNIZING that the *Agreement between Canada and the United States of America on Great Lakes Water Quality, 1978*, done at Ottawa on 22 November 1978, as amended on October 16, 1983 and on November 18, 1987 (the "1978 Agreement") and its predecessor, the *Agreement between Canada and the United States of America on Great Lakes Water Quality*, done at Ottawa on 15 April 1972, provide a vital framework for binational consultation and cooperative action to restore, protect and enhance the water quality of the Great Lakes to promote the ecological health of the Great Lakes basin;

REAFFIRMING their commitment to achieve the goals and objectives of the 1978 Agreement, as amended on 16 October, 1983 and 18 November, 1987, as well as those of its 1972 predecessor agreement;

RECOGNIZING the need to update and strengthen the 1978 Agreement to address current impacts on the quality of the Waters of the Great Lakes, and anticipate and prevent emerging threats to the quality of the Waters of the Great Lakes,

HAVE AGREED as follows:

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ARTICLE 1

This Protocol shall be referred to as the Great Lakes Water Quality Protocol of 2012.

ARTICLE 2

The title, preamble, article and annexes of the 1978 Agreement are amended to read as set forth in the Appendix to this Protocol.

ARTICLE 3

This Protocol shall enter into force on the date of the last notification in an Exchange of Notes by the Parties indicating that each Party has completed its domestic processes for approval.

IN WITNESS WHEREOF, the undersigned, being duly authorized by their respective Governments, have signed this Protocol.

DONE at Washington, this 7th day of September 2012, in duplicate in the English and French languages, each text being equally authentic.

FOR THE GOVERNMENT OF CANADA

FOR THE GOVERNMENT OF THE UNITED STATES OF AMERICA

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APPENDIX TO THE PROTOCOL AMENDING THE AGREEMENT BETWEEN CANADA AND THE UNITED STATES OF AMERICA ON GREAT LAKES WATER QUALITY, 1978, AS AMENDED ON OCTOBER 16, 1983 AND ON NOVEMBER 18, 1987

AGREEMENT BETWEEN CANADA AND THE UNITED STATES OF AMERICA ON GREAT LAKES WATER QUALITY, 2012

THE GOVERNMENT OF CANADA AND THE GOVERNMENT OF THE UNITED STATES OF AMERICA (the "Parties"),

ACKNOWLEDGING the vital importance of the Great Lakes to the social and economic well-being of both countries, the close connection between quality of the Waters of the Great Lakes and the environment and human health, as well as the need to address the risks to human health posed by environmental degradation;

REAFFIRMING their determination to protect, restore, and enhance water quality of the Waters of the Great Lakes and their intention to prevent further pollution and degradation of the Great Lakes Basin Ecosystem;

REAFFIRMING, in a spirit of friendship and cooperation, the rights and obligations of both countries under the *Treaty relating to the Boundary Waters and Questions arising along the Boundary between Canada, and the United States* done at Washington on 11 January 1909 ("Boundary Waters Treaty") and, in particular, the obligation not to pollute boundary waters;

EMPHASIZING the need to strengthen efforts to address new and continuing threats to the quality of the Waters of the Great Lakes, including aquatic invasive species, nutrients, chemical substances, discharge from vessels, the climate change impacts, and the loss of habitats and species;

ACKNOWLEDGING that pollutants may enter the Waters of the Great Lakes from air, surface water, groundwater, sediment, runoff from non-point sources, direct discharges and other sources;

RECOGNIZING that restoration and enhancement of the Waters of the Great Lakes cannot be achieved by addressing individual threats in isolation, but rather depend upon the application of an ecosystem approach to the management of water quality that addresses individually and cumulatively all sources of stress to the Great Lakes Basin Ecosystem;

RECOGNIZING that nearshore areas must be restored and protected because they are the major source of drinking water for communities within the basin, are where most human commerce and recreation occurs, and are the critical ecological link between watersheds and the open waters of the Great Lakes;

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ACKNOWLEDGING that the quality of the Waters of the Great Lakes may affect the quality of the waters of the St. Lawrence River downstream of the international boundary;

CONCLUDING that the best means to preserve the Great Lakes Basin Ecosystem and to improve the quality of the Waters of the Great Lakes is to adopt common objectives, develop and implement cooperative programs and other compatible measures, and assign special responsibilities and functions to the International Joint Commission;

RECOGNIZING that, while the Parties are responsible for decision-making under this Agreement, the involvement and participation of State and Provincial Governments, Tribal Governments, First Nations, Métis, Municipal Governments, watershed management agencies, local public agencies, and the Public are essential to achieve the objectives of this Agreement;

DETERMINED to improve management processes for the implementation of measures necessary to achieve the objectives of this Agreement,

HAVE AGREED as follows:

ARTICLE 1

Definitions

In this Agreement:

(a) "Boundary Waters Treaty" means the *Treaty relating to the Boundary Waters and Questions arising along the Boundary between Canada and the United States*, done at Washington on 11 January 1909;

(b) "General Objectives" means broad descriptions of water quality conditions consistent with the protection of the level of environmental quality which the Parties desire to secure and which will provide a basis for overall water management guidance;

(c) "Great Lakes Basin Ecosystem" means the interacting components of air, land, water and living organisms, including humans, and all of the streams, rivers, lakes, and other bodies of water, including groundwater, that are in the drainage basin of the Great Lakes and the St. Lawrence River at the international boundary or upstream from the point at which this river becomes the international boundary between Canada and the United States;

(d) "International Joint Commission" or "Commission" means the International Joint Commission established by the Boundary Waters Treaty;

(e) "Municipal Government" means a local government created by a Province or State situated within the Great Lakes basin;

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(f) "Public" means individuals and organizations such as public interest groups, researchers and research institutions, and businesses and other non-governmental entities;

(g) "State and Provincial Governments" means the Governments of the States of Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Wisconsin, the Commonwealth of Pennsylvania and the Government of the Province of Ontario;

(h) "Tribal Government" means the government of a tribe recognized by either the Government of Canada or the Government of the United States situated within the Great Lakes basin;

(i) "Tributary Waters" means surface waters that flow directly or indirectly into the Waters of the Great Lakes;

(j) "Waters of the Great Lakes" means the waters of Lakes Superior, Huron, Michigan, Erie and Ontario and the connecting river systems of St. Marys, St. Clair including Lake St. Clair, Detroit, Niagara and St. Lawrence at the international boundary or upstream from the point at which this river becomes the international boundary between Canada and the United States, including all open and nearshore waters.

ARTICLE 2

Purpose, Principles and Approaches

PURPOSE

1. The purpose of this Agreement is to restore and maintain the chemical, physical, and biological integrity of the Waters of the Great Lakes. To achieve this purpose, the Parties agree to maximize their efforts to:

   (a) cooperate and collaborate;

   (b) develop programs, practices and technology necessary for a better understanding of the Great Lakes Basin Ecosystem; and

   (c) eliminate or reduce, to the maximum extent practicable, environmental threats to the Waters of the Great Lakes.

2. The Parties, recognizing the inherent natural value of the Great Lakes Basin Ecosystem, are guided by a shared vision of a healthy and prosperous Great Lakes region in which the Waters of the Great Lakes, through sound management, use and enjoyment, will benefit present and future generations of Canadians and Americans.

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3. The Parties recognize that it is necessary to take action to resolve existing environmental problems, as well as to anticipate and prevent environmental problems, by implementing measures that are sufficiently protective to achieve the purpose of this Agreement.

PRINCIPLES AND APPROACHES

4. The Parties shall be guided by the following principles and approaches in order to achieve the purpose of this Agreement:

   (a) accountability – establishing clear objectives, regular reporting made available to the Public on progress, and transparently evaluating the effectiveness of work undertaken to achieve the objectives of this Agreement;

   (b) adaptive management – implementing a systematic process by which the Parties assess effectiveness of actions and adjust future actions to achieve the objectives of this Agreement, as outcomes and ecosystem processes become better understood;

   (c) adequate treatment – treating wastewater without relying on flow augmentation to achieve applicable water quality standards;

   (d) anti-degradation – implementing all reasonable and practicable measures to maintain or improve the existing water quality in the areas of the Waters of the Great Lakes that meet or exceed the General Objectives or Specific Objectives of this Agreement, as well as in areas that have outstanding natural resource value;

   (e) coordination – developing and implementing coordinated planning processes and best management practices by the Parties, as well as among State and Provincial Governments, Tribal Governments, First Nations, Métis, Municipal Governments, watershed management agencies, and local public agencies;

   (f) ecosystem approach – taking management actions that integrate the interacting components of air, land, water, and living organisms, including humans;

   (g) innovation – considering and applying advanced and environmentally-friendly ideas, methods and efforts;

   (h) "polluter pays" – incorporating the "polluter pays" principle, as set forth in the *Rio Declaration on Environment and Development*, "that the polluter should, in principle, bear the cost of pollution";

   (i) precaution – incorporating the precautionary approach, as set forth in the *Rio Declaration on Environment and Development*, the Parties intend that, "Where there are threats of serious or irreversible damage, lack of full scientific certainty

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shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation";

(j) prevention – anticipating and preventing pollution and other threats to the quality of the Waters of the Great Lakes to reduce overall risks to the environment and human health;

(k) Public engagement – incorporating Public opinion and advice, as appropriate, and providing information and opportunities for the Public to participate in activities that contribute to the achievement of the objectives of this Agreement;

(l) science-based management – implementing management decisions, policies and programs that are based on best available science, research and knowledge, as well as traditional ecological knowledge, when available;

(m) sustainability – considering social, economic and environmental factors and incorporating a multi-generational standard of care to address current needs, while enhancing the ability of future generations to meet their needs;

(n) tributary management – restoring and maintaining surface waters that flow into and impact the quality of the Waters of the Great Lakes;

(o) virtual elimination – adopting the principle of virtual elimination for elimination of releases of chemicals of mutual concern, as appropriate; and

(p) zero discharge – adopting the philosophy of zero discharge for control of releases of chemicals of mutual concern, as appropriate.

ARTICLE 3

General and Specific Objectives

1. The Parties, in achieving the purpose of this Agreement, shall work to attain the following General and Specific Objectives, and are guided by the Principles and Approaches identified in Article 2:

(a) GENERAL OBJECTIVES

The Parties adopt the following General Objectives. The Waters of the Great Lakes should:

(i) be a source of safe, high-quality drinking water;

(ii) allow for swimming and other recreational use, unrestricted by environmental quality concerns;

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(iii) allow for human consumption of fish and wildlife unrestricted by concerns due to harmful pollutants;

(iv) be free from pollutants in quantities or concentrations that could be harmful to human health, wildlife, or aquatic organisms, through direct exposure or indirect exposure through the food chain;

(v) support healthy and productive wetlands and other habitats to sustain resilient populations of native species;

(vi) be free from nutrients that directly or indirectly enter the water as a result of human activity, in amounts that promote growth of algae and cyanobacteria that interfere with aquatic ecosystem health, or human use of the ecosystem;

(vii) be free from the introduction and spread of aquatic invasive species and free from the introduction and spread of terrestrial invasive species that adversely impact the quality of the Waters of the Great Lakes;

(viii) be free from the harmful impact of contaminated groundwater; and

(ix) be free from other substances, materials or conditions that may negatively impact the chemical, physical or biological integrity of the Waters of the Great Lakes;

(b) SPECIFIC OBJECTIVES

The Parties, to help achieve the General Objectives, shall, in cooperation and consultation with State and Provincial Governments, Tribal Governments, First Nations, Métis, Municipal Governments, watershed management agencies, other local public agencies, downstream jurisdictions, and the Public, identify and work to attain Specific Objectives for the Waters of the Great Lakes, including:

(i) LAKE ECOSYSTEM OBJECTIVES

Lake Ecosystem Objectives shall be established for each Great Lake, including its connecting river systems, that:

(A) are binational, except for Lake Michigan, where the Government of the United States shall have sole responsibility;

(B) specify interim or long term ecological conditions necessary to achieve the General Objectives of this Agreement;

(C) may be narrative or numeric in nature;

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(D) will be developed in recognition of the complexities of large, dynamic ecosystems; and

(E) may be developed for temperature, pH, total dissolved solids, dissolved oxygen, settleable, and suspended solids, light transmission, and other physical parameters; and levels of plankton, benthos, microbial organisms, aquatic plants, fish or other biota; or other parameters, as appropriate;

(ii) SUBSTANCE OBJECTIVES

Substance Objectives are numeric targets that may be established binationally by the Parties, except where specific to Lake Michigan, to further direct actions to manage the level of a substance or combination of substances to reduce threats to human health and the environment in the Great Lakes Basin Ecosystem. The Parties shall identify Substance Objectives, where deemed essential to achieve the General Objectives and Lake Ecosystem Objectives of this Agreement.

The Parties shall develop the Substance Objectives:

(A) using approaches appropriate to the substance or combination of substances;

(B) using binational processes established by the Parties, domestic programs implemented by the Parties, or programs developed and implemented by other entities having relevant jurisdiction coordinated binationally as appropriate.

IMPLEMENTATION

2. The Parties shall progress toward the attainment of these General Objectives, Lake Ecosystem Objectives and Substance Objectives through their respective domestic programs. The Parties shall use best efforts to ensure that water quality standards and other regulatory requirements of the Parties, State and Provincial Governments, Tribal Governments, First Nations, Métis, Municipal Governments, watershed management agencies, and other local public agencies are consistent with all of these objectives. Objectives developed jointly by the Parties do not preclude either Party from establishing more stringent domestic requirements.

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MONITORING

3. The Parties shall monitor environmental conditions so that the Parties may determine the extent to which General Objectives, Lake Ecosystem Objectives and Substance Objectives are being achieved.

REPORTING

4. The Parties shall publicly report, in the Progress Report of the Parties, State of the Great Lakes Report and Lakewide Action and Management Plans, on the progress in achieving the General Objectives, Lake Ecosystem Objectives and Substance Objectives.

REVIEW

5. The Parties shall periodically review the Lake Ecosystem Objectives and Substance Objectives and revise them if appropriate.

6. The International Joint Commission may make recommendations to the Parties, in accordance with Article 7, about how to develop or achieve the Lake Ecosystem Objectives and Substance Objectives.

ARTICLE 4

Implementation

1. The Parties, in cooperation and consultation with State and Provincial Governments, Tribal Governments, First Nations, Métis, Municipal Governments, watershed management agencies, other local public agencies, and the Public, shall develop and implement programs and other measures:

   (a) to fulfill the purpose of this Agreement, in accordance with the Principles and Approaches set forth in Article 2; and

   (b) to achieve the General and Specific Objectives set forth in Article 3.

2. These programs and other measures shall include, but are not limited to:

   (a) pollution abatement, control, and prevention programs for:

      (i) municipal sources, including urban drainage;

      (ii) industrial sources;

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(iii) agriculture, forestry, and other land use;

(iv) contaminated sediments, and dredging activities;

(v) onshore and offshore facilities, including the prevention of discharge of harmful quantities of oil and hazardous polluting substances;

(vi) sources of radioactive materials; and

(vii) other environmental priorities that may be identified by the Parties;

(b) aquatic invasive species programs and other measures to:

(i) prevent the introduction of aquatic invasive species;

(ii) control or reduce the spread of existing aquatic invasive species; and

(iii) eradicate, when feasible, existing aquatic invasive species;

(c) conservation programs to:

(i) restore and protect habitat; and

(ii) recover and protect species;

(d) enforcement actions and other measures to ensure the effectiveness of the programs described in (a), (b) and (c); and

(e) research and monitoring programs to support the commitments made in this Agreement.

3. The Parties commit themselves, in the implementation of this Agreement, to seek:

(a) the appropriation of funds;

(b) the appropriation of funds required by the International Joint Commission to carry out its responsibilities effectively;

(c) the enactment of any legislation that may be necessary to implement programs and other measures developed pursuant to Article 4;

(d) the cooperation of State and Provincial Governments, Tribal Governments, First Nations, Métis, Municipal Governments, watershed management agencies, and other local public agencies in all pertinent matters;

(e) Public input and advice on all pertinent matters, as appropriate; and

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(f) input and advice from downstream jurisdictions on matters relating to this Agreement, as appropriate.

4. The Parties' policy is to ensure that a combination of local, state, provincial, and federal participation provide financial assistance to construct and improve publicly owned waste treatment works.

5. The Parties' respective obligations are subject to the appropriation of funds in accordance with their respective constitutional procedures.

ARTICLE 5

Consultation, Management and Review

1. Recognizing the importance of Public input and advice, the Parties shall convene, with the Commission, a Great Lakes Public Forum within one year of entry into force of this Agreement, and every three years after the first Forum. The Great Lakes Public Forum will provide an opportunity for:

   (a) the Parties to discuss and receive Public comments on the state of the lakes and binational priorities for science and action to inform future priorities and actions; and

   (b) the Commission to discuss and receive Public input on the Progress Report of the Parties.

2. The Parties hereby establish a Great Lakes Executive Committee to help coordinate, implement, review and report on programs, practices and measures undertaken to achieve the purpose of this Agreement:

   (a) the Parties shall co-chair the Great Lakes Executive Committee and invite representatives from Federal Governments, State and Provincial Governments, Tribal Governments, First Nations, Métis, Municipal Governments, watershed management agencies, and other local public agencies;

   (b) the Parties shall convene the Great Lakes Executive Committee at least twice each year, and shall appoint Annex-specific sub-committees to the Great Lakes Executive Committee, as required, to assist in the implementation of this Agreement;

   (c) the Parties shall establish, in consultation with the Great Lakes Executive Committee, binational priorities for science and action to address current and future threats to the quality of the Water of the Great Lakes, not later than six months after each Great Lakes Public Forum. The priorities shall be established

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based on an evaluation of the state of the Great Lakes and input received during the Great Lakes Public Forum and recommendations of the Commission;

(d) the Parties shall establish priorities, in consultation with the Great Lakes Executive Committee, for each Annex sub-committee to ensure the effective implementation of this Agreement. The Parties shall regularly update those priorities; and

(e) the Parties shall prepare, in consultation with the Great Lakes Executive Committee, a binational Progress Report of the Parties to document actions relating to this Agreement, taken domestically and binationally. The first such report shall be provided to the Public and the Commission before the second Great Lakes Public Forum, and subsequent reports shall be provided before each subsequent Great Lakes Public Forum.

3. To further assist in the implementation of this Agreement, the Parties shall convene a Great Lakes Summit in conjunction with the Great Lakes Public Forum to promote coordination among the Parties, the Commission and other binational and international governmental organizations, and increase their effectiveness in managing the resources of the Great Lakes.

4. The Parties shall review each Assessment of Progress Report prepared by the Commission in accordance with Article 7(1)(k), and consult with each other on the recommendations contained in the report, and consider such action as may be appropriate. The Parties may transmit any comments to the Commission within six months of receipt of the Assessment of Progress Report.

5. Following every third triennial Assessment of Progress Report of the Commission, the Parties shall review the operation and effectiveness of this Agreement. The Parties shall determine the scope and nature of the review taking into account the views of State and Provincial Governments, Tribal Governments, First Nations, Métis, Municipal Governments, watershed management agencies, other local public agencies, downstream jurisdictions, and the Public.

6. Each Party shall make available to the other Party, at its request, any data or other information in its control relating to the quality of the Waters of the Great Lakes. The disclosure of this information is subject to national security considerations, information-sharing laws, privacy laws, regulations, and policies.

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ARTICLE 6

Notification and Response

The Parties acknowledge the importance of anticipating, preventing and responding to threats to the Waters of the Great Lakes. The Parties commit to the following notification and response process:

(a) if a Party becomes aware of a pollution incident, or the imminent threat of a pollution incident, that could be of joint concern to both of the Parties, it shall notify the other Party in accordance with the requirements set out in the Canada-United States Joint Inland Pollution Contingency Plan and the Canada-United States Joint Marine Pollution Contingency Plan. A pollution incident is a release of any pollutant of a magnitude that causes or may cause damage to the Waters of the Great Lakes or may constitute a threat to public safety, security, health, welfare, or property;

(b) the Parties shall continue to implement the CANUSLAK Annex of the Canada-United States Joint Marine Pollution Contingency Plan, as amended, or any successor instrument, to provide a coordinated binational approach for planning and preparedness in response to pollution incidents;

(c) the Parties shall notify each other, through the Great Lakes Executive Committee, of planned activities that could lead to a pollution incident or that could have a significant cumulative impact on the Waters of the Great Lakes, such as:

(i) the storage and transfer of nuclear waste or radioactive materials;

(ii) mining and mining related activities;

(iii) oil and gas pipelines;

(iv) oil and gas drilling;

(v) refineries; power plants;

(vi) nuclear facilities;

(vii) hazardous waste storage;

(viii) treatment or disposal facilities; and

(ix) other categories of activities identified by the Parties.

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ARTICLE 7

The International Joint Commission

1. The Parties agree that, pursuant to Article IX of the Boundary Waters Treaty, the Commission shall have the following responsibilities:

   (a) analyzing and disseminating data and information obtained from the Parties, State and Provincial Governments, Tribal Governments, First Nations, Métis, Municipal Governments, watershed management agencies, other local public agencies, and the Public, relating to the quality of the Waters of the Great Lakes and to the pollution that enters the boundary waters from tributary waters and other sources. The Commission shall have authority to verify independently such data and information through tests or other means that it deems appropriate, in accordance with the Boundary Waters Treaty and with applicable laws;

   (b) analyzing and disseminating data and information about the General Objectives, Lake Ecosystem Objectives and Substance Objectives, and about the operation and effectiveness of the programs and other measures established pursuant to this Agreement;

   (c) tendering advice and recommendations to the Parties on the following:

      (i) the social, economic and environmental aspects of current and emerging issues related to the quality of the Waters of the Great Lakes, including specific recommendations concerning the revision of the General Objectives, Lake Ecosystem Objectives and Substance Objectives, legislation, standards and other regulatory requirements, programs, and other measures, and intergovernmental agreements relating to the quality of these waters;

      (ii) matters covered under the Annexes to this Agreement;

      (iii) approaches and options that the Parties may consider to improve effectiveness in achieving the purpose and objectives of this Agreement; and

      (iv) research and monitoring of the Waters of the Great Lakes, including recommendations for specific research and monitoring priorities;

   (d) providing assistance as requested by the Parties in the coordination of the Parties' joint activities;

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(e) assisting in and advising on scientific matters related to the Great Lakes Basin Ecosystem, including:

(i) identifying objectives for scientific activities; and

(ii) tendering scientific advice and recommendations to the Parties and to State and Provincial Governments, Tribal Governments, First Nations, Métis, Municipal Governments, watershed management agencies, other local public agencies, and the Public;

(f) investigating any subjects related to the Great Lakes Basin Ecosystem that the Parties may refer to the Commission;

(g) consulting on a regular basis with the Public about issues related to the quality of the Waters of the Great Lakes, and about options for restoring and protecting these waters, while providing the Public with the opportunity to raise concerns, and tender advice and recommendations to the Commission and the Parties;

(h) engaging with the Public to increase awareness of the inherent value of the Waters of the Great Lakes, of the issues related to the quality of these waters, and the benefit of taking individual and collective action to restore and protect these waters;

(i) ensuring liaison and coordination among the institutions established under Article 8 and other institutions within the Commission's purview, such as Boards responsible to oversee Great Lakes water levels and air pollution matters;

(j) coordinating with other binational or international institutions that address concerns relating to the Great Lakes Basin Ecosystem;

(k) providing to the Parties, in consultation with the Boards established under Article 8, a triennial "Assessment of Progress Report" that includes:

(i) a review of the Progress Report of the Parties;

(ii) a summary of Public input on the Progress Report of the Parties;

(iii) an assessment of the extent to which programs and other measures are achieving the General and Specific Objectives of this Agreement;

(iv) consideration of the most recent State of the Lakes Report; and

(v) other advice and recommendations, as appropriate;

(l) providing to the Parties, at any time, special reports concerning any problem relating to the quality of the Waters of the Great Lakes;

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(m) submitting to the Parties, for their review and approval, an annual budget of anticipated expenses for carrying out its responsibilities under this Agreement. Each Party shall seek funds to pay half of the approved annual budget. A Party shall not be obliged to pay a larger amount than the other Party;

(n) providing any requested data or information, furnished to the Commission in accordance with this Article, to the Parties or State and Provincial Governments, Tribal Governments, First Nations, Métis, Municipal Governments, watershed management agencies, other local public agencies, downstream jurisdictions, or the Public; and

(o) publishing any report, statement, or other document prepared in the discharge the Commission's functions under this Agreement.

2. A Party shall provide any available data or other information relating to the quality of the Waters of the Great Lakes if it is requested by the Commission. The Party shall disclose the information, subject to national security considerations, information-sharing laws, and privacy laws, regulations, and policies.

3. When discharging its responsibilities under this Agreement, the Commission may exercise all of the powers conferred to it by the Boundary Waters Treaty and by any legislation passed pursuant thereto, including the power to conduct public hearings and to compel the testimony of witnesses, and the production of documents.

4. The Parties shall enable the Commission to make available to the Public all advice and recommendations made by the Commission to the Parties pursuant to this Article.

5. In addition to the responsibilities outlined in this Article, the Commission has specific roles and responsibilities pursuant to Annex 1 – Areas of Concern; Annex 2 – Lakewide Management; Annex 5 – Discharges from Vessels; and Annex 10 – Science, of this Agreement.

6. Notwithstanding any other provision of this Agreement, the Parties shall ensure that the Commission does not release any information that is protected or regulated under applicable law, unless it has consent of the owner.

ARTICLE 8

Commission Boards and Regional Office

1. The Parties hereby direct the Commission to establish a Great Lakes Water Quality Board, a Great Lakes Science Advisory Board, and a Great Lakes Regional Office to assist in exercising the powers and responsibilities assigned to it under this Agreement.

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2. The Great Lakes Water Quality Board shall be the principal advisor to the Commission. The Great Lakes Water Quality Board shall be composed of an equal number of members from Canada and the United States. The Great Lakes Water Quality Board shall include representatives from the Parties and State and Provincial Governments and also may include representatives from Tribal Governments, First Nations, Métis, Municipal Governments, watershed management agencies, other local public agencies, downstream jurisdictions, and the Public.

3. The Great Lakes Water Quality Board shall assist the Commission by:

   (a) reviewing and assessing progress of the Parties in implementation of this Agreement;

   (b) identifying emerging issues and recommending strategies and approaches for preventing and resolving the complex challenges facing the Great Lakes; and

   (c) providing advice on the role of relevant jurisdictions to implement these strategies and approaches.

4. The Great Lakes Science Advisory Board shall provide advice on research to the Commission and to the Great Lakes Water Quality Board. The Great Lakes Science Advisory Board shall also provide advice on scientific matters referred to it by the Commission, or by the Great Lakes Water Quality Board, in consultation with the Commission. The Great Lakes Science Advisory Board shall consist of managers of Great Lakes research programs and recognized experts on Great Lakes water quality problems and related matters and include representatives from the Parties and State and Provincial Governments.

5. The Commission shall appoint the members of the Great Lakes Water Quality Board and the Great Lakes Science Advisory Board subject to consultation with the appropriate government or governments concerned.

6. The Parties instruct the Commission to prepare the detailed functions of the Boards for review and approval by the Parties.

7. The Parties agree that the Great Lakes Regional Office of the Commission shall:

   (a) provide administrative support and technical assistance to the Great Lakes Water Quality Board and the Great Lakes Science Advisory Board and their sub-organizations, to assist the Boards in discharging effectively the responsibilities, duties and functions assigned to them;

   (b) provide public notice and outreach for the activities, including public hearings, undertaken by the Commission and its Boards;

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(c) provide any other assistance to the Commission, as required to fulfill the Commission's responsibilities under this Agreement; and

(d) be managed by a Director appointed by the Commission in consultation with the Parties and with the co-chairs of the Boards. The position of Director shall alternate between a Canadian citizen and a United States citizen. Consistent with the responsibilities assigned to the Commission, and under the supervision of the Commission, the Director shall be responsible for:

(i) managing the Great Lakes Regional Office and its staff in the carrying out of the functions described herein; and

(ii) conducting such activities in support of the Boards as directed by the Boards' co-chairs in consultation with the Commission.

ARTICLE 9

Existing Rights and Obligations

This Agreement shall not be interpreted to diminish the Parties' rights or obligations under the Boundary Waters Treaty.

ARTICLE 10

Integration Clause

The Annexes form an integral part of this Agreement.

ARTICLE 11

Amendment

1. This Agreement and its Annexes may be amended by written agreement of the Parties.

2. The Parties shall promptly advise the International Joint Commission of any amendment to this Agreement and its Annexes.

3. An amendment shall enter into force on the date of the last notification in an Exchange of Notes between the Parties indicating that each Party has completed its domestic processes for entry into force.

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ARTICLE 12

Entry into Force and Termination

1. This Agreement shall enter into force upon signature by the duly authorized representatives of the Parties.

2. This Agreement will remain in force until terminated by a Party through written notification delivered to the other Party through diplomatic channels.

ARTICLE 13

Supersession

This Agreement supersedes the *Agreement between Canada and the United States of America on Great Lakes Water Quality*, done at Ottawa on 15 April 1972.

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ANNEX 1

AREAS OF CONCERN

A. Purpose

The purpose of this Annex is to contribute to the achievement of the General and Specific Objectives of this Agreement by restoring beneficial uses that have become impaired due to local conditions at Areas of Concern (AOCs), through the development and implementation of Remedial Action Plans (RAPs) for each AOC designated pursuant to this Agreement.

B. Programs and Other Measures

An AOC is a geographic area designated by the Parties where significant impairment of beneficial uses has occurred as a result of human activities at the local level.

The Parties have designated AOCs and may, after consulting with State and Provincial Governments, Tribal Governments, First Nations, Métis, Municipal Governments, watershed management agencies, other local public agencies, the Public, and the Commission as appropriate, designate additional AOCs based on an evaluation of Beneficial Use Impairments (BUIs). A BUI is a reduction in the chemical, physical or biological integrity of the Waters of the Great Lakes sufficient to cause any of the following:

1. restrictions on fish and wildlife consumption;
2. tainting of fish and wildlife flavour;
3. degradation of fish and wildlife populations;
4. fish tumours or other deformities;
5. bird or animal deformities or reproduction problems;
6. degradation of benthos;
7. restrictions on dredging activities;
8. eutrophication or undesirable algae;
9. restrictions on drinking water consumption, or taste and odour problems;
10. beach closings;

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11. degradation of aesthetics;

12. added costs to agriculture or industry;

13. degradation of phytoplankton and zooplankton populations; and

14. loss of fish and wildlife habitat.

For each AOC, the Parties, in cooperation and consultation with State and Provincial Governments, Tribal Governments, First Nations, Métis, Municipal Governments, watershed management agencies, other local public agencies, and the Public, shall develop and implement a systematic and comprehensive ecosystem approach to restoring beneficial use.

The Parties shall cooperate with State and Provincial Governments to ensure that RAPs are developed, periodically updated, and implemented for each AOC. Each plan shall include:

1. identification of BUIs and causes;

2. criteria for the restoration of beneficial uses that take into account local conditions and established in consultation with the local community;

3. remedial measures to be taken, including identification of entities responsible for implementing these measures;

4. a summary of the implementation of remedial measures taken and the status of the beneficial use; and

5. a description of surveillance and monitoring processes to track the effectiveness of remedial measures and confirm restoration of beneficial uses.

A Party shall make RAPs and updated RAPs available to the Commission and the Public.

A Party shall remove a BUI designation when the established criteria have been met.

A Party may elect to identify an AOC as an AOC in Recovery when all remedial actions identified in the RAP have been implemented and monitoring confirms that recovery is progressing in accordance with the RAP. A Party shall monitor and take further action, if required, to restore beneficial uses within an AOC in Recovery.

A Party shall remove the designation of an AOC or AOC in Recovery when environmental monitoring confirms that beneficial uses have been restored in accordance with the criteria established in the RAP.

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A Party shall solicit a review and comments from the State and Provincial Governments, Tribal Governments, First Nations, Métis, Municipal Governments, watershed management agencies, other local public agencies, the Public, and the Commission:

1. prior to the designation of an AOC in Recovery; and

2. prior to the removal of a designation as an AOC or an AOC in Recovery.

C. Reporting

The Parties shall report on progress toward implementation of this Annex every three years through the Progress Report of the Parties, including:

1. a listing of current AOCs;

2. the status of BUIs in each AOC;

3. the actions completed or initiated in each AOC during the reporting period; and

4. the remaining actions required in each AOC for the removal of the designation as an AOC.

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ANNEX 2

LAKEWIDE MANAGEMENT

A. Purpose

The purpose of this Annex is to contribute to the achievement of the General and Specific Objectives of this Agreement by assessing the status of each Great Lake, and by addressing environmental stressors that adversely affect the Waters of the Great Lakes which are best addressed on a lakewide scale through an ecosystem approach.

B. Programs and Other Measures

The Parties, in cooperation and consultation with State and Provincial Governments, Tribal Governments, First Nations, Métis, Municipal Governments, watershed management agencies, other local public agencies, and the Public, shall undertake the following lakewide management actions:

1. establish Lake Ecosystem Objectives as a benchmark against which to assess status and trends in water quality and lake ecosystem health;

2. assemble, assess and report on existing scientific information concerning the state of the waters of each Great Lake including current and future potential threats to water quality;

3. identify research, monitoring and other science priorities for the assessment of current and future potential threats to water quality, and for the identification of priorities to support management actions;

4. conduct surveys, inventories, studies and outreach activities as required to support the above assessments;

5. identify the need for further action by governments and the Public to address priority threats to water quality and the achievement of Lake Ecosystem Objectives;

6. develop and implement lake specific binational strategies to address Substance Objectives, such as nutrient objectives developed pursuant to Annex 4, and any other current and future potential threats to water quality that are judged to be best addressed on a lake by lake basis; and

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7. develop, within three years of entry into force of this Agreement, an integrated nearshore framework to be implemented collaboratively through the lakewide management process for each Great Lake. The nearshore framework shall:

   (a) provide an overall assessment of the state of the nearshore Waters of the Great Lakes;

   (b) identify nearshore areas that are or may become subject to high stress due to individual or cumulative impact on the chemical, physical or biological integrity of those areas;

   (c) identify areas within the nearshore which, due to their nature, are of high ecological value;

   (d) determine factors and cumulative effects that are causing stress or that are threatening areas of high ecological value;

   (e) establish priorities for nearshore prevention, restoration and protection measures based on consideration of nearshore and whole-lake factors;

   (f) identify and engage appropriate agencies and entities that are developing and implementing prevention, restoration and protection strategies;

   (g) include consideration of non-point source runoff, shoreline hardening, climate change impacts, habitat loss, invasive species, dredging and contaminated sediment issues, bacterial contamination, contaminated groundwater, and other factors where they are identified as a source of stress to the nearshore environment;

   (h) take into account the impact on human health and the environment;

   (i) include monitoring of the nearshore to support this framework, which shall be conducted on a frequency to be determined by the Parties, to assess changes in the nearshore over time; and

   (j) be regularly assessed and revised as appropriate.

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C. Lakewide Action and Management Plans

The Parties shall document and coordinate these management actions through the development of Lakewide Action and Management Plans (LAMP) for each Great Lake as follows:

- Lake Superior;
- Lake Huron, and the St. Marys River;
- Lake Erie, and the St. Clair River, Lake St. Clair, and the Detroit River;
- Lake Ontario, and the Niagara River and the St. Lawrence River to the international boundary; and
- Lake Michigan, for which the Government of the United States shall have sole responsibility.

The Parties shall issue a LAMP for each Great Lake every five years. When the LAMP is issued, the Parties shall provide a copy to the Commission for advice and recommendations.

The Parties shall provide brief annual updates to the Public on each LAMP.

D. Reporting

The Parties shall report on progress toward implementation of this Annex every three years through the Progress Report of the Parties.

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ANNEX 3

CHEMICALS OF MUTUAL CONCERN

A. Purpose

The purpose of this Annex is to contribute to the achievement of the General and Specific Objectives of this Agreement by protecting human health and the environment through cooperative and coordinated measures to reduce the anthropogenic release of chemicals of mutual concern into the Waters of the Great Lakes, recognizing:

1. that chemicals of mutual concern released into the air, water, land, sediment, and biota should not result in impairment to the quality of the Waters of the Great Lakes;

2. the need to manage chemicals of mutual concern including, as appropriate, by implementing measures to achieve virtual elimination and zero discharge of these chemicals;

3. the importance of a life-cycle management approach to minimize risks and environmental impacts of chemicals of mutual concern and products containing chemicals of mutual concern;

4. that the Public can contribute to achieving reductions of the environmental impact of chemicals of mutual concern and products containing chemicals of mutual concern by using safer and less harmful chemicals and adopting technologies that reduce or eliminate the uses and releases of chemicals of mutual concern;

5. the susceptibility of the Great Lakes Basin Ecosystem to the negative impact of chemicals of mutual concern, due to the economic activity level and population density in the region, as well as the unique characteristics of the ecosystem;

6. that knowledge and information concerning the use, creation and release of chemicals of mutual concern, and combinations thereof, are fundamental to the sound management of chemicals in the Great Lakes Basin Ecosystem;

7. that climate change may affect the use, release, transport, and fate of chemicals of mutual concern in the Great Lakes Basin Ecosystem, thereby contributing to impacts on human health and the environment;

8. that chemicals of mutual concern may be managed at the federal, state, provincial, tribal, and local levels through a combination of regulatory and non-regulatory programs; and

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9. that international efforts may contribute to reductions of releases of chemicals of mutual concern from out-of-basin sources that are deposited within the Great Lakes Basin Ecosystem.

B. Programs and Other Measures

The Parties shall identify chemicals of mutual concern that originate from anthropogenic sources. The Parties shall mutually determine those chemicals that are potentially harmful to human health or the environment by:

1. establishing and implementing a process by which the Great Lakes Executive Committee may recommend chemicals of mutual concern to the Parties. The recommendation shall include a review of available scientific information supporting the recommendation; and

2. considering recommendations of the Great Lakes Executive Committee and jointly designate chemicals as chemicals of mutual concern for the purposes of this Agreement.

The Parties, in cooperation and consultation with State and Provincial Governments, Tribal Governments, First Nations, Métis, Municipal Governments, watershed management agencies, other local public agencies, and the Public, shall target these chemicals of mutual concern for action by:

1. preparing binational strategies for chemicals of mutual concern, which may include research, monitoring, surveillance and pollution prevention and control provisions;

2. coordinating the development and application of domestic water quality standards, objectives, criteria, and guidelines among the Parties and other governmental entities, subject to relevant domestic law and regulation, by:

   (a) maintaining, periodically reviewing, and making publicly available current water quality-standards, objectives, criteria and guidelines for chemicals of mutual concern;

   (b) aligning, where appropriate, domestic water quality standards, objectives, criteria and guidelines applicable to chemicals of mutual concern;

   (c) developing, where warranted, new domestic water quality standards, objectives, criteria and guidelines for chemicals of mutual concern; and

   (d) reviewing and addressing any exceedences of or non-compliance with domestic water quality standards, objectives, criteria, and guidelines for chemicals of mutual concern;

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3. reducing the anthropogenic release of chemicals of mutual concern and products containing chemicals of mutual concern throughout their entire life-cycles;

4. promoting the use of safer chemical substances and the use of technologies that reduce or eliminate the use and release of chemicals of mutual concern;

5. continuing progress toward the sound management of chemicals of mutual concern using approaches that are accountable, adaptive, and science-based;

6. monitoring and evaluating the progress and effectiveness of pollution prevention and control measures for chemicals of mutual concern, and adapting management approaches as necessary; and

7. exchanging, on a regular basis, information on monitoring, surveillance, research, technology, and measures for managing chemicals of mutual concern.

C. Science

The Parties, in cooperation and consultation with State and Provincial Governments, Tribal Governments, First Nations, Métis, Municipal Governments, watershed management agencies, other local public agencies, and the Public, shall coordinate on science priorities, research, surveillance and monitoring activities, as appropriate, including:

1. identifying and assessing the occurrence, sources, transport and impact of chemicals of mutual concern, including spatial and temporal trends in the atmosphere, in aquatic biota, wildlife, water, and sediments;

2. identifying and assessing loadings of chemicals of mutual concern into the Waters of the Great Lakes from all sources including point sources, non-point sources, tributaries, and the atmosphere;

3. evaluating the effects of chemicals of mutual concern, and combinations thereof, on human health and the ecosystem, including the development and use of reproductive, physiological and biochemical measures in wildlife, fish and humans as health effect indicators;

4. maintaining biological and sediment banks to support retrospective analysis and to establish background levels for use in assessing future management actions;

5. coordinating research, monitoring, and surveillance activities as a means to provide early warning for chemicals that could become chemicals of mutual concern;

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6. reviewing and prioritizing research, monitoring, and surveillance needs on an annual basis, taking into account progress made in implementing this Agreement, new developments in science, and other factors; and

7. exploring research, monitoring, and surveillance opportunities related to management at source and treatment technologies under the respective jurisdictional authorities to address chemicals of mutual concern in wastewater effluent and residuals.

D. Reporting

The Parties shall report on progress toward implementation of this Annex every three years through the Progress Report of the Parties. The report shall include:

1. an identification of chemicals of mutual concern; and

2. the status of initiatives to develop binational strategies to address issues involving chemicals of mutual concern and the status of implementing binational strategies for chemicals of mutual concern.

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ANNEX 4

NUTRIENTS

A. Purpose

The purpose of this Annex is to contribute to the achievement of the General and Specific Objectives of this Agreement by coordinating binational actions to manage phosphorus concentrations and loadings, and other nutrients if warranted, in the Waters of the Great Lakes.

B. Lake Ecosystem Objectives

To achieve the purpose of this Annex and pursuant to Article 3(1)(b)(i), the Parties hereby adopt Lake Ecosystem Objectives related to nutrients, including:

1. minimize the extent of hypoxic zones in the Waters of the Great Lakes associated with excessive phosphorus loading, with particular emphasis on Lake Erie;

2. maintain the levels of algal biomass below the level constituting a nuisance condition;

3. maintain algal species consistent with healthy aquatic ecosystems in the nearshore Waters of the Great Lakes;

4. maintain cyanobacteria biomass at levels that do not produce concentrations of toxins that pose a threat to human or ecosystem health in the Waters of the Great Lakes;

5. maintain an oligotrophic state, relative algal biomass, and algal species consistent with healthy aquatic ecosystems, in the open waters of Lakes Superior, Michigan, Huron and Ontario; and

6. maintain mesotrophic conditions in the open waters of the western and central basins of Lake Erie, and oligotrophic conditions in the eastern basin of Lake Erie.

C. Substance Objectives

To achieve Lake Ecosystem Objectives, the Parties deem it essential to establish Substance Objectives, in accordance with Article 3(1)(b)(ii), for phosphorus concentrations for the open waters and nearshore areas of each Great Lake. To achieve these Substance Objectives for phosphorus concentrations, the Parties shall develop phosphorus loading targets and allocations for each Party for each Great Lake, as required.

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The Parties shall retain the following Substance Objectives on an interim basis for phosphorus concentration in the open Waters of the Great Lakes until updated:

Interim Substance Objectives
for Total Phosphorus Concentration
in Open Waters (ug/l)
(as represented by Spring means)

Lake Superior	5
Lake Huron	5
Lake Michigan	7
Lake Erie (western basin)	15
Lake Erie (central basin)	10
Lake Erie (eastern basin)	10
Lake Ontario	10

To help achieve these Substance Objectives, the Parties shall use the following phosphorus loading targets for the Waters of the Great Lakes on an interim basis until the loading targets are updated:

Interim Phosphorus
Load Targets
(Metric Tonnes Total P Per Year)

Lake Superior	3400
Lake Michigan	5600
Main Lake Huron	2800
Georgian Bay	600
North Channel	520
Saginaw Bay	440
Lake Erie	11000
Lake Ontario	7000

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The Parties, in cooperation and consultation with State and Provincial Governments, Tribal Governments, First Nations, Métis, Municipal Governments, watershed management agencies, other local public agencies, and the Public, shall:

1. for the open Waters of the Great Lakes:

    (a) review the interim Substance Objectives for phosphorus concentrations for each Great Lake to assess adequacy for the purpose of meeting Lake Ecosystem Objectives, and revise as necessary;

    (b) review and update the phosphorus loading targets for each Great Lake; and

    (c) determine appropriate phosphorus loading allocations, apportioned by country, necessary to achieve Substance Objectives for phosphorus concentrations for each Great Lake;

2. for the nearshore Waters of the Great Lakes:

    (a) develop Substance Objectives for phosphorous concentrations for nearshore waters, including embayments and tributary discharge for each Great Lake; and

    (b) establish load reduction targets for priority watersheds that have a significant localized impact on the Waters of the Great Lakes.

In establishing Substance Objectives for phosphorus concentrations and phosphorus loading targets, the Parties shall take into account the bioavailability of various forms of phosphorus, related productivity, seasonality, fisheries productivity requirements, climate change, invasive species, and other factors, such as downstream impacts, as necessary.

The Parties shall complete this work for Lake Erie within three years of entry into force of this Agreement and complete this work for the other Great Lakes on a schedule to be determined by the Parties.

The Parties shall periodically review the Substance Objectives for phosphorus concentrations, phosphorus loading targets, and phosphorus loading allocations, apportioned by country to ensure that Lake Ecosystem Objectives are met.

The Parties shall establish Substance Objectives, loading targets and loading allocations for other nutrients apportioned by country, as required, to control the growth of nuisance and toxic algae to achieve Lake Ecosystem Objectives.

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D. Programs and Other Measures

The Parties, in cooperation and consultation with State and Provincial Governments, Tribal Governments, First Nations, Métis, Municipal Governments, watershed management agencies, other local public agencies, and the Public, shall develop and implement the following programs and other measures to achieve the Lake Ecosystem and Substance Objectives for phosphorus concentrations, loading targets, and loading allocations apportioned by country, established pursuant to this Annex:

1. the Parties shall assess and, where necessary, develop and implement regulatory and non-regulatory programs to reduce phosphorus loading from urban sources including:

    (a) programs to prevent further degradation of the Waters of the Great Lakes from wastewater treatment plants located in the Great Lakes basin;

    (b) programs to optimize existing wastewater treatment facilities;

    (c) programs to ensure that construction and operation of municipal wastewater treatment facilities that discharge one million liquid gallons or more per day achieve a maximum effluent concentration of 1.0 milligram per litre total phosphorus for plants in the basins of Lakes Superior, Michigan, and Huron, and of 0.5 milligram per litre total phosphorus for plants in the basins of Lakes Ontario and Erie;

    (d) more stringent restrictions on phosphorus discharges from wastewater treatments plants may be considered as action plans are developed and implemented; and

    (e) new approaches and technologies for the reduction of phosphorus from wastewater, storm water discharge, and other urban sources;

2. the Parties shall develop and implement regulatory and non-regulatory programs to reduce phosphorus loading from industrial discharges, and continue to develop and implement new technologies, as necessary;

3. the Parties shall assess and, where necessary, develop and implement regulatory and non-regulatory programs to reduce phosphorus loading from agricultural and rural non-farm point and non-point sources including:

    (a) programs to assess the effectiveness of current phosphorus management options including best management practices; and

    (b) programs to support the ongoing development and implementation of new approaches and technologies for the reduction of phosphorus from agricultural and rural non-farm sources;

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4. the Parties shall take appropriate measures to reduce phosphorus in household laundry and dishwashing detergents and household cleaners to 0.5 percent by weight, where necessary to meet the Substance Objectives for phosphorus concentrations, loading targets, and loading allocations apportioned by country to be developed pursuant to this Annex;

5. the Parties shall evaluate programs and practices to manage phosphorus inputs;

6. the Parties shall develop for Lake Erie, within five years of entry into force of this Agreement and for other Great Lakes as required, phosphorus reduction strategies and domestic action plans to meet Substance Objectives for phosphorus concentrations, loading targets, and loading allocations apportioned by country, developed pursuant to this Annex. These strategies and action plans shall include:

   (a) assessment of environmental conditions;

   (b) identification of priorities for binational research and monitoring; and

   (c) identification of priorities for implementation of measures to manage phosphorous loading to the Waters of the Great Lakes;

7. the Parties shall identify watersheds that are a priority for nutrient control, and shall develop and implement management plans, including phosphorus load reduction targets and controls, for these watersheds, as appropriate.

E. Science

The Parties, in cooperation and consultation with State and Provincial Governments, Tribal Governments, First Nations, Métis, Municipal Governments, watershed management agencies, other local public agencies, and the Public, shall undertake the necessary research, monitoring and modeling to establish, report and assess Substance Objectives for phosphorus concentrations, loading targets, and loading allocations apportioned by country for the management of phosphorus and other nutrients, as required, and to further the understanding of issues such as:

1. nutrient distribution and movement within the Great Lakes;

2. the causes of toxic algal blooms and nuisance algal blooms;

3. phosphorus sources and forms;

4. nutrient conditions and biological responses in the Great Lakes;

5. adverse effects from excessive inputs of phosphorus;

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6. the influence of climate change on nutrient inputs to the Waters of the Great Lakes and the formation of algae and other emerging issues related to nutrients;

7. non-point source phosphorus control methods;

8. the use of objectives and targets based on soluble reactive phosphorus (or bioavailable phosphorus), or use of surrogate measures; and

9. improved technologies and management practices.

The Parties shall do the following to maximize the effectiveness of the scientific activities referred to in this Annex:

1. establish and regularly review and revise binational priorities for nutrient science; and

2. collect and share binational monitoring data and other scientific information related to nutrients in the Waters of the Great Lakes.

F. Reporting

The Parties shall report on progress toward implementation of this Annex every three years through the Progress Report of the Parties. This report shall document:

1. Lake Ecosystem Objectives and Substance Objectives;

2. implementation of the binational strategies and domestic action plans;

3. changes in phosphorus loading and concentrations; and

4. progress toward achievement of the Substance Objectives for phosphorus concentrations, loading targets and loading allocations apportioned by country, established under to this Annex.

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ANNEX 5

DISCHARGES FROM VESSELS

A. Purpose

The purpose of this Annex is to contribute to the achievement of the General and Specific Objectives of this Agreement by preventing and controlling vessel discharges that are harmful to the quality of the Waters of the Great Lakes, through the adoption and implementation of regulations, programs, and other measures that facilitate coordinated and cooperative implementation and enforcement, where appropriate.

B. Programs and Other Measures

The Parties' responsibility for implementation of this Annex is expected to rest principally with Transport Canada, Fisheries and Oceans Canada, the Canadian Coast Guard, the United States Coast Guard, and the United States Environmental Protection Agency and other agencies, as appropriate. These responsible authorities shall meet annually to consider issues of this Annex.

The Parties, in cooperation and consultation with State and Provincial Governments, Tribal Governments, First Nations, Métis, Municipal Governments, watershed management agencies, other local public agencies, and the Public, shall adopt programs and measures that:

1. protect the quality of the Waters of the Great Lakes;

2. apply environmental requirements and practices that are protective of the environment and human health, provided that the Parties shall implement this Agreement with due regard for securing the safety of a ship and the passengers and crew, and for saving life on the Waters of the Great Lakes;

3. take into account relevant standards and guidance issued under the auspices of the International Maritime Organization (IMO);

4. implement their respective domestic laws and regulations for vessel discharge, taking into account best-available science; and

5. prohibit, and make subject to penalties, as appropriate, discharges from vessels that are harmful to the quality of the Waters of the Great Lakes.

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Discharges

The Parties shall address discharges to the Waters of the Great Lakes as follows:

1. prevention of pollution from Oil and Hazardous Polluting Substances:

   (a) the discharge of a Harmful Quantity of Oil or Hazardous Polluting Substance, including any such quantities as may be contained in Ballast Water, shall be prohibited;

   (b) as soon as any person in charge has knowledge of any discharge or probable discharge of Harmful Quantities of Oil or Hazardous Polluting Substances, notice of such discharge shall be given to the appropriate agency in the jurisdiction where the discharge occurs; and

   (c) the programs and measures to be adopted for the prevention of discharges of Harmful Quantities of Oil and Hazardous Polluting Substances shall include:

      (i) regulations for design, construction, and operation of vessels guided by standards and guidelines developed by the IMO, including the following requirements:

         (A) that each Vessel shall have a suitable means of containing on board cargo spills of Oil and Hazardous Polluting Substances caused by loading or unloading operations;

         (B) that each Vessel shall have a suitable means of containing on board fuel Oils spills caused by loading or unloading operations, including those from tank vents and overflow pipes;

         (C) that each Vessel shall have the capability of retaining on board oily and other wastes accumulated during vessel operation;

         (D) that each Vessel shall be capable of off-loading retained oily wastes and wastes containing Hazardous Polluting Substances to a reception facility;

         (E) that each Vessel shall be provided with a means for rapidly and safely stopping the flow of cargo fuel Oil, or waste material during loading, unloading or bunkering operations in the event of an emergency;

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(F) that each Vessel shall be provided with suitable lighting to adequately illuminate all cargo and fuel Oil handling areas if the loading, unloading or bunkering operations occur at night;

(G) that hose assemblies used on board vessels for Oil loading, unloading, or bunkering shall be suitably designed, identified, and inspected to minimize the possibility of failure; and

(H) that Oil loading, unloading, and bunkering systems shall be suitably designed, identified, and inspected to minimize the possibility of failure;

(ii) identification of vessels carrying cargoes of Hazardous Polluting Substances in bulk, containers, and package form, and of all such cargoes;

(iii) identification in vessel manifests of all Hazardous Polluting Substances;

(iv) carriage and stowage arrangements of all Hazardous Polluting Substances in packaged form using as a guide the *International Maritime Dangerous Goods Code*; and

(v) programs to ensure that merchant Vessel personnel are trained in all functions involving the use, handling, and stowage of Oil and Hazardous Polluting Substances; the abatement of pollution from Oil and Hazardous Polluting Substances; and the hazards associated with the handling of Oil and such substances;

2. Garbage:

(a) the discharge of garbage, except for cargo residue, shall be prohibited; and

(b) taking into account guidance issued by the IMO, the Parties may establish regulations that require reasonable measures to minimize the discharges of cargo residues;

3. Wastewater and Sewage:

(a) the discharge of wastewater in Harmful Quantities shall be prohibited;

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(b) the Parties shall:

(i) control the discharge of sewage from vessels that may affect the quality of the Waters of the Great Lakes; and

(ii) develop and implement regulations to require that every vessel operating on the Great Lakes that is provided with toilet facilities shall be equipped with an approved device or devices to contain, incinerate, or treat sewage to an adequate degree; and

(c) critical use areas in the Great Lakes basin may be designated where the discharge of wastewater or sewage shall be limited or prohibited;

4. Biofouling:

The Parties shall undertake appropriate measures to prevent the release of Aquatic Invasive Species, and pathogens, as a result of biofouling, taking into account guidelines on biofouling developed by the IMO;

5. Antifouling Systems:

The Parties shall undertake appropriate measures to prevent harm in the Great Lakes basin from antifouling systems, considering standards and guidelines developed by the IMO;

6. Ballast Water:

(a) the Parties shall establish and implement programs and measures that protect the Great Lakes Basin Ecosystem from the discharge of Aquatic Invasive Species in Ballast Water, taking into account Annex 6 of this Agreement and, as appropriate, the standards set forth in the *International Convention for the Control and Management of Ship's Ballast Water and Sediments, 2004*, and associated guidance; and

(b) the Parties shall undertake scientific and economic analysis, when appropriate, on the following:

(i) risks posed by the discharge of Ballast Water from Vessels;

(ii) Ballast Water management systems in light of the unique characteristics (such as salinity and temperature) of the Great Lakes Basin Ecosystem; and

(iii) alternative technologies and approaches to protect the Great Lakes Basin Ecosystem from Aquatic Invasive Species in Ballast Water discharge.

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Reception facilities

The Parties shall, as appropriate, ensure that adequate facilities are provided to receive, treat and dispose of vessel wastes such as Oil and Hazardous Polluting Substances, Garbage, Wastewater, and Sewage, and Ballast Water.

Review of discharges from Vessels

The Parties shall review services, systems, programs, recommendations, standards and regulations relating to shipping activities for the purpose of maintaining or improving the quality of the Waters of the Great Lakes. The review shall include, without limitation:

1. review of vessel equipment, manning, and navigation practices or procedures, and of aids to navigation and vessel traffic management, for the purpose of precluding casualties that may be deleterious to water quality;

2. review of any practices and procedures, shipboard technologies, research and development, effects on water quality, and possible preventative measures that would minimize deleterious effects on water quality for the following discharges:

   (a) Oil and Hazardous Polluting Substances;

   (b) Garbage;

   (c) Wastewater and Sewage;

   (d) Biofouling;

   (e) Antifouling Systems; and

   (f) Ballast Water;

3. review of the number, sufficiency and effectiveness of reception facilities provided for treatment, and subsequent disposal of garbage, sewage, or oil and Hazardous Polluting Substances from vessels; and

4. the Parties shall revise or adopt additional programs and measures, as appropriate, to address findings of the reviews.

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C. Reporting

The Parties shall report on progress toward implementation of this Annex every three years through the Progress Report of the Parties.

The Parties, through their responsible authorities, may provide additional detailed reports to the International Joint Commission about the progress made under this Annex, prior to the International Joint Commission's Triennial Meeting on Great Lakes water quality. The Parties will make these reports available to the Public.

D. Definitions

In this Annex:

1. "Antifouling System" means a coating, paint, surface treatment, surface or device that is used on a vessel to control or prevent attachment of unwanted organisms;

2. "Ballast Water" means water with its suspended matter taken on board a vessel to control trim, list, draught, stability or stresses of the ship;

3. "Biofouling" means the accumulation of aquatic organisms such as micro-organisms, plants and animals on surfaces and structures immersed in or exposed to the aquatic environment;

4. "Discharge" includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting or dumping; it does not include unavoidable direct discharges of Oil from a properly functioning vessel engine;

5. "Garbage" means all kinds of food waste, domestic waste and operational waste, all plastics, cargo residues, cooking oil, fishing gear, and animal carcasses generated during the normal operation of the Vessel and liable to be disposed of continuously or periodically;

6. "Harmful Quantity" means any quantity of a substance that if discharged into receiving water would be inconsistent with the achievement of the General or Specific Objectives of this Agreement;

7. "Harmful Quantity of Oil" means any quantity of Oil that, if discharged from a Vessel that is stationary into clear calm water on a clear day, would produce a film or a sheen upon, or discoloration of, the surface of the water or adjoining shoreline, or that would cause a sludge or emission to be deposited beneath the surface of the water or upon the adjoining shoreline;

8. "Hazardous Polluting Substance" means, subject to Canadian or United States national laws or regulations, any substance which, if introduced into marine

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or fresh waters is liable to create hazards to human health, to harm living resources and marine life, to damage amenities or to interfere with other legitimate uses of the waters, and includes but is not limited to substances subject to control by the *International Convention for the Prevention of Pollution from Ships, 1973* as amended by the Protocol of 1978, and those substances subject to control by the *International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea*, *1996,* when the latter comes into effect, the *Canada Shipping Act, 2001*, the *Federal Water Pollution Control Act* of 1972, as amended, the *Comprehensive Environmental Response, Compensation, and Liability Act* (CERCLA), as amended, and the *Oil Pollution Act* (OPA) of 1990, as amended, but excluding Ballast Water, Oil, Garbage, and Sewage;

9. "Oil" means Oil of any kind or in any form, including, but not limited to, petroleum, fuel Oil, Oil sludge, Oil refuse, Oil mixed with ballast or bilge water and Oil mixed with waste other than dredged material;

10. "Sewage" means human or animal waste generated on board ship and includes wastes from water closets, toilets, urinals, hospital facilities, or any receptacles intended to receive or retain human or animal waste;

11. "Vessel" means any ship, barge, or other floating craft, whether or not self-propelled, used or capable of being used for marine transportation or navigation; and

12. "Wastewater" means water in combination with other substances, including water used for washing cargo holds, but excluding Ballast Water and water in combination with Oil, Hazardous Polluting Substances or Sewage.

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ANNEX 6

AQUATIC INVASIVE SPECIES

A. Purpose

The purpose of this Annex is to contribute to the achievement of the General and Specific Objectives of this Agreement. Through this Annex the Parties shall establish a binational strategy to prevent the introduction of Aquatic Invasive Species (AIS), to control or reduce the spread of existing AIS, and to eradicate, where feasible, existing AIS within the Great Lakes Basin Ecosystem.

B. Programs and Other Measures

The Parties shall develop and implement programs and other measures to eliminate new introductions of AIS through a binational prevention-based approach, informed by risk assessments. This approach takes into account that new species may pose a risk to the Great Lakes, even in the absence of scientific certainty.

The Parties, subject to their respective laws and regulations, and in cooperation and consultation with State and Provincial Governments, Tribal Governments, First Nations, Métis, Municipal Governments, watershed management agencies, other local public agencies, and the Public, shall:

1. implement ballast water discharge programs that are protective of the Great Lakes Basin Ecosystem, as provided for in Annex 5, Discharges from Vessels;

2. implement programs to prevent the introduction and spread of AIS by:

   (a) conducting proactive, binationally coordinated Risk Assessments on various Pathways such as:

      (i) the trade and importation of live organisms for various uses including, but not limited to, aquariums and gardens, bait fish, live fish food markets, and biological supply houses;

      (ii) recreation and other resource use including, but not limited to, boating and personal watercraft use, fishing, hunting, diving, and float plane aviation;

      (iii) connecting waterways, including intermittent waterways; and

      (iv) other Pathways and Vectors, as appropriate;

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(b) developing regulations or management strategies informed by these Risk Assessments;

(c) coordinating the implementation of management strategies as appropriate;

(d) undertaking education and outreach efforts;

(e) establishing effective barriers that prevent the spread of AIS while allowing the movement of other ecosystem components (such as water and native species), as informed by Risk Assessments and where economically feasible; and

(f) ensuring that any inter-basin transfer of water includes the appropriate consideration of the potential to introduce AIS;

3. within two years of entry into force of this Agreement, develop and implement an early detection and rapid response initiative that:

(a) develops species watch lists;

(b) identifies priority locations for surveillance;

(c) develops monitoring protocols for surveillance;

(d) establishes protocols for sharing information;

(e) identifies new AIS; and

(f) coordinates effective and timely domestic and, when necessary, binational response actions to prevent the establishment of newly detected AIS.

C. Science

The Parties, in cooperation and consultation with State and Provincial Governments, Tribal Governments, First Nations, Métis, Municipal Governments, watershed management agencies, other local public agencies, and the Public, shall undertake the following:

1. ecological assessments of the effectiveness of AIS prevention programs;

2. development and evaluation of technology and methods that increase the effectiveness of control and eradication efforts;

3. development and evaluation of technology and methods that improve the ability to achieve effective barriers that prevent the spread of AIS while allowing the movement of other ecosystem components through canals and waterways;

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4. development and evaluation of technology and methods, including genetic techniques, that improve the ability to detect potential AIS at low levels of abundance;

5. determination of potential AIS habitat requirements and additional factors that would affect the establishment and spread of AIS;

6. assessment of the ecosystem impacts of both established and high-risk AIS in order to inform management regarding decisions for rapid response and control programs;

7. assessment of the potential impact of climate change on the introduction, survival, establishment, and spread of AIS; and

8. Risk Assessments of species, Pathways and Vectors as determined to be appropriate by the Parties.

D. Reporting

The Parties shall report on progress toward implementation of this Annex every three years through the Progress Report of the Parties.

E. Definitions

In this Annex:

1. "Aquatic Invasive Species" (AIS) means any non-indigenous species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that threatens or may threaten the diversity or abundance of aquatic native species, or the ecological stability, and thus water quality, or water quality of infested waters, or commercial, recreational, or other activities dependent on such waters;

2. "Pathways" means the broad corridors or routes by which AIS are transferred from one geographic area to another (such as transoceanic shipping);

3. "Risk Assessment" means a method of identifying threats and vulnerabilities by assessing the likelihood of introduction, survival, establishment, and spread of AIS, and by assessing the magnitude of any associated impacts; and

4. "Vectors" means the sub-corridors or routes within Pathways that are the physical means by which AIS are transported from one geographic area to another (such as Ballast Water).

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ANNEX 7

HABITAT AND SPECIES

A. Purpose

The purpose of this Annex is to contribute to the achievement of the General and Specific Objectives of this Agreement by conserving, protecting, maintaining, restoring and enhancing the resilience of native species and their habitat, as well as by supporting essential ecosystem services.

B. Programs and Other Measures

The Parties, subject to their respective laws and regulations, and in cooperation and consultation with State and Provincial Governments, Tribal Governments, First Nations, Métis, Municipal Governments, watershed management agencies, other local public agencies, and the Public, shall:

1. conduct a baseline survey of the existing habitat against which to establish a Great Lakes Basin Ecosystem target of net habitat gain and measure future progress;

2. within two years of entry into force of this Agreement, complete the development and begin implementation of lakewide habitat and species protection and restoration conservation strategies that use adaptive management approaches, identify conservation mechanisms, and address the most significant stressors to native species and habitat;

3. assess gaps in current binational and domestic programs and initiatives to conserve, protect, maintain, restore and enhance native species and habitat as a first step toward the development of a binational framework for prioritizing activities;

4. facilitate binational collaborative actions to reduce the loss of native species and habitat, recover populations of native species at risk, and restore degraded habitat;

5. renew and strengthen binational collaborative actions to conserve, protect, maintain, restore and enhance native species and habitat by identifying protected areas, conservation easements and other conservation mechanisms to recover populations of species at risk and to achieve the target of net habitat gain; and

6. increase awareness of native species and habitat and the methods to protect, conserve, maintain, restore and enhance their resilience.

These programs and other measures will also contribute to recovery of populations of species at risk, restoration of degraded native habitat and species, and a net gain in habitat.

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The Lakewide Action and Management Plans will be the principal mechanisms for coordinating development and implementation of the lakewide habitat and species protection and restoration conservation strategies under this Annex.

C. Science

The Parties, in cooperation and consultation with State and Provincial Governments, Tribal Governments, First Nations, Métis, Municipal Governments, watershed management agencies, other local public agencies, and the Public, shall conduct research and monitoring, as needed, to implement prevention measures that consider the climate change impacts and other stressors and improve the resilience of native species and habitat.

D. Reporting

The Parties shall report on progress toward implementation of this Annex every three years through the Progress Report of the Parties.

E. Definition

In this Annex:

"Ecosystem Services" means the benefits people obtain from ecosystems such as: energy, food and water, biomedicines, flood prevention, biodiversity, climate regulation, erosion control, pest and pathogen control, soil formation, nutrient cycling, recreation, heritage, spiritual or personal fulfillment and other non-material benefits.

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ANNEX 8

GROUNDWATER

A. Purpose

The purpose of this Annex is to contribute to the achievement of the General and Specific Objectives of this Agreement by coordinating groundwater science and management actions.

B. Programs and Other Measures

The Parties, in cooperation and consultation with State and Provincial Governments, Tribal Governments, First Nations, Métis, Municipal Governments, watershed management agencies, other local public agencies, and the Public, shall:

1. within two years of entry into force of this Agreement, publish an initial report on the relevant and available groundwater science, and update this report at least once every six years;

2. identify priorities for science activities and actions for groundwater management, protection, and remediation, to achieve the General and Specific Objectives of this Agreement; and

3. coordinate binational activities under this Annex, together with domestic programs, to assess, protect, and manage the quality of groundwater, and to understand and manage groundwater-related stresses affecting the Waters of the Great Lakes.

C. Science

Recognizing the interconnection between groundwater and the Waters of the Great Lakes, the Parties, in cooperation and consultation with State and Provincial Governments, Tribal Governments, First Nations, Métis, Municipal Governments, watershed management agencies, other local public agencies, and the Public, shall:

1. identify groundwater impacts on the chemical, physical and biological integrity of the Waters of the Great Lakes;

2. analyze contaminants, including nutrients in groundwater, derived from both point and non-point sources impacting the Waters of the Great Lakes;

3. assess information gaps and science needs related to groundwater to protect the quality of the Waters of the Great Lakes; and

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4. analyze other factors, such as climate change, that individually or cumulatively affect groundwater's impact on the quality of the Waters of the Great Lakes.

D. Reporting

The Parties shall report on progress toward implementation of this Annex every three years through the Progress Report of the Parties.

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ANNEX 9

CLIMATE CHANGE IMPACTS

A. Purpose

The purpose of this Annex is to contribute to the achievement of the General and Specific Objectives of this Agreement by coordinating efforts to identify, quantify, understand, and predict the climate change impacts on the quality of the Waters of the Great Lakes, and sharing information that Great Lakes resource managers need to proactively address these impacts.

B. Programs and Other Measures

The Parties shall take into account the climate change impacts on the chemical, physical and biological integrity of the Waters of the Great Lakes and shall consider such climate change impacts in the implementation of this Agreement.

The Parties, in cooperation and consultation with State and Provincial Governments, Tribal Governments, First Nations, Métis, Municipal Governments, watershed management agencies, other local public agencies, and the Public, shall use their domestic programs to address climate change impacts to achieve the objectives of this Agreement.

The Parties shall communicate and coordinate binationally regarding ongoing developments of domestic science, strategies and actions to build capacity to address the climate change impacts on the Great Lakes Basin Ecosystem.

Recognizing that climate change has an impact on Great Lakes water quality and water quantity, the Parties shall ensure that their actions taken pursuant to this Annex are coordinated, as appropriate, with the water quantity management actions taken by or in conjunction with the International Joint Commission.

C. Science

To identify and quantify the climate change impacts on the quality of the Waters the Great Lakes, the Parties, in cooperation and consultation with State and Provincial Governments, Tribal Governments, First Nations, Métis, Municipal Governments, watershed management agencies, other local public agencies, and the Public, shall:

1. develop and improve regional scale climate models to predict climate change in the Great Lakes Basin Ecosystem at appropriate temporal and spatial scales;

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2. link the projected climate change outputs from the regional models to chemical, physical, biological models that are specific to the Great Lakes to better understand and predict the climate change impacts on the quality of the Waters of the Great Lakes;

3. enhance monitoring of relevant climate and Great Lakes variables to validate model predictions and to understand current climate change impacts;

4. develop and improve analytical tools to understand and predict the impacts, and risks to, and the vulnerabilities of, the quality of the Waters of the Great Lakes from anticipated climate change impacts; and

5. coordinate binational climate change science activities (including monitoring, modeling and analysis) to quantify, understand, and share information that Great Lakes resource managers need to address climate change impacts on the quality of the Waters of the Great Lakes and to achieve the objectives of this Agreement.

D. Reporting

The Parties shall report on progress toward implementation of this Annex every three years through the Progress Report of the Parties.

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ANNEX 10

SCIENCE

A. Purpose

The purpose of this Annex is to contribute to the achievement of the General and Specific Objectives of this Agreement by enhancing the coordination, integration, synthesis, and assessment of science activities. Science, including monitoring, surveillance, observation, research, and modeling, may be supplemented by other bodies of knowledge, such as traditional ecological knowledge.

B. Programs and Other Measures

The Parties, in cooperation and consultation with State and Provincial Governments, Tribal Governments, First Nations, Métis, Municipal Governments, watershed management agencies, other local public agencies, and the Public, shall:

1. use adaptive management as a framework for organizing science to provide and monitor the effect of science-based management options;

2. undertake monitoring and surveillance to anticipate the need for further science activities and to address emerging environmental concerns; and

3. facilitate information management and sharing to improve knowledge, accessibility and exchange of relevant Great Lakes information.

C. Science Review, Priority-Setting and Coordination

The Parties, in cooperation and consultation with State and Provincial Governments, Tribal Governments, First Nations, Métis, Municipal Governments, watershed management agencies, other local public agencies, and the Public, shall:

1. undertake a review of available scientific information to inform management actions and policy development. Priority issues to be addressed through this review of available scientific information shall be established on a three-year basis by the Parties in consultation with the Great Lakes Executive Committee, considering advice developed by the Commission in consultation with the Great Lakes Science Advisory Board;

2. identify science priorities, taking into account recommendations of the Commission;

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3. use their best efforts to ensure that agencies that fund scientific activities orient their research programs in response to research priorities identified by the Parties; and

4. coordinate scientific efforts in support of the restoration and protection of the chemical, physical, and biological integrity of the Waters of the Great Lakes to facilitate and evaluate achievement of the General and Specific Objectives of this Agreement.

D. Ecosystem Indicators

The Parties shall establish and maintain comprehensive, science-based ecosystem indicators to assess the state of the Great Lakes, to anticipate emerging threats and to measure progress in relation to achievement of the General and Specific Objectives of this Agreement. The indicators shall be periodically reviewed and updated as necessary.

E. Lake-Specific Science and Monitoring

In addition to ongoing science and monitoring activities that are routinely carried out by the Parties and other government and non-government entities, the Parties shall implement a cooperative science and monitoring initiative for each of the Great Lakes on a five-year rotational basis. The Parties shall focus monitoring activities on the science priorities identified through the Lakewide Management Process. The Parties will coordinate these activities across government and non-government organizations.

F. Reporting

The Parties shall report on progress toward implementation of this Annex every three years through the Progress Report of the Parties.

The Parties shall also issue, every three years, a State of the Great Lakes Report to the Commission and the Public, describing basin-wide environmental trends and lake-specific conditions using ecosystem indicators established by the Parties.

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www.**epa.gov**

Additional information can be obtained at:

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Great Lakes National Program Office
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77 West Jackson Boulevard
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Fax: 1-312-886-6869
Toll Free: 800-621-8431

www.**ec.gc.ca**

Additional information can be obtained at:

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10 Wellington Street, 23rd Floor
Gatineau QC K1A 0H3
Telephone: 1-800-668-6767 (in Canada only) or 819-997-2800
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