Transboundary Watersheds

First report to the governments of Canada and the United States under the Reference of November 19, 1998 with respect to international watershed boards

December 2000



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December 12, 2000

Honorable Madeleine Albright Secretary of State 2201 C St., NW Washington, D.C. 20520 The Honourable John Manley, P.C.,M.P. Minister of Foreign Affairs 125 Sussex Drive Ottawa, Ontario K1A 0G2

Dear Secretary Albright and Minister Manley:

We have the honor to transmit herewith the first report of the International Joint Commission (Commission) concerning the establishment of international watershed boards. This report was requested by the governments of Canada and the United States in the Reference of November 19, 1998 which requested the Commission to further define the framework for operation of international watershed boards as recommended by the Commission in its 1997 report to the governments, *The IJC and the 21st Century*. This first report will be followed by a second report in two years.

The report provides the Commission's initial analysis of the feasibility of establishing international watershed boards along the common boundary and summarizes progress towards the establishment of watershed boards in the boundary area. It recommends that the governments approve, as a first step, the gradual development of the Commission's International Red River Board as an international watershed board. It also recommends that the governments provide resources to support this effort.

The Commission does not plan a formal public release of this first report but it will be available in hard copy to interested parties and posted on the IJC web site (www.ijc.org).

Gerald E. Galloway

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The International Joint Commission

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Introduction

This is the International Joint Commission's (IJC) first report to the governments of Canada and the United States under the Reference of November 19, 1998 with respect to IJC international watershed boards.

During the two-year interval, the Commission investigated the status of watersheds within the boundary area to discuss the concept of a watershed approach and to explore opportunities for establishment of one or more international watershed boards. As a result of its investigation and continuous interaction with stakeholders in these watersheds, and in order to further its commitment to the international watershed concept, the Commission has come to certain conclusions and initiated certain actions.

- a) The Commission has noted widespread, if not universal, interest in and support for a watershed approach along the boundary.
- b) The Commission has amalgamated pre-existing boards with water quantity and water quality responsibilities in two watersheds, the Red River and the St. Croix River, and directed them to adopt an ecosystem approach to their responsibilities. This will permit them to provide some of the benefits which IJC international watershed boards would offer, including the combination of impartiality, independence, an ecosystem approach, and an enhanced capacity to address transboundary issues at the local level.
- c) The Commission is taking steps to amalgamate its boards in two other watersheds, the Rainy-Namakan and the Souris River, where it does not have the same coextensive water quantity and water quality responsibilities, and will be seeking the agreement of the governments of Canada and the United States to have the amalgamated boards adopt an ecosystem approach to their responsibilities.

- d) The Commission has decided to continue to seek ways to provide the benefits that IJC international watershed boards can offer to the boundary basins by:
 - tasking its International Red River Board to continue its efforts to increase stakeholder involvement in its activities, assuming the alerting and monitoring functions identified in the 21st century report, expanding local membership and seeking fiscal support from governments for, among other purposes, the continuance of its watershed information network and outreach activities;
 - seeking approval from governments to assign floodrelated tasks stemming from the Commission's recent report, *Living with the Red*, to the International Red River Board;
 - continuing to work with existing state-provincial bodies in the various watersheds; and
 - seeking to leverage the current enthusiasm among U.S. federal agencies, and some U.S. states and non-governmental organizations (NGOs), for the formation of watershed boards and the development of a pilot IJC international watershed board.

The Commission does not at present have the resources, nor does it believe that it has the widespread support needed, to establish the IJC international watershed boards as proposed in its 1997 report on *The IJC and the 21st Century*. It does believe, however, that there are interim measures available to move the concept forward. While the growing number of watershed initiatives by federal, state and provincial governments may be a positive development, they may not provide the same capacity to prevent and resolve transboundary disputes over water provided by institutions operating in the proven IJC tradition. They could, nevertheless, provide opportunities for constructive cooperation between state-provincial bodies and the IJC's own boards.

Background

In its 1997 report, the Commission advised the governments that the establishment of permanent international watershed boards in major transboundary basins would provide a much improved mechanism for avoiding and resolving transboundary disputes. These IJC boards would adopt an integrative, ecosystem approach to transboundary water issues, involve local interests and build a local capacity at the watershed level to anticipate and respond to the range of transboundary water-related and other environmental challenges that can be foreseen for the 21st century. They would also offer a proven means for dealing with situations of asymmetrical governance in the two countries, particularly those in which corresponding levels of government do not have equivalent authority or responsibilities. Specific tasks for these boards would include:

- assessing and reporting on the state of the watershed every two years;
- employing the science necessary to make recommendations on emerging or existing issues;
- coordinating international watershed board activities with those of current federal, state, provincial and local government and NGOs; and
- providing an information network for the diverse community of interests and entities within a major transboundary watershed.

In making this proposal, the Commission was highly conscious of the need to coordinate its efforts with those of other institutions at all levels, and to avoid duplication.

At their meeting in Ottawa on March 10, 1998, the then Canadian Minister of Foreign Affairs and the United States Secretary of State accepted in principle the

Commission's proposal to establish such international watershed boards. Eight months later, on November 19, 1998, the governments of Canada and the United States gave the Commission a reference, pursuant to Article IX of the Boundary Waters Treaty of 1909, with respect to international watershed boards. This reference asked the Commission to carry out certain tasks in consultation with the two federal governments, relevant states and provinces, tribes, First Nations and local interests, as appropriate. These tasks included:

- further defining the general framework under which IJC international watershed boards would operate;
- recommending a location where the first international watershed board could be established:
- developing cost projections; and
- indicating possible sources of funding.

The governments encouraged the Commission to draw on expertise, data and technology available from government and non-government sources in undertaking this work, and to draw upon and complement the numerous activities that are underway within the international watersheds at federal, state and provincial levels.

Consultations with Governments, Interests and the Public

In 1998 and 1999, the Commission consulted federal officials and the governments of provinces and states along the border concerning the establishment of IJC international watershed boards. It also held workshops in the Rainy, Red and St. Croix watersheds, areas that the Commission identified as possible sites for the first IJC international watershed board.

Although the concept of watershed management has gained acceptance in domestic water management, federal officials in Canada are divided on the structure, authority and responsibilities of IJC international watershed boards in addressing transboundary issues. They are also concerned that the presence on those boards of members from the private and non-governmental sectors could interfere with discussions of technical issues and create pressure for what officials might regard as unwelcome changes in government priorities. Some Canadian and United States federal and regional officials have expressed concern that they could be required to divert scarce resources to support IJC international watershed boards.

U.S. federal agencies are more optimistic and some, such as the Environmental Protection Agency (EPA), are enthusiastic about the benefits offered by international watershed boards. Beginning in 1991 with adoption of a watershed protection framework, the EPA has stressed the importance of an ecosystem approach to watersheds. It has backed this policy with resources, making grants to states and NGOs trying to deal on a broader scale to address water issues. As illustrated in the attached Annex 1, many states and local entities and some provinces - from the Red River to the St. Croix to the Yukon -- have been active in uniting diverse groups of stakeholders on both sides of the border into organizations which focus on the watershed or ecosystem. It is possible that this widespread awareness of the importance of an ecosystem approach and the energy and (limited) resources being expended on behalf of watersheds in the United States might be channeled into support for international watershed boards.

Aboriginal peoples and some interest groups, particularly in the west, have expressed support for IJC international watershed boards, but the Commission

found less support for the concept of the traditional IJC structures for watershed boards at the provincial and state level. Although there may be some variation in their views, British Columbia and Washington, and New Brunswick and Maine, consider that their provincial-state arrangements are adequate to address most transboundary water issues. With the possible exception of British Columbia, their perspective might change if there were sufficient resources available and if they were confident that their prerogatives would be preserved. Provincial-state arrangements are necessarily limited to matters within provincial-state jurisdiction, and experience has shown that they may not always be available in times of controversy when they may be needed most. Provincial and state governments and local interest groups are less skeptical about IJC international watershed boards in the Rainy River and Red River watersheds. And it is possible that there may be opportunities for further discussion with respect to IJC international watershed boards for the St. Mary and Milk Rivers and for the Poplar River.

In the course of its consultations and inquiries, the Commission has identified a number of watershed initiatives, some of which are described in Annex 1, that have been taken or proposed by state and provincial governments and, in some cases, federal and other authorities, to address issues in transboundary watersheds apart from the Great Lakes. (The Great Lakes represent a special case in view of their size and the extent and scope of the institutional arrangements that have developed in that region.) These initiatives reflect growing recognition of the need for institutions that can provide for improved consultation and cooperation within such watersheds. The rationale for an ecological, watershed basin approach has widespread appeal. Many local and regional initiatives are grappling with watershed issues. None of these initiatives, however, provide institutional arrangements that can offer the combination of proven advantages that IJC institutions have historically brought to the avoidance and resolution of transboundary disputes over water and other environmental issues. They lack the transboundary authority, the dispute resolution capabilities, the neutrality, the permanence and the corporate expertise and experience inherent in an IJC international watershed board. Still, the added dimensions offered by these attributes of an international watershed board have yet to generate a level of demand from a wide spectrum of entities in any one watershed sufficient to galvanize the formation of an international watershed board.

The IJC has already provided limited resources to and support for its ecosystemoriented boards, as for example in the St. Croix River basin. The EPA is providing one-time funding to help launch the start of a Watershed Information Network (WIN) in the Red River basin that, through the IJC's International Red River Board, will provide a communication and information coordination function to interested entities within the watershed. The IJC has also used its own resources to foster discussions of the merits and potential of an international watershed board in several transboundary watersheds.

The Commission continues to believe, as stated in its 1997 report, *The IJC and the 21st Century*, that IJC international watershed boards offer permanent, independent mechanisms — which can continue to operate effectively even in times of transboundary controversy — for joint fact-finding, public consultation, and the prevention and resolution of disputes relating to transboundary waters. IJC international watershed boards are not intended or designed to provide for the management of watersheds, which remains the responsibility of governments. They would not duplicate or interfere with but rather would complement the work of federal or provincial-state institutions.

IJC international watershed boards would:

- identify and articulate issues affecting the system;
- communicate these issues across the watershed and provide a forum for the public to engage these issues;
- study and research emerging issues and suggest possible solutions to issues that cannot be resolved as effectively through other mechanisms;
- provide the ability to enhance local capacity to address transboundary issues by bringing knowledge, experience and resources from across the two countries to bear on local cross-border questions; and
- provide a means for dealing with asymmetrical governance in the two countries.

The International Joint Commission concludes as follows:

It is not feasible at this time to establish IJC international watershed boards as originally conceived in the 21st century report, in the absence of more substantial support from federal, provincial and state governments and provision of the financial and other resources which those boards will require.

Although the Commission cannot immediately establish international watershed boards, it has decided to provide many of the basic benefits of IJC international watershed boards by amalgamating or considering amalgamation of its boards in watersheds where the Commission has water quantity and water quality responsibilities, namely: the St. Croix River; Rainy Lake - Rainy River - Lake of the Woods; and the Red River. It has also amalgamated the Souris River responsibilities of the International Souris-Red River Engineering Board and the International Souris River Board of Control. If the Canadian and U.S. governments agree, these amalgamated boards will be asked to adopt an ecosystem approach to transboundary issues that fall within their mandates. This ecosystem approach, when combined with the boards' independent, binational structure, and their commitment to finding consensus that reflects the common interest of both countries, will enable the amalgamated boards to serve more effectively as means to avoid and prevent transboundary disputes. Moreover, these amalgamated boards, with the inclusion of non-government members, may evolve into international watershed boards.

Joint state and provincial watershed initiatives can be positive developments when they are inclusive and permit federal and other participation. The development of such institutions, however, does not provide a consistent approach along the boundary operating within a uniform framework.

Local provincial and state organizations are a means for coordinating the management activities of government agencies. The Commission's amalgamated boards will seek out opportunities to expand their mandates and to cooperate with such bodies. As regards the Red River, for example, the Commission's amalgamated board will look to establish constructive relations with bodies such as the Red River Basin Board and institutions that may develop from the International Flood Mitigation Initiative. Cooperation would strengthen the ability of IJC boards to undertake joint fact-finding, contribute to consensus building, and be a forum for advising and being advised. It would also provide state-provincial bodies with another source of information and expertise with respect to transboundary issues. It is, however, essential that such arrangements for cooperation with other bodies preserve the inherent character and independence of Commission institutions so that they can continue to fulfil their role in preventing and resolving transboundary disputes.

As governments are aware, while the Commission has been carrying out investigations and consultations on this reference it has also been completing its work under a separate reference on flooding in the Red River basin. While working on both of these references, the Commission has been most impressed by the energy being devoted throughout the basin to work together to address issues of common concern. Indeed, in the light of the many federal, state, provincial and local watershed initiatives in the basin coupled with the more comprehensive mandate of the Commission's International Red River Board, the Commission does consider it both timely and constructive to identify this Commission board as a pre-pilot international watershed board.

Next Steps

By separate action and after appropriate consultations, the Commission will seek the agreement of the governments of Canada and the United States to:

- expand the mandate of the IJC's amalgamated International Red River Board to include certain flood-related responsibilities;
- expand the mandate of the IJC's amalgamated International Souris River Board to include water and aquatic environmental quality, flow forecasting and flood operations and to adopt an ecosystem approach; and
- expand the mandate of the IJC's amalgamated International Rainy Lake Board (when that amalgamation has been effected by the Commission) to include water and aquatic ecosystem quality and to ensure that an ecosystem approach is taken in the Rainy Lake-Rainy River boundary water system and possibly to include the Lake of the Woods.

The Commission and its boards will continue to develop constructive ways to work with state-provincial and other bodies to further the goals outlined in *The IJC and the 21st Century*.

Where local interest has been expressed in the establishment of IJC international watershed boards, for example with respect to the St. Mary and Milk Rivers, the Commission will continue consultations with a view to creating such boards.

Recommendations

The Commission recommends that the governments of Canada and the United States:

- Approve, as a pre-pilot effort, the movement of the International Red River Board in the direction of its eventual establishment as an international watershed board.
- Provide sufficient resources to fund international watershed board capabilities for the pre-pilot project that will be developed in accordance with the recommendation immediately preceding. Such resources will help establish the IJC's international watershed board capacity to serve the watershed and its credibility among entities within the watershed. An estimated \$165,000 (U.S.) annually would fund this initiative (See Annex II). These funds would cover, among other things, ongoing information network and outreach activity, intergovernmental liaison, and information gathering and reporting. The Commission anticipates that as each watershed board comes into existence a similar amount would be required for each one annually.

The Commission proposes to report to the governments on IJC progress towards the creation of international watershed boards in two years. The Commission intends to recommend the establishment of further pre-pilot, pilot or international watershed boards at that time.

Signatures

Signed in Washington, DC, December 11, 2000.

L. H. Legault Canadian Chairman

Thomas L. Baldini United States Chairman

Robert Gourd Commissioner

Susan B. Bayh Commissioner

Alice ChamberlinCommissioner

Annex 1— Watersheds Along the Boundary

YUKON RIVER

IJC - There is no IJC board or other organizational structure in this watershed.

The Yukon River Inter-Tribal Watershed Council was formed as a result of a Yukon River summit in 1997 by Native American tribes and First Nations, with financial and technical assistance from the U.S. Environmental Protection Agency and from foundations. Its objective is to coordinate efforts to protect the watershed.

TAKU RIVER

January 1999 - The Governor of Alaska wrote to the U.S. Deputy Secretary of State requesting a reference to the IJC for the Taku River watershed and noting the IJC's international watershed board initiative. This has been the subject of discussions between the Canadian and U.S. governments. The major concern in this basin is the development of the Tulsequah Chief mine in British Columbia. The province of British Columbia does not support the establishment of IJC international watershed boards anywhere in the province.

COLUMBIA RIVER

April 1998 - At a workshop in Castlegar, participants expressed support for the establishment of a watershed council and possibly an IJC international watershed board in the Upper Columbia River Basin to coordinate planning and decision-making functions.

June 1999 - The IJC was invited to meet with the Columbia Basin Tribal / First Nations in Kelowna, B.C., to discuss the role of the IJC and to explore the possible establishment of an international watershed board. At the meeting, the

First Nation and Tribal representatives expressed their feelings that, on issues affecting the Columbia basin, they did not have a voice and were not involved in decision-making.

IJC -

- The International Kootenay Lake Board of Control is responsible for overseeing the implementation of the Orders with respect to the level of Kootenay Lake. It holds a public meeting every fall. At the October 2000 public meeting there was a oral request for the Board to be expanded to include a land-owner representative from each side of the boundary.
- The International Osoyoos Lake Board of Control is responsible for overseeing the implementation of the Orders with respect to the level of Osoyoos Lake. It holds a public meeting every fall. Questions raised at an Osoyoos Board public meeting included issues of water quality, water temperature, impacts on fish, and potential relationships to Osoyoos dam releases.
- The International Columbia River Board of Control is responsible for overseeing the effect of regulation of water levels at Grand Coulee Dam on the levels of the Columbia River at the international boundary.

British Columbia - Washington Environmental Cooperation Council was established in 1992, the Council is a bilateral arrangement between British Columbia and Washington to ensure coordinated action and information sharing on environmental matters of mutual concern. British Columbia has clearly stated that it does not support the establishment of IJC international watershed boards in any part of the province, and has declared that the Council "deals with virtually all of the issues proposed for the new watershed boards". During the dispute over Pacific salmon, the Council stopped meeting.

FLATHEAD RIVER

IJC - There is no IJC board or other organizational structure in this watershed.

The Flathead Basin Commission was created in 1983 by legislation enacted by the state of Montana. Flathead Basin Commission seeks to encourage responsible economic development in the basin without compromising either the present high quality of the basin's waters or international cooperation and coordination between Montana and British Columbia concerning resource development activities in the North Fork of the Flathead River.

February 2000 - the Flathead Basin Commission invited the IJC to consider establishing an international watershed board in the Flathead basin, in part, because Flathead Basin Commission has not been able to establish an effective working relationship with the Province of British Columbia. The IJC has advised Flathead Basin Commission that the support of the British Columbia government is essential for an international watershed board.

ST. MARY - MILK RIVERS

IJC - Accredited Officers (one each from Canada and the United States) are authorized to manage the measurement and apportionment of the water in these rivers according to the Boundary Waters Treaty (Article VI) and the IJC's 1921 Order.

The Milk River International Alliance was formed by a grassroots group of water users, with support from U.S. federal and Montana state agencies, to develop a framework for improving water management in the basin. Over 200 attended an initial workshop in March 1999 - including 30 Canadians, and Native Americans/First Nations representatives. The alliance which is open to anyone interested in joining, is guided by a four-member, citizens advisory council.

The Milk River Watershed News is a basin newsletter, created in Montana, to keep basin residents informed, to describe the management of the river, and to share ideas for improving local water management.

June 1999 - There was a discussion of the possibility of an IJC watershed board as part of a Commission tour of the basin. There was some interest in exploring the concept.

SOURIS RIVER

IJC - The International Souris River Board has recently been formed by the amalgamation of the International Souris River Board of Control and the Souris River portion of the International Souris-Red Rivers Engineering Board. The amalgamated board, whose fundamental mandate is to prevent and resolve water-related disputes between Canada and the United States, will continue to assist the Commission with the responsibilities assigned to it in the Souris River basin by the governments of Canada and the United States under the Boundary Waters Treaty. These include ensuring surveillance over the use and apportionment of the waters of the Souris River. The Commission is also considering how its Board can take a more ecosystemic approach and, keeping in mind the responsibilities of the Souris River Bilateral Water Quality Monitoring Group, plans to consult with the U.S. and Canadian Governments on this matter. The Board is currently composed of federal, state, and provincial members, and the Commission is looking to expand the board to include local representation.

The Souris River Bilateral Water Quality Monitoring Group was established on October 26, 1989 in accordance with the Canada-United States Agreement for Water Supply and Flood Control in the Souris River Basin. Article VI of the agreement deals specifically with water quality, including provision for the establishment of a Bilateral Water Quality Monitoring Group. The Group is composed of three members from each country and is co-chaired by a Canadian and a U.S. member. The Bilateral Water Quality Monitoring Group is responsible for interpreting and exchanging data, and preparing an annual report for governments on Souris River water quality, as well as developing recommendations to governments on the monitoring program, and establishing water quality objectives at the two boundary crossings of the Souris River.

RED RIVER

June 1999 - A meeting of the IJC with the key interests in the basin was held to discuss the role, structure and membership of a possible international watershed board. Subsequent discussions were held in the basin as part of the work of the IJC's International Red River Task Force and meetings of the other organizations in the basin.

IJC - The International Red River Board of the IJC has recently been formed by amalgamation of two of the Commission's advisory boards, the International

Red River Pollution Board and the Red River portion of the International Souris-Red Rivers Engineering Board. The amalgamated board, whose fundamental mandate is to prevent and resolve water-related disputes between Canada and the United States, will continue to assist the Commission with the responsibilities assigned to it in the Red River basin by the governments of Canada and the United States under the Boundary Waters Treaty. These include maintaining continuous surveillance over the quality of the water and the health of the transboundary aquatic ecosystem, reporting on developments and activities which may adversely affect the quality or quantity of the water and the health of the ecosystem at the international boundary, and addressing a number of transboundary flooding issues. The Commission has also proposed some floodrelated tasks for the Board that stem from the Commission's recent report on reducing Red River flood impacts, reflected in a proposed directive for the Board. The Commission will discuss the proposed directive with the federal governments to confirm its mandate and explore funding options. The Board is currently composed of federal, state, and provincial members, and the Commission is looking to expand the board to include local representation.

The Red River Basin Board has been chartered under the laws of Manitoba, North Dakota, Minnesota, and South Dakota as a not-for-profit corporation. Its board of directors has 21 members (7 Canadian) representing local government (cities, counties, and rural municipalities), watershed boards, water-resource districts, First Nations and Native Americans. The Board recently agreed to expand its membership to include federal government and environmental organization representatives. There are also three at-large members, and members appointed by the governors of North Dakota, Minnesota and South Dakota, and the premier of Manitoba. The board's mission is to develop a comprehensive water management plan that would then be implemented by other agencies within the basin. It also seeks to serve as an information clearing house; to provide public information on basin issues; to serve as a forum for discussion, consensus building and dispute resolution, including inter-jurisdictional differences, in the management of surface and groundwater supplies in the Red River basin; and to provide advice to governments on all aspects of water management.

A Memorandum of Understanding for Flood Mitigation was signed on November 15, 2000 by Manitoba, Minnesota and North Dakota. South Dakota may sign it at a later date. It lays out the framework for the three states and the province to significantly improve cross-border cooperation and strengthen efforts to prevent and reduce flooding in the shared river basin. This framework includes regular meetings of the provincial premier and the three state governors.

The International Coalition (TIC) for Land and Water Stewardship in the Red River Basin is a non-profit organization incorporated in 1981 in Minnesota, North Dakota and Manitoba to serve as an international model for communication, cooperation and action. TIC's mission is to promote wise stewardship of land and water resources in the Red River Basin by involving the public, local land and water management organizations, and local, state and federal agencies.

The Pembina River Basin Advisory Board was established in March 1998 to develop and have implemented a comprehensive water management plan for the Pembina River Basin, and to facilitate and pursue the resolution of interjurisdictional issues. The impetus behind the creation of the Board was the chronic flooding problem in the lower Pembina and the controversy over the road-dike along the boundary in Manitoba. Proposed solutions have included revisiting storage reservoir proposals (e.g. Pembina Dam), and examination of the feasibility of small-scale tributary impoundments. The board includes 13 members from local municipalities and water resource boards in North Dakota and 11 members from conservation districts, regional municipalities, Manitoba Natural Resources (Water Resources Branch) and the Pembina Valley Water Cooperative in Manitoba. (The Red River Basin Board has a Pembina River Advisory Group whose membership overlaps that of the Pembina River Basin Advisory Board.)

RAINY-NAMAKAN-LAKE OF THE WOODS BASIN

March and July 1999 - The IJC held a workshop in International Falls to discuss the possibility of establishing an international watershed board with a follow-up meeting in July in Fort Frances. Participants were interested in the concept but concerned about the creation of another organization.

IJC -

• The International Rainy Lake Board of Control is responsible for overseeing the lake levels in the Rainy-Namakan system. The Orders for this system, which are issued under the Rainy Lake Convention, were recently changed and the impact of the changes is being monitored. (An International Steering Committee comprising representatives of a wide variety of local interests had been formed to take the lead in proposing changes to the Orders.)

• The International Rainy River Pollution Board is responsible for overseeing the quality of the water in the Rainy River. The Board was initially established because of pollution from the pulp and paper mills which has been reduced.

The IJC is considering the amalgamation of the Rainy Lake Board of Control and Rainy River Pollution Board, and plans to consult with the U.S. and Canadian governments on the advisability of including Lake of the Woods in the geographic scope of Board considerations. The amalgamated board, whose fundamental mandate will be to prevent and resolve water-related disputes between Canada and the United States, will continue to assist the Commission with the responsibilities assigned to it with respect to the Rainy Lake, Rainy River and possibly the Lake of the Woods basins by the governments of Canada and the United States under the Boundary Waters Treaty, the Rainy Lake Convention and the Lake of the Woods Convention. These include ensuring compliance with the Commission's Orders and, with the agreement of the governments of Canada and the United States, maintaining continuous surveillance over the quality of the water and the health of the transboundary aquatic ecosystem and developments which may adversely affect the quality of the water and the health of the ecosystem. The Commission intends to include local representation on any amalgamated board.

The International Lake of the Woods Control Board was established pursuant to the Lake of the Woods Convention and is responsible for overseeing the level of the Lake of the Woods if it goes outside stated parameters. It works in partnership with the Canadian Lake of the Woods Control Board which controls the day-to-day levels.

Rainy River Watershed Program is led by the Rainy River First Nations with financial support from Environment Canada. A key element of the program is an annual ManOMin Conference for the watershed. The first such conference was held in April 2000 and had additional sponsorship support from Koochiching County in Minnesota, and the Minnesota Pollution Control Agency. The conference brought together a broad representation of users and interested parties from around the watershed and provided a good forum for the exchange of information and the coordination of activities. The Rainy River Watershed program also focuses on capacity building particularly with respect to environmental monitoring, rehabilitation and public awareness and involvement. The scope of this program is the Rainy River and does not extend to either Rainy Lake or Lake of the Woods.

THE GREAT LAKES

Spring 1999 - The IJC Water Quality Board prepared a paper reviewing possible watershed board options and the Commission undertook a literature search of watershed structures. The Commission determined that, given the size and existing institutional complexity of the Great Lakes, it would focus on other watersheds for a possible pilot international watershed board.

Great Lakes Water Quality Agreements (GLWQA) were first signed in 1972 and 1978 and then subsequently revised in 1983 and 1987. It is an agreement between the Canadian and United States governments with respect to restoring the physical, chemical and biological integrity of the Great Lakes, taking an ecosystemic approach. The agreement is managed by the Binational Executive Committee. The International Joint Commission was given the role of assessing progress under the agreement and assisting with its implementation.

IJC - GLWQA Boards

- The Great Lakes Water Quality Board is the principal adviser to the Commission with respect to the GLWQA.
- The Great Lakes Science Advisory Board advises the Commission on the scientific aspects of the GLWQA.
- The Council of Great Lakes Research Managers maintains an inventory of the research relevant to the GLWQA and improves coordination of research.

IJC - Great Lakes Control Boards

- The International Lake Superior Board of Control oversees the outflows from Lake Superior pursuant to the Commission's Orders of Approval.
- The International Niagara Board of Control oversees operation of the Chippewa-Grass Island Pool pursuant to a reference from the Canadian and United States governments. It also oversees the annual installation and removal of the Lake Erie ice boom pursuant to an IJC Order of Approval.

• The International St. Lawrence River Board of Control oversees the outflows from Lake Ontario through the St. Lawrence River pursuant to the Commission's Orders of Approval.

Other Great Lakes Institutions

- The Great Lakes Commission is a binational agency that "promotes the orderly, integrated and comprehensive development, use and conservation of the water and related natural resources of the Great Lakes basin and St. Lawrence River. Its members include the eight Great Lakes states with associate member status for the Canadian provinces of Ontario and Québec."
- The Great Lakes Fishery Commission was established by Canada and the United States in 1955 to develop coordinated programs of research, recommend measures to sustain the productivity of fish stocks and to minimize sea lamprey populations.
- Council of Great Lakes Governors The mission of the Council is "To encourage and facilitate environmentally responsible economic growth".

The above listing for the Great Lakes only identifies some of the primary organizational structures in the basin. There are numerous other institutional arrangements.

ST. CROIX RIVER

Spring 1999 - The Commission met with senior officials from Maine and New Brunswick to discuss the possible creation of an international watershed board. Maine was reluctant to pursue the concept. Subsequently, in August 1999, coordination and cooperation among the interests in the basin were discussed at a workshop in Calais, Maine.

IJC - The International St. Croix River Board was recently formed by amalgamation of the International St. Croix River Board of Control and the Advisory Board on Pollution Control St. Croix River. The amalgamated board, whose fundamental mandate is to prevent and resolve water-related disputes between Canada and the United States, will continue to assist the Commission with the responsibilities

assigned to it in the St. Croix River basin by the governments of Canada and the United States under the Boundary Waters Treaty. These include ensuring compliance with the Commission's Orders of Approval and maintaining continuous surveillance over the quality of the water and the health of the transboundary aquatic ecosystem and developments which may adversely affect the quality of the water and the health of the ecosystem. The amalgamation provides for an ecosystem approach in dealing with transboundary issues related to the St Croix River. The Board is currently composed of federal, state, and provincial members and the Commission is looking to expand the board to include local representation.

St. Croix International Waterway Commission (IWC) was established in 1986-87 by the State of Maine and the Province of New Brunswick to foster international cooperation in this boundary watershed. In one effort, IWC has pushed successfully to restore clam beds in an effort to demonstrate to the community that ecosystem restoration is possible. In July 1999, Oak Bay, a 1000-acre tidal area that had been closed by pollution for 50 years, was reopened to clamming after a five-year effort by IWC. The EPA and Environment Canada have observer status on the IWC, and other U.S. and Canadian federal agencies provide support to the organization.

Annex 2— Watershed Boards: Costs Estimates

Maintaining Liaison Meeting with in-basin stakeholders, organizing meetings, coordinating research and data collection, and preparing biennial state of the basin reports; one professional -level person half-time and one support person.	75,000
Meeting Space, Printed Materials and Postage Outreach activities including newsletters, brochures, meetings, etc.	25,000
Web site Internet connection; hardware, software; and appropriately displayed content.: hardware/software sustainment:	15,000
Office Space In basin - annual space/furniture rental costs	15,000
Travel Costs Watershed board staff travel budget	5,000
Report Preparation Design and cost for 1000 copies of a watershed report	5,000
Scientific Study Scientific study of basin issues. On both sides of the border, governments can be expected to use existing agencies for much of this work, but it may be cost-effective from time to time to use either state agencies or academic institutions	25,000
TOTAL	165,000

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