

**FIRST PROGRESS REPORT
To The
INTERNATIONAL JOINT COMMISSION
By The
INTERNATIONAL LAKE ONTARIO-ST. LAWRENCE RIVER STUDY BOARD**

**Covering the Period
12 December 2000 through 22 March 2001**



**22 MARCH 2001
Buffalo, New York
Ottawa, Ontario**

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International Joint Commission
Washington, D.C.
Ottawa, Ontario

Commissioners:

The International Lake Ontario-St. Lawrence River Study Board submits herein its First Semi-annual Progress Report, covering activities from our formation on 12 December 2000 through to 22 March 2001.

1. SUMMARY

The International Lake Ontario-St. Lawrence River Study Board officially began on 12 December 2000. However, prior to that date, several pertinent activities took place. On 19 September and 4 October 2000, agency workshops were held in Syracuse, New York and Cornwall, Ontario, respectively. At these meetings, sources of data from agencies were noted that could supplement the activities of the Study. Also, individuals were identified that could be nominated for leadership and membership of the Technical Work Groups (TWG). Prior to 12 December, several Study Board and Public Information Advisory Group (PIAG) members were also selected.

The Study Board has held four meetings, Washington, DC on 12 December 2000; Burlington, Ontario on 11-12 January 2001; Montreal, Quebec on 24-25 January 2001 and Rochester, New York on 21-22 March 2001; and conducted five conference calls (attendance during each of these events is included as Attachment 1). The PIAG held meetings in Burlington and Rochester, on 10 January 2001 and 22 March 2001, respectively. The Board conducted two workshops. On 22-25 January 2001, technical experts were invited to Montreal, Quebec to review the Plan of Study document to determine if additional activities are required, and to provide an estimate of first-year products and costs. On 20-21 March 2001 an "Plan Formulations and Evaluations Methodologies" workshop was held for members of the Board, PIAG and TWG leads. Several invited experts on evaluation methodologies participated in this workshop.

The membership of seven TWGs was established, including Wetlands/Environmental, Coastal Zone/ Riparian/ Shore Property, Recreational Boating/ Tourism, Domestic/ Industrial/ Municipal Water Uses, Commercial Navigation, Hydroelectric Power and Hydraulic & Hydrologic Modeling. A Common Data

Needs Group was established and a Plan Formulation Evaluation Group established in principle.

The Board decided that bathymetric/ topographic mapping was critical to the success of the Study and sent letters to dozens of agencies throughout the United States and Canada soliciting cost-sharing partnerships. During its 9 February 2001 Conference Call, the Board agreed to fund activities by the Common Data Needs Group to begin work on bathymetric/ topographic mapping, the Environmental TWG to produce 10 different products and by the Recreational Boating TWG to perform a literature review.

Work on the Study web site is nearing completion. A meeting with representatives working on the Study site from Cornell University and the Institute for Water Resources was held in Buffalo on 13 March 2001 to discuss its content.

The following is the list of Deliverables accomplished during this reporting period.

- Establishment of the Study Team including
 - * Study Board
 - * Co-Directors
 - * Co-Managers
 - * Public Interest Advisory Group
 - * Seven Technical Work Groups and a Common Data Needs Group
- Terms of Reference for and initial engagement of the TWGs on the work plan
- Year 1 Work Plan and Funding Allocation
- Scoping of Year 1 Common Data (Bathymetry and Topographic) Needs
- Initiation of a Study Web Site
- Initial Evaluation Methodologies Scoping and Framework

2. BOARD ACTIVITIES

At its first meeting on 12 December 2000, the Board identified individuals that could be included on the evaluation teams, and discussed products for the first year, such as a recreational boating survey and site-specific bathymetric/ topographic surveys, one for a wetland and one for an erosion-prone area. They also decided that Board meetings would be open to the public but it is preferable that specific public issues be raised through the PIAG.

During its 21 December 2000 conference call, the Board discussed procedures for establishing evaluation teams, funding and future workshops and meetings. The Board's 5 January 2001 call was conducted to finalize arrangements for the 11-12 January 2001 meeting of the Board and the 22-25 January 2001 Technical Experts Workshop in Montreal.

The January meeting in Burlington, Ontario, was the first meeting fully attended by the twelve member Board. During the meeting, curricula vitae of suggested TWG members were distributed. Nominations were made by Board members and the two General Managers based on candidate's expertise in Great Lakes studies related to the interests considered. The Board outlined a schedule of activities to be conducted through July 2001, including the Montreal planning workshop, a fisheries workshop to be held in conjunction with the St. Lawrence Institute of Environmental Science Conference in Cornwall in May and future meetings at Akwesasne. (The list of planned events is included as Attachment 2.) Each of the Board members described what they want to see accomplished during the first year. The Board endorsed the development of an historic/naturalized knowledge base of the Lake Ontario -St. Lawrence River system and a review of legislative/ jurisdictional changes (1960-present). They also decided to ensure that data collection and cataloging during the Study ties into a regional GIS accessible to the public via the Web Site.

On 22-25 January 2001, the Board held its Technical Experts Workshop. Eighty-five individuals attended the extremely successful event. A consultant managed the workshop. The first day included presentations about existing Lake Ontario regulation and recent studies regarding improvements, as well as, the new Study. Experts established groups and participated in break-out sessions to determine if the items described in the Plan of Study document dated September 1999 represented those that would be needed to fully accomplish Study objectives. The groups outlined what level of funding would be required during the first year and the resulting products. Given these first-year proposals, the Board determined the amounts of funding that should be distributed to the various TWGs. On 7 February 2001, the Commission at its Executive Session with the Study Directors and General Managers in Ottawa, Ontario reviewed and noted the distribution of funding.

During its 9 February 2001 Conference Call, the Board directed the General Managers to inform nominated TWG members that they have been selected to participate in the Study. The majority of those invited have confirmed that they are willing to participate. The Board also agreed to identify Board and PIAG liaison members for each TWG.

The TWG were instructed to develop Terms of Reference and revised cost estimates based on the values approved by the Board and IJC. Also during the call, the Board agreed to fund three proposals:

- \$50 to \$100 K Cdn by the Common Data Needs Group to begin work on bathymetric/ topographic mapping
- \$119 K Cdn by the Environmental TWG to produce 10 different products
- \$6 K Cdn by the Recreational Boating TWG to perform a literature review

As a measure to reduce the overall cost of bathymetric/ topographic mapping, 25 letters were send to agencies, such as New York State Department of Environmental Conservation, U.S. Geological Survey, the Canadian Hydrologic

Service and the SeaMap Office of the Bedford Institute of Oceanography, to solicit cost-sharing partnerships.

The Study Team applied themselves to the issue of how to evaluate alternative regulation plans in an Evaluation Methodologies Workshop on 20-21 March 2001 in Rochester NY. Presentations were made on evaluation methodology experiences of the IJC Levels Reference Board Study about 10 years ago, and the Plan 1998 and Interest Satisfaction alternative regulation experiences of the Commission's International St. Lawrence River Board of Control. Presentations were made by several other economics evaluation experts and discussions held on how to apply evaluation techniques to this Study and how data collection work might be crafted to best suit expected evaluation processes.

On 21 March, the Study Team undertook a short inspection tour of the Rochester/Greece shoreline led by PIAG member Max Streibel.

3. PUBLIC INTEREST ADVISORY GROUP (PIAG) ACTIVITIES

The Public Interest Advisory Group (PIAG) was formally established and includes 23 members (see Attachment 3) representing various interests. The group held two meetings during the reporting period, 10 January 2001 in Burlington, Ontario and 22 March 2001 in Rochester, New York. The purpose of the Burlington meeting was to serve as an initial gathering of members, and also to outline the actions that will be accomplished during the first year. A survey asking interests to identify stress and threshold levels as prepared and distributed by the International Water Levels Coalition, will be provided for Study use. Individual PIAG members will conduct informational meetings with local groups around Lake Ontario and also participate in TWG meetings.

At the Rochester meeting, "Public Interaction Tactical Plan" and "Educational Program Content" Task Groups were formed. These groups outlined activities that will be undertaken.

4. TECHNICAL WORK GROUP (TWG) ACTIVITIES

A list of currently appointed and proposed TWG members along with Board liaisons to the TWGs is included as Attachment 4.

4.1 Common Data Needs

The Common Data Needs Group was formally established on 24 January 2001 by the Board with the selection of the U.S. and Canadian Leads, Roger Gauthier of the U.S. Army Corps of Engineers, Detroit District and Wendy Leger of Environment Canada, Burlington, Ontario, respectively.

The Common Data Needs Work Group was apportioned \$1,000,000 U.S. by the Study Board to conduct the bathymetric and topographic mapping necessary to support the impact assessments of the study. The Work Group held its first meeting in Buffalo on February 21-22 along with representatives from other work groups and those specializing in GIS and spatial data. The purpose of the meeting was to identify areas most sensitive to water level/flow changes and critical to the impact assessments; to identify existing sources of data; to evaluate and prioritize the most important areas needing topographic and bathymetric data; and to begin discussions on GIS standards.

Prior to the meeting, the Common Data Needs Work Group let a contract with Baird and Associates, Coastal Engineers Ltd. to provide an initial assessment of the areas that are most sensitive to water level changes and critical to the impact assessments that will be carried out within the overall IJC Study. They were also asked to provide information on existing sources of topographic and bathymetric data for the nearshore zone including areas of coverage, dates, scales and availability of the data. They were also required to develop an initial evaluation and ranking criteria to allow the Common Data Needs group to effectively and objectively evaluate the needs of the study and the most important areas to gather topographic and bathymetric data.

A draft report was presented at the Feb 21-22 meeting and each reach of shoreline was examined by the work group and initial prioritization took place. Following the meeting, further information has been gathered by Baird for the upper part of the system (Lake Ontario and upper St. Lawrence) and by Environment Canada for the lower St. Lawrence River. A final draft report outlining priorities for bathymetric, topographic, and imagery data has been compiled and is being distributed to a number of the work groups for their review and input. Once the prioritization is complete, another evaluation of costs will be conducted.

The Common Data Needs work group is considering a test flight of one of the U.S. reaches with topographic LIDAR this spring. An evaluation of this pilot is currently underway. The plan is to fly the bathymetric SHOALS in July 2001 and the remainder of the topographic LIDAR in fall 2001.

4.2 Coastal Zone, Riparian, Shore Property TWG

The U.S. and Canadian Leads of the Coastal Zone, Riparian, Shore Property (CZ) TWG are Thomas Bender of the U.S. Army Corps of Engineers, Buffalo District and Ralph Moulton of Environment Canada, Burlington, Ontario, respectively. The group has nearly finalized its membership and has disseminated appropriate review materials to all its members. The first meeting of the group has been scheduled for March 28, 2001 in Burlington, Ontario to discuss budget and finalize work tasks.

4.3 Wetland/ Environmental TWG

Ten projects to document the response of various environmental components to changes in water levels in the St. Lawrence River sector received funding and deliverables will be provided to the Study Board by March 31, 2001. These projects include documenting historical aerial photographs of wetlands, determining the present status of St. Lawrence River wetlands, year-to-year variability of wetlands, zebra mussel and pike recruitment, adult fish captures, fish habitat and health and projects related to wildfowl and riparian birds.

The U.S. and Canadian Leads of the Wetland/ Environmental TWG are Mark Bain of Cornell University and Christiane Hudon of Environment Canada, St. Lawrence Centre, Montreal. The Wetland/ Environmental Technical Working group has been established and underway mostly by way of frequent and regular communications between the U.S. and Canada Leads. Issues, immediate needs, planning status, and meeting scheduling are well underway for this working group. The U.S. work group membership is nearly finalized: one new invitee pending. Contacts of collaborators and participants in New York State government have been identified, introduced to the effort, and contacted regarding interest. Canadian membership is also nearly finalized. Members from first Nations and from Fisheries & Oceans Great Lakes Laboratory must be confirmed. The first meeting of the Wetlands/Environment Technical Working Group has been scheduled for April 17-18, in Montreal, to define projects and procedures to submit proposals.

4.4 Recreational Boating/Tourism TWG

The U.S. and Canadian Leads of the Recreational Boating TWG are Jonathan Brown of the U.S. Army Corps of Engineers, Buffalo District and Jean-Francois Bibeault of the St. Lawrence Centre, Environment Canada. The group requested and received \$6,000 to perform a literature review and a preliminary data analysis according to recreational boating activities for the St. Lawrence River section.

4.5 Commercial Navigation TWG

The U.S. and Canadian Leads of the Commercial Navigation TWG are Roger Haberly of the U.S. Army Corps of Engineers, Buffalo District and Ivan Lantz of the Shipping Federation of Canada, respectively.

4.6 Hydroelectric Power Generation TWG

The Canadian Lead of the Hydroelectric Power Generation TWG is Sylvain Robert of Hydro Quebec. Nominees for the U.S. Lead and membership of the group are being considered.

4.7 Domestic, Industrial and Municipal Water Uses TWG

The U.S. and Canadian Leads of the Domestic, Industrial and Municipal Water Uses TWG have not been confirmed at this time. Contacts are underway.

4.8 Hydrologic and Hydraulic Modeling TWG

The U.S. and Canadian Leads of the Hydrologic and Hydraulic Modeling TWG are Tom Croley of the Great Lakes Environmental Research Laboratory and David Fay of Environment Canada, respectively. The first meeting a the group has been scheduled for 26-27 March 2001 in Burlington, Ontario.

5. Budget and Timeline

U.S. funding of \$2.18 million U.S. was received in July 2000. Canadian funding of \$600,000 Cdn has been provided for obligation and expenditure through 31 March 2001. The approved Canadian funding for FY2001-2 is \$3.18 million Cdn which will become available on 1 April 2001. At its 22-25 January 2001 meeting in Montreal, the Board approved the allocation of funding shown in Table 1 for the various groups and activities that will take place through 31 March 2002. A semi-annual accounting of funds expended is proposed to occur following the end of the respective Canadian and U.S. fiscal years.

To date, the following is an estimate of funds that have been obligated and/or expended:

<u>Expenditures/Commitments in</u>	<u>Canada</u>	<u>U.S.A</u>
Environmental TWG	119,000	
Recreational Boating TWG	6,000	
Common Data Needs Group	22,000	
Montreal Workshop	50,000	
Rochester Workshop	10,000	6,700
PIAG (travel, etc)	25,000	3,000
Website Design		10,000
Project Management*	<u>231,000</u>	<u>100,000</u>
Totals	\$463,000	\$119,700

* Project Management Costs include the following:

- * Staff salary for Study Directors, Managers & admin assistants.
- * Staff travel & communications costs
- * Office supplies, space rentals, office supplies & equipment
- * Printing and translation

The funding schedule shown in Table 1 was presented to the IJC during the February Executive meeting. The Board's proposed funding schedule (shown in the last column of the table) was endorsed by the IJC.

Table 1. Year 1 Budget
 (US \$K unless otherwise indicated)

Study Team or Activity	Plan of Study Proposed Budget			Board Budget Decision
	US	CAN	TOTAL	
Common Data Needs	500	700	975	1000
Environment	640	865	1220	685
Coastal	770	770	1270	600
PIAG	270	340	498	285
Recreational Boating	160	200	300	280
Mun./Indus. Water	79	116	160	260
H & H Modeling	160	235	320	225
Commercial Navigation	49	197	185	105
GIS	-	-	-	100
Plan Form./Evaluation	-	-	-	40
Hydro	0	0	0	20
TOTAL				3600

Respectfully submitted,

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