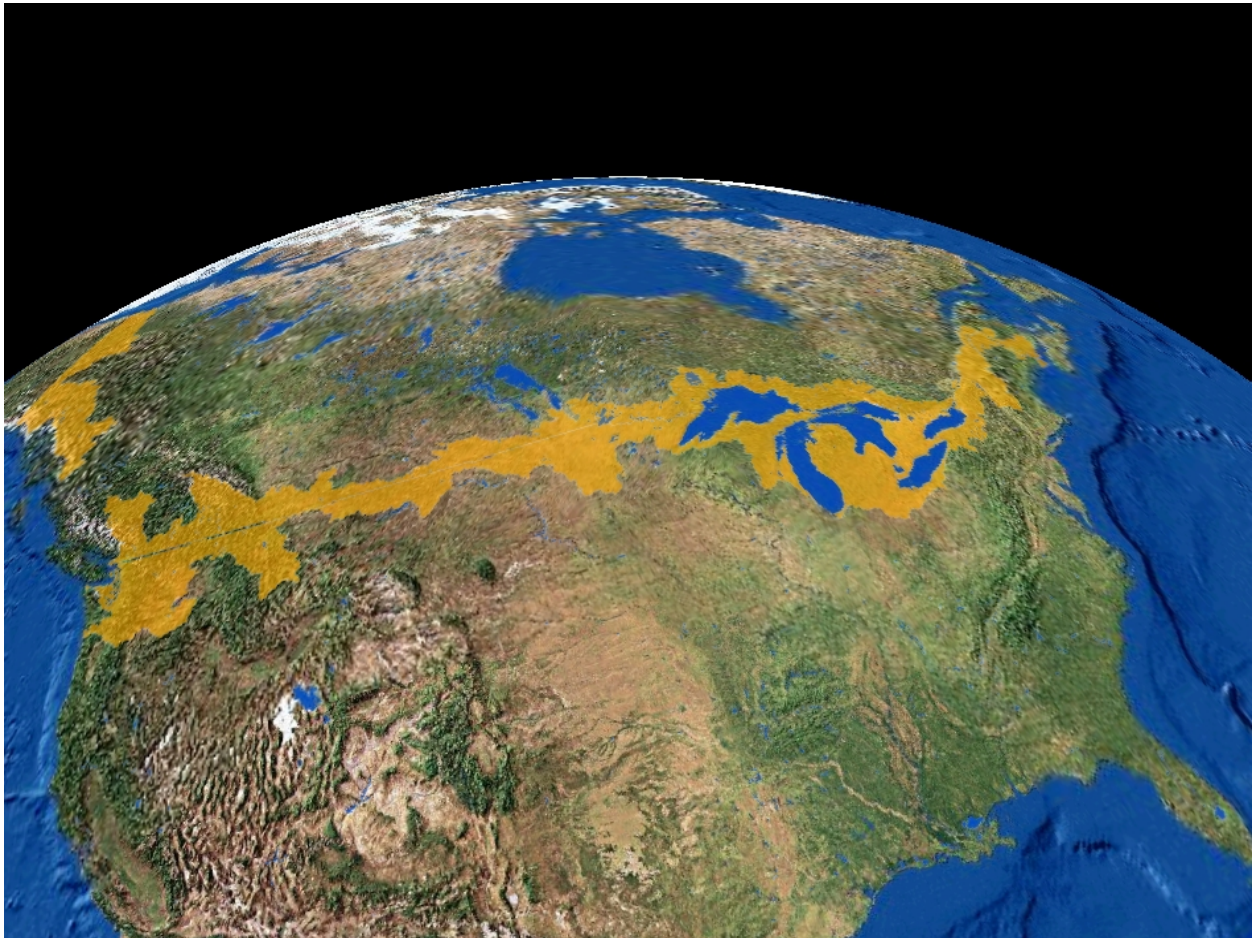


INTERNATIONAL JOINT COMMISSION
REPORT OF THE INTERNATIONAL WATERSHEDS INITIATIVE
WORKSHOP

OCTOBER 27, 2008
OTTAWA, ONTARIO



View of the shared drainage areas along the international boundary, using draft delineations based on Canadian and U.S. hydrographic datasets. Prepared by Michael T. Laitta, IJC Geographic Information Systems Coordinator

Summary

Representatives of six transboundary basins met with IJC Commissioners and staff prior to the IJC's Fall Semi-Annual Meeting in Ottawa to exchange information and ideas regarding implementation of the International Watersheds Initiative (IWI). The workshop was a continuation of discussions initiated at the March 2008 IWI Workshop held in Vancouver, B.C., and was organized in response to an expressed desire at the latter meeting for further opportunities for ongoing dialogue among the existing, pilot and candidate IWI boards. Participants received and discussed technical presentations on three emerging issues for IWI boards – data harmonization; water quality and health; climate change – and concluded that these issues deserve greater attention in the development of board work plans. They reviewed and commented on the process for submitting, evaluating, funding and reporting of IWI projects. They also discussed and critiqued a staff draft of the Third Report to Governments on the IWI, which is expected to be finalized by the end of 2008, and agreed to submit additional basin-specific information and photos by November 26. Attendees were also briefed on IJC plans for the organization's centennial during 2009 and considered options for board involvement in substantive and celebratory events to mark the occasion. The workshop agenda and list of participants are attached.

Opening Discussion

Board members and other participants highlighted the following points in the opening round of discussions:

- the importance of recognizing that each basin is unique and that the implementation of a watershed approach can take various forms depending upon local needs and circumstances;
- the desirability of trying to anticipate or resolve issues at the local or basin level, where possible;
- the need to find more effective ways to engage the public;
- the importance of involving other partners (e.g., private or alternative organizations, citizens' groups) in the work of the IWI boards; and
- the opportunities to learn from the work of other IJC boards, including the various Great Lakes boards and task forces.

Fostering a Harmonized Geospatial Approach to Transboundary Basins

A presentation by GIS Coordinator Michael Laitta underscored the need for, and value of, consistent and coherent maps and data sets covering the *hydrography* (rivers, streams, lakes) and the *drainage areas* of transboundary basins. Merging and harmonizing the *hydrography* is accomplished through coordination among federal natural resources and environmental agencies. The IJC played a catalytic role in bringing these agencies together in a Transboundary Hydrographic Data Harmonization Task Force, which will hold its second meeting on November 19-20 in Ottawa. Harmonization of the *drainage areas* needs to be worked out as part of this initiative. The IJC developed a successful process for data harmonization at the watershed level in the St. Croix River basin. This process, with appropriate modifications, can be

applied to other basins. Participants generally endorsed the view that the IJC can continue its pioneering and catalytic role by:

- highlighting the benefits of a harmonized geospatial approach, setting priorities;
- preparing a hydrologically accurate IJC activities map for the entire border (see cover graphic for a draft representation);
- providing tools and support to its boards to facilitate data harmonization;
- linking up the relevant experts (including the Canadian Space Agency and NASA as appropriate);
- encouraging the appropriate agencies to store, maintain and update transboundary data; and
- helping boards to make the best possible use of harmonized data to respond to real-world problems in their basin.

IWI Project Review Process

The IWI Coordinators briefed the boards on the project review process, including submission, evaluation, funding and reporting. Among the highlights of the presentation and ensuing discussion:

- Canada has made available Cdn \$597.500 for 2008-09 and \$659,000 for 2009-10. The US provided substantial IWI funding in 2004-06; the availability of additional resources will depend on upcoming congressional budget decisions.
- Projects completed in 2004-08 totaled \$2.1 million, and addressed the following priority areas: hydrologic and hydraulic modeling (29% of funding), hydrologic data collection and analysis (28%), ecosystem monitoring (23%), GIS data compilation and harmonization (7%), public outreach (5%), board support (4%) and ecosystem analysis (4%).
- Using a more transparent submission and review process that seemed to work well, the IJC approved ten new projects from four boards in September 2008, totaling Cdn \$545,724. In some cases a final decision required further consultations with the board or the two governments.
- Suggested improvements: (1) Give more thought to the evaluation of project deliverables. (2) Develop a matrix listing government agencies in each country and their capacity to assist boards in implementing projects and their administrative requirements. (3) Make a clearer distinction between projects suitable for IWI funding through IJC boards, and activities (such as gauging) that are more appropriately the ongoing responsibility of the federal governments. (4) Take advantage of in-kind services offered by some federal government agencies. (5) Consider ways to permit funding of multi-year projects, and leveraging state/provincial funds. (6) Clarify the extent of boards' authority to decide on project proposals (resolving issues at the lowest

possible level¹) and when the federal governments need to be consulted. (7) Issue a call for proposals at least twice yearly, timed to mesh better with the fiscal calendar of each country and allowing ample time for project preparation and execution.

Water Quality and Health

Brian Gibson, Co-Chair of the Health Professionals Task Force (HPTF), outlined human health challenges for transboundary watersheds, including:

- emerging chemicals such as pharmaceuticals;
- local loadings of persistent toxic substances;
- eutrophication and harmful algal blooms;
- changes in recreational water quality;
- surface and groundwater quality for drinking water; and
- effects of urban sprawl.

These have received some attention in the Great Lakes context, but have not featured prominently thus far in the thinking of the IWI boards. A preliminary HPTF scoping exercise focused on three predominantly rural transboundary watersheds (Red, St. Croix, Souris) found that: (1) data are located in many places, (2) public health responsibility is exercised differently on each side of the border, (3) public health and water quality jurisdictions are generally not linked, and (4) the capacity to respond to a disease outbreak or emerging public health threat has not been tested. Workshop participants recognized the need for more emphasis on the link between water quality and health, and that comprehensive watershed management strategies need to anticipate health problems. Boards were encouraged to consider what steps they might take, including:

- informing themselves (e.g., through presentations by health professionals, including HPTF members);
- considering including a public health expert as board member, to provide a constant, resident perspective on these issues;
- creating a public health network to provide ready access to expertise as required and to strengthen local capacity to address public health issues; and
- monitoring current conditions to assess present risks and establish baselines, and developing the ability to forecast problems.

¹ Known in European Union law as the subsidiarity principle.

HPTF members are working with several boards to develop project proposals for consideration and funding under the IWI.

Climate Change

Syed Moin, International Upper Great Lakes Study Manager, reviewed recent climate trends and the scientific consensus on anticipated likely climatic changes for the border area:

- warmer temperatures year-round, particularly in winter;
- increased precipitation overall, with wetter winters and springs and drier summers;
- increased runoff and increasing drought;
- changes in natural stream flow;
- lengthened growing season and freeze-free season;
- more rainy and fewer snowy days; and
- shifts in forest species.

The effects of various climate scenarios on levels and outflows from the Great Lakes have been modeled. Possible effects in IWI basins have received little attention to date, but the technology developed for the Great Lakes studies will be available for other boards. The Rainy River Board would certainly benefit from this given their proximity to the Great Lakes. Some IWI boards are reporting greater climate variability in recent years; others are seeing noticeable trends. An important question is whether existing IJC regulation plans are sufficiently robust to take into account predicted changes in climate. Water management agencies tend to begin with the working assumption of stationarity, now questioned by many prominent hydrologists². IJC directives generally do not explicitly mention climatic change, but the issue does appear in the founding documents for the IWI in the list of emerging challenges that argue for adopting a more comprehensive watershed approach to transboundary basins. Workshop participants recognized that IWI boards need to give this issue more attention in their strategic planning process.

Third IWI Report to Governments

The IWI Coordinators presented a draft, which had been circulated in advance of the workshop, of the proposed Third Report to Governments, provisionally titled *Basins without Borders: Toward a More Effective, Better Integrated Approach to Transboundary Watersheds*. The Commission intends to complete this report by the end of 2008. Participants' reaction to the draft was on the whole positive, with a feeling that the IJC has a good story to tell. Staff took note of various suggested enhancements and improvements, including:

² P.C.D. Milly et al. 2008. Stationarity is dead: whither water management? Science 319: 573-574.

- making reference to other transboundary basins, such as Lake of the Woods, St Mary, Milk, Flathead and the Alaska/B.C. area;
- starting off with a briefer, more focused executive summary;
- including more vivid success stories submitted by boards;
- stressing the importance of a flexible, basin-specific approach; and
- highlighting partnerships, social/economic challenges, tackling important public needs, the added value of a watershed approach, and the need for more public outreach.

Boards were asked to submit, no later than November 26, revised language on their accomplishments, together with photos or other compelling graphics, for inclusion in the next draft.

IJC Centennial

Staff reviewed the state of plans for celebration of the IJC Centennial. The focal point of these will be Boundary Waters Week, set for the June 5-13, 2009, at Niagara Falls; but there will be various other conferences and professional meetings where the Centennial could be profiled. Boards are encouraged to use their regularly scheduled meetings during 2009 to include commemorative sessions or events involving local, provincial/state and regional officials and stakeholders, and to submit papers or presentations for relevant technical meetings such as those of the American/Canadian Water Resources Associations and the Earth Resources Systems Institute. IJC staff will be distributing presentation kits with talking points, centennial literature, banners and other materials that boards may use in their activities.

Closing Comments

Board representatives commented that they find these workshops to be extremely useful and suggested that there be a workshop associated with each Semi-Annual meeting, if possible. It was recommended for the next workshop that the boards take a more active role (as they had in Vancouver) and make presentations on what they are doing to advance the IWI principles.

Agenda
International Watersheds Initiative Workshop

October 27, 2008

IJC Board Room
234 Laurier Avenue West, 22nd Floor
Ottawa, Ontario

Item	Time	Topic	Lead
1	0900 - 0945	Welcome. Self-introductions. Review of agenda. Quick verbal update by each board on its recent IWI activities.	Brooks/Blaney All
2	0945 -1030	Emerging Issues for IWI Boards: I. Fostering a harmonized geospatial approach to transboundary basins. <ul style="list-style-type: none"> • How do present data disconnects at the border impede and hamper the work of our boards? • What can boards do to address the problem at the local/regional level? • How can boards make more effective use of GIS data to tackle local issues? 	Laitta
	1030 - 1045	Health Break	
3	1045 -1145	IWI Project Review Process: Submitting, evaluating, funding and reporting. <ul style="list-style-type: none"> • Is the process fair, open and practical? • How can process be improved? • How can we be more strategic with our investment? 	Yuzyk/Brakel
	1145 - 1245	Lunch (Will be Provided)	

4	1245 - 1330	Emerging Issues for IWI Boards: II. Water Quality and Health. <ul style="list-style-type: none"> • What are the key transboundary water quality issues? • How can boards address them more effectively? • What are possible concerns/issues with moving forward? 	Gibson
5	1330 - 1415	Emerging Issues for IWI Boards: III. Climate Change <ul style="list-style-type: none"> • What is the state of knowledge? • How good are the climate models on a basin scale and how useful are they to the boards? • Where are research efforts currently focused? • How can/should boards address climate change in their work plans? 	Moin
6	1415 - 1515	Third IWI Report to Governments. <ul style="list-style-type: none"> • Does the draft report adequately capture the effort and successes that have been made? • Does the text reflect the progress that has been made by your board? • Does it express a vision for the future and make appropriate recommendations? 	Brakel/Yuzyk
	1515 - 1530	Health Break	
7	1530 - 1600	IJC Centennial Celebrations and Board Activities. <ul style="list-style-type: none"> • What are the activities/events being planned by the IJC? • How do the boards plan to highlight the centennial? • Will the centennial program have an appropriate mix of celebration and substance? 	Heisler/Cade Beckhoff/Bevacqua
8	1600 - 1630	Roundtable./Summary	All
	1630	End of Meeting	

Participants

International Watersheds Initiative Workshop - Ottawa, ON - October 27, 2008

Board	Attending	Canada / US
Rainy Lake Board of Control	Rick Walden	Canada
	Edward Eaton	U.S.
Rainy River Water Pollution Board	Bill Darby	Canada
	Jeff Stoner	U.S.
Red River Board	Mike Renouf	Canada
		U.S.
Souris River Board	Russell Boals	Canada
		U.S.
St. Croix River Watershed Board	Bill Appleby	Canada
		U.S.
Accredited Officers for the St. Mary-Milk Rivers	Russell Boals	
International Upper Great Lakes Study	Syed Moin	
Health Professionals Task Force	Brian Gibson	
St. Croix International Waterway Commission	Lee Sochasky	
IJC Commissioners	Allan Olsen	
	Irene Brooks	
	Jack Blaney	
	Pierre Trépanier	
	Sam Speck	
	Rt. Hon. Herb Gray	
IJC Staff	Antionette Cade	
	Bernard Beckhoff	
	Chuck Lawson	
	Frank Bevacqua	
	Jim Houston	
	Joel Weiner	
	Michael Laitta	
	Murray Clamen	
	Nick Heisler	
	Paul Pilon	
	Ted Yuzyk	
	Willem Brakel	