

Directive for the *International Lake of the Woods Basin Water Quality Plan of Study Team*

The purpose of this directive is to establish and direct the International Lake of the Woods Basin Water Quality Plan of Study Team (the Study Team) to develop a Water Quality Plan of Study (PoS) as described in the attached ***Terms of Reference International Lake of the Woods Basin Water Quality Plan of Study Team. (ToR)***

The IJC shall appoint two co-chairs, one Canadian and one American.

The Co-Chairs shall appoint their team membership, as they see fit, striving to balance Canadian and American membership. The International Watershed Coordinator for the Lake of the Woods and Rainy River Basin shall serve as the Secretariat for the Team.

The Co-Chairs will be responsible for organizing and executing the work of the Study Team, and for coordinating with, and reporting to, the Commission. Under the general supervision of the Co-Chairs, the Secretariat shall carry out such duties as are assigned by the Co-Chairs or the Study Team as a whole. When identified by the Study Team, the Commission will pursue technical assistance from the two Governments, the province of Ontario, and the State of Minnesota.

The Study Team may collaborate with selected scientists from the Core Monitoring subcommittee of the International Multi Agency Working Group (IMA) and the Lake of the Woods State of the Basin Report (SOBR) Principal Investigator and others as necessary.

Members of the Study Team and any committees or work groups created by it will be responsible for their own expenses unless otherwise arranged with the Commission.

The Commission may provide guidance, logistic and scientific support to the Study Team. The Study Team shall consult with others as necessary to seek their views so that each is aware of any activities in the basin that might be useful to it in carrying out its responsibilities.

The Study Team shall make use of public input received prior to and during the development of the PoS. The Study Team will strive to early engage and receive input from First Nations, Metis and Native American Tribes in the basin. The Study Team shall distribute information widely to raise awareness of the effort to develop a Plan of Study and the purpose of the proposed study. To the extent possible, the development of the PoS shall be an open and transparent process.

The Study Team shall provide opportunities for the public and the International Rainy-Lake of the Woods Watershed Board (IR-LWWB) to comment on the draft PoS concurrently with the Commission's review. The Study Team shall coordinate its public involvement plans with the Commission and the Board.

The Study Team will evaluate and analyze available information, and it will inform the Commission of any additional informational requirements necessary to develop the Plan of Study.

The Study Team will strive to reach decisions by consensus and will immediately notify the Commission of any irreconcilable differences.

Any lack of clarity or precision in instructions or directions received from the Commission shall be promptly referred to the Commission for clarification.

Timelines:

The Study Team shall:

Produce a preliminary draft PoS to be submitted to the IR-LWWB and the IJC by February 28, 2014

Present and discuss the preliminary draft PoS at a technical workshop on March 11-12 AM, immediately prior to the IR-LW Watershed Forum (March 12 PM-13, 2014), to seek experts input and broaden the technical base of the PoS.

Produce a draft PoS report to be submitted to the IJC, the IR-LWWB and to the Board's Community Advisory Group (CAG) and Industrial Advisory Group (CAG) prior to the April IJC Semi-annual meeting.

Produce a final draft PoS to be presented to the public July 2014 for a 30 day public comment period before IR-LWWB annual meeting – and as a topic at the Boards public meeting

Final PoS to be submitted to the IJC October 6, 2014 - two weeks before the IJC Fall-Semi annual meeting for consideration by the Commission.

Documents, letters, memoranda, and communications of every kind in the official records of the Commission are privileged and become available for public information only after their release by the Commission. The Commission considers all documents in the official records of Study Team or any of its committees or work groups to be similarly privileged. Accordingly, all such documents shall be so identified and maintained as separate files.

Camille Mageau
Secretary, Canadian Section
International Joint Commission

Chuck Lawson
Secretary, U.S. Section
International Joint Commission

Signature: 

Signature: 

Date: February 3, 2014

Date: February 3, 2014

Terms of Reference (ToR)
International Lake of the Woods Basin
Water Quality Plan of Study (PoS) Team

1 Introduction

The Governments of Canada and the United States of America (the Governments)¹ agreed to the International Joint Commission's (IJC) recommendation² that it prepares a Water Quality Plan of Study (PoS) for the Lake of the Woods basin to ensure a sound understanding of water quality issues and to inform subsequent actions by the Governments and by the International Rainy-Lake of the Woods Watershed Board (RLWWB) in fulfilling its Directives³. The PoS is to address priority issues identified in the IJC's January 2012 report⁴ to the Governments, submitted in response to the Reference from the Governments to the IJC of June 17, 2010⁵.

The RLWWB formed a PoS Committee to prepare the Terms of Reference for the PoS. The Commission reviewed and refined the document to reduce costs and shorten the timeline of activities while, leveraging of the networks and on-going activities in the watershed.

2 Purpose

The purposes of the PoS are to:

- Identify needed scientific research to understand the underlying causes of current water quality concerns and establish what remedial actions might be most appropriate to addressing the priority issues;
- Provide an analysis of what work is being done in these areas, its timing, as well as what work is still needed;
- Assess the costs of any actions and the role of governments and the public in this regard; and
- Provide a basis for the Commission to report to the Governments on recommended actions.

3 Study Scope

3.1 Priority Issues and Factors

The scope of the PoS includes each of the priority issues and factors related to water quality specifically identified by the IJC. The priority issues include:

¹ Letters to the IJC from the United States Department of State (June 29, 2012) and from Foreign Affairs Canada (July 25, 2012).

² Report to the Governments of the United States and Canada on Bi-national Water Management of the Lake of the Woods and Rainy River Watershed, January 2012.

³ Directive to International Rainy-Lake of the Woods Watershed Board, April 1st 2013.

⁴ Report to the Governments of the United States and Canada on Bi-national Water Management of the Lake of the Woods and Rainy River Watershed, January 2012.

⁵ Letters to the IJC from the United States Department of State (June 17, 2010) and from Foreign Affairs Canada (June 17, 2010).

- Nutrient enrichment and harmful algal blooms (NE-HABs);
- Alien aquatic invasive species (AIS);
- Surface and groundwater contamination, including heavy metals and other contaminants (S&GWC)

Other important factors identified as priorities by the IJC for understanding water quality include climate change and related development of indicators and adaptation measures as well as hydrology and hydrologic regulation. These factors (Climate and Hydrology) will be considered within the PoS insofar as they relate directly to the PoS priority issues.

The priority issues and factors identified above may not be discrete. As such, the scope of the PoS should address relationships between issues and interactions that may occur between factors.

3.2 Geographic Focus

The Lake of the Woods Basin consists of the Lake of the Woods and Rainy watershed. It drains an area of approximately 69,750 km². Approximately 59% is in Ontario and Manitoba and 41% in Minnesota. This is an immense area, much of which is outside the scope of the IJC's authorities.

The geographic scope of the PoS draws from the IJC's authorities under the Boundary Waters Treaty and the Directives assigned by the IJC to the RLWWB. As such, the scope of the PoS should focus on the boundary waters of the Lake of the Woods and Rainy River watershed as defined in the Directives of the RLWWB⁶. Consideration for scientific analysis could be given to upstream waters outside the defined boundary waters where there is justification to believe that activities upstream will impact receiving boundary waters as is provided for with respect to the Alert level function in the RLWWB Directives.

3.3 Project Components

An update to the State of the Basin Report (SOBR) is an integral and essential element of the Plan of Study work plan. The update of the SOBR is under contract by an independent author who will work in close collaboration with the PoS Study Team. The SOBR will deliver on the first three components and will partially cover components four and five of the PoS (see Figure A1), which are:

1. Identify existing research, data, regulatory and other relevant information available on the priority issues and factors;
2. Identify current activities and projects occurring in the watershed intended to address the priority issues and factors;

⁶ The IJC may make recommendations to Governments with regards to water quality objectives for boundary waters in the Lake of the Woods and Rainy River watershed as defined by the Boundary Waters Treaty; these waters include Lake of the Woods, Rainy River, Rainy Lake and Namakan Lake, Sand Point, Little Vermilion, Lac La Croix, Crooked, Basswood, Sucker, Knife, Saganaga, Gunflint, and North Lakes.

3. Identify key science and/or policy questions to be answered within the priority areas of concern and identify gaps in knowledge that, if filled, would provide answers to those key questions;
4. Define the studies and research to fill gaps and,
5. Define additional activities and projects to address priority issues and factors.

Much of this original baseline information was collected as part of the SOBR written in 2009 – a collaborative effort between the Lake of the Woods Water Sustainability Foundation, Ontario Ministry of the Environment, Minnesota Pollution Control Agency and Environment Canada.

Figure A1 illustrates the proposed workflow that will ensure the SOBR update is written and the PoS is complete and comprehensive, and details for each workflow box is provided in the PoS components listed as #1-11 below.

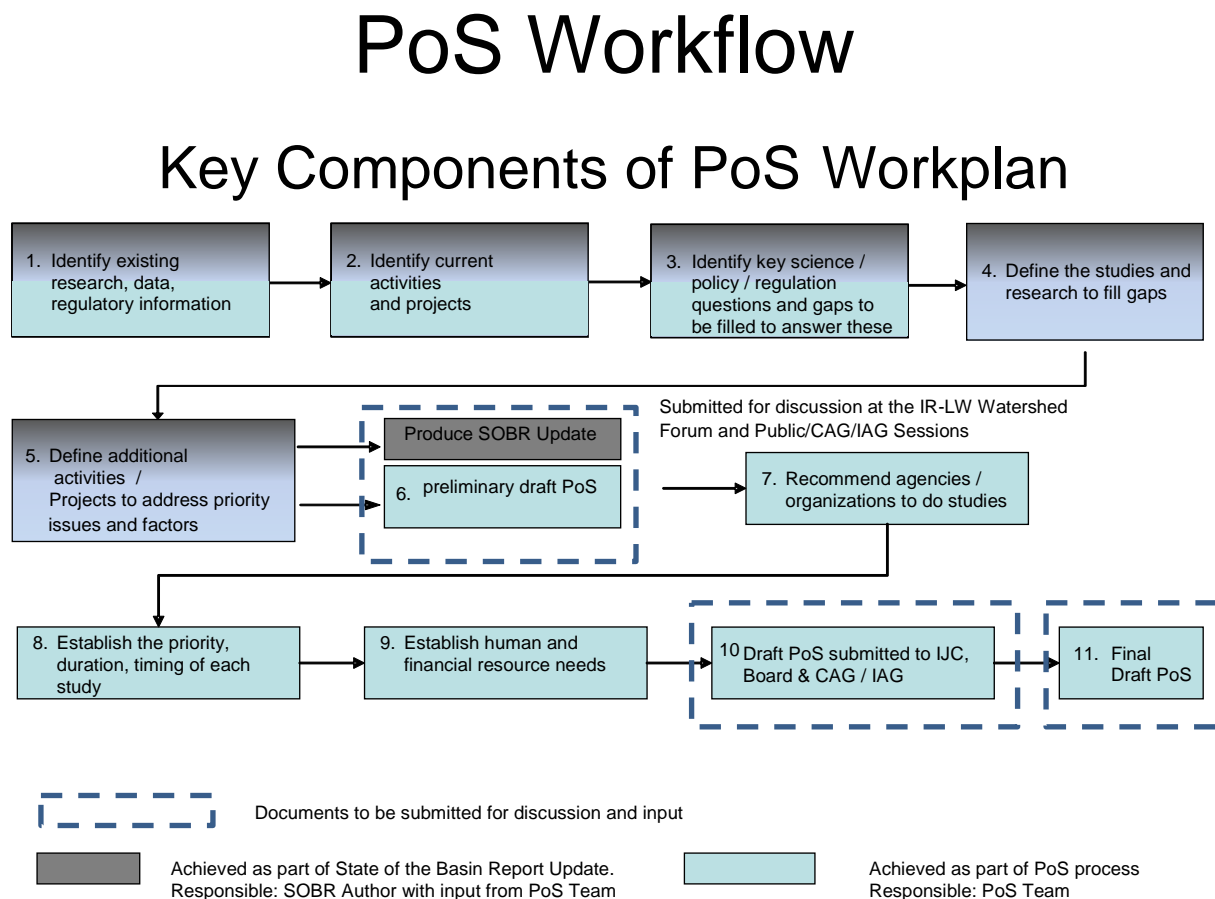


Figure A1: PoS Workflow

The following PoS project components (numbers correspond to numbers shown in boxes above) are required (but not limited to):

1. Identify existing research, data, regulatory and other relevant information available on the priority issues and factors.
2. Identify current activities and projects occurring in the watershed to address the priority issues and factors.
3. Identify key science and/or policy questions to be answered within the priority areas of concern and identify gaps in knowledge that, if filled, would provide answers to those key questions. As part of this component, it is critical to:
 - a. Develop an approach for engaging key scientists, resource managers, policy personnel, First Nations, Tribes, Métis, the public and the Board's CAG and IAG in this key component throughout the watershed. It is recommended that a technical session of experts (including traditional knowledge sharing) occur at the start of the process (for components 1-8) and a second technical session be held to review the output of the first session prior to finalizing a first draft; and
 - b. Ensure that discussions around key science and/or policy questions not only focus on the priority issues and factors of concern themselves, but also on the gaps that may exist within the regulatory environment (e.g., land use regulation in unorganized territory, watershed planning capabilities, existing and/or differing standards).
4. Define the studies, research, and other activities necessary to fill the identified knowledge gaps and answer the key questions, including:
 - a. Articulating and recommending the methodology for conducting all studies and activities to be performed and level of detail anticipated for each;
 - b. Making recommendations for building upon existing monitoring programs to ensure long-term data are available to conduct the research, monitor trends and anticipate ecosystem pressures, as well as the effectiveness of activities and adaptive management strategies; and
 - c. Identifying the sources of, or means of obtaining, needed information (scientific and historic/traditional knowledge).
5. Define and articulate the additional activities and projects necessary to address the priority issues and factors
6. Produce a preliminary draft version of PoS to be submitted for discussion at the International Rainy – Lake of the Woods Watershed Forum (IR-LW Watershed Forum) in March.
7. Recommend the agencies or organizations with the knowledge or expertise (scientific and historic/traditional) to conduct aspects of each study or activity, including the defined additional activities and projects.

8. Establish the priority, duration and timing of each study or activity.
9. Estimate the human and financial resources, including expertise, required to conduct each individual study or activity:
 - a. Provide a selection of options that range from a full suite of recommended studies/activities and higher-end costing to scaled-down options with only priority studies and lesser cost; and
 - b. Identify potential funding sources available in both Canada and the U.S. to conduct this work and/or anticipated future funding constraints that could compromise the outcome of this study.
10. Produce a draft PoS to be submitted for comments to the IJC, Board and it's CAG / IAG at the April Semi-annual meeting.
11. Produce a Final Draft PoS to be presented to the public in July for a 30 day public comment period before IR-LWWB annual meeting – and as a topic at the public meeting
12. Submit a Final PoS to the Commission by the end of September 2014.

4 Available Information and concurrent activities

On-going activities and existing networks can be leveraged to accelerate the production of the PoS. These could include the Lake of the Woods Water Sustainability Foundation (LWWSF) IR-LW Watershed Forum, the International Multi-Agency Arrangement for Lake of the Woods (IMA) activities, the SOBR Principal Investigator activities, the meetings of the IR-LWWG CAG, IAG and Water Level Committees and other organisations.