

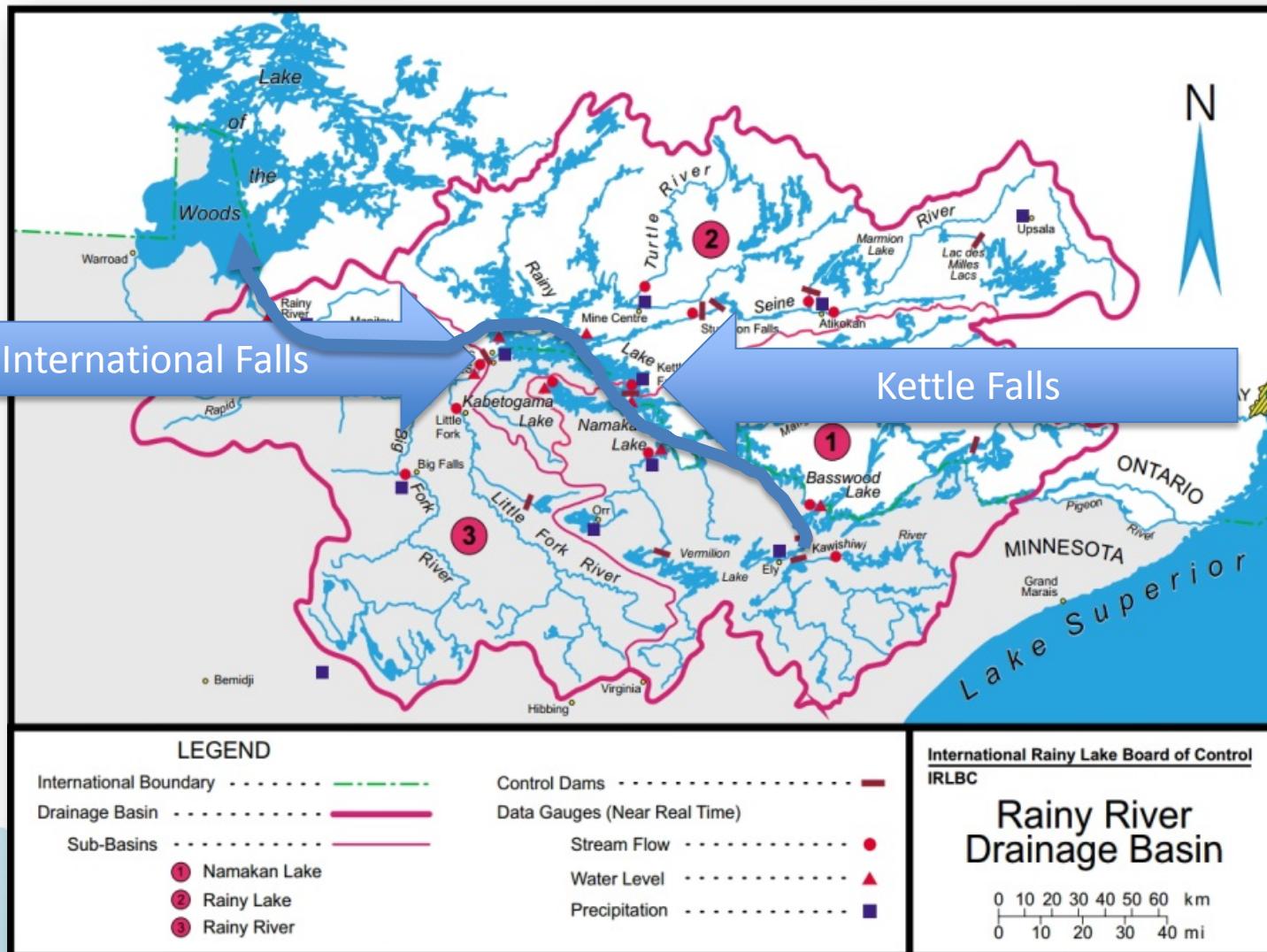


Rainy-Namakan Lakes 2000 Rule Curve Review

August 2015
W. Jenkinson



Rainy River Watershed



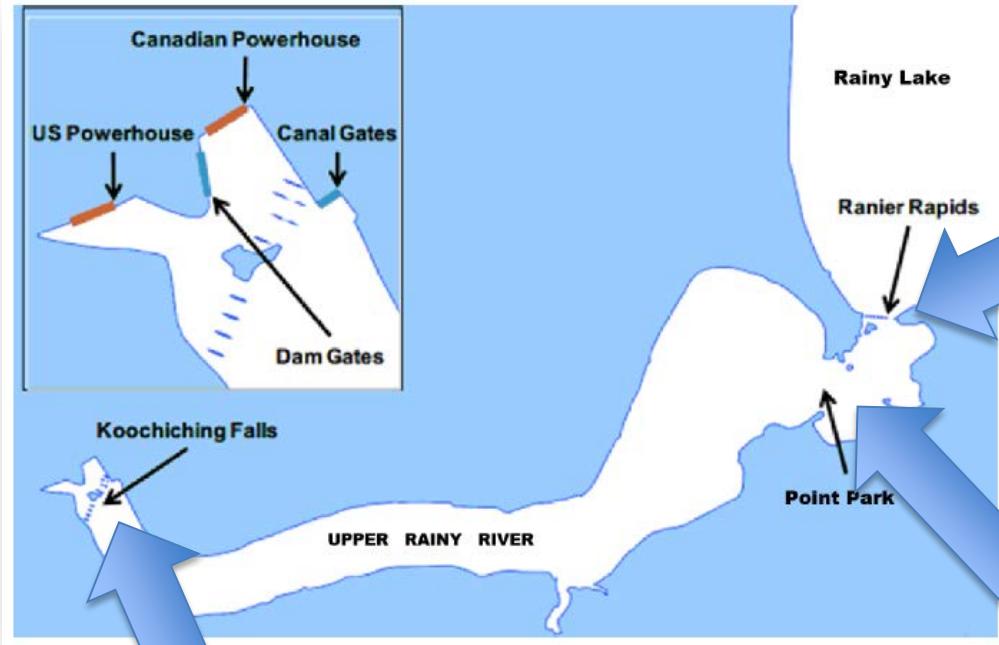


Namakan Lake Control Structures





Hydraulic Conveyance at Rainy Lake Outlet

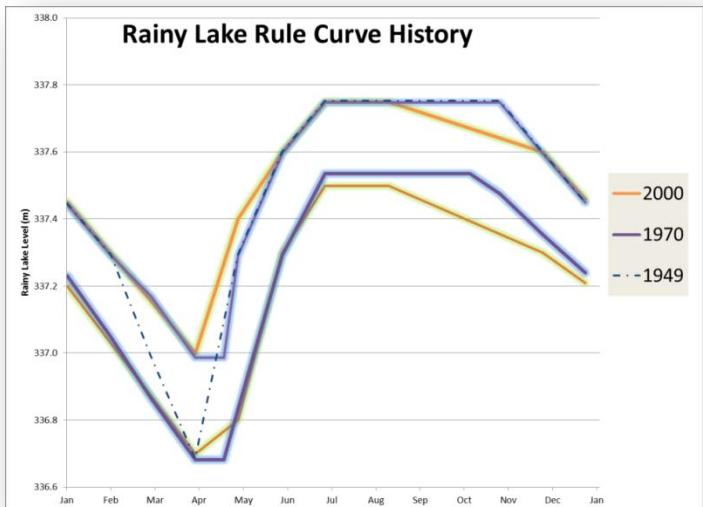
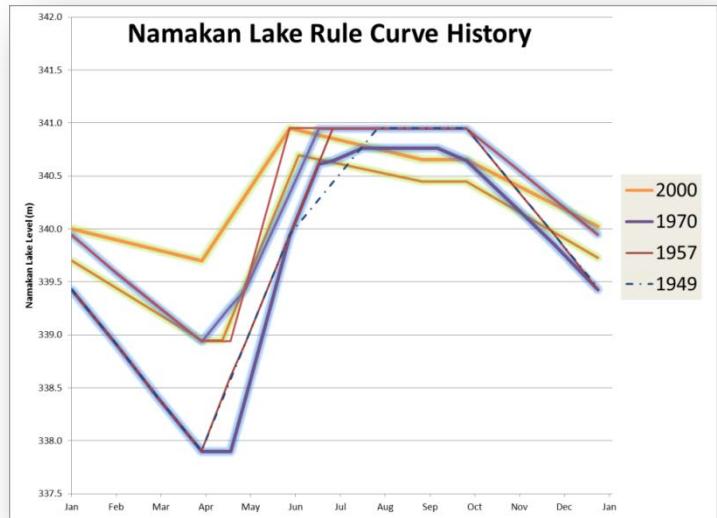




1970 and 2000 - Rainy and Namakan Lake Rule Curves

A Rule Curve: limits or guidelines (rules) on how water levels should be maintained in a lake or reservoir throughout a year.

- **1949 Order** directed the Companies, insofar as possible, to keep the level of Rainy and Namakan lakes precisely on a single rule curve (which varied seasonally) defined for each lake.
- **1957 Supplementary Order** made no change in rule curve on Rainy Lake, but defined both an upper and lower rule curve for most of the year on Namakan Lake, with the level to be maintained between these limits at the discretion of the Companies, and with a single rule curve remaining only for the summer months.
- **1970 Supplementary Order** defined an upper and lower rule curve for both lakes, with operation between these curves at the discretion of the Companies, and prescribed minimum outflows from the lakes.
- **2000 Supplementary Order** revised the 1970 upper and lower rule curves for both lakes, required that the Companies target the middle portion of the rule curve band subject to other direction from the International Rainy Lake Board of Control, and revised the prescribed minimum outflows. Order stipulated a review in 15 years (2015)





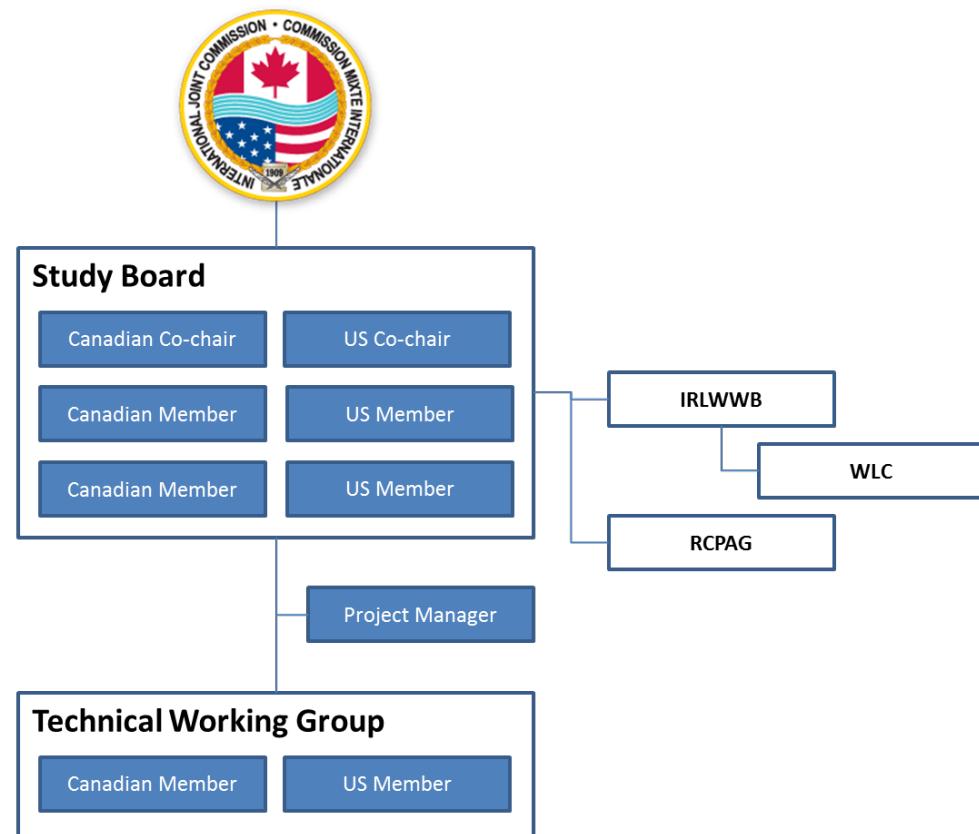
- Studies supporting the scheduled rule curve review began in 2010 (based on government funding procured in 2009 for this purpose.)
- Studies looked at a wide range of potential impacts to the watershed due to the rule curve (flooding damage, wildlife habitat, cultural resources, fish spawning, etc.)
- Review the effects of the 2000 Rule Curves beginning in 2015
- Will consider the information collected through the previous studies.
- Examiners to deliver a comprehensive set of study results to the IJC so that they may make an informed decision.
- Ultimately, the commission will decide whether to maintain the 2000 Rule Curves or alter the rules governing dam operation once again



2000 Rainy-Namakan Rule Curve Evaluation Plan

Governance

- **Six-Person Study Board**
 - Responsible for directing the study
 - Liaising with the Watershed Board and Public Advisory Group
 - Supported by the Project Manager
- Extensive engagement with public, and Aboriginal peoples, required throughout the study
- **Two-person TWG**
 - Arms-length modelers
 - Conduct simulations of rule curve options
- **Project Manager**
 - Supporting the Study Board
- **IRLWWB and WLC**
 - Consulted through outreach plan
- **Rule Curve Public Advisory Group (PAG)**
 - Formed by study board.
 - Public and stakeholder groups as well as First Nations, Metis and Tribes, as members
 - Regular outreach throughout the review process





- **August 4, 2015** – announce the structure, role and membership of the Study Board and TWG.
- **August 10, 2015** - study board convene an initial meeting separately and in conjunction with the IRLWWB annual meetings.
- **November 1, 2015** – Evaluation Methodology Report to be sent to IJC
- **March 2016** – International Lake of the Woods Science Forum – Study Board public information meetings.
- **March 21, 2017** – Draft report submitted to the Commission.
- **May 31, 2017** – Final draft report submitted to the Commission. Public hearings to be held as required.