# INTERNATIONAL RAINY LAKE BOARD OF CONTROL (IRLBC) INTERNATIONAL RAINY RIVER WATER POLLUTION BOARD (IRRWPB)

### **NEWSLETTER**

4<sup>th</sup> Quarter 2007

This newsletter provides a summary of the activities of the International Rainy Lake Board of Control (IRLBC) and the International Rainy River Water Pollution Board (IRRWPB) during the 4<sup>th</sup> Quarter (October-December) of 2007.

#### Basin Conditions and Regulation

The above normal rainfall in September was followed by two more above normal periods of rain in October. As a result, the inflows to Rainy and Namakan lakes, already near 75 percentile at the end of September, continued to rise. Inflow to Namakan Lake was the maximum of record (for the time of year) for 20 days in late October and early November, while inflow to Rainy exceeded 95 percentile during the same period. Overall, Namakan inflow rose from a low of less than 30 m<sup>3</sup>/s in mid-September to a peak of over 500 m<sup>3</sup>/s in October before declining to 175 m<sup>3</sup>/s at year-end, still an 80 percentile value for that time. Rainy inflow rose from a low of 20 m<sup>3</sup>/s in mid-September to a peak near 880 m<sup>3</sup>/s in October before declining to 290 m<sup>3</sup>/s at year-end, still an 80 percentile value. To limit rising lake levels in response to these inflows, the dams on both Rainy and Namakan lakes were fully opened. On Namakan Lake, the outflow capacity was not sufficient to keep the lake level within the IJC band, especially given that the level band declines significantly over the fourth quarter. Although the lake level did not rise much above its end-September level, it did not start to decline significantly until November 7. It was above its upper rule curve from October 5 through November 22, with a maximum deviation of 24 cm on November 6. At year-end, Namakan Lake was at 45 percent of its IJC band, with an outflow just over 180 m<sup>3</sup>/s. In contrast to Namakan, the outflow capacity on Rainy Lake was sufficient to keep the lake level within its operating band, although Rainy did reach 98 percent of its band on October 26. Rainy Lake ended the year at 73 percent of its band, with an outflow of 370 m<sup>3</sup>/s. Water levels, inflows and outflows for both lakes are shown on the attached graphs.

#### International Joint Commission Semi-Annual Meeting

IRLBC and IRRWPB members and staff attended the fall semi-annual meeting of the IJC in Ottawa ON on October 17. The Boards' presentation to the IJC addressed water quality, basin activities, Board meetings and lake regulation. The water quality component reported on water sampling and environmental effects monitoring, existing fish consumption advisories, and municipal/industrial point source discharges. There were no violations reported and aquatic health was said to be good. The basin activities component provided an update on spring hydropower peaking operations, environmental monitoring for rule curve re-assessment, the proposed Namakan River hydropower developments, the emerging issue of spiny water fleas in the basin, and the data collection for, and development of, a Rainy River hydraulic model. Following the presentation, there was discussion of governance issues in the basin, including the proposed merger of the IRLBC and IRRWPB, the future creation of a watershed board, and whether emerging Lake of the Woods water quality issues should be addressed separately or by an expanded IRRWPB. The Boards were requested to consider these matters, discuss them with IJC staff and provide input to the IJC Commissioners.

#### **Board Meetings**

During the quarter, the Boards met in Ottawa on October 16 and held a conference call on October 31. The Ottawa meeting focused on the presentation to the IJC the next day. The conference call was focused on the IJC's Watershed Boards initiative; a briefing by Willem Brakel of the IJC's US Section was followed by questions and discussion.

#### Rainy River Hydropower Peaking

During the 4<sup>th</sup> quarter the Work Group confirmed that, in the spring of 2008, as in 2007, no peaking would be conducted during a 2.5 month spring spawning period window, nominally from April 15 through June 30 but with actual dates depending on the status of the spawn. The agreement for this ongoing trial will be reviewed in the fall of 2008. The Work Group agreed that the process had worked well in 2007 and thanked Boise and Abitibi for their co-operation.

#### Proposed Hydropower Developments on the Namakan River in Ontario

As reported in previous Newsletters, these proposed developments continue to be a matter of public concern. By letters dated October 12, the IJC alerted the US Department of State and the Cdn Dept of Foreign Affairs & International Trade about the issue. These letters and related attachments were posted on the IRLBC and IRRWPB web sites in November.

#### Environmental Monitoring for Future Rule Curve Evaluation

This topic was last addressed in the 1<sup>st</sup> Quarter 2007 Newsletter. A team was to be named by the IJC to develop and cost a plan to conduct Rainy River data collection and analysis, and basin socio-economic studies, to fill current gaps in the information needed to re-assess the Rainy and Namakan rule curves in 2015. Concern was expressed at a meeting with the basin resource agencies in August that this had not yet been done, and was raised again in the Boards' presentation to the IJC in October. By year-end, prospective team members had been contacted by the IJC but funding was still an issue.

#### Rainy River Hydraulic Model

Under the IJC's International Watersheds Initiative, the US Section of the IJC has been funding work since 2006 by the US Geological Survey and the US Army Corps of Engineers to collect data for, and develop, a hydraulic computer model of the lower Rainy River. Last mentioned in the 4th Quarter 2006 Newsletter, this work is also addressed in the fall 2006 and both 2007 Board reports to the IJC. Work on the model was completed in late 2007, but further review, testing and a report remain to be done.

#### IRRWPB Receives Reply Letter from MPCA on Mercury Monitoring

The IRRWPB received a letter from the Minnesota Pollution Control Agency (MPCA), dated November 26, 2007, in response to recommendations about mercury monitoring near the Pine Island Peat Facility project. The IRRWPB request was in consideration of inquiries received from Manitoba Eco-Network and the Indigenous Environmental Network and on the Board's review of the permit and other information for this facility concerning potential transboundary effects of water pollution. The MPCA response stated that the facility holds a NPDES Permit for which the operators must comply and the MPCA reviews quarterly regarding discharge of total mercury concentration. The IRRWPB intends to review in greater detail the contents of the MPCA response and include their recommendations in the spring 2008 semi-annual report to the IJC.

#### Appointment of New IRRWPB Member

Effective October 15, Melanie Neilson (Environment Canada, Burlington ON) was named by the IJC as the Cdn Co-Chair of the IRRWPB, replacing John Merriman, who had retired in March 2007.

Questions or comments? Contact the Boards' Secretary:

Kari Layman

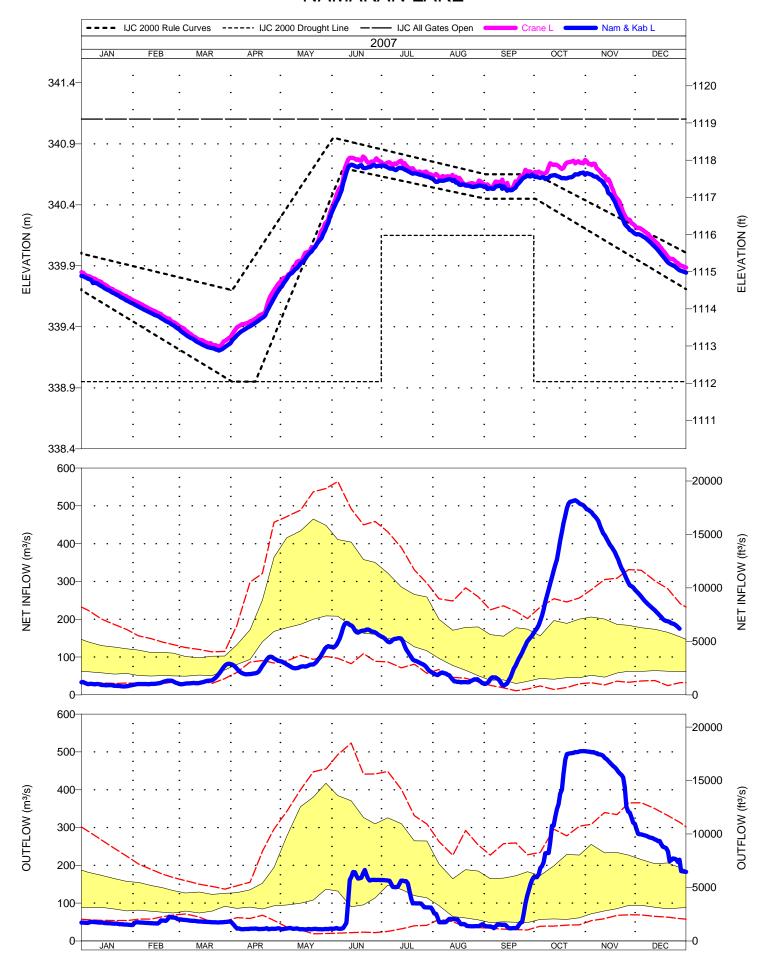
USACE - St. Paul District 190 Fifth Street East

St. Paul, Minnesota 55101 - 1638

Phone: 651 290-5424 Fax: 651 290-5841

Email: Kari.L.Layman@usace.army.mil

## NAMAKAN LAKE



## **RAINY LAKE**

