

**INTERNATIONAL RAINY LAKE BOARD OF CONTROL
INTERNATIONAL RAINY RIVER WATER POLLUTION BOARD****NEWSLETTER****2nd Quarter 2006**

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 2nd Quarter (April – June) of 2006.

Basin Conditions and Regulation

The water levels of Rainy Lake and the main portion of the Namakan Chain of Lakes remained within their IJC-defined rule curves throughout the quarter. However, the level of Crane Lake (part of the Namakan Chain) did exceed the Namakan upper rule curve level in April. Water levels, inflows and outflows are shown on the attached graphs.

The quarter started with early and strong snowmelt runoff. However, this runoff was short-lived and was not sustained and incremented by the usual rainfall amounts. As a result, the inflow to Namakan peaked in early April and did not rise higher in May as it would normally do. Similarly, the inflow to Rainy peaked before mid-April and rose to only a slightly higher second peak in May. Due to continued lack of rain, inflows to Namakan declined sharply through June, while inflows to Rainy started to decline in mid-May and continued to fall through June. Although the inflows to both lakes were the maximum of record (for time of year) in early April, they were only 40 percentile (Namakan) and 50 percentile (Rainy) in early May and had declined to only 25 percentile (Namakan) and 20 percentile (Rainy) by the end of June.

In spite of the varying inflows, the Companies varied the outflows to keep the lakes rising within their rule curve bands. Initially, the outflows from both lakes had to be increased in order to keep the lake levels from exceeding their upper rule curves. Namakan Lake reached 98% of its rule curve band on April 10, while Rainy Lake reached 98% of its band on April 8. The levels of both lakes moved toward the middle portion of their bands as the quarter progressed. At the end of June Namakan was at 44% of band and Rainy was at 51%, while their outflows were down to about 30 and 20 percentile respectively (both outflows had exceeded 90 percentile in April).

International Joint Commission Semi-Annual Meeting

IRLBC and IRRWPB members and staff attended the spring semi-annual meeting of the IJC in Seattle, Washington on April 6. The Boards' presentation to the IJC addressed emerging basin issues, lake regulation, planned basin activities, proposed projects under the IJC's "Watersheds

NOTICE**2006 IRLBC/IRRWPB
Joint Public Meeting****7:00 PM, Wednesday, August 23****La Place Rendez-vous
Fort Frances, Ontario**

Initiative” and hydropower peaking on the Rainy River. Basin issues included the potential Minntac tailings basin discharge, the Pine Island Peat Mine, proposed Namakan River hydropower developments and the need for improved cross-border communications within the basin. Planned basin activities included a tour of United States wastewater treatment facilities in May and public plus other meetings in the summer. Regarding the IJC’s Watersheds Initiative, the Boards provided an update, and rough costs, for the basin projects they had previously submitted for consideration under this program. These included floodplain management work, increased local involvement and hydraulic models for the Rainy River and the Namakan Chain of Lakes.

Following the Boards’ presentation, Members and staff met with IJC staff to further discuss the Rainy River peaking issue.

Rainy River Hydropower Peaking

This issue has been reported upon in previous Newsletters. During the IJC Semi-Annual Meeting on April 6, the Boards presented an overview of the comprehensive study plan (that IJC staff had requested) and tabled details of the plan. The estimated cost was \$800K - \$1.1M. Given the cost, the Boards suggested that the IJC consider the priority of this versus other work, and consider alternate approaches. Regarding springtime peaking operations, the Boards recommended dialogue with the Companies and, depending on outcome, involving other agencies.

Based on discussion with IJC staff after the presentation, the Boards subsequently sought expert input on the environmental impact of peaking operations and on appropriate springtime peaking limitations. Water level data was analyzed to determine the fluctuations resulting from peaking. Several documents were then prepared and submitted to the IJC in June.

Board Meeting and Tour Summary

The Boards met in Seattle on April 5 and 6. The bulk of the discussion concerned the material to be presented to the Commission and the follow-up activities from that presentation. Subsequently, four joint conference calls were held during the quarter, on April 13, April 28, May 26 and June 23. The conference calls dealt primarily with the follow-up work on the peaking issue and the resulting submission to the Commission. However, also discussed were the basin emerging issues (noted previously), funding for environmental monitoring for future assessment of the 2000 rule curves, the May tour of wastewater treatment facilities and the summer meetings.

On May 15-16, several Members of both Boards and IJC staff toured wastewater treatment facilities on the United States side of the Rainy River. This was a follow-up to the tour of Canadian facilities in September 2005. Board members, IJC staff and guests toured the Baudette Wastewater Treatment Facility (a lagoon system) in Baudette, the North Koochiching Sanitary Sewer District facility (a municipal biological/mechanical system) in International Falls and the Boise Paper wastewater treatment facility (an industrial biological/mechanical system), hydraulic power plant and paper production facility, also in International Falls.

On May 17, the Board members, IJC staff and guests conducted on-the-river surveys of the lower reaches of the Little Fork and Big Fork Rivers and the Rainy River in the vicinity of the two tributaries.

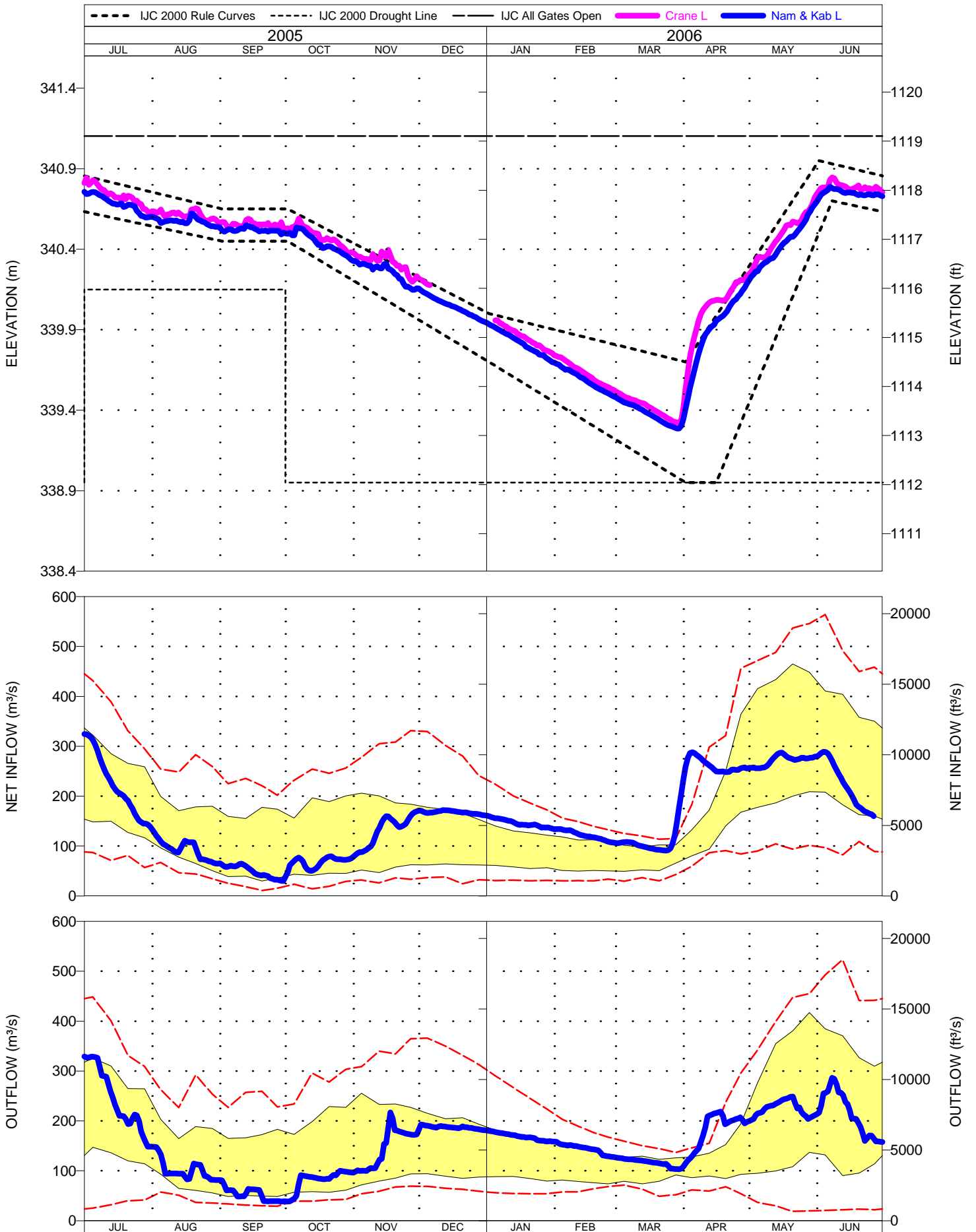
Survey of the Rainy River

With support from the U.S. Section of the International Joint Commission, the U.S. Army Corps of Engineers partnered with the U.S. Geological Survey to collect data on river-bottom depths and instantaneous velocities along about 290 cross sections of the Rainy River from the dam at International Falls and Fort Frances to the mouth near Baudette, Minn. These data were collected from May 15 through May 26, 2006. This period was targeted because of typically high river flow conditions during the spring, but as the basin conditions section described, flow conditions were lower than normal from lack of rain. The Minnesota Pollution Control Agency provided a student employee for part of this effort, which made it possible to complete the surveys in a timely manner. Study investigators are in the process of quality assuring the accuracy and consistency of the data, which will include coordinate information made possible by global-positioning technology. These data were collected for the purpose of constructing hydraulic models of the Rainy River, subject to the availability of future funding.

Questions or comments? Contact the Boards' Secretary:

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NAMAKAN LAKE



RAINY LAKE

