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

NEWSLETTER

4th 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 4th Quarter (October-December) of 2006.

Basin Conditions and Regulation

Water levels, inflows and outflows for Namakan and Rainy lakes are shown on the attached graphs. The dry conditions that began earlier in the year persisted and even deepened somewhat through the quarter. Inflows to Namakan Lake for the October through December period were only 6 percentile, while inflows to Rainy Lake set a new minimum of record for the period since 1911.

Namakan Lake started the quarter at its lower rule curve (LRC) level and with its outflow at 30 m³/s, the minimum specified by the International Joint Commission (IJC). However, as the rule curves start to slope downward more steeply on October 1, the Companies (Abitibi-Consolidated and Boise Cascade) were able to keep the lake level within the IJC operating band through the quarter in spite of the low inflows, with outflows ranging from 30 to 53 m³/s. In early December, given the low level of Rainy Lake, the IRLBC authorized the Companies to maintain the level of Namakan Lake in the lower portion of its operating band (rather than the middle portion). Namakan Lake ended the year at 36% of band.

Rainy Lake started the quarter 19 cm (7.4 in) below its LRC and only 2.5 cm (1 in) above its drought line (DL), with its outflow at the specified IJC minimum of 100 m³/s. The DL is the level at which the IRLBC can reduce the outflow below 100 m³/s, at its discretion, to as low as 65 m³/s, subject to consultations with resource agencies, affected municipalities and others. Rainy Lake fell below its DL on October 5, but both Boards agreed that the current outflow provided a reasonable balance between the needs of the lake and the river and so no further reduction in outflow was authorized at that time. This assessment was reviewed through October and November. By November 30, Rainy Lake was 44 cm (17 in) below its LRC and 19 cm (7.4 in) below its DL. Projections indicated that, without an outflow reduction, the lake level would likely continue to decline and be over 45 cm below its LRC on March 31st. Consequently, after extensive consultations by both Boards, and considering in particular the fishery on both the lake and the river and the risk to the Emo water intake on the river, outflow reductions were decided upon. The outflow was reduced from 100 to 80 m³/s in two steps on December 11-12 and further to 65 m³/s in two steps on December 20-21. Monitoring of dissolved oxygen levels at two locations in the river on a weekly basis, and monitoring of the river level at the Emo intake, were implemented. Rainy Lake ended the year 40 cm (16 in) below its LRC and 10 cm (4 in) below its DL.

News Releases

The IRLBC issued news releases (which were also posted on the web sites of both Boards) regarding the dry conditions and the Rainy Lake outflow reductions on October 27, December 8 and December 19.

Board Meetings, Reports and Presentations

The Boards met in Ottawa on October 19 and also appeared before the IJC at its fall semi-annual meetings. At its meeting the Boards finalized their IJC presentation and discussed regulation, hydropower peaking, their fall report, environmental monitoring and basin projects and their funding. The Boards' presentation to the IJC focused on basin water quality monitoring, basin issues (including peaking and environmental monitoring), emerging basin issues (including Rainy River turbidity and nutrient loads), basin projects and funding under the IJC's Watersheds Initiative program (including Rainy River surveys and modeling), Board activities and lake regulation. The Boards' joint fall 2006 report was submitted to the IJC in draft form in October and finalized on December 1; it is posted on the Boards' web sites.

During the quarter, the Boards held three joint conference calls. Topics discussed included regulation, hydropower peaking, environmental monitoring, basin conferences/workshops, Board correspondence, Board membership, the Pine Island peat mine and the fall report to the IJC.

Rainy River Peaking Work Group

Hydropower peaking operations on the Rainy River at Fort Frances – International Falls have been addressed in past Board newsletters and semi-annual reports. In August, the Boards, Boise and Abitibi had agreed to set up an informal committee to review peaking operations during the spring spawn. During October and November this “Work Group” was set up, consisting of representatives from the IRLBC, the IRRWPB, Abitibi, Boise, the Minnesota Department of Natural Resources and the Canadian Department of Fisheries and Oceans. The first meeting was held on November 29, during which it was agreed that, for 2007 and 2008, 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. A draft report was prepared by year-end and another meeting will be held in March 2007.

Rainy River Modeling

In previous newsletters this year, the Boards reported on initial survey work conducted on the Rainy River and on the award of 2006/07 funding from the U.S. Section of the IJC for both additional survey work and for the development of a computer hydraulic model of the river from International Falls – Fort Frances to Lake of the Woods. More detail on this modelling initiative is available in the Boards' Fall 2006 Report to the IJC. During November and December the field work required to map the river valley elevations above the river water level was conducted. This data will be combined with the earlier survey work that mapped the river bed. The resultant digital elevation product should be available in March, at which time development of steady and unsteady flow models of the Rainy River is expected to commence.

Pine Island Peat Mine Monitoring

The proposed Pine Island Bog Horticultural Peat Facility in Koochiching County (Minnesota) has been under review by the IRRWPB due to the potential for release of mercury through peat mining operations into the Black River and thence the Rainy River. Discharges from the facility are subject to permit conditions by the Minnesota Pollution Control Agency (MPCA). Since being briefed on the project by an MPCA engineer in August (see 3rd Quarter Newsletter), the IRLBC has drafted recommendations for additional long-term mercury monitoring (see Fall 2006 Report).

Environmental Monitoring for Future Rule Curve Evaluation

The new rule curves adopted for Rainy and Namakan lakes in 2000 are subject to review in 2015. This review is dependent on the collection of environmental and other data in the interim, so that impacts may be assessed. As noted in the 3rd Quarter Newsletter, the co-chairs of the resource agencies' Rule Curve Monitoring Committee have highlighted their concerns about funding being available to continue Rainy and Namakan monitoring and about the lack of Rainy River monitoring. The lack of any socio-economic study for the future assessment of the rule curves has also been noted. This issue is of growing concern to both Boards and has been reported to the IJC in the Boards' Fall 2006 Report and as part of the Boards' October 2006 presentation to the IJC. The Boards followed-up with a letter to the Commission in early December detailing the information gaps.

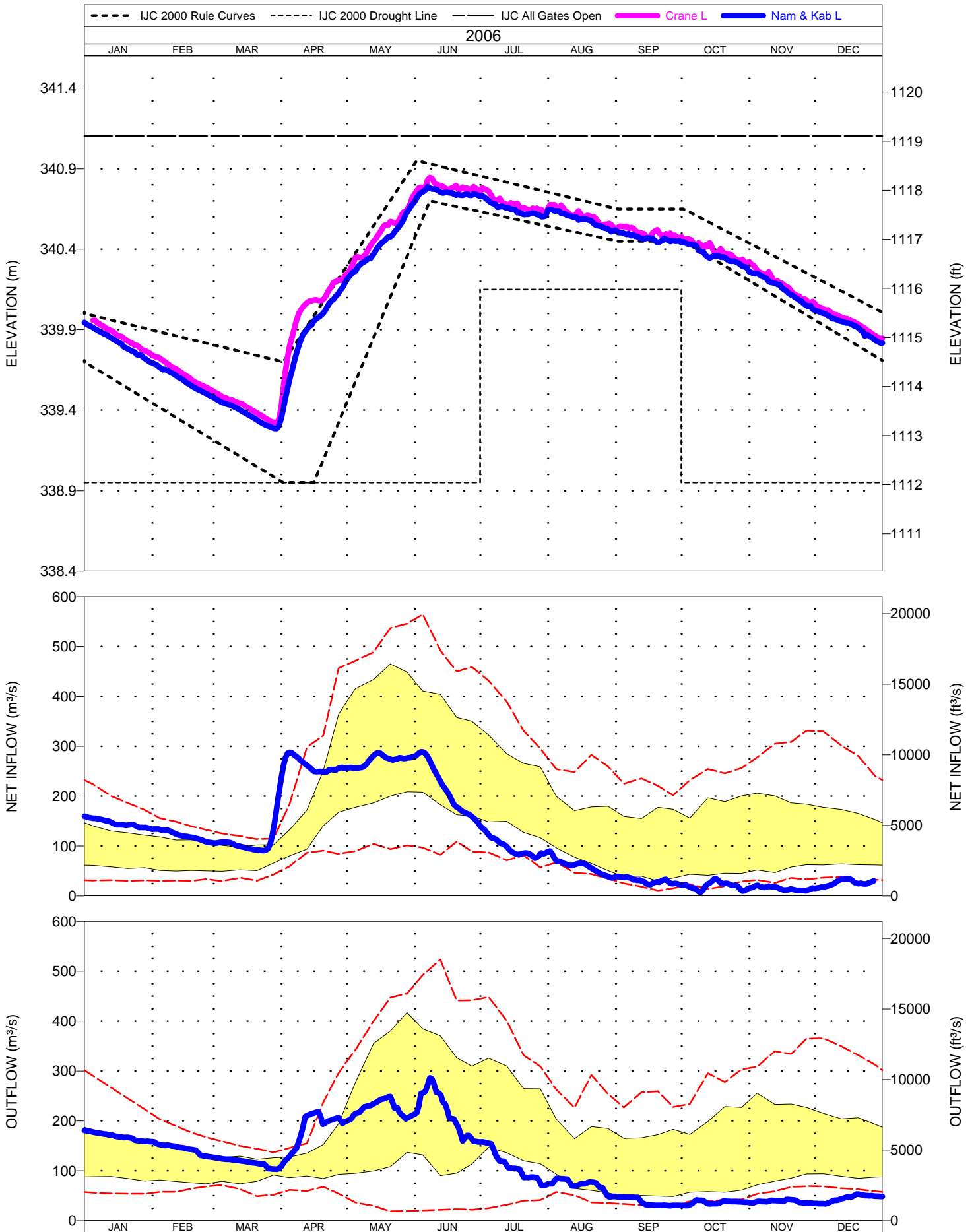
Namakan River Hydropower

As noted in the Boards' Fall 2006 Report to the IJC, the Boards continue to monitor activities regarding the potential development of three hydropower sites on the Namakan River in Ontario between Lac la Croix and Namakan Lake. No impact on water levels on the international boundary waters is either anticipated or approved. More information on the proposed projects can be found on the web site of the proponent, Ojibway Power and Energy Group Ltd., at www.opeg.ca.

Questions or comments? Contact the Boards' Secretary:

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NAMAKAN LAKE



RAINY LAKE

