## INTERNATIONAL RAINY LAKE BOARD OF CONTROL

# NEWSLETTER

### REVIEW OF THE IJC ORDER FOR RAINY AND NAMAKAN LAKES

November 1996

### Introduction

The final plan of study for the review of the IJC order was approved by the International Joint Commission on January 17, 1996 by letter to the Chairmen of the International Rainy Lake Board of Control. The Board has the delegated responsibility for the review. As part of the study plan the Board developed a list of specific activities to be carried out, and a schedule for completion of the work. The Study is anticipated to be complete by the spring of 1998, and allows time for public review of both an interim Status Report and the Board Draft Report to the IJC. The Board also developed a budget for completion of the activities and by April, 1996 had obtained commitments for the funding necessary to carry out the work.

#### **Fisheries Review**

First priority was given to an independent review of the existing information on the fisheries of Rainy and Namakan lakes. Contracts were let in February, 1996 to retain two fisheries experts, one in Canada and one in the United States, to provide advice to the Board on these aspects of the study. The experts retained were Gordon Koshinsky of Saskatoon, Saskatchewan, and James Kitchell of Madison, Wisconsin. Both experts, highly recommended by colleagues in the fisheries field, were knowledgeable of the fisheries in the basin, and were independent of the studies carried out by the agencies or bodies with a direct interest in the regulation of the Rainy Lake system. The two experts submitted independent interim progress reports to the Board in late March, 1996. A final combined consensus report was prepared and submitted to the Board in early August. In their executive summary, the fisheries experts endorsed the proposed rule curve changes recommended by the International Steering Committee. They noted that current water level regulation and fisheries exploitation act together to increase the inherent variability in fish populations, leading to uncertainty about the relative causes of decline of these populations. Nevertheless, they felt that remedial actions could help rehabilitate the depressed fish populations, and should include both more natural water level conditions and continued efforts to reduce and constrain exploitation pressure. Their five major findings and conclusions were:

- 1. Further analysis of the existing data sets will not offer significant improvement in understanding of effects of water regulation on fisheries.
- 2. Overexploitation has played a major role in the decline of fish stocks.
- 3. Water level regulation has contributed to the decline of fish stocks.

- 4. Fisheries managers should develop and implement a more aggressive program to evaluate the importance of invasion by the exotic smelt (Osmerus mordax).
- 5. Management actions such as those embodied in new rule curves and more restrictive fishery regulations require follow-up studies.

# **Spring Meetings**

The International Rainy Lake Board of Control met with a number of stakeholder groups in Fort Frances, Ontario on March 4 and 5, 1996 to discuss preliminary proposals on a number of Study activities. The purpose of the meetings was to seek participation by key stakeholder groups and to obtain input on study directions so that plans in these areas could be firmed up and work initiated. The Board, recognising the importance of evaluating the downstream impacts of possible changes to the rule curves, took steps to ensure that the views of downstream interests are made known. Meetings were held with representatives of municipalities and the resource management agencies with interests on the Rainy River. The meetings were useful in facilitating contacts, gathering additional information and explaining the expectations of the Board in relation to feedback expected from the resource management agencies. The Board also indicated that it will look to the Lake of the Woods Control Board to assess possible impacts on Lake of the Woods.

The role of the Board and the IJC in relation to downstream impacts is to facilitate affected interests in coming together to express their views, rather than to perform a detailed assessment.

The Board also met with groups which had expressed interest in the potential of inflow forecasting for improving management of the lake levels on Rainy and Namakan Lakes. As a result of the meeting it was agreed that an Inflow Forecasting Study Team would be established to provide advice and input to this Study component. The Team will be co-chaired by the Board Engineering Advisors and include agencies that can provide technical expertise, and groups that have an interest in the outcome of modelling and forecasting work. Boise Cascade, Stone-Consolidated, Voyager National Park and the Minnesota Department of Natural Resources have agreed to provide forecasting expertise. Other groups or agencies will participate in definition of the scope of activities and may be able to provide input and expertise at a later date. This component of the Study will now be initiated based on the concepts and ideas discussed at the meeting.

### **Other Activities**

A number of other activities have been initiated, and have reached the stage of interim reports or interim documents subject to internal agency review. For example, the Hydrologic Modelling Review activity is being carried out under the lead of Environment Canada. A Model User's Manual and a Model Data Report have been drafted. The model is now ready for testing once the historic data base of lake levels and streamflow is updated to include more recent data, including the provisional 1996 information.

The US Army Corps of Engineers, St. Paul, is conducting the review of existing Environmental and Economic Data. This work is advancing well and should be available to the Board for review by the end of November, 1996.

The Board anticipates that the draft Status Report will be complete in the spring of 1997. The Status Report will summarise all activities to date and will be released to the public. This will be a key point in

the Study, and an excellent opportunity for input by stakeholders. Technical reports that the Board has received will also be made available at that time.

## **High Water Event**

As residents of the basin are aware, high water was experienced in the basin in the spring and early summer of 1996. Delayed snowmelt and heavy precipitation combined to create a rapid rise in inflow and relatively high levels on Namakan and Rainy Lakes. Rainy Lake experienced its highest level since 1974. The inflow volume has been estimated to have a frequency of occurrence of about once every 20 to 25 years. Concern over localized flooding has been expressed to the Board by residents, and has also generated considerable coverage in the local media. Those with concerns should be aware that the flood risk associated with the existing versus the proposed rule curves will be assessed thoroughly as part of this Study.

The Board will be using the Newsletter as one of the mechanisms to keep agencies and the public informed on study progress. If you wish to be added to the mailing list, or have comments or questions, please contact the Board's Engineering Advisors:

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