International Rainy and Namakan Lakes Rule Curves Study Board

IJC Board recommends additional flood protection and further ecological benefits, finds 2000 Rule Curves performed as expected

May 1, 2016 The International Joint Commission's (IJC) International Rainy and Namakan Lakes Rule Curves Study Board, (the Board) released its draft report "Managing Water Levels and Flows in the Rainy River Basin" for public consultation, closing June 1, 2017.

The Board was tasked with evaluating the performance of the 2000 Rule Curves and examining options for improved regulation of the water levels of Rainy Lake and the Namakan Chain of Lakes. It found that the 2000 Rule Curves generally performed as expected, bringing benefits to navigation, tourism, and ecology of the Namakan Chain of Lakes, some benefit to fisheries on Rainy Lake, but decreases in hydropower generation and higher water levels in flood years on Rainy Lake. The Board concluded that the 2000 Rule Curves are a viable option going forward, but that some modifications could provide additional benefits overall.

The Board examined a wide range of alterations to the 2000 Rule Curves, focusing finally on two key areas: reducing peak water levels in flood years on Rainy Lake, and reducing the artificially large drawdown of both lakes during the winter period for ecological benefits. Rule Curve Alternative B provides a spring target level range on Rainy Lake lower than the 2000 Rule Curves, for use in years when flood risk is deemed to be high (otherwise the 2000 Rule Curves are followed). This alternative would reduce, but not eliminate, peak flood levels in most flood years. Alternative C includes this conditional spring target, but also introduces an early drawdown of the lakes in the fall, before freeze-up, with less drawdown during the core winter period. This is intended to provide improved winter survival of muskrats, which typically cannot survive the drawdown in the 2000 Rule Curves. Increased muskrat populations would, in turn, result in improved wetland conditions and associated ecosystem benefits including reducing invasive Hybrid Cattails and promoting the growth of Wild Rice. The changes to the winter drawdown would also benefit fall spawning species such as Lake Whitefish and Cisco and survival of benthic invertebrates. This approach results in greater hydropower generation in the fall, but less in the winter, and is expected to result in a net reduction in power generation.

The Board is recommending Alternative C be adopted, along with a development of an ongoing Adaptive Management program, to monitor the effectiveness of Rule Curve changes and make adjustments based on monitoring results. Should the IJC determine that the changes to winter water level targets in Rule Curve Alternative C for both lakes are not acceptable, the Board recommends that the conditional spring flood reduction component for Rainy Lake be implemented (Rule Curve Alternative B).

The Board provides seven major recommendations on the Water Levels Committee operations, including the development of Operational Guidelines for best practices such as wild rice

production and the currently used Rainy River Sturgeon Protocol, as well as comments on data monitoring and public engagement. The Board also suggests the IJC recommend to Canada and USA a feasibility study of modifying the outlet of Rainy Lake for flood reduction. Finally, it provides recommendations for improved and ongoing engagement with First Nations, Tribes and Métis to improve water level management.

Throughout the Study, the Board has engaged with local individuals, groups, and communities. This included the 32- local member Rule Curve Public Advisory Group appointed by the IJC to reflect the diverse interests in the watershed and the Resource Advisory Group consisting of resource scientists from state, provincial and federal agencies, as well as Treaty #3 representatives and several First Nation communities and the Métis Nation of Ontario. Based on feedback from these groups, and at more than 45 public and advisory group meetings and seminars, the Board has found the following: broad local support on the Namakan Chain of Lakes for the 2000 Rule Curve; strong support for the flood damage reduction approach for Rainy Lake provided the walleye fishery is safeguarded; and, with the exception of concerns raised over reduction in hydropower generation, general support for ecological benefits that could be achieved through modifying the over-winter drawdown of Alternative C.

"*The high level of public interest in this study contributed directly to the findings and recommendations in this report*", remarked Canadian Study Co-Chair Matt DeWolfe.

His US counterpart, Col. Samuel Calkins added "*The contributions of the RCPAG and RAG as well as the many individuals who contacted the Study Board, allowed for a good understanding of the concerns and priorities of the public, and we are very grateful for that input."*

Any changes to the rule curves would be introduced by the IJC, following public hearings.

The public and other interested parties have until midnight June 1st, 2017 to comment, either in writing at

ParticipateIJC.org or by email at Rainy@participateijc.org or by regular mail at:

International Joint Commission
ATTN: RAINY – NAMAKAN RULE CURVES STUDY
234 Laurier Avenue West, 22nd Floor Ottawa, ON K1P 6K6
Or
1717 H Street NW, Suite 801, Washington, DC 20006

For more information on the Study please contact:

Matt DeWolfe, Canadian Study co-chair 800-661-5922 ex 3

Scott Jutila, American Study co-chair 651-290-5631