

Rainy-Namakan Rule Curves Final Letter Report following and considering Public Comments

November 8, 2017

This document summarizes the public comments received by the International Rainy and Namakan Lakes Rule Curve Study Board (Study Board) on their final report to the International Joint Commission (IJC), as well as comments received by the IJC during the public hearings and comment period on the IJC's report titled "Draft Changes to the Rainy and Namakan Lake Rule Curves for Public Comment". The comments have been summarized and grouped by general theme, and each comment includes a response from the IJC, and, where relevant, the IJC's planned path forward.

The IJC would like to thank all those who took the time to attend the public hearings, or submitted comments during the comment period. The IJC has considered all comments received in developing the path forward, including comments associated with the following themes:

Theme 1: Changes to Existing Rule Curves

While the IJC heard a lot of support for the implementation of the Study Board's recommended Rule Curve Alternative, "Alternative C", mainly from Rainy Lake interests, the IJC also heard some dissenting views from stakeholders on Namakan Lake, who supported Alternative B, which included no rule curve change on Namakan Lake and a flood reduction curve on Rainy Lake. The major dissenting points summarized as follows:

- a. **Comment:** Some stakeholders on the Namakan Chain of Lakes felt the proposed new rule curve lacks water level flexibility during early March, which may lead to increased flood risk. More specifically Namakan stakeholders have concerns with Alternative C with regard to increased flooding risk from March 1 to March 15, since under the new rule curve water levels could be approximately eight to twelve inches higher on Namakan Lake compared to the 2000 rule curve for Namakan Lake during that period.

Response: The Study Board did not see an issue with the increased water levels on Namakan Lake from March 1 to March 15, since there have not been any floods on record on Namakan Lake during that time. They also did not believe the minor raising of the upper rule curve band during this period would add to the flood risk. Further, the upper portion of the rule curve band would not be targeted in years where there is high snow pack or a forecasted wet spring through the El Nino Southern Oscillation (ENSO) forecasting system.

The IJC is of the view that within a climate change context, it is hard to predict

what future inflows might be during this time. In response to this public concern the IJC may direct the Water Levels Committee (WLC) to deviate from the Order to regulate water levels below the Alternative C Namakan Rule Curve from March 1 to March 31 if required. The IJC will provide specific direction within the new WLC directive that they can request a deviation from the IJC on Namakan Lake water levels if high inflows are anticipated during March 1 to March 31, while considering other impacts and trade-offs. The new directive to the WLC will also specify that they shall have a meeting with interested parties and stakeholders in the basin in late February or early March in anticipation of the spring freshet to receive input from those attending the meeting for consideration by the WLC.

- b. **Comment:** Some stakeholders on the Namakan Chain of Lakes felt the timing of the fall draw-down in proposed Alternative C would adversely affect walleye spawning.

Response: The Study Board in its final report anticipates an increase to walleye, northern pike, cisco and lake whitefish spawning habitat on Namakan Lake with Alternative C, compared to the 2000 Rule Curve. The findings of the Study Board regarding walleye in Rainy Lake was also usually an improvement over the 2000 rule curve, except when a spring flood was predicted and the flood reduction curve was implemented, but no flood occurs. This flood reduction element is common to both Alternatives B and C and could hurt walleye in Rainy Lake, by reducing lake levels and thus spawning area, but this would only be potentially damaging to walleye stocks if walleye production had been weak in the 2-3 years preceding a flood declaration. In operational terms, this would mean that, if walleye had not been abundant for several years, the WLC would consider not lowering the lake in response to a forecasted wet spring. This would be discussed by the WLC in their meeting with stakeholders in late February or early March and include fisheries experts, and would be a feature to include in the Operational Guidelines.

- c. **Comment:** Namakan Lake resort and property owners expressed concern that the fall drawdown of proposed Alternative C for the Namakan Lake is too steep and will not result in the cleaning of spawning gravels that walleye use for spawning the following spring or that lake whitefish use to spawn in the fall. They indicated the 2000 Rule Curve provides these benefits to spawning.

Response: Fisheries experts working on the study indicate that Alternative C will clean walleye and whitefish spawning gravels, and this feature was specifically incorporated into the design of Alternative C as a positive ecological benefit.

- d. **Comment:** The hydropower companies, including H2O power, PCA, as well as Manitoba Hydro, expressed a lack of support for the new rule curve citing issues related to lower power production during the winter months due to the timing of the drawdown. The IJC heard specifically from H2O Power that they predict that Alternative C will reduce hydropower generation by 1%.

Response: The Study Board acknowledged that flows will be higher in early fall and lower in late fall and winter under Alternative C and that this will result in a net reduction in energy generation in most years. Considering all the ecological benefits, as well as other benefits of Alternative C, the IJC views the 1% reduction in annual power production to be reasonable, considering the power companies have experienced a 9% increase in average annual power production by increasing the efficiency of their turbines over the years, as was noted at one public hearing.

Theme 2: Expanded Role for the WLC of the IRLWWB

Most, if not all comments received, supported the WLC, a committee of the International Rainy Lake-Lake of the Woods Watershed Board (IRLWWB) having a more engaged role in managing levels and flows in the Rainy Lake basin. In preliminary collaborations with the WLC, they have already indicated that there will be a need for increased resources to be provided to the WLC for them to deliver on their increased responsibilities under the updated Order and directive. The IJC has, and will continue to, alert the governments to this need for their consideration. Concerns received during the public comment period related to establishing new processes or roles, as follows:

- e. **Comment:** The IJC heard from the resource agencies that they should be included as members on WLC and their input is needed for the Operations Guide. The IJC also heard from the operators of the International Falls Dam that they too should be included on the WLC.

Response: The IJC's new Directive to the International Rainy-Lake of the Woods Watershed Board (IRLWWB) is to have the WLC establish advisory sub-committees, including resource agencies and dam operators. The IJC is proposing the WLC further develop Operational Guidelines, including consideration for downstream interests, expanding on what was developed by the Study Board, and

in consultation with resource agencies, stakeholders and Indigenous peoples in the basin.

- f. **Comment:** The spring meeting before freshet each year needs to be multi-faceted and inclusive.

Response: The IJC is proposing to have the WLC meet with stakeholders and other interested parties towards the end of February or early March, prior to the spring freshet, so their views can be considered in the WLC's annual decision to follow the normal rule curve or the high flood risk rule curve for Rainy Lake. This is proposed to be included in the new WLC directive. The meeting will be open to anyone who would like to attend.

- g. **Comment:** Support for Recommendation 5 by resource agencies in the form of reduced ramping rates and opposition to this by the power companies. (Recommendation 5 is examining the practical operational approaches to benefit Rainy River, while meeting rule curve requirements).

Response: The Study Board's Final Report in Annex 8 contains sample Operational Guidelines. Ramping rates are discussed under the year-round considerations for the WLC, as are other means of protecting the Rainy River from negative impacts due to releases from the International Falls Dam. The Study Board's recommendation calls for the identification of best practices for limiting large flow changes. Those practices would have to consider the trade-offs for reduced flow changes, including, for example, the impact to hydropower generation, the position within the Rule Curve, and flood and drought risk. The IJC is proposing the WLC further develop the Operational Guidelines, expanding on what was developed by the Study Board, in consultation with resource agencies, stakeholders and Indigenous peoples in the basin.

Theme 3: Employ Adaptive Management to Evaluate Impacts

Those who provided comments on Adaptive Management (AM) supported it. No comments received expressed opposition to AM. Comments received pertained to process, monitoring needs and funding issues:

- h. **Comment:** The need for funding to conduct AM was expressed by some. Concerns were expressed that Rainy River impacts need more focus in future research associated with AM.

Response: The Study Board specifically noted in their report that funding is an

important consideration in implementing AM, and the IJC will be looking to leverage resources with its partners to ensure monitoring on the river is included. As well, the workshop proposed for winter 2018 will include discussion of research needs on the Rainy River.

The Study Board and IJC recognize that there are ongoing gaps in information pertaining to the Rainy River. However, it is worth noting that, at the time of the development of the 2009 Plan of Study to conduct this most recent review of the 2000 rule curves, the IJC responded to concerns for a lack of data on the Rainy River by convening a workshop in March 2008 to evaluate what priority monitoring and studies were needed on the river, so that the 2000 Rule Curves could be properly evaluated and these were then incorporated into the 2009 Plan of Study. This led to a variety of factors being studied within Rainy River for the 2000 Rule Curves Review including: sturgeon spawning habitat and population, walleye spawning habitat, index of biotic integrity, mussels, cultural resources, as well as municipal and fish hatchery use. The IJC will aim to, through AM, focus on monitoring impacts of the rule curves on Rainy River aquatic resources.

- i. **Comment:** Resource agencies need to be involved in AM and consider all aquatic and riparian species.

Response: The Study Board report acknowledged resources that should be monitored and the need for funding to implement AM. The IJC anticipates that, much like the last time AM was conducted in the basin in order to review of the 2000 Rule Curves, which included resource agencies, resource agencies will be a key partner to successfully conduct AM again in the future. The IJC supports AM and is proposing to ask the IRLWWB on how best to implement adaptive management and consider the recommendations made by the Study Board relative to AM, including institutional arrangements proposed in their final report.

- j. **Comment:** The AM cycle should refer to the entire 15 year period of data collection (monitoring) and research that occurs between prescribing rule curves and the full review of those rule curves.

Response: The Study Board recommended a formal review after a 15-year period as part of an AM process. The IJC agrees and is including a clause in the revised order specifying a review of the new rule curves would take place within 15 years from the implementation of the new order, or as otherwise determined by the IJC, as stated for the last review. It is proposed to state that the next review shall, at a minimum, consider monitoring information collected by natural resource

management agencies and others during the interim that may indicate the effect of the changes contained in the Supplementary Order, as stated for the last review.

Theme 4: Stakeholder Concerns outside the scope of the Rule Curves Review

Some comments received during the public comment period were outside the purview of the Study and outside the mandate of the IJC. For example:

- k. **Comment:** Consider impacts on rare species and Alien Invasive Species (AIS) in Lake of the Woods.

Response: The Study Board correctly referenced the geographic scope limits of the study area as the confluence of Rainy River with the Lake of the Woods, which excludes the Lake of the Woods proper. In January 2012, as part of their report to governments on *Bi-national Water Management of the Lake of the Woods and Rainy River Watershed*, the IJC recommended to governments it provide them with a reference to study Lake of the Woods water levels, as it had not been studied in many years. The governments deferred the recommendation. Now that the Rule Curve study is completed, the IJC plans to recommend to the governments they again consider giving the IJC such a reference that can include the findings of the 2000 Rule Curve review.

- l. **Comment:** The Study Board's Recommendation 9 is for the IJC to advise governments that modifying the outlet of Rainy Lake to alter flow conveyance is a subject of interest in the watershed. An increased conveyance leaving Rainy Lake is seen by some as an alternative to reduce flood risk on that lake. However, others in the basin voiced concern with this approach, citing environmental concerns, downstream flooding, engineering feasibility and cost concerns.

Response: The issue is outside the mandate of the IJC, and a reference from governments would be required for the IJC to formally study the issue and make recommendations regarding outlet modification. Accordingly, the IJC is alerting the governments that this is an issue in the basin, stating there is some support for and some support against.

Theme 5: Improve Collaboration with Indigenous Communities

The Study Board and the IJC worked with Indigenous peoples throughout the study, and received input from them regarding the Study Board's final report and the IJC's draft report that was provided for public comment prior to the IJC's public hearings in August 2017. Most voiced support for the recommended updates to the rule curve, but they generally requested an

increased and ongoing involvement and consultative role both with the WLC itself, and with the development of new procedures.

- m. **Comment:** The IJC should partner with Grand Council Treaty 3 in order to involve them further in the following IJC activities: developing WLC terms of reference, a communications strategy, pre-spring engagement and increased collaboration with Indigenous communications in the basin.

Response: The IJC is committed to engaging with stakeholders, the public and Indigenous communities as it develops the new protocols, engagement strategies and guideline documents for the WLC. It will work with Indigenous communities in particular in order to ensure they are involved in its work, and that of the WLC, and in order to strengthen its relationship with them in the long-term.