

## **INTERNATIONAL JOINT COMMISSION**

In the Matter of Emergency Regulation of the Level of Rainy Lake and of other Boundary Waters in the  
Rainy Lake Watershed

### **Supplementary Order**

To the Order Prescribing Method of Regulating the Levels of Boundary Waters, dated 8 June 1949, as amended by Supplementary Orders dated 1 October 1957, 29 July 1970 and 5 January 2000, as consolidated by the Consolidated Order dated 18 January 2001.

#### **WHEREAS:**

A Convention between the United States of America and Canada providing for emergency regulation of the level of Rainy Lake and of the level of other Boundary Waters in the Rainy Lake watershed was signed at Ottawa on 15 September 1938 and was duly ratified;

Pursuant to the said Convention the Commission, by Order Prescribing Method of Regulating the Levels of Boundary Waters dated 8 June 1949, determined when emergency conditions exist in the Rainy Lake watershed and adopted certain measures of control with respect to the dams at Kettle Falls and International Falls - Fort Frances in order to prevent the occurrence of such emergency conditions;

The Commission reserved the right to amend or rescind its Order of 8 June 1949 at any time and to issue such supplementary or other Orders as it might deem to be in the public interest;

The Commission, by Supplementary Order dated 1 October 1957, amended its Order of 8 June 1949 to permit greater flexibility in the regulation of the level of Namakan Lake;

The Commission, by Supplementary Order dated 29 July 1970, further amended its Order of 8 June 1949, based on experience which demonstrated the difficulties of operating the outlet works so as to ensure that lake levels will be at precise elevations on certain dates and to further qualify the Commission's determination of "emergency conditions" within the meaning of the Convention signed on 15 September 1938;

The Commission, by Supplementary Order dated 5 January 2000, further amended its Order of 8 June 1949, in order to carefully adjust the rule curves in the watershed, determining that some variation in the regulated levels may be desirable from year to year within defined rule curve bands and so as to provide a better balance between upstream and downstream concerns and various interests in the basin, including environmental concerns, hydropower, flood risk, and boating;

The Supplementary Order dated 5 January 2000 contained a condition that it should be reviewed 15 years after its adoption in order to assess its effects;

The Commission issued an official Consolidated Order in January 2001, which was “adopted by the Commission as the authoritative text of the Commission’s Order of June 8, 1949, as amended, and replaces the individual Order and Supplementary Orders listed above;”

In 2010, the Commission convened an independent binational group of experts to carry out studies identified in the 2009 Plan of Study for the Evaluation of the 2000 Rainy and Namakan Lakes rule curves. These studies, in addition to ongoing monitoring activities carried out by resource agencies, were conducted over a five year period in order to understand the effects and changes of the 2000 Supplementary Order on conditions in the Rainy Lake basin;

The Commission also received a reference, dated June 17, 2010, under Article IX of the Boundary Waters Treaty from the Governments of Canada and the United States, to study and make recommendations regarding “the binational management of the international waters of the Lake of the Woods and Rainy River system”;

The Commission, after studying this issue and reporting to Governments, recommended the consolidation of the International Rainy River Pollution Board and the International Rainy Lake Board of Control into a single board, called the International Rainy Lake-Lake of the Woods Watershed Board. Following endorsement by the two governments the Commission established the Watershed Board to be supported by a Water Levels Committee (WLC), which was charged with ensuring compliance with its Orders of Approval and acting as a technical advisor to the Commission and the Watershed board;

The Commission established the International Rainy and Namakan Lakes Rule Curves Study Board in August 2015, and charged it “to evaluate options for regulating levels and flows in the Rainy-Namakan Lakes system in order to benefit affected interests and the system as a whole”;

The Study Board provided its final report to the Commission in June 2017, and recommended modified rule curves for Rainy and Namakan lakes, after careful consideration of the issues in the basin and extensive consultation with the public;

The Commission considered the recommendations of the Study Board before publishing draft changes to its Orders of Approval for the emergency regulation of Rainy and Namakan Lakes and inviting public comment in July 2017. The draft Supplementary Order was based on Rule Curve Alternative C, developed by the Study Board, which provided conditional spring flood reduction targets for Rainy Lake in years with high spring flood risk and reduces over-winter drawdown for broad ecological benefits in both lakes;

The Commission provided a convenient opportunity to be heard to the public, stakeholders, First Nations, Métis, and Tribes in the basin through a public comment period that lasted from July 25 to September 1, 2017, and public hearings which were held on August 16, 2017 in Fort Frances, Ontario; August 17, 2017 in International Falls, Minnesota and Kabetogama, Minnesota, and August 18, 2017 in Rainy River, Ontario. Following the close of the public comment period on September 1, 2017 all comments were collated and posted on the Commission’s website at <http://www.participateijc.org>;

Concerns were raised by stakeholders on Namakan Lake in the public comment period about increased water levels on Namakan Lake from March 1 through 15 with Rule Curve Alternative C. The Commission consulted with members of the Study Board and experts about this concern and finds that there have been no floods in March on record in Namakan Lake and that raising of the upper rule curve band during this period would not add to the flood risk, and notes that the upper portion of the rule curve band will not be targeted in years where there is high snow pack or a forecasted wet spring;

The Commission is of the view that within a climate change context, it is hard to predict what future inflows may be between March 1 and 15. In light of this and concerns raised by Namakan Lake stakeholders about the potential for spring flooding, the Commission emphasizes the flexibility the WLC has within the rule curve for Namakan Lake, and the potential for the WLC to request a deviation from the Rule Curve for Namakan Lake if it deems it necessary due to the risk for spring flooding. Further, consultation with the public will be a critical component of WLC operations under the new order, including prior to the crucial spring freshet period;

The consistently high level of public engagement in the basin continues to impress the Commission, and is invaluable in contributing to the work of the Commission, the Watershed Board and the Water Levels Committee;

The Commission endorses the application of an adaptive management approach in order to monitor and objectively understand how the changes to the rule curves affect the Rainy and Namakan Lakes system, so the rule curves can be objectively reviewed in the future;

The Commission recognizes the long history of the Indigenous peoples in the Rainy-Lake of the Woods basin, and will endeavor to build on existing relationships with Indigenous peoples moving forward in the basin. The Commission recognizes that developing stronger relationships with Indigenous communities requires a sustained and committed approach to the Commission's work in the basin;

After careful deliberation, the Commission is confident that the adoption of the rule curves contained in this Order will result in broad ecological benefits, and that the new inclusion of an alternative rule curve for Rainy Lake for high flood risk years will help to reduce flood peaks. Combined with further operational guidance for the Water Levels Committee, more flexibility for the Water Levels Committee in targeting levels within the rule curves, continued and improved engagement with Métis, Tribes, and First Nations, and the exploration of adaptive management, the rule curves will help to ensure that the boundary waters of the Rainy River basin are well managed for years to come.

**NOW THEREFORE THIS COMMISSION ORDERS AND DIRECTS THAT:**

The Order Prescribing the Levels of Boundary Waters dated 8 June 1949, as amended by the three Supplementary Orders dated 1 October 1957, 29 July 1970, and 5 January 2000, as consolidated by the Consolidated Order dated 18 January 2001, is hereby amended by:

1. Deleting Condition 1(a) and substituting the following:

1(a) The Companies, their successors or assigns shall operate the discharge facilities at the Kettle Falls Dam as authorized by the Water Levels Committee of the International Rainy Lake and Lake of the Woods Watershed Board, hereafter “Water Levels Committee”, in such manner that insofar as possible the level of Namakan Lake, unaffected by wind or currents, will be between the following minimum and maximum elevations on the dates shown or between elevations which can be interpolated therefrom between these dates, these elevations being above mean sea level. Furthermore, the companies, their successors, or assigns shall keep the Water Levels Committee informed in advance of their intended actions. The Water Levels Committee shall monitor hydrologic conditions and the Companies' actions and may provide the Companies with directions for the operation of their discharge facilities. The Companies shall carry out any instructions provided by the Water Levels Committee, which may include instructions to target specific levels within the band.

**Namakan Lake Elevations**

Minimum			Maximum		
Date	Meters	Feet	Date	Meters	Feet
01-Jan	339.66	1114.37	01-Jan	339.93	1115.26
15-Mar	339.56	1114.04	15-Mar	339.90	1115.16
31-Mar	338.95	1112.04			
			15-Apr	339.99	1115.45
22-Apr	338.95	1112.04			
31-May	340.47	1117.03	31-May	340.93	1118.54
			8-Jun	340.94	1118.57
15-Jun	340.68	1117.72			
30-Sept	340.40	1116.80	30-Sept	340.6	1117.45
15-Nov	339.73	1114.60	15-Nov	339.98	1115.42

2. Deleting Condition 2(a) and substituting the following:

2(a) The Companies, their successors or assigns shall operate the discharge facilities at the International Falls-Fort Frances Dam as authorized by the Water Levels Committee, in such manner that insofar as possible the level of Rainy Lake, unaffected by wind or currents, will be between the following minimum and maximum elevations on the dates shown or between elevations which can be interpolated therefrom between these dates, these elevations being above mean sea level.

Furthermore, the companies, their successors or assigns shall keep the Water Levels Committee informed in advance of their intended actions. The Water Levels Committee shall monitor hydrologic conditions and the Companies' actions and may provide the Companies with directions for the operation of their discharge facilities. The Companies shall carry out any instructions provided by the Water Levels Committee, which may from time to time include instructions to target specific levels within the band.

**Rainy Lake Elevations**

Minimum			Maximum		
Date	Meters	Feet	Date	Meters	Feet
01-Jan	336.99	1105.61	01-Jan	337.25	1106.46
15-Mar	336.89	1105.28	15-Mar	337.18	1106.23
01-Apr	336.71	1104.69			
			15-Apr	337.20	1106.30
01-May	336.80	1104.99	01-May	337.40	1106.96
01-Jun	337.30	1106.63	01-Jun	337.60	1107.61
01-Jul	337.50	1107.28	01-Jul	337.75	1108.10
15-Jul	337.49	1107.25	15-Jul	337.73	1108.04
			22-Sep	337.64	1107.74
30-Sep	337.31	1106.66			
22-Nov	337.07	1105.87	22-Nov	337.26	1106.50
30-Nov	337.04	1105.77	30-Nov	337.26	1106.50
22-Dec	337.00	1105.64	22-Dec	337.27	1106.53
31-Dec	336.99	1105.61	31-Dec	337.25	1106.46

3. Renumbering existing Conditions 2(b)(c) and (d) as 2(c)(d) and (e), and substituting the following as Condition 2(b):

2(b) If forecasts show that the basin may experience high inputs that may cause flooding later in the season, the WLC may direct that the Companies follow the below high flood risk rule curve for Rainy Lake. The determination to follow the high flood risk rule curve should be made by the Water Levels Committee no later than March 10. If, after the Water Levels Committee has made the determination to follow the high flood risk rule curve, conditions change as the year progresses and the risk of flooding decreases, the Water Levels Committee may direct the Companies to return to following the standard rule curve for Rainy Lake contained in condition 2(a).

**Rainy Lake Elevations (high flood risk rule curve)**

Minimum			Maximum		
Date	Meters	Feet	Date	Meters	Feet
01-Apr	336.70	1104.66	01-Apr	337.00	1105.64
01-May	336.70	1104.66	01-May	336.85	1105.15
			01-Jun	337.30	1106.63
			01-Jul	337.60	1107.61
15-Jul	337.50	1107.28	15-Jul	337.75	1108.10
31-Dec	337.20	1106.30	31-Dec	337.45	1107.12

4. Deleting Condition 4 and substituting the following:

4. All obligations imposed in the said Order dated June 8, 1949, as amended by the Supplementary Orders dated October 1, 1957; July 29, 1970; January 5, 2000; and this Order upon the Companies, their successors or assigns apply jointly and severally to H2O Power Corporation and Packaging Corporation of America and their successors or assigns.

5. Deleting Condition 5 and substituting the following:

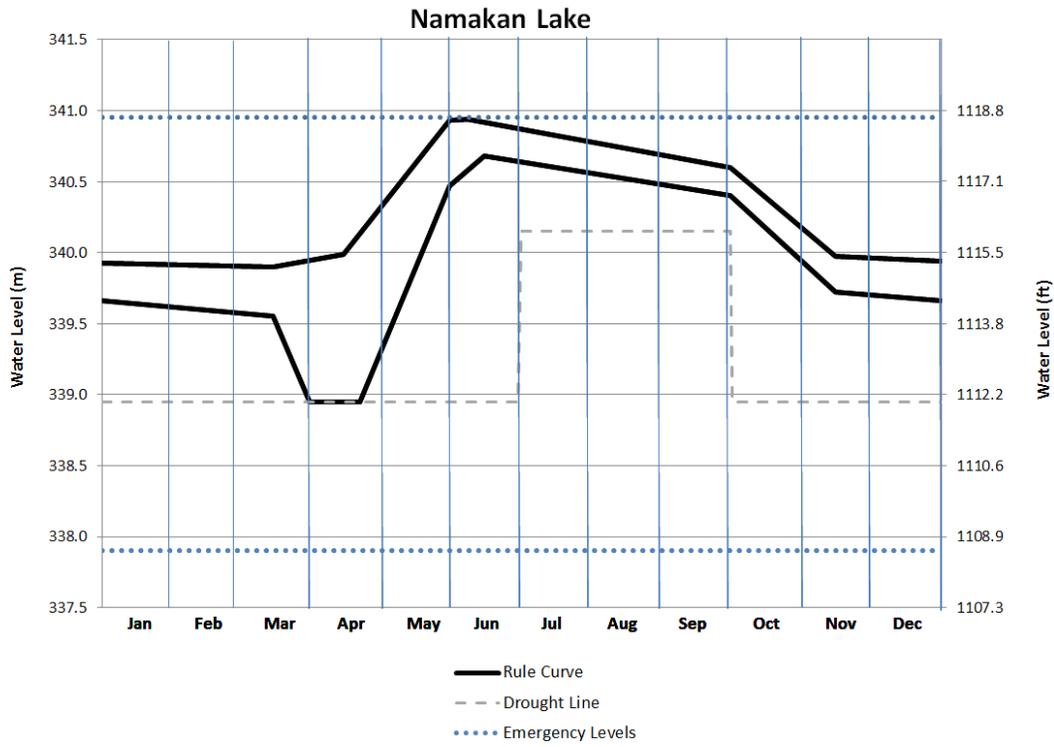
5. This Order shall be subject to review 15 years after the effective date of this Supplementary Order or as otherwise determined by the Commission. The review shall, at a minimum, consider monitoring information collected by natural resource management agencies and others during the interim that may indicate the effect of the changes contained in this Supplementary Order.

6. Conditions 1(c) and 2(c), and Condition 3, are changed to refer to the “Water Levels Committee” in place of the “International Rainy Lake Board of Control”.

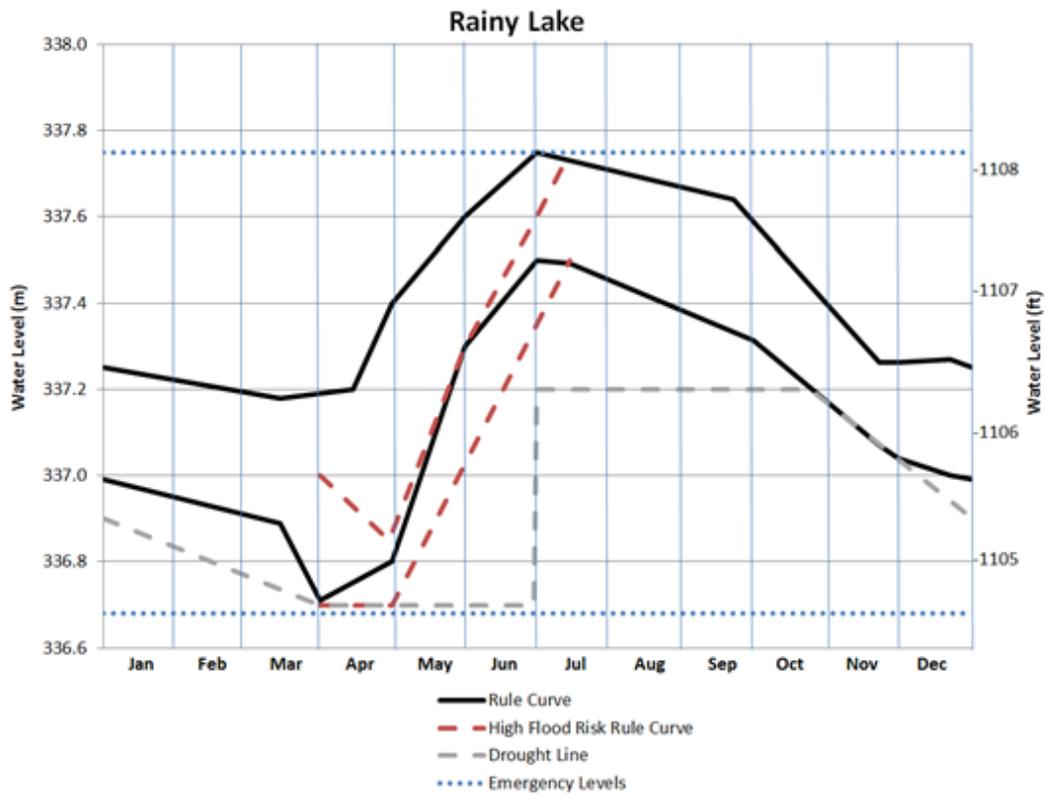
7. Deleting Figure 1, and substituting the Figure set out below.

Figure 1

Namakan Lake Rule Curve



Rainy Lake Rule Curves



Signed on the 1<sup>st</sup> day of March, 2018.



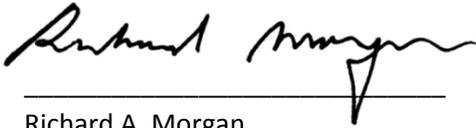
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