### 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 Order dated 1 October 1957.

# 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 specifically 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 amendment to terminate 30 September 1962

unless the Commission continued it in force beyond that

date;

The Commission, after affording opportunity for the interested parties to be heard and deeming such action to be in the public interest, has extended the termination date of the 1 October 1957 amendment on two occasions and the said amendment is in force at the present time;

Heavy rainfalls have occurred at various times since 1957, and especially throughout the summer of 1968, which caused both Rainy and Namakan Lakes to rise considerably above the full pool elevations set forth in the Commission's Order of 8 June 1949, as amended by the Supplementary Order of 1 October 1957;

Low water conditions also have occurred at various times since 1957, causing both Rainy and Namakan Lakes to fall below the minimum elevations set forth in the said Order, as amended;

Experience has demonstrated the difficulties of operating the outlet works so as to ensure that lake levels will be at precise elevations on certain dates, under all

conditions of supply, and also the desirability of further qualifying the Commission's determination of "emergency conditions" within the meaning of the Convention signed on September 15, 1938;

At the Commission's request in the summer of 1968, its International Rainy Lake Board of Control undertook an examination of further measures of regulating the levels of Namakan and Rainy Lakes and the results of such examination and the Board's conclusions were set forth in the Board's Report to the Commission, dated March 1969;

The Commission made copies of the Board's Report available at once to all interested persons;

After due notice, the Commission held a public hearing at International Falls, Minnesota, on 24 June 1969 at which time the conclusions of the International Rainy Lake Board of Control and the proposed changes in regulation were explained by the Board of Control and all interested persons were given opportunity to present testimony and make representations to the Commission;

At the hearing testimony was presented and representations were made on behalf of the Province of Ontario and the State of Minnesota, the Manitoba Hydro-Electric Board, the City of Winnipeg Hydro-Electric System, The Hydro-Electric Power Commission of Ontario, The Ontario-Minnesota Pulp and Paper Company Limited, the operators of tourist, fishing and hunting camps and resorts and by various individuals;

Both the Government of Canada and the Government of the United States were represented at the said hearing by Counsel;

The International Rainy River Water Pollution Board reported to the Commission in April, 1970 that when the outflow from Rainy Lake is low, unsightly fibrous sludge deposits on the bed of Rainy River are exposed; that this condition becomes increasingly offensive when the outflow is less than 4000 cfs (cubic feet per second); and that at a streamflow of 3300 cfs dissolved oxygen in Rainy River is below the objective of 5 milligrams per litre; and

WHEREAS the Commission has been informed that
Minnesota and Ontario Paper Company was merged with and
into Boise Cascade Corporation in 1965;

NOW THEREFORE THIS COMMISSION ORDERS AND DIRECTS THAT:

- 1. The Order Prescribing Method of Regulating the Levels of Boundary Waters, dated 8 June 1949, is hereby amended by deleting paragraphs A, B and C, relating to the determination of emergency conditions in and along the shores of the Namakan Chain of Lakes and Rainy Lake, and substituting therefor the following:
  - "A. Emergency conditions exist in and along the shores of the Namakan Chain of Lakes when the level of Namakan Lake is higher than elevation

- 1118.6 feet above mean sea level, excluding the effect of wind and currents, and the inflow at that time is in excess of the total outflow capacity of the present structures at Kettle Falls; emergency conditions also exist when the level of Namakan Lake is lower than elevation 1108.6 feet above mean sea level and the outflow has been reduced to 1000 cfs (cubic feet per second);
- "B. Emergency conditions exist in and along the shores of Rainy Lake when its level is higher than elevation 1108.1 feet above mean sea level, excluding the effect of wind and currents, and the inflow at that time is in excess of the total outflow capacity of the present structure at International Falls-Fort Frances; emergency conditions also exist when the level of Rainy Lake is lower than elevation 1104.6 feet above mean sea level and the outflow has been reduced to the minimum allowable discharge prescribed by Order of this Commission; and
- "C. In order to prevent the occurrence of such emergency conditions, it is necessary to anticipate high and low inflows to said lakes insofar as possible and so regulate the outflow at the Kettle Falls Dams and the International

- Falls-Fort Frances Dam as to avoid as far as possible the occurrence of such conditions."
- 2. The said Order dated 8 June 1949, as amended by Supplementary Order dated 1 October 1957, is further amended by deleting Paragraph numbered 1 and substituting therefor the following:
  - "1.(a) The Companies, their successors or assigns shall operate the discharge facilities at the Kettle Falls Dams as authorized by the International Rainy Lake Board of Control in such manner that insofar as possible the level of Namakan Lake, as determined at the Kettle Falls-Namakan Lake gauge, will be between the following minimum and maximum elevations on the dates shown or between elevations which can be interpolated therefrom between these dated; these elevations being shown in feet above mean sea level:

## NAMAKAN LAKE ELEVATIONS

Date	<u>Minimum</u>	Maximum
l Ĵan	1113.6	1115.3
l Feb	1111.9	1114.1
l Mar	1110.3	1113.1
1 Apr	1108.6	1112.0
21 Apr	1108.6	1113.1
l May	1110.2	1113.6
1 Jun	1115.3	1116.6
21 Jun	1117.5	1118.6
l Jul	1117.6	1118.6
21 Jul	1118.0	1118.6
1 Aug	1118.0	1118.6
1 Sep	1118.0	1118.6
11 Sep	1118.0	1118.6
1 Oct	1117.6	1118.6
1 Nov	1116.3	1117.5
l Dec	1115.0	1116.4

- " (b) Whenever the level of Namakan Lake is in excess of 1119.1 feet, as will occur occasionally when flood inflows are in excess of the outflow capacity of the present dams at Kettle Falls, all gates and fishways in those dams shall be fully open to ensure the most rapid possible return to the maximum elevation prescribed in sub-paragraph (a).
- " (c) Whenever the level of Namakan Lake is lower than the minimum elevation prescribed in sub-paragraph(a), as will occur occasionally during periods of deficient inflow, the total outflow from the dams at Kettle Falls shall be reduced to 1000 cfs (cubic feet per second) until the lake level returns to the minimum elevation prescribed in sub-paragraph(a)."
- 3. The said Order dated 8 June 1949 is hereby amended by deleting Paragraphs numbered 2 and 3 and substituting therefore 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 International Rainy Lake Board of Control in such manner that insofar as possible the level of Rainy Lake, as determined at the gauge on the Department of Public Works, Canada, Five Mile Dock, 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 shown in feet above mean sea level:

#### RAINY LAKE ELEVATIONS

Date	Minimum	Maximum
1 Jan	1106.4	1107.1
1 Feb	1105.8	1106.6
l Mar	1105.2	1106.2
l Apr	1104.6	1105.6
21 Apr	1104.6	1106.2
1 May	1105.1	1106.6
1 Jun	1106.6	1107.6
1 Jul	1107.4	1108.1
1 Aug	1107.4	1108.1
1 Sep	1107.4	1108.1
1 Oct	1107.4	1108.1
11 Oct	1107.4	1108.1
1 Nov	1107.2	1108.1
1 Dec	1106.8	1107.6

- " (b) Whenever the level of Rainy Lake is in excess of 1108.6 feet, as will occur occasionally when flood inflows are in excess of the outflow capacity of the dam at International Falls-Fort Frances, all gates in that dam shall be fully open to ensure the most rapid possible return to the maximum elevation prescribed in subparagraph(a).
- " (c) Whenever the level of Rainy Lake is lower than the minimum elevation prescribed in subparagraph(a), as will occur occasionally during periods of deficient inflow, the outflow from the dam at International Falls-Fort Frances shall be

reduced to the minimum outflow prescribed in sub-paragraph(d), until the lake level returns to the minimum elevation prescribed in sub-paragraph(a).

- " (d) The minimum instantaneous outflow from the dam at International Falls-Fort Frances shall be 4000 cfs (cubic feet per second) between the hours of sunrise and sunset in the months of May to October, inclusive, and 3300 cfs at all other times.
- " (e) The existing barrier which obstructs or partially obstructs the high-level Bear Portage outlet, and which has deteriorated by natural process, shall not be repaired, strengthened, raised, lowered, or otherwise modified in any way be the Companies, their successors or assigns, or by any other corporation or person without specific authorization from this Commission.
- "3. Notwithstanding Paragraphs numbered 1 and 2 of this Order, if extremely high or low inflows to Namakan Lake or Rainy Lake are anticipated, the International Rainy Lake Board of Control, after obtaining the approval of the Commission, may authorize the levels of Namakan Lake and/or Rainy Lake to be raised temporarily to greater than the maximum or lowered temporarily to less than the

minimum elevations respectively prescribed in Paragraphs numbered 1 (a) and 2 (a) of this Order."

4. All obligations imposed in the said Order dated 8 June 1949, as amended by the said Supplementary Order dated 1 October 1957 and by this Order, upon the Companies, their successors or assigns apply jointly and severally to Boise Cascade Corporation, Minnesota and Ontario Paper Company, Rainy River Improvement Company and The Ontario-Minnesota Pulp and Paper Company Limited.

Signed this 29th day of July, 1970.

A.D.P. HEENEY
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