Water Levels Committee of the International Rainy-Lake of the Woods Watershed Board

Summary of 2022 Post Flood Report

A companion document to the 2022 Post Flood Report prepared by the Water Levels Committee

Water Levels Committee of the International Rainy- Lake of the Woods Watershed Board
September 2023

Introduction

The 2022 flooding in the Rainy River basin was a disaster of historic proportions. Rainy Lake reached record- breaking water levels, and Namakan Lake ranked as the third highest levels on record. Losses from the flood were widespread and included severe damages to homes, docks, boathouses, shorelines, trees, infrastructure, and roads. Thousands of hours were spent on flood protection and mitigation such as sandbagging, berming, and pumping, as well as recovery and remediation efforts as water levels lowered to normal ranges. Many recreational and tourism operators across the region lost business or had to close due to flooding. The economic, financial, and emotional toll on the entire community was significant.

Figure 1. Flood mitigation efforts at Thunderbird Lodge in International Falls, MN

The Water Levels Committee of the International Rainy-Lake of the Woods Watershed Board is responsible for monitoring basin conditions and ensuring the rule curves are followed under the International Joint Commission Order for regulating water levels of Rainy and Namakan Lakes. The Water Levels Committee wrote a 2022 Post Flood Report to document what caused the flood and the actions taken by the Water Levels Committee before and during the flood. In August 2022, the International Rainy-Lake of the Woods Watershed Board hosted community listening sessions in Fort Frances, ON and International Falls, MN to provide an opportunity for community members to share their views and concerns with the Board and its Committees. Takeaways from those sessions are included in the 2022 Post Flood Report, as well as an analysis of what would have happened if the High Flood Risk Rule Curve on Rainy Lake was implemented ahead of the 2022 flood. This document serves as a high-level summary of the Water Levels Committee's Post Flood Report.

Who Does What in the Basin

There are multiple entities in the U.S. and Canada involved with watershed management, in terms of ecological health and water levels, within the Rainy-Lake of the Woods watershed. The International Joint Commission is an independent, objective, and binational body established by Canada and the U.S. to prevent and/or resolve disputes under the 1909 Boundary Waters Treaty. The 1938 Rainy Lake Convention gave the International Joint Commission responsibilities to control water levels in the Rainy Lake watershed under emergency conditions. To do this, the International Joint Commission has employed water level rule curves, beginning in 1949, with regular updates to reflect current science and stakeholder benefits. The rule curves were last updated in 2018, following the release of the Rainy and Namakan Lakes Rule Curve Study report of 2017. The current International Joint Commission Order consists of rule curves for Rainy Lake and Namakan Lake. The rule curve band provides an upper and lower limit for the water elevation in the reservoir on any day of the year (lower in the winter, higher in the summer). The rule curves also establish minimum releases during low inflows and All-Gates Open levels during high inflows.

In 2013, the International Joint Commission established the International Rainy Lake of the Woods Watershed Board to assist with binational coordination of watershed management. The International Rainy-Lake of the Woods Watershed Board's mandate is to ensure compliance with the International Joint Commission's Order pursuant to the 1938 Rainy Lake Convention, to monitor and report on the ecological health of the Lake of the Woods and Rainy Lake boundary waters aquatic ecosystem, including water quality, and to assist the International Joint Commission in preventing and resolving disputes regarding the boundary waters of the Lake of the Woods and Rainy River watershed. The International Rainy-Lake of the Woods Watershed Board delegates its authority to ensure compliance with the International Joint Commission Order in emergency regulation of Rainy and Namakan Lake to the Water Levels Committee. The Water Levels Committee monitors hydrologic conditions and may provide dam operators with directions for the operation of their discharge facilities to ensure that the rule curves of Rainy and Namakan Lakes are followed.

Lake of the Woods water levels are managed by the Canadian Lake of the Woods Control Board between lower and upper elevations set by the 1925 Lake of the Woods Convention and Protocol. The International Lake of the Woods Control Board, made up of co-chairs from the U.S. Army Corps of Engineers and Environment and Climate Change Canada, approve the actions of the Lake of the Woods Control Board whenever Lake of the Woods water levels rise above 1061' or fall below 1056' elevations. Figure 2 illustrates and differentiates the binational management, especially water levels, in the Rainy-Lake of the Woods watershed. The Water Levels Committee does not have the authority to regulate water levels of Lake of the Woods; therefore, the scope of this report focuses on the flooding of Rainy and Namakan Lakes. The LWCB's "2022 Flooding in the Winnipeg River Basin" report covers Lake of the Woods and is available on its website (https://www.lwcb.ca/permpdf/Reporton2022FloodinginWRBasin.pdf).

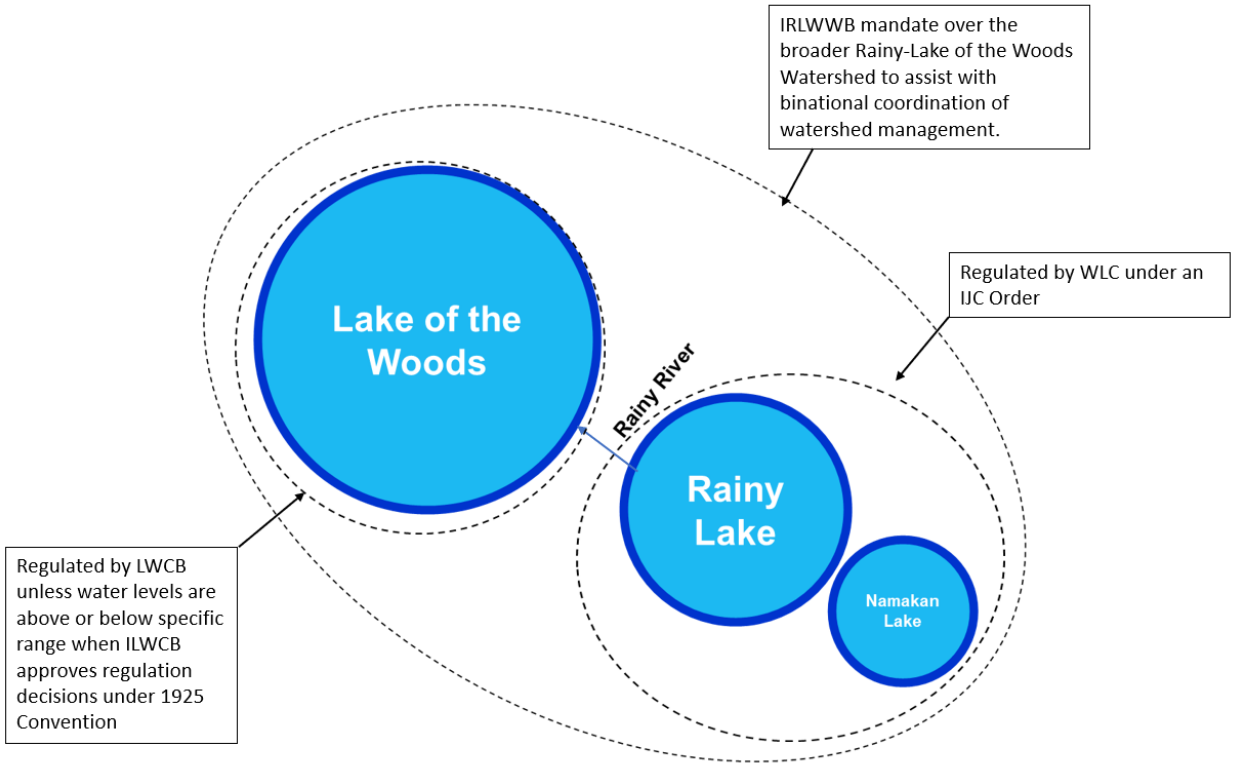

Figure 2. Roles and Responsibilities in the Rainy-Lake of the Woods Watershed

2022 Basin Conditions and Water Levels Committee Actions

Prior to the 2022 flood, the Rainy River basin experienced severe drought conditions between the spring of 2020 and the fall of 2021. This was due to consistently lower than normal amounts of precipitation for most of that period. Rainy and Namakan Lake levels were affected by the prolonged drought conditions. Namakan Lake levels were the lowest they had been since the 2000 Rule Curves were implemented (between 2000-2018). At Rainy Lake, the level dropped below the lower rule curve in July 2021 and continued to decline to its official Drought Line in September 2021. The Rainy Lake level reached its lowest level since 2003. In November, the Rainy River basin was still classified as being under a moderate to severe drought, despite slightly above normal precipitation in September 2021. From October to December 2021, average inflows into both Rainy and Namakan ranked low in comparison to the last 30 years.

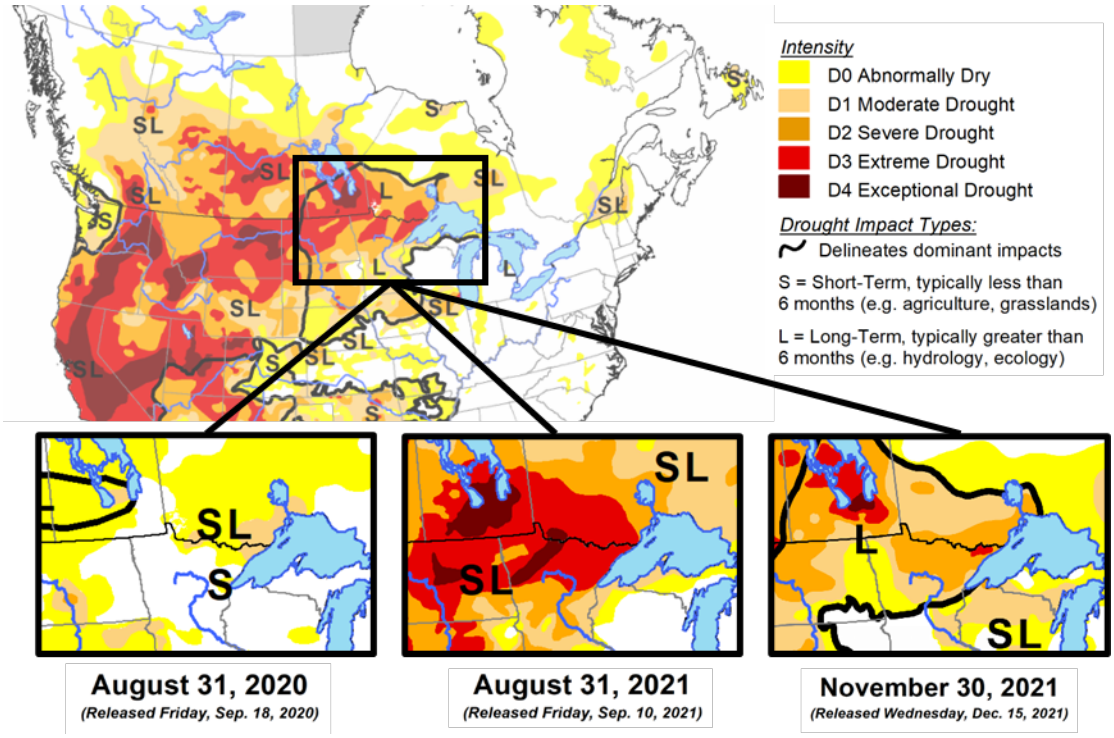

Figure 3. North American Drought Monitor Map of the Rainy River Basin (NCEI-NOAA)

From mid-February to the end of March 2022, there was above normal snow depth and snow water equivalent (SWE) measured across the Rainy River basin. SWE, or the amount of liquid water in snow, is used to better understand the amount of snow melt that will runoff into the basin. On-the-ground measurements of the snowpack water content were conducted at locations across the Rainy River watershed in late February by the US Army Corps of Engineers. Measurements indicated higher than normal snow water equivalent in general, with the highest amounts to the west of Rainy Lake in the local Rainy River watershed. The measurement at International Falls was slightly below the median while slightly above at Ash Lake. Compared to the measurements taken in 2014, values were generally less in 2022 (65% of the 2014 value at Tower, 78% at Cook, 72% at Ash Lake and 69% at Birchdale). The measurement at Ray, MN indicated higher snow water content in 2022 compared to 2014.

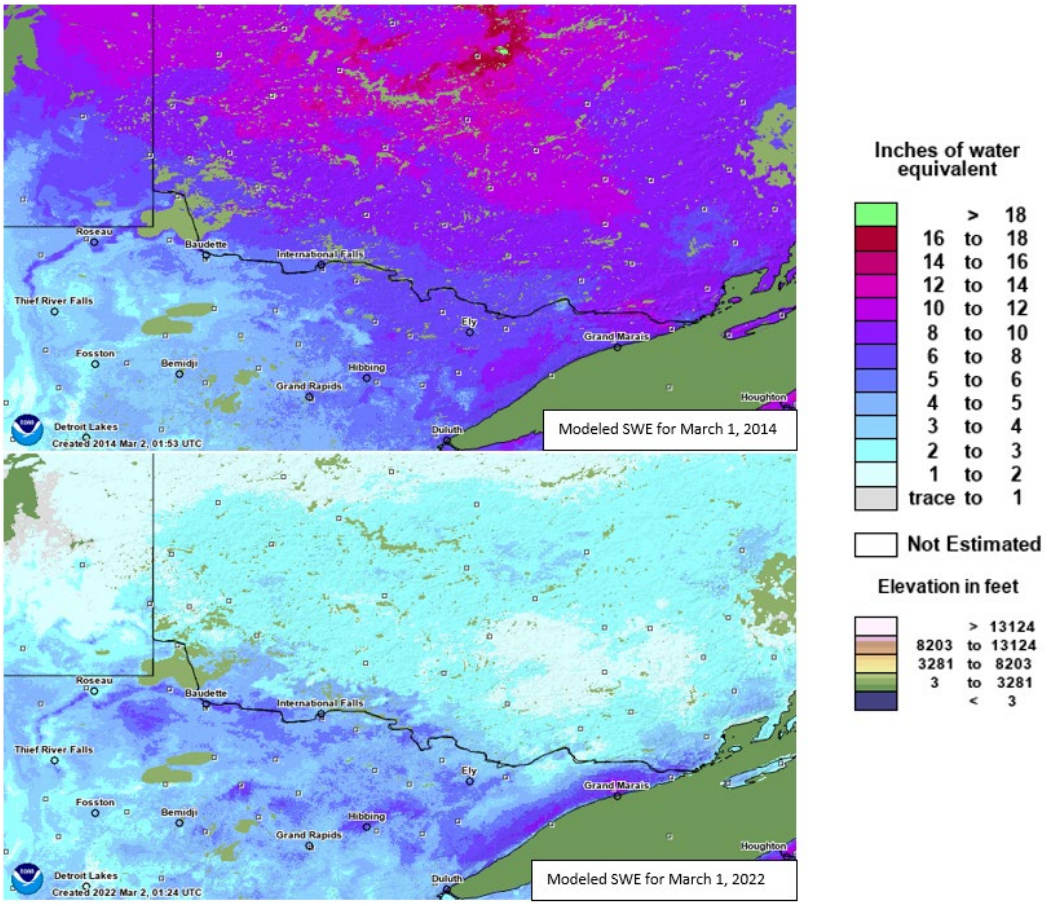

Figure 4. Modeled snow water equivalent (SWE) in March 2014 (top) and March 2022 (bottom) (NOHRSC-NOAA)

On March 10, 2022, the Water Levels Committee decided to follow the standard rule curve, instead of the high flood risk rule curve, based on the data available at the time. When deciding on which Rainy Lake rule curve to follow, the Water Levels Committee must consider the risk of flooding as well as the risk of not refilling the lakes to their summer lake levels. Should the High Flood Risk Rule Curve (HFRRC) on Rainy Lake be implemented and forecasted flood conditions do not occur, there can be negative impacts on fish spawning, navigation, and aquatic vegetation diversity (if HFRRC is implemented every year). Current conditions that lead to the decision not to use the high flood risk rule curve were:

- The current drought status for the basin ranged from abnormally dry in portions of Canada to moderate to severe drought in the U.S. Drought conditions indicate capacity in the basin to absorb precipitation and reduce runoff.
- Base flow[1] conditions were in the low to normal range for this time of year, consistent with the drought status. The tributary flows are the best indicator of the basin hydrology and capacity to absorb spring runoff. They did not indicate a lack of capacity in the watershed and therefore did not indicate a high risk for flooding heading into the spring.

[1] Base flow is defined as the portion of streamflow that is not directly influenced by precipitation runoff.

- Overall average winter temperatures were colder than recent years, but warmer than 2014 when spring flooding last occurred in the basin. Colder temperatures accumulated over the winter indicate a delay in ground thawing is possible and therefore an increased risk of rain-on-snow runoff.
- The accumulated snowpack depth at the time of the decision was higher than normal, falling in the 80 to 95 percentile range based on historic records. Snowpack was much less than in 2014 and comparable to 2019 when normal spring flows developed. However, according to the National Weather Service, the water contained in the snowpack, the Snow Water Equivalent, was moderate, generally between 3-5 inches of water. This was less than in 2019 and much less than in 2011, 2013, or 2014 (there was no high water in 2011, or 2019, while in 2013 Rainy Lake rose slightly above the All Gates Open level and 2014 was the highest level since 1950).

Figure 5 shows the Water Levels Committee's March 31 water level targets for Rainy Lake as the range within the yellow arrows. This means operators were to achieve water levels between 336.9 and 337.0 m by March 31. While not targeting the High Flood Risk Curve specifically, this level target range was within High Flood Risk Curve range and in the bottom half of the normal Rule Curve band for March 31. In short, the Water Levels Committee hedged against above normal spring flows in line with the basin conditions but did not identify a high risk of flooding as March progressed.

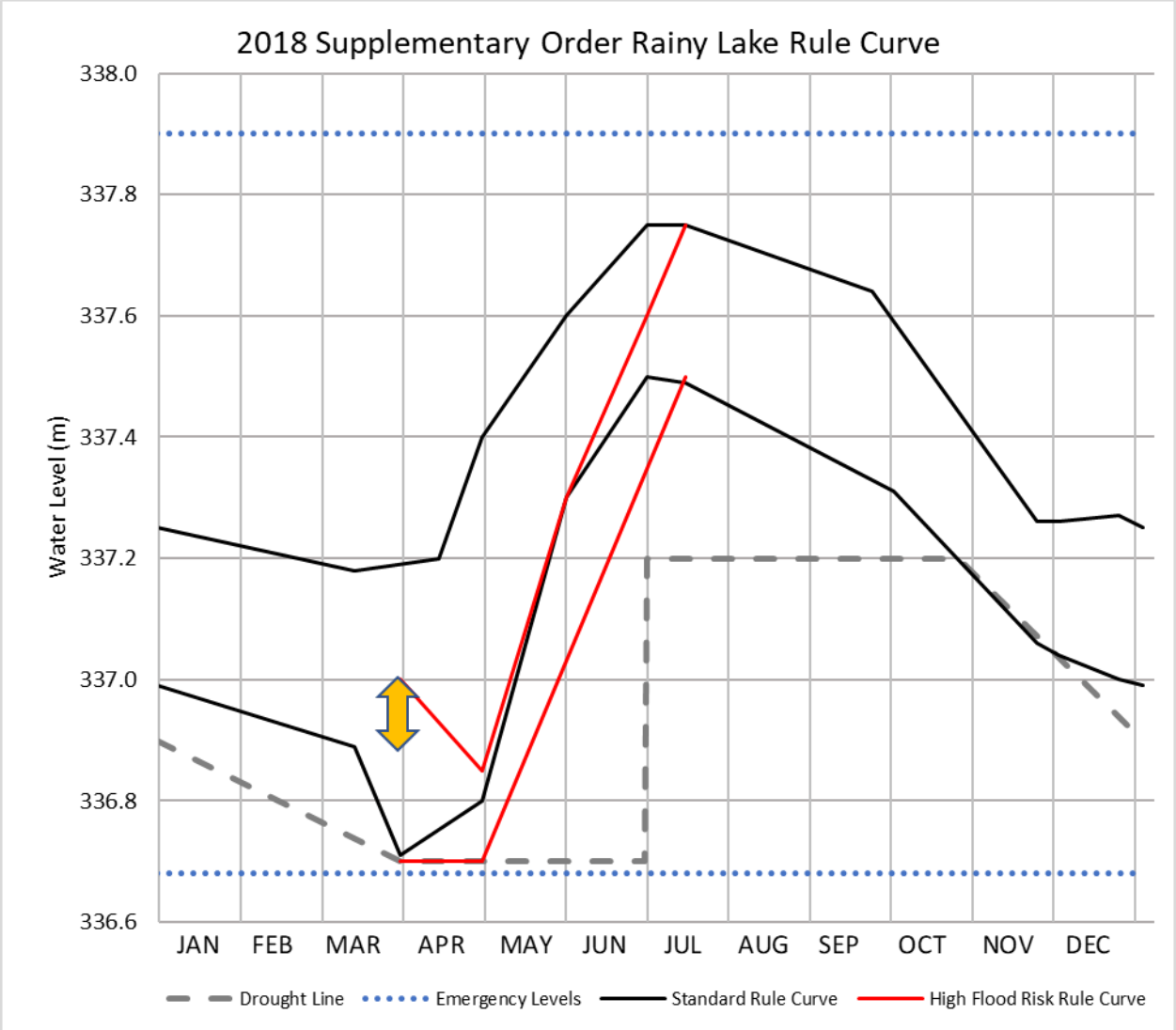

Figure 5. March 31, 2022 Rainy Lake Target under the Standard Rule Curve

On March 31, 2022, the Water Levels Committee reconvened to review basin conditions. The drought condition improved to a moderate drought on the U.S. side of the basin, and the Canadian drought index indicated similar conditions. The base flows were still within the low to normal range, and snow depth in late March ranked within the 60 to 80 percentiles (Figure 6) which was less than 2014 and comparable to 2018. Some precipitation had occurred the week prior, but the tributary flows exhibited a minimal response to the precipitation. The Rainy Lake level was within the targeted middle of the standard rule curve and at the top of the High Flood Risk Rule Curve. The Water Levels Committee decided to inform operators to continue targeting the middle of the band for both lakes.

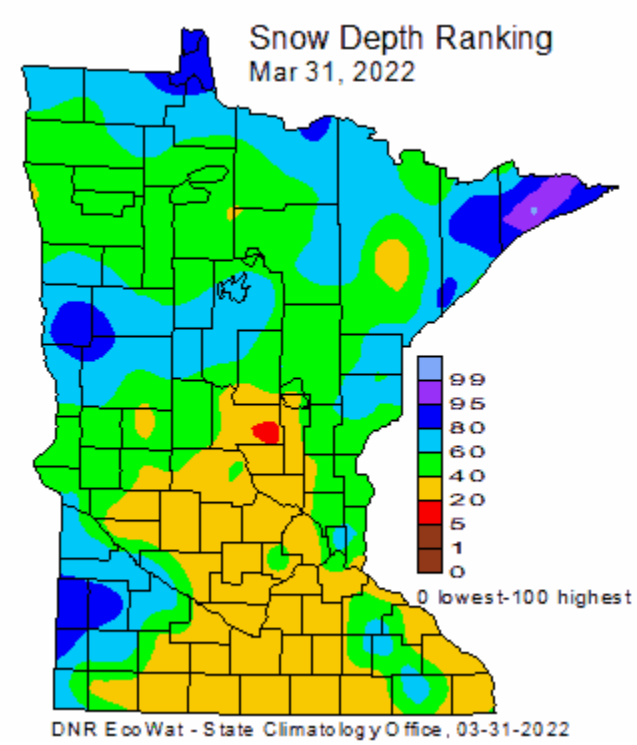

Figure 6. Snow depth ranking on March 31, 2022 (MN DNR State Climatology Office)

Conditions changed dramatically in April and May 2022 and abruptly ended the two-year drought. Precipitation was abundant and regular through the spring. In April, a series of Colorado Low systems[2] crossed the basin. Although air temperatures in the first few days were above freezing, an additional 10 cm (4 in) of snow fell over the Rainy River watershed by the end of the first week of April. Conditions in the second week of April did not improve; air temperatures continued plummeting and the Colorado Low brought widespread, heavy snowfall to the basin. Snowfall totals ranged from 30 to 70 cm (12 to 28 in). The highest amounts of snow accumulated directly over the Namakan sub-basin. This shift in weather stalled typical snowmelt in the basin. Inflows into Namakan and Rainy Lakes remained within normal ranges during these snow events, and outflows from the dams were managed to remain within rule curves.

[2] A Colorado Low is a low pressure storm system that forms in winter in southeastern Colorado or northeastern New Mexico and tracks northeastward across the central plains of the U.S. over a period of several days, producing blizzards and hazardous winter weather (NOAA).

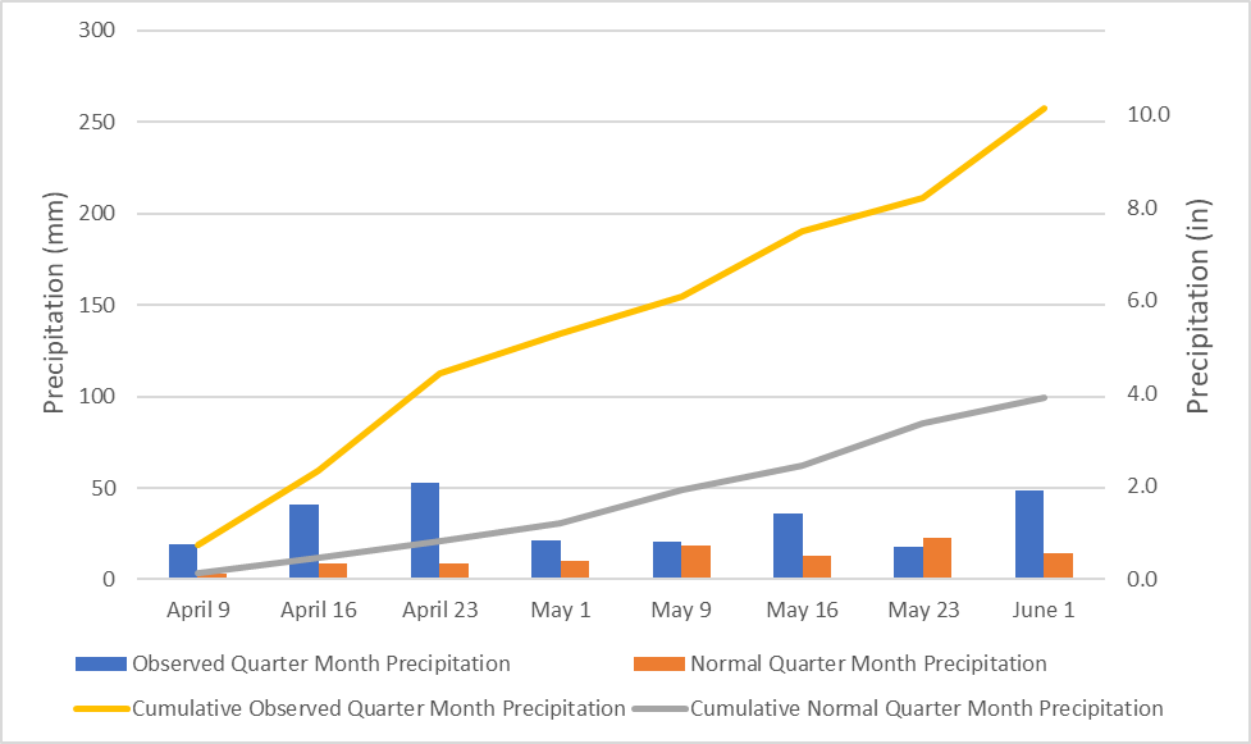

Figure 7. Rainy River Basin mean cumulative precipitation from April 1 to May 31, 2022 from Environment Canada's Regional Deterministic Precipitation Analysis

Source: Normal data 1981 – 2022 Environment Canada's Regional Deterministic Precipitation Analysis, for data prior to 1981 area-weighted average of weather station data (weather station sources include Meteorological Service Canada, NOAA, USGS)

In the third week of April, the next Colorado Low struck, causing a rain-on-snow event that resulted in an almost instant depletion of the snowpack. In response to the extreme precipitation which occurred on April 22-23, the Namakan Lake outflow was increased to approximately 280 cms (9,888 cfs), and the Rainy Lake outflow increased to approximately 740 cms (26,133 cfs) on April 25. All logs were pulled from sluices at Namakan dams on April 26 and gates at the International Falls-Fort Frances Dam were opened to maximize outflow as lake levels rose, with all the gates open on May 5. Once all sluices and gates were open at Namakan and Rainy Lake dams, there were no additional actions that the dam operators or the WLC could take to pass additional water. The rate of water released from both lakes steadily rose as the water levels of the lakes increased but outflow rates remained well below the inflow rates as above normal precipitation continued to fall on the basin.

Table 1. Timing of gate openings at the International Falls/Fort Frances Dam

Date (2022)	Gates Open
April 27	9
May 2	12
May 4	14
May 5	All Gates Open

Wet conditions continued into May, with precipitation in the form of rain. From April 1 to the end of May, the Rainy River basin had an average of 257 mm (10.1 in) of rainfall as shown in Figure 7. This equated to more than twice the average for April and May in the basin. The intensity and longevity of the spring rainfall caused flows in the tributaries of the Rainy River watershed to remain at high or close to peak levels from late April to mid-June. The Vermilion River set a new peak flow record, and many other tributaries ranked second or third for all-time high flows. The long duration of these high flows fed the inflows to the lakes and ultimately became the driving force behind the flooding.

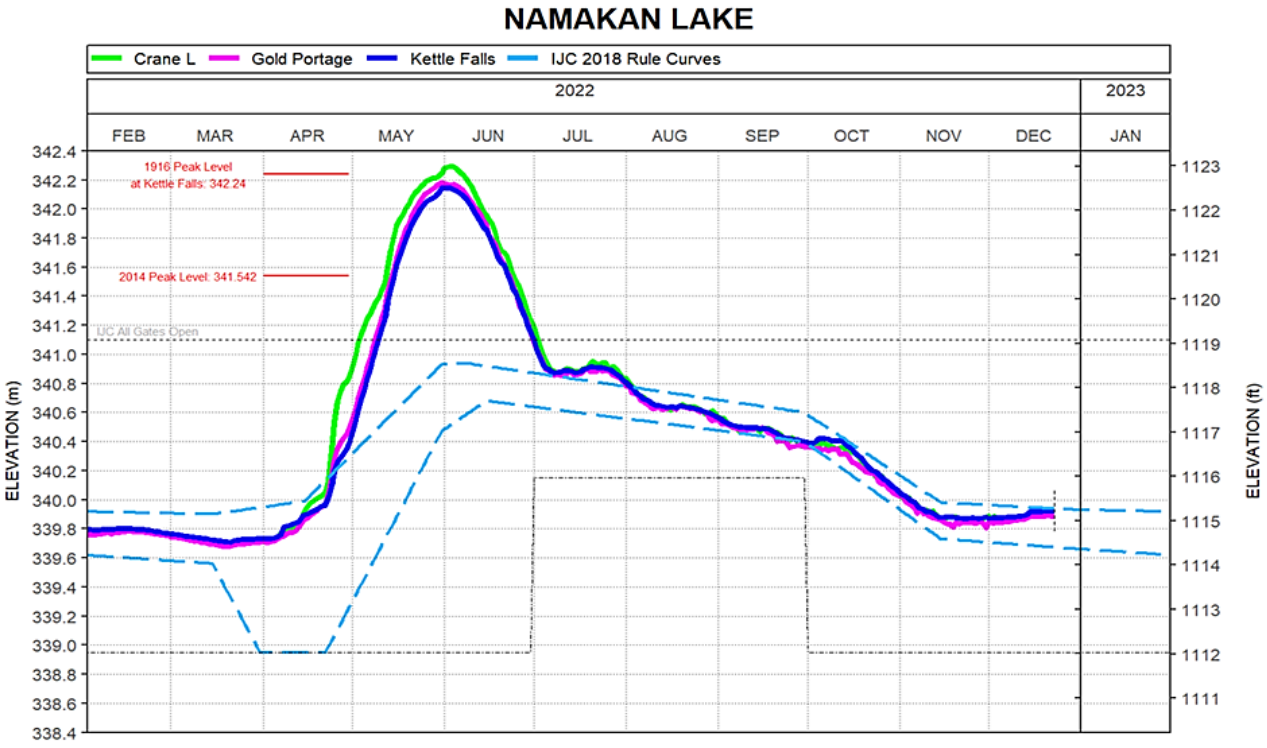

Figure 8. Namakan Lake levels in 2022 with 1916 and 2014 peak levels marked for comparison (LWCB)

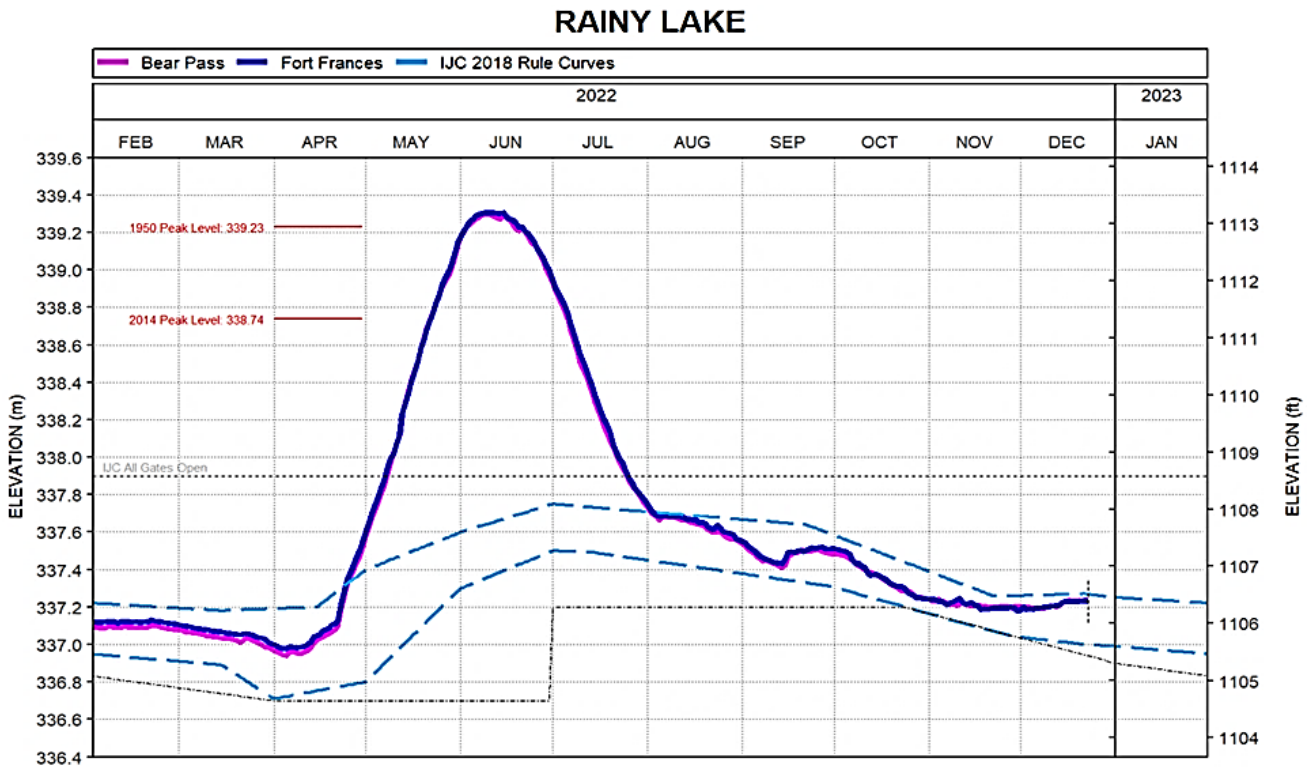

Figure 9. Rainy Lake levels in 2022 with 1950 and 2014 peak levels marked for comparison (LWCB)

The average inflow to Namakan and Rainy Lakes was the highest on record for April and May combined. The inflows for April through July 2022 were second highest only to 1950. As a result, the water level of Namakan Lake rose to a maximum level of 342.18 meters (1,122.69 feet), the third highest on record, and only 7 centimeters (2.8 inches) lower than the record level set in 1916. The water level of Rainy Lake rose to 339.31 meters (1,113.28 feet) and set a new record 8 centimeters (3.1 inches) higher than the previous level record set in 1950. Table 2 displays the top 5 highest levels for Namakan and Rainy Lakes.

Table 2. Namakan and Rainy Lake All Time Record Levels (LWCB)

	Namakan Lake			Rainy Lake		
Rank	**Date**	**Level (m)**	**Level (ft)**	**Date**	**Level (m)**	**Level (ft)**
1	1916-05-23	342.25	1,122.92	2022-06-14	339.31	1,113.28
2	1950-06-07	342.2	1,122.76	1950-07-05	339.23	1,113.01
3	2022-05-31	342.18	1,122.69	1916-06-08	339.09	1,112.55
4	1927-05-19	341.97	1,122.00	2014-07-01	338.74	1,111.41
5	1938-05-22	341.84	1,121.58	1941-10-18	338.6	1,110.95

During the flood event, the Water Levels Committee Engineering Advisors worked closely with Ontario Ministry of Northern Development, Mines, Natural Resources and Forestry (MNRF) and the U.S. National Weather Service (NWS) to provide guidance three days a week on forecasts for the levels of both lakes. The Lake of the Woods Control Board (LWCB) provided the level

forecasts and communicated them through the NWS's Rainy River Basin webpage, which housed current water level and flow observations, precipitation, river level, and lake level forecasts. The NWS also conducted a weekly webinar for agencies and public members to attend. The forecast and basin condition updates and weekly meetings continued until the end of the flood event.

At the end of May, the U.S. Co-Chair and public member of the Water Levels Committee member met with local officials and community members from around International Falls. During the week of June 6, 2022, the Water Levels Committee and International Joint Commission representatives, including a U.S. Commissioner, traveled through the larger basin to meet with the affected residents and community officials. Local Water Levels Committee members were consistently communicating with affected residents, providing information, and answering questions.

As both lakes began to recede, the Rainy Lake Property Owners Association sent a letter to Water Levels Committee when the Namakan Lake water level fell below its prescribed All-Gates Open level on June 30. The letter requested that when Namakan Lake water level recedes to 1,118.8 feet (top of 1970 Rule Curve) operations on the lake should follow the 1970 rule curve temporarily to speed up the decline of the Rainy Lake in the hope that residents have access to damages and start on restoration activities. The Water Levels Committee had concerns over the risk of holding a steady Namakan Lake water level should an unforecasted precipitation event occur; however, no precipitation was forecasted for the period that Namakan Lake would be held at the 1970 Rule Curve. The Water Levels Committee also wanted to ensure residents on Namakan Lake agreed with the recommendation to hold Namakan Lake water levels steady rather than continuing to keep the water level within the 2018 Rule Curve. Following a discussion amongst the Water Levels Committee and Namakan Lake residents, the Water Levels Committee requested a Temporary Order from the International Joint Commission to hold the lake at the upper limit of the 1970 Rule Curve. An outline of the temporary target is shown as the yellow line in Figure 10.

On July 5, the Water Levels Committee received the Temporary Order from the International Joint Commission. The dam operators were directed to make a minor adjustment from the standard Namakan Lake water level target to the temporary target range from 340.90 m to 341.0 m. The target was a 10 cm (4 in) range centered on the upper level of the 1970 Rule Curves, 340.95 m (1,118.6 ft). This level also follows the top of the 2018 Rule Curve in early June, but the 2018 Rule Curves drops gradually over the summer rather than holding flat per the 1970 Rule Curves. The temporary target resulted in Namakan Lake being approximately 5-15 cm higher (2-6 in) than it would have been following the 2018 Upper Rule Curve.

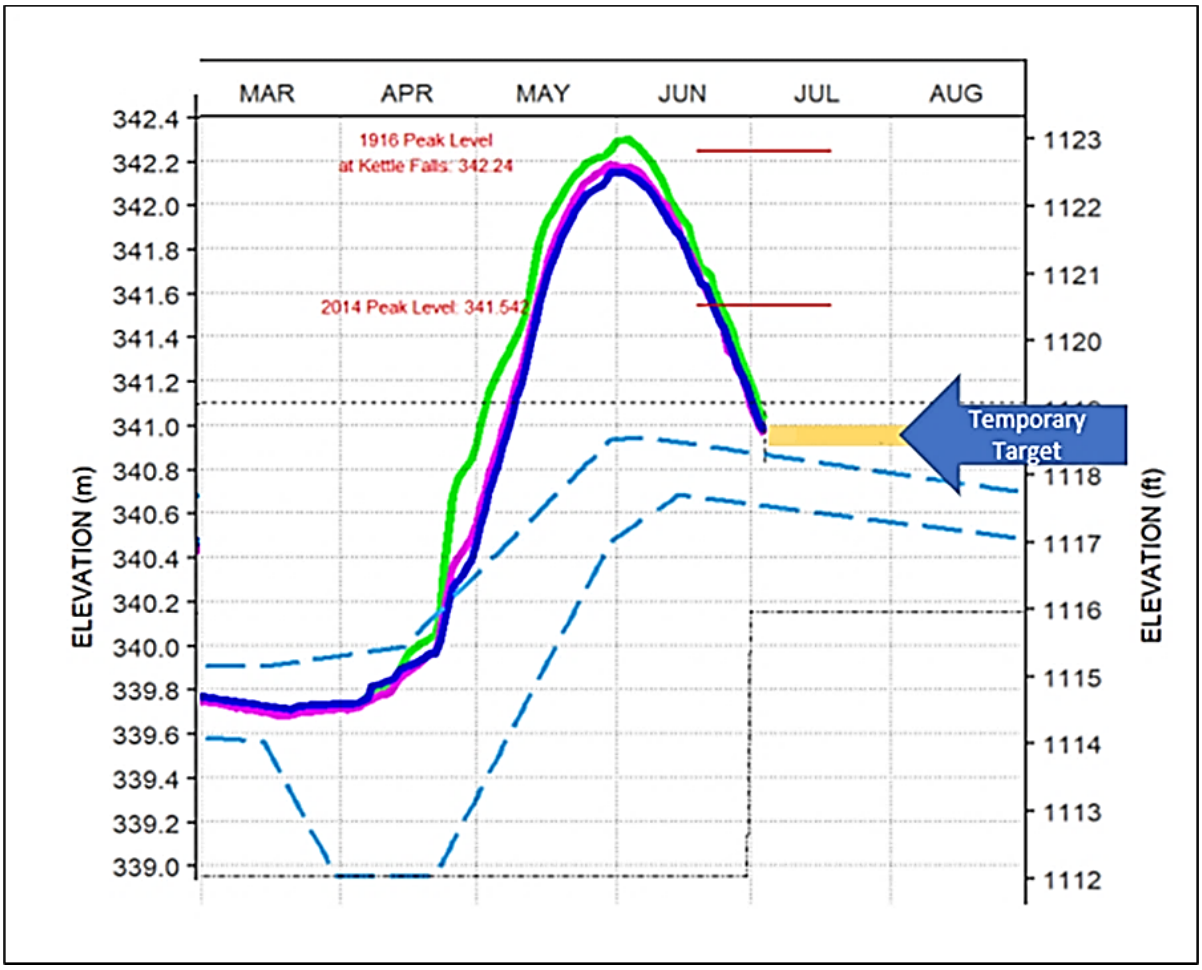

Figure 10. Water Level Target for Namakan Lake under the July 5 International Joint Commission Temporary Order, the blue dashed lines outline the 2018 rule curve, dark blue line indicates the Namakan Lake level at Kettle Falls, green lake indicates the Crane Lake level, and pink line indicates the Lake Kabetogama at Gold Portage.

On July 26, as Rainy Lake fell below the International Joint Commission All- Gates Open lake level, the Water Levels Committee advised operators to set outflows from Namakan and Rainy lakes to target the middle of their rule curves. The Namakan and Rainy Lakes returned to their standard rule curves on August 3, 2022.

During the International Rainy-Lake of the Woods Watershed Board annual basin meeting the second week of August, the International Rainy-Lake of the Woods Watershed Board and Water Levels Committee hosted two Public Listening Sessions: one in Fort Frances, Ontario, and the other in International Falls, Minnesota. A press release was posted on the International Rainy-Lake of the Woods Watershed Board's website to inform the residents about the listening sessions. The goal for each session was to provide an opportunity for the community members to share their views and concerns with the Board and its Committees. Participants were asked to register in advance and submit questions. The Water Levels Committee developed a video presentation about the 2022 flood. The video played at the beginning of each listening session and is available on the International Rainy-Lake of the Woods Watershed Board's website. The video followed a facilitated session for participants to ask questions and express concerns. As

mentioned in the Introduction, takeaways from those sessions are included in the 2022 Post Flood Report as wells as a summary of all the public engagement by the International Rainy-Lake of the Woods Watershed Board and Water Levels Committee during the flood event. The main question frequently asked was what would have happened if Rainy Lake's High Flood Risk Rule Curve was used in March 2022.

What if the Rainy Lake High Flood Risk Rule Curve was Implemented in 2022?

On March 1, 2018, the International Joint Commission signed a Supplementary Order updating the rule curves for Rainy and Namakan lakes that included broad ecological benefits while assisting in reducing flood peaks. Within the 2018 Supplementary Order, there is an alternative rule curve known as the High Flood Risk Rule Curve (HFRRC) for Rainy Lake that is designed to be used in the event forecasts predict that high inflow indicators in the upcoming spring are prevalent. During the development of the HFRRC, model simulations indicated that peak levels for moderately high inflow events could be slightly reduced by providing additional drawdown capacity on Rainy Lake in April. For extreme inflow events, the High Flood Risk Rule Curve was shown not to have the capacity to prevent extremely high levels on Rainy Lake and, therefore, cannot prevent flooding.

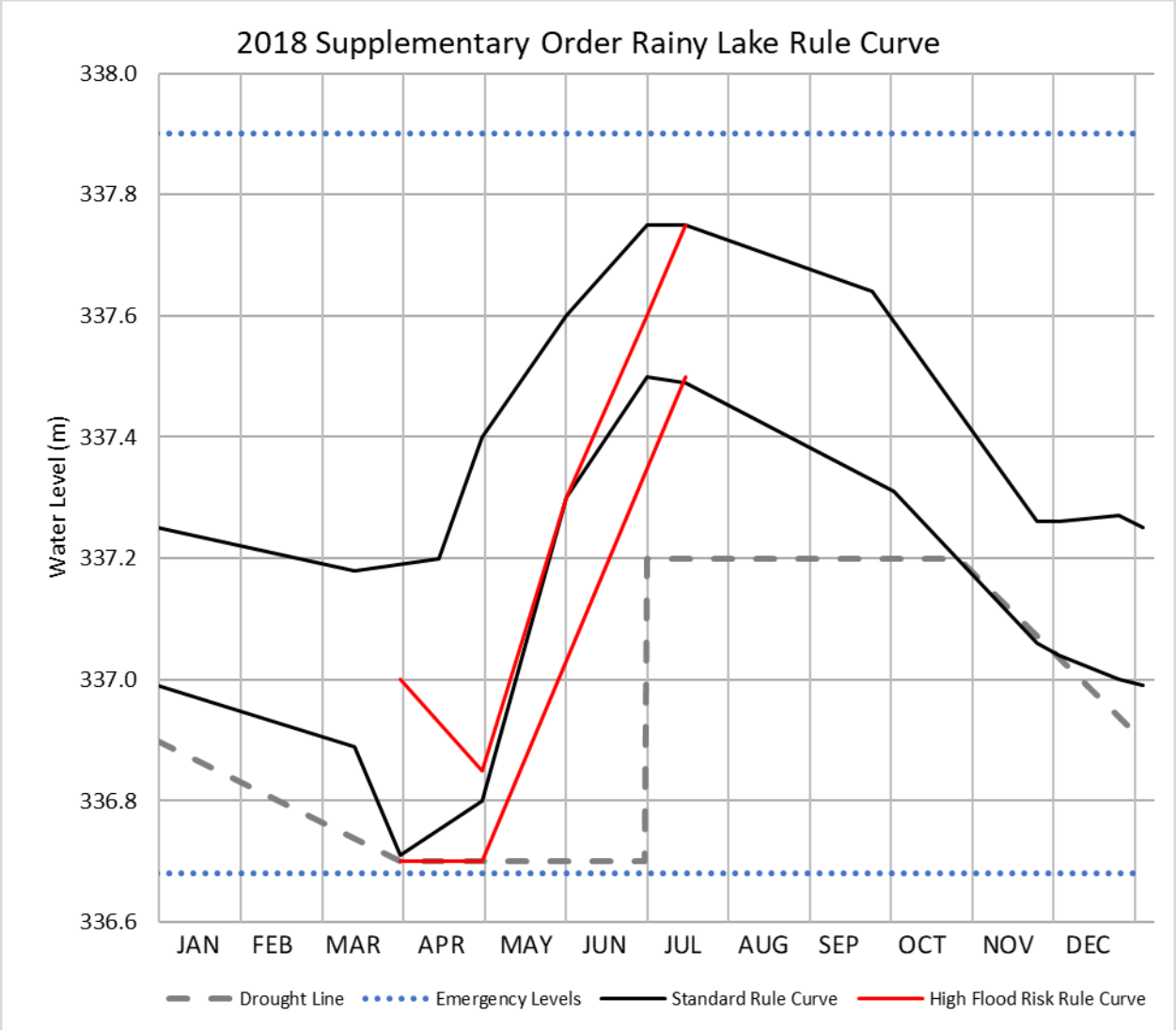

Figure 11. Rainy Lake rule curve under the 2018 Supplementary Order

During the 2022 flood, many residents in the basin raised the question on what flood impacts would have been if the HFRRC was implemented on Rainy Lake and if Namakan Lake was drawn down further before the spring runoff season. To answer this question, the Shared Vision Model (SVM) of the 2000 Rule Curve Review was used to explore what-if scenarios on Namakan and Rainy Lakes.

In the spring of 2022, the Water Levels Committee directed the dam operators to target within the 25 to 75 percent of the band of the 2018 Rule Curve on Rainy Lake. A simulation of this regulation strategy was completed, and these results can be compared to the other simulations using the 2018 Rule Curves, as shown in Table 3. The difference in peak level was 1 cm on Namakan Lake, and the level would have returned below the All-Gates Open level one day sooner. For Rainy Lake, the peak level would have been 4 cm lower, and the level would have returned below the All-Gates Open level two days sooner.

Table 3. Simulated Peak Levels on Namakan and Rainy Lakes in 2022 under different Regulation Strategies using the 2018 Rule Curves.

	Namakan Lake Peak Levels in meters
Regulation Strategy	**2022**
2018 RC (between 25% and 75%) ***- used in 2022***	342.11 (42 days above all gates open level)
2018 RC (bottom 25% Nam, high risk Rainy) ***- alternative***	342.10 (41 days above all gates open level)
	Rainy Lake Peak Levels in meters
Regulation Strategy	**2022 Peak Level (m)**
2018 RC (between 25% and 75%) ***- used in 2022***	339.21 (66 days above all gates open level)
2018 RC (bottom 25% Nam, high risk Rainy) ***- alternative***	339.17 (64 days above all gates open level)

For those impacted by flooding it is understandable that every centimeter of flood level and every day above the All-Gates Open level is meaningful, and therefore even these relatively small reductions in lake level and time are significant. However, it is key to recognize that implementing the High Flood Risk Rule Curve comes with significant risks. In the early spring the prospect of flooding is judged only based on indicators of potential, while the main driver of flooding, spring precipitation, cannot be accurately forecasted out more than a few days. Drawing down the lakes to the bottom of their rule curves based on the possibility of reducing a flood by centimeters and days in anything but the most exceptional case of potential risk is irresponsible, as the negative consequences of that action (i.e., when flood inflows do not develop) cannot be taken lightly. Spring runoff volumes help refill lakes to their higher summer water levels and lowering lake levels for anticipated runoff volumes that do not occur risk ability for lakes to remain within their rule curves. The 2017 Rule Curve Study (IRNLRCSB 2017) found that negative impacts occur to fish spawning when the HFRRC is implemented but the forecasted flood conditions do not occur. Implementing the HFRRC when flood volumes do not occur would also impact early season boating due to the low Rainy Lake levels. It was also found that aquatic plant diversity on Rainy Lake decreased, with hybrid cattail invasion worsening on Rainy Lake.

Flood Resiliency and Resources

2022 is the fourth year since 2000 where very high-water levels occurred, with the last high-water event in 2014. Rainy Lake hit record-setting water levels that were 8 cm (3.1 in) above the previous record set in 1950. Namakan Lake experienced the third highest water levels on record, just 7 cm (2.8 in) lower than the record level set in 1916. Flooding has always occurred in the Rainy River watershed and will continue to do so in the future. For shoreline structures such as docks and boathouses, there is an inherent compromise between building structures at a level that is suitable during normal water level years and also building them high enough to ensure minimal damage is sustained in times of moderately high water levels. For example, the town of Rainy River, Ontario, rebuilt a road along Rainy River to the elevation of the sand berms used in 2014 flood fighting efforts. The mitigation minimized the flood damages in 2022 though there

was still visible shoreline infrastructure damage. Unless such structures are built above the historic high-water levels, which would likely limit their usefulness in most years, they will inevitably be inundated and suffer some damage in years of extremely high inflow. When building or repairing structures that are not designed to withstand some degree of inundation, such as cabins or homes, local regulations that define hazard land elevations should be followed. The U.S, Federal Emergency Management Agency (FEMA)'s Flood Map Service Center (https://msc.fema.gov/portal/home) is the official public source for flood hazard information like maps and flood insurance studies in the U.S.

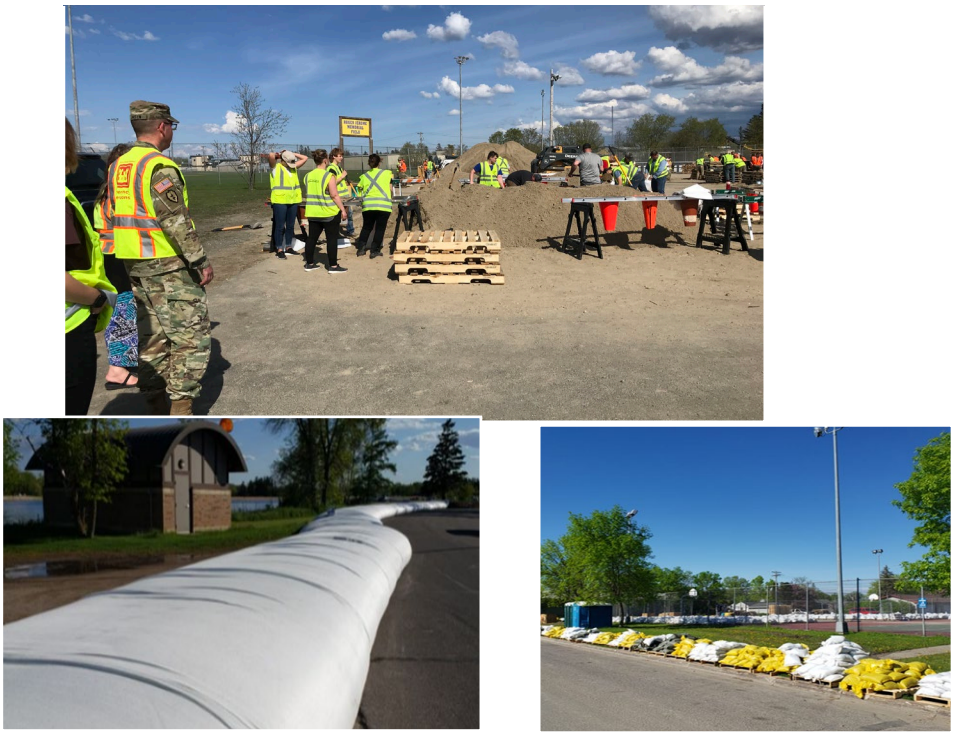

Figure 12. Sandbagging in International Falls, MN (top and bottom right photos) and flood mitigation efforts in Warroad, MN (bottom left photo).

Information about the International Joint Commission and the International Rainy-Lake of the Woods Watershed Board, including announcements for public meetings and webinars, can be found on the International Joint Commission website (https://www.ijc.org/en/rlwwb). All Water Levels Committee decisions are posted on the Water Level Decisions & Data page (https://www.ijc.org/en/rlwwb/watershed/data) within the Board's website and includes links to water level data resources, as well as websites specific to flooding and drought conditions. Of special interest on the Board's website are a series of three videos that explain the hydraulic limitations at the outlet of Rainy Lake that govern what water management is achievable during years such as 2022 (https://www.ijc.org/en/rlwwb/watershed/simulation).

The Water Levels Committee, although responsible for overseeing regulation of this transboundary basin, is not a flow-forecasting agency. Rather, those responsibilities, along with associated public safety responsibilities, lie with governments on either side of the border. In

Ontario, the Ministry of Natural Resources and Forestry, Surface Water Monitoring Centre, operates the provincial Flood Forecasting and Warning Program (https://www.lioapplications.lrc.gov.on.ca/webapps/swmc/flood-forecasting-and-warning-program/#ontarioFloodMap). Included in the information they provide are notices of flood watches and warnings and special watershed conditions statements, as well as local and provincial flood messages and information about states of emergency.

In response to the need to provide increased public information during the 2022 flood event, the United States National Weather Service created a new Rainy River Basin page on their website (https://www.weather.gov/dlh/RainyRiverBasin). The NWS basin page contains information on basin conditions and various information resources related to water level and flow conditions and water management throughout the basin, including flood briefings when flooding is forecasted.

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