



Role and Responsibility of the Adaptive Management Committee



Beginning in 1949 Canada and the United States, through the IJC, jointly established formal rules for regulating water levels and flows for the Namakan and Rainy lakes system. The development of “rule curves” to assist and guide decisions is intended to balance interests in these two lakes and the system as a whole. These interests include protecting shoreline properties, communities and archeological sites from flooding and erosion; protecting the complex natural environment of the basin; maintaining seasonal water levels to allow for recreational and tourism uses; protecting water quality and ensuring sufficient water levels for hydroelectricity generation while conforming to the requirements of the International Treaty.

To ensure that the rule curves kept current with the most recent scientific information, the IJC conducted a comprehensive review between 2015 and 2017 to examine the socio-economic and ecological impacts of water levels management decisions. Among the 11 recommendations from that study ([see pp. 19-28 of the study report](#)) was that the IJC use a formal adaptive management process for the long-term evaluation of the effectiveness of the Rule Curves. It was further recommended that this work be overseen by a new Adaptive Management Committee that would also assist in identifying and responding to emerging climate change conditions.

In 2018, the IJC endorsed the application of an adaptive management approach. The Commission also established the IRLWWB’s Adaptive Management Committee (AMC) and directed the new committee to report to the Board.

What are the AMC's responsibilities?

The AMC considers information collected by resource agencies and others in order to determine the effectiveness of existing rule curves (2018) on water levels, flows, and affected interests in the boundary waters as well as to assess how the Rainy Lake – Namakan Reservoir system may be changing over time and possible modifications to improve their performance. Effectiveness is also measured through use of projects to better understand effects of the rule curves measured against IJC criteria.

The AMC is also responsible for overseeing the Board's implementation of the IJC's climate change adaptation guidance framework for the Board to assess and respond to known and anticipated climate change impacts.



AMC led projects and initiatives:

Completing the 2015-2017 Rule Curve Study Projects

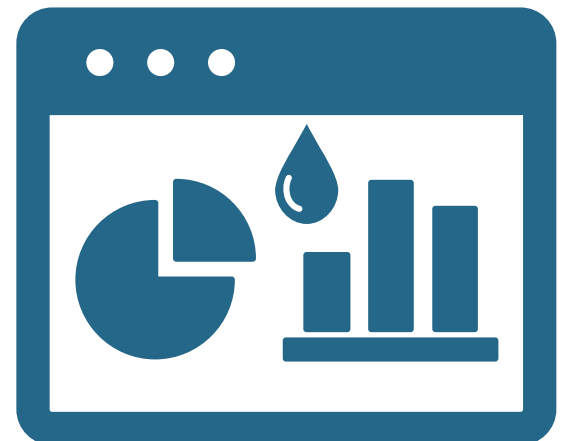
In 2018, contributors to the rule curve study and a task team assigned to explore use of adaptive management for rule curves developed a list of priority adaptive management performance indicators. Whereas around 21 performance indicators had been developed during the rule curve study, this group identified a further 17 prospective performance indicators. After its launch in 2020, the Adaptive Management Committee focused on completing projects from the rule curve study that were designed to improve performance indicators including a bathymetry (underwater surface) study for the lower Rainy River, between Manitou Rapids and Lake of the Woods.



Projects to Prioritize Performance Indicators and Improve their Modelling

Between 2020 and 2025 the AMC developed and led several projects aimed at improving the modelling of existing performance indicators. These projects included studies of field verification of spawning areas and habitat for Lake Whitefish and Walleye in Rainy Lake and collecting information on how water levels and water level changes affect submerged aquatic vegetation.

In 2023, the AMC began working with the modelling team from Environment and Climate Change Canada to update and improve the assessment models. This project is continuing but is anticipated to provide a much more efficient platform that will integrate Socio-Economic and Environmental information.



AMC led projects and initiatives:



Engaging Indigenous Communities in Adaptive Management

The AMC engages in outreach, engagement and collaboration with Indigenous knowledge holders to address knowledge gaps identified in the 2017 rule curve study report.



Adaptation to Changing Climate

To date, the committee has also anchored the IRLWWB's climate change adaptation activities in relation to the effects of climate change on water levels and flows in the transboundary waters under the IJC's jurisdiction.



Preparing for the Next Rule Curve Review

In 2025, the AMC is bringing together the ECCC modelling team, IJC and agency experts, public and Indigenous knowledge holders and resource experts to assist in prioritizing prospective new performance indicators.