

## 2025 Spring Freshet Review

Warm weather combined with rain in mid-March triggered early snowmelt across the basin. Principal reservoirs maintained high storage capacity while this initial runoff occurred. A significant snowpack remained in the northern portion of the basin until mid-April, when successive episodes of warm weather and rainfall accelerated melting and spring runoff in this region. The principal reservoirs gradually filled from mid-April to early May, reducing flood impacts along the main stem of the Ottawa River. The combination of early onset conditions and substantial northern snowpack resulted in a prolonged freshet with multiple peaks and substantial total volumes through the spring period. Water regulation via the reservoirs was key in maintaining conditions along the main stem below major flood levels in most flood vulnerable areas between Mattawa and Montreal.



\*Information on the natural lakes that existed prior to the construction of reservoirs (1911-1954) is sparse or missing. It is therefore only possible to estimate the natural (unregulated) discharge.



## 2025 Spring Freshet Highlights

**Early freshet onset:** On March 16, a large weather system from Colorado brought rainfall and warm temperatures over much of the basin that triggered a rapid melting of snow in the southern portion of the Ottawa River basin and a moderate response in the central and northern portions.

**Exceptional northern basin contributions:** <u>Substantial</u> <u>snowpack in northern basins melted rapidly by mid-April,</u> producing significant inflows in several sub-basins including the Kinojevis. Spring freshet volumes at Lake Timiskaming outlet ranked 2<sup>nd</sup> highest in the last 30 years (94<sup>th</sup> percentile), just below the 2019 event.



**Prolonged freshet with remarkable volumes:** The 2025 freshet featured a long duration with <u>3 distinct peaks at Carillon</u>. (<u>2 peaks between Mattawa and Lake Deschenes</u>). Total volumes at the Carillon dam (91<sup>st</sup> percentile) ranked 3<sup>rd</sup> highest in the last 30 years, after 2019 and 2017, and 4<sup>th</sup> highest historically.





## 2025 Freshet volumes

Location	Average discharge (m <sup>3</sup> /s)	Percentile (%)	Last 30 yrs Rank (1993-2024)	Historical Rank
Timiskaming*	1204	94%	2	11 (113 yrs)
DesJoachims*	1483	90%	4	6 (75 yrs)
Britannia	2361	87%	5	13 (110 yrs)
Baskatong*	355	84%	5	13 (98 yrs)
Carillon	3809	91%	3	4 (63 yrs)

Note: Freshet volume calculations are based on the period from March 1<sup>st</sup> to June 15<sup>th</sup>.

\* Volumes calculated for reservoirs are based on outflows

