2026 Spring Freshet Review

An extended spring freshet driven by successive periods of snowmelt and rainfall

7 739 m^3/s	60.22 m	108.63 m
Carillon peak discharge	Britannia peak water level	Lac Coulonge peak water level

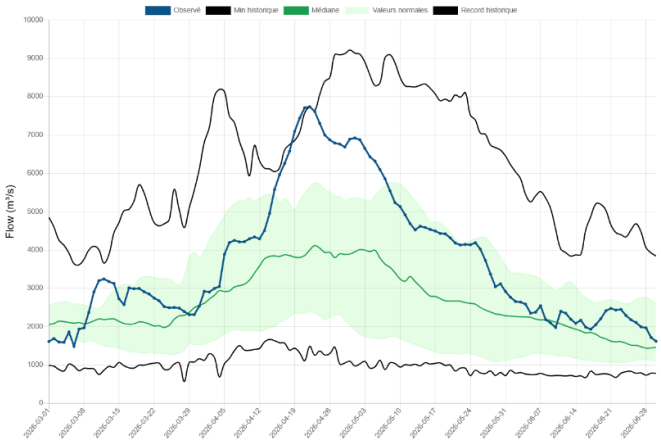
The 2026 spring freshet was a prolonged and complex event caused by uneven snow accumulation across the basin, varying snowmelt timing among sub-basins, and significant precipitation during the runoff period. Combined, these factors produced a multi-phase freshet that was difficult to forecast.

Spring runoff began in early March in the southern sub-basins, but colder weather and additional snowfall delayed broader snowmelt and kept Ottawa River levels relatively stable through late March. By early April, runoff from the central sub-basins drove significant water level increases along the main stem of the river, prompting the issuance of the first flood-related communications.

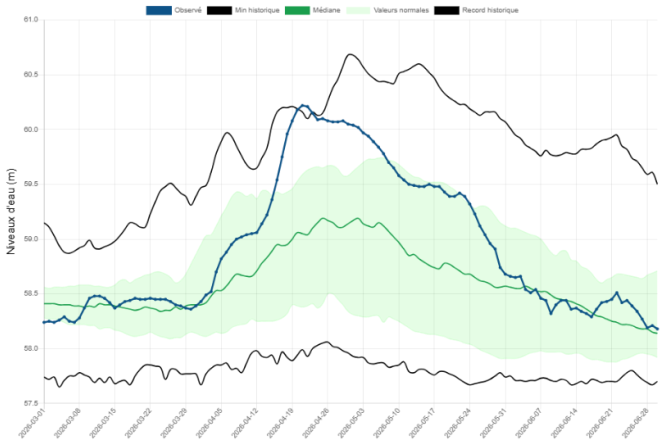
By mid-April, minor flood thresholds were exceeded at several locations, and flood risks continued to rise. Reservoir operations were carefully managed to mitigate the impacts of a historically large snowpack in the northern parts of the basin.

Rapid melting of the above-average northern snowpack, combined with warm temperatures and rain-on-snow events, led to substantially higher inflows from late April through early May. Peak water levels occurred during this period, with major flood thresholds exceeded at several locations. The peak discharge at Carillon reached 7,739 m^3/s, the fourth highest on record.

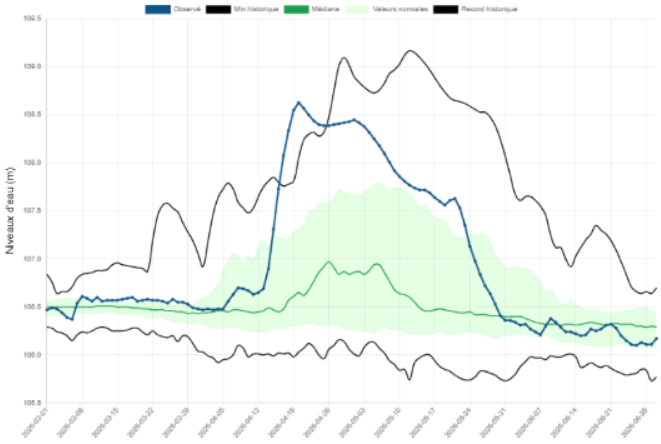
Water levels then gradually receded as the remaining snowpack melted, with a more rapid decline during the second half of May, bringing levels back below minor flood thresholds.



Carillon discharge: peak = 7 739 m^3/s, above normal range

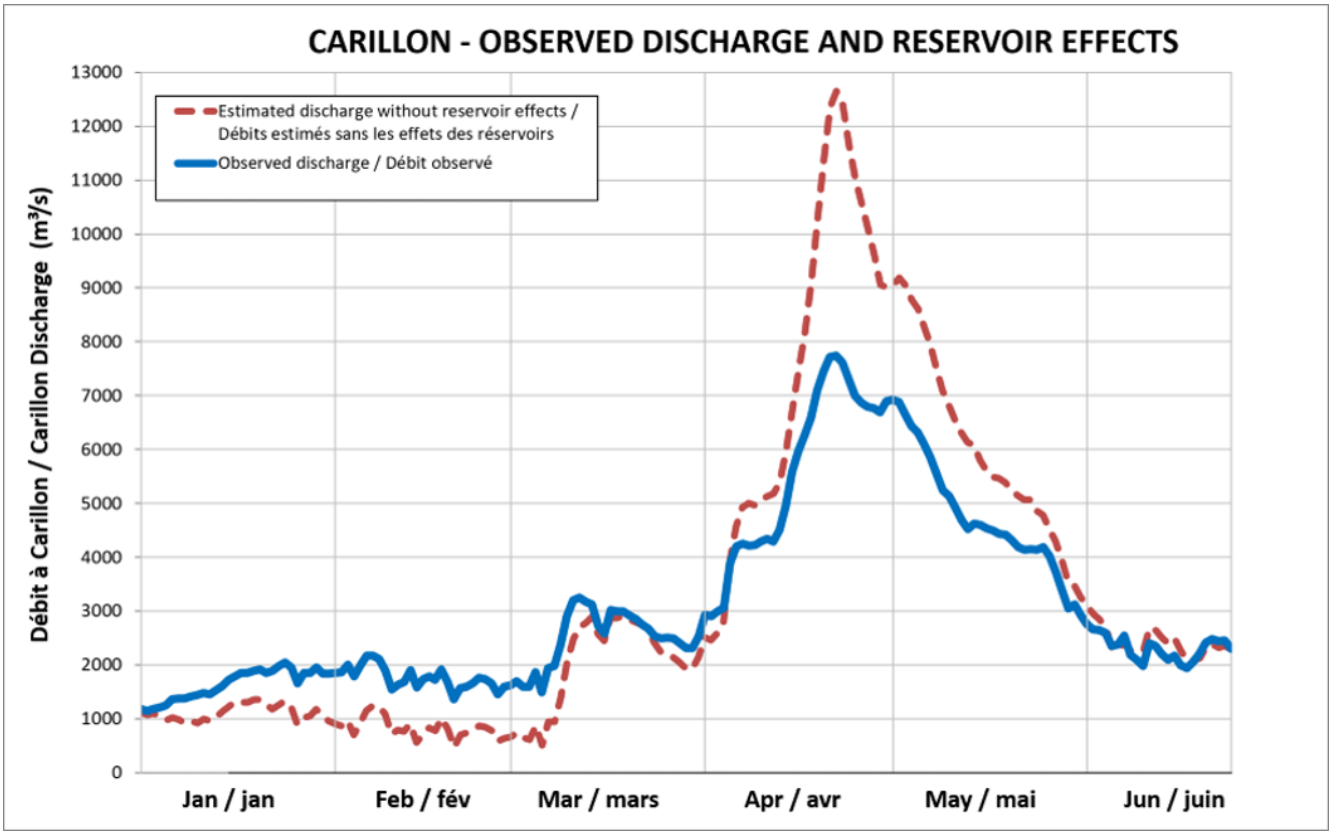


Britannia water levels: peak = 60.22 m, above normal range



Lac Coulonge water levels: peak = 108.63 m, above normal range

Impact of Flow Regulation



***Carillon**: Observed discharge (solid blue line) compared with the estimated discharge without reservoir effects (red dashed line). Reservoirs helped reduce the peak discharge at Carillon by close to 5,000 m^3/s from an estimated natural peak near 12,700 m^3/s down to an observed peak of 7,739 m^3/s.*

Public Communications Issued During the Spring Freshet

MARCH 11	APRIL 2	APRIL 13
Bulletin	Press Release #1	Press Release #2
Overview of early spring conditions	Rising Ottawa River Water Levels / 4-day forecasts begin	Increasing flood risks along the Ottawa River

Visit the Latest News section of the ORRPB's website.

2026 Spring Freshet in Numbers

Average discharge by location – 2026 freshet *(calculated based on March 1 to June 15, 2026 data)*

Location	Average discharge (m^3/s)	Percentile (%)	Last 30-yr rank
Timiskaming*	1,251	95 %	2
DesJoachims*	1,617	95 %	2
Britannia	2,450	91 %	3
Baskatong*	318	80 %	9
Carillon	3,974	91 %	3

** Spring freshet volumes are represented by average discharge. Average reservoir discharges are based on outflows.*

2026 Spring Freshet Regulation Strategy

Reservoir operations during the 2026 freshet followed the same two-phase strategy used in past years, applied here to a longer and more demanding event.

PHASE 1 • MARCH → EARLY APRIL

Maximizing storage capacity

From March through early April, while the southern and central sub-basins were already reacting with active snowmelt and spring runoff, the principal reservoirs were held at low levels, maximizing storage capacity to capture the much larger snowmelt volume still accumulating in the northern part of the basin.

PHASE 2 • MID-APRIL → MAY

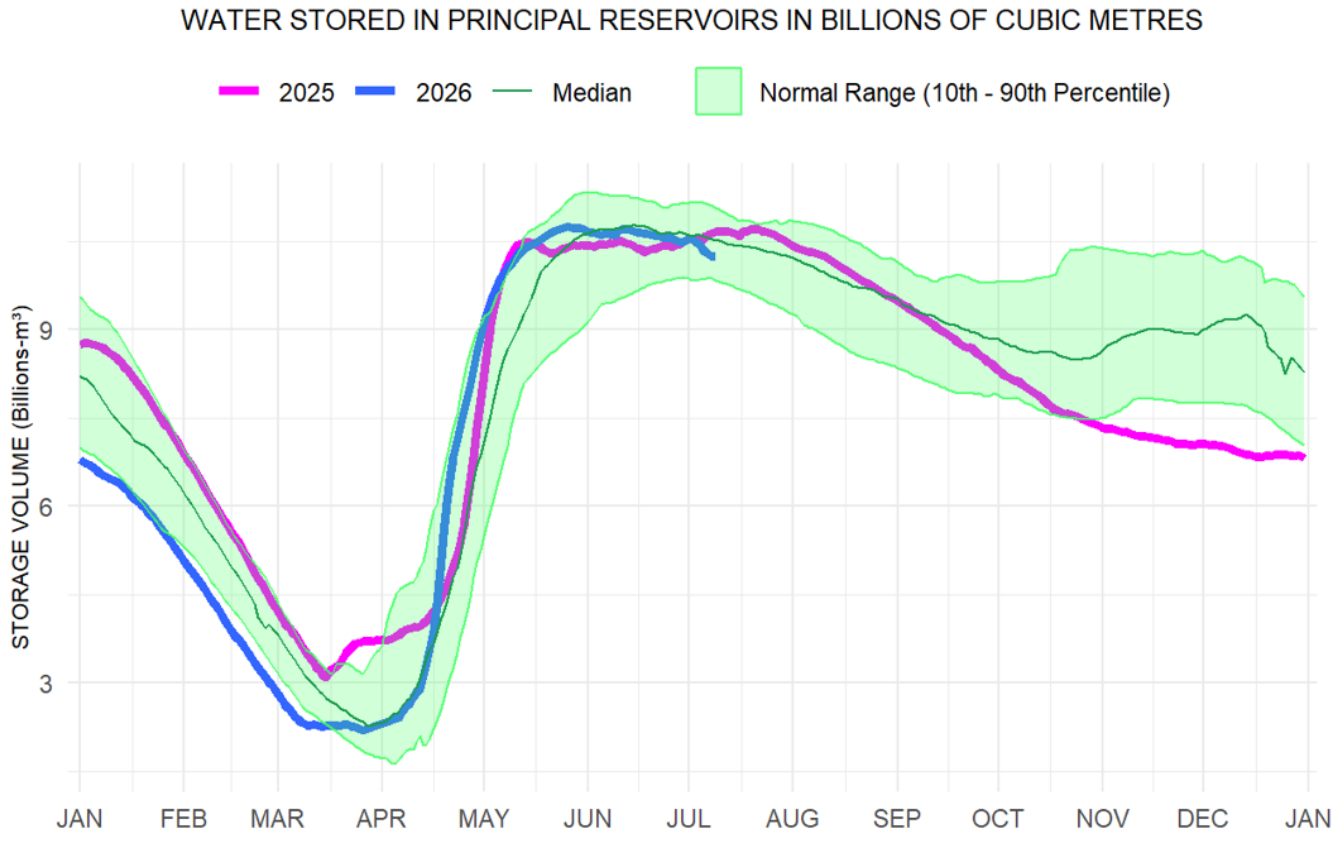
Strategic reservoir refilling

As that northern snowpack began melting rapidly in mid-April and runoff increased, operations shifted to a strategic refill: reservoirs captured the rising inflows which is what kept flood peaks lower along the main stem of the Ottawa River. This refill brought storage up quickly through late April to early May, before storage eased back within normal conditions for the rest of the season.

HYDROLOGICAL CONDITIONS AND STORAGE CAPACITY

It is worth noting that the summer and fall of 2025 were relatively dry, leading to low base flow conditions. This is reflected in the storage evolution, where the winter drawdown of the reservoirs stayed near the lower edge of the normal range. In fact, the seasonal low was reached earlier than usual, as early as the beginning of March compared with late March or early April for the median, and that low level was then held until spring runoff arrived. The storage space was therefore available earlier than normal waiting for the freshet. Despite this at or above normal storage space being available early, major flood thresholds were still widely exceeded. This illustrates that the ability to mitigate flooding along the main stem depends on several factors, notably the inflows originating from the unregulated portion of the basin, which cannot be stored in the reservoirs, as well as the magnitude of the freshet relative to the storage capacity of the principal reservoirs.

Evolution of Storage Volumes in the Principal Reservoirs



** The 10th–90th percentile normal range are calculated for the period 1991–2020.*

Information

Ottawa River Regulation Planning Board (ORRPB)

General information

Website

Contact the Ottawa River Regulation Secretariat (ORRS)

1-888-621-0059

secretariat@ottawariver.ca

X / Twitter: @ORRPB