High Water on WWK

What happened, how the fixed weir behaved, and what we need to learn next



Marks Point 20 Apr 26

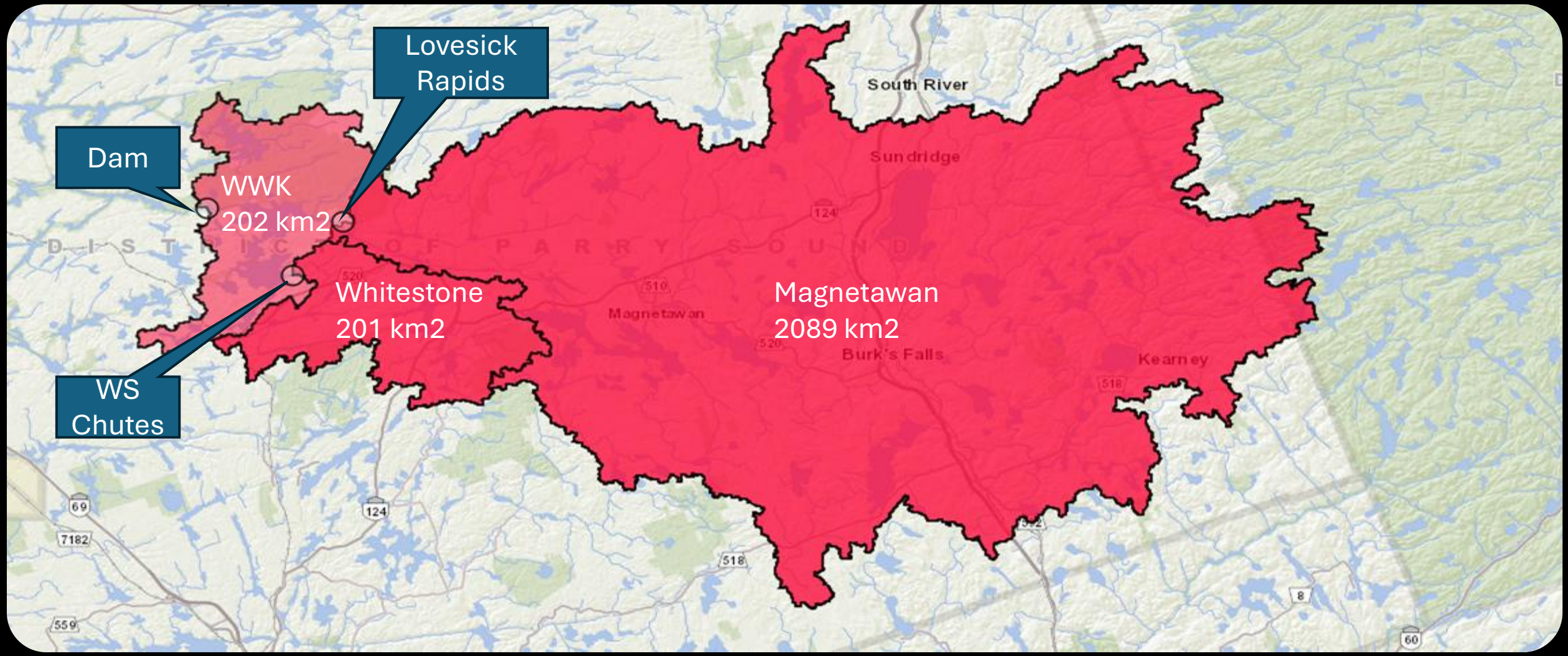


Our Goal

Understand the mechanics of the flood of 2026 and share what we learned over the past year.

Identify possible courses of action and their effects on the Magnetawan watershed

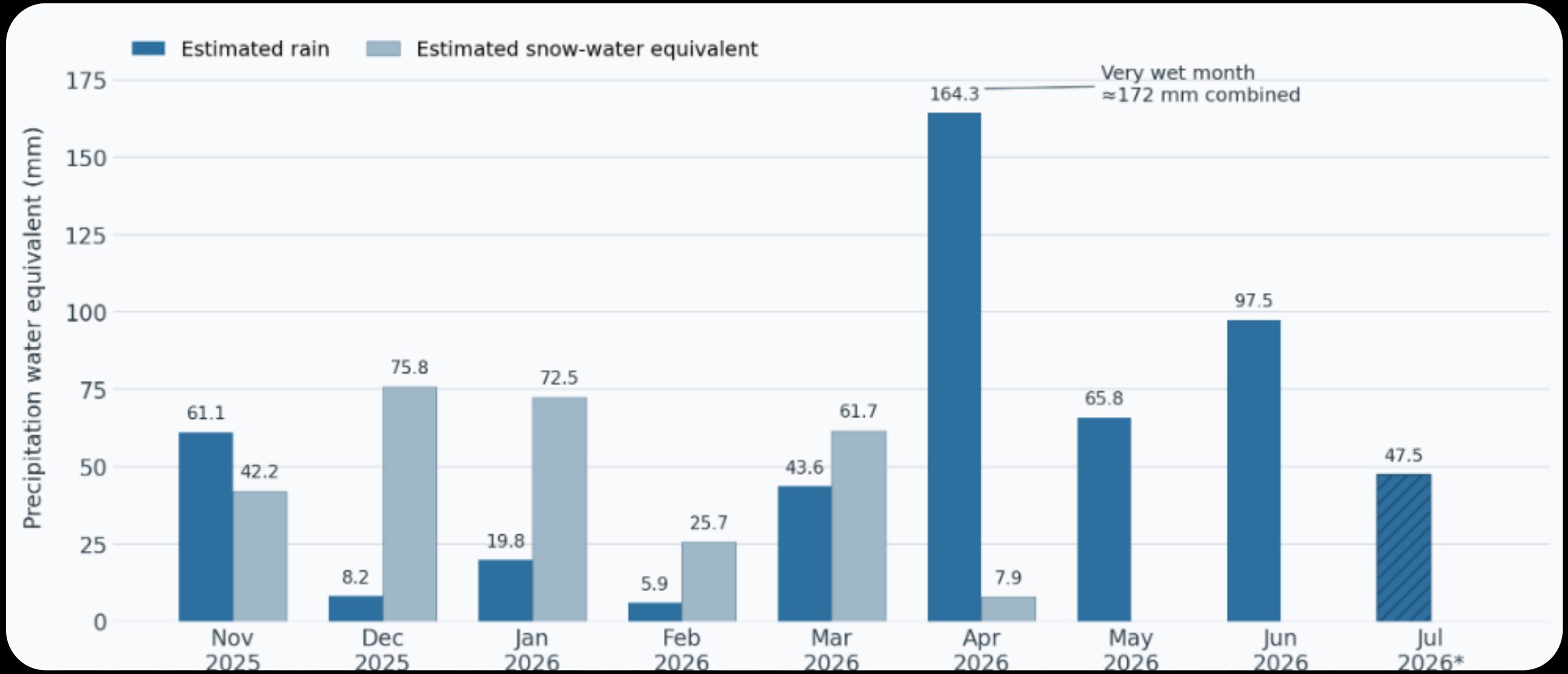




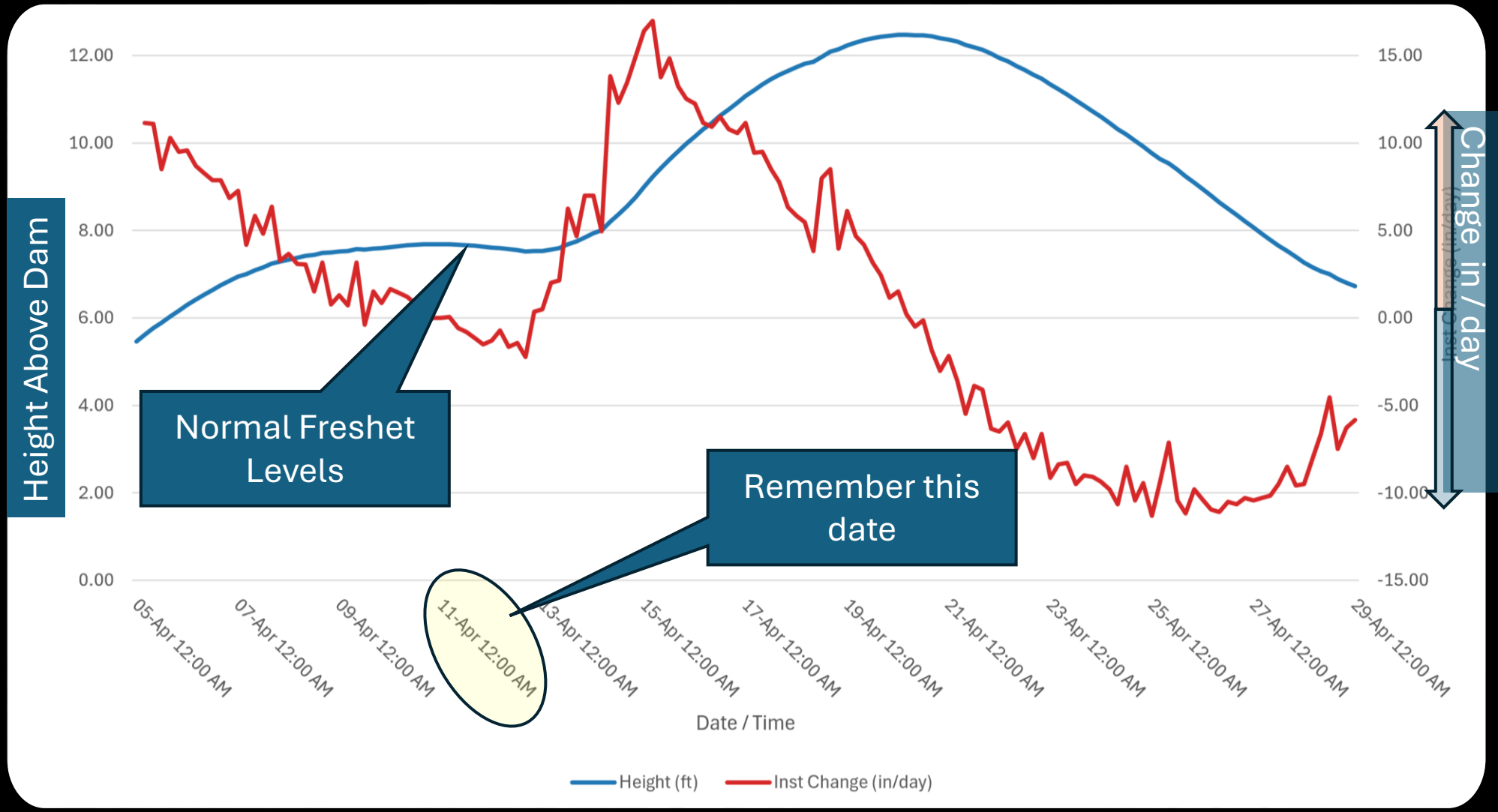
What happened : Our Catchment Area - 2492 km^2

The Magnetawan River drainage basin,

As delineated using the Province of Ontario's watershed-boundary and hydrology data.



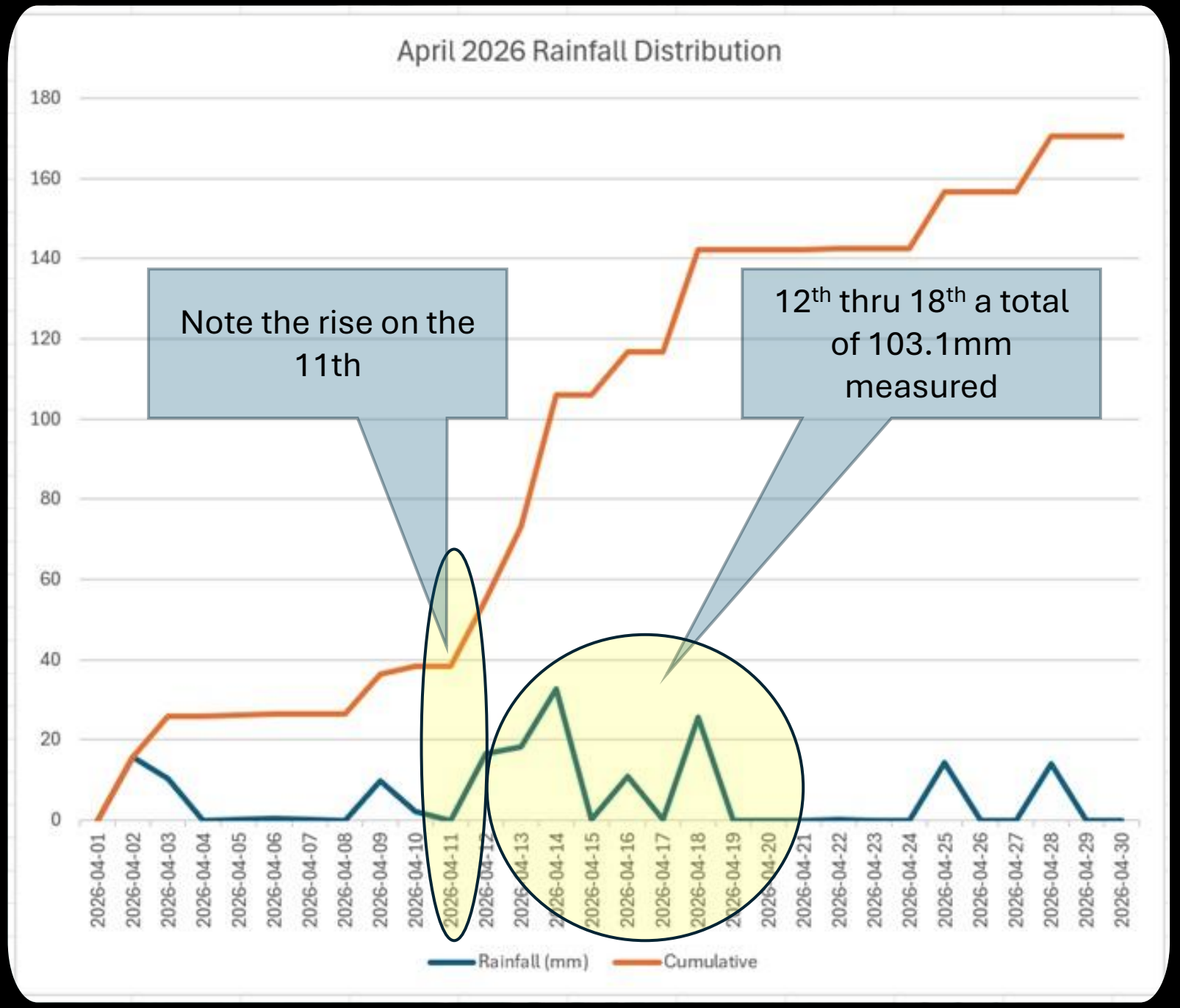
What happened: The Precipitation

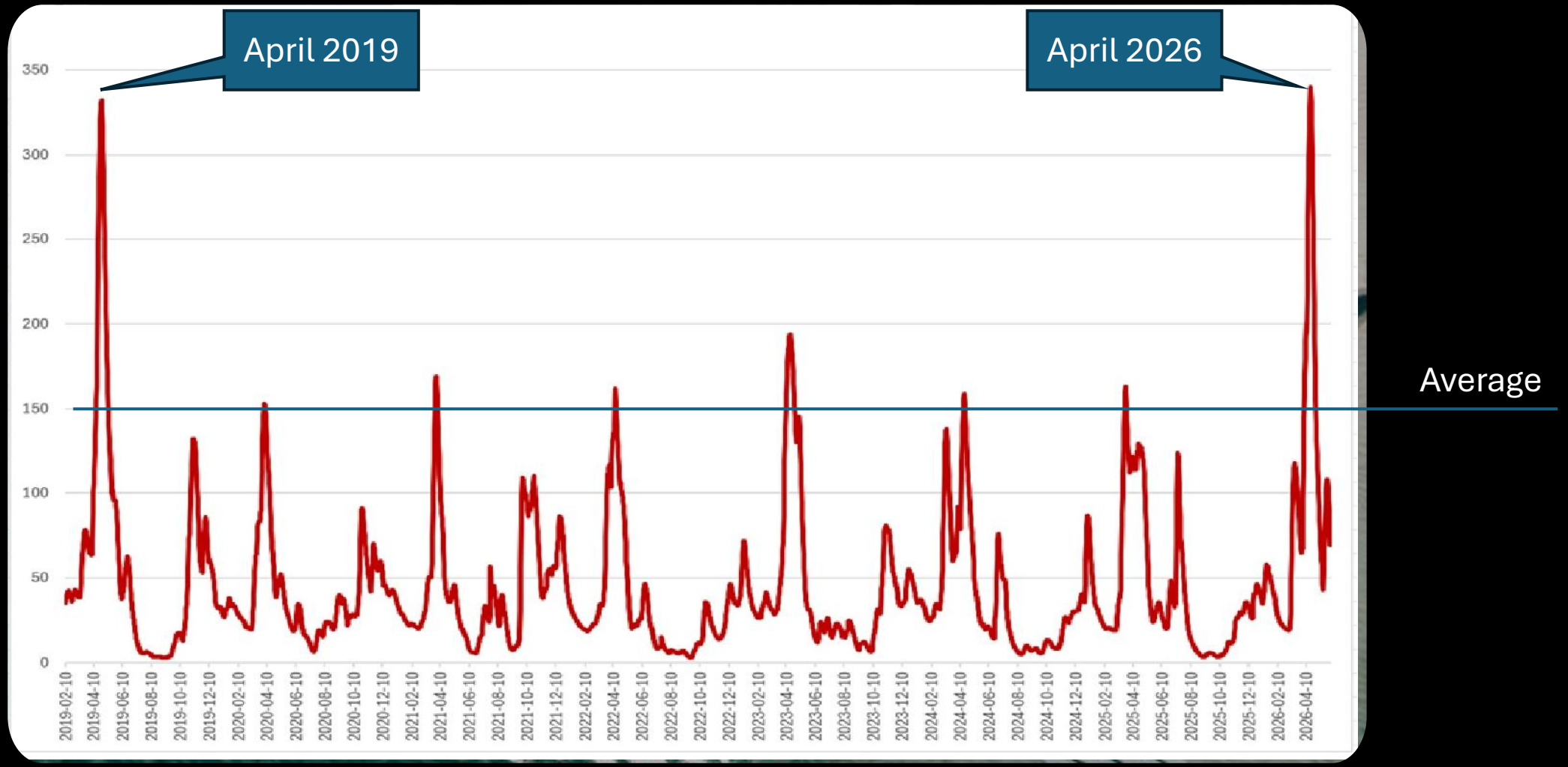


What happened: The Lake Level

Height over dam vs Rate of Change 5 Apr – 20 Apr

Marks Point April 2026 Rainfall





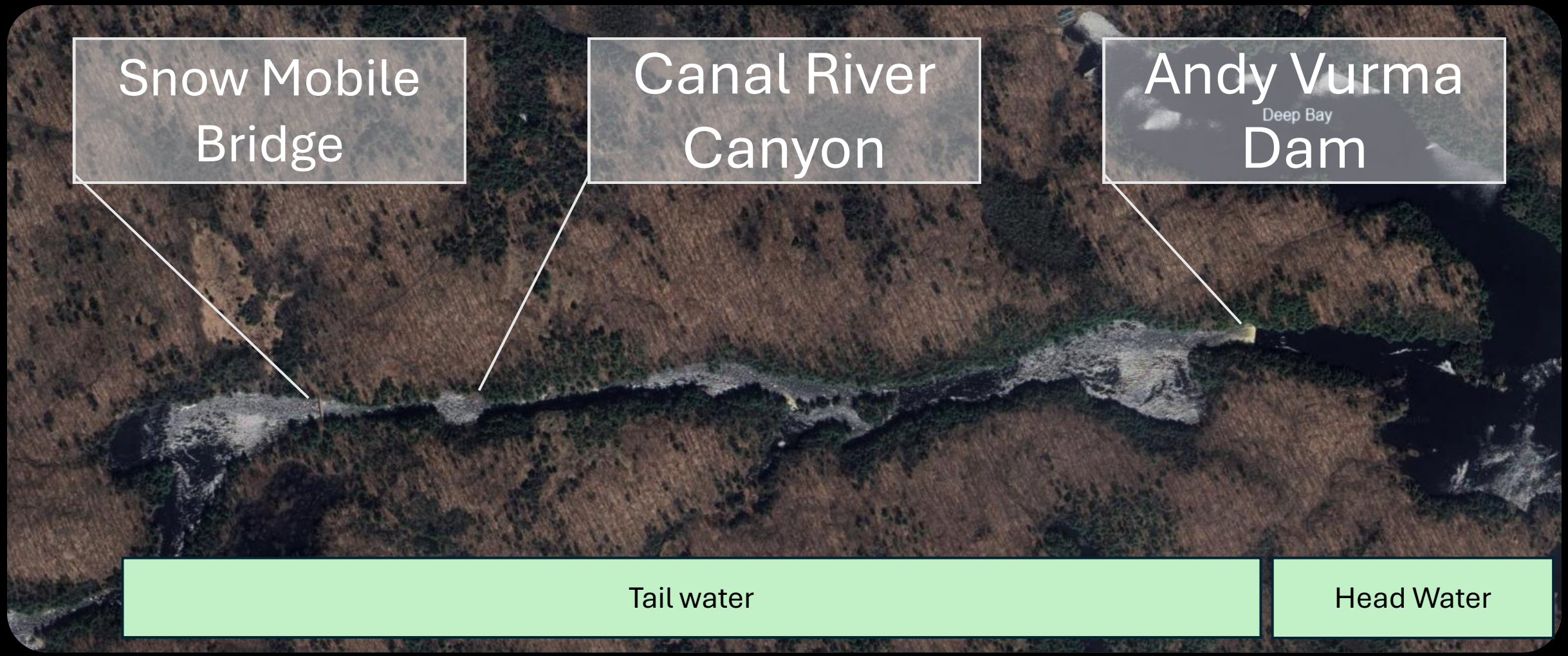
How Does This Compare to Other Years?

Measured at Britt 2019 – 2026

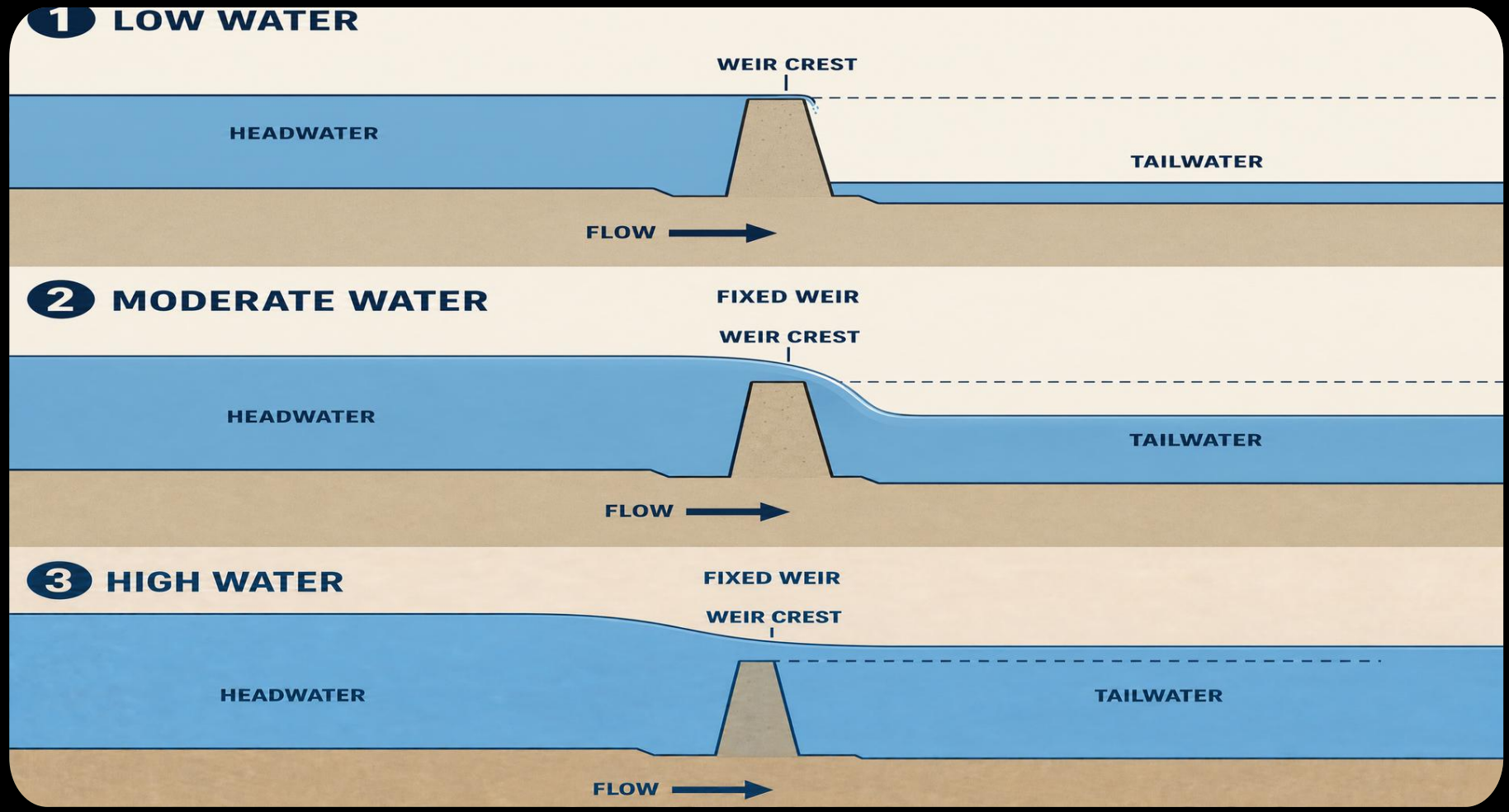


Why it Happened: The Andy Vurma Dam

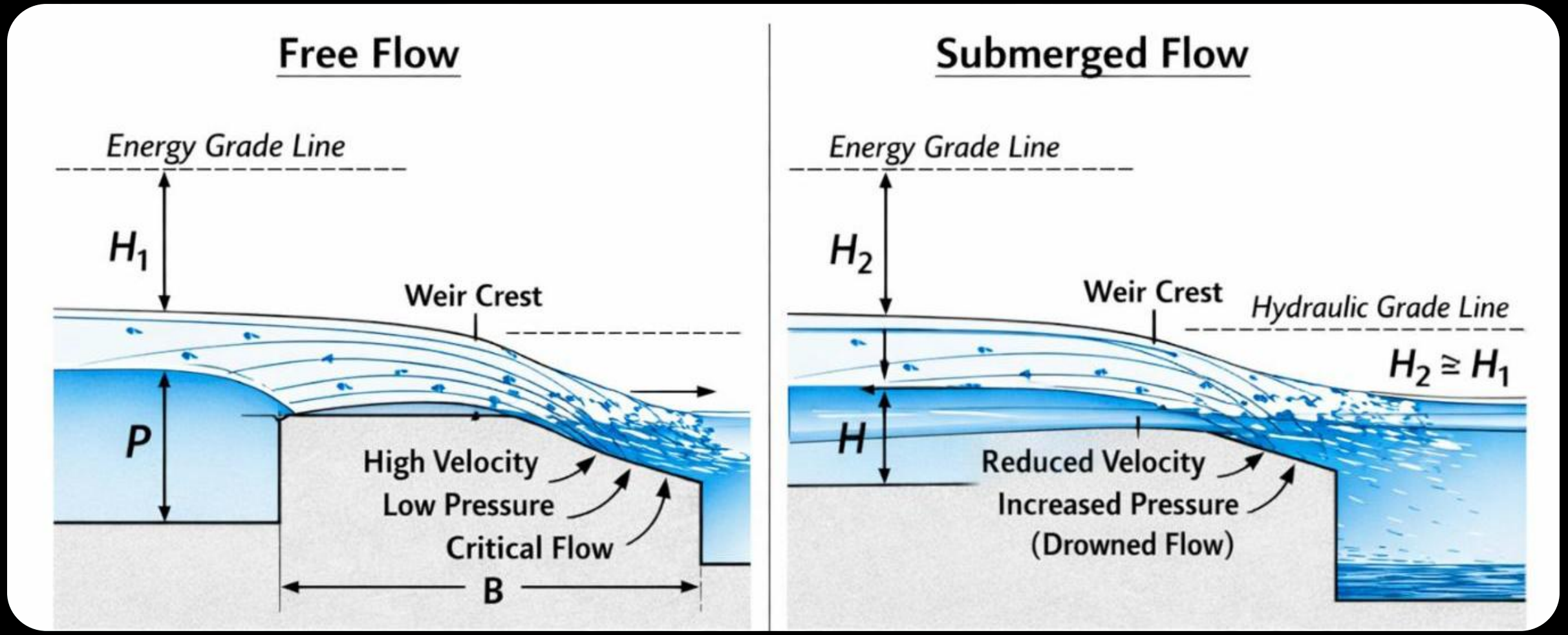
Constructed 2001-2002



Why it Happened: The restriction



Why it happened: Flow over a weir



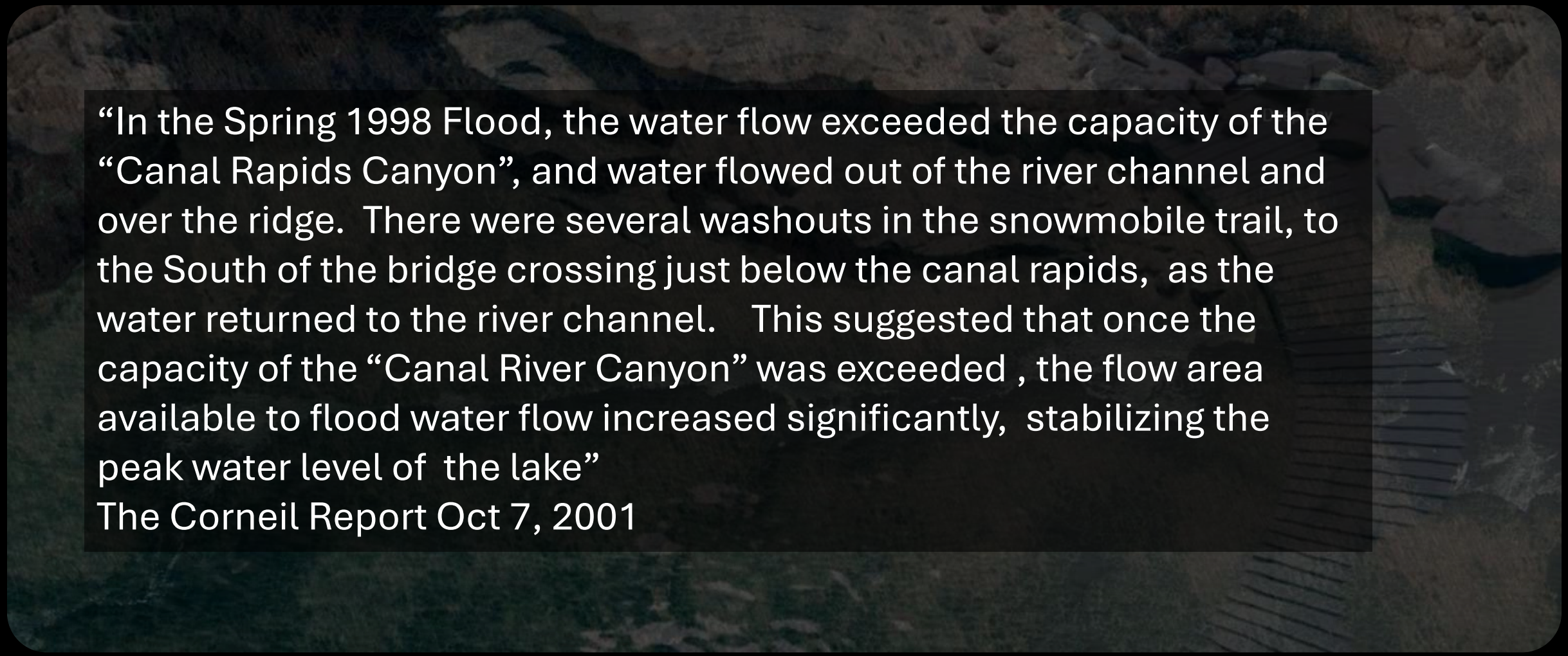
Why it happened: High water = reduced flow

The submerged flow phenomenon



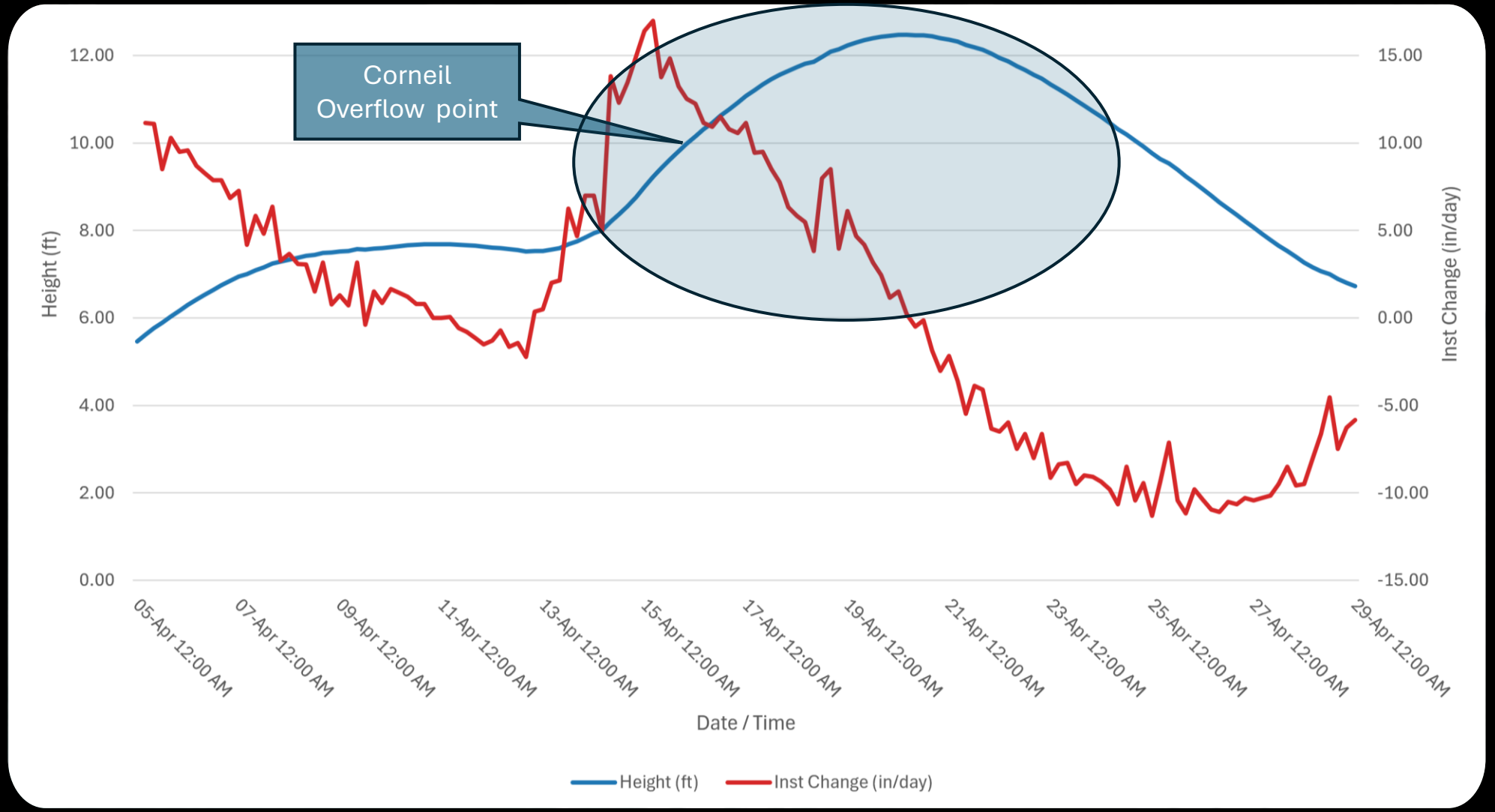
Why it happened

Andy Vurma Dam – 28 March 26



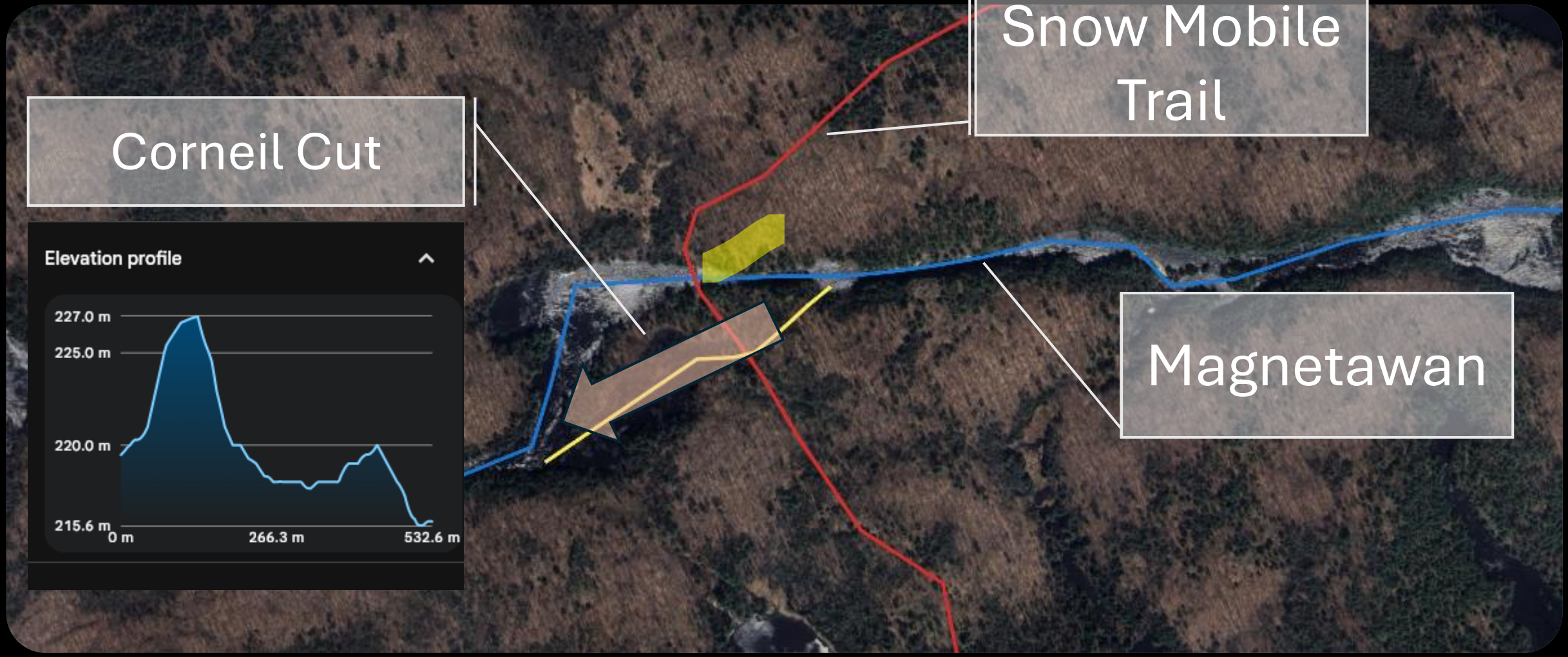
The Surprise: The High Water Level

The Corneil Report Oct 2001



What happened: The Lake Level

Height over dam vs Rate of Change 5 Apr – 20 Apr



The Corneil Route

High water escape route... below the dam



Canal Rapids Looking Upstream from the Snowmobile Bridge



Google Maps View of the Corniel Route



Image Courtesy of Cole Pollard

Waters Downstream of the Bridge

Conclusions

The dam manages the low and normal water.

The water problem is really two separate problems

- Moderate water might be mitigated by modification.
- Flood water needs a plan for the excess water

What happened, how the fixed weir behaved, and **what we need to learn next**

