



International Lake Ontario-St. Lawrence River Board

Quarterly Newsletter: Summer 2020



Introduction

The summer issue has arrived. In this issue the International Lake Ontario – St. Lawrence River Board will discuss favorable spring conditions, what the summer looks like, coastal resiliency resources, and how the forecasts of Lake Ontario and Lake St. Lawrence levels are shaping-up. It will be key moving forward that everyone continues to have conversations on how we can leverage all available resources, learn from the past, and develop plans to become more adaptable to extreme weather events.

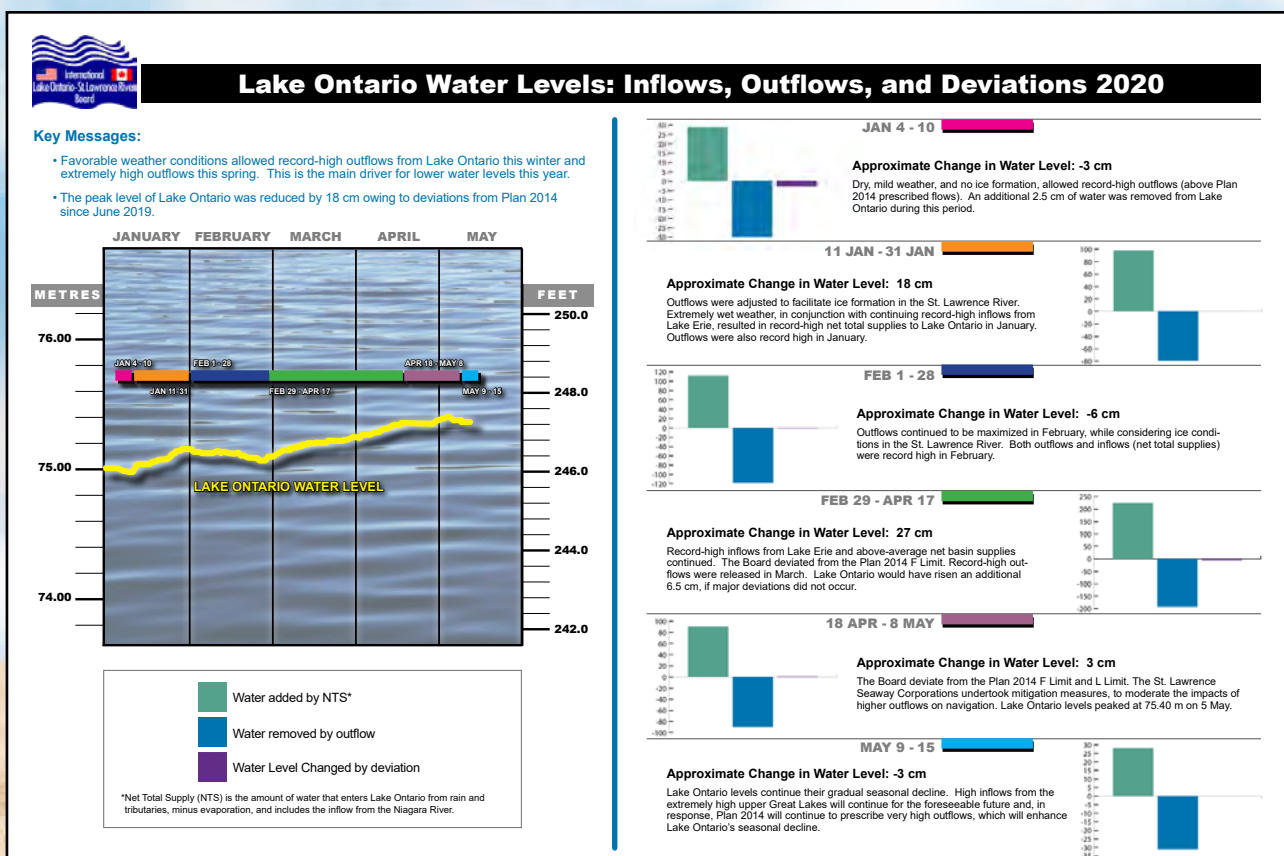
Check out the recently prepared story map available [here](#) that describes the history and purpose of the sixty year old project regulating the outflows of Lake Ontario into the St. Lawrence River at the Moses Saunders Dam.

Spring Operations

Lake Ontario and the St. Lawrence River basin saw a reprieve this spring in large part due to mild weather conditions, less rainfall, and an early Ottawa River freshet that while above average, was much less than the extremely high years of 2017 and 2019. These conditions caused a more moderate rise in lower St. Lawrence River levels, despite high outflows released from Lake Ontario, and combined with more moderate inflows from Lake Erie, Lake Ontario water levels rose gradually when compared to the same time in 2017 and 2019.

Weather conditions will always be the primary driver to water levels. This year the Board was also able to use the deviation authority, provided by the International Joint Commission, at key opportunities to increase outflows to remove every additional centimeters of water possible from Lake Ontario. The events this spring have provided a much needed reprieve to the U.S. and Canadian shoreline following the extreme events of 2017 and 2019.

[Click here for a larger view of the Deviation Graphic](#)



Coming this Summer

The Board used its deviation authority, provided by the International Joint Commission, to release additional outflows until the water levels on Lake Ontario peaked on May 5th. Following the peak, the Board’s deviation authority ended. After carefully assessing the situation, the Board decided not to request additional deviation authority.

With Lake Erie continuing to contribute extremely high amounts of water to Lake Ontario, Plan 2014 will continue to call for high outflows from Lake Ontario. The amount of additional water that would be removed with deviation authority would only be minimal, and could lead to outflows that would negatively affect stakeholders elsewhere in the system.

One area of the system that may be affected this year will be Lake St. Lawrence. Sustained high outflows and declining levels of Lake Ontario this summer are expected to cause below-average water levels of Lake St. Lawrence. With forecasts suggesting that levels as low as those experienced in the summer of 2018 are possible, the Board agreed to adjust outflows if necessary to maintain Lake St. Lawrence above a minimum of 73.0 m (239.5 ft) until after the September long weekend. This will provide limited relief to Lake St. Lawrence shoreline interests and boaters during the peak of summer, with negligible impact on Lake Ontario levels..

[LINK TO NEWS RELEASE.](#)

Coastal Resiliency

Coastal resiliency is a term that has been used quite extensively throughout the 2017 and 2019 high water events, but what does it mean to have a resilient shoreline? How can we take advantage of available resources, and the conversations necessary to take action and better prepare for the next extreme event?

Coastal Resilience identifies nature-based, green infrastructure and non-engineering solutions, which coastal communities may use to lessen the impact of high and low water events. This can be done in a variety of ways by effectively protecting, restoring and sustainably managing natural and man-made resources while strengthening local capacity for climate adaptation.

No one individual, group, or organization can undertake these engineering challenges alone. It will take a unified effort to identify areas that can benefit from resiliency measures, and fund these major undertakings. Both the U.S. and Canada are heading in the right direction and have resources available to assist homeowners and municipalities to take action.

Some examples include:

- Shoreline Protection - seawalls, revetments, groins, bulkheads, etc.
- Flood proofing/ relocating vulnerable structures and roads
- Floating docks/dock extensions/modular board walks
- Coastal wetland construction to mitigate losses
- Soft engineering/green infrastructure (e.g. re-vegetation of shoreline)

- Integrated shoreline management planning
- Zoning restrictions/ setbacks
- Improved flood plain mapping/ technical services

US:

- [Sea Grant](#)
- [NYSDEC](#)
- [Great Lakes Commission](#)
- [U.S. Army Corps of Engineers](#)

Ontario

- [Conservation Ontario](#)

Quebec

- [Sécurité publique](#)

Lessening the impact to the next high and low water event is a goal everyone can agree upon, and right now the momentum is pushing that goal forward. It is critical that momentum is not lost and that we continue look at all possible options knowing that no regulation plan can prevent water levels from extreme weather events.



Forecast and Outlook

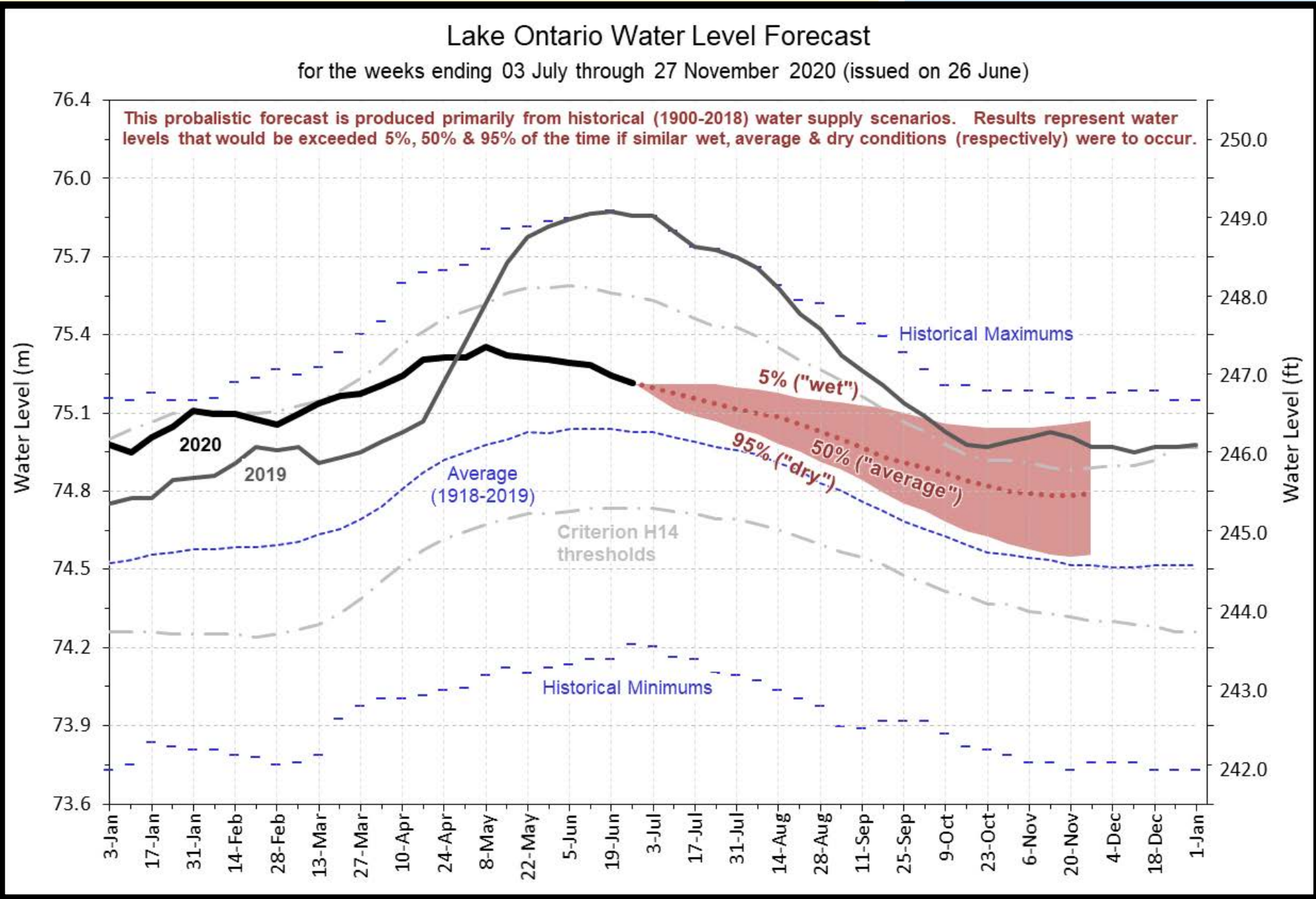
The forecast is based on current levels of Lake Erie and Lake Ontario, short-term weather predictions, an ensemble of historical water supplies, and the current outflow strategy. The Board, utilizing Plan 2014, will continue to release high outflows, which will safely lower the Lake Ontario water level in consideration of all interests. Sustaining high outflows this summer will cause the Lake St. Lawrence water levels to be well below average.

It is important to remember:

- Levels are dictated primarily by water supplies
- Regulation of outflows has a limited role and cannot prevent high levels during periods of persistent and excessive wet weather
- Outflows will remain high, but drier weather would help to lower water levels. However, if it's wet enough, there will be no way of avoiding high water levels in the future



Lake Ontario Water Level Forecast



For the most up to date forecast information visit: <https://ijc.org/en/loslrb/watershed/forecasts>



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The Board's website
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