

# Flood Watch

The Essex Region Conservation Authority Advises that, due to record high lake levels, a Long Term Flood Watch is in effect for all shoreline areas within the Essex Region, including Pelee Island. Areas of potential concern are the low lying beach communities and shoreline areas along Lake St. Clair, the Detroit River, and Lake Erie, as well as low lying areas along the downstream reaches of major tributaries. Unless superseded by a Flood Warning, this Flood Watch related to High Great Lakes water levels will remain in effect until further notice. Conditions will be continuously monitored and re-evaluated with weekly updates based on short and long-range weather forecasts. However, it should be noted that water levels are not anticipated to peak until June-July 2020. Therefore, our office is advising residents to take proper caution especially near shoreline areas where conditions can change quickly based on wind speed and direction.

## **Areas of Potential Concern:**

With record high lake levels, areas that may be potentially impacted can vary from day-to-day based on wind speed and direction. Areas at risk of flooding and significant nearshore erosion as it relates to wind are described below. The direction stated is the direction the wind is blowing from.

### Northeast/East Winds

- Lake St. Clair shoreline from Windsor to Belle River;
- Lake Erie shoreline including Pelee Island;
- Detroit River shoreline.

### North Winds

- Lake St. Clair shoreline

### Northwest Winds

- Lake St. Clair shoreline from Belle River to Tilbury North

### South/Southwest/Southeast Winds

- Lake Erie Shoreline including south Pelee Island

### West Winds

- West shoreline of Pelee Island

## **Weekly weather outlook:**

Winds are currently out of the southeast at moderate speeds and are expected to continue out of the east-northeast directions through Friday. Forecasts are predicting winds to shift to directions out of the west on Saturday. Winds are expected to remain out of the southwest and increase in speed up to approximately 40 km/hr by Saturday night and through Sunday morning. These conditions bring an elevated risk of flooding and erosion to the Lake Erie shoreline with the following areas particularly susceptible: County Road 33 between

Sturgeon Creek and Point Pelee National Park, and the west and south shorelines of Pelee Island. Longer range forecasts are predicting winds shift to a north-northeasterly direction by Monday April 20th with speeds around 30 km/hr. With north winds, the low lying areas along the Lake St. Clair shoreline are the areas of particular concern for increased wave activity, flooding, and nearshore erosion. If these winds shift and become more so out of the east, then areas along the Lake Erie shoreline (in particularly east of the tip of Point Pelee) could see those same conditions. By Tuesday, winds are forecasted to shift back out of the southwest at strong sustained speeds around 40 km/hr with potential impacts along the Lake Erie shoreline including Pelee Island.

Precipitation forecasts show relatively low amounts of precipitation day to day, with at most 10 mm of equivalent rainfall predicted on any given day over the next 5 days.

**Current Conditions:**

Water levels remain at record high levels in the Essex Region. Both Lake St. Clair and Lake Erie still water levels are roughly 30 cm (1 foot) above the monthly average level this time last year and continue to move through their seasonal rise. In general, these elevated lake levels bring an elevated risk of flooding and nearshore erosion across the watershed. Measurable wind from any direction can potentially cause minor flooding issues while sustained wind speeds nearing 30 km/hr can and has caused significant flooding, substantial nearshore erosion, and damage to shoreline structures.

Elevated lake levels continue to cause downstream reaches of major tributaries to remain elevated. With tributaries full of lake water, it reduces their capacity to handle rainfall and has the potential to cause local rivers, creeks and streams to spill into low-lying areas. As we move through spring, low-pressure systems can bring both rainfall and strong winds that can both impact local watercourses and produce unpredictable waves and water level changes impacting shoreline communities.

**Great Lakes Water Level Outlook:**

Current information shows that outflows for all lakes remains well above normal. Both Lake St. Clair and Lake Erie still water levels are roughly 30 cm (1 foot) above the monthly average level this time last year. Forecasts are predicting that Lake Erie and Lake St. Clair rise between 2.5 cm and 10 cm from now until mid-May 2020. Long-term predictions indicate that monthly average peak water levels could be 8 cm higher than levels experienced in June and July of 2019 for both lakes. This would leave both lakes, the Detroit River, and river-lake interface zones at an elevated risk of flooding. ERCA will continue to monitor levels and forecasts and advise accordingly.

**Monitoring:**

The Municipality of Leamington should continue to monitor the flood control dykes in the Southeast Leamington Area, including the Mersea Road 1 Dyke and the Marentette Dyke. The Municipality of Leamington and the County of Essex should also continue to monitor for signs of accelerated erosion along Point Pelee Drive between Sturgeon Creek and Point Pelee National Park. The City of Windsor should continue to monitor water levels along the flood control dykes within the Little River Drain corridor. The Township of Pelee should continue to monitor areas along the shoreline that have experienced significant erosion, such as the West Shore Road and McCormick Road, which have sustained significant damage through the early part of spring 2020.

Essex Region Conservation Authority officials will continue to monitor conditions and advise accordingly.

**Caution:**

People should take extra caution to avoid areas where flooding is occurring as well as rivers, streams, and shoreline areas during significant rainfall and wind/lake events. The combination of slippery banks, waves, waves overtopping shoreline structures, and fast moving water can be dangerous. Standing water can also present its own unseen hazards. Children, pets, and livestock should be kept away from flowing or standing water as well as shoreline areas.

**Issued By:**

James Bryant, P.Eng.  
Water Resources Engineer, Watershed Management Services  
519-819-7912

**Issued By:**

Tim Byrne, C.E.T.  
Director, Watershed Management Services  
519-796-2300

**Date: April 17, 2020**

**Time: 2:32 pm**

**This advisory is in effect until: 16:00 PM, Apr 24, 2020**

**Municipalities and Other Agencies:**

Upon receipt, hand directly to the Flood Coordinator or Emergency Planner for your Municipality or Agency.

**Media:**

Upon receipt, hand directly to your newsroom.

**Types of Flood Bulletins**

Watershed Conditions - High flows, unsafe banks, melting ice or other factors that could be dangerous for recreational users such as anglers, canoeists, hikers, children, pets, etc. Flooding is not expected.

Watershed Conditions – Early notice of the potential for flooding based on weather forecasts calling for heavy rain, snow melt, high wind or other conditions that could lead to high runoff, cause ice jams, lakeshore flooding or erosion.

Flood Watch Bulletins Flooding is possible in specific watercourses or municipalities. Municipalities, emergency services and individual landowners in flood-prone areas should prepare.

Flood Warning Bulletins Flooding is imminent or already occurring in specific watercourses or municipalities.