

MVCA Completes Safe Access Review Around Mississippi Lake

January 2024



Background

In 2022, MVCA adopted a [Watershed Plan for the Mississippi River](#) that recommends a variety of actions to support safe and sustainable development. One recommendation was to examine roads that flooded during the 2019 flood and other roads with potentially “unsafe access”.

Last year, the Mississippi Lake Association (MLA) approached MVCA to pursue an investigation of roads abutting the lake. Preliminary investigations were conducted in 2023 and results are being shared with MVCA’s Board of Directors, Emergency Services at the Township of Beckwith, Township of Drummond North Elmsley, and the Municipality of Mississippi Mills, and area residents.

Methodology

A table-top review of flood plain mapping was used to identify roads at risk of flooding during a 1:100-year flood event. Preliminary findings were discussed with the MLA including areas where field verification would be beneficial. MVCA did spot-check surveys in a selection of areas where information received indicated that road works may have altered the road’s vulnerability during a 1:100-year flood event.

Based upon the desktop review and field spot checks, MVCA created a list of roads at risk for use by area municipalities and local road associations to prioritize the need for further surveys and road works. This work will assist municipal staff involved in emergency response during flood events.

Unsafe Access

Vehicular and pedestrian access routes are deemed unsafe if the depth of flooding during a regulatory (1:100 year) flood event is equal or greater than 30 cm along the travelled surface of the road where the water velocity *does not* exceed 1.0 metre/second.

Under these circumstances, development of the property may be limited by MVCA to prevent loss of life and property during a flood event. Alterations can be made to a road to reduce or eliminate this risk, but must be done in consultation with MVCA and requires a permit and legal survey to verify finished grades.



Findings

Much of Mississippi Lake was developed before flood plain mapping was available and before regulations were in place to restrict development within the flood plain. Therefore, several roads and properties around the lake are subject to seasonal flooding, and are particularly vulnerable during large flood events as evidenced during the 2019 spring freshet/rainfall event.

In total, 68 roads (or segments of roads) were identified that would experience a minimum 30 cm of flooding during a 1:100-year event. Of those, 23 roads are predicted to experience flooding to a depth greater than 1 metre.

Table 1 lists affected roads and the degree of predicted flooding.

Next Steps

Residents can access [on-line flood plain mapping](#) to view current regulatory limits and affected roads.

If a property has a second road access that is not subject to flooding, the property is deemed to have Safe Access.

Alterations to roads and properties within regulated hazard lands require approval of MVCA. Depending upon whether a road is in public or private ownership, responsibility for the planning and completion of remedial works rests with either the municipality or the local road association.

MVCA will coordinate a meeting with the Lake Association and Road Associations to discuss preliminary results.

Table 1: Roads with Segment(s) of Unsafe Access

Beckwith Township	
≥ 30 cm of flooding	≥ 1 m of flooding
<ul style="list-style-type: none"> • Avenue 3 • Avenue 3A • Avenue 4 • Avenue 4A • Beckwith 9th Line • Beckwith Lane • Lakeside Drive • McCann Road • Mitchell Lane • Moonlight Bay • Petrie Road • Rathwells Shore Road • Ruth Street • Sunset Lane 	<ul style="list-style-type: none"> • Abs Road • Dowdall Shore Lane • Mississippi Lake Seasonal Resort • Otterslide Lane • Scotch Corners Road
Drummond/North Elmsley Township	
≥ 30 cm of flooding	≥ 1 m of flooding
<ul style="list-style-type: none"> • 1st Avenue • Birch Grove Lane • Commodore Island Road • Flintoff Bay • Hardwood Road • Island View Drive • Lakeview Village Crescent (McCrearys) • Pickerel Point Road • Pretties Island • Tina Drive 	<ul style="list-style-type: none"> • Craigs Shore • Drummond Concession 7B • Grasshopper Point • Hunters Bay • Machin Drive • McCulloughs Landing • Norway Point Road
Municipality of Mississippi Mills	
≥ 30 cm of flooding	≥ 1 m of flooding
<ul style="list-style-type: none"> • Townline Road West 	<ul style="list-style-type: none"> • Birch Point Lane • Montgomery Park Road • Ramsay Concession 5A