



MCINTYRE RIVER FLOODPLAIN

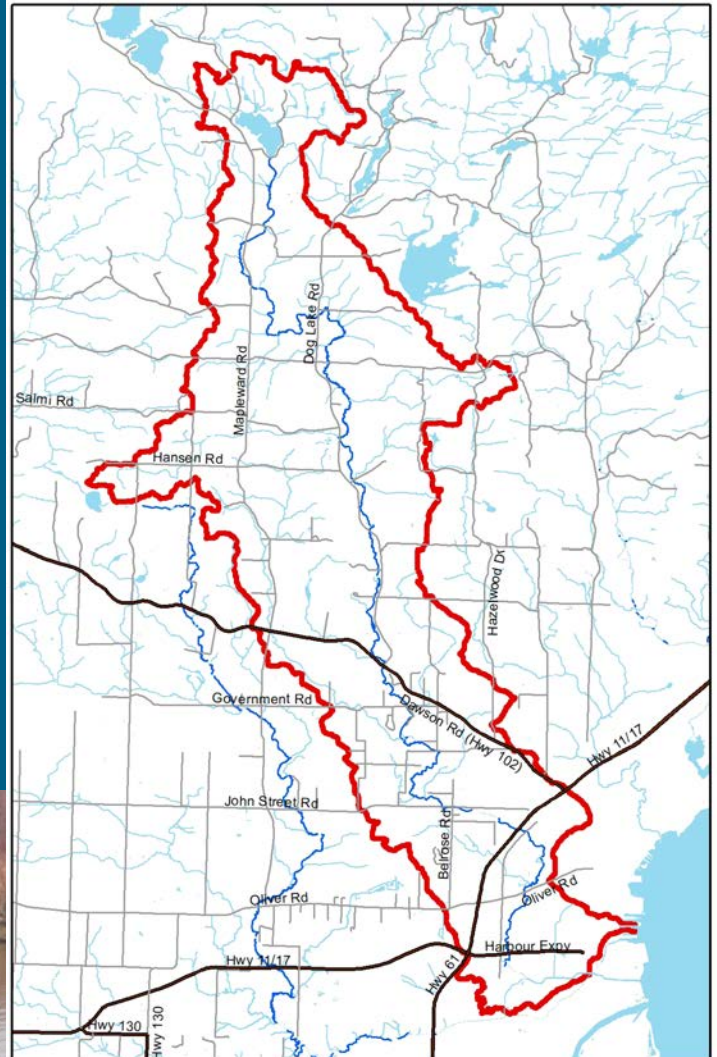
July, 2017

The McIntyre River flows in a south-south-east direction through the unincorporated Township of Gorham and the City of Thunder Bay. The McIntyre River watershed is long and fairly narrow, with a main channel and several contributing tributaries. The McIntyre River rises north of Trout Lake and flows to Thunder Bay where it discharges into the Neebing- McIntyre Floodway Channel which then flows into Lake Superior.

The LRCA in partnership with Environment Canada operate a streamflow gauge and tipping bucket precipitation gauge on the McIntyre River, which is located just upstream of Highway 102 and Dog Lake Road intersection.

The Neebing-McIntyre Floodway consists of the Diversion Structure, Diversion Channel and widened and deepened Floodway Channel which flows into Lake Superior. The Floodway works by diverting excess flow from the Neebing River into the Diversion Channel which then combines with the McIntyre River flow into the Floodway Channel. The Neebing-McIntyre Floodway provides protection up to and including the Regional Storm.

Watershed Size	146.5 square kilometres
Length of River	29 kilometres
Average Channel Slope	0.5%
Average Channel Width	6 - 8 metres
Average Bank Height	4.0 metres
Thermal Regime	Cold Water
Streamflow Gauge/Precipitation Gauge Location (1986 to present)	Corner of Highway 102 and Dog Lake Road
McIntyre River Flow at confluence with Floodway during Regional Storm	168.14 cubic metres per second
Flow at Streamflow Gauge Location during Regional Storm	92.7 cubic metres per second
Highest Recorded Instantaneous Flow at Gauge Site	June 2008 Approximately 29 cubic metres per second



McIntyre River Watershed



McIntyre River Flood Damage Centres

Floodplain mapping studies were completed in 1984 and updated in 2015 on the McIntyre River to determine the Regulated Floodplain. The floodplain is considered to be the watercourse area or area next to a watercourse that is under water during a flooding event. The Regional Storm is the magnitude of storm that determines the floodplain for regulatory purposes. Maps have been prepared and are available from the Conservation Authority that detail the Regional floodplain and flood elevation along the McIntyre River.

It is estimated that in excess of 13 homes are built in the Regional Floodplain of McIntyre River. Homes located in the floodplain are considered to be located within Flood Damage Centres. These areas will flood during the Regional Storm and may need to be evacuated. Some areas may flood during flood events that are more frequent than the Regional Storm.

The Lakehead Region Conservation Authority monitors local conditions and administers the Flood Warning System for the City of Thunder Bay and all rural Member Municipalities of the LRCA. Flood Warning Messages are issued during flood events. The City of Thunder Bay through their Emergency Management Plan will have established procedures during flooding events and will coordinate any necessary evacuations.

Streets with residential development in the Floodplain of the McIntyre River include:

John Street Road
Toms Road
Dawson Road
Ada Avenue

Residents living in Flood Damage Centres should pay attention to local flooding conditions in their area and be on alert for flood messaging. Residents should also prepare their individual flood emergency plans to be prepared in the event of a flood.

During flooding events some roads and watercrossings will be overtopped. Residents should never drive through a flooded section of road as the condition of the road and depth of flooding is not apparent and can be dangerous.

Definitions:

Flood Damage Centres: Areas that have residential dwellings located in areas that are prone to flood.

Regulated Floodplain: The main stream/river channel plus the area of land adjacent to the river or stream that is flooded (i.e. under water) by the 100 year storm or the Regional Storm, whichever is greater.

Regional Storm: Storm that occurred in Timmins, Ontario in 1961 in which 193 millimetres of rain fell in 12 hours. In most cases the Regional Storm exceeds the 100-year storm.

100-Year Storm: Storm that on average should occur every 100 years; however, has a 1% chance of occurring or being exceeded in any given year.