

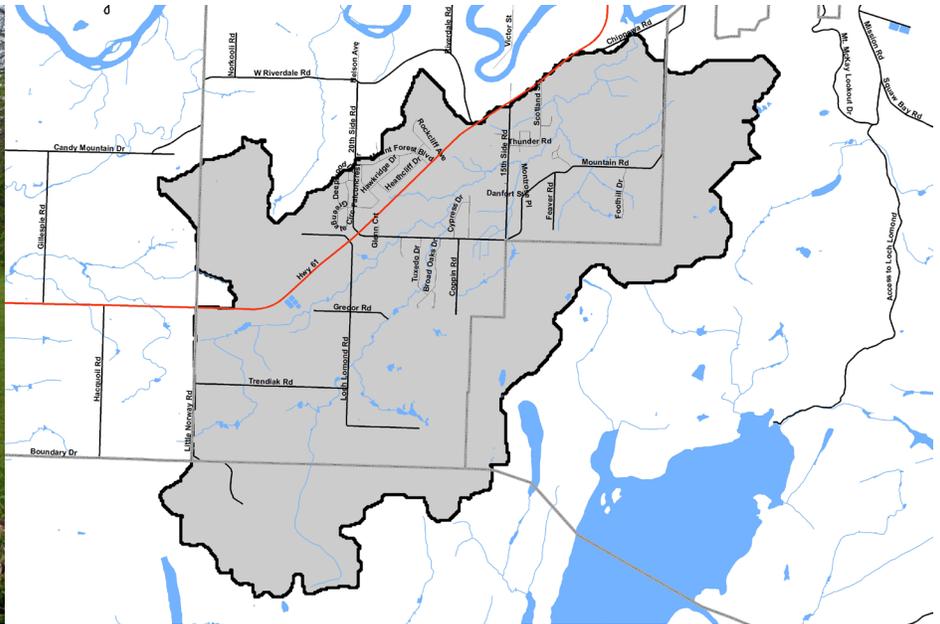


February 2020

The Mosquito Creek Watershed is located within the City of Thunder Bay, Municipality of Oliver Paipoonge, Municipality of Neebing and Fort William First Nation. The headwaters originate in the Municipality of Neebing and flows in a northeasterly direction, towards the City of Thunder Bay and discharges to the Kaministiquia River approximately nine kilometres upstream of Lake Superior. The drainage area of the Mosquito Creek Watershed is approximately 30 square kilometres and includes the main branch of the creek, as well as several smaller tributaries.

The main branch of the creek is approximately 15 kilometres long and its channel is typically 2 to 8 metres wide. The creek valley and channels are poorly defined near the headwaters of the watershed and deepen steadily in the downstream direction to form deep and well-defined valleys near the mouth of the creek at the Kaministiquia River.

The existing land use in the Mosquito Creek Watershed is predominately rural and forest, with some suburban settlement and pockets of commercial and institutional development.



Watershed Size	30.3 square kilometres
Length of River	15 kilometres
Average Channel Slope	1.7%
Average Channel Width	2 - 8 metres
Thermal Regime	Warm Water
Real-Time Hydrometric Data Record	Not Available
Approximate Peak Flow during Regional Storm at confluence of Kaministiquia River	46.3 cubic metres per second



Mosquito Creek

Floodplain mapping studies were completed in 1984 and updated in 2020 on Mosquito Creek 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. On Mosquito Creek, 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 Mosquito Creek.

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.

FLOOD MESSAGING TERMINOLOGY:

	NORMAL: Conditions are within NORMAL limits. No flooding is expected.
	WATERSHED CONDITIONS STATEMENT- WATER SAFETY: High flows, unsafe banks, melting ice or other factors could be dangerous for recreational users such as anglers, canoeists, hikers, children, pets, etc. Flooding is not expected.
	WATERSHED CONDITIONS STATEMENT- FLOOD OUTLOOK: Early notice of the potential for flooding based on weather forecasts calling for heavy rain, snow melt, high wind or other conditions.
	FLOODWATCH: Indicates that there is the <u>potential</u> for flooding within specific watercourses and municipalities.
	FLOOD WARNING: Indicates that <u>flooding is imminent or occurring</u> within specific watercourses and municipalities.

Residents living near floodplains 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 water crossings 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:

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). The regulated floodplain on Mosquito Creek is calculated using the Regional Storm.

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.