



WASTE MANAGEMENT AND ENVIRONMENTAL SUSTAINABILITY MEMORANDUM

TO: MAYOR, A NUTTALL AND MEMBERS OF COUNCIL

FROM: S. COULTER, B.SC., ACTING ASSOCIATE DIRECTOR OF WASTE MANAGEMENT
AND ENVIRONMENTAL SUSTAINABILITY
D. JEFFERY, SENIOR ENVIRONMENTAL OFFICER

NOTED: B. ARANIYASUNDARAN, P. ENG., PMP, GENERAL MANAGER OF
INFRASTRUCTURE AND GROWTH MANAGEMENT
M. PROWSE, CHIEF ADMINISTRATIVE OFFICER

RE: 2022-2023 WEST NILE VIRUS CONTROL PROGRAM UPDATE

DATE: JUNE 21, 2023

The purpose of this Memorandum is to provide Members of Council with information regarding the status of the annual City of Barrie (City) West Nile Virus (WNV) Control Program for 2023. *Ontario Regulation 199/03, Control of West Nile Virus* (WNV) empowers the Medical Officer of Health from the Simcoe Muskoka District Health Unit (SMDHU) to determine if there is a need to reduce the risk of exposure to WNV and if so, to compel municipalities to take action. The Medical Officer of Health will notify a municipality of any required actions through a 'Notice to Larvicide'.

Background

The 'Notice to Larvicide' for the City of Barrie was issued on May 3, 2023, requiring that municipally owned catch basins receive larvicide application during the summer months for 2023, commencing June 19, 2023.

Municipally owned catch basins located on private property will not be scheduled for larvicide application and will be managed on a request only basis by the landowner to the Waste Management & Environmental Sustainability (WMES) Branch. A consent form must be signed by the landowner prior to treatment.

The City currently has a Standing Agreement for Larviciding with G.D.G. Canada-Kersia Group (G.D.G) (FIN2022-179P) and the required funds are included in the approved 2023 Business Plan (G/L 1290-670700). The Municipal/Provincial cost sharing arrangement for expenses directly associated with the application of the larvicide will entail 30% of the cost borne by the City of Barrie and 70% covered by the SMDHU. G.D.G. is responsible for obtaining the required pesticide permit from the Ministry of the Environment, Conservation and Parks (MECP) and will perform the larvicide application on behalf of the City with an approved treatment period from June 19, 2023 to October 31, 2023.

The SMDHU WNV Surveillance Program includes monitoring of, but not limited to, municipal catch basins, stormwater ponds and natural sites for mosquitos and to conduct adult trapping. The Surveillance Program is scheduled to commence in mid to late June and is performed by SMDHU staff on a weekly basis.

The *Culex pipiens/restuans* species of mosquitos typically develop in catch basins and are a major contributor to the spread of the viral infection. The larvicide, when applied to the catch basin sumps, will disrupt the mosquito's life cycle and adult mosquitos will not emerge. By reducing the adult *Culex* population, amplification of WNV is reduced and the risk of exposure to WNV in the human population is reduced.



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The SMDHU will provide public awareness materials to the City of Barrie for distribution at several City facilities. Provincial regulation requires that public notification related to the larvicide application be provided which will be satisfied through detailed posting on the City web page and in the local newspaper.

2022 Program Outcomes

The City and G.D.G were in full compliance with approved MECP pesticide permit 2640-CFDQK7 that was issued for 2022.

Table 1 summarizes the application period for each round of larviciding treatment and outlines the total number of storm catch basins treated for each round, including all authorized rear lot catch basin treatments.

Table 1: 2022 Larviciding Treatment Summary and Total Catch Basins Treated

2022 Larviciding Treatment Summary	Storm Sewer Catch basins Treated
Round 1 (July 21 – July 27, 2022)	11,362
Round 2 (July 27 – Aug 19, 2022)	12,821
Round 3 (Aug 18 – Sept 14, 2022)	13,525
Authorized Rear Lot Treatments	7

City staff worked collaboratively with the SMDHU to perform required surveillance activities at City owned infrastructure. The SMDHU advised that in 2022, there were no (0) human WNV cases reported in the Simcoe or Muskoka area. Over 4700 mosquitoes were collected for identification and testing, there were no (0) positive pools in Simcoe or Muskoka Area.

2023 Program Expectations

WMES will collaborate with G.D.G to ensure compliance with the conditions outlined in the pesticide permit (Permit Number 2104-CRXLUB) and the contract specifications.

City staff will also accompany SMDHU staff while conducting their WNV Surveillance Program to provide access to City infrastructure and ensure City health and safety protocols are followed.

The SMDHU is the lead agency for WNV control; all questions and concerns from the public should be directed to the SMDHU. A hyperlink will be established from the [City's website](#) to the [SMDHU website](#) to assist the public with access of information related to WNV.

Should you have any questions or require and further information, please contact Sandy Coulter at extension 5826.