

# 2022 *Lymantria dispar dispar* Integrated Pest Management Program

## Aerial Spray

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# Introduction

**Egg Mass Monitoring Data (Fall 2021)**



**Council Endorsed Aerial Spray for 2022 (December 2021)**



**Detailed Park/Street tree data collection (Fall 2021/Winter 2022)**



**Develop & Fine Tune Aerial Spray Zones (January – March 2022)**



**Development & Roll out of Communications Plan**

## *Lymantria dispar dispar* (LDD)

- Also called “Spongy Moth”
- Non-native insect pest present for more than 30 years.
- Prefers deciduous trees, specifically oak
- Eats leaves for 8 weeks (May – July)
- Turns into a moth in July
- Lays eggs late summer
- Populations negatively impacted by cold winters, bacteria, virus, and parasitic wasps



## 2022 Forecast

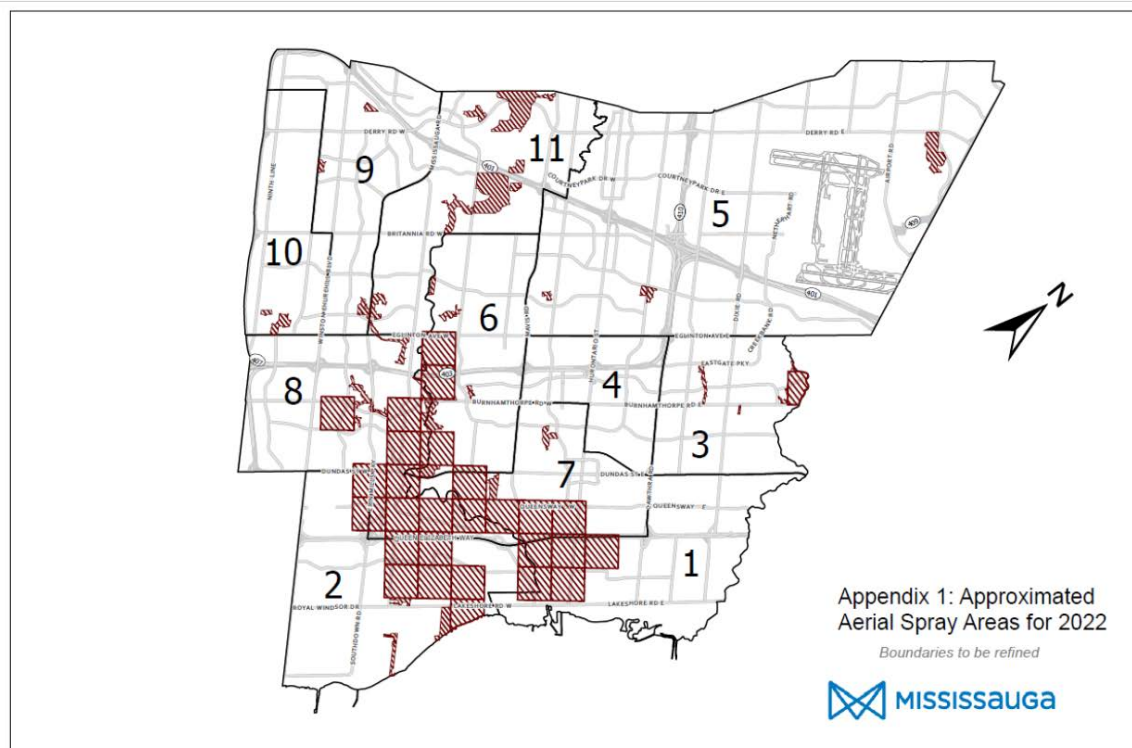


7.2

- Ontario in the midst of the largest LDD outbreak recorded in the province.
- Mississauga outbreak began in 2017, and continues in many areas.
- Egg Mass monitoring (based on 1km<sup>2</sup> grids) predicted the potential for heavy or severe defoliation in approximately 3322ha of the city in 2022.
- Potential impacts to trees: extreme leaf loss, stress, susceptibility to diseases and extreme weather.

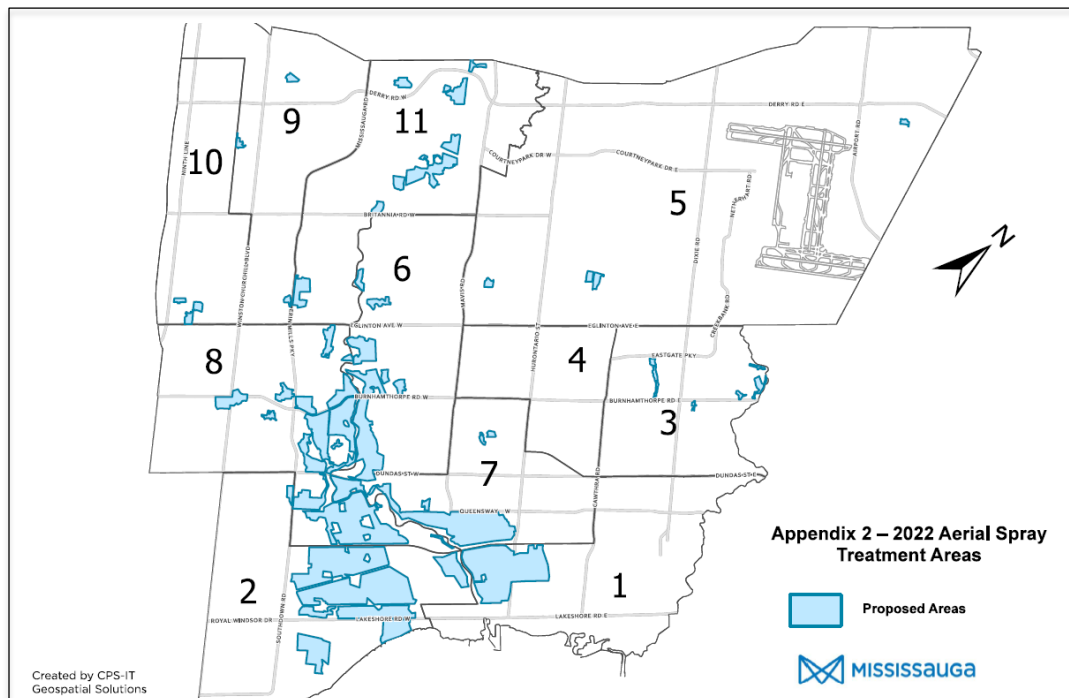
# High Priority Areas

- Criteria
  - Areas with Severe Forecast
  - Areas with Heavy Forecast but Severe in 2021
- Credit River Valley  
South Mississauga  
Scattered Woodlands
- All Wards except 4



# Aerial Spray Treatment Areas

- Refined based on:
  - Consultant Data
  - Staff Field Validations
  - Host trees/habitat
  - Public Reports
  - Removal of non-treed areas
- 2091 hectares
  - 5167 acres
- Outside of Spray Area
  - Other IPM measures





# We are not alone!

- Other GTA municipalities implementing IPM programs which include many of the same components as Mississauga.
- Aerial sprays anticipated in Toronto, Hamilton and Oakville for 2022.

# Aerial Spray Program

- Seasonal spray window
  - April 25 – June 12
- Leaf emergence & caterpillar hatch-out
- Weather conditions
- 48 hours in advance
- Multiple helicopters over several days
- 5:00am-7:30am, likely mid-May
- 2 sprays, 7-10 days apart
- Foray<sup>®</sup> 48B containing Btk





# Technical Stakeholders

- Internal & external groups
  - Traffic Operations
  - Capital Works
  - Emergency Management
  - Fire & Emergency Services
  - Police
  - Regional, Provincial, Federal
- Logistics & approvals
- Road closures
- Park & trail closures



# Post-Spray Work

- Efficacy Monitoring
  - Deposit modelling (consultants)
  - Defoliation surveys (staff & consultants)
- Fall LDD egg mass counts (consultants)
- Reports to Council



# Public Health

- Peel Public Health does not anticipate any human health impacts with use of Foray 48B (Btk)
  - health literature and surveillance information from 2006-2007 and 2018 programs indicate low risk of short-term adverse health impacts.
- Btk approved in Canada for aerial use over urban areas.
- Foray 48B used successfully in Mississauga 2006, 2007, and 2018 aerial sprays to mitigate LDD impacts.
- Peel Public Health engaged and will be supporting the spray by fielding any health related questions from the public.
- Exposure to LDD caterpillars can cause skin, eye and respiratory irritation in some people due to allergic reactions to the caterpillar hair

# Communications Phases

## Before

- Increase awareness of aerial spray
- Advertise Virtual Public Meeting
- Actions residents can take on their property
- Councillor Toolkits to answer questions

## During

- Advise residents how they can stay informed
- Clarify expectations for what will be happening and what residents should do
- Communicate aerial spray dates and locations

## After

- Communicate Results of the spray to residents and Council.
- Advise of other IPM measures to control LDD throughout the spring, summer and fall.

# Communications Tools

## Website:

Interactive map  
Videos, FAQs

311

Virtual Public  
Meeting

Mailouts:  
letters,  
postcards

Road Signage/  
Digital Signage

Eblasts

Newspaper  
Ads

Media in  
Multiple  
Languages

Media  
Advisory

Councillor  
Toolkits

Social Media

Peel Public  
Health



## For more information:

- 3-1-1 Call Centre
- Peel Public Health  
905-799-7700
- Family Physicians
- Social Media  
@citymississauga & @saugaparksrec
- Website:  
[www.mississauga.ca/2022spray](http://www.mississauga.ca/2022spray)

