## 2022 Lymantria dispar dispar Integrated Pest Management Program

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## **2021 Public Reporting**

- Mississauga resident reports:
  - Service Requests (208)
  - 311 Calls (191)
  - Inspection Requests (58)
  - Tree Pest emails (228)
  - Public Reporting Map (1643)
- Mississauga and other municipalities inundated with calls; experienced across the province





## **2021 Data Gathering**

- Public reporting/observations received in 2021
- Defoliation Surveys (June-July)
  - 40 parks + 244 streets
- Public reporting and defoliation surveys informed expanded egg mass monitoring program
- Egg Mass Monitoring (Sept-Oct)
  - 50 Parks + 75 Neighbourhoods



Created by CPS-IT Geospatial Solutions



## **2022 LDD Outlook**

- Ontario is in the midst of the largest LDD outbreak recorded in the province
- In Mississauga, the outbreak that began in 2017 continues
- Egg Mass Monitoring results indicate approximately 3322ha of the city have potential for severe defoliation or repeat defoliation in 2021
- Fall Cankerworm populations not expected to be significant in 2022



Gypsy moth 2019

Areas in the Ontario where gypsy moth caused defoliation

#### Light = 4,046 ha Moderate to severe = 43,157 ha









### Lymantria dispar dispar 2021

Areas in Ontario where Lymantria dispar dispar moth caused defoliation

#### Light = 9,101 ha Moderate to severe = 1,779,744 ha



Area of light defoliation

Area of moderate to severe defoliation



#### Disclaimer:

This map is illustrative only. Do not rely on this map as being a precise indicator of routes, locations of features, nor as a guide to navigation. This map was produced by the Ministry of Northern Development, Mines, Natural Resources and Forestry.







## 2022 Proposed Integrated Pest Management

- Treatments:
  - Aerial spray
  - Ground-based:
    - Tree Azin Injections
    - Ground spray of Btk
    - Egg mass scraping
- Monitoring:
  - Effectiveness monitoring (aerial spray zone)
  - Defoliation monitoring (treatment areas)
  - Egg mass surveys





Area of potential spray = **3322 ha (11.4% of city)** after accounting for potential hardscaping = **2658 ha (9.1% of city)** 



# What if we don't aerial spray?

- Other IPM measures insufficient for size of outbreak; expected severe defoliation in 9.1% of city
- Potential increased tree mortality due to severe defoliation or repeated years of defoliation
- Residents experience reduced enjoyment of private and public lands







## **Next Steps**

- Council approval to move forward
- Engage/secure aerial spray service providers:
  - Zimmer Air Services Inc.
  - BioForest
- Develop communications plan
- Continued outreach with:
  - Municipalities
  - Peel Public Health
  - Residents
  - Other stakeholders (schools, institutions, etc.)
- Refine aerial spray boundaries



## Thank-you

