

Subject: Gypsy Moth Population Assessments and Defoliation Forecast & 2021 Treatment Program Development

Recommendation:

BE IT RESOLVED THAT Council receive Report #2021-0054 for information;

AND THAT Council direct staff to implement an aerial spray program based on Option 2 of the BioForest 2020 Gypsy Moth Monitoring Program Report.

Background:

In 2020 Council Approved the Gypsy Moth Management Policy S802-03 to address the periodic infestation of the European Gypsy Moth experienced in the Town of Pelham.

In the fall of 2020, through a competitive bid process the Town of Pelham awarded a three year contract to Lallemand Inc./BioForest (BioForest) to:

- 1) perform annual egg mass surveys,
- 2) prepare a detailed population assessment and forecast report, including management options,
- 3) develop aerial spray blocks in accordance to Policy S802-03,
- 4) coordinate an aerial spray program,
- 5) prepare an aerial spray summary report, and
- 6) implement a forest health volunteer program.

This report serves to fulfill the requirements of Policy S802-03 to inform Council of the results of the egg mass surveys and management recommendations prior to the implementation of any treatment program.

The 2020 Gypsy Moth Monitoring Program Report, prepared by BioForest, has been included as an attachment to this report (Appendix A).

Analysis:

While the report provides evidence that Pelham's gypsy moth population may have passed its peak and is on the decline, given the population levels and abundance of host species the Town is forecast to experience severe levels of defoliation throughout areas of Fenwick, and Fonthill as well as rural forested areas south of Fenwick and north/west of Fonthill.

The report provides three management options to protect the overall health of the Town's urban forest canopy:

- 1) "Do nothing", where the town does not intervene and allows the gypsy moth population to run its natural course,
- 2) targeted treatment of areas within the urban boundaries of Fenwick and Fonthill (with the option of adding forested areas adjacent to the urban boundaries),
- 3) large-scale treatment including both urban and rural areas.

The 2021 Operating Budget includes \$150,000 for the Gypsy Moth treatment Program. The cost associated with coordination of the areal spray program and implementation of a scaled down forest health program is \$39,000. Program communications costs are expected to be similar to 2020 at \$5400. Based on preliminary pricing of \$920/ha for urban aerial treatment, the remaining \$105,600 will be utilized for the spraying of 114ha.

Due to the resources available, staff recommend that the Town of Pelham design an aerial spray program for the treatment of gypsy moth based on Option 2 of the BioForest, 2020 Gypsy Moth Monitoring Program Report.

Financial Considerations:

There are no financial considerations attributed to this report. An aerial spray program based on Option 2 can be implemented within the limits of the existing operating budget.

Alternatives Reviewed:

All three management options provided in the BioForest, 2020 Gypsy Moth Monitoring Program Report were considered in the preparation of this report.

As Council will recall, Policy S802-01 is based on the principals of Integrated Pest Management (IPM) and provides a process to address the periodic infestations of the gypsy moth, including the development of an aerial treatment program according to the most appropriate IPM strategy, and the available financial

resources.

As staff are following the council approved policy, no further alternatives were considered in the preparation of this report.

Strategic Plan Relationship: Grow Revenue - Promote Cultural Assets and Protect Environment

The tree canopy within the municipal boundary is vital to the high quality of life within the Town of Pelham.

Consultation:

Lallemand Inc./BioForest provided; 2020 Gypsy Moth Monitoring Program Report

Other Pertinent Reports/Attachments:

Appendix A – BioForest Report – 2020 Gypsy Moth Monitoring Program Report
Gypsy Moth Management Policy S802-03
Public Works Report 2021-0054

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