

Subject: Town of Pelham Gypsy Moth Policy and 2020 Gypsy Moth Management Options

Recommendation:

THAT Committee of the Whole receive Report #2020-0017 Town of Pelham Gypsy Moth Policy and 2020 Gypsy Moth Management Options; and

THAT a Forestry Health Reserve Fund be established and the necessary by-law be prepared; and

THAT Committee of the Whole recommend that Council approve the Public Works Gypsy Moth Management Policy S801-14.

Background:

During the September 3rd, 2019 Policy and Priorities meeting, Council directed staff to develop a Gypsy Moth Management policy and that no final policy decision would be made until after feedback is received following a Public Meeting held on October 23, 2019.

Staff received thirty seven (37) responses from the public. Twenty six (26) responses favoured Alternative 5; where the Town would spray public and private property, within and outside of the Urban Boundary, with infestation levels of at least moderate to severe, and that the cost of spraying would be distributed over the entire tax base.

The proposed Public Works Policy S801-14 for Gypsy Moth Management is closely aligned with Alternative 5. It was developed to provide a road map for staff to implement a gypsy moth management program, based on the analysis of egg mass survey results, and the most appropriate Integrated Pest Management (IPM) strategy, which depends upon a number of environmental and ecological variables.

IPM can be defined as “the maintenance of destructive agents, including insects, at tolerable levels by the planned use of preventive, suppressive, or regulatory tactics and strategies that are ecologically and economically efficient and socially acceptable”.

The Public Works Policy S801-14 for Gypsy Moth Management has been added as an attachment to the Town of Pelham Gypsy Moth Policy and 2020 Gypsy Moth Management Options report as Appendix A.

Analysis:

In the fall of 2019, The Town of Pelham retained the services of Lallemand Inc./Bioforest to conduct egg mass surveys and prepare a report to provide staff with: 1) an assessment of the gypsy moth situation within the municipal boundary; 2) forecasts of likely defoliation in 2020; 3) short and long term management options applying a philosophy of IPM; and 4) specific recommendations for management in the affected areas.

The Town of Pelham received a draft report from Lallemand Inc./Bioforest in the last week of January; however, the final version was not available in time to include in this report.

The preliminary findings predict that both public and private trees in Fenwick and Fonthill, as well as rural properties south of Fenwick and northwest of Fonthill are at risk of severe defoliation in 2020. Egg mass counts in some areas range between 5000 and 213,000 egg masses per hectare.

Approximately 1185 hectares (ha) have been recommended for aerial spraying in 2020 consisting of 250 ha inside and adjacent to the Urban Boundary of Fenwick, 308 ha inside and adjacent to the Urban Boundary of Fonthill and 626 ha of property in the rural areas of Pelham. These numbers represent preliminary estimates only as spray blocks have not yet been developed. The cost of spraying 1185 ha is estimated at \$1,040,000.

The total budget approved for the 2020 Gypsy Moth Management program is \$150,000. Municipal property identified at severe risk of defoliation consists of 32.75 ha and has an estimated cost to treat of \$30,000. Design and administration of a treatment program including; post spray assessments, public education and fall egg mass surveys has an estimated cost of \$40,000. This leaves an estimated \$80,000 budget to treat heavily infested areas.

Options for Council to consider regarding Gypsy Moth Management in 2020 are as follows:

- 1) The Town takes no action on public or private trees and executes a strong communication and engagement program throughout the community to educate

the public on options to protect their trees. This would include public meetings and direct mailing options. There is an adequate budget allotment for this option.

2) The Town implements a targeted aerial spray program of approximately 33 ha of municipal property and approximately 90 ha of private property. Staff would work in conjunction with a forestry consultant to design a program that would have the greatest impact on the gypsy moth population, within the limits of the existing budget. Public Works Policy S801-14 would be used to guide the decision making process in the development of spray blocks, and the execution of the spray program. This option would also be supported by a strong public outreach and communication program as described in Option 1. This option can be completed utilizing the existing budget allotment.

3) The Town implements a large-scale, extensive aerial spray program within the urban boundaries, as well as throughout the rural area of Pelham that meet the criteria stated in the Gypsy Moth Management Policy. This option would also be supported by a strong public outreach and communication program as described in Option 1. The estimated cost of this option is \$1,040,000. Pursuing this option would require Council to approve a net tax increase of \$930,000 since \$110,000 is already budgeted in the 2020 budget for spraying.

The budget shortfall would require an adjustment to the 2020 Budget which will impact the tax levy and be applied to the general tax base, which effectively increases tax rates by 6.64% over 2019 as a special gypsy moth levy, in addition to the approved 5.95% increase after growth in the 2020 operating budget, for a total increase of 12.59%. For the average household, this would be a total increase of \$224 to their tax bill from 2019. Approximately \$106 represents the approved 5.95% tax increase and the \$118 represents the additional tax increase for the Gypsy Moth Infestation Spray Program for the Town.

The option to bill residents separately and possibly charging commercial property owners a higher rate than residential owners has been considered and it has been deemed impractical since the commercial properties only represent 2% of the tax properties. Administratively, it would be a very time consuming, manual process. Adjusting the 2020 budget and increasing the tax levy would be the most efficient collection method, and would be consistent with the manner in which other Town services are levied upon the taxpayers in Pelham.

In the event that Council wishes to pursue this option, staff recommends the following motion:

"THAT Council approves the recommendation to adjust the 2020 budget by

\$930,000 and increase the tax levy by an additional 6.64% on top of the 5.95% increase previously approved to support the Gypsy Moth spraying of severely invested areas in Pelham.”

4) The Town implements a targeted aerial spray program within or adjacent to the urban boundaries of both Fonthill and Fenwick that meet the criteria stated in the Gypsy Moth Management Policy. This option would also be supported by a strong public outreach and communication program as described in Option 1. The estimated cost of this option is \$500,000. The budget shortfall of \$390,000 would require an adjustment to the 2020 Budget which will increase the tax levy by approximately 2.8% bringing the total tax levy increase to 8.75% after growth and be applied to the general tax base.

Financial Considerations:

The Public Works Gypsy Moth Management Policy S801-14 identifies how the periodic gypsy moth infestation is treated by the Town of Pelham as part of an overall Integrated Pest Management Strategy.

The Policy requires a Forestry Health Reserve Fund be created to fund programs related to the health of the forests and tree canopy within the Town of Pelham.

Future Gypsy Moth Management Programs will be funded through the Forestry Health Reserve with Council approval.

Financial Considerations for 2020 Gypsy Moth Management Options were discussed in the Analysis Section above. It is important to note that the exact cost of these options will not be known until a consultant can be retained through the Request for Proposal process to develop the spray blocks and administer the treatment program based on the Gypsy Moth Management Policy and finalized Gypsy Moth Monitoring Program Report.

Alternatives Reviewed:

The alternatives reviewed for gypsy moth management options have been included in the analysis section.

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

The tree canopy within the municipal boundary is vital to protecting the environment and the quality of life within the Town of Pelham, and is an asset that set us apart from neighboring municipalities.

Consultation:

Lallemand Inc./BioForest provided; 2019 population assessments, 2020 defoliation forecasts, treatment area estimates, potential management options and policy improvement recommendations.

Other Pertinent Reports/Attachments:

Appendix A – Public Works Gypsy Moth Management Policy S801-14
Public Works Report – 2019-0053 Town of Pelham Gypsy Moth Policy Development

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