

Subject: 2023 Spongy Moth Management Program**Recommendation:**

BE IT RESOLVED THAT Council receive Report #2023-0057, Spongy Moth Management Program, for information.

Background:

In 2020 Council Approved Policy S802-03 to address the periodic infestation of the *Lymantria dispar* dispar moth (Spongy Moth) experienced in the Town of Pelham.

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 a treatment program, if required.

The full 2022 Spongy Moth Monitoring Program Report, prepared by BioForest, was not received in time to include as an attachment to this report, however Staff have received the 2023 defoliation forecast map, and a summary of findings that do not support the need for an aerial spray program in 2023. The 2023 defoliation forecast map and summary of findings have been attached to this report as Appendix A.

Analysis:

BioForest conducted spongy moth egg mass surveys in the Town of Pelham from January 16th to February 7th, 2023. A total of 133 plots including street trees and forest plots were assessed throughout Pelham including Fenwick and Fonthill.

Overall, the spongy moth population in Pelham has declined significantly from the levels seen in the previous three years and is a reflection of the success of both private and municipal spray programs.

Street trees and forests in Fenwick, Fonthill, and rural areas of Pelham are mostly forecast to experience nil to light defoliation in 2023. Only four plots are forecast to experience moderate defoliation. Two of these plots are located North/West Fonthill, with one plot located north of Fenwick, and the other near east Fonthill on Merritt Road. The plots are identified in Figure 1 of Appendix A (attached).

Section 5.1 of Policy S802-03 prescribes an egg mass density of 2500 egg masses per hectare as the minimum requirement for aerial spray treatment within the

municipal boundary. An egg mass density of 2500 egg masses per hectare will lead to severe defoliation.

None of the four plots identified to receive moderate defoliation meet the threshold criteria in Policy S802-03, therefore staff do not recommend the implementation of an aerial spray program in 2023.

The management objective of Policy S802-03 is to maintain spongy moth populations at tolerable levels and to ensure sure that outbreaks are controlled properly, as total eradication of this specific pest is not achievable. While the spongy moth population has declined significantly, there remains a potential for population growth so the continuance of annual monitoring programs for spongy moth and other invasive species is recommended as part of an ongoing operational program.

Financial Considerations:

The Council approved the operating budget for the spongy moth treatment program in 2023 as \$150,000. The annual cost associated with spongy moth consulting and program coordination including egg mass surveys, defoliation surveys, and technical reporting is \$35,000. Not providing an aerial spray program will result in savings of \$115,000.

Staff is revising Policy S802-03 to incorporate other invasive species and plan to bring it to Council for consideration in Q2, including the option of utilizing program savings to create a reserve fund for the management of periodic invasive species infestations.

Alternatives Reviewed:

No alternatives were reviewed as staff is following Policy S802-03.

Strategic Plan Relationship: Strong Organization

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

Consultation:

Lallemand Inc./BioForest provided; 2022 egg mass survey summary and 2023 defoliation forecast map.

Other Pertinent Reports/Attachments:

Appendix A – Summary of Results

Public Works Policy S802-03

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