DATE: July 22, 2019

TO: Honorable Council Members & Julie Rosenbach, Sustainability Director

FROM: Ann Morrill – Pest Management Advisory Committee Chair

RE: Report on Evaluation of Pesticides Use Ordinance to Council & Sustainability Director

South Portland’s Pesticide Use Ordinance (Chapter 32) established a Pest Management Advisory Committee (PMAC) with members appointed or designated by the City Council. The primary duties of the PMAC are to advise the Council and Sustainability Director and assist in implementing the ordinance through a variety of activities. The ordinance also directs the PMAC to provide recommendations for possible amendments or improvements based on a review of pilot project results, reporting data and any issues identified in the implementation the ordinance.

On behalf of the PMAC, I respectfully submit the accompanying report detailing the PMAC’s evaluation of the ordinance for the period since it was enacted.
1. INTRODUCTION

South Portland’s Pesticide Use Ordinance (Chapter 32) established a Pest Management Advisory Committee (PMAC) with members appointed or designated by the City Council. The primary duties of the PMAC are to advise the Council and Sustainability Director and assist in implementing the ordinance through a variety of activities. The ordinance also directs the PMAC to provide recommendations for possible amendments or improvements based on a review of pilot project results, reporting data and any issues identified in the implementation the ordinance. This report details the PMAC’s evaluation of the ordinance for the period since it was enacted and will be repeated every three years hereafter.

2. ORDINANCE BACKGROUND & OVERVIEW

2.1. Basis for Ordinance
On June 8, 2015, the nonprofit group Protect South Portland sponsored a workshop presentation to the Council about the harmful effects of pesticide use on public health and the environment, and the benefits of sustainable (i.e., organic) land care practices. During this workshop the Council voiced unanimous support for developing and enacting a pesticide ordinance.

2.2. Ordinance Development Process
Following a second workshop on July 13, 2015, to review policy options and different types of ordinances, the Council directed staff to develop a draft ordinance that would greatly restrict or eliminate the use of synthetic pesticides throughout the City. The City Manager appointed a committee consisting of the Sustainability Coordinator, the Parks Superintendent, and the Stormwater Program Coordinator to develop a draft ordinance based on extensive research, stakeholder input, and best management practices.

Over the next year, the pesticide ordinance committee reviewed numerous documents and solicited input and guidance from a variety of stakeholders including policy makers, environmental advocates and land care professionals to develop the initial draft ordinance. Following assistance from Corporation Counsel, staff presented this document to City Department Heads and at two subsequent Council workshops and continued to refine the provisions based on Council feedback. Following two readings at regular Council meetings, the Pesticide Use Ordinance was approved on September 7, 2016.
2.3. Ordinance Implementation Process
The ordinance was designed to be implemented in the following phases to allow time for residents and businesses to become familiar with the various provisions:

- **Phase One (beginning May 1, 2017):** City-owned properties (except for the golf course) could not use or apply certain pesticides for turf, landscape and outdoor pest management activities.

- **Phase Two (beginning May 1, 2018):** private properties (except for Sable Oaks) could not use or apply certain pesticides for turf, landscape and outdoor pest management activities shall apply to private property.

- **Phase Three (beginning May 1, 2019):** golf courses could not use or apply certain pesticides on certain portions of the courses for turf, landscape and outdoor pest management activities.*

  *With the sale of the Sable Oaks Golf Club in early 2019 and likelihood this area will be redeveloped for residential and commercial uses, these provisions will eventually only apply to the municipal golf course.*

3. ORDINANCE EVALUATION
The PMAC completed most of the ordinance evaluation before May 1, 2019 and will continue to do so every three years hereafter. The PMAC may also provide recommendations to the City Council and Sustainability Coordinator for any ordinance amendments it deems appropriate.

3.1. Measures of Success
The PMAC identified several measures of success in the implementation of the Pesticide Use Ordinance.

3.1.1. Pest Management Advisory Committee: the composition of the PMAC consists of the following:

- One practicing agronomist

- Two landscape professionals licensed by the Maine Board of Pesticides Control, at least one of whom with experience in organic land care practices and accreditation by the Northeast Organic Farming Association (and ideally one of whom is an accredited arborist)

- Three resident or taxpayer representatives

- City’s Stormwater Program Coordinator

The collective knowledge and expertise of this group was instrumental in guiding the ordinance implementation process and was essential for conducting education and
outreach to residents and local businesses. Additionally, the PMAC’s Waiver Committee has generally been very responsive in considering the few waiver applications received since the inception of the ordinance.

3.1.2. **Education & Outreach:** as summarized in the PMAC’s 2018 Annual Report, PMAC members have been directly involved in numerous public education & outreach efforts including the staffing of tables with informational resources to help interested parties comply with the Pesticide Ordinance and presentations to professional organizations to provide opportunities for information exchange. A chronological listing of these events is as follows:

- **Maine Landscape and Nursery Association Spring Meeting (March 2017):** Sustainability Director Julie Rosenbach and Stormwater Program Coordinator Fred Dillon provided an ordinance overview and responded to member questions.

- **Brooks to Bays (4/26/17):** South Portland Conservation Commission event to promote greater awareness about the connection between land use activities, the City’s surface water resources and Casco Bay. The PMAC staffed a table with a variety of informational brochures to inform residents about basic ordinance provisions and the effective start date of 5/1/17 for City-owned properties. Soil test kits were also provided.

- **South Portland Land Trust Plant Sale (5/20/17):** PMAC tabling event with info. resources.

- **WillardFest (7/8/17):** PMAC tabling event with info. resources.

- **Art in the Park (8/12/17):** PMAC tabling event with info. resources.

- **City-Sponsored Event on Organic Land Care Practices (September 2017):** Osborne Organics provided a public presentation relating sustainable land care practices to the ordinance.

- **City-Sponsored Event on Organic Land Care Practices (November 2017):** Osborne Organics provided a presentation for land care professionals on how to adapt their practices to the ordinance.

- **Maine Landscape and Nursery Association Fall Meeting (November 2017):** similar to March 2017 event that included presentation by PMAC member (and licensed agronomist) Jesse O’Brien.

- **Home Depot Green Neighbors Cleaner Streams (5/5/18):** PMAC tabling event done in conjunction with the City of Portland and Cumberland County Soil & Water Conservation District to promote more sustainable land care practices.

- **Broadway Garden (5/12/18):** PMAC tabling event with info. resources.
• **Drillens Hardware (5/19/18):** PMAC tabling event with info. resources.

• **Shoppers Hardware (5/26/18):** PMAC tabling event with info. resources.

• **Electronic Waste Collection Event (6/2/18):** City staff provided informational brochures on the ordinance to E-Waste event participants.

• **WillardFest (7/14/18):** PMAC tabling event with info. resources.

• **Art in the Park (8/11/18):** PMAC tabling event with info. resources.

• **StonyFields Day (9/29/18):** PMAC tabling event with info. resources.

• **Applicator’s Roundtable (1/29/19):** event done in partnership with City of Portland to provide an opportunity for land care professionals to express concerns with pesticide ordinances in both communities.

• **Osewantha Garden Club (3/19):** PMAC presentation on “How to Grow Healthy Gardens without Synthetic Pesticides” including related info. resources.

The creation of the [Grow Healthy South Portland](#) website was also a major success and serves as a valuable information resource for residents and businesses seeking to gain a better understanding of the ordinance and sustainable land care practices. The small number of public complaints and questions about the ordinance since its inception seems to indicate that the public has developed a general understanding about the basic ordinance requirements. Since the state of the science for organic alternatives to synthetic pesticides is constantly evolving, the website is a continuous work in progress and is updated periodically to reflect the most current knowledge.

3.1.3. Two **Demonstration Projects** implemented last year by the City generated extensive media coverage and public interest.

• **The Yerxa Park Project** was done in collaboration with the Parks Department to serve as a demonstration for residents and businesses in the use of alternatives to synthetic pesticides for invasive plant management and suppression. The Parks Department received a $15,000 Community Development Block Grant to begin making improvements to this underutilized public space. Since much of the park is overgrown with Japanese knotweed, the City hired a company in early September 2018 that provided six goats for six days to essentially cut down the knotweed. In the process, there was extensive media coverage from local, regional and national news outlets which resulted in intense public interest – virtually all of it very positive.

• **Bug Light Park / StonyFIELDS Day** was done in partnership with yogurt producer Stonyfield Organic to kick off their national initiative to promote organic-only land care for all athletic and playing fields. Stonyfield chose South Portland as the inaugural community largely because of the City’s creation of the Pesticide Use Ordinance.
3.1.4. The State’s Stormwater Permit requires the City to implement a variety of measures that reduce polluted stormwater runoff. As a case study in pollution “source control”, the Pesticide Use Ordinance greatly enhances the City’s compliance with the Stormwater Permit by demonstrating a commitment to “go above and beyond” the minimum permit requirements – which do not include explicit restrictions on the use of lawn and turf chemicals.

3.1.5. A “spillover effect” has occurred because of the City’s Pesticide Use Ordinance, which has served as a model for the neighboring communities of Portland and Falmouth. Portland enacted a pesticide ordinance in January 2019 based largely on the provisions of South Portland’s ordinance while Falmouth has consulted with City staff on numerous occasions as they develop their ordinance.

3.1.6. The ordinance has also resulted in the purchase of specialized new equipment and adoption of more sustainable cultural practices by City staff. An aerator was purchased for Wainwright Field to promote soil health and the grounds crews at Wainwright and the municipal golf course are generally using an organic-only land care approach.

3.2. Areas for Possible Improvement

3.2.1. Annual Applicator Reports: the ordinance specifies that all State of Maine licensed pesticide applicators (working in South Portland) are required to submit an annual summary report on or before February 1 for the previous year. While the information required in the report is identical to the State’s reporting requirements, there is currently no simple mechanism for determining which applicators have worked in the City. This is because the State does not require applicators to specify the communities in which synthetic (and organic) pesticides have been applied. The State is considering updating its reporting requirements to provide more community-specific information. However, in the meantime the City will either have to assume the administrative burden of developing its own applicator notification and tracking system (which would be a significant undertaking) or forgo the annual reporting requirements until the State has revamped their report tracking system.

3.2.2. Establishing Clear Metrics to Measure the Effectiveness of Ordinance Implementation: while by most accounts, the implementation of the ordinance has been very successful in raising public awareness about the alternatives to synthetic pesticides, it remains a significant challenge to connect this qualitative success with quantitative measures that more clearly indicate a reduced use of synthetic pesticides throughout the City. Consequently, the PMAC has discussed a number of key metrics that could provide some quantitative basis for measuring relative success. These include:

- **Public survey via questionnaire to measure community response to the ordinance:** the accuracy and reliability of survey results are largely dependent on the rigor with
which the survey is designed and administered. While the PMAC has limited capacity to design and implement a proper survey instrument, a simple questionnaire was developed to begin gathering data on public attitudes, behaviors and perceptions about the Pesticide Use Ordinance. The City could consider seeking professional assistance to develop a more rigorous survey instrument that would provide more actionable data about the extent to which the public and businesses have adopted behaviors consistent with the ordinance.

- **Grow Healthy South Portland website traffic statistics**: the City’s website uses Google Analytics to track a wide variety of visitor activities including pages visited, session duration, pages per session, among many others. While initially intended for businesses, this platform now also offers a powerful tool to measure the effectiveness of government websites. It appears that few (if any) City Departments have used Google Analytics to measure website effectiveness, but the platform could be used in the future to promote the increased use of the Grow Healthy South Portland webpages.

- **Number of waiver requests received & approved**: while the number of waivers received to date has been minimal, the PMAC could establish a more formalized methodology for tracking the types of requests and subsequent responses to provide a uniform basis for comparison from year to year.

- **Water quality monitoring**: since one of the primary purposes of the ordinance is to “protect the City’s waterways and natural resources”, the City could consider monitoring water quality in some of these waterways. The Maine Board of Pesticides Control has conducted very limited monitoring for certain types of pesticides at a few South Portland locations. More frequent monitoring could be done at additional locations to supplement the MBPC’s data set; however, depending on the sampling parameters, pesticides analyses can be fairly expensive and sample collection requires some expertise to perform correctly. While City staff has some capacity to collect the samples for subsequent analysis, numerous local consulting firms also provide these services.

### 3.2.3. Waiver Review Committee

the ordinance currently specifies only two members – the Chair and at least one member licensed by the Maine Board of Pesticides Control – to review waiver applications. Given the tight time constraints specified in the ordinance for responding to waiver requests (5 business days) and possibility that one of the two members is unavailable, increasing the number Waiver Review Committee members from two to three may be worthy of consideration.

### 3.2.4. Designated City staff person for PMAC support

it may be prudent to consider allowing other City staff positions to provide PMAC support since the duties of the Stormwater Program Coordinator may be subject to change depending on future work load demands.
To provide maximum flexibility, the language in Section 32.4.(A)(i) could be amended as follows:

(i) The City’s Stormwater Program Coordinator; A City staff person with the relevant experience as determined by the Sustainability Director and City Manager;

4. COURSE CORRECTIONS

In the process of implementing the ordinance, the PMAC encountered a few situations that highlighted the need for an improved waiver application form and review process. Specifically, the initial form did not allow applicants to provide the level of detail needed for the PMAC to make fully informed decisions about whether to grant waivers for the use of synthetic pesticides. Consequently, after meeting in the spring of 2019 with waiver applicants to discuss their suggestions for improvements, the form was updated to allow for much more detailed and site-specific information.

Test plots at the Wainwright Recreation Complex also revealed that certain species of grubs were not responding well to organic-only pesticides and posed a significant risk of athletic injury due to severe turf damage. Therefore, the PMAC approved the one-time use of a “least-toxic” synthetic pesticide at Wainwright and SMCC for grub control with the understanding that both facilities must transition to 100% organic land care.

5. NEXT STEPS

With the third and final phase of the ordinance now in effect, the PMAC will continue promoting organic land care practices that greatly reduce and mostly eliminate the use of synthetic pesticides. Future initiatives to help achieve this goal could include:

- Continue evolution of Grow Healthy South Portland website to reflect latest state of science and knowledge about sustainable land care practices
  - Explore use of Google Analytics to help inform ways in which use of website can be promoted and increased
- Partner with retailers to provide customer education materials for organic land care practices consistent with the ordinance
- Consider developing metrics to quantitatively measure reduced use of synthetic pesticides, for example:
  - Consider developing more rigorous survey instrument for more accurate data about the extent to which public and businesses have adopted land care practices consistent with the ordinance
  - Explore partnership with MBPC to track pesticide use (including volumes) at local level
- Widely distribute and disseminate Pesticide Use Ordinance Questionnaire
• Continue development of public demonstration projects to promote land care practices consistent with the ordinance
  
  o **Yerxa Park:** Parks Department will be bringing goats back in September 2019 and working with PMAC to demonstrate different cover materials to suppress knotweed; PMAC will develop accompanying interpretive signs and web content.
  
  o **Bug Light Park:** Osborne Organics will be working with City to develop landscape improvement plan for turf areas.
  
  o **Test Plots:** continue use of City property to demonstrate effectiveness of various land care practices for dealing with problematic pests (such as grubs and invasive plants).

• Engage with **Fertilizer Working Group** to help determine whether implementation of planned fertilizer ordinance will be the responsibility of the PMAC or a newly formed committee.

Respectfully submitted by Pest Management Advisory Committee on 7/22/19

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<tr>
<th>Cathy Chapman – resident</th>
<th>Justin Nichols – MBPC &amp; NOFA certified professional</th>
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<td>Fred Dillon – City’s Stormwater Program Coordinator</td>
<td>Jesse O’Brien – practicing agronomist &amp; MBPC certified professional</td>
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<td>Ann Morrill – resident (PMAC Chair)</td>
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