

Report to:

Rapport au:

**Agriculture and Rural Affairs Committee
Comité de l'agriculture et des affaires rurales
3 March 2016 / 3 mars 2016**

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**Submitted by
Soumis par:
Susan Jones**

**Acting Deputy City Manager/Directrice municipale adjointe par intérim,
City Operations/Opérations municipales**

Contact Person

Personne ressource:

**Kevin Wylie, General Manager, Public Works / directrice générale, Travaux publics
613-580-2424 x 19013, Kevin.Wylie@ottawa.ca**

Ward: CITY WIDE / À L'ÉCHELLE DE LA VILLE

File Number: ACS2016-COS-PWS-0012

SUBJECT: 2016 Wild Parsnip Strategy

OBJET: Stratégie de 2016 sur le panais sauvage

REPORT RECOMMENDATIONS

That the Agriculture and Rural Affairs Committee receive this report for information.

RECOMMANDATIONS DU RAPPORT

Que le Comité de l'agriculture et des affaires rurales prenne connaissance de ce rapport.

BACKGROUND

There has been an increase in the incidence of invasive plants in the City of Ottawa, specifically weeds that may pose a public safety hazard and reduce biodiversity, like Wild Parsnip. High concentrations of the plant have been identified in both eastern and southern Ontario, and it is predicted that the plant is spreading across the province from east to west. As of January 1, 2015, Wild Parsnip was identified as a noxious weed by the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA).

Wild Parsnip is known to slowly invade unmaintained areas in waves after initial infestation; however, once it is well established it reproduces at a very rapid rate. The seeds can also lie dormant for a period of time making it even more challenging to contain. Although it is rarely found in regularly maintained urban environments, it is prominent in rural areas and some suburban areas of the City where grass cutting is not completed as frequently, and it can then be spread to adjacent maintained areas such as parks, pathways and, in some cases, even residential properties. The seed is typically spread with the wind and can also be spread during mowing practices if cutting cycles are not adequately scheduled around the plants maturation process. Toxic sap found in Wild Parsnip leaves, stems and flowers can cause severe skin rashes when it comes into contact with the skin in the presence of sunlight. Wild Parsnip's ability to rapidly regenerate reduces native plants' abilities to compete for space, which in turn reduces biodiversity.

In 2014, the Public Works Department completed a mapping exercise to identify Wild Parsnip infestation levels on City properties across the city. The mapping exercise focused primarily on rural roadsides since those areas are more prone to infestation. The extent of Wild Parsnip in the City of Ottawa was determined by the physical inspections of roadside ditches and service requests received by the Public Works Department and Ottawa Public Health. The mapping exercise was a critical first step in the creation of the 2015 Wild Parsnip Management Strategy as it provided reliable baseline data that can be used to evaluate the effectiveness of any strategies going forward.

The [2015 Wild Parsnip Strategy](#) (ACS2015-COS-PWS-0011) was developed as a pilot project with the goal to test the effectiveness of different methods of control, and was presented to the Agricultural and Rural Affairs Committee on May 7, 2015. The report described in detail the goals and key activities put in place to reduce the growth of Wild Parsnip in areas that are highly infested in order to reduce the spread of this noxious weed. The 2015 Wild Parsnip strategy consisted of the following key activities:

- Accelerated grass cutting;
- Applied the herbicide, Clearview, at different cycles in highly infested areas along roadsides and parkland;
- Evaluated the effectiveness of the two activities above, using an expert agronomist to track infestation levels;
- Remapped infestation showing spread level of Wild Parsnip (light, medium, heavy); and
- Conducted an education and public health awareness campaign about Wild Parsnip.

DISCUSSION

2015 Wild Parsnip Strategy Results

In 2015, the Wild Parsnip Strategy involved herbicide application to over 260km of roadsides and several selected areas of parkland as well as increased roadside mowing cycles in selected infested areas. The Public Works Department contracted the services of an agronomist (P.T. Sullivan Agro Inc) to assess the effectiveness of the strategy, specifically whether herbicide application, accelerated grass cutting or a combination of both is the most effective method to managing Wild Parsnip. The agronomist produced a report outlining their assessment results. Their assessment, carried out on August 5, 2015, counted the number of wild parsnip plants in a 2 foot hoop area and assessed if the plants were living (in a vegetative, reproductive or flowering state) or dead (visibly cut-off, sprayed, or both). They found that the greatest number of living plants (primarily in the vegetative state) were located in test areas that had been cut, and the greatest number of dead plants were located in test areas that had been sprayed. Therefore, grass cutting may control the spread of wild parsnip by diminishing the maturation process, but it will not prevent the spread of the plant, which Clearview application appears to do.

Accelerated Grass Cutting

As part of the 2015 Wild Parsnip Strategy, the Public Works Department increased the grass cutting width along pathways and roadsides to cutback further to the fence lines in areas highly infested with Wild Parsnip. The timing of the cuts was aligned to a full cut at the beginning of the season (mid May to mid June). The assessments complete by the P.T. Sullivan Agro Inc team in different areas demonstrated that the mowing of Wild Parsnip, even when the timing of the cuts aligned with research recommendations, controls the spread of the weed but does not decrease Wild Parsnip infestation levels.

Regular mowing is shown to be effective in urban areas and active parkland as it prevents Wild Parsnip growth and therefore decreases the spread of the weed.

Herbicide Application

The application of Clearview was piloted in 2015. The herbicide was applied at different times throughout the season, to supplement accelerated mowing cycles. The targeted areas were again chosen based on the 2014 infestation mapping and focussed on highly infested areas, along pathway systems through passive parkland in and around naturalized areas, and highly infested roadside ditches.

The Public Works Department piloted Clearview by applying the herbicide in early June and end of July/early August to test the effectiveness as follows:

1. Application of herbicide to the plant before it flowers;
2. Application of herbicide after it has grown, and is in flower; and,
3. A small portion was also tested using a targeted spraying method.

Homeowners with property adjacent to roadsides identified for herbicide spraying were provided with an information sheet and an option to opt out of the program.

The agronomist assessment of the test plots in the east, west and south zones confirmed that herbicide application is more effective in the spring and in the fall on juvenile plants. Therefore, it was determined that the best time to apply the herbicide to control the level of infestation is from mid to late May or to target the new growth in the fall.

To summarize, the 2015 Wild Parsnip Strategy results demonstrated that:

- Mowing is not a successful strategy on its own to decrease Wild Parsnip infestation levels;
- Mowing alone only controls the spread of the weed when cut at the appropriate times;
- Herbicides are a useful tool to supplement existing strategies (eg. Mowing); and,
- The best time to spray with herbicide to have optimal results is mid to end of May before the plants has flowered or target the new growth in the fall.

Mapping Exercise

In 2015, a comprehensive mapping exercise was conducted with a more detailed and holistic approach than was completed in 2014 as staff focused its 2014 mapping efforts

on rural roadside ditches. However, between 2014 and 2015 Wild Parsnip had expanded into newly identified high infestation areas. This expansion was determined based on both the increase of service requests received from the public as well as on-site/field observations and inspections from front-line staff in the Parks, Buildings and Grounds Branch and the Roads Services Branch. The 2015 mapping exercise categorized the infestation of Wild Parsnip into three groups: light, medium and heavy.

Education Strategy and Awareness Campaign

An education strategy was developed by the Public Works Department, Ottawa Public Health and Corporate Communications to provide information to the public on the 2015 spraying locations along with information on how to identify Wild Parsnip. Given that the plant seed life is three to five years, the best method is to identify the noxious weed locations, and provide information to the public to avoid these areas.

The 2015 outreach and education program on invasive plants included the following;

- Distribution of an awareness postcard shared with Councillors' offices and at community fairs and events to help people identify Wild Parsnip and avoid exposure. This postcard was also shared electronically with parents of school aged children when school resumed in the fall and also distributed to City partners, such as school boards, Ottawa Public Health, and staff;
- Frequent messages through social media to encourage residents to make themselves aware of how to identify and avoid contact with Wild Parsnip;
- Staff made updates to the City's website throughout the pilot on its progress, activities, and observations;
- During the spraying period, signage was posted every 100 metres where spraying was conducted and a targeted communications strategy was developed to ensure residents were aware that they could opt out of any pesticide application adjacent to their property; and,
- Caution signs were installed by staff in areas of high infestation levels.

Throughout the pilot, Council received updates on the progress and activities of the pilot and staff continued to map infestation levels. The 2015 Wild Parsnip Map is attached as Document 1. Additionally, on November 2, 2015, the Public Works Department met with various internal and external stakeholders to share the preliminary results of the pilot and receive feedback on the overall 2015 Wild Parsnip Strategy. It was a great opportunity to discuss ideas with the stakeholders on how to improve the Strategy and

work collaboratively on public communication options. This meeting also helped to inform the approach for the City's 2016 Wild Parsnip Strategy, which is outlined below.

2016 Wild Parsnip Strategy

Through the 2015 and 2016 budget processes, the Public Works Department received \$100,000 and \$98,000, respectively, to develop and expand the Wild Parsnip Strategy. Based on the 2015 Wild Parsnip infestation mapping data, in 2016, the funds will be utilized to extend test plots. This may also include further applications of different herbicides, such as Truvist which was not previously tested.

Herbicide Application

Staff will continue with the application of Clearview in the areas identified in the 2015 Wild Parsnip Strategy and concentrate expansion to highly infested areas located on the 2015 infestation map. The focus will be on pathway systems through passive parkland areas, locations encroaching on high usage recreational space, in and around naturalized areas, and on highly infested roadside ditches.

Once the list of locations is finalized, it will be circulated to the City's partners, including the National Capital Commission, the Ministry of the Environment and Climate Change, and the Ontario Invasive Plant Council to ensure that any potential concerns are identified, and the proper course of action is taken.

The application of the herbicide Clearview will occur in the spring, which will increase its effectiveness in managing Wild Parsnip growth. Early application of the herbicide will also reduce any potential issues with crop seeding/germination in farmland areas.

The use of a second herbicide, Truvist, may be included on some areas to test its effectiveness as compared to Clearview.

Grass Cutting

Mowing frequency and timing will be adjusted in 2016 to ensure the best use of staff time and resources are coordinated with the herbicide applications.

Monitoring

The Public Works Department will again retain the services of an agronomist to assess the same test plot locations from 2015 of highly infested roadside and passive parkland

areas to analyze the effectiveness of herbicide application versus cutting cycles. A report will be submitted with findings and recommendations in the fall 2016.

Communication, Education and Outreach Plan

The Public Works Department, in conjunction with Ottawa Public Health and Corporate Communications, will work together to refresh the 2015 communication, education and outreach plan. The list of locations identified for the 2016 Wild Parsnip Strategy will be determined based on the 2015 infestation mapping. Once the locations are selected, staff, in consultation with the contractor, will prepare a weekly schedule for the herbicide application. Staff will prepare weekly updates to the Councillors on where the spraying will occur. This information will also be available on Ottawa.ca.

Staff will also work with its partners to develop a consistent design for signage that will be used by all organizations to indicate areas of high incidence of Wild Parsnip. The signage will also provide links and contact information for residents who would like more information on Wild Parsnip or have questions.

A requirement of the Ontario *Pesticides Act* is to ensure the public is notified in advance of pesticide applications. The default notification is to place signs along the spray area at every 100m. However, when spraying over 200km of roadsides, it was found that placing and removing signs was not practical. There is an alternative to the default posting of signs where the Ministry of Environment and Climate Change (MOECC) may approve a different method of notification. Staff will work with the MOECC to agree on the best alternative and standardize the content and wording of the notification to meet MOECC requirements.

Again this year, rural residents who do not wish to have the roadside adjacent to their property sprayed will be given the option of the “No Spray” sign and can opt out of the Wild Parsnip program if they chose. Information will be shared on how to opt out as part of the communications to residents on our website and in print materials.

The Public Works Department will continue to work diligently with its internal and external stakeholders in promoting community awareness of the potential risks associated with this plant. The 2016 communication, education and outreach program will focus on awareness of the health risks related to exposure to Wild Parsnip and the benefits of spraying to ensure continued biodiversity. In early spring, the information postcard that was developed for the 2015 Strategy will be distributed widely to residents and will also be shared electronically with schools and parents of school-aged children.

The postcard is also available to Councillors for distribution in both hard copy and electronic format.

The City website will continue to be updated with relevant information for residents along with more visuals to assist them in identifying this plant from other less harmless plants such as Queen Anne's Lace or Ragweed.

Since the implementation of a Wild Parsnip Strategy, other municipalities and the Province have reached out to the Public Works Department to understand its strategy and recommendations on how to manage this noxious weed. The City of Ottawa is seen as a leader in Wild Parsnip management, and staff will continue to initiate new partnerships with experts in the field and/or interested parties, and also work closely with their existing partners.

RURAL IMPLICATIONS

Wild Parsnip is mainly found along rural and suburban roadsides, especially in areas with steep ditches.

CONSULTATION

In 2016, the Public Works Department will continue to work with its internal and external stakeholders to explore ways to reduce the spread of Wild Parsnip in the City of Ottawa and put in place strategies to educate the public on the health risks of Wild Parsnip.

The 2016 strategy was developed by the Public Works Department in consultation with the following stakeholders:

- Ministry of the Environment and Climate Change, Province of Ontario Pesticides Specialist (MOECC)
- Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA)
- Ontario Invasive Plant Council (OIPC)
- National Capital Commission (NCC)
- Hydro One
- Hydro Ottawa
- Rideau Valley Conservation Authority (RVCA)
- Ministry of Transportation Ontario (MTO)
- United Counties of Leeds and Grenville
- United Counties of Stormont, Dundas and Glengarry
- Planning and Growth Management Department

- Development Review Services Branch
- Land Use and Natural System Unit
- Emergency and Protective Services Department
 - By-Law Services
- Ottawa Public Health
- Corporate Communications Department

COMMENTS BY THE WARD COUNCILLOR(S)

This is a City-wide report.

LEGAL IMPLICATIONS

There are no legal implications with respect to receiving this report for information.

RISK MANAGEMENT IMPLICATIONS

There are risk implications. These risks have been identified and explained in the report and are being managed by the appropriate staff. For example, there is the risk of a potential herbicide spill impacting ground and surface water, agricultural resources and non-target species of plants, insects and mammals. Mitigation strategies include hiring a certified contractor who is well-aware of the risks and has the appropriate training in spill management; also, working with subject matter experts, such as MOECC and the Land Use and Natural System Unit to identify approved products, methods and locations for the control of Wild Parsnip.

FINANCIAL IMPLICATIONS

There are no financial implications with respect to the information in this report.

ACCESSIBILITY IMPACTS

Staff will ensure that any applicable accessibility standards are adhered to during the execution of the projects and initiatives identified in this report. This will involve consulting with the appropriate staff within the City.

ENVIRONMENTAL IMPLICATIONS

Wild Parsnip was declared as a noxious weed by the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA). Wild Parsnip's ability to rapidly regenerate reduces native plants' abilities to compete for space, which in turn reduces biodiversity.

Residents who do not wish to have herbicide sprayed along the roadside adjacent to their property are able to opt out of the program by contacting the City of Ottawa.

TERM OF COUNCIL PRIORITIES

The 2015-2018 Term of Council Priority Sustainable Environmental Services includes a Strategic Objective to support an environmentally sustainable Ottawa (ES1). Under this objective, staff will work to control Wild Parsnip.

SUPPORTING DOCUMENTATION

Document 1 – 2015 Wild Parsnip Infestation Map

DISPOSITION

The Public Works Department will work with the identified stakeholders to implement the 2016 Wild Parsnip Strategy and will follow up with weekly updates on the spraying locations with ward councillors.