

Community Services Standing Committee Meeting

Date: Wednesday, February 7, 2024

Time: 9:00 o'clock a.m.

Location: Council Chambers, 1st Floor, Windsor City Hall

All members will have the option of participating in person in Council Chambers or electronically and will be counted towards quorum in accordance with Procedure By-law 98-2011 as amended, which allows for electronic meetings. The minutes will reflect this accordingly. Any delegations have the option to participate in person or electronically.

MEMBERS:

Ward 2 - Councillor Fabio Costante

Ward 3 - Councillor Renaldo Agostino

Ward 4 - Councillor Mark McKenzie

Ward 5 - Councillor Ed Sleiman (Chairperson)

Ward 6 - Councillor Jo-Anne Gignac

ORDER OF BUSINESS

Item # Item Description
1. CALL TO ORDER

READING OF LAND ACKNOWLEDGMENT

We [] would like to begin by acknowledging that the land on which we gather is the traditional territory of the Three Fires Confederacy of First Nations, which includes the Ojibwa, the Odawa, and the Potawatomi. The City of Windsor honours all First Nations, Inuit and Métis peoples and their valuable past and present contributions to this land.

2. DISCLOSURE OF PECUNIARY INTEREST AND THE GENERAL NATURE THEREOF

3. ADOPTION OF THE MINUTES

- 3.1. Adoption of the Community Services Standing Committee minutes of its meeting held December 6, 2023. **(SCM 355/2023)**

4. REQUEST FOR DEFERRALS, REFERRALS OR WITHDRAWALS

5. COMMUNICATIONS

6. PRESENTATIONS AND DELEGATIONS

7. COMMITTEE MATTERS

- 7.1. Minutes of the Windsor Accessibility Advisory Committee of its meeting held December 5, 2023 **(SCM 15/2024)**
- 7.2. Minutes of the Windsor Essex Regional Community Safety and Well-Being Systems Leadership Table of their meeting held September 13, 2023 - City Wide **(SCM 365/2023)**
- 7.3. Minutes of the Meetings of the Executive Committee and Board of Directors, Willistead Manor Inc., held November 9, 2023 **(SCM 320/2023)**

7.4. Report No. 132 of the Windsor Accessibility Advisory Committee - Accessible purchases from the Capital Fund for Huron Lodge **(SCM 12/2024)**

7.5. Report No. 133 of the Windsor Accessibility Advisory Committee - Accessible purchases from the Capital Fund for the Windsor Public Library **(SCM 13/2023)**

8. ADMINISTRATIVE ITEMS

8.1. Response to CQ 12-2022 & CQ 22-2022 - Solar Lights on City Trails – City Wide **(S 11/2024)**

8.2. Response to CR 655/2020 – Invasive Plant Management Strategy - City Wide **(S 10/2024)**

8.3. Update on Reaching Home: Canada's Homelessness Strategy (2019 - 2028) **(S 13/2024)**

9. QUESTION PERIOD

10. ADJOURNMENT



Committee Matters: SCM 355/2023

Subject: Adoption of the Community Services Standing Committee minutes of its meeting held December 6, 2023.

Community Services Standing Committee Meeting

Date: Wednesday, December 06, 2023

Time: 9:00 o'clock a.m.

Members Present:

Councillors

Ward 2 - Councillor Fabio Costante

Ward 3 - Councillor Renaldo Agostino

Ward 4 - Councillor Mark McKenzie

Ward 5 - Councillor Ed Sleiman

Ward 6 - Councillor Jo-Anne Gignac

PARTICIPATING VIA VIDEO CONFERENCE ARE THE FOLLOWING FROM ADMINISTRATION:

Sandra Gebauer, Council Assistant

ALSO PARTICIPATING IN COUNCIL CHAMBERS ARE THE FOLLOWING FROM ADMINISTRATION:

Andrew Daher, Commissioner, Human & Health Services

James Chacko, Executive Director, Parks & Facilities

Tanya Antoniw, Executive Director, Employment & Social Services

Michelle Staadegaard, Manager, Culture & Events

Stephen Lynn, Manager, Social Policy & Planning

Jennifer Tanner, Manager, Homelessness & Housing Support

Kelly Goz, Manager, Homelessness & Housing Support

Emilie Dunnigan, Manager, Development Revenue & Financial Administration

Mary Ellen Bernard, Program Manager

Doran Anzolin, Executive Initiatives Coordinator

Samantha Magalas, Executive Initiatives Coordinator

Charmaine Valbuena, Coordinator Social Planning

Sumar Jasey, Emergency Planning Officer

Anna Ciacelli, Deputy City Clerk

Minutes

Community Services Standing Committee Wednesday, December 06, 2023

Page 2 of 8

1. CALL TO ORDER

The Chair calls the meeting of the Community Services and Parks Standing Committee to order at 9:00 o'clock a.m.

2. DISCLOSURE OF PECUNIARY INTEREST AND THE GENERAL NATURE THEREOF

None disclosed.

3. ADOPTION OF THE MINUTES

3.1. Adoption of the Community Services Standing Committee meeting minutes held November 1, 2023.

Moved by: Councillor Jo-Anne Gignac
Seconded by: Councillor Mark McKenzie

THAT the minutes of the Community Services and Parks Standing Committee meeting held November 1, 2023 **BE ADOPTED** as presented.

Report Number: SCM 294/2023

4. REQUEST FOR DEFERRALS, REFERRALS OR WITHDRAWALS

None requested.

5. COMMUNICATIONS

5.1. Les Amis Duff Baby Annual Report - Ward 2

Councillor Fabio Costante inquires whether there is an update from Ontario Heritage Trust on the status of Wi-Fi accessibility in the mansion. Michelle Staaedegaard, Manager, Culture and Events appears before the Community Services Standing Committee regarding the communication "Les Amis Duff Baby Annual Report" and Letter from the President Les Amis Duff-Baby and indicates that administration hasn't received a response from Ontario Heritage Trust at this time.

Councillor Fabio Costante requests confirmation related to staffing allocation at the site. Ms. Staaedegaard indicates that there area a total of 12 days approved by council and they are working with Les Amis to determine which dates or months would be preferred.

Councillor Fabio Costante inquires at what point should we consider adding to the complement of staff given the increased interest and demand for the property and requests clarification related to the costs. Ms. Staaedegaard indicates that adding more staff would cost around \$255 per person per day for a 4 hour shift. She adds that with attendance numbers increasing since

Minutes

Community Services Standing Committee Wednesday, December 06, 2023

Page 3 of 8

Covid, they are going to monitor attendance over the next year to see if the interest is ongoing or if it plateaus before adding any further staffed days.

Councillor Fabio Costante inquires about the peak periods. Ms. Staaedegaard indicates that the summer into September were the busiest months in 2023 which was driven by some of the group hosted events.

Councillor Fabio Costante inquires if ward funds can be used to help support the initiative. The Council Secretariat will provide this information to the Councillor.

Councillor Fabio Costante comments that adding a few more hours per month would cost very little and is a worthwhile effort.

Councillor Jo-Anne Gignac inquires in what year were the hours expanded. Ms. Staaedegaard indicates that it has been since 2022.

Councillor Jo-Anne Gignac inquires about the weigh scale that was removed from the building and what the course of action would be to return the original weigh scale to the property. Ms. Staaedegaard indicates that she will follow up, but believes that they were unable to locate the original weigh scale.

Councillor Fabio Costante inquires about what next steps will be and if there will be a follow-up report. Administration indicates that there would need to be direction from Council requesting a report and recommendations moving forward.

Moved by: Councillor Jo-Anne Gignac
Seconded by: Councillor Fabio Costante

Decision Number: **CSSC 216**

THAT the correspondence of the President Les Amis Duff-Bâby dated August 29, 2023 and the memo of the Manager, Culture & Events dated November 20, 2023 regarding the Les Amis Duff Baby Annual Report **BE RECEIVED** for information; and,

THAT administration **BE REQUESTED** to report back and provide a cost estimate to add to the staff compliment for a 4 month period specifically during peak season, and that this information **BE BROUGHT FORWARD** when this committee report proceeds to Council; and,

THAT administration **BE REQUESTED** to provide a fulsome report regarding 2023 and 2024 attendance numbers and staffing possibilities to a future meeting of Council for their consideration.

Carried.

Report Number: SCM 314/2023
Clerk's File: SR2023

6. PRESENTATIONS AND DELEGATIONS

6.1. Pathway to Potential Renewal Strategy – StrategyCorp

Minutes

Community Services Standing Committee

Wednesday, December 06, 2023

Page 4 of 8

Nabiha Chowdhury, Senior Consultant & Jaiman Chin, Vice President, StrategyCorp

Nabiha Chowdhury, Senior Consultant & Jaiman Chin, Vice President, StrategyCorp appear via video conference before the Community Services Standing Committee regarding the presentation entitled, "Pathway to Potential Renewal Strategy" and provide an overview of the P2P program's process; the progress being undertaken by StrategyCorp as it relates to poverty reduction and supporting affordable community programming; accessibility for all residents; and provide details regarding an overview of Pathway to Potential; Project & Stakeholder Consultation Overview; Key Findings from Engagement & Research; Windsor-Essex Poverty Reduction Efforts; P2P's new approach; The Proposed Strategic Framework; The three Strategic Pillars; and concludes by providing next steps.

Councillor Jo-Anne Gignac requests that the consultants elaborate on where further input to the program will be coming from. Mr. Chin indicates that the draft framework direction is currently under validation with community agencies; community partners have been consulted; and the forward looking action plan is still under development.

Councillor Jo-Anne Gignac inquires as to how the City is going to be able to drive real data from affected neighbourhoods as it relates to what services are required across the region. Mr. Chin indicates that better data collection will be an important piece that can be used to inform what changes could be made across the region with a closer emphasis on the experience of affected residents.

Councillor Fabio Costante inquires whether United Way was consulted on this effort. Mr. Chin indicates that the United Way was engaged several times throughout the process and this approach is intended to build on the work that is already being done in the community by other groups to address other aspects of poverty or to bring in other service providers to offer other supports as identified.

Councillor Mark McKenzie inquires about the process to bridge funding gaps between now and the spring. Stephen Lynn, Manager Social Policy and Planning appears before the Community Services Standing Committee regarding the presentation entitled, "Pathway to Potential Renewal Strategy" and indicates that current P2P partners were notified 13 months ago that the funding was going to be coming to an end and asked them about the sustainability of the current programming with the funding ending December 31st, 2023. Mr. Lynn adds that they were provided with an opportunity to apply for the request for proposals for the next funding year, although there will be a gap.

Councillor Mark McKenzie expresses concern with the gap and the possibility of some organizations will need to shut down until more funding becomes available. Mr. Lynn indicates that none of the organizations will close, some of the programs that have been funded by P2P that they offer will end. Mr. Lynn adds that affected departments have also been notified of the programs that may be affected.

Councillor Jo-Anne Gignac inquires in terms of P2P percentage of support to different agencies around the city, the funding received would be for specific programming that is offered as a part of their overall budget. Mr. Lynn indicates that the illustration of how it works is correct. Agencies have core funding to operate and some of these agencies have applied for a specific

Minutes

Community Services Standing Committee Wednesday, December 06, 2023

Page 5 of 8

program that they have been able to deliver when funding was made available. Additional funding sources will need to be applied for in order for the programs to continue as P2P funding will end.

Councillor Jo-Anne Gignac inquires whether these organizations have likely applied through different agencies and funding grants for their core operational programming. Mr. Lynn indicates that throughout the last several months, newsletters and grant opportunities have been identified and provided to these agencies in order to prepare for the gap in funding through P2P and to seek out alternative funding options.

Moved by: Councillor Jo-Anne Gignac
Seconded by: Councillor Fabio Costante

Decision Number: **CSSC 224**

That the presentation by StrategyCorp regarding Pathway to Potential Renewal Strategy **BE RECEIVED** for information.

Carried.

Clerk's File: SS2023

7. COMMITTEE MATTERS

7.1. Minutes of the Meetings of the Executive Committee and Board of Directors, Willistead Manor Inc., held October 12, 2023

Moved by: Councillor Jo-Anne Gignac
Seconded by: Councillor Mark McKenzie

Decision Number: **CSSC 217**

THAT the minutes of the Willistead Executive and Board of Directors, Willistead Manor Inc. meeting held October 12, 2023 **BE ADOPTED** as presented.

Carried.

Report Number: SCM 281/2023

7.2. Minutes of the Windsor Accessibility Advisory Committee of its meeting held October 19, 2023

Moved by: Councillor Jo-Anne Gignac
Seconded by: Councillor Mark McKenzie

Decision Number: **CSSC 218**

THAT the minutes of the Windsor Accessibility Advisory Committee meeting held October 19, 2023 **BE ADOPTED** as presented.

Report Number: SCM 312/2023

Minutes

Community Services Standing Committee
Wednesday, December 06, 2023

Page 6 of 8

7.3. Report No. 131 of the Windsor Accessibility Advisory Committee - Funding for the installation of a hearing loop system at the Windsor International Airport

Moved by: Councillor Mark McKenzie
Seconded by: Councillor Renaldo Agostino

Decision Number: **CSSC 219**

THAT Report 131 of the Windsor Accessibility Advisory Committee indicating:

THAT the request for funding from Your Quick Gateway (Windsor) Inc. in the upset amount of \$67,000 in invoiced costs from the Capital Fund 7086008 for the installation of a hearing loop system, and the removal and installation of new carpeting at the Windsor International Airport BE SUPPORTED.

BE APPROVED.

Carried.

Report Number: SCM 313/2023
Clerk's File: MB2023

7.4. Minutes of the Committee of Management for Huron Lodge of its meeting held November 20, 2023

Moved by: Councillor Jo-Anne Gignac
Seconded by: Councillor Mark McKenzie

Decision Number: **CSSC 220**

THAT the minutes of the Committee of Management for Huron Lodge meeting held November 20, 2023 **BE ADOPTED** as presented.

Report Number: SCM 315/2023

8. ADMINISTRATIVE ITEMS

8.1. CQ 4-2021 – Report on Pilot Project to Offer Menstrual Hygiene Products in Select Municipal Buildings Free of Charge - City Wide

Councillor Renaldo Agostino inquires about the process of the program and when it will end. James Chacko, Executive Director Parks appears before the Community Services Standing Committee regarding the administrative report "CQ 4-2021 – Report on Pilot Project to Offer Menstrual Hygiene Products in Select Municipal Buildings Free of Charge - City Wide" and indicates that they have an abundance of stock and the administrative report is requesting to continue the pilot project as is and when the stock is depleted, they would report back to council for direction.

Moved by: Councillor Renaldo Agostino
Seconded by: Councillor Jo-Anne Gignac

Minutes

Community Services Standing Committee Wednesday, December 06, 2023

Page 7 of 8

Decision Number: **CSSC 221**

THAT the report of the Executive Initiatives Coordinator dated November 17, 2023, entitled "CQ 4-2021 – Report on Pilot Project to Offer Menstrual Products in Select Municipal Buildings Free of Charge - City Wide" **BE RECEIVED.**

Carried.

Report Number: S 158/2023

Clerk's File: GM2023

8.2. Response to CQ 7-2022 Regarding the Dog Park Policy - City Wide

Councillor Mark McKenzie inquires whether residents would like a dog park, can it be brought forward as a council question to work with administration. Mr. Chacko indicates that there are two different options, Option 1: status quo where the policy does not change and decisions are made on a one off basis as an exception to the dog park policy. Option 2 would require an amendment to the policy which would be brought before council for consideration.

Councillor Fabio Costante requests clarification related to the procedure for either option. Mr. Chacko indicates that a council question would need to come forward to council, administration would review the policy and make a recommendation to council and council could direct administration to waive a portion(s) of the policy to allow the park.

Councillor Fabio Costante requests clarification related to administration not making any recommendations to contravene its own policy, so any report under Option 1: status quo would not be an administrative recommendation. Mr. Chacko indicates that the administrative report would be to see that the current Dog Park Policy be enacted and enforced as it currently stands.

Councillor Fabio Costante requests clarification on the report as it relates to funding for option 2. If we are changing the policy and the framework and are budgeting for dog parks in the future, why is there not a funding implication in the report? Mr. Chacko indicates that they are trying to illustrate the cost of both constructing and maintaining the small area dog parks. Council could approve funding for a park to be constructed when directed to build it.

Councillor Renaldo Agostino inquires whether vibrancy, safety & security been considered when putting together this report or is it all just procedural. Mr. Chacko indicates that they have proposed potential pilot project options and looked at different park lands, but ultimately decided that bringing the procedural content to council for direction was a cleaner approach which would allow council to direct administration to develop a pilot project.

Councillor Ed Sleiman inquires if there is not enough available funding for a dog park to be created, is Council able to contribute wards funds or would it still need to be approved by council. Mr. Chacko indicates that as long as Council directs Administration to construct a dog park, the source of funding is irrelevant, whether it be ward funds, sponsorship or other grant funds. They will see to it that the park is constructed.

Moved by: Councillor Mark McKenzie

Seconded by: Councillor Jo-Anne Gignac

Minutes

Community Services Standing Committee

Wednesday, December 06, 2023

Page 8 of 8

Decision Number: **CSSC 222**

THAT the report of the Executive Initiatives Coordinator, Community Services dated November 17, 2023, entitled "Response to CQ Regarding the Dog Park Policy – City Wide" **BE RECEIVED** for information.

Carried.

Councillors Renaldo Agostino and Fabio Costnate voting nay.

Report Number: S 159/2023

Clerk's File: SR2023

8.3. Windsor Joint Justice Facility Operating Agreement - City Wide

Moved by: Councillor Mark McKenzie

Seconded by: Councillor Jo-Anne Gignac

Decision Number: **CSSC 223**

THAT Council **APPROVE** entering into the Operational Agreement for the purpose of providing for the continued operation and management of the Windsor Joint Justice Facility, 200 Chatham Street East and 150 Goyeau Street, for a ten (10) years Term; and,

THAT Administration **BE AUTHORIZED** to extend the Term for up to two (2) additional periods, each period for five (5) years, satisfactory in form to the City Solicitor, in financial content to City Treasurer, and in technical content to the Executive Director, Parks & Facilities; and,

THAT the CAO and City Clerk **BE AUTHORIZED** to execute all agreements, satisfactory in form to the City Solicitor, in financial content to City Treasurer, and in technical content to the Executive Director, Parks & Facilities.

Carried.

Report Number: S 160/2023

Clerk's File: SR/14696

9. QUESTION PERIOD

None registered.

10. ADJOURNMENT

There being no further business the meeting of the Community Services Standing Committee is adjourned at 10:01 o'clock a.m. The next meeting of the Community Services Standing Committee will take place on Febraury 7, 2024.

Carried.

Councillor Sleiman (Chairperson)

Deputy City Clerk / Supervisor of Council Services



Committee Matters: SCM 15/2024

Subject: Minutes of the Windsor Accessibility Advisory Committee of its meeting held December 5, 2023



Windsor Accessibility Advisory Committee

Meeting held December 5, 2023

A meeting of the Windsor Accessibility Advisory Committee is held this day commencing at 10:30 o'clock a.m. via Zoom video conference, there being present the following members:

Sally Bennett Olczak, Co-Chair
Peter Best, Co-Chair
Councillor Fred Francis
Surendra Bagga
Danica McPhee
Riccardo Pappini
Nicholas Petro

Guest in attendance:

Shauna Boghean, Vision Loss Rehabilitation Ontario – regarding ***Item 4.1***

Also present are the following resource personnel:

Gayle Jones, Accessibility, Diversity Officer
James Chacko, Executive Director, Parks and Facilities
Nada Tremblay, Manager Community Programming & Development
Mark Keeler, Human Resources Assistant
Karen Kadour, Committee Coordinator

1. Call to Order

Sally Bennett Olczak, Co-Chair calls the meeting to order at 10:33 o'clock a.m. and the Committee considers the Agenda being Schedule A, attached hereto, matters which are dealt with as follows:

2. Declaration of Conflict

Riccardo Pappini discloses an interest on matters relating to Huron Lodge as a family member is employed at Huron Lodge.

3. Adoption of the Minutes

Moved by Councillor Fred Francis, seconded by Danica McPhee,
That the minutes of the Windsor Accessibility Advisory Committee of its meeting held October 19, 2023 **BE ADOPTED** as presented.
Carried.

4. Business Items

4.1 Accessible Pedestrian Signals - Update

Peter Best reports that in terms of the accessible pedestrian signals, progress is being made due to extensive communication with the Traffic Department. He adds that as the environment for every corner is different, it is necessary to develop a standard to provide consistencies throughout the city.

Shauna Boghean advises that people in various neighbourhoods are voicing their concerns with the volume of tone and loudness from the pedestrian signals.

Moved by Nicholas Petro, seconded by Riccardo Pappini,
That the update on the Accessible Pedestrian Signals **BE RECEIVED**.
Carried.

4.2 Facility Accessibility Design Standards (FADS) Update

Riccardo Pappini remarks that the members of FADS include himself, Peter Best, Danica McPhee, Surendra Bagga and Nicholas Petro. He adds that the subcommittee meets on a weekly basis to review each section of FADS.

Peter Best states although the FADS process for the City of Windsor has been slow, the final document will be helpful going forward.

Nicholas Petro adds that the subcommittee has been focusing on practical solutions as FADS is not only for those building and designing these structures but also for the people using them.

Moved by Riccardo Pappini, seconded by Nicholas Petro,
That the update regarding the progress of the Facility Accessibility Design Standards document **BE RECEIVED**.
Carried.

4.3 WAAC 2023 Operating Budget and Capital Budget – Discussion

Gayle Jones advises that Councillor Fred Francis at the WAAC meeting held October 19, 2023 requested that Administration bring back a report with suggestions for the Operating Budget. The request was provided to a number of different groups and Huron Lodge and the Windsor Public Library responded with suggestions. She provides an overview of the funds available in the Operating Budget as well as the Capital Budget. A review of the suggestions is undertaken.

Councillor Fred Francis leaves the meeting at 11:25 o'clock a.m.

Peter Best proposes that consideration be given to funding for programming to train staff/individuals to assist and teach individuals i.e. Windsor Public Library on the use of various forms of devices such as the LyriQ reader. Gayle Jones responds that funding for programming in the amount of \$5,000 from the Capital Fund has been included. He suggests that approximately \$5,000 of WAAC's Operating budget go to the library for training and development.

Danica McPhee expresses similar concerns around access and she proposes using the funds where the most people will have access to those devices.

Surendra Bagga advises that the people who sell the equipment will provide training on how the device works.

Moved by Danica McPhee, seconded by Surendra Bagga,
That **APPROVAL BE GIVEN** to an expenditure in the upset amount of \$7200 from the Windsor Accessibility Advisory Committee 2023 Operating Budget for the purchase of a Portable Snoezelen Cart and Wall Mounted Manipulatives for Huron Lodge; and,

That **APPROVAL BE GIVEN** to an expenditure in the upset amount of \$5,200 from the Windsor Accessibility Advisory Committee 2023 Operating Budget for the purchase of a LyriQ reader, two I pads, audio books and ear buds for the Windsor Public Library.

Carried.

Riccardo Pappini discloses an interest and abstains from voting on the matter relating to Huron Lodge.

Moved by Surendra Bagga, seconded by Nicholas Petro,

That **APPROVAL BE GIVEN** to an expenditure in the upset amount of \$25,000 of invoiced costs from the Capital Fund 7086008 tied to the purchase of a Wheelchair Accessible Bike, Height adjustable table, Accessible picnic table, Genie Messaging Platform and Abby Engagement model

Carried.

Riccardo Pappini discloses an interest and abstains from voting on this matter.

Peter Best voting nay.

Moved by Nicholas Petro, seconded by Peter Best,

That **APPROVAL BE GIVEN** to an expenditure in the upset amount of \$15,000 of invoiced costs from the Capital Fund 7086008 for the Riverside Library Branch tied to the purchase of a LyriQ reader, Desktop Magnifier, two (2) Large print keyboards, Audio books, and accessibility software and programming for persons with disabilities.

Carried.

5. 2024 Working Guide – Proposed Agenda Items

- (a) Transit Windsor report on accessibility complaints.
- (b) Discussion regarding signage.
- (c) WAAC Accessibility Priorities for 2024
- (d) Sandy's Point – Discussion regarding continued improvements and the Spring Media Event Announcement.
- (e) **Work Groups**

In terms of Transit Windsor complaints, Danica McPhee asks what is our purview with Handi Transit and if they can be included in the discussion. Gayle suggests inviting a representative from Handi Transit to attend a meeting. The Chair requests that Tyson Cragg, Executive Director, Transit Windsor be invited to attend the next meeting of WAAC.

Peter Best requests that a discussion be held to review the role of WAAC; the process of WAAC in terms of operational budgets and WAAC's relationship with Administration and Council. The Chair asks that the Mandate of WAAC be included for discussion at the next meeting of WAAC.

Sally Bennett Olczak, Co-Chair states that Councillor Fred Francis has requested that a discussion be held relating to a member of the community who has expressed

concern regarding accessible parking near the Capitol Theatre with the upcoming beautification of University Avenue.

Danica McPhee advises that she attended the Essex County Accessibility Advisory Committee Forum held October 19, 2023 at Heritage Park Alliance in Lasalle. She states that the Key Note speaker was a disability/accessibility consultant from the Rick Hansen Foundation and adds the event was well attended.

6. Date of Next Meeting

The next meeting will be held in late February/early March 2024.

7. Adjournment

There being no further business, the meeting is adjourned at 12:26 o'clock p.m.



Committee Matters: SCM 365/2023

Subject: Minutes of the Windsor Essex Regional Community Safety and Well-Being Systems Leadership Table of their meeting held September 13, 2023 - City Wide



**MEETING OF THE
WINDSOR ESSEX REGIONAL COMMUNITY SAFETY AND WELL-BEING
SYSTEMS LEADERSHIP TABLE**

MEETING MINUTES

WEDNESDAY, SEPTEMBER 13TH, 2023; 9:00AM TO 10:00AM

VISION: "A COMMUNITY WHERE EVERYONE FEELS SAFE, HAS A SENSE OF BELONGING, EQUITABLE ACCESS TO SERVICES AND OPPORTUNITIES,
AND CAN HAVE THEIR NEEDS MET ACROSS WINDSOR AND ESSEX COUNTY"

In Attendance

Co-Chairs

Andrew Daher, Sandra Zwiers

Members

Mary Birch, Jeanie Diamond-Francis, Sonja Grbevski, Bill Marra,
Eric Nadalin, Carolyn Warkentin, Jason Woods, Joyce Zuk

Project Team

Amanda Alchin, Doran Anzolin, Stephen Lynn, Michelle Oake

Regrets

Members

Kevin Blondin, Angela Ferguson, Frank Providenti

Agenda Item	Highlights	Action/Update
<p>Call to Order</p>	<p>1.1 Welcome</p> <ul style="list-style-type: none"> Michelle Oake, Project Manager, Windsor Essex Regional Community Safety and Well-Being (WERC SWB) Plan, City of Windsor, welcomed Sandra Zwiers, <i>new</i> Co-Chair of the Regional Systems Leadership Table (RSLT), and Chief Administrative Officer, County of Essex. Mary Birch, Director, Legislative and Community Services and Clerk, County of Essex, was thanked for her term as Co-Chair, and commitment to being a member of the RSLT moving forward. <p>1.2 Establish Quorum and Call to Order</p> <ul style="list-style-type: none"> 12 members were present, establishing quorum. The meeting was called to order at 9:03 am. <p>1.3 Approval of Today's Agenda</p> <ul style="list-style-type: none"> The Meeting Agenda for September 13, 2023, was approved. <p>1.4 Declaration of Conflicts of Interest</p> <ul style="list-style-type: none"> N/A 	

	<p>1.5 Approval of June 28th, 2023 Meeting Minutes</p> <ul style="list-style-type: none"> The June 28, 2023 Meeting Minutes were approved. 	
<p>Matters of Discussion</p>	<p>2.1 Progress Updates: WERCSWB Projects</p> <ul style="list-style-type: none"> A high level review of the four priority areas within the WERCSWB Plan (henceforth the ‘Plan’) was provided: <ul style="list-style-type: none"> Priority #1: Good Governance & Data Priority #2: Engaged & Safe Communities Priority #3: Mental Health & Substance Use Supports Priority #4: Financial Security & Economic Equity Each priority category consists of two goals and up to three initiatives per goal. In total, eight goals have been set, and 17 initiatives were established to achieve and action the goals. <p>2.1.1 Community Investment Fund</p> <ul style="list-style-type: none"> This municipal funding will be used in 2023 to implement areas of the Plan that do not have secured grant funding (e.g., Goals 3 and 7). The RSLT will have the opportunity to review relevant project drafts created with this funding. <p>2.1.2 Building Safer Communities Fund (BSCF)</p> <ul style="list-style-type: none"> With consultation from community partners and police services (WPS, LPS, OPP), the City of Windsor submitted a regionally focussed prevention and intervention plan to combat youth gun and gang activities, to Public Safety Canada, which was successful. Through the BSCF, \$2.7 million, over three years, will be provided to the City of Windsor, by Public Safety Canada to support the prevention of youth gun and gang violence in the region. Implementation activities (e.g., funded programs, development of a Regional Crime Prevention Council, and Future Call for Proposals) and timelines were discussed and reviewed. <p>2.1.3 Data Consortium</p> <ul style="list-style-type: none"> An update was provided and received regarding the partnership between the City of Windsor and St. Clair College, through a WE SPARK grant. An update was also provided and received on the Data Consortium project, which falls under Priority #1 (Good Governance & Data). Communication and consultation with community partners will continue to be a priority through the WERCSWB Plan and the RSLT, especially as grants are being applied to. <p>2.1.4 Substance Supports in Neighbourhoods Accessed through Police Partnerships (SSNAPP)</p>	<p>ACTION</p> <ul style="list-style-type: none"> A Gantt chart outlining progress towards the Plan’s priorities, goals, initiatives, and implementation activities will be submitted to the RSLT for the next meeting.

	<ul style="list-style-type: none"> • Substance Supports in Neighbourhoods Accessed through Police Partnerships (SSNAPP), seeks to address substance use and related crime through a coordinated public education and training strategy. <ul style="list-style-type: none"> ○ This is a partnership between the City of Windsor, Windsor Police Service (WPS), and the Windsor Essex County Health Unit (WECHU) with Windsor Police Service being the Community Safety and Policing Grant holder. ○ The SSNAPP Team has hosted a number of community engagement events over the summer. ○ SSNAPP relates to Goals 4, 5, and 6 of the Plan, with the Priorities being “Engaged and Safe Communities” and “Mental Health and Substance Use Supports”. • At present time, the Plan has 19 on-going project activities, which align with 7/8 goals and 10/17 initiatives. 	
<p>Unfinished Business</p>	<p>3.1 RSLT Terms of Reference</p> <ul style="list-style-type: none"> • The <i>Terms of Reference</i> were approved at the last meeting on June 28, 2023 as a living document. <p>3.2 New Structure of RSLT Meetings</p> <ul style="list-style-type: none"> • Historically, the RSLT was established to guide the development of the Plan. • Now that the Plan has been developed, the membership list has been restructured to promote the long-term implementation of the Plan. • The past and present membership lists were reviewed and discussed. • Action Tables and Partnered Committees were identified (e.g., WECOSS LC). The WERCSWB Project Manager will be a member of the Action Tables and Partnered Committees and will report back to the RSLT for efficiency. <p>3.2.1 Review Committee for Future (ESN and PWLE) RSLT Members</p> <ul style="list-style-type: none"> • Goal 2 of the Plan is to improve representation and inclusion of priority populations. • Five RSLT membership seats will soon be filled by representatives from the Enhanced Sector Network and People with Lived Experiences. <ul style="list-style-type: none"> ○ A public call for Expressions of Interest will be requested for Committee review and selection. ○ This Review Committee will be temporary sub-committee and will consist of the following individuals: Michelle Oake, Eric Nadalin, Joyce Zuk 	<p>ACTION</p> <ul style="list-style-type: none"> • The <i>Terms of Reference</i> will be disseminated to all RSLT members through DocuSign for signature. <p>ACTION</p> <ul style="list-style-type: none"> • Michelle Oake will contact Joyce Zuk and Eric Nadalin regarding the EOI Review Committee’s next steps.
<p>New Business / Round Table Discussion</p>	<p>4.1 Good News and Upcoming Events</p> <p>4.1.1 Public Safety Information Day (September 2023)</p> <ul style="list-style-type: none"> • Michelle Oake will be attending Public Safety Information Day, as a WERCSWB Plan representative, which is occurring Sunday, September 17 at Seacliff Park, to raise awareness of the Plan and its ongoing implementation activities. 	

	<p>4.1.2 Law Enforcement Training Conference (Rescheduled Date TBD)</p> <ul style="list-style-type: none"> This event was intended to take place in September. It is being rescheduled. <p>4.1.3 Neighbourhood Safety Walks and CPTED Training (November 2023)</p> <ul style="list-style-type: none"> Since previous Safety and Crime Prevention Walks (e.g., Tecumseh, Harrow, Essex, Leamington) and CPTED trainings have proven to be successful, dates have been booked for two safety walks, as well as a two-day CPTED training course this year: <ul style="list-style-type: none"> November 2, 2023: Windsor Safety Walk November 14, 2023: Leamington Safety Walk November 15 & November 16, 2023: CPTED Training <p>4.2 Community Spotlight: Update from Community Leaders</p> <ul style="list-style-type: none"> Since there are many organizations in the community who are working towards the common goal of community safety and/or well-being, it was suggested that time permitting, the RSLT may welcome guests for up to 15 minutes (per meeting) to provide an update on their work, through a community safety and well-being lens. There was a general consensus that, time-permitting, the “Community Spotlight” will be a standing RSLT Agenda Item moving forward. 	<p>ACTIONS</p> <ul style="list-style-type: none"> Michelle Oake will inform the RSLT of the dates and times of the Safety Walks and CPTED training once confirmed.
<p>Adjournment</p>	<p>5.1 Next Quarterly Meeting</p> <ul style="list-style-type: none"> December 13, 2023 (Virtual: 9:00 am – 10:00 am) <p>5.2 Meeting Adjourned</p> <ul style="list-style-type: none"> The meeting was adjourned at 10:00 am. 	



Committee Matters: SCM 320/2023

Subject: Minutes of the Meetings of the Executive Committee and Board of Directors, Willistead Manor Inc., held November 9, 2023

A meeting of the **Executive Committee Board of Directors, Willistead Manor Inc.** is held this day commencing at 4:00 o'clock p.m. at Willistead Manor, there being present the following members:

D. Sanborn, Chair
J. Evans
C. Gaudette
R. Gauthier

Also in attendance are the following Resource Personnel:

D. Seguin, Deputy Treasurer – Financial Accounting
C. Menard, Supervisor, Community Programming - Cultural Affairs
& Willistead Manor Coordinator
S. Gebauer, Council Assistant & Executive Secretary to the Board
of Directors, Willistead Manor Inc.

1. CALL TO ORDER

The Chairperson calls the meeting to order at 4:09 o'clock p.m. and the Executive Committee considers the Agenda being Schedule "A" ***attached*** hereto, matters, which are dealt with as follows:

2. ADOPTION OF THE MINUTES

Moved by J. Evans, seconded by R. Gauthier,
That the minutes of the Executive Committee Board of Directors
Willistead Manor Inc. meeting held October 12, 2023 **BE ADOPTED** as presented.

Carried.

3. BUSINESS ARISING FROM THE MINUTES

None.

4. REPORTS

4.1 Chairperson

D. Sanborn informs the Committee members that work on the grate cover in the vestibule at the Coach House is almost complete.

4.2 Administration

C. Menard, Supervisor, Community Programming - Cultural Affairs & Willistead Manor Coordinator provides the following updates:

Priority Projects List:

- C. Menard provides an overview of the priority projects list created after the walkthrough of the Manor with R. Gauthier and indicates that all projects must be prioritized and that the budget for each must be identified.

Facilities:

- The re-installation of the repaired window grate covers is ongoing. New capstones, where needed, have been ordered and will be installed next Spring. The Main Courtyard replacement is on track and work will likely begin in February. The stone colour for the courtyard has been chosen and the new flowerbeds have been ordered and are in the greenhouse.
- The vent covers in the Coach House are still to be installed and the cabinet lighting will be handled next.
- The new chandelier has been hung in the Conservatory. Next up is the large chandelier for the Walker bedroom, which will likely happen in January as it needs coordinating with the US inspection company and City Facilities. With Holiday tours beginning soon, it is not a good time to complete that work.

Manor Closure:

- Willistead Manor will be closed from January to June 2024. There is a possibility that some stand-alone events, hosted with Thyme TO-GO will take place in the Manor, such as the Mother's Day Brunch, which was extremely successful. C. Menard will discuss this further with City Facilities and with Windsor Fire and Rescue Services.

Custodian RFP Update:

- The job posting for the position of Heritage Custodian and Maintenance Attendant (live in) closed on October 16th, 2023. Informal interviews have been conducted and candidates have been shortlisted. The hiring process will take place in December and the successful candidate will likely start in January 2024.

Culture & Events:

- **Poetry at the Manor – Vol. 11:** The event was a huge success, was standing room only and was a great time.
- **Holiday Tours:** Wednesdays, Dec 6, 13, 20 & 27; and Sundays, Dec 3, 10 & 17.
- **Breakfast with Santa:** Sundays, Dec 3, 10 & 17; one date is already sold out.
- **The Mayor’s Reception:** Dates identified for this event are January 14th or January 21st, 2024. C. Menard will coordinate details with the Rotary Club of Windsor (1918) and R. Gauthier will coordinate with the Walker Family.

Documentary Updates:

- There are no new updates at this time. Suede Productions is still planning its own distribution/release and details are currently not available.

The Committee members discuss the Mayor’s Reception and it is decided that the event will take place on Sunday, January 21, 2024.

4.3 Treasurer

D. Seguin, Deputy Treasurer – Financial Accounting, provides the current account balances as follows:

- Operating Account -- \$20,947.
- Savings Account -- \$32,791.

5. NEW BUSINESS

None.

6. DATE OF NEXT MEETING

The next meeting of the Executive Committee Board of Directors, Willistead Manor Inc. will be held on Thursday, February 8, 2024 at 4:00 o’clock p.m.

7. ADJOURNMENT

There being no further business, the meeting is adjourned at 4:28 o’clock p.m.

CHAIRPERSON

EXECUTIVE SECRETARY

A meeting of the **Board of Directors, Willistead Manor Inc.** is held this day commencing at 4:30 o'clock p.m. at the Coach House Historical Exhibition, there being present the following members:

D. Sanborn – Chair
A. Abu-Zahra
MJ. Dettinger
J. Evans
R. Gauthier
C. Gaudette
D. Langstone
M. McKenzie
E. Morasset
C. Pitman

Regrets from Board Members:

A. Jahns

Also in attendance are the following resource personnel:

D. Seguin, Deputy Treasurer – Financial Accounting
C. Menard, Supervisor, Community Programming - Cultural Affairs
& Willistead Manor Coordinator
S. Gebauer, Council Assistant & Executive Secretary to the Board
of Directors, Willistead Manor Inc.

1. CALL TO ORDER

The Chairperson calls the meeting to order at 4:33 o'clock p.m. and the Board considers the Agenda being Schedule "A" ***attached*** hereto, matters, which are dealt with as follows:

2. ADOPTION OF THE MINUTES

Moved by C. Gaudette, seconded by D. Langstone,
That the minutes of the Board of Directors, Willistead Manor Inc. meeting held October 12, 2023 **BE ADOPTED** as presented:

Carried.

3. BUSINESS ARISING FROM THE MINUTES

D. Sanborn informs the Board members that work on the grate cover in the vestibule at the Coach House is almost complete and that there should not be any barriers when visitors come into the Coach House to purchase tickets for the tours.

4. CHAIRPERSON'S REPORT

None.

5. REPORTS

5.1 Management

C. Menard, Supervisor, Community Programming - Cultural Affairs & Willistead Manor Coordinator provides the following updates:

Facilities:

- The re-installation of the repaired window grate covers is ongoing. New capstones, where needed, have been ordered and will be installed next Spring. The Main Courtyard replacement is on track and work will likely begin in February. The stone colour for the courtyard has been chosen and the new flowerbeds have been ordered and are in the greenhouse.
- The vent covers in the Coach House are still to be installed and the cabinet lighting will be handled next.
- The new chandelier has been hung in the Conservatory. Next up is the large chandelier for the Walker bedroom, which will likely happen in January as it needs coordinating with the US inspection company and City Facilities. With Holiday tours beginning soon, it is not a good time to do that work.

Manor Closure:

- Willistead Manor will be closed from January to June 2024. There is a possibility that some stand-alone events, hosted with Thyme TO-GO will take place in the Manor, such as the Mother's Day Brunch, which was extremely successful. C. Menard will discuss the possibility of hosting such events with City Facilities and with Windsor Fire and Rescue Services.

Custodian RFP Update:

- The job posting for the position of Heritage Custodian and Maintenance Attendant (live in) closed on October 16th, 2023. Informal interviews have been conducted and candidates have been shortlisted. The hiring process will take place in December and the successful candidate will likely start in January 2024.

Culture & Events:

- **Poetry at the Manor – Vol. 11:** The event was a huge success, was standing room only and was a great time.
- **Holiday Tours:** Wednesdays, Dec 6, 13, 20 & 27; and Sundays, Dec 3, 10 & 17.
- **Breakfast with Santa:** Sundays, Dec 3, 10 & 17; one date is already sold out.

Documentary Updates:

- There are no new updates at this time. Suede Productions is still planning its own distribution/release and details are currently not available.

C. Menard informs the Board members that January 21, 2024 has been chosen as the date for the annual Mayor's Reception and indicates that formal invites will be sent at a later date.

The Board members are made aware of the Public Engagement Kick-Off Event for the Walkerville Heritage Conservation District Study, being held on November 20, 2023 at 6:30pm in the Saltmarche Gallery (News Release attached as Appendix A) and are encouraged to attend. C. Menard further informs that due to the closure of the Manor in January, Guide staff will be assisting the Planning Department with the study.

C. Menard provides the Board members with an overview of the priority projects that were identified during the walkthrough of the Manor with R. Gauthier and indicates that all projects must be prioritized and that the budget for each must be identified.

C. Menard confirms that the deposit has been paid to Artist Michele Van Maurik, for the portrait of Mary Walker.

5.2 Treasurer

D. Seguin, Deputy Treasurer – Financial Accounting, provides the current account balances as follows:

- Operating Account -- \$20,947.
- Savings Account -- \$32,791.

6. COMMITTEES

6.1 Fundraising

None.

6.2 Community Relations and Promotion

None.

6.3 Acquisitions

R. Gauthier indicates that that the Portrait of Mary Walker may be completed in January, in advance of the Mayor's Reception, however, it will not be put on display because an event will be planned to mark the unveiling of the portrait.

6.4 Friends of Willistead (FOW)

C. Pitman, provides the following updates:

- Since the October Board meeting, the Friends of Willistead welcomed two groups from Académie Ste. Cécile as well as a group from Walkerville that also toured the Coach House.
- They were contacted by King Edward Public School about bringing a group of students to tour the Manor, something that is tied into their curriculum. The students would be coming with their families, who live in the community, which will create a nice connection to the community. Because of the potential size of this group it may be planned as an Open House.
- Six members of the FOW received Ontario Volunteer Service Awards, five for 5 years of service and one for 15 years of service.
- Seven students from the St. Clair College Design Program as well as two students from the Architectural Program will be assisting with the Christmas decorating on Saturday, November 18th.
- A few of the FOW members will be on duty to help during the Breakfast with Santa events.

C. Menard indicates that he is able to support the FOW with some staff during the tour by the children of King Edward Public School and their families.

C. Pitman informs the Board members that the FOW would like to make a contribution towards the portrait of Mary Walker and may reallocate some of the funds that are normally allotted to the Endowment Fund. Currently, when conducting tours in the Manor, the members use a small picture of Mary that hangs in the bedroom to talk about her. The portrait will provide the members greater opportunity to discuss Mary Walker. This matter will be discussed at their upcoming meeting

6.5 Education

None.

6.6 Historical

None.

6.7 Event Planning

None.

7. NEW BUSINESS

The Board members discuss the annual fundraising letter.

Moved by J. Evans, seconded by D. Langstone,

That the Willistead Manor annual fundraising letter **BE PREPARED** to include an incentive consisting of a draw for a dinner for six at Willistead Manor to an upset limit of \$600.00, for donors of \$100 or more; and,

That the cost of the dinner for six **BE FUNDED** from the Willistead Manor Inc. Operating Account.

Carried.

Moved by J. Evans, seconded by MJ. Dettinger,

That the Board of Director, Willistead Manor Inc. **AUTHORIZE** any costs associated with the mailing of the annual fundraising letter; and,

That these costs **BE FUNDED** from the Willistead Manor Inc. Operating Account.

Carried.

Moved by C. Gaudette, seconded by A. Abu-Zahra,

That an expenditure in the amount of \$100 **BE APPROVED** for the purchase of a gift certificate for a restaurant, to be presented to B. Reid, to thank her for her continued support and assistance to the Willistead Manor Inc. Board of Directors; and,

That this expenditure **BE FUNDED** from the Willistead Manor Inc. Operating Account.

Carried.

8. DATE OF NEXT MEETING

The next meeting of the Board of Directors, Willistead Manor Inc. will be held Thursday February 8, 2024 at 4:30 o'clock pm.

9. ADJOURNMENT

There being no further business, the meeting is adjourned at 5:10 o'clock p.m.

CHAIRPERSON

EXECUTIVE SECRETARY



NEWS RELEASE

FOR IMMEDIATE RELEASE
November 3, 2023

City to Host Public Engagement Kick-Off Event for Walkerville Heritage Conservation District Study

The City of Windsor is pleased to launch a Heritage Conservation District (HCD) study project focused on Walkerville. Together with consultant M. R. Letourneau & Associates, we invite you to learn about the project and share your stories and vision for the area. What makes Walkerville a special place to you, and what do you believe to be its boundaries? What is the recognized history of Walkerville, and what are some lesser known stories?

The Walkerville HCD Study is intended to identify the unique heritage resources in Walkerville. It is a chance to celebrate and inventory the rich heritage of Walkerville. The kickoff event will present the basics of an HCD study and provide an opportunity for you to express how the heritage in Walkerville should be maintained.

Public Engagement Kick-Off Event:

Monday, November 20, 2023

Saltmarche Gallery, 2nd Floor, Willistead Manor
1899 Niagara Street, Windsor, Ontario
6:30 p.m. to 9 p.m.

Presentation begins at 7 p.m.

Meeting Agenda:

- Part 1: Welcome and Presentation
- Part 2: Question and Answer Period
- Part 3: Breakout Interactive Workshops

To learn more, [contact 311](#) or visit the [Walkerville Heritage Conservation District Study page at Let's Talk Windsor](#).

-30-

Media Contacts:

Kristina Tang
Planner III – Heritage
(519) 255-6543 ext. 6179
ktang@citywindsor.ca

Mary Rodgers
Corporate Marketing and Communications
Officer
Cell: (519) 562-2427

Marcus Létourneau M. R. Letourneau
and Associates Inc. Cell: (613) 331-
0988
marcus@mrletourneauassociates.ca



Committee Matters: SCM 12/2024

**Subject: Report No. 132 of the Windsor Accessibility Advisory Committee -
Accessible purchases from the Capital Fund for Huron Lodge**

REPORT NO. 132
of the
WINDSOR ACCESSIBILITY ADVISORY COMMITTEE (WAAC)
Meeting held December 5, 2023

Members present: Sally Bennett Olczak, Co-Chair
Peter Best, Co-Chair
Councillor Fred Francis
Surendra Bagga
Danica McPhee
Riccardo Pappini
Nicholas Petro

Moved by Surendra Bagga, seconded by Nicholas Petro,

That **APPROVAL BE GIVEN** to an expenditure in the upset amount of \$25,000 of invoiced costs from the Capital Fund 7086008 tied to the purchase of a Wheelchair Accessible Bike, Height adjustable tab, Accessible Picnic Tab, Genie Messaging Platform and Abby Engagement model for Huron Lodge.

Carried.

Riccardo Pappini discloses an interest and abstains from voting.

Peter Best voting nay.

Councillor Fred Francis was absent when the vote was taken on this matter.

Windsor Accessibility Advisory Committee	On file.	
Financial Planning Administrator		
Alina Sirbu, Executive Director Long Term Care, Huron Lodge		asirbu@citywindsor.ca



Committee Matters: SCM 13/2024

**Subject: Report No. 133 of the Windsor Accessibility Advisory Committee -
Accessible purchases from the Capital Fund for the Windsor Public Library**

REPORT NO. 133
of the
WINDSOR ACCESSIBILITY ADVISORY COMMITTEE (WAAC)
Meeting held December 5, 2023

Members present: Sally Bennett Olczak, Co-Chair
Peter Best, Co-Chair
Councillor Fred Francis
Surendra Bagga
Danica McPhee
Riccardo Pappini
Nicholas Petro

Moved by Nicholas Petro, seconded by Peter Best,

That **APPROVAL BE GIVEN** to an expenditure in the upset amount of \$15,000 of invoiced costs from the Capital Fund 7086008 for the Riverside Library Branch tied to the purchase of a LyriQ reader, Desktop Magnifier, two (2) Large print keyboards, Audio books, and accessibility software and programming for persons with disabilities.

Carried.

Councillor Fred Francis was absent when the vote was taken on this matter.

Windsor Accessibility Advisory Committee	On file.	
Financial Planning Administrator		
Michael Chantler, Chief Executive Officer, (A) Windsor Public Library		mchantler@citywindsor.ca

Subject: Response to CQ 12-2022 & CQ 22-2022 - Solar Lights on City Trails – City Wide

Reference:

Date to Council: February 7, 2024
Author: Samantha Magalas
EIC, Community Services
smagalas@citywindsor.ca
519-253-2300 x2370
Parks
Report Date: January 21, 2024
Clerk's File #: SR2024

To: Mayor and Members of City Council

Recommendation:

THAT the report titled Response to CQ 12-2022 & 22-2022 – Solar Lights on City Trails **BE RECEIVED** for information.

Executive Summary:

N/A

Background:

On July 25, 2022, Councillor Kieran McKenzie asked the following question:

“Asks that Administration report back on the impact and feasibility of adding solar lights to park trails across the City when trail remediation occurs and where appropriate, and further, to report back on the impact of adding solar lights to any new park trail system as a standard practice moving forward.”

On October 11, 2022, Councillor Morrison asked the following question:

“Asks that Administration develop a plan for Council’s consideration to install solar lights where feasible and appropriate on all existing parkland trails. The analysis should include full costing of a variety of phasing options as well as cost projections for the initial installation, full life cycle maintenance and replacement of the lights.”

This report is in response to those questions.

Discussion:

There are 175km of trails within the Parks system. Of those 175 km, 12 km are located along the central riverfront and therefore the style and type of lighting for those 12km would be governed by the Central Riverfront Master Plan (CRIP) as they would be required to meet the standards outlined in that document. The CRIP outlines that specific decorative light poles and fixtures are required. This results in a specific style of hard-wired decorative light pole and fixture that cannot be replaced with a current solar light. Based upon the requirement to install decorative hard-wired light poles and fixtures, and that the per unit cost is several times the cost of a solar light for the purpose of this report, those 12km of trails have been removed from the calculations below.

Administration estimates that if City Council wishes to add solar lighting to either new trail systems or as trail remediation occurs, approximately 30 lights would be required per kilometer to adequately light the trails. This number may vary slightly depending on the location of the trail and proximity to any obstructions (e.g. trees, buildings etc.) or other lighting sources (e.g. parking lots, street lights etc.) For example, if the tree canopy in a specific area of a trail is very dense, more lighting may be required to adequately light that area. Alternatively, dense tree canopy may not allow for the installation of solar lights. Further, trails that run along side an already lit roadway or parking lot may not require as many lights. As the solar lighting technology continues to improve, the capabilities may allow for more area to be covered per individual light therefore resulting in less lighting required over each kilometer of trail.

Assuming 30 lights per kilometer, it is estimated that approximately 4,890 solar lights are required to adequately light all existing Parks trails (175 km total – 12km (CRIP trails) = 163km x 30 lights/km = 4,890 lights). As of November 2023, there were 520 solar and 1,103 hardwired lights located on trails in City parks.

The current total number of lights is 1,623 meaning Administration would need to install (approximately) 3,267 additional solar lights to have all existing trails lit. Each solar light, including the fixture, pole and installation, costs approximately \$1,400 (based on 2023 prices). The approximate cost would be \$4.58 million plus applicable HST (3,267 lights x \$1,400/light = \$4,573,800).

In addition, over their anticipated twenty (20) year life, each fixture is expected to be replaced once at an estimated replacement cost of \$700 (based on 2023 prices) plus applicable HST. The estimated total operating cost for all 3,787 solar lights installed on the existing trail system would be \$2.65 million plus applicable HST.

Risk Analysis:

There is a significant financial risk identified, as there is currently no capital budget approved by Council to fund the installation of new solar lights along City trails. In addition, additional operating budget would need to be granted to maintain existing and future solar lights installations.

Climate Change Risks

Climate Change Mitigation:

Lighting including streetlights, traffic signals and park lighting make up less than one percent of the City's Corporate Greenhouse Gas (GHG) inventory. The addition of solar lighting to trails will not result in an increase in corporate GHG emissions. As park lights are replaced with solar installation, minor reductions in the Corporate energy and GHG inventory may be noted.

Climate Change Adaptation:

The City's climate change projections forecast an increase of more extreme weather events that may result in more electricity interruptions. The installation of solar lighting will allow for lighting during these interruptions.

Financial Matters:

The supply and installation of each solar light fixture and pole has an estimated capital cost of \$1,400 plus applicable HST per unit (based on 2023 prices). Assuming 30 lights per kilometer, the total capital cost for the initial supply and installation cost for all outstanding 3,267 solar lights on existing trails would be \$4,573,800, or \$42,000 per kilometer.

Over their anticipated twenty (20) year life, each solar fixture is expected to be replaced once at an estimated replacement cost of \$700 plus applicable HST. In 2023, Council granted a Parks Operations operating budget request for \$25,000 for the maintenance costs of existing solar lights, which represents \$500,000 over 20 years. Once all trails identified have solar lights installed, an additional operating budget of \$108,000 per year to maintain all 3,787 solar light fixtures over their anticipated 20-year life will be required. This assumes there is no replacement cost required for 1,103 hardwired lights currently installed during their lifespan.

Administration notes that the cost for solar lights is much less than hardwired lighting. Even taking into account the replacement of each solar fixture once over a twenty (20) year life span, the costs for installing hardwired lighting currently is anywhere from five to eight times the cost of solar. This range in cost differential is dependent upon the style of lights, where existing hydro services are and what wattage is available.

As directed, Administration has determined a few options that could be explored as part of future budget preparations, if directed to install lights on all city trail systems.

Option 1 - City Council could direct Administration to install lighting on 5kms of trails per year so that all existing trails are fully lit by 2046 at an annual capital cost of \$210,000 (plus applicable HST) plus maintenance operating budget. Any new trails that are

created would need to have adequate solar lighting worked into the proposed capital and operating budgets.

Option 2 – City Council could direct Administration to accelerate the timeline and install lighting on 10 kms of trail per year so that all trails are fully lit by 2035 at an annual capital cost of \$420,000 (plus applicable HST) plus maintenance operating budget. Any new trails that are created would need to have adequate solar lighting worked into the proposed capital and operating budgets.

Administration points out that the cost estimates presented in this report have not been adjusted for the impact of inflation in future years. Actual costs would need to be monitored and Council updated should cost escalations cause these estimates to no longer be relevant to decision-making over funding of the lighting infrastructure in the City's trail system.

The majority of the solar lighting installation to date has been funded by the Council ward fund initiative program as there is no capital budget funding for solar lighting supply and installation incorporated within the 10-year approved capital plan. It is recommended that, should Council wish to proceed, that direction be given as to which option should be actioned (Option 1 or Option 2) and further, the City Treasurer, in conjunction with the Executive Director, Parks and Facilities, be given instruction to identify funding in future capital budgets which may require reprioritizing projects that are planned and approved in principle.

Consultations:

Emilie Dunnigan – Manger, Financial Administration

Karina Richters - Supervisor Environmental Sustainability & Climate Change

Jamie Scott – Manager, Facilities Operations (A)

Dave Nicholls – Manager, Parks Operations (A)

Wadah Al-Yassir – Manager, Parks Development

Natasha Gabbana – Senior Manager of Asset Planning

Conclusion:

Should City Council wish to proceed with adding solar lighting to City trails, (either to new trails or during existing trail remediation), Administration recommends installing lighting on 5kms of trails per year for a total of 25kms over the next 5-year budget cycle. This course of action would allow all current and future (new) trails to be fully lit by the year 2046. Should Council wish to proceed with this, capital funding would need to be identified.

The installation of solar lights along the city's existing and future trails found within our parkland allows for the significantly increased usage of our parkland trails. Solar lights provide an added level of convenience, comfort and safety that increases the communities experience and allows for greater usage of our parks as a whole.

Planning Act Matters:

N/A

Approvals:

Name	Title
Samantha Magalas	EIC, Community Services
Erika Benson	Financial Planning Administrator
James Chacko	Executive Director, Parks & Facilities
Ray Mensour	Commissioner, Community Services
Janice Guthrie	Commissioner, Corporate Services/Chief Financial Officer
Joe Mancina	Chief Administrative Officer

Notifications:

Name	Address	Email

Appendices:



Council Report: S 10/2024

Subject: Response to CR 655/2020 – Invasive Plant Management Strategy - City Wide

Reference:

Date to Council: February 7, 2024
Author: Karen Alexander
City Natural and Outreach Coordinator
(519) 966 – 5852
kaalexander@citywindsor.ca

Parks
Report Date: January 21, 2024
Clerk's File #: SR2024

To: Mayor and Members of City Council

Recommendation:

THAT the report titled Response to CR 655/2020 Invasive Plant Management Strategy – City Wide **BE RECEIVED** for information.

Executive Summary:

N/A

Background:

On July 8, 2019, Councillor Gignac asked that “Administration prepare a maintenance plan for East Bank of Little River where resident delegations identified a noxious, invasive plant (weed) issue”.

Administration submitted report S 164/2020 in response to that question on December 21, 2020. At that meeting, Council directed through CR 655/2020:

“That Administration **BE REQUESTED** to report back to Council outlining the costs associated with undertaking an invasive species management strategy citywide.”

This report is in response to that direction.

The City is currently working towards managing invasive species by following the guidelines of various Master Plans and Projects that have been approved by Council including the City's Official Plan to protect healthy environments and communities.

Master Plans

The Environmental Master Plan outlines a coordinated approach to invasive species in parks, natural areas, and the public right-of-way by: 1) develop and implement a *Phragmites australis* (*Phragmites*) control program across City departments, 2) track and monitor the outcome of approaches used to control *Phragmites*, 3) continue to track and identify new invasive species to develop strategies to minimize their impact, 4) develop strategies for other invasive species in parks and natural areas.

The Rediscover our Parks Master Plan includes a number of indirect opportunities to incorporate invasive species awareness and prevention activities, including volunteer stewardship and the urban forest management plan.

The Climate Change Adaptation Plan addresses invasive species: Protect and enhance biodiversity and enhance ecosystem functions with the creation of an invasive species program by: 1) hiring an invasive species coordinator, 2) monitoring Windsor's natural areas for invasive species, 3) increase invasive and woody species control measures such as prescribed burns, cutting, and physical removal.

Council approved the Black Oak Heritage Park Management Plan which includes invasive species management strategies. This plan is being used on an on-going basis. For example, control implementation for the species Black Locust started shortly after the plan was approved, and with support from the Ministry of Environment Conservation and Parks (MECP), Species at Risk Stewardship Fund (SARSF), Natural Areas, Forestry, and Horticulture worked together to control a large stand of mature Black Locust trees to oak savannah as per the management strategy. In general, the Black Oak Heritage Park Management Plan recommends high-priority invasive species for management activities, provides advice for control implementation, and includes some native species as an "invasive threat" because they are causing impacts to the rare plant communities in that park (e.g., woody shrubs encroaching on a prairie). The City has also invested in preventative actions such as the Oak Wilt Strategy as reported to Council in report S131/2023, created in partnership with the Canadian Food Inspection Agency (CFIA).

Projects

Funding from Parks Canada through the Ojibway National Urban Park project, enabled the City to hire the Invasive Species Centre to prepare the Invasive Species Strategy for the Ojibway Prairie Complex (**Appendix A**), consisting of Black Oak Heritage Park, Tallgrass Prairie Heritage Park, Ojibway Park, Ojibway Prairie Provincial Nature Reserve, Spring Garden Natural Area and Oakwood Natural Area. This strategy identified 498 non-native and invasive species and sorted these species into one or more informative lists. There are 22 species that are regulated by the Canadian Food Inspection Agency (CFIA), the Ontario Invasive Species Act (ISA), and/or the Ontario Noxious Weed List. Using Legislation and the level of threat to the ecosystems in the Complex, 55 species were selected for management activities and 14 species were identified for containment since they are just arriving and eradication is likely if control is implemented quickly. The strategy also included a "Watch List" that identified the

invasive species in proximity to the Complex and are most likely to arrive next. Sorting invasive species and noxious weeds into lists for other natural areas is a logical approach for managing multiple species in one natural area, while attempting to prevent new species from arriving in the meantime.

The Ojibway National Urban Park project also allowed for the City to hire the Invasive Phragmites Control Centre to prepare the Invasive Phragmites Management Program for the City. Phragmites australis has invaded private and public land across the city (**Appendix B**). The consultant has come back with a report and program that suggests a reduction of 98% of the current infestation is achievable goal within the next 10 years if the program is properly structured and sufficiently funded. The implementation of the program by the consultant would require the City to hire a full-time position (Phragmites Coordinator). The program suggests that nine (9) components play an important role in guiding successful control for the City. The components are: 1) establish a City Working Group, 2) Delineate Phragmites Management Areas, 3) map Phragmites and create prioritization framework, 4) investigate opportunities for collective impact 5) control implementation and permits, 6) monitor and report, 7) training, education, and information dissemination, 8) prevention and policies, 9) funding.

Other examples of what the City is doing or has done are:

1. The City continues to control invasive species to fulfill the habitat compensation requirements under the Endangered Species Act (ESA) Permits for the Fire Hall 5 development, and invasive species management will begin in winter 2024 on several properties in the Little River Corridor as per the requirements of the ESA permit for the Nextstar development.
2. The City hired the Invasive Phragmites Control Centre to implement Phragmites control at Spring Garden Pond, Ojibway Park, and Blue Heron Ponds. In the Ojibway Prairie Complex, Guides have been manually removing scattered regrowth to ensure Phragmites does not re-establish.
3. The Parks Department also does a number of management actions for Noxious Weeds, including Wild Parsnip and Poison Ivy control select areas of parks across the city. Additional hazardous plant examples can be seen in **Appendix C**. Parks also does Phragmites australis control in some natural areas, and prescribed burns are integrated to improve successful management of nuisance native species and invasive species.

In addition, the Parks Department endeavours to staying up-to-date on Invasive Species in Ontario through information provided by the Invasive Species Centre (ISC). The City Naturalist participates in the annual forums and meetings hosted by the ISC and the Ontario Phragmites Working Group. Remaining current on invasive species is important to ensure staff are aware of any new threats to our parks and natural areas. For example, Tree-of-Heaven (**Appendix D**) is already found within City parks and has just been listed as restricted under the Invasive Species Act in Ontario, as of Jan. 1, 2024.

Discussion:

In order to implement a full city-wide invasive species management strategy, this would require not only completing individual park management plans, but completing an overarching strategy in terms of priority of response across the City. Working groups would be created and other departments would be consulted in order to get a full grasp on how these invasive species should be addressed. It is important to note that even with a comprehensive citywide strategy plan, it is not realistic to assume that 100% of the invasive species found within the City of Windsor could be eradicated.

The cost to implement a citywide plan is anticipated to cost multi millions of dollars and would take many years to complete. At the same time, new threats continuously appear and would require Administration to monitor and adapt the citywide plan. However, the initial citywide invasive species management plan is an overall strategy that will direct control implementation for what species are already here and recommend prevention activities to reduce the likelihood of new arrivals (e.g., Spotted Lanternfly, Kudzu, Japanese Stiltgrass, etc.).

Administrative Options:

1A – Status Quo

As noted in the background section of this report, Administration is already doing a number of things to work towards managing invasive species. If directed, these efforts can continue as part of the activities of the Parks Department staff. As per the Parks Master Plan, Administration is moving forward with creating park specific work plans. This is done when the current work load of the existing staff allows for the opportunity to move forward with this process. The process involves identifying invasive species and determining the course of action options with the associated costs. This will be a lengthy process and Administration estimates it could complete approximately 1-2 parks per year depending on the size and scale of the park. There are 205 parks within the City of Windsor park system. The ISC has completed a plan for the Ojibway Prairie Complex consisting of six (6) City of Windsor Parks. Administration has completed an additional two (2) park invasive species management plans leaving 197 parks still to be completed. The costs to continue developing plans with the status quo approach is currently funded within the existing Parks budget. This option will take more than 100 years to complete for all existing parks.

Option 1B – Add a Temporary Full-Time (TFT) Biodiversity Coordinator

The addition of a TFT Biodiversity Coordinator would allow for Administration to develop a formal comprehensive citywide strategy, that includes plans for all 205 parks and bring back a report to Council with recommendations and costs to implement the plan. This would occur in a much timelier process than continuing with the status quo process of developing park management/work plans using the existing staff resources. The costs would be approximately \$160,000 per year plus applicable HST. Full details are noted in the Financial Matters section of this report. It is estimated this option would take four (4) years to complete.

This option provides an additional benefit for Council to consider. If the City of Windsor were to be faced with an invasive species that poses a significant and immediate threat to the City, additional resources may be required to control and eradicate. This position could be utilized to help implement an immediate response.

Option 2 – Hire Consultant

A consultant could be hired to complete a citywide strategy. The product produced would be the same as option 1B (hire a TFT Bio-Diversity Coordinator). Administration estimates if a consultant was hired, it would take approximately three (3) years to complete the plan and would cost approximately \$800,000 based upon the recent work completed for the Ojibway Prairie Complex Invasive Species Management Plan. This option would cost more than option 1B, however it is anticipated that a citywide strategy could be available for Council direction in three years as opposed to four.

Risk Analysis:

There is a high risk with continuing status quo in the City's fight against invasive species and noxious weeds. Currently, we are not gaining on the problem and due to the spread of some species, (e.g., Phragmites, Tree-of-Heaven), other department budgets outside of Parks are increasingly affected (e.g., the frequency of road allowances and drain maintenance projects can increase). In some areas, the problem is actually getting worse across the City while Administration focuses on control in other areas. If something like Oak Wilt or Spotted Lantern Fly was discovered, Administration may need to return to Council with specific requests in order to address those concerns.

There is a significant financial risk with option 1B or 2 as noted in the financial section of this report. There is currently no funding available for either option. The initial cost is expected to be between \$640,000 (option 1B) and upwards of \$800,000 (option 2) for the study. Any report back to Council for approval to implement a citywide Invasive Species Management Plan would contain an overarching plan and recommendations with significant costs associated with undertaking it, which is expected to be in the multi millions of dollars.

There is a moderate health and safety risk associated with some noxious weeds located throughout the City. Should a member of the public or city staff come in contact with these weeds, the weeds could cause a reaction to skin or other exposed areas. Administration is working on management/work plans for each park, which will help to mitigate these issues, but at the current rate, the plans will take years to complete. The Parks Department when it becomes aware, works to identify and properly remove any noxious weeds as part of their ongoing operations which also helps to mitigate these risks.

Focusing on natural heritage parks is a priority for these plans as the City is responsible for any endangered habitat per the Ontario Endangered Species Act (ESA). The Parks Department will continue with the development of individual plans for all parks including natural heritage parks. There is significant timing risk that this process will take an extended period of time.

Climate Change Risks

Climate Change Mitigation:

N/A

Climate Change Adaptation:

The City of Windsor's Climate Change Adaptation Strategy identifies invasive species as a threat to biodiversity and ecosystem function. Windsor's climate projections predict an increase in favourable conditions for the spread of invasive species, potential loss of species at risk and environmental damages due to extreme weather. These as well as other factors and human stressors put these valuable resources in jeopardy. The City needs the services of natural areas to both mitigate and adapt to climate change. Protecting and enhancing these natural assets is vital to becoming a more resilient city to the affects of climate change.

Financial Matters:

Without fully knowing what invasive species occur in the City and where all of the invasive species are, it is hard to estimate a price to implement any citywide plan but it is likely the cost to carry out a full strategy would be in the multi millions. Price options for developing that strategy are noted below:

Option 1A – Status Quo

There would be no additional cost to remain status quo with the current process of addressing invasive species including noxious weeds. Parks will continue to create park-specific work plans and management plans for all parks located in the City of Windsor, implement control, and respond to public concerns about invasive species as well as noxious weeds at specific parks as budget and staff resources allow.

Option 1B – Add TFT Biodiversity Coordinator

If Council directs Administration to move forward with Option 1B, a TFT Biodiversity Coordinator would be hired to create a formal citywide strategy. This position would undertake a full citywide review of all invasive species to comprise an in-depth plan and strategy on how to mitigate the concerns. The cost for Option 1B would include the salary for a TFT Biodiversity Coordinator position which would be budgeted annually at \$80,000 including fringes plus there would be an additional \$80,000 annual cost to undertake the study. These additional costs include supplies, the use of a vehicle, specific software licences required for mapping and additional Natural Areas staff time to assist with the physical inventory of each area. The total annual cost for this option is approximately \$160,000 plus applicable HST. It is estimated this option would take four (4) years to complete once funding is available bringing the total cost of this option to approximately \$640,000 plus applicable HST.

Option 2 – Hire a Consultant for a Full City-Wide Strategy

If Council wishes to direct Administration to move forward with Option 2, an outside consultant would be hired. It is estimated based on the recent works undertaken within the Ojibway Prairie Complex that this project would cost upwards of \$800,000 and take 3 years to complete once funding is available. A Request for Tender process would be completed to award the contract to a consultant. The consultant would undertake a full citywide review of all invasive species to comprise an in-depth plan and strategy on how to mitigate the concerns.

There is currently no additional funding available in the Parks budget for costs related to Option 1B and Option 2. If directed by Council to move forward with either of these options, the City Treasurer, in consultation with the Executive Director, Parks and Facilities, would need to be given direction as to the preferred option in order to identify an appropriate funding source which would be brought forward for consideration during the 2025 budget process.

It is expected that if either Option 1B or Option 2 is directed by Council, a comprehensive report identifying control implementation plans for individual parks and an overarching citywide invasive species management strategy will be completed. The final report will include a full strategy with recommendations and costs to implement for Council's future consideration.

Consultations:

Roberta Harrison – Coordinator, Maintenance

Emilie Dunnigan - Manager, Development Revenue and Financial Administration

Karina Richters – Supervisor, Environmental Sustainability & Climate Change

Conclusion:

Without further direction, the Parks Department will continue its efforts to manage invasive species and noxious weeds across City owned property and will continue to develop individual park invasive species management plans as noted in Option 1A within the existing approved Parks budget.

Should Council direct Administration to move forward with Option 1B or Option 2 as noted in the Financial Matters section of this report, the City Treasurer would be directed to identify an appropriate funding source during the 2025 budget process.

Planning Act Matters:

N/A

Approvals:

Name	Title
Sam Magalas	Executive Initiatives Coordinator

Name	Title
Yemi Adeyeye	City Forester, Manager of Forestry and Natural Areas
Erika Benson	Financial Planning Administrator
James Chacko	Executive Director, Parks & Facilities
Ray Mensour	Commissioner, Community Services
Janice Guthrie	Commissioner, Corporate Services/Chief Financial Officer
Joe Mancina	Chief Administrative Officer

Notifications:

Name	Address	Email

Appendices:

- 1 Appendix A - Ojibway Prairie Complex Invasive Species Strategy
- 2 Appendix B - Phragmites
- 3 Appendix D - Tree of Heaven
- 4 Appendix C - Hazardous Plant Examples

Ojibway Prairie Complex **Invasive Species Strategy**



Invasive
Species
Centre

SUPPORT SERVICES

August 2022

This document was prepared for the City of Windsor by the [Invasive Species Centre](#).

Inquiries regarding this document can be directed to the:

Invasive Species Centre

1219 Queen St. E

Sault Ste. Marie, ON

P6A 2E5

P: (705) 541-5790 | Email support@invasivespeciescentre.ca

Recommended Citation

Invasive Species Centre (2022). "Ojibway Prairie Complex Invasive Species Strategy". Prepared for the City of Windsor, Parks Department - Natural Areas, pp. 1 - 48 +*appendices*.

Contents

Introduction	6
Invasive Species Management.....	8
Prevention.....	8
Management.....	9
Goals and Objectives.....	12
Using this Strategy	13
The Ojibway Prairie Complex.....	13
Prevention Policies.....	15
Management Policies.....	16
Invasive Species Management at the Ojibway Prairie Complex.....	16
Challenges and Needs.....	17
Collaborative Projects.....	18
Invasive Species Management on adjacent lands	19
Status Report on Invasive Species Management in the Complex	19
Invasive Species in the Ojibway Prairie Complex.....	21
The Occurrence List	21
Legislation	22
Threat References.....	22
Management.....	23
The Management List	23
The Containment List.....	25
The Watch List.....	26
The Watch List (Select Species).....	26
Improving Management of Invasive Species	27
Management Resources	27
Management Timing Windows.....	28
Partner Advice.....	31
Recommended actions for Management and Containment	33
Preventing Invasive Species	35
Watch List Resources	36
Watch List Timing Windows.....	36
Recommendations for Prevention.....	40

Summary of Recommendations.....	42
Beyond the Ojibway Prairie Complex	43
Recommendations for Beyond the Complex.....	46
Funding Invasive Species Action	46
Integration into City Operations.....	46
External funding sources.....	47
References	48
APPENDIX 1: Partner Interview Summaries.....	49
APPENDIX 2: Policy Review Summary.....	56

Table of Figures

<i>Figure Description</i>	<i>Page Number</i>
Figure 1. The Invasion Curve illustrates the rising costs of invasive species as they establish and spread over time and the economic impact that is potentially gained as the species is contained and eradicated. Prevention is the most cost-effective approach to invasive species management (Image via the Invasive Species Centre; Adapted from the Generalized Invasion Curve (Agriculture Victoria, 2010)	7
Figure 2. The Ojibway Prairie Complex contains five City-owned parks: Black Oak Heritage Park, Ojibway Park, Tallgrass Prairie Heritage Park, Spring Garden Natural Area, and Oakwood Natural Area. The Ojibway Prairie Provincial Nature Reserve is included in the Complex but is owned by Ontario Parks.	13
Figure 3. A visual list of the Strategies and Plans included showing how they relate to each other under the Official Plan. The blue lines indicate where the new Invasive Species Strategy will advance existing goals, objectives, and actions. Green arrows show where the new Strategy can advise the implementation of an existing Document. *The Phragmites Management Plan has been submitted to the City but has not been approved by City Council	43

Table of Tables

<i>Table Description</i>	<i>Page Number</i>
Table 1. City of Windsor activities on invasive species sorted into prevention and management categories along with an estimate of the percentage of resources that are directed to each category.	20
Table 2. The Management List: a short list of species that are considered higher priority to manage based on the level of threat each species poses to the prairie and savannah ecosystems in the Complex.	23
Table 3. The Containment List: a short list of species that are considered candidates for containment activities; high eradication potential.	26

Table 4. <i>The Watch List (Select Species): a short list of species that are higher priority to address with preventative actions.</i>	27
Table 5. Management timing windows for species on the management list. Recommendations are based on Best Management Practices or gardening resource. Resources are linked in the associated spreadsheet.	28
Table 6. The Windsor Watch List: when to look.	37
Table 7. The Windsor Watch List: where to look.	38
Table 8. The Windsor Watch List: what to look for.	38
Table 9. The Windsor Watch List: common pathways.	39
Table 10. Summarizes recommendations for the City of Windsor to improve prevention and management of invasive species.	42
Table 11. Provides a written list of what the Ojibway Prairie Complex Invasive Species Strategy can advance for the City of Windsor and what the new Strategy can advise within existing strategies and plans. *the <i>Phragmites</i> Management Plan has been submitted to the City but has not been approved by City Council.	44

- Introduction -

Invasive species are considered one of Canada's greatest threats to the survival of our native biodiversity. These species arrive, often accidentally, and establish in the absence of natural predators or controls. As a result, these species can kill, crowd out, and devastate native species and their ecosystems. Invasive species are plants, animals, insects, and pathogens that are introduced to an area and cause harm to the environment, economy, or society. Non-native species aren't automatically considered invasive species just because they come from a different area, they must also cause negative environmental, economic, or social impacts.

In Ontario, the establishment and spread of invasive species can result in economic losses to forestry, agriculture, fisheries, healthcare, tourism, and recreation. It is estimated that these impacts alone cost Ontario \$3.6 billion a year, and this does not account for the ecosystem services provided by healthy environments that are free of invasive species. Services such as air purification, flood mitigation, aesthetic value, and impact on real estate. This estimate also does not capture costs at the federal or provincial level, for example, the Great Lakes Fisheries Commission spends just under \$20 million per year to keep sea lamprey predation to a level that allows for sustainable fisheries within the Great Lakes. Also missing from this estimate are the costs for research and development.

Municipalities are on the front lines of invasive species management in Canada. Spending an estimated \$247.9 million annually on invasive species, respondents to a 2021 National Municipal Expenditures survey also reported that the available funds for managing invasive species are insufficient. Many expect the costs to manage invasive species to increase in the future by either under 25% or 25-50% (Vyn, Richard. 2021). Municipalities are spending on average ~\$220,000/year to prevent, detect, and manage invasive species. The costliest invasive species in Ontario is Emerald Ash Borer (EAB) with over \$22 million spent annually across Ontario's 444 municipalities (Vyn, Richard. 2019). Treatment and removal of EAB killed trees in Canadian urban areas over a 30-year period may reach up to \$2 billion. (McKenney *et al.*, 2012).

To reduce the long-term impacts of invasive species, more prevention investments are needed across all levels of government. Investing in prevention provides economic returns of up to 100 x higher than the management costs after a species has arrived and spread (Figure 1). Management costs increase and the likelihood of eradication decreases as time passes. At a certain point, populations become impossible to eradicate from an ecosystem and are either managed at a cost to the municipality, or they are left to spread across a landscape causing ever-increasing impacts and losses to the economy, society, and environment.

Prevention is generally considered the most cost-effective approach, however less than 20.4% of funds spent by Ontario municipalities are spent on prevention programs while an estimated 79.6% of municipal budgets available are spent on control and management (Vyn, Richard. 2019). This implies that there is an opportunity to consider ways to shift budgets toward prevention activities to protect a community from long-term management costs.

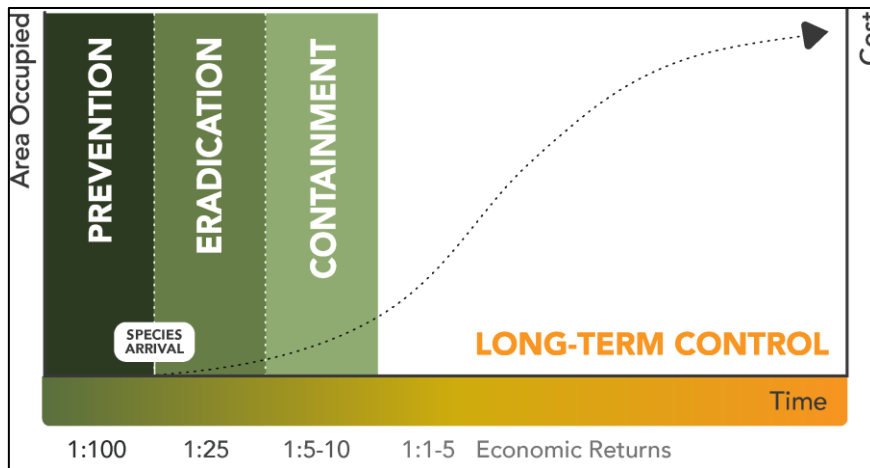


Figure 1. The Invasion Curve illustrates the rising costs of invasive species as they establish and spread over time and the economic impact that is potentially gained as the species is contained and eradicated. Prevention is the most cost-effective approach to invasive species management (Image via the [Invasive Species Centre](#); Adapted from the Generalized Invasion Curve ([Agriculture Victoria, 2010](#))).

The City of Windsor (“City”) is in many ways ahead of the curve when it comes to investment in invasive species management and prevention. The City is clearly motivated to improve management of invasive species, supporting many ecological and economic benefits into the future. [The Official Plan](#) describes the intent to protect healthy environments and communities. The [Environmental Master Plan](#) and the [Climate Change Adaptation Plan](#) both directly reference the need for more action on invasive species. The [Parks Master Plan](#) recommends park-level management plans that can guide the management of park-specific invasive species issues. For example, the [Black Oak Heritage Park Management Plan](#) recommends high-priority invasive species for management activities, provides advice for control implementation, and includes some native species as an “invasive threat” because they are causing impacts to the rare plant communities in that park (e.g., woody shrubs encroaching on a prairie). The City has also invested in preventative actions such as the Oak Wilt Strategy, created in partnership with the Canadian Food Inspection Agency (CFIA), and a long-term management strategy for *Phragmites australis*, which has invaded private and public land across the city (at time of publication the City of Windsor’s *Invasive Phragmites Management Plan* has been submitted but has not yet been approved by the City Council).

The extensive consideration of invasive species throughout the City’s policies and strategies deserves significant recognition, yet due to limited resources and complex management scenarios realizing these objectives can be difficult. Decisions about what species to control, what programs to implement to prevent new arrivals, and how to ensure resources are shared and used effectively across implicated City departments are all challenges that can be addressed with some strategic thinking and an initial pilot program. The Ojibway Prairie Complex (the “Complex”) offers the City an opportunity to forward existing policies and plans for natural heritage land in the city, while beginning toward a broader strategic approach to invasive species management.

The Invasive Species Centre (ISC) is a non-profit organization that offers expertise in invasive species management, policy, and education and awareness programs. The ISC presents the *Ojibway Prairie Complex Invasive Species Strategy*. The strategy is built around three lists of invasive species: the occurrence list, the containment list, and the watch list that have been created for the Ojibway Prairie Complex; and it synthesizes work done to date by the City and partners on invasive species in and around the Complex. Recommendations and resources to improve prevention and management of invasive species are included.

Invasive Species Management -----

The Invasion Curve (Figure 1) shows the most cost-effective opportunity to address invasive species includes prevention and early containment. Unfortunately, many species arrive undetected and spread rapidly causing significant harm to Canada's environment, economy, and society. Others arrive and establish but do not rapidly spread or cause significant or immediate harm; they are non-native species like Red Clover (*Trifolium pratense*), or Dames Rocket (*Hesperis matronalis*). Some non-native species such as dandelions or European starling (*Sturnus vulgaris*) will eventually naturalize. Finally, even native species can be considered by some to be invasive when they move to new locations and become a nuisance in certain ecosystems. Plus, climate change and human disturbance can cause an increase in invasive characteristics in native and non-native species. For example, trembling aspen is a native tree in Windsor, but it can reproduce rapidly and require management to protect native prairie and savannah ecosystems. Examples of native species becoming invasive are relatively rare, and typically involve local land management priorities.

Decisions about what species to manage can therefore become complicated quickly. Generally, a species is selected for management when it threatens the environment, society, and/or economy, but it is not common to embark on an invasive species strategy with a clean slate. It is more common that by the time a strategy is underway, there is already a short (or long) list of non-natives, nuisance natives, and invasive species that have established in the focus area and require management. Plus, it is very uncommon to have all the resources to remove every non-native or invasive species causing harm, so prioritizing where to place limited resources becomes a necessary step. Prioritization frameworks can be developed to help make management decisions, but they are time consuming to create and difficult to implement across a large city because priorities will change from one land use to another. When focusing on one geographic area, such as the Ojibway Prairie Complex, invasive species management can start by sorting invasive, non-native, and nuisance native species into prevention, containment and eradication, and long-term management lists. To be most effective, invasive species management should be combined with new or updated policies, strategies and implementation plans, and public education.

Prevention -----

Prevention is about intercepting pathways of spread and preventing a species from arriving in the first place. Pathways of spread are how invasive species move to new locations. Pathways may include the movement of whole species or viable parts of a species via humans, wildlife, all-types of vehicles, and commodities, both locally and through international trade routes and borders.

Pathways analyses can inform prevention work. They can be species specific or address an entire taxa such as invasive herbaceous plants or aquatic invasive species. Pathways can also be identified using

geographic areas, such as a natural area or a city park. A natural area can be more or less vulnerable to invasive species depending on the health and integrity of the ecosystems present, recreation and development pressure, and surrounding land use.

Prevention activities and programs tend to be increasingly effective when they focus on species specific pathways and include a clear call to action. Prevention can be about monitoring and detection, public education and awareness, and/or specific activities to reduce the likelihood of arrival.

Examples:

- [Clean-Drain-Dry campaign](#) is about reducing the spread of aquatic invasive species and the ISC is working with partners to install watercraft decontamination stations which include various tools to clean a boat. The boater pulls up to the station, uses the tools to clean their boat, and moves on to another lake.
- [‘Don’t Move Firewood’ campaign](#) is a prevention program that was created in response to emerald ash borer, mountain pine beetle, and Asian longhorned beetle and is effective at reducing the spread of other forest pests and insects that we have less knowledge about.
- Boot brush stations placed at trail heads can encourage trail users to brush their boots clean of plant materials and seeds before entering the trail. They can stand alone or be associated with interpretive signs.
- The City’s own *Oak Wilt Strategy* is about preventing oak wilt from arriving in Windsor and Canada. The Strategy ensures all City-owned oak trees in Windsor are monitored on an annual basis to look for signs and symptoms of the disease.
- The [Grow Me Instead Campaign](#) targets the horticultural industry with information for the consumer about what native species can replace commonly sold horticulture plants that can escape gardens and establish in parks and natural areas. The campaign aims to encourage consumers to choose native species for their landscaping and gardening projects.

Management -----

Eradication/Containment

If prevention is not successful, invasive species may successfully establish and begin to spread. There is a limited time for eradication efforts to occur and succeed; more often the task is about containment.

Containment is about catching the spread of an invasive species and containing it to one area.

Containment requires confidence that the extent of a new invasive species is fully known. Eradication of a contained species can take years, depending on how many reproducing individuals have established and whether the containment activities were successful.

So, eradication and containment of invasive species is about early detection and rapid response (EDRR).

EDRR programs need to be informed to be effective. What species are coming next? What species are just arriving and have not yet widely spread? What species will require rapid response and pre-arrival preparations for control. EDRR programs commonly focus on newly arriving invasive species from outside the management area, but some property management plans, or City-wide plans, may include species on the containment list when they are recently established, or slow spreading, and there is potential to eradicate them from the focus area. Decisions about rapid response investments are often guided by existing priorities, strategic plans, and property management plans as well as investments being made in adjacent jurisdictions. A land manager may sometimes be required to move quickly and

prepare for a new invasive species. A notable example is the emerald ash borer (EAB). EAB arrived in Detroit on wood packaging materials in the early 1990's, reaching Windsor, Ontario by 2002. When EAB arrived in North America, not much was known about these insects. The CFIA and local municipalities moved fast with attempts to contain its spread, but EAB proved too aggressive for any containment effort in Essex County. EAB continues to spread across Canada today.

Effective containment programs will include regular check-ins with a broader invasive species field of professionals to regularly update the watch list, and to keep land manager's alert. Regular updates to the public could increase the likelihood of detecting an incoming invader.

Containment and eradication programs are not common, but here are some examples:

- After ten years of control work aimed at eliminating the Asian longhorned beetle from Toronto and Vaughn, the Canadian Food Inspection Agency declared the pest eliminated in 2013. The program involved cutting and chipping infested trees and all potential host trees within 400 m of an infested tree, followed by surveys to determine if any beetles remained. After 5 years of no detection of beetles or infested trees, the pest was declared eradicated.
- The City of Windsor's list of species included in the Letter of Opinion application to the Ministry of Natural Resources and Forestry (MNRF) is an example of staying steps ahead of an infestation. The City included Japanese stiltgrass in the application, but Japanese stiltgrass has not been detected in the Complex. Including the species in the application means that if the species were to arrive, the City would already have permission to treat it with an herbicide. Alternatively, waiting until there is a confirmed occurrence could result in costly delays while the City plans for control.
- Another local example is from the Ministry of Transportation (MTO). The MTO applies containment principles to their stewardship programs for the Herb Gray Parkway in Windsor. Their staff are trained biologists with long-term knowledge of the properties they manage, and they use a list of species that are targeted for control implementation. These species constantly try to establish on the parcels managed by the MTO, and the field team will rapidly respond to new plants before they are able to establish and spread.

Long-term Management

If prevention, containment, and eradication activities are not used, or not successful, an invasive species may establish and spread beyond any possibility to contain and eradicate without a longer-term management strategy. Long-term management is about strategic control implementation. Any species targeted for long-term management without a strategic plan for how to control its extent and spread will often fail to achieve containment of the target species; control implementation strategies are essential for success.

Long-term management strategies will often be species specific and include mapping exercises to understand the pattern of infestation, control planning, hiring contractors for control implementation, and long-term monitoring. Some strategies may also include new policies, training and professional development, and extensive education and outreach programs to ensure the public is supportive and aware of control methods. The *City of Windsor's Phragmites Management Plan* is an example of how to address a well-established species in one city or area.

Long-term management programs will organically include research and development activities because learning and adapting is inevitable. Challenges will surface, new methods may arrive, and some species may develop resistance to tried and true methods. Ensuring control programs track methods and adapt to changing circumstances is also essential to long-term success.

Some examples of long-term management programs include:

- The County of Norfolk where the Long Point *Phragmites* Action Alliance is leading a watershed approach to *Phragmites* management. The Control Implementation Plan suggested a *Phrag*-free watershed within 8-years and incorporates control activities on private and public land.
- Lambton Shores *Phragmites* Community Group has been implementing a *Phragmites* Management Plan over the last 10 years. Their work has transformed the shoreline into a *Phragmites*-free zone. This program engaged municipal drain superintendents, road departments, and associated private land, to ensure *Phragmites* was entirely controlled in these areas. The program is shifting to long-term management activities to ensure *Phragmites* does not re-establish in the community.
- Long-term management strategies can also be multi-species in scope. The MTO has been managing invasive species along the Herb Gray Parkway in Windsor for over ten years. Their invasive species management program targets well over 20 species on an annual schedule. They use professional expertise to short-list the species they manage; mostly species that are a threat to the prairie and savannah ecosystems they have restored.
- The York Regional Forest Invasive Species Action Plan includes a detailed prioritization framework that helps City staff make decisions about when to manage an invasive species.
- The Nature Conservancy of Canada will implement invasive species management on their properties using Property Management Plans. The non-profit organization will start with occurrence maps and then track stewardship activities over time, remapping target invasives using appropriate intervals (e.g., 5 years). Property Management Plans will target aggressive invasive species that threaten the specific ecosystems that occur on the property. The City's *Black Oak Heritage Park Management Plan* includes similar logic.

- Goals and Objectives -

The Ojibway Prairie Complex Invasive Species Strategy has four goals and 12 objectives.

Goal 1: Increase the efficiency of invasive species management in the Ojibway Prairie Complex.

- Compile a comprehensive list of invasive species already in the Complex
- Identify invasive species that are high priority for long term management
- Identify invasive species in the Complex that are candidates for containment and eradication programs
- Provide resources that can support management and control of high-priority species and containment species
- Synthesize experiences and recommendations from nearby land managers to provide up-to-date advice on what methods work in prairie and savannah, wetlands, and woodland habitats
- Recommend actions, programs, and initiatives that the City of Windsor can implement to improve effectiveness and efficiencies of invasive species management in the Complex

Goal 2: Prevent new invasive species from arriving in the Ojibway Prairie Complex.

- Review current policies that are aimed at preventing invasive species
- Recommend policy, actions, programs, and initiatives that will prevent invasive species
- Create a Watch List of invasive species that are nearby, but not in the Ojibway Prairie Complex
- Provide resources that can support prevention activities

Goal 3: Incorporate the invasive species strategy into existing plans and strategies at the City of Windsor to prepare for broader, city-wide actions that will prevent new invasive species from reaching the Ojibway Prairie Complex

- Summarize existing city-wide policies and strategies that may contribute to the spread or introduction of invasive species in the Ojibway Prairie Complex

Goal 4: Increase public awareness about invasive species at the Ojibway Prairie Complex

- Recommend actions, programs, and initiatives the City of Windsor can implement to increase public awareness and support for invasive species management in the Ojibway Prairie Complex

- Using this Strategy -

The Ojibway Prairie Complex Invasive Species Strategy is presented as two interrelated pieces:

1. **The Ojibway Prairie Complex Invasive Species Strategy** is this document that describes the Strategy and includes 2 Appendices.
2. **The Ojibway Prairie Complex Invasive Species Lists and Resources** is an associated Excel Spreadsheet that contains various lists associated with the Strategy as well as resources and links to external information to help City staff find relevant information quickly. The written strategy will refer to the spreadsheet as required throughout the document.

- The Ojibway Prairie Complex -

The Ojibway Prairie Complex is a collection of six closely situated natural areas within the City of Windsor (Figure 2). The Department of Parks' Ojibway Nature Centre manages the five City-owned natural areas in the Complex:

- Ojibway Park
- Tallgrass Prairie Heritage Park
- Black Oak Heritage Park
- Spring Garden Natural Area
- Oakwood Natural Area

The adjacent Ojibway Prairie Provincial Nature Reserve is the sixth parcel in the Complex, but it is owned and managed by Ontario Parks. Together, these parks cover 260 hectares of land and include a mosaic of wetlands, forest, savanna, and prairie habitats. The diversity of habitat supports a tremendous variety of vegetation and wildlife species that live in the Complex.



Figure 2. The Ojibway Prairie Complex contains five City-owned parks: Black Oak Heritage Park, Ojibway Park, Tallgrass Prairie Heritage Park, Spring Garden Natural Area, and Oakwood Natural Area. The Ojibway Prairie Provincial Nature Reserve is included in the Complex but is owned by Ontario Parks.

The Ojibway Prairie Complex is designated as Natural Heritage Lands in the Official Plan and appears in Schedule B: Greenway System and Schedule C: Development Constraint Areas – Natural Heritage System.

- 5.3.2. Greenway System Policies are based on the belief that the quality-of-life within Windsor will be enhanced by the establishment of a linked and continuous network of “green” land uses. The Greenway System is a planned network of natural environment and recreational elements. This network includes the Ojibway Prairie Complex. Policies are focused on guidelines for designating greenway components, expanding the system in the City and beyond city boundaries, creating public access, recreation ways, and linkages between existing areas designated as natural heritage, waterway corridors, community and regional parks and waterfront recreation.
- 5.3.3 Natural Heritage Designations and Policies provide for the protection and conservation of Windsor’s most environmentally significant and sensitive natural areas, including provincially designated areas of natural and scientific interest (ANSI) and wetlands. Policies which establish the permitted uses, ancillary uses, evaluation criteria, protection and conservation of lands designated as Natural Heritage are further described in the Land Use Chapter of this plan.

The Land Use Chapter (Chapter 6) aims to ensure Windsor is a healthy and livable city, one in which people can enjoy a vibrant economy and a sustainable healthy environment in safe, caring, and diverse neighbourhoods. City Council will manage development through an approach which balances environmental, social, and economic considerations. The Goals and Objectives of Natural Heritage land use is to protect and conserve environmentally significant and sensitive natural heritage features and functions (6.8.1.1), provide opportunities for recreational uses within Natural Heritage areas (6.8.1.2) and to link to other components of the Greenway System (6.8.1.3).

Other relevant and current designations for the Ojibway Prairie Complex include:

- Ojibway Prairie Remnants Area of Natural and Scientific Interest (Province of Ontario)
- Environmentally Significant Areas (Essex Region Conservation Authority, (ERCA))
- Provincially Significant Wetlands (Province of Ontario)
- Important Amphibian and Reptile Area (Canadian Amphibian and Reptile Conservation Network)
- Western Lake Erie Watersheds Priority Natural Area Registry (City of Windsor, ERCA, US Fish and Wildlife, Detroit River International Wildlife Refuge)
- Carolinian Core Natural Area (Carolinian Canada)

The Ojibway Prairie Complex may become a National Urban Park in the near future. Parks Canada launched a new program to support the creation of national urban parks in August 2021, where Parks Canada and the City of Windsor signed a statement of collaboration indicating their intent to work together on a feasibility study. The project is currently in a pre-feasibility assessment phase, which is an exploratory phase of work and is the first step of a multi-step, multi-year roadmap that leads towards obtaining National Urban Park designation.

The Ojibway Prairie Complex is also a candidate Key Biodiversity Area (KBA) in Canada. KBAs are areas that have characteristics that make them important for sustaining wildlife and biodiversity. KBA designations hold international significance under the International Union for the Conservation of Nature (IUCN) Taskforce on Biodiversity and Protected Areas. Canada, and other countries across the

globe, have come together to create and implement a new system for identifying such areas across the planet. In Canada, Wildlife Conservation Society is the secretariat working with partners to identify KBAs across the country. There is an application in progress to designate the Ojibway Prairie Complex and Greater Park Ecosystem (private natural heritage land around the Complex) as a KBA.

Prevention Activities -----

The City of Windsor has six activities that relate to *preventing* invasive species:

1. The *Oak Wilt Strategy* is embedded in the annual work plan in the Parks Department. Staff receive a refresher course on how to identify signs and symptoms of the disease and the team uses the Tree Inventory for Natural Asset Management to monitor every oak tree in the city. If oak wilt is detected, the team would notify the Canadian Food Inspection Agency. At this time, there is limited direction on what response would ensue, and what role the City would play in containment and eradication activities. In the past, the City has also worked with the CFIA to set up beetle traps. This project did not occur in 2021.
2. The *Climate Change Adaptation Plan* Action 5: Protect Biodiversity and Enhance Ecosystem Functions includes 5.4: the creation of an Invasive Species Program; the following subtasks are related to prevention work:
 - Hire an invasive species coordinator for the City of Windsor
 - Monitor Windsor’s natural areas for invasive species such as *Phragmites*, oak wilt, the Asian longhorned beetle, etc.
 - Enhance targeted education to the public regarding BMPs for protecting private trees from invasive species.
3. The *Environmental Master Plan* Objective 5: develop a coordinated approach to invasive species in parks, natural areas, and the public right-of-way, includes one preventative action: continue to identify and track new invasive species and develop strategies to minimize their impact.
4. The *Rediscover our Parks Master Plan*, Action 2.02: encourage and facilitate support for volunteer efforts in park stewardship to incorporate invasive species education, *prevention*, and control activities.
5. By-law 135-2004 “*Trees on Highways*” is a by-law that restricts the planting of Poplar species, Willow species, Thorney Honey Locust or Manitoba Maple on City right-of-ways. Some low-growing trees may also not be acceptable from a safety point of view. By-law officers also enforce the Noxious Weed Act using by-law 3-2006, “a by-law to establish standards respecting yard waste & exterior property maintenance and to prohibit littering in the City of Windsor”. Also known as the Yard Maintenance and Anti-Littering by-law.
6. Tree Planting of Carolinian Species Policy (1994)

Management Activities -----

The City of Windsor has several relevant activities that support invasive species *management*:

1. The City's *Environmental Master Plan* includes Objective C5: Develop a coordinated approach to invasive species in parks, natural areas, and the public right-of-way, includes the following management actions:
 - a. Develop and implement a *Phragmites* control program across City departments
 - b. Track and monitor the outcome of approaches used to control *Phragmites*
 - c. Develop strategies for other invasive species in parks and natural areas
2. *Rediscover our Parks Master Plan* recommends the City protect and promote existing natural areas and connections and create management plans for parks. Also included is a recommendation to create protocols for succession control in managed natural and naturalized areas to deter the establishment of exotic and naturally aggressive invasive species for the purpose of preparing standards for the establishment of urban wildlife habitat.
3. The *Climate Change Adaptation Plan* Action 5: Protect Biodiversity and Enhance Ecosystem Functions includes 5.4: the creation of an Invasive Species Program; the following subtasks are related to management work:
 - a. Hire an invasive species coordinator for the City of Windsor
 - b. Monitor Windsor's natural areas for invasive species such as *Phragmites*, oak wilt, the Asian longhorned beetle, etc.
 - c. Increase invasive and woody species control measures such as prescribed burns, cutting, and physical removal
 - d. Enhance targeted education to the public regarding BMPs for protecting private trees from invasive species.
4. The City of Windsor's *Black Oak Heritage Park Management Plan* includes recommendations and specific control methods for ten high-priority invasive, or nuisance native, species in the park.
5. The City of Windsor has a *Phragmites Management Plan* that has yet to be approved by City Council.

Invasive Species Management at the Ojibway Prairie Complex -----

The City of Windsor's Parks department is responsible for management of parks in the city, including the Ojibway Prairie Complex. The department has Natural Areas staff that focus on management of parks designated as Natural Heritage. The parks department has been increasing invasive species management activities across the city, with a focus on species that threaten human health such as wild parsnip or have become a significant problem in the city (*Phragmites*). The Natural Areas staff work on invasive species management in the Complex, and they are currently focusing efforts on the implementation of existing plans such as the *Black Oak Heritage Park Management Plan* and working with the MTO on the implementation of the *Spring Garden Restoration Plan*. The Natural Areas staff also manage native species that threaten the integrity of the prairie and savannah ecosystems that naturally occur in the Windsor area (e.g., Manitoba Maple, Autumn Olive).

The Public Works and Engineering departments will also manage invasive species in and around the Ojibway Prairie Complex, but their work is motivated by protecting city infrastructure. All of their work

on invasive species in and around the Ojibway Prairie Complex is about *Phragmites australis* because this species will dominate road allowances and municipal drains, altering the flow of water, and triggering the Drainage Act. The City will navigate other legislation that often applies when clearing drains and road allowances in the Complex (e.g., Endangered Species Act.)

The Parks Department:

- Manages Wild Parsnip at Malden Park, and the riverfront by removing plant materials and then spraying with an herbicide (glyphosate) in the spring
- Manages poison ivy at parks across the city using public signs, removing plant materials, and then spraying with an herbicide (glyphosate)
- Manages *Phragmites australis* in the natural areas. City wide, the Parks operation department mows roadside ditches twice a year. Several pilot projects have been undertaken including control projects at Ojibway Prairie Complex and Little River. The hope is to increase public buy-in while trialing different control methods and gaining knowledge and experience.
- Undertakes prescribed burns to manage nuisance native species and invasive species encroaching on the native prairie and savannah ecosystems. The City continues to expand areas under prescribed burn treatments.
- Undertakes shrub control using manual cuts to promote open habitats. Stumps are treated with herbicide and plant materials are used to create brush piles for wildlife.
- Targets high-priority invasive species and nuisance native species as identified in the Black Oak Heritage Park Management Plan
- Applies for and obtains a 5-year Letter of Opinion under the Ontario Pesticide Act for selected Natural Heritage lands within the City, to treat specified herbaceous plants, woody shrubs, and nuisance native species with specified herbicides and control methods
- Works with the Friends of Ojibway Prairie and the Essex County Field Naturalists' Club to organize volunteer events that manually remove garlic mustard, dog-strangling vine, and Purple Loosestrife. Dog-strangling vine was contained rapidly after it was detected in two locations in the Complex. One location was associated with a nearby garden, and another was along a biking path.

The Engineering and Public Works department:

- Manages *Phragmites australis* in drains and municipal road allowances

The Planning Department will also be involved in invasive species management activities across the city, particularly prevention work, but their perspectives and current activities were not included in this strategy. For example, the City's *Phragmites Management Plan* (submitted to the City, but not yet approved by Council), encourages programs that promote the quick reestablishment of ground cover following projects that disturb sediment such as road work and culvert replacements.

Challenges and Needs -----

Each City department is experiencing different challenges associated with invasive species including:

- The City's 311 line receives numerous calls about poisonous plants that are challenging to respond to all the time. By-law sometimes receives calls to identify plants in yards that are not well maintained.

- Inconsistent signage for invasive species management activities, particularly species that cause human health risks.
- Misidentification of invasive species.
- Lack of clarity on what control methods to use for specific species that may arrive, or are already here, and need to be managed (e.g., giant hogweed, wild parsnip).
- Areas along on the waterfront are overwhelmed with black locust; choosing what control methods to use for this situation is a challenge.
- The public can still buy and plant many of the species that become invasive and costly to manage. More public awareness and engagement is required.
- The Oak Wilt strategy does not include clear directions for how the City of Windsor would be expected to respond should oak wilt arrive in the city. What would the City's role be in the short-term and long-term?
- Maintenance of all the drains in and around the Complex uses an 8-year cycle unless there is a problem with the flow of water. There is no control program for *Phragmites*, so the Public Works and Engineering Departments repeatedly cut and remove biomass, just to return to the same problem. Some learning and a shift in how things are being done is happening under leadership of the Invasive *Phragmites* Control Centre.
- Documentation required to do work in the drains in the Ojibway Prairie Complex can be extensive. These drains may have Species at Risk, and this requires documentation to be submitted to the Ministry of Environment, Conservation and Parks, Essex Region Conservation Authority, the Ministry of Northern Development, Mines, Natural Resources, and Forestry, and if the drain also supports fish habitat, the Department of Fisheries and Oceans. A template for a mitigation plan for municipal drain maintenance could help to navigate the environmental protections.
- City staff working on drains, road allowances and other public lands in and around the Complex may not be confident in identifying invasive species.
- Drains cut through various parcels in the Complex and not all of them are owned and managed by the City of Windsor. Some municipal drains are abandoned in the Complex but have not been through the regulatory process to recommission them; these are prime candidates for retirement. It would be beneficial for the City to go through the process of cleaning up the maps, maintenance schedules, and decommission certain drains to make them natural drains. The budget is limiting how fast this work can get done.

Collaborative Projects -----

The City of Windsor works with partners to implement invasive species management activities inside the Complex. The City has done work with Ministry of Transportation, Ontario Hydro, Ontario Parks, the Friends of Ojibway Prairie (FOOP) and the Essex County Field Naturalists' Club (ECFNC).

The City works with Ministry of Transportation and Ontario Parks to coordinate prescribed burns across the Complex. Some reported challenges from Ontario Parks include:

- High complexity prescribed burns would be very helpful to push back a lot of the woody veg and invasives. Not possible/unlikely to occur now because of infrastructure in the park.
- Management of the tree species is very labour-intensive.
- Special approval is required from Hydro One to treat *Phragmites* under the powerlines.

The City has, hosted volunteer events with the Friends of Ojibway Prairie and Essex County Field Naturalists' Club to manually remove garlic mustard, purple loosestrife, and dog-strangling vine from specific areas in the Complex. Manual control of these invasive species must be done annually to stop seed production

Hydro One could not be reached during the development of this strategy, but invasive species management does occur in specific locations in the corridor. Hydro One regularly implements woody species control in the hydro corridor. Some success is visible in the Ojibway Prairie Provincial Nature Reserve where Ontario Parks is working with partners, including Hydro One, to control *Phragmites* for species at risk (SAR) in the Complex, however long-term success is limited by the broader infestation in the hydro easement, private properties, and throughout the Complex.

Invasive Species Management on adjacent lands -----

The Ojibway Prairie Complex is surrounded by a variety of land uses, including other natural areas that are managed by different organizations. The Ontario Ministry of Transportation manages the prairie and oak savannah habitat associated with the Herb Gray Parkway and the associated 74 ha of prairie and savannah habitats that were restored during the construction of the highway system. Ontario Parks, Southwest Zone manages the Ojibway Prairie Provincial Nature Reserve for the Province of Ontario.

To gather information about invasive species management occurring near the Complex, the ISC conducted interviews with these partners. Detailed summaries are available in Appendix 1 and the species managed are included in the associated Excel Spreadsheet.

The Ministry of Transportation and the Essex Region Conservation Authority met with ISC to discuss invasive species management. Staff from both organizations indicated that management of invasive species along the Herb Gray Parkway is going okay, but it is an ongoing program because invasive species are still present on the landscape. Plus, invasive species continue to arrive and require annual management activities. Other challenges reported include:

- Adjacent lands that are privately owned can contain sources of invasive species with no one implementing any kind of control.
- Other sources of invasive species may include unpermitted horseback riding and ATV's, off-leash dogs, brush piles, trail grooming for off-road biking, compost, and organic waste disposal. Yard waste may introduce plant materials from gardens.
- Restoration sites and the Ojibway Prairie Complex are home to many SAR, which require considerations while control planning. Hiring staff and contractors that understand the importance of protecting SAR has made a significant difference.

Status Report on Invasive Species Management in the Complex -----

Comparing current invasive species management activities with the prevention, containment, and long-term management approach presented in this strategy can be helpful to understand where the City could improve (Table 1). Table 1 displays reasonable estimates for current investments of time and resources into prevention, containment/eradication, and long-term management categories. Most municipalities report less than 40% of resources going to prevention, and about 60% going toward long-

term management. Currently, the City invests approximately 60% of resources into management activities in the Complex, while prevention activities account for about 40% of resources. Several of the activities recommended in the *Climate Change Adaptation Plan* are occurring at the Ojibway Prairie Complex; the City completes natural area inspections once a week by walking the trails, and inspects off-trail areas once a year, looking for new species and/or evidence of increasing spread of existing invasive species. The City will also monitor for new arrivals when special projects provide opportunities to visit off-trail areas in the park (e.g. Tway blade orchid project).

The City can improve invasive species management in the Ojibway Prairie Complex by investing in prevention and containment activities, while considering how to make the most impactful investments into long-term management.

Table 1. City of Windsor activities on invasive species sorted into prevention and management categories along with an estimate of the percentage of resources that are directed to each category.

Prevention	Management	
	Containment/Eradication	Long-term Management
<ul style="list-style-type: none"> • Oak Wilt Strategy • Specific actions within the Climate Change Adaptation Plan, Rediscover our Parks Master Plan, and the Environmental Master Plan • By-law 135-2004 “Trees on Highways” & By-law 3-2006 “Yard Maintenance and Anti-litter” • Carolinian Tree Planting Policy (1994) • Natural area trail inspections are done weekly; off trail inspections are done annually and as special projects permit 	<ul style="list-style-type: none"> • Dog-strangling vine (DSV) control and management 	<ul style="list-style-type: none"> • 5-year Letter of Opinion • 8-year maintenance cycles for drains in the Complex • Black Oak Heritage Park Management Plan • <i>Phragmites</i> Management • Collaboration on garlic mustard, purple loosestrife • Species specific management activities (wild parsnip, black locust, etc.) • Volunteer events and public education • Prescribed Burns • Invasive Species Strategy
40%	60%	

- Invasive Species in the Ojibway Prairie Complex -

Decisions about what prevention, containment, and long-term management activities are best to protect the Complex from the impacts of invasive species should be informed by the invasive species that already in the Complex, plus the invasive species that are nearby enough to warrant preventative actions.

To provide the City with some species-specific guidance for the Ojibway Prairie Complex, the ISC created several lists of invasive species. Each List is presented on a Tab in the associated Excel spreadsheet titled: *Ojibway Prairie Complex Species Lists and Resources*.

- **Occurrence List:** a comprehensive list of all invasive species known to occur in the Complex
- **Containment List:** a short list of species that are considered candidates for containment activities; high eradication potential
- **Management List:** a short list of species that are considered higher priority to manage based on the level of threat each species poses to the prairie and savannah ecosystems in the Complex
- **Watch List:** a list of invasive species nearby the Complex that are not yet recorded inside the Complex
- **Watch List (select species):** a short list of species that are higher priority to address with preventative actions

The Occurrence List -----

See: The Ojibway Prairie Complex Invasive Species Lists and Resources

Tab: Occurrence List

To find out what invasive species are already in the Complex, the ISC used the Early Detection and Distribution Mapping System (EDDMapS) and a well-known and respected citizen science database known as iNaturalist, plus a list of known species from staff at the City of Windsor's Parks (Natural Areas) Department.

The EDDMapS query function was used to focus results to reports located inside the Ojibway Prairie Complex. The iNaturalist Ojibway Biodiversity Project was used to gather research grade invasive species reports. Also included as evidence of occurrence in the Complex was the high-priority species for control and management that were listed in the Black Oak Heritage Park Management Plan, plus the species included in the City of Windsor's Letter of Opinion (Japanese stiltgrass was removed from the occurrence list and placed on the Watch List).

The Occurrence List is a comprehensive list of invasive species currently known to occur in the Complex. There are 498 species on the occurrence list. Four species in the list are actually native species that are managed by either the City, the MTO, or both because they can quickly invade a prairie and savannah ecosystem; they are mark with a single asterisk* and include: Trembling Aspen (*Populus tremuloides*), Manitoba Maple (*Acer negundo*), Annual Ragweed (*Ambrosia artemisiifolia*), and Giant Ragweed (*Ambrosia trifida*).

Legislation -----

22 invasive species in the Ojibway Prairie Complex are regulated under one or more of the following three resources, and should be prioritized for control and management:

- [Canadian Food Inspection Agency](#) (7 species)
 - The Canadian Food Inspection Agency (CFIA) prevents the introduction of invasive species through import regulations. The CFIA is concerned about a list of species that may cause serious damage to Canada's economy and the environment when they invade farmland, forests, parks and other natural areas.
- [Ontario Invasive Species Act](#) (4 species)
 - The Ontario Invasive Species Act, 2015, S.O. 2015, c.22 – Bill 37 includes 22 regulated invasive species. Species are chosen for regulation based on their invasive qualities and their potential impact on the environment, the economy, and society well-being.
- [Ontario Noxious Weed List](#) (13 species)
 - The Ontario Weed Control Act, R.S.O. 1990 contains a list of plants that includes difficult to manage species on agricultural land once established and will reduce yield and quality of the crop being grown, negatively affects the health and well-being of livestock, or poses a risk to the health and well-being of agricultural workers.

Threat References -----

117 invasive species appear on one or more of the following six resources that were used to identify any species reported in the Ojibway Prairie Complex that have already been listed as a threat to the environment, economy, or society. Threat References can be used as a guide for prioritizing management resources. Unfortunately, no list is available that identifies invasive species that threaten prairie and savannah ecosystems.

- Great Lakes Governors Least Wanted List (1 species)
 - The least wanted aquatic invasive species that present an imminent threat to the Great Lakes-St. Lawrence River region.
- NDMNRF Forest Health Conditions Report (2 species)
 - Forest health monitoring in Ontario includes the occurrence of biotic and abiotic disturbances and events, and an invasive species pest index.
- Urban Forest Associates Inc. Category 1 species (22 species)
 - Aggressive invasive exotic terrestrial plant species that can dominate a site to exclude all other species and remain dominant on the site indefinitely.
- Credit Valley Aquatic Plant List (8 species)
 - A full list of aquatic invasive species in the watershed categorized by ecological threat rank and a management rank (how successful would management actions be?).
- Credit Valley Forest Pest and Diseases List (3 species)
 - A full list of forest pest and diseases in the watershed categorized by ecological threat rank and management rank (how successful would management actions be?).
- York Regional Forest Invasive Species Threat Rank (38 species)

- A list of species of concern for the Region of York developed based on staff experience and other threats in nearby regions.
- Provincial Weed ID for Field Crops (71 species)
 - For people who work in agriculture and are hoping to minimize the impact that weeds have on their crops. The book presents a list of species that are commonly found in agricultural areas or that are common in Ontario and may pose a risk to human health.

Management -----

50 invasive species are identified under the Management heading. Five organizations are included under this heading, the City of Windsor (WIN), Ministry of Transportation/Essex Region Conservation Authority (MTO), Ontario Parks (ON Parks), Friends of Ojibway Prairie, and Essex County Field Naturalists’ Club (FOOP/ECN). Species are marked under one or more of these organizations to indicate that they are already being managed or being considered for management.

The Management List -----

See: The Ojibway Prairie Complex Invasive Species Lists and Resources

Tab: Management List

The Management List is the short-list of invasive species that are priority to control in the Complex because they are considered a significant threat to the prairie and savannah ecosystems the City is managing. The Management List includes 55 invasive species.

The Management List was created by prioritizing all the species identified under the Windsor Management column, plus an additional 12 hand-selected species that occur in the Complex and are a high threat to the ecosystems in the Ojibway Prairie Complex.

Three of the species are native species that are considered a threat to the prairie and savannah ecosystems in the Complex (marked with a single asterisk*). Another 14 of the 55 invasive species are candidates for containment if the City acts quickly to control them (marked with a double asterisk**). The Containment List is also presented as its own list on another Tab.

Table 2. *The Management List: a short list of species that are considered higher priority to manage based on the level of threat each species poses to the prairie and savannah ecosystems in the Complex.*

Taxon	Scientific Name	Common Name *native species **containment species
Plantae	<i>Acer negundo</i>	Manitoba maple*
Plantae	<i>Acer plantanoides</i>	Norway maple
Plantae	<i>Ailanthus altissima</i>	Tree-of-heaven
Plantae	<i>Alliaria petiolata</i>	Garlic mustard
Plantae	<i>Ambrosia trifida</i>	Giant ragweed*
Plantae	<i>Armoracia rusticana</i>	Horseradish**
Plantae	<i>Berberis thunbergii</i>	Japanese barberry

Taxon	Scientific Name	Common Name *native species **containment species
Plantae	<i>Berberis vulgaris</i>	European barberry
Plantae	<i>Butomus umbellatus</i>	Flowering rush**
Plantae	<i>Celastrus orbiculatus</i>	Oriental bittersweet
Plantae	<i>Centaurea stoebe</i>	Spotted knapweed**
Plantae	<i>Cirsium arvense</i>	Canada thistle
Plantae	<i>Cirsium vulgare</i>	Bull thistle
Plantae	<i>Concallaria majalis</i>	Lily of the valley**
Insecta	<i>Cydia pomonella</i>	Codling moth
Plantae	<i>Cynanchum rossium</i>	Dog strangling vine**
Plantae	<i>Dipsacus fullonum</i>	Common teasel
Plantae	<i>Elaeagnus angustifolia</i>	Russian olive
Plantae	<i>Elaeagnus umbellata</i>	Autumn olive
Plantae	<i>Euonymus europaeus</i>	Spindle tree
Plantae	<i>Euphorbia cyparissias</i>	Cypress spurge
Plantae	<i>Galium mollugo</i>	Hedge bedstraw
Plantae	<i>Hesperis matronalis</i>	Dames rocket**
Plantae	<i>Hydrocharis morsus-ranae</i>	European frog-bit
Plantae	<i>Iris pseudacorus</i>	Yellow flag iris**
Plantae	<i>Lonicera japonica</i>	Japanese honeysuckle
Plantae	<i>Lonicera maackii</i>	Amur honeysuckle
Plantae	<i>Lonicera morrowii</i>	Morrow's honeysuckle
Plantae	<i>Lonicera tatarica</i>	Tartarian honeysuckle
Plantae	<i>Lonicera x bella</i>	Bell's honeysuckle
Plantae	<i>Lythrum salicaria</i>	Purple loosestrife
Plantae	<i>Melilotus alba</i>	White sweet clover
Plantae	<i>Miscanthus sacchariflorus</i>	Japanese silver grass**
Plantae	<i>Morus alba</i>	White mulberry
Plantae	<i>Narcissus pseudonarcissus</i>	Daffodil**
Plantae	<i>Pastinaca sativa</i>	Wild parsnip
Plantae	<i>Phalaris arundinacea</i>	Canary reed grass
Plantae	<i>Phragmites australis</i>	Common reed
Plantae	<i>Phyllostachys aureosulcata</i>	Yellow groove bamboo**
Insecta	<i>Popillia japonica</i>	Japanese beetle
Plantae	<i>Populus alba</i>	White poplar**
Plantae	<i>Populus tremuloides</i>	Trembling aspen*

Taxon	Scientific Name	Common Name *native species **containment species
Plantae	<i>Reynoutria japonica</i>	Japanese knotweed**
Plantae	<i>Rhamnus cathartica</i>	Common buckthorn**
Plantae	<i>Rhamnus frangula</i>	Glossy buckthorn**
Plantae	<i>Robinia pseudo-acacia</i>	Black locust
Plantae	<i>Rosa multiflora</i>	Rambler rose (Multiflora rose)
Plantae	<i>Securigera varia</i>	Crown vetch
Plantae	<i>Sonchus arvensis</i>	Perennial sow thistle
Plantae	<i>Tussilago farfara</i>	Coltsfoot
Plantae	<i>Ulmus pumila</i>	Siberian elm
Plantae	<i>Viburnum opulus</i>	Guelder rose
Plantae	<i>Vicia cracca</i>	Tufted vetch
Plantae	<i>Vicia villosa</i>	Hairy vetch
Plantae	<i>Vinca minor</i>	Periwinkle

The Containment List -----

See: The Ojibway Prairie Complex Invasive Species Lists and Resources

Tab: Containment List

The Containment List is a tab that short-lists species already identified in the Management List and are ideal candidates for containment activities (marked with a double asterisk** in the Management List). Containment activities would still be guided by the same available resources as presented in the Management List, but with an added sense of urgency as there is still time to contain and eradicate these species from the Complex.

There are 14 containment species on the list. Nine of these species are either regulated, ranked on one or more of the threat references, or already being managed by adjacent land managers. Lily of the Valley is not an aggressive invader, but it is commonly planted in gardens and used in residential landscaping. The Complex is nearly surrounded by private residential land, but Lily of the Valley occurs in the Complex in just a few locations, and it is easy to control. For truly little investment, the City could eradicate Lily of the Valley from the Complex.

Five of the 14 containment species are regulated species in Canada and/or Ontario. Flowering rush, Common buckthorn, and Glossy buckthorn are Category 1 species according to the Urban Forest and Associates report. Three of the containment species are either being managed already, or eminently, by the MTO on adjacent lands: Flowering rush, Yellow flag iris, and Common buckthorn. Dog-strangling vine has been hand-pulled by City staff and volunteers representing the FOOP and/or ECFN.

Table 3. The Containment List: a short list of species that are considered candidates for containment activities; high eradication potential.

Taxon	Scientific Name	Common Name
Plantae	<i>Armoracia rusticana</i>	Horseradish
Plantae	<i>Butomus umbellatus</i>	Flowering rush
Plantae	<i>Centaurea stoebe</i>	Spotted knapweed
Plantae	<i>Concallaria majalis</i>	Lily of the valley
Plantae	<i>Cynanchum rossium</i>	Dog-strangling vine (European swallow-wort)
Plantae	<i>Hesperis matronalis</i>	Dames rocket
Plantae	<i>Iris pseudacorus</i>	Yellow flag iris
Plantae	<i>Miscanthus spp.</i>	Japanese silver grass
Plantae	<i>Narcissus pseudonarcissus</i>	Daffodil
Plantae	<i>Phyllostachys aureosulcata</i>	Yellow groove bamboo
Plantae	<i>Populus alba</i>	White poplar
Plantae	<i>Reynoutria japonica</i>	Japanese knotweed
Plantae	<i>Rhamnus cathartica</i>	Common buckthorn
Plantae	<i>Rhamnus frangula</i>	Glossy buckthorn

The Watch List -----

See: The Ojibway Prairie Complex Invasive Species Lists and Resources

Tab: Watch List

The Ojibway Prairie Complex Invasive Species Watch List is a list of aggressive invasive species that are close enough to the Complex, and aggressive enough to warrant concern and investment in preventative programs and activities.

The Watch List was created using a search in EDDMaPs and iNaturalist looking for invasive species reports in Windsor, Essex County, Ontario, Michigan, and Ohio. The resulting list of invasive species was compared to the occurrence list. If a species appeared on both lists, it is already in the Complex. If it was not yet reported in the Complex, it was left on the Watch List. The entire Watch List is presented in the Associated Excel Spreadsheet on a Tab labelled: Watch List.

There are 71 invasive species on the Windsor Watch List.

The Watch List (Select Species) -----

See: The Ojibway Prairie Complex Invasive Species Lists and Resources

Tab: Watch List (Select species)

To reduce the Watch List to a short-list of high-priority species for prevention activities, the ISC used the same Legislation and Threat References used to sort the Occurrence List, as well as professional advice and expertise, to identify 11 invasive species (Table 4). The Canadian Food Inspection Agency regulates

five of these species, including Kudzu, which also appears on the Ontario Noxious Weeds Act. Three species are regulated under the Ontario Invasive Species Act, and another three species appear on the Ontario Noxious Weed Act. The remaining three species were selected as Watch List species because of proximity, and level of threat to ecosystems and recreation in the park.

Table 4. *The Watch List (Select Species): a short list of species that are higher priority to address with preventative actions.*

Taxon	Scientific Name	Common Name	Proximity to Windsor
Fungus	<i>Ceratocystis fagacearum</i>	Oak wilt	Belle Isle, MI
Insecta	<i>Lycorma delicatula</i>	Spotted lanternfly	Wyandotte, MI
Plantae	<i>Heracleum mantegazzianum</i>	Giant hogweed	Wheatley, ON
Plantae	<i>Pueraria montana</i>	Kudzu	Kingsville/Leamington, ON
Insecta	<i>Myrmica rubra</i>	European fire ants	Hamilton, ON
Plantae	<i>Crupina vulgaris</i>	Common crupina	near Columbus, OH
Plantae	<i>Reynoutria sachalinensis</i>	Giant knotweed	Ridgetown ON
Plantae	<i>Arundo donax</i>	Giant reed	Cleveland OH
Plantae	<i>Microstegium vimineum</i>	Japanese stiltgrass	Ann Arbor MI/ near Glencoe ON
Plantae	<i>Myriophyllum spicatum</i>	Eurasian watermilfoil	LaSalle ON
Mollusca	<i>Monacha cartusiana</i>	Carthusian snail	Windsor, ON

- Improving Management of Invasive Species -

To improve the management of invasive species across the Ojibway Prairie Complex, this strategy focuses attention on candidate species for containment activities, and a list of species that should be incorporated into longer term management programs. The strategy does not provide specific control implementation plans for target invasive species, but it does provide some high-level advice on when to implement common control methods along with links to resources and information to help the City access information quickly. Preventing invasive species is also a priority that is covered in the next section.

Management Resources -----

See: The Ojibway Prairie Complex Invasive Species Lists and Resources

Tab: Management Resources

The Management Resources tab provides helpful resources that are meant to support action towards control and management of these high-priority invasive species. Links to Ontario Best Management Practices are provided, along with links to other beneficial resources in Ontario or from other jurisdictions.

Ontario Best Management Practices (BMPs) guide control implementation of specific invasive species. They can be helpful because they include all the possible control methods that are permitted, and/or have been tried by Ontario land managers. Not all invasive species have associated Ontario BMPs; other jurisdictions may have high quality resources that can help, so they have been included in the Resources Tab. While utilizing resources from other jurisdictions, it is important to remember that there will likely be differences in legislation and regulations between Canada and other countries.

Management Timing Windows -----

See: The Ojibway Prairie Complex Invasive Species Lists and Resources

Tab: Management Timing Windows

Management Timing Windows provides a summary of the time of year to best control each invasive species on the management list. The visual includes some text indicating what control method is suitable for that time of the year. The Ontario BMPs are used wherever possible, but other sources may be referenced if an Ontario BMP was not available.

Table 5. Management timing windows for species on the management list. Recommendations are based on Best Management Practices or gardening resource. Resources are linked in the associated spreadsheet.

HB=herbicide

P= Plantae

I= Insecta

Taxon	Scientific Name	Common Name *native species **containment species	Best Management Practices Timing Windows for all control methods											
			JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
P	<i>Lythrum salicaria</i>	Purple loosestrife							Before going into seeds					
P	<i>Ambrosia trifida</i>	Giant ragweed*						During active growth						
P	<i>Alliaria petiolata</i>	Garlic mustard				Before seed production								
P	<i>Cirsium arvense</i>	Canada thistle				Herbicide/mowing					Herbicide			
P	<i>Securigera varia</i>	Crown vetch					Herbicide/Pulling							
P	<i>Pastinaca sativa</i>	Wild parsnip				HB	Mowing							
P	<i>Melilotus alba</i>	White sweet clover			Mowing									
P	<i>Phalaris arundinacea</i>	Canary reed grass				Mowing					Mowing			

Taxon	Scientific Name	Common Name *native species **containment species	Best Management Practices Timing Windows for all control methods											
			JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
P	<i>Vinca minor</i>	Periwinkle				During active growth								
P	<i>Cynanchum rossium</i>	Dog strangling vine**					Herbicide/ Pulling							
P	<i>Dipsacus fullonum</i>	Common teasel				HB						HB		
P	<i>Vicia cracca</i>	Tufted vetch					Herbicide/Pulling							
P	<i>Miscanthus sacchariflorus</i>	Japanese silver grass**								Mowing				
P	<i>Phragmites australis</i>	Common reed	Remove biomass								Herbicide			
P	<i>Rosa multiflora</i>	Rambler rose (Multiflora rose)										Pulling and Digging		
P	<i>Reynoutria japonica</i>	Japanese knotweed**					HB		HB					
P	<i>Berberis thunbergii</i>	Japanese barberry									Herbicide			
P	<i>Elaeagnus umbellata</i>	Autumn olive									Cut Stump Method			
P	<i>Lonicera japonica</i>	Japanese honeysuckle									Cut Stump Method			
P	<i>Lonicera maackii</i>	Amur honeysuckle												
P	<i>Lonicera tatarica</i>	Tartarian honeysuckle												
P	<i>Lonicera morrowii</i>	Morrow's honeysuckle												
P	<i>Lonicera x bella</i>	Bell's honeysuckle												
P	<i>Celastrus orbiculatus</i>	Oriental bittersweet	Herbicide									Herbicide		
P	<i>Elaeagnus angustifolia</i>	Russian olive								Herbicide				
P	<i>Viburnum opulus</i>	Guelder rose								Cut Stump Method				
P	<i>Acer negundo</i>	Manitoba maple*						Cut Stump Method						
P	<i>Morus alba</i>	White mulberry										Cut Stump		

Taxon	Scientific Name	Common Name *native species **containment species	Best Management Practices Timing Windows for all control methods											
			JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
P	<i>Acer plantanoides</i>	Norway maple										Herbicide		
P	<i>Ailanthus altissima</i>	Tree-of-heaven										Cut Stump Method		
P	<i>Robinia pseudo-acacia</i>	Black locust							Cut Stump Method					
P	<i>Rhamnus cathartica</i>	Common buckthorn**						Cutting/Girdling						
P	<i>Euonymus europaeus</i>	Spindle tree				Anytime the ground is not frozen (cut stump method)								
P	<i>Populus alba</i>	White poplar	Cut Stump Method/ Anytime the ground is not frozen											
P	<i>Populus tremuloides</i>	Trembling aspen*												
P	<i>Ulmus pumila</i>	Siberian eElm									Cutting/Girdling			
P	<i>Concallaria majalis</i>	Lily of the valley**				Herbicide								
P	<i>Iris pseudacorus</i>	Yellow flag iris**					Herbicide or hand pulling							
P	<i>Vicia villosa</i>	Hairy vetch					Herbicide/Pulling							
P	<i>Butomus umbellatus</i>	Flowering rush**					Cutting/Pulling							
P	<i>Phyllostachys aureosulcata</i>	Yellow groove bamboo**				Herbicide/Mowing								
P	<i>Rhamnus frangula</i>	Glossy buckthorn**					Cutting/Girdling							
P	<i>Centaurea stoebe</i>	Spotted knapweed**					Herbicide							
P	<i>Hesperis matronalis</i>	Dames rocket**					Pulling							
P	<i>Narcissus pseudonarcissus</i>	Daffodil**				Mow, dig, cut, and/or herbicide								
P	<i>Armoracia rusticana</i>	Horseradish**				Dig up plants and roots and/or herbicide during active growth								
P	<i>Berberis vulgaris</i>	European barberry										Cut stump/ herbicide		
P	<i>Cirsium vulgare</i>	Bull thistle												

Taxon	Scientific Name	Common Name *native species **containment species	Best Management Practices Timing Windows for all control methods											
			JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
I	<i>Cydia pomonella</i>	Codling moth				Insecticide targeting larvae								
P	<i>Euphorbia cyparissias</i>	Cypress spurge				Early bud: herbicide					Herbicide in early fall			
P	<i>Galium mollugo</i>	Hedge bedstraw								Herbicide				
P	<i>Hydrocharis morsus-ranae</i>	European frog-bit						Hand pull before plants seed						
I	<i>Popillia japonica</i>	Japanese beetle				Pheromone traps: beware of spillover effect								
P	<i>Sonchus arvensis</i>	Perennial sow thistle								Herbicide on rosettes				
P	<i>Tussilago farfara</i>	Coltsfoot						Herbicide during leafy stage						

Partner Advice -----

Essex County Field Naturalists' and Friends of Ojibway Prairie

- Allow volunteers to work alongside City staff with exterminator licenses so shrubs can be included in events. Create a list of species that can be manually controlled using hand-pulling and/or loppers for shrubs.
- Create a list of species that should be watched for and train volunteers on what to look for and how to report them. Also include training on pathways to help people understand how these species arrive and how they can mitigate spread. The City can utilize tools and training information on the EDDMapS.org website to help support community science efforts and increase reporting.
- Boot cleaning stations can be a fantastic way to combine public awareness with immediate action. Consider other signage as needed (e.g., public safety).

Ministry of Transportation (MTO) and Essex Region Conservation Authority

- Invest in research and development to learn what works best in the Complex. After 10 years of invasive species management, the MTO knows that long term management is required to keep populations down along with annual monitoring to ensure control methods are working and new populations and species are found early. Over the years, control methods have evolved as new techniques have emerged and lessons have been learned.
- Inventory invasive species, then triage and prioritize species for management.
- Monitor for new invasive species every year; if one is detected, work it into the management plan as quickly as possible.
- Develop a list of BMPs, read them and re-read them. Always start there, but understand that techniques, and success rates, will vary depending on site specific conditions and constraints.

Conditions can vary annually too, one year a site can be very wet, another year bone dry and this can affect the method used and the results.

- Work with your neighbours as much as you can; fringe properties have been an ongoing source of seed and invasive species.
- Incorporate public awareness and engagement opportunities.
- An Ojibway Prairie Complex land managers collaborative could bring everyone working on invasive species together on an annual basis to discuss priorities, lessons learned, control methods, and other relevant knowledge sharing.
- Indigenous engagement should be prioritized. Caldwell First Nation has certified Prescribed Burn Technicians.

Species advice

- Tree-of-heaven: best controlled with cut-stump treatments in winter using pure unmixed round-up
- Canada thistle: spring herbicide, cut in summer, fall herbicide; extend herbicide late into the season if you must, it still dies
- Teasel: same as Thistle, but every other year
- *Phragmites*: Cut-to-drown in Spring Garden is showing fantastic results. Do not skip any years. Habitat Aqua is now available for *Phragmites*. The City of Windsor should stay informed on the status of the biocontrol research for *Phragmites* and put up a hand for a release site.
- Autumn olive: do not skip any years, do not give up; it took MTO 10 years to see improvements.
- Birdsfoot trefoil: spray as early as possible in the spring when they are very small
- Reed canary grass: almost as bad as *Phragmites*, it can get out of hand quickly in a prairie
- Crown-vetch: similar to birdsfoot trefoil, spray it early. This species has a long germination period, when it finally comes up it is four years old. Spray when they are very small.
- Garlic mustard, sweet clover, ragweed: just cut them, or hand-pull, repeat
- Wild parsnip: spray rosettes before they flower; do not skip a year

Taxa advice

- Woody species
 - Sweep in the winter with cut-stump method, return in the spring to treat regrowth
 - It does get hard to tell where the regrowth is. Their program is trialing foliar spray using a selective broadleaf herbicide called Navius (Bayer product). E.g., spring and fall foliar treatments for Black Locust produced great results. The program is now trialing Navius on autumn olive starting with removal of the dense infestation, followed by Navius in a low concentration with a foliar spray. Results will be available for the City.
- Herbaceous species
 - Prescribed burns are effective to control many herbaceous plants

- Recommended actions for Management and Containment -

1. Continue with:
 - a. *Black Oak Heritage Park Management Plan* high-priority invasive species control.
 - b. Additional park-level Management Plans and invasive species mapping as per the *Environmental Master Plan and the Rediscover our Parks Master Plan*.
 - c. *Phragmites Management Plan*.
 - d. *Climate Change Adaptation Plan*.
 - i. Hire an Invasive Species Program Coordinator & *Species at Risk specialist (could be one position)*.
 - ii. Increase invasive and woody species control measures such as prescribed burns, cutting, and physical removal.
 - e. Decommissioning municipal drains in the Complex (where appropriate to do so).
2. Know and track the pattern of infestation for high priority species.
 - a. Compile available species maps and/or create original maps for species on the containment list and management list (starting with containment species).
 - b. Create a GIS project that holds occurrence data layers (original infestation pattern) along with a stewardship layer to hold information about control implementation each year.
 - c. Connect the GIS project to Arc GIS Field Maps and ensure Field Staff and/or Contractors can update the project as control activities are implemented.
3. Help all City departments protect Species at Risk in the Complex.
 - a. Create a timing windows tab for SAR activity in the Complex (e.g., emergence/arrival, breeding, nesting, etc.) that can be used to inform high-level control planning and as a reference for City staff doing invasive species work in the Complex (e.g., when to get a permit, what species are present).
4. Implement control of high-priority species.
 - a. Prioritize containment species for control and management activities. Pursue eradication from the Complex.
 - b. Use occurrence maps and the Management List Timing Windows to create Control Implementation Plans. Plans can be created for one species (e.g., *Phragmites*), or a group of species that can be managed at the same time with the same methods (e.g., invasive honeysuckles). They can include staff activities, hired help, and/or volunteer roles. Creative mapping can incorporate colours and legends to help differentiate what control methods are planned for certain areas, species polygons, or entire parks and make dividing the work easier (e.g., contractor, staff, volunteer event). Archive stewardship layers and start fresh each year; this will make it easier to layer the history of stewardship activities by species or park.
 - c. Review control plans well ahead of implementation and send staff for any necessary professional training and certifications. Some examples may include chainsaw safety, exterminator licenses, prescribed burns, etc. The application of newly registered products like Habitat Aqua may require additional certifications (Aquatic Pesticide License).

- d. Continue obtaining a Letter of Opinion on a 5-year rotation and add all management, containment, and watch list species that require herbicide use.
- 5. Increase staff knowledge and develop supporting resources.
 - a. Host Invasive Species Training Days for City staff at the Ojibway Prairie Complex to review identification resources for management and containment list species. Include Watch List species and the Oak Wilt Strategy and other prevention measures that may be added to annual work plans (see Prevention Recommendations).
 - b. Train all field staff on reporting protocols and move toward the creation of one GIS project for invasive species.
 - c. Distribute public messaging and helpful resources to ensure staff are consistent and well-informed about invasive species.
 - d. Create a template or checklist for Public Works to follow when preparing documentation for drain or other infrastructure projects in the Complex; include an invasive species section to ensure thorough consideration of prevention, containment, and management measures.
 - e. Implement Clean Equipment Protocol (see prevention recommendations). Clean Equipment protocol is also used to prevent the spread of established invasive species and is particularly effective on *Phragmites australis*. Several municipalities have reported that clean equipment protocol is only effective if a cleaning station and paid time to clean equipment is also provided.
- 6. Increase collaboration on invasive species management.
 - a. Create and facilitate an Ojibway Prairie Invasive Species Collaborative to bring the partners working on invasive species in and around the Complex together to share knowledge and resources (Ontario Parks, MTO, ERCA, Hydro One, etc.). One annual meeting is a good start. Ensure First Nation representatives are on the Collaborative as well as all affected City departments.
 - b. Use the collaborative to explore opportunities to align control implementation plans for higher-priority species. And/or focus on *Phragmites* to start (as per the *Phragmites Management Plan*) or split into Committees.
 - c. Supplement the hiring of Ontario Federation of Anglers and Hunters (OFAH) Hit Squad students to implement invasive species control in the Complex every year (May to September). The OFAH Hit Squad program is funded by Canada Summer Jobs and may provide up to 8 weeks of funding for multiple students to work on invasive species control and programs.
- 7. Increase public engagement in invasive species management.
 - a. Offer Volunteer Events for local naturalists' clubs to target species like garlic mustard, purple loosestrife, and dog strangling vine. Offer Corporate Workdays for local corporations looking for team building and community projects.
 - b. Create a Volunteer Program for the Ojibway Prairie Complex and train Volunteer Park Stewards to work alongside City staff to manage invasive species.
 - c. Create a Communications Plan to employ consistent messaging, expectations, and signage that can be used to support all invasive species control implementation activities on an annual schedule. Consider targeted campaigns (e.g., Grow me Instead).

8. Incorporate research and adaptive management.
 - a. Work with the Ojibway Prairie Invasive Species Collaborative to pilot various control methods and emerging tools; monitor and evaluate effectiveness and discuss results at annual meetings.
 - b. Partner with the University of Windsor and/or St. Clair College to explore opportunities for research programs and projects related to invasive species management; make the Complex a 'Living Lab', a place to advance invasive species management and prevention knowledge. Monitoring and tracking results of certain management activities can help to inform future decisions. Monitoring programs can potentially be incorporated into the curriculum.
 - c. Consider the Ojibway Prairie Complex for new biocontrol release sites. These research projects are often looking for new partners and project sites at scale. A great example is the biocontrol research for *Phragmites australis* underway by the University of Toronto.

- Preventing Invasive Species -

The Ojibway Prairie Complex is in West Windsor and is surrounded by a mix of land use including large manufacturing and industrial operations, commercial business, and residential communities. Each parcel is bordered by a different mix of these land uses, making them individually more or less vulnerable to specific pathways. For example, Tallgrass Prairie Heritage Park is surrounded by residential properties, while Black Oak Heritage Park has a dog park and a network of unauthorized biking trails. Garden waste introducing new invaders sold in horticulture is likely a bigger problem at Tallgrass Prairie Heritage Park than the latter, but the heavy off-road biking activities may introduce and spread more invasive species and contribute to more rapid spread at Black Oak Heritage Park.

The Complex is also fragmented by a Hydro One easement and hydro-corridor and is further fragmented by a network of formal and informal drains, municipal roads and ditches, a series of interconnected railways, and paved, gravel, and dirt trails. These features act as corridors that can facilitate rapid movement of invasive species and increase the vulnerability of the Complex to new invaders, but also the likelihood that an aggressive invader will spread before it can be contained.

Looking at the broader landscape, the Windsor-Detroit urban area hosts the greatest amount of cross-border activity in North America. The Ambassador Bridge alone is the busiest commercial trade route on the Canada-US border. Downtown Windsor is also connected to downtown Detroit via the Windsor-Detroit Tunnel, and the CN and Pacific Railways travel through Windsor and continue into Michigan under the Detroit River. A ferry service is used for specific goods travelling in and out of Canada and the City hosts an international airport.

Windsor also has the Herb Gray Parkway System that was constructed by Ontario's Ministry of Transportation to connect Ontario's 401 to the I-75 in Michigan via the to-be-built Gordie Howe International Crossing. The bridge and associated platform are located beside the Black Oak Heritage Park, on the other side of Broadway St. When completed, the new bridge will provide a third route over the Detroit River for personal vehicles and transport trucks plus a new active transportation route for bicycles. Thanks to the City's Active Transportation Master Plan, the bike lane across the Detroit River

will connect to the City’s extensive trail network and provide a pathway for a bicyclist to travel from the port-of-entry to locations across the city, including the Ojibway Prairie Complex. The City has truly little control over monitoring and screening programs that look for invasive species at international borders; regardless, the volume of people, vehicles, and commodities that arrive and move through Windsor every day leaves the city vulnerable to the arrival, establishment, and spread of new invasive species to Ontario, Canada, and even North America.

Watch List Resources -----

See: The Ojibway Prairie Complex Invasive Species Lists and Resources

Tab: Watch List Resources

This tab includes links to external resources to help identify each invasive species on the Watch List, along with training opportunities, and links to Best Management Practices that are available for control and management of these species.

The Invasive Species Centre currently offers two courses for practitioners that are relevant to the Watch List for Windsor, the Oak Wilt Course, and the Forest Pest Course. Oak Wilt is on the Watch List and a link to the training course can be found on the Watch List Resources Tab.

Watch List Timing Windows -----

See: The Ojibway Prairie Complex Invasive Species Lists and Resources

Tab: Watch List Timing Windows

This tab contains four different resource tables for invasive species on the Watch List. To prevent an invasive species from arriving in the Complex, the City must also know when to look (Table 6), where to look (Table 7), and what to look for (Table 8). Where to look can be guided by knowing the common pathways an invasive species might use to arrive (Table 9), as well as preferred habitats. What to look for is about knowing the signs and symptoms of a disease (oak wilt), or the appearance of eggs (spotted lanternfly), or young plants. Training programs to introduce staff to these concepts would be ideal, but good training is not always available.

The Watch List Resources are meant to help the City know what to keep a look out for and provide the City with quick access to relevant resources and information. Common natural and artificial pathways that contribute to the spread of these invasive species are provided in Table 9. Comprehensive pathways analysis is often more informative, but at a high-level, we can see that vehicles, gardening, and contaminated soil are the more common artificial pathways for the Watch List (select species). Knowing how a species might arrive is important for intercepting its arrival.

Table 6. The Windsor Watch List: when to look.

Scientific Name	Common Name	Proximity to Windsor	When to Look											
			JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
<i>Ceratocystis fagacearum</i>	Oak wilt	Belle Isle, MI				Symptoms appear in early spring								
<i>Lycorma delicatula</i>	Spotted lanternfly	Wyandotte, MI			Eggs			Adults						
<i>Heracleum mantegazzianum</i>	Giant hogweed	Wheatley, ON				Perennial plant grows April to November								
<i>Pueraria montana</i>	Kudzu	Kingsville/ Leamington, ON						Flowers						
<i>Myrmica rubra</i>	European fire ants	Hamilton, ON				Disturbed nests causing fire ant bites								
<i>Crupina vulgaris</i>	Common crupina	Near Columbus, OH				Appear in spring								
<i>Reynoutria sachalinensis</i>	Giant knotweed	Ridgetown, ON				Perennial; emerges in spring with reddish shoots								
<i>Arundo donax</i>	Giant reed	Cleveland, OH	Light brown foliage in winter		Perennial; emerges in spring, flowers late summer						Light brown foliage in winter			
<i>Microstegium vimineum</i>	Japanese stiltgrass	Ann Arbor, MI/ near Glencoe, ON				Emerges in spring/flowers in August and September								
<i>Myriophyllum spicatum</i>	Eurasian watermilfoil	LaSalle, ON					Tiny pinkish flowers inches above water							
<i>Monacha cartusiana</i>	Carthusian snail	Windsor, ON					Attach to stems/ other objects							

Table 7. The Windsor Watch List: where to look.

Scientific Name	Common Name	Proximity to Windsor	Where to look
<i>Ceratocystis fagacearum</i>	Oak wilt	Belle Isle, MI	Host trees: red oak, pin oak, and black oak
<i>Lycorma delicatula</i>	Spotted lanternfly	Wyandotte, MI	Larvae/adults: Grape and tender fruit orchards, urban trees (Apple sp., black walnut, red maple, tree-of-heaven)
			Eggs: tree trunks, bricks, stones, metal and lawn furniture
<i>Heracleum mantegazzianum</i>	Giant hogweed	Wheatley, ON	Roadside ditches, along streams, old fields, open woodlands
<i>Pueraria montana</i>	Kudzu	Kingsville/Leamington, ON	full sunlight; abandoned fields, pastures, tree plantations, roadsides, riverbanks, and urban areas
<i>Myrmica rubra</i>	European fire ants	Hamilton, ON	moist soils and wetlands. Nest underground in shaded areas.
<i>Crupina vulgaris</i>	Common crupina	near Columbus, OH	open areas like pastures, grasslands, rangelands, hayfields, roadsides, and along railroads
<i>Reynoutria sachalinensis</i>	Giant knotweed	Ridgetown, ON	full sun, along riverbanks, shorelines, beaches and canals. May also be found in shaded forest with wet soil
<i>Arundo donax</i>	Giant reed	Cleveland, OH	Along streambanks, floodplains, and riparian areas.
<i>Microstegium vimineum</i>	Japanese stiltgrass	Ann Arbor, MI/ near Glencoe, ON	Ground plant; shade tolerant; wet or dry soil; forest, wetlands, lawns, gardens, prairies
<i>Myriophyllum spicatum</i>	Eurasian watermilfoil	LaSalle, ON	Submerged aquatic plant in lakes and rivers
<i>Monacha cartusiana</i>	Carthusian snail	Windsor, ON	Dry grassy areas, prairies

Table 8. The Windsor Watch List: what to look for.

Scientific Name	Common Name	Proximity to Windsor	What to look for
<i>Ceratocystis fagacearum</i>	Oak wilt	Belle Isle, MI	Discoloration and wilting of oak leaves in spring and early summer. Fungal mats under the bark.
<i>Lycorma delicatula</i>	Spotted lanternfly	Wyandotte, MI	Eggs: shiny putty-like grey masses on bark and other flat surfaces. Adults: swarming of insects at base of host tree.
			Oozing sap and/or Yellow/whitish mold patches on bark
<i>Heracleum mantegazzianum</i>	Giant hogweed	Wheatley, ON	Large white flowers, large diameter stems (10-15 cm) with purple spots, grows up to 5.5 m tall.
<i>Pueraria montana</i>	Kudzu	Kingsville/Leamington, ON	Climbing vines with hairy twigs, stems grow 10 to 30 m in length: forms dense mats over native vegetation. Flowers: hang in purple clusters
<i>Myrmica rubra</i>	European fire ants	Hamilton, ON	Form super colonies with multiple queens and nest underground; not obvious until disturbed; reports of fire ant bites
<i>Crupina vulgaris</i>	Common crupina	Near Columbus, OH	Emerging seedlings appear as two fleshy oblong cotyledons 1-3 cm long, with a red central vein when in full sun
			Leaves: alternate, smaller towards the top of the stem, rough and coarse when touched. Flowers: lavender or pink

Scientific Name	Common Name	Proximity to Windsor	What to look for
<i>Reynoutria sachalinensis</i>	Giant knotweed	Ridgetown, ON	20-foot-tall grass species. Leaves: 2 feet long, opposite. Flowers: purple to silver feathery plume. Light brown in winter.
<i>Arundo donax</i>	Giant reed	Cleveland, OH	Bamboo-like grass growing up to 7 m tall; hollow stem with nodes. Leaves: green and yellow with fine hairs; appears in dense stands.
<i>Microstegium vimineum</i>	Japanese stiltgrass	Ann Arbor, MI/ near Glencoe, ON	Dense mats; alternate leaves 7cm long, asymmetrical with distinct shiny midrib; flower spikes on top of each plant
<i>Myriophyllum spicatum</i>	Eurasian watermilfoil	LaSalle, ON	Submerged plant; feather-like green leaves in whorls around stem in groups of 4 or 5;
			Leaves: 12 or more thread-like segments. Flowers: tiny pinkish, occur on reddish spikes that stand several inches above water
<i>Monacha cartusiana</i>	Carthusian snail	Windsor, ON	Shells are pale white and yellow and may have brown stripes. Feed on variety of plants, dead and alive. They will attach to grass stems.

Table 9. The Windsor Watch List: common pathways.

Scientific Name	Common Name	Proximity to Windsor	Common Pathways	
			Natural Pathways	Artificial Pathways
<i>Ceratocystis fagacearum</i>	Oak wilt	Belle Isle, MI	Infected underground roots; sap beetles, bark feeding beetles	Movement of firewood
<i>Lycorma delicatula</i>	Spotted lanternfly	Wyandotte, MI	Nymphs feed on whatever host the eggs were laid on	Shipping objects, packing materials, metal, vehicles
			Migratory flights during mating; adults make short jumps	
<i>Heracleum mantegazzianum</i>	Giant hogweed	Wheatley, ON	Seed travels in water and on wind	Gardening, recreation (boots, bikes, vehicles)
<i>Pueraria montana</i>	Kudzu	Kingsville/Leamington, ON	Stolons, rhizomes, seeds	Contaminated soil, recreation (boots, bikes, vehicles)
<i>Myrmica rubra</i>	European fire ants	Hamilton, ON	Local spread; multiple queens	Contaminated soil
<i>Crupina vulgaris</i>	Common crupina	near Columbus, OH	Seed travels in water and on wind	Equipment, recreation (boots, bikes, vehicles)
<i>Reynoutria sachalinensis</i>	Giant knotweed	Ridgetown, ON	Primarily rhizomes, plant materials in water	Gardening
<i>Arundo donax</i>	Giant reed	Cleveland, OH	Seed travels in wind and water	Equipment, recreation (boots, bikes, vehicles)
<i>Microstegium vimineum</i>	Japanese stiltgrass	Ann Arbor, MI/ near Glencoe, ON	Water, wildlife	Contaminated soil, vehicles, equipment
<i>Myriophyllum spicatum</i>	Eurasian watermilfoil	LaSalle, ON	Fragmentation; plant materials in water	Boat propellers, trailers, and equipment
<i>Monacha cartusiana</i>	Carthusian snail	Windsor, ON	Animal moves slowly; prefers well-drained soils	Marble stone and tile imports

- Recommendations for Prevention -

1. Continue implementing the *Oak Wilt Strategy*.
 - a. Request and initiate the creation of a rapid response plan for oak wilt in partnership with the CFIA. If the City will have a role to play, the response plan would ensure staff is prepared with the right equipment, emergency reserves, and training/skills to properly respond to a positive oak wilt observation. If the CFIA is leading the initial containment efforts, it would still be important for the City to understand what best management practices are available in case the containment program fails, and the City is left to manage the infestation and consequences of oak wilt (e.g., emerald ash borer aftermath).
 - b. Create an Emergency Reserve budget for oak wilt response so that if oak wilt does establish, and the CFIA is unable to provide adequate resources, the City is able to respond immediately and there will be no costly delays.
2. Continue implementing the *Climate Change and Adaptation Strategy*.
 - a. Hire an Invasive Species Coordinator & *Species at Risk Specialist (could be one position)*
 - b. Monitor Windsor's natural areas for invasive species such as *Phragmites*, oak wilt, the Asian longhorned beetle, etc.
 - c. Enhance targeted education to the public regarding BMPs for protecting private trees from invasive species.
3. Continue implementing the prevention activities in the *Environmental Master Plan* and the *Rediscover our Parks Master Plan*.
 - a. Continue to identify and track new invasive species and develop strategies to minimize their impact.
 - b. Encourage and facilitate support for volunteer efforts in park stewardship to incorporate invasive species education, *prevention*, and control activities.
4. Stay informed on emerging and arriving threats.
 - a. Sign up for Invasive Species Centre quarterly newsletter, *The Spread*.
 - b. Sign up for Invasive Species Centre events, media, and news updates.
 - c. Attend relevant conferences and workshops (e.g., North American Prairie Conference).
 - d. Invest in professional training for staff to learn about Watch List species when training courses are available.
 - e. Join the Invasive Species Centre's Municipal Community of Practice and attend spring/fall conferences to connect with municipal practitioners in Ontario.
 - f. Learn from other land managers by creating and facilitating an annual meeting about invasive species management in prairie and savanna habitats. Bring land managers together from Ontario and close U.S. states to share knowledge about emerging threats and new invaders, and what control methods are working to contain them.
5. Enhance monitoring for Watch List (select species) in the Complex.
 - a. Use the Watch List Resources to create a training program for Natural Areas staff. Ensure all City staff who do work in and around the Complex can identify Watch List species and know how to report potential observations.
 - b. Use the Watch List Resources and timing windows to create a monitoring program for Natural Areas.

- c. Create Highly Probable Areas (HPA's) in the Complex. HPA's are places where invasive species are more likely to arrive (parking lots, shorelines, trail heads, disturbed areas, fence lines, etc.). Use HPA's to prioritize monitoring activities.
- 6. Increase public awareness and engagement opportunities.
 - a. Create a webpage where residents can report concerning and/or invasive species. Include information on the Watch List. Require all submissions to include photos. Have 311 direct calls about invasive plants to the webpage so staff can respond via email and use photos to triage complaints that require a site visit.
 - b. Construct and install tire & boot-brush stations at trail heads throughout the Complex. Include interpretive signs about invasive species and explain why tire & boot-brushing helps prevent invasive species.
 - c. Purchase 'Grow me Instead' program materials and make them available at the Ojibway Nature Centre. Consider other locations across the city such as public libraries, arenas, and plant nurseries willing to work with the City, particularly for those in close proximity to the Complex.
 - d. Share the Watch List with local naturalist clubs and encourage reporting of any potential observations of Watch List species.
 - e. Create species-specific call-to-actions and send information to residents with property adjacent to the Complex. E.g., a one-page sheet on signs and symptoms of oak wilt including instructions on how to make a report (use the reporting webpage).
- 7. Introduce new policies.
 - a. Require all City staff and contractors hired to do work in the Ojibway Prairie Complex to follow the Ontario Clean Equipment Protocol as a component of their work. Prepare to pay for the time required to invest in this Protocol and consider providing a Cleaning Station at an appropriate location (e.g., Malden Park Equipment yard) where crews would go to wash equipment before entering the Complex, or when moving from one park to another within the Complex.
 - b. Review the Carolinian Tree Planting Policy (1994) and ensure the policy is still current and in operation; add/remove species as required. Consider increasing diversity of species planted if it is reasonable to do so.

- Summary of Recommendations -

The Ojibway Prairie Complex Invasive Species Strategy includes recommendations to improve prevention and management of invasive species. The City is already investing in prevention, containment, and long-term management activities, with most resources being absorbed by long-term management. Investing in additional prevention activities will reduce the likelihood of new invasive species reaching the Complex, and the likelihood of detecting new arrivals. Meanwhile, continuing to improve and grow the long-term management program will help the City begin to observe reductions in occurrence and spread of invasive species already in the Complex. Table 10 summarizes current activities along with new recommendations to illustrate a proposed, more balanced, approach to invasive species management. Eventually, long-term management activities gain on the invasive species already present, while prevention activities stop new arrivals. Incorporating prevention, containment, and long-term management activities into an invasive species strategy will lead to a reduction of impacts from invasive species in the Ojibway Prairie Complex.

Table 10. Summarizes recommendations for the City of Windsor to improve prevention and management of invasive species.

Category	Prevention	Management	
		Containment/ Eradication	Long-term Management
Current	<ul style="list-style-type: none"> • Oak Wilt Strategy • Specific actions withing the Climate Change Adaptation Plan, Rediscover our Parks Master Plan, and the Environmental Master Plan • By-law 135-2004 “Trees on Highways” & By-law 3-2007 “Yard Maintenance and Anti-Littering” • Carolinian Tree Planting Policy (1994) • Natural area trail inspections are done weekly; off trail inspections are done annually and as special projects permit 	<ul style="list-style-type: none"> • Dog-strangling vine (DSV) control and management 	<ul style="list-style-type: none"> • 5-year Letter of Opinion • 8-year maintenance cycles for drains in the Complex • Black Oak Heritage Park Management Plan • <i>Phragmites</i> Management • Collaboration on garlic mustard, purple loosestrife • Species specific management activities (wild parsnip, black locust, etc.) • Volunteer events and public education • Prescribed burns
	40%		60%
New	<ul style="list-style-type: none"> • Stay informed on emerging and arriving threats • Enhance monitoring activities for the Watch List • Increase public awareness and engagement opportunities to prevent invasive species and report observations • Introduce new policies 	<ul style="list-style-type: none"> • Know and track the pattern of infestation for high priority species • Implement control of high-priority species • Incorporate research and development • Increase staff knowledge and develop supporting resources • Increase collaboration • Increase public engagement 	
	50%		50%

- Beyond the Ojibway Prairie Complex -

Invasive species do not stop at political boundaries, and neither should the work to prevent, and manage them. Focusing an invasive species strategy on Natural Heritage lands is a great first step, but invasive species will also impact other land designations, as well as social well-being and local economies. Eventually action on invasive species should include the whole city because what happens outside the Complex will affect how effective this strategy can be.

The ISC took some time to consider immediate opportunities for the City of Windsor to incorporate invasive species prevention and management into City operations during the policy review completed for this strategy. Eight documents were reviewed. Full summaries of each review have been included in Appendix 2.

The Ojibway Prairie Complex Invasive Species Strategy does not fit under any specific Master Plan; it is better placed in its own space because work on invasive species will advance some strategies, but also advise others (Figure 3). To clarify when the Strategy might advance or advise existing policies, plans, and strategies, the ISC created Table 11. Specifically, this table allows for easier reference to opportunities to advance existing invasive species policies and make it easier to know when to consider incorporating invasive species actions into existing policies and plans.

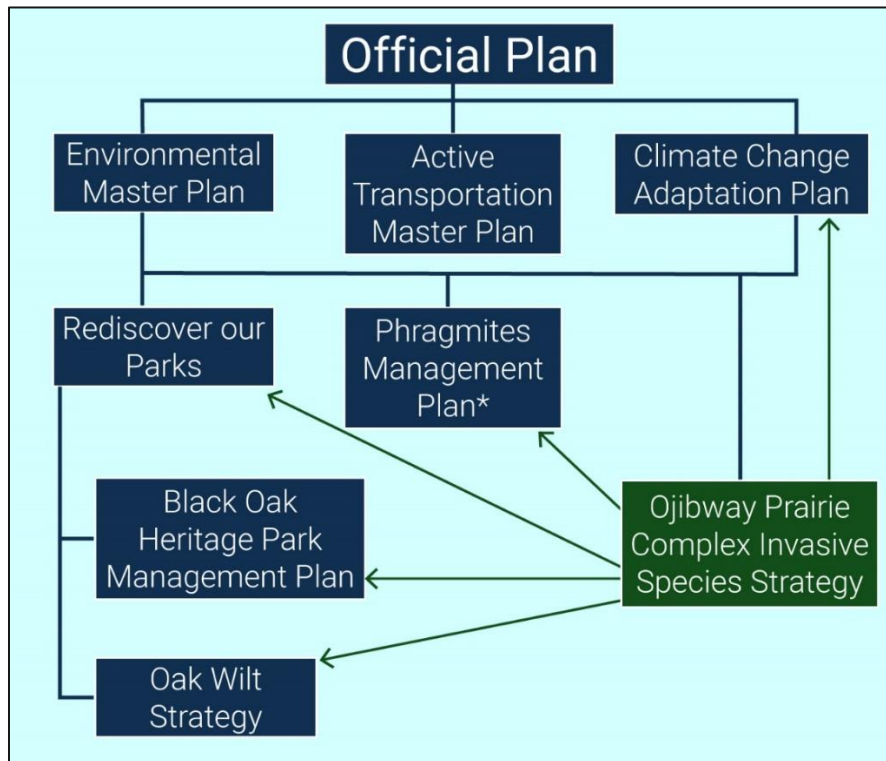


Figure 3. A visual list of the Strategies and Plans included showing how they relate to each other under the Official Plan. The blue lines indicate where the new Invasive Species Strategy will advance existing goals, objectives, and actions. Green arrows show where the new Strategy can advise the implementation of an existing Document. ****The Phragmites Management Plan has been submitted to the City but has not been approved by City Council.***

Table 11. Provides a written list of what the Ojibway Prairie Complex Invasive Species Strategy can advance for the City of Windsor and what the new Strategy can advise within existing strategies and plans. *The Phragmites Management Plan has been submitted to the City but has not been approved by City Council.

Document	New Strategy Advances:	Strategy Advises:
Official Plan	Strategic Directions: Development Strategy & Healthy Community Strategy	5.3.2. Greenway System Policies 5.3.3. Natural Heritage Designation Lands Policies
Active Transportation Master Plan	Nothing specific	Action 2C3. Provide landscaping and public art in the right-of-way (enhancements such as plants, trees, street banners, and public art) Action 3D.1 improve active transportation connections to Detroit, including Gordie Howe International Bridge and Pilot program for an active transportation ferry Action 3D.2. work closely with neighbouring communities and jurisdictions to ensure active transportation connections
Environmental Master Plan	Objective 5: Develop a Coordinated Approach to Invasive Species Management in parks, natural areas, and public rights-of-way, actions: <ul style="list-style-type: none"> • Continue to identify and track new invasive species and develop strategies to minimize their impact • Develop strategies for other invasive species in parks and natural areas 	Objective 7: Protect, enhance, and expand the quality and condition of natural areas and wetlands by creating management plans for rare ecosystems and identifying issues like invasive species Objective 8: protect and enhance the quality and condition of the urban forest canopy Objective 9: increase connectivity within and between parks and natural areas Tree Planting of Carolinian Species Policy (1994) Windsor-Essex County Environment Committee

Document	New Strategy Advances:	Strategy Advises:
Rediscover our Parks Master Plan	Strategic Direction 4: protect and promote existing natural areas and connections and create management plans for parks.	Strategic Direction #8: Action 8.12. Develop Management Plans for Parks Action 2.02 encourage and facilitate support for volunteer efforts in park stewardship Action 4.08 develop an urban forestry management plan
Climate Change and Adaptation Plan	Action 5: Protect Biodiversity and Enhance Ecosystem Functions <ul style="list-style-type: none"> • 5.4: create an invasive species program 	Funding Sources <ul style="list-style-type: none"> • Integration into initial planning, design, and funding of infrastructure projects, into Master Plan documents, and into program and policy development • Asset Management and Capital Planning • Operational budgets
Black Oak Heritage Park Management Plan	The field work completed to create the plan found 127 introduced species in the park, 10 were identified as high priority species for control and management activities, and another 10 were considered moderate priority for control. The plan provides control methods and control implementation guidance	Provides an example for other park-level management plans that can address invasive species
<i>Phragmites</i> Management Plan*	The potential for the recommended approach for management of <i>Phragmites</i> in the City to be used for other species	Control planning for other invasive species using a similar approach as described in this document

- Recommendations for Beyond the Complex -

Many of the above recommendations can be initially scoped to the Complex, but then expanded to include other areas in the city. There are a few actions that would benefit the Complex and the whole City of Windsor.

1. Integrate invasive species into City Council Reports.
 - a. Insert an invasive species section on all reports to City Council that require staff to consider how the issue at hand and the recommended project might contribute to the introduction or spread of invasive species in the city. Table 2 can be a helpful resource to get started. Tracking recommendations that include reference to invasive species can help the City understand where invasive species are already impacting City operations, or where activities and operations are potentially contributing to a worse problem. Over time, the City can adjust the strategy to incorporate vulnerabilities and pathways that would not have already been included within the Ojibway Prairie Complex.
2. Initiate an Invasive Species Committee of Council or encourage one to form under the Windsor-Essex Environmental Advisory Team and bring together members of the public with staff and Councilors to advance invasive species programs across the city and County.
 - a. The Green Shovels Collaborative recommends regional collaboratives for addressing *Phragmites australis* in Ontario and is preparing supportive guides and resources.

- Funding Invasive Species Action -

Funding for invasive species management and prevention activities is often a limitation. While any budget is helpful, there is a certain level of funding that should be established and maintained to ensure the strategy is making progress. Knowing what the number is will require more information about the extent of invasive species, chosen activities and control methods, timelines, and staffing resources. Budgets for invasive species management tend to be high when control programs are just getting started, and over time will decrease as the invasion is brought under control. Budgets for this strategy should be placed in categories: Prevention, Containment, Management.

Implementing an invasive species strategy will benefit from long-term, multi-year management teams. Many invasive species programs run with part-time, or seasonal staff because long-term, full-time staff can be challenging to fund; but there are more than enough invasive species in the Complex to manage with an annual program and control implementation schedule and there is growing evidence that the benefits of a strong, long-term team is worth the cost. The Ministry of Transportation reported efficiencies and greater opportunities for sharing knowledge, learning, and adaptive management; their team did not change for 10+ years. York Region supported an invasive species program for ten years and also reported the benefits of continuity and long-term learning.

Integration into City Operations -----

- Ensure capital investment allows for the implementation of the Ojibway Prairie Invasive Species Strategy.

- Start an Emergency Reserve Fund that holds some funds for EDRR programs. A Reserve Fund ensures budgets are available to implement immediate containment and eradication programs when a new aggressive invasive species does arrive.
- Asset Management / Natural Asset Management (NAM) has already been used by the City of Windsor to inventory trees and incorporate City-owned trees into asset management planning. The Oak Wilt Strategy is built on the results of tree inventories. NAM could also inform monitoring programs for other pests (spotted lanternfly adults prefer to lay eggs on tree-of-heaven or willows), and the natural asset management process could be used to improve invasive species management on Natural Heritage Lands or other nature-based infrastructure (e.g., stormwater ponds).
- Open a Municipal Green Bond for stewardship of Natural Heritage Lands and include invasive species management
- Introduce parking fees or other “user-fee” programs such as a trail-head donation box that can supplement the cost of invasive species management at the Complex.

External funding sources -----

- Grants and donations can be pursued by the City. The Invasive Species Centre has offered Microgrants and administers the Green Shovels Collaborative’s Invasive *Phragmites* Control Fund, both of which have been accessed to support modest municipal action on invasive species control programs.

- References -

Agriculture Victoria (2010), “Invasive Plants and Animal Policy Framework”. Published by The State of Victoria, Department of Primary Industries, Melbourne, Victoria, Australia.

Canadian Food Inspection Agency (last updated 2021-07-13) “List of pests regulated by Canada” (<https://inspection.canada.ca/plant-health/invasive-species/regulated-pests/eng/1363317115207/1363317187811>)

Cowbrough, M., F. Tardif, J Letarte. Grain Farmers of Ontario. Weed ID Guide for Ontario Crops. ([omafra_weedIDguide_final_web.pdf \(dropbox.com\)](#))

Credit Valley Conservation Aquatic Invasive Species & Fish Diseases ([AquaticSpeciesList.pdf \(cvc.ca\)](#))

Credit Valley Conservation Forest Pest and Diseases List ([960 ForestPestList-20211013.pdf \(cvc.ca\)](#))

Great Lakes St. Lawrence Governors & Premiers (2013) “Least wanted” AIS List. ([least-wanted-ais-brief-5-2019.pdf \(gsgp.org\)](#))

Invasive Species Centre (last updated 2022) “Ontario Invasive Species Act” Species List. ([Ontario Invasive Species Act – Invasive Species Centre](#))

Ministry of Agriculture, Food and Rural Affairs (last updated 2021-02-12) “Noxious Weeds in Ontario effective January 1, 2015”. ([Noxious Weeds in Ontario \(gov.on.ca\)](#))

Urban Forest and Associates Inc. Invasive exotic species found in southern Ontario. ([Invasive Species – Urban Forest Associates Inc. \(ufora.ca\)](#))

Vyn, Richard. 2019. “Estimated Expenditures on Invasive Species in Ontario: 2019 Survey Results.” Report prepared for the Invasive Species Centre.

Vyn, Richard. 2021. “Estimated Annual Expenditures on Invasive Species by Canadian Municipalities: 2021 National Survey Results.” Report prepared for the Invasive Species Centre.

York Region Nuisance Species List (unpublished data)

APPENDIX 1: Partner Interview Summaries

Essex County Field Naturalists Club (ECFNC) & Friends of Ojibway Prairie (FOOP)

Essex County Field Naturalists' Club and the Friends of Ojibway Prairie are community volunteer organizations that have assisted with invasive species management activities in the Complex in the past. Both groups also have a role in advocating for control and management of invasive species and they can offer many eyes on the ground to watch for incoming invaders.

Species that have been managed in the past by organized volunteer events in the Complex include:

- Garlic mustard
- Purple loosestrife
- Dog-strangling vine
- Sweet white clover

These are species that can be easily hand-pulled, bagged, and disposed of by volunteers. People like to help and when the City can organize events and provide some guidance, the methods do work to curb the spread and reduce the overall impact of certain invasive species.

The City will have maps of where these events occurred. Most of the garlic mustard work has been done at the Ojibway Park, in Black Oak Heritage Park, and Oakwood Natural Area. Purple loosestrife was done at Tallgrass Prairie Heritage Park. They have also done work at the Ojibway Prairie Provincial Nature Reserve with permission from Ontario Parks.

Challenges/Recommendations

- Create a list of species that can be manually controlled using hand-pulling and/or loppers for shrubs. Allow volunteers to work alongside City staff with exterminator licenses so shrubs can be included in events.
- Create a list of species that should be watched for and train volunteers on what to look for and how to report them. Also include training on pathways to help people understand how these species arrive and how they can mitigate spread.
- Tire & Boot cleaning stations can be a fantastic way to combine public awareness with immediate action. Consider other signage as needed (e.g., public safety).

Concerns about incoming species

- Japanese stiltgrass
- Japanese knotweed
- Autumn olive – is bad in Spring Garden Natural Area
- Black Oak Heritage Park is infested with Invasive honeysuckles, especially Amur honeysuckle

Other comments

- Advantage of having a National Park is the staff patrol to monitor issues like dirt biking. The disadvantage is that stewardship might be impeded. (e.g., one well-meaning individual was escorted from Point Pelee National Park for pulling garlic mustard).

- FOOP is working with Tallgrass Ontario to look for Purple Twayblade Orchid in Tallgrass Prairie Heritage Park. The population in Ojibway is a stronghold for the species.
- What about Ganatchio Trail? This system has many significant species. It is better to do invasive species management across the City.
- Secure Ojibway Shores!
- Keep going with all sorts of stewardship events. Even if they are not for invasive species management. Litter clean-ups and other activities get people involved and this may pique their interest in helping with other stewardship work.
- White mulberry – not as high a priority in Ojibway, red mulberry is not present in the core of the park; it is in La Salle.

Ontario Ministry of Transportation, Essex Region Conservation Authority, Wood

The Ontario Ministry of Transportation (MTO), the Essex Region Conservation Authority (ERCA), and hired consultants have been managing invasive species across the 74 ha of land restored after the construction of the Herb Gray Parkway in Windsor. These land parcels are spread out around the Complex; some adjacent to existing City-owned lands. The MTO hires ERCA and local consultants to do the work and together they have gained a tremendous amount of knowledge and experience over the years. There has been both longevity and stability for the project from annual funding and the ability to work with the same people representing ERCA and Wood. Being able to develop stable relationships with local partners has contributed to a consistent growth in the knowledge base and introduced the opportunity for adaptive management.

It is important to note that the MTO started with a “blank slate” because the lands were completely restored with native species after the construction of the Herb Gray Parkway. The invasive species management program has been therefore focused on prevention along with selective targeting of native species that can establish and alter oak savannah and prairie ecosystems. Over the years, as new invaders arrived, the team would adjust and plan for control and management as needed.

The initial list of invasive species controlled on the MTO lands included:

- Multiflora rose (*Rosa multiflora*)
- Buckthorn (*Rhamnus cathartica*)
- Exotic Honeysuckles (*Lonicera sp.*)
- White Mulberry (*Morus alba*)
- Black Locust (*Roninia pseudo-acacia*)
- Russian Olive (*Elaeagnus angustifolia*)
- Autumn Olive (*Elaeagnus umbellata*)
- Tree-of-heaven (*Ailanthus altissima*)
- Siberian Elm (*Ulmus pumila*)
- European Reed (*Phragmites australis*)
- Sweet Clovers (*Melilous sp.*)
- Awnless Brome (*Bromus inermis*)
- Common Crown-vetch (*Securigera varia*)
- Thistles (*Cirsium sp.*)
- Purple Loosestrife (*Lythrum salicaria*)

- Garlic Mustard (*Alliaria petiolata*)
- Annual Ragweed (*Ambrosia trifida*)
- Wild Carrot (*Daucus carota*)
- Birds-foot Trefoil (*Lotus corniculatus*)
- Manitoba Maple (*Acer negundo*) *native species
- Dogwood sp. (*Cornus*) *native species

The MTO estimates about 20% of their land is impacted by invasive species and this has been about the same area every year. As control implementation occurred, followed by annual monitoring, an enormous amount of knowledge has been gained leading to the evolution of control methods over the years. Control methods have always been limited by timing restrictions due to the presence of rare and at-risk species. A lot of chemicals were used at first, and then more manual techniques started to come into play. After 10 years of invasive species management, they know that long term management is required to keep populations down along with annual monitoring to ensure control methods are working and new populations and species are found early. Over the years, control methods have evolved as new techniques have emerged and lessons have been learned.

- To treat woody species, they initially used a lot of cut-stumps with Garlon treatments. Eventually it became challenging to know where the regrowth was coming from so, they started looking into different control methods including a new herbicide called Navius. Navius is a broadleaf, selective herbicide that can be used in various concentrations depending on what you intend to treat. They tried Navius on black locust using a spring foliar spray and the results were great. Now the team is moving to treat woody species by cutting and removing the dense infestation in the winter and then treating fresh growth in the spring with Navius. They intend to treat other woody invasive species with Navius going forward, including multiflora rose, buckthorn, honeysuckles, olives, and dogwoods. Tree-of-Heaven is different. It is best controlled with winter cut-stump treatments using a pure unmixed round-up to paint the stumps.
- *Phragmites* was initially treated with targeted herbicide application and hand-brushing. These techniques worked fine, but in the early years there were no control methods for *Phragmites* in water. In Spring Garden Natural Area, they tried all sorts of control methods to treat a 4-ha pond. Eventually they hired the Invasive *Phragmites* Control Centre to cut-to-drown *Phragmites* using Truxors and they were pleased with the results. The last few years they are using Stihl Kombi trimmers with cut blades to cut as close to the bottom as possible. ERCA recently restored 74 acres of *Phragmites* at a private wetland in the River Canard (Collavino wetland). They can control water depth to keep it underwater, and they were able to draw the water down to burn the dead biomass in winter 2022. Maintaining control around the periphery will be an ongoing challenge.
- Herbaceous plants are mostly controlled with hand-pulling before they go to seed (garlic mustard, sweet clover, ragweed). Herbicides will work too but require the right timing. Thistles respond well to spring herbicide, followed by a cut in the summer, and another application of herbicide in the fall. Teasel has an every-other-year element to consider for herbicides. Birds foot trefoil and crown vetch should be controlled annually, as early as possible in the spring, treat as much as you can with herbicides when they are small. Crown vetch has a long germination period, when it finally comes up, it is 4-years old. Get it early.
- Prescribed Burns are used to boost the native plant communities and keep non-native herbaceous plants, shrubs, and woody species under control.
- Bag worms were initially sprayed, now they just pull them off.

Challenges and Recommendations

- Managing invasive species in the restoration sites has been going OK; it is the fringe areas that have been the challenge. Some adjacent lands are privately owned and contain sources of invasive species with no one implementing any kind of control. Some City-owned properties have been helpful to work with, but private lands are an ongoing challenge.
- Waste disposal in natural areas. Prior to prescribed burns, trash must be removed for safety. The initial clean-up removed 10 tons of trash and hundreds of tires. A lot of this trash was historic, but people are still dumping trash into the natural areas.
- Other sources of invasive species may include unpermitted horseback riding and ATV's, off-leash dogs, brush piles, trail grooming for off-road biking, compost, and organic waste disposal. Yard waste may introduce plant materials from gardens (e.g., English ivy, lily of the valley, etc.)
- Restoration sites and the Ojibway Prairie Complex are home to many Species at Risk. Hiring staff and contractors that understand the importance of protecting SAR is going to make a significant difference.
- Habitat Aqua is now available for *Phragmites*. MTO is looking into whether it can be used on flowering rush as well. The City should stay informed on the status of the biocontrol research for *Phragmites* and put up a hand for a release site.
- Some species can be treated with herbicide extremely late in the growing season and the plants will still die (e.g., teasel, Canada thistle). If you cannot treat it with herbicides before the plant goes to seed, cut it down and treat the regrowth later in the same year.
- An Ojibway Prairie Complex land managers collaborative could bring everyone working on invasive species together on an annual basis to discuss priorities, lessons learned, control methods, and other relevant knowledge sharing.
- Is the Ojibway Prairie Complex going to become an Urban National Park? This could potentially be a good thing
- Indigenous engagement should be prioritized. Caldwell First Nation have certified Prescribed Burn Technicians.

Resources

- Invasive Plant Council Best Management Practices (BMPs)
- Urban Forest and Associates Invasive Species of Southern Ontario

Concerns about incoming species

- Flowering rush is beginning to establish in wetlands and waterways and is suspected to become a big problem if nothing is done to reduce its spread.
- Japanese knotweed and Japanese honeysuckle
- Reed canary grass can invade very quickly and should not be ignored
- Wild parsnip is already here but cannot be left to spread throughout the Complex. Combine treatments with public signage to keep people safe. Parsnip can be killed by spraying rosettes before they flower. Wild Parsnip requires multiple years of treatment.
- Spongy moths are rare on MTO lands, but this could change.
- Oak wilt, continue to set traps and monitor for its arrival

Ontario Parks

Written submission along with two PDF maps of *Phragmites* inventory completed by Wildlife

Preservation Canada in 2018

Received May 3, 2022

Submitted by: Jenni Kaija Bershatsky

Do you manage invasive species at the Provincial Park? What species?

- *Phragmites*, black locust, trembling aspen
- Woody shrubs growth is also managed

Do you have any maps of invasive species that you would share with the City?

- There is some *Phragmites* mapping that was produced through a research partnership. It can be shared.

What control methods did you use?

- Woody species are cut and dabbed with herbicide.
- Prescribed burns are used to control the growth of shrubs (including non-native species) in tall-grass prairie areas.
- Herbicide application, followed by cutting was used on *Phragmites* stands

Were you successful? Would you do the same thing again?

- We are making progress but work to control growth of woody species continues. The work is very labour intensive but has been successful.

What challenges did you have? Do you have any recommendations for the City if they were to manage the same species?

- High complexity prescribed burns would be very helpful to push back a lot of the woody veg and invasives. Not possible/unlikely to occur now because of infrastructure in the park.
- Management of the tree species is very labour-intensive.
- Special approval is required from Hydro One to treat *Phragmites* under the powerlines.

Any resources you consulted that you think the City should know about?

- Park staff and other City staff at the nature centre are great resources

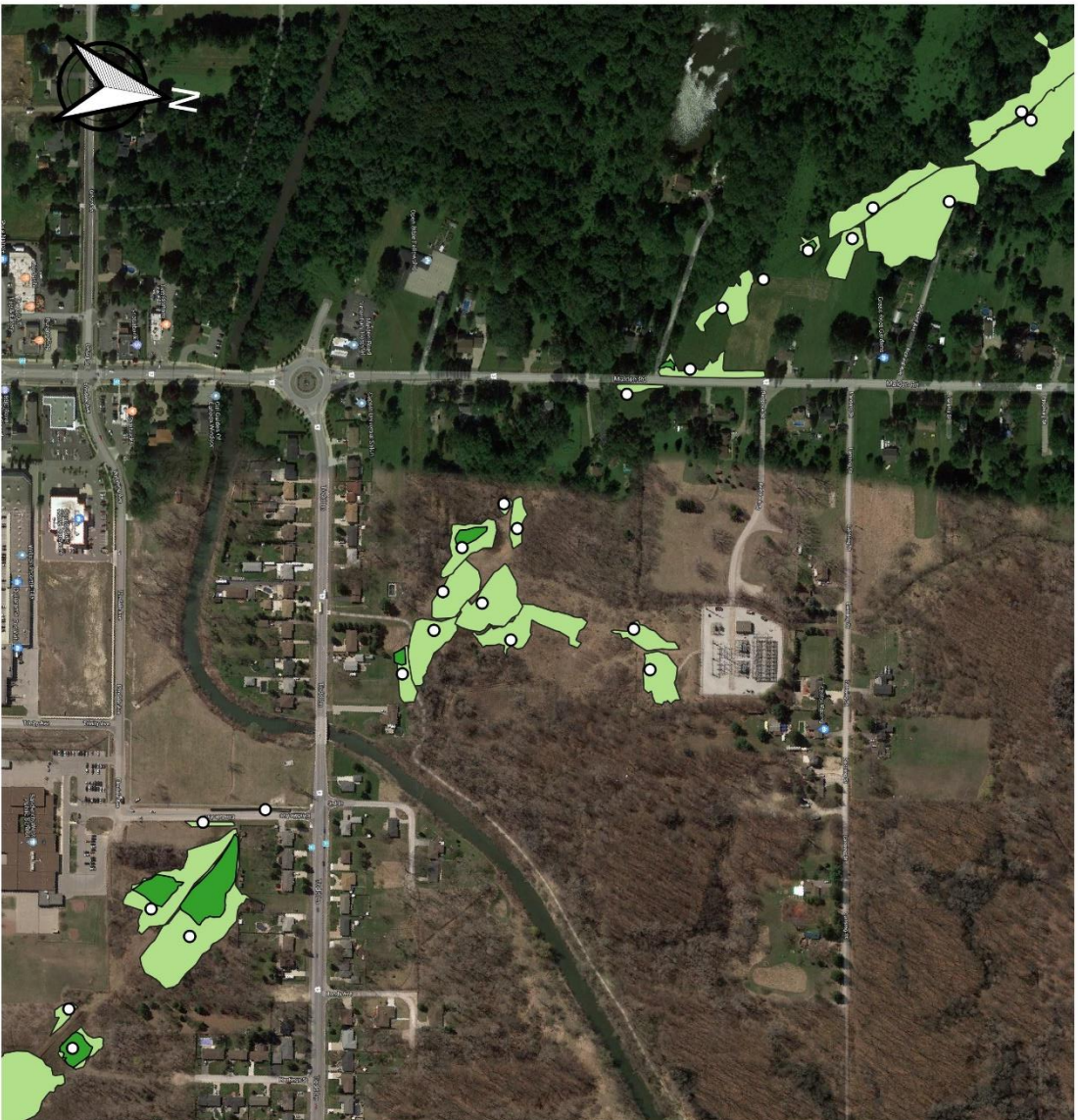
Do you have any invasive species on your radar? Concerns about incoming species?

- *Phragmites* is an ongoing challenge.
- Black locust and trembling aspen still require regular management.
- Since high-complexity prescribed burns do not happen anymore, more areas are growing in thicker with woody vegetation. Management will have to be considered in other areas to maintain the open prairie (i.e. Sassafras stands becoming larger).

Ojibway Prairie Complex and Greater Park Ecosystem Wildlife Corridor

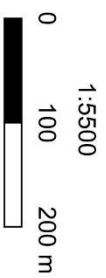
Invasive Plant Inventory (*Phragmites australis*)

Map 2 of 4



Legend

- Inv. Spp. Patch
- Infested Area
- Gross Area



- Notes:**
- Infested Area = Area of land containing one invasive species. An infested area of land that is defined by drawing a line around the actual perimeter of infestation as defined by the canopy cover of the invasive plants, excluding areas not infested.
 - Gross Area = It is the area of land occupied by an invasive species. Unlike Infested Area, the area is defined by drawing a line around the general perimeter of the infestation, not the canopy cover of the plants. The Gross Area may contain significant parcels of land that are not occupied by invasive plants.
 - Aerial Imagery from Google Satellite 2017
 - Created Dec 2018 by K. Hall





**Ojibway Prairie Complex and
Greater Park Ecosystem
Wildlife Corridor**

Invasive Plant Inventory
(*Phragmites australis*)

Map 3 of 4



- Notes:
- Infested Area = Area of land containing one invasive species. An infested area of land that is defined by drawing a line around the actual perimeter of infestation as defined by the canopy cover of the invasive plants, excluding areas not infested.
 - Gross Area = It is the area of land occupied by an invasive species. Unlike Infested Area, the area is defined by drawing a line around the general perimeter of the infestation, not the canopy cover of the plants. The Gross Area may contain significant parcels of land that are not occupied by invasive plants.
 - Aerial Imagery from Google Satellite 2017
 - Created Dec 2018 by K. Hall



APPENDIX 2: Policy Review Summary

City of Windsor Official Plan

The City of Windsor Official Plan provides guidance for the physical development of the municipality over a 20-year period while taking into consideration important social, economic, and environmental matters and goals. As such, the City of Windsor Official Plan provides the policy framework that will guide the following:

- Where new development can locate
- How existing and future neighbourhoods will be strengthened
- How Windsor's environment will be enhanced
- What municipal services, such as roads, water mains, sewers and parks, will be provided
- When and in what order Windsor will grow

The Primary Plan includes:

I. Introduction (introduction and glossary chapters), strategic directions (development strategy and healthy community chapters), management elements (environment, land-use, and infrastructure chapters), civic image (urban design and heritage conservation chapters), implementation (procedures and tools) and schedules (maps).

II. Strategic Directions identify the vision, values (principles) and direction (growth concept) for land use planning. There are two chapters: Development Strategy and Healthy Community.

The Ojibway Prairie Complex is implicated in the Development Strategy as a component of the Greenway System (3.2.3.3). The Greenway System is a vision for land use planning that aims to connect Windsor's neighbourhoods, parks, natural areas, and waterfront. The system will foster recreational activities, contribute to community health, and enhance the natural environment and link Windsor to its neighbouring municipalities.

The Complex is also implicated in the Healthy Community strategic vision. This vision applies a healthy community philosophy that is rooted in the belief that peoples' social, economic, and cultural and psychological well-being is influenced by the physical environment in which they live, work and play. The implementing healthy community policies are interwoven throughout the Plan, particularly within the Environment, Land Use, Infrastructure, and Urban Design chapters, to ensure their consideration as a part of the planning process.

III. Management Elements identifies and directs the physical and structural features of the city which are the primary focus of the Plan and includes the following corresponding chapters:

- Environment
- Land Use, and
- Infrastructure

City of Windsor's Active Transportation Master Plan

The City of Windsor's Active Transportation Master Plan outlines a network that connects key existing trails and pathways to a developed on-street network of trails to allow for commuters, recreational users, and others to have a safe, convenient, attractive, and fun walking, cycling, or other kind of active trip through the city. The network is also connected to the City-wide transit system. The Master Plan is a guide for investments in active transportation over the next 20 years. The plan includes a series of strategies and actions related to five overarching themes: Connecting Communities, Places for People, Innovation and Integration, Culture Shift, and Quality of Life.

Invasive species are not directly discussed in the strategy, however investments in active transportation networks may contribute to the spread, particularly for species that are known to move along corridors using wind, or by attaching to people and recreation wheels, as well as species that spread on heavy equipment and construction vehicles. Noteworthy is the recently completed Herb Gray Parkway Trail and its connections to the downtown Waterfront Trail, plus the plans to continue building this system over the Gordie Howe International Bridge into Detroit along with a proposed active transportation ferry (Action 3D.1). These investments are positive steps toward climate adaptation and active transportation but may contribute to the spread of invading species and lead to an increase in new invading species entering Canada. Similarly, the plans to work closely with neighbouring communities to ensure active transportation connections may create greater opportunity for new invasive species to move throughout the County using transportation and recreation corridors. Also noteworthy are the plans to improve user experiences, specifically Action 2C.3 which encourages the use of enhancements like trees, plants, street banners, and public art. Enhancements must use a diversity of native trees and plants, and the City could consider options for including invasive species related messaging in public art and street banners.

City of Windsor's Environmental Master Plan

The City of Windsor's Environmental Master Plan is a strategic vision to ensure Windsor is a leader in its daily actions and services to enhance the environment for present and future generations. The document has seven guiding principles: Form Partnerships, Engage Residents, Focus on Innovation and Balance, Work Together (internally), Lead by Example, and Achieve Realism, and five goals: A) Improve Air Quality, B) Improve Our Water Quality, C) Responsible Land Use, D) Increase Resource Efficiency, E) Promote Awareness.

The strategic vision, guiding principles, and goals form the foundation for the Environmental Master Plan. Goal C, Responsible Land Use – 'to enhance our community through naturalization, reforestation, park and urban planning, densification, and community initiatives' includes Objective C5: Develop a coordinated approach to invasive species in parks, natural areas, and the public right-of-way. With the following actions:

- Develop and implement a *Phragmites* control program across City departments
- Track and monitor the outcome of approaches used to control *Phragmites*
- Continue to identify and track new invasive species and develop strategies to minimize their impact
- Develop strategies for other invasive species in parks and natural areas

Two other Objectives under Goal C have direct relevance to invasive species. Objective C7: Protect, enhance, and expand the quality and condition of natural areas and wetlands by creating management plans for rare ecosystems and identifying issues like invasive species. This objective includes reference to implementing management plans, SAR protection measures, and monitoring quality and condition of natural area components. The actions also include plans to create a multi-use buffer zone around the natural area and wetlands in conjunction with the plan to increase canopy cover in the city. And Goal C, Objective C4: expand public understanding of the value of natural spaces and native plants is relevant to invasive species because the actions include plans to undertake a natural capital report, develop an engagement strategy to improve community acceptance of naturalization programs, promote benefits of green space and protection and preservation of natural areas, and the use of native plants. The City cultivates native plants in the greenhouse for use in parks and to sell at an annual plant sale.

Goal C, Objective C8 is noteworthy; protect and enhance the quality and condition of the urban forest canopy. For example, plans for tree inventory and health assessments could provide information that can be used to understand the status of invasive species in the city and the threat of new invading species. Increasing forest cover may be challenging if invading species continue to threaten specific species (beech bark disease, oak wilt, emerald ash borer). Another noteworthy action is in Goal C, Objective 9. The plan is to increase connectivity within and between parks and natural areas, which could increase the spread of current or new invading species. And Objective 5 offers opportunities to incorporate invasive species content in the plans to ‘increase awareness among residents and stakeholders of the City’s environmental programs, policies, and initiatives’.

The Environmental Master Plan also includes a graphic listing all the existing plans, policies, and strategies under each Goal. Noteworthy achievements include:

- Tree Planting of Carolinian Species Policy (1994)
- Windsor-Essex County Environment Committee

Rediscover our Parks’ Master Plan

The ‘Rediscover our Parks’ Master Plan is a high-level document that identifies the needs and recommendations for consideration within the parks capital and operational budgets for the next 20 years. The City’s park system has 209 parks and natural areas, two golf courses, one cemetery, two Provincial Nature Reserves. The Plan provides 115 recommendations (including 41 additional studies and 21 policy amendments) to be completed over the 20-year period from 2016 to 2035 that are organized under nine guiding principles (also referred to as strategic directions in the report): accessibility & inclusivity, communication & partnership, health & wellness, sustainability, park diversity, connectivity, safety, efficiency, experience.

Strategic Direction 4 recommends the City protect and promote existing natural areas and connections and create management plans for parks. Also included is a recommendation to create protocols for succession control in managed natural and naturalized areas to deter the establishment of exotic and naturally aggressive invasive species for the purpose of preparing standards for the establishment of urban wildlife habitat. Invasive species are not specifically mentioned again but would no-doubt find their way into newly developed park/natural area management plans (Strategic Direction #8: Action 8.12), and during the establishment of an urban forestry management plan for the Parks Greenway System and public rights-of-way by conducting a full tree inventory (Action 4.08).

Noteworthy in the Parks Master Plan is the number of indirect opportunities to incorporate invasive species awareness and prevention activities into existing recommendations. For example, Action 4.08, establish an urban forestry management plan, and Action 2.02 encourage and facilitate support for volunteer efforts in park stewardship, both offer opportunities to incorporate invasive species education, prevention, and control activities. The Parks Master Plan speaks about marine recreation in Windsor and calls for marine-based recreation guidelines. The City of Windsor owns and operates a marina and manages multiple parks and a multi-use trail along the Detroit River. Fishing, kayaking, boating, and other aquatic-based activities are increasing in popularity and may create more opportunities for invading species to establish and affect City services and programs.

Also noteworthy are the recommendations to protect and promote existing natural areas and connections and to promote naturalization where warranted to create buffers and connection to natural areas. Connectivity is incredibly important for parks, climate change, and a number of other benefits, but should be implemented with an invasive species lens to ensure these activities do not facilitate the establishment and spread of invasive species.

City of Windsor's Climate Change Adaptation Plan

The Climate Change Adaptation Plan was created in recognition of the importance of immediate action. Climate predictions for the region include:

- A decrease in freeze-thaw cycles
- Increase in mean annual temperatures
- More hot days, fewer cold days
- Precipitation events will become more intense and extreme
- Winter is going to get wetter, with slight decline in precipitation in the summer

The strategy was created to help combat the impacts of Climate Change and includes seven key objectives:

- Integrate Climate Change Thinking and Response
- Protect Public Health and Safety
- Reduce Risk to Buildings and Property
- Protect Biodiversity and Enhance Ecosystem Functions
- Reduce Community Service Disruptions
- Build Community Resilience

Each objective has a sub-list of actions, presented as a checklist, to guide preparations for the future climate and to create a more resilient city. Invasive species are addressed in Action 5: Protect Biodiversity and Enhance Ecosystem Functions which includes 5.4: the creation of an Invasive Species Program with the following subtasks:

- Hire an invasive species coordinator for the City of Windsor
- Monitor Windsor's natural areas for invasive species such as *Phragmites*, oak wilt, the Asian longhorned beetle, etc.
- Increase invasive and woody species control measures such as prescribed burns, cutting, and physical removal

- Enhance targeted education to the public regarding BMPs for protecting private trees from invasive species.

There is also a section on the cost of doing nothing. The impacts of invasive species are also often communicated this way. Also noteworthy is in the Implementation section they discuss financing ideas for the Strategy. Recommendations are to include climate change in asset management and capital planning, and to reconsider or enhance day-to-day operation budgets. They also recommend continuing to utilize external grants and opportunities like the Green Municipal Fund Leadership in Asset Management Program (LEAP), which Windsor used to include climate change considerations in Asset Management Planning.

Black Oak Heritage Park Management Plan

The Black Oak Heritage Park Management Plan summarizes the ecological significance of the flora, fauna and natural heritage features found with the park. It is also a guide to future management activities to enhance or restore diminished tallgrass woodland, savannah and prairie habitat for rare and provincially significant flora and fauna. The goal of the plan is to provide recommendations for the protection and restoration of the most fragile ecosystems in the park.

The field work completed to create the plan found 127 introduced species in the park, 10 were identified as high priority species for control and management activities, and another 10 were considered moderate priority for control. The Plan includes maps showing where the high priority species are abundant in the park and offers recommendations on effective management techniques as well as equipment required; these species are tree-of-Heaven, white mulberry, black locust, Amur honeysuckle, autumn olive, Japanese honeysuckle, Siberian elm, and *Phragmites australis*.

Phragmites Management Plan

The Windsor *Phragmites* Management Program (WPMP) was developed to guide the implementation of effective, efficient, and environmentally responsible *Phragmites* control throughout the City regardless of location and degree of infestation. The WPMP outlines a systematic and comprehensive approach guided by nine main components. It includes practical and logistical considerations, and detailed information on control methods, control contract selection criteria, permits, monitoring, and funding.

Summary of Recommendations:

1. Hire a *Phragmites* coordinator;
2. Establish a City Working Group and a Coalition Working Group;
3. Delineate *Phragmites* Management Areas;
4. Undertake a preliminary *Phragmites* assessment using roads and trails to create location maps, develop a control Prioritization Tool, obtain site specific information to inform required control actions;
5. Facilitate collaboration opportunities and undertake community outreach develop control plans and acquire required permits;
6. Establish and maintain monitoring and reporting programs;

7. Implement training workshops geared to specific audience needs, create and disseminate educational materials, use demonstration sites to increase public awareness, engagement and support;
8. Determine funding needs and seek funding opportunities; and
9. Implement strategies and policies to prevent further spread.

The WPMP outlines a recommended approach to reduce *Phragmites* in the City of Windsor by up to 98% if the program is properly structured, well managed, and sufficiently funded. The approach also recommends engagement of adjacent municipalities, which aligns well to the Green Shovels Collaborative's goal to attain 'Phrag-Free' status throughout much of Ontario by 2033. With the WPMP in place, the City will be well positioned to achieve the same status in the same timeframe. As an additional benefit, the infrastructure, partnerships, and program put in place for *Phragmites* will also be useful for managing other problematic invaders.

The *Phragmites* Management Plan advances a number of planned activities for the City:

- Environmental Master Plan Objective 5: Develop a Coordinated Approach to Invasive Species Management in parks, natural areas, and public rights-of-way, actions:
- Develop and implement a *Phragmites* control program across City departments
- Track and monitor the outcome of approaches used to control *Phragmites*
- Climate Change Adaptation Strategy in Action 5: Protect Biodiversity and Enhance Ecosystem Functions
- Monitor Windsor's natural areas for invasive species such as *Phragmites*, oak wilt, the Asian longhorned beetle, etc.

APPENDIX A - Phragmites Australis



Photo Credit: Tom Preney

Phragmites is considered Canada's worst invasive plant. It spreads at aggressive rates and outcompetes native species for water and nutrients. Reaching heights of 5 or more, and densities of 200 stems/m², this species can significantly reduce biodiversity in an ecosystem and affect ecosystem function. Phragmites is a threat to Species at Risk and provides poor habitat for wildlife. Dead standing stalks are a fire hazard and can impair sightlines along roads and highways. Phragmites can also affect recreational activities like boating, swimming, and angling.

Hazardous Plants

POISON IVY



Leaves of three, let it be! A common vine found throughout the refuge is poison ivy (*Rhus radicans*). Although the oil of this plant causes an allergic reaction in many people, it provides food and cover for wildlife. Many species of songbirds are known to eat its berries.

Poison Ivy



Poison Ivy Characteristics

Leaves

Leaves of three leave them be!

Toothed or lobed

Shiny green in spring and summer and reddish orange in the fall

Flowers grow in clusters (May to July)

Grayish, white, yellow or greenish petals

Berries

1/4 inch round, white or cream coloured



How Does it Grow?

Most frequent kind grows horizontally on or just below the ground surface with upright leafy stalks 10-80 cm high.

Second kind is a climbing vine which develops aerial roots and may climb 6-10 m per node.



Habitat

Poison ivy can be found around edges of woodland, in meadows, forest openings, trails, waste areas, fence lines, and roadsides.

The tall climbing vine form is mainly confined to the counties bordering Lake Erie, Lake Ontario and the lower Ottawa Valley.

Poison ivy is sometimes mistakenly called Poison oak. True Poison oak occurs in the southern United States, but not in Canada.

Poison Ivy Dangers

Contains an oily, poisonous allergen called URUSHIOL.
Urushiol causes an irritating inflammation of the skin
(allergenic dermatitis) which frequently develops blisters,
followed by intense itchiness.
Contact with any part of the plant can transfer these oils.



Poison Ivy Dangers

Urushiol can be removed with strong soap and water before it's been absorbed by the skin, however, time is important as 50% of the urushiol is absorbed within 10 mins. of contact. Once it has penetrated into the skin, attempting to remove it with water is ineffective.

It can remain active on clothes, tools, animals, boots, etc. for years.



Poison Ivy Effects

Will cause a rash in those who are allergic.

Rash can appear in as early as 4 hrs or as late as 48 hrs.

Everyone reacts differently.

Red skin, streaking, eyes swell shut, bubbling and blistering



Treatment For Poison Ivy

Wash with soap and cold water immediately

Don't breach the skin

Clean tools, clothing and boots

Try to avoid scratching

If possible take a cool shower

Calamine lotion or hydrocortisone cream

If severe seek medical treatment



Preventing Contact

Wear gloves, long sleeve shirts and pants.

Avoid areas where poison ivy has been identified.

Perform a pre-site assessment before beginning work in new areas.

Notify your Supervisor if you suspect any plants that may be poison ivy.



Cow Parsnip



Cow Parsnip Characteristics

Leaves

Lobes shaped like a hand with fingers

3 lobes per stalk

Fuzzy undersides

Up to 0.5 m long



Flowers

White umbrella shaped clusters

Each is 10 to 30 cm across

Made up of 15 to 30 small clusters



Height

Can be 1 m to 2.5 m

Cow Parsnip Dangers

The stems and leaves contain a clear sap that is responsible for causing a characteristic rash with burn-like blisters and subsequent hyper-pigmentation.

The chemical is photosensitive, with the rash occurring only after exposure to ultraviolet light (Phytophotodermatitis).

Wild Parsnip



Wild Parsnip Characteristics

Leaves

2 to 5 pairs of leaflets

Grow across from one another along stem

End leaflet is diamond shaped

Leaflets are toothed

Flowers

Yellowish-green flower clusters

Each is 10 to 20 cm across

Height

Can be 0.5 m to 1.5 m in



Wild Parsnip Dangers

Handling the shoots and leaves of the plant requires caution as the sap is toxic. It has photosensitive chemicals that causes phytophotodermatitis. The condition is a type of chemical burn rather than an allergic reaction and is similar to the rash caused by poison ivy. Symptoms include redness, burning, and blisters; afflicted areas can remain discolored for up to 2 yrs.



Contact With Wild Parsnip

The problem is most likely to occur on a sunny day when gathering foliage or pulling up old plants.

The symptoms have mostly been mild to moderate.



Treatment

Immediately cover skin exposed to the sun

Immediately wash with soap and cold water

Clean tools, clothing and boots

**Cover areas exposed to the sap to protect them from the sun
for at least 2 days**

Cover affected areas with cool, wet cloth

If blistering appears, do not rupture

If severe seek medical treatment

Stinging Nettle



Stinging Nettle Characteristics

Leaves

Thin, bright to dark green

Saw-toothed

Stinging hairs on the underside



Flowers

Tiny greenish-white flowers

Arranged in clusters



Stems

1 – 1.5 m tall

Stinging hairs throughout



Stinging Nettle Dangers

Some species have hollow stinging hairs on the leaves and stems that act like hypodermic needles, injecting histamine and other chemicals into whatever it comes in contact with. Individuals may experience a burning or stinging sensation, red, itchy swelling, and/or white bumps that can last up to 24 hrs.

In a severe allergic reaction, cramps, diarrhea and wheezing can occur.

Stinging Nettle Treatment

Wash the area with soap and cold water as soon as possible to relieve the sting and remove the nettle hairs.

Avoid scratching/rubbing the itchy areas.

Avoid extreme heat.

Take lukewarm baths and showers.

Apply cold compresses.

Anti-itch drugs/creams containing antihistaminic or hydrocortisone, may provide relief from the symptoms.

Calamine lotion may also be helpful.

General Precautions

Become familiar with indigenous, hazardous plants in order to identify them by sight.

Inform your Supervisor if you find any poison ivy, wild parsnip, cow parsnip, or giant hogweed and they will determine a course of action.

Avoid using power tools near or burning the plant – damage can release toxic sap or oil.



General Precautions

Never touch or brush up against any of these plants with bare skin and do not attempt to remove them.

If you must work near the plant, cover any exposed body parts with the appropriate PPE ie/ impermeable coveralls and boots, rubber gloves, and a face shield to protect eyes and face.

If exposed to any of these plants, immediately inform your Supervisor.

Scrub any exposed PPE with soap, water and scrub brush before removing.

General Precautions

Rewash rubber gloves before removing them.

Remove clothing carefully to avoid contact with toxic sap that may be on clothing.

Launder all exposed clothing and PPE in an a dedicated washing machine.

As soon as possible, wash with soap and water.

Giant Hogweed



Habitat

Giant hogweed was introduced from Europe, presumably as an ornamental plant.

It can now be found along roadsides, trails and streams.



Characteristics

This invasive plant can reach heights of 4-5 m and has a reddish-purple stem measuring from 5-10 cms in diameter. It flowers from June to September and has a cluster of flowers measuring up to 1.1 m across. Each cluster will have 30–20 flowers.

Various parts of the plant, including stems and leaves, release a clear, watery sap that is extremely toxic.



Giant Hogweed Dangers

Giant hogweed can be a serious health hazard for humans. Skin contact with the sap in the presence of UV light can cause phytophotodermatitis, a painful swelling, itching and blistering.

This usually appears in a few hours and can last for months.



Giant Hogweed Dangers

When the blisters subside, there is a dark, streaky skin pigmentation that can last for months or even years.

Depending on individual sensitivity, effects can last for months and skin can remain sensitive to UV light for years.

If the sap gets in your eyes, it can cause permanent blindness.

If you have been exposed to this plant, wash the affected area immediately, avoid direct exposure to sunlight and seek medical advice.

The End

Appendix B – Tree of Heaven



Photo Credit: Tom Preney

Tree of Heaven has a combination of highly successful reproductive traits, tolerance for a wide variety of environmental conditions, defense mechanisms, and allelopathy make tree-of-heaven highly invasive. This species has detrimental impacts on native plant species, built infrastructure, and human health. It is also the preferred host of the invasive **spotted lanternfly**. Tree of Heaven's pollen causes allergies and its sap causes dermatitis and very rarely, myocarditis if it enters the bloodstream. The tree also has an unpleasant odour. (Invasive Species Centre).



Council Report: S 13/2024

Subject: Update on Reaching Home: Canada's Homelessness Strategy (2019 - 2028)

Reference:

Date to Council: February 7, 2024
Author: Kelly Goz
Manager (A), Homelessness & Housing Support
519-255-5200 x 5362
kgoz@citywindsor.ca
Housing and Children's Services
Report Date: January 22, 2024
Clerk's File #: SS/4274

To: Mayor and Members of City Council

Recommendation:

THAT the report from the Manager (A), Homelessness & Housing Support regarding Reaching Home: Canada's Homelessness Strategy **BE RECEIVED**; and,

THAT the Chief Administrative Officer (CAO) and City Clerk or their designates **BE AUTHORIZED** to:

- i. Execute and submit applications and related submissions and amendments to secure funding related to Reaching Home: Canada's Homelessness Strategy and any subsequent programs or program extensions, provided they are in a form satisfactory to the City Solicitor, satisfactory in financial content to the City Treasurer, and technical content to the Commissioner, Human and Health Services and Executive Director of Housing and Children's Services; and,
- ii. Execute the Funding Agreements and any related amendments and extensions between the City of Windsor as the Community Entity for Reaching Home: Canada's Homelessness Strategy including any current or subsequent programs and program extensions, and Infrastructure Canada or successor ministries, provided that the Funding Agreements and any related amendments and extensions are in a form satisfactory to the City Solicitor, satisfactory in financial content to the City Treasurer, and technical content to the Commissioner, Human and Health Services and Executive Director of Housing and Children's Services; and,

- iii. Execute the Mid-Year dialogue, annual work plan, signing officers form and any other documents where required by Infrastructure Canada or successor ministries, to remain in compliance with mandatory reporting requirements under Reaching Home: Canada's Homelessness Strategy provided they are in a form satisfactory to the City Solicitor, satisfactory in financial content to the City Treasurer, and in technical content to the Commissioner, Human and Health Services and Executive Director of Housing and Children's Services; and,

THAT the Commissioner, Human and Health Services or their designate **BE AUTHORIZED** to enter into agreements to participate in initiatives related to the Canadian Alliance to End Homelessness Built for Zero – Canada Campaign; and,

THAT the Executive Director of Housing and Children's Services or their designate **BE AUTHORIZED** to issue a Request for Proposal, as required, consistent with the municipal purchasing by-law and requirements established by Infrastructure Canada or successor ministries, under Reaching Home: Canada's Homelessness Strategy to identify and select sub-projects to deliver program components to address local community needs at a cost not to exceed the funding allocation provided by the Federal government or as allocated in the approved City budget in each respective year; and,

THAT the Executive Director of Housing and Children's Services or their designate **BE AUTHORIZED**, throughout the duration of Reaching Home: Canada's Homelessness Strategy, to approve projects, allocate funds, withdraw, negotiate and re-allocate program funds, including re-allocation between the different program components and program recipients, agencies and organizations to maintain and ensure compliance with program rules and criteria, and/or to enable full take-up of program funds, and/or to address local community housing needs; and,

THAT as the Community Entity for Reaching Home: Canada's Homelessness Strategy, the Commissioner, Human and Health Services or their designate **BE AUTHORIZED** to execute, sign, amend, and terminate agreements with Purchase of Service agencies on behalf of the City, provided such agreements and documents comply with the governing program requirements and are in a form satisfactory to the City Solicitor; satisfactory in financial content to the City Treasurer and satisfactory in technical content to the Executive Director of Housing and Children's Services; and,

THAT for any agreements above \$1 million dollars, that in addition to the Commissioner, Human and Health Services or their designate, the Chief Administrative Officer or their designate **BE REQUIRED** to sign as a secondary authority; and,

THAT the Executive Director of Housing & Children's Services and City Treasurer or their designates **BE AUTHORIZED** to sign and submit financial claims and any amendments as required by Infrastructure Canada; and,

THAT the Executive Director of Housing and Children's Services or their designate **BE AUTHORIZED** to execute and submit to Infrastructure Canada any required Forecast of Project Expenditure (FPE), Activity Reports and any other such forms or reports as required by Infrastructure Canada; and further,

THAT the Executive Director of Housing and Children’s Services or designate **BE AUTHORIZED** to acquire resources and partner to deliver Reaching Home: Canada’s Homelessness Strategy and any affiliated programs, at a cost not to exceed the federal funds provided by Infrastructure Canada or successor ministry under Reaching Home: Canada’s Homelessness Strategy, or any amounts allocated to the programs in the approved City budget in each respective year.

Executive Summary:

N/A

Background:

The federally funded Homelessness Partnering Strategy (HPS) took effect on April 1, 2007, and was renewed twice since funding was first made available. In March 2013, Canada’s Economic Action Plan endorsed the third renewal of HPS using a “Housing First” approach. That round of funding was for a five-year period, which began April 1, 2014, and ended March 31, 2019.

As part of Budget 2017, the Government of Canada committed to Canadians to consult with stakeholders, provinces, territories, Indigenous partners, and people with lived experience of homelessness on how to modernize programming to better prevent and reduce homelessness across Canada. As a result, the Government of Canada announced a new strategy to replace HPS called Reaching Home: Canada’s Homelessness Strategy (RH). This change became effective April 1, 2019.

In 2023, oversight of the federal homelessness portfolio formally shifted from Employment and Social Development Canada to Infrastructure Canada to realign and streamline federal housing and homelessness policy and program planning.

Reaching Home is designed to be a directly administered community-based program that relies on communities to determine local needs to develop appropriate data informed projects. Reaching Home also supports the goals of the National Housing Strategy, notably to support the needs of the most vulnerable Canadians, to improve access to safe, stable and affordable housing. The RH delivery model is comprised of a Community Advisory Board (CAB) and a Community Entity (CE). The CAB is the local organizing committee responsible for supporting the direction for addressing homelessness within a community. The designated Community Entity for RH is the City of Windsor. The City of Windsor has acted as the CE since 2007 under Council approval (CR 246/2013, CR M451-2015 and 372/2019).

This report is intended to update Council on the four (4) year extension of Reaching Home funding for 2024-2028 and the funding reductions. Additionally, it will highlight one-time funding recently announced under the Reaching Home: Unsheltered Homelessness Support Funding (November 1, 2023 – April 30, 2024).

Discussion:

Reaching Home provides direct funding to communities across Canada to support efforts in addressing local needs and specific homelessness priorities. It encourages communities to adopt a more fulsome approach to homelessness that shifts away from

emergency response to focusing on longer-term solutions based on data, best practice and innovative solutions.

Since 2019, Reaching Home has focused on building the capacity of communities through data collection, partnerships, research, and innovative initiatives. Together, these efforts support evidence-based decision-making to target Reaching Home investments where they will have the most significant impact. The investments being made locally focus on removing real and perceived barriers faced by those who are experiencing or at risk of homelessness.

Reaching Home: Canada's Homelessness Strategy 2024-2028 Extension

As part of the Reaching Home extension (2024-2028), communities were given an opportunity to provide feedback to the program directives. The updated directives are intended to operationally:

- Integrate feedback and provide additional clarification on current eligible and ineligible activities and program requirements;
- Communicate expectations for RH regarding governance, meaningful collaboration with Indigenous partners, Coordinated Access, HIFIS and Outcomes Based Approach; and
- Update and modernize language to reflect clear alignment with – and connection to – other existing tools, such as the Community Homelessness Report and Coordinated Access Guide

As is apparent in Windsor Essex and across the country, homelessness remains a persistent issue that has been exacerbated by the COVID-19 pandemic, increase in drug poisonings as well as the affordable housing crisis which affects persons, families, and the broader community in which they reside. Homelessness also increases pressure on other sectors, such as health and justice. In order to combat this complex social issue, there is a need for intentional, strategic and innovative strategies that can start to effectively address this issue.

Initiatives that have been supported under Reaching Home throughout Windsor Essex have included but are not limited to expansions to the Windsor Essex Housing Connections (Housing First) program, acquisition and renovation of properties to expand the supply of supportive and affordable housing, addition of an Indigenous Outreach worker, the implementation of the Homelessness & Housing Help Hub (H4), implementation of the Windsor Essex By-Names Prioritized List (BNPL) and the Homeless Individuals and Families Information System (HIFIS) to improve data collection and reporting.

Funding Reductions (April 1, 2024 – March 31, 2028)

On November 28, 2023, the City of Windsor as the Community Entity received verbal and written communication from Infrastructure Canada regarding its Reaching Home: Canada's Homelessness Strategy funding allocation for the four (4) year extension that covers the period from April 1, 2024 – March 31, 2028, which aligns with the National

Housing Strategy. This written correspondence was shared with City Council on December 11, 2023, as part of the communication agenda.

As part of the correspondence, it was detailed that RH funds will continue to support the existing homelessness initiatives currently funded in the community, however significant financial pressures will begin in 2026-2028. For greater clarity, federal Reaching Home incremental funding (one-time) received from 2021 to present will be decreased by \$234,814 (6.7%) beginning in 2024-2026 and an additional \$2,432,546 (74%) in 2026-2028, which results in returning to its pre-pandemic base funding allocation of \$853,851. Given the significant funding reductions anticipated in 2026-2028, there will be program reductions and/or eliminations under existing federal and/or provincially funded homelessness programs unless new dollars are secured through future upper-level government budget approvals, which have yet to be determined.

Winter Unsheltered Homelessness Response Funding (Nov. 1, 2023 – April 30, 2024)

Subsequently, on December 22, 2023, the City received a communication from Infrastructure Canada that recognized that during winter people experiencing homelessness often face additional risks in unsheltered areas and outdoors. To support community responses, Infrastructure Canada made one-time funding available of up to \$1,111,104 with an aim to help people find safer and more stable places to stay during winter and only covers the period of November 1, 2023 – April 30, 2024.

This one-time funding will enable communities to invest in a range of eligible activities that will help keep people experiencing unsheltered homelessness safe and find a more stable place to stay this winter. Reaching Home's objectives continue to apply to this incremental funding, and communities are encouraged to work towards helping people find stable housing by connecting those experiencing unsheltered homelessness to available supports.

Locally, this funding has been allocated to support several initiatives already approved and communicated by the Community Advisory Board that includes:

- Temporarily expanding shelter and warming centre spaces at the Welcome Centre Shelter for Women and Families, Downtown Mission, Salvation Army – Centre of Hope and the Essex County Homelessness Hub (ECH2).

In addition, this funding will support an expansion of hours at the Homelessness & Housing Help Hub (H4) from 6pm to 11:30pm seven days a week and will also provide intentional, rapid housing supports to persons at highest risk. Although the expansion of hours is only temporary until April 30 (in alignment with this one-time funding period), the goal is to seek additional funding to allow for the expansion to continue permanently. This would allow the homelessness system to continue to respond to the concerns raised by the broader community, business community and feedback from Windsor Police to better support people experiencing homelessness. Other homelessness response initiatives may be considered depending on available resources.

Risk Analysis:

There is a significant financial risk that if additional federal government funding is not secured, particularly in 2026, that Housing Services will need to review its entire homelessness portfolio and may need to reduce and/or eliminate homelessness programs as a result of the anticipated net funding loss. This concern has been raised by a number of Ontario communities who receive Reaching Home dollars and are directly impacted, and advocacy efforts are underway by OMSSA, AMO, FCM and the Canadian Alliance to End Homelessness.

In addition, if the City of Windsor is unable to sufficiently and adequately provide the resources necessary in Windsor Essex to meet housing and homelessness demands, there is a risk that the requirements pertaining to Reaching Home targets, in particular the mandated 50% reduction in households experiencing chronic homelessness by 2028, will not be met.

The housing and homelessness sector cannot end homelessness and address all housing needs on its own. Windsor Essex continues to strive to achieve the goals stated in the Windsor Essex 10-year Housing and Homelessness Master Plan by working to integrate the housing and homelessness system with health, justice, child welfare, social services, and education systems as well as other sectors such as philanthropy and the business community. Achieving this shared goal of ending homelessness requires human and financial investments by all levels of government.

The City, will continue to monitor the annual allocations and report back to Council on impacts to services and/or requests for additional funding, if required.

Climate Change Risks

Climate Change Mitigation:

N/A

Climate Change Adaptation:

N/A

Financial Matters:

Reaching Home: Canada's Homelessness Strategy is comprised of four funding components:

- Designated Funding for Community Entities (CE); and
- Community Capacity and Innovation (CCI) Funding
- Incremental Funding (includes funding for capital)
- Winter Unsheltered Funding (one-time)

In addition to the Reaching Home: Canada’s Homelessness Strategy funding, the City of Windsor received one-time Covid funding of \$3,774,972 in 2020-2021 from the Minister of Employment and Social Development Canada.

The following chart represents Windsor Essex’s allocation for the period 2019-2028 by funding type. Up to 15% of the total funding contribution can be allocated to project management and administrative costs.

Contract Year	Designated & CCI (Base Funding)	Incremental (includes Capital) (One-Time)	Reaching Home – Covid Funding (One-Time)	Winter Unsheltered Homelessness Response (One-Time)	Total Reaching Home Funding
2019-2020	\$718,944	\$0	\$0	\$0	\$718,944
2020-2021	\$706,444	\$0	\$3,774,972	\$0	\$4,481,416
2021-2022	\$860,001	\$2,993,313	\$0	\$0	\$3,853,314
2022-2023	\$853,851	\$2,703,127	\$0	\$0	\$3,556,978
2023-2024	\$853,851	\$2,667,360	\$0	\$1,111,104	\$4,632,315
2024-2025	\$853,851	\$2,432,546	\$0	\$0	\$3,286,397
2025-2026	\$853,851	\$2,432,546	\$0	\$0	\$3,286,397
2026-2027	\$853,851	\$0	\$0	\$0	\$853,851
2027-2028	\$853,851	\$0	\$0	\$0	\$853,851
Total Funding	\$7,408,495	\$13,228,892	\$3,774,972	\$1,111,104	\$25,523,463

Consultations:

Nancy Jaekel, Financial Planning Administrator
 Jennifer Tanner, Manager, Homelessness & Housing Support

Conclusion:

Homelessness and Housing Support Services, in partnership with community agencies and stakeholders continue towards reducing homelessness in Windsor Essex. With the anticipated funding reductions under Reaching Home this may become more difficult as the needs of people experiencing homelessness become more acute.

Planning Act Matters:

N/A

Approvals:

Name	Title
Kelly Goz	Manager (A), Homelessness & Housing Support
Kirk Whittal	Executive Director, Housing & Children’s Services

Name	Title
Andrew Daher	Commissioner, Human and Health Services
Wira Vendrasco	City Solicitor (A)
Janice Guthrie	Commissioner, Finance and City Treasurer
Steve Vlachodimos	City Clerk
Joe Mancina	Chief Administrative Officer

Notifications:

Name
Barb Iacono
Anna Angelidis
Sandra Zwiers
Danielle Fournier
Jeanie Diamond Francis
Lynn Calder
Murphy, Wendy
Naomi Levitz
Shelley Gilbert
Karen Bolger
Luciano Carlone
Krista Rempel
Stacey Yannacopoulos
Stephanie Premrl

Appendices: