

REPORT NO. 182 of the
ENVIRONMENT, TRANSPORTATION & PUBLIC SAFETY
STANDING COMMITTEE
of its meeting held December 18, 2013

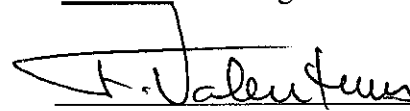
Present: **Councillor A. Halberstadt**
 Councillor R. Jones
 Councillor H. Payne
 Councillor F. Valentinis, Chair

Absent: **Councillor J. Gignac**

That the following recommendations of the Environment, Transportation and Public Safety Standing Committee **BE APPROVED:**

Moved by Councillor Payne, seconded by Councillor Halberstadt,
THAT the minutes of the Windsor-Essex County Environment Committee meeting held November 7, 2013 **BE RECEIVED** for information.
Carried.

Clerk's Note: The minutes of the Windsor-Essex County Environment Committee meeting held November 7, 2013 are **attached** as background information.



CHAIRPERSON



COUNCIL ASSISTANT

NOTIFICATION:				
Name	Address	Email Address	Phone	FAX

1000

Windsor, Ontario November 7, 2013

A meeting of the **Windsor Essex County Environment Committee** is held this day commencing at 5:30 o'clock p.m. in the Board Room, Lou Romano Water Reclamation Plant, there being present the following members:

Councillor Alan Halberstadt, Co-Chair
Charlie Wright, Co-Chair
Frank Butler (alternate)
Pauline Cheslock
Derek Coronado
Jesse Costa Gardner
Roger Dzugan (alternate)
Evan Freeman-Gibb
John Miller
Mike Nelson
Lindita Prindi
Phil Roberts (alternate)
Dr. Susan Sawyer-Beaulieu (alternate)
Tamara Stomp
Radwan Tamr (arrives at 5:50 p.m.)

Regrets received from:

Councillor Hilary Payne (meeting conflict)
Mark Bartlett
Paul Henshaw

Delegations in attendance:

Steve Green, regarding Item 5.0
Jonathon Choquette, regarding Item 9.1
Gudrin Beggs, regarding Item 9.1
Peter Vreman, regarding Item 9.1

Also present are the following resource personnel:

James Bryant, County Engineering Department
Averil Parent, Environment & Sustainability Coordinator
Beau Wansbrough, Planner II
Kadour Kadour, Committee Coordinator

1. **CALL TO ORDER**

Councillor Halberstadt, Co-Chair calls the meeting to order at 5:35 o'clock p.m. and the Committee considers the Agenda being Schedule "A" **attached** hereto, matters which are dealt with as follows:

2. **ADDITIONS TO THE AGENDA**

None.

3. **DECLARATIONS OF CONFLICT**

None disclosed.

4. **MINUTES**

Moved by C. Wright, seconded by R. Dzugan,
That the minutes of the Windsor Essex County Environment Committee at its meeting held October 3, 2013 **BE ADOPTED** as presented.

Carried.

5. **PRESENTATION**

Steve Green is present to request the removal of certain varieties of Milkweed from Ontario's Noxious Weed Act. His presentation entitled "Milkweed in Urban Areas" is **attached** as Appendix "A" and the highlights are as follows:

- Milkweed flowers produce nectar that benefits the butterfly species.
- Milkweed is the host plant for the monarch butterfly. Without milkweed, the larva would not be able to develop into a butterfly.
- Experts state the number of monarch butterflies is at a all-time low after the milkweed supply "crashed" in the U.S. corn belt.
- Mr. Green is requesting the development of Nectar Corridors in Windsor and Essex County for the monarchs (and other butterflies and bees) by community groups and like minded organizations.
- He suggests OMAFRA be lobbied to change the Noxious Weed Act so that milkweed is allowed in all areas except around livestock.

T. Stomp states historically, "farmers rule". She notes there is no such thing as a noxious weed as dandelions may the cure for cancer. She agrees milkweed should be in the urban corridor.

S. Green indicates he was advised by By-law Enforcement that milkweeds cannot be planted in areas where agriculture is impacted.

Councillor Halberstadt, Co-Chair suggests a subcommittee be established as there is some confusion relating to the Noxious Weed Act.

Moved by M. Nelson, seconded by F. Butler,
That a subcommittee consisting of M. Nelson, S. Green and P. Roberts **BE REQUESTED** to meet with By-law Enforcement regarding the Noxious Weeds Act and how it pertains to milkweeds.

Carried.

Clerk's Note: An e-mail from A. Parent dated November 26, 2013 to the Manager of By-law Enforcement regarding milkweeds is attached as Appendix "B". The email response from the Manager of By-law Enforcement answered the question of Steve Green and therefore the subcommittee no longer needs to be formed.

9. **NEW BUSINESS**

9.1 **LaSalle Woodlot Development**

Jonathon Choquette, Project Coordinator, is present to provide information relating to the Ojibway Massasauga Recovery Project. The salient points of his presentation (attached as Appendix "C") are as follows:

- Ojibway population of Massasauga is extremely important to national, provincial and local biodiversity conservation.
- Long term goal is to undertake recovery actions to reduce the extinction risk of the Ojibway population.
- Restoration of habitat connectivity, mitigate threats, population augmentation, and to maintain remaining sub-population.
- 100 ha target for LaSalle Woodlot ESA is feasible
- "It is recommended that following a thorough biological inventory of the LaSalle Woodlot ESA that a revised ESA boundary is developed and Natural Environment zoning be applied to appropriate parcels" (Town of LaSalle and ERCA 2011)

M. Nelson advises he met with the developer and the Town of LaSalle and suggests Mr. Choquette's presentation be received as a communication piece.

Councillor Halberstadt, Co-Chair introduces Gudrin Beggs, Amico Design Build and notes she is available for questions. She indicates an additional development of 83 residential lots abutting the woodlots is part of the design.

Moved by M. Nelson, seconded by C. Wright,

That the letter from Jonathon Choquette, Project Coordinator dated October 8, 2013 regarding the Ojibway Massasauga Recovery Project BE RECEIVED and further, that updates be provided as the project goes forward.

THE MOTION IS PUT AND IS LOST.

F. Butler strongly expresses concern that Gudrin Beggs, Amico appeared at this meeting without providing documentation prior to the meeting.

Moved by T. Stomp, seconded by F. Butler,

That in reviewing development proposals adjacent to the LaSalle Woodlot ESA, that City Council and County Council **BE REQUESTED** to support projects which adhere to the following principles:

1. To respect the LaSalle Woodlot ESA boundary as displayed in the Town of LaSalle Official Plan and LaSalle Woodlot ESA Management Plan.
 2. To respect Massasauga critical habitat as displayed in the Recovery Strategy for the Massasauga in Canada.
 3. To implement edge treatments which discourage human snake conflict (i.e. snake fencing) between the LaSalle Woodlot ESA and adjacent developments.
- Carried.

9.2 Eileen Chen non-member Application to WECEC

Moved by P. Cheslock, seconded by J. Miller,

That Eileen Chen **BE INVITED** to attend the meetings of the Windsor Essex County Environment Committee as a non-voting member.

Carried.

7. COORDINATOR'S REPORT

A. Parent reports the Green Speaker Series which included Dr. John Hartig, Refuge Manager, Detroit International Wildlife Refuge and Dr. Richard Wyma, General Manager, Essex Region Conservation Authority held on October 22, 2013 was very successful.

8. SUBCOMMITTEE REPORTS

8.1 Air

The Air Subcommittee report is distributed and attached as Appendix "D". D. Coronado provides an overview of his report as follows:

- In October, the International Agency for Research on Cancer (IARC) announced it had classified outdoor air pollution and particulate matter as carcinogenic to

humans. This is the first time experts have classified outdoor air pollution as a cause of cancer.

- In October, the province announced the end of burning coal at the Lambton Generating Station, leaving Nanticoke Generating Station as the last coal burning facility in Southern Ontario (scheduled to cease coal burning operations by the end of 2013).

Councillor Halberstadt, Co-Chair states he received a call from a reporter at the Windsor Star regarding various vehicles, i.e. ambulances, buses and if they are required to abide by the Anti-Idling By-law.

D. Coronado explains there are 14 exemptions in the City of Windsor's Anti-Idling By-law and he notes the By-law is outdated.

Councillor Halberstadt, Co-Chair requests information be provided for the December 5, 2013 meeting regarding the province-wide petition relating to anti-idling.

8.2 Transportation

F. Butler explains on September 18, 2013, a 200 lbs. nitrogen tank was moved from the main campus of the University of Windsor across Wyandotte Street East to the campus on the south side of Wyandotte. He notes since the tank was moved by hand dolly across city streets, it is a matter for Fire and Rescue Services.

Moved by T. Stomp, seconded by C. Wright,
That Councillor Halberstadt, Co-Chair **BE DIRECTED** to contact the Fire Chief, Fire and Rescue Services regarding the logistics relating to the nitrogen tank transportation at the University of Windsor on September 18, 2013.
Carried.

8.3 Provincially Significant Wetlands

J. Costa Gardner reports a Wetlands Strategy meeting was recently held regarding the progress of the natural areas in the Parkway Projects. He notes the ratio is 8 to 1 as it pertains to natural areas to the Parkway lands. Councillor Halberstadt, Co-Chair suggests a tour of the DRIC lands be undertaken in the spring 2014.

R. Tamr leaves the meeting at 7:20 o'clock p.m.

As it relates to the Ojibway Shores, J. Costa Gardner states the Field Naturalists along with a small group of experts will be undertaking a three season biological inventory.

8.4 Water Quality

A. Parent states the Water Quality Subcommittee submitted comments through the WECEC Co-Chairs to the International Joint Commission regarding their draft Lake Erie Ecosystem Priority Report.

In terms of phosphorous education, the Subcommittee discussed potential campaign measures to educate the public on the labeling of phosphorous content.

8.5 Tree By-law

Councillor Halberstadt, Co-Chair advises a meeting regarding the Private Tree By-law was held with the City Forester, ERCA, A. Parent and B. Wansbrough. A review was undertaken of the tree by-laws of several municipalities and strengths and weaknesses were gleaned.

Moved by T. Stomp, seconded by P. Cheslock,

That the Windsor Essex County Environment Committee Subcommittee reports
BE RECEIVED.

Carried.

10. COMMUNICATIONS

10.1 The Windsor Star article included "The Incredible Story of Humbug Marsh" dated October 18, 2013 is received for information.

10.2 The Ministry of Natural Resources Press Release entitled "Helping Communities Restore Fish and Wildlife Habitats" dated October 21, 2013 is received for information.

11. DATE OF NEXT MEETING

The next meeting will be held on December 5, 2013 at 5:30 o'clock p.m. at the Lou Romano Plant.

12. ADJOURNMENT

There being no further business, the meeting is adjourned at 7:28 o'clock p.m.

Councillor Halberstadt, Co-Chair

Committee Coordinator



AGENDA
WINDSOR-ESSEX COUNTY ENVIRONMENT COMMITTEE
held on Thursday, November 7th, 2013
Meeting at 5:30p.m. At the Lou Romano Water Reclamation Plant (4155 Ojibway)

1. **CALL TO ORDER**

2. **ADDITIONS TO THE AGENDA**

3. **DECLARATION OF CONFLICT**

4. **MINUTES**

Adoption of the minutes of the meeting held October 3rd, 2013 – *emailed separately.*

5. **PRESENTATION**

Steve Green – Request for support in removing certain varieties of Milkweed from Ontario's Noxious Weed Act.

6. **BUSINESS ARISING FROM THE MINUTES**

7. **COORDINATORS REPORT**

WECEC Coordinator Monthly Report – *attached*

8. **SUBCOMMITTEE REPORTS**

- 8.1 Air
- 8.2 Transportation – *attached*
- 8.3 Provincially Significant Wetlands
- 8.4 Water Quality – *attached*
- 8.5 Tree By-law

9. **NEW BUSINESS**

- 9.1 LaSalle woodlot development – *attached*
- 9.2 Eileen Chen non-member application – *attached*

10. **COMMUNICATIONS**

- 10.1 The Windsor Star article - *The Incredible Story of Humbug Marsh* October 18th 2013 – *attached*
- 10.2 Ministry of Natural Resources press release - *Helping Communities Restore Fish and Wildlife Habitats* October 21st 2013 – *attached*

11. **DATE OF NEXT MEETING**

The date of the next meeting will be December 5th, 2013 at the Lou Romano Water Reclamation Plant at 5:30 o'clock p.m.

12. **ADJOURNMENT**



Milkweed in Urban Areas

Habitat: Common milkweed occurs throughout southern Ontario in pastures, meadows, waste places, roadsides and cultivated land. It is especially common in the Manitoulin Islands and the east-central portions of southern Ontario, but it seems to be increasing in most other portions of the province as well.

(OMAFRA)

Benefits of Milkweed

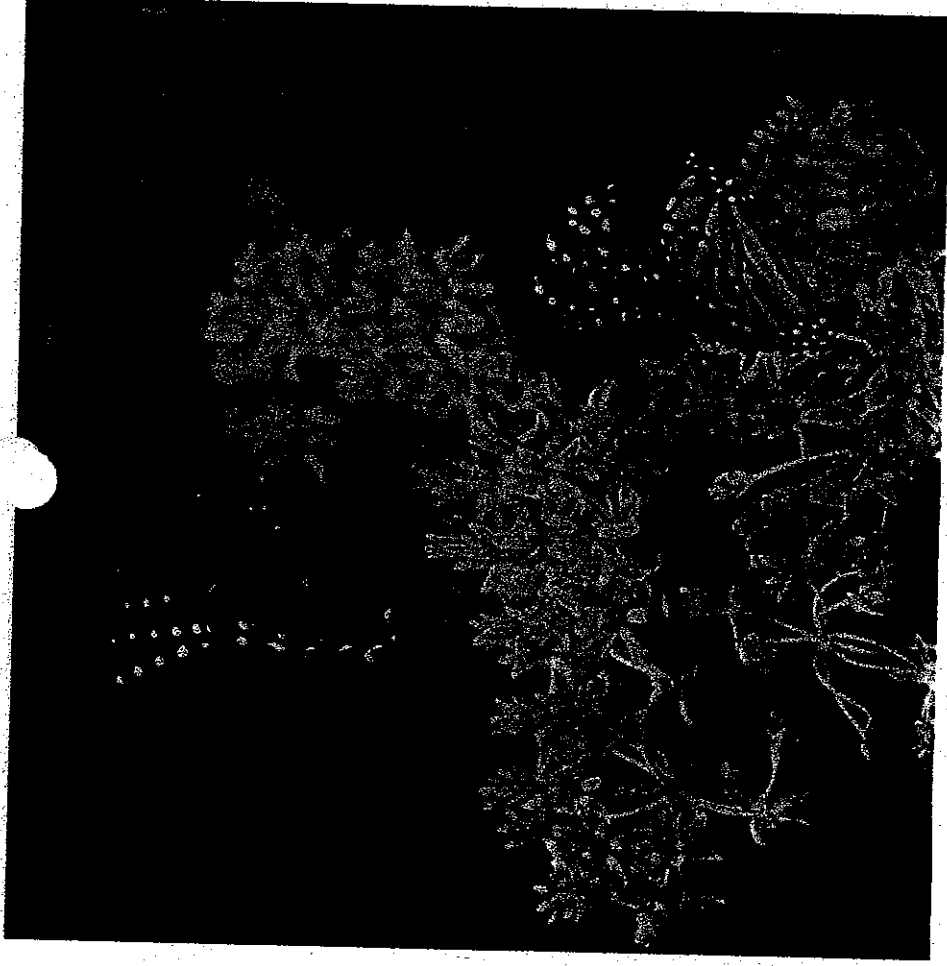
- **Honey bees take nectar from milkweed flowers. With the decline of honey bee populations in the US, planting milkweed in your garden can help to provide feeding stations as they fly between crop fields and orchards.**
- **Hummingbirds often use the floss from milkweed seed pods to line their nests.**



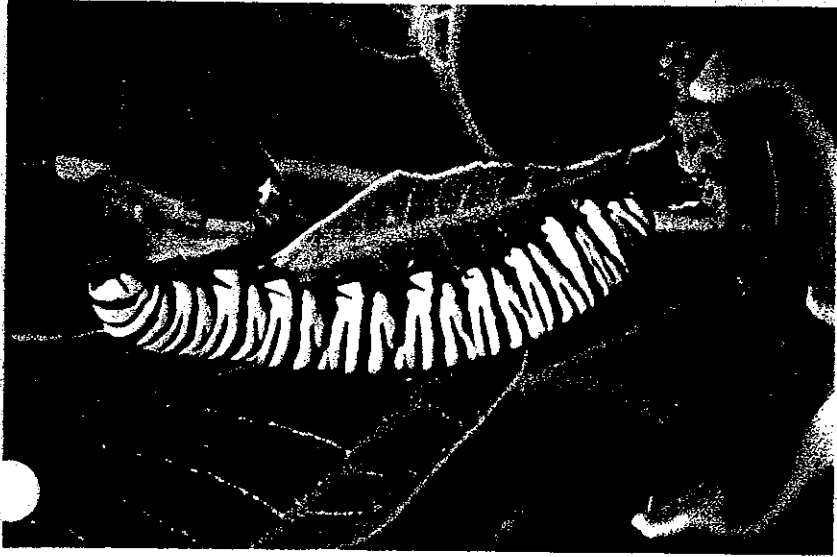
**Milkweed flowers produce
nectar that all butterfly
species benefit from.**



**Milkweed flowers produce
nectar that all butterfly
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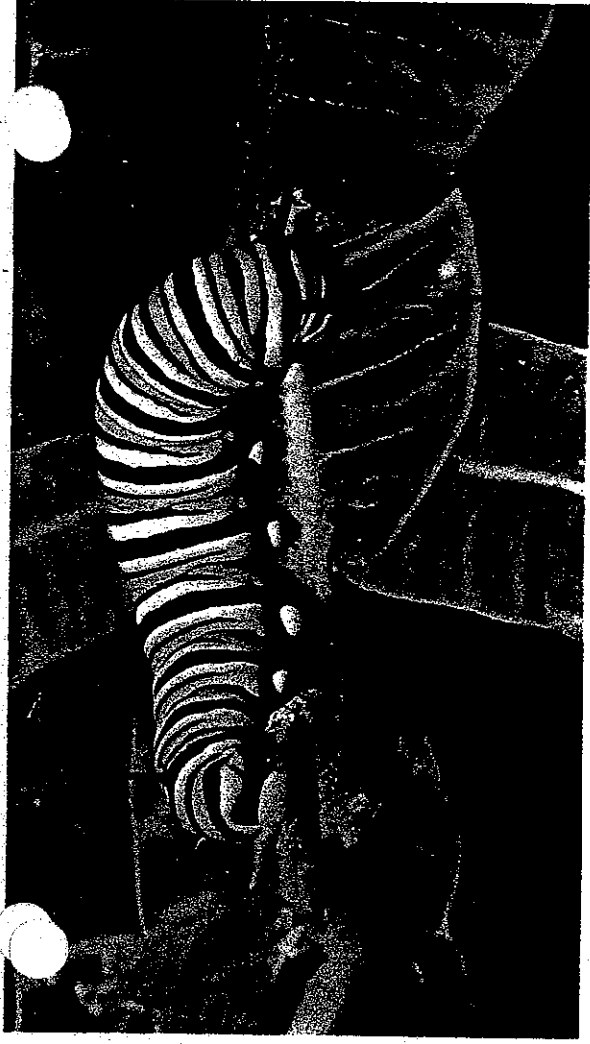


**Milkweed flowers produce
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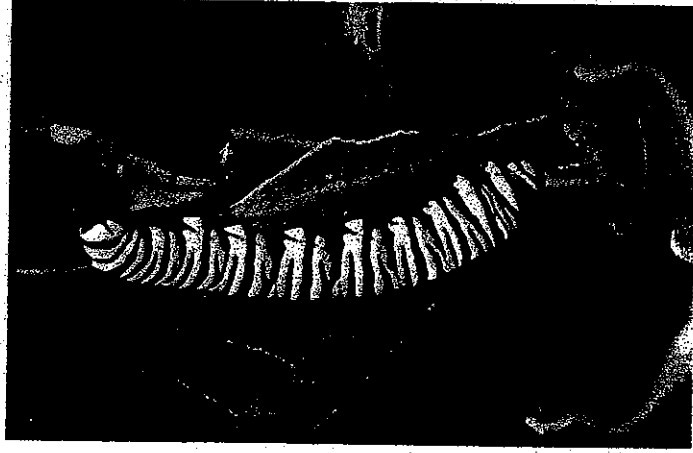


Milkweed is the host plant for the monarch butterfly. Without milkweed, the larva would not be able to develop into a butterfly. Monarchs use a variety of milkweeds.

Asclepias amplexicaulis
Asclepias arenaria
Asclepias asperula
Asclepias curassavica
Asclepias engelmanniana
Asclepias fascicularis
Asclepias hirtella
Asclepias incarnata
Asclepias latifolia
Asclepias ovalifolia
Asclepias pumila
Asclepias purpurascens
Asclepias quadrifolia
Asclepias speciosa
Asclepias stenophylla
Asclepias sullivantii
Asclepias syriaca
Asclepias tuberosa
Asclepias variegata
Asclepias verticillata
Asclepias viridiflora
Asclepias viridis
Calotropis procera



**How would you
 like your
 neighbourhood
 to be declared
 'noxious'?**





No Milkweed = No Monarchs

Where Have All The Monarchs Gone?

July 10, 2013

Where have all the monarch butterflies gone?

Expert says number is at an all-time low after milkweed supply 'crashed' in U.S. corn belt

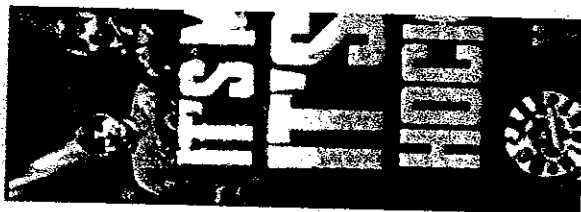
CBC News Posted: Jul 10, 2013 11:51 AM ET | Last Updated: Jul 10, 2013 12:02 PM ET



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CAUSE: Milkweed Supply

Where have all the monarch butterflies gone?

Expert says number is at an all-time low after milkweed supply 'crashed' in U.S. corn belt

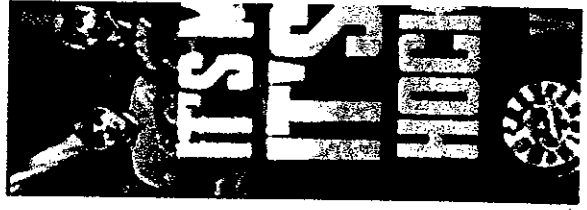
CBC News | Posted Jul 10, 2013 11:57 AM ET | Last Updated: Jul 10, 2013 12:02 PM ET



Stay Conne



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So why are we killing their habitat?



What I want

Support the development of Nectar Corridors in Windsor and Essex County for the Monarchs (and other butterflies and bees) by community groups and like minded organizations.

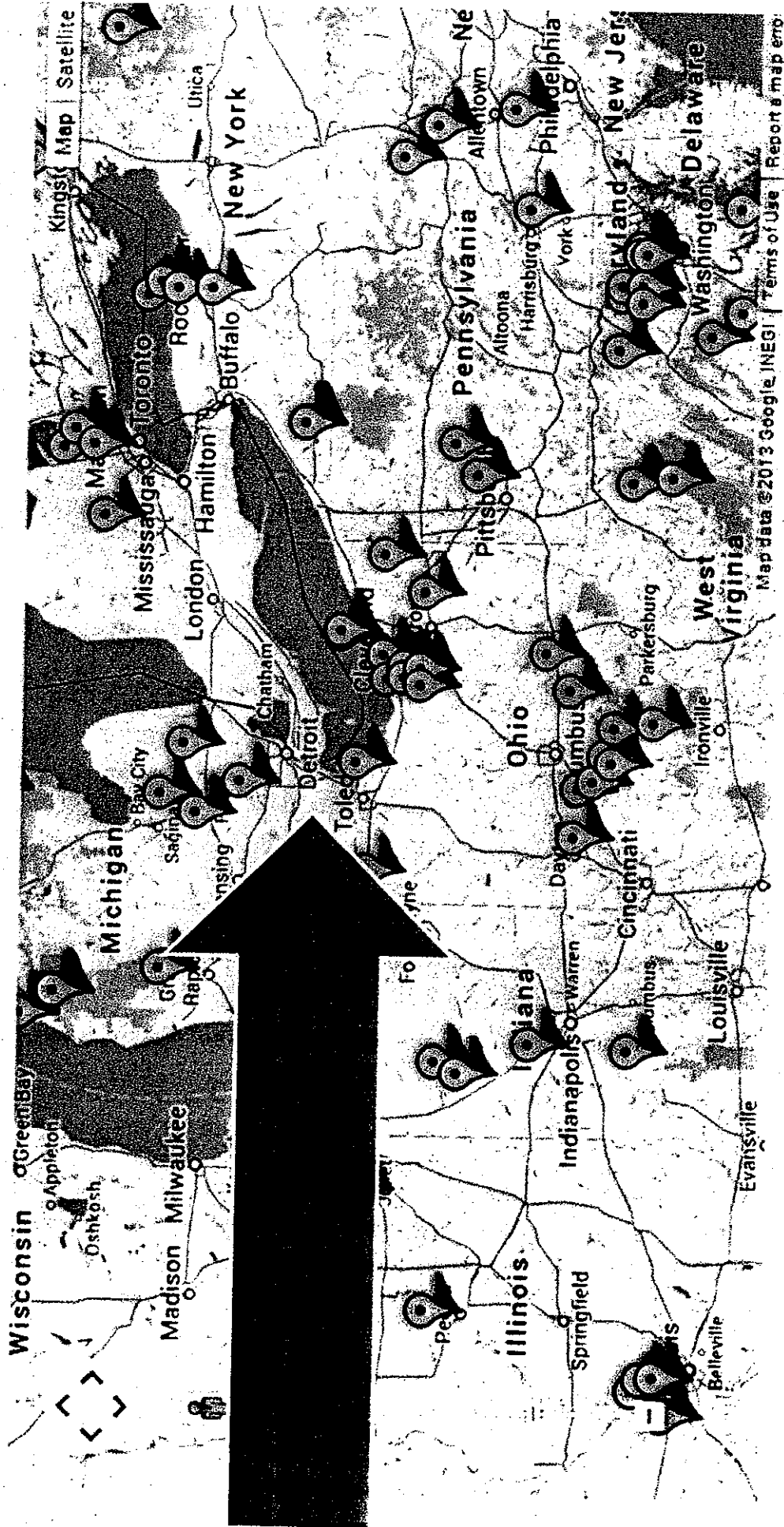
Lobby OMAFRA to change the Noxious Weed Act so that Milkweed only be killed off around livestock, allowed in all other areas.



**DO YOU WANT
TO SEE THE
MONARCHS IN
WINDSOR-ESSEX?**

Help Us Join Forces

Co-ordinate our effort to become Pollinator Friendly Region



Kadour, Karen

From: Parent, Averil
Sent: Tuesday, November 26, 2013 2:04 PM
To: Kadour, Karen
Subject: FW: By-law enforcement of milkweed

From: Kalinowski, Ann
Sent: November 8, 2013 1:43 PM
To: Parent, Averil
Cc: Halberstadt, Alan; Doyle, LeeAnne
Subject: RE: By-law enforcement of milkweed

Hi Averil:

You are correct.

Ann

From: Parent, Averil
Sent: November 8, 2013 1:37 PM
To: Kalinowski, Ann
Cc: Halberstadt, Alan; Doyle, LeeAnne
Subject: RE: By-law enforcement of milkweed

Thanks Ann,

So to clarify, if milkweed is planted on a property in part of a Naturalized Area (as defined in the by-law, with a buffer strip of 2 feet to other properties), it does not need to be killed or cut down?

Thanks,

Averil

From: Kalinowski, Ann
Sent: November 8, 2013 1:21 PM
To: Parent, Averil
Cc: Halberstadt, Alan; Doyle, LeeAnne
Subject: RE: By-law enforcement of milkweed

Hi Averil:

Under By-law 3-2006, *A By-law to establish standards respecting yard waste and exterior property maintenance*, weeds are defined as those items found in the Weed Control Act. The City of Windsor By-law Enforcement Unit does not interpret or enforce the Weed Control Act. We do ensure that grass is kept below 12 inches as outlined in the by-law and will require that property owners maintain this minimum standard. If there happens to be mild weed amongst the tall grass on a property, the requirement would be to have it cut down to 12 inches.

I have attached the By-law for your review.

Ann

From: Parent, Averil
Sent: November 8, 2013 11:38 AM
To: Kalinowski, Ann
Cc: Halberstadt, Alan
Subject: By-law enforcement of milkweed

Morning Ann,

I coordinate the Windsor Essex County Environment Committee. At their meeting last night they heard from resident and community garden network coordinator Steve Green about Milkweed.

Milkweed provides essential food and habitat for the monarch butterfly, which is decreasing in population during the migration through Essex County. Steve would like to plant Milkweed in the City, at his community garden as well as others to encourage butterflies and insects (increasing biodiversity and needed for pollination).

Milkweed is on the Noxious Weed List, as it is toxic to farm animals. This is completely understandable in the County, however there are no dairy/pig farm operations in the city.

Some members of WECEC would like to meet with you to gain a better understanding about how City of Windsor By-law enforcement interprets and enforces the Noxious Weed list.

Are you free in the next couple of weeks for a meeting? I'm available the morning of Friday Nov 22nd, or anytime the week of the 25th.

Thanks for your time and consideration of this issue.

Averil

Averil Parent, BSc., MES
Environmental Coordinator
City of Windsor
4155 Ojibway Parkway
Windsor, Ontario N9C 4A5
tel: (519) 253-7111 Ext. 3290
fax: (519) 253-0464
email: aparent@city.windsor.on.ca

 Please consider the environment before printing this email.



Ojibway Massasauga Recovery Project

Jonathan Choquette, Project Coordinator
WECEC, 7 Nov. 2013
Windsor ON



SCC Ecological
Research & Design



Wildlife Preservation Canada

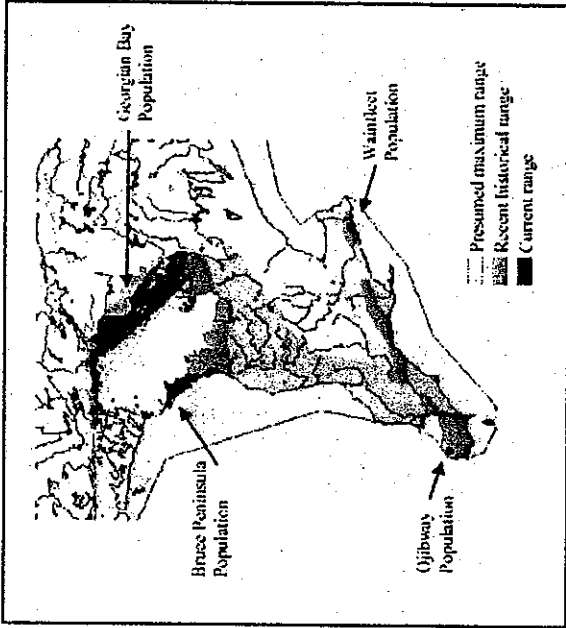
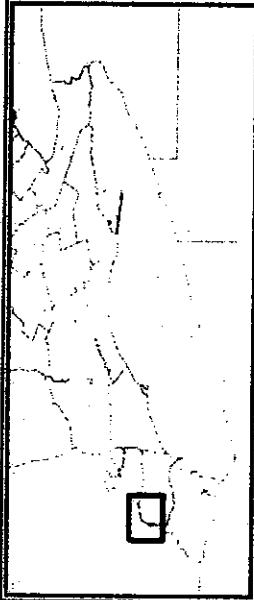
RECOVERY • CONSERVATION • KNOWLEDGE

Ojibway Population of Massasauga (*Sistrurus catenatus*)

- Extremely important to national, provincial and local biodiversity conservation
- Geographically, ecologically and genetically unique entity
- Endangered (COSEWIC) and protected (Ontario ESA, 2007)
- In serious decline



(COSEWIC 2012)



CITY OF WINDSOR

1978-2011 ~ 14.6 km²

1990 - 2011 ~ 5.7 km²

2000 - 2011 ~ 3.2 km²

2006 - 2011 ~ 0.3 km²

TOWN OF LASALLE



EXTIRPATION without INTERVENTION

(COSEWIC 2012)

Ojibway Massasauga Recovery Project

- Financial and logistical support by:



SCC Ecological
Research & Design

Canada



Wildlife Preservation Canada



Ontario

RECOVERY • CONSERVATION • KNOWLEDGE

- Long-term goal to undertake recovery actions to reduce the extinction risk of the Ojibway population
 - 1) Restoration of habitat connectivity,
 - 2) Mitigate threats,
 - 3) Population augmentation,
 - 4) **Maintain remaining sub-population**

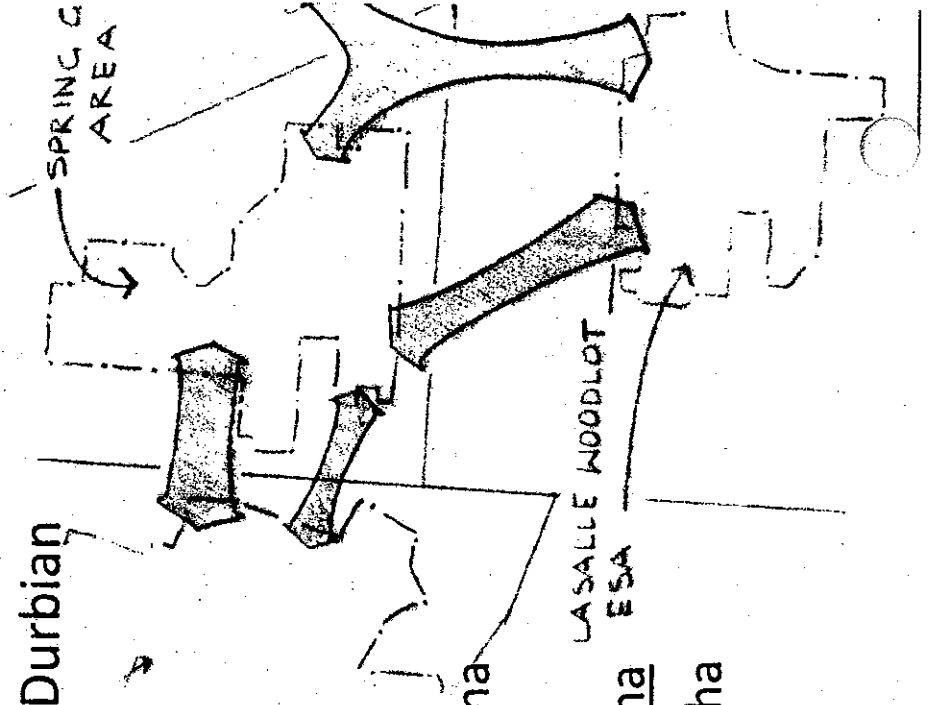
Achieving Recovery

- Maintain remaining sub-population
- Habitat restoration and enhancement
- Protecting large enough area to sustain sub-population (100 ha proposed minimum: Durbian *et al.* 2008)

- 100ha target for LaSalle Woodlot
ESA is feasible!

- Existing ESA boundary = ~93 ha
- ‘Critical Habitat’ identified by Parks Canada just outside of ESA boundary = ~7 ha
- Expanded ESA boundary = ~100ha

LAY PRAIRIE P.N.R. &
GRASS PRAIRIE H.P.



(Town of LaSalle and ERCA 2013; Parks Canada Agency 2013)

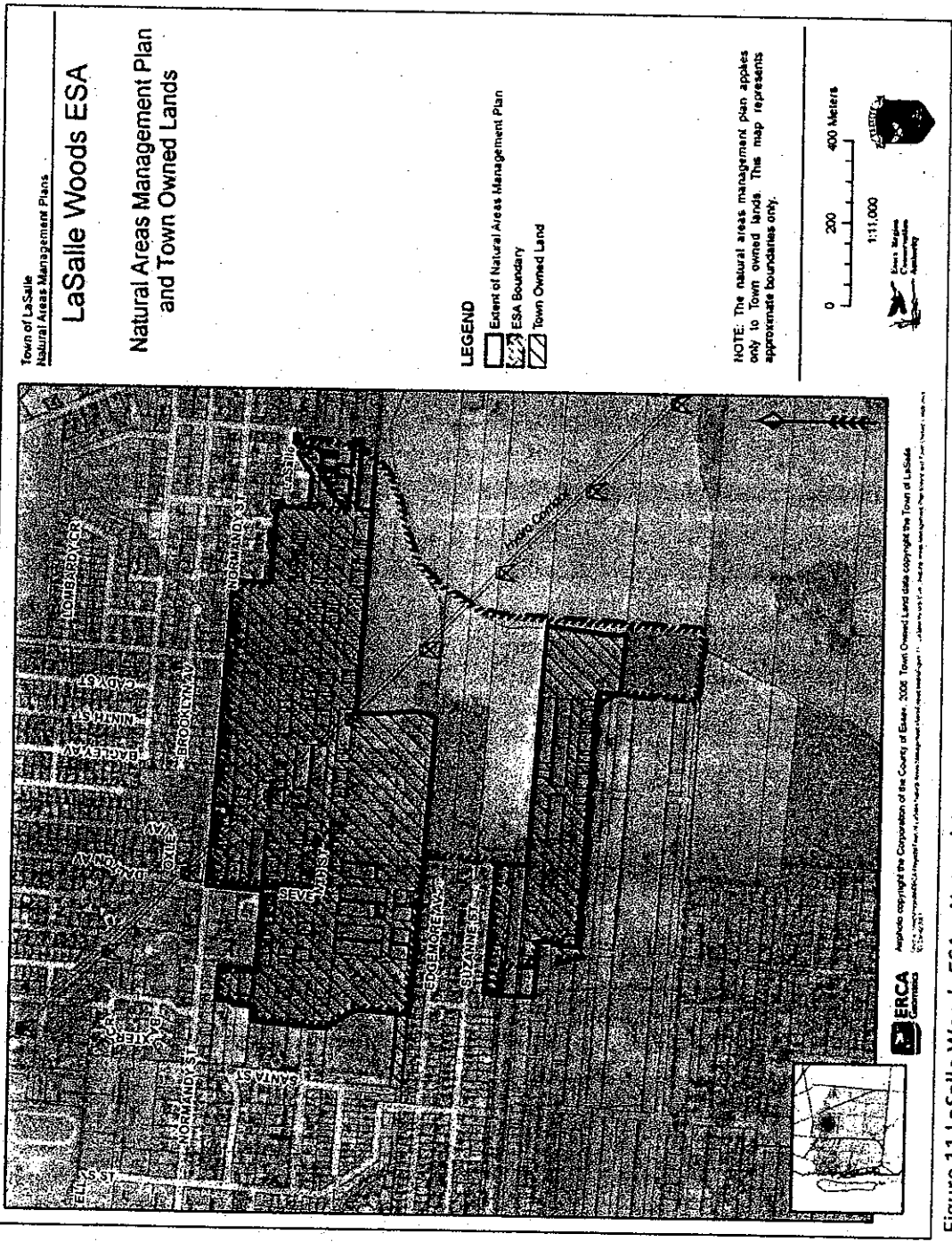


Figure 11 LaSalle Woods ESA – Natural Areas Management Plan Extent and Town Owned Lands.

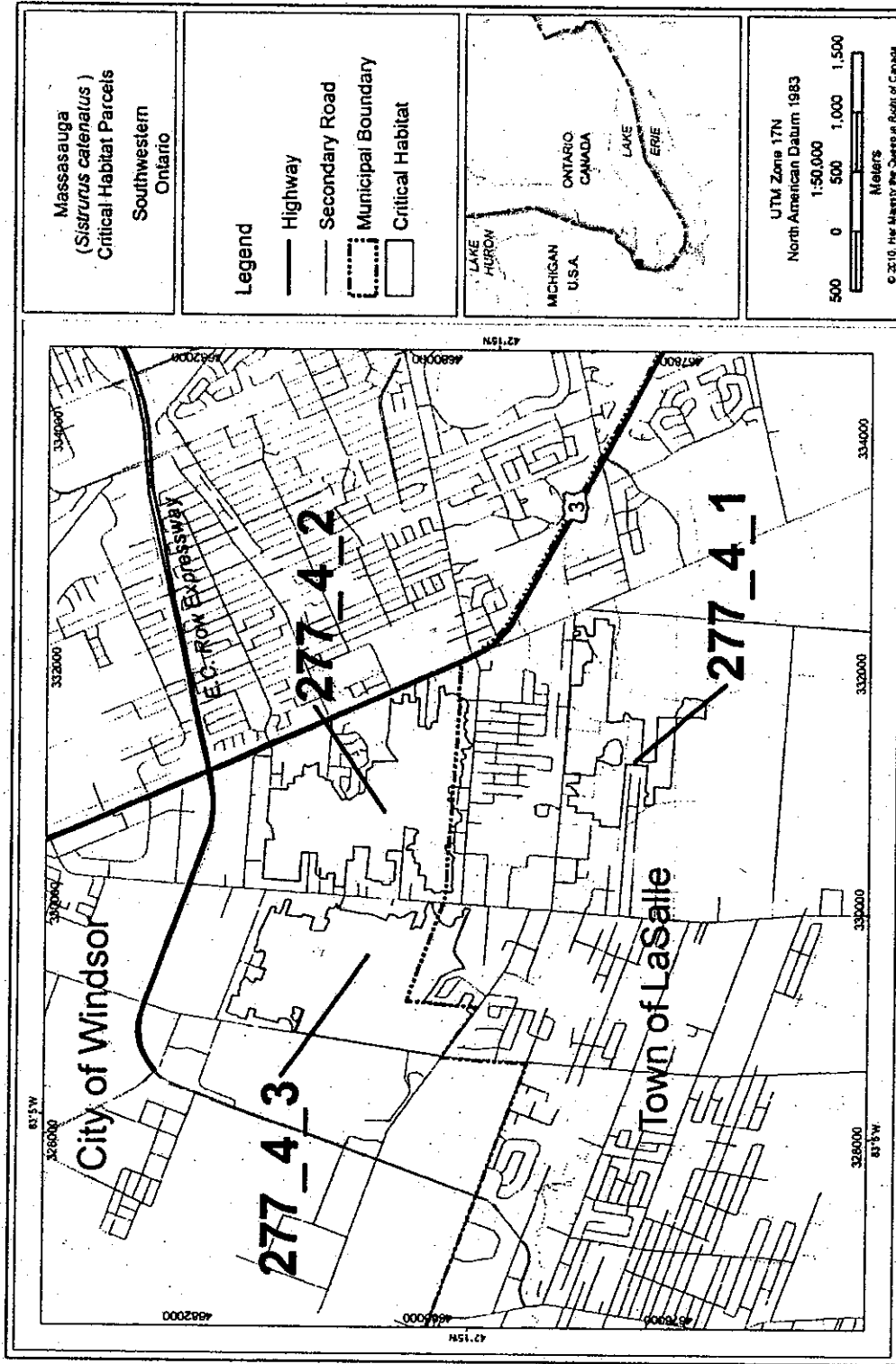


Figure 9: Fine-scale map of Massasauga critical habitat parcels 4_1, 4_2, and 4_3 for Ojibway.

(Parks Canada Agency 2013)

DRAFT

Species at Risk Act
Recovery Strategy Series

Recovery Strategy for the Massasauga (*Sistrurus catenatus*) in Canada

Support for Massasauga Recovery

"The long-term recovery goal for Massasauga in Ontario is the persistence of the species throughout its current range, by preventing extirpation of the Ojibway population..." (Parks Canada Agency 2013)

Massasauga



2012



Parks
Canada

Parks
Canada

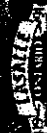
Canada

**Town of LaSalle
Natural Areas Management Plans**

**Support for
Massasauga
Recovery**

“It is recommended that following a thorough biological inventory of the LaSalle Woodlot ESA that a revised ESA boundary is developed and Natural Environment zoning be applied to appropriate parcels “ (Town of LaSalle and ERCA 2011)

2011-2021



Essex Region
Conservation
Authority

Support for Massasauga Recovery, cont.

- 1) **Detroit River Canadian Stage 2 Remedial Action Plan
(Green *et al.* 2010)**
- 2) **Essex Forests and Wetlands Conservation Action Plan (NCC
et al. 2009)**
- 3) **Ojibway Prairie Resource Stewardship Plan (Ontario Parks
2005)**

Requests to WECEC

In reviewing development proposals adjacent to the LaSalle Woodlot ESA, we request that WECEC support projects which adhere to the following principles OR express their opposition to the relevant councils (e.g., Town of LaSalle, Essex County) for projects which do not:

- 1) TO RESPECT THE LASALLE WOODLOT ESA BOUNDARY AS DISPLAYED IN THE TOWN OF LASALLE OFFICIAL PLAN AND L.W. ESA MGMT PLAN
- 2) TO RESPECT MASSASAUGA CRITICAL HABITAT AS DISPLAYED IN THE RECOVERY STRATEGY FOR THE MASSASAUGA IN CANADA
- 3) TO IMPLEMENT EDGE TREATMENTS WHICH DISCOURAGE HUMAN-SNAKE CONFLICT (E.G., SNAKE FENCING) BETWEEN THE L.W. ESA AND ADJACENT DEVELOPMENTS

Literature Cited

- COSEWIC. 2012. In Press. COSEWIC assessment and status report on the Massasauga *Sistrurus catenatus* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xiii + 66 pp. (www.registrelep-sararegistry.gc.ca/default_e.cfm).
- Durbian, F.E., King, R.S., Crabill, T., Lambert-Doherty, H., and R.A. Siegel. 2008. Massasauga home range patterns in Midwest. *Journal of Wildlife Management* 72(3): 754-759.
- Green, N.D., Cargnelli, L., Briggs, T., Drouin, R., Child, M., Esbjerg, J., Valiante, M., Henderson, T., McGregor, D., and D. Munro, eds. 2010. Detroit River Canadian Remedial Action Plan: Stage 2 Report. Detroit River Canadian Cleanup, Publication No. 1, Essex, Ontario, Canada. 170 pp.
- NCC, ERCA, ECSN, PC and CCC. 2009. Essex Forests and Wetlands Conservation Action Plan. Nature Conservancy of Canada, Essex Region Conservation Authority, Essex County Stewardship Network, Parks Canada and Carolinian Canada Coalition. 64 pp.
- Ontario Parks. 2005. Ojibway Prairie Resource Stewardship Plan Amendment. Appendix F – Repatriation of Eastern Massasauga Rattlesnakes at Ojibway Prairie Nature Reserve. March 2005. 4 pp.
- Parks Canada Agency. 2013. Draft Recovery Strategy for the Massasauga (*Sistrurus catenatus*) in Canada. Species at Risk Act Recovery Strategy Series. Parks Canada Agency. Ottawa. 35 pp.
- Town of LaSalle and ERCA. 2011. Town of LaSalle Natural Areas Management Plans: 2011-2021. Town of LaSalle and Essex Region Conservation Authority. 106 pp.

WECEC Air Subcommittee – Nov. 2013

1. Clean air saves lives! In October, the International Agency for Research on Cancer (IARC), an agency of the World Health Organization, announced that it had classified outdoor air pollution and particulate matter as carcinogenic to humans. This is the first time that experts have classified outdoor air pollution itself as a cause of cancer.

IARC reviewed over 1000 scientific papers from studies conducted on five continents. The most recent data available indicated that lung cancer deaths worldwide attributable to outdoor air pollution totalled 223,000. IARC identified the primary sources of outdoor air pollution being transportation, power generation, industrial and agricultural emissions, and residential heating and cooking.

Will Canadian governments respond? Recommended regulatory improvements could include: 1) an expansion of industrial sectors subject to release regulations under the Canadian Environmental Protection Act; 2) addressing background concentrations, cumulative, synergistic, persistent and bioaccumulative effects of substances and focusing on total annual loadings of pollutants into an airshed instead of simple concentrations of substances in air over minutes or hours as is done under point of impingement approach through the Ontario Environmental Protection Act; 3) rigorous municipal smog action plans which may include local legislation similar to Oakville's Health Protection Air Quality By-law (2010), requiring facilities to seek municipal approval for air emissions regardless of provincial requirements.

2. In October, the province announced the end of burning coal at the Lambton Generating Station, leaving Nanticoke Generating Station as the last coal-burning facility in southern Ontario (scheduled to cease coal-burning operations by the end of 2013). The closures are moving ahead one year of the province's previously announced closure by the end of 2014. Research showed that the cost of coal generation was approximately \$4.4 billion annually in Ontario when health, environmental, and financial costs were taken into consideration.