

Adopted by Council at its meeting held May 22, 2012 [M258-2012]

/AA

Windsor, Ontario May 22, 2012

**REPORT NO. 63** of the  
**ENVIRONMENT & TRANSPORTATION STANDING COMMITTEE**  
of its meeting held April 25, 2012

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**Present:** Councillor Hatfield, Chair  
Councillor Halberstadt  
Councillor Sleiman  
Councillor Valentinis

**Regrets:** Councillor Payne

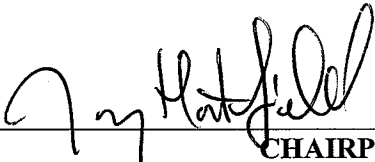
That the following recommendations of the Environment and Transportation Standing Committee **BE APPROVED:**

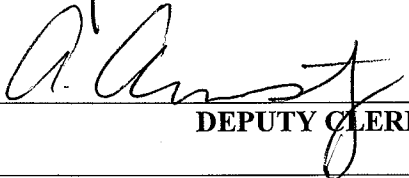
Moved by Councillor Sleiman, seconded by Councillor Halberstadt,  
**THAT** the minutes of the Windsor-Essex County Environment Committee meeting held February 2, 2012 **BE RECEIVED** for information.

Carried.

Councillor Valentinis declares a conflict and abstains from voting on this matter.

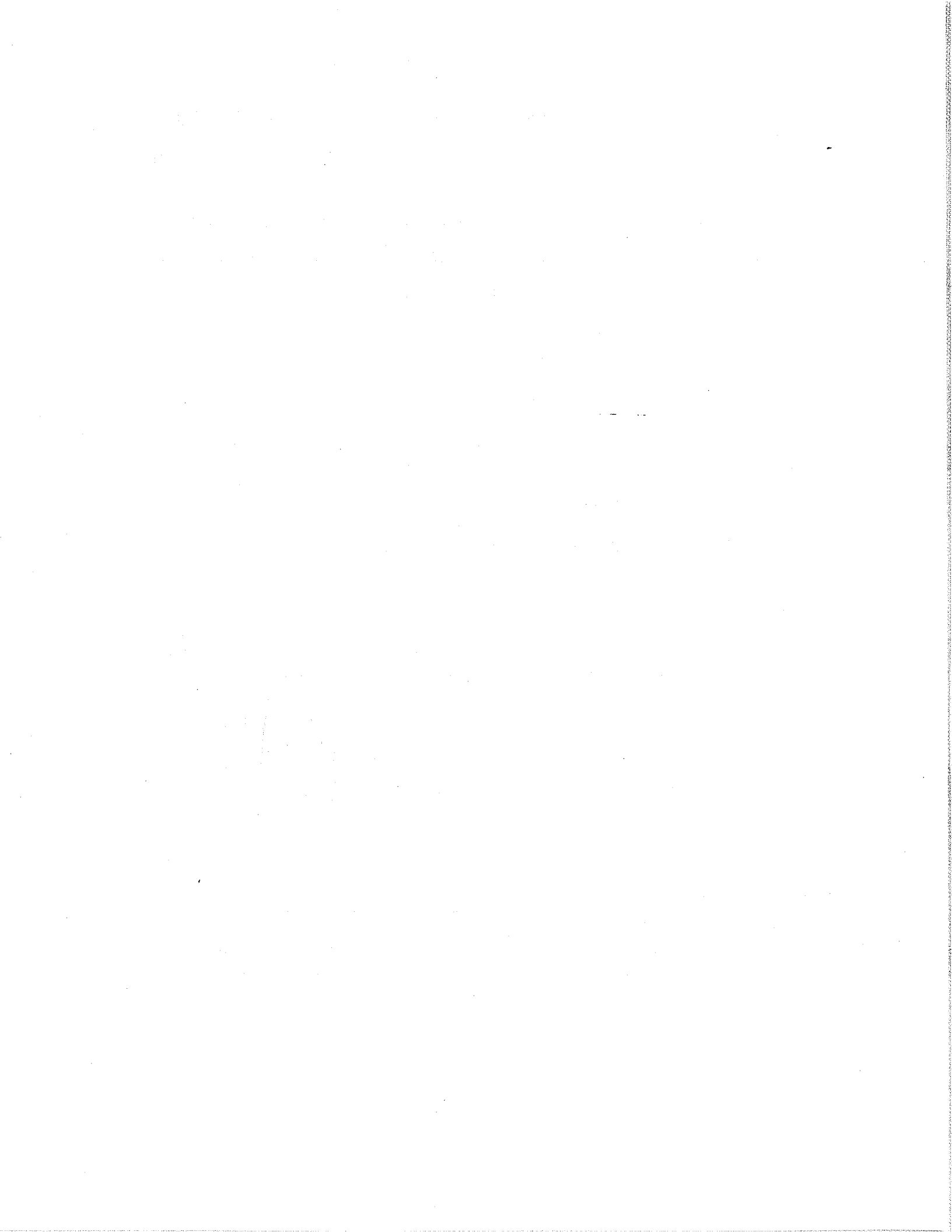
Clerk's Note: The minutes of the Windsor-Essex County Environment Committee meeting held February 2, 2012 are attached as background information.

  
\_\_\_\_\_  
CHAIRPERSON

  
\_\_\_\_\_  
DEPUTY CLERK

**NOTIFICATION:**

Name	Address	Email Address	Telephone	FAX



KK/  
Windsor, Ontario February 2, 2012

A meeting of the **Windsor-Essex County Environment Committee** is held this day commencing at 5:30 o'clock p.m. in the YQG Windsor International Airport Board Room, there being present the following members:

Councillor Alan Halberstadt, Co-Chair  
Charlie Wright, Co-Chair  
Mark Bartlett  
Rebecca Belanger (alternate for Matthew Child)  
Frank Butler (non-voting)  
Derek Coronado  
Rick Coronado  
Theresa Czerwinski (alternate for Dean Clevett)  
Roger Dzugan (alternate for Mark Bartlett)  
Karen Fallon  
Paul Henshaw (arrives at 5:38 p.m.)  
John Miller  
Juliet Mohammed (arrives at 5:42 p.m.)  
Phil Roberts  
Tamara Stomp (arrives at 5:45 p.m.)  
Radwan Tamr

**Regrets received from:**

Councillor Hilary Payne (attending the ERCA Board Meeting)  
Pauline Cheslock  
Dean Clevett

**Also present are the following resource personnel:**

Averil Parent, Environment & Sustainability Coordinator  
Beau Wansbrough, Planner II  
Karen Kadour, (A) Committee Coordinator

**1. CALL TO ORDER**

Councillor Halberstadt, Co-Chair calls the meeting to order at 5:30 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.

4. MINUTES

Moved by P. Roberts, seconded by J. Miller,  
That the minutes of the Windsor-Essex County Environment Committee at its  
meeting held January 5, 2012 **BE ADOPTED** as presented.  
Carried.

5. PRESENTATION

Dan Bissonnette, The Naturalized Habitat Network is present to provide information relating to "Project Pawpaw". A brochure entitled "Project Pawpaw" is distributed and attached as Appendix "A". Background information including coloured photographs of the Pawpaw tree is distributed and attached as Appendix "B". He provides the following information relating to the Pawpaw tree

The Co-Chair leaves the meeting at 5:40 o'clock p.m. and C. Wright, Co-Chair assumes the Chair.

- The Pawpaw tree is a small slender tree found naturally throughout the eastern United States and portions of southern Ontario, including Essex County.
- The tree has large leaves and bears an edible sweet fruit which is yellow-green in colour.
- The fruit can be eaten raw or preserved.
- Widespread deforestation across Windsor and Essex County, combined with the lack of awareness of the Pawpaw has severely impacted this species.
- The Pawpaw tree has site-sensitive requirements
- The species has been reduced to less than a dozen remnant sites in Windsor and Essex County.
- Training sessions for the Grower Training Program and the Consumer Education Program to be held in 2012 throughout Windsor and Essex County

Moved by P. Roberts, seconded by T. Stomp,  
That the Environment and Sustainability Coordinator **BE ENCOURAGED** to liaise with Dan Bissonnette, The Naturalized Habit Network regarding "Project PawPaw" and to report back.

Carried.

The Co-Chair thanks Dan Bissonnette for his Pawpaw Project presentation.

## 6. BUSINESS ARISING FROM THE MINUTES

### 6.1 Renewable Energy Media Campaign

A. Parent advises that letters requesting support for the renewable energy campaign have been sent to various solar companies in Windsor as well as the Economic Development Corporation and the Regional Chamber of Commerce. M. Bartlett will convene individual meetings with the proponents to discuss the Energy Media Campaign.

The Co-Chair returns to the meeting at 6:00 o'clock p.m.

### 6.2 New WECEC Appointments

A. Parent indicates that the elected Student Government President from St. Clair College will be put forward to sit on WECEC. She notes that student government elections will be completed in March 2012 and shortly thereafter the application of the Student Government President will be processed.

A. Parent states that a similar request has been sent to the University of Windsor Environment Committee and student government, however, discussions have not commenced.

## 7. COORDINATOR'S REPORT

### WECEC Coordinator Monthly Report

A. Parent reports that over 125 Windsor-Essex residents attended the inaugural "Green Speaker Series" event featuring Green Party leader Elizabeth May. Councillor Halberstadt, Co-Chair states that the inaugural event was a great success.

Discussion ensues regarding a Windsor Star article authored by Chris Vander Doelen dated January 31, 2012 entitled "The sky is not falling", *attached* as Appendix "C". It is generally agreed that A. Parent will respond to Mr. Vander Dolen's article on behalf of WECEC. T. Stomp requests that the letter be vetted through the Committee before it is sent.

M. Bartlett states that the Dr. David Suzuki School was the "perfect venue" for the event, however, he suggests if the venue is utilized for the next speaker series, that highlights of this school be provided for attendees.

Moved by K. Fallon, seconded by J. Miller,  
That the "WECEC Coordinator Monthly Report - January 2012" **BE RECEIVED** for information.  
Carried.

Moved by M. Bartlett, seconded by T. Czerwinski,  
That **APPROVAL BE GIVEN** to an expenditure in the upset amount of \$500.61 payable to Allegra Marketing for the printing of WECEC brochures and further, that this amount **BE DERIVED** from the 2012 WECEC budget.  
Carried.

## 8. SUBCOMMITTEE REPORTS

### 8.1 Air

D. Coronado refers to a document entitled "EPA Releases 2010 Toxics Release Inventory National Analysis", attached as Appendix "D". He states the 2012 Toxics Release Inventory shows that 3.93 billion pounds of toxic chemicals were released into the environment nationwide, a 16 percent increase from 2009. He indicates that the data relating to toxic releases in Canada has not been finalized.

D. Coronado reports that a U.S. Nuclear Regulatory Commission was held on January 5, 2012 regarding the cracked concrete shield building at the Davis-Besse Nuclear Power Station. An environmental coalition launched a new contention against FirstEnergy Nuclear Operating Company's proposal to extend the atomic reactor's operations from 2017 to 2037. A media release entitled "Beyond Nuclear Citizens Environment Alliance of Southwestern Ontario, Don't Waste Michigan and Green Party of Ohio dated January 10, 2012 is attached as Appendix "E".

D. Coronado makes reference to an article released on February 2, 2012 from Joseph Mangano, Radiation and Public Health, Ed McArdle, Sierra Club Michigan Chapter and Michael J. Keegan, Don't Waste Michigan entitled "New Report shows Increase in Cancers And Mortalities Since Fermi 2 Nuclear Plant Start Up", attached as Appendix "F". As outlined in the document, the following is stated:

*"One of the most shocking statistics shows that cancer death rates of young people (up to age 24) living in Monroe County exceeded the U.S. national rate by 28% from 1985 to 2008, a large shift from 1979-1984, when the country rate was 24% below the national average."*

Moved by M. Bartlett, seconded by K. Fallon,  
That the verbal report of Derek Coronado relating to the Air Subcommittee **BE RECEIVED**.  
Carried.

**-8.2 Transportation**

T. Czerwinski states that D. Clevett attended the Regional Emergency Response Planning Meeting held on January 31, 2012. She indicates that groups interested in participating either actively or as observers should contact Phil Berthume at Windsor Fire and Rescue Services. An e-mail from D. Clevett dated January 31, 2012 regarding the recent Regional Emergency Response Planning Meeting is attached as Appendix "G".

**8.3 Provincially Significant Wetlands**

P. Roberts states that the Provincially Significant Wetlands Subcommittee has not met in the month of January.

P. Roberts advises that the Environment & Transportation Standing Committee at its meeting held January 25, 2012 reviewed the following motion:

*"That the City pursue further discussion/negotiation with the Federal Government regarding the environmental benefits and cost savings associated with the preservation of the Ojibway Shores lands as natural heritage."*

P. Roberts provides an update relating to the St. Louis woodlot ash removal process. He notes that the trees were removed in one day with the stumps remaining.

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

That the Environment and Sustainability Coordinator **BE REQUESTED** to invite Dan Dufour from Carolinian Canada to make a presentation to WECEC regarding their Lake Erie Coastal Trail Project.

Carried.

**10.3 St. Clair College – Woodlot**

A document entitled "Site #49 – The St. Clair College Prairie" is distributed and attached as Appendix "H".

Councillor Halberstadt, Co-Chair states that Dr. Strasser, President, St. Clair College has requested the City sell the woodlot to the College.

R. Tamr leaves the meeting at 7:02 o'clock p.m.

T. Stomp leaves the meeting at 7:05 o'clock p.m.

D. Coronado suggests that ERCA undertake a provincially significant wetland (PSW) assessment. R. Belanger reports that the assessment would cost approximately \$10,000.

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

That the City of Windsor **BE REQUESTED** to retain ownership of the woodlot (located on 0 Janisse Street) adjacent to St. Clair College; that an updated environmental audit **BE UNDERTAKEN** with the intention of looking at the highest degree of protection for the woodlot and further, that the woodlot **BE ASSESSED** for its Provincial significance.

Carried.

#### 8.4 Nutrient Loading

A. Parent indicates that the newly formed Nutrient Loading Subcommittee has not met.

### 9. NEW BUSINESS

#### 9.1 Earth Day 2012

A. Parent asks if WECEC is interested in renting a booth at the Windsor-Essex County Earth Day event to be held on May 1, 2012 at Mic Mac Park/Malden Park.

Moved by J. Mohammed, seconded by P. Henshaw,

That **APPROVAL BE GIVEN** to an expenditure in the upset amount of \$200 for a booth and other associated costs for the Windsor-Essex County Earth Day event to be held on May 1, 2012 at Mic Mac Park/Malden Park.

Carried.

#### 9.2 WECEC Strategic Plan Review

A. Parent states that many of the Strategic Plan goals have been completed and can be removed from the plan. Those goals which are continuously ongoing will remain.

#### 9.3 Clean Across Canada 2013

This item is deferred to the March 1, 2012 meeting.

### 10. COMMUNICATIONS



- 10.1 The congratulatory letter from "Prevent Cancer Now" regarding WECEC's letter submitted in support of the Zero Waste Detroit Petition is received for information.
- 10.2 The response letter from the United States Environmental Protection Agency regarding WECEC's letter in support of the Zero Waste Detroit Petition is received for information.

11. **DATE OF NEXT MEETING**

The next meeting will be held on Thursday, March 1, 2011 at 5:30 o'clock p.m. at the Lou Romano Water Reclamation Plant (4155 Ojibway Parkway).

12. **ADJOURNMENT**

There being no further business, the meeting is adjourned at 7:40 o'clock p.m.

\_\_\_\_\_  
Councillor Halberstadt, Co-Chair

\_\_\_\_\_  
Committee Coordinator



**AGENDA**  
and Schedule "A"  
to the minutes of the meeting of the  
**WINDSOR-ESSEX COUNTY ENVIRONMENT COMMITTEE**  
Thursday, February 2<sup>nd</sup>, 2011  
Meeting at 5:30p.m.  
At YQG WINDSOR INTERNATIONAL AIRPORT  
BOARD ROOM

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1. **CALL TO ORDER**

2. **ADDITIONS TO THE AGENDA**

3. **DECLARATION OF CONFLICT**

4. **MINUTES**

Adoption of the minutes of the meeting held January 5<sup>th</sup>, 2011 – *emailed separately.*

5. **PRESENTATION:**

Dan Bissonnette, The Naturalized Habitat Network – Introduction to "Project Pawpaw".

6. **BUSINESS ARISING FROM THE MINUTES**

6.1 Renewable Energy Media Campaign

6.2 New WECEC Appointments

7. **COORDINATORS REPORT**

WECEC Coordinator Monthly Report – *attached.*

8. **SUBCOMMITTEE REPORTS**

8.1 Air

8.2 Transportation

8.3 Provincially Significant Wetlands

8.4 Nutrient Loading

**NEW BUSINESS**

- 9.1 Earth Day 2012
- 9.2 WECEC Strategic Plan Review – attached.
- 9.3 Clean Across Canada 2013 – attached.

**10. COMMUNICATIONS**

- 10.1 Congratulatory letter from “Prevent Cancer Now” regarding our letter submitted in support of the Zero Waste Detroit Petition – attached.
- 10.2 Response letter from the United States Environmental Protection Agency regarding our letter submitted in support of the Zero Waste Detroit Petition – attached.
- 10.3 Report to the Executive Standing Committee, “Sale of Land to St. Clair College – Woodlot” – attached.

**11. DATE OF NEXT MEETING**

The next meeting will be held on Thursday, March 1<sup>st</sup>, 2011 at the YQG Windsor Airport Board Room at 5:30 o'clock p.m.

**12. ADJOURNMENT**

## Getting Involved!

Our training sessions for our Grower Training Program and our Consumer Education Program will both be taking place at a variety of times and locations across Windsor and Essex County throughout 2012. Whether you would like to learn about growing your own Pawpaw trees or preparing your own Pawpaw dishes or both, we want to hear from you!

### Contact Us

If you would like to learn more about our Grower Training Sessions, our Consumer Education Program or any aspect of Project Pawpaw, contact us and join our notification list. This will allow you to receive periodic updates of when our training sessions and related events are scheduled to take place.

To include yourself on our e-mail notification list, contact us at...

nathabnet@primus.ca

To include yourself on our telephone notification list, contact us at...

519-259-2407

When contacting us, please be sure to include the following:

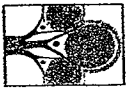
- Your name and contact information.
- Whether you are interested in our Grower Training Sessions, our Consumer Education Program or both.
- Please let us know if you have a preference for a specific time or location.

Project Pawpaw is presented by  
**The Naturalized Habitat Network  
of Essex County & Windsor**  
Visit us at  
[www.naturalizedhabitat.org](http://www.naturalizedhabitat.org)  
• Check us out on Facebook.

## Our Project Partners

We would like to acknowledge our project partners for their support.

### The McGeachy Charitable Foundation

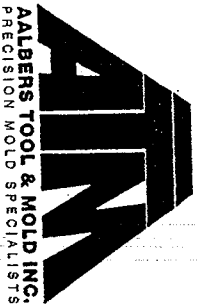


**WindsorEssex**  
COMMUNITY FOUNDATION



**The Essex Community**

**Future Development Corporation**



**ALBERS TOOL & MOLD INC.**  
PRECISION MOLD SPECIALISTS



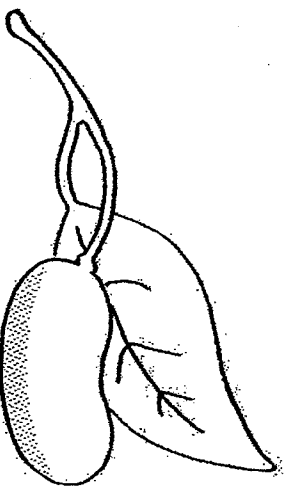
*Sisters of St. Joseph*

**COUNTY  
Connect**  
CO



A special initiative presented by

**The  
Naturalized Habitat Network  
of Essex County & Windsor**



**APPENDIX "A"**

## *The Pawpaw: Its Past & Present*

The Pawpaw (*Asimina triloba*) is a small, slender tree that is found naturally throughout the eastern United States and portions of southern Ontario, including Essex County. It has large leaves and bears an edible fruit. This sweet fruit, which is yellow-green in colour, can be eaten raw or preserved to make a variety of foods. Historically, it typically grew in enclosed wooded areas, where it flourished in moist, rich soil and found protection from harsh winds and other disturbances. Its fruit was a favourite among local wildlife and the aboriginal people who made this region their home.

The Pawpaw's circumstances changed dramatically with the onset of European settlement in our region. Widespread deforestation across Windsor and Essex County within the last century, combined with a lack of awareness of the Pawpaw and its benefits, has severely impacted this species. Furthermore, the Pawpaw's site-sensitive requirements have prevented it from re-generating in disturbed areas or being established in new forestation projects. In an area where the Pawpaw was once wide spread, this species has been reduced to less than a dozen remnant sites in Windsor and Essex County.

In addition to having a diminished presence in our region, the Pawpaw has been largely forgotten. Many of our residents are unaware of just what a Pawpaw is, much less of this species' presence in Windsor and Essex County. In a time when the people of our region have no historical or cultural connection to our native Pawpaw, this species would appear to be both gone and forgotten.

### *What if?...*

Considering the Pawpaw's sensitivities and other complexities, attempting to restore it through a quick promotion or as a garden fad or gimmick would ultimately do more to harm this vulnerable species. On the contrary, bringing the Pawpaw out of obscurity would require an ambitious investment, one which would require planning, education and personal commitment. Yet despite this level of investment, the Pawpaw offers a variety of potential opportunities and benefits. If we could utilize the Pawpaw in a meaningful way, we could restore its presence in Windsor and Essex County while establishing it as a new food crop for our region. To this end, after more than one year of planning, discussions, research, and grant applications, we have launched a special initiative....  
Project Pawpaw.

*Project Pawpaw is an initiative of the Naturalized Habitat Network dedicated to raising awareness of our indigenous Pawpaw and its benefits by providing education, training and practical experiences to both prospective producers and consumers, with the goal of restoring this species, while establishing it as a community-supported, environmentally sustainable local food resource.*

## *Presenting Project Pawpaw*

This special initiative will officially begin in November, 2011 and will continue throughout 2012. This will involve the development of new educational resources, events and activities. This particular initiative will present some significant "firsts", beginning with the development of the very first community Pawpaw project to ever take place in Canada. Just as importantly, this project will involve a level of community participation that is unprecedented in our organization.

Project Pawpaw will consist of two distinct aspects. These are:

- 1** **Grower Training**  
This portion of our initiative will provide training to those who are interested in growing the Pawpaw and harvesting their own fruit. These training events will include both formal and practical events that will be scheduled at a variety of locations across Windsor and Essex County. Participants will also be provided with their own Pawpaw seedlings. Local food producers, family gardeners and all avid gardeners are welcome to participate.
- 2** **Consumer Education**  
This portion of our initiative will provide hands on experience to those interested in working with Pawpaw fruit in their own kitchens. Beginning with an orientation, participants will be provided with samples of fresh and frozen Pawpaw fruit and encouraged to develop their own "made in Ontario" recipes. We will welcome both amateur and professional participants, including home makers, chefs, culinary students or food aficionados.

***The Naturalized Habitat Network of Essex County & Windsor***  
An Overview of...

***Project Pawpaw***

This is a special initiative that was launched last December and will continue throughout most of 2012. This project was undertaken for a number of specific reasons, which include:

1. The scarcity of the indigenous Pawpaw in Essex County and Windsor, which is limited to less than a dozen known remnant sites in this region.
2. The overall lack of awareness of this species and its benefits and opportunities.
3. An awareness that if this species were simply promoted without education as the next "plant of the month", that this would, in the long term, result in more harm than good for this species.
4. The need for comprehensive education and ongoing consultation, due to this species' specific requirements and sensitivities.
5. The need to draw this species out of obscurity and restore its presence in our region by integrating it into our landscape, diet, history, community and overall culture.

**Project Mandate:** Project Pawpaw is an initiative of the Naturalized Habitat Network dedicated to raising awareness of our indigenous Pawpaw and its benefits by providing education, training and practical experiences to both prospective producers and consumers, with the goal of restoring this species, while establishing it as a community supported, environmentally sustainable local food resource.

This initiative is the first of its kind to take place in Canada and has been quietly in development since 2010. The environmental and agricultural information that has been used to develop the educational aspects of this initiative are drawn from an eclectic mix of sources, including the following:

- The Pawpaw Research Program at Kentucky State University
- The North American Pawpaw Growers Association
- Interviews with Ohio Pawpaw farmers and tours of their properties
- Local consulting ecologist Gerry Waldron
- My own experience in tracking and growing this species over the past ten years.

For more information about this initiative, refer to our brochure or visit us site at [www.naturalizedhabitat.org](http://www.naturalizedhabitat.org).

There are some specific project-related events and activities that will take place throughout the coming year. One of the most significant is a series of training sessions on Pawpaw cultivation, which will be open to all residents of Windsor and Essex County who are interested in growing their own Pawpaw. Whether grown as a food source, as a special habitat project or both, these sessions will include individuals from different walks of life, including backyard gardeners, amateur ecologists and food producers. These sessions will include the distribution of Pawpaw seedlings for participants, as well as ongoing demonstrations throughout the remainder of the year. These training sessions will begin in March and will be offered at various locations throughout Windsor and Essex County. See our attached flyer for more details.

During the months of January and February, a significant part of our efforts have focused on community outreach, for the purpose of raising awareness of this initiative and

recruiting participants for our upcoming grower training sessions. At present, we are seeking local organizations to help us to share this information among their own members and affiliates. Some possible ways that the Windsor & Essex County Environment Committee could consider assisting us include the following:

- a. Include information about our training sessions in the "News & Events" section of your web site.
- b. Posting a downloadable, pdf version of our Pawpaw training flyer on your web site.
- c. Sharing this information as a forwarded e-mail among WECAC's affiliate organizations.
- d. Other suggestions?

Your help in promoting our training sessions would be greatly appreciated, as well as be essential to help us in our efforts to restore the Pawpaw and bring new opportunities to our region.

Thank-you for your consideration.

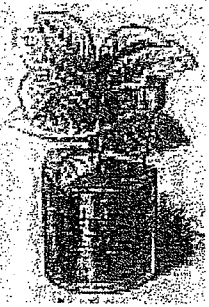
Dan Bissonnette, Program Coordinator  
Phone: 519-259-2407 E-mail: [nathabnet@primus.ca](mailto:nathabnet@primus.ca)

#### Attachments

- Project Pawpaw brochure
- The Pawpaw Grower Training Flyer
- Image montage of the Pawpaw and its fruit.

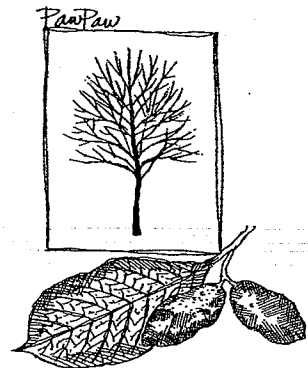
# The Pawpaw Grower Training Program

Learn to grow and manage your own backyard Pawpaw harvest! This series of grower seminars, which are the first ever to take place in Canada, will provide the essentials that will allow area residents to effectively grow their own Pawpaw trees. Through these 2.5 hour training sessions, participants will understand the special requirements and proven cultivation techniques for this truly unique native species. Participants will also be invited to participate in a series of Pawpaw-related tours and demonstrations throughout the coming months. In addition, each qualifying participant will receive his or her own Pawpaw seedling. During March and early April, over a dozen training sessions will be offered throughout Windsor and Essex County.



To request an electronic file of these listings, e-mail us at [nathabnet@primus.ca](mailto:nathabnet@primus.ca)

Saturday, March 3 - LaSalle  
 Saturday, March 10 - Puce  
 Tuesday, March 13 - Belle River  
 Wednesday, March 14 - Amherstburg  
 Saturday, March 17 - Kingsville  
 Saturday, March 24 - South Windsor  
 Monday, March 26 - LaSalle  
 Wednesday, March 28 - South Windsor  
 Thursday, March 29 - Leamington  
 Saturday, March 31 - Essex  
 Monday, April 2 - East Windsor  
 Wednesday, April 4 - Tecumseh  
 Thursday, April 5 - Essex  
 Saturday, April 7 - Comber  
 Tuesday, April 10 - Maidstone

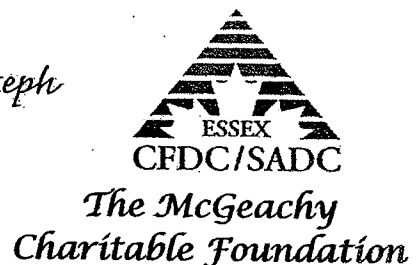


\$10.00/ person for advanced registration.  
 \$12.00/ person for same day registration.  
 Seating for each session is limited to 18 participants.  
 To reserve your space, call us at 519-259-2407.



The Pawpaw Grower Training Program is presented by **The Naturalized Habitat Network of Essex County & Windsor** as part of a special initiative, Project Pawpaw. To learn more about this project and our other events and resources, visit our web site at [www.naturalizedhabitat.org](http://www.naturalizedhabitat.org).

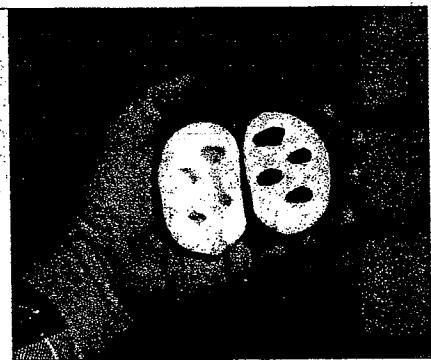
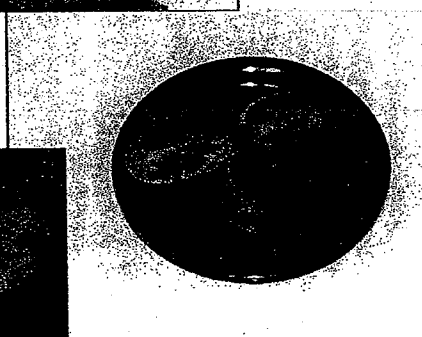
Special thanks to our project supporters





## So what exactly does a Pawpaw look like?

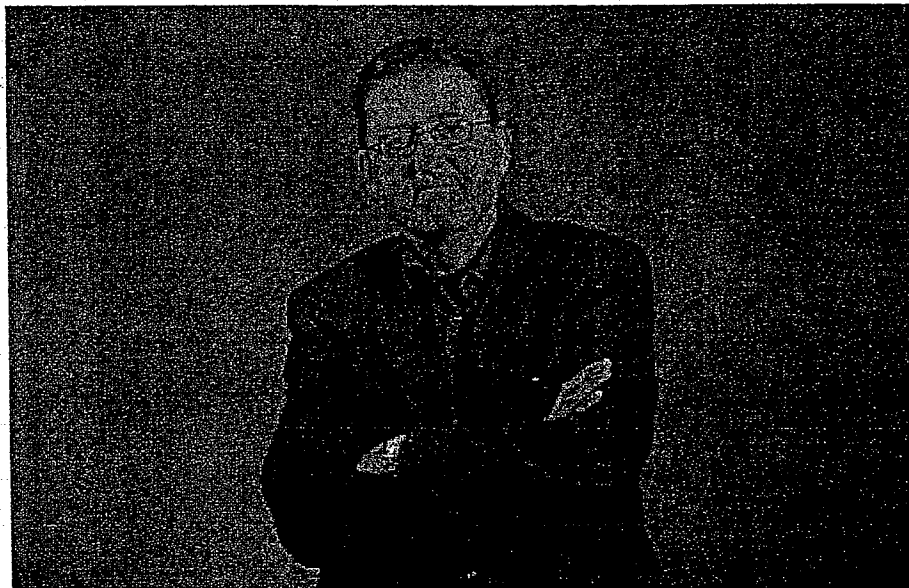
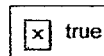
The Pawpaw Tree is a small, slender tree with large leaves. The tree on the right is twelve years old and is about 4 meters or 13 feet tall. Most trees reach 5 to 6 meters when fully mature. The large leaves and chocolate coloured flowers give this tree a distinct, tropical appearance.



The fruit of the Pawpaw is variable in size and shape. Its sweet flavour has been compared to custard, mango, banana, pear and melon. Some might suggest that our Ontario Pawpaw does not produce adequate fruit, but as these photos attest, proper planting and care can produce fruit of remarkable size and taste.

# Vander Doelen: The sky is not falling

BY CHRIS VANDER DOELEN, THE WINDSOR STAR JANUARY 31, 2012



Windsor Star columnist Chris Vander Doelen.  
Photograph by: Jason Kryk, The Windsor Star

Green Party Leader Elizabeth May is starting to look like one of those absurd cartoon figures who carry signs that read, "The End is Near."

In the cartoon strips - most notably those of the great Gary Larson - the ongoing joke is that "the end" never comes. But the sign carriers never lose faith in their grim fantasy.

That's May and her acolytes, global warming believers who never get the joke. And they never seem dispirited by mounting evidence that their scientific priesthood has been making up their climate research to keep the government money flowing.

May was in Windsor on the weekend beating a dead political horse called the Kyoto Accord. According to people who heard her speak at what I call the Saint David Suzuki elementary school, the audience ate up her message as if it had been freshly baked that day.

But then they would have, since the audience was a believer group called the Windsor Essex County Environmental Committee. "Global warming is indisputable," its co-chair said.

May reassured WECEC that indeed the sky will fall due to a climate damaged by humans. Because of that, the Harper government is wrong to try to pull Canada out of Kyoto, although our attempt to do so is merely a technicality that could be overturned by the end of the year, she claims.

## APPENDIX "C"

The bulk of May's message was politically partisan, according to some attendees. WECEC loved it, pronouncing May a charming first guest preacher for their new Green Speaker Series of environmental sermons.

Perhaps none of the people in the room had heard the latest climate news. And maybe it wouldn't have mattered, given the religious nature of their devotion to the climate faith. But yet more evidence has turned up to support the theory that global temperatures are not rising.

In fact, it appears temperatures are actually going down. So says the now infamous University of East Anglia Climatic Research Office (some of the people who have been massaging the research work there) and the Met Office, the United Kingdom's weather service and meteorological research agency.

The two bodies quietly released a paper last week which says that temperature readings from 30,000 worldwide measuring stations show that global temperatures stopped rising in 1997 and have been dropping since. In fact, the world could be heading for a mini ice age like the one that froze most of Europe and its rivers in the 1600s.

Why is this happening? The less hidebound scientists say they don't really know. Some believe it could be linked to sun spot activity, which they believe wreaks far more powerful effect on our climate than we have realized.

Others say the cooling could be linked to the rotating temperature layers of the oceans, which "flip" over every 60 years, producing the El Nino and La Nina effects.

In the past year, world temperatures have dropped by half a degree Centigrade due to La Nina in the Pacific, and is likely to plunge more, last week's report said. Had that been an increase, May and her fellow sign-carrying enviro-doomists would be in hysterics right now.

"Nature is about to carry out a very interesting experiment," Pal Brekke, senior adviser to the Norwegian Space Centre, told the Daily Mail on Sunday. "Ten or 15 years from now we will be able to determine much better whether the warming of the late 20th century really was caused by manmade CO<sub>2</sub>, or by natural variability."

And for those who inevitably will claim that Brekke is a lone freak, a "denier" who refuses to see the truth because he's in the pocket of some secret cabal of tarsand owners, there are many more who think the latest data means that global warming, as a theory, is probably deader than Sarah Palin's presidential hopes.

"We're now well into the second decade of the pause," says Benny Peiser, director of the Global Warming Policy Foundation. "If we don't see convincing evidence of global warming by 2015, it will start to become clear whether the models are bunk. And, if they are, the implications for some scientists could be very serious."

Not to mention the implications for some politicians. There is now a mountain of evidence that a tightly knit group of scientists and climate change believers around the world have been cooking their own scientific findings to shore up their flawed theories.

It will never matter to this group if the end of the world doesn't actually arrive due to warmer weather.

It's their belief in the end of the world that matters - that, and their self-righteous prescription of wealth redistribution via the Kyoto Accord as the cure.

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**FOR IMMEDIATE RELEASE**

January 5, 2012

## EPA Releases 2010 Toxics Release Inventory National Analysis

**WASHINGTON** – The U.S. Environmental Protection Agency (EPA) is releasing its annual national analysis of the Toxics Release Inventory (TRI), providing all Americans with vital information about their communities. The TRI program publishes information on toxic chemical disposals and other releases into the air, land and water, as well as information on waste management and pollution prevention activities in neighborhoods across the country. Total releases including disposals for the latest reporting year, 2010, are higher than the previous two years but lower than 2007 and prior year totals. Many of the releases from TRI facilities are regulated under various EPA programs and requirements designed to limit human and environmental harm.

"We will continue to put accessible, meaningful information in the hands of the American people. Widespread public access to environmental information is fundamental to the work EPA does every day," said EPA Administrator Lisa P. Jackson. "TRI is a cornerstone of EPA's community-right-to-know programs and has played a significant role in protecting people's health and the environment by providing communities with valuable information on toxic chemical releases."

Citizens have a right to know what toxic chemicals are being released into their communities. Over the past 25 years, the TRI program has helped citizens, emergency planners, public health officials, and others protect human health and the environment by providing them with toxic chemical release and other waste management data they need to make decisions that affect the safety and welfare of their communities.

The 2010 TRI data show that 3.93 billion pounds of toxic chemicals were released into the environment nationwide, a 16 percent increase from 2009. The increase is mainly due to changes in the metal mining sector, which typically involves large facilities handling large volumes of material. In this sector, even a small change in the chemical composition of the ore being mined - which EPA understands is one of the reasons for the increase in total reported releases - may lead to big changes in the amount of toxic chemicals reported nationally. Several other sectors also reported increases in toxic releases in 2010, including the chemical and primary metals industries.

Total air releases decreased 6 percent since 2009, continuing a trend seen over the past several years. Releases into surface water increased 9 percent and releases into land increased 28 percent since 2009, again due primarily to the metal mining sector.

EPA has improved this year's TRI national analysis report by adding new information on facility efforts to reduce pollution and by considering whether economic factors could have affected the TRI data. With this report and EPA's Web-based TRI tools, citizens can access information about the toxic chemical releases into the air, water, and land that occur locally. Finally, EPA's first mobile application for accessing TRI data, myRTK, is now available in Spanish, as are expanded Spanish translations of national analysis documents and Web pages.

TRI data is submitted annually to EPA and states by multiple industry sectors including manufacturing, metal mining, electric utilities, and commercial hazardous waste facilities. Facilities must report their toxic chemical releases to EPA under the federal Emergency Planning and Community Right-to-Know Act (EPCRA) by July 1st of each year. The Pollution Prevention Act of 1990 also requires information on waste management activities related to TRI chemicals.

More on the 2010 TRI analysis and TRI Web-based tools: <http://www.epa.gov/tri>

**BEYOND NUCLEAR  
CITIZENS ENVIRONMENT ALLIANCE OF SOUTHWESTERN  
ONTARIO  
DON'T WASTE MICHIGAN \* GREEN PARTY OF OHIO**

For Immediate Release, Tuesday, January 10, 2012

**Contacts:**

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**Environmental Coalition Challenges Davis-Besse License Extension on Shield  
Building Cracks**

***Groups Cite Problem as Final Straw Regarding Safety Risks at the Problem-Plagued  
Reactor***

Oak Harbor, OH – As promised on January 5<sup>th</sup> at a standing room only U.S. Nuclear Regulatory Commission (NRC) meeting at Camp Perry in Port Clinton near Davis-Besse about its cracked concrete shield building, an environmental coalition today launched a new contention against FirstEnergy Nuclear Operating Company's (FENOC) proposal to extend the atomic reactor's operations from 2017 to 2037. Beyond Nuclear, Citizens Environment Alliance of Southwestern Ontario, Don't Waste Michigan, and the Green Party of Ohio, official intervenors against FirstEnergy's application to NRC for a 20 year license extension at the long problem-plagued reactor, filed a formal contention in the NRC's Atomic Safety Licensing Board (ASLB) proceeding today, citing the cracked concrete shield building as the final straw regarding Davis-Besse's safety risks. The groups are calling on FirstEnergy to withdraw its application for the license extension, which would mean operations at the plant would cease at the expiration of its current license, April 22 (Earth Day), 2017, at the very latest.

"The unsolved cracking problems seem to tie directly into the fact that the 35 year old Davis-Besse plant is significantly aging, with safety significant systems, structures, and components becoming unreliable," said Terry Lodge, Toledo based attorney representing the environmental coalition. "The public cannot have any confidence in the NRC staff, because the NRC said it would get to the bottom of things before allowing restart, but then allowed restart months before solving this mystery. Consequently, we want the NRC staff to prove to a licensing board, on the public record, that the problem is solved and the plant can operate safely," he added.

"FirstEnergy plans to replace radioactive and degraded steam generators in 2014, which means they would have to cut yet another giant hole in the concrete containment building," said Michael Keegan of Don't Waste Michigan. "This would be the fourth time they would have cut through the already cracked concrete shield building. Each time introduces more and more weakness into this very safety significant containment

structure, which is supposed to be able to contain radioactivity and pressure building up within during a severe accident, to prevent its catastrophic release into the environment," he added.

The first three holes cut through the cracked shield building were: first, in 1970, during initial construction; then, in 2002, when Davis-Besse's original, corroded reactor lid was removed and replaced with a new lid, during the infamous Hole-in-the-Head fiasco; then, in late 2011, in order to replace the second corroded lid. Thus, Davis-Besse is now on its third reactor lid.

"How many organ transplants does this monster need?" asked Keegan of Don't Waste Michigan. "Now what's wrong with the steam generators, that they need to be replaced two years from now? How at risk are the steam generators as we speak? A cascading steam generator tube rupture is another pathway to a 'Loss of Coolant Accident' and potential melt down of the reactor core," he added.

A February 2000 steam generator tube rupture at the Indian Point atomic reactors near New York City, along with the 2002 Davis-Besse Hole-in-the-Head fiasco, are considered the worst "breakdown phase" accidents in U.S. nuclear power history thus far.

Joseph DeMare, a State Committee member of the Green Party of Ohio added, "It's clear that First Energy's claims that there is a new, 'safety first,' corporate culture at Davis-Besse are simply fantasy. Rushing a cracked nuclear plant back into production is the essence of a 'money first' philosophy. Wind turbines and solar plants can't melt down and render Ohio uninhabitable like Davis-Besse can. Even as this problem unfolded, FirstEnergy tried to dismiss our contention in the relicensing process that wind and solar can replace Davis-Besse's baseload generation. A company that valued safety first would try to find a way to use the safest technologies first."

Also today, the NRC ASLB rejected FENOC's motion to have the environmental intervenors' renewable alternatives contention against Davis-Besse's license extension dismissed.

"How can FirstEnergy and NRC claim the December 6<sup>th</sup> re-start of Davis-Besse was safe, when they don't even know the root cause, extent, or safety significance of the cracking yet?" asked Kevin Kamps of Beyond Nuclear. "This amounts, yet again, to a high-stakes game of radioactive Russian roulette at Davis-Besse," he added.

Kamps wrote a backgrounder a year ago, at the launch of the environmental intervention against the license extension, entitled "Davis-Besse Atomic Reactor: 20 *MORE* Years of Radioactive Russian Roulette on the Great Lakes shore?!" It chronicles the many near-disasters at the plant over the past 35 years. The backgrounder is posted online at [http://www.beyondnuclear.org/storage/Davis\\_Besse\\_Backgrounder.pdf](http://www.beyondnuclear.org/storage/Davis_Besse_Backgrounder.pdf).

At the January 5<sup>th</sup> Camp Perry NRC public meeting, the environmental coalition expressed its "deepest thanks to U.S. Representative Dennis Kucinich (Democrat-Ohio) and his staff, without whose tremendous efforts the NRC public meeting would not have taken place, and without whose own independent investigation, the public would have



been left completely in the dark by FirstEnergy and NRC in regards to how serious the cracking at Davis-Besse truly is.”

The environmental coalition’s contention relied heavily on documentation and analysis provided by the Office of Congressman Kucinich, as well as work done by David Lochbaum, Director of the Nuclear Safety Project at the Union of Concerned Scientists.

The new contention is posted on the website homepage of Beyond Nuclear, [www.beyondnuclear.org](http://www.beyondnuclear.org). It can also be emailed to reporters upon request, by contacting Kevin Kamps at Beyond Nuclear at (240) 462-3216 or [kevin@beyondnuclear.org](mailto:kevin@beyondnuclear.org). In addition, the NRC ASLB ruling rejecting FENOC’s motion to have the renewable alternatives contention dismissed is posted at Beyond Nuclear’s homepage.

For Immediate Release:

Thursday, February 2, 2012

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## **NEW REPORT SHOWS INCREASE IN CANCERS AND MORTALITIES SINCE FERMI 2 NUCLEAR PLANT START UP**

Thursday – Monroe, MI – A new report submitted to the Nuclear Regulatory Commission shows dramatic increases in cancer and mortalities in Monroe County since the start-up of the Fermi 2 nuclear plant. Using data from the Center for Disease Control, the report was prepared by Joseph Mangano, MPH, MBA Executive Director of the Radiation and Public Health Project.

One of the most shocking statistics shows that cancer death rates of young people (up to age 24) living in Monroe County exceeded the U.S. national rate by 28% from 1985 to 2008, a large shift from 1979-1984, when the county rate was 24% below the national average. Cancer death rates for 25-44 year olds in Monroe County also jumped, from 22% below the U.S. national average to 4% above the national average. In 1985 Fermi 2 loaded fuel and began low power testing, full commercial operation began January 1988.

There were 19 health indicators reviewed including infant mortalities, low birth weights and hospitalizations that showed increased incidence in Monroe County, compared to the U.S. national average. Ten of these indicators were statistically significant and 4 others approached significance.

"These patterns in Monroe County raise serious questions about whether emissions from Fermi 2 harmed local residents," says Joseph Mangano. "Before any decision is made on the future of Fermi 3, unusual health patterns such as these must be studied thoroughly by federal and state health officials, and findings reported to the public" Mangano concluded.

Nuclear power plants emit numerous radioactive isotopes not only from accidents, but also as part of routine 'normal' operations. In 2002 Fermi 2 was 10<sup>th</sup> highest in the U.S. for airborne emissions of Iodine-131, 7<sup>th</sup>

highest for Strontium 89. In 2007 Fermi 2 was 13<sup>th</sup> highest in emissions of Tritium. Fermi 2 experienced a serious accident Christmas day 1993 that resulted in a discharge of 2 million gallons of 'slightly radioactive' water into Lake Erie. The drinking water intakes for Monroe and Frenchtown Twp. are located 1/4 mile downstream from the plant. Radioactive isotopes can bio-accumulate and bio-concentrate in the food chain much like DDT and dioxins.

The report was prepared for submission to the Nuclear Regulatory Commission during the proposed Fermi 3 nuclear plant Draft Environmental Impact Statement (DEIS) public comment period. Mangano calls for more study before approval of a new Fermi 3 nuclear plant that is proposed adjacent to Fermi 2 and the closed Fermi 1. For these reasons a growing Coalition of Fermi 3 Intervenors have called for Baseline Health Studies of Monroe County in order that elevated cancers from a proposed Fermi 3 could be measured.

The Mangano findings regarding Fermi 2 are consistent with studies from around the world.

Recent French study on childhood leukemia, posted at:  
<http://www.beyondnuclear.org/home/2012/1/12/french-study-finds-childhood-leukemia-doubled-around-nuclear.html>

And the 2008 German study on childhood leukemia, posted at:  
<<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2696975/?tool=pubmed>>

Both of these studies report elevated incidence of cancers associated with proximity to nuclear power plants.

The Joseph Mangano Health Report is available from Beyond Nuclear, posted at:

[http://www.beyondnuclear.org/storage/Mangano corrected Fermi report Jan 11 2012.pdf](http://www.beyondnuclear.org/storage/Mangano_corrected_Fermi_report_Jan_11_2012.pdf)

All DEIS Public Comments (over 50) are in process of being posted at:

<http://www.beyondnuclear.org/home/2012/1/27/resistance-to-fermi-3-proposed-new-esbwr-targeted-at-monroe.html>

— 30 —

\* Beyond Nuclear \* Citizens Environment Alliance SW Ontario \*

\* Citizens for Alternatives to Chemical Contamination \* Don't Waste  
Michigan \* Sierra Club Michigan \*



## Report on Regional Emergency Response Planning for WECEC Meeting

Dean Clevett to: Teresa Czerwinski

31/01/2012 04:54 PM

From: Dean Clevett/NTK/WINDSOR/BASF-CANADA/BASF@BASF  
To: Teresa Czerwinski/NTK/WINDSOR/BASF-CANADA/BASF@BASF-CORP

Teresa

Could you please present a brief verbal report of my attendance at today's Regional Emergency Response Planning Meeting. Some notes on the meeting are below. Could you please provide a printed copy of them to whomever is taking meeting notes, for inclusion in the minutes. As a side note, not for the committee, I also discussed the possibility of BASF participating in a joint exercise with WFRS with Deputy Fire Chief McLaughlin, based on his suggestion of an exercise which also tests public awareness and preparedness. This would fit well with the suggestion from the last RC reverification team that we participate in a CAER organization. While the regional group will never use the CAER name, in practice they are a similar organization. If we could participate in a joint exercise and document it, I think that it would be useful as part of our RC outreach.

Thanks,

Dean

### Report on Regional Emergency Response Planning Meeting

- I (Dean Clevett) attended the meeting on behalf of WECEC on Tuesday January 31.
- Focus of the meeting was to start planning for this years coordinated emergency response exercise.
- Groups interested in participating either actively or as observers should contact Phil Berthume at WFRS.
- The possibility of conducting an exercise this year which also tests public awareness and preparedness was discussed.
- Phil will be sending out notes from this meeting and requesting feedback / proposals for a joint exercise.
- The next meeting will take place in March and will discuss exercise proposals.

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## Site #49 - The St. Clair College Prairie

### I. Location

The St. Clair College Prairie E.S.A. is located west of the St. Clair College campus, north of Talbot Road (Highway #3) and south of the Lennon Drain.

### II. Topographic Map Reference

Latitude: 42° 14' 56" N Longitude: 83° 01' 10" W

UTM 328 791

Scale 1:25,000

River Canard 40 J/3h

Scale 1:50,000

Amherstburg 40 J/3

### III. Approximate Area

15 Hectares (37 Acres)

### IV. Ownership

Private.

### V. Site Description

Although small, Site #49 exhibits surprising diversity. Low, sandy knolls support both upland hardwoods such as Black Oak (*Quercus velutina*), White Oak (*Quercus alba*), Red Maple (*Acer rubrum*) and Shagbark Hickory (*Carya ovata*), as well as tallgrass prairie species such as Spiked Blazing Star (*Liatris spicata*), Round-headed Bush-clover (*Lespedeza capitata*), Showy Tick-trefoil (*Desmodium canadense*) and Prairie Rose (*Rosa setigera*). Loamy soils between the knolls are poorly drained and support a lowland forest of Pin Oak (*Quercus palustris*), Swamp White Oak (*Quercus bicolor*), Bur-oak (*Quercus macrocarpa*), Red Ash (*Fraxinus pennsylvanica*) and White Elm (*Ulmus americana*). Portions of the prairie areas are in a shrub stage of succession and contain such dominants as Sumac (*Rhus* spp.), Dogwoods (*Cornus* spp.) and Willows (*Salix* spp.). A very high proportion (25%) of the flora is considered rare.

The Lennon Drain, a channelized tributary of Turkey Creek, forms the northern boundary of the E.S.A. Sidecast spoil hydrologically isolates the drain from the site. A small area in the northeast corner, formerly quarried for top soil, now has an interesting assemblage of plant species adapted to infertile subsoil. Shallow surface drains from past farming contribute to the diversity by providing vernal pools. Natural vernal pools also occur in low spots. Former homesites occur along Talbot Road but the number of persistent exotic species is low.

VI.

Criteria Fulfilled		
1.	Significant Landforms	
2.	Linkage System	
3.	Migratory Stopover	
4.	Significant Communities	✓
5.	Hydrological Significance	
6.	Diversity	✓
7.	Significant Species	✓
8.	Size	
9.	Research/Education	✓
10.	Aesthetic and/or Historical Values	

**Criterion 4: Significant Communities**

Vegetation communities found very rarely among all sites, the best example(s) of a community type found more frequently, or an endangered community. These communities may be significant regionally, provincially, or nationally.

**Criterion 6: Diversity**

Measured as the number of associations within one site. Increasing diversity of geomorphological features, such as soil and topography allows for a more diverse vegetation. In turn, the diverse tree and shrub vegetation creates a greater variety of habitats which may support a larger number of both floral and faunal species. Areas of high diversity may contain several habitat types such as open water, marsh, beach, wooded areas, etc., or may consist of many plant or animal species within one community.

**Criterion 7: Significant Species**

Floral or faunal species considered rare or endangered on a regional, provincial, or national basis.

## Criterion 9: Research/Education

The location of the area, in conjunction with its natural features, makes it particularly suitable for scientific research or conservation education. Conservation education refers to limited numbers of concerned people being allowed into the area with the understanding that a minimal amount of human impact should occur.

## VII. Biological Inventory

The following tables contain the list of plant species recorded for the study site. In these tables the following abbreviations are used to indicate the species' rarity status:

RO,RE = Rare in Ontario and in Essex County

RO = Rare in Ontario

RE = Rare in Essex County

NR = Not Rare.

Also, the source(s) of information are indicated using the following numbers corresponding to the collector(s) and collection date(s):

(1) = Dan Lebedyk and Gerry Waldron - September 4 & October 1, 1991

(2) = Paul Pratt - October 28 & November 6, 1991

(3) = Shannon Managhan - August 27, 1985

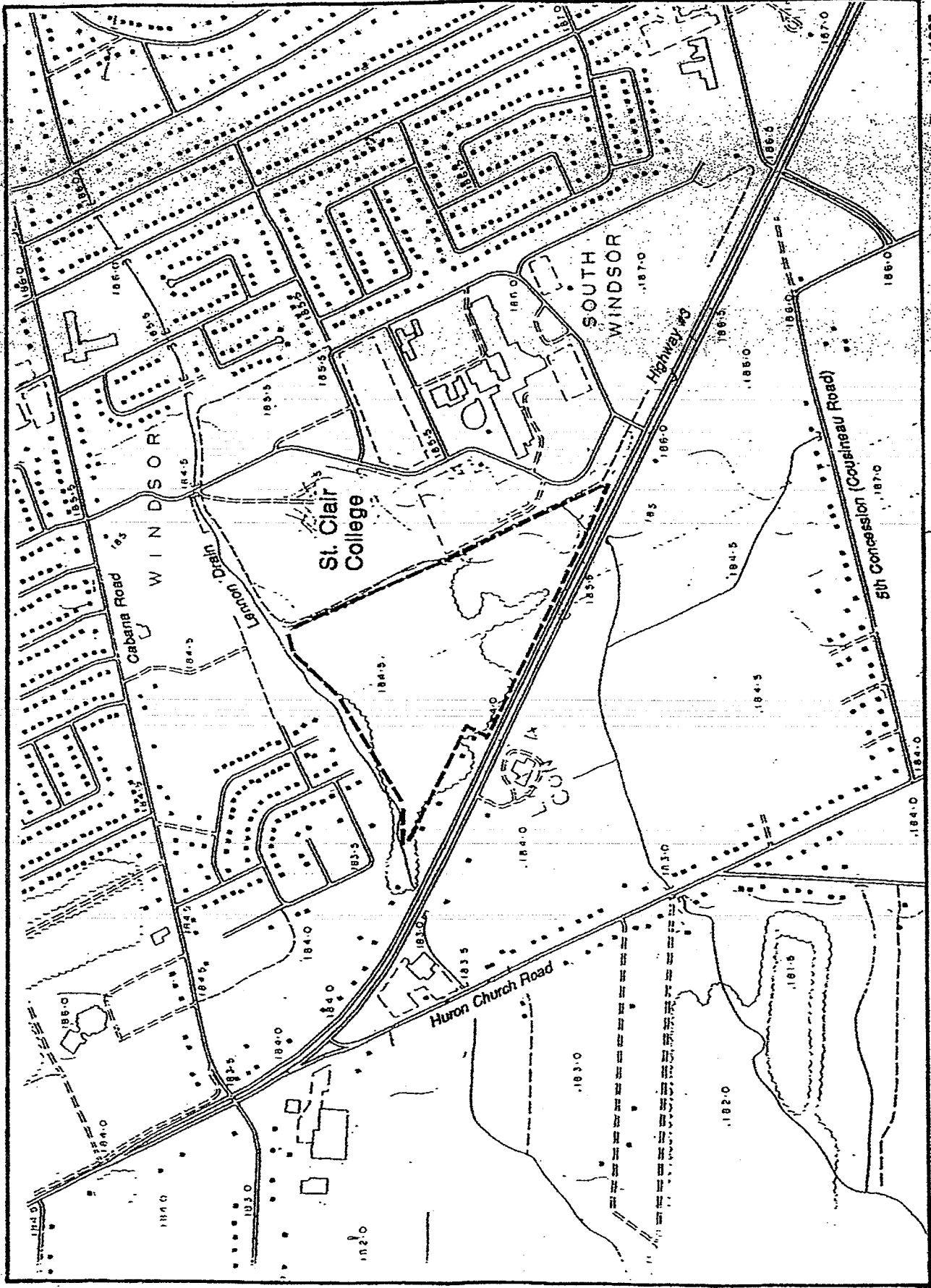
(4) = Michael Oldham - August 4, 1981

(5) = Paul Maycock and Paul Pratt - August 3 & October 15, 1975.



Environmentally Significant Area

City of Windsor



--- E.S.A. Boundary 1992

Base Map 1985

Flora of the St. Clair College Prairie

FAMILY	SCIENTIFIC NAME	COMMON NAME	STATUS	SOURCE(S)
DENNSTAEDTIACEAE	<i>Pteridium aquilinum</i> (L.) Kuhn	Bracken Fern	NR	(1)
	<i>Athyrium filix-femina</i> (L.) Roth. <i>ssp. angustum</i> (Willd.) Clausen	Lady Fern	NR	(1)
DRYOPTERIDACEAE	<i>Onoclea sensibilis</i> L.	Sensitive Fern	NR	(1)
CUPRESSACEAE	<i>Juniperus virginiana</i> L.	Red Cedar	NR	(2)
TYPHACEAE	<i>Typha angustifolia</i> L.	Narrow-leaved Cat-tail	NR	(2)
POACEAE	<i>Agrostis gigantea</i> Roth	Redtop	NR	(2) (5)
	<i>Andropogon gerardii</i> Vitman	Big Bluestem	NR	(2) (5)
	<i>Andropogon virginicus</i> L.	Broom Sedge	RE	(2)
	<i>Aristida purpurascens</i> Poirét	Purplish Triple-awned Grass	RO,RE	(2) (3)
	<i>Calamagrostis canadensis</i> (Michaux) P. Beauv.	Blue-joint	NR	(2)
	<i>Dactylis glomerata</i> L.	Orchard Grass	NR	(2)
	<i>Elymus repens</i> (L.) Gould	Quack Grass	NR	(2) (5)
	<i>Panicum acuminatum</i> Sw.	Slender-stemmed Panic Grass	RO,RE	(2) (5)
	<i>Phragmites australis</i> (Cav.) Trin. ex Steudel	Reed	NR	(2)
	<i>Poa compressa</i> L.	Canada Bluegrass	NR	(2) (5)
	<i>Poa pratensis</i> L. <i>ssp. pratensis</i>	Kentucky Bluegrass	NR	(2) (5)
	<i>Schizachyrium scoparium</i> (Michaux) Nees	Little Bluestem	NR	(1)
	<i>Sporobolus asper</i> (Michaux) Kunth	Tall Dropseed	RO,RE	(2)
	<i>Tridens flavus</i> (L.) A. Hitchc.	Tall Redtop	NR	(1)
CYPERACEAE	<i>Carex granularis</i> Muhlenb. ex Willd.	Meadow Sedge	NR	(2)
	<i>Carex lacustris</i> Willd.	Lake-bank Sedge	NR	(2)
COMMELINACEAE	<i>Commelina communis</i> L.	Asiatic Day-flower	NR	(1)

Flora of the St. Clair College Prairie

FAMILY	SCIENTIFIC NAME	COMMON NAME	STATUS	SOURCE(S)
JUNCACEAE	<i>Juncus dudleyi</i> Wieg.	Rush	NR	(2)
	<i>Juncus greeni</i> Oakes & Tuckerman	Rush	RO,RE	(2)
	<i>Juncus marginatus</i> Rostkov	Rush	RO,RE	(1)
	<i>Juncus tenuis</i> Willd.	Path Rush	NR	(2)
	<i>Juncus torreyi</i> Cov.	Rush	NR	(1) (4) (5)
LILIACEAE	<i>Asparagus officinalis</i> L.	Garden Asparagus	NR	(1) (2) (5)
	<i>Maianthemum racemosum</i> (L.) Link ssp. <i>racemosum</i>	Racemose False Solomon's Seal	NR	(1)
	<i>Uvularia sessilifolia</i> L.	Merrybells	RE	(1)
SMILACACEAE	<i>Smilax illinoensis</i> Mangaly	Carion-flower	RE	(1)
DIOSCOREACEAE	<i>Dioscorea quaternata</i> J. Gmelin	Wild Yam	NR	(1)
ORCHIDACEAE	<i>Spiranthes cernua</i> Shev.	Nodding Ladies' Tresses	RE	(1)
SALICACEAE	<i>Populus deltoides</i> Bartram ex Marshall ssp. <i>deltoides</i>	Cottonwood	NR	(2)
	<i>Populus tremuloides</i> Michaux	Trembling Aspen	NR	(2)
	<i>Salix humilis</i> Marshall	Prairie Willow	RE	(1) (2) (5)
JUGLANDACEAE	<i>Carya ovata</i> (Miller) K. Koch	Shagbark Hickory	NR	(1)
BETULACEAE	<i>Betula pendula</i> Roth	European White Birch	NR	(2)
	<i>Carpinus caroliniana</i> Walter	Blue Beech	NR	(1)
	<i>Corylus americana</i> Walter	American Hazel	NR	(1) (2)
FAGACEAE	<i>Quercus alba</i> L.	White Oak	NR	(1)
	<i>Quercus bicolor</i> Willd.	Swamp White Oak	NR	(1) (2)
	<i>Quercus macrocarpa</i> Michaux	Bur-oak	NR	(1)
	<i>Quercus palustris</i> Muenchh.	Pin Oak	RO	(1) (2) (5)
	<i>Quercus rubra</i> L.	Northern Red Oak	NR	(1)
	<i>Quercus velutina</i> Lam.	Black Oak	NR	(1)
ULMACEAE	<i>Ulmus americana</i> L.	White/American Elm	NR	(1) (2) (5)

Flora of the St. Clair College Prairie

FAMILY	SCIENTIFIC NAME	COMMON NAME	STATUS	SOURCE(S)
MORACEAE	<i>Morus alba</i> L.	White Mulberry	NR	(2)
POLYGONACEAE	<i>Rumex crispus</i> L.	Curly-leaf Dock	NR	(2) (5)
CHENOPODIACEAE	<i>Atriplex patula</i> L.	Orach	NR	(1)
CARYOPHYLLACEAE	<i>Dianthus armeria</i> L.	Deptford Pink	NR	(5)
RANUNCULACEAE	<i>Anemone virginiana</i> L.	Thimbleweed	NR	(1) (5)
	<i>Anemone cylindrica</i> A. Gray	Long-headed Thimbleweed	RE	(2) (5)
	<i>Thalictrum dasycarpum</i> Fischer & Ave-Lall.	Purple Meadow Rue	NR	(1)
LAURACEAE	<i>Sassafras albidum</i> (Nutt.) Nees	Sassafras	NR	(1)
HAMAMELIDACEAE	<i>Hamamelis virginiana</i> L.	Witch Hazel	NR	(1)
ROSACEAE	<i>Agrimonia parviflora</i> Aiton	Agrimony	RO	(1) (2) (4) (5)
	<i>Agrimonia pubescens</i> Wallr.	Soft Agrimony	RE	(1)
	<i>Crataegus crus-galli</i> L.	Cockspur-thorn	NR	(1)
	<i>Crataegus mollis</i> (Torrey & A. Gray) Scheele	Red-fruited Thorn	NR	(1) (2) (5)
	<i>Fragaria virginiana</i> Miller ssp. <i>virginiana</i>	Wild Strawberry	NR	(1) (2) (5)
	<i>Geum aleppicum</i> Jacq.	Yellow Avens	RE	(1)
	<i>Malus coronaria</i> (L.) Miller	Wild Crab	NR	(1) (2)
	<i>Malus pumila</i> Miller	Apple	NR	(2)
	<i>Potentilla simplex</i> Michaux	Common Five-finger	NR	(1) (2) (5)
	<i>Prunus virginiana</i> L. ssp. <i>virginiana</i>	Choke Cherry	NR	(1)
	<i>Rosa blanda</i> Aiton	Meadow Rose	NR	(1)
	<i>Rosa multiflora</i> Thunb. ex Murray	Multiflora Rose	NR	(5)
	<i>Rosa setigera</i> Michaux	Prairie Rose	RO	(1) (2)
	<i>Rubus occidentalis</i> L.	Black Raspberry	NR	(2)

Flora of the St. Clair College Prairie

FAMILY	SCIENTIFIC NAME	COMMON NAME	STATUS	SOURCE(S)
FABACEAE	<i>Desmodium canadense</i> (L.) DC.	Showy Tick-trefoil	NR	(1) (4) (5)
	<i>Lepedeza capitata</i> Michaux	Round-headed Bush-clover	RE	(1) (2) (5)
	<i>Melilotus alba</i> Medikus	White Sweet Clover	NR	(2)
	<i>Strophostyles helvola</i> (L.) Elliott	Trailing Wild Bean	RO	(4) (5)
GERANIACEAE	<i>Geranium maculatum</i> L.	Wild Geranium	NR	(1)
RUTACEAE	<i>Zanthoxylum americanum</i> Miller	Prickly Ash	NR	(1)
POLYGALACEAE	<i>Polygala verticillata</i> L.	Whorled Milkwort	RE	(4) (5)
ANACARDIACEAE	<i>Rhus glabra</i> L.	Smooth Sumac	NR	(1) (2) (5)
	<i>Rhus radicans</i> L. ssp. <i>negundo</i> (E. Greene) McNeill	Poison Ivy	NR	(1)
	<i>Rhus typhina</i> L.	Staghorn Sumac	NR	(1) (2) (5)
CELASTRACEAE	<i>Celastrus scandens</i> L.	Climbing Bittersweet	NR	(1) (2)
	<i>Euonymus obovata</i> Nutt.	Running Strawberry-bush	NR	(1)
ACERACEAE	<i>Acer negundo</i> L.	Manitoba Maple	NR	(1)
	<i>Acer rubrum</i> L.	Red Maple	NR	(1)
VITACEAE	<i>Parthenocissus quinquefolia</i> (L.) Planchon ex DC.	Virginia Creeper	RE	(1)
	<i>Vitis riparia</i> Michaux	Frost Grape	NR	(1) (2) (5)
HYPERICACEAE	<i>Hypericum punctatum</i> Lam.	Spotted St. John's-wort	NR	(2)
THYMELAEACEAE	<i>Dirca palustris</i> L.	Leatherwood	RE	(1)
LYTHRACEAE	<i>Lythrum alatum</i> Pursh	Wing-angled Loosestrife	RO	(5)
ONAGRACEAE	<i>Gaura biennis</i> L.	Biennial Gaura	RO,RE	(1) (2) (4)
	<i>Oenothera biennis</i> L.	Common Evening-primrose	NR	(2) (5)
ARALIACEAE	<i>Aralia nudicaulis</i> L.	Wild Sarsaparilla	NR	(1)

Flora of the St. Clair College Prairie

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APIACEAE	<i>Cicuta maculata</i> L.	Water-hemlock	NR	(1)
	<i>Daucus carota</i> L.	Wild Carrot	NR	(2) (5)
CORNACEAE	<i>Cornus amomum</i> Miller ssp. <i>obliqua</i> (Raf.) J.S. Wilson	Silky Dogwood	NR	(2) (5)
	<i>Cornus foemina</i> Miller ssp. <i>racemosa</i> (Lam.) J.S. Wilson	Gray Dogwood	NR	(1) (2) (5)
ERICACEAE	<i>Vaccinium pallidum</i> Aiton	Early Sweet Blueberry	NR	(1)
OLEACEAE	<i>Fraxinus pennsylvanica</i> Marshall	Red Ash	NR	(1) (2) (5)
APOCYNACEAE	<i>Apocynum androsaemifolium</i> L. ssp. <i>androsaemifolium</i>	Spreading Dogbane	NR	(2) (5)
	<i>Apocynum cannabinum</i> L.	Indian Hemp	NR	(1)
ASCLEPIADACEAE	<i>Asclepias incarnata</i> L. ssp. <i>incarnata</i>	Swamp Milkweed	NR	(5)
	<i>Asclepias sullivantii</i> Engelm. ex A. Gray	Sullivant's Milkweed	RO,RE	(2) (4) (5)
VERBENACEAE	<i>Verbena hastata</i> L.	Blue Vervain	NR	(2) (5)
LAMIACEAE	<i>Lycopus americanus</i> Muhlenb. ex Bartram	Cut-leaved Waterhorehound	NR	(1) (2) (5)
	<i>Monarda fistulosa</i> L.	Wild Bergamot	NR	(1) (2) (5)
	<i>Prunella vulgaris</i> ssp. <i>lanceolata</i> (W.C. Barton) Hulten	Heal-all	NR	(1) (2) (5)
	<i>Pycnanthemum virginianum</i> (L.) Durand & Jack. ex Fern. & Robin.	Mountain-mint	NR	(1) (2) (4) (5)
	<i>Scutellaria lateriflora</i> L.	Mad-dog Skullcap	NR	(1)
SOLANACEAE	<i>Solanum dulcamara</i> L.	Bittersweet Nightshade	NR	(1)
SCROPHULARIACEAE	<i>Agalinis tenuifolia</i> (M. Vahl) Raf.	Slender Agalinis	RE	(1) (5)
	<i>Verbascum thapsus</i> L.	Common Mullein	NR	(2)
	<i>Veronicastrum virginicum</i> (L.) Farw.	Culver's-root	RO,RE	(1) (2) (4)
PLANTAGINACEAE	<i>Plantago lanceolata</i> L.	Ribgrass	NR	(2)

Flora of the St. Clair College Prairie

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RUBIACEAE	<i>Cephalanthus occidentalis</i> L.	Buttonbush	NR	(1)
	<i>Galium circoezans</i> Michaux	Wild Licorice	NR	(1)
CAPRIFOLIACEAE	<i>Sambucus canadensis</i> L.	Common Elder	NR	(1)
	<i>Viburnum lentago</i> L.	Nannyberry	NR	(1)
	<i>Viburnum rafinesquianum</i> Schultes	Downy Arrow-wood	NR	(1)
	<i>Viburnum trilobum</i> Marshall	Highbush Cranberry	NR	(1)
	<i>Dipsacus fullonum</i> L. ssp. <i>sylvestris</i> (Hudson) Clapham	Teasel	NR	(1) (2)
ASTERACEAE	<i>Achillea millefolium</i> L. ssp. <i>millefolium</i>	Yarrow	NR	(2) (5)
	<i>Ambrosia artemisiifolia</i> L.	Common Ragweed	NR	(2) (5)
	<i>Antennaria neglecta</i> E. Greene	Pussytoes	RE	(1) (2)
	<i>Antennaria parlinii</i> Fern. ssp. <i>fallax</i> (E. Greene) Bayer & Stebb.	Pussytoes	NR	(2)
	<i>Aster ericoides</i> L.	Heath Aster	NR	(2) (5)
	<i>Aster macrophyllus</i> L.	Large-leaved Aster	NR	(1)
	<i>Aster novae-angliae</i> L.	New England Aster	NR	(2) (5)
	<i>Aster praealtus</i> Poiret	Willow Aster	RO,RE	(2)
	<i>Aster urophyllus</i> Lindley	Arrow-leaved Aster	NR	(1)
	<i>Bidens frondosa</i> L.	Beggar-ticks	NR	(1)
	<i>Cirsium arvense</i> (L.) Scop.	Canada Thistle	NR	(1) (2)
	<i>Cirsium discolor</i> (Muhlenb. ex Willd.) Sprengel	Pasture Thistle	RE	(1) (2) (5)
	<i>Cirsium vulgare</i> (Savi) Ten.	Bull Thistle	NR	(1) (2) (5)
	<i>Coreopsis tripteris</i> L.	Tall Coreopsis	RO,RE	(2) (4) (5)
	<i>Euthamia graminifolia</i> (L.) Nutt.	Lance-leaved Goldenrod	NR	(1) (2) (3) (5)
	<i>Helianthus giganteus</i> L.	Tall Sunflower	NR	(1) (2) (5)
<i>Liatris spicata</i> (L.) Willd.	Spiked Blazing Star	RO,RE	(2) (4) (5)	

