

AGENDA WINDSOR-ESSEX COUNTY ENVIRONMENT COMMITTEE

held on November 24th, 2016

Meeting at 5:30p.m at the Ojibway Nature Centre

1. CALL TO ORDER

2. ADDITIONS TO THE AGENDA

3. DECLARATION OF CONFLICT

4. MINUTES

Adoption of the minutes of the meeting held September 29th, 2016 - emailed separately.

5. PRESENTATION

- 5.1 Lee Tome Amherstburg Fire Department Mock Nuclear Disaster Assessment
- 5.2 Karina Richters City of Windsor Community Energy Plan

6. BUSINESS

- 6.1 Payment of Website Hosting Fee attached.
- **6.2** Water Brothers update
- 6.3 Green Speaker Series Invasive Species Roundtable update
- 6.4 WECEC giveaways and remaining funds (see Coordinator's Report)

7. <u>COORDINATORS REPORT</u>

7.1 WECEC Coordinator Monthly Report – *attached*.

8. SUBCOMMITTEE REPORTS

- **8.1** Air
- 8.2 Environmentally Sensitive Lands and Issues

9. NEW BUSINESS

- 9.1 Update on City of Windsor environmental initiatives
- 9.2 Update on Essex County environmental initiatives *attached*.

10. COMMUNICATIONS

- 10.1 Consultation on Ontario's Long Term Energy Plan *attached*.
- 10.2 Consultation on improving cycling as per Ontario's Climate Change Action Plan-attached.
- 10.3 FloodSmart Canada: Webinar on tackling flood risk attached.
- 10.4 Reducing Nutrient Loss: innovative project to assist in reducing phosphorus loadings in Lake Erie- attached.
- 10.5 Town of Lakeshore Official Plan Review, 2nd Public Open House *attached*.
- 10.6 City Council Report re. Proposed Provincial Legislation on Reducing Phosphorous to Minimize Algal Blooms in Lake Erie – <u>attached.</u>

11. DATE OF NEXT MEETING

The date of the next meeting is January 26th 2017 at the Ojibway Nature Centre.

12. ADJOURNMENT

OCT 07 2016
ENVIRONMENTAL
SERVICES

eliquidMEDIA International Inc.

3155 Howard Ave. Sulte #209

Windsor, Ontario N8X 4Y8, Canada

Phone: 519-973-1930

Fax: 519-253-0337

INVOICE

13575

GST #: 896239019

Issued: 2016-10-03

Windsor Essex County Environment Committee

Attn: Accounts Payable WECEC c/o Averil Parent 4155 Ojibway Parkway Windsor, Ontario N9C 4A5, Canada

Phone: 519-523-7111 Fax: 519-253-0464

Notes:

PLEASE NOTE OUR NEW ADDRESS, We have moved to a new location. 3155 Howard Ave., Windsor, ON N8X 4Y8

Canada

Item Total	Unit Price	Quantity	Item
\$ 360.00	\$ 30.00	12	Hosting Fee: Hosting fee prepaid annually to cover the period of Nov.16/2016 - Nov. 15/2017. A courtesy adjustment of \$5.00 per month has bee applied to this invoice.)
\$ 360.00	Subtotal:		
\$ 46.80	HST13:		
\$ 406.80	OICE TOTAL:	INV	
\$ 0.00	or Adjustments:	Payments and/o	
\$ 406.80	ALANCE DUE:	В	

WECEC COORDINATOR MONTHLY REPORT **DUSTIN CAREY & AVERIL PARENT**



- November 2016 -

ONGOING INITIATIVES

1. Communications

A. Response from Heather Grondin, WBDA

In response to a question asked of Heather Grondin during her September presentation at WECEC, she has provided the following reply:

The stormwater management ponds will undergo sampling as defined by an environmental compliance approval certificate administered by the Ministry of Environment & Climate Change. This will occur upon completion of the overall works. During construction, they will be inspected and monitored as per WDBA's Environmental Management & Monitoring Plan. Similar to the Broadway Drain, the ownership of the ponds will transfer to the City of Windsor following construction and they will be responsible for monitoring. Typically road salts do not adversely impact receiving water bodies. During retention, salts typically adhere to sediment particles and settle. This sediment is removed from the ponds during routine maintenance of the ponds. Any soluble salts entering the river are diluted to a low concentration due to the amount of freshwater in the receiving water body.

B. Green Speaker Series - Water Brothers

City administration reports that the Water Brothers will not be coming to Windsor in 2016. Therefore the \$1,000 that was set aside for this Green Speaker are now available to be spent in 2016. A new request will be brought forward in 2017 to sponsor the Water Brothers.

C. Green Speaker Series - Invasive Species Roundtable

Coordination with Kevin Money at ERCA is ongoing. Possible dates for the roundtable presentations are November 30th or December 7th. Kevin is coordinating an invasive species expert panel. There will be two presentations, one during the day for municipal administration and councilors, with a second presentation during the evening for Windsor Essex residents.

2. Reports to Council

Report No. 94 of the Windsor Essex County Environment Committee:

The Windsor Essex County Environment Committee at its meeting held July 28th 2016 approved the following Report as follows:

Moved by Councillor Francis, seconded by D. Grant,

That City Administration BE REQUESTED to provide comment and a review relating to the Request for Proposals for an Urban Forest Management Plan which will determine the general health of the urban forest, enhance the urban forest, define short and long term goals, and will determine the canopy coverage.

Carried.

This report was approved at the October 19th Environment, Transportation and Public Safety Standing Committee and it was approved at the November 7th City Council meeting.

3. WECEC Funds

A. Giveaways - \$1,700 committed + potentially \$1,300 (remaining funds)







LED lightbulbs - 60 watt energy star 4 pack \$17.97 at the Home Depot





Bicycle tire pumps - \$14.98 at the Home Depot



16oz stainless steal 4imprint.ca \$5.55 @50 bottles \$4.85 @100 bottles \$4.55 @250 bottles +\$65 processing fee https://www.4imprint.ca/tag/4827/On-the-Road/product/C105118/Carabiner-Stainless-Steel-Water-Bottle-16-oz

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15oz travel mug
4imprint.ca
\$8.25 @50 mugs
\$7.95 @100 mugs
\$7.83 @150 mugs
+\$65 processing fee
https://www.4imprint.ca/tag/4827/On-the-Road/product/C112413/Dual-Grip-Travel-Tumbler-15-oz

All of the above options allow for a 1-colour logo to be imposed onto the merchandise. 4imprint was found to be the cheapest option by far for merchandise options.

B. Smartphone App

Upwork.com, which specializes in app development, suggests that it requires between 70-140 hours to develop an app compatible with Apple phones, and 90-170 hours to develop an app compatible with Android phones. Contracting rates can range from \$20-35 dollars an hour if the software engineer is hired from a country like Pakistan or Kenya, \$40-50 if hired out of Russia or Belarus, or \$100+ if hired out of Canada. These prices are roughly in line with the estimate http://howmuchtomakeanapp.com/ provided that it would cost approximately \$24,000 to develop an app that is compatible with both Apple and Android software.

WECEC BUDGET - SUMMARY

2016 Budget					
Expense	Credit	Expenditure	Status		
2016 Budget	\$8,000.00				
Pat on the Back		\$2,195.63	Spent		
Green Speaker #1 Peter Garforth		\$1,000	Spent		
Green Speaker #2 Jason Thistlethwaite		\$424.90	Spent		
Green Speaker #3 Invasive Species panel		\$425	Committed		
Website Hosting Fee		\$406.80	Committed		
Website Domain Renewal		\$25.44	Spent		
Earth Day		\$35	Spent		
EAC Symposia		\$478.36	Spent		
Promotional Items		\$1,700.00	Committed		
TOTALS	\$8,000	\$6,691.13			
NON-ALLOCATED REMAINING		•	\$1,308.87		

- NOVEMBER 2016 -

WECEC Work Plan 2016

GOALS	ACTIONS	TIME FRAME
Goal : Improve relationships with City and County Councils.	Prepare an annual report of accomplishments and send to City and County Councils, environmental organizations, boards etc.	Yearly
Goal: Improve relationships with other organizations, committees.	Hold a meeting with other environmental organizations and committees to share information; Continue to pursue opportunities for partnering on community education/public awareness; Hold annual Pat on the Back Awards presenting \$2,000 to local environmental organizations and schools.	Yearly Ongoing Yearly
Strategic Direction #2 – Advocacy		
GOALS	ACTIONS	TIME FRAME
Goal: Provide advice on environmental issues to the City of Windsor, County of Essex and its area municipalities.	Assess issues referred from City and County Councils and respond with suggested recommendations; Provide recommendations to City and County Councils on environmental matters identified through our own initiative.	Ongoing Ongoing
Goal: Advocate for environmental groups in Windsor Essex County.	Accept delegations from environmental groups and advocate on behalf of these groups to City and County Councils.	Ongoing
Goal: Provide advice to City and County Council related to Federal and Provincial initiatives.	Develop recommendations related to Federal and Provincial plans, policies and initiatives to be forwarded to City and County Councils.	Ongoing
Strategic Direction #3 – Public Engagemen	t and Education	
GOALS	ACTIONS	TIME FRAME
Goal: Increase awareness of WECEC by the public.	Maintain a website and Facebook page; Strategically identify and attend community events; Maintain a professional display for participation at community events.	Monthly Ongoing Ongoing
Goal: Increase engagement of public on environmental issues	Develop environmental education campaigns and messaging to help inform Windsor Essex County residents about environmental issues; Host free Green Speaker Series events with environmental experts highlighting environmental issues.	Ongoing

- November 2016 -

List of Priorities (including but not limited to)

- Greening the City specifically more green roofs and other types of green infrastructure
- · Walkability, complete streets, trails, active transportation
- Review of existing tree cutting bylaw
- Pollution issues, cancer causing environmental issues
- Right to Know by-law
- Parkway natural areas
- Know Your City tour
- Information sharing about what other municipalities are doing
- Invasive species control
- Youth engagement
- Anti-Idling
- Bike Lanes

Current List of Subcommittees

- 1. Air
- 2. Environmentally Sensitive Lands and Issues

9.2 Update on Essex County environmental initiatives

Report prepared by Michael Nelson for the November 24, 2016 Windsor-Essex County Environment Committee meeting.

World Rivers Day

The Detroit River Canadian Cleanup (DRCC) celebrated World Rivers Day (WRD) with the Windsor Port Authority and Windsor Adventure Inc. on September 24th 2016. They hosted a cleanup at McKee Park as well as learned about kayak and canoe safety on the River and offered demos to the public.

Detroit River Canadian Cleanup updates:

1. Two Beneficial Use Impairments are now Restored

The DRCC also announced that two indicators of the Detroit River's quality are now considered restored, and no longer impaired as Beach Closings and Aesthetics BUI are re-designated on the Canadian side. The frequency of beach closures is no different than sites outside of the Detroit River and the aesthetics of the River are void of substances, questionable deposits, turbidity and or odor.

2. Detroit River Evening

The Detroit River Canadian Cleanup hosted our 6th Annual Detroit River Evening on Wednesday, October 26, 2016 at the Great Lakes Institute for Environmental Research (GLIER). The DRCC welcomed Peter Berry, Harbour Master of the Windsor Port Authority who gave a presentation on how industry can work in partnership with the environmental community on green projects both on the shore line and in the river. Project highlights also included presentations on the Creel Survey from Richard Drouin, Lead Management Biologist, Lake Erie Management Unit, Ontario Ministry of Natural Resources and Forestry. Also Jon Gee, Manager, Great Lakes Areas of Concern, Environment and Climate Change Canada presented information about the Great Lakes Areas of Concern. Last, Tom Henderson, Chair of the Detroit River Public Advisory Council provided an update on work that is being done by the PAC.

3. DRCC Annual Report:

The Detroit River Canadian Cleanup has released its annual report of accomplishments here: www.detroitriver.ca/wp-content/uploads/2016/10/DRCC_AR_2016_web.pdf

Environmental Assessments

The following Environmental Assessments are currently underway in the region.

- County Road 20. On November 15th a Public Meeting was held for the County Road 20 Class Environmental Assessment. The meeting was held on November 15, 2016, at the Kingsville Arena & Auditorium (1741 Jasperson Road, Kingsville, ON) and was a drop-in format starting at 3:00 p.m. and ending at 8:00 p.m. A formal notice was also published in the Southpoint Sun and Kingsville Reporter. For more information please visit: www.cr20.ca.
- Bouffard & Howard Planning Districts Integrated Class EA Addendum and
 Planning Act Approvals. For more information: http://www.lasalle.ca/en/town-hall/Bouffard---Howard-Planning-Districts.asp
- <u>Highway 3 Widening</u> Windsor to Leamington Phase 3.
 https://sites.google.com/site/highway3widening/home

Environmental Registry Notices

ERCA reviewed the following Environmental Registry (www.ebr.gov.on.ca) notices and provided comments to the Board of Director's The reports are available at the following ERCA website link: http://erca.org/wp-content/uploads/2013/01/BD_Agenda-FULL-10Nov2016.pdf

- 1. BD38/16: Amendments to the Technical Guide to Renewable Energy Approval (ER 012-7600)
- 2. BD 39/16: Sustaining Ontario's Agricultural Soils and Reducing Phosphorus to Minimize Algal Blooms in Lake Erie (ER 012-8760 and ER 012-8468);
- 3. BD 40/16: Proposed amendments to the Director's Technical Rules made under Section 107 of the Clean Water Act, 2006 (ER 012-8507).

Environmental Commissioner of Ontario

The following reports were released by the office of the Environmental Commissioner of Ontario on November 15, 2016 and are of relevance to our region:

- Putting Soil Health First: A Climate Smart Idea for Ontario.
 https://eco.on.ca/reports/2016-putting-soil-health-first/
- Urban Stormwater Fees: How to Pay for What We Need.
 https://eco.on.ca/reports/2016-urban-stormwater-fees/

ERCA prepared a report in response to the 2015–2016 Annual Report from the Environmental Commissioner of Ontario. The report was presented to the Ontario Legislature on October 26, 2016 and is available here:

(https://eco.on.ca/reports/2016-small-steps-forward). This report was presented to the Board of Director's on November 10, 2106 and is available here:

http://erca.org/wp-content/uploads/2013/01/BD_Agenda-FULL-10Nov2016.pdf

Windsor Holiday Inn Hotel and Suites 1855 Huron Church Road 6pm-8pm

https://www.ontario.ca/page/consultation-ontarios-long-term-energy-plan

Consultation on Ontario's Long-Term Energy Plan

We're developing Ontario's next Long-Term Energy Plan to build a clean, reliable and affordable energy system.

Shutting down coal-fired generating stations for good in 2014 was just the start. Now we're looking at what to do next. We want to hear your thoughts on how we produce and use our energy.

The Ministry of Energy will consider your feedback and release the Long-Term Energy Plan in 2017.

- 1. Overview
- 2. How to participate

Overview

Ontario launched its first Long-Term Energy Plan in 2010. It was reviewed and updated in <u>2013</u> with input from people across Ontario.

Ontario's energy use has changed substantially in the last decade. Our homes, businesses and industries are becoming more efficient. At the same time, we're exploring new technology and renewable energy sources.

To continue to adapt to these changes, we're getting ready to update our plan again. We need your help to ensure we balance five principles that guide decision-making:

- affordability
- reliability
- clean energy
- community and Indigenous engagement
- · conservation and demand management

How to participate

To participate:

- 1. Read the discussion paper
- 2. Share your feedback online through:
 - o our EnergyTalks consultation (starting October 17)
 - o the Environmental Registry
- 3. Attend one of our in-person consultation session

Ministry of Transportation

Ministère des Transports 10

Transportation Policy Branch 777 Bay Street, 30th Floor Toronto, Ontario M7A 2J8

Tel: 416 585-7177 Fax: 416 585-7204 Direction des politiques du transport 777, rue Bay, 30^e étage Toronto (Ontario)

M7A 2J8

Tél.: 416 585-7177 Téléc.: 416 585-7204

October 31, 2016

Dear valued partners,

Ontario's Climate Change Action Plan (CCAP), released on June 8, 2016, committed to creating a cleaner transportation sector in Ontario, in part by promoting cycling.

The Ministry of Transportation is ready to do its part to support the CCAP by implementing a number of initiatives that support reductions to transportation emissions. These initiatives will be funded by proceeds from the province's cap and trade program.

Through a discussion paper posted to the Environmental Registry, we are seeking your input on a proposed plan to implement actions identified in the CCAP to improve commuter cycling networks.

We encourage you to review the discussion paper, accessible through the Environmental Registry (EBR Registry Number: 012-8772) or the Ministry's Cycling Strategy web page and provide your comments by November 30, 2016. We look forward to hearing from you.

Sincerely,

Jill Hughes Director

c. Sandi Jokic, Manager, Sustainable & Innovative Transportation Office, Transportation Policy Branch



FloodSmartCanada – Bringing Together Communities, Businesses and Governments to Tackle Flood Risk

Presenter: Shawna Peddle (Director, Partners for Action, Faculty of Environment, University of Waterloo)

Date: Tuesday, November 29, 2016 **Time:** 1:00pm-2:00pm ET (please note your time zone)

Cost: Free!

Flooding is the most common and most expensive cause of property damage in Canada, with an estimated 1.7 million Canadian households at very high risk of flood damage. Our recent survey of Canadian homeowners revealed a lack of public understanding of flood risk and responsibilities for protection and recovery, but also highlighted public desire to understand risk and contribute to personal flood protection. To improve our odds towards reducing flood risk, we need better communication from governments and the insurance industry, as well as education on personal actions that will reduce dependence on federal and provincial disaster assistance programs.

Partners for Action (P4A), an applied research network advancing flood resiliency in Canada, collaboratively engages a diverse set of stakeholders to create and share knowledge, address information needs, and drive action. We are working through our FloodSmartCanada project to inform Canadians about their risk, opportunities to reduce this risk, and methods of risk transfer, to inspire disaster resilience in the face of a changing climate and extreme weather. This presentation will highlight results from our public survey and how these results are guiding both website content (www.floodsmartcanada.ca) and community-level projects towards understanding and tackling flood risk.

Shawna Peddle

Shawna is the Director of Partners for Action, an applied research network facilitating flood resiliency in Canadian communities, based at the University of Waterloo, with founding support from The Co-operators and Farm Mutual Reinsurance Plan. She has 17 years of experience managing environmental permitting and engagement programs for energy, resource, and infrastructure projects. That experience allowed her to engage with scientists, governments, Indigenous communities, and residents on often contentious projects. Shawna currently directs researchers furthering our knowledge of preparedness and the costs and benefits of resiliency, and facilitates a network of stakeholders identifying knowledge gaps and sharing best practices to reduce the impact of flood. She has a Bachelor's of Science (Honours) in Biology and English from Memorial University of Newfoundland, and a Master's of Science (Forestry) from the University of Toronto.



CLICK HERE TO REGISTER!

For more information, please contact
Suzanne Perdeaux, Climate Change Researcher, OCCIAR
sperdeaux@mirarco.org

This webinar was made possible with federal funding support through Natural Resources Canada's Regional Adaptation Collaboratives Program. www.ClimateOntario.ca

Canada

Canada

Canada

REDUCING NUTRIENT LOSS

Two groups join to minimize phosphorus loss in Ontario.

he Ontario Federation of Agriculture (OFA) and the Great Lakes and St. Lawrence Cities Initiative have joined forces to develop and implement a farmland water management and drainage strategy to reduce phosphorus (P) loss in the Thames River basin in southwestern Ontario. by NICOLA CRAWHALL

This is a proactive project in response to government commitments at the federal and provincial levels to reduce the amount of phosphorus entering Lake Erie by 40 percent.

As much of the Lake Erie phosphorus load is coming from agricultural and municipal sources, working together on part of the solution made sense.

Drainage of farmland is primarily driven by the need to get water off the land during the growing season. In recent years, there has been increasing interest in improving the quality of water draining off farmland. The impact of run-off is particularly acute in the western basin of Lake Erie, which is experiencing the growth of enormous harmful algal blooms, due in large part to elevated levels of reactive soluble phosphorus. These blooms have already caused some public drinking water systems to be shut off out of concern for the presence of microcystin, a toxic bacteria that can be present in the algae. The Thames River, which connects to Lake St. Clair and ultimately the Detroit River, has been identified as a priority source of P loadings into western Lake Erie from the Canadian side.

The strategy being developed will urge and support landowners to adopt improvements to water management

and drainage on their lands that will reduce phosphorus loss from their fields. Licensed drainage contractors, drainage engineers, drainage superintendents and municipal councils who all have a responsibility for aspects of drainage installation, maintenance and oversight are also being engaged as critical partners in the development of this strategy.

We do not want to reinvent the wheel. There is a tremendous amount of knowledge and experience we need to tap into. The two organizations have enlisted the support of a broad cross-section of farming and drainage interests to help develop the strategy by building on what has already been done.

Groups like the Drainage Superintendents Association of Ontario, the Ontario Certified Crop Adviser Association, Conservation Authorities, Land Improvement Contractors of Ontario, the Land Drainage Committee, Ontario Agri Business Association, the Drainage Improvement Group, academics, non-governmental organizations, and federal and provincial government agencies have all joined in the strategy development process through an advisory committee and four subcommittees. The strategy will be developed based on their recommendations to the Great Lakes and St. Lawrence Cities Initiative and OFA.

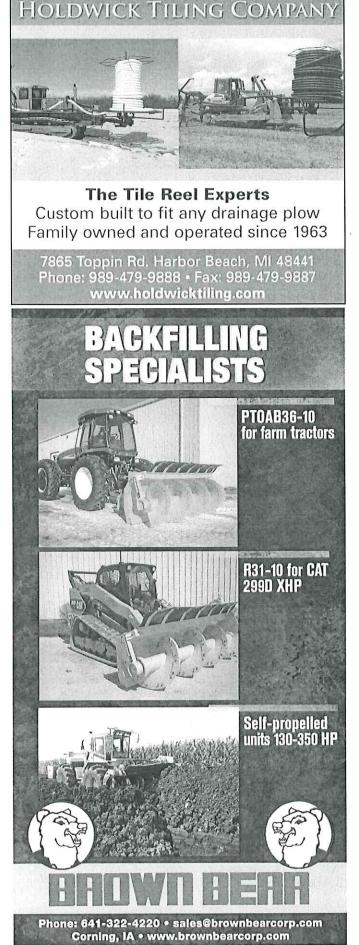
We anticipate the strategy to be developed by June, and implementation will begin in the fall of 2016.

While the details of the strategy are still being worked out, it is clear that it must address the two biggest challenges: reducing phosphorus loss when, and where, it occurs most.

Research suggests that most phosphorus loss occurs during the non-growing season and during big storm events. Most best management practices (BMPs) are geared towards the growing season, and are not necessarily able to manage the flow from intensive rainfall. New or modified BMPs may be needed, as well as consideration of new techniques and technologies. A subcommittee is tasked with investigating which BMPs would be most effective in the Thames River basin context - buffer strips, cover crops, modifications to inlets, the installation of blind inlets, stormwater ponds and artificial wetlands all may be considered.

Identifying where phosphorus loss is occurring is an ongoing challenge, given the lack of monitoring data available in the Thames River basin. The Canadian and Ontario governments are working on modeling to help identify these areas,

Continued on page 40



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which will assist our efforts, but this will take time. In the meantime, our strategy may have to settle for a "good enough" map of phosphorus sources. Some early suggestions from our science subcommittee recommend a combined approach, using the best available water quality data to identify tributaries with elevated phosphorus levels and cross-referencing these locations with GIS mapping of land cover and farming practices that are known to contribute to



Two groups are joining to develop a strategy to reduce phosphorus loss in southwestern Ontario's Thames River basin.

water and phosphorus movement into waterways.

Even in our very preliminary discussions, we have identified the opportunity to bring together thinking for the entire system from fertilizer application through land management and then drainage management. While we are looking at the tail end of the phosphorus movement chain, and the Fertilizer Institute, the Ontario Agri Business Association, and the Ontario Ministry of Agriculture, Food and Rural Affairs will be addressing the front end of the chain in terms of fertilizer application through the 4Rs program, there remains a significant middle section of the chain – soil and water management on private farmland – that needs to be integrated in this discussion in a comprehensive way. Participants in our committees are pressing us to consider how our strategy can help integrate these three aspects of phosphorus movement.

These are just some of the challenges our strategy is facing as we forge into this complex land and water management conundrum. While the challenges are daunting, the potential is exciting.

If we can figure this out for the Thames River basin, or even show progress in limiting phosphorus loss from farmland, starting from the drainage system and working back onto the land, perhaps our strategy can inform actions elsewhere in Ontario and the Lake Erie basin. DC

Nicola Crawhall is deputy director of the Great Lakes and St. Lawrence Cities Initiative and is leading the development of the Farmland and Water Management Strategy.

WE NEED YOUR INPUT! TOWN OF LAKESHORE 5-YEAR OFFICIAL PLAN REVIEW



5-YEAR OFFICIAL PLAN REVIEW









2nd PUBLIC OPEN HOUSE

(Interim Update)

The Town of Lakeshore is reviewing their Official Plan and you are invited to attend a 2nd Public Open House to learn more about the study, review draft Official Plan changes, and provide your input:

DATE: December 6, 2016 TIME: 2:00 pm to 7:00 pm

LOCATION: Atlas Tube Centre (ATC), Renaud Room, 447 Renaud Line, Lakeshore FORMAT: Drop-in Open House to review materials and speak with Town staff and consulting team

Purpose

The Official Plan is a statement of goals, objectives and policies intended to guide future land use and growth within the Town to build sustainable communities, and protect natural and agricultural resources. The policies of the Plan are designed to promote the public interest in the future development of the Town, reduce uncertainty relating to future development, and to provide a basis for the Zoning By-law and other land use controls.

Ontario's *Planning Act* requires municipalities to conduct an Official Plan Review every five years. The Town's current Official Plan was approved in November 2010, which consolidated and replaced the Official Plans of the former municipalities. The Official Plan review will need to ensure that the Official Plan is consistent with the latest Provincial policies, the new County of Essex Official Plan, and to support new community objectives and priorities in managing growth and change over the next twenty years. In support of the Official Plan Review, the Town is also undertaking a number of background studies including: Growth Analysis Study (including Employment Land Needs Review); Affordable Housing Strategy; Residential Intensification Strategy; Natural Heritage Review; Water and Wastewater Master Plan Update; and a Parks Master Plan.

Have Your Say

The purpose of this 2nd Public Open House is to present the work undertaken to date, and seek your input on planning issues and the draft Official Plan changes. Input received from the public will be considered in the review and update to the Official Plan.

Written Submissions

If you are unable to attend this meeting but would like to provide comments, please submit your comments in writing to: c/o the Planning Coordinator, Maureen Emery Lesperance, CPT, 419 Notre Dame Street, Belle River, ON NOR 1A0, or email: mlesperance@lakeshore.ca, and indicate your name and mailing address.

More Information

For further information on the 5-Year Official Plan Review, please contact Kim Darroch, B.A.(Hons.), M.PL., MCIP, RPP, Manager of Development Services, at 519-728-2700, ext. 245 or kdarroch@lakeshore.ca.

To access the background studies, including draft Official Plan changes, go to www.lakeshore.ca, click on Business Resources, Planning, Official Plan and Schedule.

We look forward to seeing you!

NOTICE DATED: November 15, 2016



Pollution Control

MISSION STATEMENT

"Our City is built on relationships – between citizens and their government, businesses and public institutions, city and region – all interconnected, mutually supportive, and focused on the brightest future we can create together"

REPORT #: C 191/2016	Report Date: 10/13/2016
Author's Contact:	Date to Council: 11/07/2016
Paul Drca	Clerk's File #: El/10822
Manager Environmental Quality	
519-253-7111 x3330	
pdrca@citywindsor.ca	

To: Mayor and Members of City Council

Subject: Proposed Provincial Legislation on Reducing Phosphorous to Minimize Algal Blooms in Lake Erie-City Wide

RECOMMENDATION:

- 1. That the City of Windsor support the Province of Ontario's Phosphorous Reduction Targets for Lake Erie and;
- 2. That City Council direct administration to submit comments as presented in this report to the Ontario Ministry of the Environment and Climate Change on proposed legislation reducing phosphorous loadings to minimize algal blooms in Lake Erie as posted on the Province of Ontario's Environmental Registry, EBR Registry Number 012-8760 by the November 20, 2016 comment submission deadline.

EXECUTIVE SUMMARY: N/A

BACKGROUND:

On October 6, 2016 the Ontario Ministry of the Environment and Climate Change (MOECC) posted proposed legislation intended to reduce phosphorous loadings to minimize algal blooms in Lake Erie on the Environmental Registry (EBR Registry Number 012-8760). This posting, under the Environmental Bill of Rights, grants the public a 45 day period to review and provide comments to the MOECC on the proposed legislation. The comment period closes on November 20, 2016.

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DISCUSSION:

In an effort to mitigate algal growth and associated algal issues in Lake Erie, the MOECC is proposing a 40% phosphorous load reduction target for the western and central Lake Erie basins by 2025 (from 2008 levels). This target was adopted through provisions within the Canada-Ontario Agreement on Great Lakes Water Quality and Ecosystem Health. The 40% reduction is supported and adopted by the United States through the Great Lakes binational process.

Ontario's proposed actions to limit phosphorous loadings target activities identified as point sources, non-point sources and agricultural sources. Further mitigation of phosphorous loadings are proposed through improvement and restoration of natural areas. Also proposed are enhanced monitoring programs in watersheds to measure remedial action effectiveness.

The proposed point source actions are of most concern to municipalities that operate wastewater treatment plants in the western and central Lake Erie basin including those on Lake St. Clair (and the Thames River watershed) and on the Detroit River. An excerpt from the proposed legislation pertaining to point source actions reads:

Point Sources

While the relative contribution from urban point sources is estimated to be approximately 10 to 15 percent of the total load across the basin, potential gains for phosphorus reduction from this source can be made. Urban point sources also have a higher soluble reactive phosphorus content than some other sources, which is a key driver of algae growth, and provides a further rationale for continued action. Achieving reductions in point source loadings may be supported by recent funding announced by Canada and Ontario through the Clean Water and Wastewater Fund (Phase 1 of Canada's infrastructure commitments, as well as future funding under Phase 2).

Proposed Action: Work with partners to update provincial policies for Lakes Erie and Ontario in order to establish a legal effluent discharge limit of 0.5 milligrams per litre of total phosphorus for all municipal sewage treatment plants (STPs) that have an average daily flow capacity of 3.78 million litres or more per day. This action will bring Ontario's policies in line with the binational recommendation under the Canada-U.S. GLWQA [Great Lakes Water Quality Agreement].

Proposed Action: Work with partners to reduce loadings where feasible, through upgrades to secondary STPs that have an average daily flow capacity of 3.78 million litres or more per day in the Lake Erie basin to a

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tertiary level of treatment, as well as improvements to wastewater treatment and collection infrastructure to reduce combined sewer overflows and bypasses, and stormwater management systems (including facility rehabilitation and incorporating green infrastructure).

As Windsor's two wastewater treatment plants exceed the daily flow capacity of 3.78 million litres the proposed actions are pertinent to their operation. Subject to Council approval, administration proposes to submit comments to the MOECC through the Environmental Registry based on the following:

- Present MOECC total phosphorous (TP) limits on Lou Romano Water Reclamation Plant (LRWRP) and Little River Pollution Control Plant (LRPCP) effluents are 0.5 and 1.0 milligrams per litre (mg/L) respectively based on monthly averages. The LRPCP has a single sample (i.e. daily sample) limit of 1.5 mg/L.
 - The LRWRP was designed to meet a 0.5 mg/L TP limit and consistently does.
 There are no concerns with LRWRP effluent meeting the proposed criteria.
 - The LRPCP, having the above noted higher TP limits, often meets the proposed 0.5 mg/L TP limit on a monthly basis, however, not consistently. In order to meet the 0.5 mg/L TP limit consistently, changes to the process would be required. The alternatives could potentially include an increased dosage of wastewater treatment chemical (up to 25%). Alternatively, the possibility of requiring polymer addition or a significant plant upgrade may be necessary if increased chemical dosage cannot create satisfactory effluent. In 2015, the LRPCP expenditure for phosphorous removal chemical was approximately \$200,000. Increased chemical dosage will also ultimately result in increased sludge disposal costs due to higher sludge production volumes.
- 2. The LRWRP and LRPCP are both secondary wastewater treatment plants. The LRWRP was most recently upgraded to secondary treatment (2007) at a cost of \$115 million. The proposed action to upgrade secondary treatment plants to a tertiary level of treatment could incur costs of a similar order of magnitude as the LRWRP expansion did. As noted above, the LRWRP consistently meets a TP limit of 0.5 mg/L and with enhanced treatment, it is possible that the LRPCP can also. Thus, tertiary treatment is not required for any secondary treatment plant effluent that meets the proposed TP limit.
- 3. Windsor's sewerage system has a high percentage of combined sewers that result in combined sewer overflows (CSO) during severe wet weather events. In 2011 the City constructed a riverfront CSO retention treatment basin (RTB) at a cost of \$68 million to address the CSOs in the eastern portion of the Riverfront Trunk Sewer catchment area (Ouellette Ave. to Devonshire Rd.). CSO control in the westerly portion of the Riverfront Trunk Sewer is yet to be addressed. Proposed CSO control options in this catchment area are another riverfront RTB or tunnel storage. Preliminary proposed costs for this CSO control are similar to

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or marginally less than the existing CSO RTB cost. A significant investment (\$millions) in wastewater treatment plant infrastructure and the sewerage system would be required to mitigate treatment plant bypasses.

- 4. The EBR posting estimates that 10 to 15 percent of TP loadings are from point sources (i.e. wastewater treatment & CSO). The three comments above present potential costly solutions to what is clearly identified as marginal phosphorous contributors to the Lake Erie basin. Administration is of the opinion that the resources required to fulfill the proposed point source actions should be more appropriately allocated to substantial total phosphorous contributors (agricultural non-point sources).
- 5. Proposed actions for point sources are costly with limited returns in overall phosphorous loading reductions, particularly with respect to Canadian wastewater treatment plant effluents. The EBR posting identifies agricultural sources as substantial phosphorous contributors in the Lake Erie watershed. It is interesting to note that the proposed actions for phosphorous reductions from agricultural sources comprise of nutrient management programs, which have a probability of reducing costs to agriculture through less use and better management of land applied nutrients including phosphorous.

Administration fully supports phosphorous (and nutrient) loading reductions aimed at addressing algal blooms in the Lake Erie basin. Furthermore, it is recommended that resources be allocated to address substantial phosphorous contributors including agricultural and non-point sources through the promotion of green infrastructure development, low impact development and agricultural nutrient management programs.

RISK ANALYSIS:

As this report pertains to comments on proposed legislation, no risks are identified at this time.

FINANCIAL MATTERS:

As this report pertains to comments on proposed legislation, no immediate financial matters are identified. Potential financial implications are presented in the Discussion section.

CONSULTATIONS: N/A

CONCLUSION:

The authour of this report has attended consultation meetings with Environment Canada (EC) and MOECC regarding Lake Erie phosphorous loading reductions that have resulted in this proposed legislation. The comments in this report have been presented at these consultations. EC and MOECC have recognized that a significant majority of

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phosphorous loadings in the Ontario portion of the Lake Erie Basin are from non-point sources (i.e. not from wastewater treatment plant effluent). It is thought that the 0.5 mg/L phosphorous limit is achievable in treatment plants that presently have higher phosphorous effluent limits through enhanced chemical treatment. The proposed tertiary level of treatment is an unnecessary and costly solution particularly when secondary treatment plants can meet the proposed phosphorus limit.

In summary, administration recommends the City of Windsor be supportive of the Province's phosphorous reduction targets, however, the reduction actions should be focused on significant loading sources.

APPROVALS:

Name	Title	
Chris Manzon	Senior Manager Pollution Control	
Mark Winterton	City Engineer and Corporate Leader – Environmental Protection & Infrastructure Services	
Onorio Colucci	Chief Administrative Officer	

NOTIFICATIONS:

Name	Address	Email	8

APPENDICES:

1 Environmental Registry Posting - EBR Registry Number: 012-8760