

## Supplementary Budget – Briefing Note

## 2019 Budget

One page brief per request

**Briefing Note required for:**

- items >\$50,000
- Corporate Strategic Initiatives

Dept	Division	Business Unit	Item	Base Supp	Amount	FTE Impact
CD	Planning Services	12823	Lake Erie Shoreline Management Plan – Consulting Fees, Year 2 of 2 Years (Gross \$50,000)	S	\$50,000	0
			Recommended Funding Strategic Development Reserve #17266	S	(\$50,000)	
			Total		\$0	

**Background:**

This is a Council Previously Approved Item

On November 6, 2017, Council approved the following recommendations:

1. The Municipality provide a letter of support to participate as a partner in the “Adapting to the Future Storm and Ice Regime in the Great Lakes” proposal in order to develop a Lake Erie Integrated Shoreline Management Plan.
2. If the proposal is successfully awarded funding by Natural Resources Canada (decision in early 2018), the Municipality commit \$50,000 in fiscal year 2018 and \$50,000 in fiscal year 2019 to be funded through the Strategic Development Reserve, as its matching share.

The Adapting to the Future Storm and Ice Regime in the Great Lakes/Lake Erie Shoreline Management Plan proposal is a multi-faceted study and it was accepted for funding by Natural Resources Canada in June 2018. The work is underway and will be completed in 2019.

Attached are the minutes from November 16, 2017 where Council originally approved. This. We were initially approached by this consulting team to see if we had interest in partnering on a proposal to the Federal Government on this to pursue matching funding from the Feds, given the serious flooding and erosion issues that are happening along Lake Erie. In the report, Council approved up to 50K for both 2018 and 2019 as our share of the contribution to this, if we were successful with the proposal. There are several other funding partners as well. The proposal was accepted for funding earlier this year and the study is now underway. Also attached is an update Report to Council from the September 10, 2018 meeting.

**Comment:**

- The 2018 Supplemental Budget Request was \$50,000 (spent)
- The 2019 Supplemental Budget Request is \$50,000

**The Corporation of the Municipality of  
Chatham-Kent**

**Chatham-Kent Council Meeting  
Council Chambers, Chatham-Kent Civic Centre**

**November 6, 2017**

**4:30 P.M.**

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**1. Call to Order**

The Mayor called the meeting to Order:

Present: Mayor Randy Hope, Councillors Authier, Bondy, Faas, Fluker, Herman, Leclair, B. McGregor, C. McGregor, Myers, Pinsonneault, Sulman, Thompson, VanDamme, Vercouteren and Wesley

Absent: Councillors Canniff and Robertson

**2. Disclosures of Pecuniary Interest  
(Direct or Indirect) And the General Nature Thereof**

**3. Supplementary Closed Session Agenda Items**

**4. Recess to Closed Session – 4:30 p.m.  
Councillor Carmen McGregor, Closed Session Chair**

That Council moved into a Closed Session Meeting of Council pursuant to Section 239 of the Municipal Act, 2001, as amended, for the following reasons:

- Proposed disposition of land by the municipality or local board with regard to Offer to Purchase – 19 Grey Street, Chatham. Section 239(2)(c), Municipal Act, 2001.
- Advice that is subject to solicitor-client privilege, including communications necessary for that purpose with regard to Erie Shore Drive. Section 239(2)(f), Municipal Act, 2001.
- Advice that is subject to solicitor-client privilege, including communications necessary for that purpose with regard to Fifth Street Bridge Contract. Section 239(2)(f), Municipal Act, 2001.

**5. Adjournment of Closed Session**

**Resumption of Open Council Meeting – 6:00 p.m.**

**6. Approval of Supplementary Agenda**

There was no supplementary agenda.

**7. Disclosures of Pecuniary Interest (Direct or Indirect) for Open Session  
Agenda Items and the General Nature There Of**

Councillor Vercouteren declared a conflict of interest with regard to Item 11(b)(ii) due to

**Municipality of Chatham-Kent**

**Legislative Services**

**Planning Services**

**To:** Mayor and Members of Council  
**From:** Bruce McAllister, Director, Planning Services  
**Date:** October 25, 2017  
**Subject:** Natural Resources Canada Climate Change Adaptation Call for Proposals – Lake Erie Integrated Shoreline Management Plan

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**Recommendations**

It is recommended that:

1. The Municipality provide a letter of support to participate as a partner in the “Adapting to the Future, Storm and Ice Regime in the Great Lakes” proposal in order to develop a Lake Erie Integrated Shoreline Management Plan.
2. If the proposal is successfully awarded funding by Natural Resources Canada (decision in early 2018), the Municipality commit \$50,000 in fiscal year 2018 and \$50,000 in fiscal year 2019 to be funded through the Strategic Development Reserve, as its matching share.

**Background**

In 2011, the Municipality of Chatham-Kent adopted the Chatham-Kent Shoreline Areas Community Sustainability Plan and the Sustainable Shoreline Secondary Plan, which contained a number of land use policies that were incorporated into the Official Plan. One of the main action items identified in the Plan was to undertake a more detailed Shoreline Management Plan to develop strategies for shoreline erosion and shoreline protection; especially, along the Lake Erie coast. It was recognized that these issues cannot be addressed solely by private landowners or the Municipality, but that a more comprehensive approach would be required with other levels of government and the Conservation Authorities. Furthermore, it was recognized that the Municipality does not have the fiscal resources required to implement strategies for shoreline erosion and shoreline protection on its own.

Over the years, there have been several instances of coastal flooding events and shoreline erosion issues that are having a significant impact on both private property and municipal infrastructure.

In late 2016, Council passed the following motion regarding the flooding events along Erie Shore Drive:

*Therefore, be it resolved that the Mayor and Administration solicit Provincial and Federal levels of government to review potential grants, cost sharing models and partnership opportunities to construct a comprehensive shoreline protection system along Erie Shore Drive to protect the 115 seasonal and permanent dwellings located along the south side of Erie Shore Drive and the approximately 1600 acres of prime and specialty crop farmland.*

Since that time, opportunities for funding have been sought out, but it has become apparent that there is no funding available from senior levels of government for area-specific hard engineering shoreline management techniques.

However, in September 2017, Canada’s Climate Change Adaptation Platform, chaired by Natural Resources Canada (NRCan), released a call for proposals for cost-shared

projects that address climate change adaptation in the areas of coastal management, energy, mining, economics, infrastructure, forestry and training.

The intent of this RFP is not to fund specific shoreline management projects, but it is for the following:

*Funding for this Call comes from NRCan's Climate Change Adaptation Program, which facilitates the development, sharing and use of knowledge, tools and practices to enhance practical action on adaptation. This call addresses some priority needs to advance adaptation and increase resilience to climate change impacts (e.g. flooding, storm surges, changing water levels) along Canada's marine coasts, Great Lakes and St. Lawrence River. Proposals should promote climate resilience through innovative adaptation solutions and analysis of policy drivers and instruments to accelerate adaptation action. As appropriate, proposals should highlight how the results are applicable and transferable to other coastal regions across Canada. Proposals promoting integrated approaches are encouraged.*

### **Comments**

In response to above-noted RFP, a team of consulting experts, led by Mr. Peter Zuzek, Zuzek Inc., is intending on submitting a proposal entitled "Adapting to the Future, Storm and Ice Regime in the Great Lakes". Mr. Zuzek has 25 years of experience working on consulting assignments across the coastal regions of the world including multidisciplinary investigations on coastal erosion and flooding, risk assessments, shoreline management plan development and climate change adaptation. Other key partner experts on the team would include:

- Linda Mortsch - Adjunct and Climate Change Scientist, University of Waterloo
- RWDI Air Inc. - a Canadian-based firm of consulting engineers and scientists
- W. F. Baird & Associates Coastal Engineers Ltd.

As part of their submission, the team is proposing to undertake three Case Studies and they have approached the Municipality and the Lower Thames Valley Conservation Authority (LTVCA) about partnering and participating in the study.

The following is an excerpt from the Executive Summary of the proposal, which describes the nature and intent of the study:

#### ***Executive Summary***

*The Great Lakes are the largest freshwater ecosystem on the planet, produce a wealth of goods and services that sustain communities, support the world's third largest economy, and are home to more than 40 million citizens in Canada and the United States.*

*Coastal hazard planning and natural resource management activities needed to maintain the sustainability of this socio-economic system do not integrate climate change impacts on physical processes, such as changes to the frequency and intensity of coastal storm surges. As a result, adaptation strategies to address climate change and its associated uncertainties have not been developed. For instance, regulations such as development setbacks intended to locate new infrastructure away from coastal hazards are based on the assumptions of climate stationarity (i.e., future erosion rates can be estimated from historical observations).*

*However, the physical processes that govern our Great Lakes ecosystem, and the very nature of the extreme events that affect them, are changing. For example, the recent 2017 rainfall in the Lake Ontario basin resulted in a new all-time high water level that persisted throughout the summer resulting in lake-wide flooding and significant economic damages. This extreme event was inconsistent with the recent government report on the State of Climate Change Science in the Great Lakes Basin (McDermid et al, 2015), which concluded that the long-term mean water levels*

peaked in the 1980s, have been decreasing ever since, and were projected to be lower in the future.

*Reductions in winter ice cover in the Great Lakes have recently been correlated with increased wave heights when compared against historical conditions (Anderson et al, 2015). Impacts of an ice-free winter on sandy coastlines, such as Lake Erie, have already been documented, including a dramatic shoreline erosion event along the western shores of Point Pelee National Park that occurred during the ice-free winter of 2005/06 (Bamasoud and Bryne, 2012). While the potential implication of climate change on future coastal storms and sandy shoreline evolution are unknown, linkages between historical climate and rates of shoreline evolution have been documented (Mattheus, 2014). By extension, the future of coastal wetlands, whose existence is often due to the sheltering of sandy barrier beaches (e.g., Rondeau Bay and Long Point Bay), is unknown. To date, research into climate change impacts on wetlands has focused on lake level fluctuations and hydrology (wetting and drying), not physical processes associated with storms.*

*Strong correlations between atmospheric warming and wind gusts have been documented (Cheng, 2014). If these trends are transferrable to large synoptic scale storm events that generate waves in the Great Lakes, warmer temperatures could also lead to increases in the frequency, magnitude and intensity of coastal storms. In turn, more intense storms lead to increased flood risks for coastal communities, higher maintenance costs for existing coastal infrastructure, and accelerated erosion rates. The impacts of changing severe storm conditions on coastal ecosystems, habitats, and water quality are unknown. However, many of the 40 million people that live in the basin rely on the goods and services produced by these coastal ecosystems, such as water purification, flood mitigation, and fisheries production.*

*To address the lack of knowledge about the impacts of climate change on coastal storms and the absence of climate change adaptation planning, a two-part study was designed to generate future climate change storm ensembles (e.g., a population of extreme storms associated with a future emission scenario and warming trend); and then apply this new knowledge to case studies focused on integrated coastal zone management. Details are as follows:*

- **Part 1 – Future Storm Ensembles for Lake Erie and Lake Ontario:**

*We will begin with a review of the available literature and historical measurement data pertaining to ice cover, waves, storm surges, and extreme weather events to assess if changes have occurred over the ~1970 – 2016 timeframe. Through this analysis we will also develop statistical relationships between different types of extreme weather events and resulting waves and storm surges. Published reports, climate model outputs, and statistical downscaling results will be evaluated to develop an ensemble of the likely frequency and magnitude of future coastal storm events. The magnitude of wave heights and storm surges associated with future storms will then be modeled and compared against historical (measured) events using extreme value analysis techniques to arrive at a risk matrix of potential wave and surge conditions associated with future storms.*

- **Part 2 Case Studies:**

*Three case studies will be completed in Part 2 that will integrate the technical findings from Part 1 into a regulatory review for hazard mitigation policies, integrated coastal zone management planning, wetland restoration initiatives, and coastal infrastructure impacts assessments. The three studies include:*

- *Conservation Authority Coastal Working Group (CWG): The study team will work in the CWG to evaluate the implications of the Phase 1 findings on the application of regulations for new coastal development and natural resource protection. The CWG is represented by 21 individual Conservation Authorities and has 37 members.*

- **Chatham-Kent Integrated Shoreline Management Plan: The Municipality and Conservation Authority will lead the development of an integrated shoreline management plan, supported by the study team that utilizes the Phase 1 technical findings to develop effective long-term climate change adaptation strategies.**
- *Credit Valley Conservation (CVC) Authority: The study team and CVC staff will work on a series of smaller studies to integrate the Phase 1 technical findings into ongoing activities at the CVC, including wetland restoration planning, source water protection initiatives in Lake Ontario, coastal infrastructure impact assessments, and disaster mitigation planning.*

In addition to the Study Team, a Steering Committee would be also formed with representatives from various government agencies and academia. A detailed description of the Study Team and Steering Committee is provided as Appendix A.

The Municipality would take the lead on the Chatham-Kent Integrated Shoreline Management Plan component of the study and the LTVCA would be the major partner and will assist in every aspect of the plan's development from project scoping, through public consultations, to final review. Specifically, the Municipality and the LTVCA would be part of Steering Committee, which would include representation from the province and federal government, industry/business and the community. One of the goals is to develop a new shoreline management plan for Chatham-Kent that is truly multi-sectoral and not just focused on hazard mitigation, as is the present practice. The scientific research that will be developed on climate change induced flooding and erosion in Part 1 of the study will assist in creating appropriate adaptation plans to deal with these various shoreline hazards. However, the adaptation plans will not just look at mitigating hazards (i.e. greater setbacks), they will also take a broader perspective and include all aspects of the socio-economic system that is the Chatham-Kent Lake Erie shoreline and develop the best possible plan for a healthy vibrant community that is safe from coastal hazards by better informing future land use policies and decision-making.

The submission deadline for proposals is Monday, November 27, 2017. It is anticipated that successful proponents will be notified by March 1, 2018 and projects must be completed no later than November 30, 2020.

### **Areas of Strategic Focus and Critical Success Factors**

The recommendations in this report support the following areas of strategic focus:

Economic Prosperity:

Chatham-Kent is an innovative and thriving community with a diversified economy

A Healthy and Safe Community:

Chatham-Kent is a healthy and safe community with sustainable population growth

People and Culture:

Chatham-Kent is recognized as a culturally vibrant, dynamic, and creative community

Environmental Sustainability:

Chatham-Kent is a community that is environmentally sustainable and promotes stewardship of our natural resources

The recommendations in this report support the following critical success factors:

Financial Sustainability:

The Corporation of the Municipality of Chatham-Kent is financially sustainable

Open, Transparent and Effective Governance:

The Corporation of the Municipality of Chatham-Kent is open, transparent and effectively governed with efficient and bold, visionary leadership

Has the potential to support all areas of strategic focus & critical success factors

Neutral issues (does not support negatively or positively)

### **Consultation**

Finance, Budget and Information Technology Services, Infrastructure and Engineering Services and Legal Services were consulted in the preparation of this report.

The LTVCA has also submitted a letter of support, which is attached as Appendix B and reads as follows:

The Lower Thames Valley Conservation Authority (LTVCA) is pleased to support your project proposal entitled "Adapting to the Future Storm and Ice Regime in the Great Lakes".

As you are aware Conservation Authorities are assigned specific responsibilities concerning shoreline management by the Province of Ontario. Under the Conservation Authorities Act (R.S.O. 1990, c. C.27), Section 28(1), the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses regulation mandates Conservation Authorities to regulate alterations to and development around the shorelines of the Great Lakes. The purpose of the regulation is to ensure that such activities do not affect the control of flooding, erosion, dynamic beaches, pollution or the conservation of land.

Complementing this, the Ontario Ministry of Natural Resources and Forestry has delegated to the Conservation Authorities its responsibilities under the Planning Act (R.S.O. 1990, c. P.13) to provide comments to municipal planning authorities on land use planning and development applications, to ensure that they comply with the Provincial Policy Statement on natural hazards. Natural hazards include specified hazards associated with the Great Lakes shoreline including flooding, erosion and dynamic beaches.

In addition to these planning and regulations responsibilities, the Ontario Ministry of Natural Resources and Forestry has also delegated responsibilities for flood forecasting and warning to Conservation Authorities, including flooding and erosion events along the Great Lakes shorelines. Conservation Authorities also offer complementary programs and services related to water and erosion control infrastructure as well as natural heritage restoration to improve the nearshore and coastal environment. Given these responsibilities and programs, Conservation Authorities are frequently engaged in the development of shoreline management plans when they are undertaken.

The impacts of climate change are becoming increasingly important for proper municipal planning and flood management. Various groups undertake research as it relates to climate change impacts on urban flooding and riverine flooding. The research includes updated intensity-duration-frequency curves for rainfall events under climate change scenarios and estimates related to infrastructure upgrades. However, the LTVCA is not aware of any work to date related to climate change that investigates the potential impacts on the unique coastal environment of Lake Erie. The Provincial Policy Statement, 2014, policy 3.13 states, "Planning authorities shall consider the potential impacts of climate change that may increase the risk associated with natural hazards." To fulfil this, planning authorities and commenting agencies need strong science-based information related to climate change impacts. With regard to the Great Lakes in particular,

information is required about potential changes to storm surges and shoreline erosion rates. For instance, a stretch of the Lake Erie shoreline within the Municipality of Chatham-Kent has experience flooding due to wave spray on more than 15 occasions in 2017 alone. Information about the potential effect of climate change is critically important to properly manage and mitigate the impacts of flooding and erosion, and to plan for the future of this area and others along the Lake Erie shoreline.

The case study “Chatham-Kent Integrated Shoreline Management Plan” will be critically important to address current and future concerns related to the Lake Erie shoreline of Chatham-Kent. It will lead to better planning for those areas impact by natural hazards by providing long-term, sustainable, adaptation strategies. The proposal addresses several of the information gaps created by a changing climate scenario. The updated storm surge information and potential future scenarios will provide a better understanding of future flood frequency and severity and assist with planning for those areas already experiencing frequent flooding and erosion, as well as helping to identify areas that will be impacted in the future.

The LTVCA will provide a staff member to participate on the Steering Committee or on an associated Technical Committee for this project as required. Since the entire shoreline involved in the case study falls under the jurisdiction of the LTVCA, the LTVCA expects to play a major role in the development of the integrated shoreline management plan. While the municipality of Chatham-Kent will take the lead on the integrated shoreline management plan, the LTVCA will be the major partner and will assist in every aspect of the plan’s development from project scoping, through public consultations, to final review. The resulting integrated shoreline management plan will form the basis of future LTVCA planning and regulation policies for that portion of the Lake Erie shoreline within the jurisdiction of Chatham-Kent and will inform LTVCA policies for the rest of the Lake Erie shoreline under its jurisdiction. As the LTVCA participates in the Conservation Authority Coastal Working Group (CWG), it will be involved with that case study as well.

Funding for Conservation Authorities’ programs comes primarily from municipal levies and, to a lesser extent the Province of Ontario. The municipality of Chatham-Kent and the Province of Ontario provide funding to the LTVCA to cover costs associated with municipal plan review, Official Plan development, and associated watershed or shoreline management plans. As a result, the LTVCA’s financial support for the project will come as in-kind contributions related to staff participation, including wages and benefits, and incidentals related to the development of the integrated shoreline management plan.

**Financial Implications**

The NRCan RFP is a 50/50 matching grant opportunity. The total proposed budget is \$800,000. It is proposed that NRCan would fund \$400,000 and the Municipality and other partners would provide the matching funds. It is proposed that the Municipality’s share would be \$50,000 in fiscal year 2018 and an additional \$50,000 in fiscal year 2019. It is anticipated that there will be other contributing partners as well.

Proposed Budget for NRCan RFP		Allocation of Funds	
NRCan	\$400,000	Tasks	Budget
Non-Federal Match		Part 1: Climatology, Modeling, and Extreme Analysis	\$400,000
CK, Provincial	\$400,000	Part 2:	
Partners, Other		CA Coastal Working Group	\$20,000

Proposed Budget for NRCan RFP		Allocation of Funds	
Partners		CK Case Study	\$200,000
		CVC Case Study	\$180,000

With a 100k investment, the CK case study is being supported by a \$600,000 investigation. The Municipality would also get access to the latest information on storm extremes due to climate change, leading coastal planners, and adaptation specialists to work through the many challenges and opportunities that we have along the Lake Erie shoreline. The \$100,000 investment over two years is essentially the equivalent of 17 cent dollars for this work (CK would fund 1/6 of the study cost).

There is currently no allocated budget; therefore, it is recommended that funding be provided from the Strategic Development Reserve with \$50,000 in 2018 and \$50,000 in 2019. This is contingent on the proposal being successfully awarded funding by Natural Resources Canada.

Prepared by:

Reviewed by:

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Bruce McAllister, MCIP, RPP  
Director, Planning Services

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John Norton, Corporate Leader  
Legislative Services

Consulted and confirmed the content of the consultation section of the report by:

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Mike Turner, Chief Financial Officer  
Finance, Budget and Information Technology Services

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Thomas Kelly, General Manager  
Infrastructure and Engineering Services

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Dave Taylor, Senior Legal Officer  
Legal Services

The Director of Planning Services noted that in 2011 Chatham-Kent adopted a Shoreline Sustainability Plan. One of the main action items identified in the Plan was to undertake a more detailed Shoreline Management Plan to develop strategies for shoreline erosion and shoreline protection. In 2017 Natural Resources Canada released a call for proposals for projects that address climate change including coastal management.

The Municipality of Chatham-Kent and the Lower Thames Conservation Authority were approached by Peter Zuzek of Zuzek Inc. who is willing to use Chatham-Kent as a case study in his review of climate change in the great lakes. The case study would result in development of an integrated shoreline management plan. The plan will not just look at mitigating hazards, but will take a broader perspective and include all aspects of the socio-economic system. It will develop a plan for a community that is safe from coastal hazards by informing land use policies and decision-making. This study has the benefit of being a concrete step for planning an approach to all of the Lake Erie shoreline, including Erie Shore Drive.

In response to a question by Councillor Herman, Mr. Zuzek explained that letters of

support from the Municipality and citizens of Chatham-Kent will assist to strengthen the submission.

Councillor Herman moved, Councillor Vercoouteren seconded:

**“That**

- 1. The Municipality provide a letter of support to participate as a partner in the “Adapting to the Future, Storm and Ice Regime in the Great Lakes” proposal in order to develop a Lake Erie Integrated Shoreline Management Plan.**
- 2. If the proposal is successfully awarded funding by Natural Resources Canada (decision in early 2018), the Municipality commit \$50,000 in fiscal year 2018 and \$50,000 in fiscal year 2019 to be funded through the Strategic Development Reserve, as its matching share.”**

The Mayor put the Motion.

Councillor	Vote	Councillor	Vote
Authier	Yes	Myers	Yes
Bondy	Yes	Pinsonneault	Yes
Canniff	Absent	Robertson	Absent
Faas	Yes	Sulman	Yes
Fluker	Yes	Thompson	Yes
Herman	Yes	VanDamme	Yes
Leclair	Yes	Vercoouteren	Yes
B. McGregor	Yes	Wesley	Yes
C. McGregor	Yes	Mayor Hope	Yes

Yes Votes: 16

No Votes: 0

**Motion Carried**

(d) Update on Erie Shore Drive – Emergency Response to Flooding

### **Municipality Of Chatham-Kent**

#### **Drainage, Asset and Waste Management / Planning Services**

#### **Infrastructure and Engineering Services / Legislative Services**

**To:** Mayor and Members of Council

**From:** Tim Dick and Bruce McAllister

**Date:** November 1, 2017

**Subject:** Update on Erie Shore Drive- Emergency Response to Flooding

#### **Recommendation(s)**

It is recommended that:

1. Infrastructure and Engineering Services be directed to provide technical guidance to homeowners on locates, preferred location, pit and drainage design and potential suppliers to help facilitate the installation of private property sump pits to address flooding from Lake Erie;
2. The Interim Control Bylaw attached to this report (Attachment A) be passed.

## **Municipality Of Chatham-Kent**

### **Community Development**

#### **Planning Services**

**To:** Mayor and Members of Council

**From:** Bruce McAllister, MCIP, RPP  
Director, Planning Services

**Date:** August 21, 2018

**Subject:** One Year Extension of Interim Control By-law Number 164-2017 for Erie Shore Drive Properties and Update on the Adapting to the Future Storm and Ice Regime in the Great Lakes – Chatham-Kent Lake Erie Shoreline Study

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#### **Recommendation**

It is recommended that:

1. The attached by-law be adopted to extend Interim Control Bylaw Number 164-2017 for a period of one year until November 5, 2019.

#### **Background**

Section 38 of the Planning Act permits a municipality to pass an Interim Control By-law prohibiting the use of land, buildings or structures for such purposes as set out in the by-law (i.e. effectively “freezing” development on the land) for up to a year, with the right to extend the by-law for a further year. In order to enact such a by-law, a municipality must direct that a review or study be undertaken in respect of land use policies in the municipality (or a defined part of the municipality).

On November 6, 2018, Council approved the following recommendations:

1. The Municipality provide a letter of support to participate as a partner in the “Adapting to the Future Storm and Ice Regime in the Great Lakes” proposal in order to develop a Lake Erie Integrated Shoreline Management Plan.
2. If the proposal is successfully awarded funding by Natural Resources Canada (decision in early 2018), the Municipality commit \$50,000 in fiscal year 2018 and \$50,000 in fiscal year 2019 to be funded through the Strategic Development Reserve, as its matching share.

Based on the above recommendations to participate in the study and the significant flooding as a result of high water levels and wave action for properties along Erie Shore

Drive that were experienced in 2017, Council deemed it necessary and expedient to pass an Interim Control By-law (By-law 164-2017) to provide the Municipality with time to undertake the study.

### **Update on the Adapting to the Future Storm and Ice Regime in the Great Lakes – Chatham-Kent Lake Erie Shoreline Study**

The Adapting to the Future Storm and Ice Regime in the Great Lakes proposal is a multi-faceted study and it was just recently accepted for funding by Natural Resources Canada. This type of work has never been completed before in the Great Lakes.

As one of four Case Studies of the overall study, experts in shoreline hazards, meteorology, climate change, coastal engineering design, and adaptation planning are undertaking a detailed study for the Lake Erie shoreline from Wheatley to Clear Creek (the Lake Erie municipal boundary of Chatham-Kent). Natural Resources Canada's Climate Change Adaptation Platform, the Municipality of Chatham-Kent, and the Lower Thames Valley Conservation Area are co-funding the study. The technical work is being undertaken by Zuzek Inc. and other partners.

Phase I investigates the magnitude and intensity of historical storms on Lake Erie, such as the recent April 14 to 16, 2018 ice storm that extensively damaged infrastructure along the shoreline. The study will also assess the effects of climate change on future ice conditions, as less ice cover increases the exposure of the shoreline to damaging storms in the winter. Estimated changes in the duration, intensity, and magnitude of future storms that cause flooding and erosion along the Lake Erie shoreline will also be provided. This work will be completed by March 2019.

Phase 2 will start in early 2019. The study will engage with shoreline stakeholders including land owners and users of the Chatham-Kent shoreline to discuss erosion and flooding hazards along the Lake Erie shoreline and explore potential solutions. Recently, as an initial step staff from the Conservation Authority, the Municipality, and the consulting team toured the shoreline and met with several land owners to gather information on their perspectives of the challenges associated with living along the lake.

Using existing knowledge of natural hazards and projected effects of climate change, the study will develop information to reduce coastal risks, increase the resilience of the shoreline, and protect natural assets such as beaches and coastal wetlands. Both short- and long-term solutions will be co-developed with stakeholders during the study. Information on future public meetings and co-learning events will be posted within the community.

### **Comments**

It took several months from the time the proposal was initially submitted to Natural Resources Canada to be evaluated and formally accepted for funding. Given that study will run through most of 2019, it is recommended that Interim Control Bylaw Number

164-2017 be extended for one additional year until November 5, 2019 in order to complete the work.

Under Subsection 38(2) of the Planning Act, R.S.O., c.P.13, as amended, authority is granted to make such an extension, provided the total period of time does not exceed two years from the date of the passing of the interim control by-law.

### **Areas of Strategic Focus and Critical Success Factors**

The recommendation in this report supports the following areas of strategic focus:

Economic Prosperity:

Chatham-Kent is an innovative and thriving community with a diversified economy

A Healthy and Safe Community:

Chatham-Kent is a healthy and safe community with sustainable population growth

People and Culture:

Chatham-Kent is recognized as a culturally vibrant, dynamic, and creative community

Environmental Sustainability:

Chatham-Kent is a community that is environmentally sustainable and promotes stewardship of our natural resources

The recommendation in this report supports the following critical success factors:

Financial Sustainability:

The Corporation of the Municipality of Chatham-Kent is financially sustainable

Open, Transparent and Effective Governance:

The Corporation of the Municipality of Chatham-Kent is open, transparent and effectively governed with efficient and bold, visionary leadership

Has the potential to support all areas of strategic focus & critical success factors

Neutral issues (does not support negatively or positively)

### **Consultation**

Legal Services was consulted in the preparation of this report.

**Financial Implications**

There are no financial implications resulting from this report.

Prepared by:

Reviewed by:



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Bruce McAllister, MCIP, RPP  
Director Planning Services

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John Norton  
General Manager,  
Community Development

Consulted and confirmed the content of the consultation section of the report by:

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Dave Taylor  
Manager, Legal Services

Attachments: By-law to Extend Interim Control By-law Number 164-2017

P:\RTC\Community Development\2018\Planning Services\Sept 10-18 One Year Extension of Interim Control By-law Number 164-2017 for Erie Shore Drive Properties.docx

By-law Number \_\_\_\_\_

of the Corporation of the Municipality of Chatham-Kent

Being a By-law to Extend Interim Control By-law Number 164-2017 under Section 38 of the Planning Act, R.S.O. 1990, c. P. 13, as amended

Whereas By-law Number 164-2017 was enacted by the Council of the Corporation of the Municipality of Chatham-Kent in order to provide interim control over development within the lands referred to on Schedule A to By-law Number 164-2017 in order to provide the Municipality with time to undertake a study of the Lake Erie Shoreline;

And Whereas it is deemed desirable and expedient to extend the period of time during which the said by-law will be in effect;

And Whereas by Subsection 38(2) of the Planning Act, R.S.O., c.P.13, as amended, authority is granted to make such an extension;

Now therefore be it and it is hereby enacted as By-law Number \_\_\_\_\_ of the Corporation of the Municipality of Chatham-Kent:

1. That Section 5 of By-law Number 164-2017, be deleted and the following substituted in place thereof:

“5. This By-law shall come into force and take effect at 11:59 pm local time on November 5, 2018 and shall be in effect until 11:59 pm local on November 5, 2019.”

Read a First, Second and Third Time the \_\_\_\_\_ day of \_\_\_\_\_, 2018.

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Mayor – Randy R. Hope

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Clerk - Judy Smith