



**Collingwood
General & Marine
Hospital**

459 Hume Street
Collingwood, Ont. L9Y 1W9
Tel (705) 445-2550
Fax (705) 444-2679
www.cgmh.on.ca

November 28, 2013

Mayor Ellen Anderson
The Blue Mountains
mayor@thebluemountains.ca

Dear Mayor Anderson:

I am writing to ask for your support of our request to the North Simcoe Muskoka Local Health Integration Network for funding to complete the documentation needed to move our Hospital redevelopment project forward. At this time we are required to complete the documentation entitled a "Business Case" which will outline not only the need for redevelopment but also the types and extent of hospital services that will be needed to support the South Georgian Bay area in the next 15 to 20 years. The cost of this work is likely to be over one-half million dollars.

Through the support of the Hospital Foundation we have managed to secure some funding to support this work but do not have sufficient to proceed. We are asking the LHIN to also provide financial support so that we will be able to carry out this much needed work.

As you know, our community is growing and aging rapidly. As we age, we often require more support from our Hospital. Our Hospital is currently struggling to meet the needs of patients within our given space so we know that this is only going to become a greater challenge. We need to move the process forward now in order ensure that we will be able to meet the needs of the community.

I have provided a draft letter of support for your consideration and would ask that if you are comfortable providing this, please forward it to myself (in c/o Jennifer Stevens) at stevensj@cgmh.on.ca before December 13th, 2013.

Sincerely,

A handwritten signature in blue ink, appearing to read "Shiela Metras", is written over a faint blue circular stamp.

Ms. Shiela Metras, Chair
Board of Trustees

November ____, 2013

Mr. Bob Morton, Chair
North Simcoe Muskoka LHIN
210 Memorial Avenue, Suites #127-130
Orillia, Ontario
L3V 7V1

Dear Mr. Morton:

I am writing to you to request that you support the Collingwood General and Marine Hospital's request for funds to move forward with the planning that is required in the next phase of their redevelopment.

We depend upon the General and Marine to provide safe, high quality patient care to our community. Unfortunately the Hospital is already challenged to support the growing needs of our community within its existing space and this issue will likely escalate as our community continues to grow and age.

It is very important that the next phase of planning proceed as quickly as possible and we urge you to support the Board's request for additional funding to make this happen.

Sincerely,



Seguin Township
5 Humphrey Drive,
Seguin, Ontario P2A 2W8

Tel: (705) 732-4300
Toll Free: (877) 473-4846
Fax: (705) 732-6347
www.seguin.ca

November 19, 2013

To all Municipalities with a permanent population of 10,000 or less:

**RE: Request for the Province of Ontario to step in and abolish OPP
new Billing model for Police Services**

At a regular meeting of the Township of Seguin Council held November 18th, 2013 Resolution No. 2013-391 was passed opposing the proposed Ontario Provincial Police new billing model for charging municipalities for policing services starting in 2015.

I enclose a copy of Resolution No. 2013-391 which requests the assistance of the Province of Ontario and Premier Wynne to abolish the proposed billing model.

Yours truly,

David Conn,
Mayor

Encl.

cc: The Honourable Kathleen Wynne, Premier of Ontario;
The Honourable Madeleine Meilleur, Minister of Community Safety &
Correctional Services;
The Honourable John Gerretsen, Attorney General of Ontario;
The Federation of Northern Ontario Municipalities (FONOM);
Association of Municipalities of Ontario (AMO);
Bonnie Lysyk, Auditor General of Ontario.



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November 19, 2013

The Honourable Kathleen Wynne,
Premier of Ontario
Minister - MINISTER'S OFFICE
11th Floor, 77 Grenville Street,
Toronto, Ontario
M7A1B3

Dear Honourable Premier Wynne:

**RE: Request for the Province of Ontario to step in and abolish OPP
new Billing model for Police Services**

At a regular meeting of the Township of Seguin Council held November 18th, 2013 Resolution No. 2013-391 was passed opposing the proposed Ontario Provincial Police new billing model for charging municipalities for policing services starting in 2015.

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David Conn,
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cc: All Municipalities with a permanent population of 10,000 or less;
The Honourable Madeleine Meilleur, Minister of Community Safety & Correctional Services;
The Honourable John Gerretsen, Attorney General of Ontario;
The Federation of Northern Ontario Municipalities (FONOM);
Association of Municipalities of Ontario (AMO);
Bonnie Lysyk, Auditor General of Ontario.



Resolution No. 2013-391

**The Corporation of
the Township of Seguin**

Moved by 

Seconded by  Date November 18th, 2013

WHEREAS, the Ontario Provincial Police are proposing a new billing model for charging municipalities for policing services, starting in 2015;

AND WHEREAS, the current billing model is a deployment model, in which cost recovery is based on percentage of detachment workload, actual detachment staffing levels, wages and benefits, and a cost recovery component for other expenditures, which model has been in place for over 15 years;

AND WHEREAS, the new methodology would charge each municipality a flat \$260 per household fee for the base costs related to providing police services, plus a variable charge for each call for service in that municipality. The rationale for this is that there is a base fixed cost for providing police services that must be borne by all participating municipalities, regardless of the number of calls for service that the OPP responds to in each municipality. The OPP have advised that 73% of their costs are fixed (i.e. base costs) and 27% are variable;

AND WHEREAS, the actual specifics of the cost for the calls for service have not been released or calculated, the OPP has estimated that the average cost per household in Ontario for policing services, including both the base cost and the calls for service, would be approximately \$369;

AND WHEREAS, this model would see the OPP costs for West Parry Sound municipalities increase from \$3,412,189 (per 2012 FIR) to \$6,537,204, an increase of \$3,125,015 or 92%;

AND WHEREAS, this model would see OPP costs increase for Seguin Township from \$592,659 (per 2012 FIR) to \$1,759,392, an increase of \$1,166,733 or 197%;

AND WHEREAS, this model is fundamentally flawed, unfair and inequitable.

THEREFORE BE IT RESOLVED THAT the Province of Ontario and Premier Wynne cannot allow this type of unfair treatment towards rural Ontario, and this funding

Township of Seguin Resolution No. 2013-391 Page 2

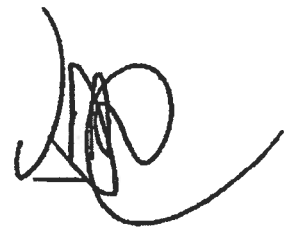
model be scrapped immediately.

AND FURTHER THAT this resolution be forwarded to The Honourable Kathleen Wynne, Premier of Ontario, The Honourable Madeleine Meilleur, Minister of Community Safety & Correctional Services, The Honourable John Gerretsen, Attorney General of Ontario, Federation of Northern Ontario Municipalities (FONOM), Association of Municipalities of Ontario (AMO), and all rural Ontario municipalities with a permanent population of 10,000 or less.

<u>DIVISION LIST</u>	<u>Yea</u>	<u>Nay</u>	<u>Absent</u>
Chidley	___	___	___
Gibbon	___	___	___
Hepworth	___	___	___
Jacklin	___	___	___
Osborne	___	___	___
Sainsbury	___	___	___
Conn	___	___	___

CARRIED

DEFEATED

A large, stylized handwritten signature in black ink, appearing to be 'J. Gerretsen', is written over the 'CARRIED' and 'DEFEATED' text.

November 27, 2013

TownThe Blue Mountains
32 Mill Street, P.O. Box 310
Thornbury, ON N0H 2P0

To Whom It May Concern:



DEC 6 2013

TOWN OF THE BLUE MOUNTAINS
PER _____

April 2, 2014, marks a historic day in Canada for the autism community. For the second year, Canadians will officially recognize World Autism Awareness Day.

As a means of increasing public awareness about Autism Spectrum Disorder (ASD) and the day-to-day issues faced by people with autism and their families, Autism Ontario is inviting municipalities across the province to raise awareness of ASD by participating in our 2014 "Raise the Flag" campaign.

By officially proclaiming April 2, 2014 as World Autism Awareness Day and participating in Autism Ontario's "Raise the Flag" campaign, your message to the people and families affected by ASD living in your community and province-wide is loud and clear that their struggles matter to all Ontarians.

Autism Ontario is the leading source of information on autism and one of the largest collective voices representing the autism community in Ontario. Today, 1 in 94 children are diagnosed with autism in Canada. Through improved public awareness, Autism Ontario strives to increase opportunities and acceptance for over 100 000 people living with Autism Spectrum Disorder in Ontario, ensuring that each person with ASD is provided the means to achieve quality of life as a respected member of society.

If your community is interested in supporting autism awareness by participating in Autism Ontario's "Raise the Flag" campaign on April 2, 2014, please register your municipality at www.raisetheflagforautism.com or email us at Natasha@autismontario.com

For questions regarding participation, please contact Autism Ontario at 1-800-472-7789 and ask to speak with Natasha Bowes (x233) or Shane Cunningham (x223).

Sincerely,

A handwritten signature in black ink that reads "Natasha Bowes". The signature is fluid and cursive, with the first name being larger and more prominent.

Natasha Bowes
Fundraising Coordinator

Ministry of Citizenship
and Immigration

Ministère des Affaires civiques
et de l'Immigration



Ontario Honours and Awards
Secretariat
400 University Avenue, 4th Floor
Toronto ON M7A 2R9

Secrétariat des distinctions et prix
de l'Ontario
400, avenue University, 4^e étage
Toronto ON M7A 2R9

RECEIVED

DEC 06 2013

November 2013

Dear friend,

I am pleased to remind you that the Ontario Honours and Awards Secretariat accepts nominations, throughout the year, for the Ontario Medal for Young Volunteers.

The Ontario Medal for Young Volunteers is presented by the Lieutenant Governor to exceptional young volunteers, between the ages of 15 and 24.

Through their actions and dedication, young volunteers have improved the quality of life in their communities, their province, their country, and even around the world. This honour recognizes Ontario's finest youth who understand the importance of volunteering and who demonstrate leadership, initiative and perseverance as well as inspire others.

Do you know an outstanding young volunteer? If so, please nominate them for the Ontario Medal for Young Volunteers.

Deadline for nominations is **January 15, 2014**

Nomination forms and additional information about the Ontario Medal for Young Volunteers, and other programs that recognize volunteers, are available on the Ministry of Citizenship and Immigration website at:

www.ontario.ca/honoursandawards

If you have any questions or require assistance please contact the Ontario Honours and Awards Secretariat by phone at (416) 314-7526, toll free at 1-877-832-8622 or TTY 416-327-2391.

I genuinely hope you take this opportunity to nominate any young volunteer(s) you believe to be worthy of this recognition.

Sincerely,

Luc Vincent
Manager

CC: CEDC



November 28, 2013

Mark Turner
 Clerk/Acting CAO
 Municipality of West Grey
 492813 Grey Road 4
 RR #2
 Durham, ON N0G 1R0

Dear Mr. Turner:

Re: OSPCA

Please be advised that the Council of the Corporation of the Municipality of Meaford adopted the following resolution at its meeting of November 25, 2013:

Be it resolved that Council of the Municipality of Meaford support the Resolution from the Municipality of West Grey regarding provincial OSPCA funding.

WHEREAS the provincial government recently announced an increase in funding to the Ontario Society for the Prevention of Cruelty to Animals (OSPCA) from \$500,000/year to \$5,500,000/year for the enforcement of animal welfare laws;

AND WHEREAS the Bruce Grey branch of the Ontario SPCA ceased operations in mid-2013 resulting in the downloading of animal welfare law enforcement and associated costs to Bruce-Grey local municipalities;

BE IT RESOLVED THAT, the Council of the Municipality of West Grey hereby petitions the provincial government to provide funding to Bruce-Grey local municipalities to help defray costs for municipal enforcement of animal welfare laws;

AND FURTHER THAT, a copy of this resolution be circulated to the Minister of Community Safety and Correctional Services; Bruce-Grey local municipalities, and local M.P.P.s.

If you require further information, please contact our office.

Sincerely,

Robert H. A. Tremblay, B.Soc.Sc., Dipl. M.A., CMO
 Director, Legislative Services/Clerk

RT/kp

Cc: Hon. Madeleine Meilleur, Minister of Community Safety
 Grey County Municipalities
 Bruce-Grey Branch OSPCA
 Bill Walker, MPP Bruce Grey Owen Sound

RECEIVED^{E.6}
NOV 29 2013



Laval, November 19, 2013

Ellen Anderson
Mayor of The Blue Mountains
26 Bridge Street
Thornbury, ON N0H 2P0

Dear Ms. Ellen Anderson,

The catastrophic Lac-Mégantic train accident underscores the importance of tightening the safety rules for transporting hazardous materials by all transportation mode.

According to a study conducted by ARC Financial, petroleum refinery activities and shipments – essentially by rail and pipelines – will only continue to grow. The safe transport of hazardous materials will therefore become an even more topical issue.

As an elected person it is YOUR obligation to make sure Transport Canada steps up its surveillance of rail companies and consequently, ensure the safety of your constituents.

Railway self-regulation must come to an end and the public safety must come before profit.

In short, you must show that a lesson was learned from the Lac-Mégantic tragedy and that something like this will never happen again.

If you have any questions, please do not hesitate to communicate with the undersigned.

Yours truly,

A handwritten signature in black ink, appearing to read "Robert Bouvier".

Robert Bouvier
President
Teamsters Canada

**Ministry of
Municipal Affairs
and Housing**

Office of the Minister

777 Bay Street, 17th Floor
Toronto ON M5G 2E5
Tel. 416-585-7000
Fax 416-585-6470
www.ontario.ca/MAH

**Ministère des
Affaires municipales
et du Logement**

Bureau du ministre

777, rue Bay, 17^e étage
Toronto ON M5G 2E5
Tél. 416-585-7000
Télééc. 416-585-6470
www.ontario.ca/MAH

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DEC 6 2 2013



13-61457

NOV 28 2013

Your Worship
Mayor Ellen Anderson
Town of the Blue Mountains
PO Box 310
26 Bridge Street
Thornbury ON N0H 2P0

Dear Mayor Anderson:

As the Minister of Municipal Affairs and Housing, I would like to thank Deputy Mayor Duncan McKinlay, Councillor Gail Ardiel, and your staff for taking the time to meet with me and the Honourable Jeff Leal, Minister of Rural Affairs, at the recent Association of Municipalities of Ontario conference in Ottawa.

I would also like to thank you for your follow-up letter on expanding rural enterprise opportunities. I appreciated hearing about how the Provincial Policy Statement is interpreted in rural Ontario. I have asked ministry staff to consider your recommendations as part of the ongoing review of the Provincial Policy Statement.

As you are aware, we are now close to the decision phase of the review process for the Provincial Policy Statement. We are currently working to resolve some complex issues with the support of other ministries and the stakeholder working groups.

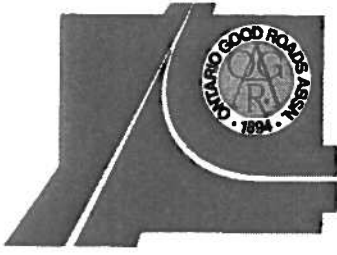
Once again, thank you to Deputy Mayor McKinlay, Councillor Ardiel, and your staff for meeting with me at the conference. Please accept my best wishes.

Sincerely,

A handwritten signature in black ink, appearing to read 'Linda Jeffrey'.

Linda Jeffrey
Minister

c: Jim Wilson, MPP, Simcoe-Grey
The Honourable Jeff Leal, Minister of Rural Affairs



Working for Municipalities

ONTARIO GOOD ROADS ASSOCIATION

1525 CORNWALL ROAD, UNIT 22
OAKVILLE, ONTARIO L6J 0B2
TELEPHONE 289-291-6472
FAX 289-291-6477
www.ogra.org

December 2, 2013

To the Head & Members of Council:

Re: Report of the OGRA Nominating Committee

The OGRA Nominating Committee met on November 27, 2013 and recommended a slate of candidates to the Board of Directors. The Board ratified the report as presented. The recommended slate is as follows:

Northern Zone	
Luc Duval, Director of Public Works & Engineering City of Timmins	Rick Harms, Project Engineer City of Thunder Bay
John MacEachern, Mayor Township of Manitouwadge	
Southwest Zone	
Chris Traini, County Engineer County of Middlesex	
South Central Zone	
Ken Laupé, Manager, Road Operations City of Brampton	Terry McKay, Deputy Mayor Township of Chatsworth
Duncan McKinlay, Councillor County of Grey	
Southeast Zone	
Craig Davidson, CAO/Treasurer Municipality of Hasting Highlands	Steve Desroches, Deputy Mayor City of Ottawa
Michelle Hendry, Director of Public Works City of Kawartha Lakes	
Toronto	
Robert Burlie, Manager, Road Operations City of Toronto	Mark Grimes, Councillor City of Toronto

The following current Boards members do not have to be re-elected to the Board and will automatically assume the following positions effective February 26, 2014:

President - Tom Bateman, P.Eng., County Engineer, County of Essex
1st Vice President – Rick Champagne, Councillor, Municipality of East Ferris
Immediate Past President – Joanne Vanderheyden, Mayor, Municipality of Strathroy-Caradoc

The above will serve on the 2014-2015 Board of Directors making a total of 15 on the Board.

The above slate of candidates will be ratified at the Annual Conference to be held in February, 2014. If any municipal member would still like to put their name forward for a position on the Board of Directors they must fill out and return the attached Nomination Form. All nominations must be postmarked or received by fax or e-mail no later than January 3, 2014 and sent to:

Alan Korell, Chair
Nominating Committee
1525 Cornwall Road
Unit 22,
Oakville, Ontario
L6J 0B2

Fax: 289-291-6477
E-mail: info@ogra.org

Please be advised that if any additional nominations are received by the deadline noted that an election will be required at the ROMA/OGRA Combined Conference.

Any questions regarding the Nomination process or serving on the Board of Directors can be directed to the undersigned at joe@ogra.org.

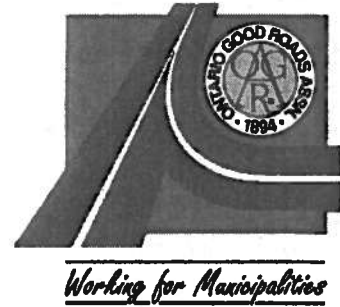
Yours truly,



J. W. Tiernay,
Executive Director

c. Alan Korell, Chair, Nominating Committee

Ontario Good Roads Association
Board of Directors
Nomination and Consent Form



We hereby nominate the following to the Board of Directors of the Ontario Good Roads Association for the 2014/15 term of office:

Name of Candidate

Name: _____

Position: _____

Municipality: _____

Moved by: _____

Seconded by: _____

(Candidates must be nominated by two eligible members of OGRA. A resolution of Council is acceptable but not mandatory)

Candidate Consent

The candidate nominated above must sign below indicating they consent to the Nomination and agree to let their name stand for office.

I, _____ hereby consent to the Nomination
(Name of Candidate)
to the Board of Directors of the Ontario Good Roads Association.

Signature

Date

Submit completed form and candidates résumé by fax or e-mail to the attention of Alan Korel, Chair, OGRA Nominating Committee
Fax: 289-291-6477
E-mail: info@ogra.org



RECEIVED
DEC 06 2013

Town of Blue Mountains
32 Mill Street, P.O Box 310
Thornbury, Ontario, Canada
N0H 2P0

December 2, 2013

Dear Mayor and Council,

RE: Lake Huron Water Levels

Enclosed please find a copy of our new position statement entitled "Extreme Water Levels on Lake Huron".

The current period of below average lake levels has generated concern among some interests. Earlier this year, the International Joint Commission (IJC) presented its recommendations to the two national governments on how to respond to this issue.

The enclosed paper presents a proposed direction for moving forward on the IJC's Reference Study. We urge caution on the suggestion of engineered structures in the St. Clair River. Rather, we support the IJC's recommendation for applying adaptive management which we address in the enclosed paper. We urge all levels of government to consider supporting adaptive management as an approach to dealing with both high and low lake level extremes.

If you have any questions about this information, please contact our office.

Sincerely,

Pamela Scharfe
Chair
Lake Huron Centre for Coastal Conservation



Extreme Water Levels on Lake Huron

Position Statement of the
Lake Huron Centre for
Coastal Conservation

2013

About the Centre

The Coastal Centre is an independent non-governmental organization dedicated to the conservation and wise stewardship of Lake Huron's coastal ecosystems. It has been in operation as a registered charity since 1998. Our environmental priorities include water quality, coastal processes, biodiversity and climate change. The Centre's work is focused on research, education and community outreach.

Extreme Water Levels on Lake Huron

Background

Lake Huron is one of the five Great Lakes positioned in the middle of this interconnected water system. Lake Huron, like the other Great Lakes, is a dynamic system and water level change is part of a normal functioning system. Recorded accounts, since 1918, show the range of levels to vary by about 2 metres. There have been several periods of low lake levels (1930s, 1960s, 2000s), and several periods of high lake levels (1970s, 1980s, 1990s).

Lake Huron is hydro-logically connected to Lake Michigan in such a way that the two lakes are considered one hydrologic unit when discussing lake levels. For this position paper, when Lake Huron water levels are referenced it is assumed that the same relates to Lake Michigan (as referenced on the water level chart shown as **Figure 1**).

It is the Centre's view that natural factors, primarily climatic factors related to precipitation and evaporation, are the key drivers of water levels. The state of balance between precipitation and evaporation will result in higher, lower or static levels. We also acknowledge that:

- i. There are changes to our regional climate that have been occurring and are expected to continue to occur in the coming decades;
- ii. There are human-related factors influencing lake levels (e.g. water diversions, dredging, water takings), but that those factors have historically altered the lakes in a minor way relative to natural factors; and
- iii. Post-glacial isostatic rebound (also called "Glacial Isostatic Adjustment") is slowly tilting the Great Lakes basin, causing water to be gradually displaced from the northeast to the southwest. The effects of this are more acute on the northern portions of the lake and on Georgian Bay. Water levels in Milwaukee, Wisconsin, for example, appear to be rising. At the same time, water levels in the northeastern portion of the basin (e.g., Georgian Bay) appear to be dropping. This rebound accounts for about 30 cm of water level change (rising or dropping) in a person's lifetime (International Upper Great Lakes Study, 2009).

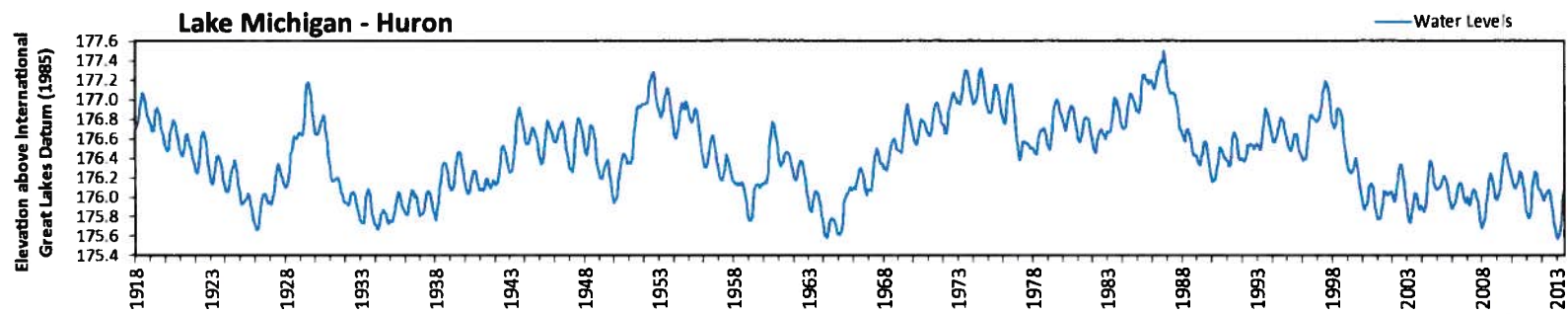


Figure 1: Water levels graph for Lake Huron/Michigan 1918 – 2013

Extreme Lake Levels

Extreme lake levels are not an unusual phenomenon. In the last fifty years Lake Huron has registered three extreme levels scenarios where records have been set. Record lows for Lake Huron were experienced in 1964 and January 2013. Record highs were experienced in 1985-86. Extreme conditions are typically met with public concern and calls for urgent action.



Figure 2: Beach erosion – southern Bruce County, 1986



Figure 3: Dune re-growth as a natural response to low lake levels – southern Bruce County, (same location as Figure 2) 2005

High Levels

Subsequent to the record high levels in 1985-86, the Canadian and United States governments requested the International Joint Commission (IJC) to investigate the extreme levels issue. This resulted in the Levels Reference Study released in 1993. The Study Board recommended against the installation of new structures to further regulate the levels and flows of the Great Lakes and St. Lawrence River because its investigations demonstrated that the costs of such measures would outweigh their economic benefits, and that these measures would produce negative environmental effects.

As a result of shoreline erosion and flooding situations during extreme high levels, extensive structural protection measures were installed along the shoreline that provided temporary relief (at least psychologically). In hindsight, many of the structures interfered with natural coastal processes and simply magnified the problem, or transferred the problem downshore. In one example near Grand Bend, Ontario, one cottage association claimed that their neighbouring cottagers' upshore had installed protection structures that had the effect of altering coastal processes causing erosion to the cottage properties downshore. They successfully launched a lawsuit that required the removal of the structures.

However, some successful adaptive management strategies did unfold as a result of the study. Ontario's Provincial Policy Statement was redesigned to incorporate development setbacks on the Great Lakes. Shoreline mapping under the federal Flood Damage Reduction Program helped define flood and erosion setbacks. Conservation Authorities were tasked to prepare Shoreline Management Plans for local implementation. These measures focused on adapting to extreme high levels, rather than battling against them.

Low Levels

The International Joint Commission (IJC) in April 2013 submitted a series of recommendations to the two federal governments intended to co-manage the lake. These recommendations followed an extensive five-year study by the International Upper Great Lakes Study (IUGLS) team. The IJC recommendations to government were not unanimously supported. The US co-chair (one of 6 commissioners, 3 from the US and 3 from Canada) refused to endorse the report, citing that the recommendations placed insufficient emphasis on climate change and the need for adaptive management. The Commission's recommendations to governments included the following:

1. Opposition to further study of Multi-Lake Regulation. Consistent with previous Commission studies, the Commission found further exploration of multi-lake regulation that includes new large-scale dams and channel enlargements is not warranted.

2. Recommendation was for further investigation to restore Lake Michigan-Huron water levels. This would include:
 - (i) exploration of options that would provide relief during low water periods, but not exacerbate future high water levels; and
 - (ii) a comprehensive binational benefit-cost analysis and a detailed environmental impact study of potential structural options.

3. Endorsement of the implementation of a comprehensive Adaptive Management approach to the Great Lakes, supported by science and monitoring (IJC, 2013).

There are many competing interests in the upper lakes, preferring various water levels that match their respective interests. Substantial regional public pressure, particularly from Georgian Bay, has called for the construction of engineered structures in the St. Clair River aimed at holding back water in the Lake Huron / Lake Michigan system. The structures being discussed would be aimed at raising levels by about 20 cm. A similar proposal was made in the 1960s during the last extreme low level but was not implemented (History of Dredging and Compensation in the St Clair River, 2009). What followed was three consecutive decades of high lake levels, including the record highs in the mid-1980s. Had the structures been in place during that time, greater flooding and erosion damages would likely have been experienced.

While extreme levels can elicit a strong emotional response amongst some directly affected by either high or low levels, the issue of extreme levels needs to be considered in a careful, objective and measured way.

Position

The Coastal Centre stresses caution on the idea of manipulating water levels through the installation of engineered structures in the St. Clair River. Lake Huron-Michigan is a large complex system. Scientists currently have a limited understanding of the long term effects to Lake Huron's ecosystems and the effects of artificially altered levels. If we use the Lake Ontario regulation experience as an example, we know that its coastal wetlands, for instance, declined dramatically as a result of compressed lake level fluctuations. Previous studies have noted the importance of unrestricted lake fluctuation as critically important to the long term health and function of coastal wetlands. Likewise, little is known about the effects of controlled levels on species and habitat. And finally, our ability to predict future lake levels is so limited that attempts to raise levels to a point that would satisfy some under low conditions could amplify

problems should high lake levels return. We are concerned that controlling 20 cm of lake levels may lead to further expectations to add more structures in the future if these structures fail to meet those expectations and/or if water levels continue to lower.

We support the pursuit of adaptive management as recommended by the IUGLS and IJC. In our view, this would include:

- **Development of ‘extreme water levels plans’:** These would present strategies to cope with emergencies and practical issues related to access, hazards and ecosystem protection, related to both extreme ends of the water levels spectrum. From past experience, we know that reacting to extreme water levels situations can lead to poorly informed decisions.
- **Planned infrastructure:** Most of our lake infrastructure (e.g. harbours, marinas, water intakes) was engineered for a specific range of lake levels, generally favouring average levels, but well within the historic range. Most plans do not accommodate levels at the extreme ends of the spectrum. Planning for marina and harbour infrastructure repairs and dredging plans that go beyond the recorded range of levels, may help speed up permitting and approvals. For example, lack of planning resulted in delays to the Chi-Cheemaun ferry schedule in early 2013 when confusion over government jurisdictions resulted in the failure to install dock fenders to accommodate lower lake levels that resulted in ferry service delays. Municipalities and private industry were frustrated with the process to investigate, provide approvals, and fund infrastructure works related to the shoreline.
- **Municipal water vs individual water intakes:** The issue of private water intakes becoming exposed during low lake conditions should provoke discussion about municipal drinking water system provision as an adaptive response.
- **Permanent severing of the Chicago sanitary sewer canals:** The canals, built in Chicago in the early 20th century, presently connect the Great Lakes with the Mississippi River system and divert water from Lake Michigan into the river. Several Non-Governmental Organizations and US State governments have proposed a permanent barrier be constructed to prevent future invasive species introductions. Severing the connection between the two water bodies would have the dual effect of increasing levels on Huron-Michigan, and remove the threat of invasive species, such as the Asian Carp, from entering the Great Lakes through the Mississippi River and related canals in Chicago.

- **Invasive plant species control and planning:** Invasive plants, like *Phragmites australis*, infesting beaches has been a response to lower lake levels in recent years. Communities would be best served with early detection and rapid response plans, rather than reacting to the problem once it becomes costly and challenging to address. Invasive species threaten the quality of our coasts, including wildlife habitat and species, as well as people’s ability to enjoy them.
- **Protecting/restoring natural resiliency:** As an adaptive response to a changing climate, building coastal resiliency provides multiple benefits including erosion control, enhanced biodiversity, water quality improvement, and better beach quality. Examples include dune conservation, coastal wetland protection and lakeshore naturalization.
- **Rural Stormwater Management planning:** It will be important that we prepare for changing climate conditions within the lake watershed. Extreme weather events in the recent past have often exceeded designed stormwater management structures. The changing climate regime requires a rethinking of current standards for dealing with stormwater management.
- **Adequate funding:** Funds should be made available at the local municipal level to implement adaptive management measures.

Ecosystem resilience is the capacity of an ecosystem to tolerate disturbance without collapsing into a qualitatively different state that is controlled by a different set of processes. A resilient ecosystem can withstand shocks and rebuild itself when necessary.
(Resilience Alliance)

We are entering into a period of a changing climate which will re-define the term “normal”. This “new normal” needs to be carefully considered and planned as we adapt to the realization of new and changing management needs. Understanding, planning and adapting to these new conditions will help coastal communities meet the challenges ahead.

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Pamela Scharfe, Chair

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