



# PORT COLBORNE

**Meeting  
Environmental Advisory Committee  
October 13, 2021 6:00 p.m.**

**The following were in attendance:**

Staff: Cassandra Banting  
Janice Peyton

Council: Councillor Mark Bagu  
Councillor Harry Wells

Public Members: George McKibbon  
Jack Hellinga  
Katherine Klauck  
Norbert Gieger  
Tim Hoyle

Guest: Rod Tennyson, Resident, City of Port Colborne

As a COVID-19 precaution, city staff and the chair met in person at the Engineering and Operations Centre. The rest of the committee joined on Microsoft Teams.

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**1. Call to Order**

George called the meeting to order at 6:00 p.m.

Introductions were made for new member Katherine Klauck and guest Rod Tennyson. Members introduced themselves and briefly gave their expectations for the committee moving forward.

Expectations were identified as follows:

1. Be more conscious of climate change, address more climate change topics and provide comments to council & staff.
2. The committee needs more recognition, we are rarely asked to do things.
3. Public education and community development where environmental issues like climate warming and electrification are concerned.
4. Review of the terms of reference.

5. Many interesting topics taking place, for example the Rankin Quarry application and the concerns about the groundwater aquifer and Lake Erie water quality.
6. Expand the committee.
7. How do we make a difference?

**2. Adoption of the Agenda**

Moved by Jack Hellinga  
Seconded by Harry Wells

That the agenda dated October 13, 2021 be accepted as circulated.  
CARRIED.

**3. Disclosures of Interest**

Nil.

**4. Approval / Review of Previous Meeting Minutes**

Moved by Tim Hoyle  
Seconded by Norbert Gieger

That the minutes of August 11, 2021 be accepted as written.  
CARRIED.

**5. Items Arising from Previous Minutes**

a) Land Use Compatibility Subcommittee Recommendations

A copy of the Land Use Compatibility recommendations is attached to the minutes.

Moved by Norbert Geiger  
Seconded by Jack Hellinga

That Councillor Wells and Councillor Bagu make a motion at Council on October 25<sup>th</sup> to ask members of the Planning Department to meet with the EAC to discuss the compatibility file.  
CARRIED.

b) Update on Community Gardens

This item was deferred as there currently is no new information.

c) Electric Vehicles

George provided a link to a summary of useful information on EV Charging Stations. George and Norbert will provide more information at the next EAC meeting.

Norbert advised that EV charging stations was a 2017 initiative and has come a long way since 2017. Norway is already at 80% EV. In England, every new home construction must have an EV charging station. In Oakville, EV chargers are available at parking meters. Councillor Wells advised that the City has approved the installation of a Level 3 EV charging station at the Market Square for 2022. Members want to be sure that the charging station that is installed is adequate for future requirements. Also, educating the community about this initiative is important. Even though there may not be many electric vehicles in town, it is important for tourism. We can promote this on the City's communications devices, City Social, Website etc.

## **6. Report on Great Lakes Water Quality**

Rod Tennyson gave a report on Port Colborne Water Quality Issues. A copy is attached to the minutes.

Rod expressed concern of ballast water and algae affecting water quality and the fishing industry and our beaches. All this is related to climate change. What options are available to try to tackle the long-term effects of ballasts and dredging? How can the committee promote awareness of this?

Katherine, Jack, Rod and George will meet virtually to further discuss the issues raised by Rod, along with the long standing concerns the committee has regarding agricultural land and other discharges to the lake where algae are concerned. The issues raised by Rod will be broken down into smaller tasks.

All agreed to proceed.

## **7. Active Transportation RFP**

This item was deferred.

## **8. Other Business**

Cassandra forwarded an invitation to members to attend a Regional Transportation Transit Authority webinar on Regional Public Transportation. Norbert, Steve, and George attended and provided comments supporting the effort. Various environmental committees within the Region were invited to attend and are receiving emails on the topic.

## **9. Next Meeting /Adjournment**

Moved by Jack Hellinga  
Seconded by Harry Wells

That with no further business to discuss, the meeting be adjourned at 7:20 p.m.  
CARRIED.

The next EAC meeting will be on Wednesday December 8<sup>th</sup> at 6 p.m.

**EAC Business Arising from the minutes;****Land Use compatibility:**

The Province amended the Planning Act and the Provincial Policy Statement (2020) to better protect employment areas and sensitive land uses (e.g., housing) that may be affected by adverse effects from noise, air, vibration and odour. Last spring, the Province also released a new draft set of land use compatibility guidelines which included an enhanced classification of industrial uses together with recommended minimum setbacks between industrial and sensitive uses. The procedures for calculating setbacks are much enhanced and greater than those used in the past for a host of industrial uses.

Both Port Colborne's official plan and zoning bylaw provide limited setback provisions where industrial uses are established. Both planning instruments do not provide setback requirements where new sensitive uses are proposed close to industrial activity. The practical effect is the Environmental Protection Act requirements become more substantial and under some instances, compliance may not be possible. In the longer term, where land use incompatibility is the cause of complaints arising from noise, air, dust, vibration and odour, MECP may refer investigation and enforcement to municipalities who will need to create and enforce regulations under the Municipal Act to address nuisances.

We took in JBL's presentation at our last EAC meeting to see how a major industrial use was addressing this issue through the purchase of surrounding properties so as to distance its operations from sensitive uses. Plant expansion is being considered now, City assistance would help.

We recommend the listed permitted uses for the Gateway Industrial Centre be reconsidered and sensitive uses be scrubbed from the permitted uses, particularly the official plan. Further before the designation and zoning are expanded southwards, the permitted uses need to be examined and every effort should be made to preclude provision for sensitive uses that would limit the expansion of medium and heavy industrial uses like JBL on the other side of the canal.

Sensitive use setbacks need to be provided by policy and overlay designation around the various categories of industrial uses west and east of the Canal so as to minimize encroachment of sensitive uses close to industrially designated and zoned areas. Further where industrially zoned lands exist, more restrictive policy is required to address rezoning applications where industrial zoned lands are proposed to be used for sensitive uses.

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**Recommendation:**

*The that Council ask the planning department to meet with the Environmentally Advisory Committee at its next scheduled meeting to review measures and seek consensus on steps to be taken to implement these recommendations.*

**Seaway Authority:**

Provincial statutes generally do not apply on Federal lands such as those lands under the Seaway Authority. As a rule of thumb, Provincial statutes of general application like the Building code do apply where building exists. Municipal planning instruments do not because planning instruments regulate use. Generally Federal authorities try to meet the requirements of both. Some discussion of recreational trails and industrial uses is needed to sort out land use compatibility concerns where these matters overlap jurisdictions.

**Recommendation:**

*When EAC meets planning staff, this matter will also be discussed to develop an approach suitable to employment designations and City planning concerns.*

**Provincially Significant Employment Areas:**

The Province has identified Provincially significant employment areas in the Growth Plan. In addition to the effort to get regional recognition of the Gateway Industrial Centre, please consider seeking Provincial designation as well.

**Recommendation:**

*Has the City considered making a request to add significant employment areas to the Provincially significant employment areas of the Growth Plan?*

**Recreation Trails**

Municipal help provided to JBL could take the form of two actions: update the municipal planning documents to comply with the land use compatibility requirements of the Provincial Policy Statement 2020 and address recreational trail locations close to the plant on Seaway Authority in order to remove that important trail from consideration as a sensitive use where the Environmental Protections Act's regulations and compliance documents are concerned.

The Active Transportation Committee is considering a draft RFP for an active transportation master plan for Port Colborne. An EAC member sits on that committee and has commented on the draft RFP. Among other things he has suggested the RFP should seek advice on how to declassify recreational trails as sensitive uses where Environmental Protection Act approvals are concerned.

**Recommendation:**

*Monitor the progress and drafting of the active transportation rfp.*

## PORT COLBORNE WATER QUALITY ISSUES

by

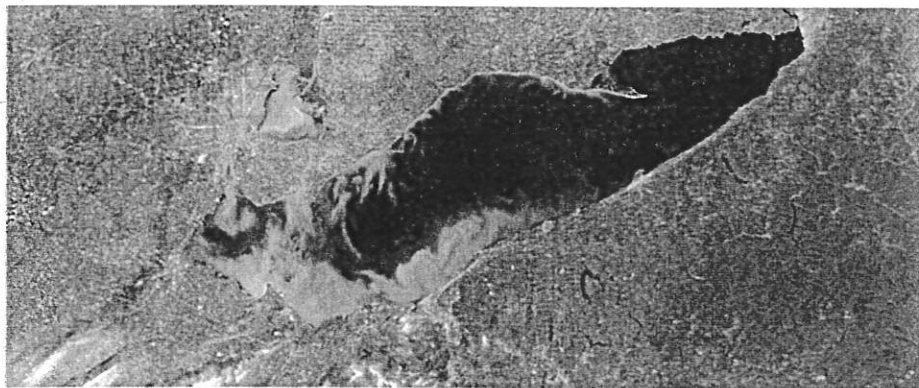
Dr Roderick Tennyson, P.Eng.

Resident, City of Port Colborne

April 2021

### Ship Ballast Issues

- Ballast water is taken into or discharged from a ship as it loads or unloads its cargo, to accommodate the ship's weight changes. Thirty percent of invasive species in the Great Lakes have been introduced through ship ballast water. "Studies show that all vessels – including "lakers," or commercial vessels that don't leave the Great Lakes — contribute to moving invasive species around the region."
- *Treatment of Ballast: is there any plan to proscribe ballast dumping at the Port Colborne harbour or treat it before dumping?*  
A recent test project on a ship's ballast load using a combination of lye and carbon dioxide to neutralize the water mixture was shown to be effective in ridding the ballast of contaminants. At present the EPA's proposed new rules will exempt all lakers from having to treat ballast water.
- *What plans are in place to prevent the release of algae from ballast dumping?*  
When ships dock at the western end of Lake Erie (such as Cleveland) to load/unload cargo, they are floating in a sea of algae, as shown in the satellite photo below. When taking on ballast, the algae will cling to the ballast tanks and mix with the water. Clearly when discharging the ballast, the algae blooms will enter the local water area and drift according to winds and currents. In this case, into Gravelly Bay, an ideal spawning place for algae blooms!



**Algae blooms at western end of Lake Erie**

Algae blooms contain the *Microcystis* cyanobacteria which produces the toxin microcystin, which can cause "liver damage, numbness, dizziness, vomiting and acute liver failure". The Centers for Disease Control says long-term inhalation of toxic algae fumes can produce neurological disorders like Parkinson's and Lou Gehrig's diseases.



Algae blooms grow best in shallow warm waters such as Gravelly Bay, adjacent to the harbour entrance. If the ballast discharge gets into Gravelly Bay, the photo below shows a preview of what could happen. This of course would be catastrophic for the residents bordering along Gravelly Bay.



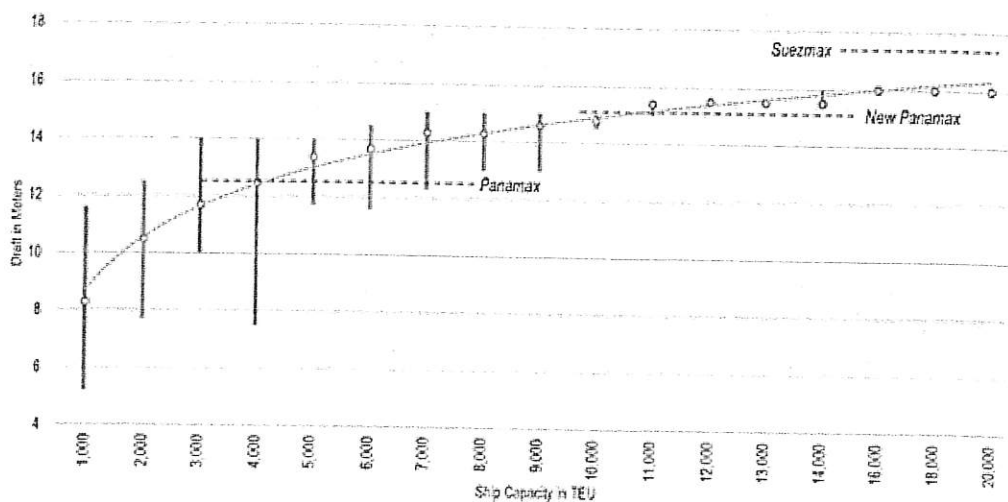
**Could Gravelly Bay become this quagmire of algae due to ballast contamination?**

### Shipping Operations

- It is assumed that the Port Colborne dock and cargo handling facilities are used to offload cargo ships, warehouse storage, and trans ship these commodities via rail to various ports around the Great Lakes. It is also assumed that to run this port on a commercial basis, that cargo (such as wheat) will also be loaded on these same ships for delivery around the Great Lakes. Are larger ships being considered for docking at Port Colborne?
- *If so, what changes to the harbour need to be made to accommodate them, such as dredging?* The nominal water depth at Port Colborne harbour is about 7.7 m (about 25 ft), although the World Port Source states that the water levels at the dock facility vary between 7.1 and 9.1 m (26 to 30 ft). However, a 1000ft ship with cargo capacity close to 70,000 tons has a TEU\* of about 5600, similar to a Panamax that plies the ocean sea routes. From the graph below, we see that such a ship requires a water depth of about 13 m (42 ft), with an additional requirement of 1m of draft because of hydrodynamic factors. "The average depth of Lake Erie is 19m (62 ft). Thus, it warms rapidly in the spring and summer and frequently freezes in the winter."

\*a measure of ship capacity called "twenty-foot equivalent units".

Dredging can disrupt the lake bottom, releasing toxic chemical compounds into the water that have accumulated over many decades due to sewage runoff, and commercial dumping of contaminants into the lake in the past. This can affect human health and the aquatic life in this eastern region of Lake Erie. For example, recent studies on fish in this area show large quantities of PCBs in the fish (Industrial pollutants isolated in eastern Lake Erie fish). Lake Erie is well known for its fishing industry. Dumping of contaminated sediments out into the open lake is illegal.



## Effect on Tourism

The long-term plan for the City of Port Colborne emphasises the need to increase tourism to the region. This of course will benefit the local service industry and the tax base for the city.

It is assumed that most tourists come to Port Colborne for its renown beaches, warm water and boating. Fishing has always been a major attractor due to the variety of fish in the lake, especially the perch. Local arts and community festivals play a role as well, and the opportunity to dive on the ship wrecks in Lake Erie is another activity of note since the lake is relatively shallow, being deeper at the eastern end of the lake around Port Colborne. Obviously, the Welland Canal is a very popular location to visit and see the large ships travelling down the canal with just a few feet of clearance to the canal walls. The current plan is to construct a welcome center for tourist boats on the west side of the canal. Courting cruise ships to dock in Port Colborne is an economic avenue the city plans to pursue aggressively in the coming years.

To enhance the tourist base and protect the region's most precious assets, the beaches, any form of pollution emanating from the dock facilities and ships will inevitably affect the quality of the nearby waters and beaches, such as Nickel Beach. Water pollution and algae growth will doom that area as well as Gravelly Bay. Clearly this will have adverse effects on the tourism industry and local business community. There will be little incentive for tourists coming to the Niagara region to make Port Colborne a destination spot. The trade-off is tourism versus an industrial complex that generates taxes and jobs.

There is another factor to consider and that is the increasing migration of city people to the Port city and its surrounds. Property values have increased and this region is growing for the reasons cited above. Any

attempt to convert the city to an industrial complex will mitigate this influx of new residents, the business they bring and of course the tax base. Again, this is a trade-off that needs to be considered.

### **The Economy and Tax Base**

The current city tax base is predicated on many factors such as resident population, tourism, business growth and industry, to name a few.

If in fact tourism were to decline due to polluted water, local businesses to close (not all of course) and there was a decline in population growth, what effect would that have on the city tax base? This is a study that needs to be undertaken soon. Preservation of water quality is critical to the survival of Port Colborne as a destination port.

### **CONTACT**

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