

# PORT DARLINGTON SHORELINE HAZARDS STUDY

## 2<sup>ND</sup> Community Newsletter & Frequently Asked Questions

Aqua Solutions 5 Inc., Baird Engineering & Planning Solutions Inc. Together with CLOCA & The Municipality of Clarington<sup>1</sup>

### **Introduction**

Central Lake Ontario Conservation Authority (CLOCA) is developing an updated Shoreline Study for the Port Darlington shoreline community including Watson Drive, Cedar Crest Beach Road, Cove Road, and West Beach Road. The 2018 Shoreline Study is being carried out by Baird Engineering and Aqua Solutions, two consulting firms that specialize in coastal engineering.

The original Draft Port Darlington Shoreline and Flood Damage Centre (Aqua Solutions 2004) study began to identify the hazardous areas (flooding, erosion, and dynamic beach) for the Port Darlington study area in order to precisely define and understand the natural hazards in the area in relation to existing and proposed development. The 2018 study will build upon and complete the 2004 draft study, informed by the recent historic water levels, climate change, and sediment transport. The study will also explore and evaluate shoreline management options including feasibility and consistency with provincial natural hazard management policy direction.

**The study area is 1.8 km along Lake Ontario shoreline, west of the mouth of Bowmanville Creek, and east of St. Mary's lands.**



**“The Port Darlington Beach Damage Centre C4 (Reach #17)...This area is at risk from flooding of the river as well as from flooding due to wave activity on Lake Ontario.” (Sandwell Report, 1990)**

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<sup>1</sup> “Information and submissions provided to the study team by members of the public will be subject to the provisions of the *Municipal Freedom of Information and Protection of Privacy Act.*”

## **What's New?**

In March, we held a Public Information & Listening Session and since then, detailed engineering work has been underway by Baird Engineering and Aqua Solutions. When we met on March 3<sup>rd</sup>, we promised to keep you informed of our progress and we also promised to share the Shoreline Study.

Since March, a Technical Assessment & Analysis has been underway by the consulting team. The consultants are looking at planning and policy as well as an overview of shoreline process, erosion and shoreline protection works concepts and climate change.

Once the draft consultant studies have been received and reviewed by CLOCA and the Municipality of Clarington, the drafts will be posted on the CLOCA website at [www.cloca.com/study.php](http://www.cloca.com/study.php).

A second public meeting will be held to receive input. **The second Public Information & Listening Session will be held Saturday December 1, 2018 from 9:00am to noon at the Darlington Energy Complex, Auditorium (OPG Darlington).**

In addition to the technical assessment, the consulting team will also be taking into account the input and advice shared at the Public Information Meeting & Listening Sessions and also through the Community Survey that can be accessed online at the following weblink:

<https://www.surveymonkey.com/r/6KYKRNK>

We received a lot of exceptional input, guidance and advice from those who attended the Public Session on March 3<sup>rd</sup>. We would like to share some of that input with you!

## **First Public Meeting & Listening Session Held March 3<sup>rd</sup>, 2018!**

*Public Meeting & Listening Session Extremely Well-Attended!*

### **Critical Advice Is Received From the Community**

The first community meeting was held on Saturday, March 3<sup>rd</sup>, 2018 from 8:30 am – 12:00 pm. The purpose of the meeting was to:

1. Introduce the 2018 Shoreline Study and the Consulting Team.
2. Share background information about the Shoreline Study, the process, timing and deliverables.
3. Allow participants to share concerns (flooding, shoreline erosion, other).
4. Provide attendees with an opportunity to ask questions about the Shoreline Study.
5. Provide a forum to ensure those in attendance are able to share their ideas and solutions to address the shoreline issues.

The Public Meeting & Information Session created a space for meaningful conversation about shoreline flooding and erosion in the Study area. Close to 80 people attended. Three presentations were provided:

1. Perry Sisson, Director of Engineering & Field Operations and Chris Jones, Director of Planning & Regulation from CLOCA provided information about the history of shoreline flooding and erosion and an overview of how the community has evolved over time.
2. Judy Sullivan, President, Aqua Solutions Inc. provided an overview of the Port Darlington Shoreline & Flood Damage Centre Study.
3. Karen Wianecki, Director of Practice, Planning Solutions Inc. provided an overview of the proposed Community Engagement Process.

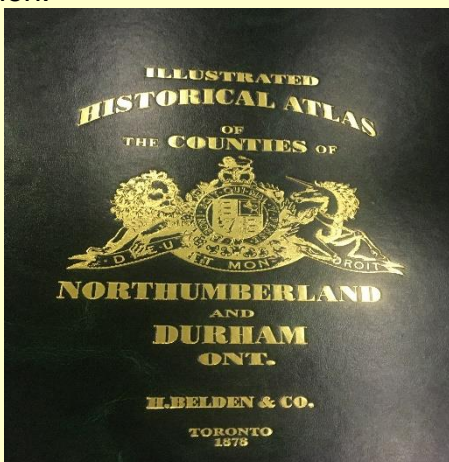
There were many excellent questions, comments and suggestions that came forward from the community. A summary of the presentations and key messages are included below:

## **Shoreline Flooding & Erosion Concerns: A Historical Overview**

An overview of erosion and flooding hazards was provided. In the study area, all five hazards are in place (Great Lakes flooding, erosion and dynamic beach as well as riverine flooding and erosion). For more information, we have also uploaded a copy of the “MNR Guide – Understanding Natural Hazards.”

Natural hazards are defined as “Natural, physical environmental processes that occur near or at the surface of the earth that can produce unexpected events.”

The area started to develop when the first plan of subdivision was registered on title in 1917. Additional lot creation took place in the area until 1962 but CLOCA did not begin to regulate stream-based hazards until the 1960s, well after development had been established in the area. In addition, the early CLOCA regulations did not apply to the Great Lakes hazards. The Port Darlington area was originally zoned agricultural, and it wasn't until 1984 that a new Comprehensive Zoning By-law was introduced, and the area was zoned as Shoreline Residential and Environmental Protection.



An interactive flooding tool was shared by CLOCA to demonstrate the extent of flooding that occurred in 2017.

## **The 2018 Port Darlington Shoreline & Flood Damage Centre Study**

There are a number of flooding and erosion hazards affecting the Study area:

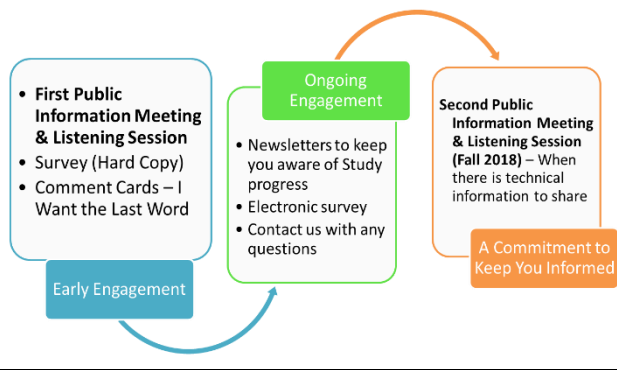
1. Flooding from Bowmanville Marsh & Creek
2. Flooding from Westside Creek Wetland/Westside Creek;
3. Flooding from Lake Ontario;
4. Erosion from Lake Ontario;
5. Dynamic Beach Hazards from Lake Ontario.

**This study** will update the Draft 2004 Report and planning/policy guidance for future development within the damage centre. It will also review concept protection works options, their feasibility, and consider an opinion of probable costs. It will incorporate the most recent information available to document:

- Sediment transport processes;
- Recent historic water levels;
- Flooding, erosion and dynamic beach hazards from Lake Ontario;
- Current provincial policy direction;
- Climate Change; and
- Updated mapping from CLOCA.

## **The Proposed Community Engagement Process**

Process is as important as product. This is an exercise that focuses on developing a new Shoreline & Flood Damage Centre Study as a foundation for taking informed action to address shoreline management issues. It is therefore imperative that the community be engaged, and that the emphasis be placed on advancing a collaborative planning model that is solutions-focused.



## Key Messages From the Community

Karen provided a recap of the key learnings and statements that emerged from the meeting:

1. “This is a critical issue for all of us – for residents, community leaders, CLOCA, municipal staff and the consulting team. This issue is also inherently complex. For the residents, this is real!
2. This is a special place. The area has become increasingly diverse. It is a strong, solid, tightly-knit community.
3. We need to leverage historical data and explore all the information available, particularly as it pertains to the pier (e.g. erosion data for that period of time that pre-dates the installation of the pier).
4. Take a holistic and systemic approach to the Study. Look at and explore how the barrier beach affects the marsh and overflow channel; what would happen if the pier were expanded.
5. The right information must be communicated to the right people, in the right way. Internet connectivity is a huge issue for the community. This needs a solution.
6. St. Mary’s has secured the services of a consultant to complete a forensic study of the channel. CLOCA will continue to work with St. Mary’s to monitor the overflow

channel and ensure that it is maintained and continues to be functioning effectively and efficiently.

7. The real issue is wave energy and the damage that it can cause in normal conditions.
8. There has been a significant evolution in the geography of the study area over time, but also a significant evolution in the policy, planning and regulatory landscape.
9. We need a solution in the short-term that will address resident concerns over the long-term.
10. Collaborative action is needed – we need to work together. Let’s be certain that we don’t repeat history. Let’s find a solution that will address all of our concerns.
11. “We have nothing natural here anymore. We have a massive pier that has impacted littoral drift.”
12. Action was taken by homeowners to protect their shoreline properties.
13. The 2018 Shoreline Study needs to consider both sides of the pier (erosion and accretion) – east and west.
14. To date, residents feel that they have been left to manage the issues on their own. Residents need help – this is a major issue and a major concern that has been devastating and hugely disruptive for many.”



**“Collaborative action is needed. We need to work together. We do not need to repeat history. We need a short-term solution that will address our concerns long-term.”**

## Keeping You Informed...

We are committed to working with you and to keeping you informed as this study moves forward. Comments are welcome at any point throughout the Shoreline Study process.

A second PIC will be held on **Saturday December 1, 2018 from 9:00am to noon at the Darlington Energy Complex, Auditorium (OPG Darlington).** The meeting will include presentations for the technical assessments, evaluated shoreline management options, and possible alternative actions for managing the hazards faced by the Port Darlington residents.

## **On-Line Presentation Material Available**

You are invited to view and explore the Storyboard Presentation materials on-line at your convenience using the following URL link:

<https://goo.gl/Y4WzSc>

Please note that the Google Chrome web browser is required in order for the presentation to be viewed on your device.

## **Looking For More Information? Still Have Questions? We Invite You to Contact Us...**

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**We Look Forward to Working With You!**