

**LaSalle Park Marine Wave Break Class EA
Summary of the June Public Information Centre and Frequently Asked Questions**

Approximately 120 people attended the Public Information Centre (PIC) held for the LaSalle Park Marina Wave Break Class EA on June 7, 2012. Over 60 comment forms and letters have been received.

The study team thanks all who have participated in this project to date!

The following summarizes the frequently raised comments/questions about the project and provides the study team’s response.

LaSalle Park Marina Wave Break Class EA Frequently Asked Questions – June 2012 PIC	
Key Comment/Question	Response
<ul style="list-style-type: none"> • Damage being done to the boats in the marina from strong east winds, storms and wave action has resulted in higher maintenance and repair costs for the marina. While a fixed option would have the highest initial cost, it was understood that the long term maintenance costs could be lower. • It was noted that having to move the docks in over winter is also a high cost, and becoming less desirable amongst aging/elderly members of the marina. 	<p>The evaluation of alternatives reflects higher maintenance costs for a floating wave break, in particular for the seasonal removal of the docks and wave break. It also reflects higher capital costs but lower maintenance costs for a fixed wave break when compared to a floating wave break.</p>
<ul style="list-style-type: none"> • What are the maintenance costs for the three options? 	<p>Maintenance costs for the three options will vary. Typical maintenance costs for marine structures, such as fixed wave break, are typically stated to vary between 0.5% to 1% of the capital cost on an average annual basis. We would expect the cost to maintain a fixed wave break at LaSalle Marina (here) to be at the lowest end of this range given the simplicity of the structure and relatively mild wave activity. Typical cost of floating wave break maintenance is not well established. We would expect the maintenance cost to be low for the design life until replacement is required. The design life is expected to be in the order of 25 to 50 years. In addition to the maintenance cost it is expected that floating structures may need to be removed from the exposed location to prevent potential damage by ice. The cost of this removal and storage will be added to annual operation costs of the floating wave break option. The combination option would have the above described maintenance cost associated with each component.</p>

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<ul style="list-style-type: none"> Floating wave breaks do not work – at best they reduce the wave size by less than half. 	<p>Floating wave breaks are designed to reduce the wave height of incident waves (outside of the basin) so that the transmitted waves (inside the basin) are within acceptable limits. Floating wave breaks can be designed to deal with waves at the LaSalle Park Marina in that fashion. A floating breakwater can reduce waves by more than one half if properly designed.</p>
<ul style="list-style-type: none"> A permanent wave break could greatly benefit business growth and beautification to the City and shoreline, as it would remove the unsightly stacked docks in the winter. 	<p>The evaluation of alternatives includes consideration of the visual improvement associated with in-water storage of the docks.</p>
<ul style="list-style-type: none"> What was the trigger to initiate this project? 	<p>The LPMA has had damage to boats in the Marina on several occasions and have been in discussions with the City since September 2009 regarding improvements to the wave break to reduce/eliminate damage and improve habitat opportunities.</p>
<ul style="list-style-type: none"> How will the wave break positively or negatively affect habitat for birds? Are there plans to plant trees to provide nesting habitat or other cover for birds? 	<p>All wave breaks provide a location for birds to rest. Permanent wave breaks also provide a location for birds to roost and/or nest. The emergent shoals located just off LaSalle Park provide some colonial waterbird nesting habitat for species such as Ring-billed Gulls, Herring Gulls and Common Terns.</p> <p>The concern often raised is that undesirable birds such as Double-crested Cormorants can use the wave breaks. These birds have been associated with an increased odour resulting from their presence/use of an area. Methods to deter the use of the wave break as habitat for undesirable birds is currently under review.</p> <p>There is currently no intention to provide plantings on the improved wave break.</p>
<ul style="list-style-type: none"> What are the consequences of fuels spills on aquatic habitat? Are there fines for fuel spills? 	<p>Fuel spills have the potential to negatively impact fish habitat. An important part of the EA process is to identify mitigation for potential environmental effects such as this. One example of mitigation related to potential spills is <i>during construction, care will be taken to refuel equipment away from water where appropriate.</i></p>

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<ul style="list-style-type: none"> • What are the environmental impacts during construction? 	<p>Impacts during construction will be clearly documented as part of the EA and through the EA process the City and LPMA will commit to mitigation to minimize potential effects. It is anticipated that effects could include things like temporary disturbance in water quality during construction and potential impact to the neighbourhood and park users resulting from the delivery of materials by truck.</p>
<ul style="list-style-type: none"> • Concerns were raised about the effect of changes to the wave break on Trumpeter Swan habitat and whether the wave break would reduce the open water needed for them to take off and land. Concern was also raised about the timing of construction as winter disturbance (November to March) would have detrimental affect. 	<p>The new wave break is currently being proposed at the 10 m contour line. The current areas in which the Trumpeter Swans have been utilizing as habitat are shallow and would not be directly impacted. The open water area needed for them to take off/land would be maintained to that 10 m contour line.</p> <p>The provision of the fixed wave break may increase the potential for earlier ice formation within the sheltered area. We would expect such a change to be relatively minor and well within the normal variation of ice formation experienced in the past. The change, if noted, could be mitigated through a bubbling system to prevent or control the formation of ice at specific locations along the shore.</p> <p>Once the preferred alternative is determined, the EA will outline timing windows for sensitive wildlife in the area and mitigation measures to minimize potential impacts.</p>
<ul style="list-style-type: none"> • The following were suggested as things that should be considered in selecting a wave break include: <ul style="list-style-type: none"> • Reduction of wave action • year round aesthetics and safety, • costs and timing of maintenance and construction, • long term strength and durability (including to withstand ice) • potential environmental impacts and/or improvements/expansions to sensitive aquatic ecosystems, fish 	<p>All of the suggestions have been incorporated in the criteria used to evaluate alternatives.</p>

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<p>and bird habitats.</p> <ul style="list-style-type: none"> • improvement to the entrance/maneuverability in and out • impact to residents along the shoreline, • cost. 	
<ul style="list-style-type: none"> • It was noted that not all boat owners are residents of Burlington. 	Agreed.
<ul style="list-style-type: none"> • Questions were raised on the potential for public access and use of a fixed wave break for walking, birding and fishing. 	It is not intended that the wave break be connected to the shore. Connection to the shore and public access to the wave break increases the liability associated with the structure, adds to the cost, and can potentially increase conflicts between boaters and fishermen in the area.
<ul style="list-style-type: none"> • A floating wave break is not effective due to the weight of zebra mussels 	It is understood that the current wave break requires frequent maintenance to remove zebra mussels. The cost associated with this maintenance has been assumed to continue for the floating wave break alternative.
<ul style="list-style-type: none"> • Would like City to use other marinas as an example (ie. Coburg, Port Dover) 	Hamilton Harbour is a unique location for a marina and provides different conditions than other marinas on the Great Lakes. The harbour offers significant protection thus allowing consideration of floating wave breaks which would not be possible in the open waters of Lake Ontario. An example of a floating wave break in Ontario is in Gananaque.
<ul style="list-style-type: none"> • Suggest bringing construction material via barge to prevent truck traffic in neighbourhood 	We have completed investigation into materials and construction techniques and agree that the most cost effective method to bring in bulk stone materials is by water. Some materials will still need to arrive by truck but the use of water where possible will minimize the potential for negative impact on the community.
<ul style="list-style-type: none"> • Can docks be left in the water over the winter with a permanent wave break option? 	With a permanent wave break it would be possible to leave the docks in over the winter.
<ul style="list-style-type: none"> • What is the expected cost for the study and who is paying? What is the expected cost of the wave break options and who is paying? 	<p>The cost for the LaSalle Park Marina Wave Break Class EA is approximately \$230,000. This work includes completing the environmental assessment and conceptual design. Additional funds will be required to conduct the detailed design for the preferred wave break.</p> <p>The capital cost of the wave break solutions presented at the PIC range from approximately \$6,000-8,000 dollars per meter for floating wave breaks to \$20,000 dollars per metre for fixed wave breaks. These costs</p>

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	<p>include no contingency allowance or taxes.</p> <p>The cost of the study is being funded jointly by the City and LPMA. It is anticipated that the cost of wave break construction, operation and maintenance will be borne by LPMA.</p>
<ul style="list-style-type: none"> • How will this affect brown trout fishing in the fall? 	<p>Brown trout fishing should not be impacted by the wave break project. Should a permanent wave break option be installed, the amount of habitat would likely increase for this and other fish species.</p>
<ul style="list-style-type: none"> • Can docks be placed farther from the pier? There is damage from fishing lures/ it'd be easier to back out. 	<p>The work currently underway does not include changes to design of the docks or expansion of the docks. This will be carried out as a separate exercise. LPMA will consider this comment at that time.</p>
<ul style="list-style-type: none"> • Is Randall Reef still contaminated? Should we be paying for and providing habitat in a contaminated lake? 	<p>The goal of the Hamilton Remedial Action Plan is the rehabilitation of Hamilton Harbour. A key element of rehabilitation is habitat improvement. Ongoing studies are being conducted in an effort to remediate Hamilton Harbour, which includes a focus on the Randall Reef area. For more information about Randall Reef, please visit: www.hamiltonharbour.ca</p>
<ul style="list-style-type: none"> • How many LPMA members are there and how many are local to Burlington? Do City Council members have an LPMA membership? 	<p>Currently, there are 219 slips at the marina. 158 or 72.5% are leased to Burlington residents.</p> <p>No member of City Council is a member of LPMA.</p>
<ul style="list-style-type: none"> • What is the relationship between the City and LPMA? Is the agreement available? • What is the City position on the marina expansion proposed by LPMA 	<p>The City and LPMA have an agreement in place for the use, operation, maintenance and renewal of the marina. The agreement is a public document.</p> <p>The City is supportive of the proposed marina expansion if all requirements of the environmental assessment study are met and LPMA can fund the project.</p>