

# **SOUTHEAST LEAMINGTON SHORELINE STUDY**

## **Meeting Summary**

Meeting with Leamington Municipal Council, February 12, 2007

### Participants:

John Adams	- Municipality of Leamington
Bill Derbyshire	- Municipality of Leamington
Rick Atkin	- Municipality of Leamington
John Patterson	- Municipality of Leamington
Bill Marck	- Municipality of Leamington
John Tofflemire	- Municipality of Leamington
Arthur Glab	- Municipality of Leamington
Brian Craig	- Parks Canada
Peter Zuzek	- Baird and Associates
Ed Dries	- Todgham and Case Associates
Ray Renaud	- ERCA Chair
Ken Schmidt	- ERCA
Stan Taylor	- ERCA
Tim Byrne	- ERCA
Danielle Stuebing	- ERCA
Cynthia Casagrande	- ERCA
John Henderson	- ERCA
Lisa Pavan	- ERCA

An ERCA representative welcomed everyone and thanked them for coming to participate in this collaborative effort.

### **1) Study Background and Related Discussion**

The study consultant outlined the main components of the study. He confirmed that the detailed area covered by the study encompassed the shoreline from Wheatley Harbour south to the tip of Point Pelee and out to the 10 metre depth contour. The study consultant further identified the 3 pillars of sustainability. They are: Resource/Environmental Benefits, Economic Criteria and Social Criteria.

## **Scope of Study**

The study consultant advised that the scope of the study included the following:

- 1) Investigation of natural hazards (flooding/erosion)
- 2) Agricultural assessment
- 3) Biodiversity assessment
- 4) Social/Community Values
- 5) Draft Sustainable Management Strategies
- 6) Evaluation of benefits and order of magnitude costs for the draft concepts
- 7) Recommendation of a preferred alternative.

## **Key Findings**

The study consultant presented the top ten findings of the study:

1. Stakeholder/Public Participation
  - Public involvement has been extensive, with a stakeholder group, a landowner survey with a 30% response, public workshops and numerous public meetings.
  - A draft technical report and draft concepts have been released to the public and their comments have been invited and responded to.
2. Social and Community Values
  - Collected information from survey, workshop and meetings
  - Many concerns: declining property values, flooding and erosion hazards, failing infrastructure
  - Stakeholders want to participate and be informed
  - Shoreline communities want to stay (in general)
  - Mixed comments regarding interior restoration (willing buyer willing seller)
3. Shoreline Erosion
  - Natural shoreline recession rate for the east shore is 1.25 m/yr (125 m/100 years)
  - 2 m depth contour = 3.9 m/yr at Pulley Road (390 m for 100 year planning horizon)
  - Lake bottom erodes even if shoreline/waterline is artificially stabilized. Downcutting will eventually undermine the protection structures
  - Shoreline erosion threatens dyke infrastructure and could lead to an interior flood

#### 4. Shoreline Communities

- Some of the ingress/egress roads are below the Provincial Standard for safe access
- Sections of Cotterie Road currently vulnerable to erosion damages
- Many of the existing waterfront homes don't meet Provincial Standards for erosion setback and flooding hazards (*but legal non-conforming*)
- Very unlikely future development (infilling) along east shore can meet provincial policy requirements

#### 5. Harbours, Sandmining and Protection

- Harbours: trap sediment and reduce natural downdrift supply
- Sand Mining: removed large volume of sand and gravel between 1910 and 1984. PPNP most affected by sand mining
- Shoreline Protection: reduces the supply of new sand and accelerates lakebed erosion
- A collaborative plan is required to develop a regional sand management plan

#### 6. Interior Flooding

- A computer model was presented showing what would happen in the event of breaches at either Hillman (Mersea Road 1) or at the southeast corner of the Marentette drainage scheme.

The drainage consultant supported the study consultant's model, but cautioned that, based on the existing condition of the dykes, a major breach would likely cause flooding to happen much more quickly than depicted.

#### 7. Drainage Schemes and Roads

- Significant repairs and upgrades required
- Municipality has a legal responsibility under the Drainage Act to complete repairs and assess land owners
- This maintenance is required regardless of what happens with this study
- A dyke failure could happen at any time

A municipal representative stated that the municipality is aware that it has to do something with the interior dyke and roads, but without sufficient funding to repair all of the roads, they are waiting for the study to advise which would be the best choice for ingress and egress. He indicated that, at this time, the municipality felt that Road C would be best. In addition, another municipal representative advised that the majority of the roads in the affected area need improvements to meet current standards.

An ERCA representative noted that a lot of these works were completed under the provisions of the Drainage Act and asked for clarification on Leamington's obligation related to same.

The drainage consultant advised that each drainage system was constructed in a different era and, as a result, the systems are inconsistent with one another in design standard and that there was typically no thought given to a level of flood protection until the 1970s. He added that the municipality is obliged under the Drainage Act to maintain these systems.

A municipal representative responded that residents have advised the town that they can't afford to do everything at once. The Municipality is therefore planning to phase in drain maintenance over the next 5 years, but not flood protection. He stated that the town relies on ERCA to take care of flood protection. He also noted the large cost for road upgrades and advised that there are issues of legal non-conformance within these areas.

An ERCA representative asked for clarification on the status of the existing flood protection dykes as related to the Drainage Act and related obligations. The drainage consultant responded that the existing flood protection dykes were constructed under the provisions of the Drainage Act and that the Municipality's obligation to repair the dykes is the same as the open drains.

#### 8. Agriculture and Rural Communities

- Marentette Drains = 73% of net returns
- Marentette muck will last many decades
- East/West/Lloyd Drains only marginally profitable with cash crops given current commodity prices. Drain repairs will be a significant financial burden on these farmers

#### 9. Hillman Marsh Conservation Area

- Provincially significant wetland and ESA
- Water level management cells mimic natural succession and enhance biodiversity
- Native biodiversity is in decline
- Barrier beach is retreating at 1.3 m/yr and lakebed erosion is severe. 0.12 hectares / yr of marsh lost
- Serious threat of breach in barrier beach
- Breach will expose Dyke Road 1 to erosion and possible failure, leading to interior flooding

## 10. Point Pelee National Park

- Ramsar wetland of international importance
- ESA and ANSI
- Isolated from natural watershed to north with construction of drainage schemes
- Now a large habitat fragment
- Native biodiversity is in decline
- 0.85 hectares of marsh and forest lost each year
- Biodiversity improvements will require complimentary land uses (natural neighbours)

### **Concepts, Benefits & Costs**

The study consultant advised that the objectives for developing sustainable management strategies were based on the 3 pillars of sustainability. The study consultant then briefly reviewed the Draft Concepts that were presented in the Draft Strategies report (dated: Dec. 6, 2006) and the following questions/comments were made:

1. Concept A (Status Quo) - no questions/comments

2. Concept B (Community Based Flood and Erosion Protection)

An ERCA representative advised that, prior to the initiation of this study, shoreline hazard management standards could not be satisfied on the majority of the shoreline properties on Pulley/Cotterie/Lakeshore. Based on the findings on this study and existing site specific issues (ie. lot depth, lot width, flankage, etc.) Concept B does not provide for new development. In response, a municipal representative advised that the public does not understand that ERCA must adhere to provincial regulations and cannot currently issue permits. The public does not understand the regulations.

A municipal representative asked whether people would be able to build on the empty lots on Marentette. An ERCA representative replied that permits for new construction cannot be issued in this area without a hearing before members of the ERCA board. ERCA staff would have to recommend denial of an application for permit for new construction because Concept B does not satisfy current provincial standards.

### 3. Concept C (Flood and Erosion Protection Upgraded to Provincial Standards)

A municipal representative asked what the design life of the proposed structures would be. The study consultant replied that he could not give a definitive answer since the conceptual protection has not yet been designed. He did however speculate that they may last 40 to 50 years with appropriate sand nourishment and rock maintenance during this time. He further stated that, even with these structures, the majority of the lots (with the possible exception of the deepest lots) may not be able to meet provincial standards for infilling. Also, in many cases, the cost of the shoreline protection could exceed the assessment value of the property.

### 4. Concept D (Multi-Use Strategy)

A municipal representative asked why this concept proposes to keep the East Beach and Marentette communities and not Pulley/Cotterie/Elmdale?

The study consultant replied that in most cases the lots on Pulley/Cotterie/Elmdale are too small and that the time is almost up for this area in terms of erosion. In addition, the lots on East Beach and Marentette help protect the interior land that is proposed to be restored. A municipal representative suggested that we are not doing shoreline residents a favour by having them maintain their breakwalls in order to protect an interior natural area and he was concerned that Concepts C and D do not provide for the long-term beyond 20 to 25 years. In addition, a municipal representative stated that it would be difficult for Municipal Council to authorize tens of millions of dollars in infrastructure spending if it's not going to be there for a long time. He further noted that other issues, such as water supply and waste water treatment must be considered.

A municipal representative then asked what would happen if all affected lands (shoreline and interior) were just allowed to go back to a natural state and there was no investment in dyke repairs or flood protection. The study consultant replied that the purpose of restoration planning is to revert back to the way things were, however, human activities have triggered problems in this area. We have changed the dynamics of this east shoreline in the last 150 years. We have altered the marsh system to a state where we can't expect it to sustain itself without propping it up.

A municipal representative suggested that other options should be considered including all of the land being returned to pre-European settlement era conditions. The study consultant replied that there could be other iterations of Concept D which include removal of more shoreline development.

A municipal representative suggested we should look at what needs to be fixed now (bandage approach), find the money and fix it. In response, another municipal representative expressed his concern that this approach would result in never ending repairs and expenditures.

## **2) Selection Criteria for a Preferred Concept**

There was discussion on how the 3 pillars of sustainability were weighted to determine the concept ranking. The study consultant advised that all aspects were weighted equally to limit the subjectivity of the results. In response, a municipal representative noted that the social benefits have been based on the values of the landowners within the affected area. Municipal expenditures within the affected area have an impact on the rest of the municipality. The social benefits of each concept may not be shared by residents located outside of the affected area.

It was acknowledged that the current study is skewed to the values of the affected residents and that the greater good of the community must be factored in to any decision that is made.

## **3) Participation in Decision Making Committee**

An ERCA representative raised the question as to who should be involved in the final decision and noted that this must be a collaborative effort. The ERCA representative then suggested that the decision making group should include the Municipality of Leamington, the federal government via Environment Canada and Parks Canada, the provincial government via the Ministry of Natural Resources and ERCA. It was also noted that landowners have expressed a desire to participate. Landowner opinions are very important, but how they would be factored into the final decision was not determined. An ERCA representative then suggested that the availability of funding is also an important issue in the final decision. A municipal representative agreed and noted that ratepayers remain concerned that ERCA is devaluing their properties for future acquisition.

A municipal representative then asked if the decision making committee would include Leamington administration, Leamington council or both. A suggestion

was not made, however, a municipal representative advised that Leamington administration is accountable to council.

A municipal representative further stated that the report is good. He said he would like to look at undertaking preventive maintenance right now. He wondered why the Trans Canada Bike Trail, which has funding to buy properties, doesn't just buy the hazardous Wheatley properties and suggested that Leamington would donate the roads.

In conclusion, a municipal representative asked an ERCA representative what ERCA would like from Leamington Council. An ERCA representative replied that he would like a public commitment to work with the Conservation Authority to come up with a final recommendation and to dialogue with the public to develop a preferred concept. He again stated his concern about being divided and said that ERCA would like to have a joint position with the Municipality.

An ERCA representative thanked everyone for their attendance/input and the meeting was concluded.

Meeting summary recorded by Ms. Lisa Pavan  
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