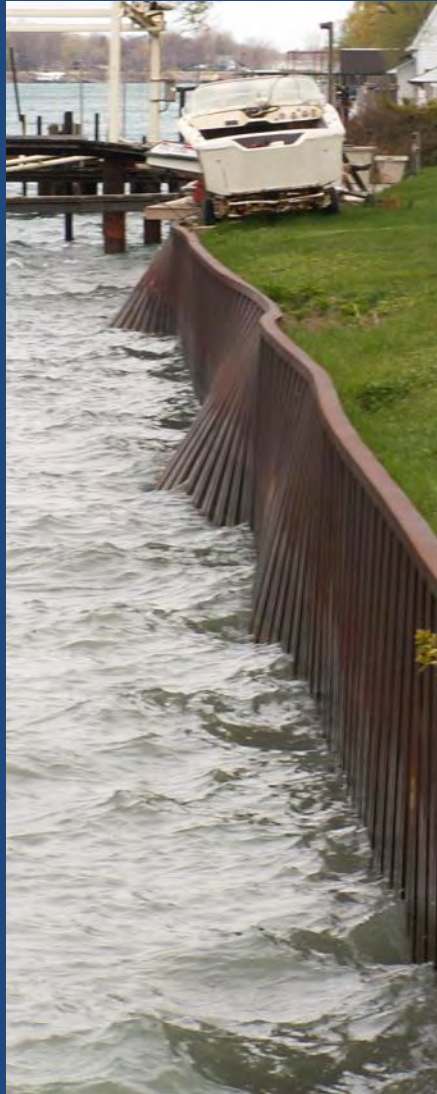


Softer But Stronger Shorelines

- Balancing Human & Environmental Needs -



*Brian McDougall
General Manager*



OUTLINE

- Background on Authority involvement in shore protection
- Look at several different shore protection projects that were designed and constructed to meet a variety of local and regional needs
- Key Notes

BACKGROUND

- Intensified development along the shoreline as well as increased use of the river for commercial and recreational navigation resulted in the need for shorelines to be stabilized





Point Edward Erosion Control Project



Point Edward Erosion Control Project



Point Edward Erosion Control Project



Point Edward Erosion Control Project





Point Edward Erosion Control Project

FACTORS

- stabilize shoreline
- public access
- baseline for park development
- vehicular viewing
- habitat improvement
- absorb waves & wakes and reduce wave reflection

Point Edward Waterfront Shore Protection



Point Edward Waterfront Shore Protection



Point Edward Waterfront Shore Protection



Point Edward Waterfront Shore Protection



Point Edward Waterfront Shore Protection



Point Edward Waterfront Shore Protection



Point Edward Waterfront Shore Protection





Point Edward Waterfront Shore Protection

FACTORS

- stabilize shoreline
- controlled public access
- safety & security
- habitat improvement
- absorb waves & wakes and reduce wave reflection
- historic preservation
- modifications to permit additional uses

St. Clair River Shoreline Assessment





St. Clair River Shoreline Assessment

PURPOSE

to provide landowners, resource managers and agencies with the knowledge and resources necessary to make environmentally friendly decisions concerning the location, design and construction of shore protection structures. This phase of the study has introduced the concept of “habitat friendly” shoreline designs to all residents and industries as well as proposed enhancement and restoration options. The foremost goal is to meet the de-listing criteria and contribute towards the rehabilitation of the St. Clair River AOC, while assisting landowners in protecting their property.

St. Clair River Shoreline Assessment



St. Clair River Shoreline Assessment





St. Clair River Shoreline Assessment

RESULTS

- steel sheet piling (33%) and revetments of various compositions (21%) are the most common structures along the shoreline
- Dikes, which make up 33% of the total length are all found in the southern reach from Port Lambton to Mitchell's Bay and rarely have protected banks
- slightly over 50% of all structures in poor-fair condition - therefore the possibilities for restoration and enhancement over the next 5-15 years is quite extensive.



St. Clair River Shoreline Assessment

NEXT STEPS

- next step in the delisting process is to create demonstration sites for the residential communities and nearby industry
- The Point Edward erosion protection projects display the concept of softer shore engineering and provides an example to the public of alternative shore protection but additional demonstrations at locations downstream will expand the educational opportunities

Mission Park Shoreline Improvement



Mission Park Shoreline Improvement



Mission Park Shoreline Improvement



Mission Park Shoreline Improvement





Mission Park Shoreline Improvement

FACTORS

- stabilize shoreline
- habitat improvement & diversity
- public access
- improvement recreation and fishing opportunities
- waterfront handicapped access
- baseline for shoreline park development
- vehicular viewing
- absorb waves & wakes and reduce wave reflection

Guthrie Park Shoreline Improvement



Guthrie Park Shoreline Improvement



Guthrie Park Shoreline Improvement



Guthrie Park Shoreline Improvement





Guthrie Park Shoreline Improvement

FACTORS

- stabilize shoreline
- habitat improvement & diversity
- public access
- improvement recreation
- vehicular viewing
- absorb waves & wakes and reduce wave reflection

Cathcart Park Shoreline Improvement



Cathcart Park Shoreline Improvement



Cathcart Park Shoreline Improvement



Cathcart Park Shoreline Improvement



Northern Map Turtle (Special Concern species) basking in the sun on the newly installed shore protection at Cathcart Park
June 4, 2012



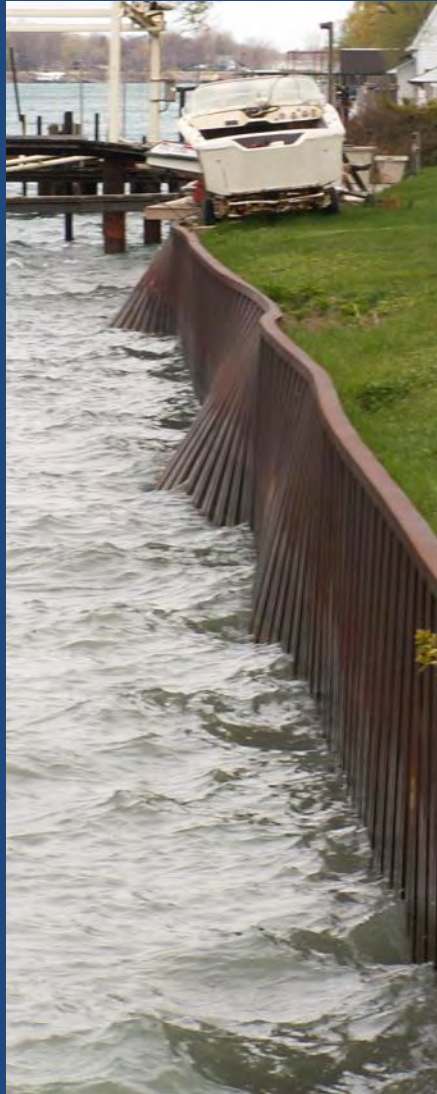
Cathcart Park Shoreline Improvement

FACTORS

- stabilize shoreline
- habitat improvement & diversity
- access to water
- improved recreation opportunities
- absorb waves & wakes and reduce wave reflection

Softer But Stronger Shorelines

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*Brian McDougall
General Manager*