

Transformative scenario planning in Collingwood, Ontario, using enhanced visualization techniques

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In 2012, the UGLS recommended an iterative Adaptive Management approach to enabling shoreline communities to assess their vulnerabilities to extreme water level variability, and to develop a specific plan for addressing these vulnerabilities.

While the theory behind UGLS' recommendations is robust, the study provided no examples of place-based implementations of this strategy to provide insight to communities who wished to experiment with it¹. In discussions with IJC Commissioners², the belief was expressed that Adaptive Management is an overarching strategy that is built on a foundation of community shoreline based management plans – which everyone agrees have not been prepared, and will not be prepared, until guidance is provided as to how a community should prepare one.

This Project attempts to fill this void by carrying out an effective place-specific analysis of practical community options to address extreme water level scenarios for the Town of Collingwood, ON. Our hope is that our project will provide a model, as well as practical guidance, for how other communities around the Upper Great Lakes might undertake the development of an adaptive plan for their shoreline.

The eventual Project (ie. the subject of the Phase 2 RFP) has three primary components:

1. The development of an advanced, fact-based visualization tool to enable citizens of all backgrounds to “see” the practical effects of water level changes on the entirety of their shoreline, both at a macro and a micro level;
2. The design and implementation of a community engagement based on the “transformative scenario planning” model³ to bring together all stakeholders, and to help them collaborate (and cooperate, despite their differences) on addressing what vulnerabilities they anticipate in the face of possible future water level scenarios, and how the community might take steps to mitigate them;
3. The consolidation of the feedback from this community engagement process into a set of observations and recommendations that could form the basis for a plan for the Collingwood shoreline.

During Phase 1 of this Project, four key partners (University of PEI, Nottawasaga Valley Conservation Authority, REOS Partners and Ontario Water Centre) will i) assess the availability and cost of data and other inputs required, ii) determine the work required to integrate the data and those other input into the UPEI “Coastal Impacts Visualization Environment” (CLIVE), iii) determine the work required to prepare a fully-configured instance of CLIVE to portray the Collingwood shoreline, iv) determine the high level outline of, and the cost to develop the detailed design of, an effective transformative scenario planning process for the Collingwood community, and v) determine the work required to manage this overall project, to consolidate outputs and learning, and to complete a final report.

¹ The only quasi-example cited, the Southern Georgian Bay Coastal Initiative, was never designed to include a complete range of stakeholders, and has suffered from a severe shortage of funding that has limited its scope.

² Personal discussions with Gordon Walker, Lana Pollack, and David Fay (Cdn. scientific adviser to IJC).

³ <http://reospartners.com/scenarios>