

# **Options Identified Through the MEOPAR Project to Address Shoreline Hazards and Risk**

**30 March 2021, B. May**

## **Background**

Here are more details on the nine options that were co-defined with research participants and collected by the MEOPAR team. Please note that these nine options were collected from input received through our project launch, key informant interviews, face-to-face focus groups, meetings, and virtual presentations, such as the StoryMap, which is linked on the first page of the survey. In some of the descriptions you will find links to more information on what each option involves.

Please also note that there are no details on exactly HOW each option might be implemented; the survey is only meant to rank possible options (WHAT options are preferred by survey participants).

It is also important to note that these options belong to all of those who responded to the MEOPAR research project. For instance, while the Town of Lincoln has played a key role with us as both a supportive partner as well as research participant, selection of preferred options through this survey does not mean that preferred options will be selected and implemented by any one party. Each participant, participant organizations and others (e.g. provincial, federal governments) have their own statutory, approval processes and responsibility for shoreline protection. The survey is intended to create dialogue on the values underlying each of the nine shoreline protection options.

Finally, the P2P survey indicates “Here are the options on the table” before the cards. This is not meant to be an exclusive list of all possibilities. In order to capture this, we have given you the option of selecting an “Other” card to indicate to us that there may be another viable option not considered. Please fill out an “Other” card if this is the case and we can follow-up further with you.

Thanks.

The MEOPAR team

<b>OPTION IDENTIFIED</b>	<b>BRIEF DESCRIPTION</b>	<b>FURTHER INFORMATION</b>
<p><b>1. Maintain existing land use mix along the shoreline</b> (private residential/business, recreational, municipal)</p>	<p>This option would allow a combination of land uses to co-exist along the shoreline, each with its own appropriate protection measures determined by the respective landowners</p>	<p>By making individual landowners responsible for their own property, shoreline risk reduction can be done in response to specific geographic and geological contexts, e.g. beach protection, cliffside stabilization, property-specific infrastructure</p>
<p><b>2. Continuous urban parkland and shoreline buffer</b></p>	<p>This option would involve an agency or organization acquiring land, enhancing and maintaining a natural area for the entire length of Town shoreline</p>	<p>By creation of a continuous urban park area, municipalities or other organizations can develop key features to maximize public access to the shoreline. This has benefits for the community at-large, as well as creates opportunities for tourism and economic development</p>
<p><b>3. Tax relief/subsidies for landowner shoreline protection</b></p>	<p>This option would provide financial incentives for private landowners to undertake actions that enhance the protection of the shoreline using the appropriate science-based information</p>	<p>Examples of tax relief/subsidies include grants for effective and sustainable shoreline protection initiatives (based on scientific/ecological evidence and including options such as green, soft or hard infrastructure), tax reduction if property improvements are made, cash payouts for damage incurred, or similar in-kind incentives that benefit both landowners and the community</p>
<p><b>4. Technical guidance for landowners on protection options and approval processes</b></p>	<p>This option would develop and provide a portal/information center of good practices for shoreline protection</p>	<p>Workshops or documentation to provide knowledge and enhance efforts of shoreline protection. Examples include standardized approval processes (such as budgets, project outlines and invoices), assessment of acceptable shoreline protection options, and step-by-step documentation on how to approach shoreline risk management</p>
<p><b>5. Grey infrastructure to harden shoreline</b></p>	<p>This option would use hard infrastructure to protect at-risk vulnerable areas</p>	<p>Examples of <a href="#">hard infrastructures</a> include seawalls, barriers or dams, typically made of concrete or wood</p>

<b>6. Green infrastructure and living shorelines</b>	This option would use nature-based solutions to protect at-risk shoreline	<a href="#">Green infrastructure</a> uses plant or soil systems to reduce impacts from storms or waves and protect the shore as well as habitats for birds and other animals. <a href="#">Living shorelines</a> are an example which includes vegetation (such as seagrass or similar vegetation), tidal marshes, coastal grasslands and wetlands. Other examples of green infrastructure include sand dunes and <a href="#">wetlands</a>
<b>7. Landowner collaboration on protection</b>	This option would bring together neighboring property owners to develop mutually beneficial shoreline protection	This is a collaborative approach where people from a same area get together, to discuss, possibly with knowledgeable people (scientists, land use planners, etc.) on what options are available to enhance the protection of the shoreline ad through consensus, co-define the most feasible strategy. It can provide benefits for both residents and the environment
<b>8. Managed retreat</b>	This option would assist landowners in pursuing managed retreat of at-risk infrastructure	Examples include partial or total removal (e.g. displacing a shed 30 m in land) of man-made or hard infrastructure. The objective is to retreat the protected shoreline to a more landward position for better protection
<b>9. Insurance</b>	This option would make insurance products available for landowners to indemnify against future shoreline erosion and related damage	Insurance would cover buildings or structures on waterfront residences that are affected by shoreline erosion. This includes homes, sheds, docks and roads. Premiums for these buildings would be based on the level of protection in place. Insurance also has the added benefit of adding valuation of natural assets
<b>10. Other</b>	This option allows survey users to identify other options that they feel would be equally effective in creating shoreline protection and community resilience	If users select this option, the research team will follow up with survey participants to explore this option further