

# BAY OF QUINTE AND LAKE ONTARIO SHORELINE MANAGEMENT PLAN

Public Consultation – Comments and Answers

November 25, 2021



*Comment 1: More information requested on the historical evolution of sandy barrier beach systems and their role in flood mitigation.*

Answer: We are reviewing historical aerial photographs to document changes to barrier beaches over time. Field observations and survey data has also been collected to characterize the alignment, profile, and overall health of barrier beaches. This will be documented in the Shoreline Management Plan (SMP) along with information on the importance and physical evolution of barrier beach systems in general.

*Comment 2: How can the protection of coastal wetlands be improved in the future? What role can landowners play in stewardship of wetlands?*

Answer: Recommendations will be provided in the Shoreline Management Plan (SMP).

*Comment 3: What role does nutrient runoff play on nearshore water quality versus inputs from wastewater treatment plants and private septic systems?*

Answer: Nutrient runoff from the land (agriculture and residential areas) along with discharge from wastewater treatment plants and private septic systems all contribute to elevated nutrient levels in the Bay of Quinte. Understanding the relative contribution of each source requires detailed site-specific investigations and is not part of this investigation. However additional information on this topic can be found on the Bay of Quinte Remedial Action Plan website: [www.bqrap.ca](http://www.bqrap.ca)

*Comment 4: More information requested on the operation of the Moses-Saunders Power dam and its influence on Lake Ontario water levels. Also, what role did Plan 2014 play in the 2017 and 2019 high lake levels?*

Answer: More information will be provided regarding this topic during the second public consultation in 2022. This will also be explained in the Shoreline Management Plan (SMP) as it pertains to the assessment of shoreline hazards and the development of recommendations for the Quinte Region. References will be provided in the SMP to scientific publications and presentations that more specifically address this comment.

*Comment 5: More details requested on how the 100-year lake level is calculated and its influence on the flood hazard limit mapping.*

Answer: This will be presented at the next Public Information Centre (2022) and documented in the Shoreline Management Plan.

*Comment 6: What should be considered when designing and implementing long-term erosion and flood mitigation strategies?*

Answer: The Shoreline Management Plan will outline factors to consider when selecting an appropriate mitigation strategy for erosion and flooding hazards, including risk exposure, risk tolerance, threatened assets, cost, local ecosystem considerations, and potential impacts to adjacent properties and shorelines.

*Comment 7: More information requested on non-structural and nature-based solutions to protect shorelines and increase resilience to flooding and erosion.*

Answer: Examples will be provided in the SMP, with recommendations specific to the individual project reaches (e.g., exposed lake shoreline versus sheltered embayments including the Bay of Quinte).

*Comment 8: Recommendations requested on effective long-term shoreline protection options to mitigate flooding and erosion.*

Answer: Recommendations will be provided in the SMP on a reach-by-reach basis (i.e., for each section of shoreline) accounting for differences in wave exposure, soils, land elevations, slope stability, land use, etc. Regulatory requirements, such as ensuring that there are no negative impacts to adjacent properties, will be discussed. The role that the various regulatory bodies play in the permitting and implementation of hazard mitigation projects along the shoreline and the steps that should be followed to ensure successful implementation will also be discussed in the Shoreline Management Plan (i.e., Conservation Authorities, MNRF, DFO, etc.).

*Comment 9: Information on flood mitigation strategies specifically to deal with high lake level periods, such as 2017 and 2019.*

Answer: This will be addressed through the recommendations discussed above and will be documented in the Shoreline Management Plan.

*Comment 10: One size fits all solutions will not work for the Quinte shoreline. How will the project team address this?*

Answer: The Quinte shoreline has been divided into 16 distinct project reaches, based on similar wave and water level exposure and common physical characteristics such as geology. Each project reach is being studied independently and shoreline management and hazard mitigation strategies will be developed accordingly, on a reach-by-reach basis.

*Comment 11: Information on the projected impacts of climate change for future ice cover, lake levels, erosion rates, and flood frequency/risk.*

Answer: The projected impacts of climate change and their influence on shoreline hazards within the Quinte region will be discussed in the Shoreline Management Plan and incorporated into the shoreline management recommendations.

*Comment 12: Are their speed limits for boats in the Adolphus Reach?*

Answer: We are looking into the what the speed limits would be for this area and will share this information accordingly.

*Comment 13: Do funding programs exist for private shoreline protection structures?*

Answer: We are not aware of any current funding programs for structures but there are programs available to help with natural shoreline plantings. However, if any funding programs become available, they will be documented in the SMP.