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Adapting to Coastal Hazards Across the Great Lakes

Bonnie Fox, Policy and Planning Director

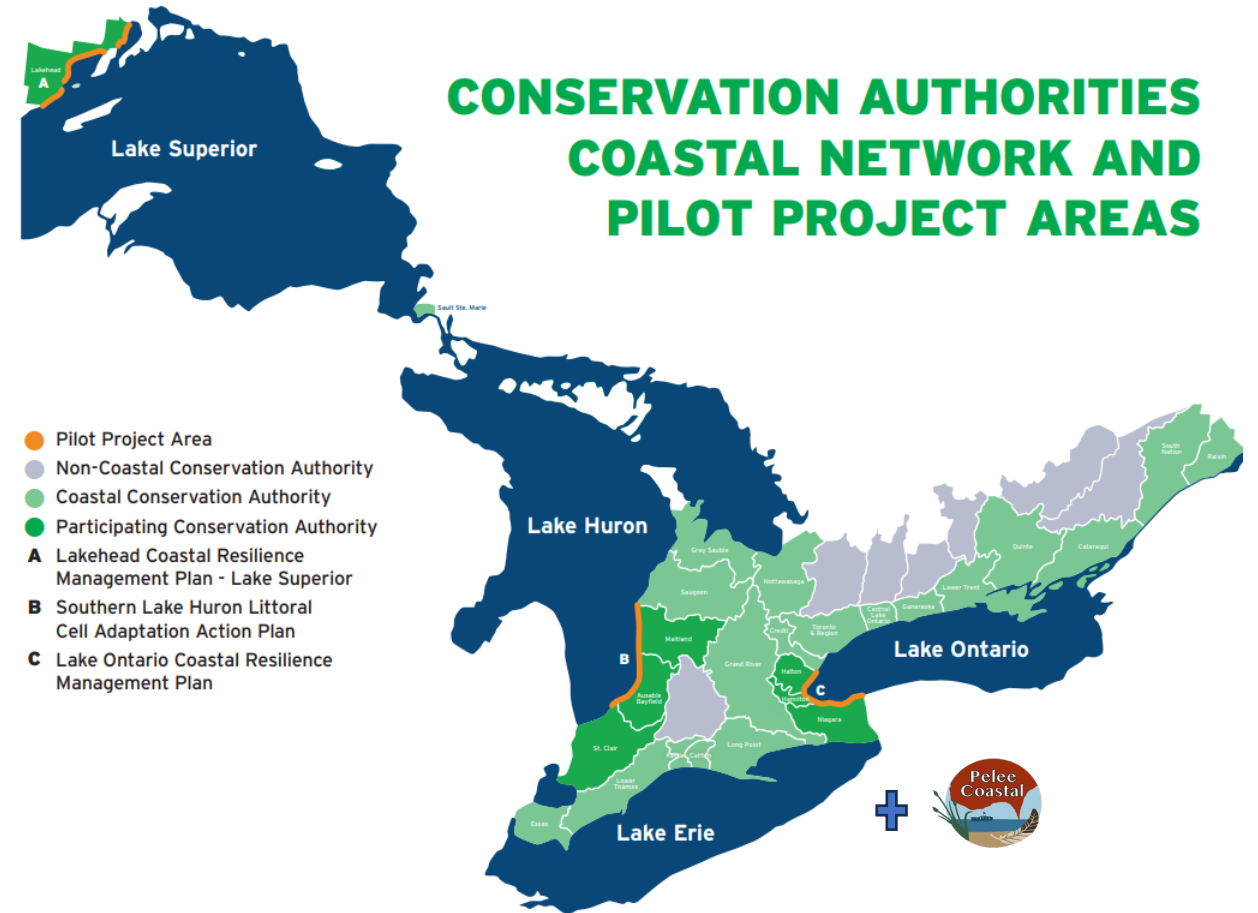
Latonnell Conservation Symposium | November 3rd, 2025





Adapting to Coastal Hazards Across the Great Lakes (2024-2028)

- Natural Resources Canada's Climate Resilient Coastal Communities (CRCC) Program
- 3 Regional Pilot Projects
 - Lake Superior – Lakehead Region CA
 - Southern Lake Huron – Maitland Valley CA
 - Lake Ontario – Niagara Peninsula CA





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Project Objective

- To co-develop with community members, regional-scale coastal resilience plans (CRPs) and adaptation actions to address climate change risks and hazards for the pilot project regions within the Great Lakes.



Erosive Gullies; Lake Huron pilot area



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Project Benefits

- Increase the capacity to work across the CA Coastal Network and beyond
- Build and share scalable climate solutions /BMPs
- Engage full range of communities
- Coastal Resilience Plans and Adaptation Actions that address:
 - climate change risks including flooding, erosion, extreme events
 - environmental and socio-economic impacts/vulnerabilities



Mission Island Marsh community boardwalk, Thunder Bay



Lakehead Coastal Resilience Management Plan – Lake Superior

- Coastal Hazard Study to Identify At-Risk Public and Private Infrastructure and Hazardous Areas.
- Risk and Vulnerability Assessments.
- Lake Superior Coastal Flood Forecasting and Warning Plan.
- Co-Development of the Lakehead Coastal Resilience Plan through community engagement



Thunder Bay, June 2007



Thunder Bay, July 2019



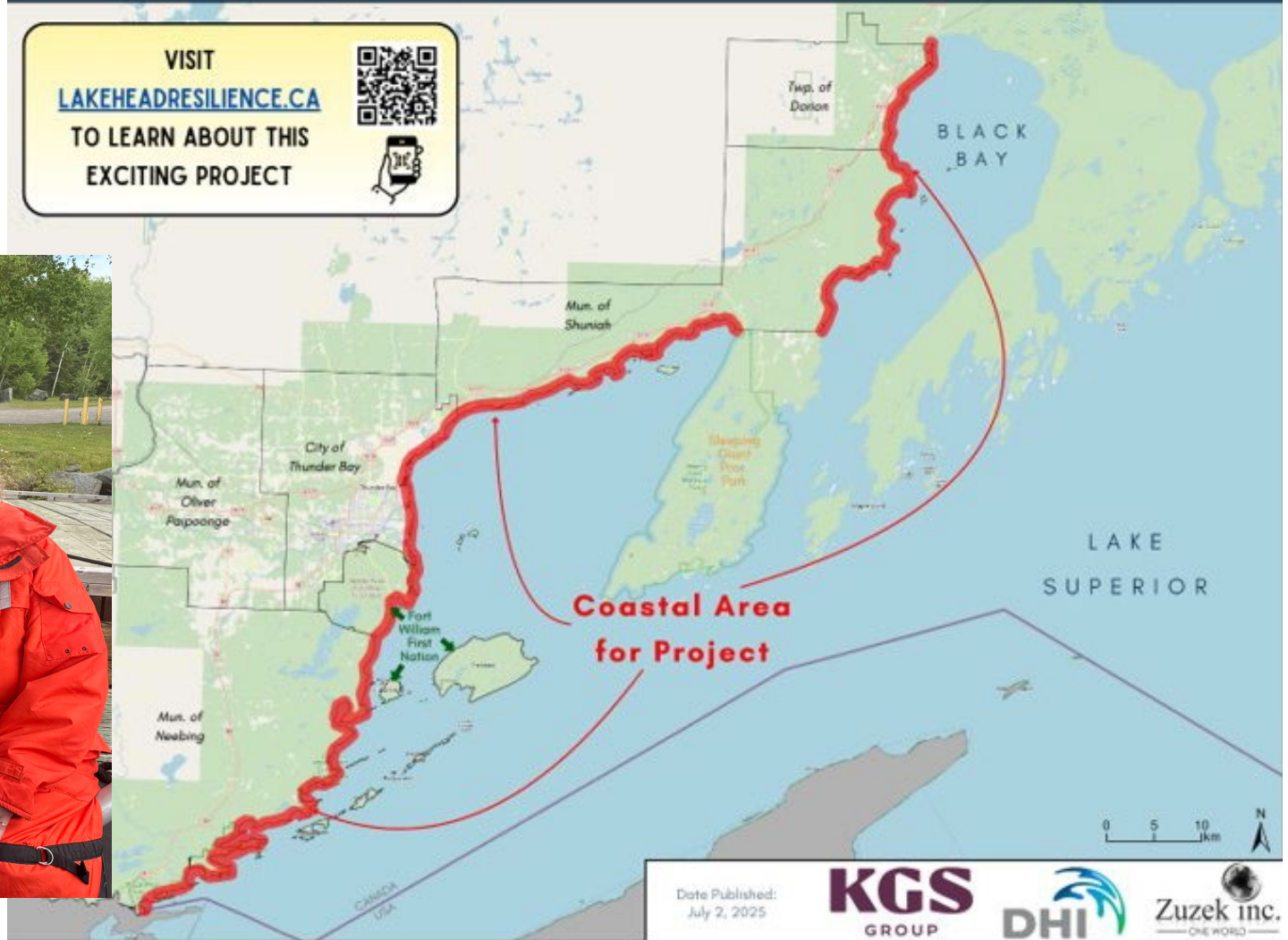
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Lakehead Coastal Resilience Management Plan

VISIT
LAKEHEADRESILIENCE.CA
 TO LEARN ABOUT THIS
 EXCITING PROJECT




Project Steering Committee
Boat Tour (June 17th, 2025)





Southern Lake Huron Adaptation Action Plan

- Building on Existing Work (*Phase 3*).
- Sediment Pathway Restoration (nature-based solution)
- Transformative Development Policy Recommendations (i.e., Land Use Policies, Zoning By-Laws and Official Plan Updates)
- Relocation Considerations Report.



Eroding high-bluff shoreline with evidence of recent slope failure
Lake Huron pilot area



Southern Lake Huron Adaptation Action Plan



July 8th, 2025 | Regional Kick-Off |
Goderich Town Hall, Ontario

Goderich Harbour - Sediment
Restoration Site





Lake Ontario Coastal Resilience Pilot Project

- Building on Existing Work.
- Coastal Hazard Study to Identify At-Risk Public and Private Infrastructure and Hazardous Areas.
- Natural Asset Inventory.
- Vulnerability and Risk Assessment.
- Long-term Monitoring Framework.
- Co-Development of Lake Ontario Coastal Resilience Plan through community engagement.



Lake Ontario Pilot Area with Extreme Hardening

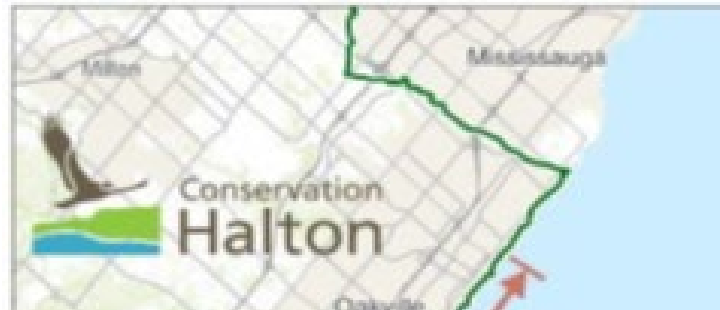


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Lake Ontario Coastal Resilience Pilot Project



July 22nd, 2025 | Regional Kick-Off |
Jordan Harbour Hotel, Ontario





Knowledge Transfer Mobilization (2024 – 2027)

- Annual Sessions with Pilot Project Leads and CA Coastal Network to discuss challenges & solutions
- Annual Presentations of Project and/or BMP Products
- Ongoing updates to webpage and annual story map updates
- Dec 2027 Project Results Webinar (Finalized BMPs)



CA Coastal Network Workshop



Best Management Practices

Project Results Webinar | December 2027

- Community Engagement ♦
- Indigenous Engagement ♦
- Terms of Reference for Committees ♦
- Terms of Reference for Types of Vulnerability and Risk Assessments ♦
- Updates to Coastal Flood Forecasting and Warning ♠
- Land Use Policies, Zoning By-Laws and Official Plan Updates ■
- Relocation Considerations Report ■
- Nature-based Solution(s) ■ ♥
- Long-term Monitoring Framework ♥
- Natural Asset Inventory ♥

♦ All pilots

♠ Lake Superior (LRCA pilot)

■ Lake Huron (MVCA pilot)

♥ Lake Ontario (NPCA pilot)



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Scan to Visit the
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