



**Development of a
Coastal Resilience Framework
&
Pelee Peninsula Littoral Cell Resilience
Committee**

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October 11, 2023

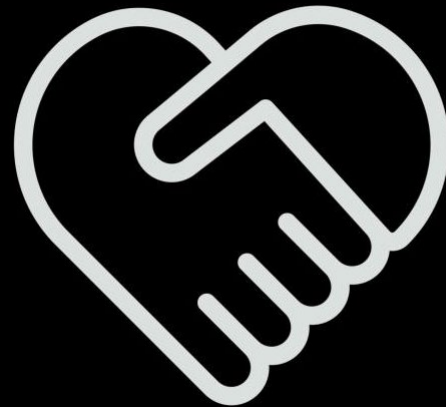


Agenda

- I. Welcome and introductions
- II. Context setting
- III. Draft Coastal Resilience Framework
- IV. Advancing the Pelee Peninsula Littoral Cell Resilience Committee
- V. NRCan's Climate Resilient Coastal Communities Fund
- VI. Next steps and future meetings



I – WELCOME AND INTRODUCTIONS



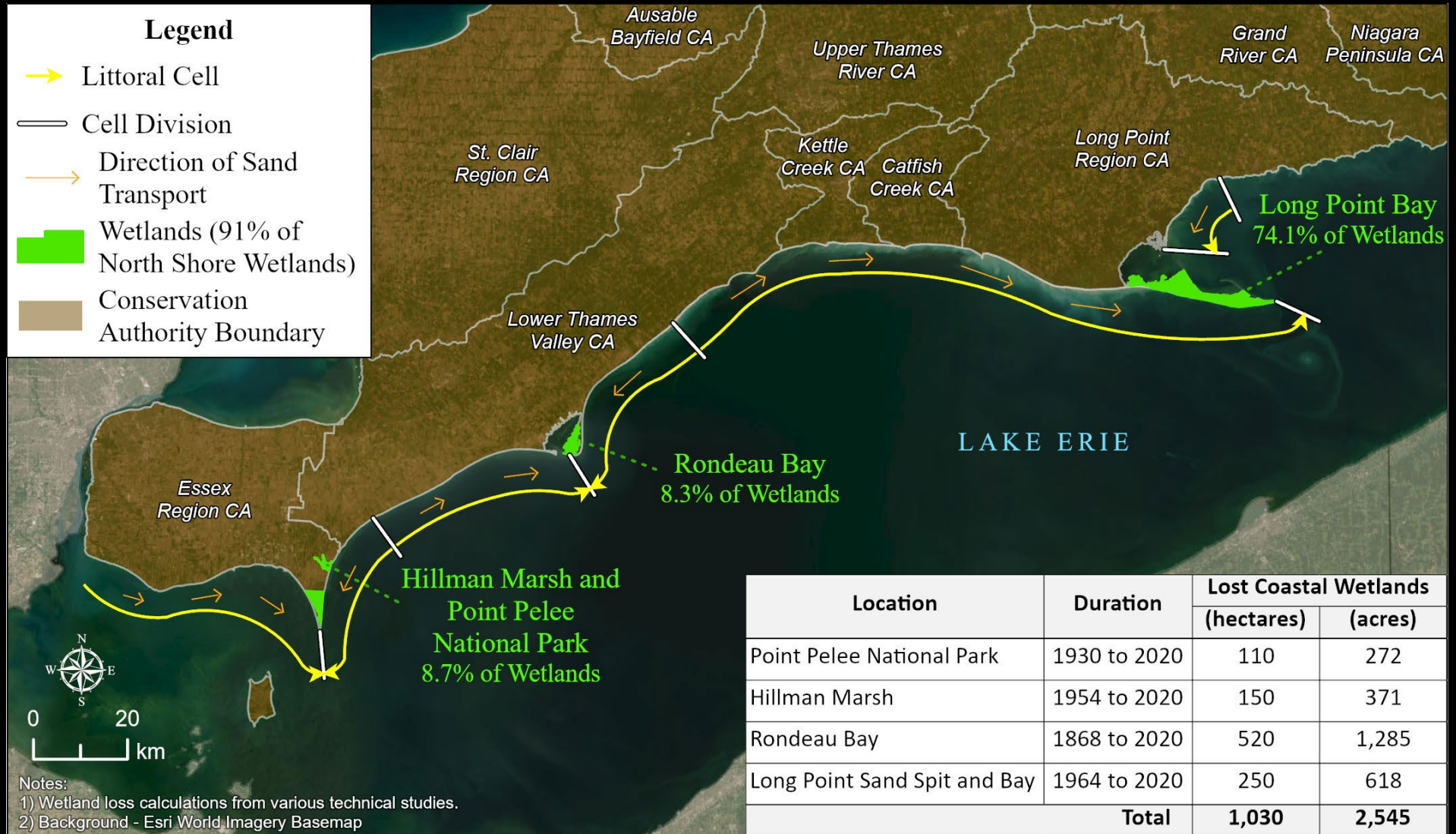


II – CONTEXT SETTING



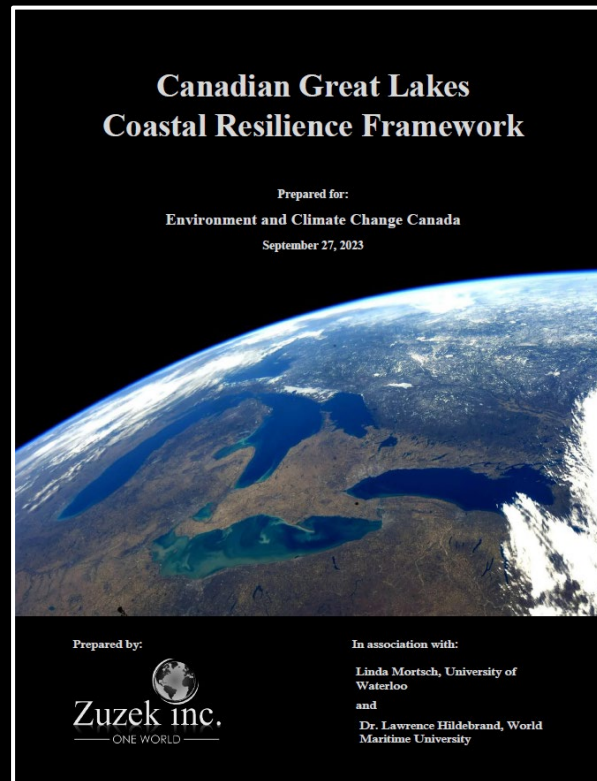


Lake Erie North Shore Littoral Cells and Coastal Wetlands





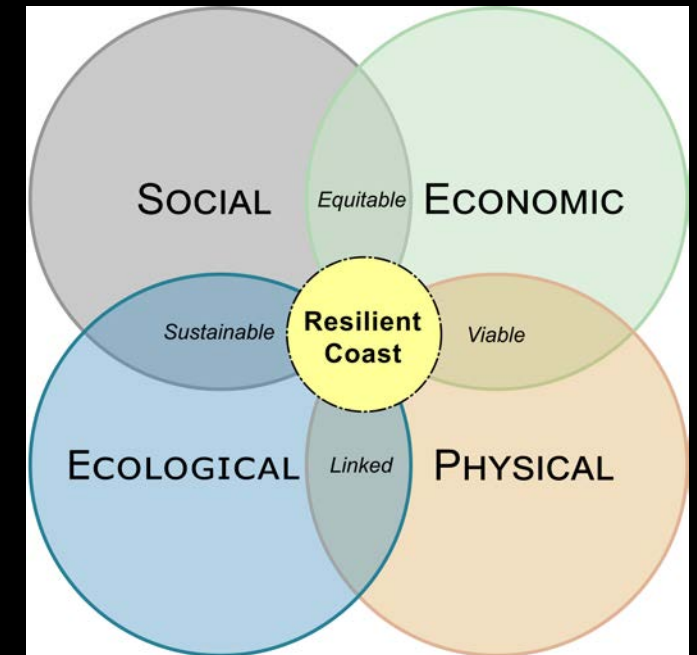
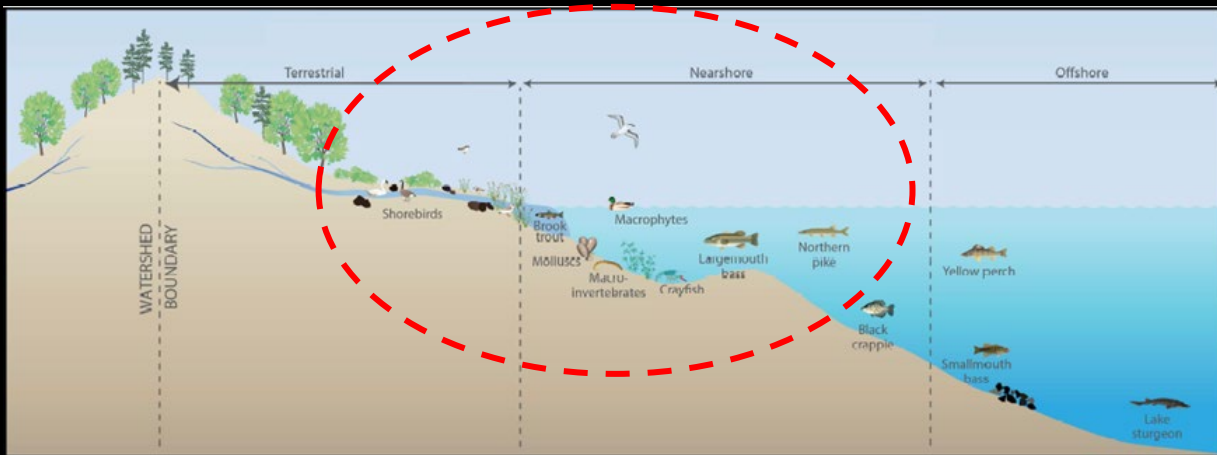
III – DRAFT COASTAL RESILIENCE FRAMEWORK





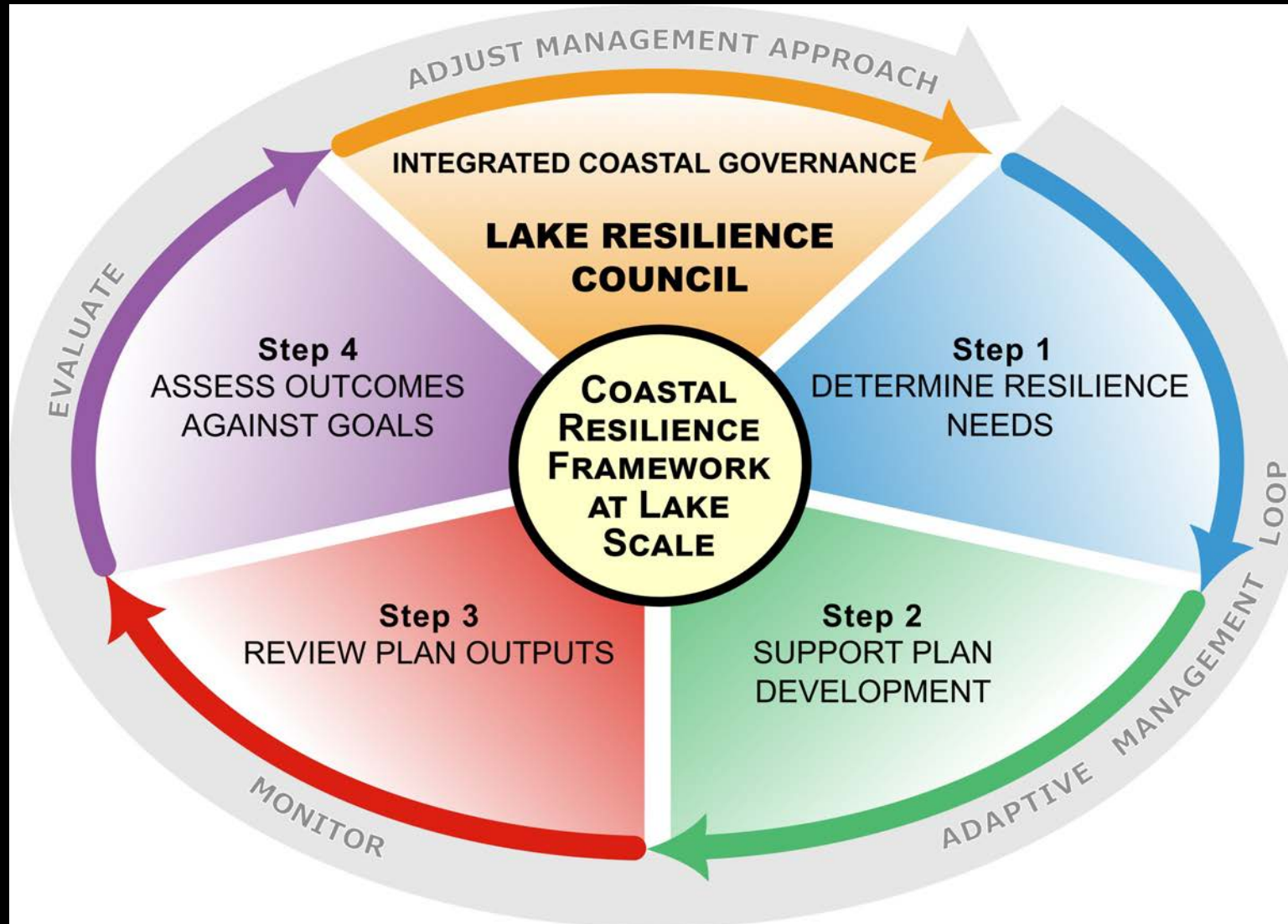
Key Aspects of the Framework

- The coastal area is an integrated social, economic, ecological, and physical system
- Scale is a defining aspect of the framework (littoral cells)
- All of society approach (by everyone for everyone)



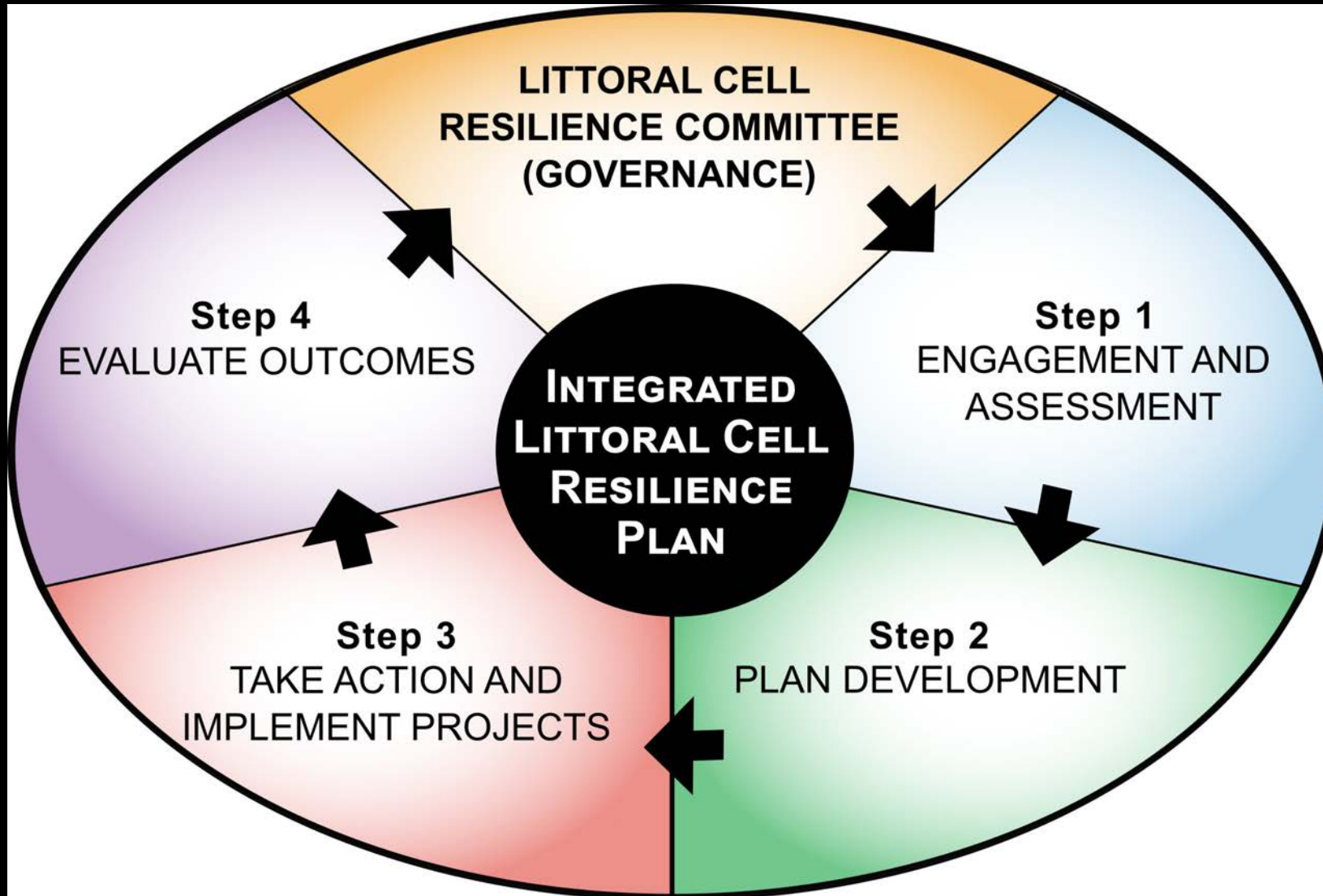


Lake Scale





Littoral Cell Scale





Selection of Case Study

- Pelee Peninsula versus Long Point Littoral Cells





Integrated Plan and Strategy Criteria

- Plan Criteria

Coastal Resilience Framework Study Site Scorecards

STUDY SITE: LONG POINT (littoral cell from Port Glasgow to Long Point shoal)		
Integrated Plan/Strategy Criteria	Score	Comments
1. Willing Partners (20) a. Diversity of stakeholders including ENGO's are interested in engaging in the case study		<ul style="list-style-type: none"> Bayham municipality- interested in studying benefits of removing <u>pier</u> Kettle Creek Conservation Authority- interested in participating in integrated planning <u>effort</u> Long Point Biosphere Reserve- Interested in being a supporter of the integrated planning effort, and could be a voice for change within the area (local champion) Long Point Rate Payers- Some are interested in participating, while education and outreach may help bring others along in our current understanding of coastal <u>health</u> CWS- interested in understanding sediment dynamics and potential impacts on the <u>NWAs</u> Bird Studies Canada and Ontario Parks (not approached yet)
2. Broad Ecological Significance (20)		<ul style="list-style-type: none"> Long Point coastal wetlands are largest in Lake Erie World Biosphere Reserve is at risk from impaired coastal processes
3. Risk to People and Infrastructure (10)		<ul style="list-style-type: none"> Risk to properties from high water levels and seiches Emergency ingress and egress at Long Point limited to <u>Causeway</u> Erosion threatening infrastructure within the littoral cell
4. Role of Coastal Economy (10)		<ul style="list-style-type: none"> Tourism is one of the main industries in the Long Point Area 3 provincial parks are within the Littoral Region and a large conservation area used for camping (Backus Woods) Long Point Provincial Park attracts over 100,000 visitors annually to the park for overnight and day use

5. Local Champion (10)		<ul style="list-style-type: none"> Norfolk County are not yet fully engaged in the Coastal Resilience Framework <u>development</u> Long Point Region Conservation Authority have limited capacity to take on activities outside of their core mandate without service delivery agreements, although the understanding and interest is there at the staff working level
6. Transferability (10)		<ul style="list-style-type: none"> There are a significant number of ENGO's and local partners who work within the Long Point geographic scope, that are engaged in planning processes for improved ecosystem health. Norfolk County may not be interested in supporting an integrated approach to managing the coast and <u>have</u> recently retained an engineering firm to build more shore protection.
7. Government priority (10)		<ul style="list-style-type: none"> ECCC- Overall assessment of nearshore waters found Port Burwell to Long Point under moderate stress from impaired coastal processes, and identified the Long Point wetlands/inner/outer bay as an area of High Ecological Value ECCC- Coastal Wetland vulnerability assessment Priority Place (terrestrial) DFO/MNR?
8. Broad diversity of coastal resilience challenges (10)		<ul style="list-style-type: none"> Coastal ecosystem consists of eroding bluffs, sandy beaches, <u>dunes</u> and coastal wetlands, each requiring differing management actions, ranging from protection, to monitoring to restoration.
9. Indigenous interest (10)		<ul style="list-style-type: none"> Mississauga's of the Credit First Nation (Treaty land) Hodenoosauneega (Territory)
10. Short-term (within 5 years) actions to increase coastal resilience (10)		<ul style="list-style-type: none"> Through engagement of partners in integrated planning activities, efforts could be directed to share information with community and stakeholders to improve awareness of coastal issues, and share new and innovative ways of managing the coast



Project Criteria

Ability to Demonstrate Success

- Potential for success

Project Criteria – Ability to Demonstrate Success	Score	Comments
1. Ecological & geodiverse acuteness (crisis/significance) (20)		<ul style="list-style-type: none"> • The Port Burwell Pier is holding back significant quantities of sediment from reaching Long Point. Significant permanent loss of coastal due to barrier beach erosion.
2. Social/Economic acuteness- (Interconnectedness of equity, social and economic issues) (20)		<ul style="list-style-type: none"> • As water levels have dropped, the urgency of the action has as well, and potential impacts on the social and economic fabrics have decreased. However, now is the time for action, as climate science is showing water levels will be higher and lower in the future. • The Long Point beaches are one of the cornerstones of the tourism sector. • Fish production from Long Point's inner and outer bay supports the recreational and commercial fishing industries
3. Readiness of funding/funding partners and future funding opportunities (10)		<ul style="list-style-type: none"> • CWS have identified an interest in understanding sediment dynamics along the coast of the Long Point NWA. • In the future, a pier removal project could be aligned with Natural Infrastructure Fund and Disaster Mitigation and Adaptation Fund • Broader integrated planning effort, if community led, likely well aligned with NRCan's Coastal Community Climate Fund
4. Local leadership capacity (10)		<ul style="list-style-type: none"> • Potential but no confirmed participants. • Small Craft Harbours are the owner of the pier in Port Burwell, and have not been approached yet about pier removal/alteration project • Municipality of Bayham (Port Burwell), have an interest in supporting the studies, and should resources be available, expect they may take on a bigger leadership role.
5. Willingness of partners to pursue future funding (10)		<ul style="list-style-type: none"> • Unknown, need local council support.

6. Past studies or data (10)		<ul style="list-style-type: none"> • Some local studies, no littoral cell investigations.
7. Feasibility to action (10)		<ul style="list-style-type: none"> • Long-term/large actions: will take multiple years to complete the studies, bring partners together to overcome land ownership differences, conduct engagement on options and seek funding for implementation of restoration activities, but it is feasible.
8. Co-benefits (10)		<ul style="list-style-type: none"> • Both significant social and economic co-benefits of resorting impaired coastal processes by removing the Port Burwell jetty and bypassing sediment at Port Stanley and Port Bruce.
9. Innovation, transformation adaptations and nature-based solution opportunities (20)		<ul style="list-style-type: none"> • Approach would be innovative in Canada and globally (jetty removal) • Would have significant components that leverage nature-based solutions
10. Consistent with goals of national adaption strategy (10)		<ul style="list-style-type: none"> • Adapting to climate change by restoring natural coastal processes and relying on nature-based solutions is consistent with the strategy.
Scoring Total:		
Scoring Grand Total:		



Rapid Scoring Results (1 hour call)

- Task Team

TASK TEAM FROM THINK TANK
Jody Mckenna, ECCC
Stephanie Otto, ECCC
Clarissa Medrano, ECCC
Neil Fisher, DFO
Stephen Marklevitz, MNRF
Greg Wilson, MECP
Linda Mortsch, UoWaterloo
Larry Hildebrand, WMU
Pete Zuzek, Zuzek Inc.

- Results

CRITERIA	PELEE	LONG POINT
INTEGRATED PLAN/STRATEGY CRITERIA		
1. Willing Parnters	18	15
2. Ecological Significance	20	20
3. Risk to People/Infr.	9	8
4. Coastal Economy	10	10
5. Local Champion(s)	10	9
6. Transferability	10	9
7. Government Priority	10	10
8. Diversity Resil. Challenges	10	8
9. Indigenous Interest	10	5
10. Short-term Actions	6	3
SCORE (max. 120)	113	97
PROJECT CRITERIA - ABILITY TO DEMONSTRATE SUCCESS		
1. Ecol/geodiversity acuteness	18	18
2. Social/Econ. Acuteness	18	18
3. Readiness of Partners	10	10
4. Local Leadership Cap.	5	5
5. Partners Pursue Future \$	5	5
6. Past Studies & Data	10	10
7. Feasibility of Action	8	8
8. Co-benefits	10	9
9. Innovation/Transformation	20	20
10. Short-term Actions	5	5
SCORE (max. 130)	109	108
OVERALL SCORE (max. 250)	222	205

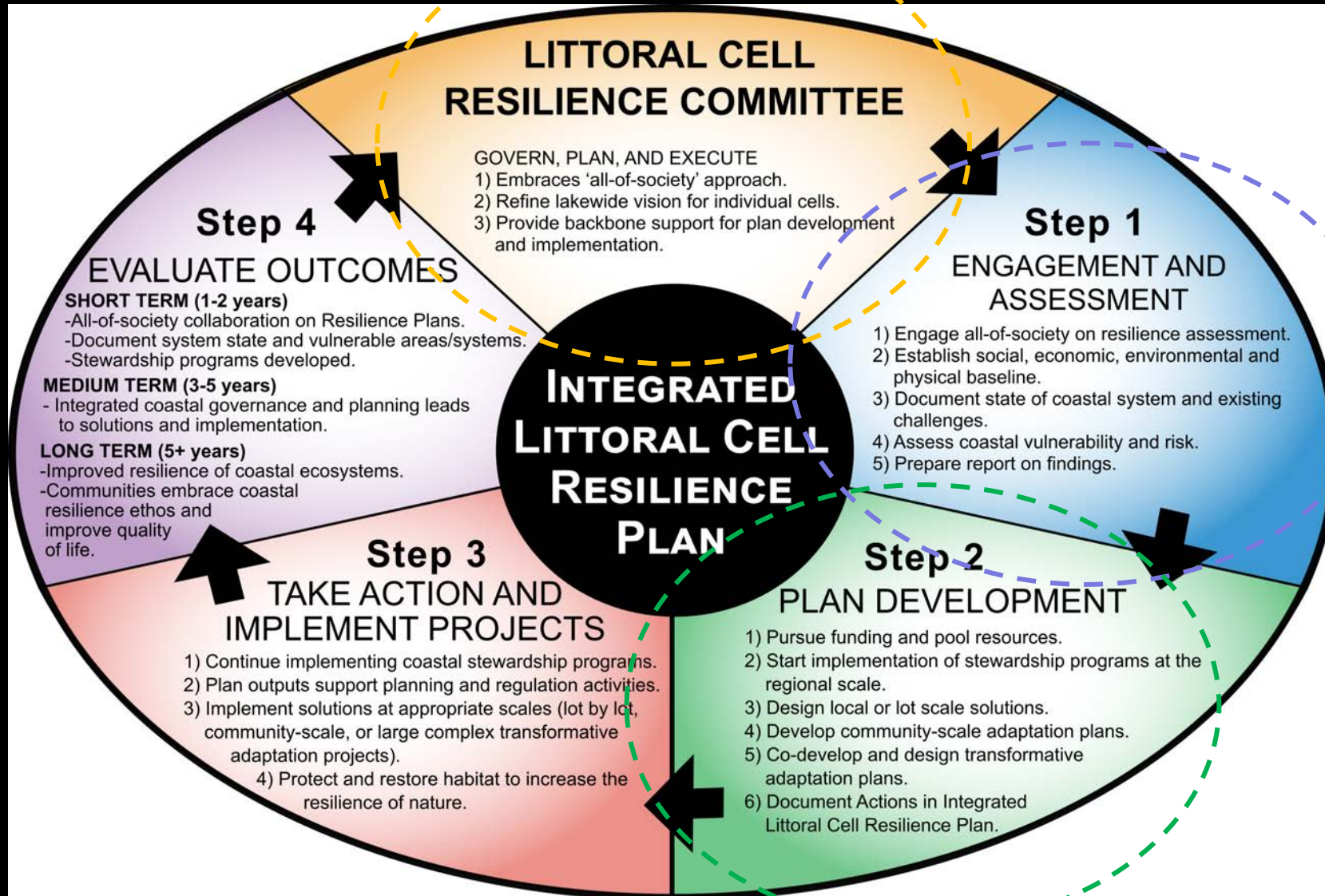


IV – ADVANCING THE PELEE PENINSULA LITTORAL CELL CASE STUDY





Littoral Cell Case Study





Group Discussion

- Beyond existing members, who else should be involved?
- What is needed for the governance structure
- What are the key vulnerabilities in the coastal area and how can the framework address?
- Can this framework address your organizations issues/challenges?
- How do you see yourself/organization contribution to the LCRC?
- What activities are already occurring and how can they be leveraged?
- Other topics and suggestions



Draft Roadmap and Meeting Schedule (confirm)

PROJECT TASKS AND SCHEDULE		2023					2024		
		Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
1.0 ENGAGEMENT IN PELEE PENINSULA LITTORAL CELLS									
1.1	Expand Membership for Littoral Cell Committee								
1.2	September TEAMS Call (with existing members)								
1.3	Meeting #1 - Late-October In-person (half day) and Field Tour (half day)								
1.4	Meeting #2 - November TEAMS Call								
1.5	Meeting #3 - January TEAMS Call								
1.6	Meeting #4 - February Draft Case Study Report via TEAMS								
2.0 THINK TANK MEETINGS									
2.1	September Meeting								
2.2	November Meeting								
2.3	January Meeting								
2.4	March Meeting								
3.0 CASE STUDY REPORT									
3.1	Draft Case Study Report								
3.2	Final Case Study Report								

 Meetings

 Report



Draft Case Study Plan TofC

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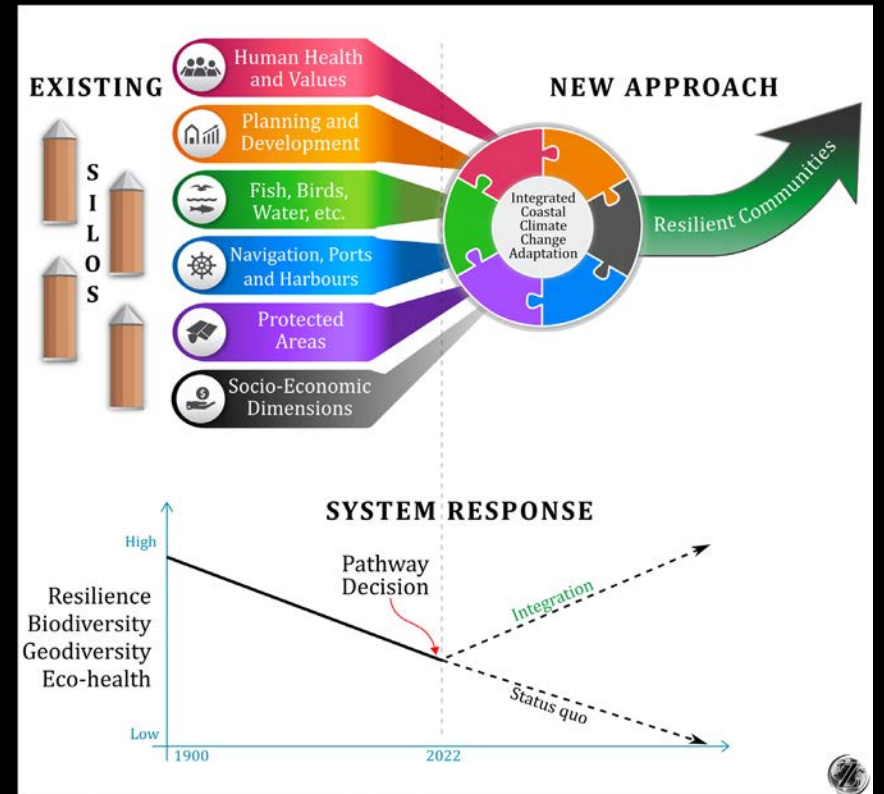


V – NRCan's Climate Resilience Coastal Communities Fund



Overview Climate-Resilient Coastal Communities (CRCC) Program - Call for Proposals September 2023

Version française à suivre





Details of Funding Program

- Submissions are due December 13, 2023
- ~20 regional scale projects across Canada with funding of ~1M/project available
- Achieve benefits working at the regional scale with all-of-society representation
- Looking for a broad range of issues: social, economic, ecological, and physical
- Co-develop climate adaptations and start implementation (e.g., planning and zoning changes, smaller scale adaptations, property acquisition program, but not transformative adaptation)
- Establish governance structure that includes indigenous communities
- Inclusive participation, including voices not typically heard
- Requires 25% non-federal match (cash and in-kind)
- Eligible recipients: province, municipality, private company, industry, ENGO



VI – NEXT STEPS





MEETING ADJOURNED

