



Lake Erie Coastal Zone Program



Introduction

The North Shore of Lake Erie is a 592 kilometre shoreline¹ containing a diversity of ecosystems and rare species, along with areas of urban and rural human settlement. The north shore of Lake Erie, “Lake Erie’s Carolinian Coast” is located within the Carolinian Life Zone, a hotspot for biodiversity and home to many species at risk (SAR) in southern Ontario. The coast is also home to Canada’s southernmost National Park, and a UNESCO World Biosphere Reserve.

The coastal zone represents a diverse area of southwestern Ontario, with much natural, cultural, and historical heritage, and attracts many residents and visitors for tourism and recreation purposes. Much of the coastal zone is highly settled and developed for human land uses. Public and private landowners have helped to

maintain the diversity of land uses in the area and have long acted as stewards of the coastal zone, but no comprehensive strategy for the entire north shore of Lake Erie exists. The Lake Erie Coastal Zone Program aims to include the entire coastal zone to promote ecological integrity and ecosystem health, provide understanding and awareness of species at risk and habitats, and present new opportunities for tourism, recreation, and conservation. The development of a Lake Erie Community Stewardship Trail Network and trail guide is one way to achieve these goals.

What is the Lake Erie Coastal Zone Program?

The Lake Erie Coastal Zone Program is a way for public and private partners to work together, to manage the coastal zone in a way that allows for multiple land uses, recreation and tourism opportunities, and education and demonstration areas, all while considering the ecological integrity and conservation of the coastal zone. One way to highlight the beauty and significance of the coastal zone is through a Lake Erie Community Stewardship Trail Network.

With the aid of trail groups, public and private landowners, conservation groups, and all interested stakeholders, the basis for a strong coastal zone trail for all partners can be identified. Implementation of a suitable network will provide youth, trail, and other groups with activities such as trail building, maintenance, and stewardship, as well as educational opportunities. The important agricultural contributions of this highly productive zone can be highlighted through a Lake Erie Community Stewardship Trail, as well as natural areas that provide sites for maintaining rare species, biodiversity and valuable ecosystem services.

Why a Lake Erie Community Stewardship Trail Network for the Coastal Zone?

Trails provide opportunities for recreation, conservation, and tourism, while promoting health and wellness and providing educational and stewardship opportunities. Trails can highlight sites of agricultural, historical, or ecosystem significance, and demonstrate points of interest in the diverse habitats of Lake Erie’s Carolinian Coast. Businesses, historic sites, and natural landscapes can all benefit from a thoughtfully placed trail. Since many excellent trail networks exist throughout southwestern Ontario, the potential for creating a comprehensive coastal zone trail network by building on these existing trails is immense.

Goals of the Coastal Zone Program

- To develop a concept for a Lake Erie Community Stewardship Trail along the north shore of Lake Erie, and an accompanying trail guide to highlight significant sites and species in the coastal zone
- To connect rural and urban residents, and individual and group conservation and stewardship efforts along the North Shore Lake Erie coastal zone, into a network of interconnected projects
- To enhance ecological integrity, and conserve coastal ecosystems and Species at Risk in the Coastal Zone of Carolinian Canada
- To enhance the enjoyment of coastal landscapes, and provide greater opportunities for access to and understanding of rare species and habitats



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Who should be involved in the Lake Erie Coastal Zone Program?

The most important participants in the Lake Erie Coastal Zone Program are the people who live, work, and play in this area. However, this program and the dialogue it encourages are for everyone who cares about Lake Erie's Carolinian Coast. It is important that every sector of the coastal zone is represented, in order to develop a concept for a trail that will be supported and maintained on the ground.

What is the Lake Erie Coastal Zone?

The coastal zone is a complex area, where terrestrial and aquatic ecosystems merge; one way to think of the coastal zone is the area influenced by the climate of Lake Erie, and the vegetation that grows as a result of this climate. When considering the coastal zone it is important to consider the entire Lake Erie watershed; with rivers as large as the Grand River, which flows 300 kilometres through 38 municipalities before reaching Lake Erie, the Lake Erie watershed is quite large. The actions that occur upstream in the watershed have impacts on Lake Erie and the coastal zone, and the habitat corridors provided by the streams and rivers of the watershed provide important habitat for many species, including species at risk.



History, Culture & Current State of the Lake Erie Coastal Zone

The coast has long been a popular area for human settlement, inhabited for several thousand years by First Nations, and by European settlers since the 17th century. Events such as the War of 1812, and the long human history in the area mean that the Lake Erie coast has many sites of historic and cultural significance.

With a population of more than 1 million people living nearby, and many more visiting each year, it is not surprising that human activities have a large impact on the coastal zone of Lake Erie. The Lake Erie coast has been recognized as a key environment, and an area requiring special attention since the 1970s. Like many other heavily populated areas in Carolinian Canada, Canada's southern coast is subject to stress from a variety of human activities,

including fishing, recreation, and industry. Water pollution, global climate change, and invasive species are also issues facing the region².

Geology, Biology, & Ecology of the North Shore Lake Erie Coastal Zone

The north shore of Lake Erie contains three prominent and ecologically unique peninsulas, Point Pelee, Rondeau, and Long Point. These peninsulas are areas of sand, forest, marsh and wildlife, not otherwise found in the urban and agricultural landscapes of southern Ontario³. The peninsulas are visible examples of the natural geomorphologic processes that have shaped the north shore of Lake Erie, including erosion, deposition, wave and wind action.

Located in the Carolinian Life Zone, the coastal zone of Lake Erie contains species and ecosystems found nowhere else in Canada. A number of sites along the Lake Erie coast have been identified as priority sites for the conservation of biodiversity, including the Point Pelee Greater Park Ecosystem, and the Dunnville Marshes.

¹ NRCAN Natural Resources Canada. 2007. The Atlas of Canada Retrieved online from <http://atlas.nrcan.gc.ca/site/english/learningresources/facts/coastline.html#c6> Previous Source: Coordinated Great Lakes Physical Data. 1977. Cornwall, Ontario: Coordinating Committee on Great Lakes Basic Hydraulic and Hydrologic Data

² NURC National Undersea Research Center for the North Atlantic and Great Lakes. No date. Laurentian Great Lakes. Accessed June 22 2009. Available online at <http://www.nurc.uconn.edu/about/grtlakes.htm>

³ Heffernan, S. and J. G. Nelson. 1979. Land Use History, Vegetation and Planning for Long Point, Rondeau, and Point Pelee Peninsulas, Lake Erie. *Contact* 11(1): 53-79.

Carolinian Canada Coalition (CCC). 2009. Author: M. Ihrig. This factsheet is the 1st in a series about the Carolinian Canada Coastal Zone Program. Obtain copies & other publications from CCC at www.carolinian.org or 519-433-7077.

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Stretching from Toronto to Windsor, the Carolinian Life Zone of southwestern Ontario is among North America's most vibrant and fragile ecoregions. Carolinian Canada Coalition (CCC) brings together diverse sectors, people and governments to collaboratively steward southwestern Ontario's unique habitat network, green infrastructure to support thriving wild and human communities in harmony for generations. EXPLORE CAROLINIAN CANADA at www.carolinian.org 519-433-7077 (Canadian Registered Charity 83559 4722 RR0001)