



BACKGROUND

Climate Change: PEI examined how rising ocean levels coupled with an increased frequency of storms have been negatively impacting the residents of nearby coastal communities. Both the biodiversity of the coastal ecosystem and island residents who own waterfront properties are being affected.

CURRICULAR CONNECTIONS:

Grade 8: *Water Systems on Earth (311-9, 311-10),*
Environmental Science 12: Unit 2 (Sustainable Development) and Unit 3 (Investigating Environmental Issues)

PROJECT

The high rate of coastal erosion on PEI can negatively affect property values, biodiversity, and infrastructure if steps are not taken to mitigate the causes of erosion. The PEI provincial government has commissioned several studies and employs staff to deal with this issue on a day-to-day basis. The following project will have you and your group selecting a section of the island, determining what the erosion risks are to that area, and how they can be mitigated.

Your task is to pick approximately 150 km of coastline on the island and determine its general geology, the nearby population density, and local biodiversity. Using the following websites as a starting point, find all the information you can and summarize into a short presentation for your class.

- <http://www.gov.pe.ca/environment/shoreline-erosion>
- <http://atlanticadaptation.ca/pei-erosion-hazardmapping>



DELIVERABLES

A completed presentation that includes the following themes:

1. Visual location of your coast line
2. Local towns or communities and details on their local economy
3. Local flora and fauna
4. What locals or the government are doing to mitigate the risk of erosion
5. Opinions and predictions of how increased erosion and saltwater intrusion could specifically affect the area.

CONCEPT QUESTIONS

1. How does the geology of PEI influence the rate of erosion? Why don't New Brunswick or Nova Scotia have the same issues with erosion?
2. What was some of the evidence presented that the rate of coastal erosion on PEI is having negative consequences?
3. Why is salt water intrusion of such great concern for the residents on PEI compared to other coastal areas?

FOR MORE INFORMATION VISIT:

WWW.FUNDY-BIOSPHERE.CA



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Fundy Biosphere Reserve
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