

# Module 12: Oceanography

## Topic 4 Content: Methods to Reduce Erosion Notes

### Introduction

#### Methods to Reduce Erosion

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Over time, humans have engineered many different ways to reduce or slow down the effects of erosion by the ocean. In this interactivity, click each of the images in the media panel to learn about the different methods that are used to reduce the effects of coastal erosion.



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### Breakwater

#### Methods to Reduce Erosion

##### Breakwater

Breakwaters are structures that are built offshore to stop the erosive power of waves. In most cases, the breakwater resembles a "T" shape. After the breakwater is constructed, sand will deposit on a beach instead of continuing to erode.



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### Beach Nourishment

#### Methods to Reduce Erosion

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Beach nourishment can occur in several different ways. Sometimes, sand is just taken from one beach location and relocated to an area of the beach that experienced erosion. Other times, sand is pumped from a ship back to the shore. This process is called dredging.



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### Seawall

**Methods to Reduce Erosion**

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A seawall is large wall built offshore to protect an area from the erosive power of waves.



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**Beach Groin or Jetty**

**Methods to Reduce Erosion**

**Beach Groin or Jetty**

A groin is a short wall built at a 90-degree angle to the shoreline in an effort to collect moving sand. Normally, a beach will have several groins, or jetties, to trap sand moving parallel to the shoreline. Beach groins can be constructed from wood pilings, large rocks, or cement.



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