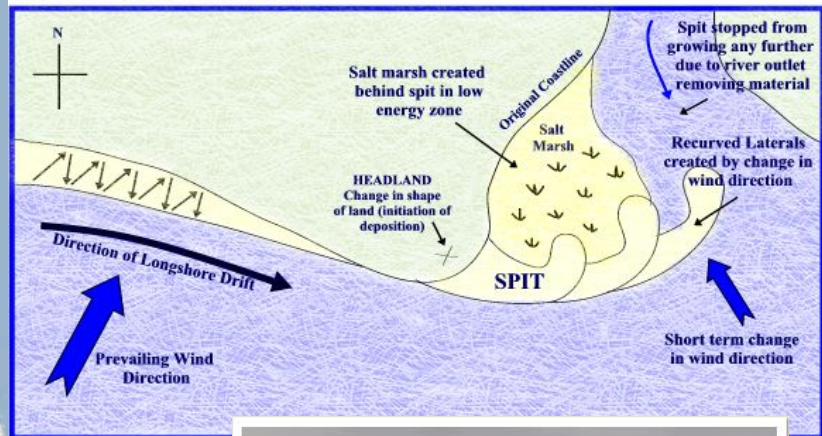


The Spit – Coastal Geology

The Spit is located at the mouth of the North and South Rivers. This is where the two rivers meet and enter the ocean. The currents here are very dangerous and should not be navigated by paddle boats. The Spit is part of a barrier beach system. The mouth of the rivers was not always located here. The “old” mouth of the North and South Rivers is further upstream of the South River at Rexhame beach. The “new inlet” where the mouth is today was formed in 1898 when a northeaster named the “Portland Gale” broke through the barrier beach at this location. Facing the ocean from the Spit to the left is Third Cliff in Scituate and to the right is Fourth Cliff, which is also Scituate although they are not connected by land anymore before the storm in 1898 you could walk from Third Cliff to Fourth Cliff!



The Formation of a Spit



The mouth of the rivers has changed at least 6 times that we know of since the last glaciers that formed the river valley retreated approximately 10,000 years ago. The process of breaching and closing of different mouths for the rivers will most likely not occur again because the transport of sand along the shore, called longshore drift, that feeds this system has been stopped by man's armoring of the coastline to protect homes from erosion. It is likely that the Spit will continue to roll backward in on itself as storms overwash it and eventually disappear.



The Spit is home to the endangered piping plover. Piping plovers nest on the Spit. The eggs are very hard to see. People and dogs are not allowed to enter their nesting grounds during the nesting season in order to help their survival.

Can you imagine when the two cliffs were connected by land? Note the fencing and signage around the piping plover nesting area. What else do you think is a potential danger to their eggs besides humans?