The Evolution of East Tuckernuck and West Tuckernuck Islands in 2016 due to rising sea level, winter storms and ocean waves.

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Winter Storms during 2016 have reshaped the southeastern area of Tuckernuck Island (Figure 1), often called Whale cove and Whale Point Point due to its general shape similar to a Whales mouth.

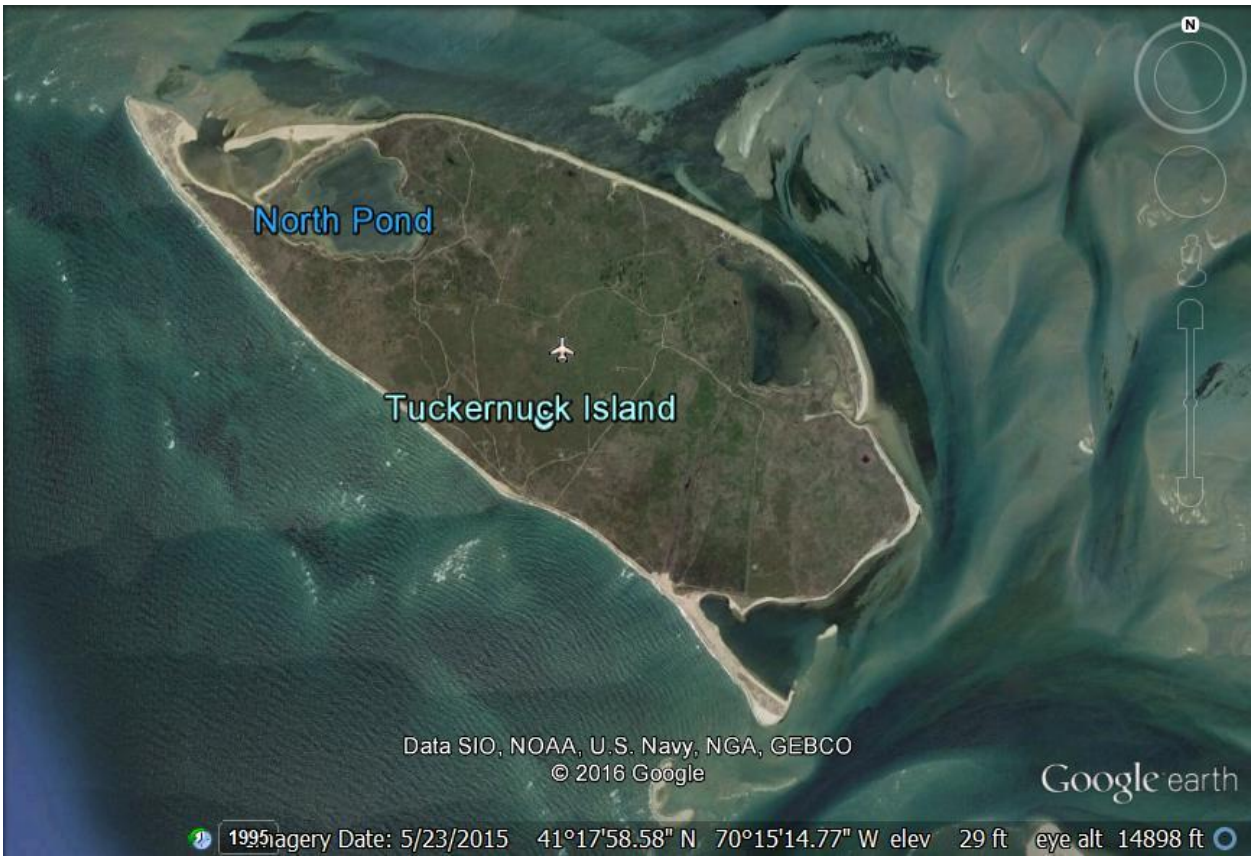

Figure 1. Tuckernuck Island May 2015 befor the 2016 winter storm changes.

An offshore sandbar merged with Whale point in January 2016 (Figure 2) after 2 winter storms and heavy surf.

Figure 2. Whale point January 2016 aerial view of southeastern Tuckernuck Island looking toward the NW. All photos were taken by Bill McGrath on February 8 and 11, 2016.

On February 11, 2016 the barrier beach south of Whale Cove was breached by waves during high tide.

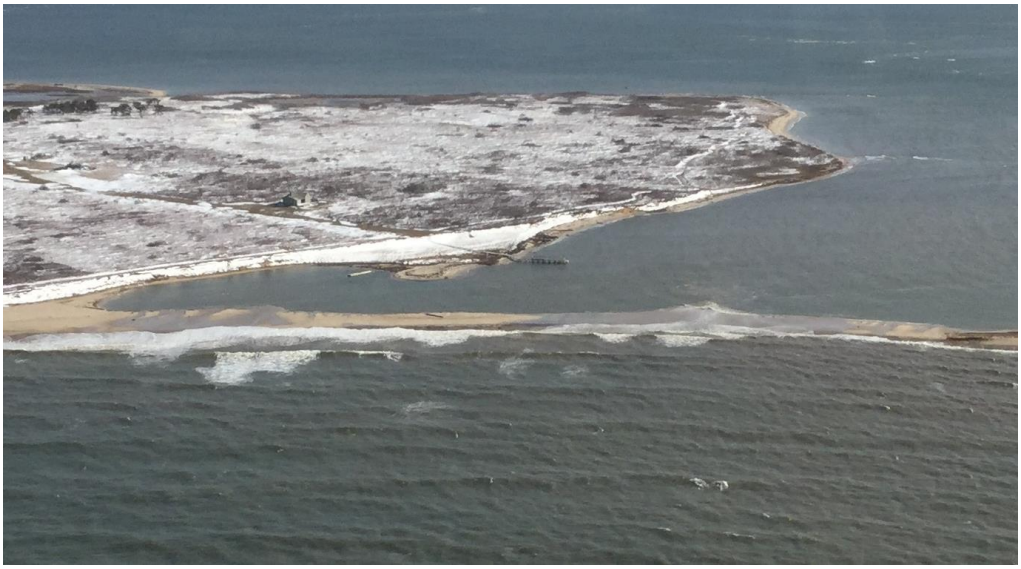

Figure 3. Photo February 11, 2016 of waves breaching the Whale Cove barrier beach leading to real-time shoreline changes on southeastern Tuckernuck Island.

Also, near the eastern end of Tuckernuck island is a generally north/south oriented wetlands slough, normally filled with freshwater *Phragmites* australis (common invasive reed) that was breached by February 2016 storm waves and filled with saltwater all the way to East Pond.

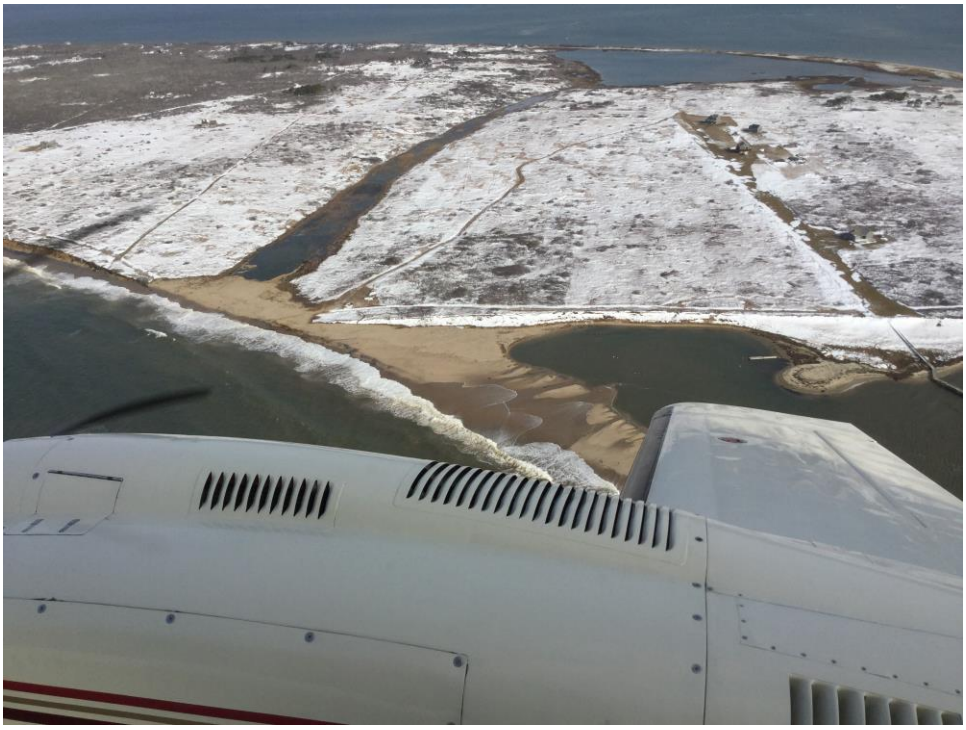

Figure 4. Slough filled with saltwater February 2016 making Tuckernuck 2 islands – East and West Tuckernuck Islands.

The flooded slough made Tuckernuck Island into 2 separate Islands now called East Tuckernuck Island and West Tuckernuck Island. Whether these changes are permanent is an important question to landowners who access Tuckernuck island via Whale Cove and historically moor their boats in that protected southeast lagoon.