

## **Erosion Rates on Ocracoke at Hatteras Inlet**

Based on DCM's most recent oceanfront erosion rate study (effective April 1, 2020), Ocracoke's oceanfront is undeveloped, and its shoreline is approximately 16.3 miles in length. Approximately 11.5 miles (70.9%) of its shoreline resulted in measured erosion, while 4.2 miles (26.1%) resulted in measured accretion. The long-term average annual shoreline erosion rate for the entire Ocracoke oceanfront is -3.2 feet per year, with a measured maximum rate of -19.8 feet per year.

Along the Outer Banks, erosion rates can change significantly (increase or decrease) within a small geographic area. The area adjacent to Hatteras Inlet (see attached map) is one of those areas where the most recent erosion rate study measured the average erosion rate to be -6.6 feet per year with a maximum rate of -19.8 feet per year. These results are very consistent with those from the 2013 and 2004 studies that measured average annual erosion rates to be -6.7 ft/yr and -5.6 ft/yr respectively.

## Legend 2020 Erosion Rates (feet/year) — Accretion Erosion 0 0.25 0.5 1 Miles