

Deal Island Shoreline Focus Area Factsheet

Boundaries of the Focus Area:

The Deal Island Shoreline focus area is located between the Tangier Sound shoreline and Laws Thorofare, and extends from Crowell Road to Parkinson Road.

Description and Uses:

This focus area provides the only access point to Wenona via Deal Island Road. The Deal Island shoreline focus area is primarily residential, but also includes several family owned and operated commercial fishing businesses. Residents include a mix of full-time and seasonal residents, many who own shoreline property on the Tangier Sound. The Tangier Shoreline includes both natural shoreline area, and bulkhead and riprap. Beach access is available on a privately-owned shoreline parcel adjacent to Middle Creek and Crowell Road, and is frequented by residents and visitors who use it for recreational purposes. Middle Creek and the surrounding marsh area are also used by recreational crabbers.

Important Historical/Heritage Features:

There are two historically significant sites in this area: the John Wesley United Methodist Church, a historic African American church that is in disrepair but being restored by the John Wesley Restoration Project; and the William Price House, one of the oldest standing dwellings in the Deal Island Peninsula area. The property is now managed by the Department of Natural Resources.

Focus Area Demographics:

2014 Census Data estimates

Population	419
Over 65	136
Under 18	36
Median household income	\$36,027
% Total population employed	22% (101 employed people, 9 self-employed)
% Population living below poverty line	23% (75% of those under 18)



The population of Deal Island was estimated to have been 1237 people in 1940, showing a drastic decline over the past century. In 2000 Deal Island had an estimated 240 occupied households (part or full time) out of 352 household units.

Information from Risk Assessment Worksheets: (**The numbers below are based on 13 responses from Deal Island shoreline area and are not representative of the Deal Island population.*)

- **Additional demographics:** 58% of respondents are full-time year-round residents. Only 11% of male heads of household and only 8% of female heads of households work in the community. Only 25% of respondents are actively engaged in local community organizations.
- **Primary concerns:** Respondents are most concerned about flooding from storms (70%), followed by flooding from tides (54%), and roadside ditches overtopping (23%). 39% are concerned about shoreline erosion and 15% are concerned about the integrity of their bulkhead or riprap.
- **Social vulnerabilities:** Most do not have children under 18 living at home, but 18% reported elderly/disabled people living at home. No one reported that they could not handle the financial burden of moderate storm damage, but 8% were uncertain.
- **Property vulnerabilities:** Almost all respondents reported that they own property. Half said their property was in the floodplain (33% were uncertain). 23% have a non-elevated HVAC unit; 36% reported having flood vents. 46% have a free-standing propane tank, but only 15% of those individuals reported that their propane tank is anchored. 73% have additional structures on site. 46% live adjacent to a shoreline; 23% live adjacent to marsh; and 23% live adjacent to ditches.
- **Shoreline vulnerabilities:** 23% of property owners have bulkhead, 46% have riprap, and 54% have natural shoreline. Only 15% of those with bulkhead said it is in good condition; 23% of those with riprap said their riprap is in good condition. No data reported on natural shoreline conditions.
- **Flooding vulnerabilities:** 46% have experienced recent flooding (within the past month), but of those who experienced flooding, 67% said that this flooding did not cause damage. 70% reported that flooding occurs during storm events; Almost 50% also indicated that flooding occurs during full moons. Wind and high tide were reported to be factors as well, but to a lesser extent. 31% have experienced minimal to moderate flood damage in the past to their primary residence; 39% have had past damage to shoreline. One person indicated that shoreline damage was significant.
- **Ditch conditions:** 39% of respondents reportedly have ditches on or adjacent to their property that are between 1-3 feet across; 46% have ditches over 3 feet in width. 39% indicated that their ditches are filled with water. No ditches were reported to have been cleaned within the last year; 23% reported ditch cleaning within the last 5-10 years and 15% reported that ditches have not been cleaned in over 20 years.

Targeted Areas of Vulnerability

- ***Deal Island Shoreline at Crowell Road:*** Significant erosion is occurring along this shoreline, which once had substantial dune structures that provided critical barriers during storm events. The forest area on backside of the shoreline is also dying due to saltwater intrusion. In several locations, the Tangier Sound is on the verge of breaking through to the tidal marsh in the Middle Creek Marsh area, which would increase wave action and erosion rates to interior sections of Deal Island, with potentially severe impacts for the Ballard Road community, a historic church, and Deal Island Road.
- ***Ballard Road Neighborhood:*** This historic African American neighborhood is located behind the Middle Creek marsh area, and is prone to roadway flooding along the only access road to the community during storm events. Much of this area is also low lying, and therefore many residents are also experiencing marsh encroachment and are vulnerable to flooding during storm events.

The area is highly vulnerable to future flooding should the Deal Island Shoreline breach. The community here is socio-economically depressed, and therefore more vulnerable to impacts.

- **Deal Island Road Adjacent to Middle Creek Marsh Areas:** While this section of the Deal Island Road does not currently experience roadway flooding, it is highly vulnerable to future flooding should the Deal Island Shoreline breach. It also provides the only access point to Wenona, an important commercial harbor for the area. Also located along this road is John Wesley UMC, which would likely be impacted by increased exposure from shoreline breach.
- **Deal Island Road Near Intersection with Ford Road:** The culverts underneath this road were recently replaced, thereby allowing additional water to pond on the north side of the road, particularly towards Osbourne Webster Road. There is a concern about installing proper flood gates that would allow water to drain, ameliorating flooding to nearby properties via ditches.

Select Focus Area Photos:



Top row: Deal Island shoreline beach erosion with ghost forest in background, photo taken from Crowell Rd.;
Bottom row: damaged bulkhead and riprap on Tangier Sound shoreline with signs of erosion (Photo Credit: L. Collier).



Top left: Flooding along Deal Island Rd. at Ford Rd. following a tropical storm during Fall 2016. Flooded shed is part of a commercial watermen business. Visible behind the shed is the Middle Creek marsh area (photo credit: M. Paolisso). **Right:** Abandoned property in Ballard Rd. neighborhood with marsh encroachment (photo credit: E. Van Dolah). **Bottom left:** Flooding during a storm on Ballard Rd. heading east towards Deal Island Road and John Wesley UMC. Middle Creek marsh is pictured on the right (photo credit: M. Paolisso).



Above: Aerial of Focus Area, looking southwest. St. John's UMC and Deal Island Rd. can be seen in lower right, and Middle Creek Marsh in top center. John Wesley UMC is in top left. (photo credit: C. Collier).