



**COMMONWEALTH of VIRGINIA**  
**DEPARTMENT OF HEALTH**  
**DIVISION OF SHELLFISH SANITATION**

*Marissa J. Levine, MD, MPH, FAAFP*  
State Health Commissioner

*109 Governor Street, 6<sup>th</sup> Floor*  
*P.O. Box 2448*  
*Richmond, Virginia 23218*

*Ph: 804-864-7487*  
*Fax: 804-864-7481*

**RAPPAHANNOCK RIVER: WARES WHARF TO MUD CREEK**  
**Growing Area # 026**  
**Essex and Middlesex Counties**  
**Shoreline Sanitary Survey**

**Date:** 14 August 2017

**Survey Period:** May 4, 2017- July 7, 2017

**Total Number of Properties Surveyed:** 101

**Surveyed By:** R.M. Thomas, W.A. McCarty III, W.I. Barrack III

**Section A: GENERAL**

This survey area extends from Reference Point 27 at Wares Wharf (State Route 611) to Reference Point 28 at Mud Creek (State Route 605). Included in this area is the Rappahannock River shoreline between these two points and Belleview Creek, Tuscarora Creek, Muddy Gut, Mill Swamp, Laytons Branch, and all of their tributaries. The survey boundary, drawn by the Division of Shellfish Sanitation, has been revised. See map for current boundary.

The topography of the area varies from 5' or less along the shoreline to a maximum of 130'± near the western edge of the survey boundary. The economy in Essex County is primarily comprised of health care, retail trade, government agencies, and manufacturing. The Middlesex County economy is similar with government agencies, retail trade, health care, and construction being the top employers. According to the 2016 U.S. Census Bureau report, Essex County population decreased 0.2% from April 1, 2010 – July 1, 2016 to 11,123 individuals. The same report stated that the Middlesex County population declined 1.7%, from April 1, 2010 – July 1, 2016 to 10,778. It is important to note that some of the properties along the shoreline and in various subdivisions are only seasonally occupied.

Since the previous survey in 2009, this area has been subjected to heavy storm damage. In February 2016, an EF-3 tornado with winds up to 140 miles per hour cut a 28 mile path from the Middle Peninsula to the Northern Neck. At times the tornado's path was 400-500 yards wide causing damage to over 30 homes and completely destroying at least 15. According to the State Police, more than 25 people were injured during the event; however, no fatalities were reported. This surge was the largest noted damage to the survey area since Tropical Storm Ernesto devastated the area in September 2006.

During the survey period, meteorological data indicated that 10.37" of precipitation fell. Monthly totals below were recorded by the Division of Shellfish Sanitation in White Stone, Virginia. A monthly breakdown follows:

|          |       |      |       |          |       |
|----------|-------|------|-------|----------|-------|
| May 4-31 | 6.42" | June | 3.44" | July 1-7 | 0.51" |
|----------|-------|------|-------|----------|-------|

Investigations were conducted by water in addition to the regularly scheduled random seawater sampling to identify and take samples at storm water outfall locations; to determine the location of straight pipes not observable by land; and to collect water samples at a closer proximity to the shoreline, closer together and farther upstream than regular seawater sampling. The additional water sampling was to identify areas that had unusually high fecal coliform counts to be further investigated from the shore.

Information about Middlesex County can be found on the county's website at: [www.co.middlesex.va.us](http://www.co.middlesex.va.us), including information about the Department of Planning and Community Development and adopted ordinances. The Erosion and Sediment Ordinance became effective July 20, 1994 as authorized by the Code of Virginia, Title 10.0, Chapter 5, Article 4 (10.1-560 et seq.). In 2001 an updated version of the 1994 Comprehensive Plan was introduced. A subdivision Ordinance was reprinted with revisions on February 22, 2006 and a Floodplain Ordinance was reprinted on February 20, 2007. The following quote has been copied from the Middlesex county Virginia Floodplain Ordinance:

*On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding by placement outside of designated flood zones. If placement outside of flood zones is not possible, the system shall include the use of top-seamed tanks and/or sealed septic and pump chamber tanks. All tanks subject to floatation shall be adequately anchored to prevent floatation.*

In the January 11, 2007 edition of the Southside Sentinel an article written by Tom Chillemi states that Middlesex County has initiated a program requiring private septic systems to be pumped out at least every five years. The Middlesex Board of Supervisors has established this program to comply with the December 12, 2005 Chesapeake Bay Local Assistance Board mandate which applies to systems located in the Chesapeake Bay Preservation District and installed after 1993.

The Essex County Zoning Ordinance Section XV-1.10.B.5 states:

*All on-site sewage disposal systems...shall be pumped out at least once every five years." Additional information about Essex County can be found on the county's website at [www.essex-va.org](http://www.essex-va.org).*

Copies for Bacteriological, Hydrographic and Shellfish Closure data are available at the area office or the Richmond central office for review. Copies of the current condemnation notices and maps are available via the internet at [www.vdh.virginia.gov/shellfish/](http://www.vdh.virginia.gov/shellfish/).

This report lists only those properties that have a sanitary deficiency or may have other environmental significance and can be located online at the above link. "**DIRECT**" indicates that the significant activity or deficiency may have a direct impact on shellfish waters. Data in the report are also made available to local health departments and other agencies to address items that may be of concern with their regulatory programs.

## SECTION B: SEWAGE POLLUTION SOURCES

[illegible]

## SECTION C: NONSEWAGE WASTE SITES

[illegible]

## SECTION D: BOATING ACTIVITY

[illegible]

## SECTION E: CONTRIBUTES ANIMAL POLLUTION

[illegible]

## SUMMARY

Growing Area # 026  
Rappahannock River: Wares Wharf to Mud Creek  
14 August 2017

### SECTION B: SEWAGE POLLUTION SOURCES

#### 1. SEWAGE TREATMENT FACILITIES

0 – DIRECT – None  
0 – INDIRECT – None  
0 – B.1. TOTAL

**2. ON-SITE SEWAGE DEFICIENCIES** – Correction of the deficiencies in this section is the responsibility of the local health department.

0 – CONTRIBUTES POLLUTION, DIRECT – None  
0 – CONTRIBUTES POLLUTION, INDIRECT – None  
0 – CP (Kitchen or Laundry Wastes), DIRECT – None  
0 – CP (Kitchen or Laundry Wastes), INDIRECT – None  
0 – NO FACILITIES, DIRECT – None  
0 – NO FACILITIES, INDIRECT – None  
0 – B.2 TOTAL

**3. POTENTIAL POLLUTION** – Periodic surveillance of these properties will be maintained to determine any status change.

0 – POTENTIAL POLLUTION – None

### SECTION C: NON-SEWAGE WASTE SITES

#### 1. INDUSTRIAL WASTE SITES

0 – DIRECT – None  
0 – INDIRECT – None  
0 – C.1. TOTAL

#### 2. SOLID WASTE SITES

0 – DIRECT – None  
0 – INDIRECT – None  
0 – C.2. TOTAL

#### 3. STORMWATER OUTFALLS

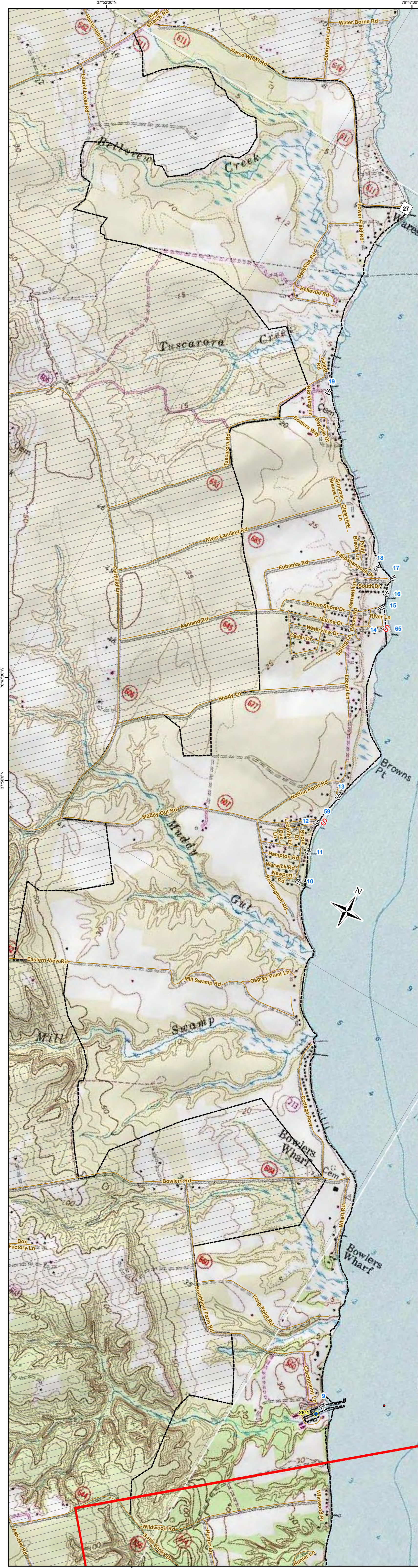
2 – DIRECT – # 59, 65  
0 – INDIRECT – None  
2 – E. TOTAL

### SECTION D: BOATING ACTIVITY

1 – MARINAS – # 9  
6 – OTHER PLACES WHERE BOATS ARE MOORED – # 2, 3, 5, 8, 10, 11  
12 – UNDER SURVEILLANCE – # 1, 4, 6, 7, 12, 13, 14, 15, 16, 17, 18, 19  
19 – D. TOTAL

### SECTION E: CONTRIBUTES ANIMAL POLLUTION

0 – DIRECT – None  
0 – INDIRECT – None  
0 – E. TOTAL



Virginia Department of Health  
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**Rappahannock River:  
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Shoreline Sanitary Survey**

**Essex and Middlesex Counties**

Date: 14 August 2017  
Survey By: R.M. Thomas, W.A. McCarty III,  
& W.I. Barrack III  
Number of Properties Surveyed: 101

0 400 800  
Yards

- Legend**
- Seawater Sampling Stations**
- Active
  - Inactive
- Shoreline Survey Deficiencies**
- Sewage Treatment Facility - Direct
  - Sewage Treatment Facility - Indirect
  - Contributes Pollution - Direct
  - Contributes Pollution - Indirect
  - Contributes Pollution (kitchen or Laundry wastes) - Direct
  - Contributes Pollution (kitchen or Laundry wastes) - Indirect
  - No Facilities - Direct
  - No Facilities - Indirect
  - Potential Pollution
  - Industrial Wastes, Direct
  - Industrial Wastes, Indirect
  - Solid Waste Dumpsite - Direct
  - Solid Waste Dumpsite - Indirect
  - Boating Activity
  - Contributes Animal Pollution - Direct
  - Contributes Animal Pollution - Indirect

Geographic coordinates in NAD83 datum;  
shown in degrees, minutes & seconds.