



# COMMONWEALTH of VIRGINIA

## Department of Health Division of Shellfish Safety

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### **LITTLE BAY AND ANTIPOISON CREEK Growing Area # 017 Lancaster County Shoreline Sanitary Survey**

**Date:** 14 February 2019

**Survey Period:** October 15, 2018 – January 16, 2019

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

**Total number of properties surveyed and samples analyzed:** 226

#### **SECTION A: GENERAL**

This survey area extends from Reference Point 17 at the first point south of Tabbs Creek to Reference Point 18 at North Point, including Fleet's Bay shoreline between these two points, Little Bay [Antipoin Creek (Harper's Creek)], and all of their tributaries.

The topography of the area varies in elevations from 5' or less along the shoreline to a maximum of 20' near the western edge of the survey boundary. The economy is based on agriculture, commercial fishing, recreation and service oriented businesses. The population density is moderate with the heaviest concentrations in eastern White Stone. Most of the properties along the shoreline are vacation homes and are seasonally occupied.

Meteorological data indicated that the area received a total rainfall of 13.50" for the survey period. A monthly breakdown is as follows:

|                  |       |          |       |          |       |                 |       |
|------------------|-------|----------|-------|----------|-------|-----------------|-------|
| Oct. 15-31, 2018 | 1.96" | November | 5.65" | December | 4.03" | Jan. 1-16, 2019 | 1.86" |
|------------------|-------|----------|-------|----------|-------|-----------------|-------|

At the beginning of the survey, inspectors reviewed the available literature from prior reports, public works and online resources to characterize land use, drainage patterns, and established nearshore seawater stations. Properties identified in the previous survey as having sanitary deficiencies or other environmental significance were revisited to evaluate their current status. All roadways and navigable shoreline within the survey boundary were visually inspected to identify potential pollution sources requiring further investigation.

Nearshore seawater stations were established to survey the full extent of waters beyond routine classification stations. Stations were created in closer proximity to the shoreline and farther upstream than routine stations and are intended to evaluate drainage entry points of potential pollution sources. Station data were analyzed to compare relative concentrations of fecal indicator bacteria within the waterway to identify potential onshore sources of contamination. Areas with elevated concentrations of fecal indicator bacteria were surveyed onshore using a property-by-property approach. Surveyors interviewed

occupants and examined properties for evidence of pollution sources within the immediate watershed.

Hydrographic data and Ebb current windows are shown in the table below. Maps of the Enterococcus sampling are shown at the conclusion of this report.

| Area 17 Nearshore Sampling |           |             |               |                                | Rainfall in Inches |                   |                   |
|----------------------------|-----------|-------------|---------------|--------------------------------|--------------------|-------------------|-------------------|
| Sample dates               | High Tide | Ebb Current | Sampling time | Enterococcus range (MPN/100ml) | Day of             | Previous 48 hours | Previous 72 hours |
| 10/16/18                   | 4:03 a    | 7:16-1:22   | 10:27-12:33   | <10-448                        | 0.07               | 0.03              | 0.05              |
| 10/30/18                   | 2:44 a    | 6:05-11:40  | 10:01-11:46   | <10-31                         | 0.00               | 0.02              | 0.06              |
| 11/1/18                    | 4:46 a    | 8:34-1:58   | 9:04-10:50    | <10-448                        | 0.00               | 0.00              | 0.00              |
| 11/13/18                   | 1:36 a    | 4:44-10:38  | 9:06-10:30    | <10-4,352                      | 0.68               | 0.50              | 0.00              |
| 11/19/18                   | 6:59 a    | 10:41-4:12  | 10:43-12:36   | <10-85                         | 0.00               | 0.00              | 0.00              |
| 12/3/18                    | 6:48 a    | 10:47-4:09  | 10:28-1:20    | <10-218                        | 0.00               | 0.04              | 0.04              |
| 12/5/18                    | 8:12 a    | 12:26-5:48  | 12:58-2:04    | <10-20                         | 0.00               | 0.00              | 0.00              |
| 12/17/18                   | 5:33 a    | 9:16-2:48   | 9:19-11:43    | <10-31                         | 0.07               | 0.49              | 0.23              |
| 1/15/19                    | 4:24 a    | 8:37-2:12   | 9:51-12:01    | <10-583                        | 0.00               | 0.26              | 1.74              |

Copies of Bacteriological and Shellfish Closure data are available at the area office for review. This report lists only those properties that have a sanitary deficiency or other environmental significance. "***DIRECT***" indicates that the significant activity or deficiency has a direct impact on shellfish waters. Data reports are made available to local health departments and other agencies to address items that may be out of compliance with their regulatory programs. Copies of VPDES Permits and inspections are available at the Department of Environmental Quality, Tidewater Regional Office (DEQ/TRO).

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/).

## SECTION B: SEWAGE POLLUTION SOURCES

[illegible]

# Shoreline Survey # 017

## SECTION C: NONSEWAGE WASTE SITES

[illegible]

## SECTION D: BOATING ACTIVITY

[illegible]

# Shoreline Survey # 017

## SECTION E: CONTRIBUTES ANIMAL POLLUTION

[illegible]

## SUMMARY

Growing Area # 017, Little Bay and Antipoison Creek  
14 February 2019

### 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

1 – DIRECT – # W7

0 – INDIRECT – None.

1 – C.1. TOTAL

#### 2. SOLID WASTE SITES

0 – DIRECT – None.

0 – INDIRECT – None.

0 – C.2. TOTAL

#### 3. STORMWATER OUTFALLS

0 – DIRECT – None.

0 – INDIRECT – None.

0 – E. TOTAL

### SECTION D: BOATING ACTIVITY

1 – MARINAS – # W5

4 – OTHER PLACES WHERE BOATS ARE MOORED – # W1, W2, W3, W4

1 – UNDER SURVEILLANCE – # W9

6 – D. TOTAL

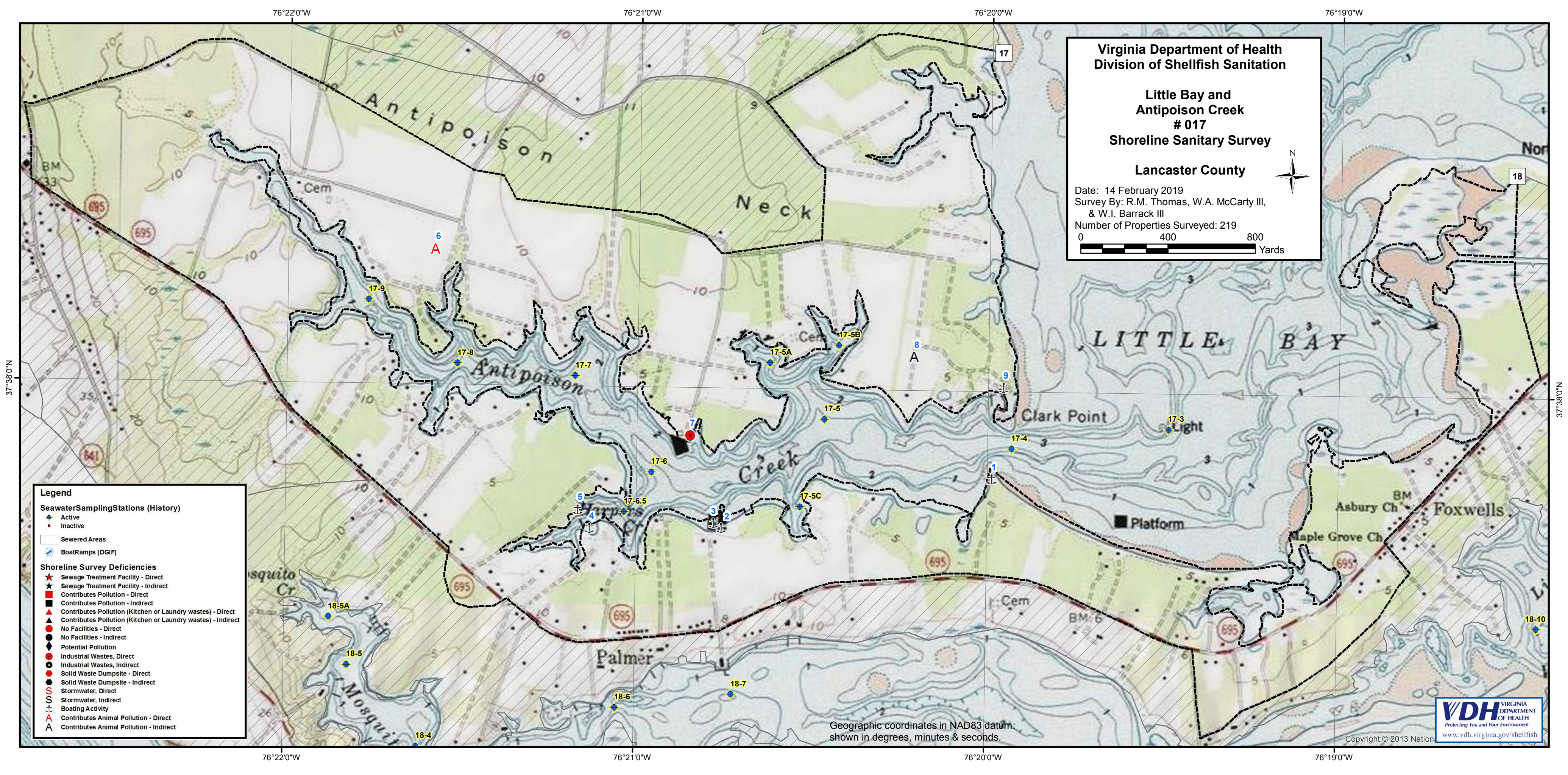
### SECTION E: CONTRIBUTES ANIMAL POLLUTION

1 – DIRECT – # W6

1 – INDIRECT – # W8

2 – E. TOTAL





**Virginia Department of Health**  
**Division of Shellfish Sanitation**

**Little Bay and**  
**Antipoison Creek**  
**# 017**

**Shoreline Sanitary Survey**

**Lancaster County**

Date: 14 February 2019  
Survey By: R.M. Thomas, W.A. McCarty III,  
& W.I. Barrack III  
Number of Properties Surveyed: 219

0400800

Yards

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**Legend**

**SeawaterSamplingStations (History)**

- Active
- Inactive

**Sewered Areas**

**BoatRamps (DGIF)**

**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
- Stormwater, Direct
- Stormwater, Indirect
- Boating Activity
- Contributes Animal Pollution - Direct
- Contributes Animal Pollution - Indirect

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



## Near Shore Enterococcus Sampling GA # 017 - Antipoison Creek

\* Highest value was 4352 collected on November 13, 2018.

