



COMMONWEALTH of VIRGINIA
DEPARTMENT OF HEALTH
DIVISION OF SHELLFISH SAFETY

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RAPPAHANNOCK RIVER: MUD AND PARROTT'S CREEKS
Growing Area # 027
Middlesex County
Shoreline Sanitary Survey

Date: 11 January 2023

Survey Period: March 21 - November 10, 2022

Total Number of Samples Properties Surveyed and Near Shore Samples Collected: 167

Surveyed By: J. Friedman & I. Geeson

SECTION A: GENERAL

This survey area extends from Reference Point 28 at Canoe House Road to Reference Point 29 at the eastern end of Corbin Hall Road, including the Rappahannock River shoreline between these two points, Mud Creek, Parrotts Creek, Harry George Creek, Weeks Creek and all of their tributaries.

At the northern end of the survey area, between Reference Point 28 and Harry George Creek, the land rises sharply from the shoreline to approximately 50 feet near the outer boundary of the survey area. The rise is more gradual near the southern end of the survey area, stopping at about 30 feet. Agriculture, forestry, recreational boating and fishing and seafood harvesting are the basis for the local economy. The US Census Bureau reported that the population for Middlesex County remains stable over the last ten years with just under 11,000 residents.

Meteorological data indicated a total of 30.35" of rain fell during the survey period. A monthly breakdown of rainfall is as follows:

March 21-31, 2022	1.08"	April	2.18"	May	4.32"
June	4.95"	July	7.15"	August	2.81"

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 establish nearshore seawater stations. Properties identified in the previous survey as having sanitary deficiencies or other environmental significance were revisited to evaluate their current status.

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 point and nonpoint source pollution. Station data were analyzed to compare relative concentrations of fecal indicator bacteria within the waterway to identify potential onshore sources of contamination.

Hydrographic data, sampling times and range of enterococcus concentrations measured are shown in the table below. Maps of the enterococcus sampling are shown at the conclusion of this report.

Growing Area # 27 Nearshore Sampling						Rainfall in inches	
Sample dates	High Tide*	Ebb Current	Sampling time	Enterococcus range (MPN/100ml)	Day of	Previous 24 hours	Previous 7 days
4/26/22	9:30	12:08	10:46 - 13:29	<10 - 591	0.33	0	<u>0</u>
5/12/22	9:26	11:47	10:08 - 14:20	<10 - 259	<u>0.04</u>	<u>0</u>	<u>0.5</u>
5/24/22	8:05	10:39	8:53 - 12:16	<10 - 980	<u>0.98</u>	<u>0.11</u>	<u>0.42</u>
5/25/22	9:02	11:29	9:54 - 11:38	<10 - 2187	<u>0</u>	<u>0.98</u>	<u>1.4</u>
8/8/22	8:50	10:44	10:02 - 11:38	<10 - 52	0	0	0.34
Total rainfall for nearshore sampling period						17.09"	

* High tide estimated from Urbanna Creek Entrance

**Slack ebb current estimated Waterview, 1.3 miles NNE of DSS sampling station # 27-4.

Information in this report is gathered by and primarily for use by the Division of Shellfish Safety, Virginia Department of Health to fulfill its responsibilities of shellfish growing area supervision and classification. However, the data is also made available to various agencies participating in shellfish program coordinated activities or other interested parties.

Copies of VPDES permits and inspections are available at the Department of Environmental Quality. A directory and interactive map are available via the internet at <https://www.deq.virginia.gov/permits-regulations/permits/water/surface-water-virginiapollutant-discharge-elimination-system>

Copies of the current condemnation notices and maps are available via the Internet at <https://www.vdh.virginia.gov/shellfish/>

This report lists only those properties which have a sanitary deficiency or have other environmental significance. **"DIRECT"** indicates that the significant activity or deficiency has a direct impact on shellfish waters.

SECTION B: SEWAGE POLLUTION SOURCES

[illegible]

SECTION C: NONSEWAGE WASTE SITES

[illegible]

Shoreline Survey # 027

SECTION D: BOATING ACTIVITY

[illegible]

SECTION E: CONTRIBUTES ANIMAL POLLUTION

[illegible]

SUMMARY

Growing Area # 027

Rappahannock River: Mud and Parrotts Creeks

11 January 2023

SECTION B: SEWAGE POLLUTION SOURCES

1. SEWAGE TREATMENT FACILITIES

0 – DIRECT – None.

0 – INDIRECT – None.

0 – B.1. TOTAL

2. ON-SITE SEWAGE DEFICIECIES – Correction of 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

0 – DIRECT – None.

0 – INDIRECT – None.

0 – E. TOTAL

SECTION D: BOATING ACTIVITY

0 – MARINAS – None.

4 – UNDER SURVEILLANCE – # 125, 147, 162, 163

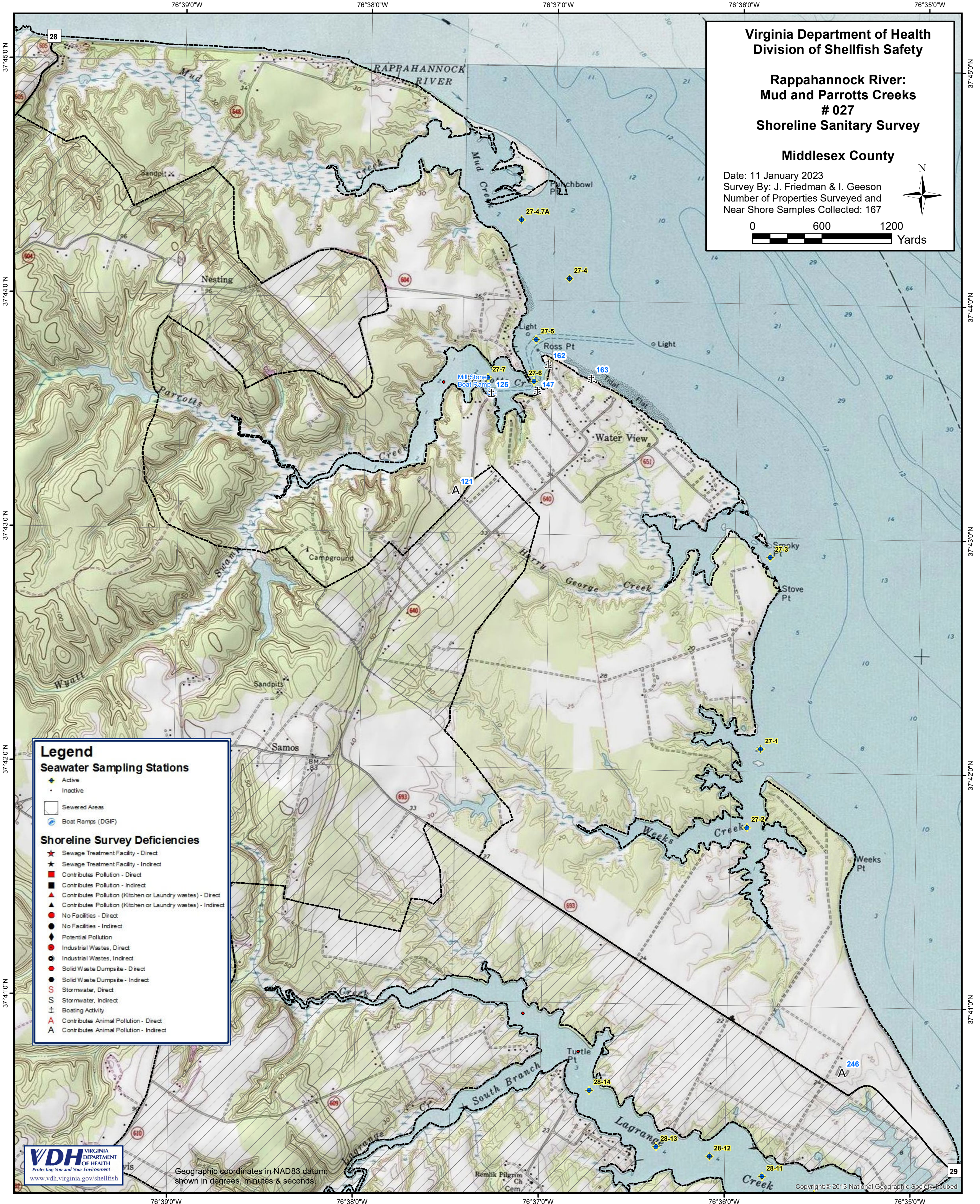
4 – D. TOTAL

SECTION E: CONTRIBUTES ANIMAL POLLUTION

0 – DIRECT – None.

2 – INDIRECT – # 121, 246

2 – E. TOTAL



Virginia Department of Health
Division of Shellfish Safety

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Mud and Parrotts Creeks
027
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Middlesex County

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06001200

Yards

N

Legend

Seawater Sampling Stations

Active

Inactive

Sewered Areas

Boat Ramps (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

S Stormwater, Direct

S Stormwater, Indirect

⚓ Boating Activity

⚓ Contributes Animal Pollution - Direct

A Contributes Animal Pollution - Indirect

VDH

VIRGINIA
DEPARTMENT
OF HEALTH

Protecting You and Your Environment

www.vdh.virginia.gov/shellfish

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

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**Near Shore Enterococcus Sampling
Growing Area # 027 -
Rappahannock River:
Mud and Parrotts Creeks
Middlesex County**

* Highest value was 2187 collected on 5/25/22.

