COMMONWEALTH of VIRGINIA
Department of Health
P O BOX 2448 RICHMOND, VA 23218 1-800-828-1120

Growing Area #026A
RAPPAHANNOCK RIVER: TAPPAHANNOCK BRIDGE TO WARES WHARF
ESSEX COUNTY
SHORELINE SANITARY SURVEY

Date: 10 July 2025
Survey Period: December 12, 2024 – July 10, 2025
Total Number of Properties Surveyed and Near-Shore Samples Collected: 45
Surveyed By: M. Farnham, J. Friedman

SECTION A: GENERAL

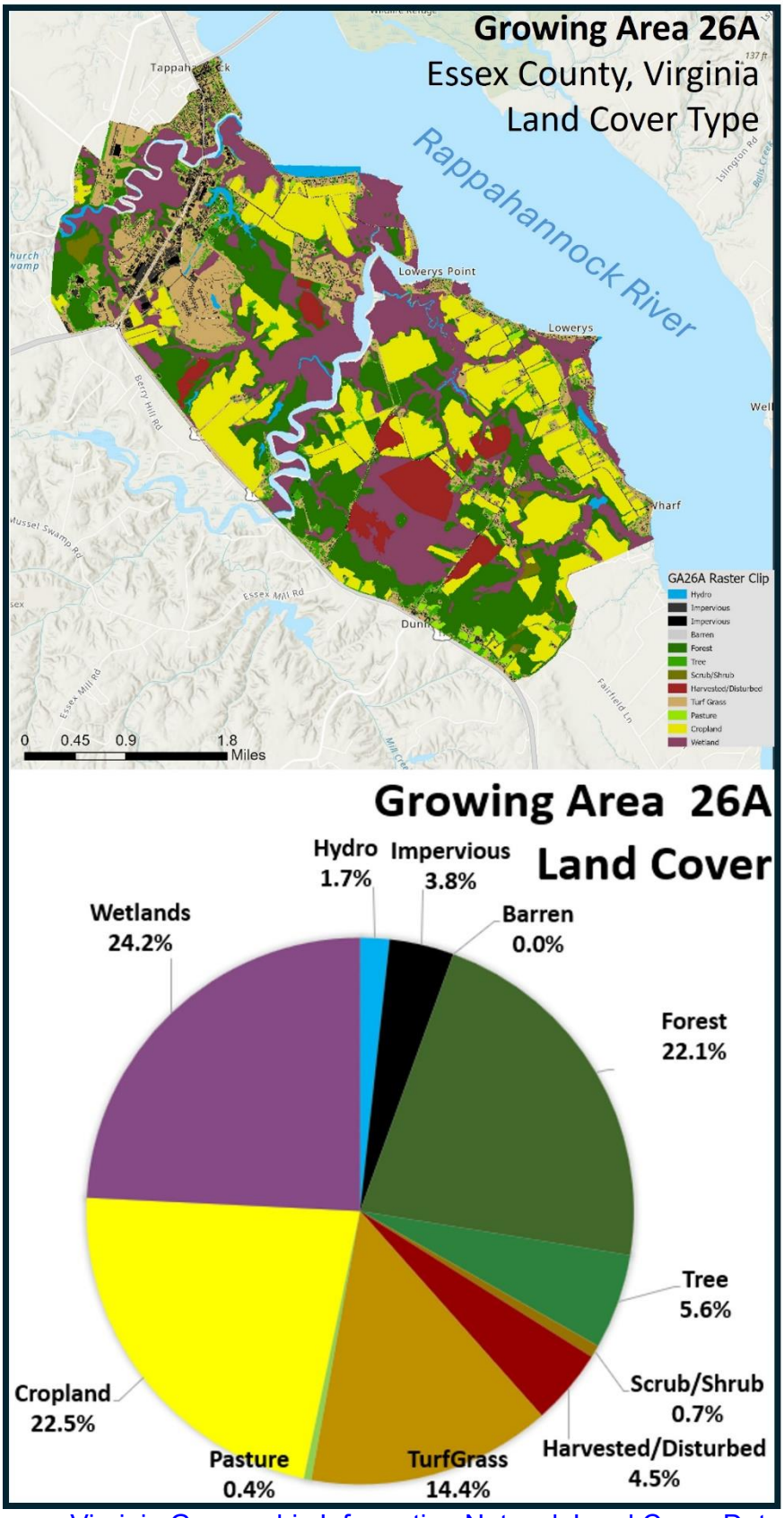
This survey includes approximately 7 miles of the Rappahannock River shoreline as well as Hoskins and Piscataway Creeks and their tributaries. The survey area extends from the upstream extent at the Route 360 Downing Bridge in Tappahannock, downstream to the Dominion Energy electric transmission line crossing between Wares Wharf and Accakeek Point. Inland, the survey area extends west to Route 17 Tidewater Trail and the majority of the town of Tappahannock.

For the most up-to-date Classification map, see Virginia Shellfish Classification Map

For the Growing Area Boundary Map, see: Virginia Shellfish Growing Area Boundary Map

Population and Landcover:
The topography of the area surveyed begins at the shoreline of the Rappahannock River and increases to 50 feet near the western edge of the survey boundary line. There are several subdivisions located within the survey area. A portion of the survey area is connected onto the Tappahannock Wastewater Treatment Plant which discharges into Hoskins Creek, with the remainder served by onsite sewage systems.

The 2020 census reported that there are an estimated 3,295 residents in Growing Area 26A with a population density is 244 residents per square mile. Within Growing Area 26A there are 1,859 housing units. Land Cover data are shown in the map below and summarized and in the following pie chart. Much of the growing area can be characterized as semirural with the majority of the population being found in Tappahannock along with communities along the Rappahannock riverfront.



Source: [Virginia Geographic Information Network Land Cover Dataset]

Rainfall Data:
Meteorological data indicated that 26.2" of rain fell during the survey period. A monthly breakdown is as follows:

Date range	Cumulative Rainfall (inches)	Avg. Monthly rainfall (2015-2024)
December 2024	1.89	3.40
January 2025	1.62	3.66
February 2025	6.06	3.08
March 2025	2.97	3.36
April 2025	4.51	3.21
May 2025	6.85	4.89
June 2025	2.32	5.42

Nearshore Water Sampling:
For this survey, nearshore seawater stations were established to assess navigable waters beyond the routine classification stations. These stations were positioned closer to the shoreline and farther upstream than the regular stations, with the goal of evaluating drainage entry points for potential point and nonpoint source pollution. Data from these stations were analyzed to compare fecal indicator bacteria (FIB) concentrations in the waterway and identify possible onshore contamination sources.

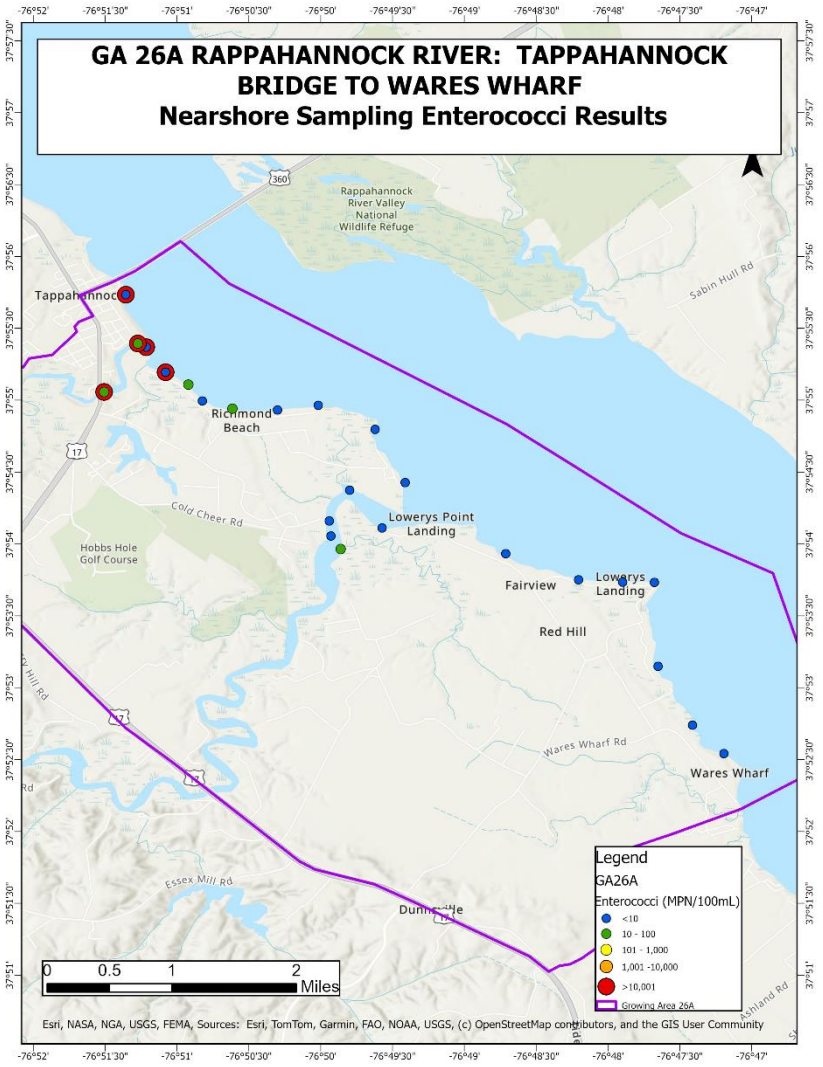
The table below shows hydrographic data, sampling times, and the range of enterococci concentrations measured.

Growing Area # 26A Nearshore Sampling					Rainfall (inches)		
Sample dates	Sampling time	High Tide*	# of boats	Enterococci range (MPN/100ml)	Day of	Previous 24 hours	Previous 7 days
12/10/24	9:31 AM – 12:09 PM	8:39 AM	1	<10 - 30	0.01	0.03	0.03
12/12/24	9:38 AM – 11:13 AM	10:43 AM	1	259->24,196	0	1.26	1.30
3/27/25	9:35 AM - 11:57 AM	12:48 PM	1	<10 - 97	0	0.01	0.84
*High Tide estimated from: NOAA ID 8635881-Tappahannock, VA					Total Rainfall: 12/10/24- 3/27/25: 12.51"		

Nearshore Sampling Summary:
Two collection events (12/10/24 & 12/12/24) were conducted around the Hoskins Creek area as sampling station 26A-15 is one of the highest fecal coliform routine stations in the region. The 12/12/24 collection was conducted after a large rain event with 1.26” inches of rain falling within the prior 24hrs. All of those enterococci samples results came back over the limit of detection for the IDEXX Enterolert testing (>24,196 MPN/100mL). Just two days prior (12/10/24) these same sampling sites were <30 (MPN/100mL) under dry weather conditions.

One additional full round of nearshore samples was collected across the growing area on 3/27/25. All these samples came back below 100 (MPN100ml) with the highest sample being 97 (MPN/100mL) just below the Tappahannock Blvd Bridge.

These sampling results indicate there could be some wet weather driven contamination that occurs within Hoskins creek and its downstream waters into the Rappahannock River following significant rain events. Hoskins Creek is currently classified as prohibited due to the Tappahannock Wastewater Treatment Plant that discharges into the creek.



Notable Events Since Prior Shoreline Survey:
On July 9, 2025 a power outage at the Tappahannock Wastewater Treatment Plant due to a lightning strike led to a discharge of approximately 725,000 gallons of partially treated sewage into Hoskins Creek. A shellfish closure was not necessary due to the size of the existing Condemnation covering all of Hoskins Creek and ~5000 acres of the adjacent Rappahannock River, but a recreational swimming advisory was issued by VDH out of an abundance of caution. That advisory was lifted on July 16, based on Virginia DEQ sampling collections on July 14, 2025 that indicated that bacteria concentrations had returned to background levels. No illnesses were reported as a result of this incident.

Marinas and Additional Marine Structures:
All marine structures (docks, piers, bulkheads) with a total length of 200' (double sided) or 330' (single side) within Growing Area 26A were measured and evaluated to determine whether they meet the NSSP definition for a "Marina". This evaluation was conducted using field observations from the boat and/or with current and historic satellite imagery to determine whether these structures are used for docking and constructed to provide temporary or permanent docking space for more than ten (10) boats. If these structures meet the NSSP Marina definition they are documented and evaluated as a Marina (Section D). There are **3** Marinas in GA 26.

If they meet the size criteria but are determined in the field to either not be used for docking or are not constructed to accommodate more than 10 boats then they are documented as "Additional Marine Structures" on the Shoreline Survey Field Map Application. For the 26A survey, there are a total of **20** of these Additional Marine Structures.

Condemnations and Deficiencies:
Information in this report is gathered by and primarily for use by the VDH Division of Shellfish Safety and Waterborne Hazards to fulfill its responsibilities of shellfish growing area supervision and classification. However, the data are 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/water/surface-waters-vpdes and VPDES Permit Map

Copies of bacteriological, hydrographical, and shellfish closure data are available at the area field office for review. Copies of the current condemnation notices and maps are available via the internet at www.vdh.virginia.gov/shellfish/.

This report lists only those properties that have sanitary deficiencies or have other environmental significance. "***DIRECT***" indicates that the significant activity or deficiency has a direct impact on the shellfish growing area waters. Individual field forms with full information on properties listed in this report are on file in the Richmond Office of the Division of Shellfish Safety and are available for reference until superseded by a subsequent survey of the area. Data in the report are also made available to local health departments and other agencies to address items that may be out of compliance with their regulatory programs.

SECTION B: SEWAGE POLLUTION SOURCES

SEWAGE TREATMENT FACILITIES

Field ID	Survey Date	Facility Name	Deficiency/ Pollutant Type	DEQ VPDES Permit #	Outfall Lat/Long	Site Remarks
STP1	8/27/25	Town of Tappahannock Wastewater Treatment Plant	Wastewater Treatment Plant	VA0071471	37.9110, -76.8751	400 Mill Rd. Tappahannock, VA 22560 Class II municipal sewage treatment facility with a total population served of 2,393. The treatment process includes screening and grit removal; flow equalization and sedimentation; biological nutrient removal; clarification; tertiary filtration (for TSS and phosphorus); chemical feed for pH/alkalinity, polymer and carbon source; UV disinfection; and cascade aeration before discharging into Hoskins Creek. Designed average flow of 0.8 MGD. The flow may be increased to 0.95 MGD under their Certificate to Operate in the future to accommodate additional growth capacity. Average annual flow:0.45MGD. Max Daily Flow 1.22MGD

ON-SITE AND SEWER INFRASTRUCTURE DEFICIENCIES

Field ID	Survey Date	Type	Lat/Long	Direct Impact to Shellfish waters	Actual/ Potential	Septic System Type	Structure Type	Contact (Y/N)	Site Remarks
P1	6/26/25	Potential Pollution	37.8956, -76.8033	No	Potential	Conv	Dwelling	N	Unidentified PVC drainpipe observed leaving house and entering ground. Previous 2014 survey noted drainpipe discharge location was 8' away from shoreline. Unable to make contact to verify nature of pipe or possible discharge.

SECTION C: NON-SEWAGE WASTE SITES

INDUSTRIAL SITES

Field ID	Survey Date	Type	Lat/Long	Direct Impact to Shellfish waters	Actual/ Potential	Site Remarks
I1	6/26/25	Petroleum storage	37.8950, -76.8146	No	Potential	Found onsite was a 2,000 gallon tank of diesel, a 12,000 gallon tank of offroad diesel and a 1,000 gallon tank of gasoline, all without berms.

SOLID WASTE SITES

-None-

SECTION D:
MARINAS

Field ID	Survey Date	Type	Lat/Long	Facility Name	Number of Wet Slips	Over 7 boats present	Evidence of Overnight Boaters	Site Remarks
M1	12/12/24	Community Dock	37.9291/ -76.8564	Riverside Condominiums	14	N	N	Available on-site are 14 seasonal slips/moorings Restroom facilities are located at the residents' homes.
M2	12/12/24	Private Dock	37.9198/ -76.8569	Tappahannock Warsaw Moose Lodge	11	N	N	Available on-site are 11 seasonal slips/moorings Restrooms available in the clubhouse.
M3	12/12/24	Community Dock	37.9144/ -76.8336	Riverdale Community Boathouse	12	N	N	Available on-site are 12 seasonal slips/moorings and boat ramp with electricity and water available. Restrooms at residence homes.

SECTION E:
ANIMALS
-None-

SUMMARY

Growing Area # 026A
Rappahannock River: Tappahannock Bridge to Wares Wharf
10 July 2025

SECTION B: SEWAGE POLLUTION SOURCES

1. SEWAGE TREATMENT FACILITIES

1 – DIRECT – #**STP1**
0 – INDIRECT – None
1 – B.1. TOTAL

2. ON-SITE AND SEWER INFRASTRUCTURE DEFICIENCIES– 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.

1 – POTENTIAL POLLUTION – **P1**

SECTION C: NON-SEWAGE WASTE SITES

1. INDUSTRIAL SITES

0 – DIRECT – None
1 – INDIRECT – **#I1**
1 – C.1. TOTAL

2. SOLID WASTE SITES

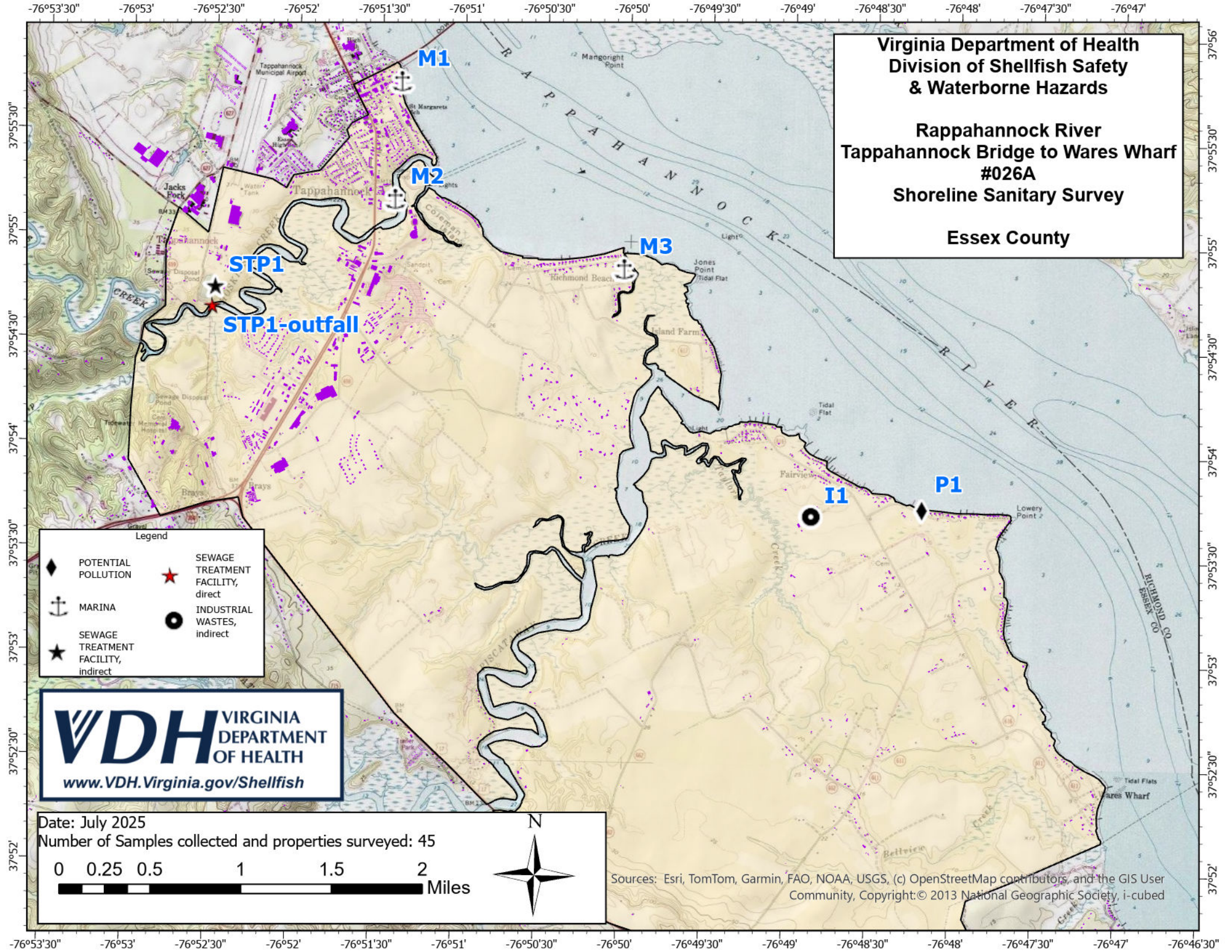
0 – DIRECT – None
0 – INDIRECT – None
0– C.2. TOTAL

SECTION D: MARINAS

3 – MARINA – **# M1, M2, M3**
3– D. TOTAL

SECTION E: ANIMALS

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


Virginia Department of Health
Division of Shellfish Safety
& Waterborne Hazards
Rappahannock River
Tappahannock Bridge to Wares Wharf
#026A
Shoreline Sanitary Survey
Essex County
M1
M2
M3
STP1
STP1-outfall
I1
P1
Legend
POTENTIAL POLLUTION
MARINA
SEWAGE TREATMENT FACILITY, indirect
SEWAGE TREATMENT FACILITY, direct
INDUSTRIAL WASTES, indirect
VDH VIRGINIA DEPARTMENT OF HEALTH
www.VDH.Virginia.gov/Shellfish
Date: July 2025
Number of Samples collected and properties surveyed: 45
0 0.25 0.5 1 1.5 2 Miles
N
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