



COMMONWEALTH of VIRGINIA
DEPARTMENT OF HEALTH
DIVISION OF SHELLFISH SAFETY

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MESSONGO AND GUILFORD CREEKS
Growing Area # 076
Accomack County
Shoreline Sanitary Survey

Date: 11 July 2022

Survey Period: November 19, 2021 – April 18, 2022

Total Number of Properties Surveyed and Near Shore Samples Collected: 128

Surveyed By: R. Snead & T. Charnock

SECTION A: GENERAL

This survey area extends from Reference Point 77 at Long Point to Reference point 78 at Ebb point, including the Chesapeake Bay shoreline between these points, Beasley Bay, Back Cove, Back Creek, Messongo Creek (Gum Branch), Rock Gut, Cattail Creek, Great Gut, Muddy Creek, (Rock Gut, Bethel Branch, and Island Field Cove), Old Cove (Bridge Gut and Justis Gut), Brewer Gut, Guilford Creek (Guilford Church Branch and Mill Branch), Young Creek (Jimmy’s Gut and Gray Ditch), and all of their tributaries.

The topography of the area is low and marshy, with maximum elevations of 8 feet near the community of Guilford. Marine flooding, and ponding of rainwater are common. The economy is based primarily upon agriculture and seafood production; poultry processing plants along Lankford Highway provide commercial employment. The rural population is relatively sparse with slight concentrations in the communities of Messongo, Hallwood, and Guilford.

The dwellings and businesses throughout the watershed are served by private septic systems. Animal activity is primarily from wildlife, with significant populations of waterfowl, deer, and small game visible during the survey period. Small livestock farms and commercial poultry farms are also present in low numbers.

Meteorological data* indicated that a total of 22.47” of rain fell during the survey period. A monthly breakdown of rainfall is listed below.

Nov. 19-30	0.42”	December	1.02”	January 2022	3.97”	February	1.25”
March	3.7”	April	1.7”	May	4.76”	June 1-5	0.43”

**Data obtained from NOAA rainfall database station # 76-22.*

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. All roadways and navigable shorelines within the survey boundary were visually inspected to identify potential pollution sources requiring further investigation.

Near-shore Enterococci sampling station locations were established to survey the full extent of waters beyond routine fecal coliform sampling stations. These 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. Sampling station data was 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 # 76 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
12/13/21	8:23	9:35	12:09-12:45	<10-20	0	0.23	0.27
12/14/21	9:13	10:31	9:15-11:16	<10-30	0	0	0.27
12/15/21	9:57	11:19	10:13-12:12	<10-10	0	0	0.27
12/16/21	10:37	11:59	11:09-11:36	<10-10	0	0	0.27
3/14/22	10:44	12:04	10:40-12:20	<10-1515	0	0	1.92
3/15/22	11:29	12:41	11:25-12:56	<10-175	0	0	1.92
3/28/22	10:26	11:31	11:02-11:41	<10-20	0	0	1.13
Total rainfall for nearshore sampling period (12/13/21 - 3/28/22) was 9.48".							

* High tide estimated from Muddy Creek Entrance.

** Slack ebb current estimated from 2.3 NM east of Watts Island.

Information in this report is gathered by and primarily for use by the Division of Shellfish Safety, Virginia Department of Health, in order 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-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/environmental-health/environmental-health-services/shellfishsafety/>

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 E: CONTRIBUTES ANIMAL POLLUTION

	GA #	Field #	Inspection Date	Deficiency or Pollution Type	Latitude	Longitude	Pollutant Remarks	Septic System Type	Structure Type	Contact	Overall Site Remarks	Locality	DSS Staff
373	76	R4	4/22/2022	CONTRIBUTES ANIMAL POLLUTION, indirect	37.904661	-75.634500	At least 5 horses in multiple pastures, multiple pens. Unchanged from previous survey.	Conv	Dwelling	N	Two story yellow vinyl house with green shutters.	Accomack	RS
4967	76	R5	5/10/2022	CONTRIBUTES ANIMAL POLLUTION, indirect	37.881096	-75.620394	Multiple Pastures and Stables, Herd of Sheep with access to Messongo Creek. Other livestock present.	Conv	Dwelling	N	Yellow 1.5 Story house with multiple pastures and stables.	Accomack	RS
365	76	R6	5/10/2022	CONTRIBUTES ANIMAL POLLUTION, indirect	37.862307	-75.629848	4 chicken houses, manure shed	NA	Agri	N	Four chicken houses.	Accomack	RS
4968	76	R7	5/10/2022	CONTRIBUTES ANIMAL POLLUTION, indirect	37.861228	-75.627095	Old chicken houses converted to livestock stables and pastures.	Conv	Agri	Y	White two story house, red roof, multiple outbuildings. Old chicken houses converted to livestock stables.	Accomack	RS
357	76	R10	6/17/2022	CONTRIBUTES ANIMAL POLLUTION, indirect	37.821006	-75.668612	Two chicken houses	NA	Agri	N	Two chicken houses.	Accomack	RS
4979	76	R11	6/21/2022	CONTRIBUTES ANIMAL POLLUTION, indirect	37.849663	-75.634301	20-25 horses and multiple pastures, stables, and fields. Manure is taken to fields by farmers.	Conv	Agri	Y	Kerkaken Acres horse farm.	Accomack	RS

SUMMARY

Growing Area # 076
Messongo and Guilford Creeks
11 July 2022

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.
- 2 – CP (Kitchen or Laundry Wastes), INDIRECT – # R2, R3
- 4 – NO FACILITIES, DIRECT – # C1, C2, C3, C4
- 0 – NO FACILITIES, INDIRECT – None.
- 6 – 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 DUMPSITES

- 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.
- 0 – OTHER PLACES WHERE BOATS ARE MOORED – None.
- 4 – UNDER SURVEILLANCE – # R1, R9, R12, R13
- 4 – D. TOTAL

SECTION E: CONTRIBUTES ANIMAL POLLUTION

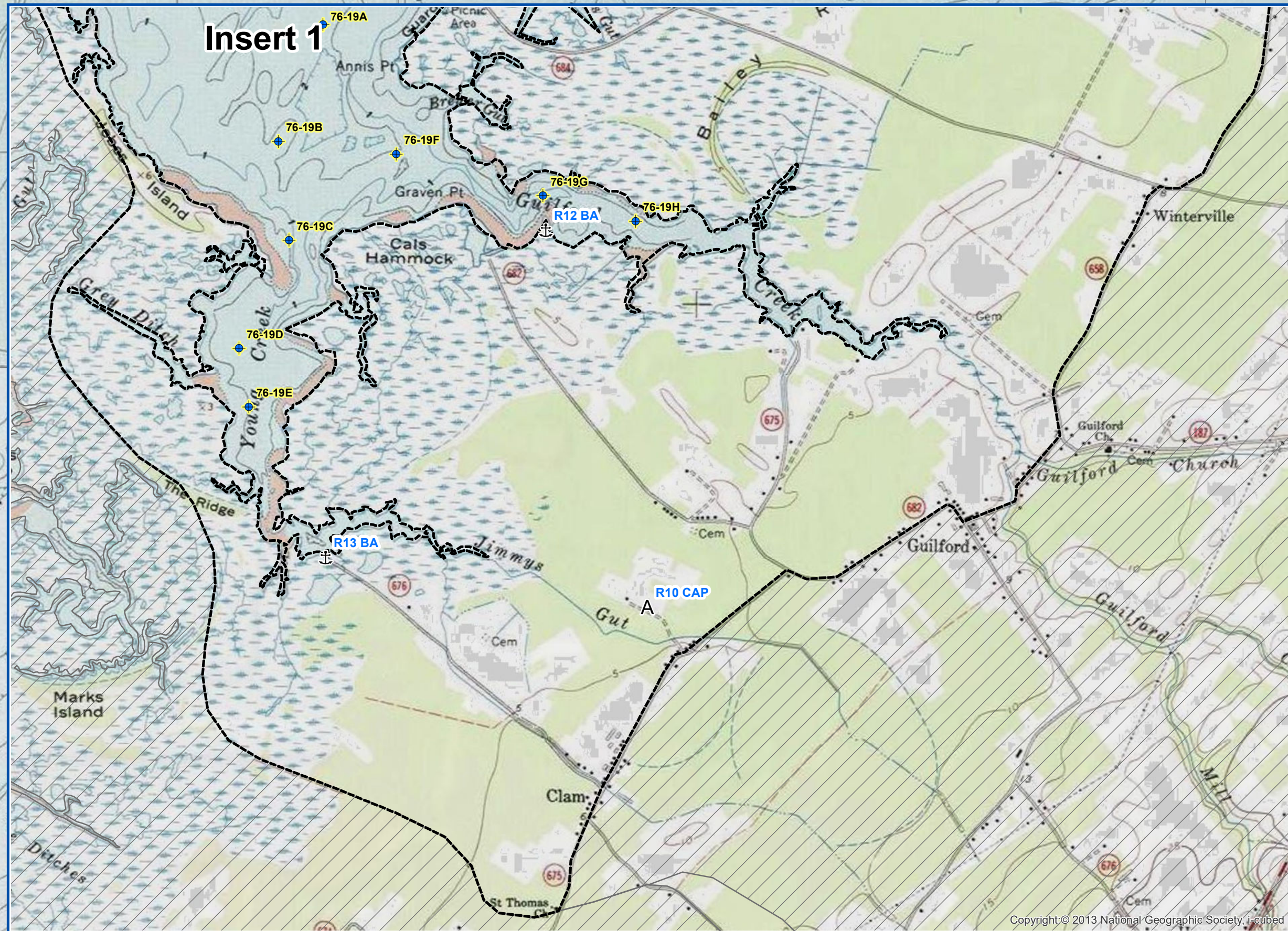
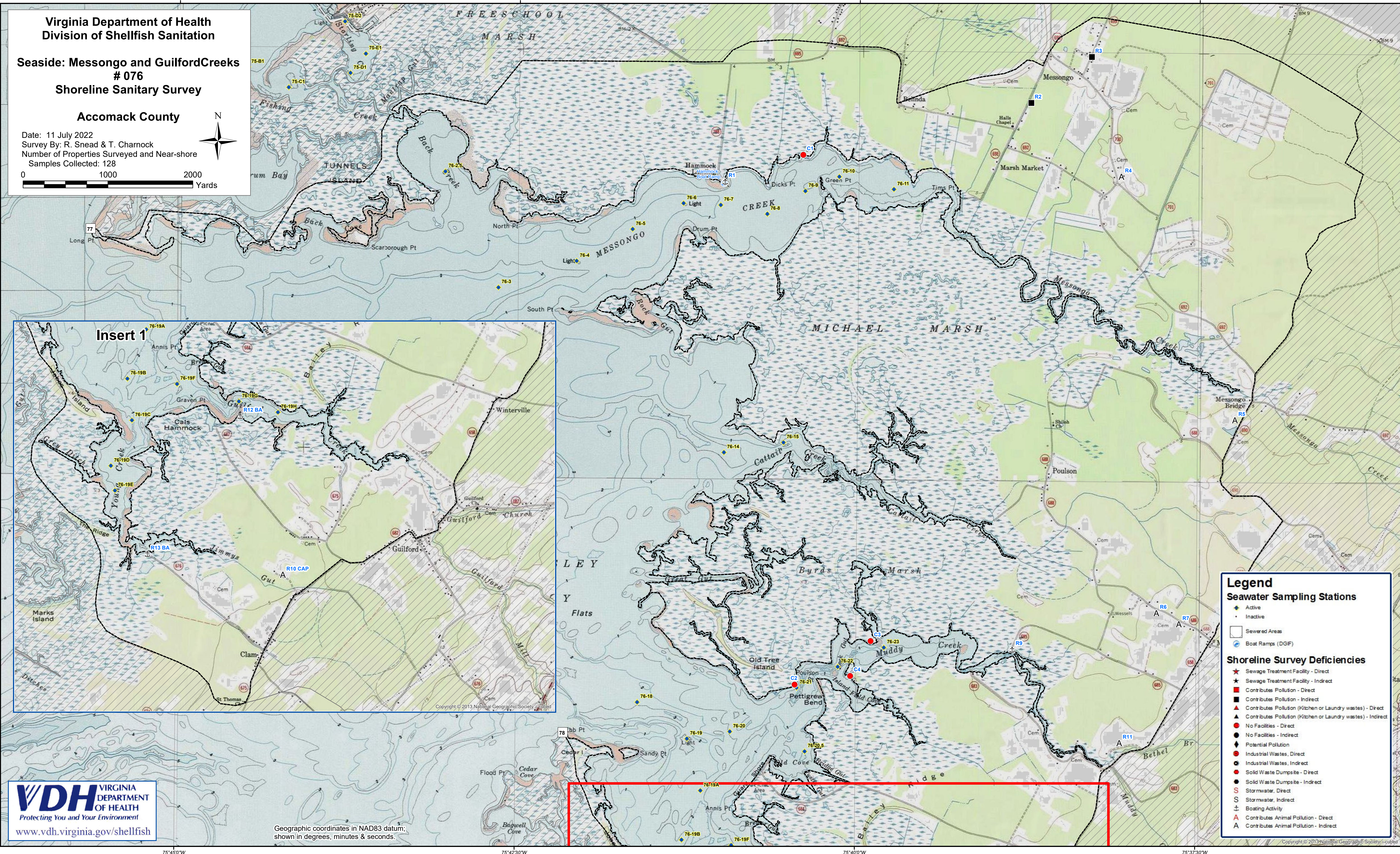
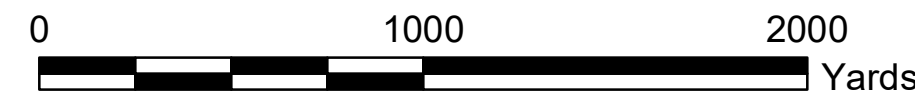
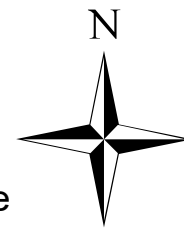
- 0 – DIRECT – None.
- 6 – INDIRECT – # R5, R6, R7, R10, R11
- 6 – E. TOTAL

Virginia Department of Health
Division of Shellfish Sanitation

Seaside: Messongo and Guilford Creeks
076
Shoreline Sanitary Survey

Accomack County

Date: 11 July 2022
Survey By: R. Snead & T. Charnock
Number of Properties Surveyed and Near-shore
Samples Collected: 128



Legend

Seawater Sampling Stations

- Active
- Inactive
- Sewered Areas
- ⚓ Boat Ramps (DGIF)

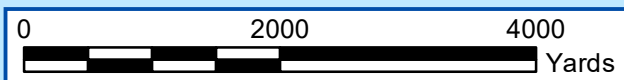
Shoreline Survey Deficiencies

- ★ 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
- A Contributes Animal Pollution - Direct
- A Contributes Animal Pollution - Indirect

Near-Shore Enterococcus Sampling

Growing Area # 076 - Seaside: Messongo and Guilford Creeks

* Highest value was 1670 collected on March 14, 2022.



Legend

Enterococcus spp. (MPN/100ml)

Sampling Dates: 12/13/21 - 3/28/22

- < 10
- 10 - 100
- 101 - 1000
- 1001 - 10000
- > 10000

