



# COMMONWEALTH of VIRGINIA

## Department of Health Division of Shellfish Safety

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### ONANCOCK AND MATCHOTANK CREEKS Growing Area # 080 Shoreline Sanitary Survey Accomack County

**Date:** 14 September 2021

**Survey Period:** December 8, 2020 – September 6, 2021

**Total Number of Properties Surveyed & Near-shore Samples Collected:** 170

**Surveyed By:** R. Snead, T. Charnock & I. Geeson

#### SECTION A: GENERAL

This survey area extends from Reference Point 80 at Ware Point to Reference Point 81 at West Point, including the Chesapeake Bay shoreline between these two points, Onancock Creek (Poplar Cove, Cedar Creek, North Branch, Central Branch (Joynes Branch), South Branch (Titlow Creek, Warrington Branch), Leatherberry Creek, Finney's Creek, Parkers Creek, and Thicket Creek), Matchotank Creek, Tarkill Creek, and all of their tributaries.

The topography varies in elevation from 0-5' along the shoreline marshes to a maximum of 40' at the inland eastern edge of the survey boundary. The population is moderate with heavier concentrations around the Town of Onancock, and in small waterfront developments between Onancock and Pungoteague Creeks. The economy is heavily agricultural, with a growing seafood industry and a notable degree of tourism and small businesses. Meteorological data indicated that the area received a total rainfall of 27.45" for the survey period.

Meteorological data indicated that the area received a total rainfall of 27.45" for the survey period. A monthly breakdown is as follows:

January	1.95"	February	4.98"	March	2.39"	April	1.03"
May	1.4"	June	4.15"	July	4.85"	August	3.79"

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 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 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 # 80 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
1/21/21	6:00	6:40	9:45-11:43	<10-31	0.00	0.00	0.19
1/25/21	9:35	10:10	10:32-12:00	<10-107	0.17	0.00	0.00
1/27/21	11:04	11:30	12:21-13:17	<10-173	0	0.18	0.35
5/5/21	8:27	8:35	10:07-10:45	<10-20	0.06	0.02	0.29
5/24/21	10:51	10:28	10:20-12:35	<10-161	0.02	0.00	0.00
6/23/21	11:28	10:55	10:57-12:38	<10-158	0.00	0.82	0.82
8/17/21	7:45	7:32	14:07-14:22	<10-<10	0.02	0.01	0.34
Total rainfall for nearshore sampling period					21.81"		

\* High tide estimated from Onancock Creek.

\*\* Slack ebb current estimated from four miles south of Watts Island.

Copies of bacteriological, hydrographic and shellfish closure data are available at the area 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/). 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.

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]

## SECTION D: BOATING ACTIVITY

[illegible]

# Shoreline Survey # 080

## SECTION E: CONTRIBUTES ANIMAL POLLUTION

[illegible]

## SUMMARY

Growing Area # 080  
Onancock and Matchotank Creeks  
14 September 2021

### SECTION B: SEWAGE POLLUTION SOURCES

#### 1. SEWAGE TREATMENT FACILITIES

1 – DIRECT – # 6  
0 – INDIRECT – None  
1 – 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.  
3 – NO FACILITIES, DIRECT – # C2, C3, C4  
0 – NO FACILITIES, INDIRECT – None  
3 – 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 – C.3. TOTAL

### SECTION D: BOATING ACTIVITY

4 – MARINAS – # R1, R2, R5, R7  
0 – OTHER PLACES WHERE BOATS ARE MOORED – None.  
1 – UNDER SURVEILLANCE – # G3  
5 – D. TOTAL

### SECTION E: CONTRIBUTES ANIMAL POLLUTION

0 – DIRECT – None.  
2 – INDIRECT – # R3, R6  
2 – E. TOTAL



Virginia Department of Health  
Division of Shellfish Sanitation

Onancock and Matchotank Creeks  
# 080  
Shoreline Sanitary Survey

Accomack County

Date: 14 September 2021  
Survey By: R. Sneed, T. Charnock  
& I. Geeson  
Number of Properties Surveyed &  
Near-shore Samples Collected: 170

00.40.8

Miles

N

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.

VDH

VIRGINIA  
DEPARTMENT  
OF HEALTH

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# GA # 080 - Onancock and Matchotank Creeks Enterococci Sampling

- Highest Sample: 173 at R072 on 1/27/21.

0 4000 8000  
Feet



## Legend

Sampling Dates: 1/21/21 - 8/17/21

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

9 September 2021