

# **COMMONWEALTH of VIRGINIA**

Department of Health Division of Shellfish Safety

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# LANCASTER, DEEP, AND MULBERRY CREEKS Growing Area # 023 Lancaster and Richmond Counties Shoreline Sanitary Survey

Date: 4 December 2019

**Survey Period:** May 20, 2019 – October 23, 2019

**Surveyed By:** R.M. Thomas, W.A. McCarty III, & W.I. Barrack III **Number of Properties and Near Shore Samples Collected**: 375

**SECTION A: GENERAL** 

This survey area extends from Reference Point 23 at the end of route 653 (Bewdley Road) to Reference Point 24 at Tarpley Point, including the Rappahannock River shoreline between these two points, Deep Creek, Mulberry Creek, Lancaster Creek, Morattico Creek and all of their tributaries. Refer to map for boundary revisions.

The topography of the area varies from 5' or less along the shoreline around Belle Island, Morattico and Simonson to a maximum of 100' inland at the boundary line (Route 3). The population in the area is moderate around Morattico, Nuttsville, Litwalton, and Simonson. Population density varies with the season as many homes along the waterfront are occupied solely on the weekends and/or during the warmer months.

Meteorological data indicated that the area received a total rainfall of 19.84" for the survey period. A monthly breakdown is as follows:

May 20-31 0.47" June 5.22" July 4.98" August 4.12" Sept. 0.55" Oct. 1-23 4.50"

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 to 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 pollution sources. Station data were analyzed and used 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 investigation. Surveyors interviewed



occupants and examined properties for evidence of these potential 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	R	Rainfall in Inches				
Sample dates	High Tide	Ebb Current	Sampling time	Enterococcus range (MPN/100ml)	Day of	Previous 48 hours	Previous 72 hours
5/20/19	1:12 am	7:42-2:50	8:56-10:40	<10-52	0.05	0.05	0.08
5/29/19	9:04 am	12:12-6:15	12:15-1:53	<10-135	0.00	0.00	0.29
7/8/19	4:44 am	8:47-2:18	9:32-11:18	<10-84	0.12	0.56	0.65
8/7/19	5:24 am	9:14-2:44	9:26-12:41	<10-860	0.08	0.10	0.45
8/19/19	2:57 am	6:43-12:13	8:38-11:18	<10-171	0.03	0.03	0.03
8/21/19	4:20 am	7:44-1:28	9:36-11:58	<10-171	1.77	1.77	1.80
8/22/19	5:03 am	8:15-2:09	9:16-11:52	<10-504	0.01	1.78	1.78
9/5/19	5:04 am	8:46-2:12	9:28-12:06	<10-609	0.02	0.02	0.02
9/26/19	10:04 am	1:43-7:08	11:32-1:40	<10-216	0.03	0.03	0.03
10/1/19	1:56 am	5:46-10:52	8:22-10:26	<10-97	0.00	0.02	0.02
10/3/19	3:42 am	7:25-12:40	8:55-11:32	<10-109	0.00	0.00	0.00
10/7/19	8:03 am	11:28-5:06	11:42-1:36	<10-132	0.00	0.02	0.02
10/10/19	10:30 am	2:05-7:39	11:38-1:49	<10-145	0.00	0.02	0.05
10/15/19	1:22 am	4:50-10:03	8:30-10:01	<10-631	0.00	0.00	0.00

The Commonwealth of Virginia, under Code Section 9VAC 10-20-120.7, specifies that onsite sewage treatment systems not requiring a Virginia Pollutant Discharge Elimination System (VPDES) permit shall:

- a. Have pump-out accomplished for all such systems at least once every five years.
  - (1) If deemed appropriate by the local health department and subject to conditions the local health department may set, local governments may offer to the owners of such system, as an alternative to the mandatory pump-out, the option of having a plastic filter installed and maintained in the outflow pipe from the septic tank to filter solid material from the effluent while sustaining adequate flow to the drain field to permit normal use of the septic system. Such a filter should satisfy standards established in the Sewage Handling and Disposal Regulations (12VAC5-610) administered by the Virginia Department of Health.
  - (2) Furthermore, in lieu of requiring proof of septic tank pump-out every five years, local governments may allow owners of on-site sewage treatment systems to submit documentation every five years, certified by a sewage handler permitted by the Virginia Department of Health, that the septic system has been inspected, is functioning properly, and the tank does not need to have the effluent pumped out of it.

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 the current condemnation notices and maps are available via the Internet at www.vdh.virginia.gov/shellfish/.

#### **SECTION B: SEWAGE POLLUTION SOURCES**

OBJEC	GA #	Field #	Inspection Date	Deficiency or Pollution Type	Latitude	Longitude	Address	Pollutant Remarks	Septic System Type	Structure Type	Contact	Overall Site Remarks	Locality	DSS Staff	Date of Correction	Correction Notes

Shoreline Survey # 023

#### **SECTION C: NONSEWAGE WASTE SITES**

овлестіо_1 #	#	nspection Deficie Date	ency or Pollution Type	Latitude	Longitude	Address	Pollutant Remarks	System Type	Structure Type	Contact	Overall Site Remarks	Locality	DSS Staff

#### SECTION D: BOATING ACTIVITY

11/8/2019	BOATING ACTIVITY	37.799239				System Type	Туре	Contact	Overall Site Remarks	Locality	Activity Type	of Wet Slips	BOATS <26'	BOATS >26'	of Live- Aboards	DSS Staff
11/9/2010		37.733239	-76.649348	3993 Hales Point Road, Farnham, VA 22460	Commercial marina and campground. Available on site are seasonal slips/moorings, fuel, water, electricity, in-out ramp, hoist, boat repair, and pumpout.	Conv	Marine	Υ	Whelan's Marina and Campground	Richmond	Marina	36	23	10	N	WB
11/8/2019	BOATING ACTIVITY	37.772079	-76.580353	1758 Bewdley Road, Lancaster, VA 22503	Former oyster plant. Portion of facility houses crab shedding plant that operates in season. Work boats are seasonally moored alongside wooden bulkhead. In-out ramp, electricity and water are on site.	Conv	Marine	N	W. R. Pittman & Son	Lancaster	OPWBM	5	1	2	N	WB
11/8/2019	BOATING ACTIVITY	37.786333	-76.612509	480 Mulberry Creek Road, Lancaster, VA 22503	White block 1 story building used primarily for crab shedding operation. Services provided are an in-out ramp, electricity and restrooms next door at owners home.	Conv	Marine	Υ	Barrack Seafood	Lancaster	OPWBM	4	2	0	N	WB
11/8/2019	BOATING ACTIVITY	37.788662	-76.618188	123 Waterview Road, Lancaster, VA 22503	White block building used primarily for crab shedding. A triple vault privy is on the property. Services provided are water and electricity.	Privy	Marine	N	Roger L. and David Parks	Lancaster	OPWBM	2	1	1	N	WB
11/8/20191	BOATING ACTIVITY	37.787533	-76.619338	End of route 621, Lancaster, VA 22503	Community boat mooring facility. Services provided are electricity and water.	Conv	Dwelling	N	Sloop Pointe Townhouses	Lancaster	OPWBM	18	2	2	N	WB
11/8/2019	BOATING ACTIVITY	37.805268	-76.636752	787 Oakley Lane, Farnham, VA 22460	Former site of shellfish repacker. Avaialble on site are seasonal moorings, an in-out ramp, water and electricity. Porta potty on site appears vault privies are no longer in use.	Privy	Marine	N	B.G. Smith & Son Oyster Company. Access to property is normally chained off.	Richmond	OPWBM	6	2	1	N	WB
11/8/2019	BOATING ACTIVITY	37.774077	-76.584160	End of route 683, Lancaster, VA 22503	Double boat ramp with temporary mooring available while launching and retrieving vessel. Services provided are an in- out ramp, restrooms and a portable toilet dump station.	Conv	Public	N	Belle Isle State Park	Lancaster	Under Surveillance	6	0	0	N	WB
11/8/2019	BOATING ACTIVITY	37.788311	-76.617930	End of Waterview Road, Lancaster, VA 22503	Formerly Piney Island Seafood. White block building, former oyster plant. Services provided are water and electricity.	Conv	Marine	N	Larry W. and Shirley A. Terry	Lancaster	Under Surveillance	12	4	4	N	WB
11/8/2019	BOATING ACTIVITY	37.806818	-76.605189	End of Shore View Drive, Lancaster, VA 22503	Available on site is an in-out ramp and loading/unloading dock.	NA	Marine	N	Lancaster Shores Homeowners Association	Lancaster	Under Surveillance	0	0	0	N	WB
1	BOATING	37.807130	-76.633553	2705 Simonson Road, Farnham, VA 22460	Public Landing. There is an in-out ramp with temporary mooring available while launching/retreiving vessel.	NA	Marine	N	Richmond County Public Dock and Ramp	Richmond	Under Surveillance	4	0	0	N	WB
1	1/8/2019 1/8/2019	1/8/2019 ACTIVITY  1/8/2019 BOATING ACTIVITY  1/8/2019 BOATING ACTIVITY  1/8/2019 BOATING ACTIVITY  BOATING	1/8/2019 ACTIVITY 37.805268  1/8/2019 BOATING ACTIVITY 37.774077  1/8/2019 BOATING ACTIVITY 37.788311  1/8/2019 BOATING ACTIVITY 37.806818  1/8/2019 BOATING 37.806818	1/8/2019 ACTIVITY 37.805268 -76.636752  1/8/2019 BOATING ACTIVITY 37.774077 -76.584160  1/8/2019 BOATING ACTIVITY 37.788311 -76.617930  1/8/2019 BOATING ACTIVITY 37.806818 -76.605189  1/8/2019 BOATING 37.806818 -76.605189	1/8/2019 ACTIVITY 37.805268 -76.636752 Farnham, VA 22460  1/8/2019 BOATING ACTIVITY 37.774077 -76.584160 End of route 683, Lancaster, VA 22503  1/8/2019 BOATING ACTIVITY 37.788311 -76.617930 Find of Waterview Road, Lancaster, VA 22503  1/8/2019 BOATING ACTIVITY 37.806818 -76.605189 End of Shore View Drive, Lancaster, VA 22503  1/8/2019 BOATING 37.807130 -76.633553 2705 Simonson Road, 1/8/2019 BOATING 37.807130 -76.6335	ACTIVITY  ACTIVITY  ACTIVITY  ACTIVITY  ACTIVITY  ACTIVITY  ACTIVITY  ACTIVITY  37.805268  -76.635752  Farnham, VA 22460  Farnham, VA 22460  water and electricity. Porta potty on site appears vault privies are no longer in use.  Double boat ramp with temporary mooring available while launching and retrieving vessel. Services provided are an in- out ramp, restrooms and a portable toilet dump station.  Formerly Piney Island Seafood. White block building, former oyster plant. Services provided are water and electricity.  End of Shore View Drive, Lancaster, VA 22503  BOATING ACTIVITY  37.806818  37.806818  37.806818  -76.605189  ACTIVITY  37.807130  -76.633553  ACTIVITY  37.807130  -76.633553  Farnham, VA 22460  End of route 683, Lancaster, VA 22503  Formerly Piney Island Seafood. White block building, former oyster plant. Services provided are water and electricity.  Available on site is an in-out ramp and loading/unloading dock.  Public Landing. There is an in-out ramp with temporary mooring available while	ACTIVITY  ACTIVITY  37.805268 -76.636752 Farnham, VA 22460 water and electricity. 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ACTIVITY  37.806818 -76.605189 Farnham, VA 22460  Farnham, VA 22460 water and electricity. Porta potty on site appears vault privies are no longer in use.  Double boat ramp with temporary mooring available while launching and retrieving vessel. Services provided are an in- out ramp, restrooms and a portable toilet dump station.  Formerly Piney Island Seafood. White block building, former oyster plant. Services provided are water and electricity.  Farnham, VA 22460  Public Activity  37.807130 -76.633553 Farnham, VA 22460  Public Landing. There is an in-out ramp with temporary mooring available while  NA Marine	ACTIVITY  ACTIVI	ACTIVITY  ACTIVI	ACTIVITY  ACTIVI	ACTIVITY  ACTIVI	ACTIVITY  ACTIVI	ACTIVITY  37.805268  -76.636752  Farnham, VA 22460  water and electricity. Porta potty on site appears vault privies are no longer in use.  Double boat ramp with temporary mooring available while  Privy Marine  N property is normally chained off.  Conv Public  N Belle Isle State Park  Lancaster  Under surveillance  Conv Public  N Belle Isle State Park  Lancaster  Under surveillance  1/8/2019  ACTIVITY  37.80518  -76.617930  ACTIVITY  37.80518  -76.617930  ACTIVITY  37.80518  -76.633553  ACTIVITY  37.807130  -76.633553  -76.633553  ACTIVITY  37.807130  -76.633553  ACTIVITY  37.807130  -76.633553  ACTIVITY  ACTIVITY  ACTIVITY  37.807130  -76.633553  ACTIVITY  ACTIVITY	ACTIVITY  37.805268  -76.636752  Farnham, VA 22460  water and electricity. Porta potty on site appears vault privies are no longer in use.  Double boat ramp with temporary mooring available while launching and retrieving vessel. Services provided are an in- out ramp, restrooms and a portable toilet dump station.  Formerly Piney Island Seafood. White block building, former oyster plant. Services provided are water and electricity.  Public  N  Belle Isle State Park  Lancaster  Under surveillance  Conv  Marine  N  Larry W. and Shirley A. Terry  Lancaster  Under surveillance  12 4  4 4  4 18/2019  BOATING ACTIVITY  37.806818  -76.605189  BOATING ACTIVITY  37.807130  -76.633553  -76.633553  2705 Simonson Road, Farnham, VA 22460  Farnham, VA 22460  Water and electricity. Porta potty on site appears vault privise are no longer in use.  Conv  Public  N  Belle Isle State Park  Lancaster  Under surveillance  12 4  4 4  4 4  4 4  4 4  4 6  1/8/2019  ACTIVITY  37.807130  -76.633553  37.807130  -76.633553  -76.633553  2705 Simonson Road, Farnham, VA 22460  ACTIVITY  ASSUMATION AND A Marine  N  Richmond County Public  Lancaster  Under Surveillance  10 0  0 0  0 0  0 0  0 0  0 0  0 0  0	ACTIVITY  37.805268  48.2019  4

### SECTION E: CONTRIBUTES ANIMAL POLLUTION

OBJECTID_1	GA #	Field #	Inspection Date	Deficiency or Pollution Type	Latitude	Longitude	Address	Pollutant Remarks	Septic System Type	Structure Type	Contact	Overall Site Remarks	Locality	DSS Staff
1960	0 23	W3	11/8/2019	CONTRIBUTES ANIMAL POLLUTION, direct	37.788655	-76.596481	133 Creekside Drive, Lancaster, VA 22503	Present at time of survey were 6 cows in fenced pasture approximately 150 yards from Mulberry Creek. Manure is left in pasture to decompose.		Dwelling	Υ		Lancaster	WB
197:	1 23	W9	11/8/2019	CONTRIBUTES ANIMAL POLLUTION, direct	37.808360	-76.629194	2477 Simonson Road	Present at the time of survey were 2 horses on fenced 3 acres within 50 feet of Lancaster Creek. Manure is left on ground to decompose.	Conv	Dwelling	Y		Richmond	WB
1969	9 23	W19	11/8/2019	CONTRIBUTES ANIMAL POLLUTION, direct	37.817372		1999 Hales Point Road, Farnham, VA 22460	Present at time of survey were 3 horses in fenced area that neighbors Morattico Creek. Manure is left on ground surface to decompose.	Conv	Dwelling	N		Richmond	WB
1968	8 23	W20	11/8/2019	CONTRIBUTES ANIMAL POLLUTION, indirect	37.821683		2321 Hales Point Road, Farnham, VA 22469	Present at the time of survey were 5+ cows, 5+ goats and 10+ chickens in fenced acreage. Manure is left on ground surface to decompose.	Conv	Dwelling	Y		Richmond	WB
197	3 23	W21	11/8/2019	CONTRIBUTES ANIMAL POLLUTION, indirect	37.810121	-76.582265	•	Present at the time of survey were 4 horses. Manure is left on ground surface to decompose.	Conv	Dwelling	N		Lancaster	WB

#### SUMMARY

Growing Area # 023 Lancaster, Deep and Mulberry Creeks 4 December 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
  - 0 DIRECT None.
  - <u>0</u> 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**

- 1 MARINAS # W23
- 5 OTHER PLACES WHERE BOATS ARE MOORED # W1, W4, W6, W7, W22
- 4 UNDER SURVEILLANCE # W2, W5, W8, W18
- 10 D. TOTAL

#### SECTION E: CONTRIBUTES ANIMAL POLLUTION

- 3 DIRECT # W3, W9, W19
- 2 INDIRECT # W20, W21
- 5 E. TOTAL



