

COMMONWEALTH of VIRGINIA DEPARTMENT OF HEALTH DIVISION OF SHELLFISH SANITATION

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MONROE BAY AND MATTOX CREEK Growing Area # 002 Westmoreland County Shoreline Sanitary Survey

Date: 7 December 2018

Survey Period: July 16 – November 5, 2018

Total Number of Near Shore Samples Collected and Properties Surveyed: 370

Surveyed By: R.M. Thomas, W.A. McCarty III, & W.I. Barrack III

SECTION A: GENERAL

This survey area extends from Reference Point 2 at Mimosa Avenue extended near Bluff Point in the Town of Colonial beach to Reference Point 3 at Church Point on the Potomac River, including the Potomac River shoreline between these two points, Monroe Bay (Monroe Creek) and Mattox creek and all of their tributaries.

The topography of the area varies in elevations from 10' or less along the shoreline to a maximum of 76' within the survey boundary. The economy is based on local service businesses, manufacturing, and retail trade. Both Monroe Bay and Mattox Creek have large marinas that serve recreational and small commercial vessels. Several communities in Westmoreland County and the majority of the Town of Colonial Beach are served by a central sewer system.

Meteorological data indicated that the area received a total rainfall of 31.12" for the survey period. A monthly breakdown is as follows:

July 16-31 9.40" August 7.50" September 6.30" October 6.42" November 1-5 1.50"

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 established 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 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 approach. Surveyors interviewed occupants and examined properties for evidence of 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.

Rainfa	II in Inche	S				
Sample	Run#	High	Ebb Current	Previous	Previous	Previous
dates		Tide		24 hours	48 hours	72 hours
7/16/18	1	6:08 am	8:58-4:18	0.00	0.00	0.00
7/17/18	1	7:02 am	9:46-5:00	0.28	0.28	0.28
8/1/18	1	7:02 am	9:40-5:00	0.64	1.57	1.98
8/2/18	1	7:44 am	10:16-5:30	0.12	0.76	1.69
8/3/18	1	8:38 am	10:52-6:06	0.38	0.50	1.14
8/14/18	1	5:56 am	8:34-3:42	0.02	0.22	3.55
8/15/18	1	6:44 am	9:22-4:24	0.16	0.18	0.38
8/28/18	2	5:14 am	7:58-3:00	0.00	0.00	0.00
8/30/18	2	6:38 am	9:10-4:00	0.00	0.00	0.00
9/11/18	2	4:50 am	7:28-2:18	0.22	0.26	1.20
9/12/18	2	5:38 am	8:10-3:00	0.00	0.22	0.26
10/17/18	2	10:50	1:28-7:30	0.13	0.15	0.31
		am				
10/25/18	2	4:32 am	6:52-1:12	0.00	0.00	0.00
11/5/18	2	12:44	3:10-9:54	1.31	1.31	1.50
		am				

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 in this 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. Copies of VPDES Permits and inspections are available at the Department of Environmental Quality, Tidewater Regional Office (DEQ/TRO).

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

SECTION B: SEWAGE POLLUTION SOURCES

OBJECTIO	GA #	Field #	-	Deficiency or Pollution Type	Latitude	Longitude	Address	Pollutant Remarks S		Structure Type	Contact	Overall Site Remarks	Locality	DSS Staff	Date of Correction	Correction Notes
81	2	5	11/29/18	SEWAGE TREATMENT FACILITY, direct	38.1829	-77.0106	Road, Colonial	Previously Public sewage treatment facility, currently hooked up to the Town of Colonial Beach Municipal sewerage system. No VPDES discharge permit, use Colonial Beach permit.	NA	Public	Y	Washington District Elementary School	Westmoreland	WB		
93	2	6	11/29/18	SEWAGE TREATMENT FACILITY, direct	38.2518	-76.9711	315 Douglas Avenue, Colonial Beach, VA 22443	Public - Municipal sewerage system. Contact: Jill Tighe. Design flow of 2.0 MGD. Bar screen removed and fine screen installed in 2017. UV disinfection with final discharge of effluent into Monroe Bay. VPDES permit # VA0026409	NA	Public	Υ	Quinn Robertson, Town Manager, Town of Colonial Beach	Westmoreland	WB		
1636	2	7	11/29/18	SEWAGE TREATMENT FACILITY, direct	38.2408	-76.9700	1544 Monroe Bay Circle, Colonial Beach, VA 22443	Private use. Residential sandfilter discharge. Residential STF added August 2010	NA	Public	Υ		Westmoreland	WB		
4580	2	38	7/17/18	POTENTIAL POLLUTION	38.2449	-76.9766	Lane, Colonial	4" terracotta pipe exiting shoreline without known orgin	Conv		N		Westmoreland	WB		

SECTION C: NONSEWAGE WASTE SITES

OBJECTID	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
84	2	1	9/17/18	SOLID WASTE SITES, indirect	38.2065	-76.9940	Loloniai Beach, VA	Old cars, parts and excessive debris scattered on premises.	Conv	Dwelling	N		Westmoreland	WB
85	2	2	9/17/18	SOLID WASTE SITES, indirect	38.2122	-76.9925	Colonial Beach, VA	Boats, parts, motors and other debris scattered on property.	Conv	Agri	N		Westmoreland	WB
1378	2	3	9/17/18	SOLID WASTE SITES, indirect	38.2197	-76.9811	Road, Colonial	Junked autos, tires, parts and other debris scattered on premises.	Conv	Agri	N		Westmoreland	WB
88	2	4	9/20/18	SOLID WASTE SITES, indirect	38.2542	-76.9711	Adjacent to 700 Colonial Avenue, Colonial Beach, VA 22443	One recycle bin; recycling only, no other trash on site.	NA	Public	z		Westmoreland	WB
4612	2	161	8/15/18	STORMWATER, direct	38.2509	-76.9606	End of Hawthorn Street, Colonial Beach, VA 22443	24" stormwater drain.	NA	Public	N		Westmoreland	WB

OBJECTID	GA #	Field #	Inspection Date	Deficiency or Pollution Type	Latitude	Longitude	Address	Pollutant Remarks	Septic System Type	Structure Type	Contact	Overall Site Remarks	Locality	Boating Activity Type	Number of Wet Slips	NUM BOATS <26'	NUM BOATS >26'	Evidence of Live- Aboards	DSS Staff
39	2	11	11/29/18	BOATING ACTIVITY	38.2307	-76.9634	1787 Castlewood Drive, Colonial Beach, VA 22443	Commercial Marina. Available on site are seasonal slips/moorings, dry storage spaces, fuel, ramp, electricity, repair, water, restrooms, dump station and sewage holding tank pumpout facilities.		Marine	Υ	Colonial Beach Yacht Center	Westmoreland	Marina	120	11	49	N	WB
102	2	13	11/29/18	BOATING ACTIVITY	38.2394	-76.9615	1004 Monroe Bay Avenue, Colonial Beach, VA 22443	Commercial Marina. Available on site are seasonal slips/moorings, electricity, water, solid waste containers, restrooms, and portable dump station pumpout facility.		Marine	Υ	Parker's Marina	Westmoreland	Marina	38	7	4	N	WB
101	2	14	11/29/18	BOATING ACTIVITY	38.2408	-76.9628	829 Robin Grove Lane, Colonial Beach, VA 22443	Commercial Marina. Available on site are seasonal slips/moorings, dry storage spaces, electricity, repair, water, solid waste containers, restrooms and portable dump station pumpout facilities.		Marine	Y	The Boathouse Marina	Westmoreland	Marina	48	29	15	N	WB
100	2	15	11/29/18	BOATING ACTIVITY	38.2431	-76.9660	554 Lafayette Street, Colonial Beach, VA 22443	Commercial Marina. Available on site are seasonal slips/moorings, ramp, electricity, water, solid waste containers, restrooms and portable dump station pumpout facilities.		Marine	Y	Winkledoodle Point Marina	Westmoreland	Marina	65	24	18	N	WB
99	2	16	11/29/18	BOATING ACTIVITY	38.2431	-76.9666	551 Lafayette Street, Colonial Beach, VA 22443	Available on site are seasonal slips/moorings, ramp, electricity, water, solid waste containers, restrooms, dump station, and sewage holding tank pumpout facilities.		Marine	Υ	Monroe Bay Marina	Westmoreland	Marina	92	24	38	N	WB
97	2	17	11/29/18	BOATING ACTIVITY	38.2477	-76.9658	119 Monroe Bay Avenue, Colonial Beach, VA 22443	Commercial Marina. Available on site are seasonal slips/moorings, fuel, ramp, and solid waste containers.	NA	Marine	Υ	Tranquil Marina	Westmoreland	Marina	21	3	4	N	WB
96	2	18	11/29/18	BOATING ACTIVITY	38.2483	-76.9659	101 South Monroe Bay Avenue, Colonial Beach, VA 22443	Available on site are seasonal slips/moorings, electricity, water, solid waste containers and restrooms.	NA	Marine	1 Y	Nightingale Marina & Motel	Westmoreland	Marina	33	5	3	N	WB
95	2	19	11/29/18	BOATING ACTIVITY	38.2489	-76.9660	11 Monroe Bay Avenue, Colonial Beach, VA 22443	37	NA	Marine	Υ	Bayside Marina	Westmoreland	Marina	38	13	14	N	WB
89	2	22	11/29/18	BOATING ACTIVITY	38.2335	-76.9697	End of Avalon Drive, Colonial Beach, VA 22443	Available on site are seasonal slips/moorings, ramp, electricity, water, solid waste containers, 1 port-o-john, and portable marine head dump station.	NA	Marine		Potomac- Westmoreland Shores Civic Corp.	Westmoreland	Marina	45	0	0	N	WB
86	2	24	11/29/18	BOATING ACTIVITY	38.2047	-76.9892	582 Burnt House Point, Colonial Beach, VA 22443	Available on site are seasonal slips/moorings, ramp, solid waste containers, and privies (used as a dump station).	NA	Marine	N	Springfield Incorporated	Westmoreland	Marina	23	4	1	N	WB
3003	2	26	11/29/18	BOATING ACTIVITY	38.2049	-76.9800	277 Harbor View Circle, Colonial Beach, VA 22443	Commercial Marina. Available on site are seasonal slips/moorings, fuel, ramp, electricity, water, solid waste containers, restrooms, dump station and sewage holding tank pumpout facilities.	NA	Marine	Y	Harbor View Marina	Westmoreland	Marina	144	29	49	N	WB

SECTION D: BOATING ACTIVITY

OBJECTIO	GA #	Field #	Inspection Date	Deficiency or Pollution Type	Latitude	Longitude	Address	Pollutant Remarks S		Structure Type	Contact	Overall Site Remarks	Locality	Boating Activity Type	Number of Wet Slips	NUM BOATS <26'	NUM BOATS >26'	Evidence of Live- Aboards	DSS Staff
94	2	20	11/29/18	BOATING ACTIVITY	38.2504		Avenue Colonial	Available on site are seasonal slips/moorings, electricity, water and restrooms.		Marine	Y	Monroe's Landing	Westmoreland	OPWBAM	30	8	4	N	WB
87	2	23	11/29/18	BOATING ACTIVITY	38.2148	-76.9708	Avenue Colonial	Available on site are seasonal slips/moorings, electricity, and water.		Marine	N	Potomac Shores Residents Association	Westmoreland	OPWBAM	22	1	1	N	WB
6	2	27	11/29/18	BOATING ACTIVITY	38.2058		91 Gun Club Road, Colonial Beach, VA 22443	Available on site are seasonal slips/moorings, and solid waste containers.		Marine	Υ	Berkley Beach	Westmoreland	OPWBAM	10	0	0	N	WB
4	2	28	11/29/18	BOATING ACTIVITY	38.2060	-76.9605	Drive, Colonial	Available on site are seasonal slips/ moorings, wooden ramp, solid waste containers, and 1 porto-o-john.		Marine	Υ	Ebb Tide Beach	Westmoreland	OPWBAM	40	0	0	N	WB
38	2	12	11/29/18	BOATING ACTIVITY	38.2324	-76.9614		Available on site is a concrete dual launch ramp and loading/unloading docks on either side. Porto-john on site.	NA	Marine	Y	Town of Colonial Beach Public Boat Ramp	Westmoreland	Under Surveillance	0	0	0	N	WB
90	2	21	11/29/18	BOATING ACTIVITY	38.2393	-76.9672	1412 Monroe Bay Circle, Colonial Beach, VA 22443	Available on site are transient slips/moorings, ramp, solid waste containers, restrooms and dump station for campers only.		Marine	Υ	Monroe Bay Campground	Westmoreland	Under Surveillance	14	0	0	N	WB
15	2	25	11/29/18	BOATING ACTIVITY	38.2031	-76.9822	On Mattox Avenue, Colonial Beach, VA 22443	Available on site is a concrete ramp and a loading/unloading dock.		Marine	Υ	Placid Bay Boat Ramp	Westmoreland	Under Surveillance	0	0	0	N	WB

SECTION E: CONTRIBUTES ANIMAL POLLUTION

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
2	8	11/29/18	ANIMAL POLLUTION,	38.2026	-76.9701	Road, Colonial	survey. Manure was left on the ground	Conv	Dwelling	Υ		Westmoreland	WB
2	9	11/29/18	ANIMAL POLLUTION,	38.2010	-76.9714	Road, Colonial	survey. Manure was left on the ground	Conv	Dwelling	Υ		Westmoreland	WB
2	10	11/29/18	ANIMAL POLLUTION,	38.2508	-76.9776	Colonial Beach, VA	•	Conv	Dwelling	N		Westmoreland	WB
	2	# # 2 8 2 9	# # Date 2 8 11/29/18 2 9 11/29/18 2 10 11/29/18	# # Date Pollution Type 2 8 11/29/18 CONTRIBUTES ANIMAL POLLUTION, indirect CONTRIBUTES ANIMAL POLLUTION, indirect CONTRIBUTES ANIMAL POLLUTION, indirect CONTRIBUTES ANIMAL	# # Date Pollution Type Latitude CONTRIBUTES ANIMAL POLLUTION, indirect CONTRIBUTES ANIMAL POLLUTION, indirect CONTRIBUTES ANIMAL POLLUTION, indirect CONTRIBUTES ANIMAL POLLUTION, 38.2010 2 10 11/29/18 ANIMAL POLLUTION, 38.2508	# # Date Pollution Type Contributes 2 8 11/29/18	# # Date Pollution Type Latitude Longitude Address CONTRIBUTES ANIMAL POLLUTION, indirect CONTRIBUTES ANIMAL POLLUTION, indirect 38.2026 -76.9701 Road, Colonial Beach, VA 22443 11/29/18 ANIMAL POLLUTION, indirect CONTRIBUTES ANIMAL POLLUTION, indirect CONTRIBUTES ANIMAL POLLUTION, indirect CONTRIBUTES ANIMAL POLLUTION, 38.2508 -76.9776 Colonial Beach, VA 22443 228 Creek View, Colonial Beach, VA 22443	# # Date Pollution Type Latitude Longitude Address Pollutant Remarks 2 8 11/29/18 CONTRIBUTES ANIMAL POLLUTION, indirect 2 9 11/29/18 CONTRIBUTES ANIMAL POLLUTION, indirect 38.2026 -76.9701 Pollutant Remarks 2 17 Ebb Tide Road, Colonial Beach, VA 22443 Pollution Street 2 10 11/29/18 ANIMAL POLLUTION, 38.2508 Pollutant Remarks 5+ Horses present at the time of the survey. Manure was left on the ground surface. 228 Creek View, Colonial Beach, VA 22443 Pollution Type 5+ Horses present at the time of the survey. Manure was left on the ground surface. 5+ Horses present at the time of the survey. Manure was left on the ground surface.	Held Inspection Date Pollution Type Latitude Longitude Address Pollutant Remarks System Type 2 8 11/29/18 CONTRIBUTES ANIMAL POLLUTION, indirect 2 9 11/29/18 CONTRIBUTES ANIMAL POLLUTION, indirect 2 11/29/18 CONTRIBUTES ANIMAL POLLUTION, indirect 2 11/29/18 ANIMAL POLLUTION, indirect 2 11/29/18 CONTRIBUTES ANIMAL POLLUTION, indirect 2 11/29/18 ANIMAL POLLUTION, indirect 2 11/29/18 ANIMAL POLLUTION, indirect 2 228 Creek View, Colonial Beach, VA 22443 Colonial Beach,	Held Inspection Date Pollution Type Latitude Longitude Address Pollutant Remarks System Type CONTRIBUTES ANIMAL POLLUTION, indirect CONTRIBUTES ANIMAL POLLUTION, indirect Type 178 Ebb Tide Road, Colonial Beach, VA 22443 Type 178 Ebb Tide Road, Colonial Beach, VA 22443 Type 178 Ebb Tide Road, Colonial Beach, VA 22443 Type 178 Ebb Tide Road, Colonial Beach, VA 22443 Type 178 Ebb Tide Road, Colonial Beach, VA 22443 Type 179 Evaluation Type Type	The contact The contact	Held # # Date Deficiency of Pollution Type Latitude Longitude Address Pollutant Remarks System Type Contact Contact Type Contact Conta	Held a pollution Type Deficiency or Pollution Type Delicion Type Type Delicion Type Type Type Type Type Delicion Type Delicion Type Type Type Type Type Type Type Type

SUMMARY

Growing Area # 002 MONROE BAY AND MATTOX CREEK 7 December 2018

SECTION B: SEWAGE POLLUTION SOURCES

- 1. SEWAGE TREATMENT FACILITIES
 - 3 DIRECT # 5, 6, 7
 - <u>0</u> INDIRECT None.
 - 3 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.
 - <u>0</u> 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 # 38

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.
 - 4 INDIRECT # 1, 2, 3, 4
 - 4 C.2. TOTAL
- 3. STORMWATER OUTFALLS
 - 1 DIRECT # 161
 - <u>0</u> INDIRECT None.
 - 1 E. TOTAL

SECTION D: BOATING ACTIVITY

- 11 MARINAS # 11, 13, 14, 15, 16, 17, 18, 19, 22, 24, 26
- 5 OPWBAM # 20, 21, 23, 27, 28
- 2 UNDER SURVEILLANCE # 12, 25
- 18 D. TOTAL

SECTION E: CONTRIBUTES ANIMAL POLLUTION

- 0 DIRECT None.
- <u>3</u> INDIRECT # 8, 9, 10
- 3 E. TOTAL



