

COMMONWEALTH of VIRGINIA

Department of Health Division of Shellfish Safety 109 Governor Street, 6th Floor P O BOX 2448 RICHMOND, VA 23218

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WINTER HARBOR AND GARDEN CREEK Growing Area # 038 Mathews County Shoreline Sanitary Survey

Date: 22 April 2019 Survey Period: December 17, 2018 – April 8, 2019 Surveyed By: R.M. Thomas, W.A. McCarty III, & W.I. Barrack III Number of Properties and Near Shore Samples Collected: 115

SECTION A: GENERAL

This survey area extends from Reference Point 38 at the end of Route 645 to Reference Point 39 at Beach Point, including the Chesapeake Bay shoreline between these two points, Winter Harbor, Garden Creek, and all of their tributaries. Refer to map for boundary revisions.

The topography of the area is low, flat, and marshy with poor drainage despite an extensive surface drainage ditch system. The population is moderate with a small concentration around the Onemo community. The stretch of beach front off of Route 609, the shoreline on the southern end of Winter Harbor and the tip of Potato Neck off Route 608 has been developed into seasonal use residential properties. The economy of the surveyed area is mostly dependent on agriculture and recreation.

Meteorological data indicated that the area received a total rainfall of 15.23" for the survey period. A monthly breakdown is as follows:

Dec. 17-31, 2018 1.97" January 2019 3.99" February 4.48" March 4.00" April 1-8 0.79"

Information about Mathews County can be found on the county website at: <u>www.mathews.va.us</u>. The following statement is on that website.

The Mathews County Board of Supervisors has required implementation of a Septic System Pump-out/Inspection Program, requiring all private septic systems to be pumped out at least once every 5 years. This program is in accordance with the County's Chesapeake Bay Preservation Ordinance and mandated by the Chesapeake Bay Local Assistance Board of the Department of Conservation and Recreation (DCR).



Shoreline Survey # 038 Page 2

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 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.

	Are	Ra	infall in In	iches			
Sample High dates Tide		Ebb Current	Sampling time	Enterococcus range (MPN/100ml)	Day of	Previous 48 hours	Previous 72 hours
12/18/18	6:24	9:13-4:10	9:06-11:34	<10-31	0.00	0.00	0.14
2/05/19	10:35	1:24-8:16	10:41-1:07	<10-20	0.00	0.00	0.00
4/03/19	10:01	12:36-7:30	10:48-1:26	<10-10	0.00	0.07	0.07
4/05/19	11:16	1:39-8:28	10:52-12:37	<10-10	0.42	0.42	0.42

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 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 <u>www.vdh.virginia.gov/shellfish/</u>.

SECTION B: SEWAGE POLLUTION SOURCES

		#	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
4616	38	W12	1/7/2019	CONTRIBUTES POLLUTION, direct	37.3808	-76.2794	615 Ivison Lane, Mathews, VA 23109	Effluent pooling on ground surface over drain field. Drain field location on left when entering property 25 feet from dirt lane. Confirmed active drain field location with local health.	Conv	Dwelling	Ν		Mathews	WB		
4617	38	W11	1/7/2019	CONTRIBUTES POLLUTION (kitchen or laundry wastes), indirect	37.3873	-76.2840	2685 Bethel Beach Rd, Mathews, VA 23109	1 1/2" black plastic hose coming from washing machine inside outbuilding draining onto ground surface. Owner states that it is the same status as the last time survey was conducted.	Conv	Dwelling	Y		Mathews	WB		

Shoreline Survey # 038

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
3064	38	W8	4/8/2019	SOLID WASTE DUMPSITE, indirect	37.4006	-76.2691		Approximately 75 boats and trucks scattered on premises.	Conv	Dwelling	Ν		Mathews	WB
3063	38	W10	4/8/2019	SOLID WASTE DUMPSITE, indirect	37.3889	-76.2905	Port	20+ junked buses, trucks and cars on premises.	Conv	Dwelling	Ν		Mathews	WB

SECTION D: BOATING ACTIVITY

OBJEC	™ 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
161	0 38	W1	4/8/2019	BOATING ACTIVITY	37.3768	-76.2637	End of State route 608, Mathews, VA 23109	Commercial Marina. Available on site are seasonal slips/moorings, in-out ramp, electricity, water, portable toilet dump station facilities, boat holding tank pump-out facilities and restrooms.	Conv	Marine	N	Winter Harbor Haven Marina, Small campground at marina - 8 sites.	Mathews	Marina	29	8	1	Ν	WB
160	7 38	W3	4/8/2019	BOATING ACTIVITY	37.3901	-76.2749	End of State route 611 on Winter Harbor, Mathews, VA 23109	Public ramp with pier. Available on site are seasonal slips used to store local waterman's boats and an in-out ramp.	NA	Marine	N	Mathews County Public Boat Landing	Mathews	OPWBAM	10	3	1	NA	WB
160	9 38	W2	4/8/2019	BOATING ACTIVITY	37.3768	-76.2626	End of State route 608 next to Winter Harbor Haven Marina, Mathews, VA 23109	Public Landing. Available on site are transient slips and in-out ramp.	NA	Marine	N	Public Dock and Ramp (Mathews County)	Mathews	Under Surveillance	10	0	0	NA	WB

SECTION E: CONTRIBUTES ANIMAL POLLUTION

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
1597	38	W5	4/8/2019	CONTRIBUTES ANIMAL POLLUTION, direct	37.4163	-76.2932	115 Callis Field Lane, Onemo, VA 23130	Present at time of survey were 5 horses in fenced pasture. Manure is left on ground surface. Pasture is 30' from ditch leading directly to Garden Creek headwaters roughly 1200' away.		Dwelling	N		Mathews	WB
1598	38	W6	4/10/2019	CONTRIBUTES ANIMAL POLLUTION, direct	37.4109	-76.2951	534 Leonards Lane, Mathews, VA 23109	Present at time of survey were 1 mule, 1 donkey, and 1 steer in pasture. 20+ chickens and 5+ geese were also on premises. Pasture is 20' from ditch that leads to headwaters of Garden Creek 1000' away.	Conv	Dwelling	N		Mathews	WB
1600	38	W18		CONTRIBUTES ANIMAL POLLUTION, direct	37.4185	-76.2881	1420 Callis Field Lane, Diggs, VA 23045	Present at time of survey were 5+ cows, 10+ hunting dogs, 6+ chickens, and 4 goats contained in pasture or pens. Pasture is 20' frpm ditch leading directly to headwaters of Garden Creek roughly 1300'.		Dwelling	N		Mathews	WB
1596	38	W4	4/8/2019	CONTRIBUTES ANIMAL POLLUTION, indirect	37.4213	-76.2834	1430 Knight Wood Road, Diggs, VA 23045	Present at the time of inspection were 5+ horses in fenced pasture and 25+ chickens not contained. Manure is left on ground surface.	Conv	Dwelling	N		Mathews	WB
1608	38	W7	4/8/2019	CONTRIBUTES ANIMAL POLLUTION, indirect	37.4010	-76.2685	1395 Bethel Beach Road, Onemo, VA 23130	Present at time of the survey were 15+ goats in 4 acres of fenced pasture. Manure is left on the ground surface. Ditch adjacent to pasture drains 1/2 mile away to Winter Harbor.	Conv	Dwelling	N		Mathews	WB
1601	38	W9	4/8/2019	CONTRIBUTES ANIMAL POLLUTION, indirect	37.3886	-76.2908	79 Potato Neck Road, Port Haywood, VA 23138	Present at the time of the survey were 25+ ducks, chickens, geese and 1 horse.	Conv	Dwelling	N		Mathews	WB
1606	38	W13	4/10/2019	CONTRIBUTES ANIMAL POLLUTION, direct	37.3896	-76.2788	72 Hurst Neck Road, Onemo, VA 23130	Present at the time of survey were 3 horses in fenced pasture. Pasture is within 40' of Winter Harbor.	Conv	Dwelling	N		Mathews	WB
1602	38	W14	4/10/2019	CONTRIBUTES ANIMAL POLLUTION, indirect	37.3891	-76.2804	36 Martin Diggs Way, Onemo, VA 23130	Present at time of survey were 2 horses, 3 donkeys, 3 guineas, 2 turkeys and 20+ geese. Ditches adjacent to pasture drain 1/4 mile to Winter Harbor.	Conv	Dwelling	N		Mathews	WB
4620	38	W15	4/10/2019	CONTRIBUTES ANIMAL POLLUTION, indirect	37.3880	-76.2790	151 Martin Diggs Way, Onemo, VA 23130	Present at time of survey were 5+ goats fenced in yard. Manure is left on ground surface.	Conv	Dwelling	N		Mathews	WB
4621	38	W16	4/10/2019	CONTRIBUTES ANIMAL POLLUTION, indirect	37.3886	-76.2854	Adjacent to 2640 Bethel Beach Road, Onemo, VA 23130	Present at time of survey were 2 horses in fenced paddock. Manure is left on ground surface.	Conv	Agri	N		Mathews	WB
4622	38	W17	4/10/2019	CONTRIBUTES ANIMAL POLLUTION, indirect	37.3845	-76.2885	3017 Bethel Beach Road, Onemo, VA 23130	Present at time of survey were 2 horses in fenced paddock. Manure is left on ground surface. Property is close proximity to Winter Harbor.	Conv	Dwelling	N		Mathews	WB
				indirect			23130	Property is close proximity to Winter Harbor.						

Shoreline Survey # 038 Page 7

SUMMARY

Growing Area # 038 Winter Harbor and Garden Creek 22 April 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.

- 1 CONTRIBUTES POLLUTION, DIRECT # W12
- 0 CONTRIBUTES POLLUTION, INDIRECT None.
- 0 CP (Kitchen or Laundry Wastes), DIRECT None.
- 1 CP (Kitchen or Laundry Wastes), INDIRECT # W11
- 0 NO FACILITIES, DIRECT None.
- <u>0</u> NO FACILITIES, INDIRECT None.
- 2 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.
- <u>2</u> INDIRECT # W8, W10
- 2 C.2. TOTAL

3: STORMWATER OUTFALLS

- 0 DIRECT None.
- <u>0</u> INDIRECT None.
- 0 E. TOTAL

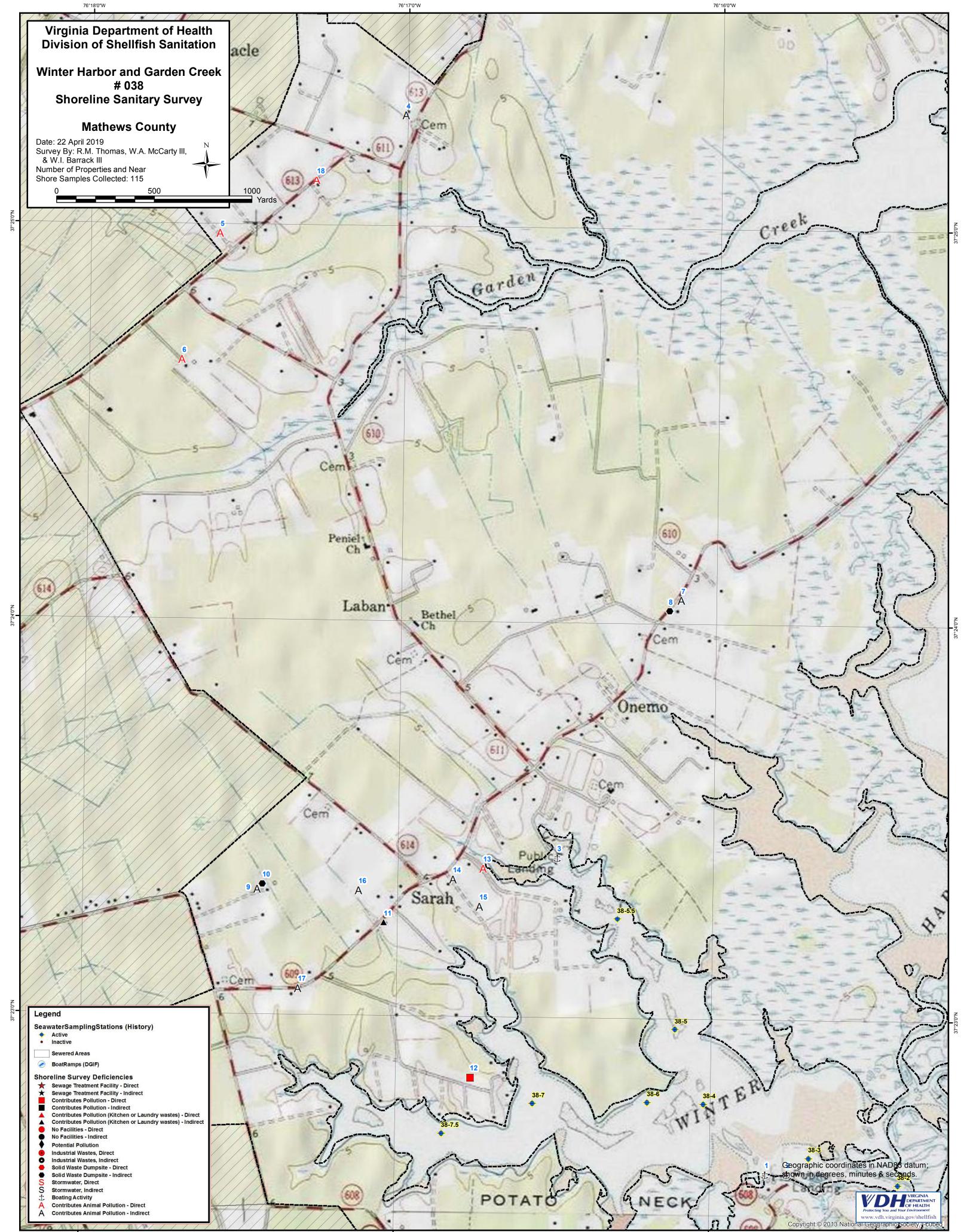
SECTION D: BOATING ACTIVITY

- 1 MARINAS # W1
- 1 OTHER PLACES WHERE BOATS ARE MOORED # W3
- <u>1</u> UNDER SURVEILLANCE # W2
- 3– D. TOTAL

SECTION E: CONTRIBUTES ANIMAL POLLUTION

4 - DIRECT - # W5, W6, W13, W18

- <u>7</u> INDIRECT # W4, W7, W9, W14, W15, W16, W17
- 11 E. TOTAL



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