



COMMONWEALTH of VIRGINIA

Department of Health Division of Shellfish Safety

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YORK RIVER: POROPOTANK AND PURTAN BAYS Growing Area # 048 Gloucester and King and Queen Counties Shoreline Sanitary Survey

Date: 30 January 2020

Survey Period: May 1, 2019 – Jan 10, 2020

Number of Near Shore Samples Collected and Properties Surveyed: 142

Surveyed By: I.M. Geeson, F.P. Monis, L.M. Sakach, & E.M. Yeargan

SECTION A: GENERAL

This survey area extends from Reference Point 48 at Route 606 (extended) in Allmondsville to Reference Point 49 at Belleview, including the York River shoreline between these two points, Purtan Bay (Bland Creek, Stubbs Pond, Leigh Creek, Purtan Creek), Indian Creek, Adams Creek (Gable Branch), Poropotank Bay, Morris Bay (Guthrie Creek), Poropotank River (Poplar Spring Branch), and all of their tributaries, within a designated boundary line drawn by the Division of Shellfish Safety).

The topography of the area is characterized by low marshy stretches along the shoreline from the northern mouth of Purtan Bay, angling inland toward the north, except around Barren Point, where there are sharp rises to over 20' elevation near the shore. The low sections widen until the elevations do not reach 10' for about one mile in the northern end of the survey. Elevations rise significantly to over 50' on a line roughly between Pinetta and Gressitt. At the outer reaches of the headwaters, elevation reaches a maximum of 103'.

The Commonwealth of Virginia, under Code Section 9VAC 10-20-120.7, and Gloucester County's Chesapeake Bay Preservation Ordinance, Section 5.5-9B (5), specifies that all on-site sewage disposal systems shall be pumped out at least once every five years. The entirety of Gloucester County is recognized as either a Resource Protection Area or Resource Management Area qualifying all properties to comply with this program. The Gloucester County Environmental Programs Division, as required by the Commonwealth of Virginia under Code Section 9VAC 10-20-120.7 and in accordance with Section 5.5-9B (5) of the County's Chesapeake Bay Preservation Ordinance, has initiated a notification and enforcement program requiring that all on-site sewage disposal systems (septic tank) be pumped out at least once every five (5) years. Septic system owners may elect, as an alternative to this pump-out requirement, to submit documentation from a licensed sewage handler/inspector explaining that the septic tank has been inspected, is functioning properly, and does not need to be pumped out. Information about King and Queen County can be found on the county website at: www.kingandqueenco.net. The following statement can be found on that website:

INFORMATION REQUIRED ON PLATS¹, PURSUANT TO THE CHESAPEAKE BAY PRESERVATION AREA DESIGNATION AND MANAGEMENT REGULATIONS (9 VAC §§10-20-10, et seq. (2002)). The septic tank on this parcel must be pumped out at least once every 5 years, or every 5 years submit certified documentation that the tank does not need to be pumped. (§120(7)(a), (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 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.

Meteorological data indicated that the area received a total rainfall of 32.35" during the survey period. A monthly breakdown is as follows:

May 2019	3.43"	August	3.39"	November	2.78"
June	5.80"	September	1.03"	December	3.48"
July	6.48"	October	4.74"	Jan. 1-10, 2020	1.22"

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 Enterococcus 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, sampling times and range of enterococcus concentrations measured are shown in the table below.

Growing Area # 48 Nearshore Sampling			Sampling Time	Enterococcus range (MNP/100 mL)	Rainfall in Inches		
Sample dates	High Tide	Ebb Current			Day of	Previous 24 hours	Previous 7 days
5/1/2019	9:28 AM		9:43am-12:17pm	<10-41	0	0	0.72
5/2/2019	10:10 AM		9:50am-12:07pm	<10-41	0	0	0.72
5/7/2019	1:30 PM		10:41am-11:39pm	108-146	0	0.02	1.04
7/29/2019	9:04 AM		10:14am-12:00pm	<10-221	0	0	2.03
9/11/2019	9:56 AM		9:50am-12:19pm	<10-341	0	0	0.62

Copies for Bacteriological, Hydrographic and Shellfish Closure data are available at the White Stone office for review. Copies of the current condemnation notices and maps are available via the internet at www.vdh.virginia.gov/shellfish.

This report lists only those properties that have a sanitary deficiency or may have other environmental significance. **DIRECT** indicates that the significant activity or deficiency may have a direct impact on shellfish waters. Individual field forms with full information on properties listed in this report are on file in the Richmond office of the Division of Shellfish Safety and are available for reference until superseded by a subsequent survey of the area. Data in the report is also made available to local health departments and other agencies to address items that may be out of compliance with their regulatory programs.

[illegible]

Shoreline Survey # 048

SECTION C: NONSEWAGE WASTE SITES

[illegible]

SECTION D: BOATING ACTIVITY

[illegible]

SECTION E: CONTRIBUTES ANIMAL POLLUTION

[illegible]

SUMMARY

Growing Area # 048

York River: Poropotank and Purtan Bays

30 January 2020

SECTION B: SEWAGE POLLUTION SOURCES

1. SEWAGE TREATMENT WORKS

0 – DIRECT – None.

0 – INDIRECT – None.

0 – B.1. TOTAL

2. ON-SITE SEWAGE DEFICIENCIES – Correction of deficiencies in this section is the responsibility of the local health department.

0 – CONTRIBUTES POLLUTION, DIRECT – None.

1 – CONTRIBUTES POLLUTION, INDIRECT – # F3

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.

1 – 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.

1 – INDIRECT – # L9

1 – C.1. TOTAL

2. SOLID WASTE SITES

0 – DIRECT – None.

0 – INDIRECT – None.

0 – C.2. TOTAL

3. STORMWATER

0 – DIRECT – None.

0 – INDIRECT – None.

0 – TOTAL

SECTION D: BOATING ACTIVITY

1 – MARINAS – # F2

0 – OTHER PLACES WHERE BOATS ARE MOORED – None.

3 – UNDER SURVEILLANCE – # F1, L1, L8

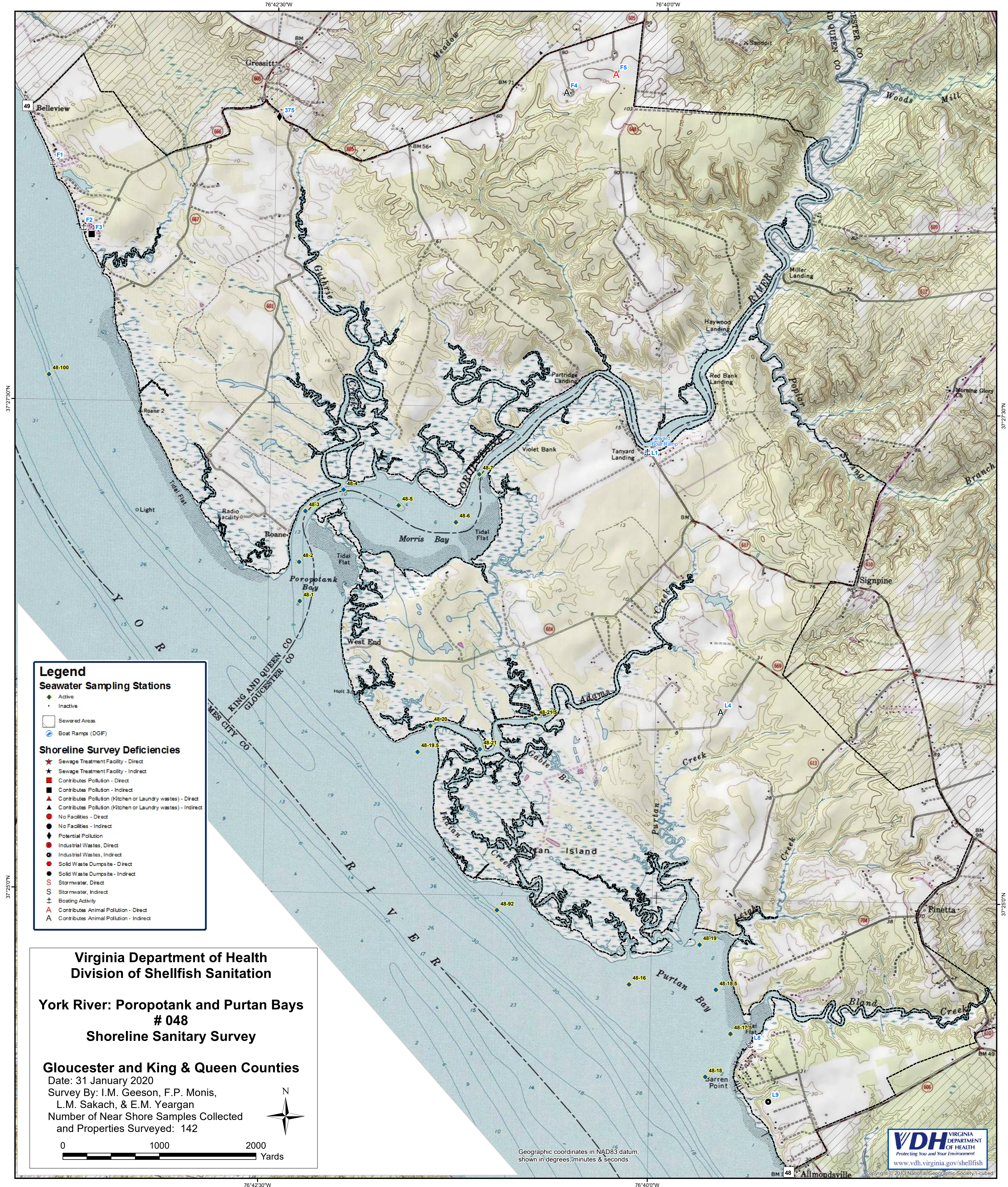
4 – D. TOTAL

SECTION E: CONTRIBUTES ANIMAL POLLUTION

1 – DIRECT – # F5

2 – INDIRECT – # F4, L4

3 – E. TOTAL



Near-Shore Enterococcus Sampling Growing Area # 048 York River: Poropotank and Purtan Bays Gloucester and King & Queen Counties

* Highest value was 341 on September 1, 2019.

