



# COMMONWEALTH of VIRGINIA

## Department of Health Division of Shellfish Safety

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### **HAMPTON ROADS: NANSEMOND RIVER TO ELIZABETH RIVER Growing Area # 064 Cities of Suffolk and Portsmouth Shoreline Sanitary Survey**

**Date:** 20 June 2019

**Survey Period:** November 6, 2018 – May 24, 2019

**Total Number of Properties Surveyed and Samples Analyzed:** 119

**Surveyed By:** F.P. Monis, L.Z. Sakach, and E.M. Yeargan

#### **SECTION A: GENERAL**

This survey area extends from Reference Point 65 at the northwest end of Park Drive at Pig Point to Reference point 66 at the northeast end of Craney Island U.S. Naval Supply Center, including the Hampton Roads shoreline between these two points, Streeter Creek, Hoffler Creek and all of their tributaries.

The topography of this area is characterized by land elevations ranging from mostly marshy along the shorelines of Hampton Roads, Streeter Creek, Hoffler Creek to 15'-20' along the western and southern inland portions.

All properties located within the survey area are served by Hampton Roads Sanitation District sewer system with treatment at the Nansemond Treatment Plant. Considerable commercial development exists in the College Drive area just off I-664 and includes many retail chains as well as several military contract employers.

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 29.13" during the survey period. A monthly breakdown is as follows:

Nov. 6-30, 2018	4.28"	January 2019	3.23"	March	3.45"	May	3.71"
December	5.35"	February	4.17"	April	4.94"		

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 # 64 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
11/6/2018	7:46	8:12 - 11:49am	10:37 - 11:59am	<10 - 620	0.13	0.31	0.62
11/7/2018	8:31	8:57 - 12:37pm	10:21 - 12:03pm	10 - 428	0.00	0.13	0.75
12/4/2019	6:40	7:17 - 10:48am	10:38 - 10:58am	<10 - 98	0.00	0.00	0.00
3/21/2019	10:15	10:22 - 1:58pm	12:39pm	<10	0.52	0.12	0.44
4/3/2019	9:00	9:09 - 12:45pm	10:35 - 12:16pm	<10 - 1153	0.00	0.35	0.5
5/23/2019	NA	Onshore samples	10:17-10:40am	494-640	0.1	0.00	0.78

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](http://www.vdh.virginia.gov/shellfish).

[illegible]

## SECTION C: NONSEWAGE WASTE SITES

[illegible]

## SECTION D: BOATING ACTIVITY

[illegible]

## SECTION E: CONTRIBUTES ANIMAL POLLUTION

[illegible]

## SUMMARY

Growing Area # 064, Hampton Roads: Nansemond River to Elizabeth River  
20 June 2019

### SECTION B: SEWAGE POLLUTION SOURCES

#### 1. SEWAGE TREATMENT FACILITIES

1 – DIRECT – # F2  
0 – INDIRECT – None.  
1 – 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.  
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

1 – DIRECT – # F1  
0 – INDIRECT – None.  
1 – C.1. TOTAL

#### 2. SOLID WASTE DUMPSITES

0 – DIRECT – None.  
2 – INDIRECT – # F5, F6  
2 – C.2. TOTAL

#### 3. STORMWATER OUTFALLS

0 – DIRECT – None.  
2 – INDIRECT – # F3, F4  
2 – E. TOTAL

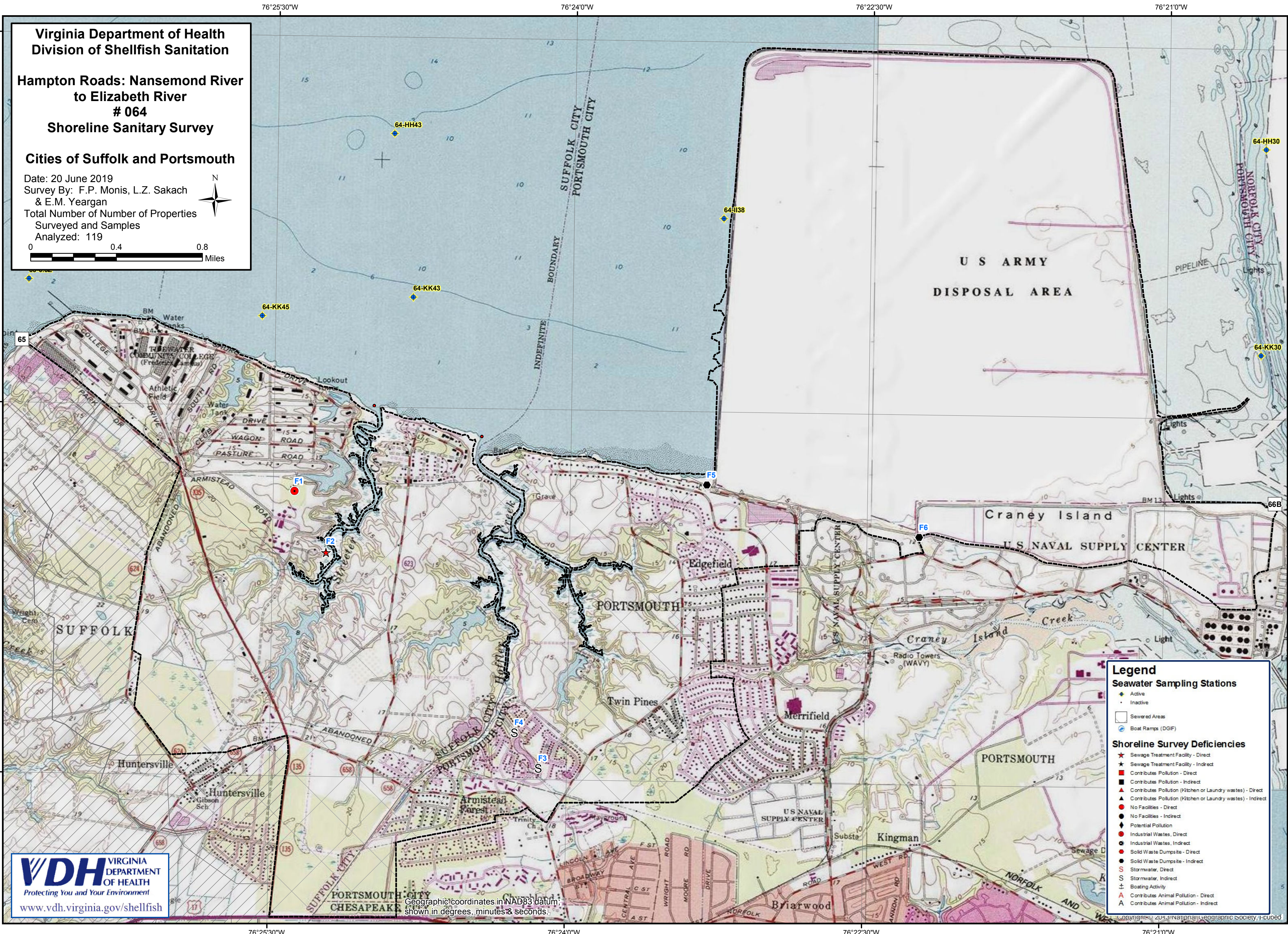
### SECTION D: BOATING ACTIVITY

0 – MARINAS – None.  
0 – OTHER PLACES WHERE BOATS ARE MOORED – None.  
0 – UNDER SURVEILLANCE – None.  
0 – D. TOTAL

### SECTION E: CONTRIBUTES ANIMAL POLLUTION

0 – DIRECT – None.  
0 – INDIRECT – None.  
0 – E. TOTAL





Virginia Department of Health

Division of Shellfish Sanitation

Hampton Roads: Nansemond River to Elizabeth River

# 064

Shoreline Sanitary Survey

Cities of Suffolk and Portsmouth

Date: 20 June 2019

Survey By: F.P. Monis, L.Z. Sakach & E.M. Yeargan

Total Number of Number of Properties Surveyed and Samples Analyzed: 119

N

00.40.8

Miles

Legend

Seawater Sampling Stations

Active

Inactive

Sewered Areas

Boat Ramps (DGF)

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

VDH

VIRGINIA DEPARTMENT OF HEALTH

Protecting You and Your Environment

www.vdh.virginia.gov/shellfish

Geographic coordinates in NAD83 datum shown in degrees, minutes & seconds.



# Shoreline Survey # 064 Hampton Roads: Nansemond River to Elizabeth River

## Enterococcus Near Shore Sampling

High Enterococcus spp. value of 1153 on 4/3/19.

0 0.5 1 Miles

### Legend

Enterococcus spp. (MPN/100ml)

Sampling Dates: 11/6/18 - 4/3/19

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