

COMMONWEALTH of VIRGINIA DEPARTMENT OF HEALTH DIVISION OF SHELLFISH SAFETY

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HAMPTON ROADS: OLD POINT COMFORT TO NEWPORT NEWS POINT Growing Area # 056 Shoreline Sanitary Survey Cities of Hampton and Newport News

Date: 7 June 2022
Survey Period: September 21, 2021 - February 16, 2022
Total Number of Near-shore Samples Taken and Properties Visited: 899
Number of staff days: 67
Surveyed By: F. Monis, J. Dickerson, I. Geeson, L. Sakach, C. Turner, E. Yeargan, & T. Egerton

SECTION A: GENERAL

This survey area extends from Reference Point 56 at Ingalls Road (extended) at Old Point Comfort to Reference Point 57 at Newport News Point, including the Hampton Roads shoreline between these two points, Mill Creek, Hampton River (Jones Creek, Herberts Creek, Brights Creek, Salters Creek, Sunset Creek) and all of their tributaries.

The area is characterized by low elevations and flat terrain, rising from less than 5' along the shoreline to a maximum of 15' along the outer headwater boundaries. The majority of the area has an elevation of 10' or less. The population is very dense, but relatively evenly distributed throughout the area. The economy is based on local commerce, the seafood industry, industrial enterprises, local military installations and the Newport News Shipbuilding facility.

Meteorological data indicated that 13.83" of rain fell during the survey period. A monthly breakdown is as follows:

Sept. 21-30, 2021	0.48"	October	2.24"	November	1.68"
December	2.09"	January 2022	6.19"	February 1-16	1.15"

Most but not all homes in the region are served by the Hampton Roads Sanitation District, Boat Harbor Treatment Plant. A small number of dwellings with onsite sewage disposal facilities still exist in the 1300 block of North Mallory Street. In January 2021, a 36" primary force main on 16th street in Newport News suffered a major line break resulting in approximately 29 million gallons of raw sewage being released into Growing Area 56. An emergency closure was put in place on 1/5/21 that restricted parts of several growing areas. The impacted waters reverted back to their previous classification status by 4/13/21. Water quality and shellfish tissue samples were evaluated at multiple locations before the closure was lifted.



For this survey, nearshore seawater stations were established to survey the full extent of navigable 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 point and nonpoint source pollution. Station data were analyzed to compare relative concentrations of fecal indicator bacteria within the waterway to identify potential onshore sources of contamination.

The entire growing area is currently in Restricted Classification Status. There is some commercial interest in opening up a portion of Hampton Roads along the Hampton Bar where the current seawater stations already consistently meet the criteria for opening based on fecal coliform levels. For this reason an additional work effort was made to more thoroughly investigate areas in this survey than may be replicated in other surveys comprising growing waters under administrative closure.

Stormwater and sewer conveyance pipes and outfall locations were reviewed in GIS layers made available by the Cities of Hampton and Newport News. Additional water samples were collected directly from stormwater outfalls during two rainfall events. Elevated levels of enterococcus were detected at several locations that feed into the Hampton Roads along Chesapeake Avenue. Dry weather sampling also established elevated levels of enterococcus in the headwaters of Sunset Creek. Further investigation in cooperation with HRSD have detected the human-associated molecular marker gene HF183 which may indicate the presence of human-source fecal pollution. VDH Shellfish Safety will take into consideration the ongoing status and mitigation of these sources of pollution in any decision to reclassify these currently-restricted waters. Updated information on the collaborative efforts between VDH, HRSD and the municipalities can be made available upon request. Stormwater features can be viewed via the public facing GIS layer for City of Hampton utilities found at... https://webgis2.hampton.gov/sites/ParcelViewer/

Elevated levels of enterococcus were identified in the vicinity of two marinas across a single sampling date. Follow up sampling did not show elevated bacterial results. It may be possible that the combination of unseasonably warm weather and high volume of boating activity within the Hampton River and transient boaters congregating in the anchorage east of I-64 contributed to the unusually high levels of enterococcus observed. The marinas were verified to be in satisfactory condition with operational pump out stations. Ongoing marine construction aimed at widening the Hampton Roads Bridge Tunnel is intermittently increasing marine traffic and impacting water turbidity.

Copies of Bacteriological, Hydrographic 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 a directory and interactive map is available via the internet at

https://www.deq.virginia.gov/permits-regulations/permits/water/surface-water-virginia-pollutant-discharge-elimination-system

Hydrographic data, sampling times and range of enterococcus concentrations measured are shown in the table below. Maps of the enterococcus sampling are shown at the conclusion of this report.

	Area	Ra	ainfall in Inc	hes			
Sampling Dates	High Tide	Ebb Current	Sampling Time	Enterococcus range (MPN/100mL)	Day of	Previous 24 hours	Previous 7 days
9/21/21	10:06	12:30	11:41	<10-41	0.00	0.00	0.23
10/4/21	8:05	10:19	9:47	<10-12033	0.00	0.00	0.00
10/5/21	8:50	11:11	9:56	<10-6867	0.01	0.00	0.00
10/6/21	9:35	12:01	9:45	10-638	0.64	0.01	0.01
10/19/21	9:01	11:37	1:15	<10-41	0.00	0.00	0.03
10/20/21	9:39	12:16	10:08	<10-441	0.00	0.00	0.03
10/21/21	10:15	12:54	2:14	73	0.00	0.00	0.03
11/3/21	8:21	10:54	9:28	<10-638	0.00	0.01	0.75
11/4/21	9:09	11:44	9:34	<10-259	0.00	0.00	0.75
11/15/21	6:11	9:58	10:12	<10-762	0.00	0.00	0.73
11/16/21			9:07	<10-2909	0.00	0.00	0.73
11/17/21			8:48	<10-384	0.00	0.00	0.73
11/18/21	8:13	12:11	9:40	<10-934	0.00	0.00	0.73
11/22/21	10:38	1:26	11:54	20-15531	0.46	0.00	0.2
12/6/21	10:28	1:56	10:28	<10-20	0.00	0.00	0.00
12/7/21	11:23	1:53	11:42	<10-350	0.00	0.00	0.00
12/8/21	12:20	3:55	9:35	<10-8664	0.24	0.00	0.00
12/20/21	9:42	12:30	9:58	<10-7270	0.00	1.1	1.53
12/21/21	10:19	1:07	10:21	<10-537	0.02	0.00	1.1
1/6/22	11:58	2:20	11:21	480-3448	0.00	0.23	3.6
1/27/22	4:11	7:08	11:40	20-865	0.00	0.00	0.66
Total Rainfall	for samplin	g Period (9/2	1/22-1/27/22)	<u>.</u>			12.32

*High Tide estimated from Hampton Roads, Old Point Comfort ** Ebb Slack Current estimated from Old Point Comfort

Information in this report is gathered by and primarily for use by the Division of Shellfish Safety, Virginia Department of Health, in order to fulfill its responsibilities of shellfish growing area supervision and classification. However, the data are made available to various agencies participating in shellfish program coordinated activities or other interested parties.

Copies of the current condemnation notices and maps are available via the Internet at <u>https://www.vdh.virginia.gov/environmental-health/environmental-health-services/shellfish-safety/</u>.

SECTION B: SEWAGE POLLUTION SOURCES

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

SECTION C: NONSEWAGE WASTE SITES

	G. #		Field #	Inspection Date	Deficiency or Pollution Type	Latitude	Longitude	Longitude Pollutant Remarks		Structure Type	Contact	Overall Site Remarks	Locality	DSS Staff
3	52 5	6	6	3/31/2022	INDUSTRIAL WASTES, direct	37.013326	-76.318153	Wash down waste from fish processing discharges directly into tidal waters. VPDES permit #VAG523006 issued by DEQ					Hampton	
	13 5	6	F1	3/31/2022	INDUSTRIAL WASTES, direct	37.023034	-76.344815	Wash down waste from crab processing operations directly discharging into tidal waters. VPDES permit #VAG523005 issued by DEQ.	NA	Business	N		Hampton	FM
3	56 5	6	F3	3/31/2022	INDUSTRIAL WASTES, direct	37.022964	-76.343386	Wash down waste from fish processing discharges directly into tidal waters. VPDES permit #VAG523001 issued by DEQ.	NA	Business	N		Hampton	FM
3	54 5	6	G98	4/18/2022	INDUSTRIAL WASTES, direct	36.999683	-76.317528	Wash down and sump from tunnel operations and expansion directly discharging into tidal waters. VPDES permit VA0005657, VA0093084					Hampton	IG
3	53 5	6	G99	4/18/2022	INDUSTRIAL WASTES, indirect	37.005710	-76.303379	Superfund site see EPA.gov for site specifics.		Business		EPA ID VA7213720603	Hampton	IG

SECTION D: BOATING ACTIVITY

	GA #	Field #	Inspection Date	Deficiency or Pollution Type	Latitude	Longitude	Pollutant Remarks	Septic System Type	Structure Type	Contact	t Overall Site Remarks	Locality	Boating Activity Type	Number of Wet Slips	NUM BOATS <26'	NUM BOATS >26'	Evidence of Live- Aboards	DSS
25	56	35	3/31/2022	BOATING ACTIVITY	37.011999	-/6 346511	Pumpout not working, HRSD year round mobile pump out program.	NA	Marine	Ν		Hampton	Marina	90	50	25	Ν	IG
5	56	CS2	3/31/2022	BOATING ACTIVITY	37.029982	-76.335690		NA				Hampton	Marina	50	2	4	Ν	СТ
14	56	CS3	3/31/2022	BOATING ACTIVITY	37.022019	-76.344140		NA				Hampton	Marina	25	3	9	Ν	СТ
15	56	CS4	3/31/2022	BOATING ACTIVITY	37.020104	-76.344356		NA				Hampton	Marina	223	15	163	Ν	СТ
17	56	CS5	3/31/2022	BOATING ACTIVITY	37.017608	-76.350387		NA				Newport News	Marina	38	7	11	Ν	СТ
16	56	CS6	3/31/2022	BOATING ACTIVITY	37.017785	-76.349841		NA				Hampton	Marina	6	0	2	Ν	СТ
3	56	CS7	3/31/2022	BOATING ACTIVITY	37.013319	-76.318194		NA				Hampton	Marina	13	0	8	Ν	СТ
7	56	F12M	3/31/2022	BOATING ACTIVITY	37.026775	-76.339394		NA	Marine	Ν		Hampton	Marina	0	0	0	Ν	FM
0	56	F1M	3/31/2022	BOATING ACTIVITY	37.004846	-76.313847		NA	Marine	Ν		Hampton	Marina	328	29	144	Ν	FM
10	56	F3M	3/31/2022	BOATING ACTIVITY	37.023011	-76.343348		NA	Marine	Ν		Hampton	Marina	13	0	1	Ν	FM
2	56	F5M	3/31/2022	BOATING ACTIVITY	37.024316	-76.310006		NA	Marine	Ν		Hampton	Marina	12	0	0	Ν	FM
357	56	F6M	3/31/2022	BOATING ACTIVITY	37.017036	-76.336441		NA	Marine	Ν		Hampton	Marina	25	8	0	Ν	FM
4	56	F7M	3/31/2022	BOATING ACTIVITY	37.024637	-76.338694		NA	Marine			Hampton	Marina	53	0	0	Ν	FM
8	56	F8M	3/31/2022	BOATING ACTIVITY	37.024421	-76.341595		NA	Marine	Ν		Hampton	Marina	35	0	8	Ν	FM
9	56	F9M	3/31/2022	BOATING ACTIVITY	37.024217	-76.342589		NA	Marine	Ν		Hampton	Marina	60	5	46	Ν	FM
6	56	L1	3/31/2022	BOATING ACTIVITY	37.036257	-76.338620		NA	Marine	Ν	Address in Healthspace listed as 9 Cape Dorey Drive, Hampton VA 23669	Hampton	Marina	24	0	0	N	LS
20	56	L2	3/31/2022	BOATING ACTIVITY	37.016188	-76.346588		NA	Marine	N	Blue Water Yacht Sales Service Yard	Hampton	Marina	20	0	0	N	LS
23	56	L3	3/31/2022	BOATING ACTIVITY	37.016835	-76.342619		NA	Marine	Ν	Blue Water Yachting Center	Hampton	Marina	211	0	0	Ν	LS
24	56	34	3/31/2022	BOATING ACTIVITY	37.015566	-76.340863		NA	Marine	Ν	Facility is not currently occupied.	Hampton	Under Surveillance	10	0	0	Ν	IG
26	56	36	3/31/2022	BOATING ACTIVITY	36.983953	-76.397756		NA	Marine	Ν	Peterson Yacht Basin, Public Boat Ramp.	Newport News	Under Surveillance	0	0	0	Ν	IG
19	56	CS1	3/31/2022	BOATING ACTIVITY	37.016614	-76.348306		NA				Hampton	Under Surveillance	5	0	3	Ν	СТ
11	56	F10M	3/31/2022	BOATING ACTIVITY	37.022938	-76.343480		NA	Marine	Ν	Hampton City Dock #2	Hampton	Under Surveillance	4	0	0	Ν	FM
12	56	F11M	3/31/2022	BOATING ACTIVITY	37.022909	-76.343646		NA	Marine	Ν	VPI Seafood Lab	Hampton	Under Surveillance	0	0	0	Ν	FM
18	56	F13M	3/31/2022	BOATING ACTIVITY	37.016636	-76.351748		NA	Marine		Vulcan Materials	Hampton	Under Surveillance	2	0	0	Ν	FM
355	56	F2M	3/31/2022	BOATING ACTIVITY	37.023040	-76.344832			Business	Ν	Graham and Rollins Incorporated	Hampton	Under Surveillance	6	0	0	Ν	FM
22	56	L4	3/31/2022	BOATING ACTIVITY	37.016346	-76.345897		NA	Marine	Ν	McGurl Yacht Accommodations	Hampton	Under Surveillance	0	0	0	Ν	LS
21	56	L5	3/31/2022	BOATING ACTIVITY	37.016352	-76.346125		NA	Marine	N	Sunset Creek Boat Ramp	Hampton	Under Surveillance	0	0	0	Ν	LS

SECTION E: CONTRIBUTES ANIMAL POLLUTION

	GA #	Field #	Inspection Date	Deficiency or Pollution Type	Latitude	Longitude	Pollutant Remarks	Septic System Type	Structure Type	Contact	Overall Site Remarks	Locality	DSS Staff
1	56	L6	3/31/2022	CONTRIBUTES ANIMAL POLLUTION, indirect	37.030766	-76.305502 7 h	orses observed.	NA	Business	N	Hampton University Stables. Facility closed due to Covid-19	Hampton	LS

SUMMARY

Growing Area # 056

Hampton Roads – Old Point Comfort to Newport News Point 28 February 2022

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

- 4 DIRECT # 6, F1, F3, G98
- <u>1</u> INDIRECT # G99
- 5 C.1. TOTAL

2. SOLID WASTE DUMPSITES

- 0 DIRECT None.
- <u>0</u> INDIRECT None.
- 0 C.2. TOTAL

3. STORMWATER OUTFALLS

Stormwater features can be viewed via the public facing GIS layer for City of Hampton utilities found at... <u>https://webgis2.hampton.gov/sites/ParcelViewer/</u>

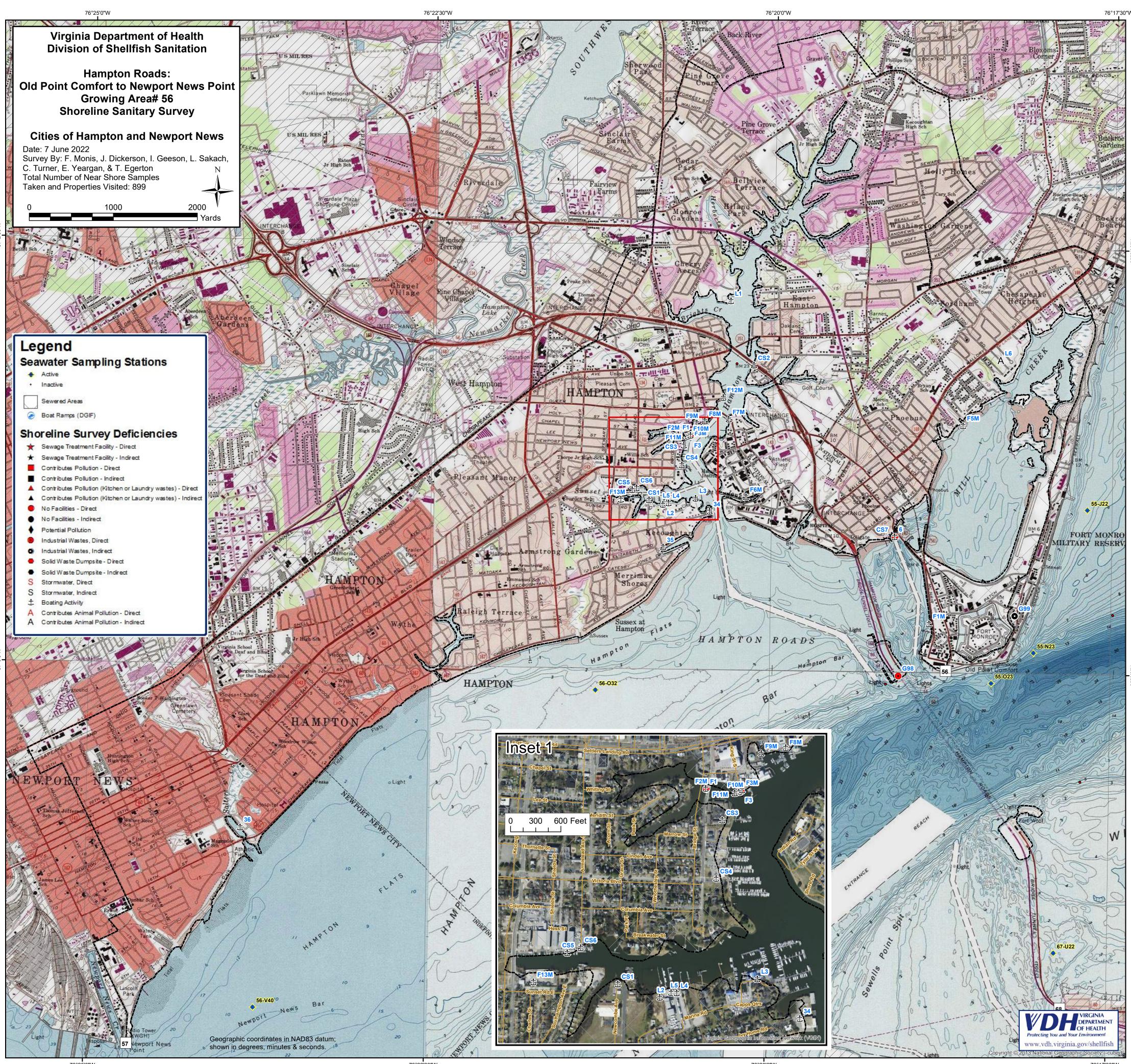
SECTION D: BOATING ACTIVITY

- 18 MARINAS # 35, CS2, CS3, CS4, CS5, CS6, CS7, F12M, F1M, F3M, F5M, F6M, F7M, F8M, F9M, L1, L2, L3
- 0 OTHER PLACES WHERE BOATS ARE MOORED None.

<u>9</u> – UNDER SURVEILLANCE – # 34, 36, CS1, F10M, F11M, F13M, F2M, L4, L5 27 – D. TOTAL

SECTION E: CONTRIBUTES ANIMAL POLLUTION

- 0 DIRECT None.
- <u>1</u> INDIRECT # L6
- 1 E. TOTAL



76°25'0"W

76°22'30"W

∎ 76°20'0"W

GA # 056 - Hampton Roads: Old Point Comfort to Newport News Point Enterococci Sampling

0 0

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9 June 2022

www.vdh.virginia.gov/shellfis

VIRGINIA DEPARTMENT OF HEALTH

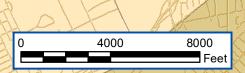
0.0

- Highest Sample: 12,033 at # F168 on 10/4/21.

Legend

Enterococcus spp. (MPN/100ml) Sampling Dates: 9/21/21 - 1/27/22

- < 10
- 10 100
- **O** 101 1000
- 0 1001 10000
- > 10000



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