



COMMONWEALTH of VIRGINIA
DEPARTMENT OF HEALTH
DIVISION OF SHELLFISH SAFETY

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JAMES RIVER: NEWPORT NEWS POINT TO DEEP CREEK
Growing Area # 057
Cities of Hampton and Newport News
Shoreline Sanitary Survey

Date: 18 August 2022

Survey Period: October 28, 2021 – April 22, 2022

Total Number of Samples Taken and Properties Inspected: 195

Surveyed By: C. Turner, J. Dickerson, I. Geeson, F. Monis, L. Sakach, E. Yeargan,
& T. Egerton

SECTION A: GENERAL

This survey area extends from Reference Point 57 at Newport News Point to Reference Point 58 at Blunt Point, including the James River shoreline between these points, Newport News Creek (Small Boat Harbor), Lake Maury, Kettle Pond, Country Club Creek, Indigo Lake and all of their tributaries.

The topography is characterized by an immediate rise in elevation along the shoreline to moderate heights and then leveling out to form a broad plateau. In the southeastern portion, the shoreline rises abruptly from 10' to 15', leveling out at approximately 20'. The relief increases in the upstream portions, with shoreline elevations reaching 25' to 30'.

The population is very dense throughout the survey area. The area economy depends upon general metropolitan commerce, seafood, tourism, various military installations, and large industrial operations including Huntington Ingalls Newport News Shipbuilding, Dominion Terminal Associates, Fairlead Boat Works, Kinder Morgan Pier IX Terminal (coal storage and shipment) and Boat Harbor Sewage Treatment Plant.

Meteorological data indicated that 21.24" of rain fell during the survey period. A monthly breakdown follows:

Oct. 28-31, 2021	0.9"	November	2.19"	December	2.02"
January 2022	6.6"	February	1.81"	March	4.66"
April 1-22	3.06"				

The area is serviced by a public sewerage system operated by the Hampton Roads Sanitation District (HRSD) and is connected to either the Boat Harbor Sewage Treatment facility, which discharges into the James River at Newport News Point; or the James River Sewage Treatment facility which discharges into the Warwick River. HRSD has announced on their website plans to transfer waste from the Boat Harbor Treatment plant to the

Nansemond Treatment facility via a 32" pipe that will traverse the James River. Construction is scheduled for 2023-2024.

Sanitary wastes generated by the Monitor-Merrimac Memorial Bridge Tunnel offices located on the south island are held in a 1500 gallon tank with a high-water alarm, and are pumped at least three times a week by an approved sewage disposal company. Wastes generated from the north service island go directly to the public sewerage system in Newport News. The James River Bridge tender station utilizes a 500 gallon holding tank for sanitary waste. This tank is pumped once every three weeks and disposed of at the HRSD Boat Harbor Treatment Plant.

Boating activity involves a full range of vessel types, sizes, and associated support activities. Several industrial facilities along the Newport News waterfront have moorings for large military, shipping or service vessels. These facilities are not regulated by the VDH Marina Program, however these facilities are included in this survey as marinas as they present a large portion of the boating activity in the survey area. The Newport News Seafood Industrial Park encompasses all of the shoreline around the small boat harbor. A number of seafood processing facilities are located within the boundary of this survey. Seafood products landed and processed include scallops, shellstock clams and crabs.

Of the seafood processing establishments located within the survey area, one has direct permitted discharge to shellfish waters; South Bay Fishmonger (VA 1641 RS).

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 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. An interactive map of sewer, stormwater and drainage basins is available on the City of Newport News' internet web page at <https://maps.nnva.gov/viewer/>

Elevated levels of enterococcus were detected during wet weather sampling at several locations that feed into the James River and Small Boat Harbor inlet. Further investigation in cooperation with HRSD has detected the human-associated molecular marker gene HF183 which may indicate the presence of human-source fecal pollution. A three year review of the sewage spill reporting database references several spills associated with periods of heavy rains in the Newport News vicinity, including two >100,000 gallon spills into Government Ditch during that time frame.

VDH Division of 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.

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.

Growing Area 57 Nearshore Sampling					Rainfall in Inches		
Sample Dates	High Tide*	Ebb Current**	Sampling Times	Enterococcus range (MPN/100ml)	Day of	Previous 24 hours	Previous 7 days
2/24/22	3:21	4:27	12:43	<10-565	0.27	0.08	0.18
3/1/22	8:44	10:06	9:27	<10-12,033	0	0	0.35
3/2/22	9:23	10:49	9:20	<10-1607	0	0	0.35
3/9/22	2:17	2:53	9:13	<10-5172	1.33	0.08	0.08
Total Rainfall for sampling period (2/24-3/9): 1.68"							

* High tide estimated from Hampton Roads, Newport News

** Ebb current estimated from Hampton Roads, Newport News

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 VPDES permits and inspections are available at the Department of Environmental Quality. A directory and interactive map are available via the internet at <https://www.deq.virginia.gov/permits-regulations/permits/water/surface-water-virginiapollutant-discharge-elimination-system>

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

SECTION B: SEWAGE POLLUTION SOURCES

[illegible]

SECTION C: NONSEWAGE WASTE SITES

[illegible]

SECTION D: BOATING ACTIVITY

[illegible]

SECTION E: CONTRIBUTES ANIMAL POLLUTION

[illegible]

SUMMARY

Growing Area # 057
James River: Newport News Point to Deep Creek
18 August 2022

SECTION B: SEWAGE POLLUTION SOURCES

1. SEWAGE TREATMENT FACILITIES

1 – DIRECT – # 41
1 – INDIRECT – # 41A
2 – 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 – TOTAL

3. POTENTIAL POLLUTION – Periodic surveillance of these properties will be maintained.

0 – POTENTIAL POLLUTION – None.

SECTION C: NON-SEWAGE WASTE SITES

1. INDUSTRIAL WASTE SITES

6 – DIRECT – # CT1, CT2A, F4, F5, L1, L2
2 – INDIRECT – # CT3, F3
8 – TOTAL

2. SOLID WASTE DUMPSITES

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

3. STORMWATER OUTFALLS

Division staff worked with Newport News Utilities Department to review stormwater outfalls and data is available through the City's web page.

SECTION D: BOATING ACTIVITY

8 – MARINAS – # CT1A, CT2, CT4, F2, GM1, L1A, L3, L4
3 – UNDER SURVIELLENCE – # CT3A, CT5, F4A
11 – TOTAL

SECTION E: CONTRIBUTES ANIMAL POLLUTION

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

Virginia Department of Health
Division of Shellfish Sanitation

James River:
Newport News Point to Deep Creek
Growing Area # 057
Shoreline Sanitary Survey

Cities of Hampton and Newport News

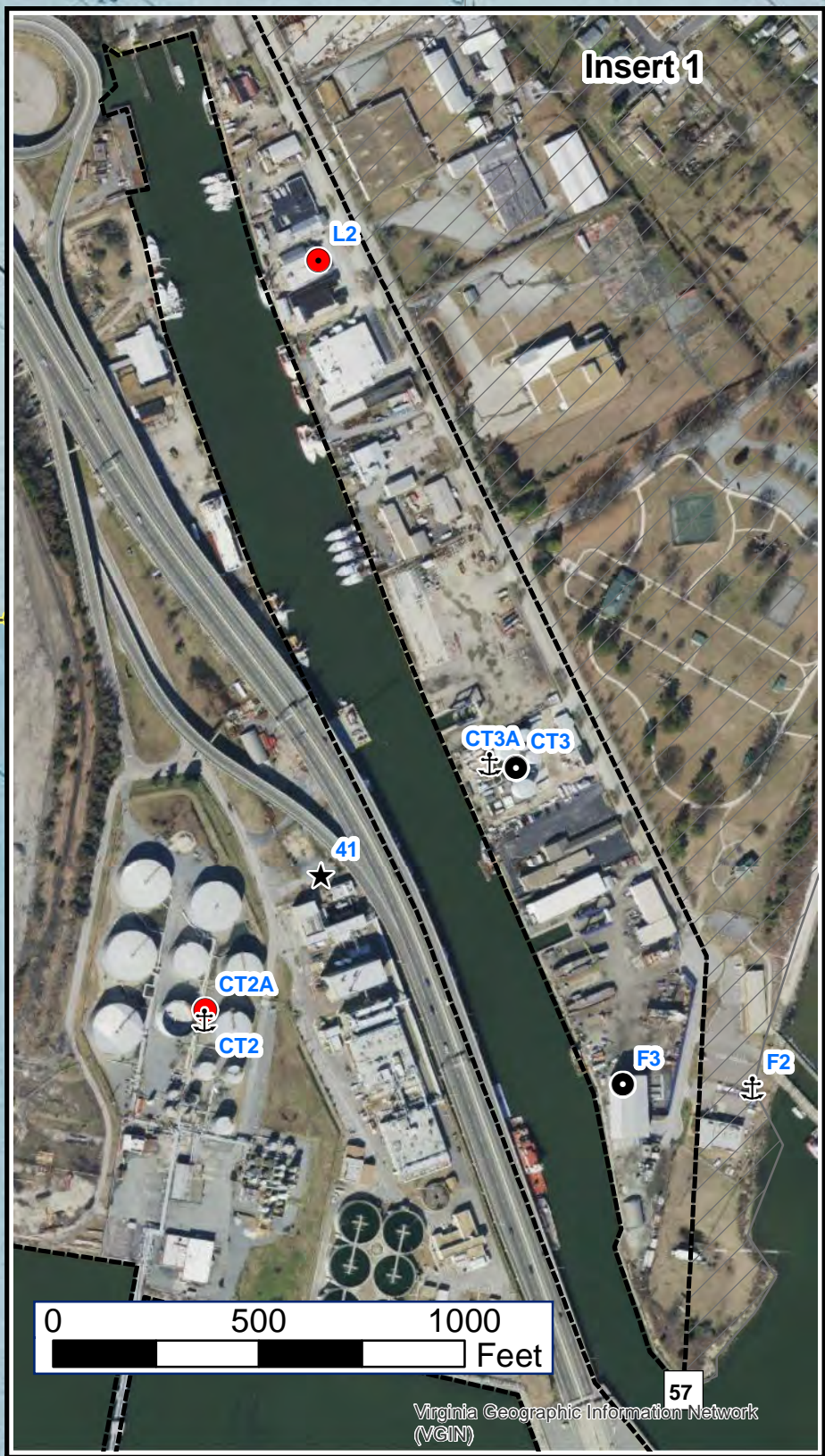
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Number of Properties Surveyed: 195



0 3000 6000 Feet



Legend

Seawater Sampling Stations

- Active
- Inactive
- Sewered Areas
- Boat Ramps (DGIF)

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



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

**Near-Shore Enterococcus Sampling
Growing Area # 057 - James River:
Newport News Point to Deep Creek
Cities of Hampton and Newport News**

* Highest "dry" sample value was 12,033 collected
on March 1, 2022.

0 4000 8000 Feet



Legend

Enterococcus spp. (MPN/100ml)

Sampling Dates: 2/24/22 - 3/9/22

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

**Targeted Rainfall Near-Shore
Enterococcus Sampling
Growing Area # 057 - James River:
Newport News Point to Deep Creek
Cities of Hampton and Newport News**

* Highest "wet" sample value was 5179 collected
on March 9, 2022.

0 4000 8000 Feet

Legend

Enterococcus spp. (MPN/100ml)

Sampling Dates: 2/24/22 - 3/9/22

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