



**COMMONWEALTH of VIRGINIA**  
**DEPARTMENT OF HEALTH**  
**DIVISION OF SHELLFISH SAFETY**

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**VIRGINIA BEACH**  
**Growing Area # 073**  
**City of Virginia Beach**  
**Shoreline Sanitary Survey**

**Date:** 29 June 2022

**Survey Period:** March 31 – May 26, 2022

**Total Number of Properties Surveyed and Near Shore Samples Collected:** 20

**Surveyed By:** I. Geeson

**SECTION A: GENERAL**

This survey area extends from Reference Point 73 at the east end of the Lesner Bridge to Reference Point 74A on the Atlantic Ocean, at the southeastern most point of the U.S. Naval Reservation at Dam Neck, including the Atlantic Ocean between these points; Rudee Inlet, Lake Rudee, Owls Creek, Lake Wesley, and Lake Christine; and all of their tributaries. Outside of Fort Story and First Landing State Park, the population is dense. Gentle hills and dunes in First Landing Park and on Fort Story reach heights of 30-50'. Low swamps, marshes and wetlands are found throughout the park and in sections of the fort. The northern part of this survey area is connected to the HRSD collection system for final treatment at the Chesapeake-Elizabeth Wastewater Treatment Plant. The southern portion of this survey is connected to the HRSD Atlantic Treatment Plant with discharges to Lake Tecumseh, Chowan & Dismal Swamp, and the Atlantic Ocean offshore of Dam Neck Road.

At the time of this writing there are no shellfish leases or public harvest grounds in this survey area. Virginia Marine Resource Commission retains the authority to issue leases within Rudee Inlet and up to the colregs boundary 3 nautical miles offshore of the Atlantic coast upon request.

Meteorological data indicated that 6.64" of rain fell during the period from March 31 to May 26. A monthly breakdown is as follows:

March 31, 2022	0.42"	April	2.05"	May 1-26	4.17"
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Rudee Inlet has heavy recreational boating activity during the warm weather months and there are commercial animal watching and fishing excursions year round. While there are pump out facilities at several of the marinas in this watershed, some of the larger commercial tour boats use a US Coast Guard Approved Type 1 or Type 2 Marine Sanitation Device and are allowed to discharge their treated waste into the growing area. VDH Marina Program Inspections indicate that there are no formal liveaboard agreements at any of the inspected facilities. During this survey the shoreline was visually inspected for evidence of liveaboards at marinas and private piers and none were observed. There is a large floating

structure in the tributary that feeds into the Northwest section of Lake Rudee, but there is no evidence that this houseboat is currently habitable.

A large tract of land located on the south side of the survey area between Rudee Inlet and Birdneck Road is owned by the federal government and the City of Virginia Beach and undeveloped. The Rudee Inlet complex drains stormwater south from approximately 19th Street and east from Birdneck Road.

Nearshore seawater stations were established in Rudee Inlet to survey waters beyond routine classification stations. Stations were created in closer proximity to the shoreline and farther upstream than routine stations.

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

Growing Area 73 Nearshore Sampling					Rainfall in Inches		
Sample Dates	Tidal stage*	Current**	Sampling Times	Enterococcus range (MPN/100ml)	Day of	Previous 24 hours	Previous 7 days
3/31/22*	1.8' rising	slack flood 17:14	16:59-17:41	<10-30	0.42"	0"	0.31"
4/11/22	1.9' rising	ebbing to a 14:51 slack	14:02-14:32	all samples below detection (<10)	0"	0"	1.11"
Total Rainfall for sampling period: 6.64"							

\* Tide station mouth of Rudee Inlet.

\*\* Current station Virginia Beach Southside.

3/31/22 Sample prioritized wet weather sampling over Tide and Current stage.

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/environmental-health/environmental-health-services/shellfishsafety/>

This report lists only those properties which have a sanitary deficiency or have other environmental significance. **“DIRECT”** indicates that the significant activity or deficiency has a direct impact on shellfish waters.

The Virginia Department of Health's Beach Monitoring Program conducts water sampling along 45 public beaches in Virginia which are analyzed weekly for enterococci during the recreational swimming season (May-September). Included within the Growing Area 73 survey boundary are 20 recreational beach monitoring sites along the Atlantic Ocean and Shore Drive. At these stations the three most recent seasons of data were reviewed. Each site had a geometric mean of less than 35 MPN/100ml and the percentage of exceedances to the swimming advisory threshold of  $\geq 104$  MPN/100ml was between 0-5%. Taken together this indicates that there are not significant or persistent impairments to water quality.

A map of this analysis is included at the end of this report. A real time interactive map of beach monitoring sites can be found online at:

<https://www.vdh.virginia.gov/waterborne-hazards-control/swimming-advisories-and-monitored-beaches-map/>

## SECTION B: SEWAGE POLLUTION SOURCES

[illegible]

# Shoreline Survey # 073

## SECTION C: NONSEWAGE WASTE SITES

[illegible]

## SECTION D: BOATING ACTIVITY

[illegible]

## SECTION E: CONTRIBUTES ANIMAL POLLUTION

[illegible]

## SUMMARY

Growing Area # 073  
Virginia Beach  
29 June 2022

### SECTION B: SEWAGE POLLUTION SOURCES

#### 1. SEWAGE TREATMENT FACILITIES

1 – DIRECT – # 10A

1 – INDIRECT – # 10

2 – 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

0 – DIRECT – None

3 – INDIRECT – # 11, 12, 33

3 – C.1. TOTAL

#### 2. SOLID WASTE DUMPSITES

0 – DIRECT – None

0 – INDIRECT – None

0 – C.2. TOTAL

#### 3. STORMWATER OUTFALLS

0 – DIRECT – None.

0 – INDIRECT – None.

0 – E. TOTAL

### SECTION D: BOATING ACTIVITY

6 – MARINAS – # 1, 2, 3, 4, 8, 9

0 – OTHER PLACES WHERE BOATS ARE MOORED – None.

4 – UNDER SURVEILLANCE – # 5, 6, 7, G1D

10 – D. TOTAL

### SECTION E: CONTRIBUTES ANIMAL POLLUTION

0 – DIRECT – None

0 – INDIRECT – None

0 – E. TOTAL



Virginia Department of Health  
Division of Shellfish Sanitation

Virginia Beach  
Growing Area # 073  
Shoreline Sanitary Survey

City of Virginia Beach

Date: 29 June 2022  
Surveyed By: I. Geeson  
Total Number of Properties Surveyed  
and Near Shore Samples Collected: 19



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

0 1000 2000  
Feet

0 3000 6000  
Feet

OCEANA NAVAL AIR STATION  
Geographic coordinates in NAD83 datum;  
shown in degrees, minutes & seconds.

0 8000  
Feet



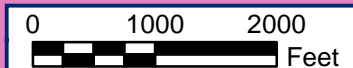
# Near-Shore Enterococcus Sampling Growing Area # 073 - Virginia Beach City of Virginia Beach

\* Beach Monitoring Program (Enterococcus)  
GeoMean 2019-2021



## Rudee Inlet

\* Highest value was 30 collected  
on April 1, 2022.



### Legend

#### Enterococcus spp. (MPN/100ml)

Sampling Dates: 4/1/22 - 4/12/22

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

#### Beach Monitoring GeoMean Average 2019-2021

- <10 (BDL)
- 10 - 20
- >20