



COMMONWEALTH of VIRGINIA

Department of Health
P O BOX 2448
RICHMOND, VA 23218

TTY 7-1-1 OR
1-800-828-1120

JAMES RIVER: MULBERRY POINT TO JAMESTOWN ISLAND James City County and City of Newport News Growing Area # 059 Shoreline Sanitary Survey

Date: 29 June 2023

Survey Period: March 15 – June 21, 2023

Total Number of Properties and samples taken: 47

Surveyed by: I. Geeson & E. Yeargan

SECTION A: GENERAL

This growing area extends from the eastern side of the Route 199, College Creek Bridge in Williamsburg to Mulberry Point on the Fort Eustis Military installation, including the James River and out to mid channel, all the shoreline between these two points, and all its tributaries.

The waters upstream of West Landing Road (coordinates 37°13'23.6", -76°41'12.5") are in the Prohibited status. Access to Skiffes Creek is strictly controlled by port security at the Fort Eustis Military Base. No recreational or commercial boating activity or harvest is authorized within this area.

The area is served by sanitary sewer (Hampton Roads Sanitation District) which is conveyed to and treated at the Williamsburg Sewage Treatment facility (discharges into James River).

The topography of the area is low near the southern boundary. Elevations here range from 0-10' in the Mulberry Island portion to a maximum of 20-30' just northeast of Eustis Lake. Towards the northern portions of the survey area in James City County and the City of Williamsburg elevation rise sharply from the shoreline to a maximum of 50-70'.

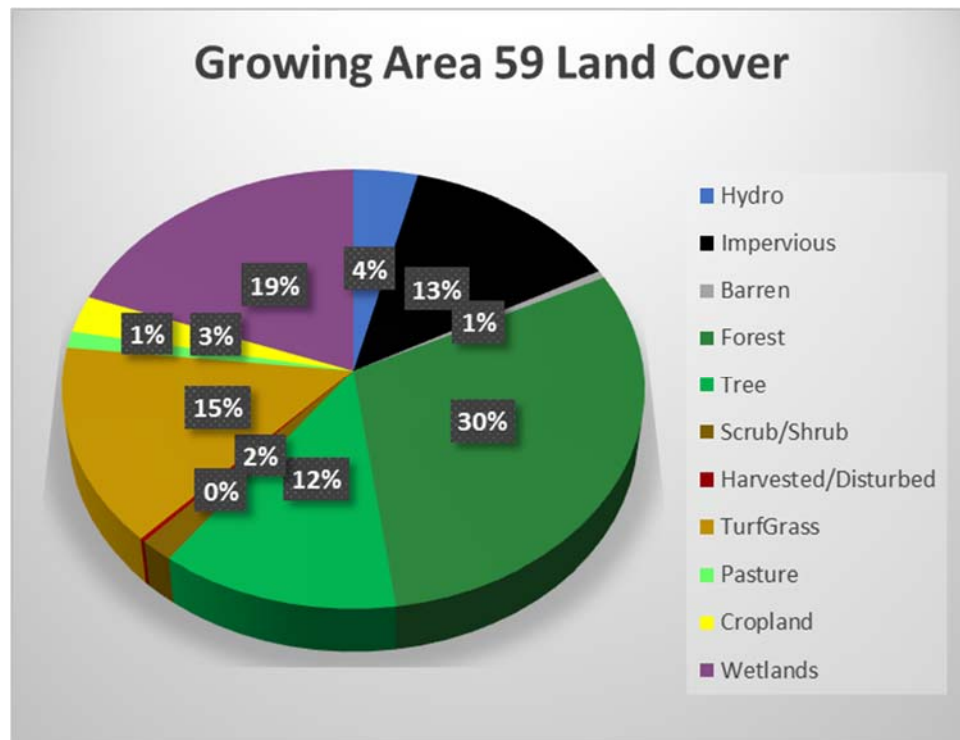
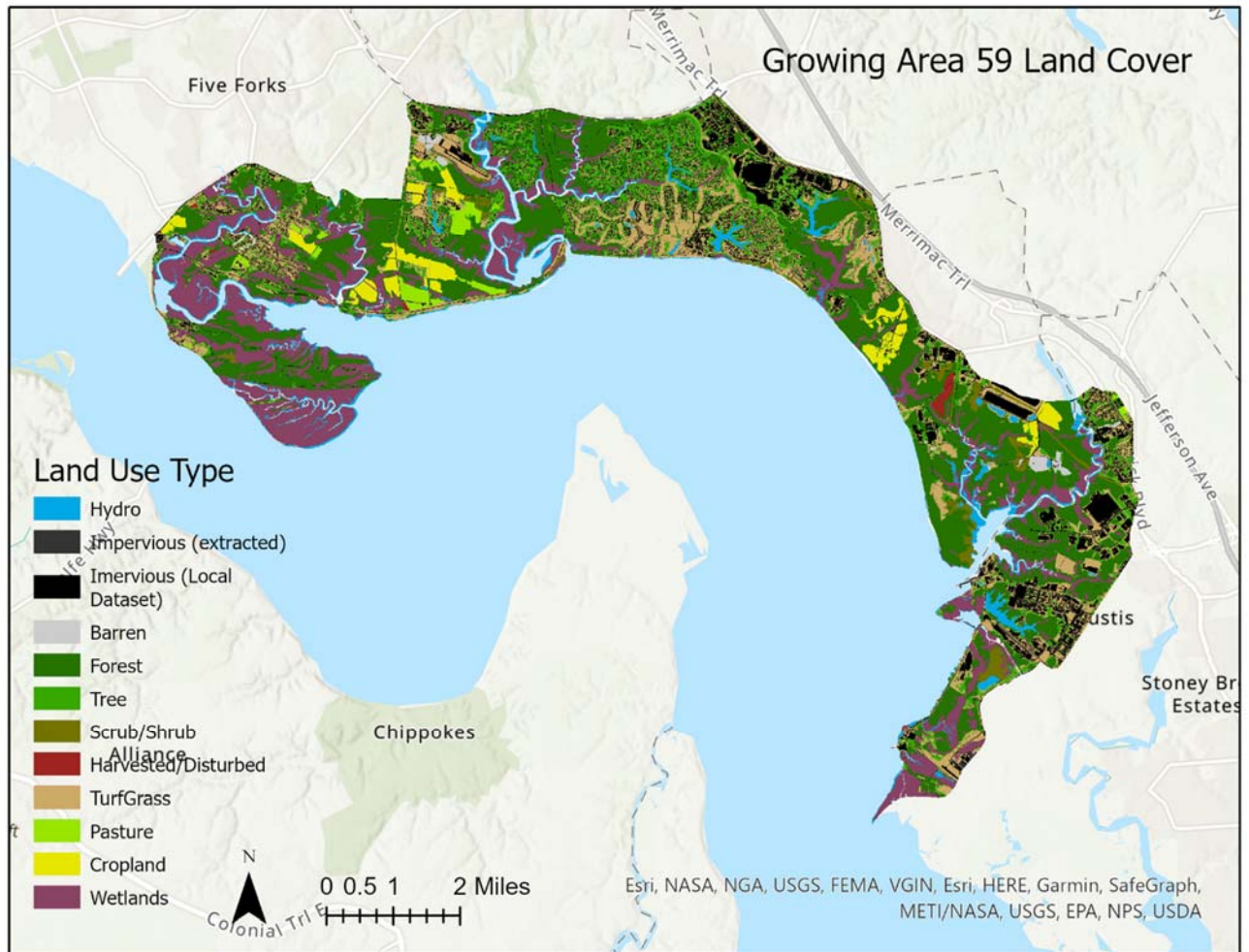
The northern portion of the survey area falls within James City County. The population in James City County has grown an estimated 17.5% since the 2010 census. The estimated population is around 81,000 people. Data from 2021 indicate there are 34,723 housing units. In 2022, 283 building permits were issued.

<https://www.census.gov/quickfacts/fact/table/US/PST045221>

Approximately 5700 people reside in Fort Eustis.

<https://www.unitedstateszipcodes.org/23604/#stats>

Within Growing Area 59, there are 5093 land parcels. Land Cover data are shown below.



Source: https://gismaps.vdem.virginia.gov/Download/Land_Cover/County_Report.pdf

Meteorological data indicated that 10.65" of rain fell during the survey period. Monthly breakdown is as follows:

Date Range	Cumulative Rainfall (inches)	Average Monthly rainfall 2012-2022
03/15/23-03/31/23	1.35"	-----
04/23	5.71	3.95
05/23	2.71	4.19
06/01/23-06/15/23	0.88	-----

At the time of this writing, the James River Reserve Fleet (JRRF) has 10 vessels in its inventory. While several of these vessels are scheduled for disposal in the distant future, the JRRF will continue to be a presence in this survey area. The vessels are monitored for water infiltration and general maintenance issues via both visual and physical inspections. These vessels are not discharging.

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.

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 # 59 Nearshore, Onshore Sampling						Rainfall in inches	
Sample dates	High Tide*	Ebb Current **	Sampling time	Enterococcus range (MPN/100ml)	Day of	Previous 24 hours	Previous 7 days
4/4/23	11:03	12:56	11:43 -14:30	9-41	0	0	1.04
5/4/23	12:03	13:41	13:01 – 14:39	9-379	0	0.04	3.18
Total rainfall for nearshore sampling period 4/4/23-5/4/23: 5.55"							

* High Tide estimated from Mulberry Point, Fort Eustis Station NOAA Station ID 2251

** Slack ebb current estimated from Point of Shoals NOAA Station ID 5246

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-virginia-pollutant-discharge-elimination-system> and <https://geohub-vadeq.hub.arcgis.com/pages/Water%20Datasets>

Copies of Bacteriological, Hydrographic and Shellfish Closure data are available at the area office for review. Copies of the current condemnation notices and maps are available via the Internet at <https://www.vdh.virginia.gov/environmental-health/environmental-health-services/shellfish-safety/>

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.

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 # 059
James River: Mulberry Point to Jamestown Island
29 June 2023

SECTION B: SEWAGE POLLUTION SOURCES

1. SEWAGE TREATMENT FACILITIES

1 – DIRECT – # 3A

1 – INDIRECT – # 3

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

1 – DIRECT – # 5

0 – INDIRECT – None.

1 – C.1. TOTAL

2. SOLID WASTE DUMPSITES

0 – DIRECT – None.

0 – INDIRECT – None.

0 – C.2. TOTAL

3. STORMWATER

1 – DIRECT – # 17A

0 – INDIRECT – None.

1 – TOTAL

SECTION D: BOATING ACTIVITY

3 – MARINAS – # 2, 17, 19

0 – UNDER SURVEILLANCE – None.

3 – D. TOTAL

SECTION E: CONTRIBUTES ANIMAL POLLUTION

0 – DIRECT – None.

1 – INDIRECT – # 18

1 – E. TOTAL

Virginia Department of Health
Division of Shellfish Sanitation

James River:
Mulberry Point to Jamestown Island
059
Shoreline Sanitary Survey

James City County and
City of Newport News

Date: 29 June 2023
Survey By: I. Geeson & E. Yeagan
Number of Properties Surveyed: 47



Legend
Seawater Sampling Stations

- Active
- Inactive

- Sewered Areas
- Boat Ramps (DGIF)

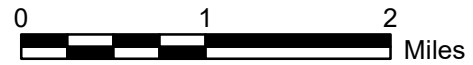
Shoreline Survey Deficiencies

- 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 # 059
- Mulberry Point to Jamestown Island
James City County & Newport News**

* Highest value was 379 collected on 5/4/23.



Legend

Enterococcus spp. (MPN/100ml)

Sampling Dates: 9/30/22 - 3/2/23

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