



## COMMONWEALTH of VIRGINIA

Department of Health  
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### **Chincoteague Bay Growing Area # 100 Accomack County Shoreline Sanitary Survey**

**Date:** 31 January 2024

**Survey Period:** October 7, 2022 – November 16, 2023

**Total Number of Properties Visited and Samples Collected:** 177

**Surveyed By:** R. Snead and T. Charnock

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

This survey area extends from Reference Point 99A at the northwest end of the Black Narrows Bridge to Reference Point 100 at the Virginia-Maryland state line where it intersects the western Chincoteague Bay shoreline, including Chincoteague Bay shoreline between these two points, Middle Mouth, Wire Narrows, Far Mouth, New Virginia Cove, Queen Sound Channel, Cockle Creek, Mosquito Creek, Little Mosquito Creek (Wattsville Branch, Wallops Pond, Snead Branch), Horntown Bay, Coldkall Creek, Swans Gut Creek, (Selby Branch, Sand Branch), Powell Creek, Guys Point Gut, and all of their tributaries.

The topography of the area varies from low and marshy along bays and creeks, to patches of elevated ground reaching 30 feet above sea level. Some residential areas experience frequent ponding of rainwater and occasional marine flooding.

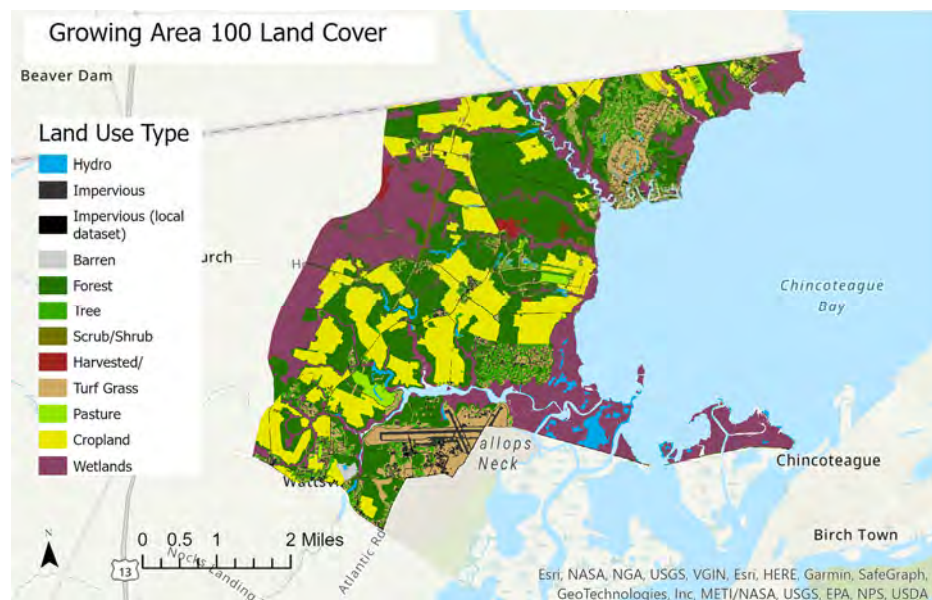
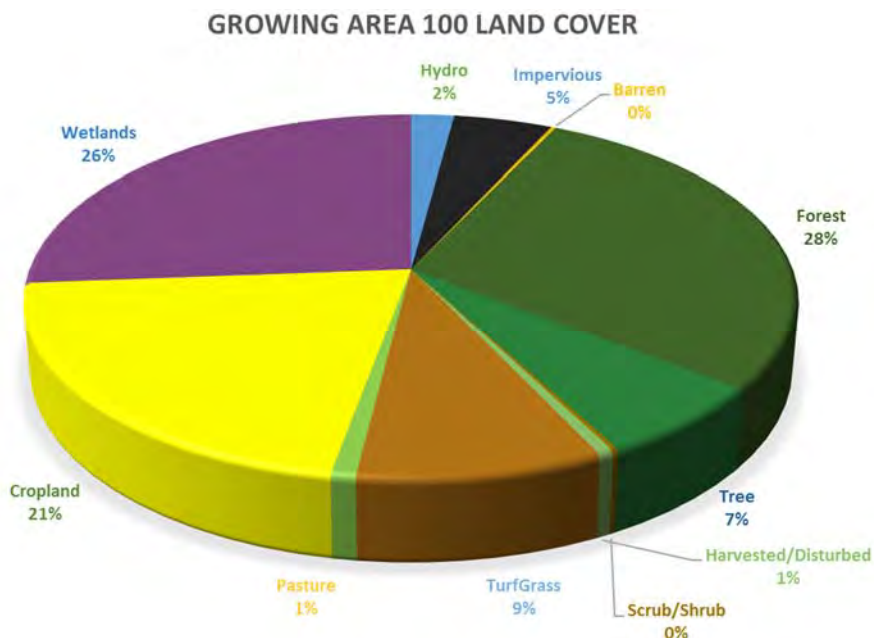
The survey area falls within Accomack County. The population remains stable at around 33,000 residents over the last two census periods. Data from 2022 indicate there are 22,044 housing units, with 207 building permits issued that year.

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

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 dwellings and businesses throughout the watershed are served primarily by private septic systems. Wallops Flight Facility has a small Wastewater Treatment Plant that discharges to a Prohibited section of Little Mosquito Creek. Captain's Cove community has a non-discharging WWTP that serves their residents.

Within Growing Area 100 there are 9401 land parcels. Land use data are shown below.



Meteorological data indicated that 35.36" of rain fell during the survey period. A monthly breakdown is as follows:

Date range	Cumulative Rainfall (inches)	Avg. Monthly rainfall (2012-2022)
10/7-31/2022	1.56	-
11/2022	2.38	2.51
12/2022	3.32	3.31
1/2023	2.78	3.37
2/2023	1.57	3.59
3/2023	1.46	3.31

4/2023	4.11	2.97
5/2023	4.27	3.82
6/2023	3.45	3.14
7/2023	4.18	4.67
8/2023	2.34	3.86
9/2023	2.84	3.58
10/2023	1.09	3.85
11/1-16/2023	1.17	-

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 # 100 Nearshore Sampling, Rainfall in inches						
Sample dates	High Tide*	Sampling time	Enterococcus range (MPN/100ml)	Day of	Previous 24 hours	Previous 7 days
1-20-2023	07:41	9:47-11:10	9-10	0	0.07	0.23
2-3-2023	07:49	9:34-10:26	9-20	0	0	0.23
6-13-2023	06:04	8:07-9:45	9-134	0.01	0.14	0.25
9-11-2023	07:34	9:55-11:40	9-241	0.32	0.01	0.44
10-11-2023	07:46	9:55-11:04	9-70	0	0	0.03
10-12-2023	08:25	10:40-11:30	9-101	0	0	0.03
10-16-2023	10:58	11:32-12:29	9-229	0	0.06	0.74
11-16-2023	11:05	11:32-12:45	9-10	0	0	0.01
Total rainfall for nearshore sampling period (1-20-23 to 11-16-23)				26.84		

\* High Tide Estimated from Chincoteague Island, Blake Cove NOAA Station ID 1879.

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/water/surface-waters-vpdes> and <https://geohub-vadeq.hub.arcgis.com/pages/Water%20Datasets>

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.

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/>.

# Shoreline Survey # 100

## SECTION B: SEWAGE POLLUTION SOURCES

[illegible]

# Shoreline Survey # 100

## SECTION C: NONSEWAGE WASTE SITES

[illegible]

## Shoreline Survey # 100

## SECTION D: BOATING ACTIVITY

[illegible]

## Shoreline Survey # 100

## SECTION E: ANIMALS PRESENT

[illegible]

## SUMMARY

Growing Area # 100  
Chincoteague Bay  
31 January 2024

### SECTION B: SEWAGE POLLUTION SOURCES

#### 1. SEWAGE TREATMENT FACILITIES

- 1 – DIRECT – # G1
- 2 – INDIRECT – # R1, R13
- 3 – B.1. TOTAL

#### 2. ON-SITE SEWAGE DEFICIENCIES – Correction of the deficiencies in this section is the responsibility of the local health department.

- 1 – CONTRIBUTES POLLUTION, DIRECT – # R4
- 6 – CONTRIBUTES POLLUTION, INDIRECT – # R5, R6, R12, R15, R19, R20
- 0 – CP (Kitchen or Laundry Wastes), DIRECT – None
- 1 – CP (Kitchen or Laundry Wastes), INDIRECT – # R18
- 0 – NO FACILITIES, DIRECT – None.
- 0 – NO FACILITIES, INDIRECT – None.
- 8 – B.2. TOTAL

#### 3. POTENTIAL POLLUTION

- 0 – POTENTIAL POLLUTION – None.

### SECTION C: NON-SEWAGE WASTE SITES

#### 1. INDUSTRIAL WASTE SITES

- 0 – DIRECT – None
- 1 – INDIRECT – # R26
- 0 – C.1. TOTAL

#### 2. SOLID WASTE DUMPSITES

- 0 – DIRECT – None
- 0 – INDIRECT – # 111, 113
- 0 – C.2. TOTAL

#### 3. STORMWATER OUTFALLS

- 0 – DIRECT – None.
- 0 – INDIRECT – None.
- 0 – C.3. TOTAL

### SECTION D: BOATING ACTIVITY

- 3 – MARINAS – # R3, R9, R27
- 0 – UNDER SURVEILLANCE – None
- 3 – D. TOTAL

### SECTION E: ANIMALS PRESENT

- 0 – DIRECT – None.
- 4 – INDIRECT – # R2, R7, R10, R11
- 4 – E. TOTAL



Virginia Department of Health  
Division of Shellfish Sanitation

Chincoteague Bay  
#100  
Shoreline Sanitary Survey

Accomack County

Date: 31 January 2024  
Survey By: R. Sneed and T. Charnock  
Number of Properties Visited and  
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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 # 100 - Chincoteague Bay Accomack County

\* Highest value was 241 collected on 9/11/23  
at station # CB76.

0 1 2 Miles



## Legend

Enterococcus spp. (MPN/100ml)

Sampling Dates: 1/20/23 - 9/11/23

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