



COMMONWEALTH of VIRGINIA

Department of Health
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NANDUA AND CURRATUCK CREEKS Growing Area # 082 Accomack County Shoreline Sanitary Survey

Date: 6 August 2024

Survey Period: January 4, 2024 – July 31, 2024

Total Number of samples analyzed and sites evaluated: 124

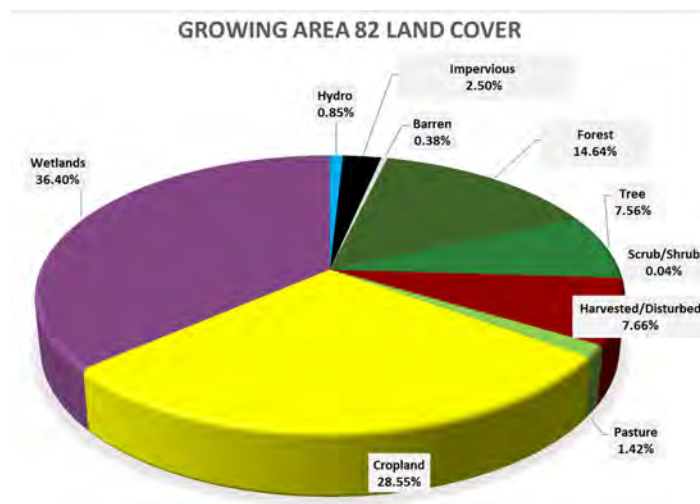
Surveyed By: T. Wagner, R. Snead, T. Charnock, & I. Geeson

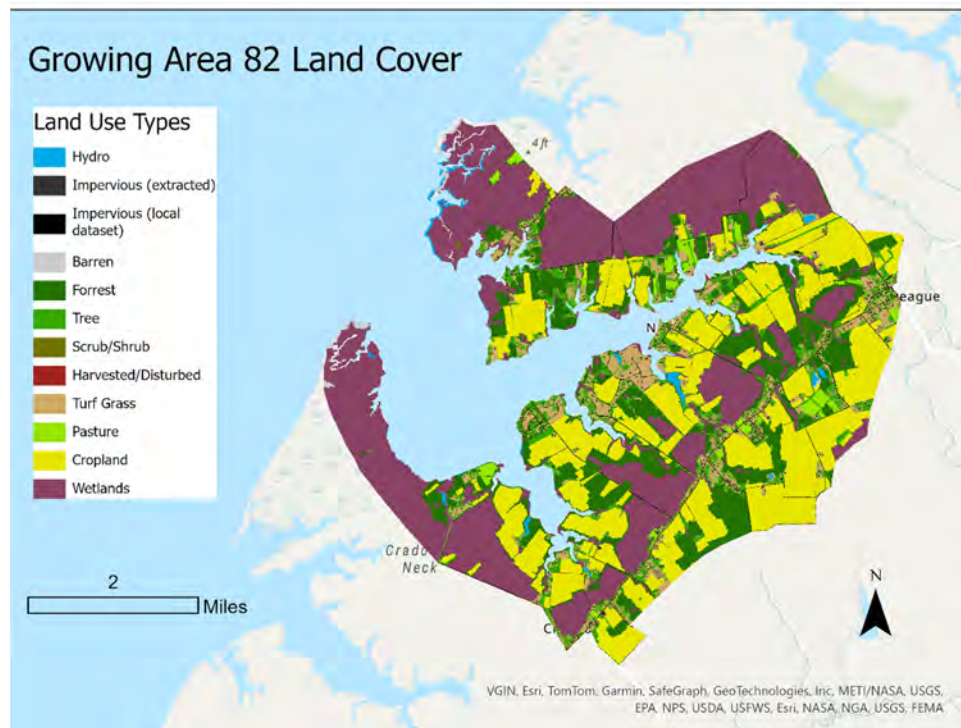
SECTION A: GENERAL

This survey extends from Reference Point 82 at Route 633 (extended to shoreline) to Reference Point 83 at Milbrys Point, including the Chesapeake Bay shoreline between these two points, Nandua Creek, Back Creek, Kusian Cove, Boggs Gut, McLean Gut, Curratuck Creek, and all of their tributaries.

Elevations are below 5' within the primary shoreline boundary (1500' shoreward of mean high water). A relatively flat plateau extends along the entire area to 10' rise approximately one mile from Route 178 where the elevation is about 25'. It reaches a maximum of 45' at the outer reaches of the drainage basin.

All properties throughout the survey are served by on-site sewage disposal systems. The 2020 census reported that there are an estimated 1189 residents across 722 housing units in Growing Area 82. Within Growing Area 82 there are 1374 land parcels. Land Cover data are shown below.





Meteorological data indicated that 24.52" of rain fell during the survey period. A monthly breakdown is as follows:

Date range	Cumulative Rainfall	Avg. Monthly rainfall (2013-2023)
January 4 - 31, 2024	3.15"	NA (partial month)
February 2024	2.59"	3.28"
March 2024	7.00"	3.22"
April 2024	1.36"	3.24"
May 2024	2.90"	3.71"
June 2024	2.07"	4.67"
July 2024	5.45"	4.68"

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 # 82 Nearshore Sampling						Rainfall in inches	
Sample dates	High Tide*	Ebb Current **	Sampling time	Enterococcus range (MPN/100ml)	Day of	Previous 24 hours	Previous 7 days
2/21/24	9:40	12:36	9:50 – 11:12	<10 - 10	0	0	0.02
4/17/24	7:44	10:42	9:17 – 10:40	<10 - 60	0	0.02	0.53
5/30/24	5:12	08:00	7:55 – 9:52	<10 - 75	0.08	0.04	0.5
6/17/24	08:24	10:12	9:14 – 12:03	<10 - 591	0	0	0.19
7/31/24	08:50	10:24	9:01 – 10:20	<10 - 31	0.44	0	1.91
Total rainfall for nearshore sampling period (2/21/24 - 7/31/24) 20.02"							

* High Tide estimated from Harborton, Pungoteague Creek, VA (NOAA ID 8633091).

** Slack Ebb Current estimated from Milby Point, 5.3 n.mi. WNW of (NOAA ID ACT4736).

Information in this report is gathered by and primarily for use by the Division of Shellfish Safety, Virginia Department of Health, 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.

Shoreline Survey # 082

SECTION B: SEWAGE POLLUTION SOURCES

[illegible]

Shoreline Survey # 082

SECTION C: NONSEWAGE WASTE SITES

[illegible]

Shoreline Survey # 082

SECTION D: BOATING ACTIVITY

[illegible]

Shoreline Survey # 082

SECTION E: ANIMALS PRESENT

[illegible]

SUMMARY

Growing Area # 082
Chesapeake Bay: Nandua Creek
6 August 2024

SECTION B: SEWAGE POLLUTION SOURCES

1. SEWAGE TREATMENT FACILITIES

0 – DIRECT – None.
0 – INDIRECT – None.
0 – 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 to determine any status change.

0 – POTENTIAL POLLUTION – None.

SECTION C: NON-SEWAGE WASTE SITES

1. INDUSTRIAL WASTE SITES

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

2. SOLID WASTE DUMPSITES

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

3. STORMWATER

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

SECTION D: BOATING ACTIVITY, INDIRECT

0 – MARINAS – None.
1 – UNDER SURVEILLANCE – # 16
1 – TOTAL

SECTION E: ANIMALS PRESENT

1 – DIRECT – # 59
1 – INDIRECT – # 76
2 – TOTAL

Virginia Department of Health
Division of Shellfish Sanitation

Chesapeake Bay: Nandua Creek
082
Shoreline Sanitary Survey

Accomack County

Date: 6 August 2024
Survey By: T. Wagner, R. Snead,
T. Charnock, & I. Geeson
Number of Properties Surveyed &
Near shore samples collected: 124



0 1000 2000
Yards

Legend
Seawater Sampling Stations

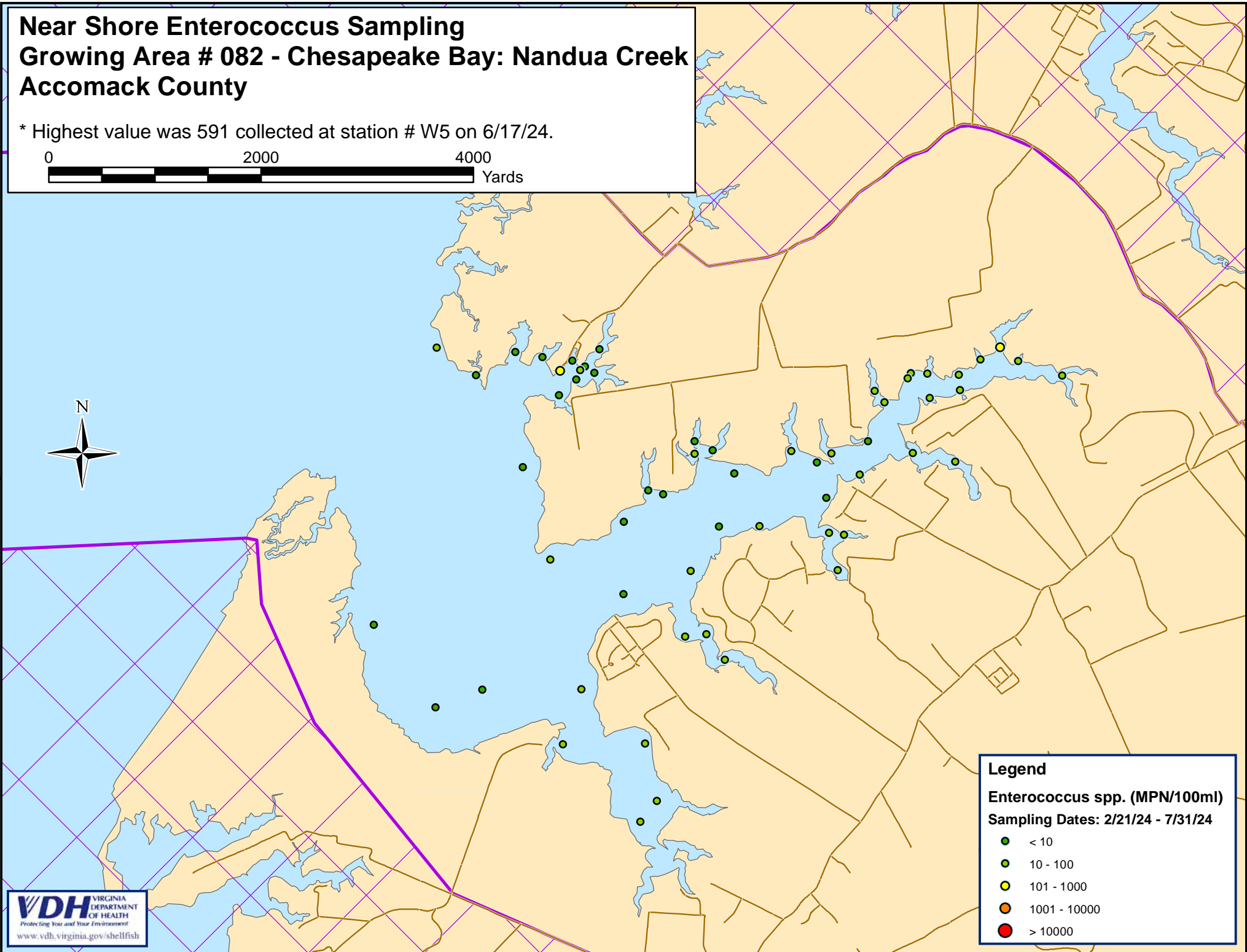
- Active
 - Inactive
 - Sewered Areas
 - Boat Ramps (DGF)
- Shoreline Survey Deficiencies**
- Sewage Treatment Facility - Direct
 - Sewage Treatment Facility - Indirect
 - Contributes Pollution - Direct
 - Contributes Pollution - Indirect
 - Contributes Pollution (Kitchen or Laundry wastes) - Direct
 - 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 # 082 - Chesapeake Bay: Nandua Creek Accomack County

* Highest value was 591 collected at station # W5 on 6/17/24.

0 2000 4000
Yards



Legend

Enterococcus spp. (MPN/100ml)

Sampling Dates: 2/21/24 - 7/31/24

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