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CHESAPEAKE BAY: NASSAWADOX AND WESTERHOUSE CREEKS Growing Area # 085 Northampton County Shoreline Sanitary Survey

Date: February 13, 2025

Survey Period: March 3, 2024 – December 31, 2024

Total Number of Properties Surveyed and samples analyzed: 251

Surveyed By: R. Snead

SECTION A: GENERAL

This survey area extends from Reference Point 85 at Nassawadox Point to Reference Point 86 at Great Neck Point, including the Chesapeake Bay shoreline between these two points, Nassawadox Creek (Kelley Cove, Holly Grove Cove, Warehouse Creek, and Church Creek), Westerhouse Creek, and all of their tributaries. After the start of this survey, the southern boundary was moved northward to Swan Drive. Future surveys will adhere to the 2024 Growing Area boundaries.

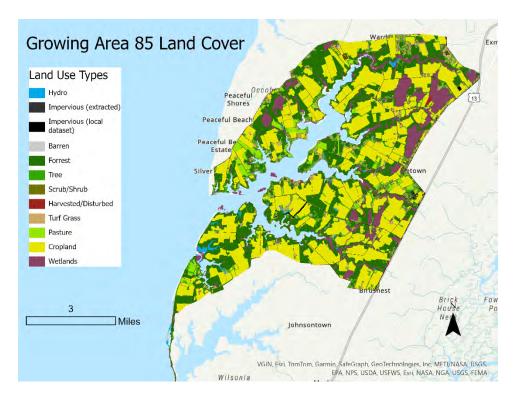
Most of this area utilizes onsite (septic) wastewater treament. A wastewater treatment plant (VA0027537) associated with the former Northampton-Accomack Memorial Hospital has been decommissioned. The buildings that remain from that facility are now connected via force main to the HRSD Onancock WWTP.

The 2020 census reported that there are an estimated 1648 residents across 886 housing units in Growing Area 85. The population density is 61 residents per square mile.

Within Growing Area 85 there are 1938 land parcels. Land Cover data are shown below.

GROWING AREA 85 LAND COVER Hydro Unpervious 2,7% Barren 0.2% Cropland 41.8% Pasture 2.6% Pasture 2.6% TurGrass 6.1%





Meteorological data indicated that 34.85" of rain fell during the survey period. A monthly breakdown is as follows:

Date range	Cumulative Rainfall (inches)	Avg. Monthly rainfall (2013-2023)
March 2024	7.95"	3.43"
April 2024	1.52"	3.32"
May 2024	3.32"	3.77"
June 2024	1.96"	4.37"
July 2024	7.59"	4.77"
August 2024	4.27"	4.13"
September 2024	3.42"	4.48"
October 2024	0.14"	3.25"
November 2024	2.42"	2.81"
December 2024	2.26"	3.34"

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.

G. G		shore Sampling	9				fall in inches
Sample	High Tide	Ebb	Sampling	Enterococcus	Day	Previous	Previous 7
dates	*	Current **	time	range (MPN/100ml)	of	24 hours	days
4-23-2024	11:04	02:00-07:48	11:05-12:10	9-9	0	0	0.61"
6-4-2024	09:20	11:29-17:48	11:14-12:38	9-31	0	0.01"	0.2"
6-6-2024	10:58	12:54-19:15	10:52-1:03	9-86	0	0.34"	0.5"
7-16-2024	06:48	08:21-15:14	9:25-10:24	9-41	0	0	1.54"
7-17-2024	07:43	09:23-16:02	9:18-11:00	9-63	0.07"	0	1.54"
8-29-2024	07:28	09:50-16:08	9:26-10:30	9-75	0	0	0
10-16-2024	10:06	12:55-18:48	10:16-11:36	9-63	0	0	0
10-17-2024	10:55	13:51-19:44	10:30-11:54	9-63	0	0	0
11-1-2024	11:08	14:46-20:22	10:30-11:21	9-52	0	0	0
11-15-2024	09:36	12:48-18:46	9:47-10:57	30-1296	1.11"	0.11"	0.84"
12-12-2024	07:37	10:54-16:51	9:24-11:32	10-1314	0	1.93"	1.95"
12-31-2024	10:40	13:45-20:04	10:41-11:24	9-63	0	0.05"	0.05"

^{*} High Tide estimated from Gaskins Point, Occohannock Creek (NOAA ID 8632869).

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.

^{**} Ebb Current estimated from Nassawadox Point, 1.9 n.mi, NW of (ACT4696) Depth; 13 feet.

SECTION B: SEWAGE POLLUTION SOURCES

GA#	Field #	Deficiency or Pollution Type	Latitude	Longitude	Pollutant Remarks	Overall Site Remarks	Locality	DSS Staff	Date of Correction	Correction Notes

SECTION C: NONSEWAGE WASTE SITES

GA #	Field #	Deficiency or Pollution Type	Latitude	Longitude	Pollutant Remarks	Overall Site Remarks	Locality	DSS Staff

	GA #	Field #	Deficiency or Pollution Type	Latitude	Longitude	Pollutant Remarks	Overall Site Remarks	Boating Activity Type	Number of Wet Slips	Evidence of Live- Aboards	Locality	DSS Staff
1	85					Permit SYOG-7QMPEB	Bayford Oyster Company. Crab shedding operation. Significant boating activity. Private boat ramp,8 boat slips, portable restroom,	Marina	13	N	Northampton	RS
2	85	2	BOATING ACTIVITY	37.477325	-75.948707	Private Pier and ramp. Shellfish site visit 2024.Not found in EHD.		Under Surveillance	5	N	Northampton	IG
3	85	G2	BOATING ACTIVITY	37.476329	-75.934967	Private Dock. Shellfish program visit 2024, not in EHD.		Under Surveillance	6	N	Northampton	IG

SECTION E: ANIMALS PRESENT SITES

	GA #	Field #	Deficiency or Pollution Type	Latitude	Longitude	Pollutant Remarks	Overall Site Remarks	Locality	DSS Staff
4	85	R1	CONTRIBUTES ANIMAL POLLUTION, direct	37.477512	-75.949659	6 horses in small fenced in pasture on waterfront property. Pasture on hill where all slopes lead directly to Nassawadox Creek.	Light blue single story cinderblock house on hill top with all slopes leading directly to Nassawadox Creek.	Northampton	RS
5	85	R2	CONTRIBUTES ANIMAL POLLUTION, indirect	37.486538	-75.945290	WildlifeER, Wildlife rehabilitation center. Present at time of survey are 6 goats, 1 sheep, 3 ducks, 7 chickens, 2 turkey, 2 guinea fowl, 2 peacocks, 2 tortoises, 7 bats, 4 hawks, 4 owls, rabbits.	Yellow vinyl siding one story house with white trim, other buildings include Wildlife rehabilitation center, wild animal shelters.	Northampton	RS
6	85	R3	CONTRIBUTES ANIMAL POLLUTION, direct	37.488444	-75.937618	Cattle farm, present at time of survey were 30-40 cattle with barn, multiple pastures and stables, cattle have direct access to Nassawadox Creek.	Two story wooden house at end end of long dirt road through center of cattle farm. Other buildings include barns, multiple RV campers, and stables.	Northampton	RS
7	85	R4	CONTRIBUTES ANIMAL POLLUTION, indirect	37.499866	-75.920977	Horse pastures in agricultural fields. Barn, stables, multiple pastures, unknown number of horses present.	Unchanged from previous survey. Horse pastures in agricultural fields. Stables, barn, unknown number of horses present	Northampton	RS
8	85	R5	CONTRIBUTES ANIMAL POLLUTION, indirect	37.508632	-75.912619	Multiple fenced pastures stables and barns, multiple horses present.	Large Brick and vinyl two story house(s) with multiple fenced pastures.	Northampton	RS
9	85	R6	CONTRIBUTES ANIMAL POLLUTION, indirect	37.506736	-75.893337	Gray barn and stables, fenced pastures. Multiple horses present, waste disposal method unknown.	White two story house with black shutters.	Northampton	RS
10	85	R9	CONTRIBUTES ANIMAL POLLUTION, indirect	37.462860	-75.926400	Present are 2 horses, 15 chickens, 5 geese	Present are 2 horses, 15 chickens, 5 geese. Manure and waste are composted and removed	Northampton	RS
11	85	R8	CONTRIBUTES ANIMAL POLLUTION, indirect	37.476612	-75.922989	Present are two large pastures with 30-40 sheep.		Northampton	RS

SUMMARY

Growing Area # 085

Chesapeake Bay: Nassawadox and Westerhouse Creeks

13 February 2025

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 is 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.
 - <u>0</u> INDIRECT None.
 - 0 TOTAL
- 3. STORMWATER OUTFALLS
 - 0 DIRECT None.
 - 0 INDIRECT None.
 - 0 C.3. TOTAL

SECTION D: BOATING ACTIVITY, INDIRECT

- 1 MARINAS # R7
- <u>2</u> UNDER SURVEILLANCE # 2, G2
- 3 TOTAL

SECTION E: ANIMALS PRESENT

- 2 DIRECT # R1, R3
- 5 INDIRECT # R2, R4, R5, R6, R8, R9
- 7 TOTAL

