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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/guickfacts/fact/table/US/PST045221

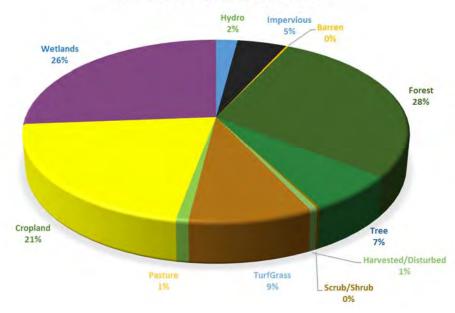
For this survey, nearshore seawater stations were established to survey the full extent of navigable waters beyond routine classification stations. Stations were created in closer proximity to the shoreline and farther upstream than routine stations and are intended to evaluate drainage entry points 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.

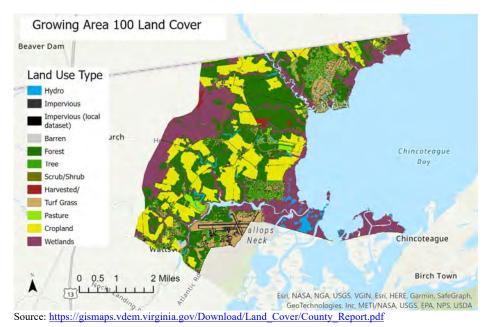
The dwellings and businesses throughout the watershed are served primarily by private septic systems. Wallops Flight Facility has a small Wastewater Treatment Plant that discharges to a Prohibited section of Little Mosquito Creek. Captain's Cove community has a non-discharging WWTP that serves their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



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

GROWING AREA 100 LAND COVER





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	High	Sampling	Enterococcus range	Day	Previous	Previous 7					
dates	Tide*	time	(MPN/100ml)	of	24 hours	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 f	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.arcqis.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/.

SECTION B: SEWAGE POLLUTION SOURCES

	GA#	Field #	Deficiency or Pollution Type	Latitude	Longitude	Pollutant Remarks	Septic System Type	Structure Type	Contact	Overall Site Remarks	Locality	DSS Staff	Date of Correction	Correction Notes
5211	100	G1	SEWAGE TREATMENT FACILITY, direct	37.944748	-75.478016	Outfall for VPDES permit # A0024457.					Accomack	IG		
2332	100	R1	SEWAGE TREATMENT FACILITY, indirect	37.944511	-75.475286	Design Flow 0.3 MGD AVG 0.05 MGD Max 0.3 MGD.	NA		Y	Wallops Island Flight Facility Sewage Treatment Facility. VPDES permit # VA0024457.	Accomack	RS		
2497	100	R13	SEWAGE TREATMENT FACILITY, indirect	37.998363	-75.418755	Captains Cove Sewage Treatment Facility.	NA			2	Accomack	RS		
2489	100	R4	CONTRIBUTES POLLUTION, direct	38.006494		Resturaunt under rennovation, multiple complaints from local residents. Septic system draining large 3 inch PVC pipe that drains directly into Chincoteague Bay.	Conv	Business	N	Resturaunt under renovation during inspection. Newly acquired by the Greenbackville Volunteer Fire Department.	Accomack	RS		
2486	100	R5	CONTRIBUTES POLLUTION, indirect	38.010459	-75.389901	Septic lid collapsing, no evidence of correction from last survey.	Conv	Dwelling	N	White two story house.	Accomack	RS		
5086	100	R6	CONTRIBUTES POLLUTION, indirect	38.013501	-75.392514	Septic tank is not connected to house, there is a pipe that exits house, and is open to environment. Pit used to dump excrement covered with plywood.	Conv	Dwelling	N	Two story Green and Tan house with red trim.	Accomack	RS		
5087	100	R12	CONTRIBUTES POLLUTION, indirect	37.958170	-75.460669	Septic System is not connected to septic tank	Privy	Dwelling	N	White Camper, lot 62.	Accomack	RS		
5088	100	R15	CONTRIBUTES POLLUTION, indirect	37.954578	-75.458541	Septic pipe unconnected and empties into sunken pit, no effluent present.	Privy	Dwelling	N	White Camper "Ameri-Camp", Lot 33, 3-7 corner lot.	Accomack	RS		
2460	100	R19	CONTRIBUTES POLLUTION, indirect	37.953392		Sewage hose on ground, unconnected to septic, unchanged from previous survey.	Privy	Dwelling	N	Cougar RV, Lot 216, 3-6.	Accomack	RS		
2461	100	R20	CONTRIBUTES POLLUTION, indirect	37.953523	-75 456735	RV's sewage pipe is disconnected from portable sewage tank and open end on ground surface, unchanged from previous survey.	Privy		N	Nomad RV.	Accomack	RS		
2442	100	R18	CONTRIBUTES POLLUTION (kitchen or laundry wastes), indirect	37.952170	-75.458817	Washer in shed discharging onto ground.	NA	Dwelling	N	Camper under metal building, outbuilding with Laundry waste.	Accomack	RS		

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SECTION C: NONSEWAGE WASTE SITES

	GA#	Field #	Deficiency or Pollution Type	Latitude	Longitude	Pollutant Remarks	Septic System Type	Structure Type	Contact	Overall Site Remarks	Locality	DSS Staff
2390	100	R26	INDUSTRIAL WASTES, indirect	37.955296	-75.449404	Waste Oil storage containers leaking and spilling oil directly onto ground surface. Unchanged from previous survey.	NA	Business	l Y	Maintenance Facility in Trails End Campground.	Accomack	RS

SECTION D: BOATING ACTIVITY

	GA#	Field #	Deficiency or Pollution Type	Latitude	Longitude	Pollutant Remarks	Septic System Type	Structure	Contact	Overall Site Remarks	Boating Activity Type	Number of Wet Slips	NUM BOATS <26'	_	Evidence of Live- Aboards	Locality	DSS Staff
2490	100	R3	BOATING ACTIVITY	38.006767	-75.390105	Significant Boating activity.	Privy	Marine	N	Greenbackville Harbor with two ramps.	Marina	48	11	5	Y	Accomack	RS
2337	100	R9	BOATING ACTIVITY	37.951612	-/5.449848	Trails End Boat Ramp, Two boat ramps, 40 boat slips.	NA	Marine	N	Trails End Boat Ramp	Marina	40	0	0	N	Accomack	RS
5206	100	R27	BOATING ACTIVITY	37.987995	-75.418493		Conv	Marine	NA	Captain's Cove Marina. 60 Boat slips, water and electrical hookups. No pump-out stations.	Marina	60	0	0	N	Accomack	RS

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SECTION E: ANIMALS PRESENT

	GA#	Field #	Deficiency or Pollution Type	Latitude	Longitude	Pollutant Remarks	Septic System Type	Structure Type	Contact	Overall Site Remarks	Locality	DSS Staff
2458	100	R2	CONTRIBUTES ANIMAL POLLUTION, indirect	37.939315		Free ranging goats and chickens, at least 5 goats, and at least 20 chickens.	Conv	Dwelling	Y		Accomack	RS
2591	100	R7	CONTRIBUTES ANIMAL POLLUTION, indirect	38.010203	-75.404944	Pastures with farm animals	Conv	Dwelling	l N	Two story white farmhouse with chicken houses and pastures.	Accomack	RS
2507	100	R10	CONTRIBUTES ANIMAL POLLUTION, indirect	38.007675	-75.434158	Farm with multiple residences, pastures, and farm animals, including multiple horses.	Conv	Agri	N	Farm with multiple residences and pastures.	Accomack	RS
2506	100	R11	CONTRIBUTES ANIMAL POLLUTION, indirect	38.006053	-/5.4360/9	Pastures for farm animals, strong odor of horse manure.	Conv	Dwelling	l N	One story biege rancher with cedar shake siding.	Accomack	RS

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

