



COMMONWEALTH of VIRGINIA

Department of Health Division of Shellfish Safety

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SEVERN RIVER Growing Area # 044 Shoreline Sanitary Survey Gloucester County

Date: 8 September 2021

Survey Period: November 4, 2021 – August 18, 2021

Total Number of Properties Surveyed and Near-shore Samples Collected: 502

Surveyed By: I. Geeson, F. Monis, L. Sakach & E. Yeargan

SECTION A: GENERAL

This survey area extends from Reference Point 44 at Tow Stake Point to Reference Point 45 at Bush Point, including the Mobjack Bay shoreline between these two points and the Severn River and its tributaries within a designated boundary line drawn by the Division of Shellfish Safety.

The topography of the area includes low and marshy areas along the shoreline in the eastern section adjacent to the mouth of the Severn River with elevations rising to 10' along the outer reaches of the watershed.

The economy is based on construction, administrative services and businesses in the surrounding localities as well as seasonal recreational activity.

At the beginning of the survey, inspectors reviewed the available literature from prior reports, public works and online resources to characterize land use, drainage patterns, and establish nearshore seawater stations. Properties identified in the previous survey as having sanitary deficiencies or other environmental significance were revisited to evaluate their current status. All roadways and navigable shorelines within the survey boundary were visually inspected to identify potential pollution sources requiring further investigation.

Department of Environmental Quality reports significant infrastructure improvements to the <1000 GPD Sewage Treatment Facility on Stump Point. An 18,000 GPD Sewage Treatment Facility was installed in Waterview Mobile Home Park to serve each of the residences there. Samples of treated wastewater were collected from the facility and were non-detect for Fecal coliform, E. coli and Enterococcus. Because the treated effluent drains to an approved subsurface drainfield, this facility is regulated by the local health department and E. coli samples are submitted quarterly.

Nearshore seawater stations were established to survey the full extent of 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.

Meteorological data indicated that the area received a total precipitation of 46.17" for the survey period. A monthly breakdown is as follows:

Nov. 2020	4.64"	December	5.49"	Jan. 2021	3.48"	February	5.54"
March	3.72"	April	2.47"	May	1.37"	June	5.97"
July	7.34"	August	6.15"				

Growing Area 44 Nearshore Sampling				Rainfall in inches			
Sampling Dates	High Tide	Ebb Current	Sampling Time	Enterococcus range	Day of	Previous 24 hours	Previous 7 days
11/4/2020	10:50	6:11	11:02-13:02	<10-135	0.00	0.00	1.25
12/15/2020	9:09	0:33	10:54-13:58	809-6131	0.00	0.85	0.92
1/5/2021	13:25	5:21	12:51-14:30	52-650	0.00	0.00	1.5
1/6/2021	14:24	6:39	12:51-14:30	<10-134	0.00	0.00	1.5
1/11/2021	7:13	11:41	9:20-11:07	<10-52	0	0	0.00
1/13/2021	8:57	12:21	9:05-12:26	<10-134	0.00	0.00	0.00
1/14/2021	9:44	1:10	9:43-12:10	<10-31	0.00	0.00	0.00
2/8/2021	6:07	10:40	9:17-11:57	31-1187	0.00	0.18	0.3
2/9/2021	7:04	11:33	9:07-11:50	10-530	0.00	0.00	0.3
2/10/2021	7:56	12:19	9:12-11:34	<10-75	0.00	0.00	0.18
2/24/2021	6:37	11:14	9:03-11:13	<10-63	0.00	0.00	2.13

2/25/2021	7:25	11:53	8:40-11:43	<10-41	0.00	0.00	2.13
2/26/2021	8:09	12:31	8:50-11:03	<10-30	0.05	0.00	1.03
3/1/2021	10:21	14:24	10:08-11:53	<10-75	0.18	0.00	1.3
3/3/2021	11:55	3:56	12:10-12:56	<10-31	0.00	0.00	0.94
3/10/2021	6:52	11:19	8:58-11:00	<10-120	0.00	0.00	0.00
3/11/2021	7:40	12:02	8:52-9:59	<10-10	0.00	0.00	0.00
3/30/2021	11:01	14:52	10:07-12:16	<10-52	0.00	0.09	1.12
4/8/2021	7:30	11:52	8:50-9:33	<10-51	0.00	0.00	0.13
8/5/2021	7:25	10:45	11:35-11:45	<10-441	0.00	0.67	1.44
8/9/2021	10:19	14:04	13:31-13:41	<10-121	0.00	0.00	1.99
Total Rainfall for sampling Period (November 4, 2020 to August 9, 2021)							4.38

*High Tide estimated from Browns Bay

** Ebb Slack Current estimated from 2 miles WSW of New Point Comfort

Copies for Bacteriological, Hydrographic and Shellfish Closure data are available at the White Stone office for review. Copies of the current condemnation notices and maps are available via the internet at www.vdh.virginia.gov/shellfish/.

This report lists only those properties that have a sanitary deficiency or may have other environmental significance. "**DIRECT**" indicates that the significant activity or deficiency may have a direct impact on shellfish waters.

SECTION B: SEWAGE POLLUTION SOURCES

	GA #	Field #	Inspection Date	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
4809	44	GSTP1	8/18/2021	SEWAGE TREATMENT FACILITY, indirect	37.322634	-76.475436	Alternative onsite sewage system with below-ground dispersal of treated wastewater. Design Flow 18,000 GPD to drainfield with berm. Newterra membrane filtration with chlorine and UV treatment.	Alt		Y	Waterview Mobile Home Park. STP serves up to 90 units. Third party wastewater management. Regulated by Local Health Department.	Gloucester	IG		
1735	44	346	8/30/2021	SEWAGE TREATMENT FACILITY, indirect	37.314763	-76.438949	DEQ permit VAG404204 Design flow 800 GPD, 750 GPD avg.	NA	Dwelling		Forecastle LLC. House and apartment. Inspected and permitted by DEQ. UV treatment discharges to contained pond.	Gloucester	IG		
1737	44	363	8/13/2021	POTENTIAL POLLUTION	37.314674	-76.446687	2010 survey notes this unit may not be connected to approved septic.	Conv	Dwelling	N	Mobile home, currently unoccupied.	Gloucester	IG		
1741	44	376	8/13/2021	POTENTIAL POLLUTION	37.315423	-76.451277	No signs of discharge. Portable privy on location.	Privy	Dwelling	N	Two mobile homes and a storage building set up for temporary living quarters.	Gloucester	IG		
1754	44	758	8/13/2021	POTENTIAL POLLUTION	37.293820	-76.440999	Previous survey notes unknown pipe exiting foundation, no discharge.	Conv		N	Revisited 8/9/21 no contact.	Gloucester	IG		

SECTION D: BOATING ACTIVITY

	GA #	Field #	Inspection Date	Deficiency or Pollution Type	Latitude	Longitude	Pollutant Remarks	Septic System Type	Structure Type	Contact	Overall Site Remarks	Locality	Boating Activity Type	Number of Wet Slips	NUM BOATS <26'	NUM BOATS >26'	Evidence of Live-Aboards	DSS Staff
1744	44	G92A	8/13/2021	BOATING ACTIVITY	37.304093	-76.454316	Satisfactory inspection by Marina Program April 2021.	Conv		NA	Severn Yachting Center.	Gloucester	Marina	125	18	40	N	IG
1753	44	G142A	8/16/2021	BOATING ACTIVITY	37.297417	-76.442361	Pumpout disfunctional during Marina Program inspection April 2021. Pumpout available at nearby Severn Yachting center.	Conv	Marine	NA	Holiday Marina.	Gloucester	Marina	20	10	0	N	IG
1708	44	38	8/13/2021	BOATING ACTIVITY	37.332342	-76.444692				N	Day use pier and unimproved ramp.	Gloucester	Under Surveillance	4	0	0	N	IG
1722	44	180	8/13/2021	BOATING ACTIVITY	37.322434	-76.473084		NA		Y	Community pier.	Gloucester	Under Surveillance	4	0	0	N	IG
1738	44	365	8/13/2021	BOATING ACTIVITY	37.314005	-76.448138		Privy	Marine	N	Barracks Boat Dock.	Gloucester	Under Surveillance	10	3	1	N	IG
1739	44	373	8/13/2021	BOATING ACTIVITY	37.314977	-76.450716		Privy			Wharf style mooring facility for workboats.	Gloucester	Under Surveillance	5	4	0	N	IG
1747	44	532	8/16/2021	BOATING ACTIVITY	37.301633	-76.469148		Conv	Marine	Y	Gloucester Point Family Campground. Ramp and temporary docking for private campground.	Gloucester	Under Surveillance	10	0	0	N	IG

SECTION E: CONTRIBUTES ANIMAL POLLUTION

	GA #	Field #	Inspection Date	Deficiency or Pollution Type	Latitude	Longitude	Pollutant Remarks	Septic System Type	Structure Type	Contact	Overall Site Remarks	Locality	DSS Staff
1711	44	98	8/13/2021	CONTRIBUTES ANIMAL POLLUTION, indirect	37.341273	-76.488501	Undetermined number of horses in stable.	NA	Agri	N		Gloucester	IG
1728	44	261	8/13/2021	CONTRIBUTES ANIMAL POLLUTION, indirect	37.307382	-76.473044	30 chickens, manure worked into the soil.	NA	Dwelling	Y		Gloucester	IG
1729	44	263	8/13/2021	CONTRIBUTES ANIMAL POLLUTION, indirect	37.310051	-76.473401	1 horse, manure pile removed annually.	NA	Dwelling	Y		Gloucester	IG
1730	44	271	8/13/2021	CONTRIBUTES ANIMAL POLLUTION, indirect	37.312020	-76.471795	20-25 chickens, manure used onsite.	NA	Dwelling	Y		Gloucester	IG
1731	44	272	8/13/2021	CONTRIBUTES ANIMAL POLLUTION, indirect	37.310217	-76.471598	4 horses, manure collected twice yearly.	NA	Dwelling	Y		Gloucester	IG
1732	44	288	8/13/2021	CONTRIBUTES ANIMAL POLLUTION, indirect	37.308924	-76.461404	1 horse and some smaller livestock viewed from road.	NA	Dwelling	N		Gloucester	IG
1751	44	641	8/13/2021	CONTRIBUTES ANIMAL POLLUTION, indirect	37.279526	-76.469399	2010 Survey references 65 Cattle and 3 horses.	NA	Agri	N	No access.	Gloucester	IG
4815	44	758	8/13/2021	CONTRIBUTES ANIMAL POLLUTION, indirect	37.293820	-76.440999	Undetermined number of ducks and goats.	Conv		N	Revisited 8/9/21 no contact.	Gloucester	IG
4816	44	758	8/13/2021	CONTRIBUTES ANIMAL POLLUTION, indirect	37.293820	-76.440999	Undetermined number of ducks and goats.	Conv		N	Revisited 8/9/21 no contact.	Gloucester	IG
1763	44	887	8/13/2021	CONTRIBUTES ANIMAL POLLUTION, indirect	37.297546	-76.422682	18 hunting dogs, kennel cleaned daily, manure on fields.	NA	Dwelling	Y		Gloucester	IG
4780	44	G123A	8/26/2021	CONTRIBUTES ANIMAL POLLUTION, indirect	37.299997	-76.475018	8 horses observed from road.			N	Pasture to west of Campground Road.	Gloucester	IG
4812	44	GT1	8/9/2021	CONTRIBUTES ANIMAL POLLUTION, indirect	37.289703	-76.434134	7 Turkeys.			N		Gloucester	

SUMMARY

Growing Area # 044
Severn River
8 September 2021

SECTION B: SEWAGE POLLUTION SOURCES

1. SEWAGE TREATMENT FACILITIES

- 0 – DIRECT – None.
- 2 – INDIRECT – # 346, GSTP1
- 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.

- 3 – POTENTIAL POLLUTION – # 363, 376, 758

SECTION C: NON-SEWAGE WASTE SITES

1. INDUSTRIAL WASTE SITES

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

2. SOLID WASTE SITES

- 0 – DIRECT – None.
- 0 – INDIRECT – None.
- 0 – C.2. TOTAL

3. STORMWATER OUTFALLS

- 0 – DIRECT – None.
- 0 – INDIRECT – None.
- 0 – E. TOTAL

SECTION D: BOATING ACTIVITY

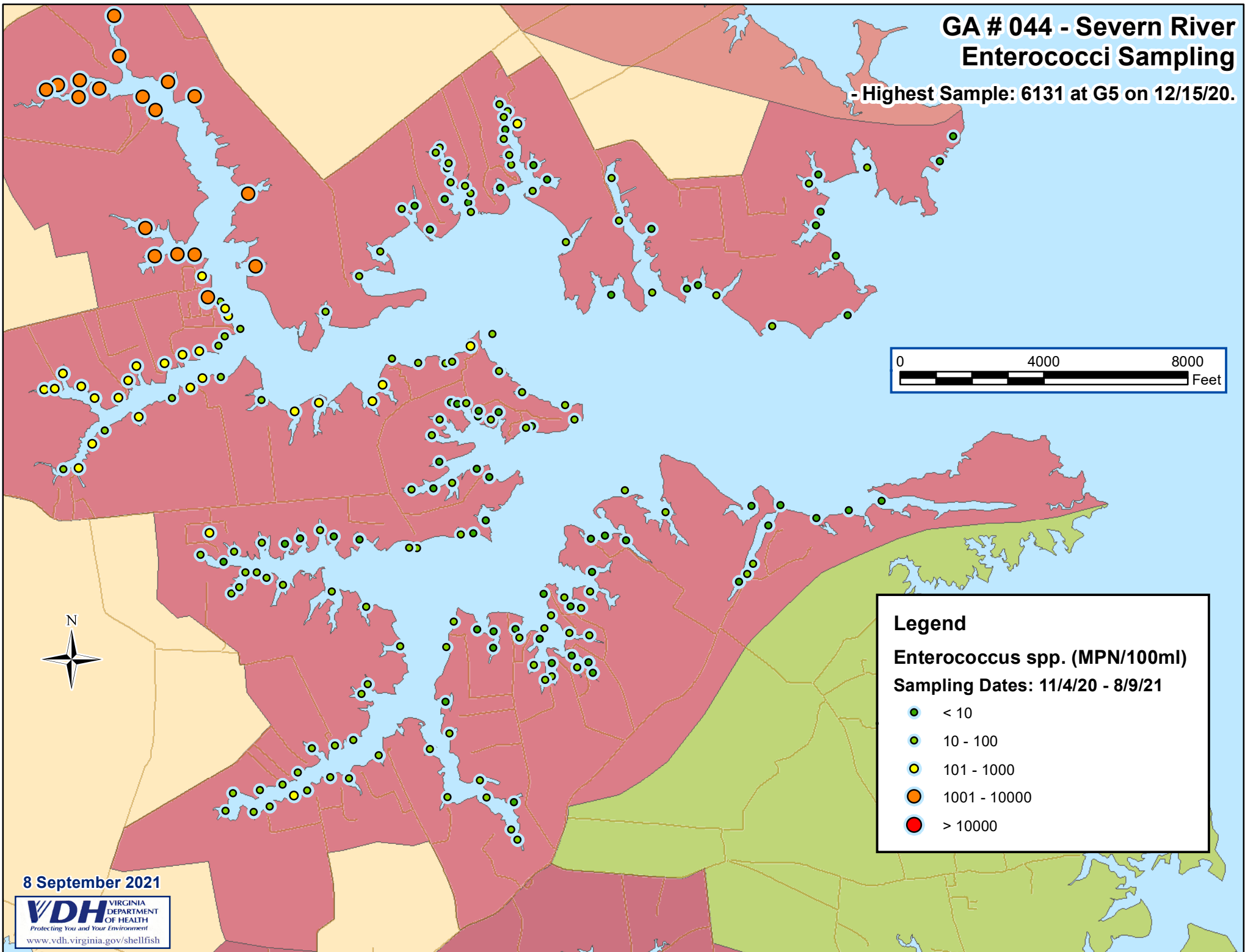
- 2 – MARINAS – # G92A, G142A
- 0 – OTHER PLACES WHERE BOATS ARE MOORED – None.
- 5 – UNDER SURVEILLANCE – # 38, 180, 365, 373, 532
- 7 – D. TOTAL

SECTION E: CONTRIBUTES ANIMAL POLLUTION

- 0 – DIRECT – None.
- 11 – INDIRECT – # 98, 263, 271, 272, 288, 641, 758, 887, G123A, GT1
- 11 – E. TOTAL

GA # 044 - Severn River Enterococci Sampling

- Highest Sample: 6131 at G5 on 12/15/20.



8 September 2021