COMMONWEALTH of VIRGINIA
Department of Health
Division of Shellfish Safety
109 Governor Street, 6th Floor
M. Norman Oliver, MD, MA
State Health Commissioner
P O BOX 2448
RICHMOND, VA 23218
Ph: 804-864-7487
Fax: 804-864-7481

NANSEMOND RIVER
Growing Area # 063
City of Suffolk
Shoreline Sanitary Survey

Date: 13 February 2019
Survey Period: May 5, 2016 - November 6, 2018
Total number of properties surveyed and samples analyzed: 1150
Total number of sampling events: 76
Surveyed By: E.M. Yeargan, T.A. Egerton, I.M. Geeson, L.Z. Sakach, F.P. Monis, J.D. Dickerson

SECTION A: GENERAL

This survey area extends from Reference Point 64 at Barrel Point upstream to Trotman Wharf on the opposite shoreline and then downstream to Reference Point 65 at Pig Point, including the Nansemond River shoreline between these 3 points, Bleakhorn Creek, Nix Cove, Campbell Creek, Cedar Creek, Wills Cove, Olds Cove, Bennett Creek (Deanes Branch), Knotts Creek, West Creek and all of their tributaries. The survey boundary has been revised. See map for current boundary.

The topography of this area is characterized by land elevations ranging from 5' or less along the shoreline to a maximum of 50' near the southwestern edge of the survey boundary. The population of Suffolk continues to grow, and ranges from moderately sparse in the diminishing farmlands on the western shores to increasingly common moderately dense in developed residential areas on the southern shore. The south shore remains more densely populated with larger subdivisions in addition to new development occurring due in part to the more widespread availability of the HRSD public sanitary sewer system. Since the last survey, public sanitary sewer has been installed on the north shore near the mouth of the Nansemond River and Bleakhorn Creek. Stormwater is managed through a network of surface ditches and stormwater structures and outfalls, which are mapped and maintained by the City of Suffolk and the locations shared with VDH:DSS.

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 current status. All roadways and navigable shoreline within the survey boundary were visually inspected to identify potential pollution sources requiring further investigation.

Near-shore 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 pollution sources. Station data were analyzed to compare relative concentrations of fecal indicator bacteria within the waterway to identify potential onshore sources of contamination. Areas with elevated concentrations of fecal indicator bacteria were surveyed onshore using a property-by-property approach. Surveyors interviewed occupants and examined properties for evidence of pollution sources within the immediate watershed.

Meteorological data indicated that the area received variable rainfall during the survey period, including extraordinary precipitation in September and October 2016 due to tropical storms Julia and Mathew. A monthly breakdown is as follows:

Area 63 Rainfall Summary (monthly total in inches)			
	2016	**2017**	**2018**
January	4.75	3.84	3.68
February	6.66	0.71	1.41
March	3.35	4.71	3.24
April	3.21	3.62	3
May	8.13	5.19	5.56
June	7.62	4.79	5.96
July	7.31	5.32	8.4
August	1.53	8.81	5.35
September	14.94	3.78	3.54
October	12.57	4.28	3.27
November	1.4	1.26	4.41
December	2.44	2.07	5.28
Total	**73.91**	**48.38**	**53.1**

In addition to the Shoreline Sanitary Survey, the Nansemond River Watershed has been a part of a major enhanced pollution source assessment study with a partnership between the Virginia Department of Health: Division of Shellfish Safety, Hampton Roads Sanitation District, City of Suffolk: Department of Public Works, and the Nansemond River Preservation Alliance. A large focus area of this study has been the upper Nansemond river watershed, in the proximity of downtown Suffolk (>10 miles upstream of conditionally approved waters and >13 miles upstream of approved growing area) as well as the downstream tributaries of the river. This enhanced source tracking effort has led to the identification and correction of multiple sewage leaks from compromised sewage structures and failing septic systems. More information on completed and ongoing infrastructure repairs can be found in the *Microbial Source Tracking* report by the City of Suffolk's Department of Public Utilities Report (2018) a copy of which is located in the Central Office classification files.

Copies of Bacteriological and Shellfish Closure data are available at the area office for review. This report lists only those properties that have a sanitary deficiency or other environmental significance. **"*DIRECT*"** indicates that the significant activity or deficiency has a direct impact on shellfish waters. Data in this report are also made available to local health departments and other agencies to address items that may be out of compliance with their regulatory programs. Copies of VPDES Permits and inspections are available at the Department of Environmental Quality, Tidewater Regional Office (DEQ/TRO).

Copies of the current condemnation notices and maps are available via the internet at www.vdh.virginia.gov/oehs/shellfish/.

SECTION B: SEWAGE POLLUTION SOURCES

	GA #	Field #	Inspection Date	Deficiency or Pollution Type	Latitude	Longitude	Address	Pollutant Remarks	Septic System Type	Structure Type	Contact	Overall Site Remarks	Locality	DSS Staff	Date of Correction	Correction Notes
4577	63	E25	12/18/18	CONTRIBUTES POLLUTION, indirect	36.8442	-76.5515	1496 Bridge Point Trail W, Suffolk, VA 23432	Sewage ponding on ground surface in back yard of home	Alt	Dwelling	Y	Septic field erupting onto ground surface on side of house facing the roadway	Suffolk	EY	7/24/17	Septic System has been replaced with new drainfield installed and properly functioning.
4575	63	E27	12/5/18	CONTRIBUTES POLLUTION, indirect	36.8598	-76.5800	5956 Godwin Blvd, Suffolk, VA 23432	Erupting Septic Field in back of house	Conv	Dwelling	Y	1 story house with green roof	Suffolk	EY		Septic System was pumped out and new drainfield is being installed in front yard. Incomplate at time of survey publication.
4554	63	F18	8/31/18	CONTRIBUTES POLLUTION, indirect	36.8913	-76.5140	8205 Harlan Drive, Suffolk, VA 23436	Effluent on ground surface.	Conv	Dwelling	Y	1 story home	Suffolk	FM		
4570	63	G2	12/5/18	CONTRIBUTES POLLUTION, indirect	36.8564	-76.5815	103 Hawk Lane, Suffolk, VA 23434	Effluent erupting in drain field behind house.	Conv	Dwelling	Y	1 story home	Suffolk	IG		
4571	63	G3	12/5/18	CONTRIBUTES POLLUTION, indirect	36.8569	-76.5801	202 Sparrow Road, Suffolk, VA 23432	Ponding over drain field.	Conv	Dwelling	Y	Drainfield behind house.	Suffolk	IG		
4614	63	E30	1/3/19	NO FACILITIES, direct	36.8816	-76.5040	N/A	PVC pipes leaving the building with no evidence of discharge at time of visit	N/A	Dwelling	N	Building is located directly above the water. Structure on pilings in mid river. No available street address.	Suffolk	EY		
4613	63	E31	12/10/18	NO FACILITIES, direct	36.8845	-76.4886	N/A	PVC pipes leaving the building with no evidence of discharge at time of visit	N/A	Dwelling	N	Building is located directly above the water. Structure on pilings in mid river. No available street address.	Suffolk	EY	2/11/19	Per Owner, facility has a closed loop sanitary system routinely pumped/hauled to pumpout facility.
1370	63	E26	12/10/18	POTENTIAL POLLUTION	36.8356	-76.5219	4701 Sleepy Hole Rd., Suffolk, VA 23435	No signs of sewage related deficiency at time of survey	N/A	Business	N	Church has structural damage and is abandoned	Suffolk	EY		
4557	63	F15	12/7/18	POTENTIAL POLLUTION	36.8884	-76.5143	1841 Woodland Road, Suffolk, VA 23436	Owner states during significant heavy rainfall the septic tank fails and effluent is on ground surface. No effluent observed during visit. Owner stated tank has been pumped out 2x this year.	Alt	Dwelling	Y	2 story home with wood siding	Suffolk	FM		
4576	63	G4	12/5/18	POTENTIAL POLLUTION	36.8555	-76.5831	Hawk Lane, Suffolk, VA 23432	The majority of homes in the neighborhood reported having issues with their septic systems following rain events	Conv	Dwelling	N	The neighborhood was surveyed after a large rain event and the majority of homes reported having trouble with their septic systems following rain events due to poor drainage in the area.	Suffolk	IG		Stormwater ditch maintenance was done to help improve stormwater drainage following rain events and to help ground from remaining saturated.
4578	63	L3	12/5/18	POTENTIAL POLLUTION	36.8718	-76.5428	6898 Crittenden Road, Suffolk, VA 23432	Previous survey owner stated septic tank fills with water when rainfall increases. No observations of pooling water during survey. Septic tank approximately 5 feet from ditch.	Conv	Dwelling	N	1 story brick siding with black shutters. 3-4 persons.	Suffolk	LS		
4579	63	L11	12/5/2018	POTENTIAL POLLUTION	36.8715	-76.5464	6800 Crittenden Road, Suffolk, VA 23432	Previous survey found toilet waste from underground pipe discharging onto ground in back of house; and CONTRIBUTES POLLUTION (Kitchen or Laundry Wastes)	Conv	Dwelling	N	1 story home. Privacy fence with no access to property.	Suffolk	LS		
1357	63	T15	12/5/18	POTENTIAL POLLUTION	36.9129	-76.4875	1731 Bleakhorn Road, Suffolk, VA 23435	Previous survey resident stated that system fails during wet weather. No evidence of discharge at previous inspection	Conv	Dwelling	N	Property not able to be inspected due to no trespassing signs and no public access.	Suffolk	TE		

SECTION C: NONSEWAGE WASTE SITES

	GA #	Field #	Inspection Date	Deficiency or Pollution Type	Latitude	Longitude	Address	Pollutant Remarks	Septic System Type	Structure Type	Contact	Overall Site Remarks	Locality	DSS Staff
4572	63	F22	12/5/2018	INDUSTRIAL WASTES, indirect	36.8385	-76.5246	Sleepy Hole Park, 4700 Sleepy Hole Road, Suffolk, VA 23435		Conv	Public	Y	Two 1000 gallon diesel fuel tanks. No means of self containment. No issues at time of visit.	Suffolk	FM
1373	63	F23	8/3/2018	INDUSTRIAL WASTES, indirect	36.8570	-76.4923	5468 Gaskins Road, Suffolk, VA 23435		Conv	Dwelling	Y	Observed one 500 gallon gas tank behind dwelling. No issues at time of visit.	Suffolk	FM

SECTION D: BOATING ACTIVITY

	GA #	Field #	Inspection Date	Deficiency or Pollution Type	Latitude	Longitude	Address	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
1371	63	F20	12/5/2018	BOATING ACTIVITY	36.8740	-76.4845	106 Club Road, Suffolk, VA 23435			Marine	Y	Bennetts Creek Landing Marina	Suffolk	Marina	18	7	2	N	FM
1376	63	F21	6/22/2018	BOATING ACTIVITY	36.8646	-76.4777	3301 Ferry Road, Suffolk, VA 23435		NA	Marine	Y	Decoys Marina	Suffolk	Marina	58	4	0	N	FM
1374	63	F19	12/5/2018	BOATING ACTIVITY	36.8509	-76.4841	Shoulder Road to Bennetts Creek Park, Suffolk, VA 23436			Marine	N	Bennett's Creek Park Boat Ramp	Suffolk	Under Surveillance	0	1	0	N	FM
1364	63	T17	12/5/2018	BOATING ACTIVITY	36.8386	-76.5505	Covenant Warf, Suffolk, VA 23432		NA	Marine	N	Bridge Point Farms Community Boat Ramp	Suffolk	Under Surveillance	0	0	1	N	EY
1369	63	T18	12/5/2018	BOATING ACTIVITY	36.8408	-76.5318	Sleepy Point Way, Suffolk, VA 23432		NA	Marine	N	Sleepy Hole Community Ramp located between 132 and 134 Sleep Point Way, Suffolk 23435.	Suffolk	Under Surveillance	0	0	0	N	EY

SECTION E: CONTRIBUTES ANIMAL POLLUTION

	GA #	Field #	Inspection Date	Deficiency or Pollution Type	Latitude	Longitude	Address	Pollutant Remarks	Septic System Type	Structure Type	Contact	Overall Site Remarks	Locality	DSS Staff
1368	63	T1	12/10/2018	CONTRIBUTES ANIMAL POLLUTION, indirect	36.8308	-76.5454	1960 Kings Highway, Suffolk, VA 23435	Present at time of survey were 4 horses.		Dwelling	N	Fenced pastures. Pastures are approximately 250 feet from river.	Suffolk	TE
1367	63	T2	12/10/2018	CONTRIBUTES ANIMAL POLLUTION, indirect	36.8305	-76.5489	1760 Kings Highway, Suffolk, VA 23435	Present at time of survey were 10 horses.		Dwelling	N	10-stall stable, fenced pastures. Stable and pasture are approximately 500 feet from river.	Suffolk	TE
1366	63	T6	12/10/2018	CONTRIBUTES ANIMAL POLLUTION, indirect	36.8524	-76.5523	1468 Peppercorn Lane, Suffolk, VA 23434	Present at time of survey were 6 horses		Dwelling	N	7-stall stable, riding area and fenced pastures. Stable and pastures approximately 100 feet from creek.	Suffolk	TE
4563	63	T7	6/6/2018	CONTRIBUTES ANIMAL POLLUTION, indirect	36.8514	-76.5515	1471 Peppecorn Lane, Suffolk, VA 23432	Present at time of survey were 1 horse and 1 pony.		Dwelling	N	Fenced pastures. Pastures are approximately 50 feet from creek.	Suffolk	TE
4561	63	T8	6/6/2018	CONTRIBUTES ANIMAL POLLUTION, indirect	36.8480	-76.5516	1479 Spring Meadow Lane, Suffolk, VA 23432	Present at time of survey were 2 horses.		Dwelling	N	Fenced pastures. Pastures are approximately 600 feet from creek.	Suffolk	TE
4559	63	T9	9/4/2018	CONTRIBUTES ANIMAL POLLUTION, indirect	36.8440	-76.5527	1493 Cedar Creek Lane, Suffolk, VA 23432	Present at time of survey were 3 horses.		Dwelling	N	Fenced pastures. Pastures are approximatley 600 feet from creek.	Suffolk	TE
4560	63	T10	6/6/2018	CONTRIBUTES ANIMAL POLLUTION, indirect	36.8460	-76.5545	1468 Bridge Point Trail, Suffolk, VA 23432	Present at time of survey was 1 horse.		Dwelling	N	Fenced pastures. Pastures are approximately 750 feet from creek.	Suffolk	TE
4562	63	T11	12/5/2018	CONTRIBUTES ANIMAL POLLUTION, indirect	36.8495	-76.5486	1445 Bridge Point Trail, Suffolk, VA 23432	Present at time of survey were 2 horses.		Dwelling	N	Fenced pasture. Pasture is approximatley 400 feet from creek.	Suffolk	TE
4564	63	T12	1/3/2019	CONTRIBUTES ANIMAL POLLUTION, indirect	36.8622	-76.5609	6100 Crittenden Road, Suffolk, VA 23432	Manure is treated with an aeration composting system to destroy pathogens and parasites before land application. Presen		Business	Y	20-stall stable, riding areas and fenced pastures. Stable and pastures approximatley 1000 feet from pond which drains into creek.	Suffolk	TE
4565	63	T13	1/3/2019	CONTRIBUTES ANIMAL POLLUTION, indirect	36.8856	-76.5135	8006 Crittenden Road, Suffolk, VA 23432	Present at time of survey were 3 horses.		Dwelling	N	Fenced pastures. Pastures are approximately 500 feet from creek.	Suffolk	TE
4566	63	T14	6/6/2018	CONTRIBUTES ANIMAL POLLUTION, indirect	36.8942	-76.4951	1975 Bridge Road, Suffolk, VA 23605	Present at time of survey were 4 horses.		Dwelling	N	Stable, riding areas and fenced pastures. Stable and pastures approximately 250 feet from pond which drains into river.	Suffolk	TE

SUMMARY

Growing Area # 063, Nansemond River
13 February 2019

SECTION B: SEWAGE POLLUTION SOURCES

1. SEWAGE TREATMENT FACILITIES

0 – DIRECT – None
0 – INDIRECT – None
0 – B.1. TOTAL

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

0 – CONTRIBUTES POLLUTION, DIRECT – None.
5 – CONTRIBUTES POLLUTION, INDIRECT – # E25, E27, F18, G2, G3
0 – CP (Kitchen or Laundry Wastes), DIRECT – None.
0 – CP (Kitchen or Laundry Wastes), INDIRECT – None.
2 – NO FACILITIES, DIRECT – # E30, E31
0 – NO FACILITIES, INDIRECT – None.
7 – B.2 TOTAL

3. POTENTIAL POLLUTION – Periodic surveillance of these properties will be maintained to determine any status change.

8 – POTENTIAL POLLUTION – # E26, E30, E31, F15, G4, T15, L3, L11

SECTION C: NON-SEWAGE WASTE SITES

1. INDUSTRIAL WASTE SITES

0 – DIRECT – None.
2 – INDIRECT – # F22, F23
2 – 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 – # F20, F21
0 – OTHER PLACES WHERE BOATS ARE MOORED – None
3 – UNDER SURVEILLANCE – # F19, T17, T18
5 – D. TOTAL

SECTION E: CONTRIBUTES ANIMAL POLLUTION

0 – DIRECT – None.
11 – INDIRECT – # T1, T2, T6, T7, T8, T9, T10, T11, T12, T13, T14
11 – E. TOTAL

Virginia Department of Health
Division of Shellfish Sanitation

Nansemond River
063
Shoreline Sanitary Survey

City of Suffolk

Date: 13 February 2019
Surveyed By: E.M. Yeargan, T.A. Egerton, I.M. Geeson, L.Z. Sakach, F.P. Monis, & J.D. Dickerson
Total Number of Properties Surveyed: 1150

0 1000 2000 Yards

N

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
- S Stormwater, Direct
- S Stormwater, Indirect
- Boating Activity
- A Contributes Animal Pollution - Direct
- A Contributes Animal Pollution - Indirect

76°36'0"W 76°34'30"W 76°33'0"W 76°31'30"W 76°30'0"W 76°28'30"W 76°27'0"W

36°54'0"N 36°52'30"N 36°51'0"N 36°49'30"N

Geographic coordinates in NAD83 datum; shown in degrees, minutes & seconds.

VDH VIRGINIA DEPARTMENT OF HEALTH
Protecting You and Your Environment
www.vdh.virginia.gov/shellfish

Virginia Department of Health
Division of Shellfish Safety

Nansemond River Growing Area # 063

Near-Shore Sampling, Shoreline Sanitary Survey

City of Suffolk

Survey Publication Date: 13 February 2019
Survey By: J. Dickerson, T. Egerton, I. Geeson, F. Monis, L. Sakach, E. Yeargan
Total Number of Samples Analyzed:1129