



**COMMONWEALTH of VIRGINIA**  
**DEPARTMENT OF HEALTH**  
**DIVISION OF SHELLFISH SANITATION**

*109 Governor Street, 6<sup>th</sup> Floor  
P.O. Box 2448  
Richmond, Virginia 23218*

*Ph: 804-864-7487  
Fax: 804-864-7481*

**MOBJACK BAY: NEW POINT COMFORT TO EAST RIVER**  
**Growing Area # 040**  
**Mathews County**  
**Shoreline Sanitary Survey**

**Date:** 20 August 2018

**Survey Period:** May 22, 2018 – July 13, 2018

**Surveyed By:** R.M. Thomas, W.A. McCarty III, & W.I. Barrack III

**Number of Properties and Near Shore Samples Collected:** 147

**SECTION A: GENERAL**

This survey area extends from Reference Point 40 at New Point Comfort Lighthouse to Reference point 41 at Bay Shore Point, including the Mobjack Bay shoreline between these two points, Deep Creek, Harper Creek, Davis Creek, Pepper Creek, Sloop Creek, and all of their tributaries.

The topography of the area varies in elevations from 5' or less along the shoreline to a maximum of 10' near the northern edge of the survey boundary. The economy of Mathews County is primarily based on health care, retail trade, manufacturing and construction. According to a 2016 US census bureau study, the median household income is \$63,157 with a current unemployment rate of 3.8%. The population is sparse with mostly seasonal cottages on the northern end of the survey area and year round dwellings near Motorun and Bavon at the southern end of the survey area. Since the previous survey, the population of Mathews county has shown a 2.2% decline with an estimated population of 8,782.

Meteorological data indicated that the area received a total rainfall of 8.16" for the survey period. A monthly breakdown is as follows:

May 22-31	1.50"	June	5.52"	July 1-13	1.14"
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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 established 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 shoreline within the survey boundary were visually inspected to identify potential pollution sources requiring further investigation.

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 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.

Area 40 Shoreline survey was unusual in that a few areas in Sloop Creek had extremely high fecal bacteria counts, which required much more intensive investigations both onshore and by water. Usually water sampling requires 2 sets of near shore sampling; however, areas of high bacterial concentration were sampled and analyzed by our lab on 4 different occasions having different previous rainfall accumulations. The last three near shore water sampling events showed very low concentrations of fecal coliform.

Property to property investigations of this area were conducted on five different days. These investigations included taking water samples from nearby ditches, ponds, etc.; evaluating the flow patterns and topography of the area; probing of septic tanks and drain fields on all properties in this area; and making contact with all of the homeowners and residents in this area. No one reported any unusual activity or discernable odors.

Hydrographic data and Ebb current windows are shown in the table below. Maps of the enterococcus sampling are shown at the conclusion of this report.

Rainfall in Inches						
Sample dates	Run #	High Tide	Ebb Current	Previous 24 hours	Previous 48 hours	Previous 72 hours
5/23/18	1	5:48 am	8:56 – 3:01 pm	0.49	0.68	0.68
5/24/18	1	7:07 am	9:51 – 3:55 pm	0.00	0.49	0.68
6/6/18	2	4:36 am	7:17 – 2:01 pm	0.00	0.00	0.09
6/7/18	2	5:26 am	8:02 – 2:39 pm	0.00	0.00	0.00
6/13/18	Ditches	n/a	n/a	0.03	0.03	0.98
6/18/18	3	2:24 am	5:34 – 11:34 am	0.00	0.00	0.00
6/25/18	Ditches	n/a	n/a	0.00	0.03	1.24
6/25/18	4	9:16 am	11:37 – 5:45 pm	0.00	0.03	1.24

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/shellfish/](http://www.vdh.virginia.gov/shellfish/).

## SECTION B: SEWAGE POLLUTION SOURCES

[illegible]

## SECTION C: NONSEWAGE WASTE SITES

[illegible]

## SECTION D: BOATING ACTIVITY

[illegible]

## SECTION E: CONTRIBUTES ANIMAL POLLUTION

[illegible]

## SUMMARY

Growing Area # 040, MOBJACK BAY: NEW POINT COMFORT TO EAST RIVER  
20 August 2018

### 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.

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.

0 – POTENTIAL POLLUTION – None.

### 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

1 – DIRECT – # W11

0 – INDIRECT – None.

1 – E. TOTAL

### SECTION D: BOATING ACTIVITY

1 – MARINAS – # W9

4 – OTHER PLACES WHERE BOATS ARE MOORED – # W6, W7, W8, W10

3 – UNDER SURVEILLANCE – # W3, W4, W5

8 – D. TOTAL

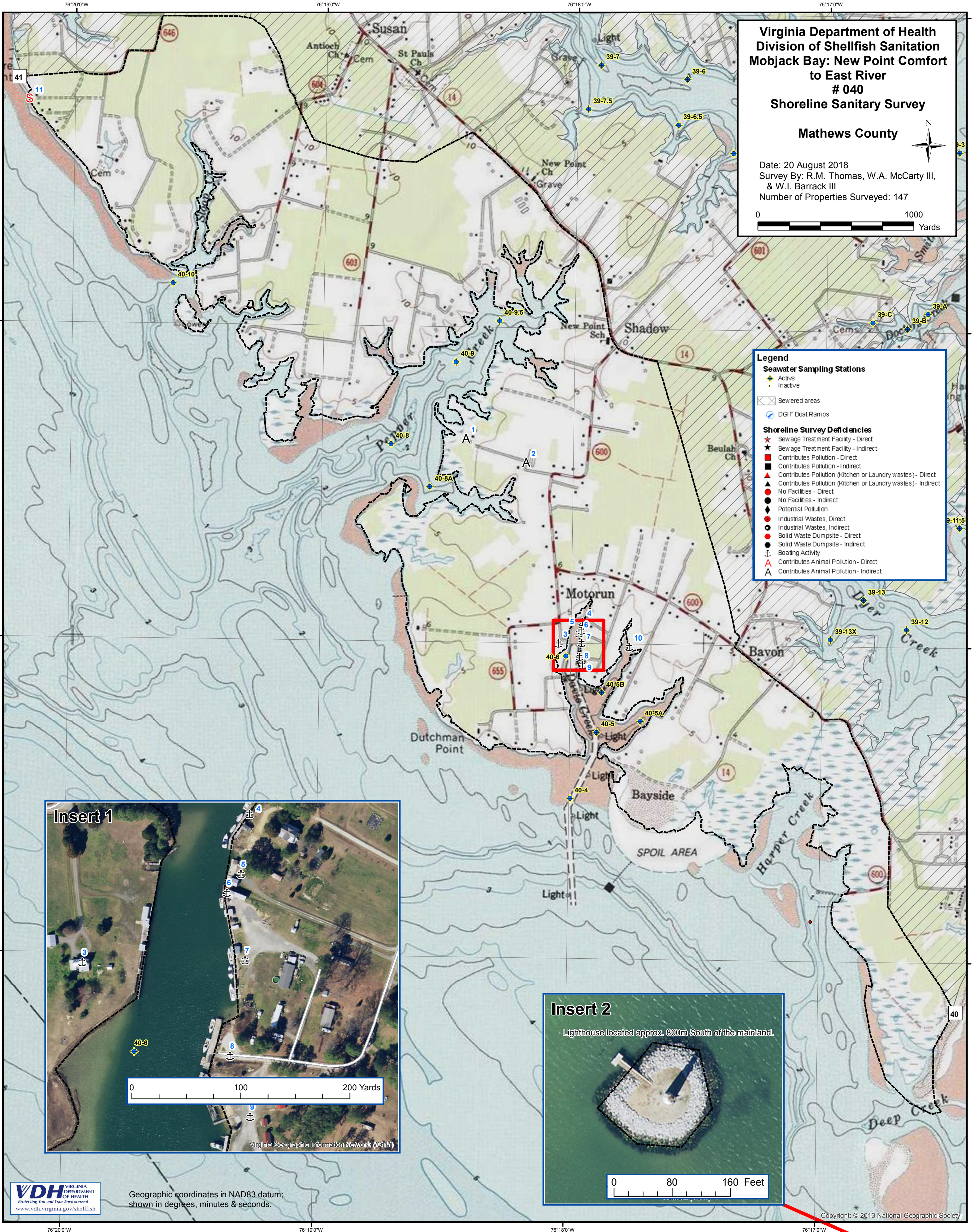
### SECTION E: CONTRIBUTES ANIMAL POLLUTION

0 – DIRECT – None.

2 – INDIRECT – # W1, W2

2 – E. TOTAL







**GA # 040 - Mobjack Bay:  
New Point Comfort to East River  
Enterococcus Sampling  
May 23 - June 18, 2018**

\* Highest value was 24196 collected on  
both May 23 and June 13, 2018.

# 040  
Mobjack Bay: New Point  
Comfort to East River

# 041  
East  
River



**Legend**

**Enterococcus spp. (MPN/100ml)**

- 0 - 10
- 11 - 100
- 101 - 1000
- 1001 - 10000
- > 10001

