HORN HARBOR AND DYER CREEK
Growing Area # 039
Mathews County
Shoreline Sanitary Survey

Date: 20 January 2022
Survey Period: September 7 – December 14, 2021
Number of properties visited and Near-shore Enterococci samples collected: 296
Surveyed By: W. Barrack, W. McCarty, J. Carrier, A. Wood, I. Geeson, A Roach

SECTION A: GENERAL

This survey area extends from Reference Point 39 at Beach Point to Reference Point 40 at New Point Comfort, including the Chesapeake Bay shoreline between these two points, Horn Harbor (Smith Creek), Doctors Creek, Dyer Creek and all of their tributaries within a designated boundary line drawn by the Division of Shellfish Sanitation.

The topography of the area has low elevation, rising to a maximum of 10 feet above sea level. The population is moderate with a concentration of dwellings along the waterfront. Many dwellings are occupied as part time vacation properties.

The economy is based on local commerce, forestry, boating and fishing, seafood and retail trade.

Meteorological data indicated that the area received a total precipitation of 6.19” for the survey period. A monthly breakdown is as follows:

- September 7-30 1.32”
- October 3.38”
- November 1.16”
- December 1-14 0.33”

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.

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 www.vdh.virginia.gov/shellfish/. Information in this report is gathered by and primarily for use of 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.
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. Individual field forms with full information on properties listed in this report are on file in the Richmond Office of the Division of Shellfish Safety and are available for reference until superseded by a subsequent resurvey of the area. Data in the report is also made available to local health departments and other agencies to address items that may be out of compliance with their regulatory programs.

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.

<table>
<thead>
<tr>
<th>Growing Area 56 Nearshore Sampling</th>
<th>Rainfall in inches</th>
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<tbody>
<tr>
<td><strong>Sampling Dates</strong></td>
<td><strong>High Tide</strong></td>
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<tr>
<td>9/7/21</td>
<td>10:00</td>
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<tr>
<td>9/8/21</td>
<td>10:43</td>
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<td>9/20/21</td>
<td>9:21</td>
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<tr>
<td>10/5/21</td>
<td>8:47</td>
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<tr>
<td>10/6/21</td>
<td>9:32</td>
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<tr>
<td>11/4/21</td>
<td>9:06</td>
</tr>
<tr>
<td>11/9/21</td>
<td>12:34</td>
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* High Tide from Wolf Trap Light.
** Ebb Slack Current from Wolf Trap Light.
<table>
<thead>
<tr>
<th>GA #</th>
<th>Field #</th>
<th>Inspection Date</th>
<th>Deficiency or Pollution Type</th>
<th>Latitude</th>
<th>Longitude</th>
<th>Address</th>
<th>Pollutant Remarks</th>
<th>Septic System Type</th>
<th>Structure Type</th>
<th>Contact</th>
<th>Overall Site Remarks</th>
<th>Locality</th>
<th>DSS Staff</th>
<th>Date of Correction</th>
<th>Correction Notes</th>
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<tbody>
<tr>
<td>039</td>
<td>G2</td>
<td>12/15/2021</td>
<td>POTENTIAL POLLUTION</td>
<td>37.326192</td>
<td>-76.273371</td>
<td>Chesapeake Shore Road, Port Haywood, VA 23138</td>
<td>One resident stated that some properties in the community have drain field problems during periods following heavy rains. No deficiencies observed during site visit.</td>
<td>Conv</td>
<td>Dwelling</td>
<td>Y</td>
<td>Bayfront cottages and residences with community drinking water and onsite septic systems.</td>
<td>Mathews</td>
<td>IG</td>
<td></td>
<td>Resident is starting process of installing new onsite septic system.</td>
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<th>Structure Type</th>
<th>Contact</th>
<th>Overall Site Remarks</th>
<th>Locality</th>
<th>Boating Activity Type</th>
<th>Number of Wet Slips</th>
<th>NUM BOATS &lt;26'</th>
<th>NUM BOATS &gt;26'</th>
<th>Evidence of Live-Aboards</th>
<th>DSS Staff</th>
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<tr>
<td>1848</td>
<td>39</td>
<td>10/25/2021</td>
<td>BOATING ACTIVITY</td>
<td>37.365430</td>
<td>-76.289051</td>
<td>1099 Possum Point Road, Port Haywood, VA 23138</td>
<td>A&amp;E Outboards. Marina drain field to southwest of property. Residence served by alternative system in front yard.</td>
<td>Conv</td>
<td>Marine</td>
<td>Y</td>
<td>Mathews Marina</td>
<td>37.365430</td>
<td>-76.289051</td>
<td>10/25/2021</td>
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<td>20</td>
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<td>BOATING ACTIVITY</td>
<td>37.369599</td>
<td>-76.302600</td>
<td>308 Railway Road, Port Haywood, VA 23138</td>
<td>Houseboats have mobile pump stations to convey waste to dump station.</td>
<td>Conv</td>
<td>Marine</td>
<td>Y</td>
<td>Mathews Marina</td>
<td>37.369599</td>
<td>-76.302600</td>
<td>12/15/2021</td>
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<td>69</td>
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<td>12/17/2021</td>
<td>BOATING ACTIVITY</td>
<td>37.340232</td>
<td>-76.274318</td>
<td>846 Sand Bank Road, New Point, VA 23125</td>
<td>Portable toilet and hand wash at marina, campground has full facilities.</td>
<td>Conv</td>
<td>Marine</td>
<td>Y</td>
<td>Mathews Marina</td>
<td>37.340232</td>
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<td>39</td>
<td>10/25/2021</td>
<td>BOATING ACTIVITY</td>
<td>37.367105</td>
<td>-76.290478</td>
<td>997 Possum Point Road, Port Haywood, VA 23138</td>
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<td>Conv</td>
<td>Marine</td>
<td>N</td>
<td>Mathews Under Surveillance 5</td>
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<td>-76.290478</td>
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<td>10/25/2021</td>
<td>BOATING ACTIVITY</td>
<td>37.366994</td>
<td>-76.275173</td>
<td>End of Captain Gene's Road, New Point, VA 23125</td>
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<td>NA</td>
<td>Marine</td>
<td>N</td>
<td>Mathews Under Surveillance 0</td>
<td>37.366994</td>
<td>-76.275173</td>
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<td>BOATING ACTIVITY</td>
<td>37.338842</td>
<td>-76.280202</td>
<td>555 Dyers Creek Road, Port Haywood, VA 23138</td>
<td></td>
<td>Conv</td>
<td>Marine</td>
<td>Y</td>
<td>Mathews Under Surveillance 4</td>
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<td>12/22/2021</td>
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<td>1858</td>
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<td>12/17/2021</td>
<td>CONTRIBUTES ANIMAL POLLUTION, direct</td>
<td>37.365029</td>
<td>-76.302189</td>
<td>381 Aldendale Lane, Mathews, VA 23109</td>
<td>4 horses observed.</td>
<td>Dwelling</td>
<td>N</td>
<td>Fenced portion of pasture allows some intertidal access to creek.</td>
<td>Mathews</td>
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SUMMARY

Growing Area # 039
Horn Harbor and Dyer Creek
20 January 2022

SECTION B: SEWAGE POLLUTION SOURCES

1. SEWAGE TREATMENT FACILITIES
   - DIRECT – None
   - INDIRECT – None
   - B.1. TOTAL

2. ON-SITE SEWAGE DEFIENCIES – Correction of deficiencies in the section is the responsibility of the local health department.
   - CONTRIBUTES POLLUTION, DIRECT – None
   - CONTRIBUTES POLLUTION, INDIRECT – None.
   - CP – (Kitchen or Laundry Wastes), DIRECT – None
   - CP – (Kitchen or Laundry Wastes), INDIRECT – None
   - NO FACILITIES, DIRECT – None
   - NO FACILITIES, INDIRECT – # None.
   - B.2. TOTAL

3. POTENTIAL POLLUTION – Periodic surveillance of these properties will be maintained to determine any status change.
   - POTENTIAL POLLUTION - # G2

SECTION C: NON-SEWAGE WASTE SITES

1. INDUSTRIAL WASTE SITES
   - DIRECT – None
   - INDIRECT – None
   - C.1. TOTAL

2. SOLID WASTE SITES
   - DIRECT – None
   - INDIRECT – None
   - C.2. TOTAL

3: STORMWATER OUTFALLS
   - DIRECT – None.
   - INDIRECT – None.
   - E. TOTAL

SECTION D: BOATING ACTIVITY

- MARINA – # 92, 178, 551
- OTHER PLACES WHERE BOATS ARE MOORED – None.
- UNDER SURVEILLANCE – # 90, G1, 99.62
- D. TOTAL

SECTION E: CONTRIBUTES ANIMAL POLLUTION

- DIRECT – # 280
- INDIRECT – None.
- E. TOTAL
GA# 039 - Horn Harbor & Dyer Cr
Enterococci Sampling

- Highest Sample:
  1388 at #106 on 11/4/21.

Legend
Enterococcus spp. (MPN/100ml)
Sampling Dates: 9/7/21 - 11/4/21
- < 10
- 10 - 100
- 101 - 1000
- 1001 - 10000
- > 10000

27 December 2021