CHESAPEAKE BAY: MILL CREEK TO DIVIDING CREEK
Growing Area # 014
Northumberland County
Shoreline Sanitary Survey

Date: 27 October 2016
Survey Period: November 06, 2015 – August 12, 2016
Total Number of Properties Surveyed: 291
Surveyed By: R.M. Thomas

SECTION A: GENERAL

This survey area extends from Reference Point 14 off state Route 609 (extended to the shoreline above Towles Creek) to Reference Point 15 at Hughlett Point, including Ingram Bay and Chesapeake Bay shoreline between these two points, Towles Creek, Harveys Creek, Mill Creek, Cloverdale Creek, Ball Creek, Ingram Cove, and all of their tributaries.

The topography of the area is generally characterized by marshes along the Chesapeake Bay shoreline and lowlands extending one to two miles inland where elevations rise to a maximum of 90 feet at the outer western edge of the survey boundary. The population density is mostly sparse with moderate concentrations around Towles Creek, Harveys Creek, Mill Creek and the Ingram Bay shoreline. The economy is based mainly on agriculture, recreation, and the seafood industry.

Meteorological data indicated that the area received a total rainfall of 44.67" for the survey period. A monthly breakdown is as follows:

<table>
<thead>
<tr>
<th>Month</th>
<th>Rainfall (&quot;</th>
<th>Month</th>
<th>Rainfall (&quot;</th>
<th>Month</th>
<th>Rainfall (&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nov. 6-30, 2015</td>
<td>3.34&quot;</td>
<td>December</td>
<td>4.52&quot;</td>
<td>January</td>
<td>3.35&quot;</td>
</tr>
<tr>
<td>February</td>
<td>5.22&quot;</td>
<td>March</td>
<td>1.76&quot;</td>
<td>April</td>
<td>2.93&quot;</td>
</tr>
<tr>
<td>May</td>
<td>8.29&quot;</td>
<td>June</td>
<td>2.53&quot;</td>
<td>July</td>
<td>5.72&quot;</td>
</tr>
<tr>
<td>August 1-12</td>
<td>1.22&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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 the shellfish waters. 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.

The Commonwealth of Virginia, under Code Section 9VAC 10-20-120.7, specifies that on-site sewage treatment systems not requiring a Virginia Pollutant Discharge Elimination System (VPDES) permit shall:

a. Have pump-out accomplished for all systems at least once every five years.
(1) If deemed appropriate by local health department and subject to conditions the local health department may set, local governments may offer to the owners of such systems, as an alternative to the mandatory pump-out, the option of having a plastic filter installed and maintained in the outflow pipe from the septic tank to filter solid material from the effluent while sustaining adequate flow to the drainfield to permit normal use of the septic system. Such a filter should satisfy standards established in the Sewage Handling and Disposal regulations (12VAC5-610) administered by the Virginia Department of Health.

(2) Furthermore, in lieu of requiring proof of septic tank pump-out every five years, local governments may allow owners of on-site sewage treatment systems to submit documentation every five years, certified by a sewage handler permitted by the Virginia Department of Health, that the septic system has been inspected, is functioning properly, and the tank does not need to have the effluent pumped out of it.

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.
## SECTION B: SEWAGE POLLUTION SOURCES

<table>
<thead>
<tr>
<th>Property 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>
</tr>
</thead>
<tbody>
<tr>
<td>5/8/20</td>
<td>CONTRIBUTES POLLUTION, indirect</td>
<td>37.81532137</td>
<td>-76.35775002</td>
<td>1156 Remo Rd, Heathsville, VA 22473</td>
<td>Septic clean out cap missing allowing rainfall to enter.</td>
<td>Conv</td>
<td>Dwelling</td>
<td>N</td>
<td></td>
<td>Northumberland</td>
<td>RT</td>
<td>6/16/2016</td>
<td>Owner replaced clean-out cap.</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>FID</th>
<th>GA #</th>
<th>Field #</th>
<th>Property 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>
</tr>
</thead>
<tbody>
<tr>
<td>693</td>
<td>14</td>
<td>R280</td>
<td>INDUSTRIAL WASTES, indirect</td>
<td>37.78078136</td>
<td>-76.32233743</td>
<td>403 Cloverdale Rd, Kilmarnock, VA 22482</td>
<td>1 x 500 gallon liquid fertilizer tank with no berm 30' from Mill Creek</td>
<td>Conv</td>
<td>Dwelling</td>
<td>N</td>
<td>2 story white frame.</td>
<td>Northumberland</td>
<td>RT</td>
<td></td>
</tr>
<tr>
<td>#</td>
<td>GA #</td>
<td>Field #</td>
<td>Property Inspection Date</td>
<td>Deficiency or Pollution Type</td>
<td>Latitude</td>
<td>Longitude</td>
<td>Address</td>
<td>Pollutant Remarks</td>
<td>Septic System Type</td>
<td>Structure Type</td>
<td>Contact</td>
<td>Overall Site Remarks</td>
<td>Locality</td>
<td>Boating Activity Type</td>
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</tr>
<tr>
<td>687</td>
<td>14</td>
<td>R24</td>
<td>BOATING ACTIVITY</td>
<td></td>
<td>37.80359787</td>
<td>-76.30821437</td>
<td>End of Skipjack Dr, Heathsville, VA 22473</td>
<td>Community pier. The portable toilet is provided by W.C. Lowery Septic Service.</td>
<td>NA</td>
<td>Marine</td>
<td>N</td>
<td>Community Pier</td>
<td>Northumberland</td>
<td>Under Surv 4</td>
</tr>
<tr>
<td>688</td>
<td>14</td>
<td>R62</td>
<td>BOATING ACTIVITY</td>
<td></td>
<td>37.80304160</td>
<td>-76.30976633</td>
<td>545 Harvey’s Neck Rd, Heathsville, VA 22473</td>
<td>Ramp, fuel, water, electricity, restrooms, dump station, pump out facility, and solid waste containers provided.</td>
<td>Conv</td>
<td>Marine</td>
<td>Y</td>
<td>Ingram Bay Marina</td>
<td>Northumberland</td>
<td>Marina 50</td>
</tr>
<tr>
<td>689</td>
<td>14</td>
<td>R70</td>
<td>BOATING ACTIVITY</td>
<td></td>
<td>37.80162131</td>
<td>-76.30875761</td>
<td>200 Ingram Bay Dr, Heathsville, VA 22473</td>
<td>No services provided. No sewage disposal services.</td>
<td>NA</td>
<td>Marine</td>
<td>N</td>
<td>Towles Landing Boating Association Pier</td>
<td>Northumberland</td>
<td>OPWBAM 6</td>
</tr>
<tr>
<td>690</td>
<td>14</td>
<td>R85</td>
<td>BOATING ACTIVITY</td>
<td></td>
<td>37.79822645</td>
<td>-76.30909871</td>
<td>1 Ingram Bay Rd, Heathsville, VA 22473</td>
<td>There is no sewage disposal service provided.</td>
<td>NA</td>
<td>Marine</td>
<td>N</td>
<td>Towles Landing</td>
<td>Northumberland</td>
<td>OPWBAM 18</td>
</tr>
<tr>
<td>FID, GA</td>
<td>Field #</td>
<td>Property Inspection Date</td>
<td>Deficiency or Pollution Type</td>
<td>Latitude</td>
<td>Longitude</td>
<td>Address</td>
<td>Pollutant Remarks</td>
<td>Septic System Type</td>
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<td>Locality</td>
<td>DSS Staff</td>
<td></td>
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<tr>
<td>5498</td>
<td>14</td>
<td>R165 9/2/2016</td>
<td>CONTRIBUTES ANIMAL POLLUTION, direct</td>
<td>37.80226923</td>
<td>-76.33923499</td>
<td>710 Train Ln, Heathsville, VA 22473</td>
<td>8 Hogs in fenced are adjacent to a pond within 50 feet of a ravine leading to Mill Creek.</td>
<td>NA</td>
<td>Dwelling</td>
<td>Y</td>
<td>Hog Barn near drainage pond believed to have overflow pipe leading to head of creek.</td>
<td>Northumberland</td>
<td>RT</td>
<td></td>
</tr>
<tr>
<td>5499</td>
<td>14</td>
<td>R166 9/2/2016</td>
<td>CONTRIBUTES ANIMAL POLLUTION, direct</td>
<td>37.80107448</td>
<td>-76.33928998</td>
<td>712 Train Ln, Heathsville, VA 22473</td>
<td>23 chickens, turkeys, and geese mixed in a fence area within 50 feet of a ravine leading to Mill Creek.</td>
<td>Conv</td>
<td>Dwelling</td>
<td>N</td>
<td></td>
<td>Northumberland</td>
<td>RT</td>
<td></td>
</tr>
<tr>
<td>692</td>
<td>14</td>
<td>R251 7/6/2016</td>
<td>CONTRIBUTES ANIMAL POLLUTION, indirect</td>
<td>37.80559417</td>
<td>-76.36816413</td>
<td>189 Bloomfield Ln, Heathsville, VA 22473</td>
<td>6+ horses; Manure left on ground surface</td>
<td>Conv</td>
<td>Agri</td>
<td>Y</td>
<td>Horse Barn</td>
<td>Northumberland</td>
<td>RT</td>
<td></td>
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<tr>
<td>6575</td>
<td>14</td>
<td>R252 7/6/2016</td>
<td>CONTRIBUTES ANIMAL POLLUTION, indirect</td>
<td>37.80433600</td>
<td>-76.36877208</td>
<td>675 Crosshills Rd, Heathsville, VA 22473</td>
<td>30 sheep</td>
<td>Conv</td>
<td>Dwelling</td>
<td>Y</td>
<td></td>
<td>Northumberland</td>
<td>RT</td>
<td></td>
</tr>
</tbody>
</table>
SUMMARY

Growing Area # 014
Mill Creek to Dividing Creek
27 October 2016

SECTION B: SEWAGE POLLUTION SOURCES

1. SEWAGE TREATMENT WORKS
   0 – DIRECT – None.
   0 – INDIRECT – None.
   0 – 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
   1 – CONTRIBUTES POLLUTION, INDIRECT – # R222
   0 – CP (Kitchen or Laundry Wastes), DIRECT
   0 – CP (Kitchen or Laundry Wastes), INDIRECT
   0 – NO FACILITIES, DIRECT
   0 – NO FACILITIES, INDIRECT
   1 - 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.
   1 – INDIRECT – # R280
   1 – C.1. TOTAL

2. SOLID WASTE SITES
   0 - DIRECT – None.
   _0 – INDIRECT – None.
   0 – C.2. TOTAL

SECTION D: BOATING ACTIVITY
1 – MARINAS – # R62
2 – OTHER PLACES WHERE BOATS ARE MOORED – # R70, R85
   1 – UNDER SURVEILLANCE – # R24
   4 – D. TOTAL

SECTION E: CONTRIBUTES ANIMAL POLLUTION
3 – DIRECT – R165, R166, R251
   1 – INDIRECT – R252
   4 – E. TOTAL