



COMMONWEALTH of VIRGINIA

Department of Health Division of Shellfish Safety

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GARDNER, JACKSON AND BONUM CREEKS Growing Area # 006 Westmoreland County Shoreline Sanitary Survey

Date: 2 September 2021

Survey Period: April 19, 2021- July 27, 2021

Total Number of Properties Surveyed and Near-shore Samples Collected: 279

Surveyed By: W. Barrack, J. Carrier, W. McCarty, A. Roach & I. Geeson

SECTION A: GENERAL

This survey area extends from Reference Point 6 at Ragged Point to Reference Point 7 at Sandy Point, including the Potomac River shoreline between these two points, Long Pond, Cherry Grove Creek, Gardner Creek, Jackson Creek, Bonum Creek and all of their tributaries within a designated boundary line drawn by the Division of Shellfish Safety.

The topography of the area ranges from 15 to 20 feet inland and falling to 5 to 15 feet along the shoreline. The economy in Westmoreland County is based on Government, Manufacturing, Retail Trade as well as Agricultural, Forestry, Fishing and Hunting.

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 to establish nearshore seawater stations. Properties identified in the previous survey as having sanitary deficiencies or other environmental significance were revisited to evaluate their classification status. All roadways and navigable shoreline within the survey boundary were visually inspected to identify potential pollution sources requiring further investigation.

Meteorological data indicated that the area received a total precipitation of 15.82" for the survey period. A monthly breakdown is as follows:

April 19-31	1.75"	May	3.32"	June	5.12"	July 1-27	5.63"
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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 was analyzed and used to compare relative concentrations of fecal indicator bacteria within the waterway to identify potential onshore sources of contamination.

Maps of the Enterococcus sampling are shown at the conclusion of this report. Hydrographic data is shown in the table below.

Area 06 Nearshore Sampling				Rainfall in Inches		
Sample dates	High Tide	Sampling time	Enterococcus range (MPN/100ml)	Day of	Previous 48 hours	Previous 72 hours
4/27/21	2:39 am	11:20-13:36	<10-41	0	0	0.52
4/28/21	3:27 am	11:31-13:21	<10-52	0	0	0.52
4/29/21	4:16 am	11:38-13:12	<10-120	0	0	0.51
5/10/21	2:05 am	9:46-10:26	<10-31	0.08	0	1.15
5/11/21	2:42 am	9:40-10:38	<10-295	0	0.08	0.8
5/24/21	12:33 am	10:01-10:34	<10-20	0.12	0	0
5/25/21	1:24 am	10:29-11:14	<10-41	0	0.12	0.12
7/6/21	12:18 am	11:17-12:36	<10-52	0	0	1.415

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.

SECTION B: SEWAGE POLLUTION SOURCES

[illegible]

SECTION C: NONSEWAGE WASTE SITES

[illegible]

SECTION D: BOATING ACTIVITY

[illegible]

SECTION F: CONTRIBUTES ANIMAL POLLUTION

[illegible]

SUMMARY

Growing Area # 006
Gardner, Jackson and Bonum Creeks
2 September 2021

SECTION B: SEWAGE POLLUTION SOURCES

1. SEWAGE TREATMENT FACILITIES

0 – DIRECT – None
1 – INDIRECT – # 8
1 – B.1. TOTAL

2. ON-SITE SEWAGE DEFICIENCIES – Correction of deficiencies in the 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

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

SECTION D: BOATING ACTIVITY

1 – MARINA – # 7
0 – OTHER PLACES WHERE BOATS ARE MOORED – None
5 – UNDER SURVEILLANCE – # 2, 3, 4, 5, 6
6 – D. TOTAL

SECTION E: CONTRIBUTES ANIMAL POLLUTION

0 – DIRECT – None.
1 – INDIRECT – # 1
1 – E. TOTAL

Virginia Department of Health
Division of Shellfish Sanitation

Gardner, Jackson
& Bonum Creeks
006
Shoreline Sanitary Survey

Westmoreland County

Date: 2 September 2021
Survey By: W.Barrack, J. Carrier,
W McCarty, A. Roach & I. Geeson
Number of Properties Surveyed &
Near-shore Samples Collected: 279



0 750 1500
Yards

Legend

Seawater Sampling Stations

- Active
- Inactive

Sewered areas

DGIF Boat Ramps

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
- Boating Activity
- Contributes Animal Pollution - Direct
- Contributes Animal Pollution - Indirect

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



GA # 006 -Gardner, Jenkins and Bonum Creeks Enterococci Sampling

- Highest Sample: 295 at S14 on 5/11/21.

Legend

Enterococcus spp. (MPN/100ml)

Sampling Dates: 4/27/21 - 8/5/21

-  < 10
-  10 - 100
-  101 - 1000
-  1001 - 10000
-  > 10000



2 September 2021