



# COMMONWEALTH of VIRGINIA

Department of Health  
DIVISION OF SHELLFISH SANITATION  
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## York River: Yorktown to Goodwin Islands Growing Area # 052 York County Shoreline Sanitary Survey

**Date:** 27 February 2012  
**Survey Period:** October 21, 2011– February 14, 2012  
**Total Number of Properties Surveyed:** 257  
**Surveyed By:** F.P. Monis and I.H. Church

### SECTION A: GENERAL

This survey area extends from Reference Point 52 at Fusilier Redoubt (Colonial Fortifications Geological Survey triangulation point “Pitz”) west of the Coleman Bridge to Reference Point 53 at the northwest mouth of the Thorofare (triangulation point “Sandbox”), including the York River shoreline between these two points, Yorktown Creek, Wormley Creek, Wormley Pond, and all their tributaries.

The topography of the area varies in elevation from up to 50’ near the estuarine shorelines in the western and central areas of the survey to elevations between 5’ and 10’ on the eastern side of the survey area. The majority of the survey area is currently on sewer. The sewered areas are connected to the Hampton Roads Sanitation District York River Treatment Plant. The treatment plant is located outside the present survey boundaries, however, the plant discharges into the Dominion Power discharge canal. The remaining survey area is scheduled to be connected to the sewer system within the next year.

The economy of the area is primarily based upon commerce, tourism, and government installations. Except for the Colonial National Historical Park, the population is moderate to dense throughout the survey area. The 2010 U.S. Census noted a population total of 65,464 for York County and a 16.3% percent increase over the past ten years.

Meteorological data indicated that 7.82” of rain fell during the survey period. A monthly breakdown follows:

October 21-31, 2011	1.12”	December	1.37”	February 1-14	0.74”
November	2.61”	January 2012	1.98”		

On January 19, 2012 a HRSD force main’s clamp broke on Hornsbyville Road which resulted in approximately 4600 gallons of wastewater to be discharged into neighboring yards, ditches, and Wormley Creek. Corrective measures were taken by HRSD.

The United States Coast Guard Reserve Training Center is a complex that has several above ground storage tanks (~26) which contain fuels, solvents, and lubricants. Emergency spill response plan is in place.

The United States Naval Fuel Storage Depot has fourteen (14) underground storage tanks which contain 50,000 gallons of JP-8 jet fuel. Emergency spill response plan is in place. The projected future plans of the fuel storage depot are that one-third of the tanks will be out-of-service within the next year with full closure of the facility by 2017 to 2018. All empty tanks will be filled-in. The fuel storage depot will be relocated to Craney Island.

Copies of bacteriological, hydrographical, and shellfish closure data are available at the Norfolk field office for review. Copies of the current condemnation notices and maps are available via the internet at <http://www.vdh.virginia.gov/shellfish/>.

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 Sanitation 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.

## **SECTION B: SEWAGE POLLUTION SOURCES**

### **SEWAGE TREATMENT FACILITIES**

12. ***DIRECT*** – York River Sewage Treatment Facility, 515 Back Creek Road, Seaford 23696. Owner: Hampton Roads Sanitation District, PO Box 5000, Virginia Beach, Virginia 23696. Public- activated sludge sewage treatment facility. Plant design flow is 15 MGD. Treatment facilities consist of 3 primary clarifiers, 2 anaerobic digesters, 3 secondary clarifiers, 1 aeration unit, 6 activated sludge aeration units, 2 chlorine contact tanks, 2 dechlorination contact tanks, denitrite process, and dewatering manually by centrifugation. While the sewage treatment facility is located in survey area # 053 on Back Creek, the outfall discharges into the Dominion Power plant discharge canal that drains into the York River. Permit # VA 006438 from the Department of Environmental Quality, Water Regional Office.

### **ON-SITE SEWAGE DEFICIENCIES**

-None-

### **POTENTIAL POLLUTION**

9. 902 Old Wormley Creek Road, Yorktown, 23690. Brick ranch house. No contact. Unknown source of a pvc pipe extending from the house across the yard to ravine.

## **SECTION C: NON-SEWAGE WASTE SITES**

### **INDUSTRIAL WASTES**

13. ***DIRECT*** – Dominion Power, 1600 Waterview Road, Yorktown 23692. Business – coal powered electric power plant. Approximately 900 MGD of waste water from various outfalls are discharged into the York River through a primary discharge canal. There are 8 permitted storm water outfalls associated with industrial activity (001, 002, 003, 004, 101, 102, 103 and 111). A 6000 gallon ash leachate collection tank is pumped to HRSD. Outfalls 003 and 004 are also associated with ash disposal pond and receive only contact water from the landfill. Canal contents and effluent from the York River Sewage

Treatment facility are pumped to a submerged diffuser pipe 3500' offshore in the York River. Plant has VPDES permit # VA 0004103 from the Department of Environmental Quality, Tidewater Regional Office.

14. ***DIRECT*** – Western Refinery, 2201 Goodwin Neck Road, Yorktown, VA 23692. Business – oil refinery. The treatment facility handles sanitary sewage, process water, boiler wastes, wash down water and storm runoff from oily areas. Wastewater enters the CPI (Corrugated Plate Interceptor) separators, which remove oily residue from the water. This oil is returned to the refining process. The separated water flows to equalization and retention tanks. The water is pumped from the tanks through an IGF (Induced Gas Floatation) unit that removes any solids remaining in the water. From the IGF, the water proceeds to the activated sludge plant where it enters an aeration tank, undergoes biological treatment, and passed to a clarifier. The water exits the clarifier and proceeds through a pipeline out the refinery dock and is discharged into the York River. VPDES permit # 0003018 from the Department of Environmental Quality, Tidewater Regional Office.

### **SOLID WASTE DUMPSITES**

-None-

### **BOATING SECTION D: ACTIVITY**

#### **MARINAS**

- 2-3. Riverwalk Landing, 425 Water Street, Yorktown, 23690. Dockmaster's office located in Building number 425. During this survey the dockmaster's office was closed. The gates to the piers were closed during this survey. Routine marina inspection conducted on 08-27-2009. There are 20 transient slips available. Sanitary facilities provided are 1 commode, 2 lavatories, 2 showers for men, and 1 commode, 2 lavatories, and 2 showers for women. Solid waste containers are provided. Rinse water is accessible. No dump station provided. Sewage holding tank pump-out is provided. Marina inspection located with the field notes. Two piers separated by a distance implied the value in displaying these properties as separate features.
7. Marlbank Cove Marina, 120 Lookout Point, Yorktown, 23692. Private community boating and clubhouse. No contact. Routine marina inspection conducted on 07-01-2010. Fourteen (14) seasonal slips are available. Sanitary facilities provided are 1 commode, 1 lavatory, 1 shower, 1 urinal for men, and 1 commode, 1 lavatory, 1 shower for women. Solid waste containers are provided. No dump station or sewage holding tank pump-out provided. Marina inspection located with the field notes.
11. Wormley Creek Marina (Pookie Enterprises), 1221 Waterview Road, Yorktown, VA 23692. Commercial marina – 83 moorings. Present at time of the last marina inspection were 25 pleasure boats less than 26', 35 pleasure boats greater than 26'. Boating services include engine repairs, marine supplies, and an in – out ramp. Fuel, water and electricity available at all slips. Sanitary facilities are provided that include: 1 commode, 1 urinal, 1 lavatory and 1 shower for men; 2 commodes, 1 lavatory, and 1 shower for women. Sewage disposal is by septic tank with the drainfield 100' from Wormley Creek. Sewage Holding Tank Pump-out and dump stations are provided. Marina inspection located with the field notes.

### **OTHER PLACES BOATS ARE MOORED**

-None-

### **UNDER SURVEILLANCE**

1. Watermen's Museum, 309 Water Street, Yorktown, 23690. There are six (6) transient slips available. At the time of this survey, the pier was not open to the public. Historical vessels are to be docked at this pier within one to two years as attraction vessels. Routine marina inspection conducted on 08-27-2009. Sanitary facilities provided are 1 commode, 1 lavatory, 1 shower, and 1 privy. The Victory Center also contains public restrooms. No dump station or sewage holding tank pump-out provided. Marina inspection located with the field notes.

### **UNDER SURVEILLANCE**

4. United States Coast Guard Reserve Training Center, Yorktown, 23690. Marine – Wormley Creek Small Boat Marina. This facility has the capacity to moor 24 small marine craft that is 45' or less in length. Routine marina inspection conducted on 06-22-2006. Sanitary facilities provided are 5 commodes, 5 lavatories, 3 showers, 4 urinals for men, and 5 commodes, 5 lavatories, 3 showers for women. Sewage disposal is direct to Hampton Roads Sanitation District. A solid waste and dump station is provided. A sewage holding tank pump-out is provided. Rinse water is accessible. Marina inspection located with the field notes.
5. United States Coast Guard Reserve Training Center, Yorktown, 23690. One large concrete pier, 1200' in length which is shared with the United States Naval Fuel Storage Depot. The pier is no longer in service. No mooring at the pier during this survey. The pier has the capacity to moor approximately 5 vessels dependent on size. Boating and sanitary facilities not provided.
6. United States Naval Fuel Storage Depot, Yorktown, 23690. One large concrete pier, 1200' in length which is shared with the United States Coast Guard Reserve Training Center. No vessels were present during the time of this survey. Boating and sanitary facilities are not provided at the pier. Emergency spill plan is in place.
8. Wormley Creek Landing, End of Old Wormley Creek Road, Yorktown, 23690. This is a small boat ramp. Solid waste container is provided. No dump station or sewage holding tank pump-out provided. No sanitary facilities provided. Marina inspection located with the field notes.
10. Private Community Pier, End of Janis Drive, Yorktown, VA 23692. Present at time of survey 1 work vessel greater than 26' and 1 recreational vessel less than 26'. 4 moorings available. No boating services, sanitary facilities, pump-out services, or solid waste disposal available. No Marina inspection located with the field notes.
14. Western Refinery, 2201 Goodwin Neck Road, Yorktown, VA 23692. Business – Deep water terminal pier for loading and offloading of petroleum products. 5 moorings. 2 work vessels greater than 26' were present during the last marina inspection. Sanitary facilities are provided that include 2 commodes, 2 lavatories and 2 showers. Solid waste disposal available. Waste is pumped through pipeline back to shore for treatment in the refinery's activated sludge wastewater treatment facility. Sewage Holding Tank Pump-out and dump stations not provided. Marina inspection located with the field notes.

### **SECTION E: CONTRIBUTES ANIMAL POLLUTION**

-None-

## SUMMARY

Area # 052  
York River: Yorktown to Goodwin Island  
27 February 2012

### SECTION B: SEWAGE POLLUTION SOURCES

#### 1. SEWAGE TREATMENT FACILITIES

- 1 – DIRECT – #12
- 0 – INDIRECT – None
- 1 – 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 – 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.

- 1 – POTENTIAL POLLUTION – # 9

### SECTION C: NON-SEWAGE WASTE SITES

#### 1. INDUSTRIAL WASTE SITES

- 2 – DIRECT – # 13, 14
- 0 – INDIRECT – None
- 2 – C.1. TOTAL

#### 2. SOLID WASTE SITES

- 0 – DIRECT – None
- 0 – INDIRECT – None
- 0 – C.2. TOTAL

### SECTION D: BOATING ACTIVITY

- 4 – MARINAS – # 2, 3, 7, 11
- 0 – OTHER PLACES WHERE BOATS ARE MOORED – None
- 7 – UNDER SURVEILLANCE- # 1, 4, 5, 6, 8, 10, 14
- 11 – D. TOTAL

### SECTION E: CONTRIBUTES ANIMAL POLLUTION

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

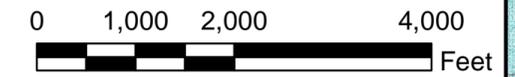
Virginia Department of Health  
Division of Shellfish Sanitation

York River:  
Yorktown to Goodwin Islands  
# 052  
Shoreline Sanitary Survey

York County



Date: 27 February 2012  
Survey By: I.H. Church & F.P. Monis  
Number of Properties Surveyed: 257



**Legend**

- Sampling Station - New (Blue diamond)
- Sampling Station - Historical (Yellow diamond)
- Sewered areas (Hatched pattern)
- DGIF Boat Ramps (Blue circle with 'B')

**Shoreline Survey Deficiencies**

- Sewage Treatment Facility - Direct (Red star)
- Sewage Treatment Facility - Indirect (Black star)
- Contributes Pollution - Direct (Red square)
- Contributes Pollution - Indirect (Black square)
- Contributes Pollution (Kitchen or Laundry wastes) - Direct (Red triangle)
- Contributes Pollution (Kitchen or Laundry wastes) - Indirect (Black triangle)
- No Facilities - Direct (Red circle)
- No Facilities - Indirect (Black circle)
- Potential Pollution (Red diamond)
- Industrial Wastes, Direct (Red circle with 'I')
- Industrial Wastes, Indirect (Black circle with 'I')
- Solid Waste Dumpsite - Direct (Red circle with 'S')
- Solid Waste Dumpsite - Indirect (Black circle with 'S')
- Boating Activity (Blue circle with 'B')
- Contributes Animal Pollution - Direct (Red circle with 'A')
- Contributes Animal Pollution - Indirect (Black circle with 'A')

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