



COMMONWEALTH of VIRGINIA
DEPARTMENT OF HEALTH
DIVISION OF SHELLFISH SANITATION

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BROAD AND LINKHORN BAYS
City of Virginia Beach
Growing Area # 071
Shoreline Sanitary Survey

Date: 30 May 2014
Survey Period: March 30, 2012 – April 25, 2014
Total Number of Properties Surveyed: 91
Survey By: I.H. Church and F.P. Monis

SECTION A: GENERAL

The surveyed portion of this growing area extends from Reference Point 72 at the bridge near the end of Inlet Road at the mouth of Long Creek into Lynnhaven Bay to approximately 3/4 mile south of the Narrows on the west shore of Linkhorn Bay, the north shore of Bird Neck Point, south shore of Rainey Gut, approximately 1.2 miles upstream from the Narrows, and finally from Reference point 73 at the east side of the Lesner Bridge over Lynnhaven Inlet, including the shoreline between these points on Long Creek, Broad Bay, Dey Cove, Mill Dam Creek, and White Hill Lake, Little Neck Creek, Crystal Lake, The Narrows, Linkhorn Bay (Rainey Gut), and all of their tributaries in the surveyed portion of this area.

Topography within the survey area ranges from approximately 5" to 25' above sea level with some higher elevations in the form of tertiary dunes of 40' at Seashore State Park. The populated sections of the survey area are predominantly residential subdivisions of the city comprised of middle to high income homes. The unpopulated area within the survey boundary is comprised entirely of Seashore State Park which forms the northwest boundary line of the survey. The economy of the survey area is based on restaurants, marinas, small to large businesses on the major streets of the area, recreational activities, and tourism.

Meteorological data indicated that the area received a total rainfall of 98.07" for the survey period. A monthly breakdown is as follows:

March 2012	0.04"	October	11.18"	May	4.71"	November	2.12"
April	3.14"	November	1.12"	June	3.69"	December	4.76"
May	6.74"	December	3.78"	July	4.65"	January 2014	4.42"
June	3.27"	January 2013	2.52"	August	3.68"	February	2.94"
July	5.39"	February	3.01"	September	0.94"	March	4.26"
August	5.81"	March	2.67"	October	4.56"	April	3.01"
September	1.48"	April	4.18"				

The majority of the properties located within the survey boundary are connected to Hampton Roads Sanitation District (HRSD) sewerage. Sections of Green Hill By the Bay and Godfrey Lane contain the highest number of onsite sewage disposal systems. The City of Virginia

Beach Public Utilities Department may plan on converting these properties to HRSD sewerage in the late summer of this year.

There are many marinas located in the survey area. However, there are many vessels that were unaccounted for; being docked behind homes with single or multiple slips. During the summer months, heavy boating activity occurs on Broad Bay and Linkhorn Bay constituting a seasonal non point source of pollution. Due to recent construction upgrades by the City of Virginia Beach, a couple of marinas no longer exist. In addition, marina offices have been relocated out of the survey boundary.

Seashore State Park which forms the northeast boundary of the survey area contains a large number of migratory and year-round birds, as well as small mammals. Broad Bay and Linkhorn Bay also maintain moderate numbers of waterfowl.

Copies of bacteriological, hydrographical, and shellfish closure data are available at the area field office for review. Copies of the current condemnation notice and maps are available via the Internet at www.vdh.virginia.gov/shellfish/.

Report copies are provided to the local health department for corrective action of deficiencies listed on the summary page in Section B.2 and the Department of Environmental Quality, Water Regional Office for possible action at the properties listed on the summary page in Section C.1.

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 are 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

-None-

ON-SITE SEWAGE DEFICIENCIES

-None-

POTENTIAL POLLUTION

-None-

SECTION C: NONSEWAGE WASTE SITES

INDUSTRIAL WASTES

-None-

SOLID WASTE DUMPSITES

-None-

SECTION D: BOATING ACTIVITY

MARINAS

4. Bubba's Marina, 3323 Shore Drive, Virginia Beach 23451. Boating services provided are fuel, water, electricity, and an in-out ramp. On-shore sanitary facilities provided are 2 commodes, and 1 lavatory for men; 2 commodes and 1 lavatory for women; and 1 commode and 1 lavatory unisex. Sewage disposal is to Hampton Roads Sanitation District sanitary sewer. Solid waste disposal containers are provided. Has an exemption to the requirement to provide boat holding tank pump-out. There is a dump station at this location.
6. Lynnhaven Seafood Marina 3311 Shore Drive, Virginia Beach 23451. Present at the time of the survey were 5 work boats >26ft and 4 pleasure boats <26 ft moored. Boating services provided are fuel, water, and electricity. On-shore sanitary facilities are 1 commode, 1 urinal, and 1 lavatory for men; 2 commodes, and 2 lavatories for women: and 1 commode and 1 lavatory unisex. Sewage disposal is to Hampton Roads Sanitation District sanitary sewer. Solid waste disposal containers, boat holding tank pump-out, and dump station facilities are present at this location.
9. Lynnhaven Municipal Marina 3211 Lynnhaven Drive, Virginia Beach 23451. Owner: City of Virginia Beach, Building 21 Municipal Center, Virginia Beach 23451. 50 slips. Present at the time of the survey were 5 pleasure boats under 26' and 2 work boats over 26' moored. Present at the time of the last inspection, 3 work boats and 15 pleasure boats under 26', 5 work boats and 10 pleasure boats over 26'. Boating services provided are fuel, water, and electricity. On-shore sanitary facilities are 1 commode, 1 urinal, and 1 lavatory for men; and 1 commode and 1 lavatory for women. Sewage disposal is to Hampton Roads Sanitation District sanitary sewer. Solid waste disposal containers and boat holding tank pump-out are provided. No dump station available.
11. Basin Road Real Estate Trust, 2228 Lynn Road, Virginia Beach 23451. Private marina for homeowners. 80 slips. Present at the time of the last inspection were 20 boats under 26' in slips. An in-out ramp is provided. There are no restrooms, solid waste disposal containers, or dump stations at this location. Has an exemption to the requirement to provide a boat holding tank pump out station.
12. Peninsula Real Estate Trust, 2201 Ebb Tide Road, Virginia Beach 23451. Private marina for homeowners. 42 slips. No boats present during last survey. Boating services provided are water and electricity. Solid waste disposal containers are not available. Has an exemption to the requirement to provide boat holding tank pump-out, dump station facilities, and on-shore sanitary facilities.
13. Lynnhaven Dry Storage, 2150 West Great Neck Road, Virginia Beach 23451. Commercial marina and dry storage facility. 24 slips and 660 dry storage spaces. Present at the time of the last inspection were 316 boats under 26' and 137 boats over 26' in dry storage. Boating services provided are fuel, water, electricity, an in-out hoist, and repair facilities. On-shore sanitary facilities provided are 3 commodes, 2 urinals, 5 lavatories, and 1 shower for men; and 5 commodes, 5 lavatories, and 1 shower for women. Sewage disposal is to Hampton Roads Sanitation District sanitary sewer. Solid waste disposal containers, boat holding tank pump-out facilities, and dump stations are provided.

14. Long Bay Pointe, 2101 West Great Neck Road, Virginia Beach 23451. Commercial marina with 215 slips. Present at the time of the last inspection were 3 work boats, 41 pleasure boats under 26' in slips; 5 work boats and 53 pleasure boats over 26' in slips. Boating services provided include fuel, water, and electricity. On-shore sanitary facilities are 4 commodes, 5 urinals, 1 shower, and 4 lavatories for men; 7 commodes, 4 lavatories, and 1 shower for women. Sewage disposal is to Hampton Roads Sanitation District sanitary sewer. Solid waste disposal containers, boat holding tank pump-out and dump station facilities are provided.
16. Marina Shores, 2100 Marina Shores Drive, Virginia Beach 23451. Commercial marina and dry storage facility. 161 slips and 450 dry storage spaces. Present at the time of the last inspection were 13 pleasure boats in slips, and 218 pleasure boats in dry storage under 26'; 1 work boat, 99 pleasure boats in slips, and 200 pleasure boats in dry storage over 26'. Boating services provided are fuel, water, electricity, marine supplies, groceries, and boat repair facilities. On-shore sanitary facilities are 9 commodes, 7 urinals, 9 lavatories, and 7 showers for men; 17 commodes, 10 lavatories and 7 showers for women. Sewage disposal is to Hampton Roads Sanitation District sanitary sewer. Solid waste disposal containers, boat holding tank pump-out and dump station facilities are provided.
17. Bay Island Quay Wharf Homeowners, 2004 Bay Island Quay Virginia Beach 23451. Private marina for homeowners. 10 slips. Present at the time of the last inspection were 3 pleasure boats under 26' in slips and 1 pleasure boat over 26'. Boating services provided are water and electricity. On-shore sanitary facilities are available in the homeowners' residences. Sewage disposal is to the Hampton Roads Sanitation District sanitary sewer. The homeowners association has an exemption to the requirement to provide boat holding tank pump-out or dump station facilities.
20. Ferebee Cove Condominium, 1637 Godfrey Lane, Virginia Beach 23454. Private marina for condominium owners. 7 slips. Present at the time of the last inspection were 2 pleasure boats under 26' in slips. Boating services provided are water and electricity. On-shore sanitary facilities are available in the condominium owners' residences. Sewage disposal is to Hampton Roads Sanitation District sanitary sewer. The Condominiums have an exemption to the requirement to provide boat holding tank or dump station facilities.
22. Linkhorn Bay Condominiums, 128 South Lynnhaven Road, Virginia Beach 23452. Private marina for condominium owners. 44 slips. Present at the time of the survey were 6 pleasure boats under 26' and 1 boat over 26' in slip. Boating services provided are water, electricity, and an in-out ramp. No restroom facilities provided. On-shore sanitary facilities are available in condominium owners' residences. Sewage disposal is to Hampton Roads Sanitation District sanitary sewer. Solid waste disposal containers are provided. There are no boat holding tank pump-out or dump station facilities provided at this location.
23. Cavalier Golf and Yacht Club, 1052 Cardinal Road, Virginia Beach 23451. Private marina for yacht club members. 85 slips. Present at the time of the last inspection were 16 pleasure boats under 26' and 77 boats over 26' in slips. Boating services provided are fuel, water, electricity, and in-out ramp. On-shore sanitary facilities provided are 7 commodes, 3 urinals, 4 lavatories, and 5 showers for men; and 7 commodes, 4 lavatories, and 3 showers for women. Sewage disposal is to Hampton Roads Sanitation District sanitary sewer. Solid waste containers are available. Boat holding tank pump-out and dump station facilities are provided to yacht club members.

24. Cove Point Council of Owners, 700 Oriole Drive, Virginia Beach 23451. Private marina for condominium owners. 66 slips. Present at the time of the last inspection were 2 pleasure boats under 26' and 3 pleasure boats over 26' in slips. Boating services provided are water and electricity. On-shore sanitary facilities are provided at the condominium owners' residences. Sewage disposal is to Hampton Roads Sanitation District sanitary sewer. The condominiums have an exemption to the requirement to provide boat holding tank pump-out and dump station facilities.

OTHER PLACES WHERE BOATS ARE MOORED

1. Virginia Pilots Association, 3329 Shore Drive, Virginia Beach 23452. Dock for pilot boats and residence for pilots. 6 slips. Present at the time of the survey were 5 boats over 26' in slips. Boating services provided are fuel, water, electricity, and repair facilities. On-shore sanitary facilities are 6 commodes, 1 urinal, 6 lavatories, and 6 showers for men; and 2 commodes and 2 lavatories for women. Sewage disposal is to Hampton Roads Sanitation District sanitary sewer. Solid waste disposal containers are available. There are no boat holding tank pump-out or dump station facilities at this location.
2. Association of Maryland Pilots, 3325 Shore Drive, Virginia Beach 23452. Dock and residence for pilots. 3 slips. Present at the time of the survey were 3 boats over 26' in slips. Boating services provided are fuel, water, electricity, and engine and hull repairs. On-shore sanitary facilities provided are 8 commodes, 4 urinals, 8 lavatories and 4 showers for men; and 1 commode, 1 lavatory, and 1 shower for women. Sewage disposal is to Hampton Roads Sanitation District sanitary sewer. Solid waste disposal containers are provided. Has an exemption to the requirement to provide boat holding tank pump-out facilities. No dump station is present at this location.
3. Lesner Inn Catering Club, 3319 Shore Drive, Virginia Beach 23451. Marine – "dock and dine" restaurant. Boats may be docked in front of special event building or go to Bubba's restaurant. 7 slips. One boat under 26' was present during the last inspection. No boating services are provided. On-shore sanitary facilities provided are 4 commodes, 2 urinals, and 3 lavatories for men; and 4 commodes, and 4 lavatories for women. Sewage disposal is to Hampton Roads Sanitation District sanitary sewer. A solid waste container is provided at this location. There is an exemption to the requirement to provide boat holding tank pump-out and dump station facilities.
7. Warner Athey, 2161 Vista Circle, Virginia Beach 23451. Commercial marina. 12 slips. Present at the time of the survey were 7 work boats and 3 pleasure boats in slips. Boating services provided are water and electricity. Onshore sanitary facilities provided are 1 commode, 1 lavatory, 1 shower, 1 outside privy for men, and 1 commode for women. Sewage disposal is to Hampton Roads Sanitation District sanitary sewer. Solid waste disposal containers are provided. There are no boat holding tank pump-out, or dump station facilities provided at this location.
8. Chick's Marina and Oyster Bar, 2143 Vista Circle, Virginia Beach 23451. Commercial Marine – "dock and dine" restaurant. 5 moorings. No boats present at time of survey or last inspection. There are no boating services provided at this location. On-shore sanitary facilities provided are 3 urinals, 1 commode, and 1 lavatory for men; and 4 commodes and 2 lavatories for women. Sewage disposal is to Hampton Roads Sanitation District sanitary sewer. There are no boat holding tank pump-out or dump station facilities provided at this location.

10. Five 2 Peers, 3201 Lynnhaven Drive, Virginia Beach 23451. Commercial marina. 43 slips and 10 dry storage spaces. Present at the time of the last inspection were 31 boats under 26' and 6 boats over 26' in slips. There are no solid waste disposal containers provided. Has a variance for onshore sanitary facilities, an exemption to the requirement to provide boat holding tank pump-out stations, and an alternate pump-out agreement with Lynnhaven Municipal Marina. There is no dump station facility at this location.
15. Capps Boatworks, 2102 West Great Neck Road, Virginia Beach 23451. Commercial marina/boat repair yard. 27 slips. Present at the time of the last inspection were 5 pleasure boats under 26'; 2 work boats and 9 pleasure boats over 26' in slips. Boating services provided are water, electricity, in-out hoist, and repair facilities. On-shore sanitary facilities provided are 1 commode, 1 lavatory unisex. Sewage disposal is to Hampton Roads Sanitation District sanitary sewer. Solid waste disposal containers are provided. There are no boat holding tank pump-out or dump station facilities available at this location.
18. W.A. Rowe, 2816 Broad Bay Road, Virginia Beach 23451. Marine – private marina. 10 slips. Present at the time of the last inspection were 2 pleasure boats under 26' and 3 boats over 26' in slips. Boating services provided are water, electricity, and an in-out ramp. On-shore sanitary facilities provided are 1 commode and 1 lavatory unisex. Sewage disposal is to Hampton Roads Sanitation District sanitary sewer. Solid waste disposal containers are provided. Has an exemption to the requirement to provide boat holding tank pump-out. No dump station facilities present at this location.
21. N. Alanton Civic League, 1445 Alanton Drive, Virginia Beach 23454. Private marina for homeowners. 8 slips. Present at the time of the survey were 6 boats under 26' in slips. The only boating service provided is electricity. There are no solid waste disposal containers available. Has an exemption to the requirement to provide boat holding tank pump-out and dump station facilities, and on-shore sanitary facilities.
25. Link Harbour Condominiums, 100 Pinewood Road, Apartment 312, Virginia Beach. Private marina for condominium owners. 18 slips. Present at the time of the last inspection were 2 boats under 26' and 5 boats over 26' in slips. Boating services provided are water and electricity. There are no solid waste disposal containers available. Has an exemption to the requirement to provide boat holding tank pump-out, and dump station facilities, and on-shore sanitary facilities.

UNDER SURVEILLANCE

5. Lynnhaven Fishing Company, 2137 Vista Circle, Virginia Beach 23415. Commercial marina. 3 moorings. Only the owner's boats are moored at this location. Present at the time of the survey were 2 work boats. The only boating service provided is fuel. There are solid waste disposal containers available. There are no boat holding tank pump-out or dump station facilities provided at this location. No restroom facilities available. This location is an extension to Chick's Restaurant.
19. Green Hill by the Bay Condo Association, 1740 Lovetts Pond Lane, Virginia Beach 23454. Private gazebo and dock for homeowners. No moorings. No boats were present at the time of the last inspection. There are no boating services at this location. Has an exemption to the requirement for onshore sanitary services. Solid waste disposal containers are available. Has exemption to the requirement for boat holding tank pump-out and dump station facilities.

26. First Landing State Park, 64th Street, Virginia Beach 23451. Owner: Virginia Department of Conservation and Recreation, 203 Governor Street, Richmond, Virginia 23219. Public boat ramp. 8 Transient slips/moorings. No boats present at the time of the last inspection. The only boating service provided is an in-out ramp. Onshore sanitary facilities provided are 2 commodes, 2 urinals, and 2 lavatories for men; and 4 commodes and 2 lavatories for women. Sewage disposal is by septic tank with drain field. No effluent observed on surrounding property. Solid waste disposal containers are available. There are no boat holding tank pump-out or dump station facilities provided at this location.

SECTION E: CONTRIBUTES ANIMAL POLLUTION

-None-

SUMMARY

Growing Area # 071
Broad and Linkhorn Bays
30 May 2014

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 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 DUMPSITES

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

SECTION D: BOATING ACTIVITY

13 – MARINAS – # 4, 6, 9, 11, 12, 13, 14, 16, 17, 20, 22, 23, 24
10 – OTHER PLACES WHERE BOATS ARE MOORED – # 1, 2, 3, 7, 8, 10, 15, 18, 21, 25
3 – UNDER SURVEILLANCE – # 5, 19, 26
26 – D. TOTAL

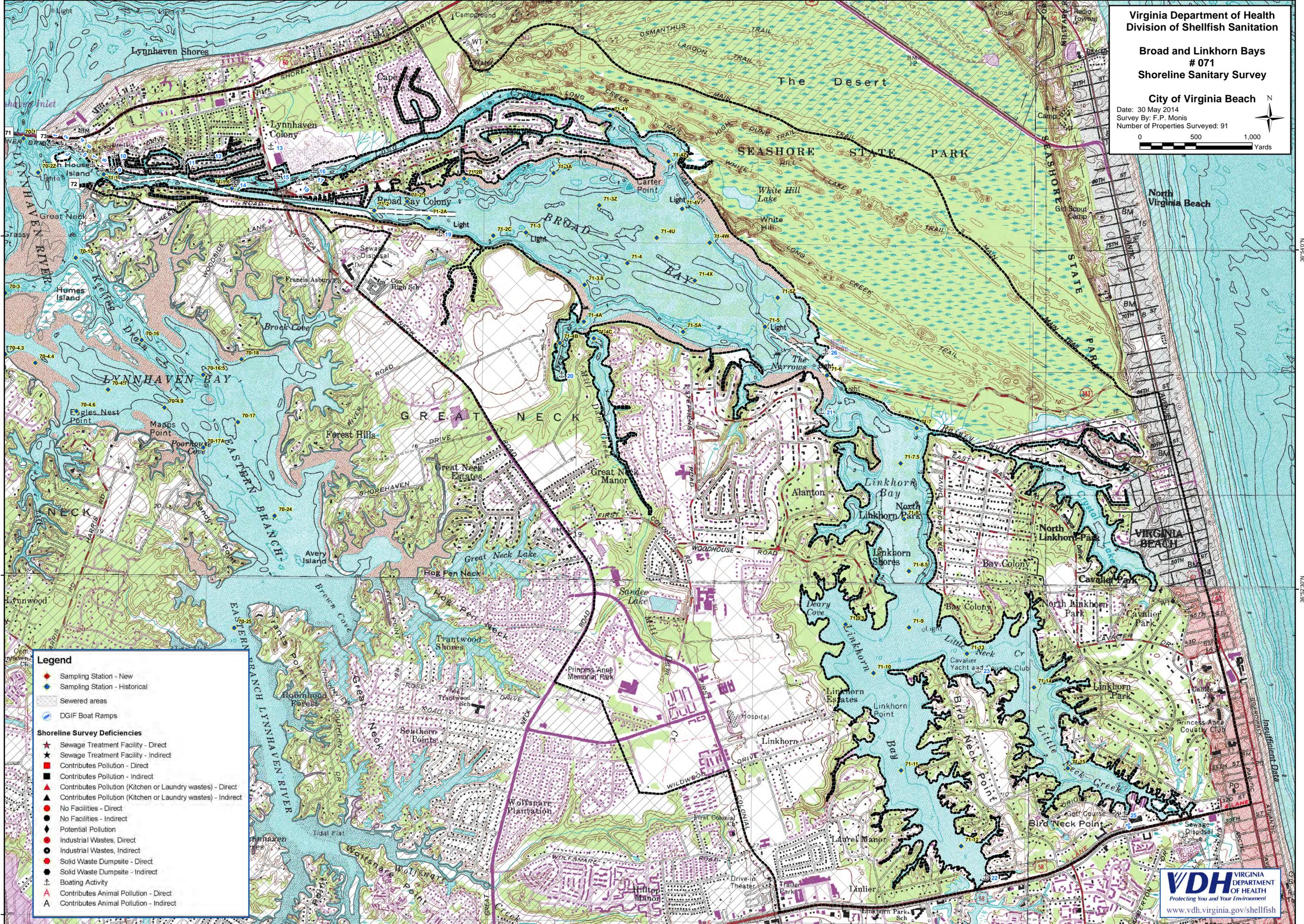
SECTION E: CONTRIBUTES ANIMAL POLLUTION

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

Virginia Department of Health
Division of Shellfish Sanitation

Broad and Linkhorn Bays
071
Shoreline Sanitary Survey

City of Virginia Beach
Date: 30 May 2014
Survey By: F.P. Monis
Number of Properties Surveyed: 91
0 500 1,000
Yards



Legend

- ◆ Sampling Station - New
- ◆ Sampling Station - Historical
- 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
- A Contributes Animal Pollution - Direct
- A Contributes Animal Pollution - Indirect