Fact Sheets for Category 5 Waters

RIVER BASIN: Potomac River & Shenandoah River Basins

CITY/COUNTY: Prince William

STREAM NAME: Neabsco Bay

HYDROLOGIC UNIT: 02070010

TMDL ID: VAN-A25E-02

ASSESSMENT CATEGORY: 5A

SEGMENT SIZE: 0.57 - Sq. Mi.

INITIAL LISTING: 2002 **TMDL SCHEDULE:** 2010

UPSTREAM LIMIT:

DESCRIPTION: Upper limit of Neabsco Bay

RIVER MILE: ~2.5

LATITUDE: 38.60833 **LONGITUDE:** -77.26667

DOWNSTREAM LIMIT:

DESCRIPTION: Confluence with the Occoquan Bay

RIVER MILE: 0.00

LATITUDE: 38.59833 **LONGITUDE:** -77.23722

Segment includes the tidal waters of Neabsco Bay downstream to the confluence with the Occoquan Bay. This segment was expanded from the 2002 cycle to include all of Neabsco Bay.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Aquatic Life Use - Not Supporting, Fish Consumption Use - Not Supporting, Recreation Use - Not Supporting

IMPAIRMENT CAUSE: pH (2002), Fish Tissue - PCBs (2002), Fecal Coliform (2004)

The listing of this stream segment is based on data from the following DEQ monitoring stations: DEQ ambient and fish tissue/sediment station 1ANEA000.57 in Neabsco Creek and fish tissue/sediment station 1ANEA000.51 (sampled in 1996). Monitoring data from these stations revealed the following during the 2004 water quality assessment period:

1) Not supporting of the Aquatic Life Use goal due to sufficient exceedances of the pH water quality criteria recorded at station 1ANEA000.57. Seven of 29 samples (24.1%) exceeded the upper range (9.0 SU) of the pH water quality criteria for Class II waters as established in 9 VAC 25-260-50 of the Virginia Water Quality Standards;

2) Not supporting of Fish Consumption Use goal due to a Health Advisory issued by the Virginia Department of Health (VDH) for PCB's in fish tissue. This segment is nested within the 20.3 square mile area (approximately) covered by the VDH fish consumption advisory. See the fact sheet for the Virginia tidal waters from the Woodrow Wilson Bridge to Brent Point at the mouth of Aquia Creek for discussion of the Health Advisory issued by VDH.

Within this segment, fish tissue data revealed exceedances of the water quality criterion based tissue value (TV) of 54 parts per billion (ppb) for polychlorinated biphenyls (PCBs) in two species in 1996 (largemouth bass, carp) and five species in 2000 (largemouth bass, carp, channel catfish, white catfish, american eel). While the 1996 sampling event preceeds the assessment window, it is relevant historical information.

3) Not supporting of the Recreation Use goal due to sufficient exceedances of the instantaneous fecal coliform bacteria criterion (8 of 38 samples - 21.1%) recorded at station 1ANEA000.57.

In addition, the Aquatic Life Use goal has an observed effect due to exceedances of the chlorophyll a screening level of 50 ug/L. Ten (10) of 15 samples (66.7%) exceeded the chlorophyll a screening level.