# Chesapeake Bay Program Analytical Segmentation Scheme 

## Revisions, Decisions and Rationales 1983-2003 <br> 2005 Addendum

## December 2005



# Chesapeake Bay Program Analytical Segmentation Scheme Revisions, Decisions and Rationales 1983-2003 

2005 Addendum

Prepared by the<br>Chesapeake Bay Program<br>Monitoring and Analysis Subcommittee<br>Tidal Monitoring and Analysis Workgroup<br>Annapolis, Maryland

## Contents

Introduction ..... 1
Methods Used to Subdivide Segments and Split Segments by Jurisdiction ..... 2
Web Access to Segmentation by Jurisdiction ..... 4
Literature Cited ..... 4
Appendix BMaryland's and Virginia's Chesapeake Bay ProgramSplit Segments Boundary Delineations by Jurisdiction5
Appendix C2003 Chesapeake Bay Program Segmentation SchemeCoordinates Geo-reference and Narrative Descriptionsby Jurisdiction11

## INTRODUCTION

In October 2004, the Chesapeake Bay Program released Chesapeake Bay Program Analytical Segmentation Scheme: Revisions, Decisions, and Rationales 1983-2003 (U.S. Environmental Protection Agency 2004). The Segmentation Scheme Report provided documentation on the development of the spatial segmentation scheme of the Chesapeake Bay and tidal tributaries over the period from 1983 to 2003. Included within the Segmentation Scheme Report were tables describing the segment boundaries and split segment boundaries.

Segments have been defined as a way of grouping areas with similar natural characteristics. To date, segment boundaries have been defined based on selected ecological criteria. As a result, management and monitoring strategies can be defined for each segment as a whole. Additional information on the rationale for utilizing natural characteristics for delineating segments can be found in the Segmentation Scheme Report.

It has become increasingly apparent that the political jurisdictions charged with adopting water quality standards and developing management strategies for waters within their jurisdiction need well defined boundaries for the segments that lie within their authority. The 2003 revisions to the Chesapeake Bay Program segmentation scheme included multiple segments and split segments that crossed jurisdictional boundaries. This has led to some confusion as to the area within segments that are under the jurisdiction of the individual states and the District of Columbia. In an effort to address this concern, the Chesapeake Bay Program has revised the descriptions contained within the Segmentation Scheme to more fully reflect jurisdictional boundaries.

The purpose of this addendum is to provide an updated description of segments and split segments by jurisdiction. Each segment or split segment definition contains a series of points that are defined by both a set of latitude and longitude coordinates in decimal degrees and a textual narrative describing their location. The segment boundaries follow the shorelines between the geo-referenced boundary coordinates including within each segment, all tidally influenced waters.

In the original Segmentation Scheme Report, the segment and split segment descriptions were presented in Appendix B (split segments) and Appendix C (segments). For purposes of this Addendum, the updated segment descriptions are presented here as revisions to those appendices. Appendix A of the original Segmentation Scheme remains unchanged and therefore is not replicated here.

## METHODS USED TO SUBDIVIDE SEGMENTS AND SPLIT SEGMENTS BY JURISDICTION

Originally, the impetus to divide certain Chesapeake Bay Program segments came from the desire of Maryland, Virginia and the District of Columbia to adopt submerged aquatic vegetation (SAV) restoration acreages in their respective water quality standards regulations for the tidal Potomac River. Each Chesapeake Bay Program segment was allocated acreage-specific SAV restoration goals, but the jurisdictions wanted to know what portions of those segments were legally responsible for. To allocate the area of individual Chesapeake Bay Program segments shared by two or more jurisdictions to the appropriate jurisdiction, it became necessary to apply state and District boundary data to be able to subdivide those segments. However, there were no legally recognized boundary data for the tidal Potomac River or even one common boundary dataset that all of the jurisdictions were using. An attempt was made to create a jurisdictional boundary file for the tidal Potomac River that Maryland, Virginia and the District of Columbia could agree upon.

After examining several different digital boundary files, it was determined that the best boundary along the Virginia shoreline was one produced by the Virginia Department of Conservation and Recreation (VA DCR). The VA DCR boundary was mostly based on the state boundaries appearing on digital 1:24000 scale quad sheets (digital raster graphics, or DRGs). The Maryland-Virginia state boundary delineated on the quad sheets appears to be based on the Mathews-Nelson Survey of 1927, which used the legally defined boundary of the low-water mark on the Virginia side of the river, except where embayments were crossed from one point on land to another point on land. However, shorelines can change in almost 80 years, either through natural or anthropogenic influences, which may partially account for discrepancies between the legal definition of the boundaries and how the data appear today. The state boundary was digitized on-screen using the DRGs as a background upon which to trace the line work. In the lower Potomac River, DCR used 1:12000 scale digital orthophoto quarter quads (DOQQs) having photo dates of 1992-1996 as the source for the boundary definition. Maps of the state boundary along the Potomac River are included in Technical Support Document for Identification of Chesapeake Bay Designated Uses and Attainability: 2004 Addendum (U.S. Environmental Protection Agency 2004b).

For the Maryland-District of Columbia boundary lines that cross the Potomac River diagonally from the Virginia shoreline, data provided by the District of Columbia Department of Health's Water Quality Control Branch were used. These data and the VA DCR data were merged to create a boundary file that all three jurisdictions agreed to use in allocating SAV restoration goals in those shared segments.

Later, it was determined that all segments that crossed jurisdictional boundaries needed to be subdivided. This included the continuation of the Maryland-Virginia boundary across the Chesapeake Bay and partly up the tidal Pocomoke River, and
the two tidal tributaries-C \& D Canal and Nanticoke River-that straddled the Maryland-Delaware boundary.

The Maryland-Virginia state boundary from VA DCR extended across the Chesapeake Bay and up the tidal Pocomoke River. This boundary was used with slight modification of some of the vertices of the boundary in Pocomoke Sound that subdivided segments POCMH and POCOH. Maryland Department of the Environment provided coordinates of a series of navigational buoys that define the MarylandVirginia state boundary at those vertices. The original VA DCR boundary data were altered to reflect these navigational buoy locations. The differences in distance between the navigational buoy locations and the vertices in the VA DCR data were all less than 30 meters, most less than 10 meters.

For the Maryland-Delaware boundary, Maptech 1:24,000 scale DRGs were used to digitize the boundary line on-screen. The GIS coverage was then edited and the two affected segments were split by the state boundary.

Those Chesapeake Bay Program segments that encompass multiple jurisdictions are:

| Segment Name | Segment Effected <br> Descriptor | Jurisdictions |
| :--- | :--- | :--- |
| C\&D Canal | C\&DOH | (DE, MD) |
| Upper Nanticoke River | NANTF | (DE, MD) |
| Anacostia | ANATF | (DC, MD) |
| Upper Potomac River | POTTF | (DC, MD, VA) |
| Middle Potomac River | POTOH | (MD, VA) |
| Lower Potomac River | POTMH | (MD, VA) |
| Lower Central Chesapeake | CB5MH | (MD, VA) |
| Tangier Sound | TANMH | (MD, VA) |
| Lower Pocomoke River | POCMH | (MD, VA) |
| Middle Pocomoke River | POCOH | (MD, VA) |

The Chesapeake Bay Program split segments were created to aid Maryland and Virginia in their adoption of SAV restoration acreages and water quality standards (U.S. Environmental Protection Agency 2004b). Two of the segments that were split for this purpose (POTOH and TANMH) share both Maryland and Virginia waters. Since the two segments were split by request of Maryland Department of the Environment for Maryland attainment, only the Maryland portion of those segments was required. The state boundary data that was used to subdivide all shared segments by jurisdiction was also used to subdivide the split segments POTOH1 and TANMH1. Only the Maryland portion of these split segments was retained in the data set.

## WEB ACCESS TO SEGMENTATION SCHEMES

The Chesapeake Bay Program partners maintain web access to the past and present segmentation schemes at www.chesapeakebay.net. Segment maps and a map of current monitoring stations can be found under Maps and Mapping at this website. Segment maps and monitoring maps are available in GIS format at:
$\mathrm{ftp}: / / \mathrm{ftp} . c h e s a p e a k e b a y . n e t /$ pub/Geographic/Chesapeake Bay.
The appendices contained in this addendum are available as an EXCEL file at: www.chesapeakebay.net/segmentscheme.htm.

## LITERATURE CITED

U.S. Environmental Protection Agency. 2004a. Chesapeake Bay Program Analytical Segmentation Scheme: Revisions, Decisions and Rationale 1983-2003. EPA 903-R-04-008. CBP/TRS 268/04. Chesapeake Bay Program Office, Annapolis, Maryland.
U.S. Environmental Protection Agency. 2004b. Technical Support Document for Identification of Chesapeake Bay Designated Uses and Attainability. EPA 903-R-04006. Chesapeake Bay Program Office, Annapolis, Maryland.

## appendix

## Maryland's and Virginia's Chesapeake Bay Program Split Segments Boundary Delineations by Jurisdiction

Table B-1. Latitude/longitude and narrative geo-reference identifiers for the end coordinates bounding each of Maryland's and Virginia's split Chesapeake Bay Program segments.


|  | Chesapeake <br> Segment <br> Bescription Program | Split <br> Segment | Segment |
| :--- | :--- | :--- | :--- |


|  |  |  |
| :--- | :--- | :--- |
| 39.358330 | -76.345024 | Cunninghill Cove, mouth of unnamed creek |
| 39.356564 | -76.322929 | Maxwell Point |
| 39.412685 | -76.400780 | Gunpowder Falls, 1500 feet below Route 7 |



Following the MLW line which defines the Maryland/Virginia boundary to the first point described above, except for the following embayments where the boundary is the confluence of the mouth of the embayment with the Potomac River:

[^0]| Segment Description |  | Chesapeake Bay Program Segment | Split <br> Segment | Number of Latitude/ Longitude Coordinates to Follow |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | POTOH2 | 3 |
| 38.444565 | -77.040695 | Windmill Point |  |  |
| 38.444935 | -77.016396 | 1.5 miles southeast of Chapel Point, due east of Windmill Point |  |  |
| 38.500164 | -77.026306 | Port Tobacco Marina (edge of 7.5 ' quad sheet) <br> POTOH3 |  | 3 |
| 38.408745 | -77.124855 | 0.15 miles southwest of Benny Gray Point |  |  |
| 38.408894 | -77.110886 | Blossom Point |  |  |
| 38.475391 | -77.130676 | Wards Run, 0.25 miles upstream of Hill Top Fork |  |  |
| Elk River |  | ELKOH | ELKOH1 | 8 |
| 39.449200 | -76.007698 | Turkey Point |  |  |
| 39.429420 | -75.997681 | 1300 feet southwest of Wroth Point |  |  |
| 39.474773 | -75.940498 | East of Ford Landing on Veazey Neck |  |  |
| 39.486473 | -75.923767 | Town Point |  |  |
| 39.523182 | -75.871521 | West of where the road north from Randalia ends |  |  |
| 39.525536 | -75.874619 | East side of Welch Point |  |  |
| 39.544392 | -75.855301 | Paddy Biddle Cove |  |  |
| 39.545540 | -75.876144 | 0.6 miles south of Elkmore |  |  |
|  |  |  | ELKOH2 | 3 |
| 39.545540 | -75.876144 | 0.6 miles south of Elkmore |  |  |
| 39.544392 | -75.855301 | Paddy Biddle Cove |  |  |
| 39.607624 | -75.822853 | Elkton, 500 feet below Route 7 |  |  |
| Sassafras River |  | SASOH | SASOH1 | 4 |
| 39.389511 | -76.040848 | Grove Point |  |  |
| 39.372025 | -76.101227 | 2850 feet east of Howells Point |  |  |
| 39.371868 | -75.955750 | 0.66 miles northwest of Freeman Creek |  |  |
| 39.378330 | -75.961472 | Cassidy Wharf |  |  |
|  |  |  | SASOH2 | 3 |
| 39.378330 | -75.961472 | Cassidy Wharf |  |  |
| 39.371868 | -75.955750 | 0.66 miles northwest of Freeman Creek |  |  |
| 39.376785 | -75.806549 | 350 feet upstream of Route 301 |  |  |
| Tangier Sound |  | TANMH | TANMH1 | 28 |
| 37.941404 | -76.083908 | MD/VA boundary, 2.25 miles west of Smith Gut Point |  |  |
| 37.953599 | -76.052055 | MD/VA boundary, 1450 feet west of Hog Neck |  |  |
| 37.953392 | -75.993331 | MD/VA boundary, 400 feet east of Horse Hammock |  |  |
| 37.946050 | -75.943628 | MD/VA boundary, between Smith and Cedar Island |  |  |
| 37.906718 | -75.952630 | MD/VA boundary, 2.75 miles west of Clump Island |  |  |
| 37.911304 | -75.883558 | MD/VA boundary, 300 feet north of Green Harbor Island |  |  |
| 37.911789 | -75.837732 | MD/VA boundary, 1.15 miles south of Cow Gap Island |  |  |
| 37.924927 | -75.848007 | Eastward Point, on eastern side of Broad Creek |  |  |
| 38.015781 | -75.845947 | East side of Daugherty Creek Canal |  |  |
| 38.016033 | -75.846458 | West side of Daugherty Creek Canal |  |  |
| 38.020733 | -75.856712 | South side of gut southwest of Acre Creek |  |  |
| 38.020973 | -75.856819 | North side of gut southwest of Acre Creek |  |  |
| 38.036049 | -75.868935 | 700 feet east of Flatcap Point, Janes Island |  |  |
| 38.058910 | -75.868744 | South shore of Pat Island |  |  |
| 38.064907 | -75.866974 | NE Pat Island- across gut from Hazard Island |  |  |
| 38.065315 | -75.866608 | Hazard Island- across gut from Pat Island |  |  |
| 38.075314 | -75.870750 | Gut between Hazard Cove and Mine Cr.- south side |  |  |
| 38.075665 | -75.871155 | Gut between Hazard Cove and Mine Cr.- north side |  |  |
| 38.078552 | -75.877586 | Hazard Island- 1200 feet northeast of tip of Hazard Pt. |  |  |
| 38.122917 | -75.937126 | Eastern side of Little Deal Island |  |  |
| 38.125946 | -75.941216 | Eastern point on north side of Little Deal Island |  |  |
| 38.131565 | -75.948860 | Wenona on Deal Island, north of channel |  |  |
| 38.136566 | -75.959633 | Twiggs Point Southern-most point of Clay Island |  |  |
| 38.232738 | -75.972618 |  |  |  |



| Segment | Chesapeake <br> Bescription | Brogram <br> Segment | Split <br> Segment |
| :--- | :--- | :--- | :--- | | Number of Latitude/ |
| :--- |
| Longitude Coordinates |
| to Follow |

VIRGINIA SPLIT SEGMENTS


## appendix $\subset$

## 2003 Chesapeake Bay Program Segmentation Scheme Coordinates Geo-reference and Narrative Descriptions by Jurisdiction

Table C-1. Textual description of coordinates bounding the 2003 Chesapeake Bay Program Segmentation Scheme segments by jurisdiction.

|  | Chesapeake <br> Bay Program <br> Segment | Number of Latitude/ <br> Description |
| :--- | :--- | :--- |

## MARYLAND SEGMENT BOUNDARIES

| Northern Chesapeake Bay |  | CB1TF 10 |
| :---: | :---: | :---: |
| 39.420143 | -76.123344 | 1000 feet southwest of Cherry Tree Point, Aberdeen Proving Ground |
| 39.401688 | -76.035194 | North of Chesapeake Haven, Grove Neck |
| 39.429420 | -75.997681 | 1300 feet southwest of Wroth Point |
| 39.4492 | -76.007698 | Turkey Point |
| 39.529629 | -75.979271 | Red Point |
| 39.540794 | -76.002899 | East side of Carpenter Point |
| 39.608994 | -76.121094 | Port Deposit |
| 39.608959 | -76.132683 | East side Spencer Island |
| 39.609001 | -76.135147 | West side Spencer Island |
| 39.608971 | -76.143379 | Just south of Rock Run on western shore |
| Bush River |  | BSHOH 3 |
| 39.339172 | -76.256592 | 800 feet upriver of Leges Point |
| 39.351715 | -76.232986 | Mouth of Abbey Creek |
| 39.482510 | -76.215805 | Church Creek, at the railroad tracks |
| Gunpowder River |  | GUNOH 7 |
| 39.316414 | -76.331039 | Carroll Island, midway between White Oak and Carroll Points |
| 39.312862 | -76.321449 | Carroll Point |
| 39.312767 | -76.321190 | Carroll Point |
| 39.303204 | -76.296249 | Rickett Point at end of Ricketts Point Road |
| 39.412685 | -76.400780 | Gunpowder Falls, 1500 feet below Route 7 |
| 39.326569 | -76.361801 | 170 feet south of west side of bridge to Carroll Island |
| 39.326477 | -76.361130 | 170 feet south of east side of bridge to Carroll Island |
| Middle River |  | MIDOH 5 |
| 39.286442 | -76.384102 | North shore of Holly Beach |
| 39.309422 | -76.342964 | Carroll Island, between Weir Point and Hawthorn Cove |
| 39.326477 | -76.361130 | 170 feet south of east side of bridge to Carroll Island |
| 39.326569 | -76.361801 | 170 feet south of west side of bridge to Carroll Island |
| 39.329792 | -76.446922 | 150 feet downstream of railroad tracks, above Eastern Blvd |



| Segment Description |  | Chesapeake <br> Bay Program Segment | Number of Latitude/ Longitude Coordinates to Follow |
| :---: | :---: | :---: | :---: |
| Rhode Rive |  | RHDMH | 5 |
| 38.867775 | -76.519608 | Salt Pond at the mouth of the Rhode River |  |
| 38.864788 | -76.485870 | 1.2 miles east southeast of Dutchman Point |  |
| 38.886829 | -76.475616 | 0.8 miles east of Saunders Point |  |
| 38.888672 | -76.489876 | Saunders Point, south of Mayo Beach Park |  |
| 38.883629 | -76.554649 | Muddy Creek, 1200 feet below North and South Forks converge |  |
| West River |  | WSTMH | 4 |
| 38.848892 | -76.493805 | Felicity Cove, 2 |  |
| 38.864788 | -76.485870 | 1.2 miles east so |  |
| 38.867775 | -76.519608 | Salt Pond at the |  |
| 38.822258 | -76.551514 | 2400 feet down |  |
| Middle Central Chesapeake Bay |  | CB4MH | 18 |
| 38.384819 | -76.381432 | Cove Point |  |
| 38.393951 | -76.282532 | Meekins Neck, 800 feet north of Cattail Island |  |
| 38.421051 | -76.288589 | Meekins Neck, across channel from Point \#4 |  |
| 38.421944 | -76.288742 | Southern tip of Taylors Island |  |
| 38.487057 | -76.331779 | West side of Oyster Cove, Taylors Island |  |
| 38.526997 | -76.333771 | 190 feet south of LCHMH Point \#3 |  |
| 38.527523 | -76.333801 | East edge of tidal flat north of existing James Island |  |
| 38.672421 | -76.340698 | 720 feet along shore north northwest of Blackwalnut Point |  |
| 38.719185 | -76.334084 | South side Knapps Narrows, 275 feet west of Route 33 |  |
| 38.719967 | -76.333054 | North side Knapps Narrows, 150 feet west of Route 33 |  |
| 38.752529 | -76.340332 | 1500 feet northeast of Green Marsh Point |  |
| 38.836365 | -76.369392 | Kent Point |  |
| 38.989105 | -76.330185 | 0.6 miles northeast of where Route 50 west meets the Bay |  |
| 38.995991 | -76.413185 | 500 feet southeast of Moss Pond |  |
| 38.976032 | -76.452377 | Greenbury Point, 800 feet up east side from the tip |  |
| 38.946095 | -76.455879 | Bay Ridge, near Bainbridge Avenue |  |
| 38.907860 | -76.466240 | Southern shore of Thomas Point Park |  |
| 38.848892 | -76.493805 | Felicity Cove, 250 feet north of Bay Road |  |
| Western Branch Patuxent River |  | WBRTF | 3 |
| 38.784637 | -76.713326 | Mouth of Western Branch, west side |  |
| 38.785023 | -76.712456 | Mouth of Western Branch, east side |  |
| 38.797241 | -76.729507 | Where Western Branch narrows, north of sewage plant |  |
| Upper Patuxent River |  | PAXTF |  |
| 38.700325 | -76.695824 | On marshy point 0.5 miles north of Hotschkins Branch |  |
| 38.700516 | -76.694160 | 0.8 miles north of Jones Point |  |
| 38.874958 | -76.677834 | Near unnamed stream south of Mt. Nebo Branch |  |
| 38.785023 | -76.712456 | Mouth of Western Branch, east side |  |
| 38.784637 | -76.713326 | Mouth of Western Branch, west side |  |
| Middle Patuxent River |  | PAXOH | 4 |
| 38.542320 | -76.678818 | Chalk Point, eastern side |  |
| 38.540684 | -76.668045 | Gods Grace Point near end of Leitchs Wharf Road |  |
| 38.700516 | -76.694160 | 0.8 miles north of Jones Point |  |
| 38.700325 | -76.695824 | On marshy point 0.5 miles north of Hotschkins Branch |  |
| Lower Patuxent River |  | PAXMH | 4 |
| 38.304638 | -76.421448 | Fishing Point |  |
| 38.319176 | -76.420990 | Drum Point |  |
| 38.540684 | -76.668045 | Gods Grace Point near end of Leitchs Wharf Road |  |
| 38.542320 | -76.678818 | Chalk Point, eastern side |  |



Following the MLW line which defines the Maryland/Virginia boundary to the first point described above, except for the following embayments where the boundary is the confluence of the mouth of the embayment with the Potomac River:

| Hunting Creek | Unnamed embayment (Mason Neck NWR) |
| :--- | :--- |
| Little Hunting Creek | Occoquan Bay |
| Dogue Creek | Powells Creek |
| Gunston Cove | Quantico Creek |


| Piscataway River |  |
| :--- | :--- |
| 38.711002 | -77.036736 |
| 38.702038 | -77.044693 |
| 38.697979 | -76.996788 |


| Mattawoman Creek |  |
| :--- | :--- |
| 38.566856 | -77.209755 |
| 38.554722 | -77.220268 |
| 38.591194 | -77.124672 |

PISTF
3
West of Fort Washington
Mockley Point, 500 feet west of tip
Piscataway Creek Park, north of sewage disposal plant
MATTF
3
Cornwallis Neck, 0.25 miles northwest of Deep Point Stump Neck, east of radio towers and west of Roach Road 2300 feet downstream of Routes 224/225 (7.5' quad edge)

| Segment <br> Description | Chesapeake <br> Bay Program <br> Segment | Number of Latitude/ <br> Longitude Coordinates <br> to Follow |  |
| :--- | :--- | :--- | :--- |
| Middle Potomac River |  | POTOH | 4 |
| 38.389680 | -77.029268 | MLW 1 mile southeast of Mathias Point, just north of Route 639 |  |
| 38.407509 | -76.997322 | 0.65 miles northwest of the town of Popes Creek |  |
| 38.523266 | -77.256630 | 1000 feet southwest of Moss Point |  |
| 38.524168 | -77.284864 | MLW midway between Shipping Point and Quantico Pier |  |

Following the MLW line which defines the Maryland/Virginia boundary to the first point described above, except for the following embayments where the boundary is the confluence of the mouth of the embayment with the Potomac River:

Unnamed Embayment (Chopawamsic Island)
Unnamed Embayment (near Arkendale Road)
Aquia Creek
Potomac Creek

| Lower Potomac River | POTMH |  |
| :--- | :--- | :--- |
| 37.909777 | -76.263700 | MLW east of Ophelia, 300 feet northwest of light |
| 38.038605 | -76.321442 | Point Lookout |
| 38.407509 | -76.997322 | 0.65 miles northwest of the town of Popes Creek |
| 38.389680 | -77.029268 | MLW 1 mile southeast of Mathias Point, just north of Route 639 |

Following the MLW line which defines the Maryland/Virginia boundary to the first point described above, except for the following embayments where the boundary is the confluence of the mouth of the embayment with the Potomac River:

| Upper Machodoc Creek | Gardner Creek |
| :--- | :--- |
| Rosier Creek | Jackson Creek |
| Monroe Bay | Bonum Creek |
| Mattox Creek | Yeocomico River |
| Popes Creek | Coan River |
| Nomini Bay | Presley Creek |
| Lower Machodoc Creek | Hull Creek |
| Unnamed Embayment <br> (south of Ragged Point) | Hock Creek |


| Northeast River |  | NORTF 3 |
| :---: | :---: | :---: |
| 39.540794 | -76.002899 | East side of Carpenter Point |
| 39.529629 | -75.979271 | Red Point |
| 39.608879 | -75.937988 | 750 feet above railroad bridge, 1500 feet below Route 40 |
| Elk River |  | ELKOH 7 |
| 39.449200 | -76.007698 | Turkey Point |
| 39.429420 | -75.997681 | 1300 feet southwest of Wroth Point |
| 39.474773 | -75.940498 | East of Ford Landing on Veazey Neck |
| 39.486473 | -75.923767 | Town Point |
| 39.523182 | -75.871521 | West of where the road north from Randalia ends |
| 39.525536 | -75.874619 | East side of Welch Point |
| 39.607624 | -75.822853 | Elkton, 500 feet below Route 7 |
| C\&D Canal |  | C\&DOH 4 |
| 39.525536 | -75.874619 | East side of Welch Point |
| 39.523182 | -75.871521 | West of where the road north from Randalia ends |
| 39.534616 | -75.779424 | MD/DE state line, southern shore |
| 39.536623 | -75.779582 | MD/DE state line, northern shore |
| Bohemia River |  | BOHOH 3 |
| 39.486473 | -75.923767 | Town Point |
| 39.474773 | -75.940498 | East of Ford Landing on Veazey Neck |
| 39.461319 | -75.783554 | 600 feet below entrance of Sandy Branch |


| Segment Description | Chesapeake Bay Program Segment | Number of Latitude/ Longitude Coordinates to Follow |
| :---: | :---: | :---: |
| Sassafras River | SASOH | 3 |
| 39.389511 -76.040848 | Grove Point |  |
| 39.372025 -76.101227 | 2850 feet east of Howells Point |  |
| 39.376785 -75.806549 | 350 feet upstream of Route 301 |  |
| Upper Chester River | CHSTF | 3 |
| 39.246002 -75.986618 | Travilla Wharf |  |
| $39.245350-75.985878$ | Marshy point across from Travilla Wharf |  |
| 39.254440 -75.839638 | Andover Branch 900 feet above Route 313 |  |
| Middle Chester River | CHSOH | 4 |
| 39.147564 -76.086426 | 1100 feet below Browns Creek |  |
| $39.146572-76.075684$ | Northwest Point, west of Riverview |  |
| $39.245350-75.985878$ | Marshy point across from Travilla Wharf |  |
| $39.246002-75.986618$ | Travilla Wharf |  |


| Lower Chester River |  |
| :--- | :--- |
| 39.029720 | -76.242516 |
| 39.016422 | -76.296959 |
| 38.970539 | -76.248413 |
| 38.970455 | -76.246330 |
| 39.146572 | -76.075684 |
| 39.147564 | -76.086426 |
| 39.056882 | -76.220903 |
| 39.054563 | -76.220229 |


| Eastern Bay |  |
| :--- | :--- |
| 38.836365 | -76.369392 |
| 38.752529 | -76.340332 |
| 38.970455 | -76.246330 |
| 38.970539 | -76.248413 |


| Upper Choptank River |  |
| :--- | :--- |
| 38.810635 | -75.902985 |
| 38.808270 | -75.900391 |
| 38.980827 | -75.792931 |

Middle Choptank River

| 38.653545 | -75.959129 |
| :---: | :---: |
| 38.647415 | -75.952339 |
| 38.808270 | -75.900391 |
| 38.810635 | -75.902985 |

## Lower Choptank River

| 38.672421 | -76.340698 |
| :--- | :--- |
| 38.571705 | -76.336029 |
| 38.573353 | -76.306503 |
| 38.628571 | -76.171051 |
| 38.649193 | -76.153114 |
| 38.719967 | -76.333054 |
| 38.719185 | -76.334084 |


| Mouth of Choptank River |  |
| :--- | :--- |
| 38.649193 | -76.153114 |
| 38.628571 | -76.171051 |
| 38.647415 | -75.952339 |
| 38.653545 | -75.959129 |

Grove Point
2850 feet east of Howells Point

CHSTF
3

Marshy point across from Travilla Wharf
Andover Branch 900 feet above Route 313

CHSOH

8
Wickes Beach, Eastern Neck Island
Kent Island, 1600 feet north of Grollman Road
Route 50, west side of Kent Narrows
Route 50, east side of Kent Narrows
Northwest Point, west of Riverview
1100 feet below Browns Creek
South end of Eastern Neck, east of Route 445 bridge
Northern tip of Eastern Neck Island, east of Route 445 bridge

## EASMH

4
Kent Point
1500 feet northeast of Green Marsh Point
Route 50, east side of Kent Narrows
Route 50, west side of Kent Narrows

## CHOTF

3
1850 feet downstream from mouth of Tuckahoe Creek
1000 feet downstream of Gilpin Point
3500 feet upstream of Route 313 bridge

## CHOOH

4
1.5 miles downstream of Bow Knee Point
1.05 miles upstream of Cabin Creek

1000 feet downstream of Gilpin Point
1850 feet downstream from mouth of Tuckahoe Creek
CHOMH1
7
720 feet along shore north northwest of Blackwalnut Point Hills Point
1.6 miles almost due west of Hills Point

400 feet west of Castle Haven Point
0.9 miles north of Chlora Point

North side Knapps Narrows, 150 feet west of Route 33
South side Knapps Narrows, 275 feet west of Route 33

## CHOMH2

4
0.9 miles north of Chlora Point 400 feet west of Castle Haven Point 1.05 miles upstream of Cabin Creek 1.5 miles downstream of Bow Knee
$\left.\begin{array}{lrll} & & \begin{array}{l}\text { Chesapeake } \\ \text { Segment } \\ \text { Bescription Program }\end{array} & \\ \text { Segment }\end{array} \quad \begin{array}{l}\text { Number of Latitude/ } \\ \text { Longitude Coordinates } \\ \text { to Follow }\end{array}\right]$

| Segment |  | Chesapeake <br> Bay Program <br> Segment |
| :--- | :--- | :--- |
| Description |  | Longitude Coordinates |
|  |  | Lo Follow |


| Segment Description |  | Chesapeake Bay Program Segment | Number of Latitude/ Longitude Coordinates to Follow |
| :---: | :---: | :---: | :---: |
| Upper Pocomoke River |  | POCTF | 3 |
| 38.062958 | -75.617470 | West of Unionv |  |
| 38.062840 | -75.616302 | West of Unionvi |  |
| 38.183201 | -75.391991 | Snow Hill, 1900 |  |
| Middle Pocomoke River |  | $\mathbf{P O C O H}$ | 10 |
| 37.966858 | -75.674603 | On mainland 40 |  |
| 37.951850 | -75.676225 | MD/VA bounda |  |
| 37.949924 | -75.667353 | MD/VA bounda |  |
| 37.945125 | -75.656153 | MD/VA bounda |  |
| 37.946728 | -75.648248 | MD/VA bounda |  |
| 37.966423 | -75.648553 | MD/VA bounda |  |
| 37.994347 | -75.624314 | Intersection of S County, VA | ounty, MD and Accomack |
| 37.994449 | -75.623122 | Worcester/Acco |  |
| 38.062840 | -75.616302 | West of Unionv |  |
| 38.062958 | -75.617470 | West of Unionv |  |
| Lower Pocomoke River |  | POCMH | 8 |
| 37.924927 | -75.848007 | Eastward Point, |  |
| 37.911789 | -75.837732 | MD/VA bounda |  |
| 37.912169 | -75.801148 | MD/VA bounda |  |
| 37.941226 | -75.761753 | MD/VA bounda |  |
| 37.954523 | -75.704753 | MD/VA bounda |  |
| 37.955327 | -75.691653 | MD/VA bounda |  |
| 37.951850 | -75.676225 | MD/VA bounda |  |
| 37.966858 | -75.674603 | On mainland 40 |  |

## DELAWARE SEGMENT BOUNDARIES

| C\&D Canal |  | C\&DOH |
| :--- | :--- | :--- |
| 39.536623 | -75.779582 | MD/DE state line, northern shore |
| 39.534616 | -75.779424 | MD/DE state line, southern shore |
| 39.542904 | -75.724831 | North of Summit Bridge and 250 feet east of the power line |
|  |  | NANTF |
| Nanticoke | -75.701629 | MD/DE state line, northern shore |
| 38.561509 | -75.701489 | MDDE state line, southern shore |
| 38.559706 | -75.606522 | Seaford, DE just above Middleford Road |
| 38.642723 |  |  |

## DISTRICT OF COLUMBIA SEGMENT BOUNDARIES

| Upper Potomac River | POTTF |  |
| :--- | ---: | :--- |
| 38.791836 | -77.038923 | DC/MD/VA boundary 200 feet east of Jones Point Park |
| 38.802464 | -77.025166 | DC/MD boundary, near Fox Ferry Point |
| 38.805753 | -77.020951 | DC/MD boundary, southern shore of Oxon Creek. |
| 38.809449 | -77.016184 | DC/MD boundary, northern shore of Oxon Creek. |
| 38.850609 | -77.018761 | Border between Bolling Air Force Base and US Naval Station |
| 38.850546 | -77.022368 | 2250 feet due south of western side of Hains Point |
| 38.856720 | -77.022491 | Hains Point |
| 38.929682 | -77.115663 | Chain Bridge, eastern shore |
| 38.929522 | -77.116453 | MHW, Chain Bridge, western shore |
|  |  |  |
| Anacostia River | -77.022491 | ANATF |
| 38.856720 | -77.022368 | Hains Point |
| 38.850546 | -77.018761 | 2250 feet due south of western side of Hains Point |
| 38.850609 | -76.941198 | Border between Bolling Air Force Base and US Naval Station |
| 38.918261 | -76.941951 | DC/MD boundary, eastern side of Route 50 bridge |
| 38.918850 | DC/MD boundary, western shore |  |


|  | Chesapeake <br> Segment <br> Bescription Program <br> Segment | Number of Latitude/ <br> Longitude Coordinates <br> to Follow |
| :--- | :--- | :--- |

## VIRGINIA SEGMENT BOUNDARIES

| Lower Central Chesapeake Bay |  |
| :--- | ---: |
| 37.619465 | -76.280251 |
| 37.797581 | -76.025650 |
| 37.941404 | -76.083908 |
| 37.885680 | -76.229038 |
| 37.889451 | -76.236198 |
| 37.909725 | -76.263702 |

## CB5MH

## 6

Fleets Island, at end of road north of Windmill Point
3 miles west northwest of Tangier Sound Light
MD/VA boundary, 2.25 miles west of Smith Gut Point
MD/VA boundary, 2500 feet southwest of Smith Point Smith Point
East of Ophelia, 300 feet northwest of light

| Upper Potomac River |  |
| :--- | :--- |
| 38.524181 | -77.285294 |
| 38.524168 | -77.284864 |
| 38.791836 | -77.038923 |
| 38.929522 | -77.116453 |
| 38.929473 | -77.116695 |

POTTF
5
Midway between Shipping Point and Quantico Pier
MLW midway between Shipping Point and Quantico Pier
DC/MD/VA boundary 200 feet east of Jones Point Park
MHW, Chain Bridge, western shore
Chain Bridge, western shore

Following the MLW line which defines the Maryland/Virginia boundary to the first point described above. This segment contains the following embayments where the Maryland/Virginia boundary is the confluence of the mouth of the embayment with the Potomac River:

| Hunting Creek | Unnamed embayment (Mason Neck NWR) |
| :--- | :--- |
| Little Hunting Creek | Occoquan Bay |
| Dogue Creek | Powells Creek |
| Gunston Cove | Quantico Creek |


| Middle Potomac River |  |
| :--- | :--- |
| 38.389660 | -77.029305 |
| 38.389680 | -77.029268 |
| 38.524168 | -77.284864 |
| 38.524181 | -77.285294 |

POTOH
4
1 mile southeast of Mathias Point, just north of Route 639
MLW 1 mile southeast of Mathias Point, just north of Route 639
MLW midway between Shipping Point and Quantico Pier
Midway between Shipping Point and Quantico Pier

Following the MLW line which defines the Maryland/Virginia boundary to the first point described above. This segment contains the following embayments where the Maryland/Virginia boundary is the confluence of the mouth of the embayment with the Potomac River:

Unnamed Embayment (Chopawamsic Island) Aquia Creek
Unnamed Embayment (near Arkendale Road) Potomac Creek

| Lower Potomac River | POTMH |  |
| :--- | :--- | :--- |
| 37.909725 | -76.263702 | East of Ophelia, 300 feet northwest of light |
| 37.909777 | -76.263700 | MLW east of Ophelia, 300 feet northwest of light |
| 38.389680 | -77.029268 | MLW 1 mile southeast of Mathias Point, just north of Route 639 |
| 38.389660 | -77.029305 | 1 mile southeast of Mathias Point, just north of Route 639 |

Following the MLW line which defines the Maryland/Virginia boundary to the first point described above. This segment contains the following embayments where the Maryland/Virginia boundary is the confluence of the mouth of the embayment with the Potomac River:

| Upper Machodoc Creek | Gardner Creek |
| :--- | :--- |
| Rosier Creek | Jackson Creek |
| Monroe Bay | Bonum Creek |
| Mattox Creek | Yeocomico River |
| Popes Creek | Coan River |
| Nomini Bay | Presley Creek |
| Lower Machodoc Creek | Hull Creek |
| Unnamed Embayment | Hock Creek |
| $\quad$ (south of Ragged Point) |  |


| Segment <br> Description |  |
| :--- | ---: |
| Middle Pocomoke River <br> 37.951850 | -75.676225 |
| 37.941841 | -75.677261 |
| 37.994449 | -75.623122 |
| 37.994347 | -75.624314 |
| 37.966423 | -75.648553 |
| 37.946728 | -75.648248 |
| 37.945125 | -75.656153 |
| 37.949924 | -75.667353 |


| Lower Pocomoke River |  |
| :--- | ---: |
| 37.911789 | -75.837732 |
| 37.806671 | -75.755676 |
| 37.806152 | -75.755272 |
| 37.787926 | -75.741074 |
| 37.941841 | -75.677261 |
| 37.951850 | -75.676225 |
| 37.955327 | -75.691653 |
| 37.954523 | -75.704753 |
| 37.941226 | -75.761753 |
| 37.912169 | -75.801148 |


| Tangier Sound |  |
| :--- | ---: |
| 37.792580 | -76.032707 |
| 37.781960 | -75.873726 |
| 37.846237 | -75.786530 |
| 37.911789 | -75.837732 |
| 37.911304 | -75.883558 |
| 37.906718 | -75.952630 |
| 37.946050 | -75.943628 |
| 37.953392 | -75.993331 |
| 37.953599 | -76.052055 |
| 37.941404 | -76.083908 |
| 37.797581 | -76.025650 |


| Western Lower Chesapeake Bay |  |
| :--- | ---: |
| 37.084686 | -76.271126 |
| 37.087894 | -76.268974 |
| 37.083694 | -76.165154 |
| 37.729496 | -76.123352 |
| 37.619465 | -76.280251 |
| 37.613708 | -76.280586 |
| 37.512447 | -76.285423 |
| 37.473808 | -76.263008 |
| 37.462313 | -76.257705 |
| 37.459854 | -76.257225 |
| 37.309418 | -76.275558 |
| 37.105408 | -76.283676 |


| Eastern Lower Chesapeake Bay |  |
| :--- | ---: |
| 37.083694 | -76.165154 |
| 37.010635 | -75.965233 |
| 37.111908 | -75.933571 |
| 37.115574 | -75.970390 |
| 37.787926 | -75.741074 |
| 37.806152 | -75.755272 |
| 37.806671 | -75.755676 |
| 37.846237 | -75.786530 |


| Chesapeake | Number of Latitude/ <br> Bay Program <br> Segment |
| :--- | :--- |
| Lo Follow |  |

POCOH
8
MD/VA boundary, Pocomoke Sound
Between Pig Point and Shad Landing
Worcester/Accomack County boundary, eastern shore
Intersection of Somerset County and Worcester County, MD
and Accomack County, VA
MD/VA boundary, 700 feet upstream of mouth
MD/VA boundary, Pocomoke Sound
MD/VA boundary south of Williams Point
MD/VA boundary, Pocomoke Sound

## POCMH

10
MD/VA boundary, 1.15 miles south of Cow Gap Island
Scott Island, west side
Scott Island, south side
South of Webb Island, between Deep Creek and Doe Creek
Between Pig Point and Shad Landing
MD/VA boundary, Pocomoke Sound
MD/VA boundary, Pocomoke Sound
MD/VA boundary, Pocomoke Sound
MD/VA boundary, Pocomoke Sound
MD/VA boundary, Pocomoke Sound
TANMH
11
3.25 miles west, 0.3 miles north of Tangier Sound Light

1 mile southeast of south tip of Watts Island, just east of quad bound.
0.57 miles west southwest of flashing red light at tip of Guilford Flats

MD/VA boundary, 1.15 miles south of Cow Gap Island
MD/VA boundary, 300 feet north of Green Harbor Island
MD/VA boundary, 2.75 miles west of Clump Island
MD/VA boundary, between Smith and Cedar Islands
MD/VA boundary, 400 feet east of Horse Hammock
MD/VA boundary, 1450 feet west of Hog Neck
MD/VA boundary, 2.25 miles west of Smith Gut Point
3 miles west northwest of Tangier Sound Light

## CB6PH

## 12

900 feet southwest of abandoned lighthouse north northeast of Grand View 400 feet northeast of abandoned lighthouse north northeast of Grand View 6 miles east of Grand View, 10.2 miles west of Fishermans Island 10 miles east of Hughlett Point, approximately 1 mile north of wreck
Fleets Island, at end of road north of Windmill Point
Windmill Point
Gwynn Island, east side of northern end
Gwynn Island, 0.25 miles northeast of Sandy Point tip
0.08 miles north northeast from northern tip of Rigby Island

Rigby Island, east side of northern end
North side of Deep Creek, north of New Point Comfort
East side of Northend Point

## CB7PH

11
6 miles east of Grand View, 10.2 miles west of Fishermans Island 5 miles south of Fishermans Island, 6.3 miles northeast of Cape Henry 0.68 miles west of Smith Island, 2 miles east of Route 13

300 feet due north of light in channel, 260 feet west of Route 13
South of Webb Island, between Deep Creek and Doe Creek
Scott Island, south side
Scott Island, west side
0.57 miles southwest of flashing red light at tip of Guilford Flats

| Segment | Chesapeake <br> Bay Program <br> Description | Number of Latitude/ <br> Segment |
| :--- | :--- | :--- |


| Description |  |
| :--- | :--- |
| 37.781960 | -75.873726 |
| 37.792580 | -76.032707 |
| 37.729496 | -76.123352 |


| Mouth of the Chesapeake Bay |  |
| :--- | ---: |
| 36.967342 | -76.296967 |
| 36.907486 | -76.093224 |
| 36.907352 | -76.090591 |
| 36.919083 | -75.993782 |
| 37.010635 | -75.965233 |
| 37.083694 | -76.165154 |
| 37.087894 | -76.268974 |
| 37.084686 | -76.271126 |
| 37.017586 | -76.297104 |
| 37.002299 | -76.300643 |


| Upper Rappahannock River |  |
| :--- | :--- |
| 38.082386 | -76.979980 |
| 38.089813 | -76.973442 |
| 38.312946 | -77.462326 |

Middle Rappahannock River

| 37.979389 | -76.924652 |
| :--- | :--- |
| 37.988907 | -76.895859 |
| 38.089813 | -76.973442 |
| 38.082386 | -76.979980 |


| Lower Rappahannock River |  |
| :--- | ---: |
| 37.558598 | -76.297974 |
| 37.558395 | -76.283516 |
| 37.613708 | -76.280586 |
| 37.653767 | -76.457794 |
| 37.649799 | -76.496513 |
| 37.988907 | -76.895859 |
| 37.979389 | -76.924652 |


| Corrotoman River |  |
| :--- | :--- |
| 37.649799 | -76.496513 |
| 37.653767 | -76.457794 |
| 37.769997 | -76.478516 |

Piankatank River

| 37.473808 | -76.263008 |
| :--- | :--- |
| 37.512447 | -76.285423 |
| 37.558395 | -76.283516 |
| 37.558598 | -76.297974 |
| 37.577724 | -76.583008 |
| 37.459854 | -76.257225 |
| 37.462313 | -76.257705 |


| Upper Mattaponi River |  |
| :--- | :--- |
| 37.656723 | -76.882187 |
| 37.658237 | -76.881470 |
| 37.788898 | -77.104210 |

1 mile southeast of south tip of Watts Island, just east of quad boundary
3.25 miles west, 0.3 miles north of Tangier Sound Light

10 miles east of Hughlett Point, approximately 1 mile north of wreck

## CB8PH

10
Where I-64 south meets Willoughby Spit
West side of Lesner Bridge (Route 60)
East side of Lesner Bridge (Route 60)
Fort Story, 2000 feet north of North Virginia Beach
5 miles south of Fishermans Island, 6.3 miles northeast of Cape Henry 6 miles east of Grand View, 10.2 miles west of Fishermans Island 400 feet northeast of abandoned lighthouse north northeast of Grand View 900 feet southwest of abandoned lighthouse north northeast of of Grand View Fort Monroe Military Reservation, west of Thimble Shoal 0.32 miles east northeast of Old Point Comfort lighthouse

## RPPTF

## 3

430 feet east of the mouth of Hutchinson Swamp
0.7 miles upstream of Peedee Creek

Fredericksburg, 300 feet above aqueduct

## RPPOH <br> 4

1000 feet downstream (southeast) of Jenkins Landing
Mulberry Island, 0.33 miles upstream (northwest) of Mulberry Point
0.7 miles upstream of Peedee Creek

430 feet east of the mouth of Hutchinson Swamp

## RPPMH

7
Stingray Point
0.8 miles east of Stingray Point (point 1)

Windmill Point
0.5 miles northwest of Orchard Point

Approximately 0.25 miles south of Whitehouse Creek mouth
Mulberry Island, 0.33 miles upstream (northwest) of Mulberry Point 1000 feet downstream (southeast) of Jenkins Landing

## CRRMH

## 3

Approximately 0.25 miles south of Whitehouse Creek mouth 0.5 miles northwest of Orchard Point

Western Branch, 400 feet upstream of Route 3
PIAMH
7
Gwynn Island, 0.25 miles northeast of Sandy Point tip
Gwynn Island, east side of northern end
0.8 miles east of Stingray Point (RPPMH point 1)

Stingray Point
Dragon Swamp, 0.5 miles below Zion Branch
Rigby Island, east side of northern end
0.08 miles north northeast from northern tip of Rigby Island

## MPNTF

3
Across the river from Courthouse Landing 1000 feet upstream of Mitchell Hill Creek Aylett, 800 feet above Route 360 bridge

| Segment <br> Description |  |
| :--- | :--- |
| Lower Mattaponi River |  |
| 37.538822 | -76.791504 |
| 37.537014 | -76.786194 |
| 37.658237 | -76.881470 |
| 37.656723 | -76.882187 |


| Upper Pamunkey River |  |
| :--- | :--- |
| 37.543476 | -76.976799 |
| 37.543507 | -76.974968 |
| 37.689621 | -77.214119 |


| Lower Pamunkey River |  |
| :--- | :--- |
| 37.532749 | -76.810616 |
| 37.535069 | -76.805229 |
| 37.543507 | -76.974968 |
| 37.543476 | -76.976799 |


| Middle York River |  |
| :--- | :--- |
| 37.288246 | -76.598122 |
| 37.316483 | -76.577034 |
| 37.537014 | -76.786194 |
| 37.538822 | -76.791504 |
| 37.535069 | -76.805229 |
| 37.532749 | -76.810616 |


| Lower York River |  |
| :--- | ---: |
| 37.223167 | -76.420166 |
| 37.262413 | -76.390877 |
| 37.316483 | -76.577034 |
| 37.288246 | -76.598122 |

## Mobjack Bay

| 37.105408 | -76.283676 |
| :--- | :--- |
| 37.309418 | -76.275558 |
| 37.262413 | -76.390877 |
| 37.223167 | -76.420166 |

## Upper James River

| 37.227379 | -76.946426 |
| :--- | :--- |
| 37.241180 | -76.945686 |
| 37.533394 | -77.436775 |
| 37.329826 | -77.281128 |
| 37.317638 | -77.277275 |


| Appomattox River |  |
| :--- | :--- |
| 37.317638 | -77.277275 |
| 37.329826 | -77.281128 |
| 37.233662 | -77.407867 |

## Middle James River

| 37.154785 | -76.670403 |
| :--- | :--- |
| 37.202007 | -76.626305 |
| 37.245670 | -76.871529 |
| 37.245888 | -76.897522 |
| 37.241180 | -76.945686 |
| 37.227379 | -76.946426 |


| Chesapeake | Number of Latitude/ <br> Bay Program <br> Segment |
| :--- | :--- |
| Lo Follow |  |

MPNOH 4

Lord Delaware Bridge (Route 33), West Point side
Lord Delaware Bridge (Route 33), east side
1000 feet upstream of Mitchell Hill Creek
Across the river from Courthouse Landing
PMKTF 3
0.75 miles upstream of creek at Cook Landing

Cohoke Marsh, 0.9 miles downstream of Turkey Creek
2000 feet upstream of Totopotomoy Creek
PMKOH
4
Eltham Bridge (Routes. 30/33), west side Eltham Bridge (Routes 30/33), east side (West Point)
Cohoke Marsh, 0.9 miles downstream of Turkey Creek
0.75 miles upstream of creek at Cook Landing

YRKMH
6
Naval Supply Center, Cheatham Annex Blundering Point, 1000 feet northwest of tip
Lord Delaware Bridge (Route 33), east side
Lord Delaware Bridge (Route 33), West Point side
Eltham Bridge (Routes 30/33), east side (West Point)
Eltham Bridge (Routes 30/33), west side
YRKPH
4
Sandbox, northeast tip of Goodwin Neck
Jenkins Neck, between Hog Island and Sandy Point
Blundering Point, 1000 feet northwest of tip
Naval Supply Center, Cheatham Annex

## MOBPH

4
East side of Northend Point
North side of Deep Creek, north of New Point Comfort Jenkins Neck, between Hog Island and Sandy Point Sandbox, northeast tip of Goodwin Neck

JMSTF
5
0.3 miles downstream of Sloop Point

Tettington, 500 feet downstream of road to the river Upstream of Mayos Bridge, as far as Browns Island dam Mouth of small creek east of Shand Creek and north of light City Point, Hopewell

## APPTF

3
City Point, Hopewell
Mouth of small creek east of Shand Creek and north of light
Petersburg, 1500 feet upstream of Route1 bridge
JMSOH
6
0.7 miles north of Hunnicut Creek, south of Hog Island Near Carters Grove Home, 1.25 miles southeast of Grove Creek 1300 feet north northwest of Barrets Point During Point
Tettington, 500 feet downstream of road to the river 0.3 miles downstream of Sloop Point


Chesapeake Bay Program A Watershed Partnership

U.S. Environmental Protection Agency

Region III

Chesapeake Bay Program Office

Annapolis, Maryland
1-800-YOUR-BAY

Monitoring and Analysis Subcommittee and
Tidal Monitoring and Analysis Workgroup


[^0]:    Unnamed Embayment (Chopawamsic Island)
    Unnamed Embayment (near Arkendale Road)
    Aquia Creek
    Potomac Creek

