### PART G: BRIEF HISTORY OF THE CHESAPEAKE BAY AND TIDAL TRIBUTARY ASSESSMENTS FOR NUTRIENTS AND SEDIMENTS

Due to the complexity of the nutrient and sediment listing history for the Chesapeake Bay and its tidal tributaries, Maryland provides the following text and visuals to help illustrate how listing decisions were made over the past 8 (1996, 1998, 2002, 2004, 2006, 2008, 2010, 2012) Integrated Reports<sup>42</sup>. The first section provides an overview of all Chesapeake Bay listings while the second section covers a representative example, involving the Gunpowder and Middle Rivers, in more detail.

## **G.1** Overview of the TMDL and Listing History for Chesapeake Bay

In the 1996 and 1998 303(d) Lists, specific Maryland tidal tributaries of the Chesapeake Bay were identified as being impaired for nutrients<sup>43</sup> and sediments. These nutrient and sediment impairments were assessed at the 8-digit watershed scale and were included in the 1996-1998 Memorandum of Understanding between EPA and MDE (hereafter referred to as 'MOU listings').<sup>44</sup> Between 1996 and 2008, Maryland developed TMDLs to address many of these tidal nutrient MOU listings. As these TMDLs were completed and submitted to EPA, MDE received credit towards meeting the MOU for addressing these nutrient impairments.

In 2004, EPA and the Bay states began work on the development of the Chesapeake Bay TMDL. In anticipation of this Bay-wide TMDL, MDE published a list of watersheds in the Maryland Register with their associated impairments that MDE had determined would be addressed via the Chesapeake Bay TMDL. For the most part, these impairments consisted of the tidal nutrient and sediment impairment listings for which MDE had not yet developed a TMDL. However, there were some watersheds on this list that were inadvertently included (e.g. Potomac River Montgomery County<sup>45</sup>) and others that were inadvertently excluded from the 2004 Maryland Register list (e.g. Magothy River). This was Maryland's first public notification that the Chesapeake Bay and its tidal tributaries (hereafter referred to as simply "Chesapeake Bay") would be addressed via the Chesapeake Bay TMDL.

In the 2006 IR, Maryland first introduced the new salinity-based segmentation scheme for the Chesapeake Bay. The 2006 IR thus served as a transitional report which cross-walked the older 8-digit watershed assessment scale nutrient and sediment listings to the new salinity-based assessment scale listings. In 2008, Maryland fully adopted the salinity-based Chesapeake Bay segments as the spatial assessment scale and made other refinements to the way nutrient and sediment impairments were listed. In particular, Chesapeake Bay nutrient listings were now separately identified for the nutrients nitrogen and phosphorus. In addition, nutrient assessments were now identified for each subcategory designated use (e.g, Open Water, Deep Water, etc.) that applied within a given monitoring segment. One nuance with this spatial cross-walk (8-digit watershed to salinity-based segment) was that some 8-digit

 $<sup>^{42}</sup>$  Prior to 2004, similar water quality documentation to the Integrated Report was referred to as the 303(d) List.

<sup>&</sup>lt;sup>43</sup> At that time in 1996, only a generic "nutrients" impairment was specified. Only later in the 2008 IR, were 'nutrient' listings specifically split out and separately identified as total phosphorus or total nitrogen.

<sup>&</sup>lt;sup>44</sup> This MOU set out a TMDL development schedule for Maryland that prioritized these earliest impairments as the highest priority for TMDL development.

<sup>&</sup>lt;sup>45</sup> Potomac River Montgomery County is not tidal and therefore was not going to be directly addressed by the Bay TMDL. Instead, this and other watersheds that were inadvertently included were later addressed individually by MDE.

watersheds overlapped with multiple salinity-based segments, and vice versa. This meant that the MOU credits, for 8-digit watershed nutrient and sediment impairment listings that were not yet addressed via a TMDL, had to be transferred to the appropriate salinity-based bay segment(s).

The approval of the Chesapeake Bay TMDL in December of 2010 meant that all of the remaining Category 5 (impaired, TMDL needed) nutrient and sediment Chesapeake Bay listings, including those mentioned in the MOU, had now been addressed by TMDLs. The Bay TMDL also addressed/overlapped segments with previously completed TMDLs.<sup>46</sup> It's also worth noting that the Bay TMDL even addressed water segments not identified as impaired (e.g. Fishing Bay Mesohaline, (FSBMH) was in Category 3 – insufficient information). In summary, the Bay TMDL addressed all nutrient and sediment impairments in the Chesapeake Bay and its tidal tributaries. Since the 2010 Integrated Report had been submitted to EPA prior to the finalization of the Bay TMDL, the actual administrative process of moving these listings from Category 5 to Category 4a on the Integrated Report did not occur until the following reporting cycle (2012). The timeline shown in Figure 17 below summarizes these changes to Maryland's tidal nutrient and sediment listings. Table 48 shows the public review periods provided for each of the past 7 Integrated Reports (303(d) Lists). To see records of the public review process for the Chesapeake Bay TMDL please read Section 11 of the Chesapeake Bay TMDL located at: http://www.epa.gov/reg3wapd/tmdl/ChesapeakeBay/tmdlexec.html.

<sup>&</sup>lt;sup>46</sup> Section C.3.1 addresses this situation briefly. This scenario and how it will be handled with respect to TMDL endpoints will be discussed in a separate document and public review process.

## Overview of the TMDL and Listing History for Chesapeake Bay

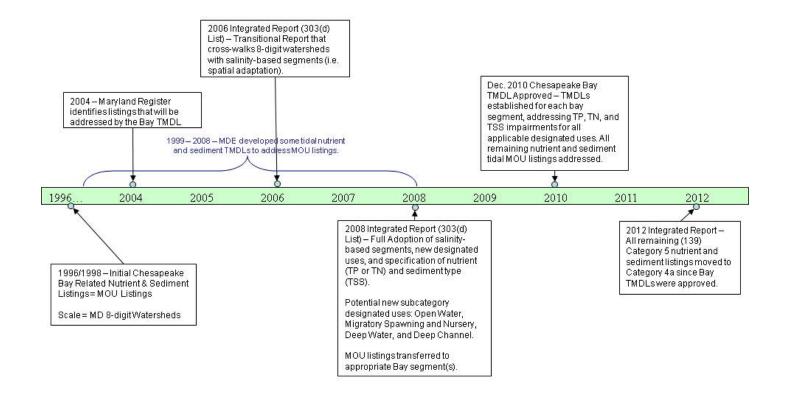


Figure 16: Timeline of Chesapeake Bay segment listings and TMDL development.

Integrated Report (303(d) List) Cycle	Public Review Period
2012	2/13/12 - 4/26/12
2010	2/12/10 - 3/26/10
2008	3/12/08 - 4/28/08
2006	1/20/06 - 3/8/06
2004	12/1/03 - 1/31/04
2002	2/22/02 - 4/8/02
2000	*
1998	2/18/98 - 3/20/98
1996	10/11/96 - 11/12/96 <sup>47</sup>

#### Table 48: Timing of Public Review Periods for each of the past 7 Integrated Reports (303(d) Lists).

\*States were not required to submit an Integrated Report (303(d) List) during this cycle-year.

# **<u>G.2.</u>** Review of the TMDL and Listing History for the Gunpowder (GUNOH) and Middle River (MIDOH) Bay Segments

This section describes the listing changes that happened specifically to the Gunpowder River, Bird River, and Middle River 8-digit watersheds as a result of changes to the Chesapeake Bay assessment processes and due to the completion of Water Quality Analyses (WQA) and TMDLs. This 'real-life' listing scenario is provided to help illustrate the evolution of the listings of many tidal waters of the Chesapeake Bay as a result of the updated water quality standards and the approval of the final Bay TMDL. These three waters (Gunpowder, Bird, and Middle) are discussed together because the original tidal Gunpowder River 8-digit watershed listing (nutrients and sediments) partially overlapped what is now the Middle River (MIDOH) bay segment and because the current salinity-based segment (GUNOH) overlaps all of Bird River 8-digit watershed (See Figure 18).

In 1996, the Gunpowder River, Bird River, and Middle River 8-digit watersheds were identified as being impaired for nutrients and sediments on Maryland's 303(d) List. These nutrient and sediment impairments were included in the MOU between EPA and MDE and were counted as a total of 6 MOU listings that required prompt TMDL development. In 2005, MDE wrote and EPA approved a water quality analysis (WQA) for nutrients in the Bird River, which demonstrated that applicable nutrient related water quality standards were being met in Bird River. The completion of this WQA therefore addressed the nutrient MOU (1) impairment listing for the Bird River. However, the Gunpowder River and Middle River nutrient (2) and sediment listings (2) and the Bird River sediment (1) listing still remained to be addressed by either a WQA or TMDL.

In 2006, Maryland's IR provided a crosswalk table for the revised Chesapeake Bay nutrient and sediment listings (2006 IR, Table 5). This table showed which 8-digit watershed listings would become part of certain salinity-based segments. In the case of these three tidal rivers, Middle River and part of the 8-digit Gunpowder River (the Seneca Creek portion) became the Middle River Oligohaline (MIDOH) segment. The remaining tidal portion of the Gunpowder River and all of Bird River then became the Gunpowder River Oligohaline (GUNOH) segment. See Figure 18.

<sup>&</sup>lt;sup>47</sup> This end date for the public comment period was approximated from supplementary documentation (EPA Approval Letter) as an exact record could not be located.

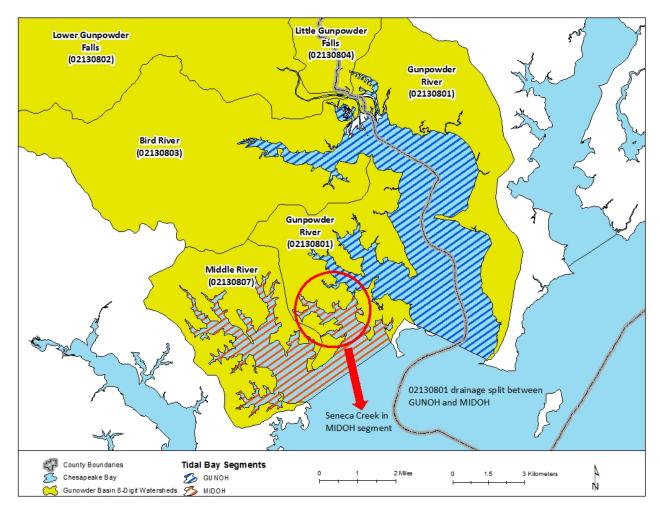


Figure 17: Map illustrating the overlap of the older segmentation (8-digit watersheds) with the new Bay segments (e.g. GUNOH).

These segmentation changes then became fully effective in the 2008 IR as the salinity-based segmentation scheme became final. In addition, the nutrient impairment listings for these two Bay segments (MIDOH and GUNOH) were now also separately identified according to the applicable subcategory designated uses (i.e. Open Water and Migratory Spawning and Nursery) and according to whether the impairment was due to total nitrogen (TN) or total phosphorus (TP). Table 49 shows the crosswalk from the tidal 8-digit watershed nutrient listings to the new Bay segment nutrient listings. The changes in listing reflect the refined spatial segments, designated uses, and pollutant types.

 Table 49: Crosswalk of the older 8-digit watershed nutrient listings to the new Bay segment nutrient listings.

Previous Assessments (Used until 2008)	New Assessments (Adopted in 2008)
8-digit Watershed Segment - Pollutant (Designated Use not specified)	Bay Segment - Designated Use - nutrient - Category
Gunpowder River (not including Seneca Creek) - Nutrients	GUNOH - Open Water – TN - 5
	GUNOH - Open Water – TP - 5
Bird River - Nutrients	GUNOH - Spawning and Nursery - TN - 3
	GUNOH - Spawning and Nursery - TP - 3
Gunpowder River (only the Seneca Creek portion) - Nutrients	MIDOH - Open Water - TN - 5
	MIDOH - Open Water - TP - 5
Middle River - Nutrients	MIDOH - Spawning and Nursery - TN - 3
	MIDOH - Spawning and Nursery - TP - 3

As a result of this change, there were now a total of four nutrient listings for each GUNOH and MIDOH. Each of these particular bay segments included an open water (OW) and a migratory spawning and nursery (MSN) designated use. At the time, the MSN designated use, per nitrogen and phosphorus, could not be assessed so it was placed in Category 3. Meanwhile, the OW designated use for both Bay segments (GUNOH and MIDOH) retained a Category 5 (impaired, needs TMDL) status. Regardless of the refinements, the 2 remaining nutrient MOU listings (Gunpowder River – nutrients and Middle River – nutrients), along with the MOU requirement to develop TMDLs, was passed on to the new Bay segments GUNOH and MIDOH.

For sediments, the new spatial scale (salinity-based bay segment) caused the three 8-digit listings to be aggregated into two listings (See Table 50). Additionally, the sediment listings were now associated with a new subcategory designated use, shallow water submerged aquatic vegetation (SWSAV), and the impairing pollutant was modified to total suspended solids (TSS). In a similar manner as with the nutrient listings, the 3 sediment MOU listings/credits were transferred to the new segments GUNOH and MIDOH. It's worth noting that in the 2008 IR, the GUNOH segment met TSS-related water quality standards and, as a result, was moved to Category 2. This, at the time, effectively addressed the sediment MOU listing for Bird River since the Bird River 8-digit watershed was wholly within GUNOH.<sup>48</sup> However, in the 2010 IR, GUNOH failed to meet TSS-related standards and was recategorized to the impaired part of the list (Category 5) thereby requiring a TMDL.

<sup>&</sup>lt;sup>48</sup> The Gunpowder River 8-digit watershed MOU listing was split between MIDOH and GUNOH. Therefore both bay segments had to be addressed to get this MOU credit.

Previous Assessments (Used until 2008)	New Assessments (Adopted in 2008)
8-digit Segment - Pollutant (Designated Use not specified)	Bay Segment - Designated Use - nutrient
Gunpowder River (not including Seneca Creek) - Sediments	
Bird River - Sediments	GUNOH - Shallow Water SAV - TSS
Gunpowder River (only the Seneca Creek portion) - Sediments	
Middle River - Sediments	MIDOH - Shallow Water SAV - TSS

 Table 50: Crosswalk of the older 8-digit watershed sediment listings to the new Bay segment sediment listings.

In September 2010 the Chesapeake Bay TMDLs were provided for public review and comment. It's worth noting that the public notice used to announce the availability of the Bay TMDLs specifically identified the individual Bay segment TMDLs (92), including those for GUNOH and MIDOH. Finally, after an extensive public outreach effort and after responding to all comments, in December 2010, the Chesapeake Bay TMDLs were approved. These TMDLs provided nutrient and sediment loadings per bay segment that were designed to meet the applicable water quality criteria in each individual bay segment for each applicable subcategory designated use. So, for the GUNOH and MIDOH segments, a total of eight nutrient-related listings were addressed by the Chesapeake Bay TMDLs (which, at the same time, addressed the remaining two nutrient MOU listings for the 8-digit Gunpowder River and Middle River watersheds). In addition, the Bay TMDLs addressed the sediment-related listings for GUNOH and MIDOH (associated with two remaining sediment MOU listings – Gunpowder and Middle River 8-digit watersheds, Bird River addressed during 2008 delisting). In summary, the Bay TMDLs addressed all remaining nutrient and sediment MOU listings for tidal waters of the Chesapeake Bay. In the case of the Bird River, the Bay TMDL even overlapped a previously completed WQA for nutrients.

Timelines are provided below to help illustrate the changes to nutrient and sediment listings discussed for GUNOH and MIDOH.

## Tidal Gunpowder River (GUNOH) and Middle River (MIDOH) Nutrient Listing Timeline

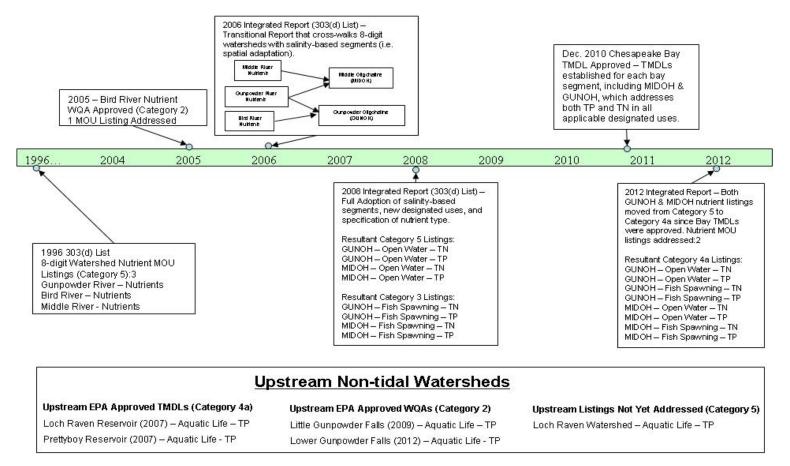
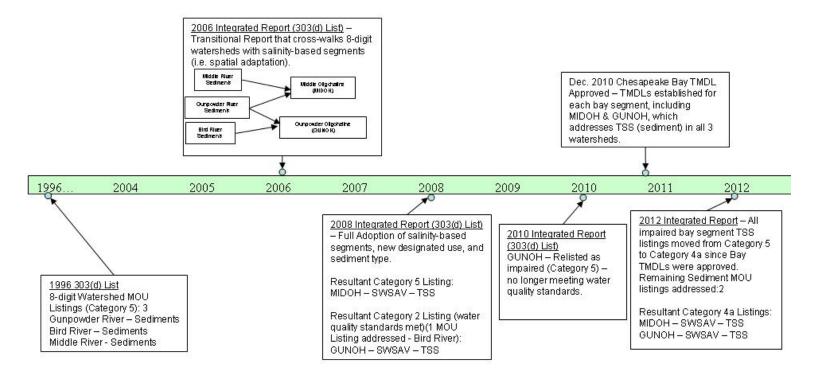
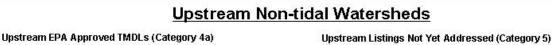


Figure 18: Timeline of Nutrients Assessment History for GUNOH and MIDOH.

# Tidal Gunpowder River (GUNOH) and Middle River (MIDOH) Sediment Listing Timeline





Loch Raven Reservoir (2007) – Aquatic Life – Sedimentation/Siltation

Lower Gunpowder Falls – Aquatic Life - TSS

Figure 19: Timeline of Sediment Assessment History for GUNOH and MIDOH.

#### Inter-relationship between Non-tidal and Tidal Water Assessments and Relevant Load Reductions

#### Nutrients

Like many Chesapeake Bay segments, segment GUNOH has a large upstream watershed comprised of non-tidal rivers and impoundments that ultimately feed into GUNOH. GUNOH specifically has 2 major publicly-owned reservoirs (Prettyboy and Loch Raven) and 6 non-tidal 8-digit watersheds upstream of its tidal waters including: Prettyboy Reservoir watershed, Loch Raven Reservoir watershed, Little Gunpowder Falls, Lower Gunpowder Falls, Bird River, and Gunpowder River. Each of these non-tidal waters, and the sources within them were assigned nutrient load reductions by the Bay TMDL that would result in water quality standards attainment in the downstream GUNOH segment. In addition, the Prettyboy (in 2007) and Loch Raven (in 2007) Reservoirs (the reservoirs, not the entire watershed) each received their own individual nutrient TMDLs designed to meet applicable water quality standards in the reservoirs themselves. In these cases, water quality managers will apply nutrient limits so as to meet water quality standards in both the nearfield waters (in this case the reservoirs) and the downstream waters (i.e. GUNOH). In addition, the Loch Raven Reservoir watershed (i.e. the streams, not the reservoir) is currently<sup>49</sup> on Category 5 (impaired) and awaits TMDL development. Once this TMDL is completed, the sources within this watershed will also have to meet both the load reduction of the nearfield TMDL and Bay TMDL.

In the case of the Little Gunpowder Falls and the Lower Gunpowder Falls watersheds, they have recently been assessed (2009 and 2012, respectively) as *locally* (i.e. in the nearfield) meeting nutrient water quality standards. However, since they are both contributing sources to the water quality of segment GUNOH, they will have to meet the nutrient load reductions required for the GUNOH Bay TMDL. Likewise, even though the Bird River and Gunpowder River non-tidal watersheds have not been assessed for nutrients, load reductions assigned by the Bay TMDL will be enforced. Figure 21 shows the spatial arrangement of the watersheds and their Integrated Report nutrient assessment status.

<sup>&</sup>lt;sup>49</sup> The Loch Raven Reservoir watershed (streams) was first listed for a total phosphorus impairment on the 2014 IR. This assessment was based on a Biological Stressor Identification Analysis.

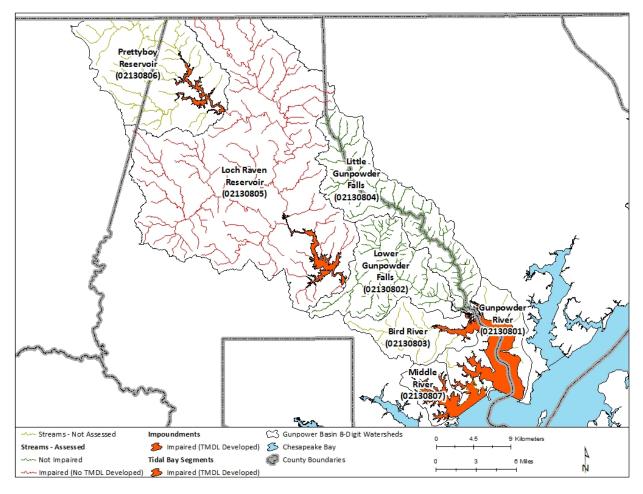


Figure 20: Integrated Report - Nutrient Assessment Status in the GUNOH watershed.

#### Sediments

Similar as with nutrients, the Bay TMDL assigns sediment load reductions to all upstream waters. Upstream of GUNOH, only the Loch Raven Reservoir (impoundment) has an individual sediment TMDL addressing a nearfield sediment impairment. The Lower Gunpowder Falls watershed is currently<sup>50</sup> listed on Category 5 and will receive a nearfield TMDL. Here again, upstream sources will have to meet both the pollutant load reductions of any nearfield TMDLs and those required by the Bay TMDL. Figure 22 shows the spatial arrangement of the watersheds and their sediment assessment status.

<sup>&</sup>lt;sup>50</sup> The Lower Gunpowder Falls watershed (streams) was first listed for a total suspended solids impairment on the 2012 IR. This assessment was based on a Biological Stressor Identification Analysis.

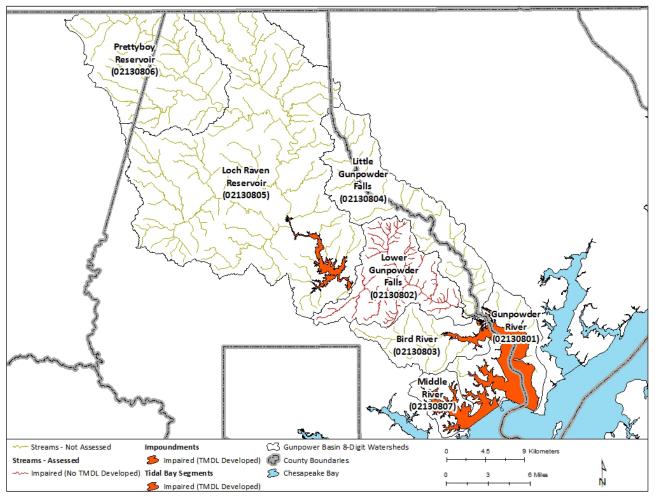


Figure 21: Integrated Report - Sediment Assessment Status in the GUNOH watershed.

### Summary

The Bay TMDL requires nutrient and sediment load reductions from every subwatershed within the GUNOH segment-shed. This means that nutrient and sediment load reductions are required from subwatersheds whose nearfield waters are 1) impaired by nutrients/sediments, 2) meeting applicable nutrient/sediment related water quality standards, and 3) have not yet been assessed for nutrients/sediments. So, even if a given subwatershed in the GUNOH segment-shed's non-tidal streams are meeting nutrient/sediment related water quality standards, reductions still need to occur to meet downstream water quality goals, as per the Bay TMDL. Additionally, for some subwatersheds where TMDLs have been developed to address nearfield water quality impairments, two sets of allocations are applicable, Bay TMDL allocations and nearfield TMDL allocations. See Figures 23 and 24 for maps displaying how nutrient and sediment allocations apply.

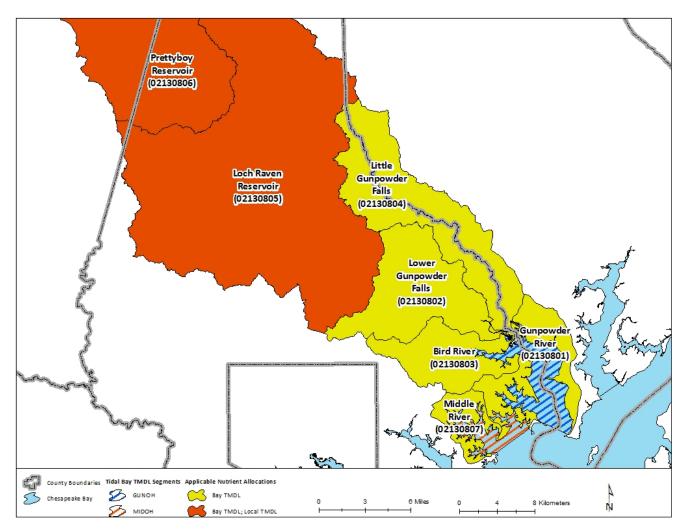


Figure 22: Map of Applicable Nutrient Load Allocations for GUNOH and MIDOH.

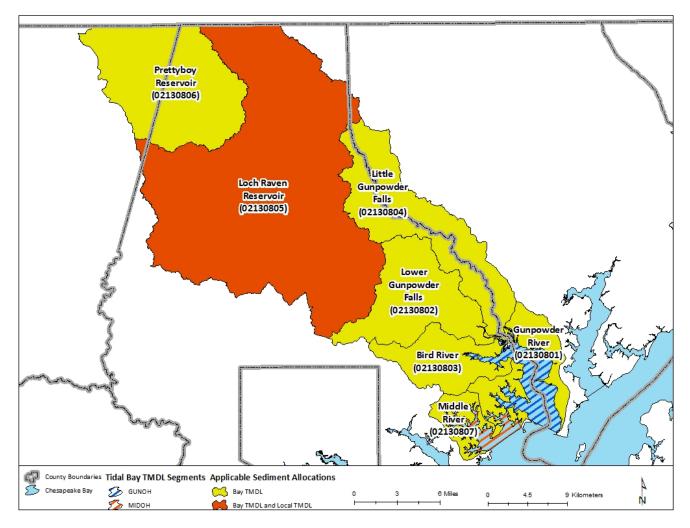


Figure 23: Map of Applicable Sediment Load Allocations for GUNOH and MIDOH

The approval of the Chesapeake Bay TMDL addressed all tidal nutrient and sediment listings associated with the Chesapeake Bay (both MOU related listings and listings that were not related to the MOU). Tables 51 through 53 in part H present 1) how the Bay segmentation altered the scale of the tidal nutrient and sediment MOU listings, 2) how Maryland took credit for addressing tidal nutrient and sediment Chesapeake Bay MOU listings, via a nearfield TMDL, WQA, or the Chesapeake Bay TMDL, and 3) additional non-MOU related tidal nutrient and sediment Chesapeake Bay TMDL.

Nutrient and sediment TMDLs have now been developed for Chesapeake Bay segments, Maryland's Coastal Bays, and impaired non-tidal, free flowing waters and drinking water reservoirs statewide. Therefore, nutrient and sediment reduction strategies are comprehensively in place throughout Maryland to address these nutrient and sediment water quality impairments. For any new nutrient and sediment impairment listings that are identified via the Integrated Report process, Maryland will continue to make addressing these impairment listings a priority. Maryland will also continue to monitor and assess the current reduction strategies that are in place for addressing nutrients and sediments, and the State will adapt and update these strategies if needed.

# Part H: TABLES OF 1996/1998 MEMORANDUM OF UNDERSTANDING (MOU) LISTINGS AND LISTINGS LEFT OUT OF THE MOU

The MOU, signed in 1998 between EPA and MDE, established a timeline for Maryland TMDL production with the goal of addressing all 1996 and 1998 303(d) listings by 2011. Tables 51 and 53 below describe the tidal Chesapeake Bay nutrient and sediment listings included in the MOU and how they were addressed. It also includes additional non-tidal nutrient and sediment listings which were originally planned to be addressed via the Chesapeake Bay TMDLs but, instead, were addressed separately since they are not part of the Chesapeake Bay estuary. The left-most fields in these tables provide the historical (i.e. MOU) listing information. Moving left to right in the table, the fields demonstrate how these listings evolved and how their listing category changed. The section breaks in the table (the long gray shaded breaks) separate various groupings of listings including: 1) water body-designated use-pollutant combinations/listings that were addressed by stand-alone TMDLs (solely developed by Maryland prior to the Chesapeake Bay TMDLs), 2) listings addressed by the Chesapeake Bay TMDLs and included in the *revised* 2004 Maryland Register notice, 4) 2012 Integrated Report listings addressed by the Chesapeake Bay TMDLs that are not associated with an original 1996/1998 MOU listing, and 5) the non-tidal listings that were once planned to be addressed by the Chesapeake Bay TMDLs but were actually addressed separately, since they are not part of the Chesapeake Bay estuary (in orange and pink highlighting). Table 52 provides a key for cells that have been highlighted in color.

Year Listed	8-digit Watershed, Code	Original Impair- ment	Addressed by:	Year Addressed	1996/1998 MOU Listing Addressed (1=Yes, 0=No)	MOU Listing Addressed by Bay TMDL (1=Yes, 0=No)	Chesapeake Bay Segment ID	Integrated Report Impairing Substance	Integrated Report Designated Use	2010 IR Listing Category	2012 IR Listing Category	IR Listings (Category 5) Addresse d by Bay TMDL
Address	ed by a stand-alone	TMDL prior	to establishment of the Ches	apeake Bay TM	1DLs							
								Nitrogen	Open Water	4a	4a	0
1996	Port Tobacco	Nutrianta	Stand-alone Nitrogen and	1998	1	0	РОТОН2	Nitrogen	Seasonal Migratory	4a	4a	0
1996	River, 02140109	Nutrients	Phosphorus TMDLs Approved by EPA	1998	1	0	POTOH2	Phosphorus	Open Water	4a	4a	0
								Phosphorus	Seasonal Migratory	4a	4a	0
			Stand-alone Nitrogen and					Nitrogen	Open Water	3	3	0
1000	Transquaking	NT / ' /	Phosphorus TMDLs for	1000/2000	1	0	FODMU	Nitrogen	Seasonal Migratory	3	3	0
1996	River, 02130308	Nutrients	Both Transquaking and Chicamacomico Rivers	1999/2000	1	0	FSBMH	Phosphorus	Open Water	3	3	0
			Approved by EPA					Phosphorus	Seasonal Migratory	3	3	0
1996	Western Branch,	Nutrients	Stand-alone BOD TMDL	1999	1	0	WBRTF	Nitrogen	Open Water	N/A	4a	0

Table 51: This table shows the relationship between the original and current tidal nutrient listings and how the MOU was addressed, by either an older stand-alone TMDL or WQA, or through one of the Chesapeake Bay TMDLs. See Table 52 for a key to the color coding in this table.

Year Listed	8-digit Watershed, Code	Original Impair- ment	Addressed by:	Year Addressed	1996/1998 MOU Listing Addressed (1=Yes, 0=No)	MOU Listing Addressed by Bay TMDL (1=Yes, 0=No)	Chesapeake Bay Segment ID	Integrated Report Impairing Substance	Integrated Report Designated Use	2010 IR Listing Category	2012 IR Listing Category	IR Listings (Category 5) Addresse d by Bay TMDL
	02131103		Approved by EPA					Nitrogen	Seasonal Migratory	N/A	4a	0
								Phosphorus	Open Water	N/A	4a	0
								Phosphorus	Seasonal Migratory	N/A	4a	0
								Nitrogen	Open Water	4a	4a	0
1996	Bohemia River,	NT / 1 /	Stand-alone Nitrogen and	2000	1	0	DOUOU	Nitrogen	Seasonal Migratory	4a	4a	0
1990	02130602	Nutrients	Phosphorus TMDLs Approved by EPA	2000	1	0	BOHOH	Phosphorus	Open Water	4a	4a	0
			hppiotod by Ein					Phosphorus	Seasonal Migratory	4a	4a	0
								Nitrogen	Open Water	5	4a	1
								Nitrogen	Seasonal Migratory	3	4a	0
								Nitrogen	Deep Water	5	4a	1
1996	Corsica River,	NT / ' /	Stand-alone Nitrogen and	2000	1	0	CHENT	Nitrogen	Deep Channel	5	4a	1
1990	02130507	Nutrients	Phosphorus TMDLs Approved by EPA	2000	1	0	CHSMH	Phosphorus	Open Water	5	4a	1
			rippioted by Erri					Phosphorus	Seasonal Migratory	3	4a	0
								Phosphorus	Deep Water	5	4a	1
								Phosphorus	Deep Channel	5	4a	1
			Stand-alone Nitrogen,					Nitrogen	Open Water	5	4a	1
1996	Lower Wicomico	Nutrients	Phosphorus, and BOD	2000	1	0	WICMH	Nitrogen	Seasonal Migratory	3	4a	0
1990	River. 02130301	Nutrients	TMDLs Approved by	2000	1	0	WICMH	Phosphorus	Open Water	5	4a	1
	10.01, 02100001		EPA					Phosphorus	Seasonal Migratory	3	4a	0
								Nitrogen	Open Water	4a	4a	0
1996	Manokin River,	Nutuitente	Stand-alone Nitrogen and BOD TMDLs Approved	2000	1	0	MANMH	Nitrogen	Seasonal Migratory	4a	4a	0
1990	02130208	Nutrients	by EPA	2000	1	0	MANNIH	Phosphorus	Open Water	N/A	4a	0
			09 2111					Phosphorus	Seasonal Migratory	N/A	4a	0
								Nitrogen	Open Water	5	4a	1
1000	Marshyhope	Nutuitente	Stand-alone Phosphorus	2000	1	0	NANOU	Nitrogen	Seasonal Migratory	3	4a	0
1996	Creek, 02130306	Nutrients	TMDL Approved by EPA	2000	1	0	NANOH	Phosphorus	Open Water	5	4a	1
								Phosphorus	Seasonal Migratory	3	4a	0
1996	Wicomico	Nutrients	Stand-alone Nitrogen and	2000	1	0	WICMH	Nitrogen	Open Water	5	4a	0
1990	Creek,	muinents	Phosphorus TMDLs	2000	1	0	WICININ	Nitrogen	Seasonal Migratory	3	4a	0

Year Listed	8-digit Watershed, Code	Original Impair- ment	Addressed by:	Year Addressed	1996/1998 MOU Listing Addressed (1=Yes, 0=No)	MOU Listing Addressed by Bay TMDL (1=Yes, 0=No)	Chesapeake Bay Segment ID	Integrated Report Impairing Substance	Integrated Report Designated Use	2010 IR Listing Category	2012 IR Listing Category	IR Listings (Category 5) Addresse d by Bay TMDL
	02130303		Approved by EPA					Phosphorus	Open Water	5	4a	0
								Phosphorus	Seasonal Migratory	3	4a	0
								Nitrogen	Open Water	N/A	4a	0
1996	Sassafras River,	Nutrients	Stand-alone Phosphorus TMDL Approved by	2001	1	0	SASOH	Nitrogen	Seasonal Migratory	N/A	4a	0
1770	02130610	rutients	EPA	2001	1	0	5/15011	Phosphorus	Open Water	4a	4a	0
								Phosphorus	Seasonal Migratory	4a	4a	0
	Stillpond		Stand-alone Nitrogen and					Nitrogen	Open Water	5	4a	1
	Creek/Fairlee		Phosphorus TMDLs Approved for Stillpond,					Nitrogen	Seasonal Migratory	3	4a	0
1996	Creek/Worton Creek,	Nutrients	Fairlee, and Worton	1999/2001	1	0	CB2OH	Phosphorus	Open Water	5	4a	1
	02130611		Creeks Individually by EPA					Phosphorus	Seasonal Migratory	3	4a	0
								Nitrogen	Open Water	5	4a	1
1996	Swan Creek,	Nutrients	Stand-alone Nitrogen and Phosphorus TMDLs	2001	1	0	CB1TF	Nitrogen	Seasonal Migratory	3	4a	0
1990	02130706	INULLERINS	Approved by EPA	2001	1	0	CBIII	Phosphorus	Open Water	5	4a	1
			11 5					Phosphorus	Seasonal Migratory	3	4a	0
								Nitrogen	Open Water	5	4a	0
								Nitrogen	Seasonal Migratory	3	4a	0
								Nitrogen	Deep Water	5	4a	0
1996	Langford Creek,	Nutrients	EPA Concurrence with	2002	1	0	CHSMH	Nitrogen	Deep Channel	5	4a	0
1770	02130506	rutrents	WQA	2002	1	0	CHOWIT	Phosphorus	Open Water	5	4a	0
								Phosphorus	Seasonal Migratory	3	4a	0
								Phosphorus	Deep Water	5	4a	0
								Phosphorus	Deep Channel	5	4a	0
								Nitrogen	Open Water	4a	4a	0
1996	Southeast Creek,	Nutrients	Stand-alone Phosphorus TMDL Approved by	2002	1	0	CHSOH	Nitrogen	Seasonal Migratory	4a	4a	0
1770	02130508	1 autonto	EPA	2002	1	U U	Chibon	Phosphorus	Open Water	4a	4a	0
								Phosphorus	Seasonal Migratory	4a	4a	0
1996	Mattawoman	Nutrients	Stand-alone Nitrogen and	2003	1	0	MATTF	Nitrogen	Open Water	4a	4a	0
1770	Creek,	i autients	Phosphorus TMDLs	2003	Ĩ	U		Nitrogen	Seasonal Migratory	4a	4a	0

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	02140111		Approved by EPA					Phosphorus	Open Water	4a	4a	0
								Phosphorus	Seasonal Migratory	4a	4a	0
								Nitrogen	Open Water	4a	4a	0
1996	Northeast River,	Nuturi austa	Stand-alone Nitrogen and Phosphorus TMDLs	2003	1	0	NORTE	Nitrogen	Seasonal Migratory	4a	4a	0
1990	02130608	Nutrients	Approved by EPA	2003	1	0	NORTF	Phosphorus	Open Water	4a	4a	0
								Phosphorus	Seasonal Migratory	4a	4a	0
								Nitrogen	Open Water	4a	4a	0
1996	Back River,	Nutrients	Stand-alone Nitrogen and Phosphorus TMDLs	2005	1	0	ВАСОН	Nitrogen	Seasonal Migratory	4a	4a	0
1990	02130901	Nutrients	Approved by EPA	2003	1	0	БАСОП	Phosphorus	Open Water	4a	4a	0
								Phosphorus	Seasonal Migratory	4a	4a	0
								Nitrogen	Open Water	5	4a	1
1996	Bird River,	Nutrianta	EPA Concurrence with	2005	1	0	GUNOH	Nitrogen	Seasonal Migratory	3	4a	0
1990	02130803	Nutrients	WQA	2005	1	0	GUNOH	Phosphorus	Open Water	5	4a	1
								Phosphorus	Seasonal Migratory	3	4a	0
								Nitrogen	Open Water	5	4a	1
								Nitrogen	Seasonal Migratory	3	4a	0
			Stand-alone Nitrogen,					Nitrogen	Deep Water	5	4a	1
1996	Breton Bay,	Nutrients	Phosphorus, and BOD	2005	1	0	РОТМН	Nitrogen	Deep Channel	5	4a	1
1990	02140104	Nutrients	TMDLs Approved by	2003	1	0	РОТМП	Phosphorus	Open Water	5	4a	1
			EPA					Phosphorus	Seasonal Migratory	3	4a	0
								Phosphorus	Deep Water	5	4a	1
								Phosphorus	Deep Channel	5	4a	1
								Nitrogen	Open Water	5	4a	0
1996	Lower Susquehanna	Nutrients	EPA Concurrence with	2005	1	0	CB1TF	Nitrogen	Seasonal Migratory	3	4a	0
1990	River, 02120201	Ruthents	WQA	2005	1	0	CDIIF	Phosphorus	Open Water	5	4a	0
								Phosphorus	Seasonal Migratory	3	4a	0
			Stand-alone Nitrogen and					Nitrogen	Open Water	4a	4a	0
1996	Middle Chester River, 02130509	Nutrients	Phosphorus TMDLs	2006	1	0	CHSOH	Nitrogen	Seasonal Migratory	4a	4a	0
1	10,02150505		Approved by EPA					Phosphorus	Open Water	4a	4a	0

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								Phosphorus	Seasonal Migratory	4a	4a	0
								Nitrogen	Open Water	4a	4a	0
1996	Upper Chester	Nutrients	Stand-alone Nitrogen and Phosphorus TMDLs	2006	1	0	CHSTF	Nitrogen	Seasonal Migratory	4a	4a	0
1990	River, 02130510	Nutrents	Approved by EPA	2000	1	0	CHSIF	Phosphorus	Open Water	4a	4a	0
			11 5					Phosphorus	Seasonal Migratory	4a	4a	0
								Nitrogen	Open Water	4a	4a	0
								Nitrogen	Seasonal Migratory	4a	4a	0
								Nitrogen	Deep Water	4a	4a	0
1996	Baltimore Harbor,	Nutrients	Stand-alone Nitrogen and Phosphorus TMDLs	2007	1	0	РАТМН	Nitrogen	Deep Channel	5	4a	1
1990	02130903	Nutrents	Approved by EPA	2007	1	0	TATWIT	Phosphorus	Open Water	4a	4a	0
			11 5					Phosphorus	Seasonal Migratory	4a	4a	0
								Phosphorus	Deep Water	4a	4a	0
								Phosphorus	Deep Channel	5	4a	1
			Stand-alone Nitrogen,					Nitrogen	Open Water	4a	4a	0
1996	Anacostia River	Nutrients	Phosphorus, and BOD	2008	1	0	ANATF	Nitrogen	Seasonal Migratory	4a	4a	0
1990	, 02140205	Nutrents	TMDLs Approved by	2008	1	0	ANATI	Phosphorus	Open Water	4a	4a	0
			EPA					Phosphorus	Seasonal Migratory	4a	4a	0
Address	ed by the Chesapeak	ke Bay TMDI	Ls and Included in Original 2	2004 Maryland	Register							
								Nitrogen	Open Water	4a	4a	0
								Nitrogen	Seasonal Migratory	4a	4a	0
								Nitrogen	Deep Water	4a	4a	0
1996	Bodkin Creek,	Nutrients	Chesapeake Bay TMDL	Chesapeake	1	1	РАТМН	Nitrogen	Deep Channel	5	4a	0
1770	02130902	Tuttients	Chesapeake Day TWIDE	Bay	1	1	TATWIT	Phosphorus	Open Water	4a	4a	0
								Phosphorus	Seasonal Migratory	4a	4a	0
								Phosphorus	Deep Water	4a	4a	0
								Phosphorus	Deep Channel	5	4a	0
	Eastern Davi			Channel				Nitrogen	Open Water	5	4a	1
1996	Eastern Bay, 02130501	Nutrients	Chesapeake Bay TMDL	Chesapeake Bay	1	1	EASMH	Nitrogen	Seasonal Migratory	3	4a	0
				_~				Nitrogen	Deep Water	5	4a	1

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								Nitrogen	Deep Channel	5	4a	1
								Phosphorus	Open Water	5	4a	1
								Phosphorus	Seasonal Migratory	3	4a	0
								Phosphorus	Deep Water	5	4a	1
								Phosphorus	Deep Channel	5	4a	1
								Nitrogen	Open Water	5	4a	0
1996	Aberdeen Proving Ground,	Nutrients	Chesapeake Bay TMDL	Chesapeake	1	1	CB1TF	Nitrogen	Seasonal Migratory	3	4a	0
1770	02130705	rutients	Chesapeake Day TMDE	Bay	1	1	CDIII	Phosphorus	Open Water	5	4a	0
								Phosphorus	Seasonal Migratory	3	4a	0
								Nitrogen	Open Water	5	4a	0
1996	Gunpowder	Nutrients	Chesapeake Bay TMDL	Chesapeake	1	1	GUNOH	Nitrogen	Seasonal Migratory	3	4a	0
1770	River, 02130801	Ruthents	Chesapeake Day TMDL	Bay	1	1	Genon	Phosphorus	Open Water	5	4a	0
								Phosphorus	Seasonal Migratory	3	4a	0
1996	Honga River,	Nutrients	Chesapeake Bay TMDL	Chesapeake	1	1	HNGMH	Nitrogen	Open Water	5	4a	1
1770	02130401	rutients	Chesapeake Bay TMDE	Bay	1	1	moonin	Phosphorus	Open Water	5	4a	1
								Nitrogen	Open Water	5	4a	1
								Nitrogen	Deep Water	5	4a	1
1996	Kent Island,	Nutrients	Chesapeake Bay TMDL	Chesapeake	1	1	CB4MH	Nitrogen	Deep Channel	5	4a	1
1770	02130511	rutrents	Chesapeake Day TWDL	Bay	1	1	CD4MII	Phosphorus	Open Water	5	4a	1
								Phosphorus	Deep Water	5	4a	1
								Phosphorus	Deep Channel	5	4a	1
								Nitrogen	Open Water	5	4a	0
	Other West							Nitrogen	Deep Water	5	4a	0
1996	Chesapeake	Nutrients	Chesapeake Bay TMDL	Chesapeake	1	1	CB4MH	Nitrogen	Deep Channel	5	4a	0
1770	Drainage, 2131005	1 tutionto	Chesupeake Day TWDL	Bay	Ĩ	1	CD-IIII	Phosphorus	Open Water	5	4a	0
	2131005							Phosphorus	Deep Water	5	4a	0
								Phosphorus	Deep Channel	5	4a	0
1996	Kent	Nutrients	Chesapeake Bay TMDL	Chesapeake	1	1	EASMH	Nitrogen	Open Water	5	4a	0
1770	Narrows/Prospe	1 (unicitto	Chesapeake Day TWDL	Bay	1	1		Nitrogen	Seasonal Migratory	3	4a	0

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	ct Bay,							Nitrogen	Deep Water	5	4a	0
	02130504							Nitrogen	Deep Channel	5	4a	0
								Phosphorus	Open Water	5	4a	0
								Phosphorus	Seasonal Migratory	3	4a	0
								Phosphorus	Deep Water	5	4a	0
								Phosphorus	Deep Channel	5	4a	0
1996	Little Choptank	Nutrients	Chesapeake Bay TMDL	Chesapeake	1	1	LCHMH	Nitrogen	Open Water	5	4a	1
1990	River, 02130402	Nutrents	Chesapeake Bay TWDL	Bay	1	1	LCIIIVIII	Phosphorus	Open Water	5	4a	1
								Nitrogen	Open Water	5	4a	0
								Nitrogen	Seasonal Migratory	3	4a	0
								Nitrogen	Deep Water	5	4a	0
1996	Lower Chester	Nutrients	Chesapeake Bay TMDL	Chesapeake	1	1	CHSMH	Nitrogen	Deep Channel	5	4a	0
1990	River, 02130505	Nutrents	Chesapeake Bay TWIDL	Bay	1	1	CHSWIII	Phosphorus	Open Water	5	4a	0
								Phosphorus	Seasonal Migratory	3	4a	0
								Phosphorus	Deep Water	5	4a	0
								Phosphorus	Deep Channel	5	4a	0
								Nitrogen	Open Water	5	4a	1
1996	Lower Choptank	Nutrients	Chesapeake Bay TMDL	Chesapeake	1	1	CHOMH1	Nitrogen	Seasonal Migratory	3	4a	0
1990	River, 02130403	Nutrents	Chesapeake Bay TMDL	Bay	1	1	Спомпт	Phosphorus	Open Water	5	4a	1
								Phosphorus	Seasonal Migratory	3	4a	0
								Nitrogen	Open Water	5	4a	0
	Potomac							Nitrogen	Seasonal Migratory	3	4a	0
	River/Chain							Nitrogen	Deep Water	5	4a	0
1996	Bridge to	Nutrients	Chesapeake Bay TMDL	Chesapeake	1	1	РОТМН	Nitrogen	Deep Channel	5	4a	0
1990	Marshall Hall	inutients	Chesapeake Day TWIDL	Bay	1	1	TOTWIN	Phosphorus	Open Water	5	4a	0
	(Upper Tidal), 02140201							Phosphorus	Seasonal Migratory	3	4a	0
	02140201							Phosphorus	Deep Water	5	4a	0
								Phosphorus	Deep Channel	5	4a	0
1996	Potomac	Nutrients	Chesapeake Bay TMDL	Chesapeake	1	1	POTOH1	Nitrogen	Open Water	5	4a	1

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	River/Marshall			Bay				Nitrogen	Seasonal Migratory	3	4a	0
	Hall to Smith Pt (Middle Tidal),							Phosphorus	Open Water	5	4a	1
	02140102							Phosphorus	Seasonal Migratory	3	4a	0
	Potomac							Nitrogen	Open Water	5	4a	1
1996	River/Smith Pt	Nutrients	Chesapeake Bay TMDL	Chesapeake	1	1	POTTF	Nitrogen	Seasonal Migratory	3	4a	0
1770	to Mouth,	Tuttients	Chesapeake Day TMDE	Bay	1	1	10111	Phosphorus	Open Water	5	4a	1
	02140101							Phosphorus	Seasonal Migratory	3	4a	0
1996	Tangier Sound,	Nutrients	Chesapeake Bay TMDL	Chesapeake	1	1	TANMH	Nitrogen	Open Water	5	4a	1
	02130206			Bay	_	1		Phosphorus	Open Water	5	4a	1
Address	ed by the Chesapeak	ke Bay TMDI	Ls and Included in Revised 2	004 Maryland I	Register	1	1	1	1	r	ľ	
									Open Water	5	4a	1
	T							Nitrogen	Deep Water	5	4a	1
1996	Lower Chesapeake	Nutrients	Chesapeake Bay TMDL	Chesapeake	1	1	СВ5МН		Deep Channel	5	4a	1
1770	Bay, 02139998	rutificitits	Chesupeake Buy ThibE	Bay	1	1	CDSIMI		Open Water	5	4a	1
								Phosphorus	Deep Water	5	4a	1
									Deep Channel	5	4a	1
									Open Water	5	4a	1
	NC 111							Nitrogen	Deep Water	5	4a	1
1996	Middle Chesapeake	Nutrients	Chesapeake Bay TMDL	Chesapeake	1	1	СВЗМН		Deep Channel	5	4a	1
1770	Bay, 02139997	rutrients	Chesapeake Day TWIDE	Bay	1	1	CDSWIII		Open Water	5	4a	1
								Phosphorus	Deep Water	5	4a	1
									Deep Channel	5	4a	1
								Nitrogen	Open Water	5	4a	0
1996	Upper Chesapeake	Nutrients	Chesapeake Bay TMDL	Chesapeake	1	1	СВ2ОН	Nitrogen	Seasonal Migratory	3	4a	0
1990	Bay, 02139996	inutients	Chesapeake Day TWIDL	Bay	1	1	CB20H	Phosphorus	Open Water	5	4a	0
	<i>.</i>							Phosphorus	Seasonal Migratory	3	4a	0
Address	ed by the Chesapeak	ke Bay TMDI	Ls and Not Included in 2004	Maryland Regi	ster							
1996	Back Creek	Nutrients	Chesapeake Bay TMDL	Chesapeake	1	1	C&DOH	Nitrogen	Open Water	5	4a	1
1770	C&D Canal near	rauments	Chesapeake Day TWDL	Bay	1	1	Cabon	Nitrogen	Seasonal Migratory	3	4a	0

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	MD/DE line,							Phosphorus	Open Water	5	4a	1
	02130604							Phosphorus	Seasonal Migratory	3	4a	0
								Nitrogen	Open Water	5	4a	1
1996	Bush River,	Nutrients	Chesapeake Bay TMDL	Chesapeake	1	1	BSHOH	Nitrogen	Seasonal Migratory	3	4a	0
1990	02130701	Nutrents	Chesapeake Bay TMDL	Bay	1	1	DSHOII	Phosphorus	Open Water	5	4a	1
								Phosphorus	Seasonal Migratory	3	4a	0
								Nitrogen	Open Water	5	4a	1
1996	Dividing Creek,	Nutrients	Chesapeake Bay TMDL	Chesapeake	1	1	POCTF	Nitrogen	Seasonal Migratory	3	4a	0
1990	02130204	Nutrents	Chesapeake Bay TMDL	Bay	1	1	TOCH	Phosphorus	Open Water	5	4a	1
								Phosphorus	Seasonal Migratory	3	4a	0
								Nitrogen	Open Water	5	4a	0
1996	Furnace Bay,	Nutrients	Chesapeake Bay TMDL	Chesapeake	1	1	MD-CB1TF	Nitrogen	Seasonal Migratory	3	4a	0
1990	02130609	Nutrients	Chesapeake Bay TMDL	Bay	1	1	MD-CBIIF	Phosphorus	Open Water	5	4a	0
								Phosphorus	Seasonal Migratory	3	4a	0
								Nitrogen	Open Water	5	4a	0
								Nitrogen	Seasonal Migratory	3	4a	0
								Nitrogen	Deep Water	5	4a	0
1996	Gilbert Swamp,	Nutrients	Chesapeake Bay TMDL	Chesapeake	1	1	РОТМН	Nitrogen	Deep Channel	5	4a	0
1990	02140107	Numents	Chesapeake Bay TMDL	Bay	1	1	РОТМП	Phosphorus	Open Water	5	4a	0
								Phosphorus	Seasonal Migratory	3	4a	0
								Phosphorus	Deep Water	5	4a	0
								Phosphorus	Deep Channel	5	4a	0
								Nitrogen	Open Water	5	4a	1
1996	Lower Elk	Nutriants	Chasanaaka Day TMDI	Chesapeake	1	1	ELKOH	Nitrogen	Seasonal Migratory	3	4a	0
1990	River, 02130601	Nutrients	Chesapeake Bay TMDL	Bay	1	1	ELKUH	Phosphorus	Open Water	5	4a	1
								Phosphorus	Seasonal Migratory	3	4a	0
	Lower			<i>a</i>				Nitrogen	Open Water	5	4a	1
1996	Pocomoke	Nutrients	Chesapeake Bay TMDL	Chesapeake Bay	1	1	РОСОН	Nitrogen	Seasonal Migratory	3	4a	0
	River, 02130202			Bay				Phosphorus	Open Water	5	4a	1

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								Phosphorus	Seasonal Migratory	3	4a	0
									Open Water	5	4a	1
								Nitrogen	Deep Water	N/A	4a	0
1996	Magothy River,	Nutrients	Chasanaalta Day TMDI	Chesapeake	1	1	MAGMH		Seasonal Migratory	3	4a	0
1996	02131001	Nutrients	Chesapeake Bay TMDL	Bay	1	1	MAGMH		Open Water	5	4a	1
								Phosphorus	Deep Water	N/A	4a	0
									Seasonal Migratory	3	4a	0
								Nitrogen	Open Water	5	4a	1
1006	Middle River - Browns Creek,	Nutrionto	Chasanaalta Day TMDI	Chesapeake	1	1	MIDOH	Nitrogen	Seasonal Migratory	3	4a	0
1996	02130807	Nutrients	Chesapeake Bay TMDL	Bay	1	1	MIDOH	Phosphorus	Open Water	5	4a	1
								Phosphorus	Seasonal Migratory	3	4a	0
								Nitrogen	Open Water	5	4a	0
								Nitrogen	Seasonal Migratory	3	4a	0
								Nitrogen	Deep Water	5	4a	0
1996	Miles River,	Nutrients	Chesapeake Bay TMDL	Chesapeake	1	1	EASMH	Nitrogen	Deep Channel	5	4a	0
1990	02130502	nutrients	Chesapeake Bay TMDL	Bay	1	1	EASMIT	Phosphorus	Open Water	5	4a	0
								Phosphorus	Seasonal Migratory	3	4a	0
								Phosphorus	Deep Water	5	4a	0
								Phosphorus	Deep Channel	5	4a	0
								Nitrogen	Open Water	5	4a	1
1996	Nanjemoy Creek.	Nutrients	Chesapeake Bay TMDL	Chesapeake	1	1	РОТОН3	Nitrogen	Seasonal Migratory	3	4a	0
1990	02140110	nutrients	Chesapeake Bay TMDL	Bay	1	1	POTORS	Phosphorus	Open Water	5	4a	1
								Phosphorus	Seasonal Migratory	3	4a	0
								Nitrogen	Open Water	5	4a	0
1996	Nassawango Creek,	Nutrients	Chesapeake Bay TMDL	Chesapeake	1	1	POCTF	Nitrogen	Seasonal Migratory	3	4a	0
1990	02130205	inutients	Chesapeake Day TWIDL	Bay	1	1	TOCIT	Phosphorus	Open Water	5	4a	0
								Phosphorus	Seasonal Migratory	3	4a	0
1996	Oxon Creek,	Nutrients	Chesapeake Bay TMDL	Chesapeake	1	1	POTTF	Nitrogen	Open Water	5	4a	0
1990	02140204	rauments	Chesapeake Day TWDL	Bay	1	1	10111	Nitrogen	Seasonal Migratory	3	4a	0

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								Phosphorus	Open Water	5	4a	0
								Phosphorus	Seasonal Migratory	3	4a	0
	Patuxent River							Nitrogen	Open Water	5	4a	1
	Middle (Patuxent			Chesapeake				Nitrogen	Seasonal Migratory	3	4a	0
1996	River/Rt. 214 to	Nutrients	Chesapeake Bay TMDL	Вау	1	1	PAXTF	Phosphorus	Open Water	5	4a	1
	Ferry Landing), 02131102							Phosphorus	Seasonal Migratory	3	4a	0
								Nitrogen	Open Water	5	4a	1
	Patuxent							Nitrogen	Deep Water	5	4a	1
1996	River/Ferry Landing to	Nutrients	Chesapeake Bay TMDL	Chesapeake	1	1	РАХМН	Nitrogen	Seasonal Migratory	3	4a	0
1990	Mouth, 02131101	numents	Chesapeake Bay TMDL	Bay	1	1	ГАЛИП	Phosphorus	Open Water	5	4a	1
								Phosphorus	Deep Water	5	4a	1
								Phosphorus	Seasonal Migratory	3	4a	0
								Nitrogen	Open Water	5	4a	1
1996	Piscataway Creek,	Nutrients	Chesapeake Bay TMDL	Chesapeake	1	1	PISTF	Nitrogen	Seasonal Migratory	3	4a	0
1990	02140203	nutrents	Chesapeake Bay TMDL	Bay	1	1	FISTE	Phosphorus	Open Water	5	4a	1
								Phosphorus	Seasonal Migratory	3	4a	0
								Nitrogen	Open Water	5	4a	1
								Nitrogen	Deep Water	N/A	4a	0
1996	Severn River,	Nutrients	Chesapeake Bay TMDL	Chesapeake	1	1	SEVMH	Nitrogen	Seasonal Migratory	3	4a	0
1990	02131002	nutrents	Chesapeake Bay TMDL	Bay	1	1	SEVMIN	Phosphorus	Open Water	5	4a	1
								Phosphorus	Deep Water	N/A	4a	0
								Phosphorus	Seasonal Migratory	3	4a	0
								Nitrogen	Open Water	5	4a	1
								Nitrogen	Deep Water	N/A	4a	0
1996	South River,	Nutrianta	Chasepeeke Dev TMDI	Chesapeake	1	1	SOUMH	Nitrogen	Seasonal Migratory	3	4a	0
1990	02131003	Nutrients	Chesapeake Bay TMDL	Bay	1	1	SOUMH	Phosphorus	Open Water	5	4a	1
								Phosphorus	Deep Water	N/A	4a	0
								Phosphorus	Seasonal Migratory	3	4a	0

Year Listed	8-digit Watershed, Code	Original Impair- ment	Addressed by:	Year Addressed	1996/1998 MOU Listing Addressed (1=Yes, 0=No)	MOU Listing Addressed by Bay TMDL (1=Yes, 0=No)	Chesapeake Bay Segment ID	Integrated Report Impairing Substance	Integrated Report Designated Use	2010 IR Listing Category	2012 IR Listing Category	IR Listings (Category 5) Addresse d by Bay TMDL
								Nitrogen	Open Water	5	4a	0
								Nitrogen	Seasonal Migratory	3	4a	0
								Nitrogen	Deep Water	5	4a	0
1996	St. Clement's	Nutrients	Chesapeake Bay TMDL	Chesapeake	1	1	РОТМН	Nitrogen	Deep Channel	5	4a	0
1990	Bay, 02140105	Numents	Chesapeake Bay TMDL	Bay	1	1	РОТМП	Phosphorus	Open Water	5	4a	0
								Phosphorus	Seasonal Migratory	3	4a	0
								Phosphorus	Deep Water	5	4a	0
								Phosphorus	Deep Channel	5	4a	0
								Nitrogen	Open Water	5	4a	0
								Nitrogen	Seasonal Migratory	3	4a	0
	St. Mary's River, 02140103							Nitrogen	Deep Water	5	4a	0
1996		Nutrients	Chesapeake Bay TMDL	Chesapeake	1	1	РОТМН	Nitrogen	Deep Channel	5	4a	0
1990		Nutrents	Chesapeake Bay TMDL	Bay	1	1	FOTMIN	Phosphorus	Open Water	5	4a	0
								Phosphorus	Seasonal Migratory	3	4a	0
								Phosphorus	Deep Water	5	4a	0
								Phosphorus	Deep Channel	5	4a	0
								Nitrogen	Open Water	5	4a	1
1996	Tuckahoe Creek,	Nutrionto	Chesapeake Bay TMDL	Chesapeake	1	1	CHOTF	Nitrogen	Seasonal Migratory	3	4a	0
1990	02130405	Nutrients	Chesapeake Bay TMDL	Bay	1	1	СПОТГ	Phosphorus	Open Water	5	4a	1
								Phosphorus	Seasonal Migratory	3	4a	0
								Nitrogen	Open Water	5	4a	1
1996	Upper Choptank	Nutrients	Chesapeake Bay TMDL	Chesapeake	1	1	СНООН	Nitrogen	Seasonal Migratory	3	4a	0
1990	River, 02130404	Nutrents	Chesapeake Day TWDL	Bay	1	1	choon	Phosphorus	Open Water	5	4a	1
								Phosphorus	Seasonal Migratory	3	4a	0
								Nitrogen	Open Water	5	4a	0
1996	Upper Elk	Nutrients	Chesapeake Bay TMDL	Chesapeake	1	1	ELKOH	Nitrogen	Seasonal Migratory	3	4a	0
1770	River, 02130603	TYULICIIIS	Chesapeake Day TWIDE	Bay	1	1	LEROIT	Phosphorus	Open Water	5	4a	0
								Phosphorus	Seasonal Migratory	3	4a	0
1996	West River,	Nutrients	Chesapeake Bay TMDL	Chesapeake	1	1	WSTMH	Nitrogen	Open Water	5	4a	1

Year Listed	8-digit Watershed, Code	Original Impair- ment	Addressed by:	Year Addressed	1996/1998 MOU Listing Addressed (1=Yes, 0=No)	MOU Listing Addressed by Bay TMDL (1=Yes, 0=No)	Chesapeake Bay Segment ID	Integrated Report Impairing Substance	Integrated Report Designated Use	2010 IR Listing Category	2012 IR Listing Category	IR Listings (Category 5) Addresse d by Bay TMDL
	02131004			Bay				Nitrogen	Seasonal Migratory	3	4a	0
								Phosphorus	Open Water	5	4a	1
								Phosphorus	Seasonal Migratory	3	4a	0
								Nitrogen	Open Water	5	4a	0
								Nitrogen	Seasonal Migratory	3	4a	0
								Nitrogen	Deep Water	5	4a	0
1996	Wicomico	Nutrients	Chesapeake Bay TMDL	Chesapeake	1	1	РОТМН	Nitrogen	Deep Channel	5	4a	0
1990	River, 02140106	Nutrients	Chesapeake Bay TMDL	Bay	1	1	готмп	Phosphorus	Open Water	5	4a	0
								Phosphorus	Seasonal Migratory	3	4a	0
								Phosphorus	Deep Water	5	4a	0
								Phosphorus	Deep Channel	5	4a	0
								Nitrogen	Open Water	5	4a	0
								Nitrogen	Seasonal Migratory	3	4a	0
								Nitrogen	Deep Water	5	4a	0
1996	Wye River,	Nutrients	Chesapeake Bay TMDL	Chesapeake	1	1	EASMH	Nitrogen	Deep Channel	5	4a	0
1990	02130503	Nutrents	Chesapeake Day TWDL	Bay	1	1	EASIMIT	Phosphorus	Open Water	5	4a	0
								Phosphorus	Seasonal Migratory	3	4a	0
								Phosphorus	Deep Water	5	4a	0
								Phosphorus	Deep Channel	5	4a	0
								Nitrogen	Open Water	5	4a	0
								Nitrogen	Seasonal Migratory	3	4a	0
								Nitrogen	Deep Water	5	4a	0
1996	Zekiah Swamp,	Nutrients	Chesapeake Bay TMDL	Chesapeake	1	1	РОТМН	Nitrogen	Deep Channel	5	4a	0
1990	02140108	Nutrients	Chesapeake Bay TMDL	Bay	1	1	TOTWIT	Phosphorus	Open Water	5	4a	0
								Phosphorus	Seasonal Migratory	3	4a	0
								Phosphorus	Deep Water	5	4a	0
								Phosphorus	Deep Channel	5	4a	0
Addition	al 2012 IR Listings	Not Associat	ted with MOU Listings									
N/A	N/A	N/A	N/A	N/A	N/A	0	BIGMH	Nitrogen	Open Water	3	3	0

Year Listed	8-digit Watershed, Code	Original Impair- ment	Addressed by:	Year Addressed	1996/1998 MOU Listing Addressed (1=Yes, 0=No)	MOU Listing Addressed by Bay TMDL (1=Yes, 0=No)	Chesapeake Bay Segment ID	Integrated Report Impairing Substance	Integrated Report Designated Use	2010 IR Listing Category	2012 IR Listing Category	IR Listings (Category 5) Addresse d by Bay TMDL
								Nitrogen	Seasonal Migratory	3	3	0
								Phosphorus	Open Water	3	3	0
								Phosphorus	Seasonal Migratory	3	3	0
								Nitrogen	Open Water	5	4a	1
N/A	N/A	N/A	N/A	N/A	N/A	0	CHOMH2	Nitrogen	Seasonal Migratory	3	4a	0
IN/A	N/A	N/A	IN/A	IN/A	IN/A	0	CHOMH2	Phosphorus	Open Water	5	4a	1
								Phosphorus	Seasonal Migratory	3	4a	0
								Nitrogen	Open Water	3	3	0
NT/ A	NT / A	NT/A	NT/A		NT/ A	0		Nitrogen	Seasonal Migratory	3	3	0
N/A	N/A	N/A	N/A	N/A	N/A	0	NANMH	Phosphorus	Open Water	3	3	0
								Phosphorus	Seasonal Migratory	3	3	0
								Nitrogen	Open Water	5	4a	1
N/A	NT / A	NT/A	NT/A	NT/A	NT/A	0	NANTF	Nitrogen	Seasonal Migratory	3	4a	0
IN/A	N/A	N/A	N/A	N/A	N/A	0	NANTF	Phosphorus	Open Water	5	4a	1
								Phosphorus	Seasonal Migratory	3	4a	0
								Nitrogen	Open Water	5	4a	1
N/A	N/A	N/A	N/A	N/A	N/A	0	DAVOU	Nitrogen	Seasonal Migratory	3	4a	0
IN/A	N/A	IN/A	N/A	IN/A	IN/A	0	РАХОН	Phosphorus	Open Water	5	4a	1
								Phosphorus	Seasonal Migratory	3	4a	0
								Nitrogen	Open Water	3	3	0
NT/ A	NT / A	NT/A	NT/A		NT/ A	0	DOCMU	Nitrogen	Seasonal Migratory	3	3	0
N/A	N/A	N/A	N/A	N/A	N/A	0	РОСМН	Phosphorus	Open Water	3	3	0
								Phosphorus	Seasonal Migratory	3	3	0
								Nitrogen	Open Water	5	4a	1
NI/A	NT/A	NI/A	NT/A	NI/A	NI/A	0		Nitrogen	Seasonal Migratory	3	4a	0
N/A	N/A	N/A	N/A	N/A	N/A	0	RHDMH	Phosphorus	Open Water	5	4a	1
								Phosphorus	Seasonal Migratory	3	4a	0
Total N	utrient Listings				69	45						102
Non-Che	esapeake Bay (Nonti	idal) Related	l Nutrient MOU Listings Incl	uded in 2004 M	aryland Registe	r						

Year Listed	8-digit Watershed, Code	Original Impair- ment	Addressed by:	Year Addressed	1996/1998 MOU Listing Addressed (1=Yes, 0=No)	MOU Listing Addressed by Bay TMDL (1=Yes, 0=No)	Chesapeake Bay Segment ID	Integrated Report Impairing Substance	Integrated Report Designated Use	2010 IR Listing Category	2012 IR Listing Category	IR Listings (Category 5) Addresse d by Bay TMDL
1996	Susquehanna River/Conowing o Dam, 02120204	Nutrients	EPA Concurrence with WQA	2011	1		N/A	N/A	N/A		N/A	N/A
1996	Potomac River Montgomery County (Chain Bridge to Monocacy River), 2140202	Nutrients	EPA Concurrence with WQA	2011	1		N/A	N/A	N/A		N/A	N/A

#### Table 52: Key to color coding in Table 51.

Color	Meaning
	Added to the Revised 2004 Maryland Register List
	On Original 2004 Maryland Register List
	Not counted to avoid double counting, since bay segment listings are repeated

	stand-alone TMDL or WQA, or through one of the Chesapeake Bay TMDLs.													
Year Listed	8-digit Watershed, Code	Original Impair- ment	Addressed by:	Year Addressed	1996/1998 MOU Listing Addressed (1=Yes, 0=No)	MOU Listing Addressed by Bay TMDL (1=Yes, 0=No)	Chesapeake Bay Segment ID	IR Impairing Substance	IR Designated Use	2010 IR Listing Category	2012 IR Listing Category	IR Listings (Category 5) Addressed by Bay TMDL		
Included	d in the MOU	-	-		-	-	-	-	-	-				
1996	Anacostia River, 02140205	Sediments	Stand-alone TMDL developed	2012	1	0	ANATF	Total Suspended Solids	Shallow Water SAV	4a	4a	0		
1996	Back River, 02130901	Sediments	Bay TMDL	2010, Bay TMDL	1	1	ВАСОН	Total Suspended Solids	Aquatic Life	5	4a	1		
1996	Bohemia River, 02130602	Sediments	Delisting (met water quality standards) on the 2008 IR	2008	1	0	вонон	Total Suspended Solids	Shallow Water SAV	2	2	0		
1996	Bush River, 02130701	Sediments	Delisting (met water quality standards) on the 2008 IR	2008	1	0	BSHOH	Total Suspended Solids	Shallow Water SAV	2	2	0		
1996	Back Creek C&D Canal near MD/DE line, 02130604	Sediments	Delisting (met water quality standards) on the 2008 IR	2008	1	0	C&DOH	Total Suspended Solids	Shallow Water SAV	2	2	0		
1996	Lower Susquehanna River, 02120201	Sediments	Delisting (met water quality standards) on the 2010 IR	2010	1	0								
1996	Furnace Bay, 02130609	Sediments	Delisting (met water quality standards) on the 2010 IR	2010	1	0	CB1TF	Total Suspended Solids	Shallow Water SAV	2	2	0		
1996	Aberdeen Proving Ground, 02130705	Sediments	Delisting (met water quality standards) on the 2010 IR	2010	1	0								

Table 53: This table shows the relationship between the original and current tidal sediment listings and how the MOU was addressed, by either an older stand-alone TMDL or WQA, or through one of the Chesapeake Bay TMDLs.

Year Listed	8-digit Watershed, Code	Original Impair- ment	Addressed by:	Year Addressed	1996/1998 MOU Listing Addressed (1=Yes, 0=No)	MOU Listing Addressed by Bay TMDL (1=Yes, 0=No)	Chesapeake Bay Segment ID	IR Impairing Substance	IR Designated Use	2010 IR Listing Category	2012 IR Listing Category	IR Listings (Category 5) Addressed by Bay TMDL
1996	Swan Creek, 02130706	Sediments	Delisting (met water quality standards) on the 2010 IR	2010	1	0						
1996	Still Pond/Fairlee, 02130611	Sediments	Delisting (met water quality standards) on the 2008 IR	2008	1	0	СВ2ОН	Total Suspended Solids	Shallow Water SAV	2	2	0
1996	Kent Island, 02130511	Sediments	Bay TMDL	2010, Bay TMDL	1	1						
1996	Other West Chesapeake Drainage, 02131005	Sediments	Bay TMDL	2010, Bay TMDL	1	1	CB4MH	Total Suspended Solids	Shallow Water SAV	5	4a	1
1996	Lower Choptank River, 02130403	Sediments	Bay TMDL	2010, Bay TMDL	1	1	CHOMH1	Total Suspended Solids	Shallow Water SAV	5	4a	1
1996	Upper Choptank River, 02130404	Sediments	Bay TMDL	2010, Bay TMDL	1	1	СНООН	Total Suspended Solids	Shallow Water SAV	5	4a	1
1996	Tuckahoe Creek, 02130405	Sediments	Bay TMDL	2010, Bay TMDL	1	1	CHOTF	Total Suspended Solids	Aquatic Life	5	4a	1
1996	Lower Chester River, 02130505	Sediments	Bay TMDL	2010, Bay TMDL	1	1						
1996	Langford Creek, 02130506	Sediments	Bay TMDL	2010, Bay TMDL	1	1	CHSMH	Total Suspended Solids	Shallow Water SAV	5	4a	1
1996	Corsica River, 02130507	Sediments	Bay TMDL	2010, Bay TMDL	1	1	1					
1996	Southeast Creek, 02130508	Sediments	Delisting (met water quality standards) on the 2008 IR	2008	1	0	CHSOH	Total Suspended Solids	Shallow Water SAV	5	4a	1

Year Listed	8-digit Watershed, Code	Original Impair- ment	Addressed by:	Year Addressed	1996/1998 MOU Listing Addressed (1=Yes, 0=No)	MOU Listing Addressed by Bay TMDL (1=Yes, 0=No)	Chesapeake Bay Segment ID	IR Impairing Substance	IR Designated Use	2010 IR Listing Category	2012 IR Listing Category	IR Listings (Category 5) Addressed by Bay TMDL
1996	Middle Chester River, 02130509	Sediments	Delisting (met water quality standards) on the 2008 IR	2008	1	0						
1996	Upper Chester River, 02130510	Sediments	Bay TMDL	2010, Bay TMDL	1	1	CHSTF	Total Suspended Solids	Aquatic Life	5	4a	1
1996	Eastern Bay, 02130501	Sediments	Bay TMDL	2010, Bay TMDL	1	1						
1996	Miles River, 02130502	Sediments	Bay TMDL	2010, Bay TMDL	1	1		Total	Shallow			
1996	Wye River, 02130503	Sediments	Bay TMDL	2010, Bay TMDL	1	1	EASMH	Suspended Solids	Water SAV	5	4a	1
1996	Kent Narrows/Prospect Bay, 02130504	Sediments	Bay TMDL	2010, Bay TMDL	1	1						
1996	Lower Elk River, 02130601	Sediments	Delisting (met water quality standards) on the 2010 IR	2010	1	0	EL VOU	Total	Shallow			
1996	Upper Elk River, 02130603	Sediments	Delisting (met water quality standards) on the 2010 IR	2010	1	0	ELKOH	Suspended Solids	Water SAV	2	2	0
1996	Transquaking River, 02130308	Sediments	Delisting (met water quality standards) on the 2008 IR	2008	1	0	FSBMH	Total Suspended Solids	Shallow Water SAV	3	3	0
1996	Bird River, 02130803	Sediments	Delisting (met water quality standards) on the 2008 IR	2008	1	0	GUNOH	Total Suspended Solids	Shallow Water SAV	5	4a	1
1996	Honga River, 02130401	Sediments	Bay TMDL	2010, Bay TMDL	1	1	HNGMH	Total Suspended Solids	Shallow Water SAV	5	4a	1

Year Listed	8-digit Watershed, Code	Original Impair- ment	Addressed by:	Year Addressed	1996/1998 MOU Listing Addressed (1=Yes, 0=No)	MOU Listing Addressed by Bay TMDL (1=Yes, 0=No)	Chesapeake Bay Segment ID	IR Impairing Substance	IR Designated Use	2010 IR Listing Category	2012 IR Listing Category	IR Listings (Category 5) Addressed by Bay TMDL
1996	Magothy River, 02131001	Sediments	Bay TMDL	2010, Bay TMDL	1	1	MAGMH	Total Suspended Solids	Shallow Water SAV	5	4a	1
1996	Manokin River, 02130208	Sediments	Bay TMDL	2010, Bay TMDL	1	1	MANMH	Total Suspended Solids	Shallow Water SAV	5	4a	1
1996	Mattawoman Creek, 02140111	Sediments	Delisting (met water quality standards) on the 2008 IR	2008	1	0	MATTF	Total Suspended Solids	Shallow Water SAV	2	2	0
1996	Gunpowder River, 02130801	Sediments	Bay TMDL	2010, Bay TMDL	1	1		Total	Shallow			
1996	Middle River - Browns Creek, 02130807	Sediments	Bay TMDL	2010, Bay TMDL	1	1	MIDOH	Suspended Solids	Water SAV	5	4a	1
1996	Marshyhope Creek, 02130306	Sediments	Bay TMDL	2010, Bay TMDL	1	1	NANOH	Total Suspended Solids	Shallow Water SAV	5	4a	1
1996	Northeast River, 02130608	Sediments	Delisting (met water quality standards) on the 2008 IR	2008	1	0	NORTF	Total Suspended Solids	Shallow Water SAV	2	2	0
1996	Bodkin Creek, 02130902	Sediments	Bay TMDL	2010, Bay TMDL	1	1		Total	Shallow			
1996	Baltimore Harbor, 02130903	Sediments	Bay TMDL	2010, Bay TMDL	1	1	РАТМН	Suspended Solids	Water SAV	5	4a	1
1996	Patuxent River/Ferry Landing to Mouth, 02131101	Sediments	Bay TMDL	2010, Bay TMDL	1	1	РАХМН	Total Suspended Solids	Shallow Water SAV	5	4a	1
1996	Patuxent River/Rt. 214 to Ferry Landing, 02131102	Sediments	Delisting (met water quality standards) on the 2008 IR	2008	1	0	PAXTF	Total Suspended Solids	Shallow Water SAV	5	4a	1

Year Listed	8-digit Watershed, Code	Original Impair- ment	Addressed by:	Year Addressed	1996/1998 MOU Listing Addressed (1=Yes, 0=No)	MOU Listing Addressed by Bay TMDL (1=Yes, 0=No)	Chesapeake Bay Segment ID	IR Impairing Substance	IR Designated Use	2010 IR Listing Category	2012 IR Listing Category	IR Listings (Category 5) Addressed by Bay TMDL
1996	Piscataway Creek, 02140203	Sediments	Bay TMDL	2010, Bay TMDL	1	1	PISTF	Total Suspended Solids	Shallow Water SAV	5	4a	1
1996	Lower Pocomoke River, 02130202	Sediments	Bay TMDL	2010, Bay TMDL	1	1	РОСОН	Total Suspended Solids	Aquatic Life	5	4a	1
1996	Dividing Creek, 02130204	Sediments	Bay TMDL	2010, Bay TMDL	1	1	DOCTE	Total	A	E	4-	1
1996	Nassawango Creek, 02130205	Sediments	Bay TMDL	2010, Bay TMDL	1	1	POCTF	Suspended Solids	Aquatic Life	5	4a	1
1996	Potomac River/Smith Pt to Mouth, 02140101	Sediments	Bay TMDL	2010, Bay TMDL	1	1						
1996	St. Mary's River, 02140103	Sediments	Bay TMDL	2010, Bay TMDL	1	1						
1996	Breton Bay, 02140104	Sediments	Bay TMDL	2010, Bay TMDL	1	1		Total	C1 11			
1996	St. Clement's Bay, 02140105	Sediments	Bay TMDL	2010, Bay TMDL	1	1	РОТМН	Suspended Solids	Shallow Water SAV	5	4a	1
1996	Wicomico River, 02140106	Sediments	Bay TMDL	2010, Bay TMDL	1	1						
1996	Gilbert Swamp, 02140107	Sediments	Bay TMDL	2010, Bay TMDL	1	1						
1996	Zekiah Swamp, 02140108	Sediments	Bay TMDL	2010, Bay TMDL	1	1						
1996	Potomac River/Marshall Hall to Smith Pt (Middle Tidal), 02140102	Sediments	Bay TMDL	2010, Bay TMDL	1	1	РОТОН	Total Suspended Solids	Shallow Water SAV	5	4a	1
1996	Port Tobacco River, 02140109	Sediments	Bay TMDL	2010, Bay TMDL	1	1	РОТОН	Total Suspended Solids	Shallow Water SAV			

Year Listed	8-digit Watershed, Code	Original Impair- ment	Addressed by:	Year Addressed	1996/1998 MOU Listing Addressed (1=Yes, 0=No)	MOU Listing Addressed by Bay TMDL (1=Yes, 0=No)	Chesapeake Bay Segment ID	IR Impairing Substance	IR Designated Use	2010 IR Listing Category	2012 IR Listing Category	IR Listings (Category 5) Addressed by Bay TMDL
1996	Nanjemoy Creek, 02140110	Sediments	Bay TMDL	2010, Bay TMDL	1	1	РОТОН	Total Suspended Solids	Shallow Water SAV			
1996	Potomac River/Chain Bridge to Marshall Hall (Upper Tidal), 02140201	Sediments	Delisting (met water quality standards) on the 2010 IR	2010	1	0	POTTF	Total Suspended Solids	Shallow Water SAV	2	2	0
1996	Oxon Creek, 02140204	Sediments	Delisting (met water quality standards) on the 2010 IR	2010	1	0						
1996	Sassafras River, 02130610	Sediments	Delisting (met water quality standards) on the 2008 IR	2008	1	0	SASOH	Total Suspended Solids	Shallow Water SAV	5	4a	1
1996	Severn River, 02131002	Sediments	Delisting (met water quality standards) on the 2008 IR	2008	1	0	SEVMH	Total Suspended Solids	Shallow Water SAV	5	4a	1
1996	South River, 02131003	Sediments	Bay TMDL	2010, Bay TMDL	1	1	SOUMH	Total Suspended Solids	Shallow Water SAV	5	4a	1
1996	Tangier Sound, 02130206	Sediments	Bay TMDL	2010, Bay TMDL	1	1	- TANMH	Total Suspended Solids	Shallow Water SAV	5	4a	1
1996	Lower Wicomico River, 02130301	Sediments	Bay TMDL	2010, Bay TMDL	1	1						
1996	Western Branch, 02131103	Sediments	Bay TMDL	2010, Bay TMDL	1	1	WBRTF	Total Suspended Solids	Shallow Water SAV	5	4a	1
1996	Wicomico Creek, 02130303	Sediments	Delisting (met water quality standards) on the 2010 IR	2010	1	0	WICMH	Total Suspended Solids	Shallow Water SAV	2	2	0

Year Listed	8-digit Watershed, Code	Original Impair- ment	Addressed by:	Year Addressed	1996/1998 MOU Listing Addressed (1=Yes, 0=No)	MOU Listing Addressed by Bay TMDL (1=Yes, 0=No)	Chesapeake Bay Segment ID	IR Impairing Substance	IR Designated Use	2010 IR Listing Category	2012 IR Listing Category	IR Listings (Category 5) Addressed by Bay TMDL
1996	West River, 02131004	Sediments	Bay TMDL	2010, Bay TMDL	1	1	WSTMH	Total Suspended Solids	Shallow Water SAV	5	4a	1
Additional IR Assessments Not included in the MOU												
2008	Big Annemessex, 02130207	N/A	Bay TMDL	2010, Bay TMDL	N/A	N/A	BIGMH	Total Suspended Solids	Shallow Water SAV	5	4a	1
2008	Parts of several mainstem Bay watersheds	N/A	Bay TMDL	2010, Bay TMDL	N/A	N/A	СВЗМН	Total Suspended Solids	Shallow Water SAV	5	4a	1
2008	Parts of several mainstem Bay watersheds	N/A	Bay TMDL	2010, Bay TMDL	N/A	N/A	СВ5МН	Total Suspended Solids	Shallow Water SAV	5	4a	1
1996	Part of Lower Choptank River, 02130403	N/A	Bay TMDL	2010, Bay TMDL	N/A	N/A	CHOMH2	Total Suspended Solids	Shallow Water SAV	5	4a	1
2008	Little Choptank River, 02130402	N/A	Bay TMDL	2010, Bay TMDL	N/A	N/A	LCHMH	Total Suspended Solids	Shallow Water SAV	5	4a	1
N/A	Lower Nanticoke River, 02130305	N/A	Bay TMDL	2010, Bay TMDL	N/A	N/A	NANMH	Total Suspended Solids	Shallow Water SAV	5	4a	1
2010	Part of Patuxent River/Ferry Landing to Mouth, 02131101	N/A	Bay TMDL	2010, Bay TMDL	N/A	N/A	РАХОН	Total Suspended Solids	Shallow Water SAV	5	4a	1
2008	Pocomoke Sound, 02130201	N/A	Bay TMDL	2010, Bay TMDL	N/A	N/A	РОСМН	Total Suspended Solids	Shallow Water SAV	5	4a	1
N/A	Part of West River, 02131004	N/A	Never Listed as impaired	N/A	N/A	N/A	RHDMH	Total Suspended Solids	Shallow Water SAV	2	3	0
Count					42						37	