## 5. The 2002 303(d) List

### 5.1 Format and Structure

The development of the new Integrated 303(d) listing meta-database that links data sources and results to impairments has resulted in a significantly longer List for 2002. Each listing is followed by the current data source(s) used to justify listing (Figure 6). The actual listing is italicized and the supporting data for that listing are indented and not italicized (see Figure 6). The attainment status is also clearly designated to identify part of the List (3, 4a, 4b, 5 or 6) upon which a waterbody is placed. Only those waters placed on Part-5 of the list [303(d) List] may require a TMDL. All others are part of the State's integrated assessment of water quality and do not require TMDL development, although stressor identification or additional monitoring may be required.

Some listed segments, particularly those listed for biological impairments, have multiple data sources. This largely accounts for the extended length of this year's list. In addition, both the 1996 and 1998 303(d) Lists are included in the current list so that stakeholders can easily identify all of the 303(d) impairments that have been identified in a given basin (Figure 6). The horizontal lines shown on the list are included to help separate one listing, as well as its associated data sources, from another.

In the original 1996 303(d) List, multiple impairments in the same watershed were listed together in the same record. In the 2002 Integrated 303(d) List, these 1996 impairments are listed separately [i.e., where separate impairments were originally combined into a single listing for a watershed (see Appendix F), the impairments are now separated into individual listings]. Decoupling of the listings allows MDE to better track, sort and query impairments in the Integrated 303(d) listing meta-database for improved regulatory decision-making and water quality tracking. This change effectively doubled the number of listings in the original 1996 303(d) List from 140 to 329 in the current list. For the 1998 303(d) List, decoupling only increased the number of listings by one, from 58 to 59 (i.e., Patuxent River/Washington and Persimmons Creek were split into two separate listings) in the 2002 Integrated 303(d) List.

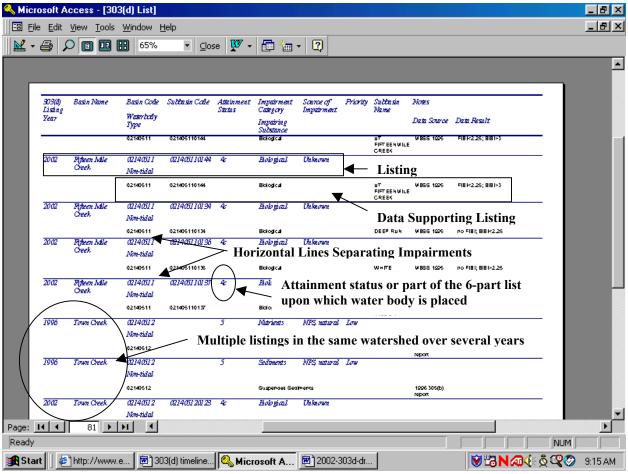


Figure 6: 2002 Integrated 303(d) List highlighting listed segments and supporting data.

## 5.2 Scale

Maryland continues to use 8-digit basins (Figure 7) as the primary planning scale for watershed based restoration efforts and Integrated 303(d) listing. This is consistent with the listing format of both the 1996 and 1998 303(d) lists and 305(b) reports. With the adoption of biocriteria this year, however, geographical resolution is provided in the form of the 12-digit subwatershed scale (Figure 8). Where limited biological impairments (less than 10) were found in an 8-digit basin, the 12-digit basin codes are also provided in the listing to facilitate a more targeted approach to TMDL development, restoration planning, and follow-up monitoring.

The new meta-database that was developed this year to track 303(d) listings and data sources also provides more flexibility in GIS development. Future 303(d) listings can thereby provide greater geographical resolution at customized scales and be more consistent with national watershed planning efforts such as the National Hydrologic Dataset (NHD).

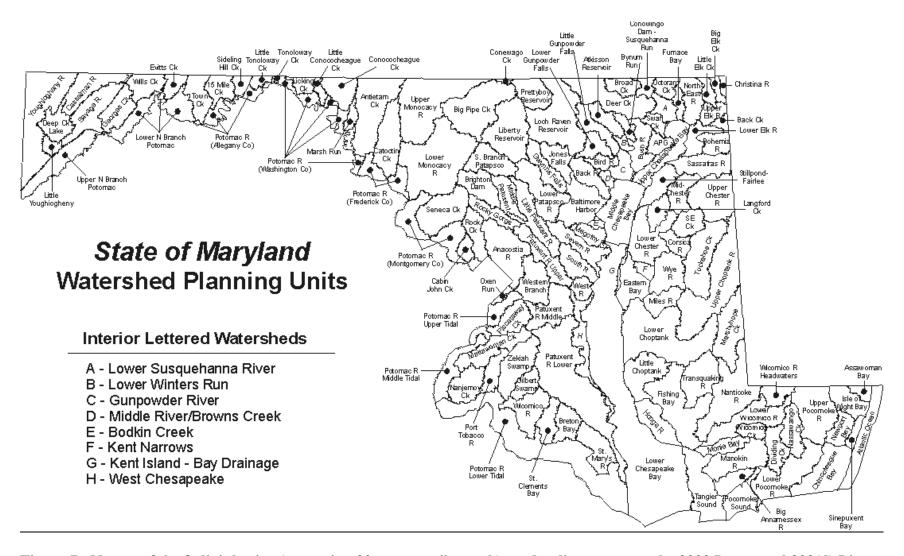


Figure 7: Names of the 8-digit basins (averaging 90 square miles each) used to list waters on the 2002 Integrated 303(d) List. Basin codes associated with these basin names are included in section 5.4.6.

# Maryland 12-Digit Watersheds with Surrounding 8-Digit Basins (in black)

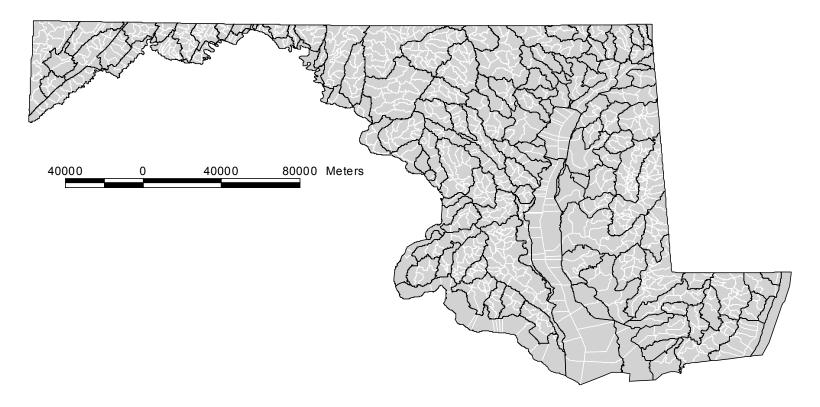


Figure 8: Maryland 12-Digit subwatersheds (outlined in white and approximately 11 square miles each) used to identify subbasins within the 8-Digit planning scale. The 8-digit basins (outlined in black) are overlaid for comparison.

## 5.3 <u>Impairment Summary</u>

Table 5: Total Water Quality Limited Segments on Part-5 of the 2002 Integrated 303(d) List after Revision and Correction.

Decoupled  303(d) List Year Vear  Decoupled Listings¹(original number of listings in parentheses)		De-Listings and Revisions(Part-6 of the List)			Removed from 303(d) List but Retained as supporting data	Listings Requiring a	Listings <u>Not</u> Requiring a TMDL for the		
	number of listings in	Category 1 <sup>2</sup> Nutrient De-listings (As Per MDE Data)	Category 2³ Tributary Strategy Revisions	Category  3 <sup>4</sup> Nutrient  Star (*)  Revisions	Category 4 <sup>5</sup> Revision of Duplications and Erroneous Listings	Category 5 <sup>6</sup> Revision of Duplications  Duplication of basin code/impairment combinations	Comprehensive 2002 303(d) List (Part 5 of List)	Comprehensive 2002 303(d) List (Part-3 or 4b of List)	Totals
1996	329 (140)	2	17	3	15	-	292	4	296
1998	59 (58)	-	-	-	2	18	39	-	39
2002	-	-	-	-	7	-	233	11	244
GRAN	GRAND TOTAL NUMBER OF LISTINGS (minus category 1-5 delistings/revisions) IN THE 2002 INTEGRATED 303(d) LIST						579		
TMDLs COMPLETED THUS FAR (Part-4a of the List)						35			
TMDLs TO BE COMPLETED [Not including waters listed on parts 3 or 4b of the Integrated List].						529			

<sup>&</sup>lt;sup>1</sup>The 1996 and 1998 303(d) Lists showed all of the impairments (i.e., impairing substances) in a watershed on a single line. The 2002 List shows each separately to enable better tracking and accounting.

<sup>5</sup>Revisions of redundant listings (due to duplication of priorities or pollutant sources) and/or erroneous listings (see section 5.4).

<sup>&</sup>lt;sup>2</sup> De-listed as per EPA approval under 303(d) Title 40 Code of Federal Regulations "good cause" provision (see section 5.4).

<sup>&</sup>lt;sup>3</sup> The large Chesapeake Bay tributary basins that were originally listed for nutrients in 1996 without supporting data or evidence of impairment within the entire basin. Listed by association with the mainstem Bay. The Bay listing as well as the smaller scale, local impairments are retained (see section 5.4).

<sup>&</sup>lt;sup>4</sup> Revisions of the "nutrient\*" listings that were based upon land-use trends indicated in earlier 305(b) reports and without supporting water quality data (see section 5.4). All smaller tributaries were listed without sufficient data and in support of the mainstem Bay nutrient listing.

<sup>&</sup>lt;sup>6</sup>Revisions of redundant listings due to duplicate listings of the same impairment with the same basin code, but using different sub basin names (see section 5.4)

<sup>&</sup>lt;sup>7</sup>The TMDL count includes both TMDLs and Water Quality Analyses submitted to EPA. Depending upon watershed segmentation and other factors, multiple TMDLs may be required for a given listing. As such, this number only addresses the number of individual 303(d) listings partially or fully addressed by one or more TMDLs.

Overall, a total of 579 Listings, not including waterbodies with an attainment status of 6 (e.g., de-listed or revised), are on the current 2002 Integrated 303(d) List. Only 529 of the 579 impairments listed on the 2002 Integrated 303(d) List may require a TMDL. Of the 579 listings, 177 listings are biological (30.6%), 131 are nutrient listings (22.6%), 106 are sediment listings (18.3%), 66 are bacteria listings (11.4%), 54 are metals listings (9.3%), 26 are toxics (4.5%), 9 are pH listings (1.6%), 8 are dissolved oxygen listings (1.4%), and 2 oil spill (0.3%). Of the 579 listings, 296 (51.6%) of them occurred in 1996, 39 (6.8%) occurred in 1998 Listings, and 244 (41.6%) were listed in 2002.

Of the 244 new 2002 listings, 26 are for fecal coliform, 18 for toxics, 14 for metals, 2 for dissolved oxygen, 177 biological, 5 for nutrients and 2 for an oil spill. Only fifteen of the 244 listings were never listed before.

- 1. Octoraro Creek, basin code 02120203, subbasin code 021202030347 (for biology).
- 2. Broad Creek, basin code 02120205, subbasin code 021202050339 (for biology).
- 3. Little Elk Creek, basin code 02130605, subbasin codec 0382 and 021306050383 (for biology).
- 4. Lower Winters Run, basin code 02130702, subbasin code 021307021130 (for biology).
- 5. Potomac Shenandoah to Monocacy, basin code 02140301 (for bacteria & biology).
- 6. Licking Creek, basin code 02140506, subbasin code 021405060171 (for biology).
- 7. Potomac River Allegany County, basin code 02140508, subbasin code 021405080120 (for biology).
- 8. Little Tonoloway Creek, basin code 02140509, subbasin code 021405090153 (for biology).
- 9. Sideling Hill Creek, basin code 02140510, subbasin codes 021405100150 and 021405100152 (for biology).
- 10. Fifteen Mile Creek, basin code 02140511, subbasin codes 021405110135, 021405110140, 021405110142, 021405110144, 021405110134, 021405110136, and 021405110137 (for biology).
- 11. Big Elk Creek, basin code 02130606, subbasin code 021306060386 (for biology).
- 12. Christina River, basin code 02130607, subbasin code 021306070381 (for biology).
- 13. Deer Creek, basin code 02120202, subbasin code 021202020328 and 021202020332 (for biology).
- 14. Potomac River Upper North Branch, subbasin Piney Reservoir, basin code 02141005 (for mercury).
- 15. Savage River, subbasin Savage Reservoir, basin code 02141006 (for mercury).

## 5.4 De-Listings and Revisions to Prior 1996 and 1998 Listings

The 2002 Integrated 303(d) List has been updated to reflect de-listing or revisions for one or more of the following reasons under the authority of the Clean Water Act's "good cause" provision existing in regulation (see Clean Water Act §130.7). "Good cause" may include, but is not limited to, situations where more recent or accurate data becomes available, more sophisticated or improved water quality modeling has been completed, or flaws in the original analysis have led to a water being improperly listed.

There were several de-listings/revisions in the current integrated list and which fell into the 6 following categories: (Category 1) nutrient de-listings as per EPA approval under 303(d) Title 40 Code of Federal Regulations "good cause" provision; (Category 2) the large, 6-digit Chesapeake Bay tributaries that were listed for nutrients in 1996 by association because the mainstem Bay was listed for nutrients; (Category 3) the "nutrient\*" listed basins that were listed in 1996 because of land use trends identified in the 305(b) report without rigorous water quality data and which more recent data have shown to be unimpaired for nutrients; (Category 4) those waterbodies that were listed multiple times for the same impairment but citing different sources or priorities; (Category 5) those waterbodies that were listed multiple times for the same basin code/impairment combinations; and , (Category 6) listings which still remain on the list but do not appear as they did in the original listings because either the wrong basin code or basin name was used originally.

### 5.4.1 CATEGORY 1 DE-LISTINGS

There were two Category 1 De-Listings on the 2002 Integrated 303(d) List:

- 1. Youghiogheny River, basin code 05020201, listed in 1996 for nutrients.
- 2. Casselman River, basin code 05020204, listed in 1996 for nutrients.

Water quality analyses and data review conducted by MDE in the above basins from 1997 to 2001 showed that these two water bodies were unimpaired by nutrients and may have been listed originally using insufficient data. These listings still appear on the current list with their attainment status changed to a 6 to denote de-listing.

## 5.4.2 CATEGORY 2 REVISIONS

The category 2 revisions are the 6-digit watersheds highlighted in the 1996 List (see Appendix F). These basins were listed for nutrients by association, and without supporting data, due to the fact that the mainstem Chesapeake Bay was listed for nutrients in 1996. The original Chesapeake Bay listings (basin codes 02139996, 02139997, and 02139998) are fully retained in the current list, while the tributary strategies' attainment status has been changed to a 6 for consistency with the 8-digit geographic resolution used throughout the document. Accordingly, the following waters were de-listed in 2002:

- 1. Pocomoke River, basin code 021302
- 2. Nanticoke River, basin code 021303
- 3. Choptank River, basin code 021304 (tributary strategy basin erroneously listed in 1996 with basin code 02130401 instead of the 6-digit 021303 designation. This is corrected in the current list)
- 4. Chester River, basin code 021305
- 5. Elk River, basin code 021306
- 6. Conewago Creek, basin code 020503
- 7. Susquehanna River, basin code 021202
- 8. Bush River, basin code 021307
- 9. Gunpowder River, basin code 021308 (also listed erroneously in the original 1996 list using basin code 02130801 instead of the 6-digit 021303 designation. This is corrected in the current list)

- 10. Patapsco River basin code 021309
- 11. Lower Western Shore, basin code 021310
- 12. Patuxent River, basin code 021311
- 13. Lower Potomac River, basin code 021401
- 14. Potomac River Washington Metropolitan, basin code 021402
- 15. Middle Potomac River, basin code 021403
- 16. Upper Potomac River, basin code 021405
- 17. North Branch Potomac River, 021410

#### 5.4.3 CATEGORY 3 REVISIONS

The "nutrient\*" listings (see 1996 listings in Appendix F) were based upon land-use trends indicated in earlier 305(b) reports and without supporting water quality data. Future revisions in this category will be made as water quality data become available. Current de-listings based on MDE's water quality analyses demonstrating achievement of water quality standards are:

- 1. Savage River, basin code 02141006, listed in 1996 for nutrients.
- 2. Conococheague Creek, basin code 02140504, listed in 1996 for nutrients.
- 3. Georges Creek, basin code 02141004, listed in 1996 for nutrients.

These listings still appear on the current list with their attainment status changed to a 6 to denote de-listing.

### 5.4.4 CATEGORY 4 REVISIONS

These revisions are shaded light gray in Appendix F, and fall into two kinds of duplication, including: (1) those waterbodies that were listed multiple times for the same parameter or pollutant, but showing different priorities; and, (2) those waterbodies were listed multiple times for the same pollutant, but showing different sources. In either case, only one of the listings was retained while the duplicate had its attainment status changed to 6, denoting de-listing. Category 4 revisions are as follows:

- 1. Baltimore Harbor, basin code 02130903, was listed 2 times for nickel [listed as two separate sources, one as "Beth Steel and SCM Hawkins Pt.(currently named Millenium Inorganic Chemicals)" and one as "Chemetals" (currently named Erachem), also for different priorities, one as a "12" and the other unspecified]. Consolidated them into one Baltimore Harbor listing for Nickel and combined the sources.
- 2. Baltimore Harbor, basin code 02130903, was listed 2 times for copper [listed as two separate sources, one as "Beth Steel" and one as "Chemetals (Erachem)"]. Consolidated them into one Baltimore Harbor listing for copper and combined the sources
- 3. Baltimore Harbor, basin code 02130903, was listed 2 times for nutrients one time for priority "12" and another time for priority "low"). The low priority listing was retained and the "12" priority was changed to attainment status 6, denoting de-listing.
- 4. Antietam Creek, basin code 02140502, listed 2 times for nutrients (one time for priority "14" and another time for priority "low"). The low priority listing was retained and the "14" priority was changed to attainment status 6, denoting de-listing.

- 5. Loch Raven Reservoir, basin code 02130805, listed 2 times for nutrients (one time for priority "15" and another time for priority "low"). The low priority listing was retained and the "15" priority was changed to attainment status 6, denoting de-listing.
- 6. Northeast River, basin code 02130608, listed 2 times for lead (one time for priority "17" and another time for priority "low"). The low priority listing was retained and the "17" priority was changed to attainment status 6, denoting de-listing.
- 7. Northeast River, basin code 02130608, listed 2 times for zinc (one time for priority "17" and another time for priority "low"). The low priority listing was retained and the "17" priority was changed to attainment status 6, denoting de-listing.
- 8. Aberdeen Proving Ground, basin code 02130705, listed 2 times for toxics (one time for priority "18" and another time for priority "low"). The low priority listing was retained and the "18" priority was changed to attainment status 6, denoting de-listing.
- 9. Liberty Reservoir, basin code 02130907, listed 2 times for lead (one time for priority "19" and another time for priority "low"). The low priority listing was retained and the "19" priority was changed to attainment status 6, denoting de-listing.
- 10. Liberty Reservoir, basin code 02130907, listed 2 times for chromium (one time for priority "20" and another time for priority "low"). The low priority listing was retained and the "19" priority was changed to attainment status 6, denoting de-listing.
- 11. Little Patuxent River, basin code 02131105, listed 2 times for cadmium (one time for priority "20" and another time for priority "low"). The low priority listing was retained and the "20" priority was changed to attainment status 6, denoting de-listing.
- 12. Middle Patuxent River, basin code 02131105, listed 2 times for zinc (one time for priority "21" and another time for priority "low"). The low priority listing was retained and the "21" priority was changed to attainment status 6, denoting de-listing.
- 13. Lower North Branch Potomac River, basin code 02141001, listed 2 times for cadmium (one time for priority "22" and another time for priority "low"). The low priority listing was retained and the "22" priority was changed to attainment status 6, denoting de-listing.
- 14. Wills Creek, basin code 02141003, listed 2 times for cyanide (one time for priority "22" and another time for priority "low"). The low priority listing was retained and the "22" priority was changed to attainment status 6, denoting de-listing.
- 15. Lower Susquehanna River, basin code 02120201, listed 2 times for cadmium (one time for priority "16" and one time for priority "low"). The low priority listing was retained and the "16" priority was changed to attainment status 6, denoting de-listing.

Another special consideration, Middle River – Browns Creek, was also placed into the category 4 revisions. Middle River – Browns Creek, basin code 02130807, was erroneously listed on the 1998 303(d) List for nickel and copper using saltwater instead of the more applicable freshwater Water Quality Criteria [COMAR 26.08.02.03-2 (Table 1)]. This oversight was recognized in 2002 and the freshwater criteria were then applied to the earlier data used for the 1998 listing. This resulted in the removal of the copper and nickel listings because the water column concentration thresholds in a freshwater system were higher for these specific metals. However, freshwater WQC thresholds for lead and cadmium are lower than those for saltwater systems. This resulted in new listings in the Middle River – Browns Creek watershed for lead and cadmium in the 2002 303(d) List. The nickel and copper listings were thereby de-listed in light of this reanalysis.

#### 5.4.5 CATEGORY 5 REVISIONS

Category 5 revisions include waterbodies that were listed two or more times for the same basin code/impairment combination (Appendix F). This may have been done originally to provide greater geographic resolution to the listings, although the same 8-digit basin code was used. In these cases, only one of the listings was retained on the List while the duplicate listings were used as supporting data. Category 5 revisions include the following:

- 1. Baltimore Harbor, basin code 02130903, was listed 4 times for the same basin code for zinc (listed as Middle Harbor, Curtis Bay/Creek, Bear Creek and Baltimore Harbor). This was consolidated into one Baltimore Harbor listing for zinc and the different subbasins were used as supporting data.
- 2. Baltimore Harbor, basin code 02130903, was listed 2 times for chromium (listed as "Bear Creek" and one as "Baltimore Harbor"). These were consolidated into one Baltimore Harbor listing for chromium with Bear Creek as supporting data.
- 3. Baltimore Harbor, basin code 02130903, was listed 3 times for the same basin code for fecal coliform (listed as Furnace Creek, Marley Creek and Rock Creek). These were consolidated into one Baltimore Harbor listing for bacteria and the different subbasins were used as supporting data.
- 4. Baltimore Harbor, basin code 02130903, was listed 3 times for PCBs (Bear Creek, Curtis Bay/Creek, and Baltimore Harbor). These were consolidated into one Baltimore Harbor listing for PCBs with Bear Creek and Curtis Bay as supporting data.
- 5. Patuxent River, basin code 02131101, was listed 10 times for fecal coliform (Solomons Island Harbor, Town Creek, Battle Creek, Island Creek, Washington Creek, Persimmons Creek, Trent Hall Creek, Buzzard Hall Creek, Mill Creek and the Patuxent mainstem. These were consolidated these into one Patuxent mainstem listing with all of the other creeks as supporting data.
- 6. Nanticoke River, basin code 02130305, was listed 2 times for fecal coliform (one time as "Cove Road Beach, Nanticoke River" and another time as "Nanticoke River"). The Nanticoke River listing was retained while the Cove Road Beach listing was used as supporting data.

## 5.4.6 CATEGORY 6 REVISIONS

Category 6 revisions are minor changes made to the original 1996 and 1998 listings due to the standardization of basin names (see Table 6 below) in the 2002 Integrated 303(d) List or to correct basin coding errors. Standardization of the basin names used for watersheds ensures consistency in the 303(d) listing and tracking process. The use of fixed drop-down menus in the 303(d) listing meta-database further minimizes data entry error and facilitates data queries/sorting. The master list<sup>8</sup> of 6 and 8-digit basin names that will be used in this and future integrated lists is given in Table 6 below.

<sup>&</sup>lt;sup>8</sup> Table derived from the State of Maryland Water Resources Administration's July 12, 1976 document describing all the 6 and 8-digit basin names and codes adopted for the purposes of developing the State's Water Quality Standards (Code of Maryland Regulations § 26.08.02).

Table 6: Standardized basin names used in the current 2002 Integrated 303(d) List.

BASIN NAME	BASIN CODE	BASIN NAME	BASIN CODE
Aberdeen Proving Ground	02130705	Conowingo Dam Susquehanna River	02120204
Anacostia River	02140205	Corsica River	02130507
Antietam Creek	02140502	Deep Creek Lake	05020203
Assawoman Bay	02130102	Deer Creek	02120202
Atkisson Reservoir	02130703	Dividing Creek	02130204
Atlantic Ocean	02130101	Double Pipe Creek	02140304
Back Creek	02130604	Eastern Bay	02130501
Back River	02130901	ELK RIVER	021306
Baltimore Harbor	02130903	Evitts Creek	02141002
Big Annemessex River	02130207	Fifteen Mile Creek	02140511
Big Elk Creek	02130606	Fishing Bay	02130307
Bird River	02130803	Furnace Bay	02130609
Bodkin Creek	02130902	Georges Creek	02141004
Bohemia River	02130602	Gilbert Swamp	02140107
Breton Bay	02140104	GUNPOWDER RIVER	021308
Brighton Dam	02131108	Gunpowder River	02130801
Broad Creek	02120205	Gwynns Falls	02130905
BUSH RIVER	021307	Honga River	02130401
Bush River	02130701	Isle of Wight Bay	02130103
Bynum Run	02130704	Jones Falls	02130904
Cabin John Creek	02140207	Kent Island Bay	02130511
Casselman River	05020204	Kent Narrows - Prospect Bay	02130504
Catoctin Creek	02140305	Langford Creek	02130506
CHESAPEAKE BAY (PROPER)	021399	Liberty Reservoir	02130907
CHESTER RIVER	021305	Licking Creek	02140506
Chincoteauge Bay	02130106	Little Choptank River	02130402
CHOPTANK RIVER	021304	Little Conococheaque Creek	02140505
Christina River	02130607	Little Elk Creek	02130605
COASTAL AREA	021301	Little Gunpowder Falls	02130804
CONEWAGO CREEK	020503	Little Patuxent River	02131105
Conewago Creek	02050301	Little Tonoloway Creek	02140509
Conococheaque Creek	02140504	Little Youghiogheny River	05020202
Loch Raven Reservoir	02130805	Pocomoke Sound	02130201
Lower Chesapeake Bay	02139998	POCOMOKE RIVER	021302
Lower Chester River	02130505	Port Tobacco River	02140109
Lower Choptank River	02130403	Potomac River Allegany County	02140508
Lower Elk River	02130601	Potomac River Frederick County	02140301
Lower Gunpowder Falls	02130802	Potomac River Lower tidal	02140101
Lower Monocacy River	02140302	Potomac River Middle tidal	02140102
Lower North Branch Potomac			
River	02141001	Potomac River Montgomery County	02140202
Lower Pocomoke River	02130202	Potomac River Upper tidal	02140201
LOWER POTOMAC RIVER	021401	Potomac River Washington County	02140501
Lower Potomac River area			
Virginia Drainage	02140112	Prettyboy Reservoir	02130806
LOWER SUSQUEHANNA			
RIVER	021202	Rock Creek	02140206
Lower Susquehanna River	02120201	Rocky Gorge Dam	02131107
Lower Wicomico River	02130301	Sassafras River	02130610
Lower Winters Run	02130702	Savage River	02141006
Magothy River	02131001	Seneca Creek	02140208
Manokin River	02130208	Severn River	02131002

BASIN NAME	BASIN CODE	BASIN NAME	BASIN CODE
Marsh Run	02140503	Sideling Hill Creek	02140510
Marshyhope Creek	02130306	Sinepuxent Bay	02130104
Mattawoman Creek	02140111	South Branch Patapsco River	02130908
Middle Chesapeake Bay	02139997	South River	02131003
Middle Chester River	02130509	Southeast Creek	02130508
Middle Patuxent River	02131106	St. Clement Bay	02140105
Middle Potomac area Virginia			
Drainage	02140306	St. Mary's River	02140103
MIDDLE POTOMAC RIVER	021403	Stillpond-Fairlee	02130611
Middle River - Browns Creek	02130807	Swan Creek	02130706
Miles River	02130502	Tangier Sound	02130206
Monie Bay	02130302	Tonoloway Creek	02140507
Nanjemoy Creek	02140110	Town Creek	02140512
NANTICOKE RIVER	021303	Transquaking River	02130308
Nanticoke River	02130305	Tuckahoe Creek	02130405
Nassawango Creek	02130205	Upper Chesapeake Bay	02139996
Newport Bay	02130105	Upper Chester River	02130510
NORTH BRANCH POTOMAC			
RIVER	021410	Upper Choptank River	02130404
North Branch Potomac River area			
West Virginia Drainage	02141007	Upper Elk River	02130603
Northeast River	02130608	Upper Monocacy River	02140303
Octoraro Creek	02120203	Upper North Branch Potomac River	02141005
Other West Chesapeake Bay		Upper Potomac River area West	
Drainages	02131005	Virginia Drainage	02140513
Oxon Creek	02140204	Upper Pocomoke River	02130203
PATAPSCO RIVER	021309	UPPER POTOMAC RIVER	021405
Patapsco River Lower North			
Branch	02130906	WASHINGTON METROPOLITAN	021402
		Washington Metropolitan area	
PATUXENT RIVER	021311	Virginia Drainage	02140209
Patuxent River lower	02131101	WEST CHESAPEAKE BAY	021310
Patuxent River middle	02131102	West River	02131004
Patuxent River upper	02131104	Western Branch	02131103
Piscataway Creek	02140203	Wicomico Creek	02130303
Wicomico River	02140106	YOUGHIOGHENY RIVER	050202
Wicomico River Headwaters	02130304	Youghiogheny River	05020201
Wills Creek	02141003	Zekiah Swamp	02140108
Wye River	02130503		

The standardized names used above are, in most cases, only marginally different than the names used in the prior listings and are still recognizable as the same basins. As per adoption of the standardized names, Table 7 below identifies the basin name changes made from the original 1996 and 1998 listings in the current 2002 Integrated 303(d) List.

Table 7: Corrections made to the original 1996 and 1998 basin names based upon standardization in the current 2002 Integrated 303(d) list.

1996 and 1998 303(d) List Basin Names Used	Standardized Name Adopted for the 2002 303(d) List	
Upper Pocomoke	Upper Pocomoke River	
Cove Road Beach, Nanticoke River	Nanticoke River	
Choptank Marine Beach	Upper Choptank River	
Evetts Creek	Evitts Creek	
Solomons Island Harbor, Patuxent River	Patuxent River lower	
Town Creek, Patuxent River	Patuxent River lower	
Battle Creek, Patuxent River	Patuxent River lower	
Island Creek, Patuxent River	Patuxent River lower	
Trent Hall Creek, Patuxent River	Patuxent River lower	
Washington and Persimmons Creek, Patuxent River	Patuxent River lower	
Buzzard Hall Creek, Patuxent River	Patuxent River lower	
Mill Creek, Patuxent River	Patuxent River lower	
Patuxent Mainstem to Ferry Landing	Patuxent River lower	
Patapcso/Back River	Patapsco River	
North Branch of Potomac River	North Branch Potomac River	
Little Patuxent River/Dorsey Run east of Route 1	Little Patuxent River	
Lower N Branch Potomac River	Lower North Branch Potomac River	
Lower North Branch of Potomac River	Lower North Branch Potomac River	
Susquehanna River/Conowingo Dam	Conowingo Dam Susquehanna River	
Kent Narrows/Prospect Bay	Kent Narrows – Prospect Bay	
Kent Island	Kent Island Bay	
Atkinson Reservoir	Atkisson Reservoir	
Patuxent River/Ferry Landing to Mouth	Patuxent River lower	
Patuxent River/Rt. 214 to Ferry Landing	Patuxent River middle	
Patuxent River/Rocky Gorge Dam to Rt. 214	Patuxent River upper	
Potomac River/Smith Point to Mouth	Potomac River Lower tidal	
Potomac River/Marshall Hall to Smith Point	Potomac River Middle tidal	
St. Clement's Bay	St. Clement Bay	
Nanjimoy Creek	Nanjemoy Creek	
Potomac River/Chain Bridge to Marshall Hall	Potomac River Upper tidal	
Potomac River/Monocacy River to Chain Bridge	Potomac River Montgomery County	
Potomac River/Washington County	Potomac River Washington County	
Upper North Branch of Potomac River	Upper North Branch Potomac River	
Triadelphia Reservoir	Brighton Dam	
Ducket Reservoir	Rocky Gorge Dam	

Other corrections to the original listings include: (1) in the 1996 list, an extra zero was inserted in the eight digit basin codes for the Youghiogheny River (listed as 050202001 instead of the correct 8-digit code of 05020201), the Little Youghiogheny River (listed as 050202002 instead of 05020202), Deep Creek (listed as 050202003 instead of 05020203), and the Casselman River

(listed as 050202004 instead of 05020204); (2) the wrong basin name was used in 1998 for the St. Mary's Lake listing (listed with the incorrect basin name of Piscataway Creek, when it should have been St. Mary's River); and, (3) Monie Bay was listed under the wrong basin code (02130202) in 1998 and has been changed to the correct basin code 02130302 in the current list. All of the above listing errors were corrected in the current list to designate the proper basin codes and basin names.

## 5.5 <u>TMDLs Completed</u>

As per the 2002 Integrated Water Quality Monitoring and Assessment Report guidance issued by EPA, MDE has identified (Part-4a of the current List) those waterbodies where a TMDL has been completed. Table 8 below also identifies those waterbodies for which a TMDL has been completed or submitted to EPA even though it may not yet have EPA approval.

Table 8: Waters for which MDE has completed a TMDL.

BASIN NAME	BASIN CODE	SUBBASIN NAME	IMPAIRMENT	DATE COMPLETED
Manokin River	02130208		Nutrients	TMDL Submitted 8/8/00; Approved 2/13/01
Seneca Creek	02140208	CLOPPER LAKE	Sediments	TMDL Submitted 12/27/01
Assawoman Bay	02130102		Nutrients	TMDL Submitted 12/31/01
Isle of Wight Bay	02130103		Nutrients	TMDL Submitted 12/31/01
Evitts Creek	02141002	LAKE HABEEB	Nutrients	TMDL Submitted 12/23/99; Approved 3/2/00
Lower Wicomico River	02130301		Nutrients	TMDL Submitted 12/28/00; Approved 6/22/01
Lower Wicomico River	02130301	TONY TANK LAKE	Nutrients	TMDL Submitted 10/5/99; Approved 12/10/99
Wicomico Creek	02130303		Nutrients	TMDL Submitted 12/14/00; Approved 1/29/01
Wicomico River Headwaters	02130304		Sediments	TMDL includes Johnson Pond (JP) Submitted 12/26/00; (JP) Approved 2/13/01
Baltimore Harbor	02130903		Toxics	TMDL Submitted 12/27/00; Approved 3/20/01
Wicomico River Headwaters	02130304		Nutrients	TMDL includes Johnson Pond (JP) submitted 12/26/00; (JP) Approved 2/13/01
Chincoteague Bay	02130106	BIG MILL POND	Nutrients	TMDL Submitted 12/10/01
Little Patuxent River	02131105	CENTENNIAL LAKE	Nutrients	TMDL Submitted 12/27/01
Little Patuxent River	02131105	CENTENNIAL LAKE	Sediments	TMDL Submitted 12/27/01
Seneca Creek	02140208	CLOPPER LAKE	Nutrients	TMDL Submitted 12/27/01
Little Youghiogheny River	05020202		Nutrients	TMDL Submitted 12/14/00; Approved 1/29/01
Jones Falls	02130904		Toxics	TMDL includes Lake Roland (LR) Submitted 11/9/00; (LR) Approved

BASIN NAME	BASIN CODE	SUBBASIN NAME	IMPAIRMENT	DATE COMPLETED
				3/28/01
Back River	02130901		Toxics	TMDL Submitted 7/26/99; Approved 12/17/99
Antietam Creek	02140502		Nutrients	TMDL Submitted 12/27/01
Swan Creek	02130706		Nutrients	TMDL Submitted 12/20/01
Stillpond-Fairlee	02130611		Nutrients	TMDL Still Pond/Fairlee[includes Fairlee Creek(F), Still pond (S) and Worton Creek (W)] F-Submitted 2/10/98, Approved 3/18/99; S-public review ends 12/17/01; W- Public Review ends 11/9/01, Submitted 12/3/01
Sassafras River	02130610		Nutrients	TMDL Submitted 12/20/01
Marshyhope Creek	02130306		Nutrients	TMDL Submitted 12/27/00; Approved 2/13/01
Western Branch	02131103		Nutrients	TMDL (BOD) Submitted 12/3/99; Approved 6/6/00
Port Tobacco River	02140109		Nutrients	TMDL Submitted 2/16/99; Approved 3/18/99
Bohemia River	02130602		Nutrients	TMDL Submitted 12/14/00; Approved 1/29/01
Savage River	02141006		Nutrients	WQA (water quality analysis) Submitted 12/28/00; Approved 4/16/01
Little Youghiogheny River	05020202	BROADFORD LAKE	Nutrients	TMDL Submitted12/23/99; Approved 3/2/00
Middle Chester River	02130509		Sediments	TMDL Submitted 3/10/99; Approved 8/24/99
Middle Chester River	02130509		Nutrients	TMDL Submitted 3/10/99; Approved 8/24/99
Corsica River	02130507		Nutrients	TMDL Submitted 4/7/00; Approved 5/9/00
Upper Pocomoke River	02130203	ADKINS POND	Sediments	TMDL Submitted 12/7/01
Upper Pocomoke River	02130203	ADKINS POND	Nutrients	TMDL Submitted 12/7/01
Transquaking River	02130308		Nutrients	TMDL Submitted T (Transquaking)-1/3/00, C (Chicamacomico)-2/28/01; Approved T-3/9/00; C-2/28/01
Lower Wicomico River	02130301	TONY TANK LAKE	Sediments	TMDL Submitted 10/5/99; Approved 12/10/99