

# ***MDEStat Meeting***

## ***January 5, 2009***



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Shari T. Wilson, Secretary

Sue Battle-McDonald, Stat Director

# Table 1: Fish Tissue Data

	FY05 Actual	FY06 Actual	FY07 Actual	FY08 Actual
Percent of sampled areas that meet two-meal-per-month MDE standard for PCB	60%	64%	*64%	No new data
Percent deviation from allowable PCB concentration found in sampled recreational fish (white perch)	-13%	-13%	†73%	No new data
Percent of sampled areas that meet two-meal-per-month MDE standard for mercury	68%	69%	+88%	No new data
Percent deviation from allowable mercury concentration found in sampled recreational fish (black bass)	-5%	-2%	-34%	No new data
<del>Percent of sampled areas that meet two-meal-per-month EPA standard for pesticides</del>				
<del>Percent deviation from allowable pesticide concentration found in sampled recreational fish (catfish, eel, or other appropriate species of your choice)</del>				

\* Included in the calculation for this percentage were sampling areas for which PCB data were not available. For the purpose of fish consumption advisories these areas were only sampled for concentration of mercury in fish tissue.

† The threshold concentration used for this calculation was 88 ppb. It is not known what threshold value was used for FY05 and FY06 however, it is possible the old threshold of 175 ppb was used because if used for FY07 the result would be -12.57%.

+ Included in the calculation for this percentage were sampling areas for which mercury data were not available. For the purpose of fish consumption advisories these areas were only sampled for concentration of PCBs in fish tissue.

## Table 2: Potomac TMDL

Source Category	Baseline lb/year	TMDL lb/year	Reduction
<i>Potomac @ Chain Bridge</i>	<i>36.23</i>	0.73	98%
<i>Lower Basin Tributaries</i>	<i>6.30</i>	0.90	86%
<i>Direct drainage</i>	<i>24.24</i>	0.91	96%
WWTP	1.68	0.15	91%
CSO	6.66	0.13	98%
<i>Atmospheric deposition</i>	<i>6.77</i>	0.48	93%
Contaminated Sites	0.03	0.02	28%
Total	3.32	3.32	96%

# Table 3: PCB Average Sludge Concentrations from Wisconsin

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<i>Low</i>	<i>High</i>	<i>Year</i>
31	202	1984
15	164	1984
7	86	1986
6	185	1987
2.51	170.0	1991
1.1	26	1991

Wisconsin (older data; dry weight; ppm)

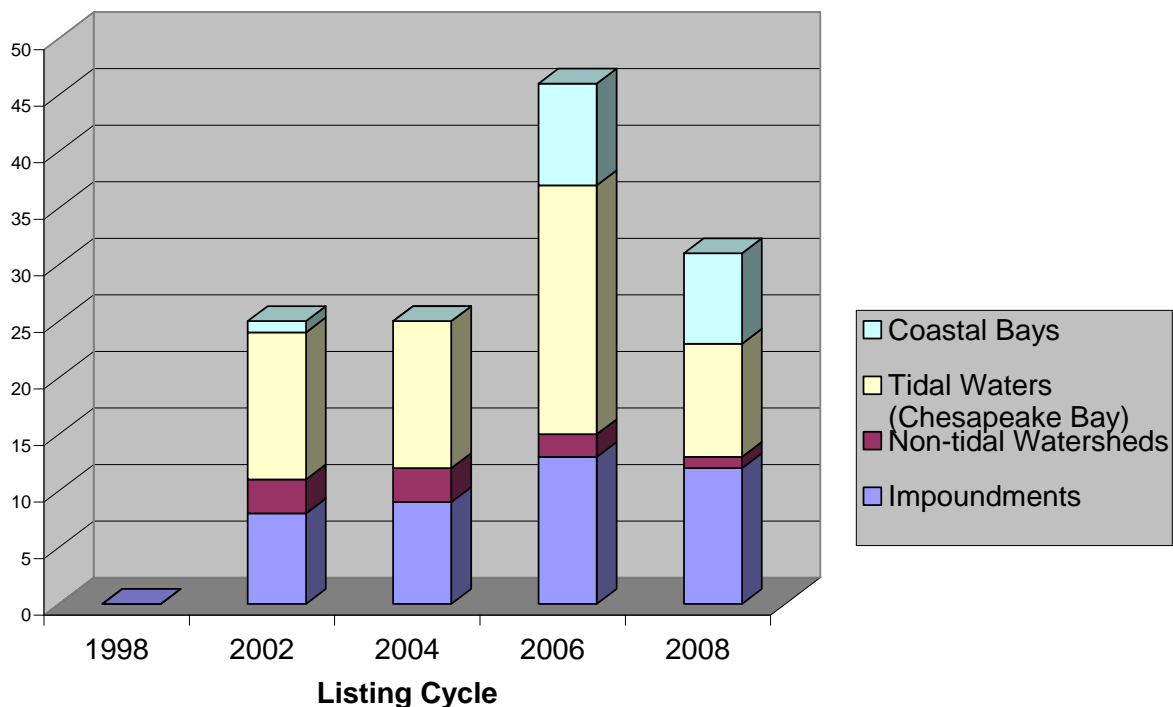
# Table 4: Nutrient Listings – Impaired Waters with a TMDL Category 4(a) & 5

Category	Waterbody Type	1998	2002	2004	2006	2008
4a	Impoundments	0	8	9	13	12
	Non-tidal Watersheds	0	3	3	2	1
	Tidal Waters (Chesapeake Bay)	0	13	13	22	10
	Coastal Bays	0	1	0	9	8
	Total	0	25	25	46	31
5	Impoundments	16	12	11	5	6
	Non-tidal Watersheds	35	29	28	27	23
	Tidal Waters (Chesapeake Bay)	69	53	53	46	40
	Coastal Bays	5	4	5	7	7
	Total	125	98	97	85	76

Note: Specific SOPs were followed for calculating these numbers for the Chesapeake Bay segments. Chesapeake Bay segments can be listed for two species of nutrients (total phosphorus and total nitrogen) at the same time as well as listed multiple times for the different designated uses within the segment (i.e. open water, deep water, deep channel, migratory spawning and nursery, etc). As a result, only one nutrient listing was counted for each Chesapeake Bay segment. The only exception to this rule was for the segment PATMH. In this segment a TMDL had been approved for only a limited portion of the segment, and so, as a result, this segment is counted both in the category 4a table as well as the category 5 table.

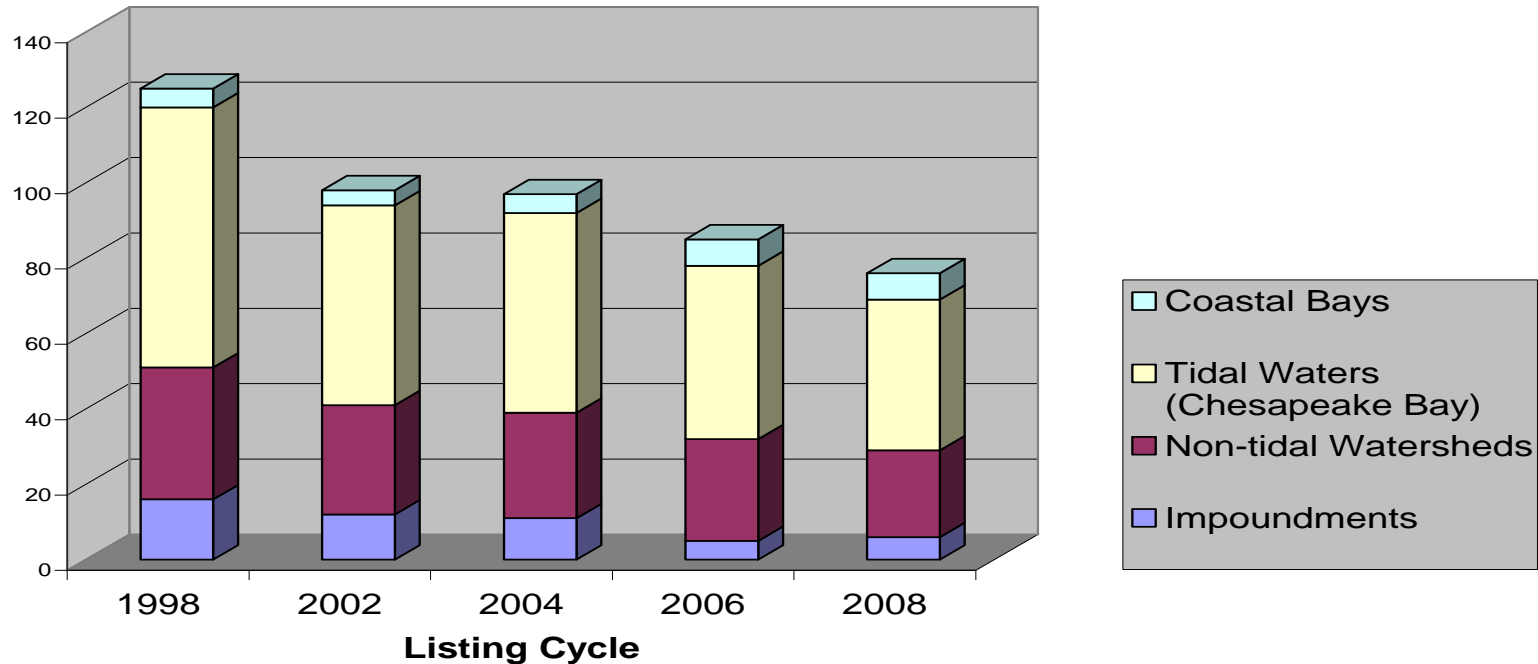
# Nutrient Listings – Impaired Waters with a TMDL Category 4(a)

Nutrient - Impaired Waters with a TMDL (Category 4a)



# Waters Impaired by Nutrients per 303(d) Listing Category 5

## Waters Impaired (Category 5) by Nutrients Per 303(d) Listing Cycle



# Table 5: Bacterial Listings Category 4(a) & 5

303(d) Listing Cycle						
Category		1998	2002	2004	2006	2006
4a	Beaches	0	0	0	0	0
	Non-tidal Streams	0	0	0	8	10
	Tidal Shellfish Harvesting Areas	0	0	0	53	58
	Other Tidal Waters	0	0	0	1	1
	Total	0	0	0	62	69
Category		1998	2002	2004	2006	2006
5	Beaches	2	0	1	12	5
	Non-tidal Streams	2	25	22	17	7
	Tidal Shellfish Harvesting Areas	0	0	73	22	10
	Other Tidal Waters	47*	40*	4	3	2
	Total	51	65	100	54	34

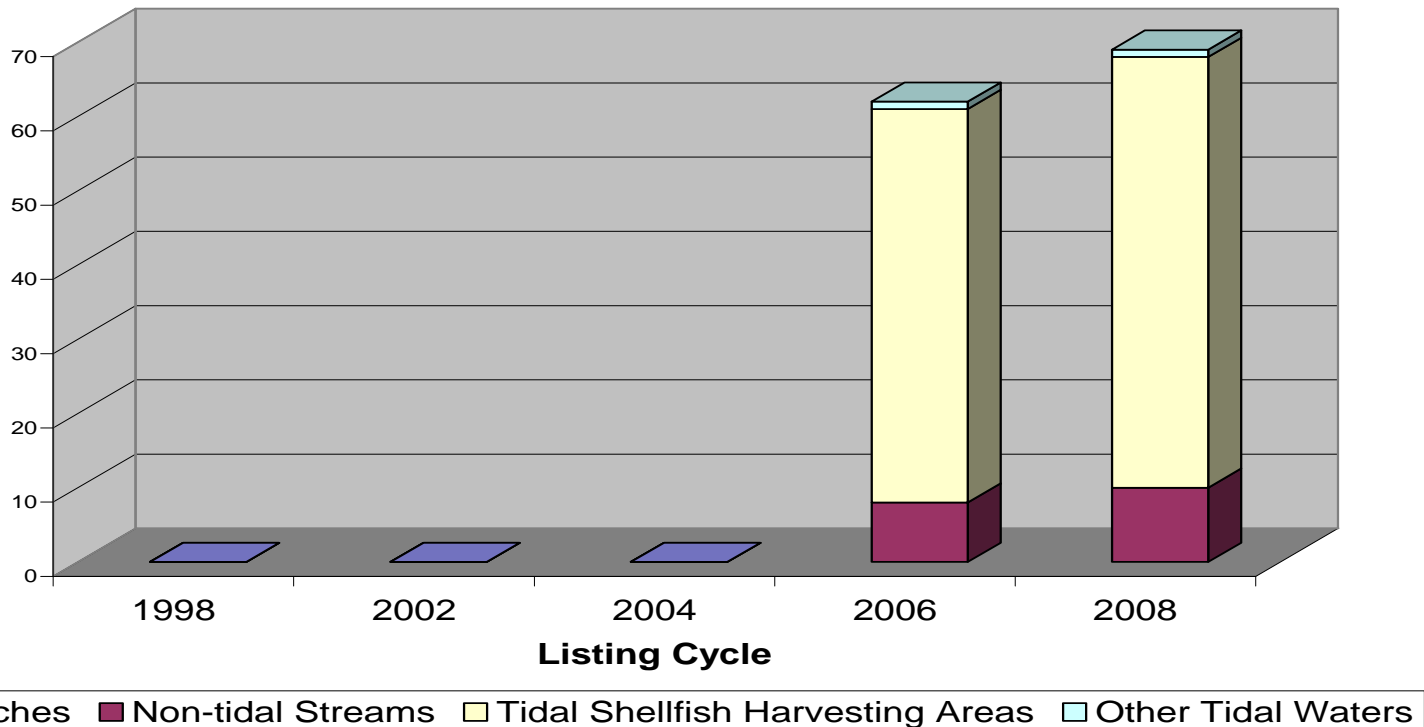
\* During both of these lists (the 1998 and the 2002), no distinction was made as to whether a tidal bacteria listing was related to the shellfish harvesting designated use or the water contact use.



# Bacterial Listings (TMDL Completed) Category 4a

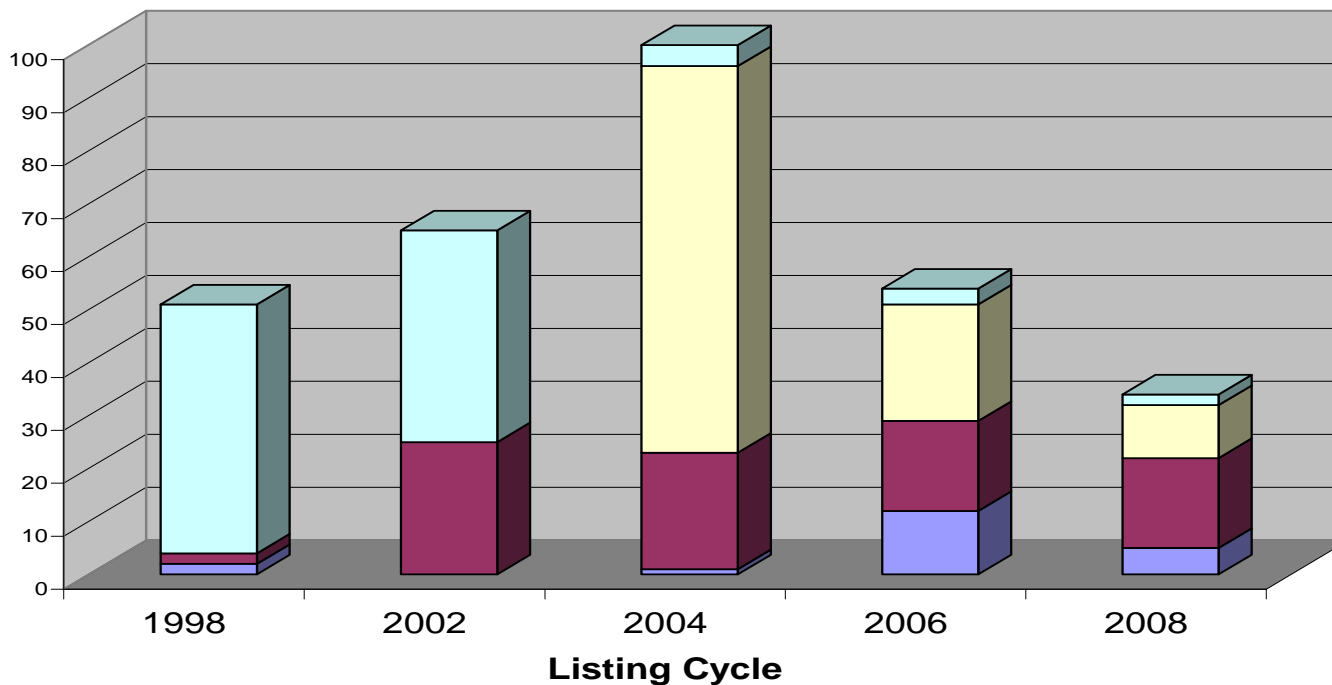
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**Category 4a (TMDL Completed) Bacteria Listings**



# Bacteria Listing by Water Body Type (Impaired) Category 5

Category 5 (Impaired) Bacteria Listings by Water Body Type



■ Beaches ■ Non-tidal Streams ■ Tidal Shellfish Harvesting Areas ■ Other Tidal Waters

# Table 6: MDE MFR Data on TMDLs

Performance Measures	FY 2006 Actual	FY 2007 Actual	FY 2008 Actual	FY09 Projected
Percent of TMDLs and Water Quality Analyses <sup>a,b</sup> (WQAs) submitted in accordance with agreed-upon TMDL submittal schedule	115%	100%	173% <sup>c</sup>	100%
Number of TMDLs and WQAs submitted in accordance with agreed-upon TMDL submittal schedule <sup>a,c</sup>	69	47	55 <sup>d</sup>	30
Number of new or renewed NPDES permits issued that incorporate approved TMDL wasteload allocations	4	4	3*	12
Percent of total required TMDLs completed <sup>a</sup>	44%	49%	56%	63%

\* WMA comment on this number: "By far the main reason that we did not issue more permits is the failure of the EPA to approve the sediment TMDLs submitted to them in 2007 for the Lower and Upper Monocacy, Antietam Creek, Catocin Creek, and Double Pipe Creek. All together, there are over 60 WWTPs in those watersheds, or ~ 1/4 of the total number of the permitted WWTPs in the State. If these TMDLs had been approved in a timely manner as anticipated, we would have gotten credit for issuing at least 10 or more NPDES permits in FY08 with TMDL limits."

SSA notes on this table:

<sup>a</sup> Calculation is based on the federal fiscal year i.e. FY 2007 is based on federal fiscal year 2007, etc. The MOU with EPA calls for a production schedule on a federal fiscal year (FFY) basis running from Oct. 1 through Sept. 30 each year.

<sup>b</sup> A Water Quality Analysis determines if water quality standards are currently being met. If they are, the waterbody may be removed from the impaired waters list and a TMDL is unnecessary. If water quality standards are not met, TMDL development proceeds unless a remedy has been identified for immediate implementation.

<sup>c</sup> In the Final 2008 Integrated Report of Surface Water Quality in Maryland, the new Chesapeake Bay segmentation was incorporated. The new segmentation has caused changes in the reported numbers previously displayed. For comparison purposes, all of the reported numbers have been updated.

<sup>d</sup> A number of impaired waters were delisted in the 2008 303d listing cycle that are attributed to the TMDL accounting framework.