

2019 Annual Baltimore Harbor and Curtis Creek/Bay PCB TMDL
Assessment

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Prepared by
Anne Arundel County
Department of Public Works
Watershed Protection and Restoration Program

With support from
Biohabitats, Inc.
2081 Clipper Park Road
Baltimore, Maryland 21211

Anne Arundel County 2019 Update on Progress Toward Meeting the Baltimore Harbor PCB TMDL WLA

Anne Arundel County (the County) submitted the Baltimore Harbor and Curtis Creek/Bay Polychlorinated Biphenyls (PCB) TMDL Restoration Plan as part of the County's 2016 MS4 Annual Report.

Consistent with the Baltimore Harbor and Curtis Creek/Bay Polychlorinated Biphenyls (PCB) TMDL Restoration Plan, PCB load updates were modeled based on the Center for Watershed Protection Watershed Treatment Model (WTM) adapted for PCBs. The model was updated to compute the 2019 progress in PCB load reduction. Progress is tracked independently for each subwatershed. The results of the 2019 progress model update are shown in Table 1 with the 2011 baseline, 2015 progress, 2017 progress, 2018 progress and wasteload allocation (WLA) included for comparison.

Table 1		
	Curtis Creek/Bay Subwatershed (PCBs in grams/year)	Baltimore Harbor Subwatershed (PCBs in grams/year)
2011 Baseline	262.89	454.55
2015 Progress	262.09	453.33
2017 Progress Update	259.68	451.08
2018 Progress Update	258.58	449.34
2019 Progress Update	258.37	449.40
WLA	17.09	40.45

The model update included revising values for non-structural BMP implementation of street sweeping and inlet cleaning to reflect 2019 actions. Additionally, BMP retrofits implemented in FY19 were added to the structural BMPs accounting. The breakdown of reductions from structural and non-structural BMPs are shown in Table 2.

Table 2		
	Curtis Creek/Bay Subwatershed (PCBs in grams/year)	Baltimore Harbor Subwatershed (PCBs in grams/year)
Reduction from Structural BMPs	0.22	0.00
Reduction from increased actions in Non-Structural BMPs (Street sweeping and inlet cleaning)	-0.01	-0.06
Total Reduction (FY19)	0.21	-0.06

During FY19 the County retrofitted 2 BMPs in Curtis Creek/Bay and 0 BMPs in Baltimore Harbor subwatersheds, representing treatment of approximately an additional 17 acres of impervious in Curtis Creek/Bay and 0 acres of impervious in Baltimore Harbor. In FY19, street sweeping covered 181 acres and 34 acres monthly in Curtis Creek/Bay and Baltimore Harbor subwatersheds respectively. Additionally, inlet cleaning addressed 97 acres and 33 acres semiannually in Curtis Creek/Bay and Baltimore Harbor subwatersheds respectively. Inlet cleaning drainage areas were estimated from calculated street segment areas where inlet cleaning was reported. Values for the WTM update were computed based in the most up-to-date GIS data from the County MS4 Geodatabase and included files documenting restoration BMPs, street sweeping, and inlet cleaning.

Details of BMPS implemented in FY19 and their associated costs appear in Table 3.

TABLE 3										
Project Number	Project Name	Project	BMP Classification	PCB TMDL Watershed	Drainage Area Treated (Acres)	Impervious Area Treated (Acres)	Removal Efficiency (percent)	Status as of June 30, 2019	FY	Cost (in thousands of Dollars)
B554000	Manor House Lane/Sunny	Pond Retrofit	PWED	Curtis Creek	46.69	13.71	60	Complete	FY19	597
B554000	Towering Oaks Court Pond	Pond Retrofit	PWET	Curtis Creek	7.95	3.23	60	Complete	FY19	417

In addition to BMP retrofits, Anne Arundel County completed the development of a targeted PCB action strategy, one of the recommendations in the 2018 Restoration Plan. Following completion of the action strategy the County began collaborating with MDE's Integrated Water Planning Program staff to refine a scope of work for the development of a monitoring strategy to further investigate watershed sources of PCB. The County anticipates initiating monitoring in 2020.