

Baltimore Harbor and Curtis Creek/Bay PCB Total Maximum Daily Load
Restoration Plan

2018 Annual TMDL Assessment Report

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Watershed Protection and Restoration Program

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Anne Arundel County 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 2018 progress in PCB load reduction. Progress is tracked independently for each subwatershed. The results of the 2018 progress model update are shown in Table 1 with the 2011 baseline, 2015 progress, 2017 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
WLA	17.09	40.45

The model update included revising values for non-structural BMP implementation of street sweeping and inlet cleaning to reflect 2018 actions. Additionally, BMP retrofits implemented in FY18 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	0.59	0.94
Reduction from increased actions in Non-Structural BMPs (Street sweeping and inlet cleaning)	0.51	0.80
Total Reduction (FY18)	1.10	1.74

During FY18 the County retrofitted 3 BMPs in Curtis Creek/Bay and 2 BMPs in Baltimore Harbor subwatersheds, representing treatment of approximately an additional 37 acres of impervious in Curtis Creek/Bay and 12 acres of impervious in Baltimore Harbor. BMP project details and project costs are provided in Table 3 on the following page.

Table 3

Project Number	Project Name	Proposed Project	BMP Classification	PCB TMDL Watershed	Drainage Area Treated (Acres)	Impervious Acre Treated (Acres)	Removal Efficiency (percent)	Status as of June 30, 2018	FY	Cost (\$)
B554000	Redgate Court	Pond Retrofit	IBAS	Baltimore Harbor	21.25	7.78	95	Complete	FY18	104,000
B554000	227TH Street	Pond Retrofit	WEDW	Baltimore Harbor	11.46	4.25	80	Complete	FY18	101,000
B554000	Hospital Drive / Foxwell	Pond Retrofit	PWED	Curtis Creek	30.09	11.28	60	Complete	FY18	31,0002
B554000	Fox Cub Court	Pond Retrofit	PWED	Curtis Creek	16.19	6.67	60	Complete	FY18	480,000
B553700	Sawmill Hollins Ferry Rd	Pond Retrofit	IBAS	Curtis Creek	32.1	19.45	95	Complete	FY18	289,000

In FY2018, street sweeping covered 180 acres and 34 acres monthly in Curtis Creek/Bay and Baltimore Harbor subwatersheds respectively. Additionally, inlet cleaning addressed 107 acres and 42 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 on the most up-to-date GIS data available from the County MS4 Geodatabase and included files documenting restoration BMPs, street sweeping, and inlet cleaning.

In addition to BMP retrofits, Anne Arundel County initiated a contract in FY2018 to develop a targeted PCB action strategy, one of the recommendations in the 2016 Restoration Plan. The County worked in collaboration with MDE's Water and Science Services staff to refine a scope of work for the development of a targeted strategy to investigate watershed sources of PCB through monitoring. The County met with MDE personnel in March 2018 to discuss possible approaches for the strategy, reaching consensus to focus on continued discovery through monitoring in selected pilot catchment(s) in addition to sampling select stormwater ponds. The strategy will focus on the logistics of PCB monitoring and recommend a monitoring plan for implementation. Development of the strategy is currently in process and is scheduled to be completed May 2019.