

2019 Annual Patuxent River Watershed PCB TMDL Assessment

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Prepared by
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Department of Public Works
Watershed Protection and Restoration Program

With support from
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Anne Arundel County 2019 Update on Progress Toward Meeting the Patuxent River PCB TMDL SW-WLA

Anne Arundel County (the County) submitted the Patuxent River Polychlorinated Biphenyls (PCB) TMDL Restoration Plan to the Maryland Department of the Environment (MDE) in January of 2019.

Consistent with the Patuxent River PCB TMDL Restoration Plan, PCB load updates as of the end of fiscal year 2019 (FY2019), were modeled using the Chesapeake Assessment Scenario Tool (CAST) using total suspended solids (TSS) coupled with PCB sediment concentration factors to translate the sediment load and reductions to PCB loads and reductions. The results of the FY2019 progress model update are shown in Table 1 with the 2014 baseline, FY2018 progress, FY2019 progress and wasteload allocation (WLA) included for comparison.

Table 1 – Patuxent River PCB Loads	
	PCBs(grams/year)
2014 Baseline	25.41
FY2018 Progress	24.70
FY2019 Progress	24.69
WLA	0.03

The FY2019 progress update included additional BMP implementation and updating annual implementation of street sweeping and inlet cleaning to reflect FY2019 actions. The breakdown of reductions from structural and non-structural BMPs are shown in Table 2.

Table 2 – Patuxent River PCB Load Reductions	
	PCBs (grams/year)
Reduction from Structural BMPs	<0.01
Reduction from increased actions in Non-Structural BMPs (Street sweeping and inlet cleaning)	0.01
Total Reduction (FY2019)	0.01

During FY2019, the County retrofitted 1 BMP in the Patuxent River watershed, representing treatment of an additional 34.6 acres of impervious. Additionally, 0.12 acres of impervious surface were removed and 1.0 acre of tree planting occurred. In FY2019, street sweeping covered 7.5 acres of road and these areas were swept 26 times per year. Additionally, inlet cleaning addressed 2.7 acres of road area in the Patuxent River watershed.

Details of BMPs implemented in FY2019 and their associated costs appear in Table 3.

Table 3 – Patuxent River FY2019 BMP Implementation									
Project Number	Project Name	Project	BMP Classification	Drainage Area Treated/ Planting Area (Acres)	Impervious Area Treated/ Removed (Acres)	Removal Efficiency (percent)	Status as of June 30, 2019	FY	Cost (Dollars)
AA18RST000011	AJ & C Garfunkel	Pond Retrofit	Wet Pond	42.16	34.6	60	Complete	FY19	714,293

AA19APY000003	Ford Property	Impervious Surface Elimination	Impervious Surface Reduction	N/A	0.12	N/A*	Complete	FY19	50,903
AA19APY000004	Ford Property	Tree Planting on Pervious Urban	Tree Planting-Forest	1.00	NA	NA*	Complete	FY19	72,948

*Impervious Surface Reduction and Tree Planting BMPs are modeled in CAST as land use change BMPs.

In addition to BMP retrofits, Anne Arundel County is developing a detailed PCB monitoring strategy focused on source tracking to identify areas and specific sources of PCBs. The County is collaborating with MDE's Integrated Water Planning Program (IWPP) staff to refine the strategy. It is anticipated that the monitoring approach will be consistent with the approach for the Baltimore Harbor PCB TMDL and the Howard County portion of the Patuxent PCB TMDL. The County will coordinate with Howard County on these efforts where feasible. The County's goal is to initiate monitoring in 2020.