CHESAPEAKE BAY COMMISSION

Policy for the Bay• www.chesbay.us

MEMORANDUM

TO: Maryland Delegation of the Chesapeake Bay Commission
DATE: April 19, 2019
FROM: Mark Hoffman, Maryland Director
RE: Maryland's Draft Phase III Chesapeake Bay Watershed Implementation Plan

---

Last Friday, April 12th, the Administration released Maryland's Draft Phase III Chesapeake Bay Watershed Implementation Plan. This document, which is open for public comment until June 7th, details the approach the State will take to achieve the pollution-load reductions needed to bring Maryland into compliance with the TMDL by 2025. Given that this 199-page document will receive considerable public and media scrutiny over the next 45 days, this summary is intended to provide Delegation members an overview of the plan. During the delegation meeting in May, we will review the plan with representatives from MDE, DNR and MDA.

For the sake of simplicity this summary focuses on Nitrogen (N) reductions.

- The needed reductions:

The Task: Maryland's Nitrogen Loads (millions of pounds/year)	
2017 Actual Load	54.2
2025 Target	45.8
Reduction Needed	8.4
Planned Reductions in Phase III WIP	9.2

- Maryland is adopting a "feasibility approach" to achieve the 2025 goals, relying on those reductions that are most practical. This means Maryland recognizes that accelerated progress in both the wastewater and agricultural sectors will be largely responsible for achieving its 2025 restoration targets. Projected changes by sectors are as follows:

Nitrogen Source Sector	2017 Actual Loads	2025 Target	Change in Load	
	(M lbs/yr)	(M lbs/yr)	(M lbs/yr)	(percent)
Agriculture	22.4	18.0	-4.4	-20%
Natural	8.1	8.1	0.0	0%
Septic	3.1	3.1	0.0	1%
Stormwater	9.4	9.2	-0.2	-2%
Wastewater	11.3	6.5	-4.8	-41%
Total	54.2	45.0	-9.2	-17%

- Maryland outlines a set of 26 “key pollution reduction strategies” among the five major source sectors as follows (note: some of these are actions, like cover crops, are already being done and hence don’t contribute to additive reductions):

Sector	BMP Description	Lbs. N Reduced	Annual Costs
Agriculture	Conservation Technical Assistance (1 million acres of Conservation Plans + Design & Oversight of all BMPs implementation)	1.1 million/year	$ 13,817,000
	Nutrient Management Compliance	1.6 million/year	$ 3,100,000
	Cover Crops (470,000 acres planted annually)	2.3 million/year	$ 25,500,000
	Manure Transport (100,000 tons transported annually)	228,000/year	$ 2,000,000
	Verification of existing BMPs	87,500/year	$ 500,000
	Implementation of Additional BMPs (The Maryland Agricultural Water Quality Cost-Share (MACS) Program)	652,000	$ 9,275,000
Natural Lands	Upland Tree Planting and Streamside Forest Buffers (1,150 acres)	8,000	$ 1,683,920
	Wetland Restoration (175 acres)	600	$ 125,000
	Stream Restoration (6 miles)	2,500	$ 3,172,520
	Shoreline Management (Living Shoreline Technique) (3,000 ln ft)	150	$ 257,140
	Oyster Aquaculture (350,000 bushels)	10,000	$ 2,500,000
Septic	Best Available Technology (BAT) Upgrades (Based on roughly 920 BAT unit upgrades)	40,000	$ 10,100,327
	Connection to Wastewater Treatment Plants (WWTP) (Based on roughly 1,600 sewer connections)	16,800	$ 1,296,899
	Pumping (Not available until Septic Stewardship Plans developed by 2021)	-	TBD - Septic Stewardship
Stormwater	Complete current Phase 1 Municipal Separate Storm Sewer (MS4) permits restoration requirement (completion dates: 2018 and 2019) Approximately 20,000 impervious acres	85,000	$ 40,000,000
	Complete new Phase 1 MS4 restoration requirement (completion dates: 2023 and 2024) Approximately 17,500 impervious acres	90,000	$ 40,000,000

	Complete Current Phase 2 MS4 restoration requirement (completion date: 2025) Approximately 3,000 impervious acres	15,000	$ 5,000,000
	Miscellaneous implementation on non-MS4 counties (i.e. trading, trust fund) Approximately 400 impervious acres	5,000	$ 5,000,000
Wastewater	Complete Bay Restoration Fund (BRF)-Funded Enhanced Nutrient Removal (ENR) upgrades to 67 significant municipal wastewater plants	4,000,000	Fully Funded Pre-WIP III
	Continue funding ENR upgrades for non-significant municipal plants through the BRF (11 additional plants by 2025, for a total of 16)	25,000	$ 50,000,000
	Provide Operations and Management (O&M) Grant through the BRF for facilities achieving nitrogen discharge concentrations of 3.0 mg/L	425,000	$ 10,000,000
	Incentivize higher treatment levels (beyond 3.0 mg/L of nitrogen) through water quality trading and the Clean Water Commerce Act (through 2021)	No estimate	$ 10,000,000
	Complete upgrades to federal significant municipal plant	3,000	No state costs
	Continue minor industrial reductions	No estimate	No state costs
	Maintain achievement of significant industrial Waste Load Allocations	No planned additional reductions	No state costs
	Implement sewer projects to address combined sewer overflows (CSOs), sanitary sewer overflows (SSOs) and inflow and infiltration (I/I)	20,000	$ 40,000,000

- Based on the modeling outputs, it is projected that Maryland will remain below its N target until 2047.
- The annual costs to the state is $273 million/year. This does not include the estimated $1.6 billion that will be spent by local governments to achieve their MS-4 permit obligations.
- The WIP states that no new state-based fees or taxes are required moving forward if Maryland: (1) uses over-achievement by wastewater treatment plants while stormwater and septic sectors build capacity; (2) continues effective and consistent enforcement of existing environmental regulations; and (3) continues to fully fund state Chesapeake Bay

grant programs (e.g., 2010 Trust Fund, Bay Restoration Fund) and directs these resources in the most cost-effective manner possible.

- The WIP details issues challenging achievement of Chesapeake Bay restoration - climate change, population growth beyond 2025, Conowingo Dam and Local Implementation - and offers strategies to address each of these issues.
- The WIP summarizes State engagement with local governments in the development of the plan and their critical role in implementation.
- The WIP states that "to sustain Chesapeake Bay restoration over the long term and accommodate projected growth, Maryland will need to implement an adaptive growth policy through the accountability and adaptive management framework that regularly revisits sector-loading trends and provides sufficient offsets to stay under the state's pollution reduction targets."
- The WIP does not specifically identify any new legislative or regulatory proposals. In Appendix D, in discussing protection strategies for water quality and aquatic resource protection, there is a recommendation identify new or modifications of existing legislation, regulations, policy or ordinances to address protection gaps.

Additional Information

Maryland's complete Draft Phase III Chesapeake Bay Watershed Implementation Plan, as well as details on how to submit comments, can be found online at: Maryland's Phase III WIP.