



Department of the Environment

Maryland Chesapeake Bay Watershed Implementation Plan

Stormwater/MS4 Permit Compliance

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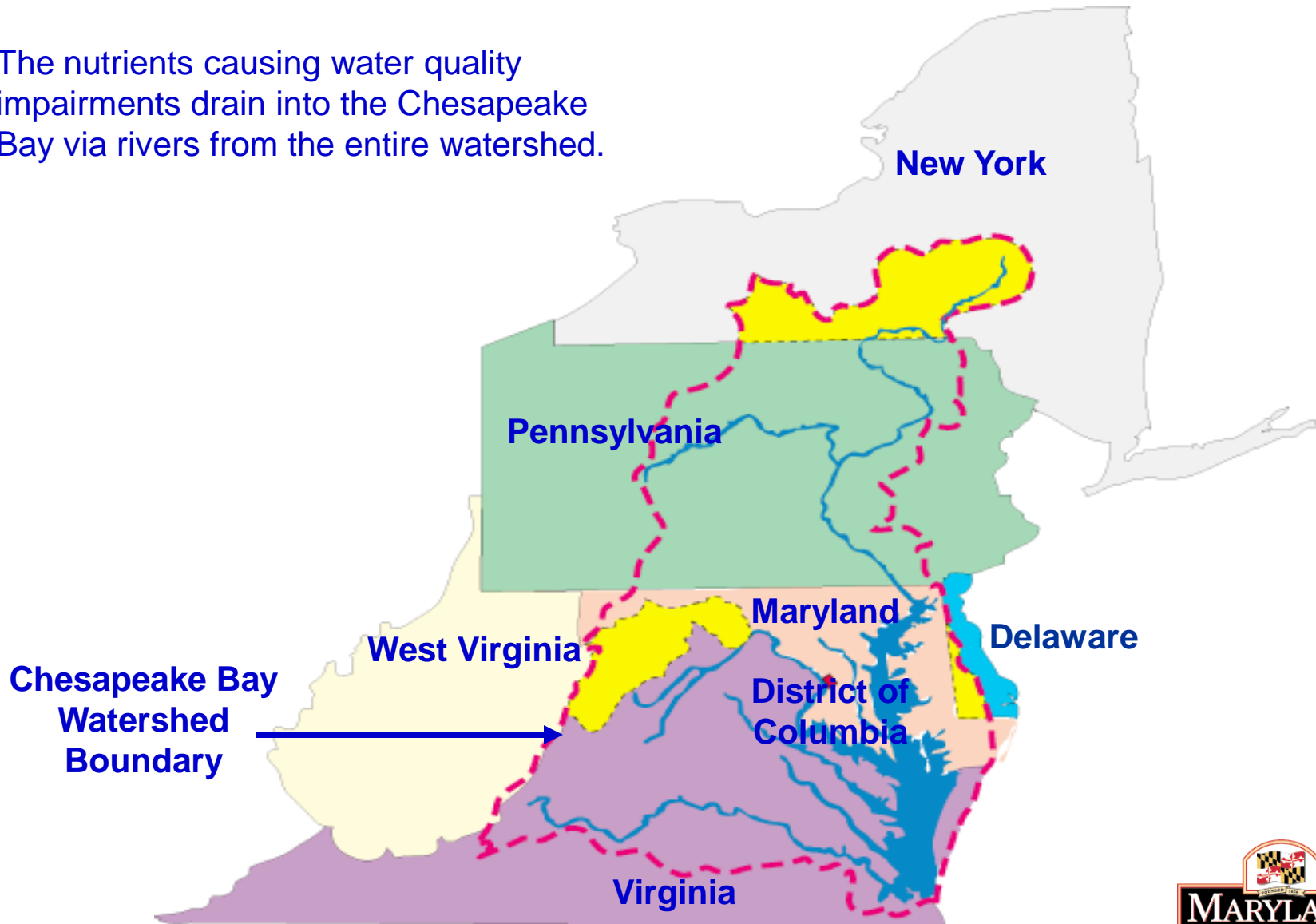
Maryland Water Quality Financing Administration

CIFA – November 3, 2015



Chesapeake Bay Watershed

The nutrients causing water quality impairments drain into the Chesapeake Bay via rivers from the entire watershed.





Ches. Bay Watershed Implementation Plan

Max Nitrogen Load (in millions of lbs/yr)

Jurisdiction	Baseline 1985	Interim Goal 2017	Final Target Goal 2025
DC	6.23	2.57	2.37
DE	5.39	3.82	3.39
MD	81.31	45.48	41.17
NY	15.72	9.60	8.85
PA	137.7	94.05	79.00
VA	90.17	58.80	52.59
WV	7.17	5.20	5.02
Total Watershed	343.69	219.53	192.39





Maryland Chesapeake Bay Total Maximum Nitrogen Loading Goal

Total Nitrogen (TN) Loading by Sector (Millions of lbs/year)

Sector	Progress Thru 2014	Final Target Load (2025)	Reduction Needed
Stormwater	9.78	7.55	2.23 (23%)
Agriculture	18.85	15.22	3.63 (19%)
Septic	2.83	1.85	0.98 (35%)
Forest	5.03	5.31	0%
Atmospheric	0.66	0.66	0%
Wastewater *	12.66	10.58	2.08 (16%)
Total	49.81	41.17	8.92 (18%)

MD1985 Baseline Load: ~81 million lbs/year

* Maryland expects to complete ENR upgrades at the Major WWTPs by 2017, and achieve 5.45M lbs/yr of nitrogen reduction (exceeding the 2.08 million lbs/yr target needed) with capacity available for future growth.





Est. Cost to Meet 2025 Target Nitrogen Reduction

Source Sector	Est. Phase II- WIP Capital Cost (millions)	Capital Cost per pound of Nitrogen Reduction
Wastewater Plants	\$2,368	\$ 400
Agriculture	\$ 928	\$ 200
Urban Retrofits - SW	\$7,388	\$ 3,800
Septic Systems	\$3,719	\$ 3,200
TOTAL	\$14,403	\$ 1,100





Stormwater MS4 Phase-1 Permits

Ten Major Jurisdictions

Baltimore City and Counties of Anne Arundel, Baltimore, Carroll, Charles, Frederick, Harford, Howard, Montgomery, and Prince George's.





Stormwater Fee Legislation

2012: HB987 required that the ten MS-4 Phase-1 permit jurisdictions shall establish a dedicated local SW fee to finance the “watershed protection and restoration fund”

2015: Repeal of mandatory fee. HB-863: Changed “shall” to “may” establish a SW fee or provide funding from other sources for deposit into the “watershed protection and restoration fund”





Stormwater Legislation - 2015

Added additional requirements:

- Develop a Financial Assurance Plan (FAP) every 2-year (starting 7/1/2016) for review & approval by MD Department of the Environment (MDE), to ensure likely compliance with 5-year MS-4 permit.
- FAP must include projected annual & 5-year BMP Costs; Revenues; Sources of Funds; Actions & Expenditures.
- If FAP deemed insufficient, MDE can fine*:

1st Offense: \$ 5,000/day; 2nd Offense: \$10,000/day - until FAP is deemed sufficient.

* Penalty collected is escrowed and is to be used by that County for SW-BMPs.





Stormwater Fee Implementation

New Fees: 6 Jurisdictions established significant new fee where none existed before - Baltimore City, Anne Arundel, Baltimore, Harford, Howard, and Prince George's Counties.

Revised Fees: 2 Jurisdictions revised fees -
Charles County: Separated stormwater fee from existing environmental service fee and increased it; Montgomery County: Restructured existing fee to comply with law, but kept it at about the same level.

Small/No Fees: 2 Jurisdictions - Frederick County established one cent per property fee; Carroll County: did not establish a fee.





Stormwater Fee – Current Status

Jurisdiction	Residential/yr*
Anne Arundel	\$34 - \$170
Baltimore City	\$40 - \$120
Baltimore County	\$14 - \$26
Carroll	Did not implement
Charles	\$35
Frederick	\$0.01 (Now Repealed)
Harford	\$12.50 (Now Repealed)
Howard	\$15 - \$90
Montgomery	\$29 - \$265
Prince George's	\$33 - \$62

* Most jurisdictions established a fee rate based on the amount of impervious surface on the property converted to equivalent residential unit (ERU) or impervious unit (IU)





Stormwater Fee Collection - Ten MS4 Phase-1 Entities

<u>Jurisdiction</u>	<u>Est. Revenue (\$M)</u>
Anne Arundel	\$14
Baltimore City	\$17
Baltimore County	\$24
Carroll County	\$ 0
Charles County	\$ 1
Frederick County	\$ 0
Harford County	\$ 0
Howard County	\$11
Montgomery County	\$23
Prince George's County	\$12
TOTAL	\$102

SW Fee Collection Mechanism: 6 entities collecting with property tax; 1 with water bills; 3 have no SW fee.





State Financial Support - Stormwater

- Chesapeake Bay 2010 Trust Fund: ~\$25M per year in Grant Funds.
- Bay Restoration Fund: ~\$50M per year in Grant Funds starting FY 2018. The SW projects compete for grant with other types of WQ projects (e.g., CSO/SSO, septic to sewer connections)
- Maryland Water Quality Revolving Loan Fund: Annual funding capacity ~\$130M per year (without bond leveraging) to provide below market interest rate loans to all types of WQ projects.





Stormwater Demand for SRF Loans

FFY 2015 WQSRF Project Priority List

Total Funding Request: \$646M

Total Stormwater BMPs: \$ 5M (<1% of total request)

Discussion/Q&A!





Maryland Department of the Environment

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