



Environmental Matters Committee

Briefing on the Bay Restoration Fund

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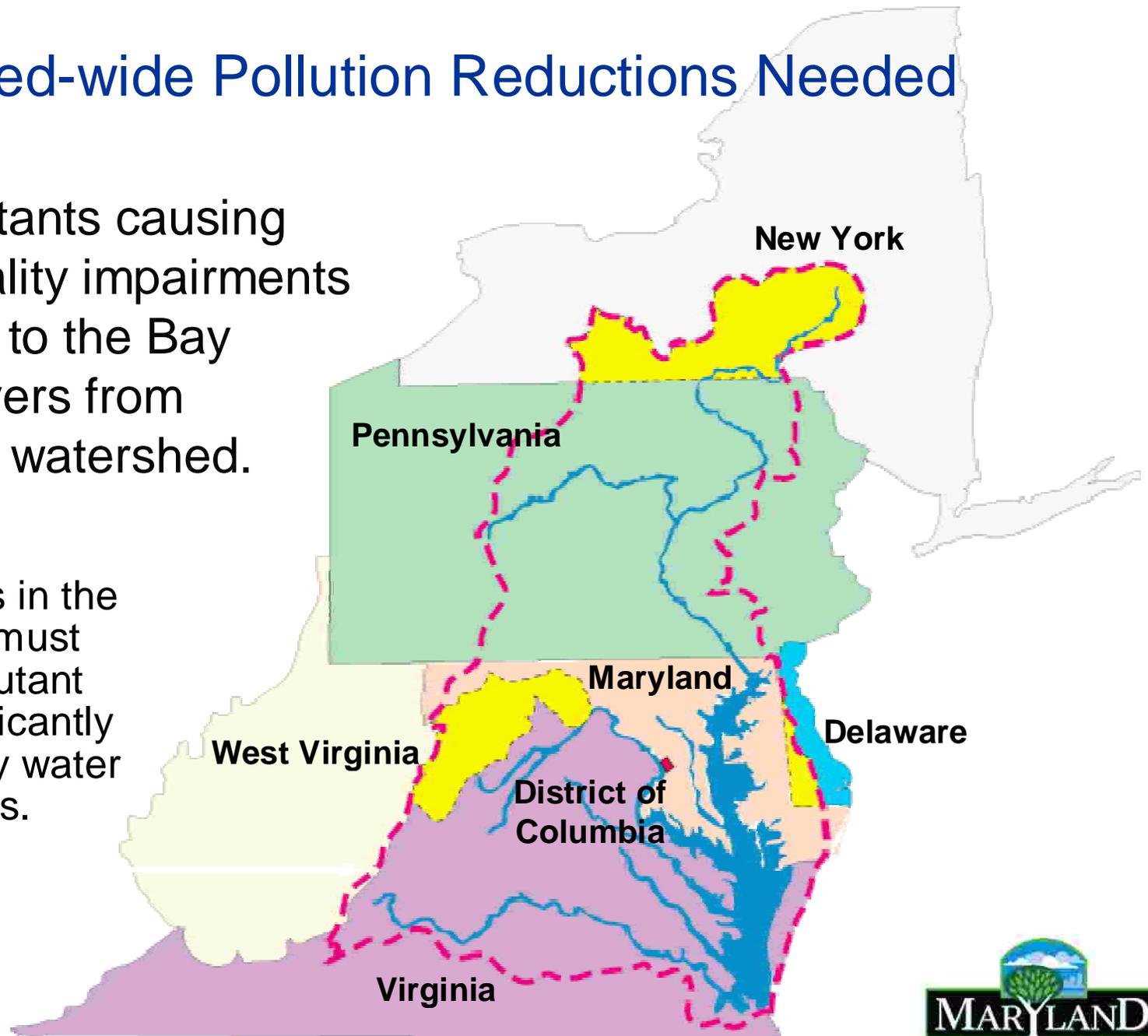
January 19, 2010



Watershed-wide Pollution Reductions Needed

The pollutants causing water quality impairments drain into to the Bay and its rivers from the entire watershed.

All 7 major jurisdictions in the watershed must reduce pollutant loads significantly to meet Bay water quality goals.



Cap Load Allocations by State

	Nitrogen Allocation (million pounds/year)	Phosphorus Allocation (million pounds/year)
PENNSYLVANIA	72	2.3
MARYLAND	37	2.9
VIRGINIA	51	6.0
DISTRICT OF COLUMBIA	2	0.3
NEW YORK	13	0.6
DELAWARE	3	0.3
WEST VIRGINIA	5	0.4
SUBTOTAL	183	12.8
CLEAR SKIES REDUCTION	-8	
BASIN-WIDE TOTAL	175	12.8



Bay Restoration Fund

- The legislation establishing the BRF was passed in 2004
- It set up two dedicated funds:
 - Wastewater treatment plant users pay \$30 per year into a fund to upgrade WWTPs
 - Onsite sewage disposal system users pay \$30 per year into a fund to upgrade septic systems and plant cover crops (the most cost-effective way to reduce nitrogen loading to groundwater and the Bay)



Bay Restoration Fund

January 2010 - over \$159 million in Bay Restoration Funds have been awarded toward ENR upgrades and:

12 facilities are operational

14 facilities are under construction

25 are under design

16 are in planning





Three Largest Treatment Plants

Back River, Patapsco and Blue Plains ENR upgrades combined will reduce 63% of the Total Nitrogen (TN) from point sources needed to meet the Bay loading cap

Facility	Reduction in Million Lbs/Year	% of TN Reduction achieved
Back River	2.2	19%
Patapsco	3.1	26%
Blue Plains (MD Portion)	2.1	18%
63 other plants	4.3	37%



Three Largest Treatment Plants

- **Patapsco**
 - 73 million gallons per day (MGD) facility serving communities in Baltimore City (32%), and Anne Arundel, Baltimore and Howard Counties (68%).
 - Construction Start: Dec 2009/Completion: May 2013
- **Blue Plains**
 - 370 million gallons per day (MGD) facility serving communities in Maryland (46% of the flow), DC (41%), and Virginia (13%).
 - Construction Start: Sept 2011/Completion: June 2015
- **Back River**
 - 180 million gallons per day (MGD) facility serving communities in Baltimore City (50%) and Baltimore County (50%).
 - Construction Start: Nov 2010/Completion: Nov 2016



Funding Shortfall for ENR Upgrades

ENR funding deficit is expected to start in FY 2012 and reach \$660 million by 2018. The BRF Advisory Committee is evaluating the following options in more detail prior to making recommendations:

- **Increasing the Bay Restoration Fund (BRF) fee, which is currently \$2.50 per month per Equivalent Dwelling Unit;**
- **Reducing the ENR grant, which currently is at 100% of eligible costs;**
- **Reprioritizing the upgrade of the ENR projects, while delaying or not undertaking the upgrade of certain WWTPs;**
- **Seeking BRF statutory changes that allow the Bay fees to make debt service payment on bonds issued by local governments (for ENR eligible cost) that have a term of up to 30 years.**
- **Redirect \$5 M/yr from operation to capital funding**





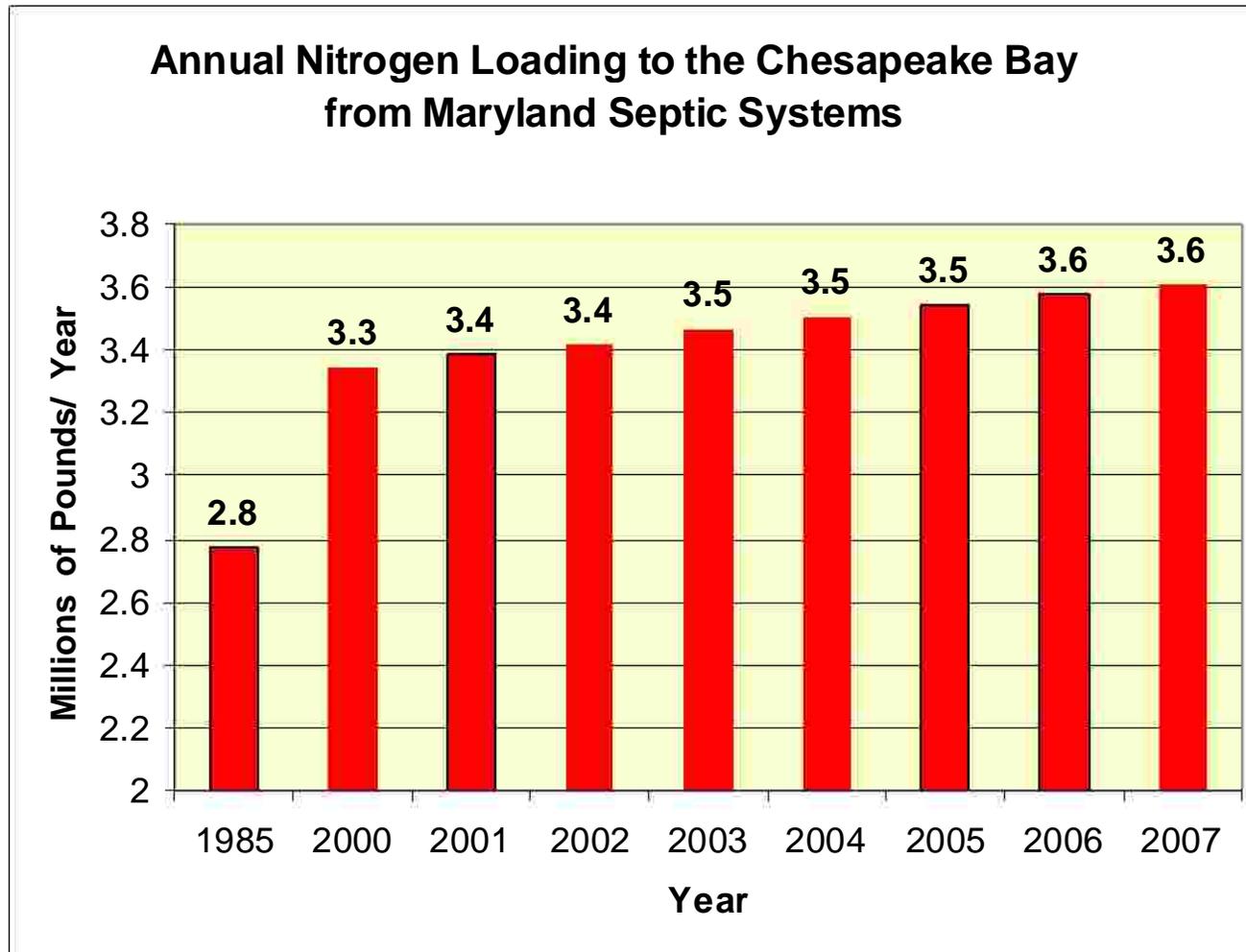
Septic System Impacts

- ~420,000 septic systems statewide
- ~51,000 septic systems in the Critical Area
- ~2,000 new and ~2,000 replacements per year state-wide
- ~240 new and ~240 replacements per year in the Critical Area
- Estimated 12 pounds per year from each system reaches surface waters
- ~ 7% of the annual nitrogen load to the Bay from Maryland.
- BAT technology can remove up to half of the nitrogen from each septic system





Annual Nitrogen Loadings from Septic Systems In Maryland are increasing

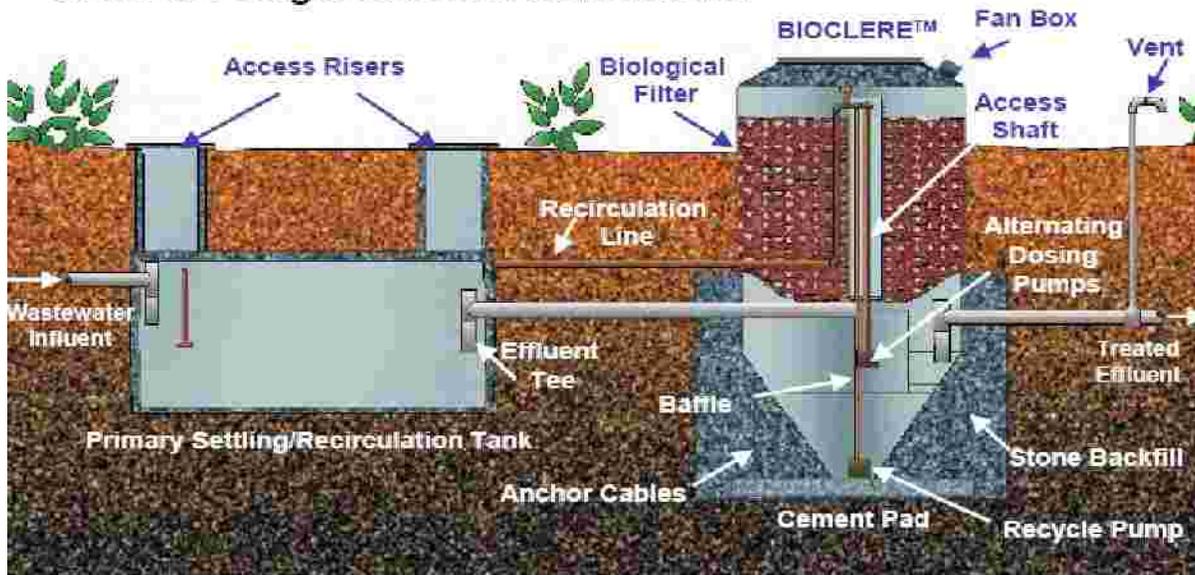




BRF OSDS Program Overview

- Revenue stream: \$8 – \$9 M million per year
- Average installation cost: \$10,000-\$12,000/EDU
- Bay goal: Upgrade 100% of existing systems
- Awards grants to Counties and direct grants to citizens.
- Conducts technology assessments, approves BAT systems (14 currently)

Standard Single Bioclere Installation:



SINGLE FAMILY HOMES



BRF OSDS Fund

Cumulative funding:

- \$28 million in funding for OSDS upgrades
 - \$ 16 million administered by 14 counties
 - \$ 12 million MDE direct grants
 - 1955 systems upgraded so far
- \$20 million in funding for cover crops
 - 240,000 acres in 2008-09





Senate Bill 554

- Any septic system for a newly constructed building or replacement system in the Critical Area must include Best Available Nitrogen Removal Technology (BAT)
- The Department shall provide assistance through the BRF, based on available funds
- Effective October 1, 2009



Current Status

- Significant increase in demand
 - Total systems installed through Sept 08: 375
 - Total systems installed through Dec 09: 1,955
- Continuing to provide grants for failing systems in the Critical Area
- 2,800 systems on the waiting list
 - Only 1% of the upgrades on the waiting list are for new systems in the Critical Area



Future Funding Strategy

- Applications and bid packages on the waiting list until July 1, 2010, when available funding will be allocated in priority order to:
 - 1) Failing systems in the Critical Area
 - 2) Other failing systems
 - 3) New or replacement systems in the Critical Area
 - 4) Other new or replacement systems
- Implement income-based grant criteria effective January 1, 2010
 - Owner-occupied primary residences - grants based on federal income tax brackets for 2008
 - Commercial, non-residential, rental, second residences - 25% grants



Income-based funding criteria

Grants for upgrades to owner-occupied primary residences:

% grant	Tax rate	2008 taxable income Married couples filing jointly or Household Income	2008 taxable income Single filers
100	10% to 15%	Up to \$65,100	Up to \$32,550
75	25%	\$65,101 to \$131,450	\$32,551 to \$78,850
50	28%	\$131,451 to \$200,300	\$78,851 to \$164,550
25	33% to 35%	Over \$200,301	Over \$164,551



Payment to Contractors

- Beginning with applications approved on or after January 3, 2010, the Department will ask homeowners to authorize payment directly to the vendor.
- Once the homeowner has indicated that the work has completed to satisfaction, MDE will issue the amount of the grant to the contractor.