

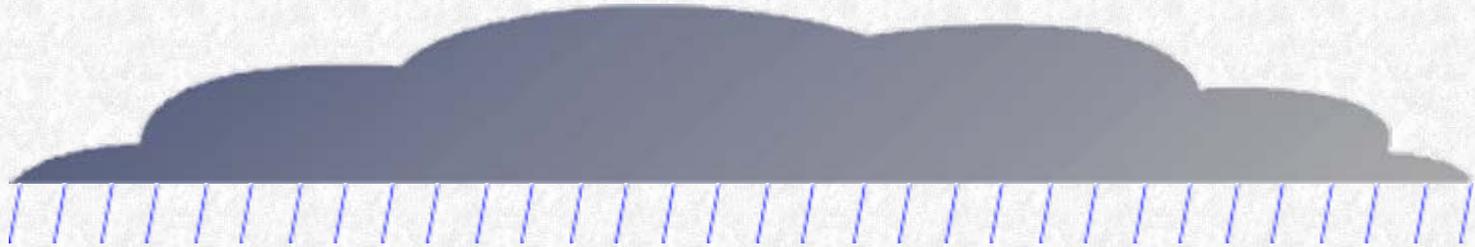


MARYLAND

DEPARTMENT OF THE ENVIRONMENT

Stormwater Management Act of 2007

Briefing to Environmental Matters Committee



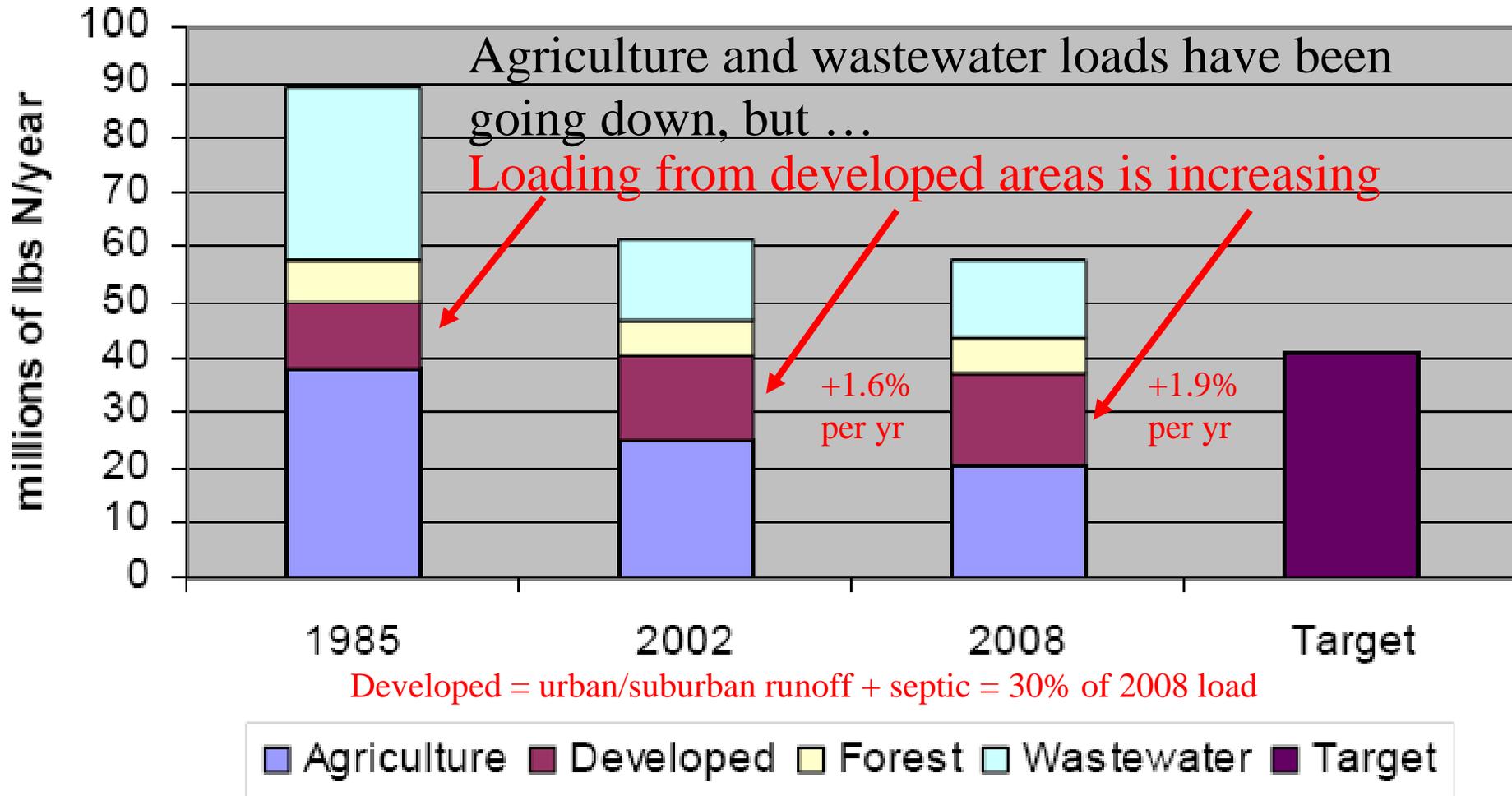
January 26, 2010

Robert M. Summers
Deputy Secretary
Maryland Department of the Environment





Nitrogen Loading to the Bay from Maryland Sources





EPA Expectations

- **TMDL and Phase I Watershed Implementation Plans to be completed by December 2010**
- **Interim (2017) and Final (2025) Nutrient and Sediment Target Loads**
- **2-year Milestones**
- **Account for Growth and Development anticipated 2011-2025**
- **Contingencies for Slow or Incomplete Implementation**





EPA Consequences

- Expand National Pollutant Discharge Elimination System (NPDES) permit coverage to currently unregulated sources
- Object to NPDES permits and increase program oversight
- Require net improvement offsets
- **Require additional pollution reductions from point sources**
- Increase and target federal enforcement and compliance assurance in the watershed
- Condition or redirect EPA grants



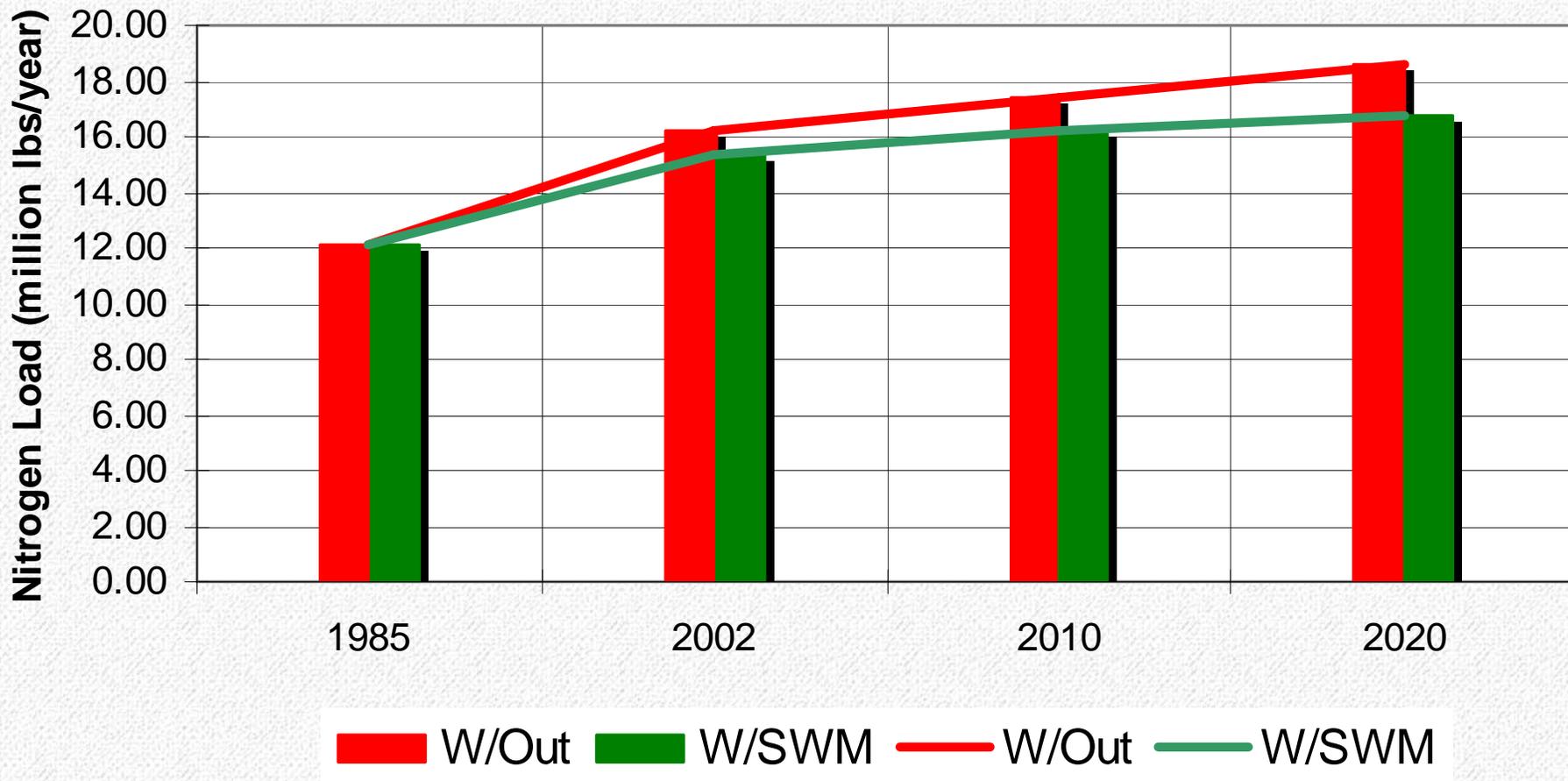
Stormwater Management Act of 2007

- Requires implementation of Environmental Site Design (ESD) to the maximum extent practicable to minimize load increases from development.
- ESD: “using small-scale stormwater management practices, nonstructural techniques, and better site planning to mimic natural hydrologic runoff characteristics and minimize the impact of land development on water resources”





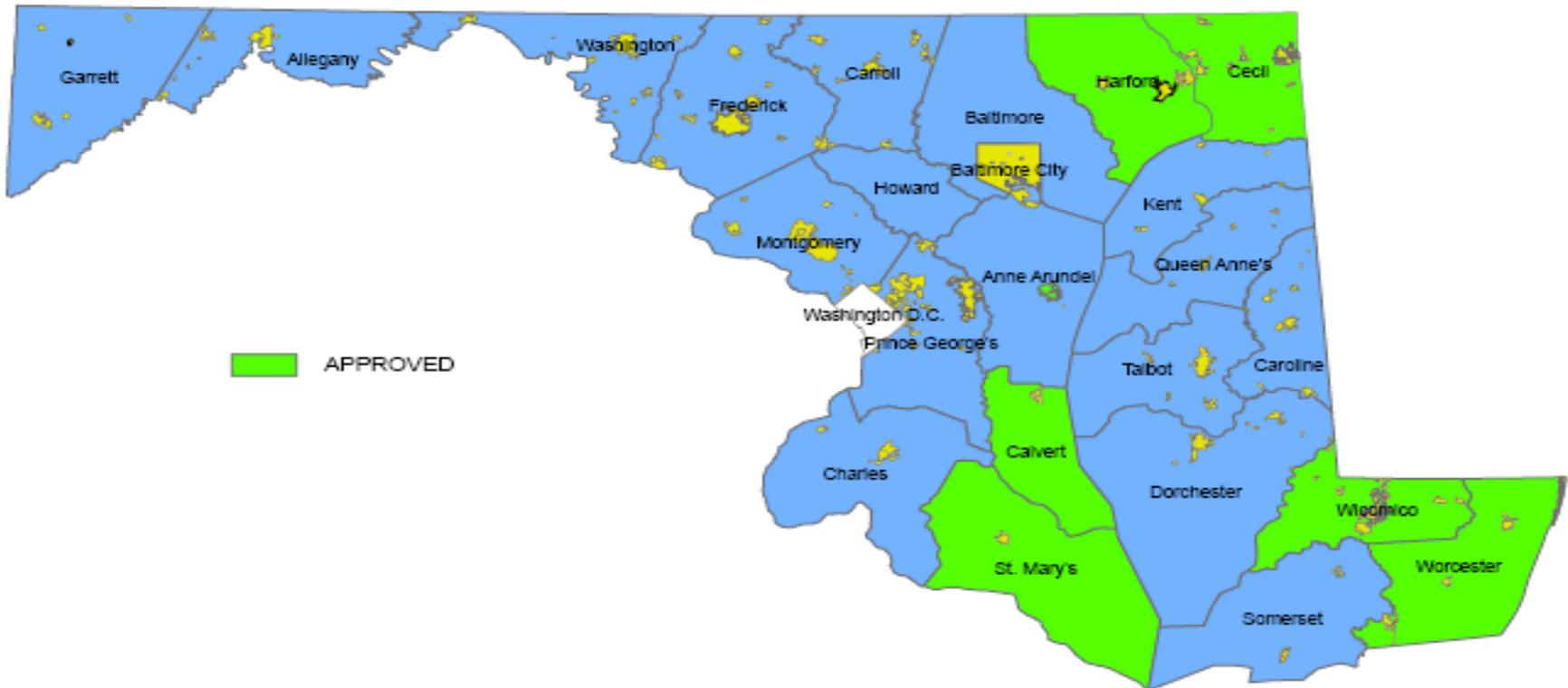
New regulations will slow the loading increase





Approved local ordinances

Stormwater Management Ordinance Submittal and Approval Tracking





Grandfather Provisions

- Law passed in April 2007
- Stakeholder process from 2007 – 2008
- Regulations proposed October 2008
- Regulations final May 2009
- Projects with final approval prior to May 2010 follow old rules
- Have 2 years to break ground to May 2012
- 5 years will have passed since law was signed

Based on recent comments, MDE is developing additional local guidance regarding the use of variances for exceptional circumstances.





New Development Threshold

An approving agency shall require that stormwater management be addressed according to new development requirements when existing site impervious area is less than or equal to 40%.



North Bay Environmental Education Camp

Redevelopment in Cecil County



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Determining Site Imperviousness

- **The local approving agency may allow lands protected by forest preservation, conservation easements, or other mechanism to be subtracted from the total site area.**



Waivers/Watershed Management Plans

- **If the local approving agency has established a watershed management plan, alternate quantitative waiver and/or redevelopment provisions may be applied.**

Local watershed management plans will be needed to implement the Bay TMDL requirements.





Redevelopment Policy

Proposed redevelopment project designs shall:

- a. Reduce existing impervious area by 50% within the LOD;**
- b. Implement ESD to the MEP to provide water quality treatment for 50% of the existing impervious area within the LOD; or**
- c. Use a combination of a. and b.**

Or...





Redevelopment Policy

Alternative stormwater management measures:

- a. Structural stormwater BMP;**
- b. Off-site BMP; or**
- c. Any combination of impervious area reduction, ESD implementation, structural practices or off-site treatment.**





Redevelopment Policy

An approving agency may develop other policies that may include:

- a. Retrofitting existing structural BMPs;**
- b. Stream restoration;**
- c. Watershed management plans;**
- d. Trading policies that involve other pollution control programs;**
- e. Fees paid in an amount specified by the approving agency; or**
- f. Other practices**





Encouraging Redevelopment

- **Regulations provide flexibility and options to integrate local priorities into watershed specific goals.**
- **Redevelopment is also encouraged by reduced requirements compared to new development**
- **New development requirements are double the redevelopment treatment requirements**





Redevelopment Requirement Comparison

Impervious Area	Old Regs (20%)	New Regs (50%)	If New Development (100%)
1.0 acre existing	0.20 acre (1 inch)	0.50 acre (1 inch)	
1.0 acre proposed			1.0 acres (2.7 inch)
Volume Requirements	690 cu. ft.	1,724 cu.ft.	9,311 cu. ft.



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NO PARKING
LOADING DOCK
VEHICLES WILL
BE TOWED AT
OWNERS EXPENSE

NO PARKING
LOADING DOCK
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Maryland
at Baltimore
University of
Maryland
Medical Center
VA Medical
Center

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Based on the 2000 Design Manual
ESD is already in use all over MD



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Ocean City
Porous asphalt



Off-Site Stormwater Management



Baltimore City School Retrofits:
Impervious area reduction
Rooftop disconnection to rain garden



Alternative Stormwater Management Measures



**Martin Plaza
Redevelopment**

**Baltimore County and
Martin Financial Assoc.**



Public – Private Partnership

**WQ treatment of 85 acres
of existing impervious**

Stony Run Stream Restoration



December, 2006



Stony Run Stream Restoration



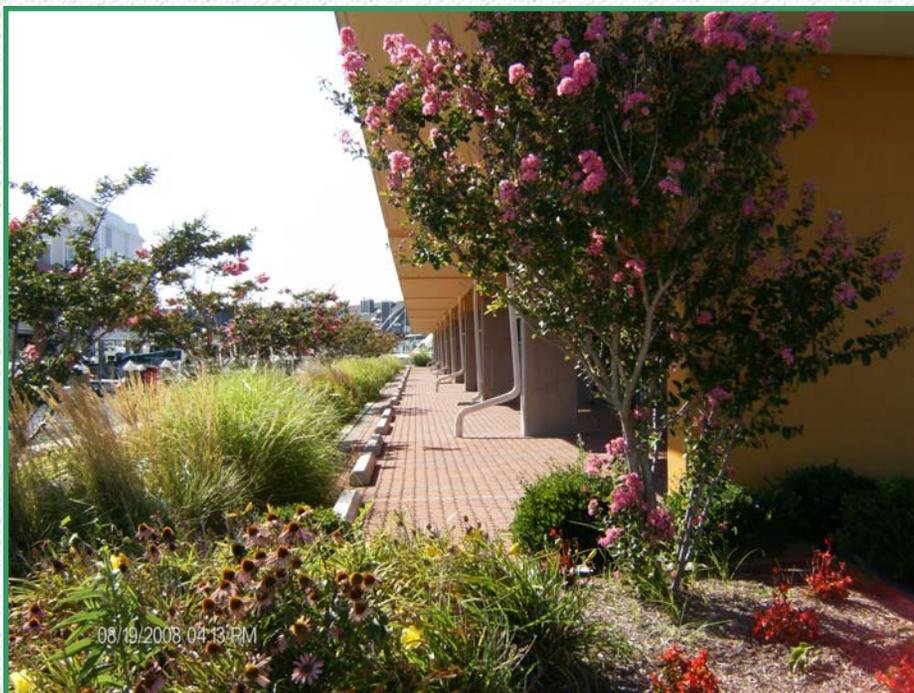
February, 2007



July, 2008



Next steps



- Continue working with localities, development and engineering communities to implement the new regulations
- Provide additional local government guidance on flexibility provided by variance, waiver and watershed management plan provisions
- Education and outreach – Design Examples and Workshops