

URBAN STORMWATER: A PERFECT STORM FOR CHANGE



Green Streets,
Green Jobs,
Green Towns



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“Only Major Growing Source of Water Pollution” – U.S. EPA

Over half of stream miles do not support healthy populations of aquatic biota



www.watersheds.org

Extreme rain events doubled in Midwest over last 50 Years



Boston Globe, 2013



850 billion gallons of untreated wastewater/stormwater per year



NRDC, 2013

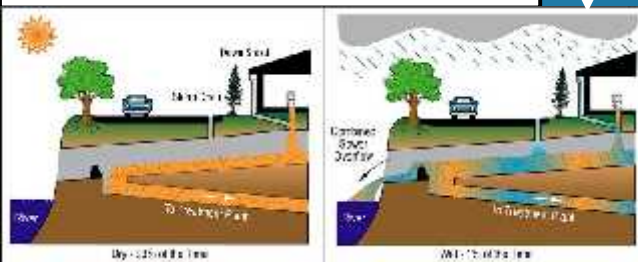
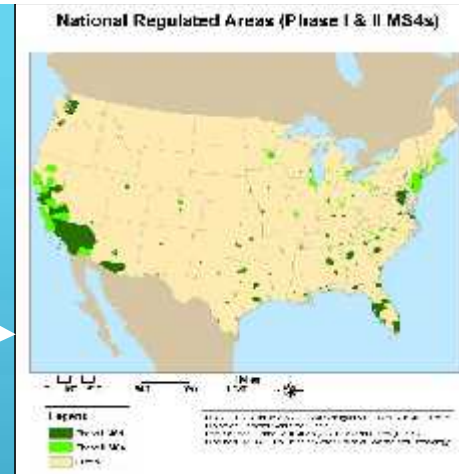
2014 had 8th worst dead zone in Chesapeake Bay – 1 mi³



THE REGULATORY CONTEXT - STORMWATER/WET WEATHER

▶ Regulated Entities

- ▶ **7,500** communities regulated municipal separate storm sewer systems (MS4s) in the U.S.
- ▶ **772** combined sewer systems in the U.S.
- ▶ **Growing interest** and public demand for green stormwater infrastructure



TRADITIONAL STORMWATER MANAGEMENT



Collect



Convey



Detain

Green Stormwater Infrastructure



Infiltrate



Retain



A DRIVER OF CHANGE...THE CHESAPEAKE BAY

- TMDL load caps established in 2010
- GOAL: Practices in place by **2025** to achieve allocated reductions (-25%)
 - Multi-jurisdictional (6 States + DC)
- State Watershed Implementation Plans (WIPs)
 - Urban Sector targets assigned
 - 2 year Milestones + Accountability
- MS4 permits written to align with TMDL



MS4 PERMITS DRIVERS

➤ EXAMPLES:

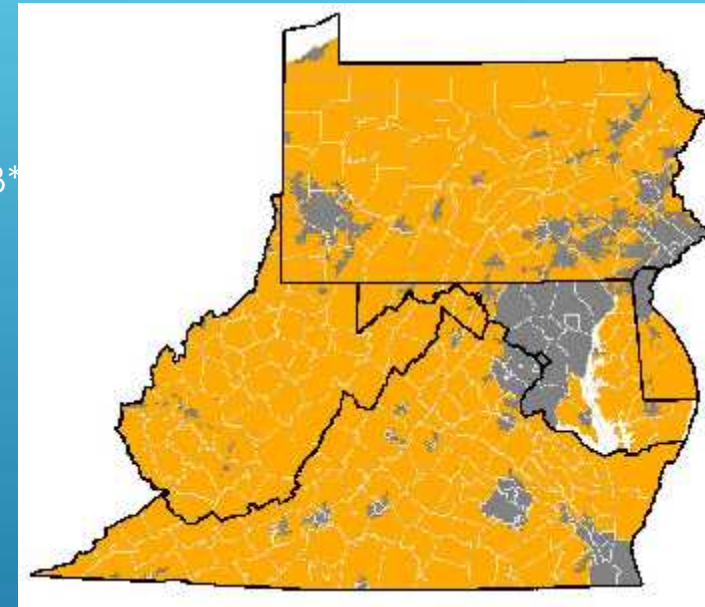
➤ MD – 20% restoration of regulated impervious surface area in permit term

- ▶ Prince George's County, MD
 - ▶ 8-15,000 impervious acres to be retrofitted – MS4 ~ \$1.2-2.25B*
- ▶ Montgomery County, MD
 - ▶ 4,300 impervious acres to be retrofitted – MS4 ~ \$645M*

*Assumes cost of urban retrofit of \$150,000/impervious acre

➤ DC – On-site retention performance standard – 90% storm capture (1.2") for new or redevelopment; Enforceable Green provisions

- ▶ 415 impervious acres to be retrofitted – MS4 ~ \$6.2M*
- ▶ \$100M of GI pledged in CSS areas – CSO = Total of 106.2M



OTHER DRIVERS

- Growing urbanized acres
- High rates of non-attainment of standards in urban streams
- Low rates of compliance with traditional SW permit requirements
- Growing regulatory demands to **IMPROVE** water quality – not just hold the line – TMDLS (For Chesapeake Bay and Local Waters)



OTHER DRIVERS

- High cost to retrofit the Built environment – demanding multiple benefit solutions
 - Community benefit
 - Economic development & jobs
 - Resiliency & Sustainability
- Move to decentralized, innovative green solutions



THE PERFECT STORM

- “Faster, Cheaper, Greener” Solutions for Communities
 - Integrated Green Infrastructure (GI)
 - New Financing tools
 - Retrofit Cost Reduction
- Compliance and Beyond



EPA's Commitment to Support Innovation

- Sustainable Financing: Promoting market approaches & **Community-Based Public Private Partnerships (CBP3)**
- Improved MS4 Permits – Measureable, Enforceable
 - Linked to TMDL performance/WQ Improvement
- GI: “Green Streets, Green Jobs, Green Towns”
- Watershed Based Approaches to MS4 Compliance
- Use of 3rd Party Delivery Systems – self audits



FASTER, CHEAPER, GREENER SOLUTIONS!



FIRST CBP3 DEMONSTRATION PROJECT! – R3



USEPA Press Release January 10, 2014

EPA, MDE, Prince George's County Announce Public, Private Partnership Model to Accelerate Green Stormwater Controls and Support Local Job Creation

(WASHINGTON – January 10, 2014)

The U.S. Environmental Protection Agency, Maryland Department of Environment (MDE) and Prince George's County today announced a \$100 million initiative to demonstrate how community-based, public-private partnerships can spur green infrastructure-driven stormwater controls, while creating thousands of local jobs and boosting economic growth.

EPA and MDE have joined forces with Prince George's County to provide technical and regulatory support for developing and implementing the Prince George's County Urban Stormwater Retrofit Public-Private Partnership Demonstration Pilot. ...





BEST PRACTICES IN PROGRESS

- ✓ Seeking **partnerships** with more **local governments** to demonstrate affordable financing approaches, linked to sustainable performance in storm water management
- ✓ EPA and our partners available to assist



QUESTIONS



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