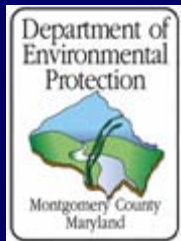


Montgomery County NPDES MS4 Permit

Anacostia Watershed Partnership
Steering Committee
February 26, 2009
Bob Hoyt



Evolution of our program: photos left to right
Downstream ponds; on-site rain gardens using volunteers; next generation stewardship



Presentation Overview

- Background and Process
- Accelerating Watershed Restoration
- Achieving Wasteload Allocations
- Cost Implications
- Regional Coordination



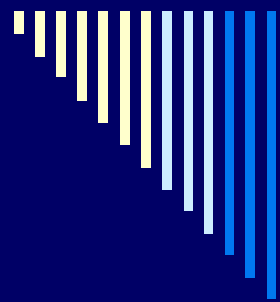
Background and Process

- Issued by Maryland Department of the Environment to control pollution from storm drain system for 5 year period
- Applies to entire County, including Public Schools, except areas covered under other MS4 permits
 - Cities of Gaithersburg, Rockville, and Takoma Park
 - Lands under the control of State (including M-NCPPC, WSSC, and SHA) or Federal agencies
- Final Determination for third generation Permit published February 25. Final on March 19 unless a contested case hearing filed.



Summary of Significant New *Permit Requirements*

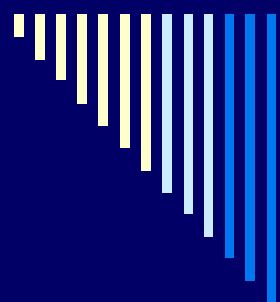
- Implementation Strategy: Develop coordinated implementation plans within one year to meet requirements
- Watershed Restoration: Implement restoration projects on 20% of impervious surfaces not currently controlled to the maximum extent practicable (MEP) and complete previous 10% restoration requirement
- Water Quality: Implement projects to make progress toward achieving wasteload allocations
- Trash Reduction: Implement initiatives to achieve Trash Free Potomac Treaty goals
- Accountability: Track progress toward meeting Permit requirements



Watershed Restoration

Permit Requirements

- Complete previous permit requirement of 10% Restoration
 - Hollywood Branch (Paint Branch of Anacostia) Restoration
- Increase Watershed Restoration to 20%
 - Provide runoff control to the maximum extent practicable for an additional 5,500 impervious acres countywide
 - Controls will include structural, non-structural, and streambank restoration projects
 - LID retrofit opportunities
 - Have completed inventory for public property in Anacostia and Lower Rock Creek
 - Working in Anacostia and Lower Rock Creek for voluntary LID retrofits on private properties (*Rainscapes*)

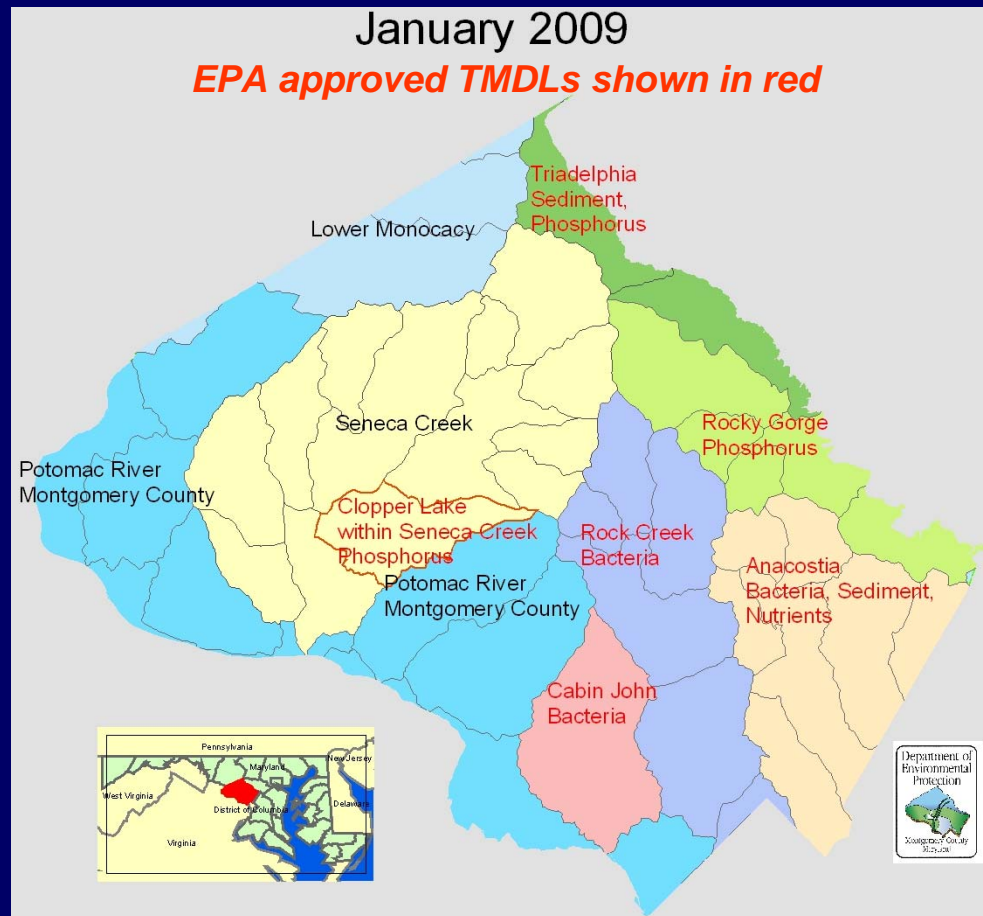


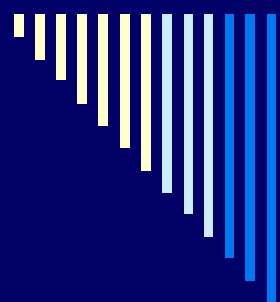
Water Quality

Permit Requirements

- Make progress toward Wasteload Allocations (WLAs) specified in EPA-approved Total Maximum Daily Loads (TMDLs)
 - Regulatory Limit (pounds, tons, # of bacteria) on amount of pollutants in runoff
 - Currently, eight TMDLs have been approved by EPA
 - Bacteria (3); sediment and nutrients in Anacostia and Patuxent Reservoirs; phosphorus in Clopper Lake
 - MDE will be adding additional water bodies and pollutants
 - Bay TMDL in 2010 will have WLAs for nutrients and sediments for the Potomac (includes Anacostia) and Patuxent

Watersheds and EPA-approved TMDLs

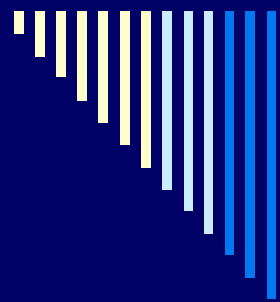




Trash Reduction

Requirements and Cost Implications

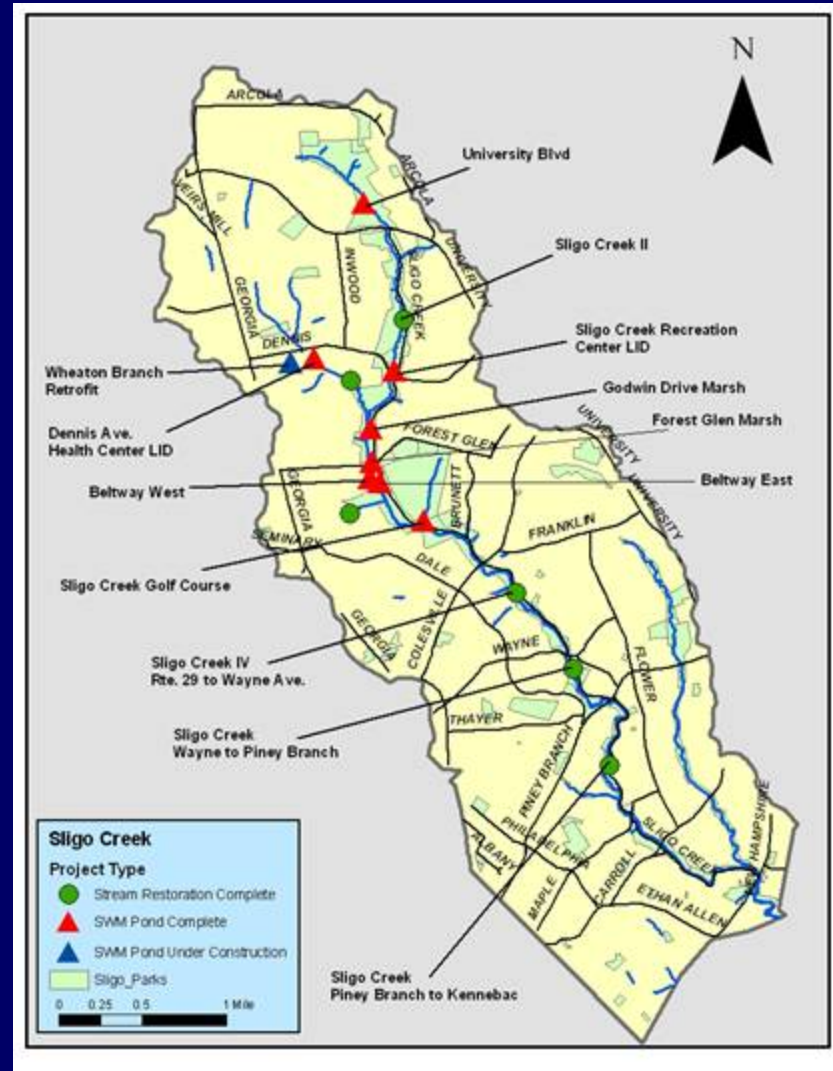
- Complete trash and litter reduction strategy to meet Potomac Trash Free Treaty goals
- Focus on the Anacostia watershed first—regulatory limits on trash being developed by State
- Currently spend about \$4.4M/yr countywide for recycling, household hazardous waste program, illegal dumping, right-of-way clean up



Watershed Restoration:

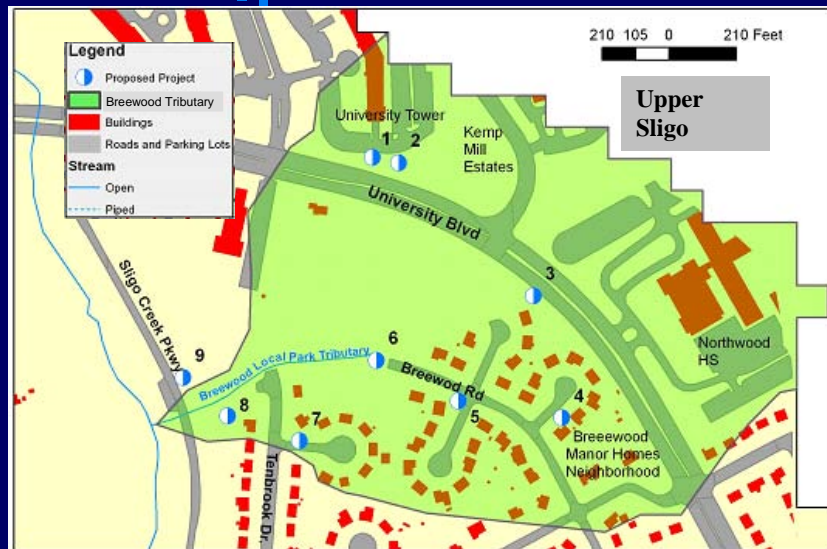
Sligo Creek

- ❑ First DEP watershed for restoration
- ❑ 12 projects built since 1990
- ❑ Project costs - \$3.0M
- ❑ Projects include
 - 3 major stormwater retrofit ponds
 - 4 constructed wetlands
 - 3 stream restoration including several with vernal pools
 - 2 LID retrofits – completed 2006
 - ❑ Sligo Recreation Center
 - ❑ Dennis Ave Health Center with monitoring
- ❑ Stream Resource Condition overall remains poor—will take time to reverse decades of degradation



Coordinated Implementation

Small Watershed Approach



Breewood Tributary of Upper Sligo Creek

- approximately 45 acres
- 33% imperviousness

- LID and Green Streets Stormwater Retrofits
- Parking lot and tree box LID
- Roadside LID stormwater retrofit
- Stormwater Wetland Retrofit
- Stream Restoration
- Rainscapes Neighborhood
- Environmental Outreach and Litter Reduction
- Local Park Improvement
- Monitoring
- Total \$1.28M
- Applied for \$400,000 for design from MDE stimulus package funds



Cost Implications

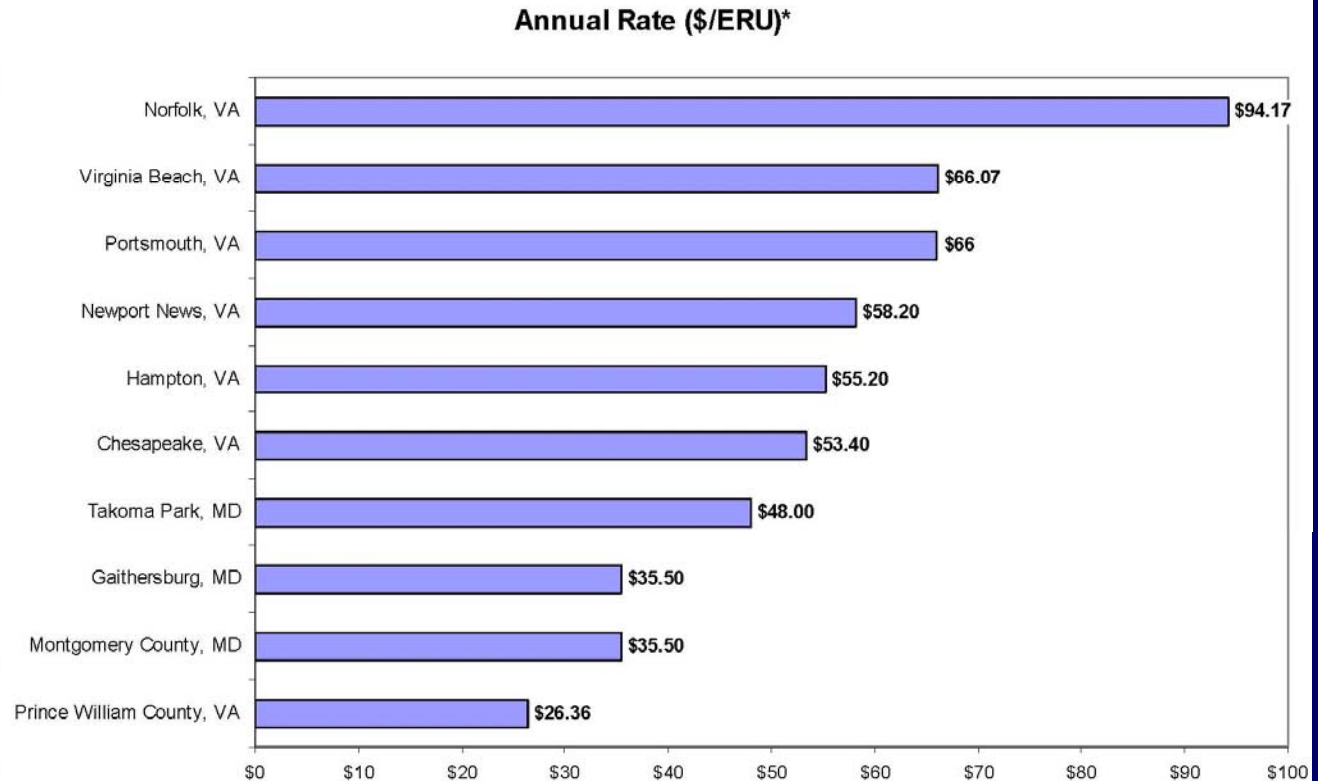
- Watershed restoration in 6 years of previous permit, cost approximately \$31M
 - Current CIP Program funding is \$25M over 5 yrs
 - Rough estimate to achieve another 20% restoration is additional \$108M
- Additional funding will be needed to meet TMDLs and trash reduction permit requirements
- DEP's implementation plans will identify projects and programs by watershed for restoration, wasteload allocations, and trash reduction
- Coordinated Implementation Strategy will provide priorities, benchmarks, timelines, and total cost estimates



Potential Funding Sources

- FY09-14 CIP for stormwater facility planning, design, construction
- WQPC for maintenance, LID implementation, monitoring
- Enterprise Fund for trash management
- DEP General Fund for enforcement, outreach, countywide monitoring, non-structural control practices, program coordination and tracking
- Other Departments and Agencies – DOT, DPS, DGS, MCPS
- SPA fees for monitoring (non-dedicated source)
- Funding Sources outside of County
 - Federal (e.g., Stimulus Package, ACOE, US DOT)
 - State (e.g., Small Creeks and Estuaries Program, 319)
 - Local Partners

Stormwater Utility Rates in 2008 in Mid-Atlantic



Source:CH2M Hill

February 26, 2009



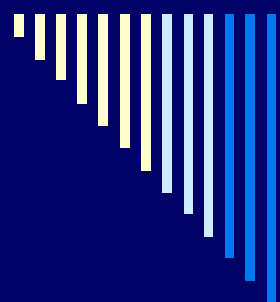
Next Steps for DEP

□ March-June 2009

- Continue project implementation consistent with existing 6 year projection levels
- Issue contract to develop coordinated implementation strategy to meet permit requirements

□ FY10

- Receive stakeholder input
- Complete analyses, cost estimates, and priorities
- Establish implementation schedule and method for tracking progress
- Identify potential County and non-County funding sources to meet implementation schedule



Anacostia Regional Coordination

- Coordination among Anacostia restoration partners and stakeholders to assure progress toward watershed goals
 - *Local initiatives will need to meet regulatory requirements*
- Technical support for monitoring and assessment
- Track progress in meeting Anacostia water quality and watershed restoration indicators
- Identify and leverage funding to support implementation and outreach