

October 14, 2011 Webinar

Stormwater Challenges

for

Local and Bay TMDL (Nutrients & Sediments)



Stormwater Regulatory Drivers

- NPDES 4th Generation Permit soon to be Issued
 - ◆ Consistent with local TMDLs and Bay WIP TMDLs
 - ◆ Increased requirements for impervious area restoration to from 10% to 20%
 - ◆ Increased Outreach and Education program requirements
 - ◆ Increased Trash and Litter control efforts
- Updated 2011 Stormwater Management Ordinance to Include:
 - ◆ Improved design requirements to meet the new Environmental Sensitive Design practices to the Maximum Extent Practicable (MEP).
 - ◆ Stronger Erosion and Sediment control enforcement.
 - ◆ Improved SW redevelopment requirements.

WIP Cost Challenge / Benefits

- Accelerated Timeframe for Implementation
 - ◆ Between 2017 and 2020
- Implementation Costs
 - ◆ Estimated \$0.5 Billion to 2017
- Capacity for Job Creation (percent of the total cost)
 - ◆ County Staff Resources (2%)
 - ◆ Consultants (15%)
 - ◆ Construction (83%)
 - ☞ Labor
 - ☞ Materials
 - ☞ Equipment

County Estimates 4,625 new jobs for the next five years*

*Estimate Salary based for Professional labor category + benefits at \$98,000 average per person, per year.
Estimate Salary based on Trade labor category + benefits at \$58,000 average per person, per year.

County Alternatives

Alternative (1)

Implement WIP I

- Treat 30% impervious acres **MS4 Phase I** and 20% impervious areas **MS4 Phase II** by 2017.
- Initial Implementation Costs are reasonable to 2017.
- Enables County's capacity to be increased gradually.
- Provides County time while EPA's CB Model is refined.

Alternative (2)

Implement WIP II

- WIP II net load reductions are higher than of WIP I .
- Initial implementation costs will be higher than WIP I.
- County's capacity will need to be increased exponentially.
- Load Reduction efforts will be four (4) times higher than the WIP I.
- May not meet load reductions by 2017.

EPA's Chesapeake Bay TMDL
Load Reductions Mandate

County's WIP-I 2017 Urban Strategies

- **County Phase I MS4 - Reductions equivalent to retrofit of 30% of untreated impervious land.**
- **MS4 Phase II (Municipalities) - Reductions equivalent to retrofit of 20% of untreated impervious land.**
- **Urban Nutrient Management Law – Continue the regulation of fertilizer applications on commercially managed lawns.**

Meets Regulation but must close the Gap in Load Reduction

- **Retrofitting un-treated impervious areas within the County by 2017 as stated in WIP-I Plan is consistent with the County's MS4 permit.**
- **This 30% retrofit will certainly NOT meet the 70% load reduction goal as stated in the State's WIP-II guidance. It likely will be only 40% to 50% of the required load reduction.**
- **Therefore, the County has three (3) more years in 2017 to “catch-up” the differences of the load reduction goals between 2017 and 2020.**

Strategies: Retrofit 30% of the un-treated impervious areas by 2017 as proposed in the WIP-I Plan

1. **Mandate:** to be consistent with our MS4 permit requirement that is the **ONLY** mandate.
2. **Budget:** Cost estimate is approx. \$400,000,000
3. **Technologies:** in 2017, more cost-effective restoration technologies may be available
4. **Loading:** in 2017, new Bay Model is very likely to reduce urban load. So we may have already met a higher load reduction percentage by then.
5. **Timing:** possibly, the 2020 deadline may be extended to 2025.

Consultation with MDE

- MDE has suggested to EPA to divide the urban land use to be more specific (commercial, industrial, high density residential, median density residential, low density residential, etc) similar to what agricultural land has.
- This way, our urban load will be significantly reduced.

Financial Plan

- **Historical Incentives.**
- **For the short term, the financial/funding plan can include current local SWM Fund efforts, increase Bond capital and pursue Federal and State Grants.**
- **The County is investigating conversion to a Stormwater Utility Fee; instead of Stormwater Management Tax.**

Questions and Answers