

# Chesapeake Bay Program Update

Presented to  
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# HRPDC and the Chesapeake Bay TMDL Process

- TMDL Developed: December 2010
  - ❑ HRPDC expressed concerns about modeling and data quality to EPA and VA.
- Phase II WIPs: January 2012
  - ❑ HRPDC developed Regional Appendix.
  - ❑ Appendix included technical and policy recommendations.
  - ❑ HRPDC working with Bay Program and State to address concerns ahead of Midpoint Assessment.
- Midpoint Assessment: 2017
  - ❑ Bay Model will be run with updated data to assess implementation progress.
  - ❑ EPA will determine if revisions to the TMDL are necessary.



# 1. Bay Model Should Reflect Local Data

## ➤ The Problem:

- ❑ Bay Model input data does not match local land use and BMP implementation levels.

## ➤ HRPDC Recommendations:

- ❑ Next version of the Bay Model should utilize local land use data and the calibration should be revised to reflect real world BMP implementation levels.

## ➤ Response to Date:

- ❑ EPA/Chesapeake Bay Program has established the Land Use Workgroup to develop protocols for utilizing local data.



# Land Use Workgroup Work Plan

- Define the land uses that should be included in the next model.
- Coordinate with other workgroups and EPA to develop loading rates for new land uses.
- Develop a process to consider local data in the development of the land use layer.
  - ❑ Collect local land use data.
  - ❑ Compare local data to model outputs.
  - ❑ Determine loading impact of using local data versus state/baywide data.
- Explore options for developing a spatial land use layer.



## 2. The Bay Model Should Credit More Practices

### ➤ The Problem:

- ❑ The Bay Model does not include efficiencies for many practices that can reduce pollutant concentrations in stormwater.

### ➤ HRPDC Recommendations:

- ❑ Virginia and EPA should work together to identify practices that should be credited and develop pollutant reduction efficiencies for these practices.

### ➤ Response to Date:

- ❑ EPA/Chesapeake Bay Program has established expert panels to establish credits for many of the practices HRPDC suggested.



# BMP Credit Progress

- Recent BMP Expert Panel Reports Approved by CBP
  - ❑ Stormwater BMP upgrades and retrofits.
  - ❑ State Stormwater Performance Standards
- Draft Panel Reports
  - ❑ Urban Nutrient Management
- Panels in Progress
  - ❑ Illicit Discharge Detection and Elimination (includes SSOs)
  - ❑ Stream Restoration revisions
  - ❑ Shoreline Erosion Control
  - ❑ Oyster Restoration
  - ❑ Urban Tree Planting
- Upcoming Panels
  - ❑ Floating wetlands
  - ❑ Street Sweeping Revisions



# Other HRPDC Technical Recommendations

HRPDC Recommendation	EPA/CBP Response
Evaluate extreme weather events	USGS study on extreme weather and loading from the Conowingo Dam being considered. EPA is considering how climate change and sea level rise predictions should factor into the TMDL process.
Revise segmentsheds	None yet.
Additional water quality monitoring	Bay Program has added some stations, but none are in Hampton Roads.
Add wetlands as a land use	Land use workgroup is considering this in cooperation with the Forestry workgroup.
BMP effectiveness for bacteria	Need to work with Virginia on this issue.
BMP effectiveness for flooding	Need to work with Virginia on this issue.



# HRPDC Policy Recommendations

HRPDC Recommendation	Virginia Response
Virginia should not renew MS4 permits until model is recalibrated with local data.	<ol style="list-style-type: none"><li>1. State has entered into an agreement with EPA that outlines the schedule for renewing all expired permits by the end of 2014.</li><li>2. Model will not be recalibrated until 2017, but localities will be able to use locally derived impervious acres to calculate load requirements.</li></ol>
Virginia should develop a schedule and process to work with local governments prior to the 2017 model recalibration to avoid previous data quality issues.	No schedule has been shared with the local governments to date.
Virginia should identify strategies and resources to implement nutrient reductions on state owned lands.	HRPDC is not aware of a State strategy, however several State agencies including VDOT are subject to the Phase II General Permit that requires them to develop a Bay TMDL Action Plan.

# TMDL Compliance and Local Governments

- Localities with MS4 permits received Waste Load Allocations (WLAs).
- Renewed MS4 permits must address WLAs.
- Renewed Phase II Permits expected to be effective July 2013.
- Phase I Permit renewals in 2013-2014.
- Proposed permit language requires localities to develop a TMDL Action Plan within 24 months of permit issuance.
  - ❑ Calculate load reduction requirement.
  - ❑ Identify management actions that will be implemented to achieve 5% of total required reductions by the end of the 5 year permit cycle (June 30, 2018).
  - ❑ Estimate the cost of implementing the action plan.

