

Hampton Roads Phase II WIP Participation

Phase II WIP Public Meeting
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Hampton Roads Phase II Approach

➤ Regional Process

- Define regional needs for new policies, authority, and funding.
- Discuss common concerns and share strategies.
- Develop Regional Report with Preferred Strategy

➤ Locality Process

- Gather data on existing BMPs and land use acres.
- Provide input data for Regional Strategy focusing on cost effective strategies
- Identify alternative BMPs



Regional Report

- Regional Approach to WIP
- Regional Engagement
- Regional Framework
- Programmatic Strategies
- Implementation Challenges and Recommended Initiatives
- Regional Preferred Scenario



Baseline Data Comparison

➤ Land Use/Land Cover

- ❑ Developed pervious lands generally overestimated in VAST.
- ❑ Ag lands generally overestimated in VAST.
- ❑ VAST overestimates septic systems for most localities.

➤ Existing BMPs

- ❑ Agricultural BMPs underestimated.
- ❑ Urban BMPs overestimated.
 - Pre – 2006 BMPs have the most discrepancies.



Popular Local Strategies

- Expand/refine street sweeping efforts.
- Increase urban nutrient management on public and/or private property.
- Stream restoration and Shoreline stabilization projects.
- Wetland restoration project
- Utilize oyster restoration as a BMP.
- Increase tree planting/urban tree canopy.
- Purchase property for conservation or restoration of floodplain/buffers.
- Convert/upgrade existing public BMPs.
- Encourage small practices on private property.



Comparison: Regional Scenario vs. Phase I WIP

BMP Type	Default Phase I WIP Treatment	Existing Treatment	Regional Scenario
Impervious Reduction	7.5%	.12%	2%
Filter	6%	1%	2%
Infiltration	6%	.5%	2%
Wet Pond/Wetland		10%	16%
DryPonds		7%	8%
ExtDryPonds		7%	8%
Tree Planting		.02%	1%
Nutrient Management		.4%	41%
Urban forest buffers		.5%	1%
UrbStrmRest (ln ft)		4,970	10,799
Shoreline Erosion (ln ft)		5,040	16,727
StreetSweep (lbs)		22,783,200	35,401,240

Credit for Alternative BMPs

- Conversion of vehicle fleets to natural gas. (air deposition)
- Floating/harvested wetlands
 - ❑ EPA has approved interim rate for VA.
- Shoreline Stabilization (living shorelines)
- No Discharge Zones
- Catch Basin Cleanouts
- SAV Restoration
- Fertilizer Restrictions (Current Urban SW Workgroup Panel)
- Illicit Discharge Detection and Elimination
 - ❑ Urban SW Workgroup panel for 2012



Summary of Regional Scenario

Pounds of nutrients removed compared to 2010 No BMPs

Scenario	Nitrogen (lbs)	Phosphorus (lbs)	Sediment (lbs)
Phase I WIP reductions	541,016	78,181	14,792,723
Regional Scenario	741,079	72,432	39,014,362
Percent of Target	>100%	93%	>100%

- Increased erosion and sediment control from 90% to 95%.
- Increased urban nutrient management by 10% on regulated and unregulated lands in order to simulate fertilizer restrictions.



Technical Resource Needs

- Additional information on treatment of terminal reservoirs in the Model.
- Add wetlands as a land cover category.
- State guidance on BMP tracking.
- Authority for BMP inspections/maintenance outside MS4 Phase II boundaries.
- Information on the nutrient removal of flooding control projects.
- Information on the bacteria removal efficiency of BMPs in the Bay Model.



Resources Requested in Regional Report

- Increase budget of Agriculture Cost-Share Program and double Soil Water Conservation District staffing.
- Issue \$300M state bond to finance wastewater upgrades.
- Establish septic system cost share program to provide 50% of projected total costs (\$114M/yr) to support upgrades, replacements, or connecting to sewer.
- Expand Chesapeake Bay Preservation Act to entire Bay watershed.



HRPDC

Phase II WIP comments



Positive comments

➤ Individual Waste Load Allocations (WLAs):

- ❑ Virginia requested that individual WLA's for MS4s be removed from the TMDL.
- ❑ Instead, aggregate waste load allocations for all MS4s within a segmentshed would be included in the TMDL.

➤ Federal facilities: Commitments from federal facilities are represented in the WIP and Virginia plans to create a Memorandum of Agreement (MOA) for these commitments.

➤ Expansion of Nutrient Credit Trading:

- ❑ MS4s can trade with all sectors.
- ❑ Localities have authority to establish local exchange programs.
- ❑ Each locality will have early notice of credits generated on private property within its jurisdiction.



Negative comments

- **Groundtruthed BMP data:** Virginia did not utilize local groundtruthed BMP data that was requested through the WIP process.
- **Local Land use data:**
 - ❑ Virginia did not utilize local land use data.
 - ❑ A schedule and process for addressing the impact of corrections on target loads was not included in the WIP.



Negative comments

➤ State-owned lands:

- ❑ Local governments assumed urban lands owned/operated by State entities would reach Level 2 (L2) reductions.
(L2 = treatment of approximately 33% of state-owned urban land).
- ❑ State did not identify strategies and resources to implement load reductions state-owned lands.

➤ Fertilizer Restrictions: Still no credit for fertilizer restrictions. State needs to work with EPA to resolve this issue ahead of permit reissuance.



Additional Concerns and Recommendations

- **Model recalibration:** State needs to work closely with Localities and EPA ahead of the 2017 model recalibration in order to avoid the problems with model version 5.
- **Future data collection:** Need more structured system to collect data from local governments for progress runs and milestones.

