Chesapeake Bay TMDL Update

EPA Response to HRPDC Letter

Agenda Item #12A

Presented to
Hampton Roads Planning District Commission
May 19, 2011

Whitney Katchmark
Principal Water Resources Engineer

Key concerns in HRPDC Letter

Letter asked questions to clarify the EPA's intentions regarding implementation of the Bay TMDL.

- Will individual Waste Load Allocations (WLAs) assigned to Phase I MS4s be removed from the TMDL?
- How will military and industrial permits within MS4 boundaries be counted in the TMDL?
- Can localities get credit for other nutrient removal programs?
- Could localities get additional time to meet stormwater nutrient reductions?

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Stormwater Nutrient Reductions

- EPA and State have not decided on whether or not to remove the individual Waste Load Allocations (WLA) for Chesapeake, Hampton, Newport News, Norfolk, Portsmouth, and Virginia Beach.
- Phase I MS4 WLAs included nutrient loads for other permittees (military installations, industrial facilities, VDOT) located within the locality boundaries.
- EPA response stated that permits for the Phase I MS4s would not include conditions or controls for regulating the activities of other permittees.

More Credit and More Time

More credit?

- EPA is willing to work with Virginia on crediting oyster restoration and no discharge zones.
- EPA does not support credits for reducing sewer overflows.

More time?

- "On a case-by-case basis, EPA would consider a request to adjust the timeline. Although at the present time …EPA believes the existing timeline should be adequate…"

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Follow-up Questions

Recommended Action:

- HRPDC Bay TMDL Subcommittee would reconvene during the first week of June to draft follow up questions for the EPA and state agencies.

- Authorize the Chairman to send a response to Jeff Corbin and Anthony Moore based on the Subcommittee's recommendations.

Chesapeake Bay TMDL Update

Phase II Watershed Implementation Plan

Agenda Item #12B

Presented to
Hampton Roads Planning District Commission
May 19, 2011

Whitney Katchmark
Principal Water Resources Engineer

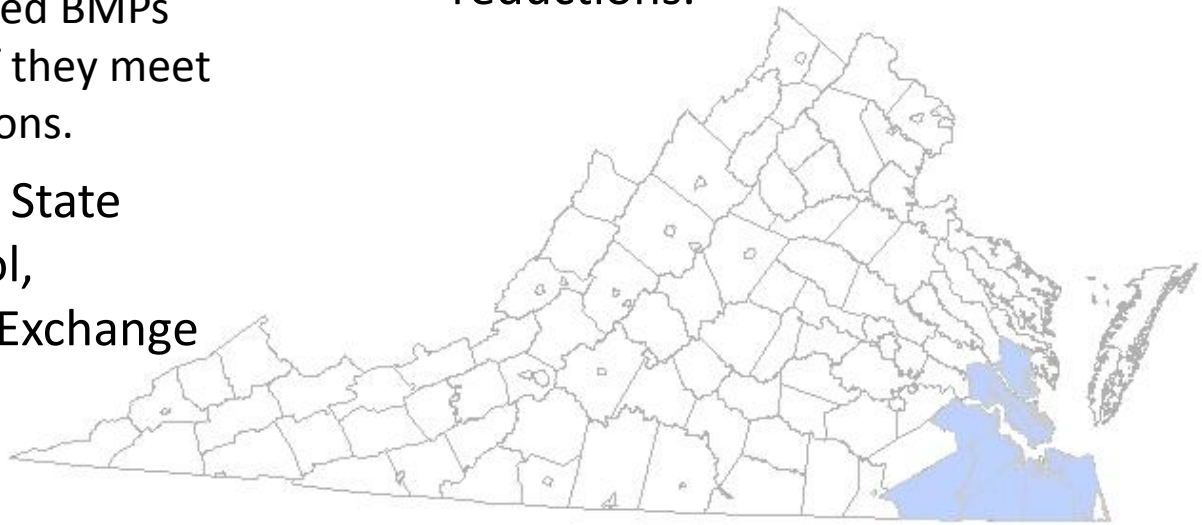
Virginia's approach to Phase II WIP

State's Role

- Provide Bay model data:
  - 2009 data
  - Assumptions used in VA's Phase I WIP to meet the 2017 and 2025 reductions.
- Provide Assessment Tool
  - Localities can enter proposed BMPs and programs to find out if they meet the 2017 and 2025 reductions.
- Evaluate the need for new State programs (Fertilizer control, Enhanced Nutrient Credit Exchange Program)

Locality or PDC's Role

- Provide more detailed plans to meet nutrient reductions required by TMDL.
  - Collect and analyze data.
  - Develop strategies to meet TMDL reductions.



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Local & Regional submittals

- Revise spreadsheets and write implementation strategies for each Locality:
  - Identify errors in 2009 land use and BMPs.
  - Locality's implementation plan for 2017 & 2025 (BMPs, septic, etc.)
  - Nutrient reductions for other permittees: military, industrial, VDOT.
  - Nutrient reductions for Agricultural loads in the locality.
  - Locality's strategies: funding, authority, & policies
- Identify programs that reduce nutrients but are not in the spreadsheet.
- Identify additional resources, authority, and regulations needed to achieve implementation goals.

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Example: Model data for Chesapeake

Subsource	Land Use LU/LC (acres)	2009 Phosphorus Load	2025 Phosphorus Goal Load	Phosphorus Reduction Goal	Phosphorus Reduction %
Animal Operations	3	165	38	(127)	-77%
Crop	4,423	6,468	4,527	(1,941)	-30%
Hay	120	15	21	6	40%
Pasture	113	133	84	(49)	-37%
Nurseries	3	404	116	(288)	-71%
MS4Urban	32,852	48,707	45,594	(3,113)	-6%
NonMS4Urban	781	4,857	2,224	(2,633)	-54%
Construction	358	3,192	1,919	(1,273)	-40%
CSS	-	-	-	-	0%
Septic	-	-	-	-	0%
Surface Mine	310	1,393	71	(1,322)	-95%
Unmanaged Grass	70	1	18	17	1700%
Forest	17,301	2,346	2,419	73	3%
Grand Total	56,334	67,681	57,031	(10,650)	-16%

- Land Use data may not be accurate.
- Nutrient loads are based on land use.

- BMP data may not be accurate.
- Phase I WIP made strange assumptions.

BMPs	2009 Progress BMPs	2025 WIP I Proposed BMPs	New BMPs Proposed by 2025	2017 BMPs 60%
Septic Pumpouts (systems)	-	388	388	233
StreetSweep	-	947	947	568
UrbStrmRest (linft)	-	2,502	2,502	1,501
WetPondWetland	5,551	4,967	-	-
Filtration	208	1,295	1,088	653
Infiltration	58	1,230	1,172	703

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HRPDC's approach: Regional Tier

Steering committee with members from:

• Local government	• DCR & DEQ
• Department of Defense	• HRSD
• VDOT	• VIMS
• Soil and Water Conservation Districts	

- ✓ Forum to define portion of land within locality boundaries that the locality is responsible for.
- ✓ Define regional needs for new policies, authority, and funding.
- ✓ Coordinate with EPA to expand opportunities for model credit.

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HRPDC's approach: Local Tier

Local tier would be a multi-department team in each locality.

- CAO or his/her representative
- Staff from public works, utilities, planning, transportation, GIS, parks and recreation, legal counsel, economic development, and school board.

Locality teams would identify nutrient reductions that could be implemented by the locality.

Potential Implementation Strategies for Localities	
Stormwater retrofits at parks, schools, and municipal centers	Financial incentives for private property partners
Development of green streets	Septic tank pump-outs or upgrades
New nutrient management techniques to maintain ballfields and golf courses	Increased sewer maintenance or recordkeeping for leaks & overflows
No discharge zones in tidal waters	Proffers from new development
Increased tree canopy requirements	Increased street sweeping

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Confirm HRPDC role in Phase II WIP

Recommended Action:

Notify the State that HRPDC staff will coordinate data collection and facilitate development of implementation strategies for the localities in the region.