Chesapeake Bay Stakeholders Advisory Group

April 29, 2021
Virginia’s Phase III WIP – refresher and update

Ann Jennings, Deputy Secretary of Natural Resources

James Martin, Chesapeake Bay Coordinator, Department of Environmental Quality

Melanie Davenport, Director, Water Permitting Division, Department of Environmental Quality

Jutta Schneider, Director, Water Planning Division, Department of Environmental Quality

Russ Baxter, Deputy Director for Soil and Water Conservation, Dam Safety and Floodplain Management, Department of Conservation and Recreation
Governor Ralph S. Northam
Environment Virginia, April 4, 2018

“Our DEQ experts tell us that at our current Bay restoration pace, we will fall millions of pounds short of our goals to reduce nitrogen and phosphorus. So my Administration is committed to preparing a new cleanup plan that incorporates input from local decision makers, prioritizes nature-based solutions, and tackles the impact of climate change on our clean water goals.”
Virginia’s WIP III Goals & EPA’s Expectations

- Restore the Chesapeake Bay.
- Achieve state basin planning targets for the Potomac, Rappahannock, York, and James Rivers and the Eastern Shore.
- Achieve our goals no later than December 31, 2025.
- Tackle additional pollution expected from growth.
- Tackle the impacts of climate change.
- Continue to engage partners, including local governments, planning district/regional commissions, and soil and water conservation districts.
- Develop a plan that is practical and cost effective.
- Maximize the potential for co-benefits.
- Meet the Environmental Protection Agency’s expectations.

**EPA Expectations:**

- By 2025, implement best management practices to reach planning targets for nitrogen and phosphorus reductions
- Develop programmatic and numeric implementation commitments
- Engage local, regional and federal partners
- Incorporate co-benefits
- Establish local area planning goals
WIP III by the Numbers

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Phosphorus Progress and Targets

Phosphorus

Agriculture
Developed (MS4)
Developed (Non-MS4)
Natural
Septic
Wastewater
WIP III Target
Climate Change
Final Target
Final WIP III Targets by Basin

<table>
<thead>
<tr>
<th>State-Basin</th>
<th>Nitrogen (million pounds per year)</th>
<th>Phosphorus (million pounds per year)</th>
<th>Sediment (million pounds per year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Shore</td>
<td>1.83</td>
<td>0.152</td>
<td>473.3</td>
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<tr>
<td>Potomac River Basin</td>
<td>16.51</td>
<td>1.823</td>
<td>1929.7</td>
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<tr>
<td>Rappahannock River Basin</td>
<td>7.09</td>
<td>0.819</td>
<td>1505.1</td>
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<tr>
<td>York River Basin</td>
<td>5.71</td>
<td>0.548</td>
<td>949.1</td>
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<tr>
<td>James River Basin</td>
<td>21.81</td>
<td>2.241</td>
<td>2015.2</td>
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<tr>
<td>Total for Virginia</td>
<td>52.95</td>
<td>5.583</td>
<td>6872.4</td>
</tr>
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</table>
Final Phase III WIP

- Meets Planning Targets
- Accounts for forecasted growth through 2025
- Accounts for climate change through 2025

- Additional 8,775,020 pound reduction in nitrogen (from 2019)
- Additional 890,934 pound reduction in phosphorus (from 2019)
Nitrogen Load Reductions

2009 - 2019

- Wastewater: 96%
- Natural: 2%
- Agriculture: 2%

Total: 9,561,781

2019 – WIP III

- Agriculture: 76%
- Developed: 13%
- Septic: 2%
- Natural: 9%

Total: 8,775,020
Phosphorus Load Reductions

2009 - 2019

- Wastewater: 80%
- Agriculture: 10%
- Natural: 10%

863,949

2019 – WIP III

- Wastewater: 10%
- Developed: 13%
- Natural: 22%
- Agriculture: 55%

890,934
Virginia’s Phase III WIP
Unregulated Developed Lands Update

Chesapeake Bay Stakeholders Advisory Group

Jutta Schneider
Director, Water Planning Division
Virginia Department of Environmental Quality
April 29, 2021
Virginia’s Phase III WIP — Unregulated Developed Lands Initiatives

40. Expand the Healthy Virginia Lawns Program – VCE
41. Pilot and expand an Urban Nutrient Management (NM) Program for Virginia Youth - VCE
42. Audit and verify contractor-applicator reports of fertilizer applied to urban lands – VDACS
43. Establish state cost share for residential homeowners, small businesses and churches, etc. – VCAP/VASWCD
44. Enhance marketing of funding opportunities for Non-MS4 localities – DEQ
45. Prepare annual estimate of the amount of stormwater local assistance needs and pursue adequate funding – DEQ
46. Establish long-term partnership with local Planning District Commissions – DEQ
Virginia’s Phase III WIP — Unregulated Developed Lands
Working with Planning District and Regional Commissions

• 14 of the 15 PDCs in Virginia’s Bay watershed assisted with development of the Phase III WIP.

• PDCs were asked to provide recommendations on revised best management practice (BMP) input decks for the unregulated, urban sector as well as programmatic actions, capacity, and funding.

• The PDCs held meetings to engage their local communities in addition to four concluding meetings held in collaboration with their local Soil and Water Conservation Districts.

• All 15 PDCs in Virginia’s Bay watershed are under contract with DEQ and develop annual work plans to advance Bay water quality efforts.

• Regionally specific work plans help meet partners where they are.

• Training on grant programs, BMP tracking and reporting, and implementation targeting.

• Regular communications with DEQ, and peer-to-peer among PDCs and with local governments.
Virginia’s Phase III WIP — Unregulated Developed Lands
Identified BMPs

- Urban nutrient management
- Stream Restoration
- Forest and grass buffers
- Shoreline Management
- Wet ponds and wetlands
- Dry extended detention ponds
- Septic systems: pumping, connections to sewer, improved treatment, new systems

Sources: VASWCD 4/27/2021, DOF 4/27/2021
Virginia’s Phase III WIP — Unregulated Developed Lands Highlights from Recent PDC Grants

- Commonwealth of Virginia Chesapeake Bay Regulatory and Accountability Program (CBRAP) Funding
  - Purpose: Virginia Planning District Commission (PDC) covering Chesapeake Bay watershed localities to provide interim technical and administrative assistance to local governments of the Chesapeake Bay Watershed Area

- Activity Areas
  - Facilitation of Chesapeake Bay Phase III WIP implementation with localities and regional partners
  - BMP implementation reporting and liaison with DEQ
  - Regionally Specific Initiatives/Programmatic Actions
  - Development and Distribution of Implementation Tools and Resources

- 2021 Contracts
  - 15 PDCs with award of $58,000 each and $14,500 match
Virginia’s Phase III WIP — Unregulated Developed Lands
Highlights from Recent PDC Grants, cont.

• 2021 CBRAP Funding Focus:

• Implementation Tools and Resources Activities:
  • Develop cost-estimates, project proposals and potential budgets for BMP implementation
  • Continue compiling GIS shapefiles to support the biennial Chesapeake Conservancy’s Bay High-Resolution Land Cover Update project
  • Improve education, implementation and development of a process to capture, track and report septic tank pump outs
  • Review local plans and ordinances and identify whether WIP III BMPs and prioritized programmatic actions are included in goals/objectives or opportunities for future inclusion
Virginia’s Phase III WIP — Unregulated Developed Lands
Highlights from Recent PDC Grants, cont.

• 2021 CBRAP Funding Focus:
• Implementation Tools and Resources Activities:
  • Support forest conservation and other land policies that reduce the impact of future development
  • Provide grant writing assistance and contract administration and project management services for awarded grants, based on local needs
  • Assist localities in identifying BMP implementation projects such as creating wetlands systems to serve as retention areas for water flowing from Towns to the Chesapeake Bay; installing rain gardens to reduce impervious surface area; and establishing a forest buffer/tree planting/stormwater management pilot program on publicly owned lands
2021 CBRAP Funding Focus:

- Regionally Specific Tasks
  - Continue evaluation of an existing water quality program (i.e. Chesapeake Bay Preservation Act), focusing on improving and quantifying water quality assessments of different buffers in the region and providing outreach to localities
  - Continue to document extent of septic systems currently installed in area within a geographical information system
  - Support SWCDs and other partners in their efforts to implement riparian buffers
Virginia’s Phase III WIP — Unregulated Developed Lands
Highlights from Recent PDC Grants, cont.

• 2021 CBRAP Funding Focus:

• Regionally Specific Tasks, cont.
  • Facilitate construction of educational BMPs on library or school property with stakeholder partners
  • Administer regional assistance/cost-share/revolving loan program for septic pump-outs and living shorelines
  • Conduct stream clean-up project
  • Continue working with Virginia Department of Forestry (VDOF) and localities to implement tree planting projects through VDOF’s Trees for Clean Water grant program
Working with PDCs- Future Outlook

• Build on current and past work and projects
• Increasing focus on implementation, incl. targeting and co-benefits
• Continue to identify funding opportunities for implementation on unregulated lands
  • upcoming in May: Request for Applications in Chesapeake Bay Preservation Act localities for septic pump-outs, assessments of agricultural lands and program development; $100k July 1 start date
• Continue grant training to PDCs/unregulated localities and provide assistance in application process
• Facilitate additional engagement with partners and agencies
• Continue to work with PDCs, localities and partners on BMP reporting
WIP III – Implementation of Agricultural Best Management Practices

Russ Baxter, Department of Conservation and Recreation
April 29, 2021
Virginia’s Phase III WIP – Agriculture
Current Initiatives

- DCR directly pays private contractors to prepare certified NMPs in localities with less than 10% of all agricultural acres under NMP to facilitate implementation.
- HB 1422 and SB 704 (2020) set a 2025 deadline to achieve stream exclusion and NMP goals: DCR has developed stream identification methodology and temporary fences as called for in the bills.
- DEQ updated the Poultry General Permit to require reporting and DCR expanded the Poultry Litter Transport program geographically and increased tonnage goals.
- DCR established a data sharing agreement with NRCS to potentially allow farmers to extend the lifespan of a practice and retain “credit” towards the TMDL; gather data on practice lifespans.
Virginia’s Phase III WIP – Agriculture Current Initiatives

- Virginia Agriculture BMP Cost Share (VACS) Program provides multiple options for riparian forest buffers and stream fencing and includes a flexible fencing option.
- DCR to implement EPA most effective basin (MEB) funding for “whole farm approach” on Eastern Shore after successful pilot by Three Rivers SWCD.
- DCR piloting small herd initiative (20-35 head) and initiating a small and disadvantaged farmer outreach program.
- DCR initiating mobilization payments providing 20% or $20,000 up front.
- 2021 legislation increased tax credits for BMPs and conservation equipment.
- Finalized WIP Initiative #14 – joint letter of agreement with Secretaries of Natural Resources, Agriculture and Forestry, Education and the President of the Virginia Association of Soil and Water Conservation Districts
Verification

• Increasingly big issue for resources to ensure BMPs are in place and functioning.
• Without verification practices are removed from Virginia’s submissions to EPA
The Virginia Agricultural BMP Cost Share Program (VACS)

• Incentive payments and/or cost-share available, up to 100%, for agricultural BMPs such as:
  – Animal Waste Management Systems
  – Cover Crops
  – Nutrient Management Planning and Precision Ag
  – Riparian Buffers: Herbaceous or Forested
  – Stream Exclusion and Alternative Watering Systems

• Increase cost-share per year per participant from $100K to $150K in FY22
Key Agricultural BMPs for WIP III

- Animal Waste Storage Facilities
- Buffers (grass and forested)
- Cover Crops (on 70% of cropland)
- Livestock Stream Exclusion
- Nutrient Management Poultry Litter Transport (89,000/yr. tons by 2025)
- Conservation Plans (on 70% of all farms)
- Sustain 2017 level of conservation tillage (~80%)
Other Conservation Programs

- Conservation Planning
- Conservation Planning Certification Training
- Resource Management Plans (RMP)
Conservation Reserve Enhancement Program (CREP)

- Partnership between DCR, USDA, and state agencies
- Offers joint financial assistance for establishing riparian forest buffers
- Provides 85% total cost-share, plus federal incentive payments and annual rental payments for a 10 or 15 year contract
## VACS Funding

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<tr>
<th></th>
<th>Cost-Share</th>
<th>Total</th>
<th>Technical Assistance</th>
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<tbody>
<tr>
<td></td>
<td>Chesapeake Bay</td>
<td>OCB</td>
<td></td>
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<tr>
<td>2016</td>
<td>$13,068,081</td>
<td>$8,731,256</td>
<td>$21,799,337</td>
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<tr>
<td>2017</td>
<td>$29,582,223</td>
<td>$23,014,616</td>
<td>$52,596,839</td>
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<td>2018</td>
<td>$8,313,487</td>
<td>$5,568,050</td>
<td>$13,881,537</td>
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<td>2019</td>
<td>$14,384,534</td>
<td>$9,613,603</td>
<td>$23,998,137</td>
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<tr>
<td>2020</td>
<td>$41,272,279</td>
<td>$17,688,120</td>
<td>$58,960,399</td>
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<tr>
<td>2021</td>
<td>$29,652,591</td>
<td>$12,708,254</td>
<td>$42,360,845</td>
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<tr>
<td>Funding provided for agricultural BMPs</td>
<td>$26,000,000</td>
<td></td>
<td></td>
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<tr>
<td>---------------------------------------</td>
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<td></td>
<td></td>
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<tr>
<td>Within the Chesapeake Bay watershed</td>
<td>$18,200,000</td>
<td></td>
<td></td>
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<tr>
<td>Outside the Chesapeake Bay watershed</td>
<td>$7,800,000</td>
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<table>
<thead>
<tr>
<th>Additional deposit for agricultural BMPs (Item Q)</th>
<th>$35,100,000</th>
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<tr>
<td>Within the Chesapeake Bay watershed</td>
<td>$24,570,000</td>
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<tr>
<td>Outside the Chesapeake Bay watershed</td>
<td>$10,530,000</td>
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<tr>
<th>Technical assistance funds (Items A.1 and Q)</th>
<th>$8,450,000</th>
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<tr>
<td>Base technical assistance</td>
<td>$4,550,000</td>
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<tr>
<td>Additional technical assistance</td>
<td>$3,900,000</td>
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An additional appropriation of up to $10 million, with $1.3 million for technical assistance, from the recordation revenue is also provided.
## Deposit to the Water Quality Improvement Fund (FY22)

<table>
<thead>
<tr>
<th>Program/Program Description</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Conservation Reserve Enhancement Program (CREP)</td>
<td>$500,000</td>
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<tr>
<td>Virginia Conservation Assistance Program (VCAP)</td>
<td>$1,000,000</td>
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<tr>
<td>Special nonpoint source reduction projects (RMPs, poultry litter transport, nutrient management plans)</td>
<td>$1,000,000</td>
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<tr>
<td>Small Farm Outreach Program (DCR and VSU)</td>
<td>$250,000</td>
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<tr>
<td>Department of Forestry (Virginia Trees for Clean Water)</td>
<td>$500,000</td>
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<tr>
<td>Department of Forestry (Water quality grants)</td>
<td>$250,000</td>
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<tr>
<td>Clean Water Financing and Assistance Program (DEQ)</td>
<td>$1,000,000</td>
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<td>Department of Health</td>
<td>$100,000</td>
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<tr>
<td>Funding for development and maintenance of Conservation Suite Application (DCR)</td>
<td>$250,000</td>
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<tr>
<td><strong>Total for carve-outs</strong></td>
<td><strong>$4,850,000</strong></td>
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</table>
VIRGINIA ASSOCIATION OF SOIL & WATER
CONSERVATION DISTRICTS

We work with the people who work the land.
Contact

• For more information, please contact:
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  Darryl Glover, Director, Division of Soil and Water Conservation
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  804-786-7119

• Or visit our webpage at:
  https://www.dcr.virginia.gov/soil-and-water/costshar