

Overview of Proposed Chesapeake Bay 2022-2023 Milestones

Moderated by James Martin, Chesapeake Bay Program Coordinator

Virginia Department of Environmental Quality

November 3, 2021

Milestones Background Information

- Initiated in 2012 by Bay Program Partnership
- Part of EPA's accountability framework designed to ensure that all Bay jurisdictions meet the nitrogen, phosphorus, and sediment allocations of the TMDL.
- Two-year milestones represent key check-in points on the way to having all pollution reduction measures in place by 2025.



Numeric Milestones

- Predict how many units of key pollution reduction practices will be implemented during the coming two years.
- For example, estimates of cover crop acres to be planted, number of trees to be planted, acres of wetlands to be restored and so on.

Programmatic Milestones

- Reflect new or enhancements to existing water quality programs that will support meeting the Bay TMDL allocations.
- May include new legislation, regulations and/or capacity-building actions to increase the resources needed to support the implementation of pollutant reduction measures.
- Also includes continuation of critical program actions identified in the WIP; such as permit reissuance, verification, data reporting, and engagement.

Department of Conservation and Recreation

Darryl M. Glover

Deputy Director for Dam Safety, Floodplain Management, and
Soil and Water Conservation

Darryl.Glover@DCR.Virginia.gov

2022-2023 Agricultural Sector Milestones

- Increases in all 2020-2021 numeric milestone targets for 2022-2023
- NMP education requirement reduction to 2 years in regulations
- Bundles for soil health, RMPs

2022-2023 Agricultural Sector Milestones

- Increase CREP match to 50% to promote forested buffers
- Expand VACS pilot projects Bay wide
- Outreach plan to farm community on the 2025 deadline
- Expand outreach to underserved communities

Virginia Department of Agriculture and Consumer Services

Darrell Marshall

Agricultural Stewardship Program Manager

Darrell.Marshall@VDACS.Virginia.gov

Draft 2022-2023 Programmatic Milestones

- **A-19.** Reporting BMPs implemented through the Agricultural Stewardship Program
 - Ongoing
- **A-36.** Reporting past stream-exclusion practices implemented prior to the use of the current reporting system
 - Implemented prior to 2016



Draft Programmatic Milestones (con't.)

- **A-37.** Develop a tiered certification program for farmers under the Virginia Grown domestic marketing program
 - The project in conjunction with Virginia Commonwealth University has concluded
 - Harmonized GAP certification (or higher)
 - Products grown under a Resource Management Plan or Conservation Plan



Draft Programmatic Milestones (con't.)

- **A-38. Dairy Margin Coverage Assistance Program**
 - The state program will reimburse dairy farmers for the insurance premium payments in the federal Dairy Margin Coverage program if they are implementing a Nutrient Management Plan
 - The federal Dairy Margin Coverage program is an insurance program designed to assist producers in coping with industry volatility, such as depressed milk prices, increasing input costs, market changes, unforeseen events, etc.



Draft Programmatic Milestones (con't.)

- **D-2.** Fertilizer Tonnage Reporting
- **D-3.** Reporting acreage under CFA management
- **D-4.** Education and Outreach regarding changes to the Fertilizer Regulation
- **D-19.** Changes to the Fertilizer Regulation



Virginia Cooperative Extension

Dan Goerlich

Associate Director for Economy, Community, and Food

dalego@vt.edu

Lonnie Johnson, Jr.

Associate Director for Field Operations and Administration

lojohns2@vt.edu

Virginia Farm Voluntary Agricultural BMP Inventory

- Helps Virginia tell the story of what farmers are doing to conserve soil, improve water quality, and help agriculture achieve its water quality goals for the WIP without cost-share.
- Partnership between the Secretary of Natural Resources, SWCD, VFB, DCR, VAC, VCE, VDOF, NRCS, VDACS, VT, DEQ, and EPA. VCE is the survey administrator.
- Currently in the data analysis phase. Partners will review the 2020 effort and consider the feasibility of future surveys.

Identify Potential Additional Credit Opportunities through Existing Programs

- Through enhanced understanding of partner water quality reporting requirements and existing VT and VSU faculty water quality related programming efforts:
 - Identify program outcomes that have positive implications for water quality and are not currently captured with existing evaluation efforts.
 - Develop evaluation strategies that serve the traditional purpose of program evaluation from an educational programming perspective, and potentially results in data, where appropriate, that supports partner agency reporting efforts and progress toward WIP goals.
 - Work with the Bay Interagency Implementation Team to identify research needs.
 - Would require a program coordinator or graduate student position to carry out this work.

New Partnership with DEQ Agricultural BMP Loan Program

- In 2021 VCE agreed to receive referrals from DEQ (and others) for producers that are interested in participating in the program but need assistance with completing and submitting the loan paperwork.

Virginia Cooperative Extension Capacity Needs

- Through the normal course of their educational programming efforts VCE agents help clientele make practice changes that have positive implications for sustainability, profitability, water quality, etc.
- VCE capacity was identified as a need in Action 9 of the *Joint Letter of Agreement between the Secretaries of Natural Resources, Agriculture and Forestry, Education, and the Virginia Association of Soil and Water Conservation Districts.*

Virginia Cooperative Extension Capacity Needs

- VCE currently has **eight** Agriculture and Natural Resources Extension agent vacancies that would require **\$536,000** recurring dollars to fill.
- VCE currently has **twelve** additional (4-H, Youth Development and Family and Consumer Science) Extension agent vacancies that would require an additional **\$816,000** recurring dollars to fill.

Virginia Department of Environmental Quality

Karen Doran

CWFAP Program Manager

Karen.Doran@DEQ.Virginia.gov

Melanie Davenport

Director, Water Permitting Division

Melanie.Davenport@DEQ.Virginia.gov

Clean Water Financing and Assistance Program 2022-2023 Programmatic Milestones

- Implement Commonwealth WW infrastructure needs assessment
 - due July 1, 2023 and every 4 years thereafter
- Conduct Water Quality Improvement Fund (WQIF) estimate of requests
 - due November 1 annually
- Conduct Stormwater Local Assistance Fund (SLAF) estimate of requests
 - due November 1 annually
- Enhance marketing of funding opportunities for non-MS4 localities
 - due December 31, 2022
- Develop and implement “pay for documented performance” pilot program to incentivize contracting and constructing innovative nutrient removal technologies
 - due December 31, 2022

Division of Water Permitting

2022-2023 Programmatic Milestones

- Reissue Municipal Separate Storm Sewer System permits
 - Individual MS4 permits
 - Small MS4 General Permit regulation
- Initiative 48 / Re-evaluate post-construction requirements under the VSMP
 - Re-evaluate post-construction water quality criteria
 - Future Projected Design Storms for Managing Stormwater

Division of Water Permitting

2022-2023 Programmatic Milestones

- Initiative 50 / Crediting of Urban Tree Canopy
 - Evaluate Urban Tree Canopy as land cover type and/or stormwater BMP
- Initiative 52 / Additional nutrient reductions from WWTPs
 - Enhanced Nutrient Removal Certainty (ENRC) Program
 - Chlorophyll-a based Wasteload Allocations for James River

Virginia Department of Forestry

Terry Lasher

Assistant State Forester

Terry.Lasher@DOF.Virginia.gov



Watershed Program – Manager (October 25, 2021)

Purpose: Promote RFB, UTC, bring focus to watershed wide approaches, enhance urban storm water efforts. (#36, F9)

- Focus: Develop criteria to achieve water quality credit for forest management plans “Maturity Measurements” concept.
- Positions: 4

Urban & Community Forestry Program – WQIF

Purpose: assists communities in attaining the WIP III goals for canopy expansion by providing cost share funding to plant and maintain more trees on both public and private land (#37, F4,5,6,11,12,14)

- Additions: Increased WQIF funding. \$500K (\$250K). Used for VTCW grant projects. CBRAPP(DEQ/EPA) \$350K over 3 yrs.
- Positions: No new capacity



Virginia Security Corridor Sentinel Landscape

Purpose: to sustain military readiness, reduce the effects of incompatible development around military installations, conserve working forests and agricultural lands and protect wildlife habitat by focusing on areas where these priorities overlap (#38, F13)

Specific Focus: Coordination of conservation activities to enhance collaborative efforts to retain working lands, combat climate change, deploy coastal resiliency efforts.

- Additions: If approved, \$300,000 over 3 yrs.
- Positions: 1



Additional Progress – Hardwood Habitat & Nursery

Purpose: Assisting with implementation and achievement of WIP planting, market enhancement and improved forest health goals.

- **HHI**: to address the decrease in valuable hardwood trees growing on public and private land in support of Virginia's economic and environmental health. This program will assist private landowners, state agencies, and the National Forest to implement better hardwood forest management practices.
- **Augusta Nursery expansion**: New equipment, fallow land to production increasing seedling out put by estimated 2.5-3 million
- **Innovation**: Creation of a hardwood management decision tool, cost share incentive program (\$350K forest products tax)
- **Additions**: \$350K for HHI, 1 time \$290K GA investment for nursery improvements and equipment.
- **Positions**: 1 Hardwood Program Manager

Virginia Department of Health

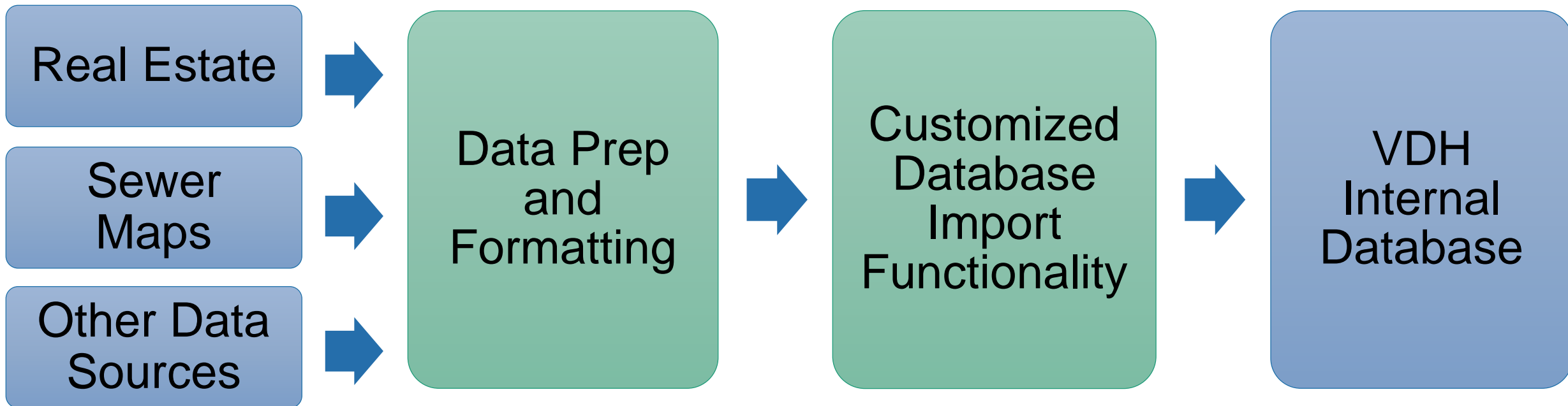
Megan Senseman

Environmental Data Coordinator

Megan.Senseman@VDH.Virginia.gov

Improve Data Management and Onsite Sewage System Inventory

- Secure funding including additional staff to:
 - Develop and maintain data import tools:



Replacement of Failing Onsite Sewage Systems

- Install at least 100 new onsite sewage systems or public sewer connections to replace failing onsite sewage systems.
- Target households at or below 200% of the federal poverty guidelines throughout the Chesapeake Bay Watershed.



Enhance VDH's Existing O&M Online Portal

- Allow for voluntary reporting of conventional system pumpouts and other maintenance.
- Part of proposed pilot program to transition pumpouts in the Three Rivers and Eastern Shore Health Districts.



Virginia Department of Health

109 Governor Street Richmond, Virginia 23219 | [Visit Official Website](#)

O&M Report Submission

Improve BMP Reporting Process

- Reassess current BMP reporting process to ensure all potential BMPs are included and are reporting the highest Nitrogen reduction.
- Send notice to owners of alternative onsite sewage systems that are overdue for maintenance.



Permits & Regulations

Air

Water

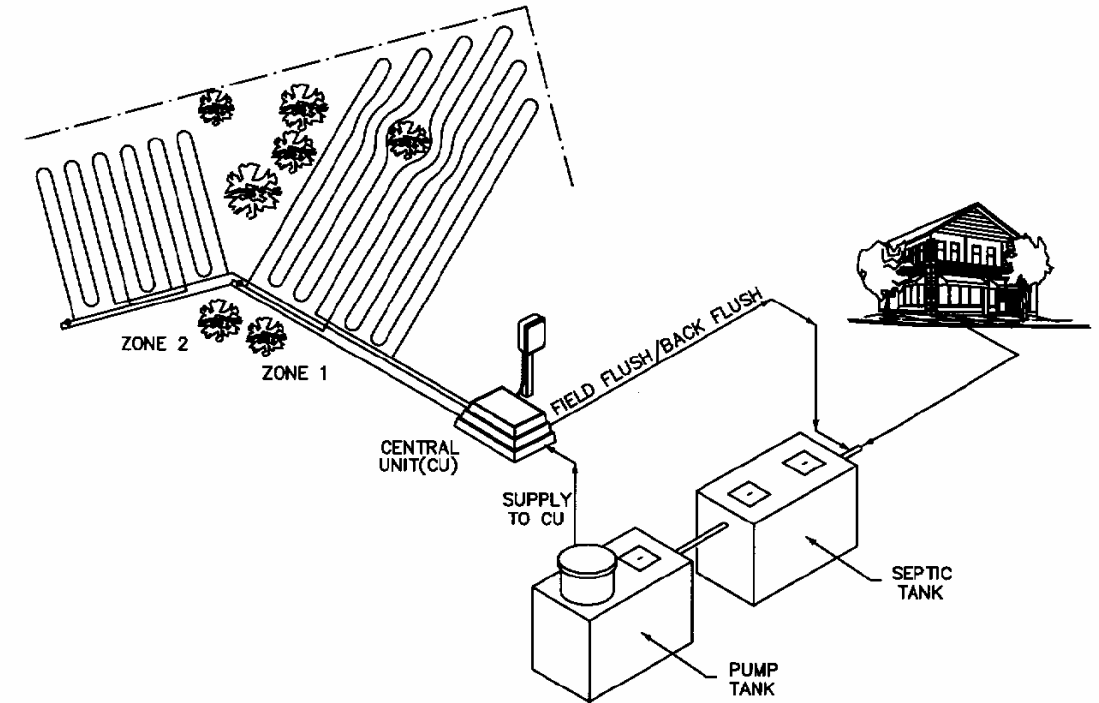
Land & Waste

Get Involved

Welcome to the BMP Warehouse

Implement New Best Management Practice

- Incorporate the 50% shallow drip dispersal BMP approved by the Chesapeake Bay Program Partnership into VDH's statewide database for future BMP reporting.



Climate Change Considerations

- Develop considerations for the impacts of climate change for septic.
- Incorporate considerations into comprehensive amendments for septic.



Wastewater Infrastructure Working Group

- Submit annual reports to Governor and General Assembly.
- The annual reports to governor and general assembly will outline policy recommendations to:
 - Promote education of adequate wastewater treatment
 - Coordinate wastewater funding
 - Endorse community-based wastewater solutions

Virginia Department of Wildlife Resources

David Norris

Regional Wildlife Manager

David.Norris@DWR.Virginia.gov

Becky Gwynn

Deputy Director

Becky.Gwynn@DWR.Virginia.gov

Department of Wildlife Resources Milestones

- WIP Chapter 7 Initiatives
- All under WIP Initiative 4
- M8-M12: wetlands restoration, conservation and protection
- Target timeline: December 2023



Department of Wildlife Resources Milestones

- M8: Provide 500 hours of technical assistance to 75+ public and private landowners, impacting 300 acres wetlands through management, enhancement or restoration.
- M9: Develop and implement wetland restoration and/or enhancement projects on 300+ acres of DWR lands.
- M10: Secure \$4,000,000+ in new funding to support wetlands acquisition, enhancement, or restoration projects.

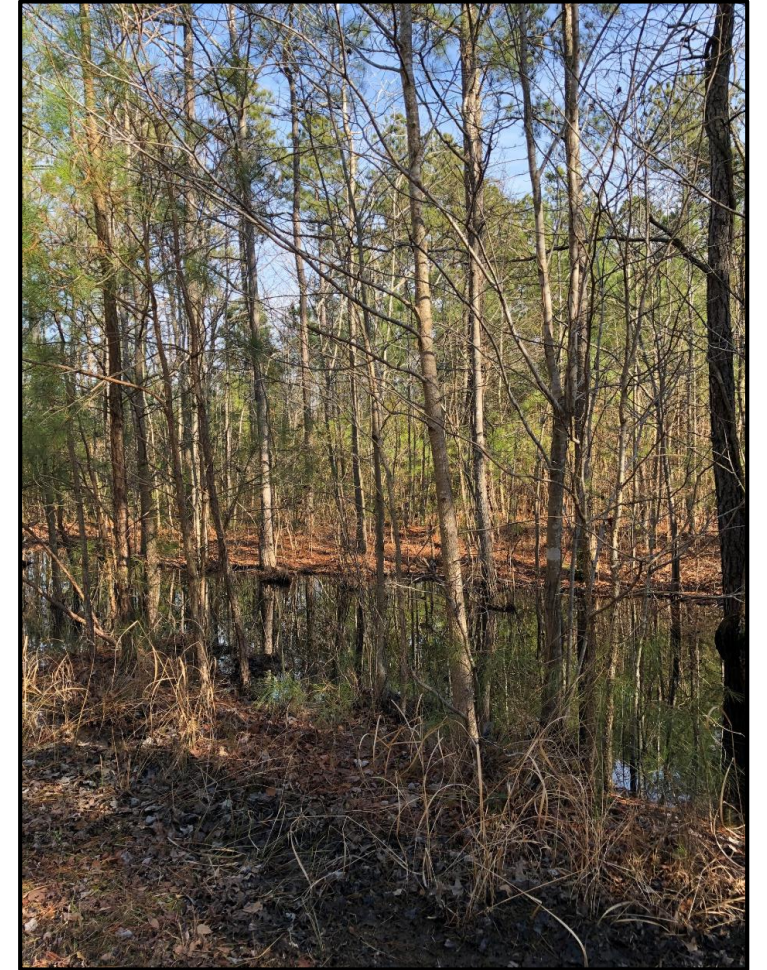


Photo credit: DWR

Department of Wildlife Resources Milestones

- M11: Leverage DWR's Virginia Migratory Waterfowl Stamp Fund competitive grant program to fund four projects that restore or enhance wetlands in the Bay watershed.
- M12: Provide 1,500 hours of coordination to state, regional and national wetlands and associated species conservation planning efforts, impacting via acquisition, enhancement or restoration.



Virginia Institute of Marine Science, Center for Coastal Resources Management

Pamela Mason

Senior Research Scientist

mason@vims.edu

CCRM/ VIMS

Deliver Research, Advisory Service & Outreach/Education

- Agriculture
- Wastewater
- Developed Lands
- Multiple sectors
- Reporting

CCRM/ VIMS

Agriculture

- CCRM, VIMS and DCR to determine if sea level rise adaptation can be incorporated into the Virginia Agriculture BMP Cost Share Program

Wastewater

- Septic Systems Mapping: failed, failing and threatened onsite septic systems in the coastal plain at risk to sea level rise
- Increasing the resiliency of Northern Neck communities vulnerable to flood impacts

CCRM/ VIMS

Tidal Wetlands/ Shores: BMP and adaptation strategy

- Mandated tidal wetlands inventory
- Decision-support model for computing sediment and nutrient removals of a living shoreline based on design parameters.
- Shoreline Management Model for preferred management approaches including Living Shorelines Suitability.
- Accelerating water quality improvements in the James River through the living shoreline collaborative.

Wetlands restoration targeting

- Develop strategies to enhance conservation and adaptation of wetlands in a changing climate

CCRM/ VIMS

- CBPA Guidance and Implementation Tools
- Integrated Submerged Aquatic Vegetation (SAV) mitigation policy for unavoidable losses of SAV.

Outreach

- Citizen Science Shoreline Evaluation Program. Operational in Northern Neck, in development Colonial SWCD
- Decision support training for Wetlands Boards

Reporting/ Verification

- Enhance 3D coastal water quality model (schism); from basin to creek

Overview of Public Review Process

- Draft milestone documents are posted online:
 - <https://www.deq.virginia.gov/water/chesapeake-bay/chesapeake-bay-nutrient-sediment-reduction-milestones>
- Review period: October 6, 2021 through November 5, 2021
- All comments must be submitted in writing
- Include the name and mailing address (or e-mail address) of the commenter.
- Two delivery options:
 - Email: chesbayplan@DEQ.Virginia.gov
 - Postal mail: DEQ, ATTN: Chesbayplan, P.O. Box 1105, Richmond, VA 23218

Milestones Next Steps:

- Review public comments
- Update draft milestones, as needed
- OSNHR review and approval
- Submit to EPA no later than January 15, 2022



Photo credit: DCR