**Virginia’s Chesapeake Bay 2022-2023 Final Progress Report**

# Agriculture - Key Ongoing Activities

| **Milestone**  **Number** | **Phase III WIP**  **Initiative or Page Number** | **Lead Agency/**  **Supporting Agencies** | **Actions**  **& Deliverables** | **Target**  **Dates** | **General Comments** | **Final Progress Update** | **Funding/**  **Grant Details** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| A1 | WIP Initiative 30 | Department of Environmental Quality (DEQ) | Reissue the [Virginia Pollution Abatement (VPA) Regulation and General Permit for Animal Feeding Operations and Animal Waste Management (9VAC25-192-10 et seq.)](https://law.lis.virginia.gov/admincode/title9/agency25/chapter192/section10):  Publish Notice of Intended Regulatory Action (NOIRA).  Complete Technical Advisory Committee (TAC) meetings. | Dec. 31, 2022  Dec. 31, 2023 | This general permit prescribes a set of Best Management Practices (BMPs) established in State Water Control Law [(§ 62.1-44.17:1.)](https://law.lis.virginia.gov/vacode/title62.1/chapter3.1/section62.1-44.17:1/) for a particular universe of animal feeding operations. | The NOIRA was published in the Jan. 30, 2023 Virginia Register. The 60- day NOIRA Comment period ended March 31, 2023.  DEQ held two TAC meetings on June 21 and July 12, 2023. DEQ prepared proposed regulatory revisions and presented the revisions to the State Water Control Board (SWCB).  On Nov. 30, the SWCB authorized DEQ to initiate a public comment period and public hearing on the proposed regulation. A 60-day public comment period will begin on January 15, 2024 and a public hearing will be held on March 5, 2024. | State funds |
| A2 | p. 43 | Department of Conservation and Recreation (DCR) | Require private sector Virginia-certified nutrient management planners who participate in Direct Pay to conduct Nutrient Management Plan verification. | Ongoing | Private Direct Pay Planners enrolled in NMP Direct Pay are required to do NMP verification in year two and three of plan life. | 5,202 acres were verified by private planners during the 2022 cycle.  23,602 acres were verified by private planners during the 2023 cycle. | State and federal funds |
| A3 | WIP Initiative 16 | DCR | Conduct annual Agricultural Needs Assessment and report funding needs to Governor and Virginia General Assembly. | Nov. 1, 2022;  Nov. 1, 2023 | Updated annually | The annual agricultural needs assessment was completed and presented to stakeholders in Aug. 2022. The assessment was adjusted to account for recent inflation and to plan for full implementation of WIP III annual practices and livestock exclusion by 2025. Meetings were held with the stakeholders in June and July 2023. Revisions were made to the assessment to reflect practice implementation by 2027, to include a 3% annual repair and replacement rate for structural practices, and to reflect significant amounts of funding provided by the state. | State funds |
| A4 | WIP Initiative 13 | DCR | Conduct both cover crop and conservation tillage surveys in Chesapeake Bay watershed. | June 30, 2022;  June 30, 2025 |  | The cover crop and tillage surveys were completed during Spring 2022. Virginia utilizes a watershed-wide survey to report conservation tillage results; however, cover crop data is reported on a practice basis. There is limited value in conducting a cover crop survey when data is not reported in that manner; however, the tillage survey is planned to be repeated in 2025. | State funds |
| A5 | WIP Initiative 13 | Virginia Cooperative Extension (VCE) in partnership with DEQ, DCR, Virginia Department of Agriculture and Consumer Services (VDACS), Virginia Department of Forestry (DOF), Soil and Water Conservation Districts (SWCDs), Virginia Tech (VT), U.S. Department of Agriculture - Natural Resources Conservation Service (NRCS), U.S. Environmental Protection Agency (EPA), and agriculture representatives | Continue work of the Voluntary Agriculture BMP Task Force to evaluate effective approaches to document BMPs implemented without cost share.  Partners review 2020 farmer survey effort and review the potential for process improvements and efficiencies and determine whether to repeat this effort in future years. | March. 1, 2022 | Analyze results of survey and site visits. Present initial and final findings to Task Force. Complete [final report](https://ext.vt.edu/content/dam/ext_vt_edu/homepage/Virginia%20Vol%20Ag%20BMP%20Producer%20Survey%20Final%20Report%2012-13-21.pdf). | Funding to support a second survey was provided in the form of WQIF funds courtesy of OSNHR/DCR. Preliminary discussions have been taking place regarding a second survey effort in 2026. | Survey administrator received $156,100 in funding support from the Water Quality Improvement Fund (WQIF) and EPA/DEQ to carry out survey design, implementation, and reporting. |
| A6 | WIP Initiative 14 | DCR, DEQ, DOF, VCE, VDACS, Virginia Association of Soil and Water Conservation Districts (VASWCD) | Conduct cross-training with partners, agencies and organizations that assist farmers. Continually identify and pursue opportunities to improve coordination. | Ongoing |  | The WIP Initiative 14 group met twice in 2022 and twice in 2023 to discuss ongoing activities with each agency and opportunities for cross-training of agency and partner staff. A cross-training opportunity was provided for stakeholders and partners on July 18, 2023; the opportunity provided high-level overviews of programs that provide incentives and assistance for producers. |  |
| A7 | WIP Initiative 15 | DEQ, VCE | In support of DEQ’s Agricultural BMP Loan Program, VCE will continue 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. | Ongoing |  | VCE extension agents assist with informing agricultural producers about the availability of the program through the normal course of their work. If a producer expresses interest, the agent assists the producer with understanding the program, how the program can help the producer achieve their goals, and with completing and submitting the loan paperwork.  Alternatively, producers that approach DEQ directly about program participation and whom need assistance with completing and submitting the loan paperwork, are occasionally referred to the appropriate Extension agent by DEQ. In this case, the agent meets with the producer to gain an understanding of the producer’s goals, and helps the producer to complete forms, submit paperwork, and respond to questions.  Agents essentially serves as a facilitator/interpreter to assist the producer with understanding, interpreting, and following through on the paperwork process. This is supplemental to assistance already provided by DEQ and intended simply to bolster/enhance DEQ capacity to serve producers.” |  |
| A8 | WIP Initiatives 16, 17 | Office of Secretary of Natural and Historic Resources (OSNHR) | Support budget proposals with adequate and consistent state funding to meet the agricultural needs assessment for both agricultural BMPs and technical assistance. | Ongoing |  | Virginia General Assembly and Governor appropriated record funding for agricultural BMPs for FY 2023-2024. The Governor’s introduced FY 2024-2026 budget fully funds the state’s portion of the needs assessment as it currently stands. | State funds |
| A9 | WIP Initiatives 17, 22 | DCR | Revisit/revise recommendations of the Virginia Soil and Water Conservation Board (VSWCB) Allocation Subcommittee to allocate base technical assistance (TA) funding to SWCDs for FY 2023-2024. Include consideration of SWCD workloads related to state tax credits and BMP verification. | Dec. 2022 |  | Completed.  Base TA was revised for FY 2023 and adopted by the VSWCB at their June 2022 meeting. Base TA will be reviewed and revised again if needed for FY 2025. | State funds |
| A10 | WIP Initiative 20 | DCR | Examine options and present to the VSWCB an approach that would regionalize prioritization of BMPs in the agricultural BMP cost share program. This examination will consider BMPs prioritized for meeting the Phase III WIP goals, soil health initiatives, and carbon sequestration. | June 30, 2023 |  | Completed.  Regional prioritization has been accomplished by SWCDs by focusing on the needs of farming operations locally and the needs of the producers in each SWCD. |  |
| A11 | WIP Initiative 20 | DCR | Report Soil Conservation and Water Quality Plans to include all federal and state conservation plans associated with agricultural BMPs in lifespan. | Ongoing | Many more plans exist than have been reported to date. Data gathering and reporting will be significantly enhanced. | DCR continues to work with DEQ to determine the best method for reporting as much data as possible for these plans. DCR continues to work with federal partners to ensure all plans that are eligible to be reported are included. Additional acreage included in resource management plans were reported to DEQ in 2023. |  |
| A12 | WIP Initiative 20 | DCR | Seek input from VACS technical advisory committee on expanding financial assistance for BMP maintenance into the VACS program with specific focus on maintenance as a barrier to farmers and landowners implementing riparian forest buffers. | Jan. 1, 2023 |  | Additional continuing conservation initiative practices were discussed during the 2023 TAC cycle and will be presented to the VSWCB for approval in the spring of 2024. | State funds |
| A13 | WIP Initiative 24 | DCR | Incorporate practices and/or bundles of practices that provide climate change benefits, such as soil health, that also improve water quality into the VACS program. | July 1, 2023 |  | A soil health bundle pilot practice for pastures was introduced into the FY 2023 VACS Program; it was implemented in one SWCD. The Whole Farm Approach for crop farms was made eligible in additional Districts for both the FY2023 and FY2024 VACS Program year: there are now 12 SWCDs that implement the Whole Farm Approach. |  |
| A14 | WIP Initiative 26 | DCR | Complete and post map of perennial streams in Virginia’s Chesapeake Bay watershed to allow farmers and the general public to determine where livestock stream exclusion should be implemented. | July 1, 2022 |  | Completed.  The data has been quality controlled and a public viewer has been created. The public viewer is available on the [DCR website](https://www.dcr.virginia.gov/soil-and-water/perennial-streams). |  |
| A15 | WIP Initiative 27 | DCR | Monitor and report continued progress of livestock stream exclusion efforts with a goal of exclusion from all perennial streams. Monitor and report continued progress of nutrient management plan efforts with a goal of 85% implementation of nutrient management plans. | Ongoing | Reports available on [DCR’s Soil and Water Conservation webpage](https://www.dcr.virginia.gov/soil-and-water/). | Progress continues to be monitored as BMPs are implemented. Data for nutrient management planning is routinely reviewed and updated maps were created to show implementation percentages at the County level. | State funds |
| A16 | WIP Initiative 27 | DCR | Develop outreach plan for farm community on WIP December 2025 deadline and the requirements that will take effect in July 2026 if targets are not met.  Determine capacity needs for an enforcement program if needed. | Sept. 1, 2022  Dec. 31, 2023 | DCR has applied to the Chesapeake Bay Program for $10,000 in (state) FY 2023 grant cycle for agricultural BMP marketing. | Marketing efforts including an outreach plan to increase producer participation in DCR conservation programs continue. DCR is requesting funding for marketing initiatives. DCR and SWCDs continue to coordinate outreach efforts with the Small Farm Outreach Program and other partners to increase the awareness of the financial assistance opportunities for producers. During FY 2023, there were 705 new participants in the VACS Program.  The effective date has been changed from July 2026 to July 2028. | State funds |
| A17 | WIP Initiative 29 | DCR | Continue to promote subsidized poultry litter transport. | Ongoing |  | Funding for poultry litter transport has been increased to record levels in FY 2023-2024 state budget. The VSWCB allocated $2 million for the poultry litter transport program for FY 2023-2024. Information sessions have been conducted in several counties/districts to promote the program. | State funds |
| A18 | WIP Initiative 33 | VDACS | Report BMPs installed to resolve founded Agricultural Stewardship Act (ASA) complaints. | Ongoing | ASA related BMPs are reported via a database maintained by DCR. Previous reporting issues in the database have been addressed. | Database is updated as complaints are received and BMPs implemented. | State funds |
| A19 | p. 120 | DOF | Forest Buffer – DOF will expand its collaboration with partners and provide technical assistance in NRCS, United States Department of Agriculture (USDA) and SWCDs in order to achieve riparian forest buffer project goals. It will also use grant programs such as the Virginia Environmental Endowment (VEE) Middle James Grant program to implement projects where traditional cost share programs do not attract landowner participation. | Dec. 31, 2023 | DOF hired three Riparian Buffer Specialists to work in high need counties. Positions are based in Warrenton, Woodstock and Crimora.  DOF continues to administer the James River Buffer Program, a 100% cost-share program with flexible requirements targeted towards landowners who do not qualify for other federal funding programs. This program serves urban, suburban, and rural areas. | Along with the three existing Buffer Specialists, DOF now benefits from four additional Watershed Positions. All these positions work together to build partnerships, pursue new funding opportunities, clarify reporting and recording protocols for field staff and partners, and find innovative ways to increase buffer implementation across the Commonwealth.  The DOF side of the James River Buffer Program has concluded. It will be replaced with a new statewide flexible buffer funding program that will support DOF led implementation with subawards to other technical service providers. This program will offer 100% cost-share to landowners who do not qualify or do not wish to participate in other buffer funding programs.  DOF completed an internal [Riparian Forest Buffer Action Plan](https://dof.virginia.gov/wp-content/uploads/Riparian-Forest-Buffer-Action-Plan_2023-08.pdf) in 2022 which guides this team’s work. As of Dec. 2023, the team has completed Phases 1 and 2 of this plan.  DOF received federal funding to create an updated Statewide Riparian Forest Buffer Action Plan. This work is underway. | VEE Middle James Grant, WQIF, Conservation Reserve Enhancement Fund (CREP), Environmental Quality Incentives Program (EQIP), USDA, State Lands WIP, James River Consortium, Chesapeake Bay Regulatory and Accountability Program (CBRAP), State Lands Fund  DOF has requested and expects an extension of a Farm Service Agency grant which funds its three Riparian Buffer Specialists. |
| A20 | p. 120 | DOF | Forest Buffer (with exclusion fencing) – Continue to coordinate and develop cost share programs with partner agencies to coordinate efforts and provide technical assistance on stream side exclusion practices. | Dec. 31, 2023 | DOF will continue to search for new, innovative partnerships and methods of stream exclusion practices with partners. These include participation with the Riparian Consortium, VACS program and the Chesapeake Bay Forest Work Group. | DOF continues to network with partners to identify new ways to increase implementation, identify and eliminate gaps in reporting, and build new capacity across the state.  The Statewide Riparian Buffer Action Plan detailed above will also support expanding this work. | VEE Middle James Grant, WQIF, CREP, EQIP, USDA, State Lands WIP, James River Consortium, CBRAP, State Lands Fund |
| A21 | p. 212 | DOF | Tree Planting – DOF will continue to utilize Reforestation of Timberland funding (RT), Ag. BMP, EQIP, CREP, NRCS and other cost share programs to impact tree planting projects in the watershed, including outreach efforts and technical assistance to provide a dedicated focus on program improvements, expansion and implementation. | Dec. 31, 2023 | RT program has matured and is celebrating its 50-year anniversary. Continues to be a reforestation strong point as well as afforestation. | DOF’s Watershed Program, created in 2021, is working across the Commonwealth to increase afforestation projects. This work includes offering training for field staff, identifying new partnerships, pursuing additional funding sources, and conducting an ongoing needs assessment to identify other opportunities for improvement. | VEE Middle James Grant, WQIF, CREP, EQIP, Reforestation of Timberlands, NRCS, DCR, State Lands WIP, CBRAP |
| A22 | p. 26 | Center for Coastal Resource Management (CCRM), Virginia Institute for Marine Science (VIMS) | Sea level rise impacts on Agricultural Lands – CCRM, VIMS and DCR to determine if sea level rise adaptation can be incorporated into the Virginia Agriculture BMP Cost Share Program. | Dec. 31, 2023 | Related research report: [Farm Resiliency Education for At-Risk Coastal Areas in the Chesapeake Bay](https://scholarworks.wm.edu/reports/2155/)  CCRM/VIMS has initiated conversations with DCR to consider opportunities for potential adaptations including wetland creation and alternative crops | VIMS continued discussion with DCR in CY 2023. |  |

(End of section)

# Agriculture – WIP Chapter 7 Initiatives

| **Milestone**  **Number** | **Phase III WIP**  **Initiative or Page Number** | **Lead Agency/**  **Supporting Agencies** | **Actions**  **& Deliverables** | **Target**  **Dates** | **General Comments** | **Final Progress Update** | **Funding/**  **Grant Details** |
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| A23 | WIP Initiatives 1, 11, 13, 26, 28, 40, 41 | VCE, Virginia State University (VSU), VT | Establish Chesapeake Bay Program Coordinator within VCE. Work with existing VCE, VT and VSU faculty that conduct water quality related educational programs to:  Learn about and compare existing program content and outcomes to Chesapeake Bay reporting requirements. Examples include educational programming related to septic system use, upkeep, and installation; grazing and hay feeding; home/yard garden management practices, and; urban nutrient management, among other topics.  Identify opportunities to capture program outcomes that have positive implications for water quality and are not currently being identified through existing evaluation efforts.  Work with faculty to devise evaluation strategies to capture participant practice changes in a format that informs the traditional purpose of program evaluation from an educational programming perspective, and results in data, where applicable, that supports partner agency reporting efforts and progress toward WIP goals.  Work with the Bay Interagency Implementation Team (BIT) to identify research needs.  Serve as the survey administrator for future editions of the Chesapeake Bay Voluntary Agricultural BMP Farmer Survey.  Coordinate the VCE Healthy Virginia Lawns Program and ensure that corresponding outcomes are captured and reported. | Dec. 2023 | Timeline contingent on the hiring of a Program Coordinator or M.S. level graduate student. | Funding for the Chesapeake Bay Program Coordinator position was not included in the final state budget. VCE utilized existing faculty with interests in this area to address the following milestone actions/deliverables:  Initiated conversations with faculty conducting water quality related research and Extension efforts encouraging them to consider how the outcomes of their work can contribute to the Commonwealth’s progress in achieving Bay related goals.  Coordinated with DCR to discuss how the new VT Soils Lab code and accompanying reporting system could support and enhance nutrient management planning and brainstorm how results/recommendations can potentially be used to assist with Bay goals while respecting client privacy.  Attended BIT, VASWCD Board, VSWCB, WIP 14 Collaboration, and other meetings to listen for research needs, opportunities, share agency updates, and make connections.  VCE Director approved an Extension Coordinator position to work with the VCE Program Development Unit and me (paid from the VCE budget). VCE plans to train this person to serve as the coordinator for future editions of the Chesapeake Bay Voluntary Ag BMP Farmer Survey.  With funding from DCR, VCE hired an Urban Nutrient Management Specialist responsible for working with VCE Healthy Virginia Lawns and growing the program. | Program would require approximately $89,000 annually. ($178,000 over FY 2023-2024).  Funding for the position was proposed but not included in the final state budget. |
| A24 | WIP Initiatives 1, 13, 15, 26, 27, 28, 31, 32, 37, 38, 39, 40, 41 | VCE, State and Local Governments, Stakeholders | Work with stakeholders and state & local partners to continue progress toward addressing Extension agent capacity needs to deliver educational programming within the Chesapeake Bay watershed region. | Ongoing |  | VCE filled five Agricultural and Natural Resources (ANR) agent positions during CY 2023. Positions were identified through an internal prioritization process. Extension agent positions are supported by both state and local dollars, and strong local government support enabled VCE to hire additional agents.  VCE ANR Extension agent positions filled during CY 2023 in the Chesapeake Bay watershed include the following counties and cities: Goochland, Stafford, Northampton, Suffolk, and Norfolk. | An estimated $594,000 (recurring) is needed to fill these positions. |
| A25 | WIP Initiative 14 | DCR | Implement Data Sharing Agreement with USDA-NRCS to re-verify federally funded agricultural BMPs with expired lifespans since 2010. | July 1, 2022 |  | Completed. Data sharing agreement is in effect. Initial pilot completed in Augusta County in 2021. A second pilot in the Lord Fairfax SWCD area was initiated in 2022 and a third pilot is currently under development for both Augusta County and Lord Fairfax SWCD. | State and federal funds |
| A26 | WIP Initiatives 19, 24 | DCR | Expand existing agricultural BMP pilot projects to additional areas within the Chesapeake Bay watershed in order to accelerate WIP Implementation. | Ongoing |  | In FY 2022-2023 the Whole Farm Approach, Small Herd stream exclusion initiative, and nutrient management plan and resource management plan direct pay were expanded to additional SWCDs. Additional funding ($7 million) for the small herd initiative was provided in the state’s budget. The Whole Farm Approach was expanded to include 12 SWCDs (seven in the Bay watershed) during 2023. | State funds |
| A27 | WIP Initiative 23 | DCR | Propose revisions to the Resource Management Plan (RMP) regulations and VSWCB policies that will promote an increase in certified planner capacity and both RMP development and certification. | Jan. 1, 2023 | DCR is exploring options that would be the most effective in achieving an increase in the number of private sector RMP planners. | DCR has developed additional online training to streamline the process of becoming a certified RMP developer.  DCR has taken several actions to promote RMP plan writer certification including increased marketing to nutrient management planners and increased outreach to individuals at industry conferences. DCR has increased the direct pay rates for resource management planners to further incentivize the development and certification of plans. DCR is also simplifying ways for individuals to document their knowledge of required skills, instead of receiving nutrient management and conservation planner certifications. | State funds |
| A28 | WIP Initiative 25 | DCR | Revise NMP Regulations to enable interested persons to qualify with two years of college education instead of four years. Where appropriate, begin to collaborate with community colleges on workforce development to promote this professional opportunity. | July 1, 2022 |  | Completed.  Became effective in April 2022. This regulatory action provides an additional option for individuals to meet the eligibility criteria established in 4VAC50-85-40, which outlines the items needed to achieve certification. Individuals who successfully complete a two-year college degree program and one and one-half years of practical experience will meet the educational components of these requirements. | State funds |
| A29 | WIP Initiative 26 | DEQ | Increase NMP implementation on agricultural lands:  During routine compliance inspections, DEQ staff will promote the benefits of whole farm nutrient management plans and provide information regarding the requirements of [§ 62.1-44.121.](https://law.lis.virginia.gov/vacode/title62.1/chapter3.8/section62.1-44.121/) of the Code of Virginia related to the NMP requirement for producers managing 50 acres or more of cropland in the Chesapeake Bay watershed, and explain the conditional effective date. | Ongoing through Dec. 2023 | [§ 62.1-44.17:1. (Permits for confined animal feeding operations)](https://law.lis.virginia.gov/vacode/title62.1/chapter3.1/section62.1-44.17:1/) and [§ 62.1-44.17:1.1 (Poultry waste management program)](https://law.lis.virginia.gov/vacode/title62.1/chapter3.1/section62.1-44.17:1.1/) of the Code of Virginia and [9VAC25-192-10 et seq. (VPA Regulation and General Permit for Animal Feeding Operations and Animal Waste Management)](https://law.lis.virginia.gov/admincode/title9/agency25/chapter192) and [9VAC25-630-10 et seq. (Virginia Pollution Abatement Regulation and General Permit for Poultry Waste Management)](https://law.lis.virginia.gov/admincode/title9/agency25/chapter630/) require NMPs for fields where collected manure is land applied. Management of cropland where manure is not applied is excluded from the scope of the Law and regulation and thereby restricts the agency to promotion and education regarding whole farm NMPs. | DEQ animal waste inspectors have been provided information related to the requirements of §62.1-44.121 to facilitate discussions with the permittees about the benefits of whole farm NMPs. | State funds |
| A30 | WIP Initiative 26 | DCR | Continue partnership with the Small Farm Outreach Program at Virginia State University (VSU-SFOP) to inform socially disadvantaged farmers about both the VACS and federal agricultural BMP incentive programs. | July 1, 2023 | FY 2023-2024 state budget appropriated additional funding to continue this partnership with VSU-SFOP through 2025. | VSU-SFOP continues to introduce small and socially disadvantaged farmers to DCR funded opportunities through SWCDs. New funding will be applied to an FY 2024-2025 contract extension. | State funds |
| A31 | WIP Initiative 27 | DEQ | Livestock stream exclusion:  During routine compliance inspections, DEQ staff will promote the benefits of stream exclusion for pastured livestock, refer permitted growers to their local SWCD where applicable and provide information regarding the requirements of [§ 62.1-44.123.](https://law.lis.virginia.gov/vacode/title62.1/chapter3.8/section62.1-44.123/) of the Code of Virginia related to bovine livestock stream exclusion from any perennial stream in the Chesapeake Bay watershed and explain the conditional effective date. | Ongoing through Dec. 31, 2023 | [§ 62.1-44.17:1. of the Code of Virginia (Permits for confined animal feeding operations)](https://law.lis.virginia.gov/vacode/title62.1/chapter3.1/section62.1-44.17:1/) and [9VAC25-192-10 et seq. (VPA Regulation and General Permit for Animal Feeding Operations and Animal Waste Management)](https://law.lis.virginia.gov/admincode/title9/agency25/chapter192) only prescribe BMPs for the confinement areas and land application of collected manure. Management of livestock on pastures are excluded from the scope of the Law and regulation and thereby restricts the agency to promotion and education regarding livestock exclusion in non-confinement areas for this initiative. | DEQ animal waste inspectors have been provided information related to the requirements of §62.1-44.123 to facilitate discussions with the permittees about the benefits of livestock exclusion in non-confinement areas. | State funds |
| A32 | WIP Initiative 28 | DCR | Research practical and economical uses for horse manure. Develop a marketing plan to promote its reuse. | July 1, 2023 |  | DCR and partners investigated potential uses; however, none of the potential uses were financially feasible. DCR applied for grant funds but was not awarded the funds. | State funds |
| A33 | WIP Initiative 30 | DEQ | Improve poultry litter transport accounting:  Begin annual reporting requirement for growers and end-users – submission upon DEQ request and in format prescribed by DEQ.  Deadline for grower reporting of transfer data from July 1, 2022 – June 30, 2023  Deadline for grower and end-user reporting of transfer data from July 1, 2023 – June 30, 2024 | Beginning Feb. 17, 2022  Sept. 15, 2023  Sept. 15, 2024 | [The Virginia Pollution Abatement Regulation and General Permit for Poultry Waste Management (9VAC25-630-10 et seq.)](https://law.lis.virginia.gov/admincode/title9/agency25/chapter630/) was amended and reissued in 2021 to include annual reporting requirements for both the permitted grower and the end-user of poultry waste. The new requirements will be phased in beginning Feb.17, 2022 through Feb. 17, 2024. DEQ is in the final stages of development of the poultry waste transfer database and external portal for external users to report their poultry transfer data more efficiently. Use of this portal will also be phased in and will include an educational component. | Beginning in Feb. 2022, DEQ staff requested and obtained transfer data from the permitted growers.  DEQ completed the development of the poultry waste transfer database and external portal for external users. Instructional materials were provided to permitted poultry growers.  Poultry growers submitted transfer information for the period July 1, 2022 through June 30, 2023 via submittal of hardcopy material, email, and the online portal. DEQ compiled this information and submitted to the Chesapeake Bay Program. | State funds, CBRAP grant used for development of an external portal and database for poultry waste transfer data. |
| A34 | WIP Initiative 31 | DCR | Review new CREP policies with USDA-Farm Service Agency (FSA) to determine whether Virginia should amend its CREP agreement. Increase the state cost share to 50%, providing 100% cost share for farmers implementing forest buffers at least 35-feet wide.  Provide additional incentives to assist farmers maintaining 35-foot or wider riparian forest buffers (dependent on additional funding). Develop a state incentive to encourage renewal of CREP contracts.  Target CREP marketing at pastures and hayfields in Virginia’s Chesapeake Bay watershed. | July 1, 2022 | Virginia routinely reviews its CREP agreements with FSA, especially after the passage of a new Farm Bill. While there have been addenda to the existing CREP agreements, the existing agreements provide more flexibility for producers than a new agreement would. | Completed.  After conversations with FSA, it was determined that Virginia does not need to amend its CREP agreement at this time. The approved state budget provided record amounts of funding for CREP for FY2023-FY2024 ($6 million). The VSWCB increased the state match for CREP practices from 35% to 50%. DCR will work to promote participation in CREP and will coordinate with FSA on marketing materials where appropriate. Additional funding ($2 million) was provided in the state budget to incentivize the maintenance of riparian buffers by agricultural producers. These funds may be used to incentivize the renewal of CREP contracts. | State funds |
| A35 | WIP Initiative 33 | VDACS | Report past stream exclusion practices implemented through the Agricultural Stewardship Act (ASA) Program that were not previously reported and tracked (prior to 2016). New ASA staff added in FY 2022 will assist the ASA Program in tracking these past practices and verifying they are still functioning. | Dec. 31, 2022 | Ongoing | Staff reported and verified 96,614 linear feet of stream exclusion and 313.66 acres of buffer during the calendar year 2022. These are practices implemented in the past without state or federal cost-share funding to address specific ASA water pollution complaints  In CY 2023, an additional 7,749 linear feet of stream exclusion and 23.1 acres of buffer were reported and verified. | State funds |
| A36 | WIP Initiative 33 | VDACS, DCR | VDACS marketing staff in conjunction with Virginia Commonwealth University (VCU) have been working to develop a tiered certification program for farmers and growers under the VA Grown domestic marketing program. The program would encompass not just local and fresh, but also quality, certified and sustainable. The sustainable part would reflect products grown under a Resource Management Plan or Conservation Plan, and certified would be Harmonized GAP or higher. Work from VCU is due back by the end of August or early Sept. 2021. Once that is received, VDACS would then consult with DCR and craft the specific certification program. | Dec. 31, 2022 |  | VDACS and DCR continue to work on this effort however challenges remain to implementation.  Unexpected delays in the RFP process for the Virginia Grown website were encountered, delaying the introduction of the new tiered certification program until approximately Aug. 2024.  Other financial incentives, including increased tax credits and an incentive in the BMP rankings to receive cost-share, seem to be increasing the visibility of RMPs. | State funds |
| A37 | WIP Initiative 33 | VDACS | VDACS has established a new reimbursement program to assist dairy farmers that participate in the federal Dairy Margin Coverage (DMC) Program. The new VDACS Dairy Producers Margin Coverage Premium Assistance Program (Program) will reimburse dairy farmers in the state for the premium payments they have made for the federal Dairy Margin Coverage program at the tier 1 level. The federal risk management program, the 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, and other unforeseen changes. Dairy farmers in Virginia that participate in the federal coverage program at the tier 1 level and (i) have a resource management plan and have been certified as having implemented such plan by or are in the process of having such plan reviewed by DCR or a local SWCD or (ii) have a nutrient management plan that has been approved by or is currently being reviewed by DCR are eligible to apply to participate in the Program. Reimbursement will be provided on a first-come, first-served basis based on available funding. | Ongoing | Chapters 330 and 331 of the 2021 Special Session 1 Acts of Assembly establishes the program.  Eligible dairy producers must apply by Feb. 1 of each year to participate. | In its first year, the program reimbursed 160 dairy farms $682,612 for Tier I DMC premium payments. 34% of the dairies that applied submitted applications in which resource management plans or nutrient management plans had an effective date within one month of the program opening enrollment date. This would indicate some correlation between the program requirements and motivation to develop or update a resource management plan or nutrient management plan.  In the second year, the program reimbursed 139 dairy farms $585,710 for Tier I DMC premium payments. There were eight farms that applied for the first time, and the program influenced all of them to develop a resource or nutrient management plan.  The program was extended through 2028 during the 2023 General Assembly Session. | State funds, $1 million allocated for FY 2022. |
| A38 |  | DEQ, DCR, VDACS | Respond to 2021 EPA Animal Agriculture Programs Assessment. | Dec. 31, 2023 | EPA commenced an update to the 2015 [Animal Agriculture Programs Assessment](https://www.epa.gov/chesapeake-bay-tmdl/epas-assessments-animal-agriculture-programs-chesapeake-bay-watershed) in 2021. Virginia agencies will consider the findings and respond as appropriate. | Completed.  DEQ staff participated in this multi-segment process to assess the Programs. Thus far this includes responding to an extensive and very detailed questionnaire, responding to follow-up questions as well as questions during the staff interviews. The DEQ Animal Waste Program Coordinator provided all responses in writing to the EPA contractor throughout this process. As of Dec. 31, 2023, EPA has not provided DEQ staff a draft or final Assessment report. |  |
| A39 | WIP Initiative 14 | DCR | Pursue VSWCB policy to articulate expectations for outreach to new, small and underserved farmers. | July 1, 2022 |  | Revisions to the FY 2023 grant agreements with Districts require each District to hold an outreach event for producers that highlights the VACS program and other agricultural programs. Districts must notify appropriate partners, including the VSU-SFOP, of the event. Many Districts have already conducted outreach events and others will continue to host events throughout the program year.  This requirement was continued in the FY 2024 grant agreements that were approved by the VSWCB. | State funds |
| A40 |  | VCE, NRCS, Virginia Soil Health Coalition | Healthy Soils Initiative: The [VA Soil Health Coalition](https://www.virginiasoilhealth.org) facilitates communication and collaboration among partners across the commonwealth to support farmers, leverage resources, and advance strategies that increase soil health and the understanding of its many co-benefits. The VA Soil Health Coalition supports four core principles of soil health management: keep soil covered, minimize soil disturbance, maximize living roots, and energize with diversity. Efforts will be made to explore VA Soil Health Coalition outcomes, impacts and their potential to support WIP goals and be captured in Virginia’s annual reporting. | Ongoing |  | From Apr. to Nov. 2022, the VA Soil Health Coalition, guided by its Steering Committee and a Strategic Planning Committee, underwent an in-depth, iterative strategic planning process to identify core priorities and strategies for the coming years. The bold, new [Collaborative Strategic Plan](https://www.virginiasoilhealth.org/strategic-plan) will guide the Coalition's long-term organizational growth and significantly advance the protection of Virginia's soil health and diverse landscapes. | Included in Program Coordinator line item. |
| A41 |  | VCE | The Graze 300 program enables Virginia farmers to achieve 300 days of livestock grazing by facilitating better pasture management and environmental stewardship. | Ongoing | The goal of this program is to improve both farm profitability and water quality by converting livestock producers to winter feeding management that is reliant upon grazing instead of a four-month long dependency on more costly hay feeding. Extending the grazing season will benefit water quality through improved water infiltration, improved nutrient use efficiency, fewer barren areas in fields (winter feeding sites) and improved soil organic matter. Efforts will be made to explore Graze 300 outcomes and impacts and their potential to support WIP goals and be captured in Virginia’s annual reporting. For more information visit the [Graze 300 VA webpage](https://ext.vt.edu/agriculture/graze-300.html). The 2023 Graze 300 impact statement will be ready in January 2024. | A survey of Graze 300 participants was carried out in 2021 and summarized in Jan. 2022. Of the 518 Virginia cow-calf producers who responded to the survey, 10.6% are grazing more than 266 days per year. Results indicate at least a two percent improvement over the past four years (approximately 12,760 cows). A conservative economic benefit of $50 per cow means an annual improvement in net farm income of $638,000. Regarding water quality, 10.6% of Virginia’s cow-calf producers in the Bay watershed represent 26,540 beef cows that graze 50,000 to 75,000 acres of pasture. The Graze 300 VA Initiative is also reaching equine, sheep, and goat producers.  To further grow the program’s success, the Graze 300 VA team received a grant from the Virginia Tech College of Agriculture and Life Sciences. The grant is enabling VCE to partner with an expanded team of conservation agencies, industry, and related groups and to move forward at an accelerated pace. This larger team is partnering with the Virginia Tech Sociology Department to better understand challenges that prevent farmers from implementing better grazing practices. The team is also training professionals from industry and multiple agencies, developing new educational resources and field-testing new technology. The long-term benefits of these efforts are increasingly profitable Virginia farms, enhanced water quality, and improved soil health. | Included in Program Coordinator line item. |
| A42 |  | DCR | DCR will work with partners to inform agricultural producers of the significant increase in tax credits that are available since Jan. 1, 2021 for both the implementation of BMPs and the purchase of certain types of equipment. | Dec. 31, 2023 |  | In response to the revisions to the tax credits available to producers, DCR provided write-ups for partners to share with producers including the Virginia Farm Bureau Federation, the Virginia Agribusiness Council, and VCE. Trainings were provided to District staff. Additional reminders about the increased tax credit amounts available have been provided to District staff for dissemination to producers.  DCR, Department of Taxation, and SWCDs continue to address questions and concerns about the current process to request tax credits as part of standard operating procedures. |  |

(End of section)

# Wastewater & Septic – Key Ongoing Activities

| **Milestone**  **Number** | **Phase III WIP**  **Initiative or Page Number** | **Lead Agency/**  **Supporting Agencies** | **Actions**  **& Deliverables** | **Target**  **Dates** | **General Comments** | **Progress Update** | **Funding/**  **Grant Details** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| W1 | WIP Initiative 2 | DEQ | Continue implementation of septic BMPs to address local impairments within the Chesapeake Bay watershed in Section 319(h) and WQIF implementation project areas. | Dec. 31, 2022 | Includes coordinating implementation efforts where possible based upon VIMS and VDH mapping of existing and increased septic failures.  Pursuant to wastewater equity legislation passed by the 2021 General Assembly (SB 1396), this also includes coordinating funding initiatives with VDH and the Department of Housing and Community Development as much as feasible. | This effort continues in 319 program. Final number of septic BMPs will be included in the 2023 Annual Report under draft. | Chesapeake Bay Restoration Fund |
| W2 | WIP Initiatives 45, 51 | DEQ | In partnership with VDH, and in consultation with stakeholders, implement the wastewater infrastructure needs assessment in accordance with Va. Code [§ 62.1-223.3](https://law.lis.virginia.gov/vacode/title62.1/chapter21.1/section62.1-223.3/). | July 1, 2023 |  | DEQ’s Clean Water Financing and Assistance Program (CWFAP) collected wastewater needs data as part of EPA’s Clean Watersheds Needs Survey to be utilized in the Commonwealth’s wastewater needs assessment report. VDH collected on-site septic needs for the Commonwealth.  The Commonwealth’s Wastewater Needs Assessment Report was submitted for review May 2023. The report was then submitted to the General Assembly in Dec. 2023. |  |
| W3 | WIP Initiatives 45, 51 | DEQ | Conduct annual WQIF Wastewater Requests Estimates Report and include findings in annual Chesapeake Bay and Virginia Waters Clean Up Plan Report for the Governor and Virginia General Assembly. | Nov. 1, 2022;  Nov. 1, 2023 |  | Completed.  Annual report was included in FY 2022 and FY 2023 Chesapeake Bay and Virginia Waters Clean Up Plan Report for the Governor and Virginia General Assembly. |  |
| W4 | WIP Initiative 52 | DEQ | Register significant dischargers under the reissued watershed general permit (9VAC25-820).  Modify watershed general permit (9VAC25-820) to incorporate Enhanced Nutrient Removal Certainty Program wasteload allocations and Chlorophyll-a based wasteload allocations. | Jan. 1, 2022  Jan. 30, 2023 | General permit to be modified with VSWCB adoption of Chlorophyll-a based wasteload allocations.  The VSWCB approved this action in Dec. 2021 and the proposal is currently in executive review. | Significant dischargers were registered under the reissued watershed general permit effective Jan. 1, 2021. Amendments to the watershed general permit to incorporate Enhanced Nutrient Removal Certainty Program WLAs and Chlorophyll-a based WLAs completed and effective Jan. 1, 2023. |  |
| W5 | WIP Initiative 52 | DEQ | Modify individual VPDES permits to incorporate Enhanced Nutrient Removal Certainty (ENRC) Program nutrient upgrade schedules and technology-based effluent limitations. | Jan. 1, 2022 |  | Completed.  All individual VPDES permits have been modified to incorporate ENRC Program schedules and technology-based effluent limits.  All new permits will include these as appropriate. |  |
| W6 | WIP Initiative 51, p. 26 | CCRM, VIMS | Mapping failed, failing and threatened onsite septic systems including systems in the coastal plain at risk to sea level rise. | Ongoing | This project identifies locations where septic systems are at risk from rising sea levels and the “lifespan” of existing systems under current sea level rise projections. Results to help inform VDH regulations or operations. | The initial analysis identifying the location of septic systems at risk is complete. The longevity analysis is underway and includes input from the VDH-led stakeholder analysis. | Chesapeake Bay Restoration Fund |
| W7 | p. 26 | CCRM, VIMS | Increasing the resiliency of Northern Neck communities vulnerable to flood impacts. | Ongoing | This project identifies threats, mitigation options, and policy solutions oriented around current and emerging onsite septic issues in socially vulnerable areas in the Northern Neck. Results will help target funding opportunities and application of other solutions. | Completed.  Activities included:  1. Mapping septic systems vulnerable to current and future flood impacts.  2. Identifying clusters of systems at current or future risk, and weight clusters in socio-economically disadvantaged areas.  3. Modeling potential sites for community wastewater systems.  4. Working with localities and conducting research on legal and policy barriers/opportunities to implementation of adaptations. | Jesse Ball DuPont Fund |
| W8 |  | DEQ | Finalize and begin implementation of DEQ's American Rescue Plan Act (ARPA) Wastewater Funds Implementation Plan. | Dec. 31, 2022 | Funding details are included in the budget proposal available on [Virginia’s LIS website](https://budget.lis.virginia.gov/bill/2022/1/). | DEQ’s ARPA Wastewater Funds Implementation Plan was finalized in Aug. 2022, significant outreach efforts were conducted Aug. and Sept. 2022, application solicitations began Sept. 2022. ARPA ENRC fund amounts authorized Nov. 2022. |  |

(End of section)

# Wastewater & Septic – WIP Chapter 7 Initiatives

| **Milestone**  **Number** | **Phase III WIP**  **Initiative or Page Number** | **Lead Agency/**  **Supporting Agencies** | **Actions**  **& Deliverables** | **Target**  **Dates** | **General Comments** | **Progress Update** | **Funding/**  **Grant Details** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| W9 | WIP Initiative 53 | DEQ | Complete amendments to the Water Quality Management Planning Regulation (9VAC25-720) to include Chlorophyll-a based wasteload allocations for significant James River dischargers and re-evaluate of industrial significant wasteload allocations. | Jan. 30, 2023 | The VSWCB approved these amendments in December 2021 and the rulemaking is currently in executive review. | Rulemaking completed and effective as of Dec. 21, 2022. |  |
| W10 | WIP Initiative 53 | DEQ | Submit for executive review a Notice of Intended Regulatory Action to amend Sewage Collection and Treatment Regulations (9VAC25-790).  Establish Regulatory Advisory Panel and develop proposed amendments for consideration by VSWCB. | Jan. 1, 2023  July 1, 2023 |  | NOIRA public notice ended on Dec. 6, 2023. No comments were received as part of this advertisement. A Regulatory Advisory Panel and development of proposed amendments for consideration by the VSWCB will be developed in CY 2024. |  |
| W11 | p. 163 | VDH | Improve data management and Onsite Sewage System inventory in VDH’s internal enterprise database through data collection and quality improvement, improve data analytics by incorporating health equity considerations. | Aug. 2023 | Secure funding to support data management and process improvement to include additional staff that will manage development and maintenance of technical tools for transferring external sources of septic data into VDH’s internal enterprise database. The additional staff will conduct data analysis, visualization, and develop necessary partnerships to incorporate health equity considerations and impacts in developing and prioritizing proposals to help septic system owners. | General Assembly provided funding for an additional staff member within the Office of Environmental Health Services to develop the online reporting tool for conventional septic system maintenance. This funding was associated with HB 769 from the 2022 session. This staff will also assist with training, data quality improvement, and other items. This position was filled in Aug. 2023. As part of the Environmental Health Capacity Grant awarded to VDH by the CDC, VDH staff created a map of septic systems within Virginia along with other environmental health and climate change hazards that is available for use by VDH employees and other partners such as local Planning District Commissions (PDCs). | State general funds were provided during the 2022 General Assembly session. Funding for the septic system map was provided by the CDC Environmental Health Capacity Grant. |
| W12 |  | VDH | Replacement of failing onsite sewage system, straight pipes, and pit privies with regulatory compliant onsite sewage systems or sewer connections. | Dec. 2023 | Install at least 100 new onsite sewage systems or public sewer connections to replace failing onsite sewage systems, straight pipes, and pit privies. Project will target households at or below 200% of the federal poverty guidelines throughout the Chesapeake Bay Watershed. | VDH received over 300 applications for septic repairs through ARPA funding. Of those projects, 96 septic repairs and sewer connections have been installed as of Dec. 15, 2023. VDH anticipates all remaining projects will be completed by Dec. 31, 2024. Additionally, VDH has installed 26 septic repairs under a grant program through Virginia Environmental Endowment (VEE) and the Smithfield Foundation. Of those, five received combined funding from ARPA and VEE. VDH exceeded the goal and installed 117 septic repairs and sewer connections during the milestone period. | VDH received $11.5 million for septic and well repairs through ARPA. VDH also received $500,000 from VEE and the Smithfield Foundation for septic repairs in Isle of Wight, James City, and Surry counties. VDH has also received $250,000 in Most Effective Basin funding from DEQ. |
| W13 | p.163 | VDH | Enhance existing O&M online portal, VDH’s internal enterprise database and related external interfacing for reporting conventional system maintenance. | Aug. 2023 | Allow for voluntary reporting of conventional system pumpouts and other maintenance. Collecting this data throughout the Chesapeake Bay watershed allows for better reporting of Nitrogen reduction.  The development of an online portal for submission of conventional system pumpouts is the first phase of a proposed pilot program to transition pumpouts in the Three Rivers and Eastern Shore Health Districts. | General Assembly passed HB 769 during the 2022 session. This bill directs VDH to take over enforcement of Chesapeake Bay pumpout requirements in the Eastern Shore, Middle Peninsula, and Northern Neck regions of Virginia. VDH developed an online reporting tool for conventional septic pumpouts and maintenance that went live July 1, 2023. This tool is also available to service providers statewide for voluntary reporting. | State funds. |
| W14 | p. 163 | VDH | Improve BMP reporting process through changes to data acquisition and analysis that modifies and interprets VDH’s internal data and data validation and improve reporting of annual maintenance for alternative onsite sewage systems. | July 2022 | Reassess current BMP reporting process to ensure all potential BMPs are included and are reporting the highest level of Nitrogen reduction. Work with VDH’s Local Health Districts to update and validate the data associated with the alternative septic systems to then improve the BMP reporting. Additionally, validate O&M reports and connect these to septic systems through improved process to ensure systems are retained in BMP reporting so long as they have one O&M report every 10 years. Validation utilizes fields submitted in the report such as address, certification statement, and operator information. VDH to ensure notice sent to all owners of alternative onsite sewage systems that are overdue for reporting of annual maintenance. | For the 2023 BMP reporting, VDH has continued efforts to get the most BMPs reported through extracting data from an internal database. There have not been major changes to the process this year as no other improvements have been identified. VDH has also received historic conventional pumpout data from Chesterfield county that has not yet been reported to the DEQ BMP Warehouse, and VDH will include this data in its 2023 BMP reporting. In 2024, as a result of 2022 legislation, VDH will report all conventional pumpouts reported through its new conventional maintenance portal. Any other historical conventional pumpout data received from localities in the Eastern Shore, Middle Peninsula, and Northern Neck regions will also be included in 2024 BMP reporting. | Additional funding is necessary for Bay wide notifications for overdue maintenance reports. |
| W15 |  | VDH | Implementation of additional BMP for 50% reductions from shallow drip dispersal installations. | Aug. 2022 | Incorporate the 50% shallow drip dispersal BMP approved by the Chesapeake Bay Program Partnership into VDH’s statewide database for future BMP reporting. | The new shallow drip dispersal BMP is included in VDH’s BMP reporting There were 24 systems that fit this criteria in 2023. | Funding through general maintenance to statewide database. |
| W16 |  | VDH | Develop considerations of the impacts of climate change on proposed treatment works for inclusion in the Sewage Handling and Disposal Regulations. VDH work to update septic regulations and incorporate climate change. | Dec. 2023 | VDH will work with a diverse group of stakeholders to develop considerations for the impacts of climate change. These considerations will be incorporated into comprehensive amendments to the Sewage Handling and Disposal Regulations, and will be submitted through the standard regulatory development process. These amendments will be created pursuant to Chapter 382 of the 2021 Special Session 1 Virginia Acts of Assembly. | VDH held four meetings in 2022 with stakeholders to evaluate initial regulatory consideration for addressing the impacts of climate change on onsite sewage systems. Stakeholders used the Hazard Analysis and Critical Control Point model to begin to outline the framework of potential regulations. A periodic review of the 12VAC5-610 regulations was opened in Dec. 2022, and VDH anticipates submission of a NOIRA by the end of 2023. | Standard agency regulatory development resources. |
| W17 | WIP Initiative 51 | VDH | Engage stakeholders via the Wastewater Infrastructure Working Group to assess wastewater infrastructure needs and develop policy recommendations. Incorporate ongoing engagement of the Wastewater Infrastructure Policy Working Group pursuant to Chapter 382 of the 2021 Special Session 1 Virginia Acts of Assembly. | Dec. 2022; Dec. 2023 | The Wastewater Infrastructure Working Group will work with stakeholders to submit annual reports to the Governor and General Assembly no later than December 2022 and December 2023. The reports will outline infrastructure needs based on assessments completed by participating stakeholders, including assessment of septic failure hotspots, and policy recommendations to: i) promote public education about the importance of adequate wastewater treatment; ii) encourage opportunities for local, state, and federal entities to coordinate the use of available wastewater infrastructure funding; iii) endorse community-based wastewater solutions for onsite wastewater systems; and iv) support prioritized, focused, and innovative uses of state and federal funding. | A Wastewater Infrastructure Manager was hired in Feb. 2022. The Wastewater Infrastructure Working Group has worked with stakeholders to draft the annual report to the Governor and General Assembly from the workgroup. The Wastewater Infrastructure Manager also assisted in the development of a Wastewater Infrastructure Needs Assessment in Virginia. The assessment identified an estimated need of $5 billion for onsite sewage system needs over the next 20 years. | General funds were provided to hire a Wastewater Infrastructure Manager at VDH. |

(End of section)

# Developed Lands (Regulated & Unregulated Urban) – Key Ongoing Activities

| **Milestone**  **Number** | **Phase III WIP**  **Initiative or Page Number** | **Lead Agency/**  **Supporting Agencies** | **Actions**  **& Deliverables** | **Target**  **Dates** | **General Comments** | **Progress Update** | **Funding/**  **Grant Details** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| D1 | WIP Initiative 41 | VCE, VSU, DCR | Implement an urban nutrient management pilot project to train youth, via the VCE 4-H Program, to make turf grass management recommendations for homeowners.  Pursue implementation of an urban nutrient management pilot project to train youth, via the VCE 4-H Program, to make turf grass management recommendations for homeowners. | June 30, 2023 | Efforts will be made to teach youth evaluation techniques that result in the information that supports WIP goals and can be included in Virginia’s annual reporting. | The VSU faculty member responsible for this initiative resigned and the position has not been filled. DCR provided $38,000 to VCE and VSU for this initiative. However, the program was not successful and funding was not provided again. | State funds |
| D2 |  | VDACS | Utilize fertilizer tonnage reporting system data to report annual fertilizer sales to DEQ. | Ongoing | [Annual report of fertilizer sales posted on the VDACS website](https://www.vdacs.virginia.gov/plant-industry-services-agricultural-commodity-inspection.shtml#materials) by Jan. 31 each year for previous fiscal year. | Completed.  The information is available on the [VDACS website](https://www.vdacs.virginia.gov/pdf/report-totalfertcounty20-21.pdf). | State funds |
| D3 | WIP Initiative 42 | VDACS | Utilize annual fertilizer application data to report acres of non-agricultural lands under management by Certified Fertilizer Applicators (CFAs) and receiving fertilizer in accordance with Nutrient Management Standards and Criteria. | Ongoing | Reported annually in June. | Completed.  The information is available on the [VDACS website](https://www.vdacs.virginia.gov/pdf/CFA-TFERT-2021.pdf). | State funds |
| D4 | WIP Initiative 42 | VDACS | VDACS staff will continue to work with turfgrass industry contacts to conduct education and outreach regarding changes to the requirements of the 2 VAC 5-405, *Regulations for the Application of Fertilizer to Nonagricultural Lands,* to ensure accurate reporting. | Ongoing | Annually, as needed (as determined by staff) | Presentation at Virginia Turfgrass Council (VTC) annual conference in February 2022 to provide information on changes to the 2 VAC 5-405, *Regulations for the Application of Fertilizer to Nonagricultural Lands.*  Information on changes to 2 VAC 5-405, *Regulations for the Application of Fertilizer to Nonagricultural Lands* provided to VTC members via email on Feb. 4, 2022.  Article in VTC September/October newsletter regarding changes to 2 VAC 5-405, *Regulations for the Application of Fertilizer to Nonagricultural Lands.*  Presentation at Virginia Turfgrass Council (VTC) annual conference in January 2023 to provide information on reporting requirements in 2 VAC 5-405, *Regulations for the Application of Fertilizer to Nonagricultural Lands.* | State funds |
| D5 | WIP Initiative 44 | DEQ | Conduct annual Stormwater Local Assistance Fund (SLAF) Requests Estimates Report and include findings in annual Chesapeake Bay and Virginia Waters Clean Up Plan Report for the Governor and Virginia General Assembly. | Nov. 1, 2022;  Nov. 1, 2023 | SLAF funding provided in the budget proposal available on [Virginia’s LIS website](https://budget.lis.virginia.gov/bill/2022/1/). | Completed. |  |
| D6 | WIP Initiative 45 | DEQ | Enhance marketing of funding opportunities for non-MS4 localities. Incorporate marketing survey results into draft comprehensive marking plan. Finalize comprehensive marketing plan. | Dec. 31, 2022;  Dec. 31, 2023 |  | Comprehensive marketing plan complete. Internal team developing marketing materials for non-MS4 localities. |  |
| D7 | WIP Initiative 43 | DCR, VASWCD | Continue to support VASWCD for implementation of voluntary urban stormwater BMP retrofits through SWCD implementation of the Virginia Conservation Assistance Program (VCAP).  DCR will work with VASWCD to ensure that no less than 25% of the funding each fiscal year supports vulnerable populations, especially those of lower economic status, indigenous, historically underrepresented communities and people of color.  VASWCD will provide financial and technical assistance for urban best management practices for homeowners and small properties via VCAP, DCR Shoreline Erosion Advisory Service (SEAS), and other programs. | Ongoing |  | The FY 2023-2024 budget provided substantial funding for VCAP. A grant agreement with the VASWCD has been executed and the VASWCD is working to expand the number or Districts that currently participate in the VCAP program. Budget language requires no less than 25% of the funding to be used for projects in low-income geographic areas. The VASWCD is finalizing strategies to address this requirement and is reviewing options that may allow for the piggybacking of funds for VCAP practices in these areas. | State funds |
| D8 | p. 9 | DEQ | Reissue Prince William and Chesterfield MS4 Permits. | Dec. 31, 2022 |  | The Prince William and Chesterfield County draft permits were sent to EPA for review. The public notice period for Prince William County ended on Dec. 3, 2023. The public notice period for Chesterfield County will end on Jan. 28, 2024. DEQ is working on incorporating changes required as part of the public notice period and responding to comments. The permits are expected to be finalized by Jan. 31, 2024. | DEQ has been awarded $150,000 through an EPA grant to hire contractors to assist with MS4 Implementation Plan reissuance. DEQ is currently in the process of finalizing the call order to be advertised for bid to contractors. |
| D9 | p. 9 | DEQ | Reissue Fairfax and Henrico MS4 Permits. | June 30, 2023 |  | The Fairfax and Henrico County draft permits were sent to EPA for review as well as public noticed. EPA comments were received and incorporated into the permits.  The public notice period for Fairfax closed on Nov. 30, 2023. The public notice period for Henrico closed on Dec. 7, 2023.  DEQ is working on incorporating changes required as part of the public notice period and responding to comments. The permits are expected to be finalized by Jan. 31, 2024. |  |
| D10 | p. 9 | DEQ | Reissue Chesapeake, Hampton, Newport News, Norfolk, Portsmouth and Virginia Beach MS4 Permits.  Reissue VDOT MS4 Permit months after these 6 tidewater Virginia MS4 permits have been issued. | Dec. 31, 2023 |  | Draft permits for Chesapeake, Hampton, Newport News, Norfolk, Portsmouth and Virginia Beach  were sent to EPA for review as well as public noticed.  Draft permits currently under public notice:   * City of Chesapeake -closes Jan. 20, 2024 * Hampton - closes Jan. 29, 2024   Draft permits with completed public notice:   * Norfolk - closed Dec. 17, 2023 * Portsmouth closed Dec. 17, 2023 * Newport News closed Dec. 18, 2023 * Virginia Beach closed Jan. 14, 2024.   DEQ is working on incorporating changes required as part of the public notice period and responding to comments.  The VDOT MS4 permit is currently being drafted and on track to be presented to VDOT for review by March 31, 2024. |  |
| D11 |  | DEQ | Evaluate the effects of modeled land use change resulting from the updates to the Chesapeake Assessment Scenario Tool (CAST) based on the new 2013-2017 land use analysis and other changes to the model. Determine any needed adjustment in WIP III effort to ensure any resulting increase in loads is fully offset. | 2022-2023 |  | During the review of CAST update data significant issues were found that went beyond land use change resulting in a delay of CAST 21 and significant discussions around future datasets. |  |
| D12 | p. 9 | DEQ | Form Technical Advisory Committee for reissuance of Phase II (Small) MS4 general permit (9VAC25-890).  Prepare proposed Phase II MS4 general permit and present to the State Water Control Board for public notice authorization.  Reissue Phase II MS4 general permit (9VAC25-890). | Dec. 31, 2021  Nov. 30, 2022  Oct. 31, 2023 |  | Regulatory action completed and effective as of Nov. 1, 2023. |  |
| D13 | WIP Initiative 48, p. 26 | DEQ | Finalize protocol for re-evaluating post-construction water quality design criteria requirements.  Submit for executive review a Notice of Intended Regulatory Action to amend Virginia Stormwater Management Program Regulation (9VAC25-870) to update the water quality design criteria requirements if necessary.  Submit for executive review a Notice of Intended Regulatory Action to amend Virginia Stormwater Management Program Regulation (9VAC25-870) to incorporate the use of future projected design storms for managing stormwater.  Establish Regulatory Advisory Panel and develop proposed amendments for consideration by State Water Control Board. | Jan. 1, 2022  July 1, 2022  July 1, 2022  Jan. 1, 2023 |  | 9VAC25-840 is being consolidated with 9VAC25-850 and 9VAC25-870 into a single regulatory chapter. This has gone through the rulemaking process and is effective as of July 1, 2023.  DEQ is currently in the process of updating the Virginia Stormwater Handbook and water quality design criteria to include the Virginia Runoff Reduction Method (VRRM, which has already been advertised for informal public comment). The revised Stormwater Handbook and VRRM are in internal review and QA/QC and is expected to begin Public Notice by Jan. 31, 2024. Once fully approved, the effective date is planned to coincide with the effective date of the Consolidated Regulations of July 1, 2024.  Programmatic action is being carried over into CY2024. |  |
| D14 | p. 26, 154 | CCRM, VIMS | Shoreline Management Model (SMM) for preferred management approaches including Living Shorelines Suitability, Phase 5.1. | Ongoing | VIMS developed the model to inform local Wetlands Boards and Virginia Marine Resources Commission (VMRC) decision-making. CCRM presents model output at Shoreline Workshops and specific trainings and digital newsletters. Project website updated as needed and in response to new authorities ([www.vims.edu/ccrm](file:///C:/Users/fua32772/Desktop/Milestones/2022-2023%20Milestones/Programmatic/www.vims.edu/ccrm) and [www.adaptva.org](file:///C:/Users/fua32772/Desktop/Milestones/2022-2023%20Milestones/Programmatic/www.adaptva.org)). | CCRM VIMS initiated SMM Phase 5.2 in October 2023. | CCRM, CZM  additional support of the model from state agencies may be necessary. |
| D15 | WIP Initiative 4, p. 153 | CCRM, VIMS | Wetlands restoration targeting. This proposed work is to inform and increase the likelihood of wetlands restoration. | Dec. 2023 | This effort will be part of Wetland Condition Assessment Tool. As both tidal and nontidal wetlands are approved Chesapeake Bay Program (CBP) BMPs, projects implemented for nutrient and sediment load reduction also can provide habitat, flood and erosion control co-benefits for resilience. | No progress to report due to funding limitations. | VIMS is seeking funding to support this effort. |
| D16 | WIP Initiative 4  p. 26, 153, 154 | CCRM, VIMS | Develop strategies to enhance conservation and adaptation of wetlands in a changing climate. | Ongoing | This project looks at the ecosystem functions provided by newly migrated marsh in comparison to existing marshes. The results will be incorporated into the Virginia Wetland Condition and Assessment Tool (WetCat). | Wetland vulnerability added to WetCat. CCRM/VIMS completed CBP Goal Implementation Team funded assessment of marsh migration models.  The final report is available on the [Chesapeake Bay Trust website.](https://cbtrust.org/wp-content/uploads/VIMS_Marsh_Migration_final_reportmetadatsheets_30Sept2022.pdf)  CBP has applied the VIMS/CCRM approach to map migration envelopes for all Bay tidal shoreline. | Currently funded by the EPA wetland program development grant. |
| D17 | p. 154 | CCRM, VIMS, DCR - SEAS | Accelerating water quality improvements in the James River through the living shoreline collaborative. | Ongoing | VIMS-CCRM is a partner; James River Association (JRA) is the lead. Partners include DCR/SEAS, Colonial SWCD and Wetlands Watch. Focus is on increased implementation of living shorelines in the James River to improve water quality. Building three projects with the first round of funding, established a living shorelines symposium process, a listserv, training and a monitoring network. | Through the JRA collaboration, the first VACS-funded shoreline stabilization project in Virginia has substantially completed construction (2023); wetland vegetation will be planted in the spring of 2024.  Through the JRA collaboration, a comprehensive series of professional development workshops on living shoreline design and construction has been developed as a Chesapeake Bay Landscape Professionals (CBLP) Shorelines certificate. The course was offered twice in 2023. | National Fish and Wildlife Foundation (NFWF) |

(End of section)

# Developed Lands (Regulated & Unregulated Urban) – WIP Chapter 7 Initiatives

| **Milestone**  **Number** | **Phase III WIP**  **Initiative or Page Number** | **Lead Agency/**  **Supporting Agencies** | **Actions**  **& Deliverables** | **Target**  **Dates** | **General Comments** | **Progress Update** | **Funding/**  **Grant Details** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| D18 | WIP Initiative 6 | DCR | Provide opportunities for localities and individual communities, via the Community Flood Preparedness Fund (CFPF), to establish nature based solutions, such as living shorelines, to increase resilience and improve water quality. Funding opportunities will be published soon after every Regional Greenhouse Gas Initiative (RGGI) auction. | Ongoing | More information available on [DCR’s Virginia CFPF webpage](https://www.dcr.virginia.gov/dam-safety-and-floodplains/dsfpm-cfpf). DCR, working with Virginia Resources Authority, continues to administer the Community Flood Preparedness Fund to assist communities with planning, studies, increasing their capacity, and where a local resilience plan has been approved, with flood resilience projects. | CFPF gives preference to projects using nature-based solutions. Round three, with almost $70 million of CFPF grant awards, was completed at the end of Dec. 2022. In calendar year 2023, an additional CFPF grant round was available, with $85 million available. Additional information is available on DCR’s website. Loans via the Resilient Virginia Revolving Loan Fund for both communities and individuals became available in 2023. This Fund assists communities with planning, studies, increasing their capacity, and where a local resilience plan has been approved, with flood resilience projects. For this first loan round, $18.5 million was available. | State funds |
| D19 | WIP Initiative 42 | VDACS, Office of Secretary of Agriculture and Forestry (OSAg&F) | Secured legislation to enhance existing lawn fertilizer contractor-applicator program. Effective July 1, 2020. Virginia's General Assembly 2020 Session: Senate Bill 849 Lawn fertilizer; contractor-applicators.  VDACS to amend 2 VAC 5-405, Regulations for the Application of Fertilizer to Nonagricultural Lands, to reflect regulatory changes required pursuant to Chapter 413 of the 2020 Acts of Assembly (SB 849): Consider additional amendments to this regulation to increase compliance. Target date Dec. 31, 2020. | Oct. 1, 2022 | On July 21, 2020, the Board of Agriculture and Consumer Services approved an exempt action to adopt amendments necessary to conform 2 VAC 5-405, Regulations for the Application of Fertilizer to Nonagricultural Land to changes in Virginia’s Fertilizer Law. The exempt action, which decreased contractor-applicators’ and licensees’ annual reporting threshold, from 100 acres to 50 acres of nonagricultural lands to which fertilizer was applied, was published in the Register of Regulations on Oct.12, 2020, and became effective on Nov. 11, 2020.  On July 21, 2020, the Board of Agriculture and Consumer Services also approved a NOIRA for 2 VAC 5-405, Regulations for the Application of Fertilizer to Nonagricultural Lands, to determine the appropriate increase to the current maximum penalty and assess the need for additional penalties that will ensure compliance with this regulation. VDACS held an industry stakeholder meeting to develop recommendations regarding penalties for non-compliance of Regulations for the Application of Fertilizer to Nonagricultural Lands. Industry stakeholders recommended increased penalty amounts to the existing penalty and two additional penalties for non-compliance. The stakeholder recommendations were approved by the Board of Agriculture and Consumer Services on July 20, 2021, initiating Stage 2 of the standard regulatory process. | Chapter 413 of the 2020 Acts of Assembly amended the Virginia Fertilizer Law, in part, by increasing from $250 to $1,000 the civil penalty that the Board of Agriculture and Consumer Services (Board) may impose upon any fertilizer contractor-applicator or licensee who fails to comply with provisions of 2 VAC 5-405. The regulation change became effective on Nov. 24, 2022.  Amendments can be reviewed on the [Virginia Regulatory Town Hall website](https://townhall.virginia.gov/L/ViewAction.cfm?actionid=5578). | State funds |
| D20 | p. 154 | DCR | Report on 57,000 additional linear feet of tidal shoreline newly stabilized and/or verified existing practices by DCR-SEAS, using funding from a NFWF grant. | June 30, 2023 | Utilizing NFWF grant funds, DCR has hired an additional staff person (SEAS program assistant) to assist with the data gathering needed to track progress. | DCR-SEAS has verified and reported (to DEQ) BMPs installed to stabilize tidal shorelines as follows (year linear feet verified): 2017 93,554 linear feet 2018 106,567 linear feet 2019 30,586 linear feet 2020 12,895 linear feet 2021 49,318 linear feet  2022 63,767 linear feet  2023 18,989 linear feet | NFWF |
| D21 | WIP Initiative 47 | DEQ | Evaluate nutrient management planning under the Erosion & Sediment Control Regulations (9VAC25-840).  Submit for executive review a Notice of Intended Regulatory Action+ to amend Erosion & Sediment Control Regulations (9VAC25-840).  Establish Regulatory Advisory Panel and develop proposed amendments for consideration by State Water Control Board. | March. 1, 2022  Sept. 1, 2022  March 1, 2023 |  | 9VAC25-840 is being consolidated with 9VAC25-850 and 9VAC25-870 into a single regulatory chapter. A NIRA will be submitted for Executive Review upon completion of the consolidation process.  DEQ is currently in the process of updating its erosion and sediment control specifications as part of the Stormwater Handbook update process and updating the VRRM.  At the June 22, 2023 SWCB meeting, the Board approved and adopted the Virginia Erosion and Stormwater Management (VESM) Regulation (9VAC25-875) and approved the repeal of the Erosion and Sediment Control Regulations (9VAC25-840), Erosion and Sediment Control and Stormwater Management Certification Regulations (9VAC25-850), and Virginia Stormwater Management Program Regulation (9VAC25-870). The VESM Regulation and repeal of the other regulations, will be effective July 1, 2024. |  |
| D22 | WIP Initiative 49 | DEQ | Perform a limited review of approximately 20 Virginia Stormwater Management Programs under the federally-delegated MS4 permitting and compliance program. | Sept. 30, 2022  Sept. 30, 2023 |  | DEQ performed MS4 program audits for 19 localities during the milestone period.  Audits were performed for the following localities:   1. Town of Christiansburg 2. Town of Vinton 3. Dept. of Defense Pentagon 4. Town of Warrenton (inspection) 5. Town of Dumfries 6. Dulles Toll Road 7. Arlington County 8. Town of Herndon 9. Central Virginia VA Health Care System (McGuire VA Hospital) 10. Town of Ashland 11. City of Petersburg 12. City of Poquoson 13. College of William & Mary 14. Tidewater Community College 15. NASA Langley Research Center 16. Fort Monroe Authority 17. City of Charlottesville 18. City of Staunton 19. Augusta County |  |
| D23 | WIP Initiative 50 | DEQ | Review Urban Tree Canopy expert panel report for potential inclusion of Tree Planting on Virginia Stormwater BMP Clearinghouse (i.e., potential BMP for use under the VSMP). Update Virginia Stormwater BMP Clearinghouse to include Tree Planting, if applicable. | Jan. 1, 2022 | DEQ prepared and published the [stakeholder advisory group report](https://rga.lis.virginia.gov/Published/2022/RD43) pursuant to Chapter 405 of the 2020 Virginia Acts of Assembly (House Bill 520). | DEQ is currently in the process of updating the Virginia Stormwater Handbook and will evaluate the inclusion of a Tree Planting Specification.  Programmatic action is being carried over to CY 2024. |  |
| D24 | WIP Initiative 49 | DEQ | Explore alternatives to ensure re-verification of stormwater BMPs in areas where DEQ is the local stormwater management program authority. | Dec. 2023 |  | DEQ to continue exploring alternatives. |  |
| D25 | WIP Initiatives 44, 46 | OSNHR, DEQ, DCR, VCE, PDCs, SWCDs, Non-Governmental Organizations (NGOs) | Develop collaborative structure for multiple agencies and organizations implementing urban BMPs in non-MS4 areas to coordinate efforts, improve reporting, accelerate implementation and verify existing practices.  Establish a task force of state agencies, local representatives and nongovernmental organizations to evaluate existing programs for implementing urban BMPs on unregulated developed lands to achieve the Phase III WIP targets. The task force will, at a minimum, consider a collaborative approach for multiple partners to accelerate implementation and verification of BMPs; recommend programmatic improvements or development of new programs; and determine funding needs. The task force will provide its recommendations to the SNHR. | Oct. 1, 2022 | Residential homeowners, churches, small businesses and many other urban landowners are encouraged to implement BMPs through technical support and financial assistance. Funding and staffing to support such implementation originates from multiple state, local and private organizations. | Coordination between organizations on these issues happens routinely, but it does not typically happen in a formalized manner. |  |
| D26 | WIP Initiative 40 | VCE, OSNHR | Through the Healthy Virginia Lawns (HVL) program, Extension Master Gardeners provide science-based information to homeowners on establishment and maintenance of lawns to reduce unnecessary chemical use that can harm the Chesapeake Bay. | Ongoing | The focus of the HVL program is to target residential lawn areas up to 1.5 acres. Efforts will be made to explore HVL outcomes and impacts and their potential to support WIP goals and be captured in Virginia’s annual reporting. | A HVL Program Coordinator was hired through Virginia Tech in partnership with DCR. WQIF funds allocated to VCE courtesy of OSNHR/DCR have been made available to the program coordinator to assist with expanding this program. | Included in Program Coordinator line item. |

(End of section)

# Forestry – Key Ongoing Activities

| **Milestone**  **Number** | **Phase III WIP**  **Initiative or Page Number** | **Lead Agency/**  **Supporting Agencies** | **Actions**  **& Deliverables** | **Target**  **Dates** | **General Comments** | **Progress Update** | **Funding/**  **Grant Details** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| F1 | p. 121 | DOF | Forest Harvesting Practices – DOF will continue to provide technical assistance to USDA conservation agencies, SWCDs and landowners for afforestation, reforestation and implementation of riparian forest buffers; continue monitoring and enforcement of the Silvicultural Water Quality Enforcement program; and continuation of logger education programs through the Sustainable Harvesting and Resource Professional (SHARP) Logger and Sustainable Forest Initiative (SFI) and training programs. | 2022 – 2023 | Strong partnership with Virginia Tech Extension SHARP Logger program. Harvest notification law facilitates onsite inspection process. Timber bridge program, preharvest plans and BMPs assist in water quality compliance. Last update to The Virginia Forest BMPs for Water Quality Guide was in 2011. Consideration for updating manual will be discussed and considered. | DOF received 3,319 harvest notifications for 157,586 acres and conducted 14,673 inspections. The DOF Silvicultural Water Quality Enforcement program issued 106 Recommendations, two Special Orders, and 11 Failure to Notify. DOF completed 192 pre-harvest plans and conducted 240 BMP audits that had a 96.8% BMP implementation rate. The Logger BMP Cost-Share program has allocated $736,305 for 88 projects. DOF assisted with at least 14 SHARP Logger and SFI training programs with 504 in attendance. | WQIF |
| F2 | p. 121 | DOF | Urban Tree Canopy Program – Pursue consistent General Fund support to expand capacity of Urban and Community Forestry (U&CF) Program, utilize Urban Tree Canopy Analysis data, urban heat island studies and support tree canopy analysis in localities. | Ongoing | DOF has grown U&CF Field positions in areas of high need. This has been accomplished by changes to existing classified position descriptions. Program leadership consists of three positions, the U&CF Program Manager, Partnership Coordinator, and a Project Coordinator. All three positions remain grant-based positions. DOF will seek permanent General funds to support these critical positions.  DOF distributed a request for proposal package in FY22 and FY23 for the Virginia Trees for Clean Water (VTCW) Program to plant trees across the Commonwealth. This program is focused on public property plantings of all types including turf to trees, street tree and more urban focused buffer plantings. | In FY22 and FY23, as part of the VTCW program using WQIF funding, DOF allocated $1.9 million to 109 projects across the Commonwealth as of Oct. 2023. | USFS, Trees for Clean Water (WQIF), Tree City USA, Tree Campus USA, CBRAP  DOF will receive $2,000,000 in WQIF funds in both FY 2023 and FY 2024 from the Virginia State Budget to support urban tree planting. DOF received continued funding of its Turf to Trees grant program through CBRAP funds. |
| F3 | p. 121 | DOF | Improve technical assistance, collaboration and oversight of stream protection projects. Increase riparian forest buffers and urban tree canopy. | Ongoing | Increased WQIF funding in FY 2022. Seeking general fund support for leadership positions. This could increase available grant funds by re-allocation of USFS grant. Increasing projects as well as the potential for contract positions. | Increased WQIF funding will continue to support direct implementation of tree planting projects including necessary maintenance through the establishment period. These funds will provide much-needed support to help Virginia meet its Phase III WIP goals. | Utilize EPA/DEQ CBRAP Funding, Trees for Clean Water (WQIF). Received $100,000 CBRAP (DEQ pass-through), $80,000 went into tree planting projects in underserved (DEQ Environmental Justice Tool) areas. |

(End of section)

# Forestry – WIP Chapter 7 Initiatives

| **Milestone**  **Number** | **Phase III WIP**  **Initiative or Page Number** | **Lead Agency/**  **Supporting Agencies** | **Actions**  **& Deliverables** | **Target**  **Dates** | **General Comments** | **Progress Update** | **Funding/**  **Grant Details** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| F4 | WIP Initiative 35 | DOF | Implement DOFs Healthy Watershed Initiative recommendations to pilot proof of concept activities with a locality or localities within the Rappahannock River Basin study area designed to aggregate and represent landowners interested in securing carbon credits in the voluntary and/or regulatory carbon markets for retaining their forestland. Work with pilot locality/localities to design and implement an economic development authority (EDA) mechanism as authorized by the General Assembly in its 2019 session to provide EDAs with such authority. Establish contractual framework and locality point of contact to ensure that the legislative change regarding the EDA success is properly implemented. Success metrics will be number of contracts executed, number of acres enrolled in carbon credit markets and development of EDA. | Dec. 31, 2023 | Two related changes to the Code of Virginia were identified and addressed in the 2021 legislative sessions:   1. HB2485 dealing with EDA allowing for aggregation of landowners to participate in carbon markets. 2. SB1343 Virginia Freedom of Information Act (FOIA); proprietary records and trade secrets; carbon sequestration agreements. Excludes from the mandatory disclosure provisions of the Virginia FOIA proprietary information, voluntarily provided by a private business under a promise of confidentiality from a public body, used by the public body for a carbon sequestration agreement. | The legislative portion of this initiative has been completed.  Contract development within the localities, staff changes, goal focus of localities and consistent capacity at the local level have been identified as barriers. DOF anticipates a need for reintroduction of the program to reinvigorate locality interest and contract development. This outreach effort is expected in 2024. | CBP, U.S Endowment for Forests and Communities, Chesapeake Bay Trust |
| F5 | WIP Initiative 35 | DOF | Implement DOFs Healthy Watershed Initiative – Create policy and financial infrastructure needed to facilitate forest and agricultural land conservation and retention at a landscape scale on a long-term basis. Metrics: Securing term length carbon credit contracts for forestland owners within the voluntary carbon credit market, realized market access and number of acres enrolled in the carbon sequestration market will measure success. | June 2022 | Moving forward with Fauquier and Essex counties primarily. Orange County is also involved. Need to develop aggregation methodology and program sign up process. With passing of HB2485 and SB1343, barriers to implementation have been addressed. This new legislation went into effect July 1, 2021. | Outreach efforts regarding carbon markets, carbon program and carbon project managers have been hosted by DOF and partners. Purpose of outreach efforts are to increase landowner knowledge of market, increase forest practitioner use of market framework for entrance and to develop an understanding of the role of the carbon project manager. First landowners in Virginia taking advantage of a nature-based removal program (afforestation) are anticipated Fall 2023. | CBP, U.S. Endowment for Forests and Communities, Chesapeake Bay Trust, Rappahannock River Basin Commission |
| F6 | WIP Initiatives 35, 36, 37 | DOF | Forest Buffer – DOF Watershed Coordinator position will increase implementation of programs and strategic initiatives. This new program and position will continue to utilize existing programs and partnerships to deliver on buffer establishment in the urban and rural sectors. DOF will work with urban localities within the watershed to discuss barriers and needs to ensure urban canopy retention and establishment. Increases in WQIF money received will be used to administer the “Trees for Clean Water” grant program. DOF will develop a matrix to realize effectiveness of “Maturity Measurements” concept. Continue to utilize community revitalization projects, raise citizen awareness and educational opportunities through outreach efforts and partner projects. | Jan. 2022 | DOF created a Watershed Program along with four new positions to assist with the implementation of the Phase III WIP. These include a Watershed Program Manager and three Watershed Stewardship Specialists. These positions have buffer establishment duties as well as conservation easement stewardship responsibilities. | The Watershed Program is fully staffed with a Watershed Program Manager and three Watershed Specialists. This team created an internal DOF Forest Buffer Action Plan and is supporting the creation of an updated Statewide Riparian Forest Buffer Action Plan. Since its creation, this team has conducted an internal statewide needs assessment for field staff, created a statewide partner inventory, implemented improvements to reporting and recording procedures, offered professional development opportunities to staff, created a publicly available cost-share portal, and more.  In addition to the improvements made to reporting and recording protocols, in 2022 DOF identified hundreds of acres of previously unreported buffers and afforestation data from a variety of sources and has since submitted this new data to the BMP Warehouse. | Trees for Clean Water, VEE Middle James River Watershed grant, CBP, USFS Chesapeake Watershed Forestry Program |
| F7 | WIP Initiatives 36, 37 | DOF | Improve technical assistance, collaboration and oversight of stream protection projects. Utilize the Watershed Program Manager for Chesapeake Bay Initiatives. Increase riparian forest buffers, urban tree canopy, and urban stormwater credit practices, develop BMPs for mitigation of concentrated flows, seek crediting program for rural and urban forestland owners plan development and ensure crediting for Green Infrastructure practices and plans. Utilize the recently developed Watershed Prioritization tool to target specific areas of need within DOF Work Areas to drive implementation of projects and focus on watersheds of highest need. | Dec. 31, 2023 | Watershed Prioritization Tool is completed and continues to evolve by adding new/improved layers as needs change or are available. Field supervisors are encouraged to use this GIS based tool when developing staff Employee Work Profiles. This allows them to better target work in areas of greatest need. Utilizing funds from the Chesapeake Bay Restoration Fund the DOF will lead an effort to assess additional riparian forest buffers needs. DOF will hire a contractor that will be developing a decision support tool to help identify the best incentive program options for landowners based on relevant criteria of their property and ownership. | In 2022 DOF hired a contractor that completed a digital buffer cost-share cheat sheet. This online portal allows both internal and external audiences to select their locality, land use, land ownership, and preferred funder type (ex. state, federal, NGO, all). After selecting these criteria, the portal will populate a list of possible cost-share opportunities to support a buffer planting. This tool has been shared with DOF field staff along with several of our partners. This resource is another example of DOF’s ongoing commitment to make buffer adoption simpler and faster for landowners across the Commonwealth.  In addition to this public-facing tool, DOF also created an internal buffer cost-share flow chart to make it easier for DOF field staff to identify the best-fit funding opportunities for their clients. | DEQ, CBRAP, EQIP, CREP, Chesapeake Bay Restoration Fund |
| F8 | WIP Initiative 37 | DOF | Urban Tree Canopy Program – Develop and provide a tree tracking platform to record and report on tree planting projects using data expected to be available to Chesapeake Bay jurisdictions through Chesapeake Conservancy Cooperative Agreement with federal government. | Dec. 31, 2023 | My Tree Counts App is complete and has been field-tested. Field staff, partners and the general public piloted this program successfully in 2020-2021. Outreach efforts to be constructed and coordinated roll out to local jurisdictions NGOs, across the state and Chesapeake Bay Watershed. This will increase tracking of tree planting efforts and implementation of small to medium scale projects that occur outside of the influence of the DOF. This will increase access to the application by the general public and volunteer planting projects that may not include DOF interaction. Reporting platform correlates to CAST report needs/standards increasing the accuracy of progress reporting. | My Tree Counts App has been in operation for four years. DOF has received a significant amount of feedback on the tool and is working with ESRI to make improvements that will launch in 2024. DOF hopes that these improvements will increase tracking of tree planting efforts and implementation of small to medium scale projects that occur outside of the influence of the DOF. | USFS, CPG funds |
| F9 | WIP Initiative 37 | DOF | Tree Planting Forest Canopy – Utilize Green Infrastructure plans, Urban Forest Management Plans and institute the USFS Tree Canopy Analysis and Tree Inventory programs to develop a matrix to focus on Maturity Measurement protocols. | Dec. 31, 2023 | Watershed Program Manager will lead this effort. Current target date for hire Sept. 2021. Roll out of draft methodology to USFS Forestry Workgroup Dec. 2022. | DOF receives limited funding from USFS that is sub-awarded to support the development of plans, canopy analyses and inventories. This work is ongoing as long as federal resources are received by the state. |  |
| F10 | WIP Initiative 38 | DOF, OSAg&F, Office of Secretary of Veterans and Defense Affairs (OSVDA), OSNHR | The Secretaries of Agriculture and Forestry and Veterans and Defense Affairs in partnership with the Governor’s Special Assistant for Coastal Adaptation and Protection, the Commonwealth’s military installations, local governments, and NGOs representing conservation, farming, forestry, private landowners and others are heading a geographically diverse partnership to seek a Sentinel Landscape designation in 2021 from the federal government encompassing much of the eastern portion of the Commonwealth. The DOF has been designated the lead agency responsible for the effort.  The federal Sentinel Landscapes Partnership initiative was created 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. The military, federal agencies, including the Departments of Defense, Agriculture and the Interior (DoD, USDA and DOI), state governments, NGOs, and other partners coordinate their conservation and working lands programs in support of ranching, farming, forestry, and conservation practices compatible with the military installations in partnership with the landowners in the landscape. A pre-application was submitted in Mar. 2021 and the Sentinel Landscape Coordinating Committee (SLCC) was awarded the opportunity to submit a “Full-Application” on Aug. 31, 2021. Acceptance pending. | Dec. 31, 2022 | Virginia submitted a final application for consideration to the Sentinel Landscapes Partnership consisting of the Federal Coordinating Committee in August 2021. The Virginia Security Corridor was not awarded a designation at this time, but since spring 2022 is considered a Tier 2 applicant and is on a rolling deadline with the anticipated completion and acceptance of the designation by the end of 2022. This effort continues to be led by the DOF with partnerships extending across federal and state agencies as well as non-governmental organizations and non-profits.  Should the full designation be awarded, the DOF anticipates receiving a three-year award of $300,000 to support a Program Coordinator. This Coordinator will work hand in hand with the SLCC, DOF and the Sentinel Landscape Management Committee. The Sentinel Landscape (SL) designation is an important tool to protect critical military infrastructure while building on established environmental initiatives. Executive Directive 14 formally established the Virginia Security Corridor State Coordinating Committee. The Committee, in place since 2018, is dedicated to exploring regional compatible land use to advance collective goals that will strengthen military readiness, empower landowners, and protect Virginia’s natural resources. The SL designation will facilitate coordination and implementation of coastal resiliency projects, climate change initiatives, afforestation projects, address heat islands in underserved communities and align conservation easement goals. | On July 10, 2023 the Commonwealth was awarded two Sentinel Landscape Designations in eastern Virginia. The landscapes, the Potomac and the Tidewater, encompass over 3 million acres in densely populated, highly concentrated Department of Defense areas of operations. The DOF is the lead agency on the project. Plan of work, budget and capacity building continued through 2023 with a program roll out anticipated in Jan. 2024. | DOD, DOI, USDA, U.S. Bureau of Land Management (BLM), NGOs, conservation partners |
| F11 | WIP Initiative 39 | DOF | Encourage Tree Conservation. Review existing legislation. Work with localities to potentially enhance state code to reflect the benefits of conserving trees that provide environmental benefits. Watershed wide and statewide meetings to be held to determine barriers to Tree Conservation in urbanized and urbanizing areas of the Commonwealth. DOF is participating in stream buffer program analysis, carbon sequestration analysis and urban canopy analysis. | Spring 2022 | DOF is participating in stream buffer program analysis, carbon sequestration analysis, urban canopy analysis and a wetland and stream mitigation bank. DOF with the Green Infrastructure Center (GIC) completed an existing legislation review and provided a Final Report outlining the findings of localities, partners and recommendations. | Still under development.  Project will not be complete until Dec. 2024. |  |

(End of section)

# Multiple Sectors – WIP Chapter 7 Initiatives

| **Milestone**  **Number** | **Phase III WIP**  **Initiative or Page Number** | **Lead Agency/**  **Supporting Agencies** | **Actions**  **& Deliverables** | **Target**  **Dates** | **General Comments** | **Progress Update** | **Funding/**  **Grant Details** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| M1 | p. 16 | VMRC | Work with the U.S. Army Corps of Engineers (USACE) and VIMS to establish an integrated Submerged Aquatic Vegetation (SAV) mitigation policy for unavoidable losses of SAV. | Dec. 2023 |  | A review of the proposed project determined that the resources needed to complete the project are unavailable at this time. Additional evaluation of the costs/benefits is needed. |  |
| M2 | p. 26, 154 | VMRC, DEQ | Produce integrated shoreline guidance with DEQ for ensuring consistent management of shoreline resources through each jurisdiction. | June 2022 |  | A review of the proposed project determined that the resources needed to complete the project are unavailable at this time. Additional evaluation of the costs/benefits is needed. | CZM Grant to DEQ |
| M3 | WIP Initiatives 1, 6, 11 | VMRC | Work with federal and non-federal partners to meet tributary-specific oyster restoration goals developed for each of the Virginia tributaries slated for large-scale oyster restoration as part of the 2014 Chesapeake Bay Watershed Agreement (Lafayette River, Lynnhaven River, Piankatank River, Lower York River, Great Wicomico River, and Elizabeth River Eastern Branch). Assist in the coordination of other partners’ planned restoration projects. Maintain, monitor, expand, and continue to protect past and ongoing restoration efforts throughout Virginia. | Oct. 2022 for restoration construction completed in the Lower York River.  Ensure the protection, maintenance and expansion of restoration efforts through 2025 and beyond. | Restoration construction targets met in the Piankatank, Great Wicomico, Lafayette, Elizabeth, and York Rivers. | Lower York River is complete.  The Lynnhaven restoration will be completed by other partners, but is currently meeting the established metrics to be considered restored. The final remaining federal project (USACE) is scheduled for completion in 2024.  Large scale oyster restoration efforts are planned, with funding, to continue work in areas beyond those currently targeted under the 2014 Agreement. | Funding: state funds, federal grants (National Oceanic and Atmospheric Administration (NOAA))  Federal and NGO partners have plans and funding to construct the remaining target acreage in Lynnhaven. VMRC has plans and funding to construct the remaining target acreage in Lower York. |
| M4 | WIP Initiative 1 | DEQ | Continue evaluation and updates to BMP Warehouse system to facilitate verification. Deliver training module following system upgrades and on Warehouse. Continue working with implementation partners to ensure complete and accurate reporting. This will include execution of recent Memoranda of Agreement between DEQ and DOF, VMRC, DCR and Department of Wildlife Resources (DWR) to establish reporting protocols for the programmatic work of these partner natural resource agencies as well as implementation efforts on lands owned by these agencies. | Dec. 31, 2022 |  | Virginia agency partners reviewed the 2022 and 2023 BMP Verification Plans to ensure their sections of the plan were current and correct.  DEQ distributed a BMP Verification Standard Operating Procedures (SOP) template to agency partners in April 2022. Partners with existing SOPs reviewed their documents to confirm all necessary content outlined in the SOP template was included in their documents and agencies without existing SOPs were tasked with drafting SOPs. DEQ continued to work with partners on SOP development in 2023.  DEQ hosted its Annual BMP Warehouse Update webinar on Aug. 2, 2022. Discussion topics included inspections, using the inspection upload template, reporting multiple BMPs, and the new Org Admin role.  In 2023, DEQ distributed an annual update via email to BMP Warehouse users. |  |
| M5 | WIP Initiative 2 | DEQ | Begin implementation of Chesapeake Bay Preservation Act (CBPA) regulations amendments to address “(vi) coastal resilience and adaptation to sea-level rise and climate change.” This includes drafting guidance and other tools and training to aid in locality adoption of provisions. | July 1, 2022 | Develop Guidance and Implementation Tools. | Grant funding used to produce draft guidance. Draft guidance was public noticed in 2022. Updates based upon comments and additional tools developed in 2023. | NOAA and EPA funding to work with PDCs, VIMS, and William & Mary Coastal Policy Center (CPC) |
| M6 | WIP Initiative 8 | DEQ | Develop and implement a “pay for documented performance” pilot program incentivizing contracting and construction of innovative nutrient removal technologies. | Dec. 31, 2022 |  | Development of pay for documented performance pilot program ongoing. Programmatic action is carrying over into CY 2024 |  |
| M7 | WIP Initiative 3 | DEQ, OSNHR | Implementation of the State Lands Watershed Implementation Plan (SWIP) will be supported by an interagency technical team to provide guidance and technical assistance to land holding agencies. Work will kick-off with an analysis to identify specific opportunities for implementation of cost effective BMPs with significant co-benefits on State owned lands. | Dec. 1, 2022 | State Lands Implementation Opportunities Analysis conducted by GIC.  Updated information on the SWIP can be found on [DEQ’s Chesapeake Bay Phase III WIP webpage](https://www.deq.virginia.gov/water/chesapeake-bay/phase-iii-wip).  Funding to implement the SWIP is included in the budget proposal available on [Virginia’s LIS website](https://budget.lis.virginia.gov/bill/2022/1/). | The SWIP Interagency Technical Team (SWIP ITT) met twice in 2022. email updates were sent to partners to summarize project accomplishments and opportunities.  DEQ received the Virginia State Lands BMP Assessment tool from the GIC in early Feb. 2022. Deliverables also included the final report, PDFs of maps and other links for the tool, a video illustrating how to use the tool, and a written guide to using the tool. The materials were distributed to the SWIP ITT members for review and member feedback was received.  Conference calls were conducted between DEQ Bay staff and representatives from the landholding entities of the four potential implementation project locations identified in GIC’s final report.  The following SWIP BMP implementation projects were active during the milestones period:   1. The Department of Corrections (DOC) State Farm Agribusiness project 2. Longwood University BMP design/engineering project   The DCR Lake Anna State Park tree planting project contract will be finalized in Jan. 2024.  Project planning is underway with DWR, Old Dominion University Institute for Coastal Adaptation & Resilience (ODU ICAR), and another project with DOC State Farm Agribusiness.  DEQ is also in discussions with the Department of Aging and Rehabilitative Services’ Wilson Workforce and Rehabilitation Center.  Staff continue to seek out new implementation project opportunities and hold meetings with potential partners. | GIC analysis funded through Chesapeake Bay Restoration Fund |
| M8 | WIP Initiative 4 | DWR | Provide technical assistance to public and private landowners, impacting wetlands through management, enhancement or restoration. | Ongoing |  | DWR consulted with a few dozen private and public landowner requests, regarding legal and/or regulatory issues, and provided onsite consultations for prospective wetland creation, restoration, or enhancement sites. DWR assisted in the preparation and planning of over 10 wetland restoration or enhancement grant applications throughout the state. Three wetland restoration and enhancement projects have been funded at Doe Creek Wildlife Management Area (WMA) and one at Mattaponi WMA totaling over 400 acres. All four projects are currently under construction or in final design stages. Two additional grants were pursued on private lands with Upper Mattaponi Indian Tribe (UMIT) proposals. DWR has submitted several multi-million-dollar shoreline/wetland protection proposals for Hog Island, Ragged Island, and Guinea Marsh.  DWR assisted in the development of the Middle Peninsula Coastal Wetlands Plan which was published in June 2023. DWR has since partnered with Natrx, VMRC, and the Middle Peninsula Public Access Authority to secure a related grant to design a wetland shoreline protection and restoration project.  DWR planned and implemented a one-acre wetland restoration project on private lands in Westmoreland County in November 2022 to restore one of five known coastal breeding sites for the state-endangered Tiger Salamander.  DWR is working with The Nature Conservancy (TNC), Chesapeake Bay Trust and the Chesapeake Bay Program to apply for funds and to develop a comprehensive restoration plan for the Pocomoke Sound along the Virginia-Maryland Eastern Shore boundary.  Ducks Unlimited (DU) recently received funding to provide engineering technical assistance to advance on-the-ground wetland habitat restoration in cooperation with the NRCS Working Lands for Wildlife Black Duck Initiative, which includes Virgina’s Eastern Shore in its focus area. DU staff is currently working with Eastern Shore NRCS staff, and they are actively pursuing private lands projects which were previously stalled or denied due to capacity or funding limitations. DU recently posted a Working Lands Biologist job position for the Western Shore of the Chesapeake Bay based out of Virginia to help alleviate similar technical assistance capacity concerns on mainland Virginia. | Game Protection Fund; Virginia Migratory Waterfowl Stamp Fund; U.S. Fish and Wildlife Service (USFWS) Wildlife Restoration program |
| M9 | WIP Initiative 4 | DWR | Develop and implement wetland restoration and/or enhancement projects on DWR lands. | Ongoing |  | DWR partnered with DU to secure grants to fund two wetland enhancement projects that will increase DWR’s ability to manage existing impoundments at Doe Creek WMA (~150 acres) and Mattaponi WMA (~70 acres). The Doe Creek project is currently under construction and the Mattaponi project is in the final design phase.  DWR planned and implemented a 9-acre warm season grass/pollinator buffer planting at Hog Island in 2022.  DWR is implementing a Black Rail habitat enhancement project within two impoundments at Doe Creek WMA (~103 acres) to be completed in 2025 and plans to implement fire and herbicide treatments to remove Phragmites and enhance habitat over ~300 acres of marsh at Saxis WMA in early 2024.  DWR was awarded a Virginia CZM Program Section 306A Grant to restore and/or enhance 100 acres of wetland habitat through strategic ditch plugging on recently acquired lands on Virginia’s Eastern Shore. This project is anticipated to be complete by Sept. 2024.  DWR partnered with Natrx, VMRC, and the Middle Peninsula Public Access Authority to secure a grant in November 2023 to design a wetland shoreline protection and restoration project at Guinea Marsh utilizing intertidal oyster structures.  DWR is also working with James River WMA, Phelps WMA, and Princess Anne WMA to develop wetland enhancement plans to maintain existing impoundments with failing infrastructure. | Game Protection Fund; Virginia Migratory Waterfowl Stamp Fund; USFWS Wildlife Restoration program; other competitive grant programs |
| M10 | WIP Initiative 4 | DWR | Collaborate with partners to secure $4,000,000+ in new funding to support wetlands acquisition, enhancement, or restoration projects. | Dec. 31, 2023 |  | DWR received $3.5 million from the US Fish and Wildlife Service to purchase 6,900 acres in Accomack County, approximately 95% of which is forested wetlands.  Partnered with DU to fund wetland enhancement projects at Doe Creek ($476,265.75, Chesapeake WILD funded) and Mattaponi WMA ($262,167, North American Wetlands Conservation Act [NAWCA] funded).  DWR was awarded a competitive State Wildlife Grant to enhance two impoundments at Doe Creek WMA ($236,510) and wetlands at Saxis WMA ($21,865).  DWR was awarded a Virginia CZM Program Section 306A Grant for $200,000 to restore and/or enhance wetland habitat on recently acquired lands on Virginia’s Eastern Shore.  DWR has partnered with Natrx, VMRC, and the MPAA to secure a $40,000 design grant for Guinea Marsh.  In October 2023, the UMIT received a $1 million grant from the US EPA to conserve and restore 3,385 acres of ancestral lands which include wetland habitats.  In November 2023, UMIT received another $3 million grant from NOAA to reacquire 853 acres of ancestral lands along their namesake river, which also includes wetland habitats.  Virginia is also involved in several outstanding NOAA Transformational Grant applications which could yield multi-million-dollar support for wetland conservation and restoration. | Competitive grants (e.g., Coastal Wetlands Conservation Act grants, NAWCA grants, Virginia Land Conservation Foundation (VLCF) and state Land & Water Conservation Fund (LWCF) grants), NGO match |
| M11 | WIP Initiative 4 | DWR | Leverage DWR’s Virginia Migratory Waterfowl Stamp Fund competitive grant program to fund four projects that restore or enhance wetlands in the Bay watershed through collaborations with three unique non-governmental partners; update proposal evaluation criteria to include incentives for submissions within the Chesapeake Bay watershed. | Dec. 31, 2023 |  | After several years without a Wetlands Biologist, DWR re‑introduced the Virginia Migratory Waterfowl Stamp Grant in February 2022. The grant application was updated to include criteria that prioritizes projects proposed within the Chesapeake Bay watershed. A DU proposal to implement a wetland enhancement project at Doe Creek WMA (within the Chesapeake Bay Watershed) was selected for funding. Two additional large-scale wetland habitat restoration projects were funded in 2023, however both projects occur outside of the Chesapeake Bay watershed. | Virginia Migratory Waterfowl Stamp Fund; NGO partner match |
| M12 | WIP Initiative 4 | DWR | Provide 1,500 hours of coordination to state, regional and national wetlands and associated species conservation planning efforts, including Phase III WIP, Atlantic Coast Joint Venture, Appalachian Mountain Joint Venture, North American Waterfowl Management Plan, Virginia Wildlife Action Plan, U.S. Shorebird Conservation Plan, and North American Waterbird Conservation Plan, impacting wetlands via acquisition, enhancement or restoration. | Ongoing |  | DWR staff, including the Wetlands Biologist, Waterfowl Biologist, Coastal Terrestrial Biologist, and others provided over 1,500 hours of coordination to federal, state, and regional wetlands and species conservation planning efforts. DWR staff represents Virginia at the Atlantic Flyway Meetings, the Atlantic Coast Joint Venture meetings, including all three flagship species working groups, and the Appalachian Mountain Joint Venture meetings. DWR participates in CBP Wetlands Workgroup and Black Duck Action Team and lead the development of the Virginia Wetlands Action Plan. DWR works with several regional groups within the state to promote wetland restoration and enhancement activities within the Chesapeake Bay watershed including the York River and Small Coastal Basin Roundtable – Habitat Restoration Steering Committee, TNC led Rappahannock Wetlands Workgroup, and the Virginia Eastern Shore Conservation Alliance. DWR also participates in the Nutria Workgroup aimed at eradicating the invasive mammal from the state and inhibiting future spread. | Game Protection Fund; Virginia Migratory Waterfowl Stamp Fund; USFWS Wildlife Restoration grant; competitive grants; partner match |
| M13 | WIP Initiative 10 | DEQ, OSNHR | The Commonwealth, in consultation with stakeholders, will continue to consider options available under the Clean Water Act to apply to the Administrator of the EPA for a No Discharge Zone (NDZ) for all or portions of the Chesapeake Bay mainstem and its tributaries. Includes evaluating additional data, information, and stakeholder engagement based upon initial information gathering efforts and evaluating extent of any NDZ. | Dec. 31, 2022 |  | DEQ has engaged VIMS and William and Mary CPC to prioritize tributaries to the Bay for consideration of NDZs. With the closing of the CPC, the work shifted but VIMS continues to engage and plans on a report in Summer 2024. | Chesapeake Bay Restoration Fund |
| M14 | WIP Initiative 12 | DCR (lead agency), supported by Department of Historic Resources (DHR), DWR, DOF, Virginia Outdoors Foundation (VOF) | Continue to conduct VLCF and LWCF grant rounds, scoring projects using [ConserveVirginia](https://www.dcr.virginia.gov/conservevirginia/).  Continue to use ConserveVirginia to target state funded acquisitions and mitigation. | Ongoing | ConserveVirginia is now included in scoring criteria for all projects considered in these two grant programs at state level. | ConserveVirginia is being used in the grant scoring criteria as well as for targeting state funded acquisitions and mitigation. | State funds |
| M15 | WIP Initiative 46 | DEQ | Evaluate long-term partnerships with local PDCs; engage 15 Bay watershed PDCs on continued implementation as well as Environmental Justice (EJ) initiatives. Work includes continued support for the PDCs to engage localities, regional and state partners regarding Bay WIP III programmatic actions and implementation activities | Dec. 31, 2022 |  | Three DEQ led meetings with the Bay PDCs were held in 2022 and three more in 2023. These meetings focused on information and resource sharing between DEQ, partner state agencies such as DOF, and the Bay PDCs. A new element, EJ, was added to the DEQ-PDC pass-through contracts in 2022. This component involved PDCs helping to facilitate information regarding EJ between DEQ, including DEQ's Office of Environmental Justice, the PDC, and localities. The meetings also included discussion on future contract scope development, and a shift towards greater BMP implementation.  Each of the Bay PDCs were awarded $58,000 in Calendar Year 2022, as pass-through agreements via CBRAP. Contracts for 2023 were issued for the same amount. |  |
| M16 | WIP Initiative 5 | DEQ | Continue working with Bay Program partners to improve the Partnership’s ability to estimate water quality benefits resulting from enhanced air emission reductions and incorporate them into the modeling system. Develop annual estimates of the nitrogen reductions resulting from such actions. |  |  | Annual estimates have not been developed. CBPO has delayed further quantification of these reductions until after the new Bay model is available. |  |
| M17 | p. 154 | CCRM, VIMS, William & Mary Biology Department | Decision-support model for computing sediment and nutrient removals of a living shoreline based on design parameters. | Ongoing | This model will be delivered in a web-based format for computing the removal capacity of a living shoreline by size/design. The intended audiences are locality planners and homeowners. | The project is underway but will not be complete until 2024. | Honda |
| M18 | p. 154 | CCRM, VIMS | Wetland Board Training, outreach, digital publications | Ongoing | Decision-maker workshops. Shoreline Contractor Training. | Wetland Board training was held annually. CCRM also produced four email newsletters annually. | CZM, EPA, others |
| M19 | p. 154 | CCRM, VIMS, VCE (Master Gardeners and Master Naturalists), VASWCD, Local Governments | Initiated a program with Northern Neck Master Gardeners to train them to provide shoreline management assessments focused on living shorelines. In the beginning stages of training Master Naturalists in the Colonial SWCD to do the same.  Building upon existing Northern Neck Master Gardeners program that worked closely with partners at VIMS and county governments to build the Shoreline Evaluation Program, an educational outreach effort that has provided hundreds of property owners with recommendations for improving upland stormwater management, pollutant and sediment runoff, and shoreline erosion. | Ongoing | Efforts will be made to evaluate the outcomes of the Shoreline Evaluation Program, expand the program to new localities, and capture outcomes in a manner that can be included with Virginia’s annual reporting. See the [Northern Neck Master Gardeners webpage](https://nnmg.org/) for further information about this program. | Northern Neck Effort ongoing. CCRM partnered with the Colonial SWCD to support District establishment of a similar program. The District launched the program July 2022. | Provided as Advisory Service. |

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# Trading & Offsets

| **Milestone**  **Number** | **Phase III WIP**  **Initiative or Page Number** | **Lead Agency/**  **Supporting Agencies** | **Actions**  **& Deliverables** | **Target**  **Dates** | **General Comments** | **Progress Update** | **Funding/**  **Grant Details** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| T1 | p. 11 | DEQ | Publish annual watershed general permit nutrient loads report. | April 1, 2022;  April. 1, 2023 |  | Annual reports were published on time and are available [on DEQ’s website](https://www.deq.virginia.gov/). |  |
| T2 | p. 11 | DEQ | Publish annual watershed general permit trades report. | July 1, 2022;  July 1, 2023 |  | Annual reports were published on time and are available on [DEQ’s website](https://www.deq.virginia.gov/). |  |

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# Reporting, Verification & Accountability

| **Milestone**  **Number** | **Phase III WIP**  **Initiative or Page Number** | **Lead Agency/**  **Supporting Agencies** | **Actions**  **& Deliverables** | **Target**  **Dates** | **General Comments** | **Progress Update** | **Funding/**  **Grant Details** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| R1 | WIP Initiative 1 | DEQ/DCR | Update BMP Verification Quality Assurance Project Plans (QAPPs) annually and submit to EPA for approval. | Dec. 1, 2022;  Dec. 1, 2023 |  | DEQ submitted annual updates for required QAPPs to EPA in both 2022 and 2023.  Comments received via EPA’s annual progress evaluation and verification assessments were incorporated into the annual revision process. |  |
| R2 | p. 11 | CCRM, VIMS | Enhance 3D coastal model (schism); from basin to creek – water quality model. | Dec. 31, 2023 | WQ model for entire east and Gulf coasts, with high resolution/focus on Chesapeake Bay (as a demo). | The SCHISM model has been formally adopted as the water quality model of the Chesapeake Bay Program. | Applied for NOAA grant. |
| R3 | p. 160 | DEQ | Update DEQ’s [Chesapeake Bay Nutrient and Sediment Reduction Milestones](https://www.deq.virginia.gov/water/chesapeake-bay/chesapeake-bay-nutrient-sediment-reduction-milestones) webpage to include periodic numeric milestone progress. | Ongoing | Updates will be posted quarterly. | The website was updated throughout the milestone period to provide public access to milestone documents.  The final [2022-2023 Programmatic Milestones](https://www.deq.virginia.gov/home/showdocument?id=15764) and final [2022-2023 Numeric Milestones](https://www.deq.virginia.gov/home/showdocument?id=15765) are currently available.  The website was also used to promote the public comment period for the draft 2024-2025 milestone documents.  Final milestone documents will be posted to the website after DEQ receives EPA approval. |  |

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