

Conowingo WIP Programmatic and Numeric Two-Year Milestones – January 15, 2025 Progress Report

Progress on 2022-2023 and Ongoing Milestones:

Action Item	Target Date	Revised Date	2022-2023 Final Milestone (WIP page reference)*	Deliverable	Lead Agency	Comments/Status Updates (Original from 2022-2023 Milestones)	Progress Report dated January 15, 2025
Capacity Building							
- Technical							
5	December 2021	Draft due September 1, 2024 and final due December 1, 2024	Updated QAPP detailing how BMP data will be collected and submitted annually to the CBP officer, assurance that the data is valued, and how the data will be interpreted for further use. (p.47)	Updated QAPP	Act 3	The inclusion of a Verification Program Plan will extend beyond this date and require another revision to the QAPP in the next cycle. Conversations about this need to involve representatives from EPA/CBPO and each involved jurisdiction.	Complete. NY submitted the final QAPPs (DEC and USC) November 14, 2024. PA DEP submitted the draft QAPP for the 2024 progress year and received comments from EPA on October 19, 2024. The revised, final QAPP will be submitted by November 27, 2024. MD submitted the draft QAPP in September 2024 and are working on revisions.
7	March 2022	July 2024	Updated draft of Audit Framework to SC for review and comment. The Audit Framework is the development guide for tracking and validating data through FieldDoc. It will be used to ensure that projects being tracked towards the Conowingo WIP are being implemented as reported and do not overlap with other BMPs being tracked for jurisdictions' WIPs. This framework will help CBP staff and CWIP steering committee members understand how an automated and semi-automated series of audit steps can increase accountability and lower verification costs, as they will be compatible with existing CBP validation requirements. It will also align with BMP		Act 3	SC Review and Comment	Complete. EPA Grant Activity 3 has been closed. Chesapeake Conservancy provided the Audit Framework on November 15, 2024 per the document titled "Recommendations for Tracking and Reporting BMP Implementation for TMDL Progress of the Conowingo Watershed Implementation Plan." (link)

Conowingo WIP Programmatic and Numeric Two-Year Milestones – January 15, 2025 Progress Report

Action Item	Target Date	Revised Date	2022-2023 Final Milestone (WIP page reference)*	Deliverable	Lead Agency	Comments/Status Updates (Original from 2022-2023 Milestones)	Progress Report dated January 15, 2025
			Verification programs through state offices/EPA. (p.47)				
Fostering Innovation							
10	Ongoing		Explore financial innovations, including pay-for-performance options and private-public partnerships. (p.45)		Act 2		Complete. New York allocated funding which is being administered by the Upper Susquehanna Coalition. The PENNVEST Clean Water Procurement Program (link) and the MDE/SRBC RFP for Verified Nutrient Reductions (link) target pay-for-performance projects.
11	Ongoing		Explore contingency plans and opportunities as needed. (p. 48) Re-evaluate Tier II BMPs that are currently under expert review (p.26)	Annual report; re-running CAST scenarios as needed.	Act 1, CBPO	This includes current initiatives to close science gaps related to dredging behind the Conowingo dam, freshwater mussel restoration, and manure treatment technologies as viable and creditable BMPs.	Ongoing. Partnership with SRBC and continued participation in the Chesapeake Bay Watershed Region Freshwater Mussel Partnership (link). SRBC convened the Steering Committee on a monthly basis to prioritize and develop strategies for the following goal areas: Bay watershed-wide conservation & restoration priorities; Technical resource sharing; Nutrient & sediment load reduction crediting in the Chesapeake Bay Partnership framework; Education & outreach; and Access to and availability of funding. The FWM Partnership Steering Committee also developed and offered the comment letter for consideration by the Beyond 2025 Steering Committee to recognize freshwater mussels as a keystone species and species of concern. See the FWM Partnership Newsletter (link). Pennsylvania DEP submitted an Acid Mine Drainage (AMD) workshop

Conowingo WIP Programmatic and Numeric Two-Year Milestones – January 15, 2025 Progress Report

Action Item	Target Date	Revised Date	2022-2023 Final Milestone (WIP page reference)*	Deliverable	Lead Agency	Comments/Status Updates (Original from 2022-2023 Milestones)	Progress Report dated January 15, 2025
							<p>proposal to the Chesapeake Bay Program Scientific and Technical Advisory Committee (STAC). STAC Technical Review report has been under development for several months. SRBC scientists, in conjunction with Mansfield University researchers, will initiate a study in 2024 for initial characterization of nitrogen and phosphorus conditions in the Lower Tioga River and Tioga Reservoir to study effects on nutrient availability before and after AMD treatment. STAC members Ben Hayes (Bucknell) and Weixing Zhu (Binghamton) are leading the synthesis of the technical reviews. Their current progress is significantly influenced by the document that SRBC submitted in October 2023 at the request of PA DEP. James Shallenberger, SRBC, will be listed as an author on the final report as a result. Their goal is to complete this by the end of 2024.</p> <p>Pennsylvania continues to work with EPA on manure treatment technology crediting opportunity.</p> <p>Maryland Pilot Project for dredging is complete. Maryland is working with the US Army Corps to finalize the monitoring contract. The Conowingo Reservoir Modeling Study (link) was completed in October 2024.</p>
Identifying and Building Partnerships							

Conowingo WIP Programmatic and Numeric Two-Year Milestones – January 15, 2025 Progress Report

Action Item	Target Date	Revised Date	2022-2023 Final Milestone (WIP page reference)*	Deliverable	Lead Agency	Comments/Status Updates (Original from 2022-2023 Milestones)	Progress Report dated January 15, 2025
12	Ongoing		Forming, tracking, and developing cooperative or informal agreements with partners in the Susquehanna River watershed to further CWIP goals and implementation. (p.13)		SC, Act 1,2,3	<i>Includes mussel collaboration.</i>	Complete. A formal cooperative agreement between NYSDEC and the Upper Susquehanna Coalition was finalized in June 2024 and will be in place through 2028. Pennsylvania’s Local Government Impact grant was awarded to Chester County Soil Conservation District for \$1.19M to Octoraro CWIP implementation. CWIP jurisdictions partnered with Octoraro Source Water Collaborative to seek grant funding for an Octoraro Watershed Coordinator position. CWIP jurisdictions partnered with SRBC to apply for National Fish and Wildlife Foundation (NFWF) Innovative Nutrient and Sediment Reduction (INSR) Grant to fund three years of a Susquehanna Watershed Coordinator position.
Pilot Project Development and Implementation							
13	Fall 2022	July 2024	Identify and scope/ one or more implementation pilot projects to achieve numeric CWIP goals.		Act 1, 2, 3	This includes refined implementation targeting in cooperation with the SC and the BMP Opportunity Analysis tool to narrow targeting within the most-effective basins, as identified in the CWIP, to identify locations where a pilot project may be implemented and necessary funding/resources pursued.	Complete. New York: Through the funding allocated to the Upper Susquehanna Coalition for project implementation, 30 acres of riparian forest buffer, 150 acres of prescribed grazing, and 1,000 acres of nutrient management are in progress. Pennsylvania: Through two rounds of contracts with funding allocated to PENNVEST for pay for performance projects, Dairy, Beef, Sheep, and Poultry

Conowingo WIP Programmatic and Numeric Two-Year Milestones – January 15, 2025 Progress Report

Action Item	Target Date	Revised Date	2022-2023 Final Milestone (WIP page reference)*	Deliverable	Lead Agency	Comments/Status Updates (Original from 2022-2023 Milestones)	Progress Report dated January 15, 2025
							Farm BMPs, wetland and stream restoration, and riparian buffer fencing projects are in progress. The third round of project solicitation is underway. Maryland: Through one round of funding allocated to SRBC for pay for success projects, precision nutrient management, forest riparian buffers, land use conversion and stream restoration projects are in progress. The second round of project solicitation is underway.
Outreach / Engagement							
15	Spring 2022	Ongoing	Providing support to stakeholders to support implementation and the tracking verification and reporting. (p. 22)	Up to 12 training sessions. Written and recorded tutorial.	Act 1, 3	These training sessions will be scheduled to occur virtually and, when possible, in person across the Susquehanna River watershed. Invitees may include, but are not limited to, CAP coordinators in PA, Agency staff from the three implementing jurisdictions, and members of the Financing Authority (or proxy).	Complete. Chesapeake Conservancy provided a virtual training session to PA CAP coordinators on the BMP Opportunity Analysis tool in May 2024.
Numeric Milestones							
18	December 2023	December 2025	Implement practices sufficient to reduce at least 25% of the nitrogen reductions identified in the CWIP, or 1.675-million pounds.		CWIP		Ongoing. Practices are being implemented in NY, PA and MD as discussed herein. Additionally, the CWIP Steering Committee is tracking progress of projects across jurisdictions for projects that are in planning or design phases of implementation. The tracking spreadsheet and progress infographic are linked here.

Conowingo WIP Programmatic and Numeric Two-Year Milestones – January 15, 2025 Progress Report

Action Item	Target Date	Revised Date	2022-2023 Final Milestone (WIP page reference)*	Deliverable	Lead Agency	Comments/Status Updates (Original from 2022-2023 Milestones)	Progress Report dated January 15, 2025
							<p>The criteria for the two pay for performance solicitations is listed below.</p> <p>For the PENNVEST Clean Water Procurement Program, the program funds Best Management Practices that can be quantified using the Chesapeake Bay Nutrient Tracking Tool (CBNTT) found on the PA DEP Nutrient Trading Program website. Criteria for project selection includes dollar cost per pound of nutrient or sediment removal, quantity of nutrient or sediment loads reduced annually, extent to which the project includes small farms (farms that are not a CAFO), verified nutrient/sediment reduction in a Tiered County, verified nutrient/sediment reduction in a local agriculturally-impaired watershed, fiscal/managerial viability of entity, and additional community/environmental benefits. The award recipients are required to provide a description of the measures to be used to quantify, by measurement or modeling, the amounts of the reduction of nutrients or sediment resulting from the proposed projects or practices, and a verification plan to verify the reduction annually in accordance with the applicable water year, as defined by DEP under Pennsylvania’s BMP Verification Program.</p> <p>For the Maryland Verified Nutrient Reductions program, projects focus on nitrogen reduction and sites located within the Susquehanna River watershed in Maryland Counties: Harford and Cecil</p>

Conowingo WIP Programmatic and Numeric Two-Year Milestones – January 15, 2025 Progress Report

Action Item	Target Date	Revised Date	2022-2023 Final Milestone (WIP page reference)*	Deliverable	Lead Agency	Comments/Status Updates (Original from 2022-2023 Milestones)	Progress Report dated January 15, 2025
							receive a higher ranking than those located in the Pennsylvania portion of the Deer Creek, Conowingo Creek, and Octoraro Creek Watersheds or in a Most Effective Basin. Criteria for project selection includes the lowest cost per pound of nitrogen removed and provided by an approved Bay Program BMP, location, and projects involving dredging in the Conowingo Reservoir. The award recipients are required to provide a proposed verification plan which describes the protocol for verifying that practices are completed to Chesapeake Bay Program standards using a third-party verifier. Structural practices may only require this once or at regular intervals. Annual practices must be verified yearly.

* As part of the adaptive management process for achieving water quality goals, jurisdictions may submit programmatic milestones that modify, are in place of, or are in addition to milestones listed in their WIPs so long as the jurisdiction can demonstrate that they will be as effective toward meeting water quality goals.

Progress on 2024-2025 Milestones:

Action Item	Target Date	Revised Date	2024-2025 Milestone	Deliverable	Lead Agency	Comments	Progress Report dated January 15, 2025
Capacity Building - Technical							
8A	Annually on December 1 st starting in 2024		Annual Submission of BMP Progress and Verification Data	Reporting in NEIEN.	Jurisdictions	Each State will submit load reduction progress information for tracked, reported, and verified practices over the prior July 1 through June 30 period. Submit to EPA into the National Environmental Information Exchange Network (NEIEN). EPA will meet with jurisdictions to review the data across the Conowingo watershed.	Ongoing. Chester County Conservation District reported four (4) BMPs implemented in June 2024 toward CWIP progress. NY and the USC are establishing the process within the database that will output the XML script to differentiate

Conowingo WIP Programmatic and Numeric Two-Year Milestones – January 15, 2025 Progress Report

Action Item	Target Date	Revised Date	2024-2025 Milestone	Deliverable	Lead Agency	Comments	Progress Report dated January 15, 2025
							between Conowingo WIP and NY WIP III.
Outreach / Engagement							
15A	December 2024		Identification of specific target audiences for local, regional, and federal engagement in the CWIP and milestone implementation process where BMP implementation is expected to occur.			Develop target audience interested parties contact information lists and develop additional targeted outreach based on the projects identified through the pay for performance solicitations. Continue to build relationships with the CWIP Core Implementation team, which includes PA, MD, NY, NRCS, and SRBC. Continue to engage with the Upper Susquehanna Coalition, Octoraro Watershed Association, Octoraro Source Water Collaborative the Freshwater Mussels, Biodiversity and Clean Water workgroups, and the dredging expert panel group.	CWIP jurisdiction partners have collaborated with SRBC, the Octoraro Source Water Collaborative and the Chester County Conservation District on the funding applications for the two watershed restoration coordinators discussed herein. The attached job description for the coordinator details the job functions and goals including engagement with landowners and partner jurisdictions.
15B	December 2024		Description of the specific roles that local, regional, and federal partners will play in implementing programmatic and numeric commitments in each of the identified source sectors of the CWIP and two-year milestones between 2022-2025.		Act 1	Partner role descriptions will include tracking, verification, and reporting of programmatic and numeric commitments. The Implementation Framework (link) will be adjusted and modified as necessary to reflect the private sector investment in the broader state-wide implementation efforts and the localized smaller-scale targeting with watershed groups and traditional grant programs.	Funding applications have been submitted to two separate watershed coordinator positions to facilitate implementation of practices across the watershed. The Octoraro Watershed Coordinator position will be housed by the Chester County Conservation District and the Susquehanna Watershed Coordinator position will be managed by SRBC.
16A	Annually on January 15 th		Annual progress report due to EPA.	Annual progress report	Act 1	Present draft progress report and receive feedback from Steering Committee prior to annual submission. Prepare a Progress Report informational handout and distribute on the Conowingo WIP website and to Steering Committee members to promote the CWIP achievements.	Ongoing annually. At the December 2, 2024 CWIP Steering Committee meeting, the draft progress report for the 2022-2023 and 2024-2025 Milestones was discussed. The annual progress report was submitted on January 15, 2025. The informational handout on progress will posted on the Conowingo WIP website and distributed to the Steering Committee members in January 2025.
17A	Fall 2024	2026-2027 Milestone development in Fall 2025 and 2026-2027 Milestones due to	Reconvene stakeholders to evaluate progress on previous milestones and make recommendations for the 2026-2027 milestones due January 15, 2025. (pg. 49)	Milestone report	Act 1	Provide updated milestones to reflect the phased implementation approach and progress to date.	At the December 2, 2024 CWIP Steering Committee meeting, the draft progress report for the 2022-2023 and 2024-2025 Milestones was discussed. Per the revised EPA Grant Activity 1 work plan, the

Conowingo WIP Programmatic and Numeric Two-Year Milestones – January 15, 2025 Progress Report

Action Item	Target Date	Revised Date	2024-2025 Milestone	Deliverable	Lead Agency	Comments	Progress Report dated January 15, 2025
		EPA January 15, 2026.					2026-2027 Milestones are due on January 15, 2026.
Numeric Milestones							
18A	December 2025		Implement practices sufficient to reduce at least 25% of the phosphorus reductions identified in the CWIP		CWIP	Funding is in place to solicit projects through a pay-for-performance model to target the reduction of 25% of the phosphorus reductions identified in the CWIP.	Ongoing. See progress description under Milestone 18 in the 2022-2023 Milestones.
Programmatic Capacity							
19	December 2024		Develop plans for changes to existing programmatic capacity or development of new programmatic capacity to implement the necessary BMPs to achieve at least 25 percent of the CWIP nutrient target by 2025.		Jurisdictions	Include evaluation of which programs will be targeted (existing and new) and how to balance resource and technical assistance needs with the existing jurisdictions’ Phase III WIPs.	The CWIP Steering Committee is developing a detailed workplan to address the specific strategies and actions to achieve the milestones. The workplan development has been discussed weekly at the regular meeting of staff from MD, PA, and NY. The goal has been to discuss one or more strategy each week and to confirm actions that will be reviewed with the full Sterring Committee at their quarterly meetings. Additionally, MD, PA, and NY have a shared Teams folder to facilitate sharing information and collaboration.
20	December 2024		Identify the specific funding, financing, cost-share, technical assistance, voluntary, incentive, policy, programmatic, legislative, and regulatory actions needed to be taken to achieve at least 25 percent of the CWIP nutrient target by 2025.		Jurisdictions	Include increasing and/or sustaining financial cost share, technical assistance, regulatory oversight, and other incentives to deliver the necessary agricultural conservation practices as defined in the CWIP. Consider utilizing a Technical Assistance Circuit Rider to provide support across jurisdictions.	The Octoraro Watershed Coordinator and the Susquehanna Watershed Coordinator are new programs that would provide technical assistance to the existing jurisdictions, local watershed groups, and directly to producers. If funded, the two positions would be housed by Chester County Conservation District and SRBC, respectively. The funding applications to the NFWF INSR program would provide for three years of Watershed Coordinators that will serve as essentially Technical Assistance Circuit Rider to provide support across jurisdictions. The programs will be sustained through additional grant applications.

Lead Agency Key:

Conowingo WIP Programmatic and Numeric Two-Year Milestones – January 15, 2025 Progress Report

- Act 1 is Activity 1: Facilitate Development and Implementation of the CWIP and Associated Two-Year Milestones: Center for Watershed Protection (lead grantee), Chesapeake Conservancy; University of Maryland Sea Grant Extension; Harry R. Hughes Center for Agro-Ecology.
- Act 2 is Activity 2: Develop and Propose a Comprehensive CWIP Financing Strategy and Associated Implementation Plan: Chesapeake Bay Trust (lead grantee), Center for Global Sustainability/School of Public Policy at the University of Maryland; Throwe Environmental, LLC; others.
- Act 3 is Activity 3: Tracking, Verifying, and Reporting Implementation of CWIP and Two-year Milestones: Chesapeake Conservancy (lead grantee), The Commons, Center for Watershed Protection.