

Activity 1: Facilitate Development and Implementation of the Conowingo WIP and Associated Two-Year Milestones

Lead Grantee: Center for Watershed Protection (CWP)

Project Leads: Karen Cappiella (CWP), Bryan Seipp (CWP), and Bill Stack (CWP)

Sub-Activities: (1) Provide Overall Assistance to the CBP Partnership's Conowingo WIP Steering Committee; (2) Developing Two-year Milestones for the Conowingo WIP; (3) Targeting Effective Practices to Reduce Pollutant Loadings; (4) Establishing a Timeline for Achieving the CBP Partnership's Conowingo WIP; and (5) Conducting Watershed-wide Stakeholder Outreach

Other Project Partners: Chesapeake Conservancy; University of Maryland Sea Grant Extension; Harry R. Hughes Center for Agro-Ecology; National Fish and Wildlife Foundation; and the Susquehanna River Basin Commission

The Center's Project Team has the experience and skills needed to facilitate development of the Conowingo WIP and 2-year milestones, with a particular emphasis on stakeholder outreach in Pennsylvania and Maryland, who will likely have the largest responsibility for achieving additional reductions.

Chesapeake Conservancy (the Conservancy) is a regional non-profit organization that works in close partnership with the CBP and other federal, state and local agencies, private foundations and corporations to advance conservation through strong public and private partnerships, new technology and innovation. The Conservancy will lead the watershed-wide outreach and support the Center on the development of approaches to target effective practices.

The University of Maryland Sea Grant Extension (MDSGE) in partnership with the Harry R. Hughes Center for Agro-Ecology (HRH) will conduct stakeholder outreach for the Maryland portion of the Conowingo Watershed. Other project partners include the National Fish and Wildlife Foundation (NFWF) and the Susquehanna River Basin Commission (SRBC).

NFWF will participate by strategically deploying a portion of their field-based outreach and stakeholder engagement capacities to ensure additional water quality improvements under the Conowingo WIP leverage existing and future NFWF-supported projects, partnerships, and initiatives in geographic regions targeted through the organization's Chesapeake Bay Stewardship Fund (identified in the [Chesapeake Business Plan](#)). NFWF will support the project team's planned outreach activities in locations that align with both NFWF's targeted geographic regions and the to-be-determined geographic priorities for the Conowingo WIP.

SRBC will support the Project Team by helping to coordinate focused stakeholder engagement, sharing insight and lessons learned with respect to operation of the CAST model, furnishing summaries of SRBC's water quality and aquatic biology monitoring data sets pertinent to the Team's objectives, and serving in an advisory capacity to the Team. SRBC will focus on assisting the Center and the Chesapeake Conservancy on outreach activities conducted in the Susquehanna Basin. This may include helping to assemble stakeholder groups, including speakers and audience, providing meeting space, and generating and presenting materials at stakeholder meetings.

The Project Team's approach to achieving the project objectives and requirements is presented below.

Assistance to the Conowingo WIP Steering Committee **Steering Committee Meetings**

The Center will convene monthly meetings of the Conowingo WIP Steering Committee throughout the first year of the project. Meeting intervals will be re-evaluated once the Conowingo WIP is finalized. Given the geographic spread of the Steering Committee members, we will use conference calls and web-based meeting platforms to convene the committee as well as provide recordings and recordation of meeting proceedings and action items. In-person meetings will be scheduled as needed based on input from the Steering Committee and will also include options to participate remotely. The Project Team will use the notes, recordings, and presentations from the Steering Committee meetings to develop public briefing reports. These reports will include key findings, actions and decisions of the Steering Committee, and upcoming events and deadlines. These reports will be disseminated to the larger CBP partnership on or quarterly basis or as requested by the Steering Committee and disseminated to stakeholders via website and using the methods described in Conduct Watershed-Wide Stakeholder Outreach.

Develop CAST Scenarios

Once the framework, geographic scope, specific watershed pollutant reduction targets become more detailed and the financing strategy is more developed, a primary task for the Project Team will be to develop CAST scenario(s) that will meet the Conowingo planning targets. Based on input from the Steering Committee, other state agency staff, and local stakeholders, the Project Team will develop up to five base CAST scenarios. These scenarios will take into account cost-effective strategies, local constraints, and priority watersheds as described under Targeting Effective Practices to Reduce Pollutant Loading. The base scenarios will be modified and edited based on input from the Steering Committee and will be run through CAST. The Project Team will run a basic comparative analysis of CAST output files. The refined scenarios, CAST results, and comparative analysis will be presented to the Steering Committee for final review and selection of final CAST scenarios. Based on input during the final review process, the Project Team will develop a final CAST scenario. These results will provide the basis for beginning to draft the Conowingo WIP.

Develop Draft and Final Conowingo WIP Documents

The Project Team will provide support to the Steering Committee to develop both draft and final versions of the Conowingo WIP. WIP development will be guided by and consistent with the *2014 Watershed Agreement*, the *2010 TMDL*, and the *Phase III WIP Expectations Document*. It will include methods for addressing gaps and contingencies.

Develop Two-Year Milestones

Develop Draft Initial Two-Year Milestones

The Project Team will facilitate development of two-year milestones associated with the WIP. The schedule for implementation of these milestones will be finalized based on Steering Committee and stakeholder input. For each set of milestones, the Project Team will calculate the estimated cost to implement the actions and commitments reflected in the two-year milestone submission using CAST and will facilitate the review and comment process with the Conowingo WIP Steering Committee, the CBP partnership and other interested parties.

Finalize Initial Two-Year Milestones

The Project Team will work with Conowingo WIP Steering Committee to facilitate the review/comment process for the initial two-year milestones, with revised estimated costs.

Develop Future Two-Year Milestones

The Project Team assumes that draft future two-year milestones will be developed during Year 3 and Year 5. During this process the Project Team will work with the Steering Committee and partners to consolidate

progress towards the initial set of two-year milestones, analyze the current strategy, and facilitate the review/comment process for new draft milestones.

Finalize Future Two-Year Milestones

The Project Team assumes that final future two-year milestones will be submitted during Year 4 and Year 6. During this process the Project Team will work with the Steering Committee and partners to finalize the new draft milestones, and estimate the cost associated with the new milestones using CAST.

Target Effective Practices to Reduce Pollutant Loading

Develop Targeting Methodology

The Project Team will develop methods for identifying potential locations for BMP implementation, focusing on the most effective and mappable practices across the basins that are prioritized by the Conowingo WIP Steering Committee. These methods will get applied to aid the development of the Conowingo WIP and be made available to the Steering Committee and local partners during the development of the two-year milestones via online resources.

Determine List of Preferred Practices

Cost-effectiveness will be calculated as the cost per pound of nitrogen and phosphorus reduced and these metrics will be derived using information from CAST. Only BMPs that are CBP-partnership approved will be considered. This initial list of preferred practices will provide the basis for the CAST scenarios developed for the WIP and will be refined based upon further investigation of geographic opportunity areas for these BMPs. The Steering Committee will provide input on and ultimately approve the list of preferred practices prior to development of the CAST scenarios.

Develop basin-scale BMP Opportunity Analysis

The Project Team will leverage the Chesapeake Conservancy's 2013/2014 one-meter by one-meter resolution land cover dataset and Li-DAR derived hydrology datasets to identify opportunities for BMP implementation for up to 5 mappable practices in a subset of geographies as identified by the CWIP Steering Committee. By utilizing this high-resolution data, the analyses will be more detailed than the initial runs of CAST scenarios developed for the CWIP which utilize 30-meter by 30-meter national datasets. The team will follow the targeting methodologies and will share the data to integrate with WIP drafting and planning.

Develop Refined BMP Opportunity Blueprint

The Project Team will develop a refined BMP Opportunity Blueprint and prioritization based on the initial BMP Opportunity Analysis. This effort will build from the research and deliverables from Chesapeake Conservancy's work under their CBP Cooperative Agreement, as identified: (1) 2017/2018 one-meter by one-meter resolution land cover dataset, (2) updated hydrology utilizing geomorphology and computer vision, and (3) research and results from adapting USDA's Agricultural Conservation Planning Framework (ACPF) toolbox for use within the Chesapeake Bay jurisdictions. With these datasets, the Project Team can expand the initial BMP Opportunity Analysis to include additional mappable BMPs, as well as prioritize these project-scale opportunities for their capacity to support milestone planning to meet CWIP pollution reduction targets. Identifying high-priority opportunities will involve analyzing cost-effectiveness, adjacency to other opportunities, and other metrics as agreed upon by the Project Team and CWIP Steering Committee. The Project Team will develop documentation of the targeting approaches and ensure that data and associated web tools meet quality standards and the needs of the CBP partnership.

Establish a Timeline for Achieving the WIP

Develop Timeline

In coordination with the Steering Committee, the Project Team will develop and propose a timeline for achieving the pollutant load reductions and implementation commitments and goals in the Conowingo WIP. The timeline will include up to three alternative scenarios for achieving the Conowingo WIP load reductions that may include commencing implementation prior to or after 2025, with ultimate achievement of goals at different timeframes (e.g., 2035, 2040). These alternatives will take into consideration the projected funding and resource availability as well as the progress that can realistically be achieved by the responsible parties. At least one Steering Committee meeting will be dedicated to the discussion of timeline in conjunction with the Activity 2 lead (Chesapeake Bay Trust) since the financing plan will directly influence the timing of funding availability.

Conduct Watershed Wide Stakeholder Outreach

Year 1

The Project Team will advocate for local stakeholders as an advisor to the WIP Steering Committee to ensure that WIP recommendations/products are locally relevant and actionable. Outreach will be focused at the regional scale in geographies that contain the most effective basins and offer high priority BMP sites based on a combination of effectiveness, CAST scenarios, and BMP Opportunity Analysis. Based on this stakeholder input, the Project Team will work with the Steering Committee as well as federal partners to inform the draft Conowingo WIP as appropriate and to develop an engagement strategy that outlines the role local and federal partners may assume in implementing the WIP.

August – October 2019

- Create Conowingo WIP web page and a “fact sheet” under the guidance of the Steering Committee.
- Disseminate project information through an informational webinar and personalized email outreach to current partners, focusing on stakeholders operating in most effective basins.

March – May 2020

- Create an online public comment portal for draft WIP.
- Carry out in-person full- or half-day engagement meetings with a diversity of stakeholders in up to eight communities in targeted basins to solicit input on draft WIP.
 - Up to 3 meetings in Maryland
 - Up to 5 meetings in Pennsylvania
 - Meetings located in other states will occur if it contains a targeted basin
- Compile comments and present a report to the Steering Committee documenting initial concerns, relevant effective practices, anticipated constraints, complementary activities currently underway, and recommendations on the role local and federal partners may assume in implementing the WIP.
- Share findings from the community outreach and engagement campaign to stakeholders via website and a webinar.

Year 2

Upon finalizing the Conowingo WIP and draft two-year milestones, outreach will focus on delivering the WIP and collecting data on specific projects that will be implemented to achieve the two-year milestones.

July – December 2020

- Conduct a webinar to share the Final WIP.
- Carry out in-person full- or half-day regional engagement meetings with a diversity of stakeholders in up to eight regions with targeted basins to solicit input on two-year milestones based on project-specific BMP Opportunity Blueprint.
 - Up to 3 meetings in Maryland
 - Up to 5 meetings in Pennsylvania
 - Meetings located in other states will occur if it contains a targeted basin

- Submit next round of draft milestone for January 2021 – November 2021.
- Provide training to local stakeholders on the data tools produced as part of the project to support planning of projects to implement the WIP.

Years 3 - 6

Project Team members will monitor and ensure feedback from stakeholders is addressed by the Steering Committee. In response to specific challenges encountered by local partners, the Project Team will work with Chesapeake Bay professional development partners to recommend training opportunities and develop guidance documents to communicate opportunities for partners involvement in implementing the actions described in the WIP.

September 2020 – May 2021

Reconvene local stakeholders in eight communities at the conclusion of each two-year milestone deadline to evaluate progress and make recommendations on the next set of two-year milestones.

- Provide technical assistance to local stakeholders to support implementation and reporting of projects toward meeting the two-year milestones by providing access to partner-led and external training opportunities.

June – November 2021

- Develop two-year milestone for 2022-2023.
- Submit Draft two-year milestone November 1, 2021

December 2021 – June 2023

- Check-in twice per year with local leads which will include updates to and training on targeting and tracking tools.
- Submit Final two-year milestones January 7, 2022

June – November 2023

- Develop two-year milestone for 2024-2025.
- Submit Draft two-year milestone November 1, 2023

December 2023 – June 2025

- Check-in twice per year with local leads which will include updates to and training on targeting and tracking tools.
- Submit Final two-year milestones January 7, 2024