# Phase 3 Watershed Implementation Plan (WIP) Planning and Progress Template

Green - action has been completed or is moving forward as planned    Yellow - action has encountered minor obstacles    Red - action has not been taken or has encountered a serious barrier

| Action # | Description | Performance Target(s) | Responsible Party(ies) and Partnerships | Geographic Location | Expected Timeline | Potential Implementation Challenges or Recommendations | Resources Available | | Resources Needed | | Annual Progress to Date (2022) |
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| | | | | | | | Technical | Financial | Technical | Financial | |
| **Priority Initiative 4: Municipal** | | | | | | | | | | | |
| 4.1 | Basin Retrofits Pilot Project | | Chester County Conservation District (CCCD), Chester County Water Resources Authority (CCWRA) | Where basin and landowner receptiveness coincide | Late 2021 launch | Establish retrofits program that can be mimicked across the watershed

A basin called out in an MS4 PRP could serve as the pilot | Local engineers/ consultants, CCWRA, Chester County Parks and Preserve.

HOA Open Space GIS layer | NFWF, Growing Greener (GG) (assuming spring 2022 availability) | | | Applied for funding from NFWF Small Watersheds Grant and were turned down. Looking to fund these projects another way. Municipal partners have been identified, sites have been selected, and project development is underway. |
| 4.2 | Minimum Control Measure (MCM) 3 (IDD&E) Compliance Assistance | *Advanced IDD&E Control – 3,000 acres treated* | CCWRA, local municipalities, Environmental Advisory Committees (EACs) | MS4 regulated areas | Ongoing | Identify needs and assistance channels for compliant MS4 programs (specifically MCM #3 for Illicit Discharge Detection & Elimination (IDD&E) and education/outreach channels) | DEP, local engineers/ consultants, EPA | | IDD&E public works training, mock inspections | | The vast majority of C3 municipalities (Chester County municipalities located in the Chesapeake Basin) have either not had their first MS4 permits approved or have received waivers, hence have not produced annual reports from which these data can be tracked. |
| 4.3 | MS4 Circuit Rider | *Circuit Rider hired/secured (one full time staff equivalent)* | CCWRA, Environ. Advisory Committees (EACs), local municipalities, Oxford Reg. Planning Comm. | MS4 muni. | Ongoing once funding secured (ideally launch spring 2022) | PCSM BMPs inventory and verification processes

If parameters for capture of underreported BMPs are known, process can commence at a limited version through catchment targeting under P.I. 1 and Action 4.5

Assist with coordinating and outreach efforts for next MS4 permit cycle in 2023 | Local engineers/ consultants, County DCIS (Dept. of Computer and Info. Services)

Env. Finance Center (EFC) | NFWF | Centralized database platform

Qualified individual that is familiar with MS4 program and Chester County | $75,000/yr: capture BMPs, build inventory and/or verify USGS inventory and conduct long-term verification processes | Efforts mostly focused on distribution of needed activities amongst various existing entities and resources.

There is a need to strengthening the capacity of this portion of the County in order to implement the C3AP municipal targets. A circuit rider in addition to DEP's clear completion of the 2018-2023 MS4 permit review process is essential to achieving our goals.

Additionally, CCCD and CCWRA do not have the staffing capacity to take on all of the C3AP goals at once.

This particular goal will have to put off at least to Spring of 2023. |

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| **4.4** | Existing BMPs Needs | *Database of implemented stormwater BMPs by 2025* | CCCD, CCWRA, local municipalities, EACs, County DCIS, County Planning (CCPC) | All areas | Ongoing, but follows initial circuit rider and BMP reporting reconciliation efforts | Potential HOA assistance entity<br><br>Initiate with MS4 municipalities with intent to follow-up with non-MS4s (first step is BMPs dated to 2003)<br><br>Result of BMP inventory generation, BMP reporting reconciliation, and initial verifications for the identification of BMPs requiring maintenance, rehabilitation, and similar. | County, CCPC, local engineers/ consultants, local maintenance contractors | NFWF, GG | Inventory of individual BMP needs (maint. needed, etc.)<br><br>Potential HOA assistance entity<br><br>MS4 GIS files | TBD (result of inventory and reconciliation processes)<br><br>See Action 4.3 for Circuit Rider information | Some progress has been made in collecting information on proposed BMP's in municipal PRP's.<br><br>A comprehensive inventory of all existing BMPs in need of repairs or maintenance is still needed, and will likely only be achieved in coordination with action item 4.3. |
| **4.5** | Catchment Targeting Initiative | See Priority Initiative 1 for targets | Ag Action Team (AT), Data Management (DM) Action Team (AT), Catchment Targeting (CT) Action Team (AT), Muni Action Team (AT), watershed groups, local municipalities, Brandywine Conservancy, CCCD, CCWRA, EACs, CCPC | Prioritized Catchments (TBD) | Mid 2021 Launch with inherent tie to P.I. 1 (catchment targeting) | Partner with Catchment Targeting AT during catchment prioritization efforts to identify individual catchment needs, BMP probabilities, etc. | | | Centralized database platform (see P.I. 5) | See P.I. 1 for more information | Primary focus is currently in the Upper Oxford area. Intent is to flesh out details of the process (e.g. what does a partnership look like between multiple entities including local municipalities) for coordinating efforts. |

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| **4.6** | BMP Reporting Reconciliation | | Muni AT, Data Mgmt AT, Catchment Targeting AT | All areas (Catchment targeting analyses will result in 2 data tables: 1) conservation needs/opps., and 2) existing BMPs for reconciliation | Launch late 2021 with inherent tie to Action 4.5 (limited activities until reporting platform is known or the parameters at a minimum) | Partner with Data Management AT for reconciliation of BMP reporting numbers (primarily through catchment targeting)<br><br>Receive back organized data USGS has requested for Ch. 102/land development BMPs; may require Data Mgmt. AT to re-organize data and information<br><br>All performance targets assume significant level of uncaptured BMPs in numbers.<br><br>**Knowing parameters/ attributes that need captured for ultimate reporting would be ideal.\*** | Practice Keeper (PK)<br><br>County Dept. of Computer and Info. Services (DCIS)<br><br>EFC | | Centralized database platform<br><br>Circuit Rider<br><br>MS4 reporting platform for Ch. 102/ PCSM BMPs | See Action 4.3 for more information | Efforts have mostly been centered around development of uniform data needs for collection and reporting. |
| **4.7** | Existing Plans Alignment | *Game plan by late 2021* | Local municipalities, EACs, CCWRA, CCPC, CCCD | All areas | Ongoing with inherent tie to Action 4.5 | Ensure efforts do not conflict and/or align with other efforts (e.g. county Act 167 plan)<br><br>Game plan and coordination with Catchment Targeting AT (P.I. 1) for complete list of existing plans that need to be encompassed by the process | CCWRA, Brandywine Conservancy<br><br>Oxford regional plans inventory completed with NFWF funding | | Potentially new GIS layers for certain plans or information | | Municipalities with PRPs have been communicating with each other, Brandywine Conservancy, CCCD, CCPC, and the public (to varying degrees) in order to meet their pollutant reduction goals and to meet the goals of the C3AP.<br><br>No concrete game plan document has been created to date. |

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| **4.8** | PennDOT PRP Reductions | | EACs, CCWRA, CCCD, local municipalities, Environ. Finance Center (EFC) | PennDOT MS4 areas | Ongoing with inherent tie to Action 4.5 | Collaborative and joint project opportunities | Local engineers/ consultants, PennDOT | | | | PennDOT PRP is currently under public comment. It includes two projects in Chester County in the CBW, each partnering with a municipality on stream restorations on Big Elk Creek.<br><br>The project in East Nottingham is currently going through waiver review by the Waterways and Wetlands Program. At least two municipalities in Big Elk are in negotiation about meeting their Big Elk PRP obligations through that project. Some local residents have raised concerns about the science behind the projected sediment/nutrient reductions being estimated for this project. |
| **4.9** | Joint PRP Projects | | Local municipalities, EACs, EFC, local watershed groups, Oxford Reg. Planning Comm. | MS4 regulated areas | Ongoing (differing PRP cycles amongst MS4s) | Foster collaborative arena for multi-municipal projects providing regional benefits through cost-effective BMP implementation. Currently assuming this may be more applicable during the 2023-2027 permit cycle). | Local engineers/ consultants, Brandywine Conservancy<br><br>MS4 PRPs<br><br>EFC | NFWF, GG, CBT, PennVEST, American Rescue Plan Act (ARPA) Local Relief Fund, local municipal. | | | Efforts currently centered around promoting joint projects. A number of PRPs have yet to be finalized and/or approved.<br><br>We have received feedback from municipalities that there has been a lack of clarity from DEP SERO over the conditions allowing municipalities to share reduction credits within a watershed. |
| **4.10** | Stormwater BMP Implementation | *Rate Reduction SWP Standards – 3,000 new acres treated*<br><br>*Treatment SWP Standards – 89 new acres treated*<br><br>*Wet Ponds and Wetlands – 50 new acres treated*<br><br>*Infiltration Practices – 64 new acres treated*<br><br>*Bioretention – 58 new acres treated*<br><br>*Bioswales – 25 new acres treated* | Local municipalities, developers, CCCD, CCWRA, EACs, Oxford Reg. Comm., CCPC | All areas with emphasis provided towards prioritized catchments | Ongoing (timing tied to catchment analyses funding and Actions 4.5 and 4.6) | MS4 PRP projects to be reported via annual reports<br><br>Significant uncaptured and/or underreported BMPs are assumed in this category and difficult to project. Assume significant progress achieved through BMP reporting reconciliation occurs for revisions to BMP implementation scenario in 2023 to better reflect rates.<br><br>BMP implementation values include projects outlined in PRPs (where available)<br><br>Landowner resistance or buy-in | Local engineers/ designers, DEP, Stroud, CCWRA, Brandywine Conservancy, Penn State, EFC<br><br>County DCIS data | Developers, local municipal., GG, NFWF, PennVEST, CBT | | Capital Cost: ~$TBD (after reconciliation and BMP rates revisions)<br><br>Current assumptions are roughly 50%-70% of BMP values are already in place and uncaptured for reporting. | Implementation is occurring, but data/info capture processes still under development (see Catchment Targeting Priority Initiative).<br><br>A non-ag sub-grants program was developed for non-ag BMP implementation (use of CAP implementation funds). This program will be used for 2023 implementation funds. We received 2 applications for the Non-Ag Subgrant for 2023.<br><br>Progress here depends on achieving 4.1, 4.3-4.5, 4.8, 4.9. |

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| | | *Vegetated Open Channels – 30 new acres treated*<br><br>*Filtering Practices – 25 new acres treated*<br><br>*Impervious Surface Reduction – 4 acres* | | | | | | | | | |
| **4.11** | Urban Landscape | *Conservation Landscaping – 100 total acres*<br><br>*Urban Forest Planting – 20 new acres*<br><br>*MS4 Tree Canopy – 10 new acres*<br><br>*Urban Nutrient Management – 2,000 acres* | CCCD, CCWRA, EACs, local municipalities, Brandywine Conservancy | All areas with emphasis provided towards prioritized catchments | Ongoing with inherent tie to Action 4.5 | **Urban nutrient management is tied to fertilizer legislation at the state level.***<br><br>Landowner resistance or buy-in | ACB, CBF, DCNR, CCPC, CCWRA, Stroud, Brandywine Conservancy<br><br>County DCIS | DCNR, Keystone, NFWF, GG, CBT, local municipal. | | Capital Cost: ~$45,000 | Implementation is occurring, but data/info capture processes still under development (see Catchment Targeting Priority Initiative). A non-ag sub-grants program was developed for non-ag BMP implementation (use of CAP implementation funds).<br><br>Progress here depends on achieving 4.1, 4.3-4.5, 4.8, 4.9. |
| **4.12** | Septic Systems | *Conventional Septic Denitrification – 3,000 systems*<br><br>*Septic System Pumping – 6,000 systems* | Local municipalities, CCWRA | All areas outside public sewage areas | On-going, with primary info capture and analysis in 2022 with developed game plan | Use County GIS/ Health Dept. information for septic systems tracking and convert to reportable data (capture of existing systems)<br><br>Initial analysis reveals approximately 17,700 septic systems (currently assuming 50% compliant systems until further analysis in completed) | County DCIS, County Health Dept., local municipalities, CCPC | | GIS support | | Applicable data and information reside with the County Health Dept. Efforts underway on defining processes to appropriately report the information. |

**Phase 3 Watershed Implementation Plan (WIP) Planning and Progress Template**

**Each county-based local area will use this template to identify:**

1. Inputs – These are both existing and needed resources, public and private, to implement the identified priority initiative.  These include both technical and financial resources, such as personnel, supplies, equipment and funding.

2. Process – what is each partner able to do where and by when.  These are the action items listed under each priority initiative.

3. Outputs and outcomes – both short and long-term. These are the priority initiatives identified by each county.   The performance targets are the intermediate indicators that will measure progress.

4. Implementation challenges – any potential issues or roadblocks to implementation that could impede outputs and outcomes.


**Asterisk:** Place an asterisk next to the action number(s) for action items that appear in both the County Planning and Progress Template and the Programmatic Recommendations Template.


**For each Priority Initiative or Program Element:**  Use the fields, as defined below, to identify the inputs and the process that will be followed to achieve each priority initiative. This is the "who, what, where, when and how" of the plan:


**Description** = What. This may include programs that address prevention, education, or as specific as planned BMP installations that will address the Priority Initiative.  A programmatic or policy effort will require some ability to quantify the anticipated benefits which will allow calculation of the associated nutrient reductions.


**Performance Target** = How. This is an extension of the Description above.  The Performance Target details the unique BMPs that will result from implementation of the Priority Initiative and serves as a benchmark to track progress in addressing the Priority Initiative.  Performance Targets may be spread across multiple Responsible Parties, Geographies, and Timelines based on the specifics of the Initiative.


**Responsible Party(ies)** = Who. This is/are the key partner(s) who will implement the action items though outreach, assistance or funding, and who will be responsible for delivering the identified programs or practices.


**Geographic Location** = Where. This field identifies the geographic range of the planned implementation.  This could extend to the entire county or down to a small watershed, based on the scale of the Priority Initiative, range of the Responsible Party, or planned funding/resources.  *NOTE: Resource limitations alone should not limit potential implementation as additional funding may become available in the future.*


**Expected Timeline** = When. Provide the expected completion date for the planned activity.  This should be a reasonable expectation, based on knowledge and experience, that will aid in tracking progress toward addressing the Priority Initiative.


**Resources Available: Technical & Funding =** This field will note technical and financial resources secured/available to implement the program (Description).  This is the total of the resources identified in the County Resources Inventory Template below allocated to the priority initiative as a whole; or, if available, to each action.


**Resources Needed: Technical & Funding =** This field will note technical and financial resources needed/outstanding to implement the program (Description).  This is the total of the additional resources projected and identified as needed in the County Resources Inventory Template below allocated to the priority initiative as a whole; or, if possible, to each action.


**Potential Implementation Challenges/Issues =** This field will note challenges and issues that may delay program implementation (Description).