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

Date:

<table>
<thead>
<tr>
<th>Action #</th>
<th>Description</th>
<th>Performance Target(s)</th>
<th>Responsible Party(ies) and Partnerships</th>
<th>Geographic Location</th>
<th>Expected Timeline</th>
<th>Potential Implementation Challenges or Recommendations</th>
<th>Available Resources</th>
<th>Needed Resources</th>
<th>Progress to Date</th>
<th>Justification for Change to Action Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1.1A</td>
<td>Continue communication, outreach and stewardship programs to increase the use of conservation tillage and no-till practices.</td>
<td>306,196 acres in conservation tillage; 805,778 acres in no-till</td>
<td>PDA, SCC, CDs, CCAs, Private Consultants, Penn State Extension, No Till Alliance, Farmland Preservation, Local Farmland Trusts/Conservancies, PA Farm Bureau</td>
<td>Chesapeake Bay</td>
<td>December 2025</td>
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<tr>
<td>2.1.2A</td>
<td>Continue communication, outreach and stewardship programs to increase implementation of cover crops.</td>
<td>547,695 acres with fall nutrients, traditional cover crop; 161,601 acres of land without fall nutrients, traditional cover crop; 124,106 acres no fall nutrients and harvested crop</td>
<td>PDA, SCC, CDs, CCAs, Private Consultants, Penn State Extension, No Till Alliance, Farmland Preservation, Local Farmland Trusts/Conservancies, PA Farm Bureau</td>
<td>Chesapeake Bay</td>
<td>December 2025</td>
<td>Challenges include CBP definition of cover crop and the inability to report commodity cover crop via transect survey methodology.</td>
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<tr>
<td>2.1.3A</td>
<td>Continue communication, outreach and stewardship programs to increase implementation of pasture management.</td>
<td>180,201 acres of land used for pasture would follow NRCS Prescribed Grazing Plan or Resource Improvement Practice.</td>
<td>NRCS, Penn State Extension, Private Consultants, CDs</td>
<td></td>
<td></td>
<td>Challenges include CBP definition of Prescribed Grazing and non-alignment with PA State regulatory requirements under Chapter 91 Manure Management and Chapter 102 Ag E&amp;S.</td>
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<tr>
<td>2.1.1F</td>
<td>Implement a comprehensive communication/outreach strategy to engage farmers/landowners in forest buffers.</td>
<td>85,000ac. of forest buffers planted on agricultural lands, and 3,100 acres of forest buffers on developed/non-ag lands.</td>
<td>DCRN, DEP, PSC, RFAC, PA WIP III Forestry Workgroup, SCC, PDA, PSU, etc.</td>
<td>PA Bay-Wide</td>
<td>By 2022</td>
<td>Coordination, scheduling, lack of funding for marketing/communications/outreach/education, etc.</td>
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Priority Initiative 1: Communications and Outreach

Section 2, State Action, Numeric Commitments
### 2.1.2F Implement a communication/outreach program to engage a variety of turf owners to plant trees and meadows on their properties.

<table>
<thead>
<tr>
<th>Action</th>
<th>5K acres of “Urban Forest Expansion” (turf to trees) + 5K acres of “Conservation Landscaping” (turf to meadow).</th>
<th>PRPS, DCNR, DEP, agencies and partners, municipalities and parks, etc.</th>
<th>PA Bay-Wide</th>
<th>By 2023</th>
<th>Brand new program-Coordination, scheduling, lack of funding, etc.</th>
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</thead>
</table>

### 2.1.3F Communicate the importance and values of forests to facilitate and encourage state and local land conservation programs.

<table>
<thead>
<tr>
<th>Action</th>
<th>Increase conserved lands both in the headwaters of the PA Chesapeake Bay watershed and near developing areas.</th>
<th>DCNR, DEP, PALTA, etc.</th>
<th>PA Bay-Wide</th>
<th>By 2023</th>
<th>Coordination, scheduling, lack of funding.</th>
</tr>
</thead>
</table>

### 2.1.4F Emphasize the full range of benefits & co-benefits of stream and wetland restoration to facilitate additional implementation.

<table>
<thead>
<tr>
<th>Action</th>
<th>Increased acres of wetlands created and restored to approximately 400 acres annually; increased feet of stream restoration projects implemented to approximately 60,000 linear feet annually.</th>
<th>DEP and appropriate NGO partners.</th>
<th>PA Bay-Wide</th>
<th>By 2023</th>
<th>Coordination, scheduling, lack of funding.</th>
</tr>
</thead>
</table>

### Section 3, Countywide Actions

#### 3.1.1 Develop communications and outreach strategy for staged approach to WIP planning and implementation in all counties.

<table>
<thead>
<tr>
<th>Action</th>
<th>Webinars and calls to provide overview of WIP, define the expectations, and discuss next steps with Tier 3 &amp; 4 counties. Designed to prepare these counties for the second phase of the WIP process.</th>
<th>Tier 3 &amp; 4 counties</th>
<th>October-December 2019</th>
<th>Participation and engagement from Tier 3 &amp; 4 counties. DEP/state staffing limitations</th>
<th>See Funding and Resources Section, Resources Needed Phase 2 columns below</th>
<th>See Funding and Resources Section, Resources Needed Phase 2 columns below</th>
<th>See Funding and Resources Section, Resources Needed Phase 2 columns below</th>
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#### 3.1.2 Conduct outreach via webinars and one-on-one meetings to provide overview of WIP, define the expectations, and discuss next steps to prepare counties for the WIP planning process.

<table>
<thead>
<tr>
<th>Action</th>
<th>Tier 3 &amp; 4 counties will explore the potential of forming regionalized planning groups of 2-4 counties. Regional planning groups will begin their regionalized planning process with an assigned external coordinator for focused outreach and engagement to county stakeholders.</th>
<th>Tier 3 &amp; 4 counties</th>
<th>Begins February 2020 (following the completion of Tier 2 county planning)</th>
<th>Regionalized planning still requires counties to submit an individual county plan. State staffing support</th>
<th>See Funding and Resources Section, Resources Needed Phase 2 columns below</th>
<th>See Funding and Resources Section, Resources Needed Phase 2 columns below</th>
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#### 3.1.3 Begin implementation of WIP plans completed by four pilot counties.

<table>
<thead>
<tr>
<th>Action</th>
<th>Assign an external coordinator to each Tier 2 county to assist with WIP planning and implementation efforts.</th>
<th>Tier 2 Counties</th>
<th>Begins July 2019</th>
<th>State staffing support</th>
<th>Internal and External Coordination</th>
<th>See Funding and Resources Section, Resources Needed Phase 2 columns below</th>
<th>See Funding and Resources Section, Resources Needed Phase 2 columns below</th>
<th>See Funding and Resources Section, Resources Needed Phase 2 columns below</th>
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</table>
### Section 10, Communication and Engagement Strategy

| 10.1.1 | Complete the public comment period and provide a response to comments received. | Comment Response Document will be attached to the final Phase 3 WIP | August 2019 |
| 10.1.2 | Develop the outreach materials, webinars, templates for letters and mailings and success stories identified by the Communications and Engagement Workgroup for their use in message delivery and outreach. | Final materials will be distributed to the C&E Workgroup materials as they are finished for their use. | As needed | $200,000 |
| 10.1.3 | Finalize the DEP Web-based StoryMap. | Final StoryMap | Summer 2019 | $20,000 |
| 10.1.4 | Schedule and participate in focus groups, forums and workshops, as appropriate. | Presentations and summaries of such events and the input provided will be shared as appropriate. | Chesapeake Bay | As needed |
| 10.1.5 | Communications and Engagement Workgroup members will use the delivery tools developed to reach their respective constituents through mailings, newsletters, their respective websites, conferences, workshops, etc. about the importance of clean water and the goals of the Phase 3 WIP. | Mailings, newsletters, websites, conferences and workshops of C&E Workgroup are utilized as appropriate to convey the message developed. | Chesapeake Bay | Between now and 2025 |
### Priority Initiative 2: Funding and Resources

**Section 2, State Action, Programmatic and Narrative Commitments**

#### 2.2.1
Pass legislation providing a funding source or combination of funding sources for the implementation of the Phase 3 WIP.

- **PDA, DCNR, DEP, State Legislature, Governor’s Office**
- **2019-2020 Session**

#### 2.2.2
Identify the process and develop specific procedures for the award of “block grants” to the lead planning teams for the implementation of the CAPs.

- **Policy and procedures and a grant agreement developed for use in the development and award of grants to counties in the implementation of the CAPs**
- **DEP, Comptroller’s Office**
- **Fall 2019**

**Section 2, State Action, Numeric Commitments**

#### 2.2.1A
Investigate the incorporation of alternative manure treatment technologies and other potential strategies to address areas of excess manure nutrient generation and capital investment required for implementation of manure treatment systems.

- **Identify various strategies to minimize nutrient imbalances in areas of excess manure nutrient generation, including the incorporation of manure treatment technologies and manure transport, as they are determined to be feasible.**
- **PDA, SCC, DEP, Nutrient Trading Program, NRCS**
- **Counties that are identified to have excess manure generated for crop need**
- **December 2025**
- **Capital investment and cost effectiveness is of concern.**

#### 2.2.1F
Maximize existing funding sources for riparian forest buffer implementation in Pennsylvania.

- **Fully utilize existing funding sources for buffer implementation and maintenance annually, including federal, state, and private programs (esp. under-utilized programs such as REAP).**
- **DEP (GG, 319), USDA (CREP+), SCC (REAP), DCNR (C2P2), TreePennsylvania (TreeVitalize) CBF (K10), etc.**
- **PA Bay-Wide**
- **By 2025**
- **Rigid programs, existing restrictions, coordination, lack of understanding about all individual programs, etc. Lack of funds to start a new program.**

#### 2.2.2F
Expand TreeVitalize and utilize other programs to facilitate community tree planting and maintenance.

- **50 New Acres of New Urban Trees (300 trees = 1 acre)**
- **Tree Pennsylvania, DCNR, PSU, municipal partners, etc.**
- **PA Bay-Wide**
- **By 2022**
- **Coordination, scheduling, lack of funding.**

#### 2.2.3F
Create additional, flexible funding options for riparian forest buffers.

- **Develop new, innovative PA (or Ches. Bay) funding source and mechanism for Buffers, including incentive programs for landowners utilizing buffer co-benefits such as wildlife habitat, income/product potential, flood mitigation, etc.**
- **All agencies and partners**
- **Bay**
- **Ongoing/ASAP**
- **Innovation, Funding, Coordination, etc.**
| 2.2.4F | Ensure that riparian forest buffers are adequately maintained to ensure survival by developing a Maintenance funding source for NGOs to develop their own maintenance programs. | Develop a Riparian Forest Buffer Maintenance funding source to create the capacity for NGOs to develop their own maintenance programs for new and already-implemented buffers (up to 5 years after initial planting). | All agencies and partners involved in riparian forest buffer implementation | PA Bay-Wide | Ongoing | Lack of interest in funding maintenance from traditional funding sources as it does not result in "new" load reductions. |
| 2.2.5F | Continue and Increase Urban Tree Canopy Grants to Communities and non-governmental organization Partners | Utilize and increase funding available through the TreeVitalize annual grant program. Encourage tree planting and/or conservation of existing tree canopy in existing DCNR Grant programs, other agency grant programs as appropriate (grants to community parks, etc.) Connect this work to DCNR’s Climate Plan. | DCNR, Tree Pennsylvania, PRPS | PA Bay-Wide | Ongoing | Current Funding does not meet demand. Processes, procedures, and administration. |
| 2.2.6F | Leverage existing funding sources for Stream and Wetland Restoration. | Explore potential to improve leveraging of EQIP, CFA and REAP programs to support creditable/conforming stream and wetland restoration implementation, management and monitoring. | DEP, NRCS, SCC, NGOs, DCNR, Universities, etc. | PA Bay-wide | Ongoing | Strict program regulations, lack of knowledge about existing programs and creditable BMPs, etc. |
| 2.2.7F | Develop funding opportunities for turf conversion programs. | Include Conservation Landscaping as an eligible BMP in existing conservation grant programs. Seek new innovative funding sources and mechanisms. Explore funding opportunities tied to flood mitigation. | DCNR, TreePennsylvania, TreeVitalize, DEP, etc. | Bay-wide | By 2021 | Time, finding funding sources, etc. |
| 2.2.8F | Continue to implement stream restoration, emphasizing creditable, load-reducing projects. Pair stream restoration projects with tree planting BMPs whenever possible. Identify areas that may have a high cost-to-benefit ratio for load reductions from legacy sediment removal | Identify areas that would benefit from Legacy Sediment Removal and Ecosystem Restoration throughout priority areas of the watershed | DEP, CDs, Watershed Organizations, Private sector companies or NGOs working on remote sensing tools | Capital investment for design/implementation is of concern. |
### Section 3, Countywide Actions

#### 3.2.1 Phase 1 (Pilot and Tier 2 counties):
- **Provide 8 – Community Clean Water Coordinators (External Full Time position)**

**Phase 2 (Tier 3 & 4 counties):**
- **Provide 13 – Community Clean Water Coordinators (External Full Time position)**

<table>
<thead>
<tr>
<th>Phase</th>
<th>Community Clean Water Coordinators</th>
<th>Full Time Position</th>
<th>State staffing support</th>
<th>Total:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1: Begins in July 2019</td>
<td>8 – Community Clean Water Coordinator(s) (External Full Time)</td>
<td>DEP External Contractor</td>
<td>Internal and External Coordination</td>
<td>21 – Community Clean Water Coordinators $2,100,000 ($100,000 per coordinator)</td>
</tr>
<tr>
<td>Phase 2: Begins in February 2020</td>
<td>13 – Community Clean Water Coordinator(s) (External Full Time)</td>
<td>DEP County Planning Offices, County Conservation Districts, Other County Partners</td>
<td></td>
<td>21 – Community Clean Water Coordinators $1,300,000</td>
</tr>
</tbody>
</table>

**Total:** 21 Community Clean Water Coordinators

#### 3.2.2 Phase 1:
- **Provide 3 – Community Clean Water Coordinator (Full Time Internal Coordinator Position)**

**Phase 2:**
- **Provide 7 – Community Clean Water Coordinator (Full Time Internal Coordinator Position)**

<table>
<thead>
<tr>
<th>Phase</th>
<th>Community Clean Water Coordinators</th>
<th>Full Time Position</th>
<th>State staffing support</th>
<th>Total:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1: Begins in July 2019</td>
<td>3 – Community Clean Water Coordinator (Full Time Internal Coordinator)</td>
<td>DEP</td>
<td>Internal and External Coordination</td>
<td>10 – Community Clean Water Coordinator $1,000,000 ($100,000 per coordinator)</td>
</tr>
<tr>
<td>Phase 2: Begins in February 2020</td>
<td>7 – Community Clean Water Coordinator (Full Time Internal Coordinator)</td>
<td></td>
<td></td>
<td>10 – Community Clean Water Coordinator $700,000</td>
</tr>
</tbody>
</table>

**Total:** 10 Community Clean Water Coordinators

External coordinating staff would be assigned to individual Tier 1 & 2 counties in phase 1, and to regionalized Tier 3 & 4 counties in phase 2. External Coordinators would be DEP contractors reporting to the DEP Internal Coordinators. Serve as the point of contact to their assigned county(ies). They would support county efforts to develop and implement countywide action plans.

Internal Coordinators: Would be DEP employees. Internal Coordinators would serve as the point of contact and provide WIP coordination for DEP and all other state agencies for external coordinator and technical coordinators.
### 3.2.3 Phase 1: Provide 2 – Clean Water Technical Assistance Coordinators (Full Time Technical Coordinator)

**Technical Coordinator:** A DEP contractor reporting to the DEP Internal Coordinator. The Technical Coordinator would be responsible for: for providing information and facilitation of planning tools through the planning and implementation process, assist with reporting and tracking of milestones annual progress, assist in model runs for plan development and during annual milestone updates.

**Technical Coordinator**

**Phase 1:** Begins in July 2019

**Phase 2:** Begins in February 2020

**State staffing support**

**Internal and External Coordination**

Technical coordinators will have varied workloads.

**Total:** 10 – Clean Water Technical Assistance Coordinators (Full Time Technical Coordinator)

**Total:** $900,000 ($90,000 per coordinator)

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### 3.2.4 Phase 1: Provide 1 – Clean Water Facilitation Coordinator (Full Time Facilitation Coordinator Position)

**Facilitation Coordinator:** A DEP contractor reporting to the DEP Internal Coordinator. Facilitation Coordinator DEP

**April 2019.**

**State staffing support**

**Internal and External Coordination**

1 – Clean Water Facilitation Coordinator (Full Time Facilitation Coordinator)

**1 – Clean Water Facilitation Coordinator $100,000**

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### 3.2.5 Phase 1: Provide 1 – Clean Water Outreach Coordinator (Full Time Outreach Contractor)

**Outreach Coordinator:** A DEP contractor reporting to the DEP Chesapeake Bay Office, in coordination with WIP Communication and Engagement Workgroup and DEP Communication Office. Outreach Coordinator DEP

**April 2019.**

**State staffing support**

**Internal and External Coordination**

1 – Clean Water Outreach Coordinator (Full Time Outreach Contractor)

**1 – Clean Water Outreach Coordinator $100,000**
**Priority Initiative 3: Expanding Capacity for Technical Assistance**

**Section 2, State Actions, Programmatic and Narrative Commitments**

<table>
<thead>
<tr>
<th>2.3.1</th>
<th>Implement a pilot of the Center for Water Quality Excellence concept in the four pilot counties of Lancaster, York, Adams and Franklin Counties.</th>
<th>DEP, Pennwest</th>
<th>Lancaster and York</th>
<th>RFP done Summer 2019 Pilot done Summer 2021</th>
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<tbody>
<tr>
<td></td>
<td>A Request for Proposals will be released and awardee put in place. Assistance will be provided to landowners and municipalities to complete projects.</td>
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</table>

**Section 9, Climate Change**

<table>
<thead>
<tr>
<th>9.3.1</th>
<th>Complete the Penn State Study, Climate Change Impacts on Pennsylvania’s Watershed Management Strategies and Water Quality Goals</th>
<th>DEP, Penn State</th>
<th>Statewide</th>
<th>December 2019</th>
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<tbody>
<tr>
<td></td>
<td>Study will answer some key questions that will be used to more effectively select and target practices that will address climate resiliency goals.</td>
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</table>

**Section 2, State Actions, Numeric Commitments**

<table>
<thead>
<tr>
<th>2.3.1A</th>
<th>Initiate Implementation of Pennsylvania’s Agriculture Conservation Stewardship Program</th>
<th>Certified Third Parties, CDs, DEP, SCC, PDA</th>
<th>Chesapeake Bay</th>
<th>January 2020</th>
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<tbody>
<tr>
<td></td>
<td>Finalize draft program guidance, application, and on-farm assessment tools; 3rd party verification tools, pilot program; and release program for initial implementation</td>
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<thead>
<tr>
<th>2.3.2A</th>
<th>Work with third-parties, integrators, and co-ops to identify alternative methods to support and assess compliance with regulations without use of regulatory entities</th>
<th>Certified Third Parties, Integrators and Cooperatives, DEP</th>
<th>Chesapeake Bay – Animal Producers</th>
<th>December 2025</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Assess/increase implementation of agricultural plans and BMPs using programs such as those developed by Turkey Hill, Alliance for Chesapeake Bay, and MD/VA Cooperative</td>
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<table>
<thead>
<tr>
<th>2.3.3A</th>
<th>Implementation of Animal Waste Management Systems</th>
<th>NRCS, CDs, Private Consultants, Swine and Poultry Integrators</th>
<th>Chesapeake Bay – Animal Producers</th>
<th>December 2025</th>
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<tbody>
<tr>
<td></td>
<td>Adequate manure storage for 90% of swine/poultry operations; 75% of all other animal types</td>
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</tbody>
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<table>
<thead>
<tr>
<th>2.3.4A</th>
<th>Develop web-based and in-person training for Manure Management Planning and Agriculture Erosion and Sediment Control Planning</th>
<th>DEP, Penn State Extension, SCC, NRCS</th>
<th>Statewide</th>
<th>January 2020</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Finalize Soil Erosion and Sedimentation Control Manual for Agricultural Operations technical guidance (383-4200-002) and train conservation districts and consultants.</td>
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<thead>
<tr>
<th>2.3.5A</th>
<th>Develop web-based and in-person training for Manure Management Planning and Agriculture Erosion and Sediment Control Planning</th>
<th>DEP, Penn State Extension, SCC, NRCS</th>
<th>Statewide</th>
<th>January 2020</th>
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<td></td>
<td>Finalize Soil Erosion and Sedimentation Control Manual for Agricultural Operations technical guidance (383-4200-002) and train conservation districts and consultants.</td>
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<tr>
<th>2.3.5B</th>
<th>Develop web-based and in-person training for Manure Management Planning and Agriculture Erosion and Sediment Control Planning</th>
<th>DEP, Penn State Extension, SCC, NRCS</th>
<th>Statewide</th>
<th>January 2020</th>
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<td></td>
<td>Finalize Soil Erosion and Sedimentation Control Manual for Agricultural Operations technical guidance (383-4200-002) and train conservation districts and consultants.</td>
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<tr>
<th>2.3.5C</th>
<th>Develop web-based and in-person training for Manure Management Planning and Agriculture Erosion and Sediment Control Planning</th>
<th>DEP, Penn State Extension, SCC, NRCS</th>
<th>Statewide</th>
<th>January 2020</th>
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<td>Finalize Soil Erosion and Sedimentation Control Manual for Agricultural Operations technical guidance (383-4200-002) and train conservation districts and consultants.</td>
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<tr>
<th>2.3.5D</th>
<th>Develop web-based and in-person training for Manure Management Planning and Agriculture Erosion and Sediment Control Planning</th>
<th>DEP, Penn State Extension, SCC, NRCS</th>
<th>Statewide</th>
<th>January 2020</th>
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<td></td>
<td>Finalize Soil Erosion and Sedimentation Control Manual for Agricultural Operations technical guidance (383-4200-002) and train conservation districts and consultants.</td>
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<tr>
<td>2.3.1F</td>
<td>Increase technical assistance available to landowners interested in implementing riparian forest buffers.</td>
<td>Create both new Commonwealth staff positions and new positions at partner organizations, and increase entrepreneurial opportunities for forest buffer work.</td>
<td>DCNR, PDA, DEP, SCC, DCED, etc.</td>
<td>PA Bay-wide</td>
</tr>
<tr>
<td>2.3.2F</td>
<td>Increase Urban Forestry Technical Assistance Available to Communities and Citizens.</td>
<td>Fund positions within the Commonwealth system and with partner organizations.</td>
<td>DCNR, TreePennsylvania, Penn State Extension, PHS, etc.</td>
<td>PA Bay-wide</td>
</tr>
<tr>
<td>2.3.3F</td>
<td>Create a turf-conversion technical assistance program.</td>
<td>Identify existing subject matter experts in native grassland and meadow establishment to evaluate and design a new program, technical guidance/specifications, etc. then create new Commonwealth positions to provide technical support to landowners.</td>
<td>DCNR, Alliance for the Chesapeake Bay, Pheasants Forever, PGC, TreePennsylvania, PSU, etc.</td>
<td>PA Bay-wide</td>
</tr>
<tr>
<td>2.3.4F</td>
<td>Provide informed technical assistance for stream and wetland restoration projects to ensure they are completed in an adequate, reportable manner.</td>
<td>Ensure that county and agency field staff are trained to support potential creditable wetland restoration opportunities. Integrate trainings into existing, well-attended courses.</td>
<td>NRCS, CCDs, SCC, PDA, DEP, DCNR, TNC, and other NGOs.</td>
<td>PA Bay-wide</td>
</tr>
<tr>
<td>2.3.5F</td>
<td>Look into feasibility of expanding the PFBC Stream Restoration Initiative, implementing stream restoration projects resulting in load reductions with habitat co-benefits, to counties in the southcentral region of the state, starting with one or more of the four pilot counties to include Adams, Franklin, Lancaster and York.</td>
<td>Expand model in Northcentral Region and work with partners in Franklin County to start a similar initiative in the Southcentral Region. This starts with the creation of new positions within the PFBC.</td>
<td>DEP, PFBC</td>
<td>NC, SC regions</td>
</tr>
</tbody>
</table>
### Priority Initiative 4: Reporting and Tracking

#### Section 2, State Actions, Programmatic and Narrative Commitments

<table>
<thead>
<tr>
<th>Priority Initiative</th>
<th>Description</th>
<th>Responsible Entities</th>
<th>Completion Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.3.15</td>
<td>Complete revisions to the Pennsylvania Stormwater BMP Manual</td>
<td>DEP, Villanova University and subcontractor</td>
<td>Statewide 2021</td>
</tr>
<tr>
<td>2.4.1</td>
<td>Pass legislation to revise Pennsylvania’s Right to Know Law to allow for additional confidentiality of landowner records.</td>
<td>DEP, EPA, Chesapeake Conservancy</td>
<td>2019-2020 Legislative Session</td>
</tr>
<tr>
<td>2.4.2</td>
<td>Develop a planning and prioritization tool for use in the development and refinement of the CAPs.</td>
<td>DEP, EPA, Chesapeake Bay</td>
<td>2020</td>
</tr>
<tr>
<td>2.4.3</td>
<td>Release a request for proposals for a contractor to begin the pilot project for the use of Lidar and remote sensing technology to identify BMPs installed for the control of stormwater as part of development activities.</td>
<td>DEP, DCNR, Chesapeake Bay</td>
<td>January 2020</td>
</tr>
<tr>
<td>2.4.4</td>
<td>Continue enhancements to PracticeKeeper.</td>
<td>DEP</td>
<td>Statewide</td>
</tr>
<tr>
<td>2.4.5</td>
<td>Finalize the revised draft Pennsylvania BMP Verification Plan and receive EPA’s approval of the plan.</td>
<td>DEP and approved verifiers</td>
<td>Chesapeake Bay Begin Summer 2019</td>
</tr>
<tr>
<td>2.4.6</td>
<td>Work with the EPA Bay Program Partnership to enhance the existing crediting protocols for programs and practices that improve water quality in Pennsylvania not currently getting full credit in the Chesapeake Bay Watershed Model.</td>
<td>DEP, Bay Program Partnership</td>
<td>January 2022</td>
</tr>
<tr>
<td>2.4.7</td>
<td>Install additional monitoring station(s) and begin to collect &quot;real-time water quality data on the Susquehanna River to further document the story of progress made by Pennsylvania’s efforts to.</td>
<td>Monitoring station(s) and water quality results</td>
<td>DEP Bureau of Clean Water, Susquehanna River January 2021</td>
</tr>
</tbody>
</table>
### Section 2, State Actions, Numeric Commitments

<table>
<thead>
<tr>
<th>2.4.1A</th>
<th>Work with the Chesapeake Bay Program Partnership to establish a creditable practice or combination of practices for implementation of advanced soil health strategies or plans on farms in the Chesapeake Bay Watershed Model for future crediting of these initiatives. Once established as a practice or set of practices that can be credited for progress in the model, commit additional funding or the technical and financial assistance necessary to implement these practices.</th>
<th>DEP, PDA, SCC</th>
<th>January 2021</th>
<th>Buy in from the Chesapeake Bay Program Partnership</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.4.2A</td>
<td>Expand reporting of dairy precision feeding</td>
<td>PDA, Dairy Co-ops, PACS Program, Dairy Nutritionists, PA Dairyman’s Assoc., CDs, NRCS</td>
<td>December 2025</td>
<td>Voluntary program. Need to have the ability to track and report what dairy farmers are already doing.</td>
</tr>
<tr>
<td>2.4.3A</td>
<td>Expand reporting of Enhanced Nutrient Management</td>
<td>4R Nutrient Stewardship Alliance, PACS, CCAs, CDs, SCC, DEP</td>
<td>December 2025</td>
<td>Voluntary program. Need to have the ability to track and report what farmers are already doing.</td>
</tr>
<tr>
<td>Requirement</td>
<td>Description</td>
<td>Responsible Parties</td>
<td>Timeline</td>
<td>Associated Costs</td>
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<tr>
<td>2.4.1W</td>
<td>Explore the feasibility of developing a GIS based online monitoring and</td>
<td>DEP</td>
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<tr>
<td>2.4.2S</td>
<td>Collect Municipal Separate Storm Sewer System (MS4) BMP data using the new reporting system for electronic submission for annual reports</td>
<td>Penn State, DEP, MS4s</td>
<td>Complete reporting system by July 2019, Enhancements to the system through 2020</td>
<td>Penn State EPA grant funding</td>
</tr>
<tr>
<td>2.4.2S</td>
<td>Initiate and collect stormwater BMP data from other DEP programs implementing provisions of the Chapter 102 regulations.</td>
<td>Penn State, DEP</td>
<td>Statewide</td>
<td>2020 Penn State EPA grant funding</td>
</tr>
<tr>
<td>2.4.1F</td>
<td>Ensure adequate tracking of partner-implemented forestry BMPs including forest buffers, tree canopy, conservation landscaping, urban forest expansion, stream wetland restoration.</td>
<td>DEP, DCNR, PDA, SCC, EPA, PACD, NGOs, Farm Organizations, NRCS, PSU</td>
<td>PA Bay-wide</td>
<td>Ongoing QA/QC of partner data, system access, etc.</td>
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<tr>
<td></td>
<td>Generate broad understanding and acceptance of watershed restoration efforts and how they improve quality of life in PA communities through reporting successful efforts, resulting in a greater appetite for forestry and all BMPs. Broader acceptance and appetite for these BMPs will make outreach and implementation less time-intensive, less expensive processes.</td>
<td>All agencies and partners</td>
<td>PA Bay-wide</td>
<td>Ongoing Report generation, digestible messaging, continual messaging, etc.</td>
</tr>
<tr>
<td>2.4.1S</td>
<td>Collect Municipal Separate Storm Sewer System (MS4) BMP data using the new reporting system for electronic submission for annual reports</td>
<td>Penn State, DEP, MS4s</td>
<td>Complete reporting system by July 2019, Enhancements to the system through 2020</td>
<td>Penn State EPA grant funding</td>
</tr>
<tr>
<td>2.4.4A</td>
<td>Expand reporting of grass buffers</td>
<td>NRCS, DEP, CDs</td>
<td>December 2025</td>
<td>Costs associated with on-site inspection to determine grass buffers; use of aerial imagery a potential</td>
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<td>50,000 acres of land adjacent to streams for establishment of grass buffers at least 35 feet in width</td>
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<tr>
<td>Section 3: Countywide Actions</td>
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<tr>
<td>3.4.1 Track and report progress in Phase 3 WIP planning and implementation in all counties.</td>
<td>Development of Countywide Action Plans (CAPs) in all counties in Pennsylvania’s Chesapeake Bay Watershed.</td>
<td>DEP, Local planning leaders, External Coordinators</td>
<td>All Counties in CBWS</td>
<td>Phase 1 Begins July 2019 Phase 2 Begins Feb 2020</td>
</tr>
</tbody>
</table>

| 3.4.2 Update reductions in the County Planning Progress template upon completion of each county plan. | Completion of Countywide Action Plans (CAPs) in all counties in Pennsylvania’s Chesapeake Bay Watershed. | DEP, Local planning leaders, External Coordinators | All Counties in CBWS | Phase 1 Begins July 2019 | State staffing support Internal and External Coordination |

| 3.4.3 Track and report progress to continue implementation of the Phase 3 WIP State Numeric Commitments described in Section 4, State Actions in the counties with minimal reductions. | Completion of Countywide Action Plans (CAPs) in all counties in Pennsylvania’s Chesapeake Bay Watershed. | DEP, Local planning leaders, External Coordinators | All Counties in CBWS | Phase 2 Begins Feb 2020 | State staffing support Internal and External Coordination |

**Priority Initiative 5: Compliance**

<table>
<thead>
<tr>
<th>Section 2, State Actions, Programmatic and Narrative Commitments</th>
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<tr>
<td>2.5.1 Pass the Fertilizer Bill to achieve the identified nutrient reductions on urban and agriculture lands.</td>
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</table>

| 2.5.2 Review, consider and potentially incorporate a revised Phosphorus Index into the planning requirements for land application of biosolids. | Incorporate revised P index tool into future nutrient management planning efforts where approved for use | SCC, Penn State, DEP, NRCS | | Statewide | July 2020 |

| 2.5.3 Develop State Agency nutrient reduction planning goals and the associated Action Plans for meeting those planning goals for the installation of practices on lands owned and maintained by state agencies. | Completed State Agency Action Plans for the reduction of nutrients on lands owned and operated by state agencies. | DEP, DCNR, Other Agencies responsible for the management of state lands, Governor’s Office | | Watershed-wide | January 2021 |
| 2.5.1A | Implement NPDES Concentrated Animal Feeding Operation (CAFO) Program Delegation | Permit 100% of all CAFOs (350+ operations in Chesapeake Bay Watershed); Inspect 20% of all permitted CAFO operations annually, per CMS | DEP |
| 2.5.2A | Complete complaint follow-up for CAFO and non-CAFO facilities | DEP, SCC, CDs |
| 2.5.3A | Implement Chesapeake Bay Agriculture Inspection Program, Phase 1, with an emphasis on meeting state planning requirement on non-CAFO operations. | Inspect 10% of the agricultural acreage annually. 50 inspections will be performed per CD Bay Technician; 100 inspections will be performed per DEP Regional Office Water Quality Specialist per year. | DEP, CDs Chesapeake Bay Ongoing |
| 2.5.4A | Implement Chesapeake Bay Agriculture Inspection Program, Phase 2, with an emphasis on meeting both state planning and implementation requirements on non-CAFO operations. | DEP, SCC, CDs, NRCS, Private Consultants Chesapeake Bay Ongoing Available funding for Technical Assistance and construction of BMPs remains a concern. |
| 2.5.1S | Complete the Pollutant Reduction or Total Maximum Daily Load Plan Reviews for the 2018 Municipal Separate Storm Sewer System (MS4) permits | Complete technical review and issue permits | DEP, MS4 permittees Statewide 2019 MS4s not addressing DEP review comments, staff shortages Existing DEP regional office staff - Additional DEP regional office staff - |
| 2.5.2S | Develop the 2023-2028 MS4 Permit | In the development of this permit, provide opportunities for input from stakeholders, including but not limited to the Phase 3 WIP Stormwater Workgroup, as part of the normal public participation process. | DEP Statewide 2019 through 2022 |
| 2.5.3S | Develop the Industrial Stormwater Permit | DEP Statewide 2019 through 2021 |
| 2.5.4S | Develop of 2019-2024 Construction Stormwater Permit | DEP Statewide 2019 |
Phase 3 Watershed Implementation Plan (WIP) Planning and Progress Reporting 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).