*Completion of the projects and programs listed herein will be predicated upon receiving the resources requested in this plan

## Phase 3 Watershed Implementation Plan (WIP) Programmatic Recommendations Template: Lycoming County

| Action # | Description | Performance Target(s) | Expected Timeline | Potential Implementation Challenges | Potential Recommendations on Improvement | Resources Needed | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Technical | Suggested Source | Financial | Suggested Source |
| | | | | | | | | | |

### Programmatic Recommendations

#### 1. Data and Tracking

| Action # | Description | Performance Target(s) | Expected Timeline | Potential Implementation Challenges | Potential Recommendations on Improvement | Technical | Suggested Source | Financial | Suggested Source |
|---|---|---|---|---|---|---|---|---|---|
| 1.1 | Improve Transect Survey | -Allow for more nuanced information to be included in Transect Survey. | -2025 and beyond | -Not getting expected ROI or outcome<br><br>-Would like to have location data – X% of cover cropping is coming from X location, but not a lot from X location. We currently have no other place that there's a number for cover crop recording because every cover crop reported is in the lowest category as wheat in transect survey | -Transect survey should have additional species, and should also consider existing cover crops that are located further from the road (current reporting only identifies cover crops that are a short distance from the road, and in many instances cover crops are one or two crop rows back from the road that is on the survey route) | -Acquire baseline cover crop numbers to supplement transect survey<br><br>- **1 clerical staff** position for collecting cover crop data - **$80,000/year**<br><br>-**1 technical staff - $80,000/year** | -NRCS<br><br>-FSA<br><br>-DEP<br><br>-Funding for staffing - DEP | -More **incentives** to participate in cover cropping **($40/acre) $320,000**<br><br>-**2 additional vehicles - $100,000** | -DEP<br><br>-Growing Greener<br><br>-Funding for vehicles - DEP |
| 1.2 | Stream/streambank restoration BMP improvements | -Improve CAST model to account for depth for streambank stabilization/restoration projects<br><br>-Increase funding, and allow for more flexibility in projects | -2025 and beyond | -Depth of streambank stabilization/restoration projects does not get counted in CAST Model | -Establish a regional work crew to help maintain projects/limit invasives<br><br>-Loosen restrictions on buffer and fencing money (fencing 15 feet from the top of a streambank is not ideal)<br><br>-Allow for depth to be counted in CAST model for streambank stabilization/restoration projects<br><br>-Allow GP6 ag crossing in special protection watersheds | -Technical assistance, equipment, and education to landowners for project maintenance (Penn State Extension has some resources)<br><br>-Incentive program | -DEP<br><br>-Penn State Extension | -Outreach and edu money<br><br>-Funding for maintenance (for contractors or create a regional work crew) | -DEP<br><br>-PA Fish and Boat Commission |

## Phase 3 Watershed Implementation Plan (WIP) Programmatic Recommendations Template: Lycoming County

| Action # | Description | Performance Target(s) | Expected Timeline | Potential Implementation Challenges | Potential Recommendations on Improvement | Resources Needed | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Technical | Suggested Source | Financial | Suggested Source |
| | | | | | | -Comprehensive Stream Assessment, temp monitoring | | | |
| 1.3 | Improve data management and project tracking | - Begin/continue to track environmental assets and "disassets" to ensure projects are equitably distributed<br><br>-Support and integrate projects that address environmental justice issues<br><br>-ID shovel-ready projects<br><br>-Collect projects and data from multiple entities<br><br>-Ensure partner data is updated at least every 6 months and uploaded onto GIS after updated<br><br>-Ensure partners and data contributors agree on a database structure format and attribute data classification in order to better standardize the existing/future data<br><br>-Examine existing inventory and database systems in municipalities operating under MS4<br><br>-Capture unreported BMPs on the ground for import into data system | -2021<br><br>-Update continuously | -Privacy concerns<br><br>-Incomplete or unavailable data<br><br>-Collaboration takes a lot of time<br><br>-Limited administrative capacity<br><br>-Communication and coordination among various entities can be challenging<br><br>-Many BMPs go unreported – these should be reflected in the data with reporting mechanisms, data management, and ground truthing | -Continually updating the map/data<br><br>-House compiled data in one location<br><br>-Allow for more detailed information to be tracked (e.g. NRCS data does not have locations associated with their projects)<br><br>-Need cross-platform data consistency<br><br>-Need to standardize the data and deliver it to the public and others in an innovative, captivating, and user-friendly fashion (can use interns for this)<br><br>-Have better tracking/ID of where the wetlands are located | -May need data organization/ GIS training | -DEP | | |

## Phase 3 Watershed Implementation Plan (WIP) Programmatic Recommendations Template: Lycoming County

| Action # | Description | Performance Target(s) | Expected Timeline | Potential Implementation Challenges | Potential Recommendations on Improvement | Resources Needed | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Technical | Suggested Source | Financial | Suggested Source |

| Action # | Description | Performance Target(s) | Expected Timeline | Potential Implementation Challenges | Potential Recommendations on Improvement | Technical | Suggested Source | Financial | Suggested Source |
|---|---|---|---|---|---|---|---|---|---|
| 1.4 | Streamline and consolidate naming conventions of BMPs across multiple agencies/platforms | -Establish a more-simplified and consolidated list of BMPs<br><br>-Ensure the streamlining approach is done collaboratively, and that all reporting mechanisms accurately reflect these changes | -2023 and beyond | -The variety of different names for BMPs creates confusion and inefficiency | -Simplify and streamline the variety of BMP names across different agencies that all mean the same thing but are slightly different<br><br>-Ensure reporting mechanisms also reflect these changes | | | | |
| 1.5 | Stormwater Ordinance update (Act 167) | -Simplification of major/minor stormwater plan process<br><br>-Get waiver/special exception/modification process built into the ordinance (e.g. If there are new and innovative ways to address stormwater that the ordinance didn't address; DEP form that says, "is there consistency without waiver")<br><br>-Review process for possible streamlining<br><br>-Enforce Act 167 | -Continuous | -Administrative challenges<br><br>-Muni coordination<br><br>-Can quickly become costly to landowners for small projects and single family homes to comply with stormwater requirements<br><br>-Educate landowners on process | -Get waiver/special exception/modification process built into the ordinance (e.g. If there are new and innovative ways to address stormwater that the ordinance didn't address; DEP form that says, "is there consistency without waiver") | -Stormwater review training<br><br>-Pre-designed stormwater controls for landowners<br><br>-Education to landowners (implementing building permits example) as integral to stormwater planning – check with municipalities especially during subdivision process | | | |
| 1.6 | Enhance local water quality monitoring | -Install more water quality monitors as Lycoming County only has 2<br><br>-Allow counties to use water quality data that comes from sources other | -2021 and beyond | -These additional monitors could reflect inconsistent data | | | | | |

## Phase 3 Watershed Implementation Plan (WIP) Programmatic Recommendations Template: Lycoming County

| Action # | Description | Performance Target(s) | Expected Timeline | Potential Implementation Challenges | Potential Recommendations on Improvement | Resources Needed | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Technical | Suggested Source | Financial | Suggested Source |

| Action # | Description | Performance Target(s) | Expected Timeline | Potential Implementation Challenges | Potential Recommendations on Improvement | Technical | Suggested Source | Financial | Suggested Source |
|---|---|---|---|---|---|---|---|---|---|
| | | than "Tier 1" data (USGS monitors that have been tracking for at least 10 years) | | | | | | | |
| 1.7 | Complete a CAST/Model My Watershed/FieldDoc water quality credit prediction analysis | -Develop BMP reduction values that can be reported by MMW so that local WQ improvements can be calculated, and municipalities have a better understanding of the value of ag BMP WQ improvements in their landscape<br><br>-Integrate MMW spreadsheet watershed model with mapping module so that site specific reductions can be calculated on the fly, or work with FieldDoc Planning Module<br><br>-User confidence that no matter the tool, BMP credits are consistently applied across programs | -2022 and beyond | - MMW/FieldDoc coding capacity and funding, municipality education on benefits, ag land management information, CAST compatibility with data sets | - Act 167 plan development cost could be greatly reduced if existing Act 167 Plans & Flow Chart Tool were used as a model. Savings of plan preparation could then be directed to municipal staff to implement the plan, including tracking and reporting of BMPs.<br><br>-Include a section related to "burst storms" or updated storm intensity curves (climate change) | -Scenario development and MMW improvement recommendations | -DEP | - $10,000/year | -DEP |
| **2. Permitting and Funding** | | | | | | | | | |
| 2.1 | Streamline permitting process for installation of BMPs | -ID ways to streamline permit processes to decrease potential inefficiencies<br><br>-Expand inter-agency collaboration<br><br>-Reduce duplicative work and leverage existing work to decrease wait time for permit approvals<br><br>-Have regularly-scheduled meetings with DEP and others about project permits –**one meeting per year** | -2025 and beyond | -Some projects do not get funding, and projects can "fall through the cracks"<br><br>-Collaboration takes time and person power<br><br>-Staff turnover can impact continuity and momentum<br><br>-Keeping contact lists accurate<br><br>-Keeping project lists up-to-date | -Expand inter-agency collaboration | -Need a way to make long-term collaboration easier without needing more meetings<br><br>-Staff time specifically allocated to collaboration<br><br>-**Edu/outreach and** | | | |

## Phase 3 Watershed Implementation Plan (WIP) Programmatic Recommendations Template: Lycoming County

| Action # | Description | Performance Target(s) | Expected Timeline | Potential Implementation Challenges | Potential Recommendations on Improvement | Resources Needed | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Technical | Suggested Source | Financial | Suggested Source |

| Action # | Description | Performance Target(s) | Expected Timeline | Potential Implementation Challenges | Potential Recommendations on Improvement | Technical | Suggested Source | Financial | Suggested Source |
|---|---|---|---|---|---|---|---|---|---|
| | | | | -Collaboration will be easier with organizations with staff rather than those that are all volunteer<br><br>-Allow GP6 ag crossing in special protection watersheds | | collaboration staff - $80,000/year | | | |
| 2.2 | Simplify funding and grants administration for implementation of BMPs | - Grants program changed to more of a targeted regional approach with an allotment of funding for each county in the Chesapeake Bay region rather than a competitive grants process between counties. | -2022 and beyond | -Additional technical and fiscal support needed for funding applicants. | -Evaluate Growing Greener and other grant programs for agricultural and other BMPs related to nutrient load reductions, and improve the process. The administration of funding should be addressed as a centralized state agency process to reduce paperwork burdens on county level staff responsible for BMP installation and program management. Counties would be responsible for project prioritization and implementation rather than grant management and preparation of applications. | - Administrative and regulatory changes | -State | | |
| 2.3 | Increase funding for green infrastructure | -Ensure funding/projects are equitably distributed and address environmental justice<br><br>-Expand Funding to DCNR's Riparian Forest Grant Program<br><br>-Continue and Expand Pennsylvania Infrastructure Investment Authority (PENNVEST) Multifunctional Buffer Grant Program<br><br>-Fund TreeVitalize to meet Tree Canopy Goals<br><br>-Provide Dedicated Funding for Clean Water Projects | | | -Collaborate with PennDOT to restrict mowing during sensitive times of the year when certain insect species (like monarch butterflies) are active.<br><br>-Expand funding for targeted green infrastructure projects that are located in low-income/minority neighborhoods (e.g. Targeted Outreach for Green Infrastructure (TOGI)). | | | | |

## Phase 3 Watershed Implementation Plan (WIP) Programmatic Recommendations Template: Lycoming County

| Action # | Description | Performance Target(s) | Expected Timeline | Potential Implementation Challenges | Potential Recommendations on Improvement | Resources Needed | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Technical | Suggested Source | Financial | Suggested Source |

| Action # | Description | Performance Target(s) | Expected Timeline | Potential Implementation Challenges | Potential Recommendations on Improvement | Technical | Suggested Source | Financial | Suggested Source |
|---|---|---|---|---|---|---|---|---|---|
| 2.4 | Support CAP Implementation | -Establish a County Action Plan Implementation Fund<br><br>-Include funding in DEP's budget to complete online reporting system<br><br>- Continued operation of Chesapeake Bay Office and DEP Regional Support Teams through Phase 3 WIP Implementation<br><br>-Establish a workforce program to train specialized staff and ensure a pipeline of necessary positions is secured | -2025 and beyond | -Costs associated with staffing, meeting, planning, and supporting implementation efforts.<br><br>-Convincing regulatory/political agencies of the need/benefit for sound integrated planning/implementation so that an appropriate budget is allocated.<br><br>-Having consistent attendance by the same State/County staff due to complexity/specialized needs of integrating water issues/programs. | -Continuous funding and technical assistance provided by the CB Office and DEP regional support through CAP implementation<br><br>-Ensure projects are equitably distributed<br><br>-Expand the CBO team to be more interdisciplinary, direct involvement by Department of Agriculture (co-lead with Chesapeake Bay Office) so that messaging is more effective with the agricultural community and to foster enhanced collaboration<br><br>-Private sector experience, plan implementation project management experience<br><br>-Support for non-governmental organizations who are already at capacity and need support on expansion.<br><br>-With the WIP 3 philosophy of local plans/effort to meet State requirements, this action is necessary to integrate programs at the State level and make local efforts possible. | -More dedicated staff to assist coordination and implementation of projects and funding opportunities<br><br>-Edu/outreach and collaboration staff - $80,000/year<br><br>-Technical staff - $80,000/year | -Dedicated DEP WIP Implementation staff to lead integrated efforts. Staff from State Departments to participate in logistics meetings. County staff dedicated for participation. | -At least 6 dedicated staff at DEP and 1 at each county. Participation by other State departments - $20 million/year<br><br>-Additional office space - $40,000/year for 2,000 sq ft office space ($20/sq ft) | -DEP<br><br>-Dept of Ag<br><br>-DCNR |
| 2.5 | Increase support for municipalities | -Develop a Municipal Stormwater Assistance Program<br><br>-Develop a Green Stormwater Infrastructure Grant Program | | | - Develop a Municipal Stormwater Assistance Program:<br>   -Match municipal costs of BMP planning, design, and implementation, at minimum, 50 percent | | | | |

| Phase 3 Watershed Implementation Plan (WIP) Programmatic Recommendations Template: Lycoming County | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Action # | Description | Performance Target(s) | Expected Timeline | Potential Implementation Challenges | Potential Recommendations on Improvement | Resources Needed | | | |
| | | | | | | Technical | Suggested Source | Financial | Suggested Source |
| | | | | | **7** | | | | |
| | | -Restore Funding for Act 167 Stormwater Management Planning | | | -Be funded annually at no less than $16 million<br><br>-Be awarded based on financial need of municipality<br><br>-Provide preference to project locations in watersheds deemed impaired by DEP and EPA<br><br>-Prioritize projects in environmental justice communities, as defined by DEP | | | | |
| 2.6 | Increase support for the agriculture community | -Establish a Pennsylvania Agricultural Cost-Share Program<br><br>-Expand Pennsylvania's Reserve Enhancement and Protection (REAP) Tax Credit Program<br><br>-Update Pennsylvania's "Clean & Green" Program<br><br>-Provide Municipalities the Authority to Enact Streambank Fencing Requirements<br><br>-Establish an Ag Reimbursement Program<br><br>-Establish an Ag Circuit Rider Program<br><br>-Allow reporting of BMPs that aren't in an Ag E&S Plan | | | -Match contribution from farmers up to a 100 percent rate<br><br>-Be need-based per counties and projects<br><br>-Have dedicated and reliable funding, at minimum, $100 million annually<br><br>-Leverage federal dollars, such as those coming from NRCS<br><br>-Be administered at the local level through the County Conservation Districts<br><br>-Be overseen by the State Conservation Commission<br><br>-Include annual reporting requirements to the public on how funds are spent and project outcomes | **-2 technical staff - $80,000/year** | -Funding for staff - DEP | **-3 additional vehicles - $150,000**<br><br>**-Survey equipment - $30,000**<br><br>-Additional office space - **$40,000/year for 2,000 sq ft office space ($20/sq ft)** | -Funding for equipment/office space - DEP |

*Completion of the projects and programs listed herein will be predicated upon receiving the resources requested in this plan

## Phase 3 Watershed Implementation Plan (WIP) Programmatic Recommendations Template: Lycoming County

| Action # | Description | Performance Target(s) | Expected Timeline | Potential Implementation Challenges | Potential Recommendations on Improvement | Resources Needed | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Technical | Suggested Source | Financial | Suggested Source |

**8**

| 2.7 | Improve Dirt and Gravel Road program | -Increase funding for D&GR and expand the program<br><br>-Educate municipalities and counties that D&GR can be used for gravel alleys<br><br>-Streamline permit process and reduce the amount of duplicative permit requirements | -2025 and beyond | - Possible lack of landowner buy in for right of way to allow BMP's to work properly.<br><br>- Lack of qualified workers<br><br>-No way to increase funding from LCCD unless looking for other sources of funding (based on a specific formula) -<br><br>-Need availability to shale and cost of driving surface aggregate can affect number of projects<br><br>- Ability to obtain shale at a reasonable price for the quantities that would be needed, also obtain Driving Surface Aggregate (DSA) that meets D&G specs at the quantities needed at a reasonable price. | -Allow GP6 ag crossing in special protection watersheds<br><br>-Amend Act 89 to allow for additional funding (D&G funding for each county comes from Legislation of Act 89. In that Act, there is a formula as to how much money goes to each district out of a $28 million allotment for the program state-wide. So PA legislators would need to adjust that act to put more money into the program)<br><br>- To improve existing practices allow Tar and Chip for current D&G roads to remove dust as a source of pollution.<br><br>- Update prevailing wage requirements for D&G to the same as other municipal monies.<br><br>- Have D&G and DEP compromise on matching stream crossing requirements for expedited reviews<br><br>- D&G stream crossing requirements too extorted compared to DEP's requirements.<br><br>- Amend Liquid Fuels funding (Townships keep roads on the books to keep liquid fuels payments up but no one uses them and they are in rough condition and probably big polluters.) | -2 technical staff - $80,000/year | -Funding for staff - DEP | -3 additional vehicles - $150,000<br><br>-Survey equipment - $30,000<br><br>-Additional office space - $40,000/year for 2,000 sq ft office space ($20/sq ft) | -Funding for equipment/office space - DEP |
| **3. Marketing and Outreach** | | | | | | | | | |
| 3.1 | Marketing and outreach materials | -Develop BMP showcase documents for marketing (demonstrating before and after at project sites) | -2025 and beyond | | -Ensure materials are available in multiple languages and address potential culturally-specific priorities | -Data sharing platform with admin/tech support | -DEP<br><br>-DCED | | |

## Phase 3 Watershed Implementation Plan (WIP) Programmatic Recommendations Template: Lycoming County

| Action # | Description | Performance Target(s) | Expected Timeline | Potential Implementation Challenges | Potential Recommendations on Improvement | Resources Needed | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Technical | Suggested Source | Financial | Suggested Source |

| | | -Develop outreach and education materials that are designed for the general public (quick and easy to read, eye-catching, "infotainment")<br><br>-Develop educational materials to landowners about why stormwater mitigation is necessary and beneficial (using layman's terms) – speak to curb appeal<br><br>-Marketing materials for green infrastructure, native plantings, and not mowing during certain sensitive times of the year for native/migrating insects<br><br>-Photo libraries for CAP counties<br><br>-Outreach materials to municipalities for funding and resources (maybe a newsletter?)<br><br>-Permitting flowchart | | | | -New county website and admin/tech support<br><br>-Social media resources and content suggestions<br><br>-**Education/outreach/collab staff - $80,000/year** | | | |

### 4. Policies and Projects

| 4.1 | Increase CREP buffer re-enrollment | -Provide more assistance to farmers with buffers to help keep them enrolled in CREP | -2025 and beyond | -Buffers are declining (based on FSA data); less re-enrollment because they don't meet the standard after the 10-year re-enrollment period. This could be due to too many invasives.<br><br>-Land use could change to forest land instead of agriculture after a certain period of time due to tree growth | -Could use 10 million tree program to put trees in the buffer if the farmer gets kicked out of the buffer designation – put trees in holes in the buffer to get renewed – do this 2 years ahead of re-enrollment<br><br>-Have seasonal staff come in the first years and spray to ensure new buffers are better maintained | -Need assistance to encourage farmers to keep what they have by obtaining the resources to maintain their buffer | -Funding for staffing – Live Stake Collaborative and DEP | | |

## Phase 3 Watershed Implementation Plan (WIP) Programmatic Recommendations Template: Lycoming County

| Action # | Description | Performance Target(s) | Expected Timeline | Potential Implementation Challenges | Potential Recommendations on Improvement | Resources Needed | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Technical | Suggested Source | Financial | Suggested Source |
| | | | | **10** | | | | | |
| | | | | -Buffers do not get counted for depth in CAST Model | | **-3 seasonal staff** to spray new buffers - **$40,000/yr - $120,000 total**<br><br>**-1 technical staff - $80,000/yr**<br><br>**-1 outreach staff - $80,000/yr** | | | |
| 4.2 | Allow planting on FEMA buyout lots | -Plant native trees and shrubs on all buyout lots<br><br>-Establish program to ensure plantings are maintained (like a workforce development program) | -2025 and beyond | -Would need technical studies to show that plantings can reduce flooding and erosion<br><br>-Chapter 106 studies<br><br>-Lots of permits would be needed to do plantings | -Revise regulation to allow native tree and shrub plantings on flood buyout lots - would allow us to do more nutrient reduction BMPs<br><br>-Ensure that needed permits to plant would not be so cumbersome as to dissuade planting | -Technical assistance<br><br>-Penn State Capstone Project for maintenance (internship)<br><br>- Universities/Colleges for internship for maintenance | -Funding for staff – DEP | - Funding/capacity municipal maintenance **-$5 million per year** | -Funding for maintenance and programs - DEP |
| 4.3 | Reduce fertilizer use | -Reduce fertilizer and lime rate recommendations in Erosion & Sediment (E&S) Control Manual<br><br>-Expand soil testing to establish appropriate fertilizer amounts<br><br>-Expanded soil testing –**Free soil tests to landowners during certain times of the year** | -2025 and beyond | -Efforts may not increase program interest or elicit behavior change | -Target farms/areas close to streams<br><br>-Need regular outreach using multiple and diverse platforms<br><br>-Replace fertilizer and lime rate recommendations in Erosion & Sediment (E&S) Control Manual with a soil test requirement for projects requiring and  National Pollutant | **-Personnel (1-2 people to do sampling) from LCCD - $80,000/year**<br><br>**-Personnel to create/establish soil baseline - $80,000/year** | -Funding for staff - DEP | -Grant funding for soil tests - **5,000 tests at $9/test – $45,000/year**<br><br>-Additional vehicle - **$50,000** | -DEP |

| Action # | Description | Performance Target(s) | Expected Timeline | Potential Implementation Challenges | Potential Recommendations on Improvement | Resources Needed | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Technical | Suggested Source | Financial | Suggested Source |

| Action # | Description | Performance Target(s) | Expected Timeline | Potential Implementation Challenges | Potential Recommendations on Improvement | Technical | Suggested Source | Financial | Suggested Source |
|---|---|---|---|---|---|---|---|---|---|
| | | -Showcase documents for marketing (demonstrating before and after) <br><br> -Support fertilizer legislation at the State level | | | Discharge Elimination System (NPDES), Erosion & Sediment Control General Permit (ESCGP), or E&S permit | | | - **Additional office space - $40,000/year for 2,000 sq ft office space ($20/sq ft)** | |
| 4.4 | Allow MS4s to count projects outside of their jurisdiction | -Many projects exist outside of the MS4 planning area that are helping to reduce nutrients that MS4s cannot get credit for – this restriction should be lifted, and more flexibility should be established to ease the work MS4s must accomplish for their permit | -2022 and beyond | -Regulation changes would be required, which could take time | -Allow MS4s to count BMPs that reduce nutrient pollution outside of their planning area. | | | | |
| 4.5 | Establish an engineering and maintenance bundling program | - Establish a program that bundles engineering and maintenance (like Lycoming County's bridge bundling program) to more-efficiently address infrastructure needs | -2025 and beyond | -Could take time to establish program and to find funding for it <br><br> -Funding mechanisms may require legislative action <br><br> -There may not be enough common projects to make it worthwhile to bundle (economies of scale) | -Incorporate a data management component to the program that would streamline and standardize project data | -One unified database of current and future MS4 projects | -Multiple agencies <br><br> - Municipalities | -State-level funding mechanisms to leverage program money (bridge bundling program is funded in part by Act 89) - **$10 million/year** | -Multiple agencies |
| 4.6 | Establish Requirements for Fertilizer Application | -Establish Requirements for Fertilizer Application: <br> -Set limits on application rates, including: <br> - 0.7 pounds of readily available nitrogen per 1,000 square feet | -2025 and beyond | | -Establish funding mechanism through small tax on fertilizer | | | | |

| Phase 3 Watershed Implementation Plan (WIP) Programmatic Recommendations Template: Lycoming County | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Action # | Description | Performance Target(s) | Expected Timeline | Potential Implementation Challenges | Potential Recommendations on Improvement | Resources Needed | | | |
| | | | | | | Technical | Suggested Source | Financial | Suggested Source |
| | | - 0.9 pounds of total nitrogen per 1,000 square feet<br><br>- No phosphorus, except on new or damaged lawns or special application rates allowed for enhanced-efficiency phosphorus fertilizer, natural organic fertilizer or organic-based fertilizer<br><br>-Set standards for labeling requirements<br><br>-Restrict application during the winter or when the ground is frozen<br><br>-Establish a professional applicator training and certification program<br><br>-Create an agricultural and homeowner education program | | | | | | | |

12

## 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:

*Completion of the projects and programs listed herein will be predicated upon receiving the resources requested in this plan

| Action # | Description | Performance Target(s) | Expected Timeline | Potential Implementation Challenges | Potential Recommendations on Improvement | Resources Needed | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Technical | Suggested Source | Financial | Suggested Source |
| | | | | | | | | | |

<div align="center">13</div>

**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).