

Countywide Action Plan Overview

Susquehanna County

Plan Highlights

The Susquehanna County Countywide Action Plan (CAP) establishes guidance and planning for the county and its local partners to work toward the common goal of clean water. Susquehanna County will be implementing this plan as framework for initiatives and methods to modify existing water quality priorities and goals within the county. The creation of this plan will increase the overall water quality within the county and will drive conservation on a local scale, while contributing to the goals of the Chesapeake Bay Cleanup effort.

The Susquehanna County CAP focuses on five (5) priority initiative groups as well as programmatic recommendations. Each priority initiative group identifies a specific framework which includes realistic and beneficial goals to improve water quality and soil health within each area. The programmatic recommendations highlight necessary changes that would remove or ease existing implementation barriers. These changes would accelerate implementation objectives to achieve nutrient reductions through and beyond 2025.

The Susquehanna County CAP is designed to highlight achievable goals and outline progressions through local priorities and initiatives. This plan also acts as a fluid document that can be altered based on future successes or obstacles to achieve long-term success.

With the Susquehanna County Conservation District operating as an independent agency within the County, their staff strives to develop collaborative energies to allow for ease of project access and execution.

This CAP document will not only outline implementation initiatives but will also strive to implement educational programs and engagement within the local community to increase awareness for the value of local resources. Throughout the plan development process, stakeholder involvement has been an integral part of establishing local perspectives to ensure a well-rounded and effective plan for Susquehanna County.

Key Findings

The Susquehanna County CAP planning process was executed with insight from many stakeholders and community members to achieve a well-rounded plan to benefit the county. A Steering Committee was developed to identify the county's main goals and to outline projected actions throughout the implementation of this plan.

A key finding within Susquehanna County's plan was that a large portion of the county properties were privately owned with the majority being agricultural or forested. This finding would support the items included in the Susquehanna County Toolbox which was developed and provided to the County from the PA Department of Environmental Protection. This Toolbox outlines the identified areas within Susquehanna County with increased nutrient contributions,

and they are as follows: 50% derived from Agriculture, 11% derived from Urban and Developed Stormwater, and 3% derived from Wastewater.

Agriculture is an important component within Susquehanna County as the county holds a steep tradition in farming. The Farm Bureau also plays a vital role within the county, advocating, serving, and helping the community learn about its resources. In addition to the agriculture activity, oil and gas also has ongoing development in Susquehanna County.

Within Susquehanna County, there is a highlighted concern for lake communities due to the potential for increased nutrient loads reaching the water source from the surrounding lake community septic systems, grey water, landscaping applications, and runoff. Priority initiatives were identified to address this concern, such as, source water protection, septic system upgrades, and stormwater management for the Lakefront Properties and Communities.

Opportunities for Success

The Susquehanna County CAP development included the identification of appropriate collaborations, priority areas, and resources needed specific to Susquehanna County that would improve the implementation success of the plan while also working to benefit and engage the residents of Susquehanna County. Opportunities and considerations that will progress the success of the Susquehanna County CAP implementation include:

- Improving source water protection for lakes and streams.
- Completion and maintenance of agriculture BMPs.
- Stormwater management BMP retrofitting and retrofit maintenance for existing infrastructure to slow/lower the amount of runoff entering streams and lakes.
- Forestry management planning on private forest lands.
- Agricultural BMP implementation, maintenance, and planning

Challenges to Implementation

During the development of the Susquehanna County CAP, there was countywide collaboration on identifying previous accomplishments, areas that would benefit from assistance, and how to complete the identified goals in a way to accurately measure success.

One of Susquehanna's major challenges to implementation is increasing collaboration throughout the county to work efficiently and effectively toward the overall county goal of improving local resources.

Susquehanna County is a large county that has limited resources currently available and ample project implementation locations. This creates a challenge to find the necessary resources to complete projects as many of the implementations would be high dollar BMPs. It will be very important throughout this plan for Susquehanna County to establish a collaborative effort and instill trust within the community and county agencies to deliver this plan at its full capacity.

Implementation Update - 2023

Susquehanna County has been effectively implementing projects that align with the outlined priority initiatives and have been securing additional funding to elevate project selection and increase project abundance.

Due to limited funding sources for Wastewater as well as Lake Management projects, the following priority initiatives have been removed from the scope of project completion for 2025, although are still of importance to Susquehanna County. These projects will be pursued as funding becomes available to support these actions.

Wastewater:

- Action 3.1 – Private Septic/Sewer Maintenance
- Action 3.1a – Private Septic Upgrades

Lake Management:

- Action 4.2 – Septic System Upgrades on Lakefront Properties

Implementation Update – 2025

The County has met or exceeded performance targets, resulting in the creation of sustainable programs and resources. As a result, the following Priority Initiatives are now recognized as completed for the progress reporting year 2025.

- Action 1.1a – Develop Agronomic Assistance/Analysis Program
- Action 1.2 – Reporting and Verification of Existing BMPs
- Action 5.1b – Forestry Harvest Ed and Outreach
- Action 5.3 – Establish Master Watershed Steward Coordinator Position

The following Priority initiatives have been removed or merged with other Priority Initiatives during the progress year 2025 to better align with the current goals of the County.

Action 1.4 – Agricultural Stream Protection BMPs, Merged with Action 5.2

Action 1.6 – Operation Transition and Land Retirement Assistance

Action 2.2 – Street Sweeping

Action 2.2a – Street Sweeper Municipality Partnership

Action 2.4 – Nutrient and Fertilizer Planning for Turf Grass

Action 2.6 – Public Green Space for Environmentally Sensitive Areas, Merged with Action 5.1

Action 4.2 – Stormwater Management, Merged with Action 2.3

Plan Summary

The implementation of the Susquehanna County Action Plan (CAP) will center around five (5) initiatives, 1) Agriculture, 2) Urban and Developed Stormwater, 3) Wastewater, 4) Lake Management, and 5) Natural, as well as outlined Programmatic Initiatives. Susquehanna County Stakeholder groups were established with the purpose of organizing teams for oversight and focus point development with each Priority Initiative.

Priority Initiative 1: Agriculture

- Priority Initiative 1.1 Implement Nutrient Management Analysis Program to Agricultural Landowners
 - Create a program for farmers to apply for soil sampling, manure analysis, and agronomics assistance to allow technical assistance and recommendations for nutrient management implementation based on sampling/analysis.

- Priority Initiative 1.1a
 - Develop Soil Sampling Program
 - Develop Manure Testing Program
 - **Develop Agronomic Assistance/Analysis Program**

- **Priority Initiative 1.2 Reporting and Verification of Existing BMPs**
 - Collect data and verify existing BMPs on operations.

- Priority Initiative 1.3 Existing BMP Maintenance Program
 - Assist producers with maintenance of existing BMP to keep them functioning.

- Priority Initiative 1.4 Agricultural Stream Protection BMPs
 - Implement BMPs for operations that are located directly on streams to improve overall stream quality.

- Priority Initiative 1.4a Riparian Buffer Implementation
 - Implement Riparian Buffers on Crop and Pasture Lands.

- Priority Initiative 1.4b Riparian Stream Fencing
 - Implement Riparian Stream Fencing on Pasture Lands.
- Priority Initiative 1.5 Farmer Survey Program
 - Generate a farmer survey to track yearly BMPs and better assist farmers with grant applications and additional hard BMPs.
- Priority Initiative 1.6 Operation Transition Planning Assistance
 - Assist farmers that are transitioning operation types with the necessary BMP and management practices. Number of operations are dependent upon current farming practices.

Priority Initiative 2: Urban and Developed Stormwater

- Priority Initiative 2.1 Update and Amend Local Stormwater Regulations
 - Update the local regulations to include proven BMPs to be utilized in project to prevent increase stormwater and nutrient discharges.
- Priority Initiative 2.1a Finalization of Act 167 Plan
 - Update Finalized Act 167 Plan from previously completed Draft Plan
- Priority Initiative 2.2 Street Sweeping
 - Increase the miles of streets swept per year and increase opportunity for additional municipalities to utilize management practice. Tracking miles of roadway completed for reporting.
- Priority Initiative 2.2a Street Sweeping Labor Partnership
 - Develop township partnership with adjacent township to utilize existing vac-truck and street sweeper and assist with overall maintenance.
- Priority Initiative 2.3 Residential Stormwater Management and Rain Barrel Program
 - Develop educational and material program for residential and small commercial properties.
- Priority Initiative 2.4 Nutrient and Fertilizer Planning for Turf Grass
 - Develop and implement plans and guidance for Turf Grass.
 - Host contractor and landscaper workshops.
- Priority Initiative 2.4a Stormwater and Nutrient Management for Turf Grass
 - Implement BMPs on Non-Ag lands like golf courses, lake properties to reduce nutrient pollution.
- Priority Initiative 2.5 Roadway Stormwater Management

- Implement new BMP's for supervisors and PennDOT to reduce runoff from roadways and minimize nutrient carrying capacity.
- Priority Initiative 2.5a Roadway Management Guide
 - Develop a Roadway Management Guide for new township supervisors.
- Priority Initiative 2.6 Public Green Space for Environmentally Sensitive Areas
 - Protect environmental sensitive areas by encouraging them to become publicly accessible greenspace.

Priority Initiative 3: Wastewater

- Priority Initiative 3.1 Upgrades and Maintenance on Public Sewer
 - Complete necessary upgrades on WTP and implement proper maintenance on remaining.

Priority Initiative 4: Lake Management

- Priority Initiative 4.1 Source Water Protection
 - Implement BMPs that will reduce nutrients in lake source water to reduce algal chemical treatments.
- Priority Initiative 4.2 Stormwater Management
 - Develop educational and material program for residential and small commercial properties and roadways.

Priority Initiative 5: Natural

- Priority Initiative 5.1 Forest Land Conservation and Management
 - Preserve Quality Forest Land Surrounding Quality Resources through land conservation.
- Priority Initiative 5.1a Forest Management Plans
 - Create Forest Management Plans for private landowners.
- **Priority Initiative 5.1b Forestry Harvest Education and Outreach**
 - Educating private forest landowners on the importance of proper harvesting and selecting a qualified timber harvester.
- Priority Initiative 5.2 Stream Restoration and Streambank Stabilization
 - Restoring streambank and stabilizing for overall watershed health.

- **Priority Initiative 5.3 Establish Master Watershed Steward Coordinator Position**
 - Establish a coordinator for Susquehanna County or shared position between multiple counties.

Programmatic Initiatives

- Action 1.1 Revise stormwater regulations to include 30% overdesign culvert replacements to account for increased flooding events.
 - This revision will allow for the replacement of culverts to be 30% overdesigned to account for increased flood events from climate change.
- Action 1.2 Access to DEP, EPA, DCNR, NRCS existing project locations and amounts
 - This update would create a better overview of areas that need work within the county and a better understanding of what is already being recorded.
- Action 1.2a Create a dashboard on Practice Keeper so different entities can see other BMP entries from other agencies.
 - Allow all entities the ability to see existing projects and locations that were previously entered by another agency into the Practice Keeper Dashboard.
- Action 1.3 Change Grant application processes to have a structured schedule of application date, award dates, and access to funding dates.
 - This implementation of grant schedule will assist in planning and implementation of the projects the funding was awarded to and will speed up the timeline.
- Action 1.4 Reinstitute the DEP stream bank fencing program
 - Generate increased interest by reinstituting the DEP stream bank fencing program and funding.
- Action 1.5 Dedicate staff from DEP or Conservation District to Verify and Report BMP's
 - Dedicated staff member at district level or state level to verify and report BMP's implemented within the county into Practice Keeper.



Completed Riparian Buffer plantings within Susquehanna County.