

Countywide Action Plan Overview

Lackawanna County

Plan Highlights

The Lackawanna County Countywide Action Plan (CAP) establishes planning and guidance for the county and its local partners to work toward the common goal of clean water. Lackawanna County has created this CAP to provide a realistic and achievable plan to benefit the county's overall resource quality while contributing to the clean water goals of the Chesapeake Bay Cleanup effort.

This CAP includes four (3) priority initiative groups as well as programmatic recommendations. Each priority initiative group outlines realistic and achievable goals to improve the overall water quality within Lackawanna County. The programmatic recommendations within this plan outline changes in current policies and program structures that will ease the process of plan implementation. The Lackawanna County CAP is designed to act as a fluid plan that can respond and reflect on local priorities, while actively utilizing opportunities and resources that become available throughout the implementation process of this plan.

A Lackawanna County Toolbox was developed and provided to the County by the PA Department of Environmental Protection to identify where the county is seeing increased nutrient loading. This document also provided an established goal to complete overall nutrient reductions within the County through 2027.

Within the Lackawanna County Toolbox, it was outlined that Lackawanna County should reduce their nutrient loading of Nitrogen by 759,000 lbs. and Phosphorous by 30,000 lbs. The Toolbox also stated that 43% of nutrient loadings are derived from Wastewater, 22% are derived from Developed and Urban Stormwater, and 16% are derived from Agriculture.

The Lackawanna County CAP is designed to achieve outlined initiatives through the Best Management Practice (BMP) implementation timeframe of 2027 to reduce the amount of Nitrogen and Phosphorus loading occurring within the County, while also extending beyond this timeframe to act as a long-term planning document for improved resource quality.

Key Findings

Throughout the planning and development process, Lackawanna County has received collaboration and insight from community members and stakeholders to assist in identifying the county's main objectives and goals throughout the deployment of this plan. It will be important to continue citizen involvement and collaboration during implementation for improved county benefit.

Within Lackawanna County, a key finding that was identified during the planning process was the need to increase overall reporting of activities and developments already taking place. Reporting the ongoing actions and projects within Lackawanna County will assist the county in

their overall nutrient reduction goals by quantifying the existing County achievements toward clean water.

Another key finding identified during plan development was the importance of stormwater management projects. This would include projects such as stormwater basin retrofits and stream bank stabilization work throughout the county. These project types were identified as an area of need to improve stormwater BMPs on existing sites, and to implement increased stream protection. The need to properly store and mitigate stormwater within the county, as well as assist stream flood control and erosion is a highlighted development opportunity within the county.

An additional key finding throughout plan development was the importance of agricultural preservation due to the limited amount of agricultural lands within the county. Agricultural lands are a large asset to the county due to the benefit of green space and the agricultural benefits of local food production.

Acid mine drainage (AMD) and abandoned mine lands (AML) are also highlighted as a key finding due to the increased presence within Lackawanna County. Some of these areas contain existing infrastructure for treatment and restoration that would benefit from maintenance to update and continue functionality. However, there are remaining sites that have not been addressed and have the potential to contribute nutrient reductions throughout the County by the addition of mitigation and restoration efforts.

Opportunities for Success

The Lackawanna County CAP development included the identification of appropriate collaborations, resources, and priorities needed to provide implementation success throughout the county.

One opportunity for successful plan implementation includes developing a partnership with county municipalities for stormwater management and stormwater improvements. Currently, twenty-eight (28) municipalities are implementing pollution reduction plans (PRPs) and by capturing the projects outlined in these plans and continuing project development, we will be able to reduce the overall nutrient loads within Lackawanna County. This collaborative effort will work to achieve CAP goals and MS4 requirements.

Another opportunity for success was found within existing AMD and AML sites due to previous implementation and funding limitations for this type of project. As identified throughout this CAP process, AMD and AML impacted areas were not factored into previous modeling but hold great nutrient reduction potential within Lackawanna County.

The Lackawanna CAP will not only outline implementation initiatives but will also strive to establish educational programs and engagement within the local community to increase the awareness of local resource value and promote resource health.

Challenges to Implementation

Throughout the planning and development process, Lackawanna County has identified some challenges that may affect plan execution including the shortage of staffing, financing for added projects, project location availability, and willingness of participation.

One of Lackawanna's major challenges to implementation of this plan is collecting MS4 data from all twenty-eight (28) MS4 communities. This is an important part of the plan to leverage project completion between MS4 projects and CAP projects based on need of requirements and project availability.

Another challenge identified was the small agricultural community within Lackawanna County. This plan aims to preserve the limited agricultural land while implementing BMPs for long term success, although the limited area for projects may slow progressions in this sector.



Family Dairy operation located within Lackawanna County.

Implementation Update - 2023

Lackawanna 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 resources, the following priority initiatives have been removed from the scope of project completion through 2025, although are still of importance to Lackawanna County. These projects will be pursued as resources becomes available to support these actions.

Priority Initiative 3: Wastewater

Priority Initiative 3.1 – Private Septic/Sewer Maintenance

Implementation Update – 2025

Lackawanna County continues to implement projects that align with the outlined Priority Initiatives. As project implementation occurs, Lackawanna County has identified Priority Initiatives that are completed simultaneously, due to the similarities in performance targets. To better track, prioritize, and implement these Priority Initiatives, the following will be combined.

Urban and Developed Stormwater

Previous Priority Initiative 2.2a – Development of Stormwater Design and Retrofit on Municipal Owned Subdivision Basins *will be combined with* Priority Initiative 2.2 - Existing and New Stormwater BMP Retrofit and Maintenance Program *to include performance targets from both priorities*

Previous Priority Initiative 2.6 – Riparian Buffer and Tree Plantings *will be combined with* Priority Initiative 3.2a – Riparian Buffer Development *to include performance targets from both priorities*.

Previous Priority Initiative 2.7 – Mine Land Planting and Protection *will be combined with* Priority Initiative 1.5 – Manure to Mine Lands Program *to include performance targets from both priorities*

Watershed Health

Previous Priority Initiative 3.3 – AML Reclamation Planning and AMD Restoration *will be combined with* Priority Initiative 1.5 – Manure to Mine Lands Program *to include performance targets from both priorities*

The following Priority Initiative description has been changed to better align with the goals of the County.

Agriculture

Previous Priority Initiative 1.5 - Manure to Mine Lands Program *updated to* Priority Initiative AMD and AML Restoration

Due to lack of funding available, Lackawanna County has removed the following Priority Initiative.

Urban and Developed Stormwater

Previous Priority Initiative 2.3a – Street Sweeping

Please view the updated Priority Initiatives under the Plan Summary.

Plan Summary

The implementation of this Plan will center around four (3) priority initiatives, including 1) Agriculture, 2) Urban and Developed Stormwater, and 3) Watershed Health, as well as Programmatic Initiatives.

The Lackawanna County CAP was developed with a focus on establishing framework for a fluid document that can be altered and adapted to respond to and reflect local priorities, while actively utilizing opportunities and resources that become available throughout the implementation timeframe of this plan.

Priority Initiative 1: Agriculture

- Priority Initiative 1.1 Implement Nutrient Management Analysis Program to Agricultural Landowners
 - Assist producers in obtaining nutrient management planning resources, including access to soil sampling, manure analysis, and agronomy assistance.
- Priority Initiative 1.2: Reporting and Verification of Existing BMPs
 - Collect data using landowner reporting forms and verify existing BMPs on agricultural operations.
- Priority Initiative 1.3: Existing BMP Maintenance Program
 - Assist producers with maintenance of existing BMPs to keep them functioning through education and funding resources.
- Priority Initiative 1.4: Farmland Preservation
 - Assist in the preservation and conservation of Farmland.
- Priority Initiative 1.5: AMD and AML restoration
 - Utilize excess manure to treat abandoned mine lands to improve available nutrients for vegetative cover. Promote new growth on mine lands to reduce runoff and protect currently established growth. Restoring AML impacted areas and treating AMD discharges to restore water quality.

- Operation and maintenance on existing reclamation and restoration sites.
- Priority Initiative 1.6: Crop Management
 - Promote crop management by increasing no-till and cover cropping through education and outreach.

Priority Initiative 2: Urban and Developed Stormwater

- Priority Initiative 2.1: MS4 Community Partnership Projects
 - Partner with MS4 Communities to assist with sediment and nutrient removal projects.
- Priority Initiative 2.1a: Collecting Existing and Planned PRPs from MS4 Permittees
 - Meet with MS4s within Lackawanna County to collect existing and planned PRPs to quantify data.
- Priority Initiative 2.2: Existing Stormwater BMP Retrofit and Maintenance Program
 - Upgrade and maintain existing basins and drainage systems to improve function. Design and Retrofit PCSM on older developments with subdivision basins released to municipalities.
- Priority Initiative 2.3: Roadway Stormwater Management
 - Implement new BMP guide for PennDOT and Township Supervisors to reduce runoff from roadways and minimize nutrient carrying capacity.
- Priority Initiative 2.4: Residential Stormwater Management and Rain Barrel Program
 - Develop Educational outreach and material program for residential and small commercial properties.
- Priority Initiative 2.5: Nutrient and Fertilizer Planning for Turf Grass
 - Develop and implement plans and guidance for application on turf grass areas.
 - Host contractor and landscaper workshops.

Priority Initiative 3: Watershed Health

- Priority Initiative 3.1: Stream Channel Restoration and Protection
 - Provide bank protection, instream habitat and riparian buffers on streams in developed areas.
- Priority Initiative 3.2: Stream Bank Stabilization
 - Protecting stream banks and securing for stabilization.
- Priority Initiative 3.2a: Riparian Buffer Development

- Protect and plant trees along critical stream sections. Increase Riparian buffers and tree plantings within urban settings.
- Priority Initiative 3.4: Forest Land Conservation and Management
 - Preserve quality forest lands surrounding quality resources through conservation easements, deed restrictions, and land conservancies.
- Priority Initiative 3.4a: Forestry Harvest ED and Outreach
 - Educating private forest landowners on the importance of proper harvesting and selecting a qualified timber harvester.

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 collected BMPs.
 - 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: Creation of a Practice Keeper Dashboard so different entities can see other BMP entries from other agencies.
 - This would allow all entities the ability to see existing projects and locations that were previously entered by another agency into the Practice Keeper Program.
- 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 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: Create an Education and Outreach Position at the CCD to promote water quality efforts to the public and municipalities.
 - DEP dedicated funding will allow each conservation district to create this position for education and outreach.
- Action 1.6: Additional engineering support from other agencies to complete projects.
 - Dedicated engineering support from other agencies would allow for more projects to be completed at a greater capacity.
- Action 1.7: Dedicated staff from DEP or Conservation District to Verify and Report BMPs.
 - Dedicated staff member at district level or state level to verify and report BMPs implemented within the county into Practice Keeper.
- Action 1.8: Streamline Permitting Process for Conservation Related Projects
 - Conservation specific permitting that is less rigid with a faster turn-around time for approval.