Countywide Action Plan for Clean Water
Luzerne County
Overview

Plan Highlights

The Luzerne County Countywide Action Plan (CAP) establishes guidance and planning to help reach local clean water goals within Luzerne County. This voluntary planning effort, led by the Luzerne Conservation District, gathered the input of local, state, and federal partners to identify priorities and initiatives to benefit water quality within Luzerne County. The initiatives and recommendations outlined within this Plan will benefit local communities while also assisting Pennsylvania in meeting its Chesapeake Bay cleanup goals. This Plan is designed to provide guidance for implementation of voluntary water quality improvements within the local watersheds without proposing additional regulatory or financial burdens on Luzerne County, municipalities, or local residents.

The Luzerne County Plan includes four (4) priority initiatives that outline dozens of tangible and quantifiable goals. These goals may be modified and evolve over time based upon the early successes of plan implementation and updates in local priorities. The Plan is designed to implement these initiatives by 2027 while also extending beyond to serve as a long-term tool to improve local water quality within Luzerne County.

This Plan is an adaptive and dynamic document that combines best management practices, data management, programmatic changes, and implementation strategies for local water quality improvements. It will be updated on a regular basis to ensure that the outlined priorities are proving successful in achieving stakeholder and community objectives for improved local water quality.

Plan implementation will not only work toward the establishment of water quality improvement projects but will also strive to educate and engage the residents of Luzerne County, increase awareness of the value of local water resources, and update programmatic guidelines to allow for ease of project access and execution. The success of the Plan implementation process will largely be dependent upon the availability of needed funds, trained staff, and resources identified within the Plan, as well as the recommended programmatic changes and updates.

The Plan Steering Committee, which included representatives from the Luzerne Conservation District, Luzerne County, Larson Design Group, and PA DEP's Northeast Regional Office, wishes to recognize the great ongoing work and successes that many of the stakeholders within the county have already and will continue to achieve. The various sectors including Agriculture, Urban and Developed Stormwater, Watershed Health, and Wastewater have made huge strides in improving local water quality; and the dedication of landowners and representatives of many non-profit and governmental entities will continue to improve both water quality and soil health throughout the county. Notably, the local wastewater management sector has continued to make great efforts and have largely contributed to the nutrient reductions within the county's waterways and assisted in meeting the county's pollutant reduction goals.

Key Findings

The Luzerne County clean water planning process involved many local partners, including non-profits, institutions, and agencies who partnered to achieve a well-rounded plan which benefits water quality throughout the entire county. Luzerne County's considerable population was well represented by stakeholders with interest and expertise in four (4) areas of focus which included Agriculture, Urban and Developed Stormwater, Wastewater, and Watershed Health. These focus groups are reflective of the priority initiative sectors included in the Plan.

During the development process, education and outreach was identified as a significant goal by stakeholders in all focus groups. The Luzerne Conservation District Board of Directors also emphasized the district's ongoing priority of providing technical assistance and encouraging voluntary compliance to address environmental concerns. This emphasis, along with Luzerne County Council's request that the plan not increase the regulatory or financial burden on the residents of the county, is reflected in the voluntary, assistance-oriented nature of this plan.

Another reoccurring concern voiced by stakeholders were the impacts and need for accurate assessment of Abandoned Mine Drainage (AMD) and Abandoned Mine Land (AML) throughout Luzerne County. AMD remediation and AML reclamation resonated as a definite countywide goal throughout the plan development process and will be a focus throughout the implementation of this plan.

Opportunities for Success

Development of this Plan included the identification of county-specific collaborations, priority areas, and resources needed for successful implementation of water quality improvement efforts, while also working to benefit and engage the residents of Luzerne County. Some key factors for success include:

- Collaboration within existing non-profits, institutes, local agencies, and partners
- AMD Coordination with existing groups, such as BAMR
- Coordination with other counties for soil health initiatives
- Collaboration with DAMA and WVSA on attaining further data and reporting knowledge
- Education/outreach for on-lot septic system maintenance and upgrades
- Technical support and resources for reporting and verification of new and existing BMPs

One of Luzerne County's greatest opportunities for success identified through the plan development process is the reporting of previously implemented BMPs within the county. For example, DEP has determined that wastewater system upgrades and maintenance practices within the county have exceeded the nutrient reduction goals assigned to Luzerne County within the Countywide Action Plan Toolbox Dataset.

Although this is a voluntary plan and no additional practices are required to meet nutrient reduction goals, the planning partners are supporting this plan to continue improving local water quality within the county and provide benefits to local communities.

Challenges to Implementation

The achievement of many plan initiatives is contingent on receiving additional resources including technical assistance, increased data, funding, and landowner/partner involvement. During the development of the Plan, there has been countywide collaboration on identifying previous accomplishments, areas that would benefit from assistance, and how to complete the identified goals in a measurable way.

The planning partners have identified a major challenge in the uncertainty of whether existing practices and prior efforts have been previously accounted for and received appropriate pollutant reduction credits in state or federal reporting programs. To address the absence of data sharing and non-recorded progress, the Plan includes proposed measures to account for unreported practices and to improve data management.

The target goals of reducing 231,000 lbs. of Nitrogen and 47,000 lbs. of Phosphorus loads entering local waterways are to be met by 2027. Due to the short timeframe of implementation, there are additional hurdles and challenges anticipated or known that include the following:

- BMP funding and resources for implementation
- Lack of developed for long-term BMP verification process and reporting resources
- Public adoption, engagement, and participation of efforts
- Attainability of expensive match criteria for high-cost projects
- Timeframe for plan implementation to achieve necessary goals
- Enough resources to provide technical assistance, implementation, and reporting
- Education, outreach, and collaboration efforts to achieve adopted goals

Luzerne County completion of The Lands at Hillside agricultural infrastructure and BMP upgrades.

Implementation Update - 2023

Local stakeholders within Luzerne County been effectively implementing projects that align with CAP priority initiatives and continue to actively seek additional funding to increase the number of CAP goals achieved.

Due to limited resources, the following priority initiatives have been removed from the scope of project completion for 2025, although they are still of importance within Luzerne County. These projects will be pursued as resources become available to support these actions.

Urban and Developed Stormwater:

Previous Priority Initiative 2.1a – Collect data on existing/planned PRPs from MS4 Permittees

Previous Priority Initiative 2.3 – Nutrient and Fertilizer Planning for Turf Grass

Wastewater

Previous Priority Initiative 3.1 – Private Septic/Sewer Maintenance

Implementation Update – 2025

Luzerne has met or exceeded performance targets, resulting in the following Priority Initiatives are now recognized as completed. These initiatives have achieved their intended outcomes.

Agriculture

Completed Priority Initiative 1.5 - Manure to Mine Lands Program

Completed Priority Initiative 4.6 – Reporting and Verification of Existing BMPs

Due to the lack of progress or changes to the following Priority Initiative has been removed.

Wastewater

Previous Priority Initiative 3.1 – Reporting of On-Lot Septic BMPs

Please view the updated Priority Initiatives under the Plan Summary.

Plan Summary

The implementation of the Plan will center around four (4) priority initiatives: 1) Agriculture, 2) Urban and Developed Stormwater, 3) Wastewater, 4) Watershed Health. Luzerne County Stakeholder groups were established with the purpose of identifying specific efforts to achieve local goals within each Priority Initiative.
The Plan was developed with a focus on establishing a framework for a fluid plan that can be altered and adapted to respond to and reflect the local priorities while actively utilizing new opportunities and resources throughout the implementation timeline. Priority Initiatives denoted with **green** have been successfully completed as of the plan year 2025.

Priority Initiative 1: Agriculture

- Priority Initiative 1.1: Nutrient Management Planning
    - 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 BMP's
    - Data collection and verification on operations with existing BMP's implemented.

- Priority Initiative 1.3: Existing BMP Maintenance Program
    - Assist producers with education and resources to implement maintenance activities on existing BMP's to increase functionality.

- Priority Initiative 1.4: Riparian Buffer and Stream Fencing
    - Implementation of stream fencing and riparian buffer on crop and pasture lands.

- **Priority Initiative 1.5:** Manure to Mine Lands Program
    - Utilize excess manure to treat abandoned mine lands to improve available nutrients for vegetative cover.

- Priority Initiative 1.6: Wetland Creation/Enhancement on Farmlands
    - Create and enhance wetlands on agricultural lands that are less productive or that are located within environmentally sensitive areas.

- Priority Initiative 1.7: Soil Health Improvement
    - Implementation of soil health practices, including no-till planting, cover cropping, and the use of pollinator species on agricultural lands.

- Priority Initiative 1.8: Barnyard Agricultural BMP Implementation
    - Continuation of LCD's & NRCS's efforts to stabilize animal feeding and animal walkways and to manage manure on existing operations.

Priority Initiative 2: Urban and Developed Stormwater

- Priority Initiative 2.1: MS4 Community Partnership Projects
    - Develop partnership with MS4 Communities to assist with sediment and nutrient removal projects.

- Priority Initiative 2.2: Residential Stormwater Management Program
    - Development of an outreach, technical assistance, and cost-share program for implementing water quality improvement BMPs on residential and small commercial properties.

- Priority Initiative 2.3: Existing Stormwater BMP Retrofit and Maintenance Program
    - Upgrade and maintain existing basins and drainage systems to improve function.

- Priority Initiative 2.4: Urban Green Space and Planting
    - Increase Green Space and continuing tree and shrub planting within urban settings.

Priority Initiative 4: Watershed Health

- Priority Initiative 4.1: AMD Treatment for Nutrient Reductions
    - Detailed evaluation of nutrient loads in AMD discharges and development of treatment plans.

- Priority Initiative 4.2: Stream Restoration
    - Provide bank protection, instream habitat, and riparian buffers on streams in degraded sections of streams in rural and developed areas.

- Priority Initiative 4.3: Riparian Buffer Development
    - Protect and plant trees along critical stream sections.

- Priority Initiative 4.4: Farmland and Forestry Preservation
    - Quantify existing preserved open space to ensure proper nutrient reduction credits and preserve additional farmland and natural lands

- Priority Initiative 4.5: AML Reclamation Planning and AMD Restoration
    - Restore AML impacted areas, enhance existing and future AML reclamation projects to include additional conservation benefits, and treat AMD discharges to restore water quality.
    - Encourage the use of AMD sludge and biosolids for soil improvement, planting of warm season grasses, and use of forest reclamation approach for improved stormwater management and wildlife habitat.

- **Priority Initiative 4.6:** Reporting and Verification of Existing BMP's
    - Collect data on and verify status and operation/maintenance needs of existing, recently completed, and in-progress BMP's.

- Priority Initiative 4.7: Wetland Enhancement and River Shoreline Improvement
    - Improve and expand wetland habitat and beneficial aquatic plant habitat for improved water quality.

Programmatic Initiative: Recommendations for State Programmatic Changes

- Action 1.1: Change program standards for Chesapeake Bay Program Technician
    - Allow additional conservation districts to participate in the Chesapeake Bay Technician Program by restoring the ability for district boards to establish local priorities while achieving more water quality benefits within the Chesapeake Bay Watershed.

- Action 1.2: Access to DEP, EPA, DCNR, NRCS data on existing project locations and amounts.
    - This effort would improve coordination and assist in identifying areas that need work within the county and improve efficiency and understanding of what is already being recorded and to identify information gaps.

- Action 1.2a: Create a dashboard on Practice Keeper so 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: Increase the prevailing wage thresholds for conservation BMP projects, including DGLVR projects.
    - Prevailing wage requirements cause increased project costs and reduce the amount of already-limited funds available for conservation projects.
    - Increasing these thresholds for conservation projects would significantly increase the amount of BMPs implemented.

- Action 1.4: Education and outreach position for water quality efforts to public and municipalities.
    - State funds allocated to conservation districts to provide outreach and education to municipalities and the general public on suburban/urban water quality, stormwater management, and sustainable land use.

- Action 1.5: Dedicated staff from DEP or Conservation Districts to Verify and Report BMPs
    - Dedicated non-regulatory staff member at the district level or state level to verify and report BMPs implemented within the county into Practice Keeper.

- Action 1.6: Reduce Burdensome Requirements for Large Scale Grant Projects.
    - Revise the Growing Greener & DCNR Riparian Buffer grant requirements to remove the obstacle of expensive match criteria for high-cost projects.
    - This will allow for the implementation of more high priority conservation projects.
    - Remove long-term land agreement obligations for the DCNR Riparian Buffer grant program

- Action 1.7: New program to provide cost-share funding for implementation of Agricultural and Residential Stormwater BMPs
    - Gain support from all sectors and pass legislation to provide much needed funding. (e.g. support of PA Senate Bill 465)

- Action 1.8: Streamline Permitting Process for Conservation Related projects
    - Conservation specific permitting that is less rigid with faster turnaround time to approval