



**State Water Plan Update
Upper Middle Susquehanna Water Resources Regional Committee
Meeting**

January 27, 2022
9:00 a.m. - 12:00 p.m.
Virtual Meeting via Microsoft Teams

Committee Members in Attendance:

Steven Barondeau	Rhonda Manning
Patrick Burke	Tony Maury
Jared Dressler	Shannon Rossman
Andrew Gavin	Robert D. Shannon
Todd Giddings	Jerry Walls
Kurt Hausammann	Wendy Walter
Russell James	Cathy Yeakel
Beth Kern	Jim Weaver

Committee Members Not in Attendance:

Andrew Gutshall	Jennifer Whisner
Dennis Hameister	

Others in Attendance:

Kristina Peacock-Jones – DEP	Monica Gould – Strategic Consulting Partners
Mark Matlock – DEP	Bob Whitmore – Strategic Consulting Partners
Mike Hill – DEP	
James Horton – DEP	

Visitors:

Curtis Schreffler
Doug Weikel

Welcome

Mark Matlock, DEP, welcomed everyone to the meeting, explained the meeting was being recorded, and provided helpful hints on the use of the technology. Shannon Rossman, Committee Chair, welcomed committee members to the meeting and completed a roll call for attendance.

Public Comment

Chair Rossman opened the meeting for public comment. An opportunity to express comments verbally or in the chat box was offered. There was no public comment.

Minutes

The meeting summary of the October 28, 2021, meeting was approved on a Pat Burke and second motion.

DEP State Water Plan Update

Kristina Peacock-Jones provided an update of what DEP is working on in regard to the State Water Plan Update. The USGS Water Use Data and Research (WUDR) grant data sharing project involving data sharing between agencies is now operational for SRBC and USGS. Data sharing is still pending with DRBC.

The three draft Critical Area Resource Plans (CARPs) continue to be under development and the drafts are progressing. Two of those CARPs are for the Ohio Regional Committee and one is for the Potomac Regional Committee.

The State Water Plan Atlas from 2009 is being developed into a Story Map as a Digital Atlas. The Digital Atlas should be ready in the first half of 2022.

The ninth Statewide Committee meeting was held on January 19, 2022.

Regional Materials

Mark Matlock shared a cumulative summary of the Upper / Middle Susquehanna Regional Committee's work for the past two years. The committee reviewed the document and made slight revisions to the materials. The revised regional committee materials follow.

Specific Regional Priorities

The Upper/Middle Susquehanna operates as a headwater's region for the Susquehanna basin and contains the West Branch watershed. The region's challenges include a history of legacy mining, aging infrastructure, and a relatively low population making broad regional coordination and ecosystem protection critical.

Protect Important Headwater Habitats, Enhance Recharge Areas, and Minimize Stormwater Runoff of the Upper/Middle Susquehanna Basin

To care for the water resources in the Upper/Middle Susquehanna basin and ensure a sustainable supply of quality water, important headwater habitats and groundwater recharge areas must be protected. Because much of the basin is forested, the approach should focus on forested land use practices and their effect on area water supplies. Minimizing large scale forest cutting is a priority to mitigate downstream flooding, preserve forested ecosystem services, and reduce sedimentation. Addressing legacy infrastructure, including point source outfalls, in acid mine drainage areas is also critical to protecting important headwaters and streams. We strongly encourage reuse of degraded/abandoned land such as available industrial or commercial lands. Marcellus shale is a large resource for natural gas in the basin that can require large quantities of water for hydraulic fracturing and has potential impacts to the headwaters, wetlands, and

the overall groundwater and surface water quality and quantity of the region. Committee members recognize a different approach must be taken to address water quantity and quality issues between rural and urban/suburban areas within the region. Rural areas strive to protect forest lands, preserve recreation areas and greenways, and protect critical habitat areas. Stormwater quality and quantity concerns in suburban and urban areas may be addressed with green infrastructure through zoning ordinance changes for underutilized and/or vacant commercial property, as well as their associated parking and paved areas.

Working collaboratively with stakeholders including state, county, and municipal government, municipal authorities, conservation districts, and watershed associations through education and outreach efforts is essential to advancing sound land use practices that are protective of these headwater areas. As part of a strategy to accomplish this, local governments can promote appropriate municipal ordinances in public water supply recharge areas, which is particularly important in areas with limited availability of quality water. The committee also recommends that statewide water well construction standards be implemented, particularly related to residential well drilling and geothermal bore holes, which will protect and sustain groundwater quality and availability.

Multi-Municipal Planning and Coordination

Land use planning and development are critical to protect headwater habitats, enhance recharge areas, and minimize stormwater runoff. Planning needs to expand with county-wide action plans and integrated water resources management throughout a watershed. A regional approach of education and outreach to water resource stakeholders, emphasizing the value of coordinated water quality and quantity planning among municipalities, is critical to protecting all communities. Continue to prioritize upgrading existing aging water and sewer infrastructure to maintain water quality and quantity, recognizing that parts of the region have experienced a decline in population and as a result many communities are challenged economically. Multi-municipal planning coordination enhances success in preserving water quality and quantity and optimizes the use of funding dollars.

Region's Uniqueness

What are the Upper/Middle Susquehanna region's unique characteristics that are important considerations in the state's water planning?

- This region encompasses a large portion of the headwaters for the Susquehanna River.
- The Upper/Middle Susquehanna has complex geology and substantial topographical variation.
- Legacy mining in the region presents water quality problems such as source water contamination but also provides opportunities through mineral recapture and recycling.
- There is a vast number of diverse hydrologic features in the basin including wetlands, streams, lakes, and ponds as well as peatlands.

- The Upper/Middle Susquehanna basin is densely forested, which helps to filter groundwater.
- With a large number of state forests, state game lands, and public lands, recreation plays a big role in this region's economy.
- Marcellus shale is a large resource for natural gas in the basin.

Stormwater and Flood Management

What are the region's concerns and recommendations for stormwater and flood management to preserve water quality?

- Good forestry practices should be continued in order to support headwaters, as healthy forests help mitigate flooding downstream.
- Incorporate green measures, such as [green streets](#) and [green roofs](#) into municipal plans to better capture precipitation in urbanized areas.
- Retrofitting existing stormwater facilities, promoting groundwater infiltration and recharge areas with a focus on smaller-scale granular solutions instead of large basins would be beneficial. With consideration of climate projections and future changes in the regional climate, local authorities should assess aging infrastructure for high-frequency storm events, erosion control, and filtration.
- Vacant shopping malls and corporate properties designed parking lots for maximum occupancy, which can lead to excessive runoff. Since the advent of virtual workspaces and online shopping, there is less demand for such large parking lots. Methods to modify or reuse these parking lots by retrofitting them with new stormwater best management practices (BMPs) should be investigated first by accurately determining responsibility. Transferring development rights might be a tool to achieve stormwater improvements on these properties.
- Stakeholders should provide education and outreach to homeowners on the impacts of stormwater, including the differences between pervious and impervious surfaces and various mitigation techniques, such as rain gutters and rain barrels, etc.
- Stormwater BMPs should be properly maintained; pervious pavements vacuumed regularly, streets swept, and algae controlled. Maintenance provisions in Municipal Separate Storm Sewer System (MS4) requirements and credits can help ensure continued functionality of BMPs.
- Connecting multiple municipalities within counties to create MS4 or stormwater consortiums so communities can discuss how best to apply the regulations would be beneficial.
- Stormwater ordinances need to be kept up to date with stormwater infrastructure improvements considered alongside redevelopment projects.

Climate Change Adaptation for Water Resources

How are water resources within the region being impacted by climate change and what could we do to adapt?

- Increased storm frequency and high intensity events will create issues with groundwater recharge and flash flooding. With droughts having a more severe impact on groundwater, continue to promote groundwater recharge to increase water availability.
- An in-depth study of climate change implications on water supply, vulnerability, availability, and reliability would be beneficial.
- Stakeholders should promote flexibility and incremental practical steps in response to the changing climate, especially in smaller communities that may lack the necessary budgets.
- Stakeholders should provide education and outreach focusing on resiliency and scientific data to help guide climate change discussions.
- Emphasizing the benefits and co-benefits of climate adaptation projects to the public and stakeholders would be beneficial, such as general resiliency and health of the ecosystem.

Logic Model

James Horton, DEP, shared a template of the previous logic model work completed by the committee. The logic model can be used to make the region's priorities actionable and measurable. A logic model is a picture that links the long term and short-term outcomes, or changes and results you hope to achieve, with the program activities and resources available to move the priorities forward.

The logic model template has the following components.

- Resources
- Activities
- Outputs
- Intermediate outcomes
- Long term outcomes

Committee members developed comments and ideas to be included in a logic model for each of their two priorities and additional comments were included in the chat function.

Resources in the Chat

- The use of county-wide Act 167 plans would be the ideal way to get up to date stormwater ordinances across the watershed.
- The Western and Eastern PA Coalitions for Abandoned Mine Reclamation (WPCAMR & EPCAMR) are both active in our region and should be included.

Next Steps

Chair Rossman thanked all committee members for their attendance, participation, and ideas.

Mark Matlock, DEP, provided an overview of the committee's future work.

- Edits to the committee's developed materials will be updated.
- A public hearing is being scheduled, tentatively for March 11. The public hearing will be a full day hearing with each regional committee having one hour to receive public comment. Comments from the public hearing will be available for the Delaware Regional Committee to review at the April meeting.
- A committee vote on approval of the committee's priorities and Story Map materials will be held at the April meeting.
- The approved regional committee documents will be provided to the Statewide Committee.
- Upper / Middle Regional Committee meetings are scheduled for the following dates in 2022.
 - April 28
 - A July meeting is not scheduled at this time.
 - October 27

The meeting was adjourned at 11:50 on a Doug Weikel / Jerry Walls motion.