Local Actions, Regional Results
APA-PA Annual Conference
October 2017
What is DVRPC?

• Federally-designated MPO for nine-county Philadelphia region in PA and NJ

• Created in 1965 to plan for “orderly growth and development”

• Transportation, economic development, land use and the environment

• Short, medium and long term transportation plans, provide funding for projects
Interactive Questions

Text DVRPC to 22333 to Join our Poll
<table>
<thead>
<tr>
<th>Major Pennsylvania Watershed</th>
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<tbody>
<tr>
<td>Erie</td>
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<tr>
<td>Ohio</td>
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<tr>
<td>Genesee</td>
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<tr>
<td>Susquehanna</td>
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<tr>
<td>Delaware</td>
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<td>Potomac</td>
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In the audience? Which category best describes you?

Consultant
Municipal Employee
Other government employee (county, regional, state)
Nonprofit
Elected Official
Planning Commission Member

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What is this project?

- Municipal Actions to Improve Water Quality
- Funded, in large part, by the William Penn Foundation
- Part of the Foundation’s Delaware River Watershed Initiative (DRWI)
- Stakeholder-based research
- Improve the ability of organizations to assist municipalities in their efforts to improve and protect water quality.
What is this project?

- Main research questions:
  - What are the barriers to, and conditions of, success for municipal-based conservation practices?
  - Where and how could municipal technical assistance be more effective?
Project Scope

- Delaware River Watershed
- 843 municipalities
- Advisory Panel (MTAAP) of 60 professionals/experts
- Political science
- Blend of qualitative/quantitative
Qualitative Interview Findings

• Municipal Technical Assistance Advisory Panel (MTAAP) – Content Experts
  ▪ Outreach for Advisory Panel
  ▪ 60+ interviews

• Municipal Outreach – Primary Target Audience
  ▪ Inform case studies, ground-truth MTAAP interview findings and early recommendations
  ▪ Outreach to 58 municipalities
  ▪ 37 participated in individual interviews
  ▪ 15 Case Studies
Do you think is the biggest threat to water quality?
Biggest Threats – to the watershed (MTAAP interviews)
Biggest Threats – to your watershed (municipal interviews)

- Agricultural runoff/activities
- Stormwater runoff
- Older development
- Erosion
- Impervious surfaces
- Landfills and other waste
- Lawn care
- Septic systems
- Upstream activities
- Construction activities
- Flooding
- Industry
- New development
- Stream buffer encroachment
- Other

n = 91 responses, 37 respondents
Important Municipal Actions (MTAAP Interviews)
Important Municipal Actions (Municipal Interviews)

n = 70 responses, 37 respondents
Greatest Limitation faced by municipalities
(MTAAP Interviews)
Greatest Limitations faced by municipalities (Municipal Interviews)

n = 63 responses, 37 respondents
Prioritized Recommendations

- Identified over 400 recommendations/ideas
- Project Team consolidated into 48 distinct recommendations/ideas grouped by four “actors”
  - Municipalities
  - Nonprofits
  - State Agencies (PADEP)
  - Collaborations (all three working in concert)
- Municipal Technical Assistance Advisory Panel (MTAAPP) prioritized list via survey
- Identified “coalition of the willing”
  - Action Plans
Municipal Actions

• A municipality should...  
  - **Lead by example** by managing its stormwater runoff  
  - Enact a municipal **stormwater fee** without creating a new stormwater authority (if an MS4 municipality)  
  - Create a **locally-funded open space program** that prioritizes land protection for water quality purposes

Complete List:  
https://www.dvrpc.org/waterquality/MunicipalActions/Recommendations/
Case Studies

Abington Township, Pennsylvania
Because Abington was largely developed before modern stormwater regulations, the township has long experienced severe flooding events during heavy rains, including some that caused residents to lose their lives. The township has spent millions over the past 15 years addressing runoff and flooding issues. Proposed state funded projects include a stormwater control plan, a stormwater management plan, and a stormwater management program. These projects are designed to reduce flooding and improve water quality in the Abington Township watershed.

Cooks Creek Watershed Association, Pennsylvania
The Cooks Creek Watershed Association (CCWA) aims to improve the water quality in the Cooks Creek watershed. The association works with local communities, business owners, and residents to implement best management practices to reduce runoff and improve water quality. The association provides educational workshops, hosting events, and organizing community cleanups.

East Bradford Township, Pennsylvania
Motivated by watershed impairment caused by suburban development over the past 30 years, East Bradford Township, in conjunction with the Water Resource Management District and the Delaware River Basin Commission, embarked on a comprehensive watershed protection plan. The plan included the development of a comprehensive plan for the entire watershed, the implementation of best management practices, and the dedication of funds for monitoring and enforcement.
15 Case Studies

- Abington Township, Montgomery County (Gaadt)
- Berks County Water and Sewer Association (DVRPC)
- Camden City, New Jersey (Gaadt)
- Durham Township, Bucks County (Center for Watershed Protection)
- East Bradford Township, Chester County (PEC)
- Hamilton Township, Mercer County (NLT)
- Kidder Township, Carbon County (DVRPC)
- Lower Salford Township, Montgomery County (PHS)
- Lower Saucon Township, Northampton County (DVRPC)
- Montgomery Township, Montgomery County (Brandywine Conservancy)
- Newark CCD, New Castle County (SSM)
- Smithfield Township, Monroe County (DVRPC)
- Stillwater Township, Sussex County (DVRPC)
- Warrington Township, Bucks County (Gaadt)
- West Chester City, Chester County, PA (PEC)
Abington, Montgomery County, PA
Abington, Montgomery County, PA

Source: Abington Township
Abington, Montgomery County, PA

Source: Abington Township
Abington, Montgomery County, PA

Source: Abington Township
Abington, Montgomery County, PA

Source: Abington Township
Abington, Montgomery County, PA

Source: Abington Township
Relevant Recommendations:

- Buy out of repetitive loss properties
- Wants new state funding source
- Municipality leading by example
- Educate landowners (done by EAC)
Durham Township, Bucks County, PA
Durham Township, Bucks County, PA

PROTECTING COOKS CREEK FOR MORE THAN 40 YEARS

Our goal is to “protect, preserve and improve the quality of water, land and life in the Cooks Creek Watershed.”

The Cooks Creek Watershed Association (CCWA) was organized in 1974. In the 40 years since its founding, Cooks Creek Watershed Association has worked to further its goal:

“To protect, preserve and improve the quality of water, land and life in the Cooks Creek Watershed.”
Relevant Recommendations:

• Expand existing organizations/alliances at county/subwatershed level
• Educate riparian landowners
West Chester, Chester County, PA
West Chester, Chester County, PA
West Chester, Chester County, PA

Impervious Surface by Parcel in West Chester Borough

Source: West Chester Borough
West Chester, Chester County, PA

Source: West Chester Borough
West Chester, Chester County, PA

Stream Protection Fee Rate Structure:

SPF rates are grouped into Tiers based on the amount of impervious area in a parcel.

<table>
<thead>
<tr>
<th>Tier</th>
<th>Impervious Area/Parcel</th>
<th>Monthly Fee*</th>
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<tbody>
<tr>
<td>1</td>
<td>0-1,000 square feet (ft²)</td>
<td>$3.35</td>
</tr>
<tr>
<td>2</td>
<td>1,000–1,500 ft²</td>
<td>$8.38</td>
</tr>
<tr>
<td>3</td>
<td>1,500–2,000 ft²</td>
<td>$11.73</td>
</tr>
<tr>
<td>4</td>
<td>2,000–2,500 ft²</td>
<td>$15.08</td>
</tr>
<tr>
<td>5</td>
<td>2,500–3,000 ft²</td>
<td>$18.43</td>
</tr>
<tr>
<td>6</td>
<td>&gt; 3,000 ft²</td>
<td>$20.10 and up</td>
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*The base rate has been set at $6.70 per 1,000 ft² of IA per month. Tiers 1-5 are charged a flat fee as shown above. Tier 6 properties are charged based on actual impervious area. The monthly fee is multiplied by 12 to determine annual costs.

Source: West Chester Borough
Relevant Recommendations:

• **Downstream** municipalities pay for improvements in **upstream** municipalities

• Create a **stormwater fee**
My community is not paying a stormwater fee

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I don’t know

Both where I work AND where I live

Yes, the community where I work

Yes, a community where I live
Read these case studies and more!

www.dvrpc.org/waterquality/MunicipalActions/CaseStudies/

Municipal Actions for Water Quality - Case Studies

Qualitative case studies are an increasingly popular tool for planners and their partners. The process of developing a case study allows researchers to capture exemplary actions, detect areas for improvement, document research questions, identify themes, and test theories and perceptions. Case studies can also provide concrete evidence to support general recommendations or abstract ideas.

Case Studies

Download All [7.5 MB pdf]

Download all 15 case studies in one document.

Abington Township, PA [1.4 MB pdf]

Since Abington was largely developed before more modern stormwater management practices took effect, the township has long experienced severe flooding events during heavy rains and tropical storms—including some that have caused residents to lose their lives. The township has spent approximately $30 million over the past 15 years addressing runoff and flooding issues.
Action Plans

• 48 Recommendations resulting in 14 Action Plans
  ▪ Coalition of the willing – MTAAP/DVRPC Project Team
  ▪ Some ideas combined

• Today – get your feedback on
  ▪ Watershed Academy
  ▪ Environmental Defense Fund
A Watershed Academy
Land Use Decisions Influence Water Quality
Is water quality a high priority for your municipal council?

Absolutely yes

Mostly when triggered by MS4 or stormwater runoff issues (ie complaints)

There are far too many other priorities to worry about besides water.
The Perfect Nexus
Certified Professionals
You interested in becoming a certified water quality professional?

Tell me where to sign up, this would be a great addition to my practice, interests, etc.

Maybe if I knew more about the time involved

Are you kidding, the last thing I need is another certification.
Access to Expertise and $
believe your municipal clients would take advantage of your expertise & funding from a Watershed Academy.

Yes

Only if there were money available

Unlikely

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thank you.
Environmental Defense Fund

• The Municipal Environmental Defense Fund could be housed an organization like the Pennsylvania Municipal League (PML)

• Provide legal defense of Pennsylvania’s municipalities’ environmentally protective measures when faced with legal a challenge.
Environmental Defense Fund

• Participating municipalities could pay a “membership fee” or an “insurance premium”

• Municipality’s counsel could access legal expertise
  ▪ Specialized training
  ▪ Additional review of ordinances
Environmental Defense Fund

- If the Fund enters into a court case on behalf of a municipality, and wins the suit, the Municipal Environmental Defense Fund will seek reimbursement of attorneys’ fees and costs as allowed under the Municipal Planning Code.
- Recovered fees and costs will be used by the Municipal Environmental Defense Fund to sustain future activities.
Would an Environmental Defense Fund motivation increase the likelihood to adopt and/or enforce more environmental protection ordinances?

Yes; this is the type of reassurance they need

No way; they’re not interested in doing more

Maybe; it depends on the details

They don’t need it. They already stick their necks out.
THANK YOU!

Text LEAVE to 22333
To exit the poll
Thank you!

Full report:
dvrpc.org/Environment/water/MunicipalActions/

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