

Collaboration for Cost Effective Stormwater Management



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Municipal Stormwater Challenges & Level Funding

1. Amount of deferred maintenance growing
 - a. ASCE's 2018 Report Card graded NJ a "D" for stormwater facilities.
 - b. Costs of infrastructure maintenance increase with inflation
2. Original infrastructure may not have been municipally funded
3. Regulations lead to increased cost
4. **Municipal tax revenue often fully allocated**

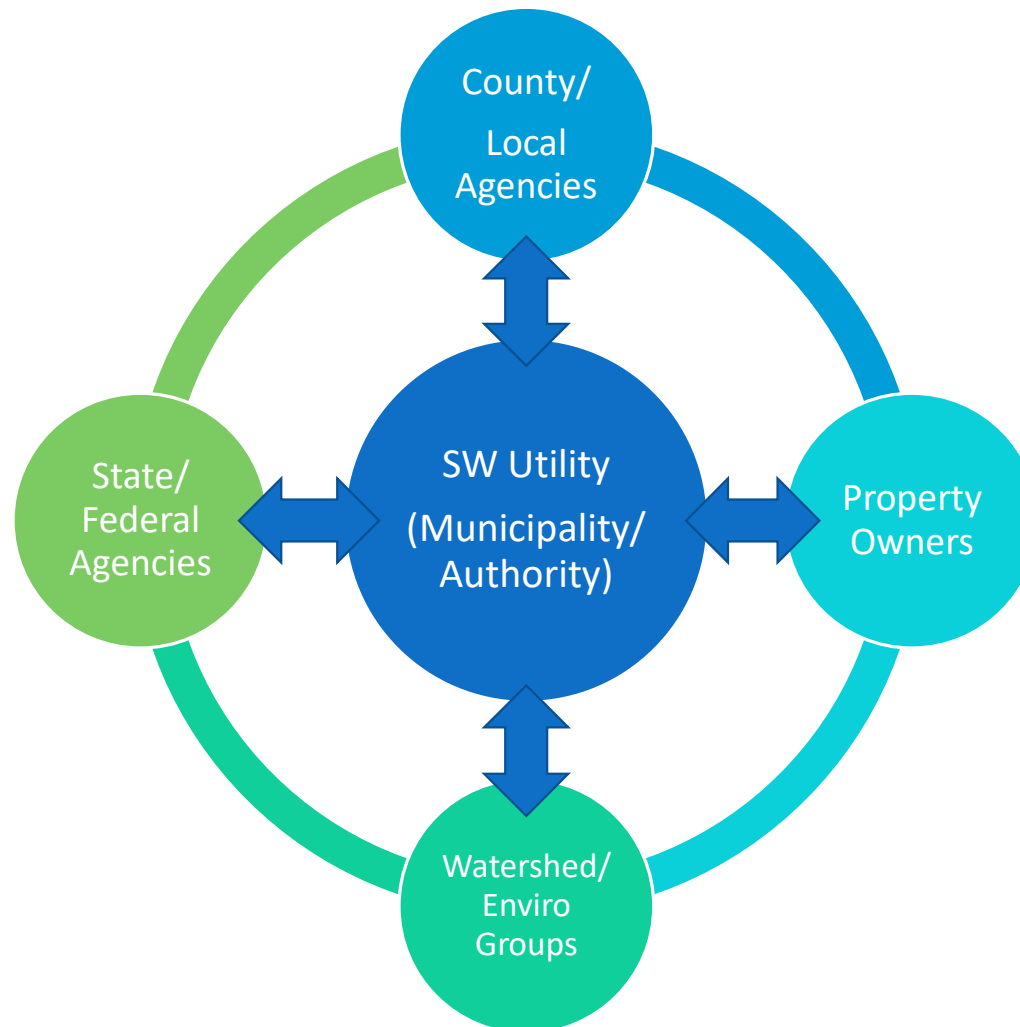


Why SW Utilities are a Platform for Collaboration

- Utilities provide mechanism for management across municipal boundaries
- Property owners are more likely to get involved when they are rewarded
 - Stormwater fees provide a mechanism to provide a benefit back to property owners via credits
 - Municipality can realize financial and administrative benefits to SW program thru property owners
- Funding agencies more likely to fund sustainable stormwater programs.
- Enhanced programs provide backbone from state agencies like NJDOT to partner.

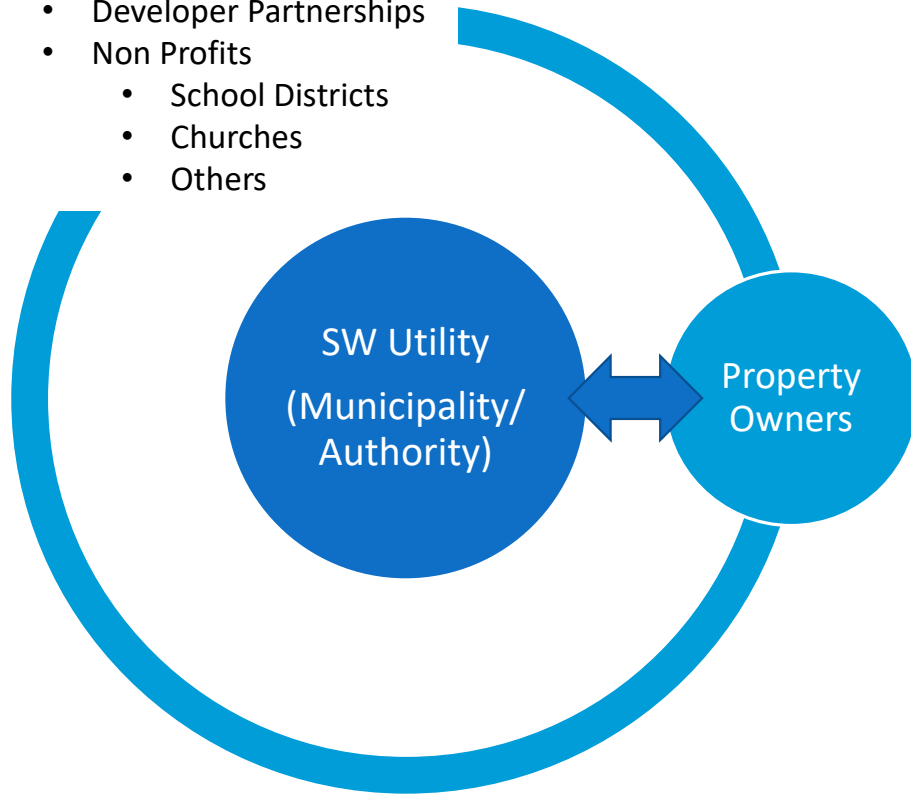


Opportunities for Collaboration



Opportunities for Collaboration

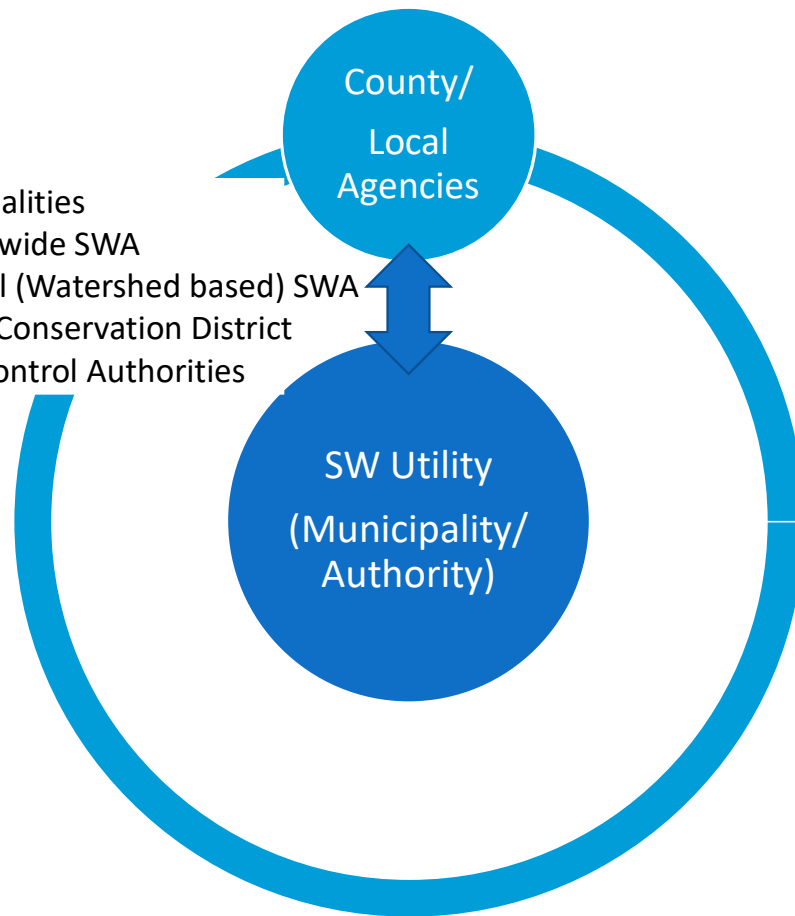
- BMPs installed by Single Property Owners
- Developer Partnerships
- Non Profits
 - School Districts
 - Churches
 - Others



- Property owners are more likely to get involved when they are rewarded
 - Stormwater fees provide a mechanism to provide a benefit back to property owners via credits
- Municipality can realize financial and administrative benefits to SW program thru property owners:
 - Maintaining private infrastructure, installing green infrastructure and other BMPs, leading public education and outreach, overall partnering to save costs (ex. street sweeping disposal)

Opportunities for Collaboration

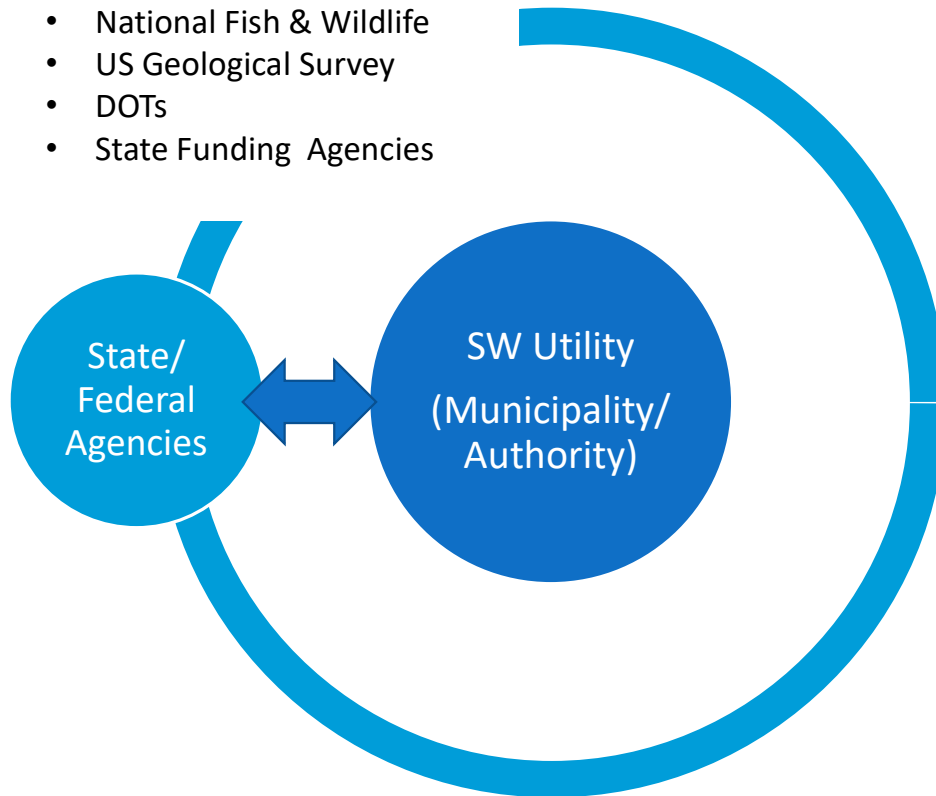
- Municipalities
- County-wide SWA
- Regional (Watershed based) SWA
- County Conservation District
- Flood Control Authorities



1. Supports watershed planning and management
2. Eliminates duplication of services
3. Gains economies of scale
4. Increases purchasing and borrowing power
5. Enhances opportunities for government grants and loans
6. Expands cost share options
7. May streamline regulatory requirements
8. More cost effective and equitable approach to rate payers

Opportunities for Collaboration

- US Army Corps of Engineers
- National Fish & Wildlife
- US Geological Survey
- DOTs
- State Funding Agencies



Examples of current collaboration:

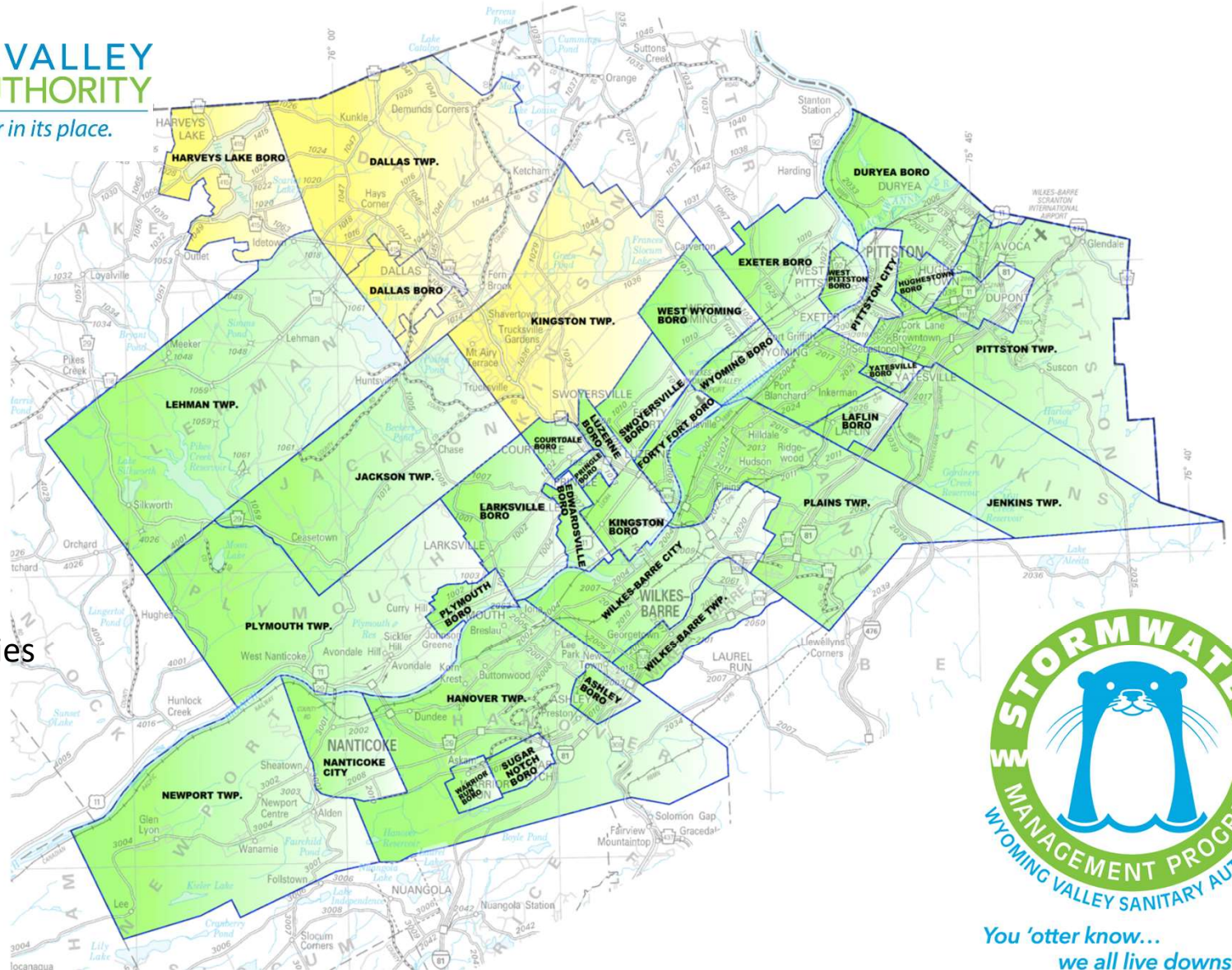
- USACE provides technical assistance and project funding. Desire to work with regional collaborations
- National Fish and Wildlife offers funding for utility implementation and BMPs
- US Geological Survey has opportunities for cost savings related to impervious area development
- NJDOT partnership opportunities likely exist
- State funding agencies may have opportunities for stormwater authority implementation and project financing



**WYOMING VALLEY
SANITARY AUTHORITY**

Together, we put water in its place.

Serves **32** municipalities
in Luzerne County,
Pennsylvania



*You 'otter know...
we all live downstream.*

Phase 1: Permit Administrator (2018-2022)

- Providing regulatory support to local municipalities
 - Pollution Reduction Planning
 - Design and installation of Best Management Practices
 - O&M of WVSA-installed BMPs
 - Emergency O&M services to municipally-owned stormwater infrastructure
 - Mapping of municipally-owned systems
 - MCMs = SBRs (State-wide Basic Requirements)
 - Public education
 - Public involvement
 - Illicit discharge detection
 - Post-construction runoff control
 - Pollution prevention / good housekeeping
 - Support in MS4 status reporting and auditing



Partnering to Meet Stormwater Needs

Municipalities:

- Maintain ownership of MS4 permits
- maintain local control of existing stormwater infrastructure.
- Adopt ordinances, assist with MCMs and submit annual reports.

Property Owners:

Partner with WVSA and their municipality to:

- Implement BMPs for control of stormwater runoff
- Engage in public events promoting water quality.

Credits to reduce fees are available for both activities.



Phase 1: Permit Administrator(continued)

- Infrastructure investments
 - \$22 million invested in BMPs
 - Streambank restoration
 - FPA detention basin retrofit
 - \$1 million invested in stormwater parks
 - \$4 million given to local municipalities over first 4 years for infrastructure improvements and community based projects
- Roughly \$8 million to be spent per year for administration, O&M and improvement costs
- Results in fee of \$4.80 per month or less for ~ 85% of all property owners.

WVSA Stormwater Management Vision

	WVSA	Municipalities
PHASE 1 Commence: <u>NOW</u> \$3 - \$4.50/ERU/mo	Permit Administrator <ul style="list-style-type: none"> - Complete New Permit Requirements <ul style="list-style-type: none"> - Prepare Regional CB PRPs and Watershed PRPs - Complete BMP design/implementation - Map System, PCM's - Certain MCM's - Emergency O&M - Stormwater Parks/ Funding to municipalities for infrastructure improvements - Enact Stormwater fee 	MS4 Permittee <ul style="list-style-type: none"> - Remain responsible for: <ul style="list-style-type: none"> - O&M of assets not installed by WVSA - Capital Improvements related to existing assets - NOI Submission - Certain MCM's - Annual Status Update Reports
PHASE 2 Commence: 2023 \$5.50 - \$7/ERU/mo	MS4 Co-Permittee/ System Lessee <ul style="list-style-type: none"> - Complete all Permit Administrator Items - Complete all MCMs - Condition Assessment/AM Planning, CI Planning - O&M of stormwater infrastructure - Repair/Replacement/Rehabilitation of SW assets - New Regulatory Requirements 	MS4 Co-Permittee/System Lessor <ul style="list-style-type: none"> - Serve as system lessor - Provide support through adoption of ordinances and similar actions to ensure proper stormwater management
PHASE 3 Commence: TBD	MS4 Co-Permittee & Stormwater System Owner	MS4 Co-Permittee

Strategic Partnerships Save Costs

WVSA is Reducing Costs through:

1. Partnering with 32+ municipalities to save money w/ economies of scale and streamlined permitting requirements
2. Strategic Partnerships for MS4 BMPs
Ex. PENNDOT, Luzerne County Flood Protection Authority and developers = Up to \$9M+ savings over 5 year permit term.
3. Strategic Partnerships for Mapping & Data Development
Ex. USACE and USGS = \$10M+ savings over 5 year permit term
4. Strategic Partnerships for SW Facility O&M
Ex. Developers, PENNDOT = \$1M+ savings over 5 year permit term
5. Strategic Partnerships for MCM's
Ex. Large Property Owners, Schools, Universities, Watershed Stewards, Girl Scouts, Boy Scouts

Collaboration Saves Money

Comparison of Approaches	WVSA Multi-Municipal Initiative	Individual Municipalities	Savings
Total Projects Needed to meet permit =	65	455	390
5 Yr Capital Cost =	\$22M	\$69M	\$47M
Projected 20 Year Present Worth Cost =	\$267M	\$541M	\$264M

Regional stormwater service reduces overall cost by over:

50% - 70%



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HRG
Herbert, Rowland & Grubic, Inc.
Engineering & Related Services

Initial Capital Cost Benefit to Municipalities

	Municipality #1		Municipality #2		Municipality #3	
	Regional	Separate	Regional	Separate	Regional	Separate
Total estimated capital cost	\$ 3,282,000	\$ 7,723,000	\$ 4,521,000	\$ 11,310,000	\$ 241,000	\$ 807,000
Savings from regional approach	\$4,441,000		\$6,789,000		\$ 565,000	
% savings	58%		60%		70%	

Regional stormwater service reduces overall cost by:

50% - 70%

Moving Forward Toward Regional Collaboration

Through course of Feasibility Study:

- Define local government needs
- Define benefits of Regional Stormwater Management (specific to community)
 - Financial
 - Administrative
 - Environmental
 - Other
- Establish vision
 - Set scope and schedule
- Summarize via Feasibility Study
- Implement dialogue with municipal leaders throughout the process to educate and collaborate



Tips for Regional Implementation

- A regional leader is needed.
- Willingness of leader to expend funds up front (until SW fees are collected and leader can be repaid)
- Develop future vision and define benefits
- Open, collaborative communication between County/Authority and municipalities
- Use a study with a business plan to demonstrate cost savings to municipalities and property owners.
- Education and Communication are key!!!





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**For additional information regarding
Stormwater Utilities:
<http://www.hrg-inc.com/stormwater-fees/>**