

New Jersey Stormwater Utility Virtual In-State Retreat

September 16, 2020

Welcome & Introductions



Bevin BuchheisterSenior Policy Analyst
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Environmental Protection



Stormwater Utility Retreat Agenda

Wednesday, Sept. 16, 2020

- 12:30-1:00 pm- Welcome and Introductions
- 1:00-1:15- Background
- 1:15- 2:30- Messaging and Public Relations: Addressing Local Concerns
- 2:30-3:00- Break
- 3:00-4:00- Local Stormwater Utility Implementation Process: Lessons Learned

Thursday, Sept. 17, 2020

- 1:00-2:15 pm- Laying the Groundwork for Rate Setting
- 2:15-2:45 pm Break
- 2:45-3:30- Developing a Regional Approach for Cost Effectiveness
- 3:30-4:00 pm Break
- 4:00-5:00 pm Develop Action Plan & Closing Remarks





Participant Introductions

Bevin Buchheister, Senior Policy Analyst, National Governors Association





- For municipal and partner primary attendees, in 1 minutes or less, please introduce your jurisdiction or organization and briefly share a stormwater utility challenge and issue you hope to learn more about at this retreat.
- For all others, briefly introduce yourselves and identify your organization and stormwater work.

• <u>Guidance:</u> Please remember to unmute yourself. Introductions will proceed in alphabetical order by group based on the participant's list.



Background on Stormwater Utility Legislation and Purpose of Retreat



John GrayRegulatory Officer, Department of Environmental Protection



Background on Stormwater Utility Legislation and Purpose of Retreat

John Gray, Regulatory Officer

Division of Water Quality

NJDEP

Purpose and Goals

Inform DEP's work in developing guidance

Facilitated discussions on utility strategies

Participants gaining knowledge on their next steps

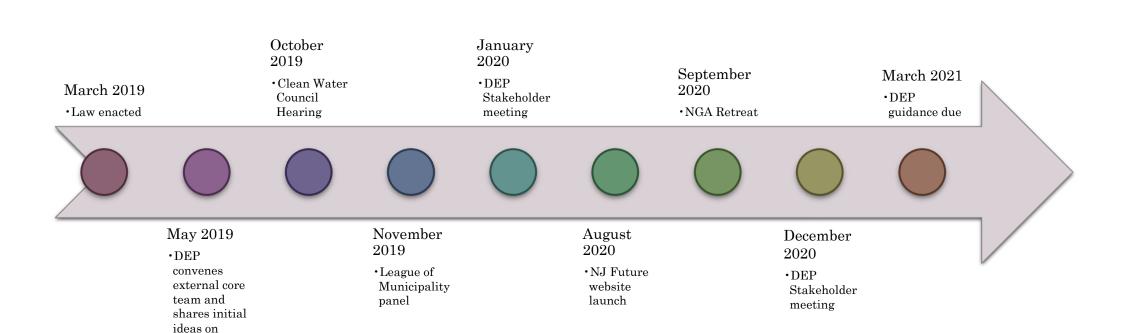
Clean Stormwater and Flood Reduction Act (NJSA 40A:26B et seq.)

- Who can establish a stormwater utility (Sec. 4, 5, 6)
- What a stormwater utility can collect fees for (Sec. 8)
- Shared services agreement (Sec. 7)
- DEP's guidance manual (Sec. 16)
- Creation of Clean Stormwater and Flood Reduction Fund (Sec. 17)
- Provisions relative to budget of certain regional sewerage authorities (amends NJSA 40:14A-4.2)
- Certain contracting requirements (amends NJSA 40A:11-4.1 and 15)

Backdrop In New Jersey

- Challenges posed by climate change to water quality and flooding
- Proper O&M is essential
- Obligations under DEP's MS4 program
- Obligations under DEP's CSO permits
- Water Bank only finances capital improvements

Timeline of Activity



guidance

Technical assistance for counties, municipalities, and authorities seeking to <u>establish</u> a stormwater utility

Factors for counties, municipalities, and authorities to consider when establishing and revising <u>stormwater</u> <u>utility fees</u> and other charges and appropriate <u>credits</u>

Information on how to develop an <u>asset</u> management program for a stormwater management system

Information on how counties, municipalities, and authorities can conduct <u>public outreach</u> related to stormwater management

DEP Guidance

- Detailed infrastructure inventory
- Identify Needs

Capital projects

Operations and Maintenance

Critical and problematic areas to protect or improve

- Impervious surface inventory
- Level of Service options
- Fee options
- Outreach

Elements of a Feasibility Study

Questions to Consider

How do I engage residents, other officials, and key stakeholders to create buy-in?

Does it make sense to approach this from a regional perspective rather than going alone?

How do I go about creating a rate structure?

What should I be doing now as I prepare to potentially create a stormwater utility?

Messaging and Public Relations: Addressing Local Concerns

Facilitator



Bevin Buchheister
Senior Policy Analyst
National Governors Association

Speakers



Jennifer Watson
Stormwater Coordinator
City of Gallatin, Tennessee



Ed Suslovic
Former Mayor, City Councilor
and State Legislator
Portland, Maine



Messaging & Public Relations: Addressing Local Concerns

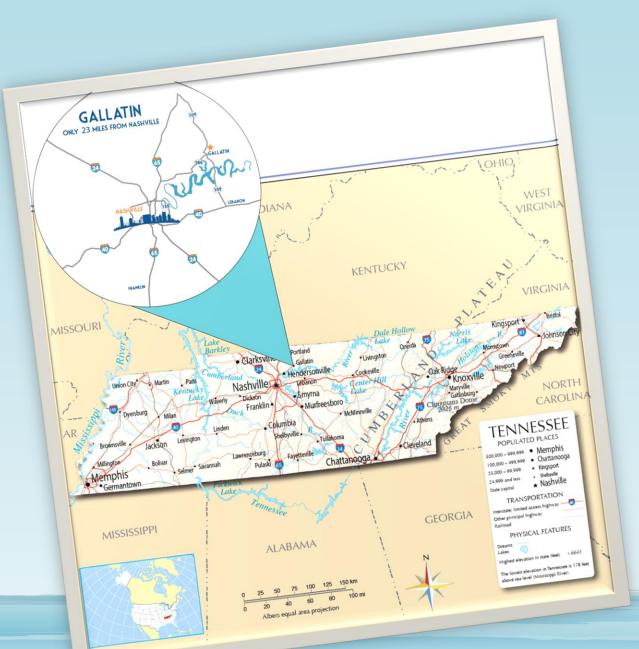


Messaging & Public Relations: Addressing Local Concerns

Cities of Gallatin, TN & Portland, ME Perspective

- 1. Introduction
- 2. It's Never to Early to Start Building Your Case
- 3. Public Engagement Strategy
- 4. So... How did Gallatin & Portland begin the messaging for a Stormwater Utility?
- 5. After Stormwater Utility Implemented





Introduction

The City of Gallatin was established in 1802

Located northeast of Nashville and is nestled on the banks of both Old Hickory Lake and the Cumberland River.

71 Stream Miles, 14 Miles of Old Hickory Lake Shoreline

Population: Approximately 40,000

The City is located at the bottom of several watersheds and often experiences flooding events





Introduction

The City of Portland was settled in 1632

Roughly 40 percent of all Maine residents live in the greater Portland metropolitan area

Situated on the Portland peninsula near Maine's southernmost border

America's 20th-largest fishing port

Despite having a population of just 60,000, Portland boasts an impressive 17 microbreweries – clean water is imperative!



Introduction

Recurrent issues highlighted a need for increased funding and a dedicated revenue source

Engineering Division realized it was time to begin planning for a Stormwater Utility Fee

Where and How to Start?







Stormwater Finance Flow Chart





It's Never too Early to Start Building Your Case

Track and Compile Any and All Pertinent Information

Drainage Complaint Records & Resolutions

Calls to staff

Calls to elected officials

Photographic and Video Evidence

Engineering and Maintenance Staff Knowledge

History of Flood/Extreme Rain Events – rainfall data amounts

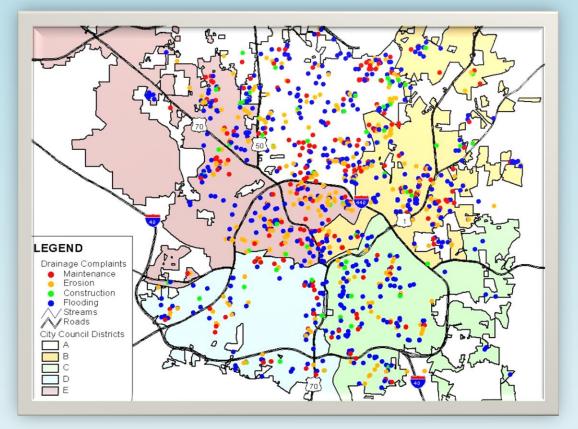
Economic Impacts - \$ Damages

Flood Insurance Repetitive Loss \$ Amounts

Any Master and Watershed Basin Plans

Completed Projects List

Future Projects List





It's Never too Early to Start Building Your Case

The Benefits for Enacting a Sustainable Financing Plan

Always keep these at the front of your mind!

You are promoting a stormwater utility because your community benefits from:

Taking Public Safety Seriously

Clean Water

Pro-actively Addressing Drainage Problems

Maintaining and Improving Aging Stormwater Infrastructure

Better Economic Development

More Attractive Neighborhoods and Downtowns

Dedicated Revenue for Scheduling Capital Improvement Projects



It's Never too Early to Start Building Your Case

The Benefits for Enacting a Sustainable Financing Plan

Always keep these at the front of your mind!

Neutralize negative political comments

Clearly addressing facts and benefits

Remaining calm and professional

Listen to critics, allow them to voice their opinions

Empathy and understanding



Embrace your advocates – encourage them to help educate and promote benefits





It's Never too Early to Start Building Your Case

Concurrently, compile a list of available resources to guide you:

No need to re-invent the wheel!

Websites dedicated to New Jersey Stormwater Utility Implementation Assistance

Consider Hiring an Experienced Consultant



















It's Never too Early to Start Building Your Case

Concurrently, compile a list of available resources to guide you:

State and National Stormwater Associations

Tennessee Stormwater Association

National Municipal Stormwater Alliance



Motivation for Formation



- To represent MS4 permittees at the national level by providing a unified voice
- To lead changes in regulation both proactively and reactively
- To **connect and unite** MS4 programs
- To promote stormwater as a **resource**
- To improve the public image of stormwater
- To create opportunities for multi-benefit and multi-use stormwater projects



It's Never too Early to Start Building Your Case

Concurrently, compile a list of available resources to guide you:

Water Environment Federation

Local Officials Toolkit - Draft

Initial Final Fact Sheets by December 2021
The following general topics:

Stormwater Management Fundamentals

Stormwater Treatment Types

Stormwater Treatment with Green Infrastructure

Incorporating Equity and Inclusion in Messaging

Resiliency





Public Engagement Strategy

Develop a Public Outreach Plan:

Prepare/Design Brochures

Billing Notices

Community Meetings

One-on-One Meetings with Large Fee Payers

Speakers Bureaus

Media Relations (Social Media, Public TV Channel, Radio, Website, Newsprint)

Educational Video

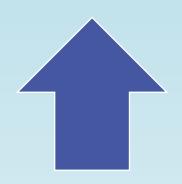
Meetings with Elected Officials





Public Engagement Strategy

Consider forming a stakeholder group with various interested parties:



Advantages

- Message tested in small group before distribution at large
- Feed-back is immediate
- Once consensus reached, stakeholder committee members become advocates/champions

Disadvantages

- It takes time to do correctly
- Each stakeholder must agree with the process and have sufficient responsibility
- The facilitator is the key to success





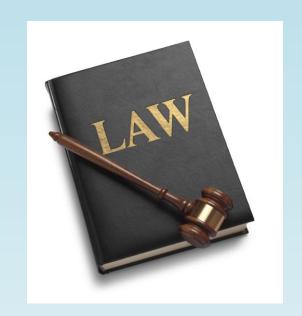
Public Engagement Strategy

Don't Get Sued! Know New Jersey 's Enabling Legislation

"...any county or municipality may... establish a stormwater utility for the purposes of acquiring, constructing, improving, maintaining, and operating stormwater management systems...

"A stormwater utility ... shall be considered a **separate** operation of the authority **to be budgeted and accounted** for **separately**"

"Any fee or other charge ... shall be based on a fair and equitable approximation of the proportionate contribution of stormwater runoff from a real property...





So... How did Gallatin begin the messaging for a Stormwater Utility?

Biggest hurdles in concept:

Idea that this is a Rain TAX

Decision maker turnover - Elections

Were we doing a "good enough" job?

Positive Considerations

When we seriously began pursuing the Utility, 2017 was not an Election year!

Chose to initially present multiple short 20 minute presentations to City Council

Then present to local Civic groups



By this time, several Middle Tennessee communities had implemented a Stormwater Utility



Messaging & Public Relations: Addressing Local Concerns: Gallatin & Portland Perspective So... How did Gallatin begin the messaging for a Stormwater Utility?

What did we present on?

Three City Council Presentations

Overview on Stormwater Basics & Requirements of the MS4 Permit

Stormwater Challenges & Existing Stormwater Level of Service

Stormwater Utility – A Sustainable Solution

Points that were Highlighted & Reiterated

Aging infrastructure

Increase in drainage complaints; City was reactive and not pro-active

No routine infrastructure maintenance or rehabilitation

Safety concerns

Have to request and compete for \$ from general fund, no dedicated funding source



So... How did Gallatin begin the messaging for a Stormwater Utility?

Who did we present to?

Community Presentations

Presented on Stormwater Basics, MS4 permit, Level of Service and Stormwater Utility as a

Solution

Who to Present to?

Civic Groups: Lions Clubs, Rotary Clubs, Sertoma Clubs

Home Owner Associations

Chambers of Commerce

Industrial Boards

Economic & Development Agencies

After successfully receiving Community Support...





So... How did Gallatin begin the messaging for a Stormwater Utility?

Whoaaaa - Wait one second...



Who Knew? City Council Approval – That May Not Be A Problem!

Next Hurdle: Make sure to communicate with, and bring City Departments on board...

Know your Critics and spend time to educate those Departments:

Economic Development Agencies

Public Utilities

Public Works



After the Stormwater Utility ...

After the Utility is passed, billing is put into place and the fee collection begins...

Public Education Continues!

Initially there will be a flurry of phone calls and complaints

Continue to promote the benefits messaging

Remind the caller that potential credits may be available

My main message: A fee is always a better choice over a tax. It is a dedicated and transparent revenue source that is fair and equitable across the city – everyone who lives on or leases real property contributes to stormwater runoff and utilizes city infrastructure and thus pays into this fund that is solely used for stormwater management.

You Will Be Successful!



Questions?

Jennifer Watson, Stormwater Coordinator

City of Gallatin, TN

Jennifer.watson@gallatintn.gov

Ed Suslovic, Former Mayor

City of Portland, ME

esuslovic@gmail.com





Break Until 3:00

Local Stormwater Utility Implementation Process: Lessons Learned



Fernando Pasquel
Chair, Stormwater Institute Advisory Committee
Water Environment Federation



LOCAL STORMWATER UTILITY IMPLEMENTATION PROCESS: LESSONS LEARNED

New Jersey Stormwater Utility

Virtual In-State Retreat



Economic Affordability Sustainable **Stormwater Utility** Regulatory Community **Compliance** Acceptance

September 16, 2020

Speaker and Moderator





FERNANDO PASQUEL

- Senior Vice President, Arcadis
- National Director, Stormwater and Watershed Management
- Chair, WEF Stormwater Institute Advisory Committee
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- Senior Policy Analyst,
 National Governors Association
- Contact: 202-595-2681, bbuchheister@nga.org



Steps to Establish a Stormwater Utility



Develop a Funding Strategy



Build Public Consensus for the Program



Q&A

Drivers for Stormwater Utility Formation

Enabling Legislation: "....Stormwater infrastructure in New Jersey currently lacks a dedicated source of funding..." (2.a.5)

NPDES permit and TMDL compliance requirements

Local stormwater / flood risk management needs

Capital project mandates (CSO/SSO, Stormwater)

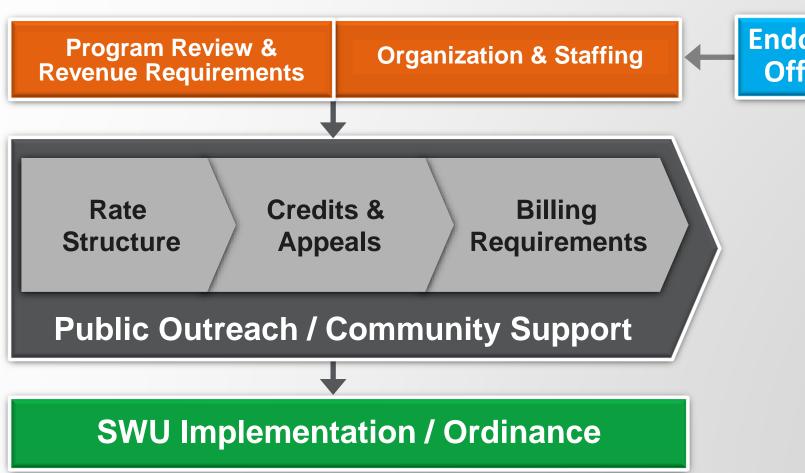
Critical maintenance needs and operations

Lack of funding for planning and implementation

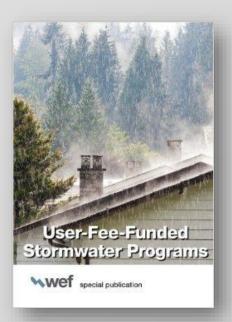
Competition for funding with other programs/utilities



Steps to Develop a Stormwater Utility and Implementation Process



Endorsement from Elected Officials / Management



Stormwater Program Elements

STORMWATER MANAGEMENT	ENGINEERING & PLANNING	CAPITAL IMPROVEMENTS	OPERATIONS & MAINTENANCE	REGULATIONS & ENFORCEMENT	OUTREACH
Master Planning Monitoring BMP /GI Implementation Program Pollution Prevention / Good Housekeeping Nutrient Management Spill Response Illicit Discharges D&E Industrial Inspections Watershed Assessments & TMDLs	Design Criteria and Standards Field Data Collection Design & Engineering Hazard Mitigation Zoning & Planning Support GIS & Database Mgmt. CSO program Source Water	CIP Project Planning & Management Implementation Forecast Project Evaluation Process Construction Management Land, Easements, and Right of Way	Maintenance Management Routine & Remedial Maintenance Emergency Response Infrastructure & Asset Mgmt. Stormwater System Inventory / GIS Water Quality and Drainage	Code Development and Ordinances Drainage System & BMP Inspections Flood Insurance Program Flood Risk Management E & S and Site Runoff Control Septic and I&I Program Wellhead Protection	Public Education and Outreach Programs Community Values Website and Social Media Public Meetings Citizens Advisory Group Public Involvement
ADMINISTRATION Operations Management, Program Planning and Development, Human Resources, Interagency Coordination, Support Services, Policies for Operations BILLING & FINANCE Billing Operations, Database Management. Customer Service, Financial Management, Capital Outlay, Overhead Costs, Cost Control					

Adapted from Guidance for Municipal Stormwater Funding, NAFSMA 2006

Stormwater Utility Services

"... acquiring, constructing, improving, maintaining, and operating stormwater management systems ..." (5.a)

ENGINEERING, PLANNING, PROGRAM ADMINISTRATION

- MS4 Permit and SWU administration/reporting
- Public education and outreach

OPERATIONS & MAINTENANCE

- Stormwater system inspections and BMP maintenance
- Outfall inspections / IDDE inspections
- Floodplain management
- Development review and inspections
- Street sweeping, leaf collection

CAPITAL

- Stormwater compliance projects
- Drainage and watershed projects
- CSO LTCP projects
- Flood risk management projects



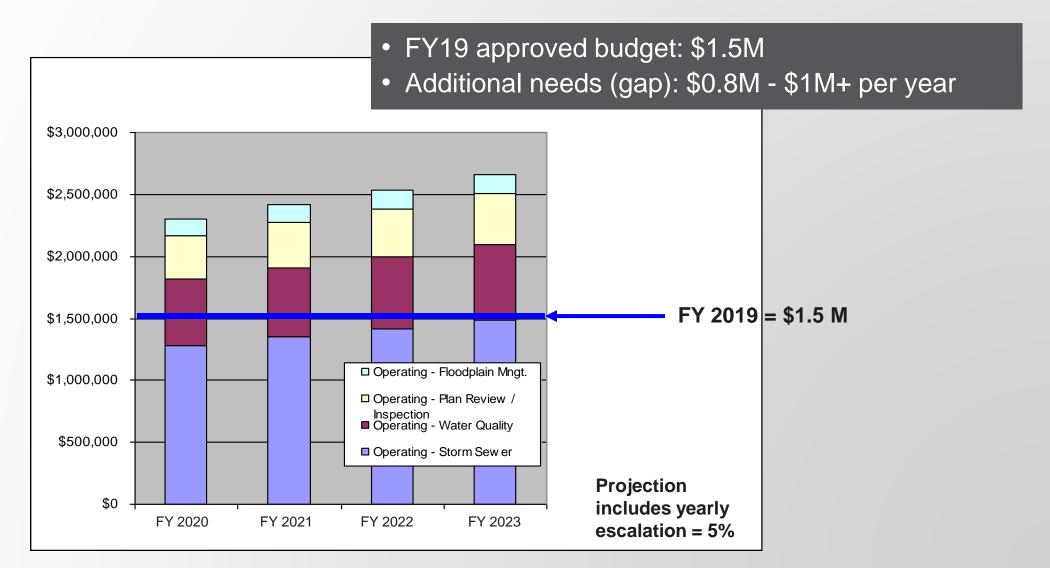




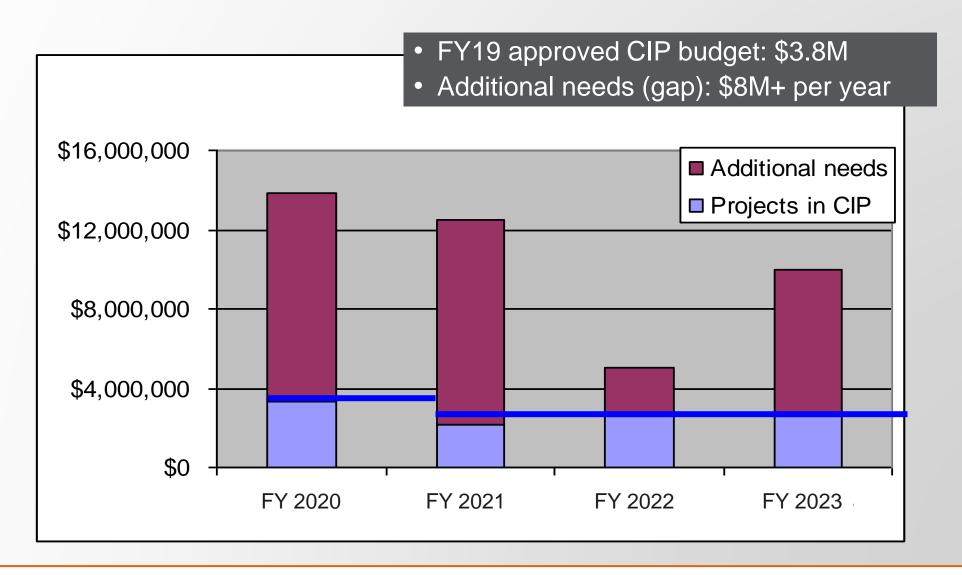




Summary of the Stormwater Program Operations and Maintenance Needs



Summary of the Stormwater Program Capital Needs



Developing Levels of Service

- Stormwater Compliance CIP
- Drainage/Watershed CIP
- M&O

A

BMPs

Reactive

Limited Maintenance

B

Enhanced BMPs

Planned Drainage

Operations & Limited Maintenance

Enhanced BMPs + Retrofits

Planned
Drainage +
Equipment +
Watershed
Projects

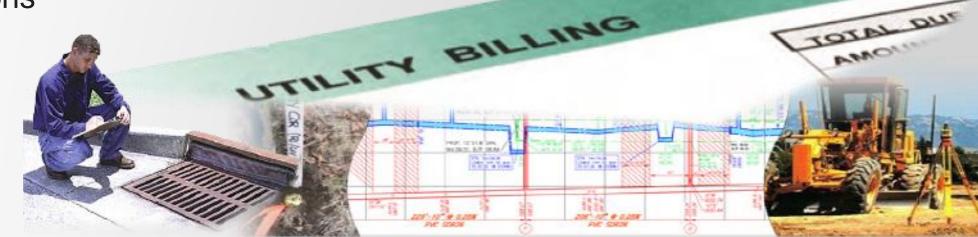
Operations & Scheduled Maintenance

Improved System Performance

How Are Fees Determined?

The stormwater management fee is based on...

- The proportionate contribution of stormwater runoff from a property (8.b)
 - Option 1: impervious area of each parcel
 - Option 2: total area of each parcel (pervious and impervious)
 - Option 3: pollutant load from each parcel
- The types of services and the cost of the program
- Policy decisions



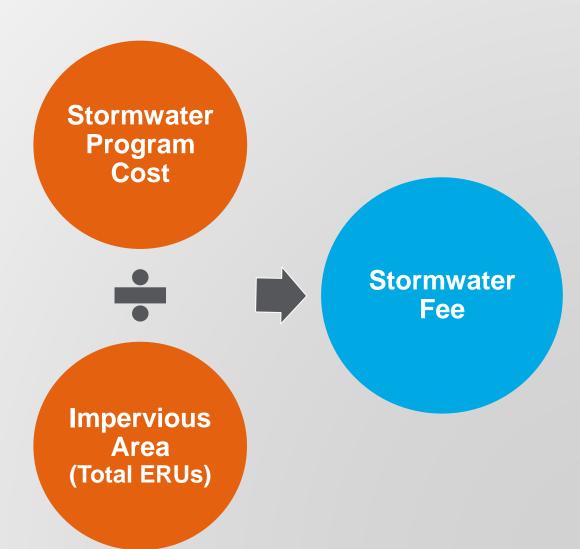
Rate Structure Alternatives

Keep it simple

- Accurate, fair, and defensible
- Representative of local conditions

Link to benefits

- Service area
- Program
- Projects



Potential Benefits of an Effective Stormwater Program



Improved recreational and aesthetic values



Lower drinking water treatment costs



Lower dredging costs for navigational channels



Reduce pollution of water supply reservoirs



Reduce **flooding** damage



Groundwater recharge – clean water available



Cleaner & healthier streams – improved water quality

Enabling Legislation (2.a.1)

 ...New Jersey faces an extensive set of problems due to inadequate stormwater infrastructure and management, and these problems directly affect the health, safety, economic well-being, and quality of life of New Jersey residents..."

Balancing Costs, Performance and Co-Benefits



Cost Co-benefits	Description of Value		
Projected Savings - Joint Projects	Joint funding from different department(s) - Percentage of saving amount to / from another project as compared to overall project cost		
Environmental Co-benefits	Description of Value		
Biological Diversity: Quality of Vegetation	Increase in Biological diversity by increasing the number of native plant species.		
Biological Diversity: Area of Vegetation	Addition of new vegetative area as a percentage of total watershed area.		
Social Co-benefit	Description of Value		
Job Creation - Capital Projects	Number of total labor hours estimated for construction and maintenance projects		
Property Values - Access to Scenic Features and Recreational Areas	Number of square feet (adjusted) of recreational area added, accessed, or improved		
Property Values - Benefits of Street Scape Improvements	Improves aesthetics of streets and protect property values		

Developing a Funding Strategy That Meets Your Community's Needs

Available Funding Options and GI Considerations

Process to Develop Funding Strategy

Credits and Exemptions to Enhance Acceptance

Billing and Policy Considerations



Numerous Funding Options Available

TRADITIONAL

Stormwater utilities and taxing districts

General appropriation revenues

Grant and loan programs

Municipal bonds

Fee in-lieu-of programs

Developer funding

Water / wastewater revenues

INNOVATIVE

Capital markets (EIB, incentives)

Cost sharing

Private and non-profit sources

Public-private partnerships

Mitigation banking and credit trading

Water quality and volume trading

Other miscellaneous sources



Considerations in Selecting Funding Options

- Identify viable funding sources
- Include a stormwater utility, in light of equity and reliability considerations
- Consider at least one long-term mechanism, depending on size of program and nature of projects
- Leverage funding from other programs and integrate market-based options



Integration of Other Market-Based Options

- Water Quality (Nutrient) or Volume Trading
 - Property owner meets stormwater requirements by buying stormwater nutrient or volume credits from an established bank (aggregators, clearinghouse, etc.) or other property owners (bilateral)
 - Adjustments (credits) to stormwater fee are provided to property owner

Subsidies

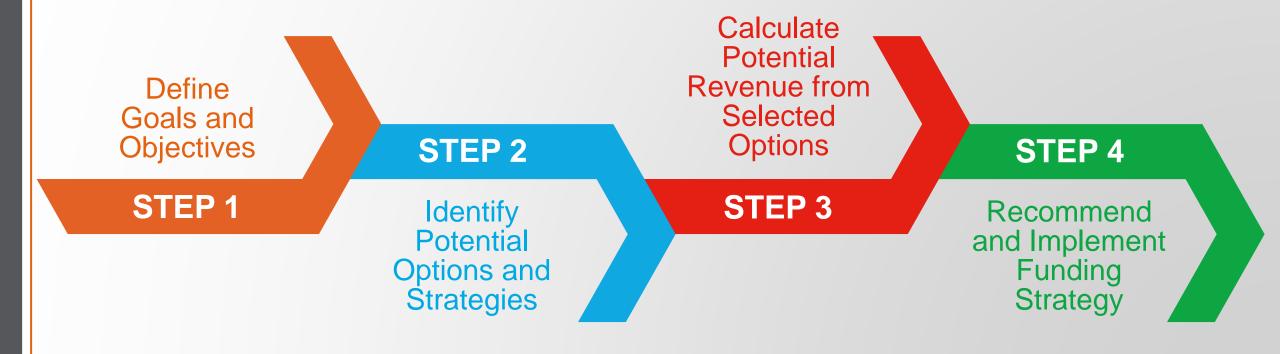
- Property owners receive a subsidy to retrofit existing parcel to meet stormwater requirements (needs lower implementation costs)
- Adjustments (credits) to stormwater fee are provided to property owner

P3 and CBP3s

- SWU pays for local share of P3 and provides adjustments (credits) once BMPs are implemented
- Potential for leveraging funds

A Systematic Process to Develop a Funding Strategy Leads to Successful Implementation

4 Steps to Identifying and Evaluating SW/GI Funding Options



Credits and Exemptions to Enhance Acceptance

Credits = fee reduction or discount on stormwater user fee for onsite mitigation (8.c)

Exemptions = waiver of stormwater user fee for properties that meet specific requirements

BENEFITS



- Rate payers can control and reduce user fee
- Promote fairness provisions of enabling legislation
- Promote equity in rate structure
- Facilitate increased use of O&M agreements
- Encourage property owner participation
- Reduce public expenditures on SWM program

CONCERNS -



- Calculation of basis of credit keep it simple
- Maintain revenue collections
- Need a documented process
- Often an application process is required, unless an innovative process is used

Key/Unique Features of NJ Enabling Legislation

"In establishing fees and other charges pursuant to this section, a county, municipality, or authority shall provide for (8.c):

(1)a partial fee reduction in the form of <u>a credit for **any** property that maintains</u> and operates a stormwater management system that complies with the State and local stormwater management standards that were in place at the time the system was approved and that effectively reduces, retains, or treats stormwater onsite;

. . .

(4) <u>an exemption from fees</u> and other charges for land actively devoted to <u>agricultural or horticultural use</u> that is valued, assessed, and taxed pursuant to the "Farmland Assessment Act of 1964," P.L.1964, c.48 (C.54:4-23.1 et seq.)."

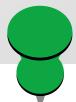
Credits Can Facilitate Stakeholder Buy-In



Credits provide incentives to implement program components and reduce the fee



Credits improve equity during implementation



A well-structured credit program will not impact revenue

Credits Considerations

- Credits account for varying levels of onsite stormwater management
- Credits promote retrofits on older parcels
- Credit and incentive programs are generally capped at an annual maximum





Basis for Credit Development



Classes of Payers or Properties



Location of Properties in the MS4 or separate MS4 Permits



Contributions to the Stormwater Infrastructure



Reduction of Stormwater Impact



Reduction of Cost of Service

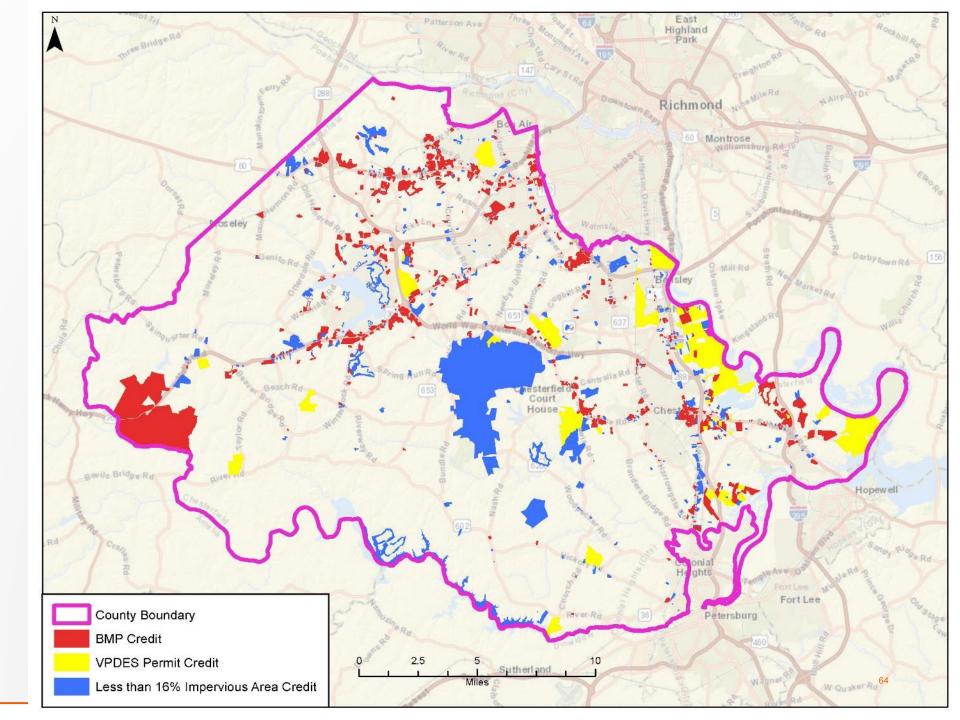
Parcels Receiving Credits Without Application

Case Study 1:

- VPDES permit holders 100% credit
- Parcels with less than 16% impervious area 30% credit
- Parcels served by BMPs:

Credit Amount Applied for BMP	Example BMPs		
15%	Quantity (e.g., flood control)		
30%	Water Quality & Quantity (before 7/1/14 stormwater regulations: extended detention, retention basin, bioretention, grass swale, vegetated filter strip, sand filter, etc.)		
50%	Water Quality & Quantity (after 7/1/14 stormwater regulations: extended detention pond, wet pond, sheet flow to filter/open space, constructed wetland, etc.)		

BMP Credit Categories



Credit Program Options

Case Study 2:

- Submit annual inspection report or lose credit.
- Available to Non-Residential Properties
- No application fee
- Monitor and adjust policy over time

Credit Description	Maximum Credit Amount		
Rate Controls	25%		
Volume Controls	25%		
Riparian Buffer	50%		
Stream Restoration	50%		
Education Program	20%		
Fertilizer Management Program	15%		
NPDES/MS4 Permit	50%		

Maximum Total Credit = 50%

Billing Considerations

		Separate Stormwater Fee			
Criteria / Approach	Funding Via Increased Tax Rates	Billed with Taxes	Billed with Utility Bills	Separate Stormwater Bill	
Ease of Implementation	•				
Customer Understanding					
Public Acceptance					
Equitable					
Revenue Collection					

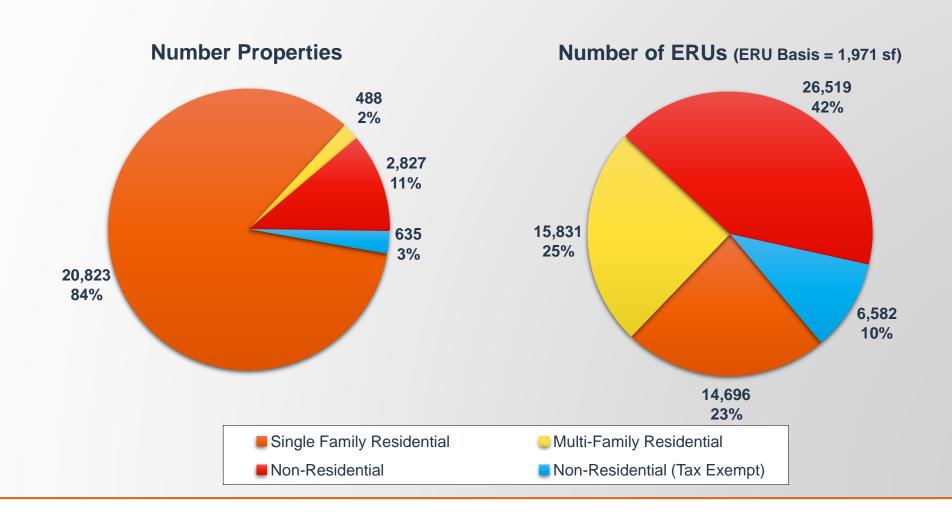
Policy Considerations

Address Impacts on Rate Structure and Revenue Estimates

- Should tax-exempt parcels be billed?
 - How would the utility impact organization and staffing?
 - What is the definition of an improved property?
 - How should facility maintenance issues be handled?
- What options / requirements do developers have?
- What are the criteria for credits/fee adjustments?

Equitable Contributions Example

Based on Impervious Area Distribution



Building Public Consensus for the Program

Methods for Gaining Public Support

Benefits of a Public Stakeholder Process

Public Outreach and Education for Implementation





Public Outreach and Consensus Building – Engagement at All Levels



Public Outreach Plan

Benefits from Staff Relationships with Key Stakeholders

PROGRAM REVIEW

- Stakeholder identification
- Develop public outreach/ education materials
- Framing the issue in public terms
 - Program and regulations
 - Stormwater funding/utility

PUBLIC ENGAGEMENT

- Stormwater advisory committee/group
- Small group meetings with civic (non-profit and tax exempt), business, community groups
- Watershed tours, media relations, fact sheets, website, social media



Building Community Support

Result of Stakeholder Process

Keys: How things get done in your community, understand culture, engage leaders and stakeholders



Inform/Empower
Community
Leadership



Collaborate with
Regional
Planning Agencies
And Local

And Local Organizations

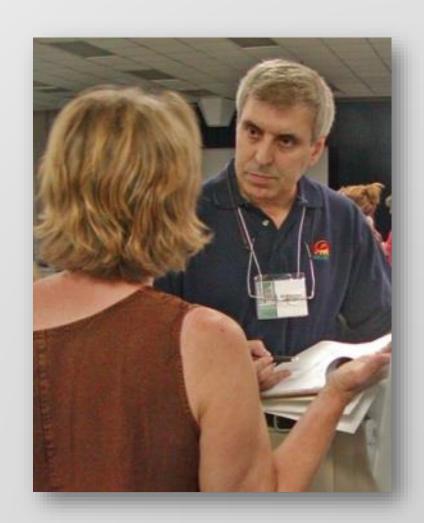


Target Presentations

- Know your audience
- Tailor the message focus on benefits (TBL)

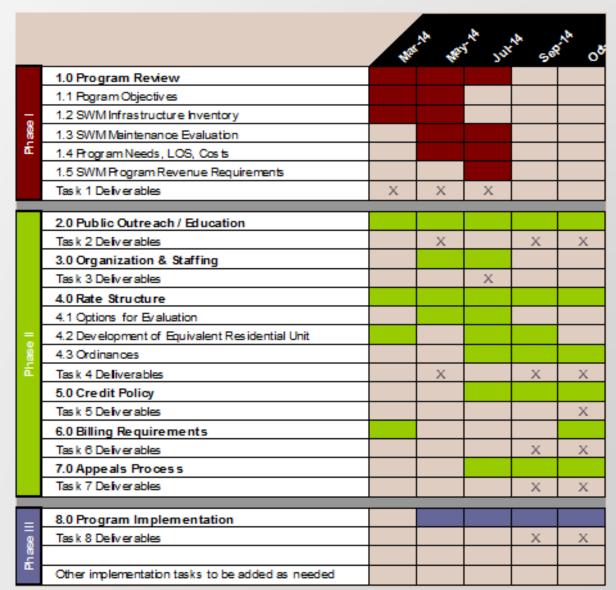
Conduct Public Outreach

- Continuous involvement = community buy-in and support
- Keep it simple most don't understand role of SW infrastructure
- Residential Benefits: reduced flooding, protect property values, co-benefits, etc.
- Non-Residential Benefits: site sustainability, reduced drainage issues, co-benefits, good neighbor/positive PR
- Review and refine the plan



Develop a Realistic Project Schedule

- Plan ahead
- Review schedule regularly
- Take your time with stakeholders



Conclusions



Municipal stormwater and parcel data facilitates implementation of stormwater utilities



Proactive approach to establishing SWUs promote property owner and local management acceptance of stormwater utility



New Jersey has good enabling legislation & stormwater/watershed problems are understood, but funding remains a challenge



Implementation success: share program vision, obtain leadership and stakeholder buy-in, define expectations and risks



Q & A

YOUR COMMENTS OR QUESTIONS ON THE IMPLEMENTATION PROCESS:

- SW program needs
- Public engagement
- Rate structure
- Policies
- Credits
- Schedule
- Other?



THANK YOU!

BEVIN BUCHHEISTER

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Conclude Day 1



New Jersey Stormwater Utility Virtual In-State Retreat

September 17, 2020

Stormwater Utility Retreat Agenda

Thursday, Sept. 17, 2020

• 1:00-2:15 pm Laying the Groundwork for Rate Setting

• 2:15-2:45 pm Break

• 2:45- 3:30 pm Developing a Regional Approach for Cost

Effectiveness

• 3:30-4:00 pm Break

• 4:00-5:00 pm Develop Action Plan & Closing Remarks



Laying the Groundwork for Rate Setting

Facilitator



Timothy Schoonhoven
Policy Analyst
National Governors Association

Speakers



Dave Mason
Associate Water Resources Engineer
CDM Smith & Past President
Tennessee Stormwater Association



Jennifer Watson
Stormwater Coordinator
City of Gallatin, Tennessee



Laying the Groundwork for Rate Setting

David Mason, PE, PMP
Jennifer Watson

September 17, 2020





Presentation Agenda

- Establishing the Need for Funding
- Stakeholder Engagement
- What Can States and Local Organizations Do to Help
- Questions and Discussion



Is A Stormwater Utility Right for You?

 Over 1,800 documented stormwater utilities nationally (39 states and the District of Columbia)

- Large range in size
 - Smallest: Indian Creek Village, Florida (pop: 88)
 - Largest: Los Angeles, California (pop: ~ 4 million)
 - Average Population: 66,153
 - Median Population: 18,217

Data Source: Western Kentucky University Stormwater Utility Survey 2020



What is the First Step in the Process? Identify the Drivers for the Program

- Regulatory programs (i.e. "unfunded mandates")
- Backlog of capital improvement projects (CIP)
- Aging infrastructure
- Public demand for service

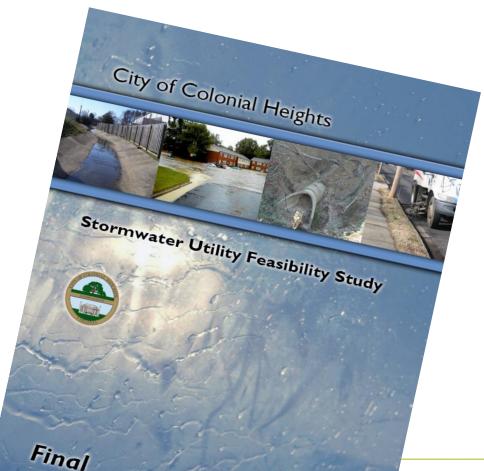




What Are You Currently Doing to Address These Challenges?

 Identify all stormwater-related services performed by your program

- Estimate costs to provide these services
- Identify the benefits gained by the community as a result of these services



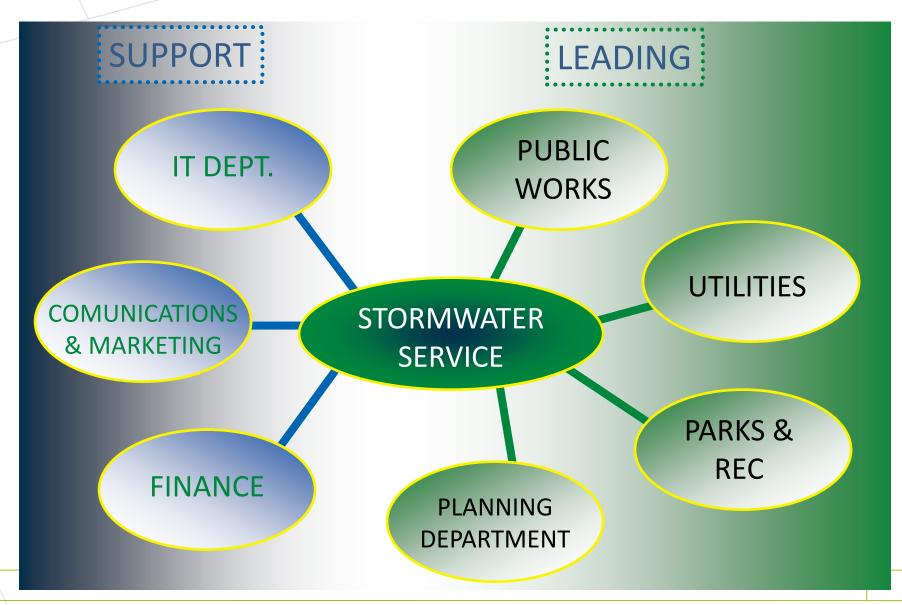


Stormwater Management Functional Areas Simplifying the Complexities

PROGRAM MANAGEMENT	REGULATORY COMPLIANCE
Master planning	☐ NPDES (i.e. 6 minimum measures)
Complaint response	☐ TMDL compliance
Development review	
OPERATIONS AND MAINTENANCE	CAPITAL IMPROVEMENT PROJECTS (CIP)
	PROJECTS (CIP) ☐ Storm System Upgrades &
MAINTENANCE	PROJECTS (CIP)



Stormwater Services – A City-Wide Function





How Do We Quantify These Services & Costs?

- Interview staff in all departments
 - What stormwater services are provided
 - What staff/equipment is utilized to perform the services
 - How effective are the services
- Review annual budgets and reports
 - Identify appropriate budget line items
 - Apply information learned from interviews



Summarize the Cost of Service By the Four Functional Areas

Primary Stormwater Program Costs	Program Management	Regulatory Services	Operation & Maintenance	Capital Improvements	Totals
Utilities					
Non-Departmental	\$19,000				\$19,000
Stormwater System Maintenance	\$162,000		\$234,000		\$396,000
Public Works					
Streets		\$30,000	\$483,000		\$513,000
Engineering	\$139,000	\$4,000			\$143,000
Parks / Grounds		\$4,000	\$71,000		\$75,000
Refuse		\$5,000	\$171,000		\$176,000
Community Development					
Zoning and Natural Resources		\$166,000			\$166,000
Inspections/Code Enforcement		\$26,000			\$26,000
Planning		\$177,000			\$177,000
GIS	\$22,000				\$22,000
Parks & Recreation		\$45,000			\$45,000
Soil and Water Conservation District		\$10,000			\$10,000
Capital Improvements				\$554,000	\$554,000
SUBTOTALS	\$342,000	\$467,000	\$959,000	\$554,000	\$2,322,000
Other Storm-Related Program Costs	Program Management	Regulatory Services	Operation & Maintenance	Capital Improvements	Totals
Loose Leaf Collection			\$319,000		\$319,000
Transportation Capital Projects				\$1,340,000	\$1,340,000
Vehicle Depreciation			\$187,000		\$187,000
SUBTOTALS	\$0	\$ 0	\$506,000	\$1,340,000	\$1,846,000
TOTALS	\$342,000	\$467.000	\$1,465,000	\$1.894.000	\$4.168.000



What Does This Cost of Service Provide for Your Community?

LOS

Customer Expectations

- Erosion
- Water Quality
- Flood protection
- Safety
- Aesthetics

Important Questions
Regarding Stormwater
Level of Service

- 1. Citizens' choice, but how much \$\$?
- 2. Regulations define the minimum, but should we do more?

Regulatory Requirements

- NPDES
- 303d List
- TMDLs
- FEMA Floodplain



What Does This Cost of Service Provide for Your Community?

Level of Service	Program Management	Regulatory Compliance	Operation and Maintenance	Capital Improvement Projects
A or 5	Comprehensive Planning & Full Implementation Capabilities	Exemplary Permit Compliance	Fully Preventative/ 100% Routine	Prioritized / Fully-Funded
B or 4	Pro-Active Planning & Systematic CIP Implementation Capabilities	Pro-Active Permit Compliance	Mixture of Routine and Inspection Based	Phased Implementation / Allocated Budgets
C or 3	Priority Planning & Partial CIP Implementation Capabilities	Minimal Permit Compliance	Mixture of Inspection and Responsive Based	Complaint, Inspection-Based / Moderate Budget
D or 2	Reactionary Planning & Minimal CIP Implementation Capabilities	Below Minimum Permit Compliance	Responsive Only	Critical Needs Only / Minimum Budget
F or 1	No Planning & No CIP Implementation Capabilities	Non-Compliance	Non-Responsive	No Planning / No Budget



If You Don't Think Your Choice of How to Do Ratings Matters?

City gets 'F' for stormwater management

MOST POPULAR

- 1 Police chase from OR to Jefferson Co. Jul 24 at 6:57 PM
- 2 The Groves at Oak Ridge: 17 residents have tested positive for virus, 1 died Jul 28 at 6:17 PM
- **3** 4th virus death in AC, active cases 219

Jul 27 at 5:46 PM



▲ HIDE CAPTION

CDM Smith engineer David Mason, at right, gave a presentation on stormwater to Oak Ridge city Council.



The Bar Has Been Set Where Do We Go From Here?

Level of Service	Program Management	Regulatory Compliance	Operation and Maintenance	Capital Improvement Projects	Total Program Cost	
	\$1,137,000	\$828,000	\$1,712,000	\$854,000		
A or 5	A or 5 Comprehensive Planning & Exemplary Permit Complian		Fully Preventative/ 100% Routine	Prioritized / Fully-Funded	\$4,531,000	
\$790,000		\$530,000	\$1,487,000	\$754,000		
B or 4	Pro-Active Planning & Systematic CIP Implementation Capabilities	Pro-Active Permit Compliance	Mixture of Routine and Inspection Based	Phased Implementation / Allocated Budgets	\$3,561,000	
	\$551,000	\$384,000	\$1,262,000	\$654,000		
C or 3	Priority Planning & Partial CIP Implementation Capabilities	Full Permit Compliance	Mixture of Inspection and Responsive Based	Complaint, Inspection-Based / Moderate Budget	\$2,851,000	
Existing	\$342,000	\$290,000	\$1,146,000	\$554,000		
LOS (2.5)	Well-Trained, In-House Staff Minimal Long Range Planning	Minimum Permit Compliance Resources At Capacity	Limited Routine Activities Lack of Dedicated Resources	Critical Needs Only / Minimum Budget	\$2,332,000	



Stormwater Utility 101 What is It? How Does It Work?

- Enterprise Fund Similar to Water, Wastewater, Electric Utilities
- Dedicated Funding through User Fee
- Fee Related to Needs or Services Provided



If it walks like a duck...

How is the Fee Calculated? Residential Customers



Single Family Units

Multi-Family Units

Condominiums

Mobile Homes



Each is assigned 1 or less Equivalent Residential Unit (ERU) depending on type and number of dwelling units.

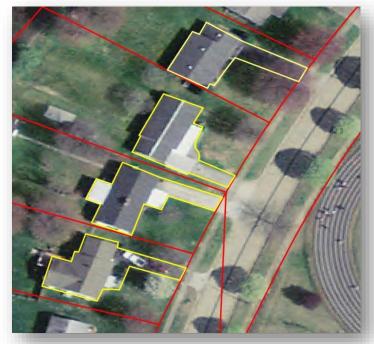
Fee = ERU x Rate (\$ per ERU per month)

Average monthly fee nationally for single-family residential is \$5.87



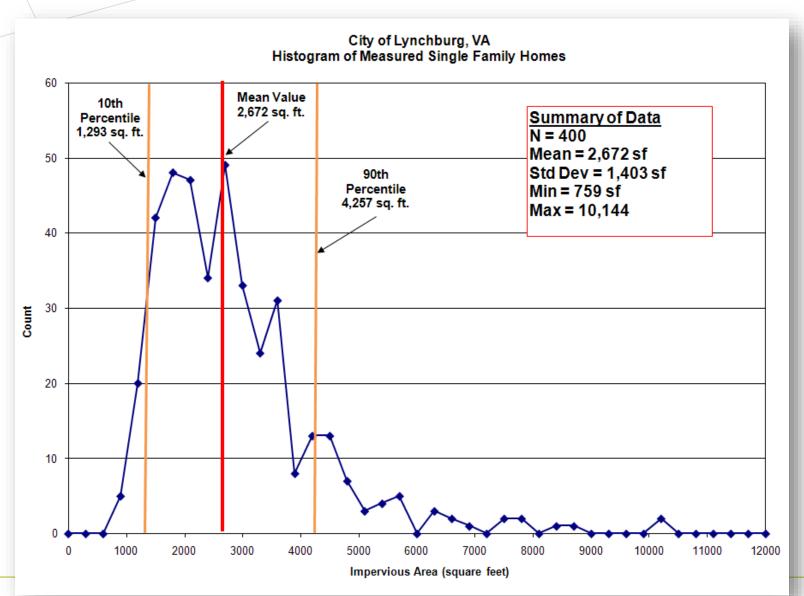
What Data is Needed to Determine the ERU?

- Acquire aerial photography of your area
- Randomly select a statistically significant sample of residential properties (typically 300-400 parcels)
- Properties should be selected from multiple property classes
- Measure the impervious area of sampled properties
 - Option: aerial photo interpretation
- Calculate the average or median of sampled properties





An Alternative to the Standard ERU Method





This Analysis Leads to a Tiered Approach to Residential Customer Billing (SFU Method)



< 1,293 Sq. Ft. = 0.48 SFU



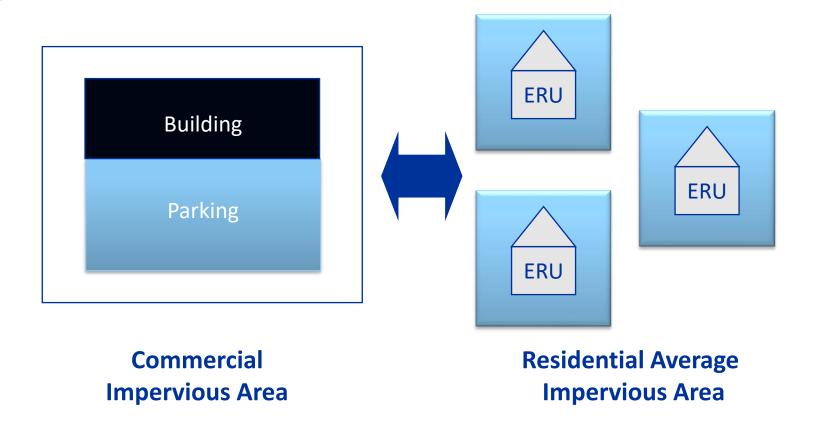
1,294 to 4,256 Sq. Ft. = 1.0 SFU



> 4,257 Sq. Ft. = 1.59 SFU



The ERU Becomes the Base Unit By Which All Other Properties are Compared



In this example, the commercial customer pays three times the amount as the residential customer.



Real World Example of ERU Calculation for Non-Residential Property



554,750 sq. ft (Building + Parking)

Equivalent Res. Unit (2,043 sq. ft./ERU)

272 ERUs



Build a Rate Model to Evaluate Options

- Consider rates for various levels of service to estimate cost burden on customers
- Consider how rates change with different rate structure options
- Include estimate of collections and impacts of credit policies

	Annual			ERU	SFU	
LOS	Program Cost		Rate		Rate	
5	\$	2,258,000	\$	5.55	6.53	
4	\$	1,879,000	\$	4.64	5.46	
3	\$	1,573,000	\$	3.90	4.59	
Exist	\$	1,096,000	\$	2.75	3.24	



Let Your Stakeholders Weigh in on the Decision

Level of Service	Operation and Maintenance		Program Management and Compliance		Capital Improvement Projects	
	Program	Stakeholder	Program	Stakeholder	Program	Stakeholder
	Components	Voting Tally	Components	Voting Tally	Components	Voting Tally
A	Fully Preventative/ 100% Routine	9	Comprehensive Planning, NPDES Compliance, Full Implementation	7	\$6 million/year (16-year program)	7
В	Mixture of Routine and Inspection Based	7	7 Pro-Active Planning, NPDES Compliance, Systematic Implementation		\$4 million/year (25-year program)	9
С	Inspection Based Only	6	Priority Planning, NPDES Compliance, Partial Implementation	6	\$3 million/year (33-year program)	6
D	Responsive Only	0	n/a	0	\$2 million/year (50-year program)	0

SWAC voted to increase LOS from \$6.5 M to \$12 M annually



Exemptions

"Don't Throw the Baby Out with the Bath Water"

- Limit the number of exemptions offered, typically just the properties required in State Law
- Common exemptions offered by most utilities
 - Federal, state and local roadways
 - Undeveloped properties
- Other exemptions for consideration
 - Railroad corridors
 - Greenway trails/systems
 - Cemeteries

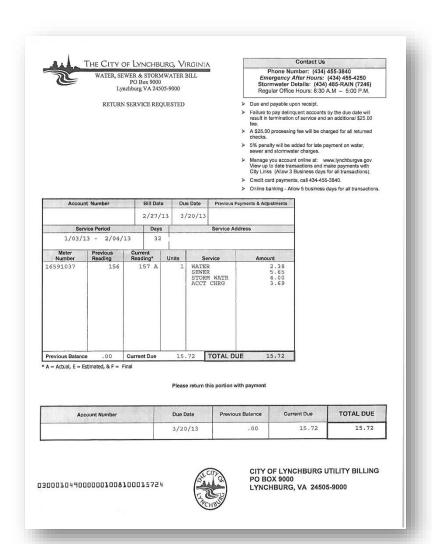
New Jersey
law only
exempts
agriculture
and
horticulture





Potentially Your Most Important Decision How Are We Going to Bill This?

- Facilitate a meeting with utility billing and IT staff to discuss options
- External agencies may be an option as well
- Primary options to consider:
 - On a customer's monthly or bimonthly utility bill
 - As a <u>fee</u> on a property owner's annual property tax bill
 - On a separate, stormwater bill
 - Combination





Some Important Questions to Discuss

- Can you physically get the charge on the bill? (i.e. is there an open space to do so)
- What is the best method to reach every property?
- Do you have a preference for billing the owner vs. the tenant?
- Will the new fee require software programming/enhancement to your existing system?



The Public must want the stormwater <u>service</u> provided by the new revenues before they will agree to pay for them.



General Guide for Public Awareness and Acceptance

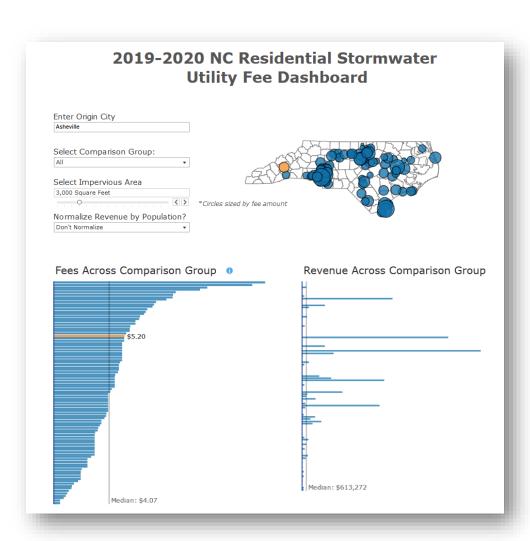
- Define the public involvement team.
 - Municipal Staff
 - Agency Partners
- Assess Community Needs
- Define Targets and Focus Groups
- Stormwater Funding Advisory Committee
- Find a Champion
 - Elected Official or Manager
 - May Come from Committee
- Prepare for a Two-Way Dialogue





What Can States Do to Help

- Develop a model ordinance that complies with State Law
- Maintain a survey of rate structures and rates throughout the State
- Provide technical guidance (workshops, website, manuals)
- Provide grant money for feasibility studies





Summary

- Do your homework and know your community well before you start
- You must sell the <u>service</u> before selling the <u>fee</u>
- A stakeholder process can be the difference between success

and failure of your efforts

- Internal and external education can prevent "surprises" at the 11th hour
- Stormwater utilities can be appropriate for communities of any size





Thank You for Your Time and Attention!

Questions?

David Mason: masond@cdmsmith.com

Jennifer Watson: jennifer.watson@gallatintn.gov





Break Until 2:45

Developing a Regional Approach for Cost Effectiveness

Facilitator



Bevin BuchheisterSenior Policy Analyst
National Governors Association

Speakers



Pam Shellenberger
Chief, Long Range Planning
York County Planning Commission



Fernando Pasquel
Stormwater Institute Advisory
Committee
Water Environment Federation



DEVELOPING A REGIONAL APPROACH FOR COST EFFECTIVENESS

New Jersey Stormwater Utility

Virtual In-State Retreat



Economic Affordability Regional Stormwater Utility Regulatory Community **Compliance** Acceptance

September 17, 2020

Speakers and Moderator



PAM SHELLENBERGER

- Chief, Long Range Planning
 York County Planning Commission
- Administrator, York County Stormwater Consortium
- Contact: 717-771-9870, x1768, pshellenberger@ycpc.org



FERNANDO PASQUEL

- Senior Vice President, Arcadis
- National Director, Stormwater and Watershed Management
- Chair, WEF Stormwater Institute Advisory Committee
- Contact: 703-842-5621, fernando.pasquel@arcadis.com





- Senior Policy Analyst,
 National Governors Association
- Contact: 202-595-2681, bbuchheister@nga.org



Benefits of Regional Cooperation



Approach and Considerations



Case Studies



Q & A

Why is a Regional Approach Needed?

560 jurisdictions with similar stormwater requirements

Lack of funding for addressing stormwater needs

Economies of scale for SWU implementation

Stormwater problems do not follow municipal boundaries

Cost sharing of compliance and project costs

It works for other sectors (Water, Sewer, Electricity)

Benefits of Regional Cooperation

Improve acceptance by having a uniform stormwater funding approach and policies Create opportunities for developing watershed solutions and reduce project costs

Leverage existing cooperation and regional agreements

Streamline program implementation to reduce regulatory compliance and O&M costs

Increase access to grants and innovative funding sources

Regional Approach Decision Process



Implementation Considerations

- Scale and levels of participation
- Regulatory agency interaction
- Leadership and roles Governance
- Services to be provided
 - At regional level
 - At municipal level
- Elected officials buy-in
- Funding strategy
 - Sources diversify and leverage
 - Performance metrics



Policy Considerations

- Which communities participate in regional study?
 - How would the regional utility impact local organization and staffing?
 - How are funds going to be collected (billing) and distributed?
 - Who implements the projects and O&M activities regional and local roles?
- How do we maintain uniformity in rates and policies?
- Who is accountable and responsible for compliance and reporting of regional operations?

Albany Pool Communities, NY Overview of Feasibility Study Project

Regional Stormwater In-Lieu Fee and Credit Banking Programs

Task 1: Data Collection and Review

Compile background information on Albany Pool Communities (APCs) stormwater programs

Task 2: Regulatory Authority and Governance

Identify regulatory and legal factors in to be considered in developing an organizational structure that supports regional funding

Task 3: Research ILF and Credit Banking Programs

Compile information from other established ILF and Credit Banking programs

Task 4: ILF and Credit
Banking Concept Workshop

Discuss merits, pitfalls, lessons learned and overall applicability to Albany Pool Communities

Task 5: Feasibility
Assessment and Report

Presentation of findings and the assessment of the feasibility for the Albany Pool Communities

Feasibility Study Findings

- 1. Regional approaches are growing in popularity as a way to enhance the cost effectiveness of stormwater management
- 2. A limited number of programs have been implemented mostly by larger municipalities. Municipalities had flexibility to meet onsite requirements with offsite mitigation.

3. Advantages:

- Flexibility to achieve stormwater compliance through either offsite or onsite options.
- Ability to drive compliance measures to priority areas

4. Challenges or Limitations

- Scale needed for viable credit banking/trading program
- Eligibility across watershed boundaries
- Program implementation and administration cost

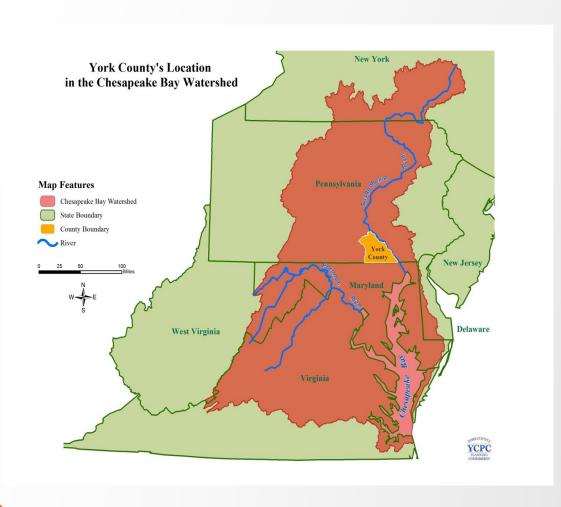
Options Considered for the APCs

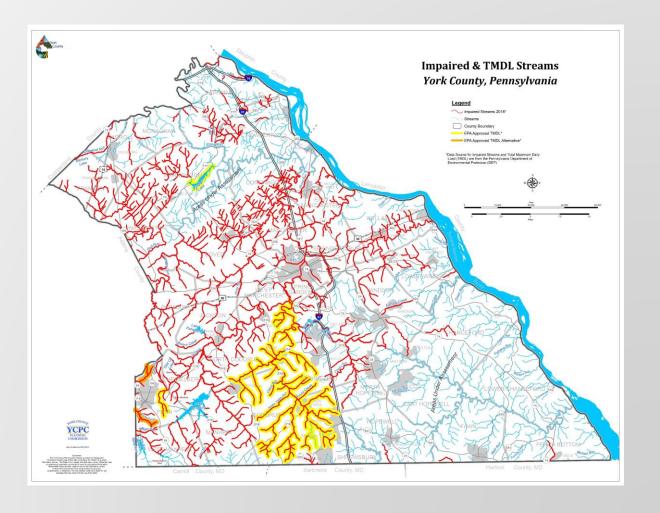
- Establish <u>only</u> in-lieu fee program
- Establish <u>both</u> in-lieu fees and credit banking / trading programs
- Implement planning and administration <u>separately</u>
- Implement planning <u>regionally</u>, but administer programs <u>separately</u>
- Implement planning and administration <u>regionally</u>

Sample Potential Program Suitability

Community	In-Lieu Fees	Credit Banking
City of Albany		
City of Cohoes		
City of Rensselaer		
City of Troy		
City of Watervliet		
Village of Green Island		

York County, PA Location in the Chesapeake Bay Watershed





York County's Journey to Improve Water Quality

Integrated Water Resources Plan

(IWRP)



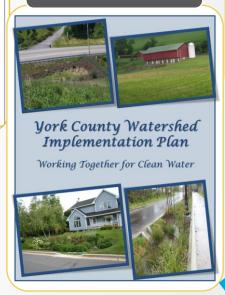
A component of the York County Comprehensive Plan

Integrated Water Resources Plan

IWRP

WIP

Watershed Implementation Plan



YORK COUNTY REGIONAL CHESAPEAKE BAY POLLUTANT REDUCTION PLAN

(2018-2023)

SUBMITTED TO PA DEP SEPTEMBER 15, 2017



PREPARED BY THE YORK COUNTY PLANNING COMMISSION AND HERBERT, ROWLAND & GRUBIC, INC IN COOPERATION WITH THE REGIONAL CREPRE MUNICIPAL STEERING COMMITTEE

FUNDED THROUGH THE USACE Section 22 PROGRAM, YORK COUNTY, AND THE

Regional Chesapeake Bay Pollutant Reduction Plan

CBPRP (2)

SWA Study

Stormwater Authority Feasibility Study



York County Stormwater Authority Feasibility Study York County Planning Commission



YORK COUNTY STORMWATER AUTHORITY IMPLEMENTATION PLAN



FINAL SUMMARY REI





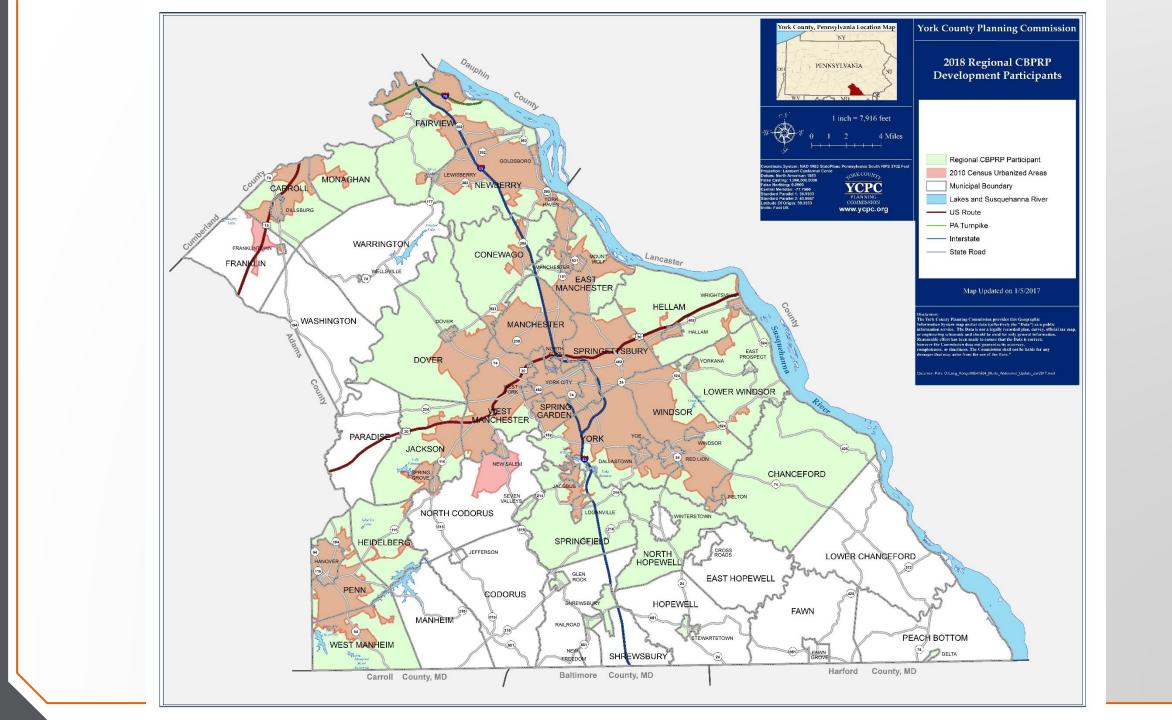
Stormwater Authority Implementation Plan

SWAIP

York's
Countywide
Action Plan
for Clean
Water



CAP



York County Regional CBPRP

YORK COUNTY REGIONAL CHESAPEAKE BAY POLLUTANT REDUCTION PLAN (2018-2023)

SUBMITTED TO PA DEP SEPTEMBER 15, 2017 (REVISED AND RESUBMITTED OCTOBER 10, 2017)



PREPARED BY THE YORK COUNTY PLANNING COMMISSION AND HERBERT, ROWLAND & GRUBIC, INC IN COOPERATION WITH THE REGIONAL CBPRP MUNICIPAL STEERING COMMITTEE

FUNDED THROUGH THE USACE SECTION 22 PROGRAM, YORK COUNTY, AND THE YORK COUNTY COMMUNITY FOUNDATION

- Requirement for MS4 Permit holders
- Pollutant reduction goal is 6.5m lbs/sediment/year
- Implemented through an Intergovernmental Cooperation Agreement
- 45 participants together will contribute \$12.8 million over 5 years
- Committed for 5 years (through December 2023)

CSWC REGIONAL CBPRP BENEFITS

- No cost to municipalities for Plan development
- Participation by DEP throughout Plan development
- Cost efficient for MS4 municipalities & other participants
- Municipalities get credit for pollutant reductions regardless of where project located in the planning area
- Projects located in 4 primary watersheds; not each huc-12 level watershed
- Implement more efficient and effective BMP's
- Priority for grant funding
- Partnership with non-municipal MS4's





YCSWC REGIONAL CBPRP LESSONS LEARNED

- Important to approach DEP with specific requests and justify why the "ask" is essential
- Obtain/Maintain documentation of DEP responses in writing
- Municipalities need to clearly understand their role in Plan implementation
- YCSWC funds are municipal monies, therefore municipal procurement process required
- Public/Private Partnerships can help reduce the municipal financial burden
- Importance of water quality monitoring
- MS4 municipalities struggling to meet the escalating costs of regulatory compliance;
 SWA options being considered





Ingredients for Success

Lead
Agency
with
Dedicated
Staff

Engage EPA & DEP

Cost Savings

Regulatory Consideration Public Private
Partnerships
&
Patience,
Persistence,
Professional
help



Conclusions



A regional approach to planning and funding improves acceptance and can reduce costs



Use lessons learned from other areas and build on regional cooperation to improve your chances of success



Implementation success: share program vision, obtain leadership and stakeholder buy-in, define benefits and risks



New Jersey has good enabling legislation and stormwater problems are understood, but funding remains a challenge

Q & A

YOUR COMMENTS
OR QUESTIONS
ON THE
REGIONAL
APPROACH:

- Concerns with the regional approach?
- Do you have examples of existing regional cooperation – activities, drivers, etc.?
- Other?

THANK YOU!

PAM SHELLENBERGER

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BEVIN BUCHHEISTER

202-595-2681, bbuchheister@nga.org

FERNANDO PASQUEL

703-842-5621 fernando.pasquel@arcadis.com



Break Until 4:00



Developing Action Plan & Closing Remarks



Conclude Retreat