# LOCAL STORMWATER UTILITY IMPLEMENTATION PROCESS: LESSONS LEARNED

**New Jersey Stormwater Utility** 

**Virtual In-State Retreat** 



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#### **Speaker and Moderator**





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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



### **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 Permit Management	Design Criteria and Standards Field Data Collection Design & Engineering Hazard Mitigation Zoning & Planning Support GIS & Database Mgmt. CSO program Source Water Protection	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 Assistance	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**



#### **How Are Fees Determined?**

#### The stormwater management fee is based on...

• The proportionate contribution of stormwater runoff from a property (8.b)

UTILITY BILLING

- 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 cos			
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	INNOVATIVE			
Stormwater utilities and taxing districts	Capital markets (EIB, incentives)			
General appropriation revenues	Cost sharing			
Grant and loan programs	Private and non-profit sources			
Municipal bonds	Public-private partnerships			
Fee in-lieu-of programs	Mitigation banking and credit trading			
Developer funding	Water quality and volume trading			
Water / wastewater revenues	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



- 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 <u>shall</u> provide for (8.c):

(1)a partial fee reduction in the form of <u>a credit for **any** property that maintains</u> <u>and operates a stormwater management system</u> 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 and other charges for land actively devoted to agricultural or horticultural use 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.)."</u>

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#### **Credits Can Facilitate Stakeholder Buy-In**

Credits provide C incentives to implement in 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**



### **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%	<b>Water Quality &amp; Quantity</b> (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.)		

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### **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
  Reduction



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	•			$\overline{}$		
Customer Understanding						
Public Acceptance	$\overline{}$					
Equitable				+		
Revenue Collection	•	•		$\overline{\mathbf{igar}}$		

#### **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





Collaborate with Regional Planning Agencies

> 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

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		- Mark	- 20	201	50	ಂಶ
	1.0 Program Review					
	1.1 Pogram Objectives					
	1.2 SWM Infrastructure Inventory					
8	1.3 SWM Maintenance Evaluation					
E	1.4 Program Needs, LOS, Costs					
	1.5 SWM Program Revenue Requirements					
	Task 1 Deliverables	X	X	х		
	2.0 Bublic Outro pob / Education					
	Tesk 2 Deliverebles		v		v	v
	2.0 Organization & Staffing		~		~	~
	Tesk 3 Deliverebles			v		
				~		
	4.1 Options for Evaluation					
-	4.2 Development of Equivalent Residential Unit					
2	4.3 Ordinances					
Ē	Task 4 Deliverables		x		х	x
	5.0 Credit Policy					
	Task 5 Deliverables					х
	6.0 Billing Requirements					
F	Task 6 Deliverables				х	х
	7.0 Appeals Process					
	Tas k 7 Deliverables				Х	Х
=	8.0 Program Implementation					
	Task 8 Deliverables				X	X
	Other implementation tasks to be added as needed					

### 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!**

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