

## Stormwater Financing

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April 16, 2009

## Today's Agenda

- Basics of Stormwater Utilities (Laura Chan)
- Examples (Marlou Gregory)
- Open Discussion (All)

## Compelling Needs



Public Responsibility for a Public Problem

## Drivers for Stormwater Programs

- ✓ Flooding problems
- ✓ Aging infrastructure
- ✓ Development pressures
- ✓ Water quality and ecology
- ✓ Regulatory mandates
- ✓ Quality of life and aesthetics
- ✓ Preservation of property value
- ✓ Drinking water protection and replenishment
- ✓ Erosion of channels and creeks
- ✓ Recreation or fisheries
- ✓ Lawsuits



## How to pay for improved stormwater services?

- ~ 125 "funding" methods and variations for local governments (some better than others).
- BIG difference between "resources", "money", and "revenue"
- Determine what works best for each locale based on needs and possibilities
- Can implement changes in stages

## Getting Started... Understand Your Program Needs

1. What are we doing now?
2. What should we be doing?
3. What could a future program do or accomplish that we cannot do today?



## Getting Started... Understand Your Current Program

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- ✓ Water Quality
- ✓ Physical Drainage
- ✓ Operations and Maintenance
- ✓ Planning, Design, and Engineering
- ✓ Capital Improvements and Expenditures
- ✓ Regulation and Enforcement
- ✓ Administration, Finance and Program Development

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## Getting Started... Identify Priorities

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- What can a stormwater program help us improve upon?

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## Program Analysis

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- Water Quality?
- Inspection, Regulation and Enforcement?
- Operations and Maintenance?
- Planning, Design, Engineering?
- Capital Improvements and Expenditures?
- Administration, Finance, and Program Development?
- Public Education?

Doing	Should	Could

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## Financial Analysis

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*Weighing revenue options...*

### 1) Costs or Uses of Funds

- Needs
- Priorities
- Levels of Service
- Cost of Service

### 2) Revenue or Sources of Funds

- Taxes
- Grants
- System Development Fees
- Review Fees
- "Utility"/Stormwater fees
- Other

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## Building Blocks for Funding

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Resource	User Fee	Volunteers	Fines
Impact Fee	Bonding	General Fund	Tax Assessment
Shared Costs	Inspection Fees	Grants	Special Sales Tax

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## Resources, Money, and Revenue

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- Resources: "free", non-monetary, donated, volunteer, goods and services
- Money: one-time, unpredictable, undependable, episodic, limited
- Revenue: regular, predictable, budgeted, cash flow



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## How much of this can you cover with resources and money?

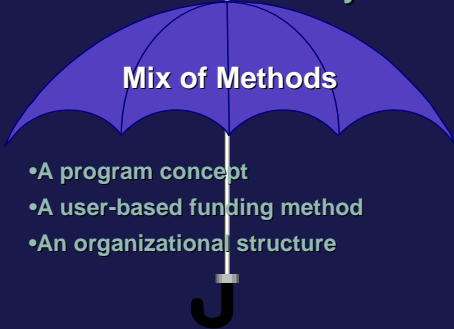
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1. Administration
  - General Administration
  - Gen Prog Planning & Dev
  - Interlocal Coordination
  - Grants Program
2. Billing And Finance
  - Billing Operations
  - Customer Service
  - Financial Management
  - Indirect Cost Allocation
  - General Government Support
3. Public Ed & Involvement
  - Public Awareness
  - SW Qual Ed & Reporting
  - Public Involvement
  - Citizen's Advisory Group
  - Non-profit Integration
  - Media Relations
  - Risk Communications
4. Technical Support
  - GIS Applications
  - Database Management
  - Mapping & Imagery
  - General Data Collection
  - Web & Customer Support
5. Engineering & Planning
  - DEC Criteria, Stds and Guidance
  - Field Data Collection
  - Quality Master Planning
  - Design, Field & Ops Engr
  - Retrofitting For Water Quality
  - Hazard Mitigation
  - Zoning Support
  - Multi-objective Planning Support
6. Operations & Maintenance
  - General Maintenance Mgmt
  - General Routine Maintenance
  - General Remedial Maintenance
  - Emergency Response Maint
  - Infrastructure Management
  - Public Assistance
7. Capital Improvements
  - Major Capital Improvements
  - Minor Capital Improvements
  - Land, Easement, and ROW
8. Regulation And Enforcement
  - Code Dev & Enforcement
  - General Permit Administration
  - Drainage Sys Insp & Reg
  - Zoning & Land Use Reg
  - Special Inspection Programs
  - Flood Insurance Program
  - Multi-Obj Floodplain Mgmt
  - Erosion Control Program
  - Pest, Herb & Fertilizer
  - Used Oil & Toxic Materials
  - Spill Response & Clean Up
  - Illicit Con & Illegal Dumping
  - Groundwater & Drinking Water
  - Watershed Assessment & TMDL
  - Septic & I&I Program
  - Industrial Program
  - Monitoring

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## What is a Stormwater Utility?

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**Mix of Methods**

- A program concept
- A user-based funding method
- An organizational structure

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## Advantages of Sustainable Stormwater Funding

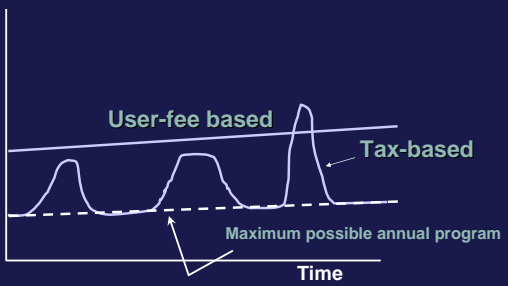
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- ✓ Stable
- ✓ Adequate
- ✓ Flexible
- ✓ Equitable

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## Stable Utility vs. Tax or "Money" Funding

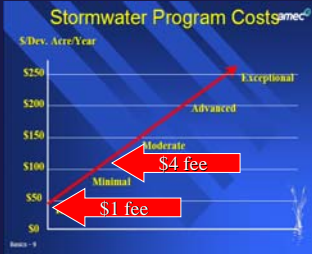
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## Adequate

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For every \$1 dollar per month per house (and appropriate fees to non-residences), a utility can typically generate about \$25 to \$35 per developed acre per year.

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## Flexible



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- ✓ Primary source for the whole program
- ✓ Other fees to enhance equity
- ✓ Credits to encourage good performance
- ✓ Can be geographically based
- ✓ Can take into account environmental costs
- ✓ Can encourage LID designs

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## Equitable


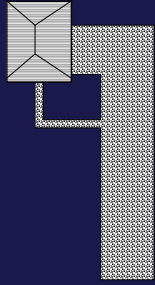



- Costs are driven by:
  - runoff peak
  - runoff volume
  - runoff pollution
- Each of these variables is directly related to impervious area in an urban setting.

*"The more you pave the more you pay."*

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## How a fee can be calculated


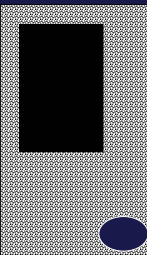




Equals 1.0 ERU

Say it is 2500 sq ft

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## How a fee can be calculated


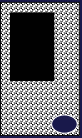
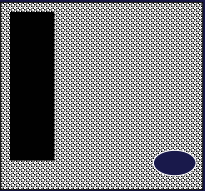
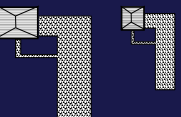
= 1 ERU

= 40 ERUs less credit

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## Typical Properties

\$4.00/month charge


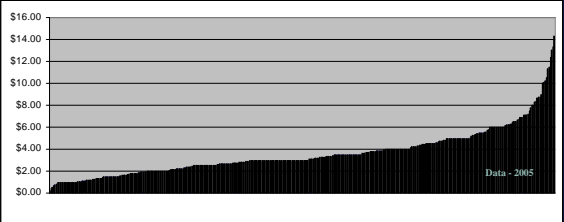





2 tiers residential

Fast Food	200,000 sq ft shopping	Large Res.	Small Res.
\$62.72/mo less credit	700,000 sq ft impervious	\$5.50/mo	\$2.50/mo
	\$1121.20/mo less credit		

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## Sample of Range of SW Fees

Average - \$3.60 per month per billing unit

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## Legal Considerations




- ✓ Fair and reasonable
- ✓ Not illegally discriminatory or confiscatory
- ✓ Costs substantially related to provision of facilities and services
- ✓ Legal by charter or legislation
- ✓ Proper procedures followed


25% Challenged in the courts

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## Who will not like the concept?

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- ✓ Tax exempt properties
- ✓ People with large paved areas with cheap buildings
- ✓ Fixed income
- ✓ Sometimes developers don't like it
- ✓ Maybe everybody !!




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## Education and Outreach

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- Key Stakeholders
  - Identify
  - Educate
  - Involve
- Public
  - Outreach
  - Education



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## Messages

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- ✓ Why do we need to make changes?
- ✓ Why do we feel it is necessary?
- ✓ What problems are we solving?
- ✓ Why do we need new sources of revenue?
- ✓ How will users be charged?
- ✓ Why is this more equitable?




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## The Process

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```

    graph TD
      A[DIMS Study] --> B[Feasibility Study]
      B --> C[Utility Implementation]
  
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## Advisability Study DIMS (does it make sense...at all)

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- A DIMS study takes quick and dirty look at whether it is advisable to begin the process of stormwater utility development and outlines a general roadmap, costs, and approach.
- It answers the question, "does this make sense at all?"

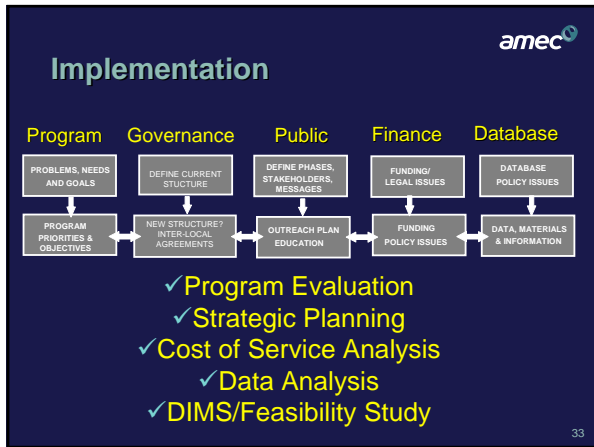
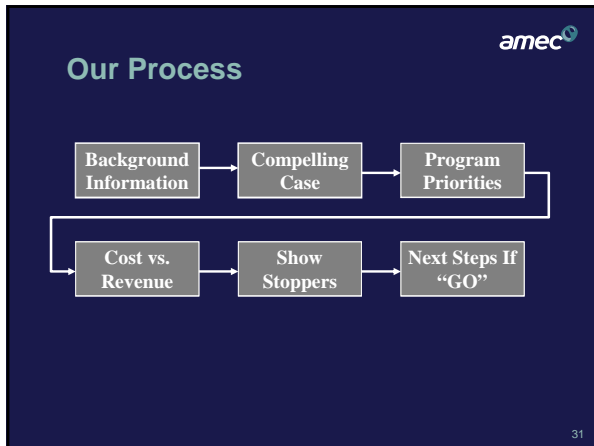
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## Feasibility Study

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A feasibility study takes a group of staff and citizens on a walk through all the key aspects of utility development without committing to utility development until all concerned agree it is the right way to go.

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- ## Really, it would have worked, but ...
- We didn't understand the process.
  - We didn't involve the community early enough or in the right ways.
  - We couldn't explain our program and funding strategy or rates.
  - We didn't prepare our elected officials for complaints.
  - We did it the convenient and inexpensive way, not the right way.
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## Questions?

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## Stormwater Program Financing Regional Approaches

Marlou Gregory  
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Prepared for  
Chittenden County, Vermont  
April 16, 2009

## Qualities of Effective Programs for SW Mgmt

- ◆ Strategic **planning** occurs – continuously
- ◆ **Leadership** – clearly defined
- ◆ Capital **reinvestment** stabilized
- ◆ **Public involvement** throughout program
- ◆ **Maintenance** resources planned and proactive
- ◆ Hazard management – **planned and communicated**
- ◆ Funding is **stable and equitable**

## Creating & Meeting Expectations



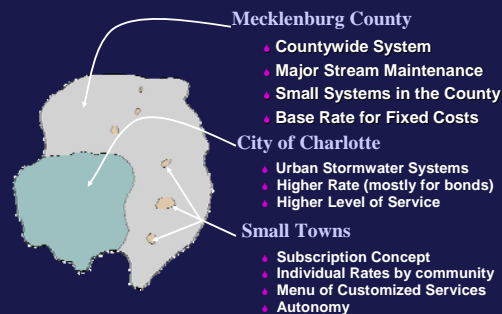
## Examples of Multi-Jurisdictional Approaches

- City of Charlotte/Mecklenburg County, NC
- Metropolitan Sewer District, Louisville and Jefferson County, Kentucky
- Sarasota County, Florida
- NEORS, Ohio

## Charlotte/Mecklenburg Co. North Carolina

- ◆ 8 jurisdictions (City, County and 6 small communities)
- ◆ 8 separate user-fee rates
- ◆ City provides administration for fee collection and revenue distribution
- ◆ Services vary by need within each community
- ◆ Use of bonds for capital program very successful
- ◆ County focuses on major stream segments in all communities
- ◆ City is Phase I NPDES: others are Phase II

## Charlotte-Mecklenburg Stormwater Utility Structure



## Charlotte-Mecklenburg, NC

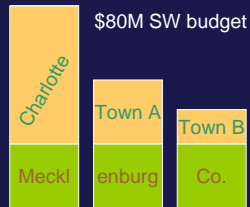
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- **Countywide stormwater utility**

- County: major systems
- City/towns: local systems
- Collaborate on NPDES

- **One bill – “Menu” concept with composite fee**

- **Wide range of local programs**



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## MSD, Louisville and Jefferson County, KY

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- ◆ Consolidation of flood control and stormwater management with a regional wastewater collection and treatment program provided by MSD
- ◆ MSD service area is virtually county-wide.
  - ◆ Most of the smaller cities and towns in Jefferson County do not perform stormwater management function
- ◆ MSD is funded principally by wastewater and stormwater service fees which are independently structured, billed, and accounted for.
- ◆ Board is appointed by the now consolidated Metro government council which directs the amalgamated County and City

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## MSD SW Services

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- ◆ Watershed-based master planning throughout the County;
- ◆ A consolidated NPDES permit administered by MSD;
- ◆ Broad range of functions that include a major flood control program responsible for approx. 29 miles of levees and other protection works along Ohio River;
- ◆ Staff of more than 600 that performs both WW and SW administrative, engineering, operational, regulatory, and infrastructure improvement and management functions. The staff is cross-trained to obtain efficient operations .

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## Sarasota County, FL

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- ◆ Unincorporated areas of County plus City of Sarasota.
  - ◆ Limited to those facilities located in publicly-owned properties and rights-of-way and those within dedicated easements
- ◆ There are four cities in Sarasota County. The city of Sarasota relies on the County to improve its drainage system and perform most stormwater operations.
- ◆ The other three cities retain responsibility for local stormwater systems.

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## Sarasota County, FL

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- ◆ Funded by benefit assessments on properties in the County and inter-governmental agreement in the City of Sarasota.
- ◆ 3 components consistent across the service area, and one component (system capitalization) that is variable by watershed.
  - ◆ Customer Service and Administration
  - ◆ Master Planning
  - ◆ Maintenance

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## North East Ohio Regional Sewerage District, OH

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- ◆ NEORS is a regional agency that currently provides wastewater services for approximately one million people within Northeast Ohio
- ◆ Stormwater management program that covers 61 communities and 350 square miles
- ◆ Establishing a stormwater management program to complement their wastewater program.

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**NEORSD** amec

Two primary roles throughout the region

- (a) stream system manager for inter-municipal streams and
- (b) regional and watershed integrator.

Stream System Manager	Regional and Watershed Integrator
Planning and Modeling	Public Education and Outreach
Capital Construction	Coordination
Inspection and Maintenance	Technical Services
Monitoring	Customer Service
Information Support	Emergency Management
Multi-Objective Floodplain Management	Community Advocacy

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**Options for Cooperation** amec

- Partner with non-profits
- Private Partnerships
- Modify local programs
- Divide responsibilities
- Share costs with other municipalities
- Centralize efforts



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**The Problems are Solvable!** amec



- Understand what you are doing/ Identify Gaps/Needs
- Who could help?
- Open up dialogue/ determine feasibility
- Manage Expectations and Timing.
- Create a Comprehensive Program.
- Study organizational options.

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**Organizational Considerations** amec

- What level of government should lead?
- Multiple roles, multiple governments?
- Existing organization or new entity?
- Linkages and relationships with other agencies?
- Outsourcing and privatization opportunities?



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**Benefits will Result** amec

- Legal mandates will be addressed.
- Public safety will be improved.
- Flooding and erosion will be corrected.
- Transportation and mobility will be enhanced.
- Pollution will be reduced.
- Other municipal systems/programs will be protected.
- Disruption of life and business will be reduced.

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**Success or Failure – It is all in the process....** amec

- Follow the **steps** in each process.
- Involve the community **early** enough and in the right ways – GET PUBLIC SUPPORT.
- Make your program and user fee easy to understand.
- Prepare your elected officials for negative feedback – give them solutions.
- Think of the long-term benefits and recognize **the pain is worth the gain.**
- Spend the money it takes – you get what you pay for.



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