Managing Stormwater in Tough Economic Times

AMEC Environment & Infrastructure, Inc.

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And I used to say that stormwater wasn’t sexy!!
Logically speaking...

1. We are facing real, unresolved, and growing problems.
There are specific drivers for better stormwater programs:

- Flooding problems
- Aging infrastructure
- Development pressures
- Erosion of channels & creeks
- Shellfish Pollution
- Beach Closure
- Regulatory mandates
- Lawsuits
- Quality of life & aesthetics
- Preservation of property value
- Drinking water protection and replenishment
Logically speaking...

1. We are facing real, unresolved, and growing problems.
2. We can solve those problems together.
## Elements of a Comprehensive Stormwater Program

### 1. Administration
- General Administration
- Gen Prog Planning & Dev
- Interlocal Coordination
- Grants Programs
- LID Project Coordination

### 2. Billing And Finance
- Billing Operations
- Customer Service
- Financial Management
- Indirect Cost Allocation
- General Government Support
- Credit System Administration

### 3. Public Ed & Involvement
- Public Awareness
- SW Qual Ed & Reporting
- Public Involvement
- Citizen’s Advisory Group
- Non-profit Integration
- Media Relations
- Risk Communications
- Green and LID Education

### 4. Technical Support
- GIS Applications
- Database Management
- Mapping & Imagery
- General Data Collection
- Web & Customer Support

### 5. Engineering & Planning
- Des Criteria, Stds And Guidance
- Field Data Collection
- Quantity Master Planning
- 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
- LID Inspections
- Public Assistance
- Public-Private Partnerships

### 7. Capital Improvements
- Major Capital Improvements
- Minor Capital Improvements
- Land, Easement, And ROW
- Green Infrastructure

### 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
- NPDES
- Volume-based Controls
Logically speaking…

1. We are facing real, unresolved, and growing problems.
2. We can solve those problems together.
3. It will cost more than we are presently paying.
Stormwater Program Costs

$/Dev. Acre/Year

2012
The End of the World

2010 – “Green”

1990 – “NPDES”

1970 – “Master plan”

1950 - “Drainage”

Regulatory mandates or program anomalies can skew these numbers higher
Logically speaking...

1. We are facing real, unresolved, and growing problems.
2. We can solve those problems together.
3. It will cost more than we are presently paying.
4. A user fee is the best way to pay for it.
1. There are about
125 “funding”
methods and
variations for local
governments... some
better than others...
# Building Blocks for Funding

<table>
<thead>
<tr>
<th>Resource</th>
<th>User Fee</th>
<th>Volunteers</th>
<th>Fines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact Fee</td>
<td>Bonding</td>
<td>General Fund</td>
<td>Tax Assessment</td>
</tr>
<tr>
<td>Shared Costs</td>
<td>Inspection Fees</td>
<td>Grants</td>
<td>Special Sales Tax</td>
</tr>
</tbody>
</table>

The big two

1. Taxes – Pay on basis of property value
2. User Fees – Pay on basis of runoff total
What is a Stormwater Utility?

Mix of methods

- A funding method
- A program concept
- An organizational entity

Over 1,200 in the US today
Advantages of a Stormwater Utility to Support Programs

Read my lips: “no new taxes”

Stable
Adequate
Flexible
Equitable
Stable
Utility vs. Tax or “Money” Funding

User fee based

“Money” or Tax-based

Maximum possible program

Time

$$
853 Utilities
Some “apples and oranges”
Some “lemons”
Mean = $4.20 ± 
This median number is rising rapidly!!
Okay - tell me when you start to feel this would be too much to charge to solve flooding and pollution problems and meet mandates where you live?
Adequate

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.
Flexible

- Primary source for the whole program
- Other fees to enhance equity
- Credits to encourage good performance
- Can be geographically different
- Can take into account environmental costs
- Regional or local
§ 45-61-3 Declaration of purpose. – The purpose of this chapter is to authorize the cities and towns of the state to adopt ordinances creating stormwater management districts (SMD), the boundaries of which may include all or part of a city or town, as specified by such ordinance. Such ordinances shall be designated to eliminate and prevent the contamination of the state's waters and to operate and maintain existing stormwater conveyance systems.
So we can...

1. Set up individual stormwater utilities as SMDs
2. Form a multi-entity SMD interlocal agreement

So...
What do “we” want to do and what keeps us from doing it?
What do we want to see happen and what keeps this from happening?
What does “regional” mean?

1. Regional program
   ✅ “we share some common elements”

2. Regional funding
   ✅ “our funding approach looks the same and saves cost”

3. Regional organization
   ✅ “our administration is cooperative”
Equitable:
“the more you pave
…the more you pay”
How a Fee is Calculated

Equals 1.0 Equivalent Residential Unit (ERU)

Say it is 2500 sq ft
Typical Properties
$6.00/month charge

- Fast Food
  - $70/mo
  - $1680/mo
  - less credit

- 700,000 sq ft impervious

- Large Res.
  - $7.50/mo
  - $1680/mo
  - less credit

- Small Res.
  - $4.50/mo

2 tiers residential
Who will not like the concept?

- tax exempt properties
- people with large paved areas with cheap buildings
- fixed income
- sometimes developers don’t like it
- maybe everyone
Logically speaking...

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2. We can solve those problems together.
3. It will cost more than we are presently paying.
4. A user fee is the best way to pay for it.
5. The “process” we follow is very important
A question of “due diligence”

Establishing a successful stormwater utility requires that you pay attention to five key areas of due diligence:

1. Staff and, if regional, inter-municipal consensus
2. Program concept and the compelling case
3. Public and political education and support
4. Financial policies and documents
5. Database development & accuracy and customer service
Careful!!

Hey we’re off and it’s smoother flying- isn’t it grand?

You bet Cap’n What’s so hard about this anyway?
Andy’s Top Ten List

1. We cut too many corners to save money on the front end.
2. We didn’t make a true compelling case.
3. We didn’t understand the process.
4. It was not legal.
5. We didn’t involve stakeholders early enough or in the right ways.
6. We couldn’t explain our program and funding strategy or rates.
7. We didn’t prepare our elected officials for vocal complaints.
8. Our revenue and rate structure limited our ability to do our program.
9. Our database was messed up without ability to easily fix.
10. Our program or performance did not meet community expectations.
Don’t try this at home!!

Implementation of Stormwater Utility
“DIMS” Study (does it make sense to try this)

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?”
There will be many hurdles, questions and objections...

... they have each been solved many times before.
“In this day and age having a stormwater utility fee is a necessity not a luxury. We are so glad we did it and are now ahead of the curve in meeting demands.”

Justin Rabidou
Public Works Director

- 17,000 population
- First in Vermont
- Regulatory drivers
- All five waterways are impaired
- 112 mi of pipe, 5,000 storm drains
- $4.50/mo/ERU
- $1.6M/yr budget
- Up to 50% credit
Questions?

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