

#### Paying for Stormwater – The Benefits of a Utility

Thursday, August 13th, 2015 1:00 – 2:30pm EDT

**Speakers:** 

- Andrew Reese, AMEC Foster Wheeler
- Dr. Robert D. Chandler, City of Salem, OR
- Sheila Dormody, City of Providence, RI

Sponsored by U.S. EPA Office of Wastewater Management

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#### Webcast Agenda

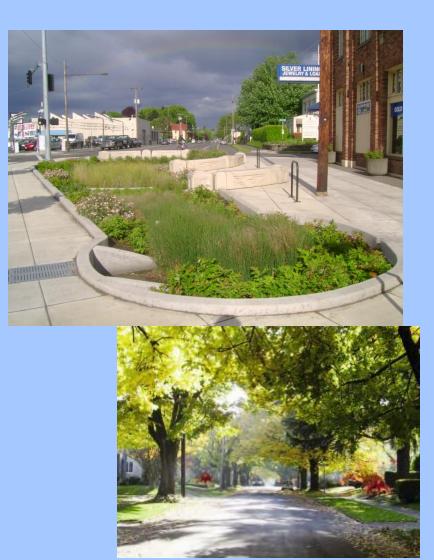
- Andrew Reese AMEC Foster Wheeler

- **Dr. Robert D. Chandler** City of Salem, OR

-Sheila Dormody

City of Providence, RI

–Q&A session



USEPA Webinar Paying for Stormwater - The Benefits of a Utility

Five Steps (and some Rules) for Establishing a Regional Stormwater Utility

> Andy Reese P.E., LEED-AP Amec Foster Wheeler



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# Setting up a utility is like helping a friend.

Setting up a <u>regional</u> utility is like negotiating a peace treaty.



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### Just when you think...

You bet Cap'n What's so hard about this anyway?

Hey we're off and its smoooooth flying- isn't it grand?

41018

#### What is a Stormwater Utility?

A way to get money
A stormwater program
An organizational entity



### Four Key User Fee Benefits

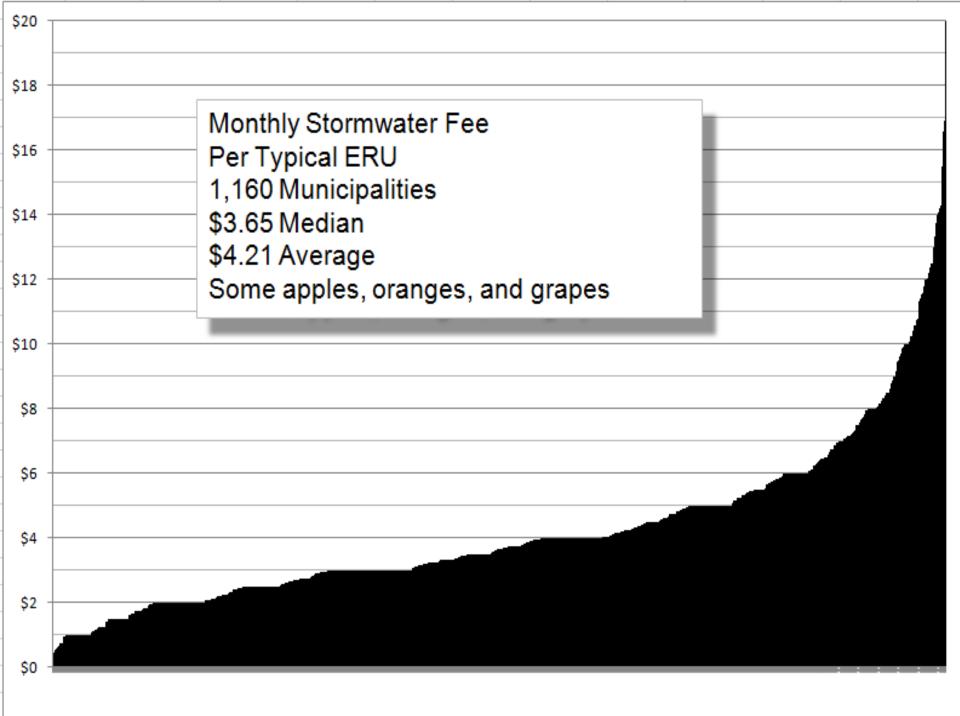
 Stable – Revenue comes in day in and out making planning and running a program far easier.

 Adequate – you can generate sufficient revenue to run a pretty good program while staying within many people's ability to pay range

 Flexible – You can fit the rate structure to support any goals within any setting.

 Equitable – most people think it is the most fair way to pay for stormwater.





#### Info on individual utilities from USEPA



#### US EPA Stormwater Program's Webcast Series

Financing a Municipal Stormwater Program with Andy Reese of AMEC Earth and Environmental, Inc.



#### Wednesday, July 12, 2006 Two-hour audio Web broadcast

Eastern: 1:00 pm - 3:00 pm	Central: 12:00 pm - 2:00 pm
Mountain: 11:00 am – 1:00 pm	Pacific: 10:00 am - 12:00 pm

Please click on the "Launch" button below to view the archived version of the presentation.

#### **Session Description**

Municipal stormwater program managers have many options to choose from in financing their programs, from general funds to dedicated sources such as stormwater utilities. Each municipality must carefully assess each potential funding method to ensure it meets their stormwater program needs. <u>The National Association of Flood and Stormwater</u> <u>Management Agencies</u> (NAFSMA) has developed Guidance for Municipal Stormwater Funding, a document to help municipalities address the procedural, legal, and financial considerations in selecting and developing stormwater financing approaches.



# Rule #1 – Get the process right

#### **Steps in Regional Feasibility**

- 1. Why might this be an attractive idea?
- 2. What would the regional agency do?
- 3. How would its activities be paid for?
- 4. How would it be governed and managed?
- 5. What is the process for setting it up?

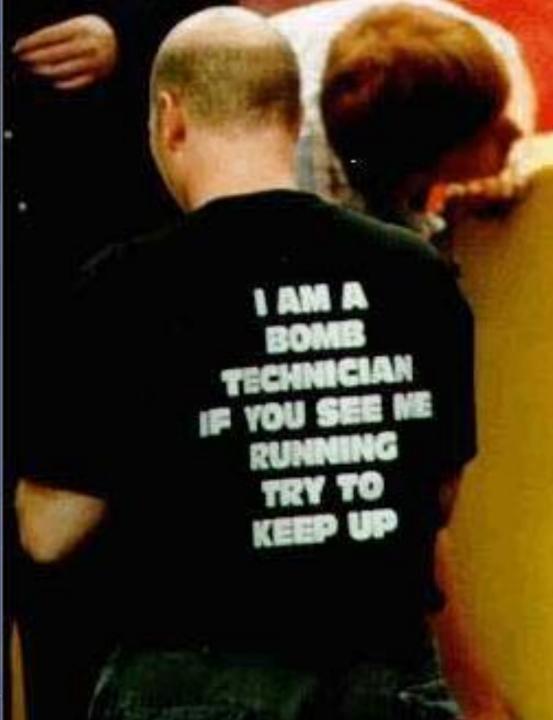


#### **Steps in Feasibility**

- 1. Why might this be an attractive idea?
- 2. What would the regional agency do?
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Rule #2 – have compelling reasons to do this



#### Compelling Case for a Utility...

We are going to develop a stormwater utility because:

Ο.

Ο.

Ο.

Ο.

Ο.

●\_

- Wastewater or Septic Pressures
- ✓ Flooding problems
- ✓ Aging infrastructure
- Development pressures
- ✓ Water quality & ecology
- Regulatory mandates
- Quality of life & aesthetics
- ✓ Source water preservation
- Preservation of property value
- Erosion of channels & creeks
- Recreation or fisheries
- ✓ Lawsuits
- ✓ Being "Green"
- ✓ Climate Change Fears



#### Compelling Case for a Regional Entity

We are going to develop a <u>regional</u> stormwater utility because:

Ο.

Ο.

Ο.

Ο.

Ο.

●\_

- Economies of scale
- Better able to gain outside funding
- Watershed consistency cross jurisdictional
- (more) Free of politics
- Better access to talent
- Local governments not focused or able
- Deal with larger streams and larger problems
- Match regulatory programs' geography

#### Why might this be an <u>unattractive</u> idea?

 One area "bailing out" another one – "paying for another's past sins"

- Losing local control of zoning, land use, etc. – "big brother decides for me"
- 3. Building a bureaucracy "fee creep"
- Consistency in treatment, fairness "getting my share"
- Responsiveness "who controls priorities"



#### **Steps in Feasibility**

- 1. Why might this be an attractive idea?
- 2. What would the regional agency do?
- 3. How would its activities be paid for?
- 4. How would it be governed and managed?
- 5. What is the process for setting it up?



# Rule #3 – meet <u>felt needs</u> effectively day one

### — ALERT —

#### The Storm Water Management Authority Wants Elected Officials to Double Fees on Your Property.

Jefferson County and our city have to receive a storm water permit from the Alabama Department of Environmental Management (ADEM). Instead of working directly with ADEM our officials pay the Storm Water Management Authority Inc. (SWMA) to get permits for residents and businesses.

SWMA collects a \$5 fee on every home and \$15 on business through our property tax bill. This fee is paid every year. Now they want to more than double these fees to \$12 on every home and \$36 on every business.

Even worse is the fact that over the past couple of years SWMA has become responsible for fewer permits. In fact when SWMA was created it was responsible to get permits for all properties 5 acres and less. Today SWMA only has to get permits for those properties 1 acres or less.



SWMA wants Millions more of our tax dollars to do less work.

Now its up to our city council members and our county commissioners to say NO to SWMA. In the upcoming weeks our officials have the opportunity to say NO to higher fees on our property and drop out of SWMA for good.

Call your County Commissioner and City Council Member and tell them to drop out of SWMA. We don't need SWMA or their higher fees.

(People Allied Now Against Corporation Energy Abuse (PANACEA), Birmingham, AL)

SWMA collected over \$2.5 million last year and wants over \$6 million next year. Great staff and a good program...that just missed the mark in citizen minds



### Which of the 68 Stormwater Functions will we Handle?

- What will we do?
   <u>type</u> of services
- 2. Where will we work (geography or program area)? <u>extent</u> of service
- 3. How good will we do it or how much will we do? <u>level</u> of service
- 4. How will we know we have done it? <u>measure</u> of service
- 5. How will others know? <u>communication</u> of service
- 6. Who sets priorities and on what basis? <u>fairness</u> of service



#### **Steps in Feasibility**

- 1. Why might this be an attractive idea?
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Rule #4 - There are about 256 stormwater funding methods but you need stable, adequate, equitable revenue

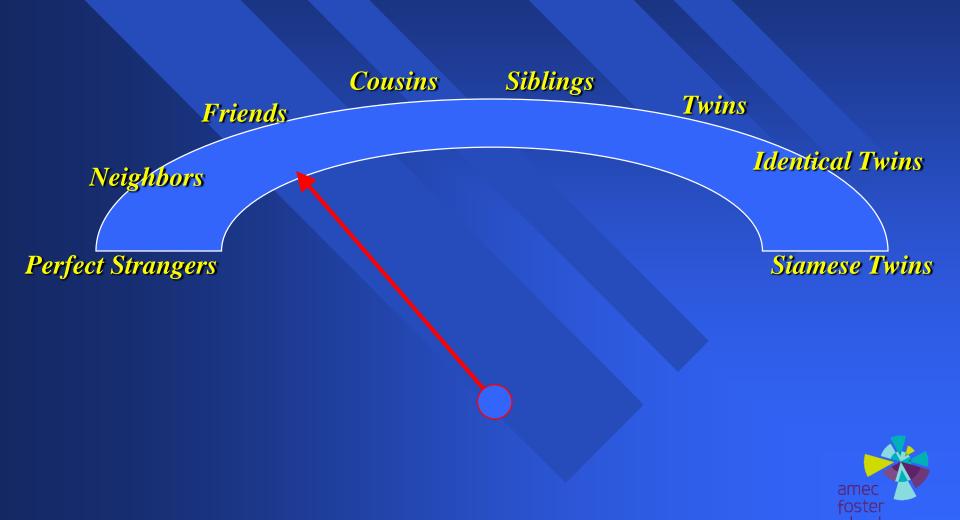


#### **Steps in Feasibility**

- 1. Why might this be an attractive idea?
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### Relationships



## Rule #5 – define your relationships in writing



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#### **Organizational Options**





#### **Steps in Feasibility**

- 1. Why might this be an attractive idea?
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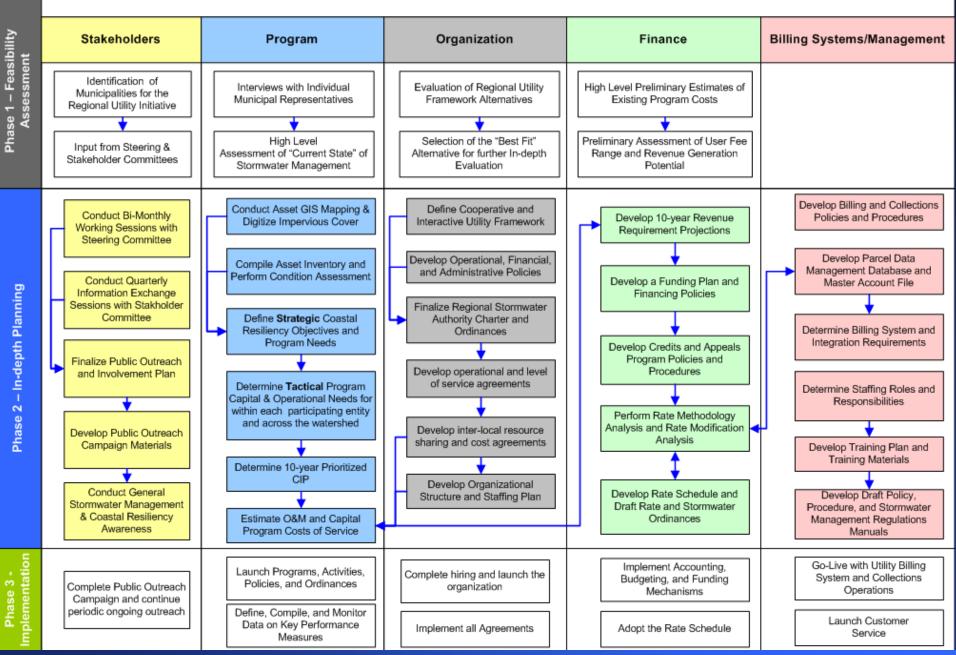
#### A question of "due diligence"

Establishing a successful regional water resource organization requires that you pay attention to five key areas of due diligence:

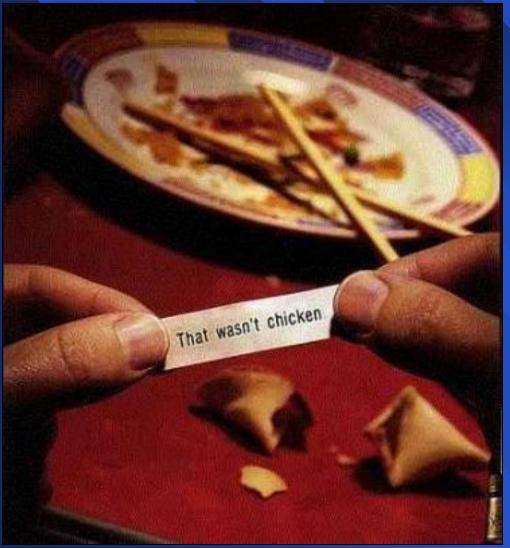
- 1. Governance and intermunicipal consensus
- 2. Program concept and the compelling case
- 3. Public and political education and support
- Financial policies and documents
- 5. Database development & accuracy and customer service







#### Rule #6 Communicate: No surprises !!



- **Public Information Plan**
- who is the public ?
- what is the message ?
- when is the message ?
- how is the message sent ?
- emergency response



"If we shot all the reporters in the afternoon we'd have news from hell by breakfast" Gen. W.T. Sherman

Chicago Daily Tribune

DEWEY DEFEATS TRUM

Survey Indicated in State; Royle Leads in

#### Deal proactively with the media

Finally: Regionalization of key services can lead to many benefits.

# Doing it right is not easy or cheap.

Doing it wrong is <u>really</u> not cheap <u>– cause you get to do it again!</u>



# Well... that's it Go out and conquer...

#### write if you feel overwhelmed...

andrew.reese@amecfw.com



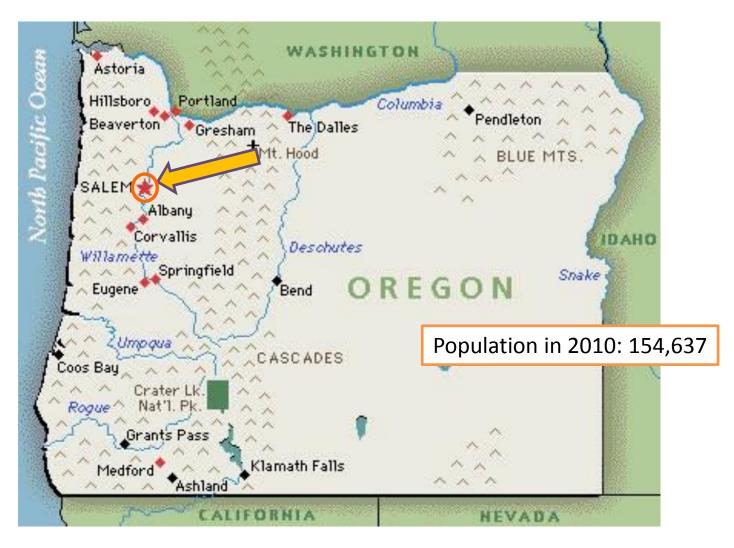
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# Why Would Anyone Try To Create a Stormwater Utility in the Midst of A Recession?

A Case Study in Salem, Oregon

Robert D. Chandler, Ph.D., P.E. Assistant Public Works Director City of Salem, Oregon

#### Salem, Oregon



#### Create a Utility in the Midst of Recession? A Short History Lesson

Feb 1983: Public Works recommends utility

\$3.60 per ESU\*

\* ESU = Equivalent Service Unit or 2,400 square feet of impervious surface area

#### Create a Utility in the Midst of Recession? A Short History Lesson

Salem residents have a pretty respectable record when it comes to taking care of the fuilding blocks of the communic woads, sewers and such. But we cannot afford to do everything at once. Something has to wait, and what may have to wait for now is the city storm drain system. The Salem City Council is meeting today to review a management plan and financing plan for renovating the system of drainage ditches and pipes that handle the winter storm water.

Community can't do it

Storm drain

system may

have to wait

We just talk about communists'

opinion

editorials

There is no argument that the city has deferred improvements on the system for years, but the delays have been less out of

neglect than simply a decision on how scarce resources would be spent. Other problems demanded attention first. To make up for lost inyestment in that storm drain network, a master plan has been devised that has three key elements.

The centerpiece is a 30-

year, \$31-million proposal to deal with drainage problems in several areas of the community. One of the money-saving innovations that would be used is retention basins that catch and hold the water until the existing pipes can handle the excess. These park-like depressions are already in use in South and North Salem.

Naturally, the relatively new approach to handling storm water is plagued by an old problem: How to pay for it. All the old standbys are available: Property taxes, local improvement districts and bond sales; but the idea under consideration is a monthly surcharge on the utility bill. Homes, apartments and businesses would be assessed a charge based on property that contributes to the runoff problem. For homes, a flat rate of \$3.60 was proposed.

We think the city council would be stretching the pockets and good will of the community to the breaking point if such a surcharge were imposed and sewer bills were increased a stunning 66 percent to pay for repairs and improvements. Another increase is likely in 1984.

Statesman-Journal, Monday, October 3, 1983

October 3, 1983

Like good citizen soldiers, area voters recently approved a major street construction project. Before that the voters authorized a massive sewer project. Clearly, Salem residents are willing to do their part when asked. It's up to our elected officials to exercise some discretion in their asking. Instead of a single massive storm drain project, the city might want to look at taking care of the

worst spot problems through some localized assessments.

The second element of the proposal before the city council is spending as much as \$800,000 a year to keep what we have in place in working order. As the major renovations get shoved further back, we can't afford not to spend

money to at least hold the line.

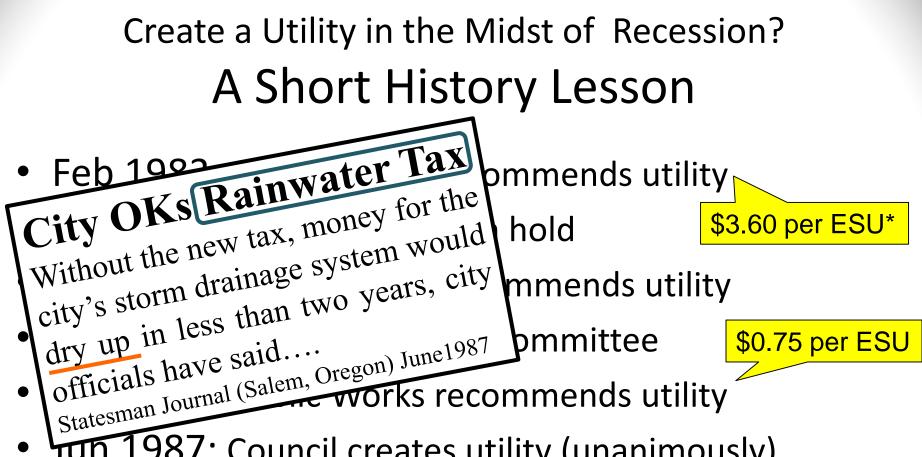
In the same spirit, the city ought to be looking at its development standards to ensure that future growth does not aggravate the existing problems. To that end, the plan suggests increasing the present 5-cents-a-square-foot development charge by a penny and a half to pay for drainage impuments in council-approved growth areasmall cost for future home buyer it means dry basements and beautifue are not mini-flood plains.

If the council does embrace all the elements of the sum of plan — and we don't think it should find the plan can be used as four the sum of the plan can be used as four the sum of the plan can be used as four the sum of the plan can be used as four the sum of the plan can be used as four the sum of the plan can be used as four the sum of the plan can be used as four the sum of the plan can be used as four the sum of the sum o

The drafters of the plan put together a fine proposal. Unfortunately, the community cannot at ford to do everything at once. "Something has to wait, and what may have to wait for now is the city storm drain system"

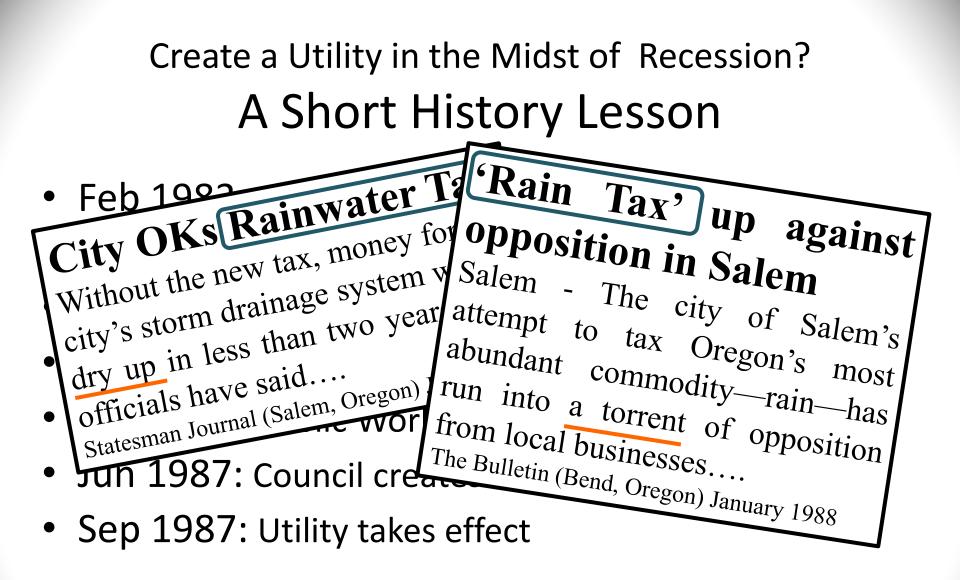
"We think the city council would be stretching the pockets and good will of the community to the breaking point if such a surcharge were imposed now...."

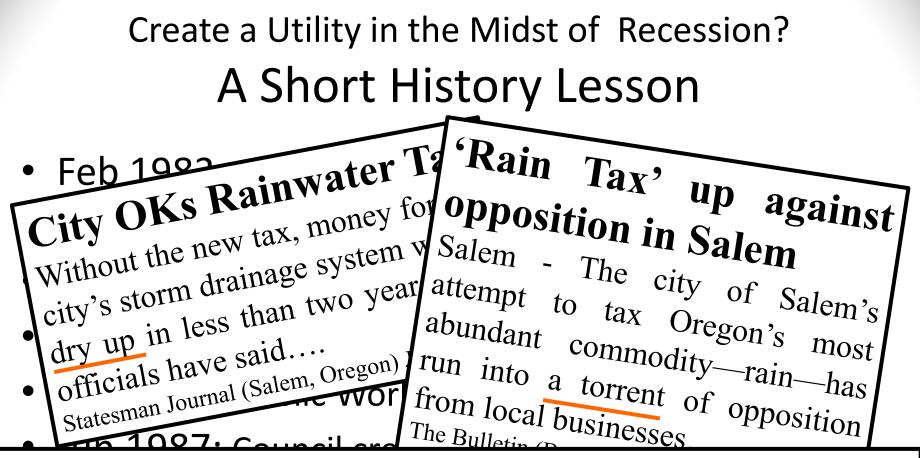
"The drafters of the plan put together a fine proposal. Unfortunately, the community cannot afford to do everything at once."



un 1987: Council creates utility (unanimously)

\* ESU = Equivalent Service Unit or 2,400 square feet of impervious surface area

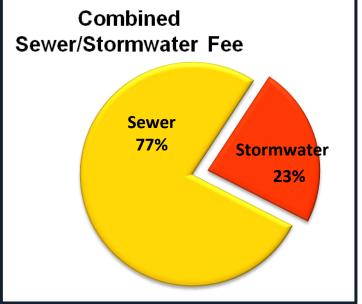




One of the problems with this new utility has been a misunderstanding of its purpose and its true cost. The euphemistic name that has been placed on this revenue source has certainly not lent credibility to its implementation....

City Manager Report to Council, February 1988

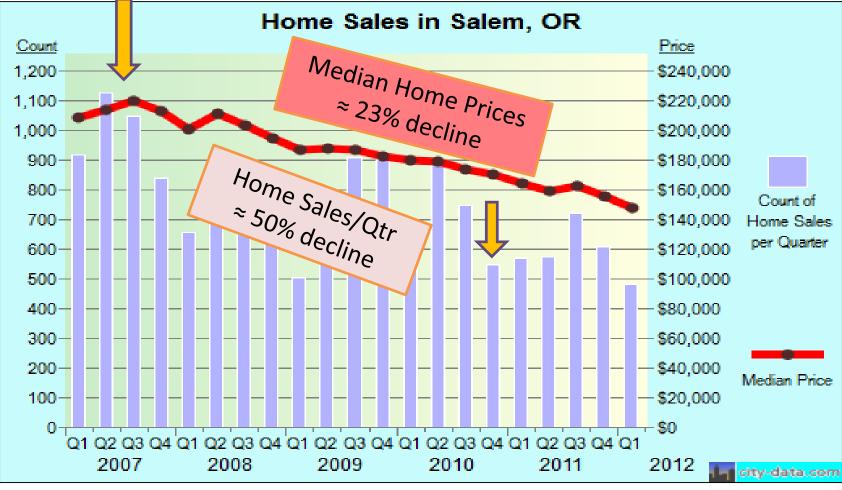
- Major water/wastewater projects completed
- NPDES Stormwater Permit in late 2010
- Stormwater a significant percentage of total wastewater bill
   Combined Sewer/Stormwater Fee
- Stormwater utility no longer novel concept



Create a Utility in the Midst of Recession? The Reason Why Not

- Unemployment in Salem Metro Area: **10.7%**
- Housing backlog: **12.8 months**
- Oregon ranked 47<sup>th</sup> in nation for job growth

#### Create a Utility in the Midst of Recession? The Reason Why Not



Source: http://www.city-data.com/city/Salem-Oregon.html

- Determine area of "Equivalent Dwelling Unit" 3,000 square feet/EDU
- Determine total number of EDUs Salem
   90,000 ≤ EDUs ≤ 110,000

- Determine area of "Equivalent Dwelling Unit" 3,000 square feet/EDU
- Determine total number of EDUs Salem
   90,000 ≤ EDUs ≤ 110,000
- Calculate dollar value per EDU
  - ~ \$10M Stormwater Program/100,000 EDUs

~ \$100/EDU per year

~ \$8.30/EDU per month

City	Monthly Rate /EDU (July 2010)	Salem Initial Rate/EDU
Keizer	\$ 3.83	
Hillsboro	\$ 4.75	
Corvallis	\$ 5.48	
Medford	\$ 5.60	
Clean Water Services <sup>1</sup>	\$ 6.25	
Vancouver	\$ 6.95	
Gresham	\$ 8.60	
Eugene	\$ 9.82	
Springfield	\$11.32	
Portland	\$21.79	

City	Monthly Rate (EDU (July 2010)	Salem Initial Rate, EDU
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Hillsboro	\$ 4.75	
Corvallis	\$ 5.48	
Medford	\$ 5.60	
Clean Water Services <sup>1</sup>	\$ 6.25	
Vancouver	\$ 6.95	
Gresham	\$ 8.60	\$ 8.00
Eugene	\$ 9.82	\$
Springfield	\$11.32	\$10.00
Portland	\$21.79	

Community Engagement – 12+ months

- 19 Neighborhood Associations
- 7 Trade/Business Organizations
- 6 Community Groups
- 7 Citizen Boards/Committees
- 6 Government Agencies
- 5 City Council Meetings
- Multiple interested individuals/businesses

Community Engagement - Examples

- Salem-Keizer School District
   66 total accounts: †\$21,000/mo (†50%)
- Local Area Grocery Chain

   Four stores + HQ:†\$1,150/mo (†100%)
- Salem Area Car Dealers Association
   Large dealership: †\$560/mo (†300%)
- Nonprofit Organizations
   Large church: †\$1,000/mo (†10X)

#### Make the feedback count

Delayed initial implementation
 Jan 2011 (original) →

#### Make the feedback count

- Delayed initial implementation
   Jan 2011 (original) → Jan 2013 (impl. date)
- Phased implementation
   None (original) →

#### Make the feedback count

- Delayed initial implementation
   Jan 2011 (original) → Jan 2013 (impl. date)
- Phased implementation
   None (original) → 2013-2016 (4 rate adjustments)
- Added a "Stormwater Base Charge"

**Stormwater Base Charge** 

- Street sweeping
- Billing/Account maintenance
- Bad debt collection
- 24/7 Public Works Dispatch
- Public Street impervious surface area

City	Monthly Rate (EDU (July 2010)	Salem Initial Rate(EDU)
Keizer	\$ 3.83	
Hillsboro	\$ 4.75	
Corvallis	\$ 5.48	
Medford	\$ 5.60	
Clean Water Services <sup>1</sup>	\$ 6.25	
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Gresham	\$ 8.60	
Eugene	\$ 9.82	
Springfield	\$11.32	
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City	Monthly Rate (SFR (July 2010)	Salem Initial Rate SFR
Keizer	\$ 3.83	
Hillsboro	\$ 4.75	
Corvallis	\$ 5.48	
Medford	\$ 5.60	
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Vancouver	\$ 6.95	
Gresham	\$ 8.60	\$ 8.00
Eugene	\$ 9.82	\$
Springfield	\$11.32	\$10.00
Portland	\$21.79	

City	Monthly Rate (SFR (July 2010)	Salem Final Rate/SFR
Keizer	\$ 3.83	
Hillsboro	\$ 4.75	
Corvallis	\$ 5.48	
Medford	\$ 5.60	
Clean Water Services <sup>1</sup>	\$ 6.25	
Vancouver	\$ 6.95	
Gresham	\$ 8.60	
Eugene	\$ 9.82	
Springfield	\$11.32	\$15.00
Portland	\$21.79	\$18 <sup>0</sup> 00

#### Create a Utility in the Midst of Recession? The Finish Line

- Sep 2009: Public Works intially recommend utility
- Jan 2010: Council Work Session
- Sep 2010: Council Work Session
- Oct 2010: Public Hearing
- Dec 2010: Public Hearing (continued)
   December 6, 2010: Council Votes
   Ordinance passed 6-2 (one abstention)
- Jan 2013: Utility takes effect

#### Create a Utility in the Midst of Recession? The Finish Line



Between December 2010 & January 2013

- Validated customer service database
- Updated public information material
- Developed rate credit protocols
- Completed Cost of Service Analysis!
- Got a rate increase!
- Changed our billing format!
- Re-engaged key customers and elected officials

#### A Storm Water "Bombshell" Tax is Scheduled to be phased in starting January ....unless <u>YOU</u> stop it



Water conservation efforts by the citizens of Saler resulted in lost revenues for the City. In an answe their good deeds the City is coming after Commen Property Owners to maintain their bloated budgets.

The City of Salem is planning to adjust charges to properties to process rain water runoff as a means to stabilize their revenue stream. Per the City's "Establishing a Stormwater Rate – Final Report" dated October 210, rates will increase an estimated <u>18%</u> for <u>small commercial</u> properties and 151% for large commercial properties.

http://www.cityofsalem.net/Departments/PublicWorks/Pages/sw\_utility.aspx

It will place a great burden on churches and non-profits that already generously and freely provide an enormous service to our community sing these organizations to fill the coffers of the City is outrageous, diversion the contract of the

r

It is time to rise up and let your voices be heard. Encourage your members to contract the City Council and raise their of the proposed rate (hidden tax) increase.

> Email: <u>citycouncil@cityofsalem.net</u> Address: 555 Liberty St SE, Salem OR 97301 Phone: 503-588-6255 Fax: 503-588-6354

#### AMERICANS FOR PROSPERITY

Marion and Polk County Fighting for Limited Government in Oregon! For more information visit us at <u>www.marionafp.com</u>

[Note: Flier has been recreated from original]

"A Storm Water "Bombshell" Tax is Scheduled to be phased in starting January 2013 ....unless <u>YOU</u> stop it"

> "In an answer to their good deeds the City is coming after Commercial Property Owners to maintain their bloated budgets."

"It will place a great burden on churches and non-profits that already generously and freely provide an enormous service to our community."



1758 22nd St SE • Salem, OR 97302-1255 • Phone 503-588-6063 • Fax 503-588-6394

Letter mailed to all non-SFR customers

RIVER FRONT CAROUSEL 101 FRONT ST NE SALEM OR 97301-3473

Dear Customer:

In December 2010, the Salem City Council and estimate of the changes you can examine the sale of the changes of the sale of th "The purpose of creating the utility is to change how your stormwater services are funded, making it more fair and equitable to both our wastewater and stormwater customers."

The purpose of creating the utility is to change how your stormwater services are funded, making it more fair and equitable to *both* our wastewater and stormwater customers. Once the fee is fully implemented, wastewater customers will be charged based on the wastewater requirements and stormwater customers will be charged based on stormwater services.

Initial implementation of the stormwater utility was delayed by Council until January 2013 to allow customers to

plan for its implementation. Also, me

fees will be completely separated in January 2016. As use your wastewater fee that currently funds stormwater services will be rel

incorporated into the bill. Your new bill will itemize how your payments are allocated

The stomwater utility fee will have two components: (1) A stomwater base fee that supports strete stweeping, dispatch services, customer service, and other services; and (2) An impervious surface charge that is related to each customer's total rooftop, driveway, and parking area. Impervious surface is measured in Equivalent Dwelling Units (EDU), where one EDU is equal to 3,000 square feet. This letter includes a map of your property showing areas determined to be impervious (Unidings, asphalit, concrete, and gravel).

Please review the information and the maps and contact us if you have any questions or if further review is necessary to ensure your property is accurately represented.

Customer		Estimated Monthly Bill	
Customer ID	Impervious Area (EDU)	Current 2012 Wastewater + Stormwater Bill	Projected 2013 Wastewater + Stormwater Bill
AC103168	4.0	\$85.07	\$91.61
Note: The estimate provided above is an expressionation that is for planning purposes only. City Council will			

Note: The estimate provided above is an approximation that is for planning purposes only. City Council will establish the actual stormwater rates for 2013 and 2014 in late 2012.

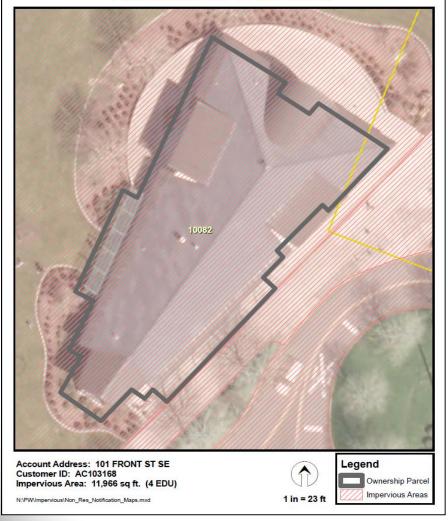
If you would like additional information regarding the stormwater utility, please visit our website: http://www.cityofsalem.net/stormwaterutility. You may also call 503-588-6211 or e-mail Zach Diehl at zdiehl@cityofsalem.net on Mike Gotterba at mgotterba@cityofsalem.net.

> Si necesita ayuda para comprender esta información, por favor llame 503-588-6211. If you need help understanding this information, please call 503-588-6211.

"Initial implementation...delayed until January 2013 Stormwater fee will be phased in over time <u>New bills</u> will itemize how payments are allocated"

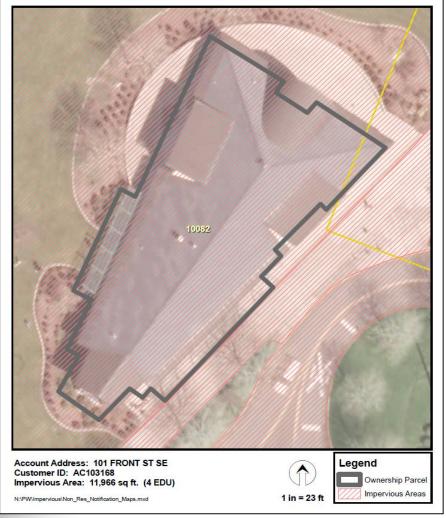
> Impervious Area Determination Current 2012 Monthly Bill Estimated 2013 Monthly Bill

**RIVER FRONT CAROUSEL** 



Letters to all Non-SFR customers Mailed October 2012 Approx. 3,527 letters After 30 days:

**RIVER FRONT CAROUSEL** 



Letters to all Non-SFR customers Mailed October 2012 Approx. 3,527 letters After 30 days: 107 contacts • 53 requested further into

- 35 map/account changes
- 3 request Spanish version
- 16 complaints\*
- \* incl. one customer who did not believe his fee would decrease

#### **Stormwater-only Accounts**

- Recognized issue ≈ Dec 2012
- Posted ≈ 400 letters
- Delayed implementation by six months
- Still recurring issue for Customer Service

Account Type	Total Accounts	Delinquent Accounts	Percent Current
Non-Residential	67	13	80.6%
Residential	392	71	81.9%
Total	459	84	81.7%

Create a Utility in the Midst of Recession? Lessons Learned – Part 1

If you want to create a utility [or enact a fee/tax]:

Give yourself time to:

- Review, validate, integrate, test your info/dB
- Identify & resolve policy issues
- Update public information
- Re-engage the public

As the time for implementation approaches:

- Remind your Officials & Decision Makers
- Remind the public & your customers

Create a Utility in the Midst of Recession? Lessons Learned – Part 2

- Focus on key target audience
  - Most impacted customers
  - Chamber of Commerce
  - City Council

Create a Utility in the Midst of Recession? Lessons Learned – Part 3

- Communications are essential
  - Timely
  - Relevant
  - Matters
- Be honest & straightforward
  - Informed dissent is always
     better than spun hyperbole
- It is relationships that matter

# Salem, Oregon's Capital



Robert D. Chandler, Ph.D., P.E. Assistant Public Works Director Salem, Oregon rchandler@cityofsalem.net 503-588-6008



#### CITY OF PROVIDENCE

Jorge O. Elorza, Mayor

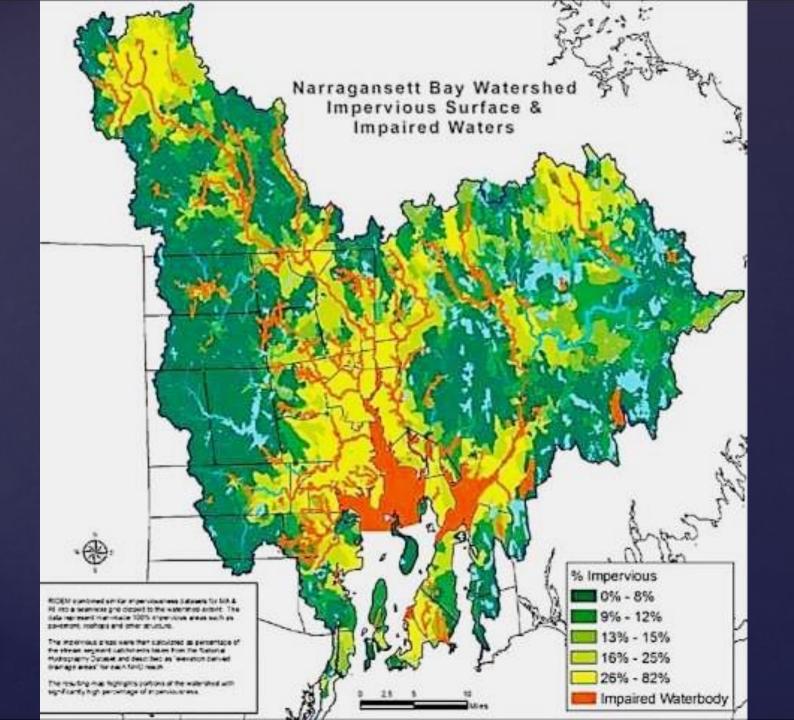
# Upper Narragansett Bay Regional Stormwater Management District Feasibility Study

Sheila Dormody, Director of Policy sdormody@providenceri.com

# Phase One Conclusions

- 1. We have real, growing, shared and unresolved stormwater problems
- 2. We can solve these problems and there will be tangible benefits
- 3. It will cost more than we are now spending
- 4. It will be more efficient and effective doing so together
- 5. A stormwater user fee is the best and fairest way to pay for the improvements





## Sustainability Goals CITY OF PROVIDENCE Arren Tarana Mario Mayor Taveras Establishes Environmental

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#### MEMO

To: Arianne Lynch, Deputy Chief of Staff From: Bill Bombard, Acting Director Depart Re: Storm Water Management

#### A Storm Water Has the Time Co

#### Introduction

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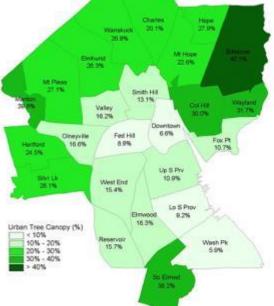
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WSJ VIDEO



**Hurricane Sa** SIGNIFICANT WIND IM 58 mph + Boston

New York Philadelphia D.C.

Norfolk

Cape Hatteras

## Water

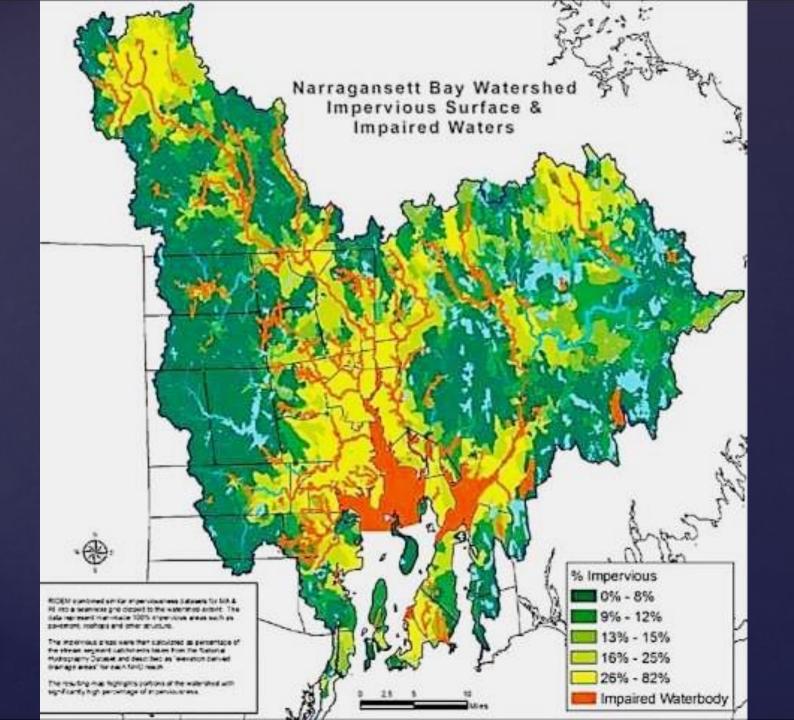
- Replace outdated water supply infrastructure in order to continue to provide high quality, affordable drinking water for all residents;
- Preserve the city's water supply by promoting efficient usage practices; and
- Improve the quality of rivers, streams and the bay through robust stormwater management efforts.

September 2014 Office of Sustainability Environmental Sustainability Task Force

PROVIDENCE



Angel Taveras, Mayor City of Providence



### After the Storm

Taking Action to Prevent Flooding and Clean Up Our Waterways

October 25, 2012 Save The Bay, Providence

> Developing Regional Solutions to Regional Problems Exploring Stormwater Utility Districts

> > December 4, 2012 Save The Bay, Providence

## **Funding Options**

- Property Taxes/General Fund
- Bonds
- Grants

## OR Designated Stormwater Fee Based on the Contribution to the Problem

# Stormwater Fee • Stable Adequate • Flexible Equitable

## Phased Approach

☑ Preliminary Meetings and Fundraising

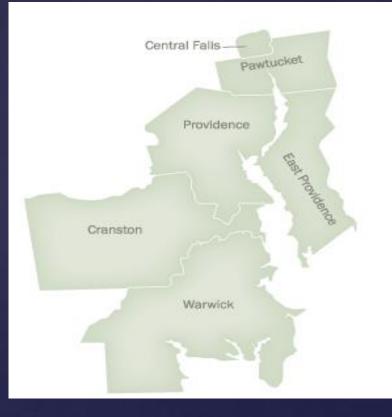
☑ Phase One – Does a regional approach to stormwater management based on user fees make sense?

Phase Two – Continue exploring regional approach: Assess needs, Develop Structure, Scope and Governance of the Utility

□ Phase Three - Implementation

## Participants and Partners

- Project Steering Committee (each municipality, Department of Environmental Management, Department of Transportation, Narragansett Bay Commission)
- Stakeholders (property owners, businesses, non-profit institutions, developers, environmental groups)
- State Agencies and EPA Region One
- Grassroots campaign



Phase One Goal: Does a Stormwater Management District Make Sense for us?

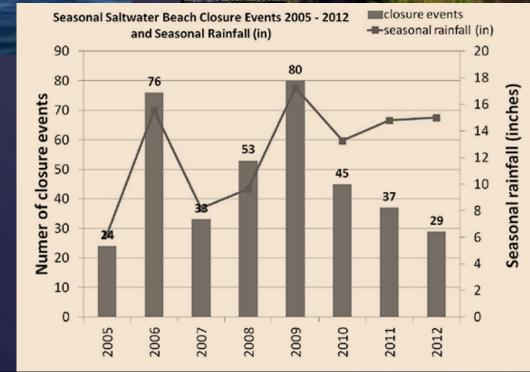
- Define compelling reasons to create a stormwater district
- Describe what's currently being done and its costs
- Describe priorities for enhancing stormwater management and costs
- Evaluate revenue potential via a stormwater utility
- Identify any "show stoppers"

Aging Infrastructure, Flooding, and Property Damage

## Polluted Waters

## Quality of Life & Aesthetics





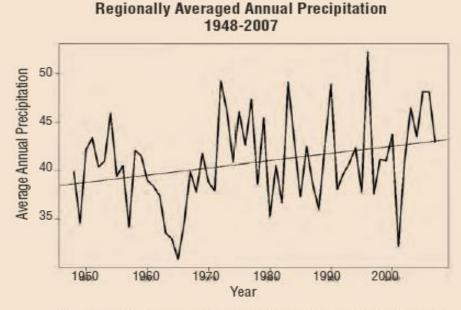


Figure 3. Time series of regionally averaged annual precipitation from 1948 – 2007. Regional average is weighted by the size of each climate division in the Northeast.





# Compliance

### & Cash

## Current Stormwater Budgets for Participating Communities

Municipality	Population	Land Area (mi <sup>2</sup> )	Density (people/mi <sup>2</sup> )	Impervious Area (acres)	Impervious Area (%)	Current Budget Est.
Central Falls	19,376	1.3	14,905	548	66.4%	\$17,723
Cranston	80,387	28.9	2,782	6,067	32.8%	\$1,354,073
East Providence	47,037	14.0	3,360	3,292	36.9%	\$275,400
North Providence	32,078	5.8	5,531	1,667	44.9%	\$117,847
Pawtucket	71,148	8.7	8,178	3,481	61.4%	\$82,311
Providence	178,042	18.3	9,729	7,672	63.8%	\$1,346,343
Warwick	82,672	35.9	2,303	7,931	34.5%	\$596,729
Totals	510,740	112.9		30,658		\$3.8M

## Range of Future Cost Estimates

Municipality	Current Budget	Future Program* Initial Estimate	Future Program Assuming \$175/developed acre/year
Central Falls (100% CSS)	\$17,723	\$29,510	\$134,400
Cranston	\$1,354,073	\$1,635,193	\$2,562,560
East Providence	\$275,400	\$692,700	\$1,500,800
North Providence	\$117,847	\$490,853	\$649,600
Pawtucket (90% CSS)	\$82,311	\$388,237	\$974,400
Providence (65% CSS)	\$1,346,343	\$3,315,647	\$2,072,000
Warwick	\$596,729	\$1,177,473	\$3,180,800
Totals	\$3,790,426	\$7,729,612	\$11,074,560

#### Focus on:

- Flood control
- Infrastructure renewal
- Water quality protection

## Preliminary Revenue Analysis

Municipality	ERUs	Current Budget	Future Program Initial Estimate	Fee \$/ERU/Mo	Future Program \$175/dev. acre/year	Fee \$/ERU/Mo
Central Falls	5,991	\$53,168	\$88,530	\$1.23	\$134,400	\$1.87
Cranston	66,305	\$1,354,073	\$1,635,193	\$2.06	\$2,562,560	\$3.22
East Providence	35,971	\$275,400	\$692,700	\$1.60	\$1,500,800	\$3.48
North Providence	18,222	\$117,847	\$490,853	\$2.24	\$649,600	\$2.97
Pawtucket	38,046	\$135,743	\$446,544	\$0.98	\$974,400	<b>\$</b> 2. <b>1</b> 3
Providence	83,839	\$1,346,343	\$3,315,647	\$3.30	\$2,072,000	\$2.06
Warwick	86,672	\$541,313	\$1,094,347	\$1.05	\$3,180,800	<b>\$3.06</b>
Totals	335,046	\$3,823,887	\$7,763,814	\$1.78	\$11,074,560	\$2.68
				(avg.)		(avg.)

Remember. . .

•Program needs drive cost.

•The program costs need to be further defined.

•The program does not include combined sewer needs or costs.

## Infrastructure Upgrades, Operations, & Maintenance

## Typical Residential Properties = \$2.75/mo

Fast Food \$40/mo less credit

200,000 sq ft shopping 700,000 sq ft impervious \$770/mo less credit

Large Res. Small Res. \$4.00/mo \$1.50/mo

2 tiers residential

## Green Credits

Neighbors can work together to plan a volunteer-based tree planting. Entire blocks could be transformed while aiding stormwater mitigation through tree transpiration.

In areas with limited impervious space the right of way may pose an opportunity to slow, filter, and infiltrate some storm water.

Stormwater flows over short grass and compacted soil quickly and can contribute to erosion and sediment problems. Direct water so it may flow through vegetated areas. This can help to dissipate velocity, filter and infiltrate some storm water coming from downspouts.

Above ground planters can artificially create 'ground' when there is little available and still keep water away from sensitive foundations. Flow through planters can accept some roof runoff and irrigate several species that can thrive in both wet and dry situations. Planters are made to spill over when the appropriate water level is reached.

#### Benefits of A Regional Approach

- Address Cause of Flooding Problems
   consistent flood mitigation across the region
- Improve Water Quality watershed based, multi-jurisdictional problems
- No Need for Individual Specialized Resources difficult for everyone to have an "expert"
- Interconnected Infrastructure combined sanitary/stormwater, separate stormwater, RIDOT, and NBC systems

## Concerns to Address

- Loss of municipal control
- Stormwater management is costly
- Potential for fee creep
- Public perception
- Unforeseen challenges

### No show stoppers

## Phase One Conclusions

- 1. We have real, growing, shared and unresolved stormwater problems
- 2. We can solve these problems and there will be tangible benefits
- 3. It will cost more than we are now spending
- 4. It will be more efficient and effective doing so together
- 5. A stormwater user fee is the best and fairest way to pay for the improvements

## Phase Two Tasks

- 1. Assess current and future operation and capital needs, and cost of services
- 2. Develop a funding plan for the regional utility
- 3. Develop an operational, financial, and administrative framework for the regional utility
- 4. Develop implementation plan
- 5. Conduct public outreach campaign

Upper Narraganset Bay Regional Stormwater Management District Study www.unbstormwater.org

RI Green Infrastructure Coalition www.greeninfrastructureri.org

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#### **Speaker Contacts**

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For questions about EPA's Green Infrastructure Webcast Series:

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### Next Webcast – October 6, 2015

#### Winter Weather O&M for Green Infrastructure

- Tom Ballestero, Associate Professor, Director of UNH Stormwater Center
- Brooke Asleson, Watershed Project Manager, Metro, Minnesota Pollution Control Agency

Registration in late September

Information and registration will be posted at <u>http://water.epa.gov/infrastructure/greeninfrastructure/gi\_training.cfm</u>