

Laying the Groundwork for Rate Setting

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Smith®**



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?

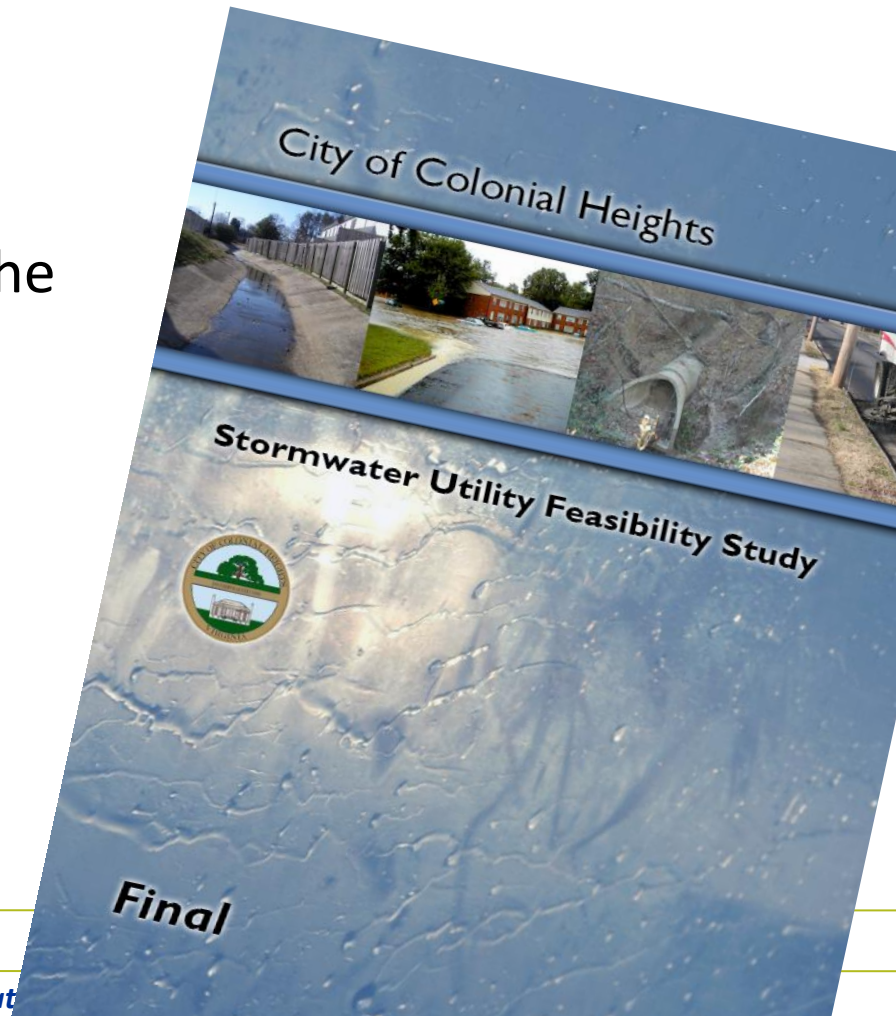
Identify the Drivers for the Program

- 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

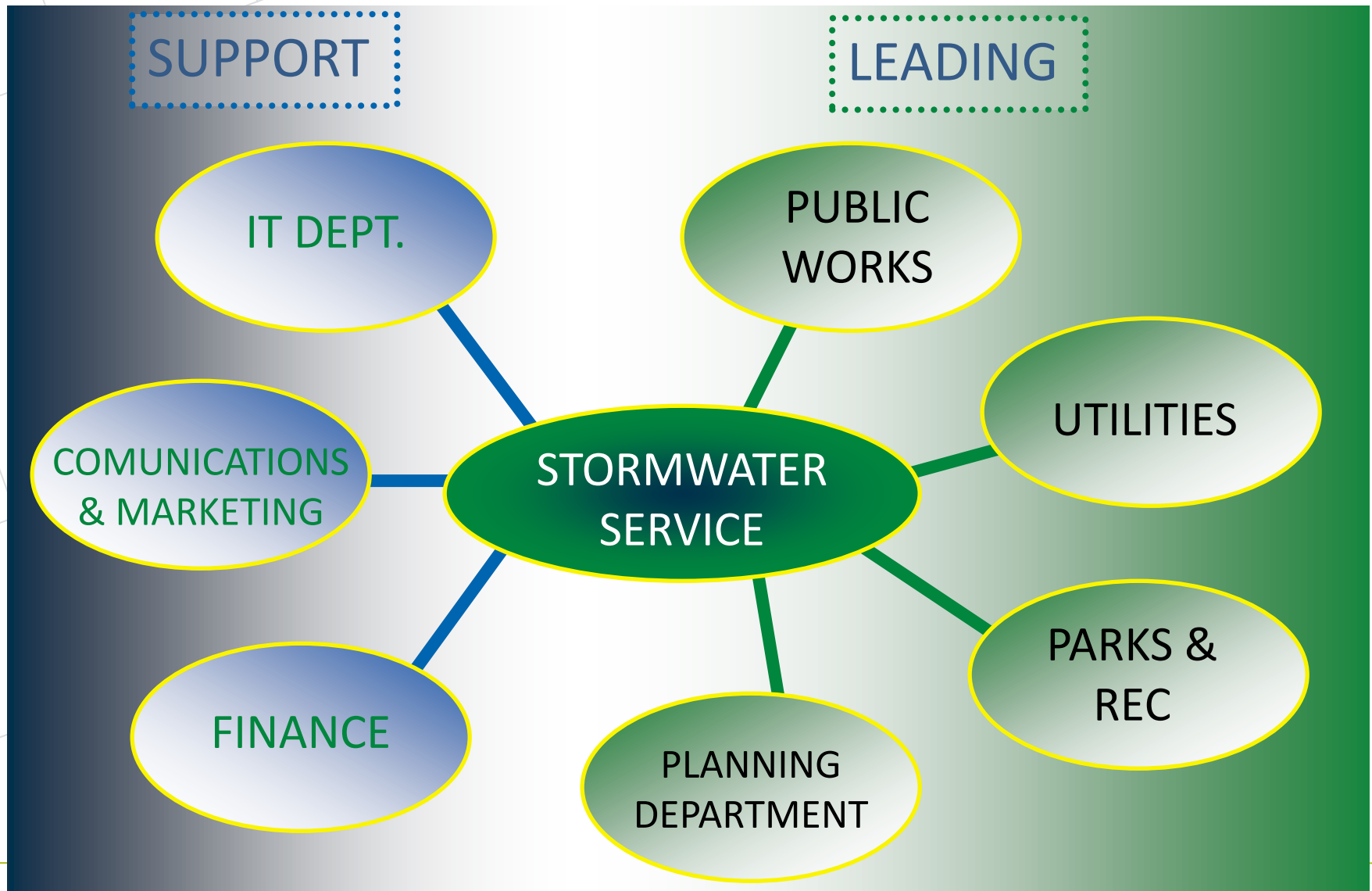


Stormwater Management Functional Areas

Simplifying the Complexities

PROGRAM MANAGEMENT	REGULATORY COMPLIANCE
<ul style="list-style-type: none">❑ Master planning❑ Complaint response❑ Development review	<ul style="list-style-type: none">❑ NPDES (i.e. 6 minimum measures)❑ TMDL compliance
OPERATIONS AND MAINTENANCE	CAPITAL IMPROVEMENT PROJECTS (CIP)
<ul style="list-style-type: none">❑ Storm sewer cleaning❑ Culvert cleaning and repair	<ul style="list-style-type: none">❑ Storm System Upgrades & Replacement❑ Stream restoration

Stormwater Services – A City-Wide Function



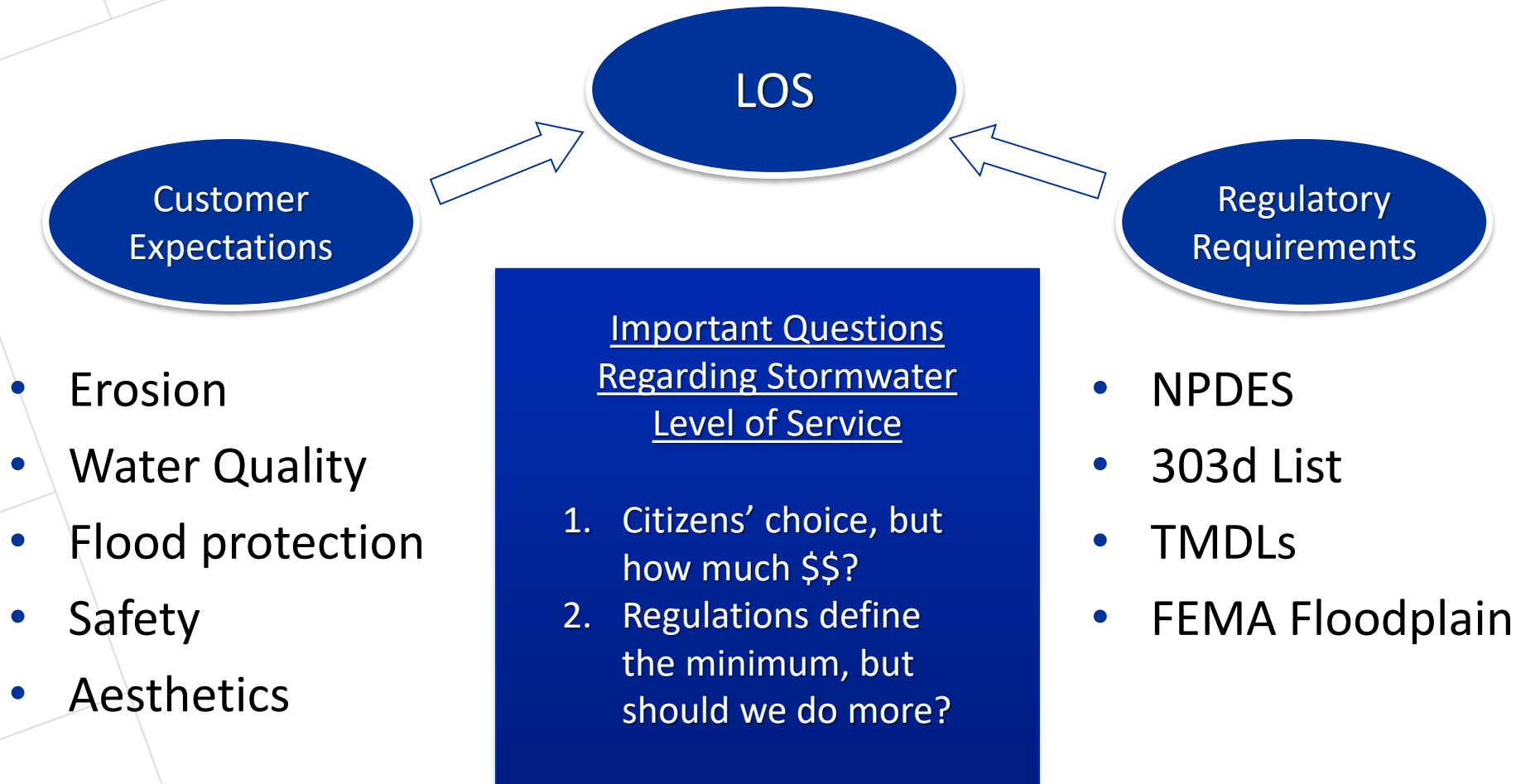
How Do We Quantify These Services & Costs?

- 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					
<i>Non-Departmental</i>	\$19,000				\$19,000
<i>Stormwater System Maintenance</i>	\$162,000		\$234,000		\$396,000
Public Works					
<i>Streets</i>		\$30,000	\$483,000		\$513,000
<i>Engineering</i>	\$139,000	\$4,000			\$143,000
<i>Parks / Grounds</i>		\$4,000	\$71,000		\$75,000
<i>Refuse</i>		\$5,000	\$171,000		\$176,000
Community Development					
<i>Zoning and Natural Resources</i>		\$166,000			\$166,000
<i>Inspections/Code Enforcement</i>		\$26,000			\$26,000
<i>Planning</i>		\$177,000			\$177,000
<i>GIS</i>	\$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
<i>Loose Leaf Collection</i>			\$319,000		\$319,000
<i>Transportation Capital Projects</i>				\$1,340,000	\$1,340,000
<i>Vehicle Depreciation</i>			\$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?



What Does This Cost of Service Provide for Your Community?

<i>Level of Service</i>	<i>Program Management</i>	<i>Regulatory Compliance</i>	<i>Operation and Maintenance</i>	<i>Capital Improvement Projects</i>
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?

<i>Level of Service</i>	<i>Program Management</i>	<i>Regulatory Compliance</i>	<i>Operation and Maintenance</i>	<i>Capital Improvement Projects</i>	<i>Total Program Cost</i>
A or 5	\$1,137,000	\$828,000	\$1,712,000	\$854,000	\$4,531,000
	Comprehensive Planning & Full Implementation Capabilities	Exemplary Permit Compliance	Fully Preventative/ 100% Routine	Prioritized / Fully-Funded	
B or 4	\$790,000	\$530,000	\$1,487,000	\$754,000	\$3,561,000
	Pro-Active Planning & Systematic CIP Implementation Capabilities	Pro-Active Permit Compliance	Mixture of Routine and Inspection Based	Phased Implementation / Allocated Budgets	
C or 3	\$551,000	\$384,000	\$1,262,000	\$654,000	\$2,851,000
	Priority Planning & Partial CIP Implementation Capabilities	Full Permit Compliance	Mixture of Inspection and Responsive Based	Complaint, Inspection-Based / Moderate Budget	
Existing LOS (2.5)	\$342,000	\$290,000	\$1,146,000	\$554,000	\$2,332,000
	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	

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



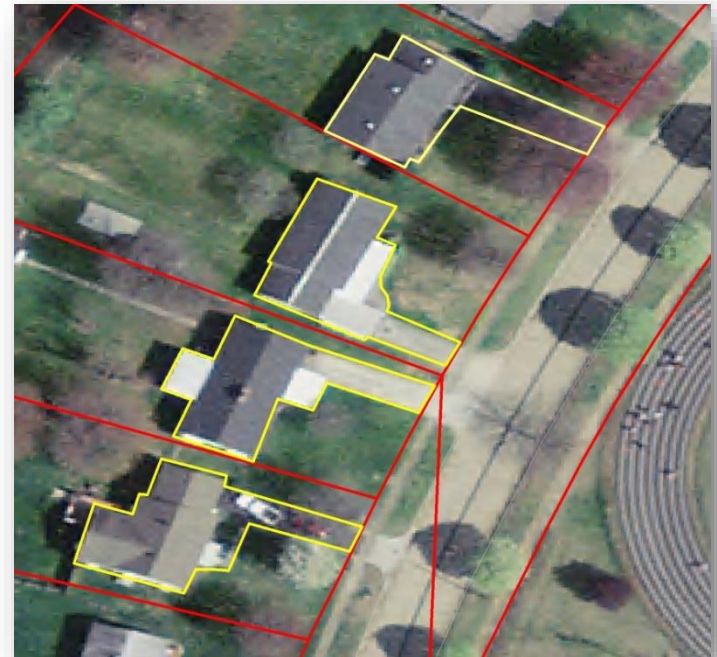
Each is assigned 1 or less **Equivalent Residential Unit (ERU)** depending on type and number of dwelling units.

$$\text{Fee} = \text{ERU} \times \text{Rate (\$ per ERU per month)}$$

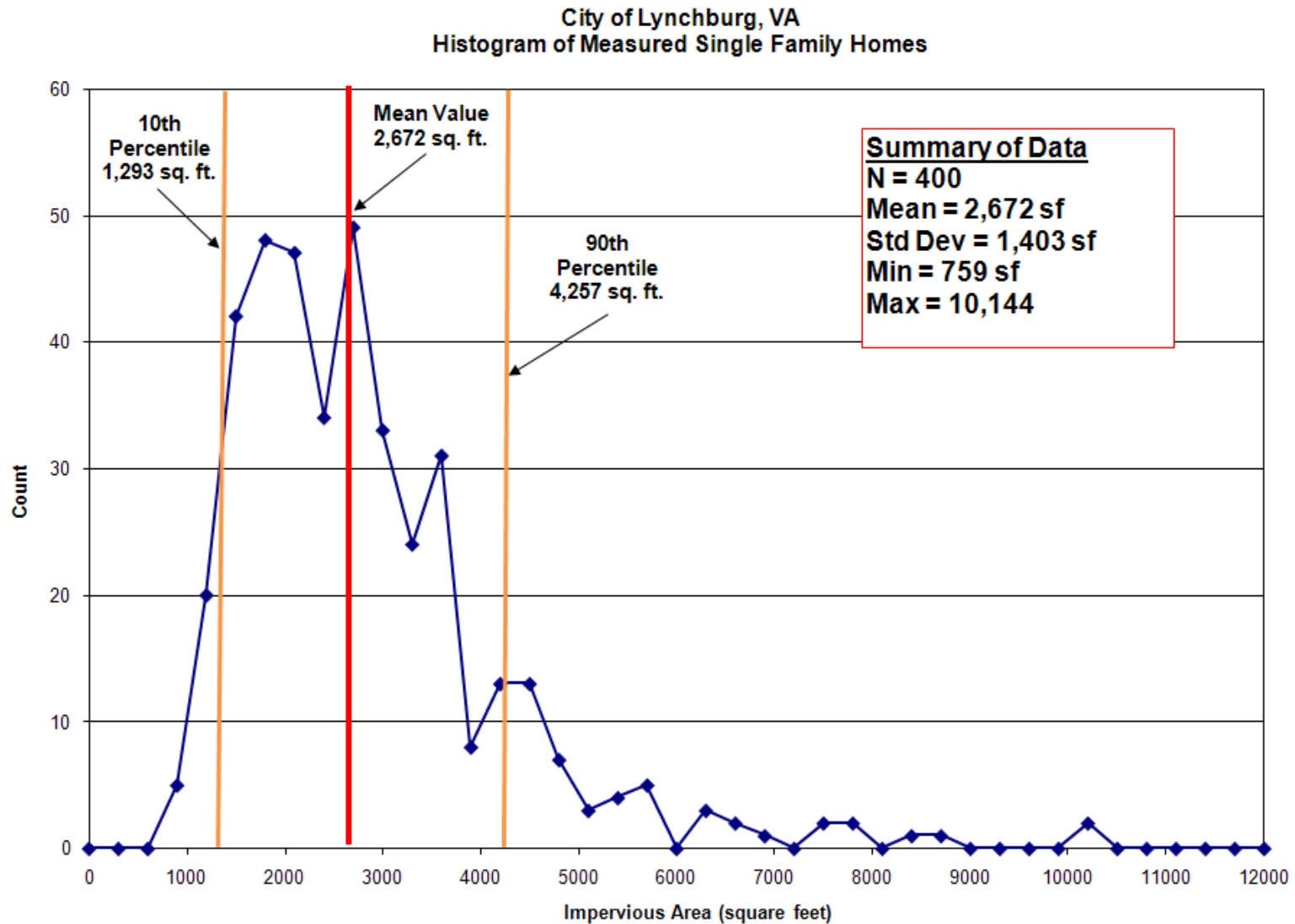
Average monthly fee nationally for single-family residential is \$5.87

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

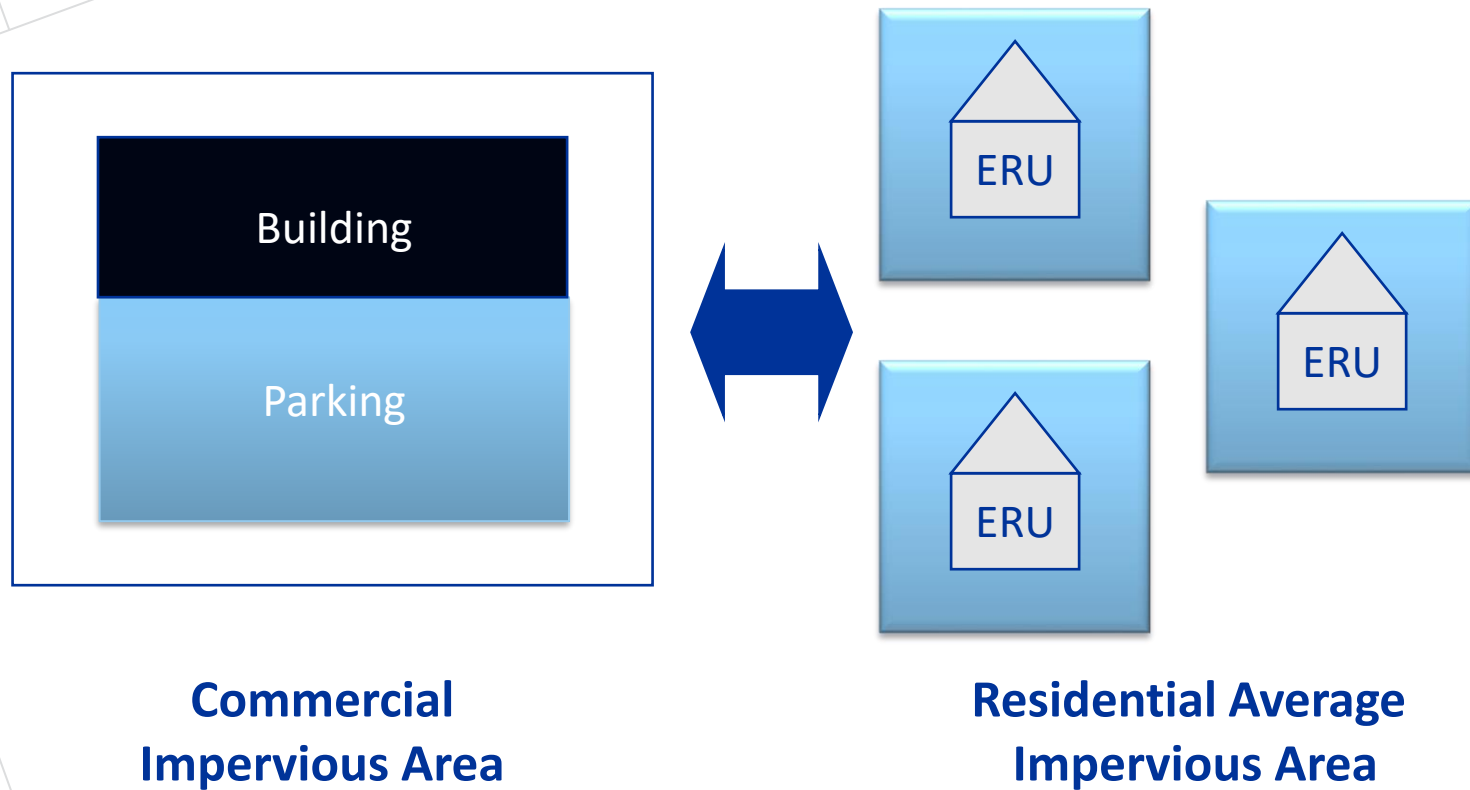


1,294 to 4,256 Sq. Ft. = 1.0 SFU



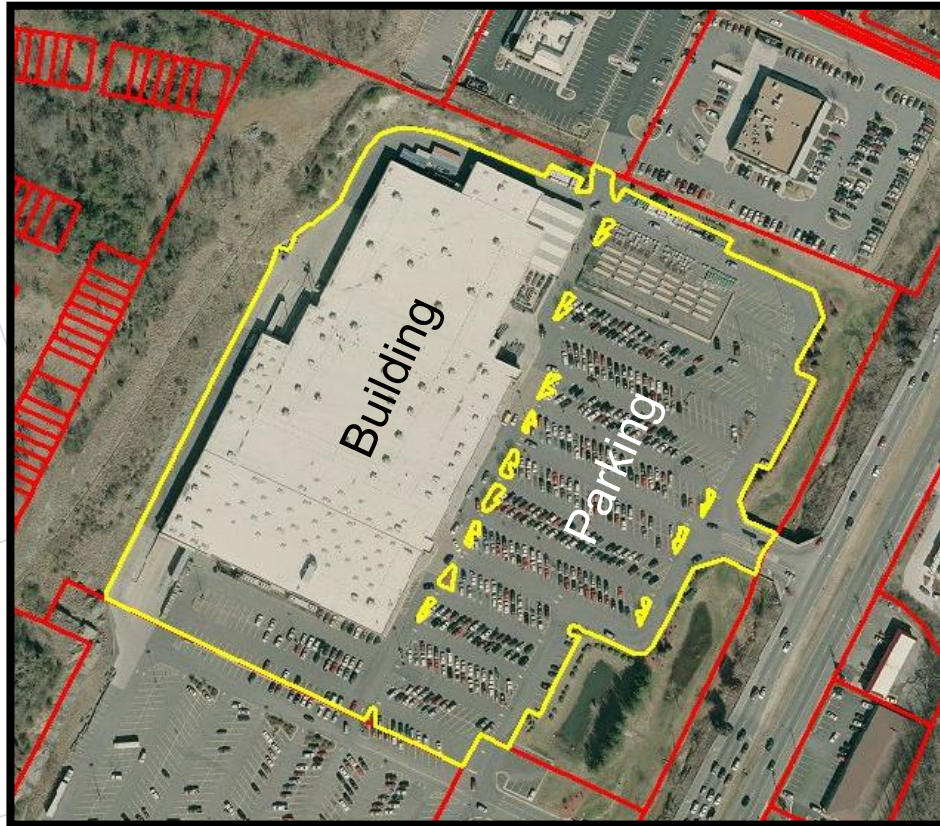
> 4,257 Sq. Ft. = 1.59 SFU

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

LOS	Annual Program Cost	ERU Rate	SFU 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 Components	Stakeholder Voting Tally	Program Components	Stakeholder Voting Tally	Program Components	Stakeholder Voting Tally
A	Fully Preventative/ 100% Routine	9	Comprehensive Planning, NPDES Compliance, Full Implementation	7	\$6 million/year (16-year program)	7
B	Mixture of Routine and Inspection Based	7	Pro-Active Planning, NPDES Compliance, Systematic Implementation	9	\$4 million/year (25-year program)	9
C	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 bi-monthly utility bill
 - As a fee on a property owner's annual property tax bill
 - On a separate, stormwater bill
 - Combination



THE CITY OF LYNCHBURG, VIRGINIA
WATER, SEWER & STORMWATER BILL
PO Box 9000
Lynchburg VA 24505-9000

RETURN SERVICE REQUESTED

Contact Us

Phone Number: (434) 455-3840
Emergency After Hours: (434) 455-4250
Stormwater Details: (434) 455-RAIN (7246)
Regular Office Hours: 8:30 A.M. – 5:00 P.M.

> Due and payable upon receipt.

> Failure to pay delinquent accounts by the due date will result in termination of service and an additional \$25.00 fee.

> A \$25.00 processing fee will be charged for all returned checks.

> 5% penalty will be added for late payment on water, sewer and stormwater charges.

> Manage your account online at: www.lyncburgva.gov
View up to date transactions and make payments with City Links (Allow 3 Business days for all transactions).

> Credit card payments, call 434-455-3840.

> Online banking - Allow 5 business days for all transactions.


Account Number		Bill Date	Due Date	Previous Payments & Adjustments		
		2/27/13	3/20/13			
Service Period		Days	Service Address			
1/03/13 - 2/04/13		32				
Meter Number	Previous Reading	Current Reading*	Units	Service	Amount	
16591037	156	157 A	1	WATER	2.38	
				SEWER	5.65	
				STORM WATR	4.00	
				ACCT CHRG	3.69	
Previous Balance		.00	Current Due	15.72	TOTAL DUE 15.72	

* A = Actual, E = Estimated, & F = Final

Please return this portion with payment

Account Number	Due Date	Previous Balance	Current Due	TOTAL DUE
	3/20/13	.00	15.72	15.72

0300010490000001008100015724



CITY OF LYNCHBURG UTILITY BILLING
PO BOX 9000
LYNCHBURG, VA 24505-9000

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 service 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 is an impervious surface?

Any surface that does not allow water to soak into the ground (roofs, driveways, roads, etc.).



Let's make it clear

CONCORD
STORMWATER
& YOU

When will the stormwater fee be implemented?

You will see the stormwater fee on your January 2006 utility bill.

Who will it affect?

All customers – this includes property owners as well as renters, businesses, churches and other non-profits. The fee, which is based on your impervious area, will be included in your monthly utility bill.



CONCORD
NORTH CAROLINA
a city meeting the future...

www.ci.concord.nc.us
Environmental Services
704-920-5370
26 Union Street, South
Concord, NC 28026-0308

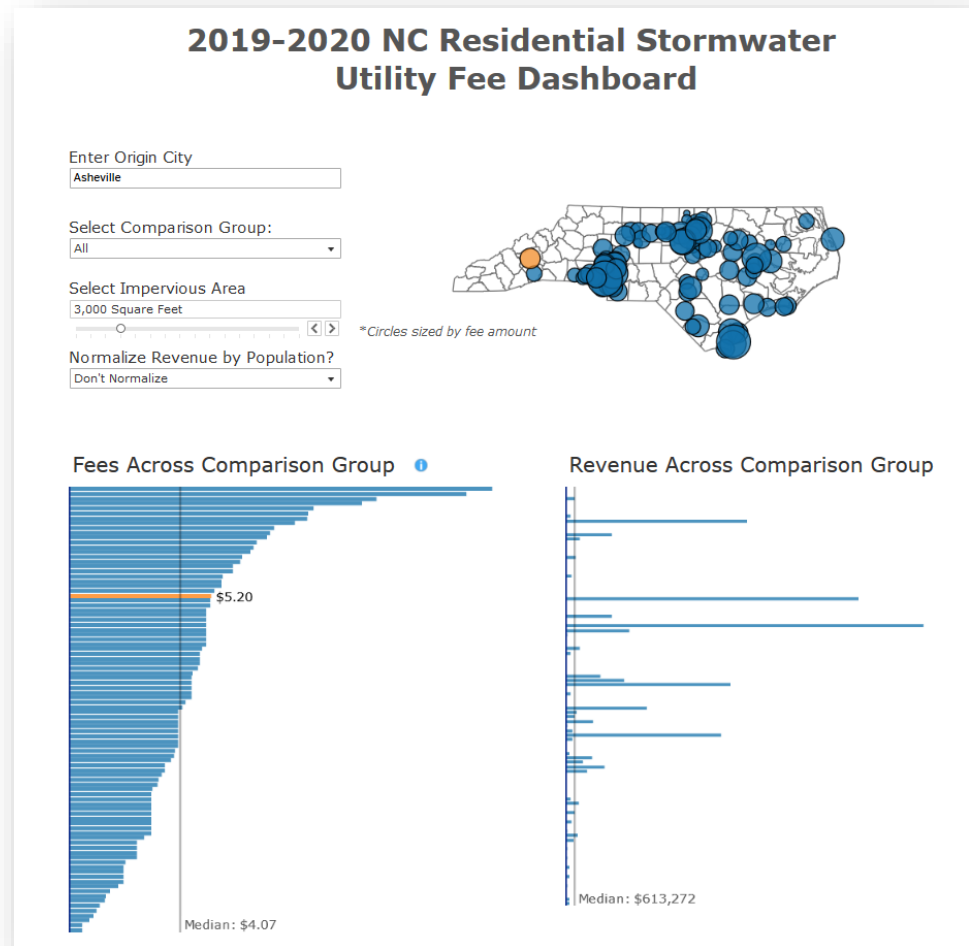
What is Stormwater Runoff?

Stormwater runoff is the water that flows off roofs, driveways, parking lots and other hard surfaces during rain storms. Rather than being absorbed into the ground, it flows into ditches, culverts, catch basins and drainage pipes.



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 service before selling the fee
- 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?

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