

# Funding Sources for a Stormwater Utility

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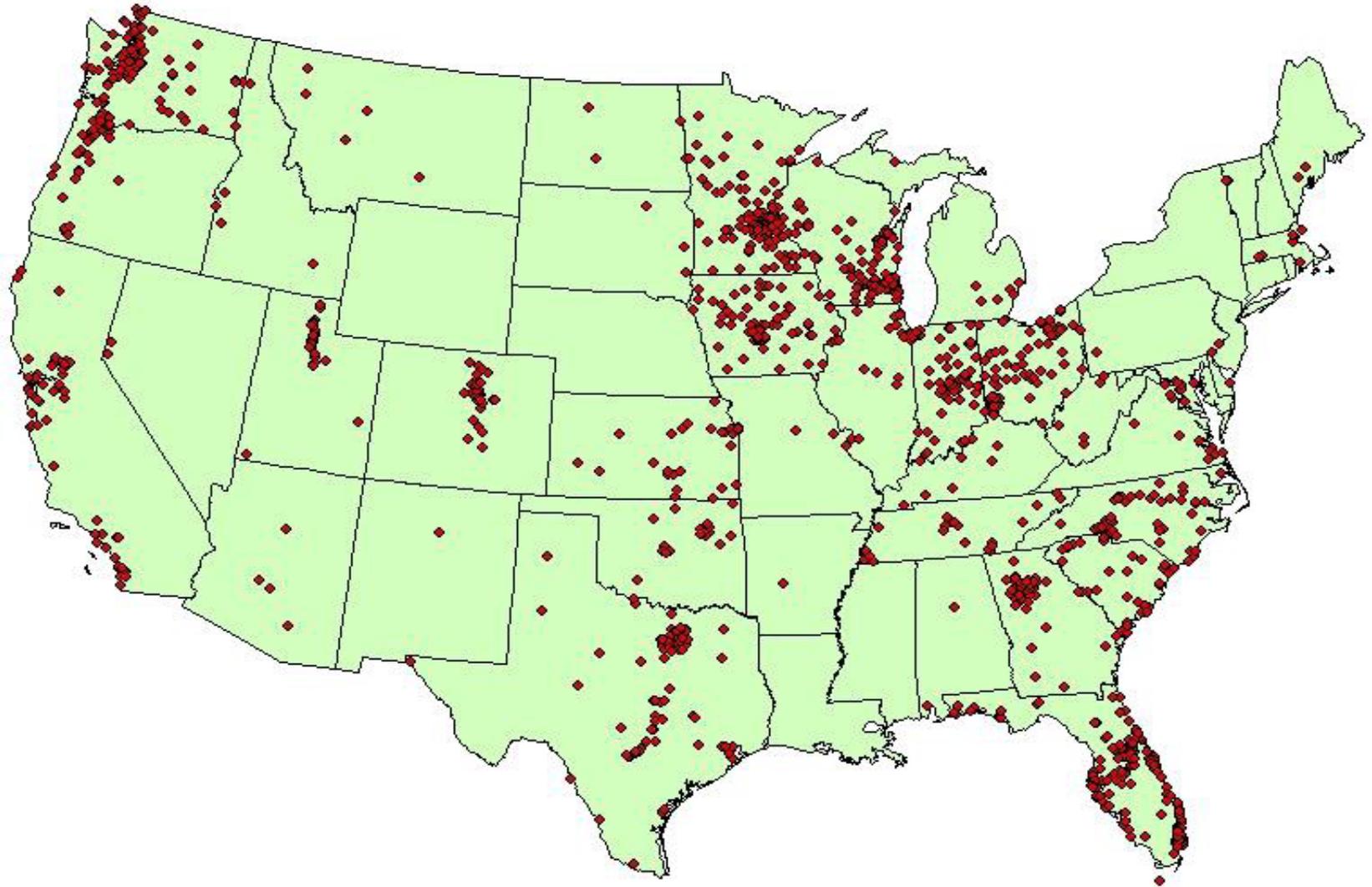
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# General Overview

- Studied over 1,300 in US; estimates 1,500 to 2,000
- Average monthly single residential fee is \$4.20
- Fees range from less than \$1.00 to \$22.37 per month

# Stormwater Utilities 2012



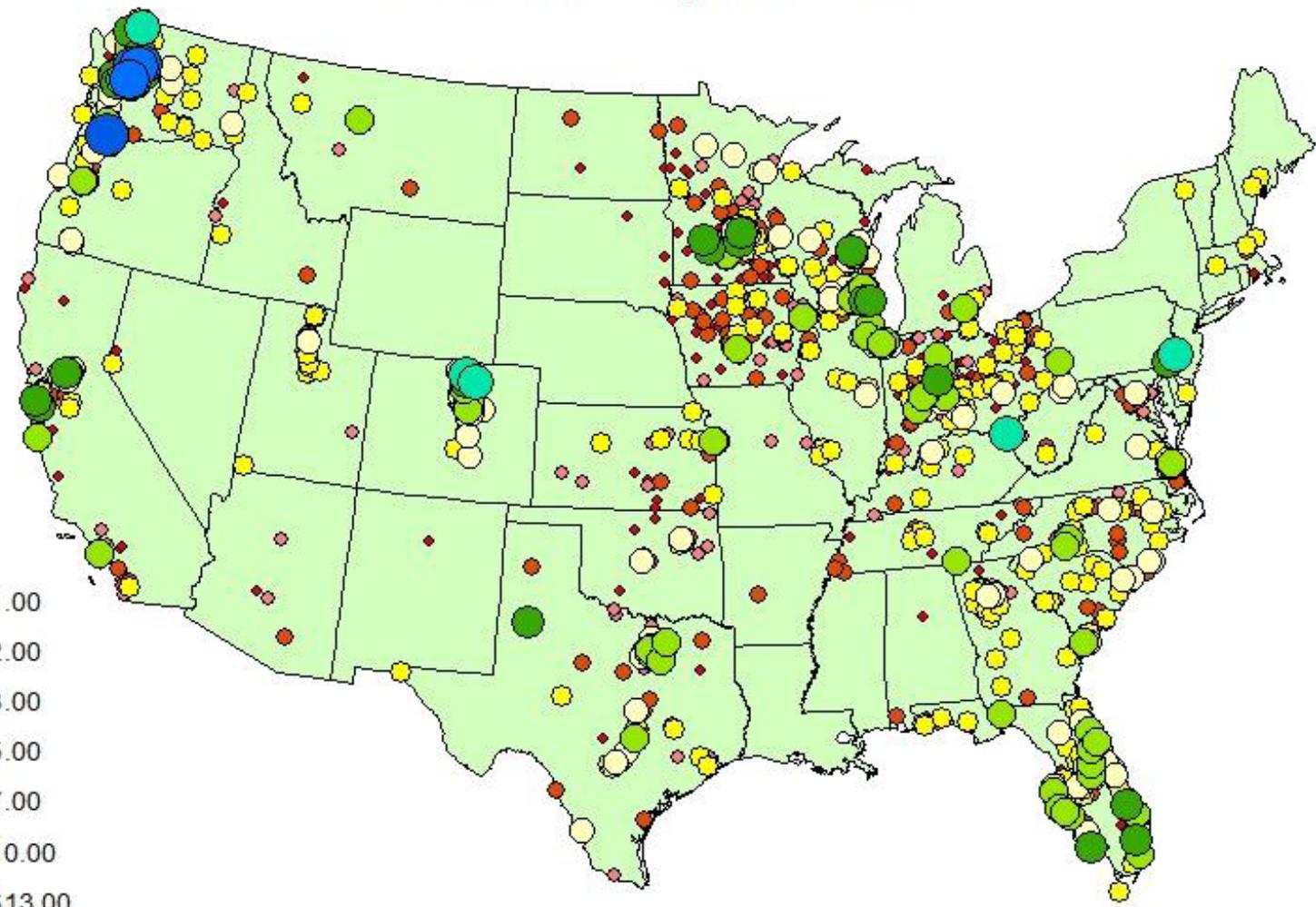
Source: Western Kentucky University Stormwater Utility Survey 2012

# Stormwater Utility Fees 2012

## SWUs 2012

### Fee

- \$0.00 - \$1.00
- \$1.01 - \$2.00
- \$2.01 - \$3.00
- \$3.01 - \$5.00
- \$5.01 - \$7.00
- \$7.01 - \$10.00
- \$10.01 - \$13.00
- \$13.01 - \$15.00
- \$15.01 - \$20.00
- \$20.01 - \$22.37



Source: Western Kentucky University Stormwater Utility Survey 2012

# Fee Structures

- A fee must be fair and equitable to all users
- Higher fees for a larger amount of stormwater runoff
- Various factors need to be considered
- Common method for allocating costs is based on impervious areas

# Fee Structures

- Ad valorem/property value
- Flat Fee
- Land Characteristics
  - Impervious cover
  - Gross Land area

# Ad valorem

- Easy to administer
- Costs based on assessed property value may not be the most equitable cost
- Tax-exempt properties do not contribute

# Flat Fee

- Commonly used for residential property
- Simplest rate component to utilize
- Equitability issues
- Flat fees are used initially

# Land Characteristics

## Impervious Cover

- Fees are proportional to measured impervious area
- Specific runoff characteristics of each parcel or land use class
- Measuring the impervious area is labor intensive
- Undeveloped property is not included
- Water quality is not considered

# Land Characteristics

## Gross Land Area

- There is a high level of technical accuracy
- Susceptible to challenges
- Specific runoff characteristics of each parcel or land use class are used
- Undeveloped property included
- Water quality can be included

# Fee Structures

- Customer Classification
- Equivalent Runoff Unit (ERU)

# Customer Classification

- Typically two classes
  - Residential
  - Non-residential
- Can be further broken down

# ERU

- Most common billing unit
- Based on stormwater generation
- Size depends on utility

Based on Rose, Duncan T. "Rate Structure Fundamentals."  
Establishing a Stormwater Utility in Florida. Ed. Camilla  
Augustine and Scott McClellan. Tallahassee : Florida  
Stormwater Association, 2003.

# Example: Commercial Fee Determination

## *Unique Fee for Each Property*

### **Sample Calculation –Commercial Property**

Impervious area for a specific property \* 20,000 sf

ERU Value – square feet 2,682 sf

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ERUs for this specific property 7.5 ERUs

ERU value – Fee per ERU per month \$3.00

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**Monthly Stormwater Bill for this Property \$22.50**

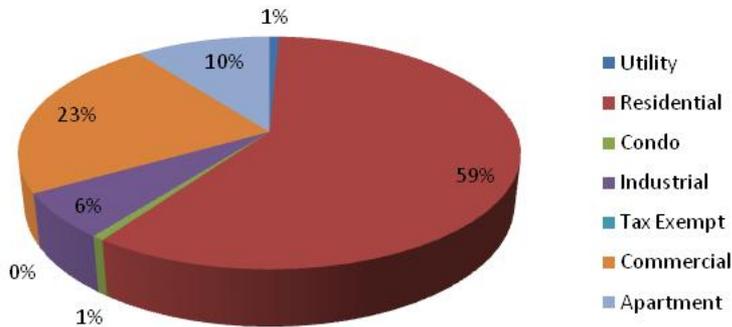
**Non- Residential**

**Paved Surfaces  
& Structure  
=20,000 sf**

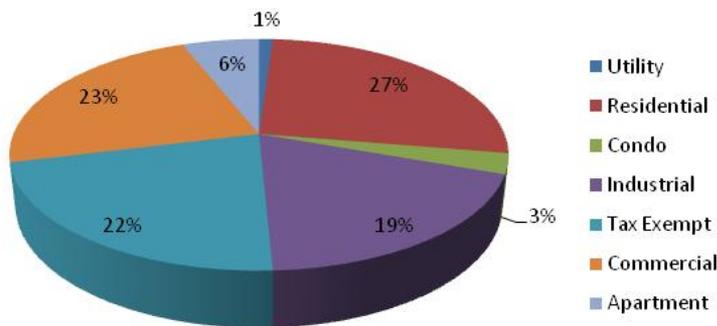
*\*Impervious area to be property-specific and based upon tax records and other sources (e.g., aerial photography)*

# Example of Revenue Sources

**Based on Assessment**



**Based on Fees**



Property Class	Assessed Value	Based on Taxes	Based on ERU's
Utility	38,657,710	1%	1%
<b>Residential</b>	<b>3,031,442,500</b>	<b>59%</b>	<b>27%</b>
Condo	34,441,960	1%	3%
Industrial	322,555,660	6%	19%
<b>Tax Exempt</b>	<b>2,535,227,590</b>	<b>0%</b>	<b>22%</b>
Commercial	1,178,814,070	23%	23%
Apartment	532,050,820	10%	6%
<b>Total</b>	<b>7,673,190,310</b>	<b>100%</b>	<b>100%</b>

**ERUs provides a fair and equitable allocation of costs and reduces burden on residents.**

# Credits

- Financial incentive
- Typically for non-single family residence
- Reduce stormwater impact or management cost
- Applied as a percentage or flat fee reduction
- Limits to how much credit is allowed <sup>(1)</sup>

(1) Black & Veatch Enterprise Management Solutions. [2007 Stormwater Utility Survey](#)

# Example – Philadelphia Credit Program

- Uses a parcel based fee
- Allow for credit if retrofit is installed
- ~100% impervious area fee reduction
- Can reapply for credit must document:
  - Inspection
  - Maintenance
  - Functionality

# For Additional Information

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