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NC Stormwater Utilities: Past, Present and Future

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Major Topics

- Stormwater Utility Basics
- Typical North Carolina Stormwater Utilities
- Billing
- Customer Service
- Credit Programs
- Trends

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Stormwater Utilities in General

- A way to provide stable, consistent funding for stormwater services
- Number of utilities growing – EPA reported just over 100 in 1994, today there are more than 500
- Rise in utilities triggered by NPDES Phases I and II

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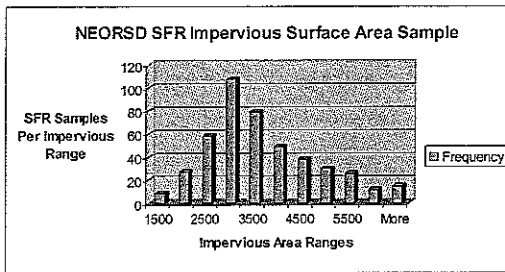
Rate Structures

- Often based on impervious surface
- Can calculate the impervious surface on all properties (usually done for commercial properties)
- Flat or tiered fees for residences based on Equivalent residential units (ERUs)
- Bills placed on water, sewer, or property tax bills

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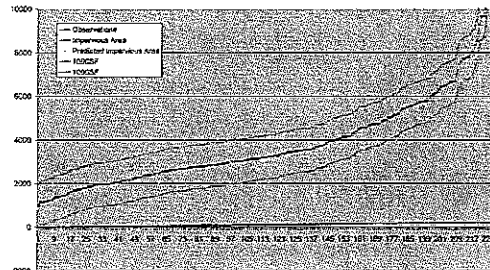
Divining Residential Rate Structures



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Tiering Residential Rates - \$%!?!*^& it!



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Advantages

- More reliable and consistent than property tax revenue
- More equitable than taxes: attempts to charge based on the amount of runoff created, not property value
- Pays for long-needed drainage improvements or other water quality and quantity needs
- Educates citizens on stormwater

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Disadvantages

- Creates a new fee for citizens, which may be perceived as a "rain tax"
- Must educate citizens and elected officials on stormwater and the need for a fee
- Administrative hurdles in customer service and in billing operations
- Possible appeals or challenges

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2006 TJ COG Survey Results

- 37 local governments in NC charge a stormwater fee
- All 37 responded to survey
 - Urban areas such as Charlotte and Raleigh
 - Suburban and rural areas such as Bessemer City, Kernersville, Dallas, Oak Island
- Average SFR = 2,455 square feet
- Fee ranges from \$1/mo to \$7.06/mo
- Average fee is about \$4/mo

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Charlotte-Mecklenburg Storm Water Services

- Began in response to NPDES Phase I
- First stormwater utility in North Carolina (since 1993)
- 7-year process of studies, task forces, public meetings, etc.
- Charges \$5.87/mo for SFR under 2,000 square feet, \$7.63/mo for SFR greater than 2,000 square feet, and \$113.87/mo per acre impervious surface for commercial (third tier coming)

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Town of Kernersville

- Began in response to NPDES Phase II
- Relatively new fee (developed in 2006)
- Based on impervious surface
- Fees billed on property taxes
- SFRs charged a \$3.29/mo for up to 2,980 square feet of impervious surface area
- Exempts properties with under 500 s.f. of impervious surface area

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Typical Services

- All stormwater-related programs and services
 - For example:

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RETROFITS



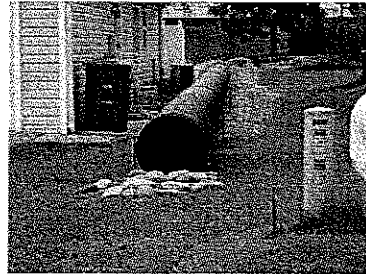
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Typical Services

- All stormwater-related programs and services
 - For example:

RETROFITS
(ZOOMED VIEW)



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Typical Services

- All stormwater-related programs and services
 - For example:

EQUIPMENT
AND
FURNISHINGS



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Typical Services

- All stormwater-related programs and services
 - For example:

STREAM
RESTORATION




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Typical Services

- All stormwater-related programs and services
 - For example:

CHANNEL STABILIZATION
(USING THE 'BUILDING WALL AS STREAM BANK' METHOD)



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Creating the Billing File

- All billing mechanisms present challenges
- Even if conveyed on tax statements, some account rectification is required
- Issues include private streets, common areas and account/parcel issues

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Maintaining the Billing File

- Database maintenance is all about detecting change
- Maintenance issues depend on billing mechanism, database connections, and policy decisions
- Maintenance frequency is influenced by billing mechanism and particulars
- Quality control is an ongoing issue

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Maintaining the Billing File

- Database maintenance is all about detecting change
 - Things get built
 - Things get torn down
 - Customers and owners change
 - Accounts get added
 - The service area changes
 - Credits change
 - Errors are found

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Managing Customer Service

- Approach must be tailored to utility's circumstances
- Must establish procedures before they are needed
- Heaviest workload occurs at beginning
- Customer service workload may taper off rapidly

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Administering a Credit Program

- A credit is a reduction in stormwater fee associated with a BMP or activity that reduces a customer's demand for stormwater service
- BMP-based v. Activity-based
- Advantages and disadvantages

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Trends in Stormwater Utilities

- BMP maintenance involvement
- More sophisticated financing / bonding
- Enhanced rate structures
- New data sources
- More sophisticated ratemaking
- Level and extent of service variation
- Streamlined account maintenance
- Streamlined customer service

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QUESTIONS

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