

City of Lafayette
Stormwater
Technical Advisory Committee

August 13, 2009



CITY OF LAFAYETTE
WET WEATHER PROGRAM

Welcome and Introductions

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Purpose of SWTAC

- Provide vital feedback for Stormwater Master Planning
- Bring a broad perspective to the Stormwater Program
- Give input on implementation of green and sustainable infrastructure
- Offer community perspective of the proposed Stormwater user fee rate and assessment structure
- Support community education and outreach initiatives



Today's Agenda

- Stormwater User Fee Updates
 - Ordinance
 - Policy documents
- Stormwater Capital Program Project Prioritization
- Long Term Control Plan (LTCP) Update



Stormwater User Fee Update

- Ordinance
 - Content
 - Status
 - Timeline
- Policy Documents
 - Billing criteria
 - Billing class



Stormwater Utility Ordinance

- **What is it?**
 - An ordinance amending existing Section 8.08.140 and enacting a new article, Sections 8.08.800 - .890, of the City of Lafayette Municipal Code providing for a stormwater service charge in the City of Lafayette, Indiana



Stormwater Utility Ordinance

- **How?**

- In accordance with and pursuant to Indiana Code 36-9-23, the Common Council desires to establish a distinct, just and equitable schedule of service charges for the users of the system

- **Why?**

- The Stormwater Service Charges will help the city to maintain and operate the system; plan, design, fund and construct projects necessary for the system; implement the programs necessary to provide the safe and efficient conveyance of Stormwater; and begin an inspection and maintenance program of the city's Stormwater infrastructure



Stormwater Utility Ordinance

- **Details of the amendment**
 - Sections establishing a Stormwater Service Charge
 - Definitions
 - Equivalent residential Unit (ERU)
 - Impervious Surface Area
 - Residential
 - Dwelling Unit
 - Non-Residential



Stormwater Utility Ordinance

- **Stormwater Service Charge**

- Will be imposed on each and every lot and parcel of land within the city that directly or indirectly contributes to the city's Stormwater Drainage System
- Will be assessed against the property owner for residential and non-residential property each month
- Late payment will be subject to collection or deferred payment charge
- Delinquent charges constitute a lien against the property and may be collected, along with applied penalties, recording fees and service charges, in accordance with the provisions of IC 36-9-23-32 and -33.



Stormwater Utility Ordinance

- **Definitions**

- ERU - One (1) equivalent residential unit shall equal 3,200 square feet of impervious surface area, which shall be considered the average impervious surface area for a residential lot or parcel
- Impervious Surface Area - A surface, such as pavement, rooftops, compacted gravels and other structures, which prevent the infiltration of Stormwater into the soil
- Residential - A parcel or property containing a single building or structure intended for sleeping purposes, having occupants permanent in nature and containing not more than two (2) dwelling units
- Dwelling Unit - A building or structure or portion thereof that contains living facilities, including provisions for sleeping, eating, cooking, and sanitation, as required by local, state and federal code, for not more than one (1) family or congregate resident for sixteen (16) or fewer persons
- Non-Residential - A parcel or property not defined as residential



Stormwater Utility Ordinance

- **Timeline?**
 - Propose to introduce the ordinance at the September 14, 2009 Council Meeting



Questions or Comments?



Program Policy

Parcel Review and Billing Criteria

- **Visual inspection of parcel determines**
 - Parcel Status
 - Developed or Non-Developed
 - Storm Classification
 - Residential or Non-Residential
 - Roadway
 - Railway



Program Policy

Parcel Review and Billing Criteria

- **Parcel data table also provides**
 - Parcel area
 - UZO zoning classification overlay
- **Other process information used**
 - Existing utility billing database
 - Emergency response address data



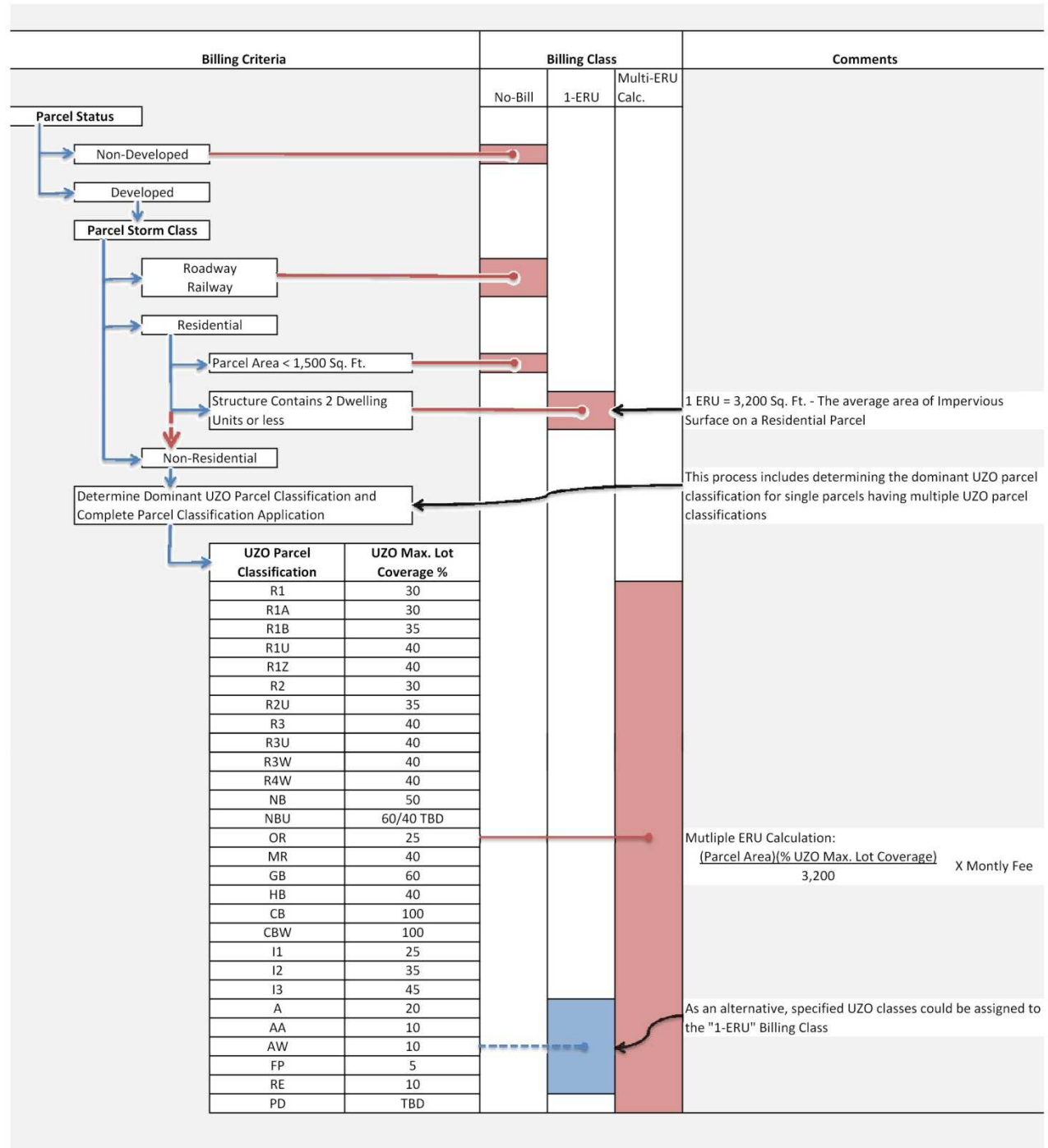
Program Policy

Parcel Review and Billing Class

- **Three Billing Class “Bins”**
 - No-Bill
 - 1-ERU (base fee)
 - Multi-ERU calculation
 - Parcel area
 - UZO parcel classification
 - Maximum lot coverage (%)



- How does this all fit together?



9/4/2009

Questions or Comments?



Stormwater Capital Program Project Prioritization

- **Why must the city prioritize its capital projects?**
 - To determine the greatest need when considering a project
 - To distinguish between public and private benefit when choosing projects
 - Provides the city with project planning tool
 - Determines logical project area(s)
 - Incorporate projects into long term plan
 - Cost effective strategy



Determining the Greatest “Need”

- **City must prioritize the most needed projects**
 - What will be the biggest public benefit
 - What will benefit the most residents
 - What will provide the most needed fix to public infrastructure
 - What will provide preventative measures from public infrastructure deterioration
 - What will have the greatest impact on water quality



Public vs. Private Benefit



Public Roadway



Private Yard



Public vs. Private Benefit

Determining the Difference

- **Public benefit area**
 - Problem area occurring within the public right-of-way and/or if the problem is impacting public infrastructure
 - Does NOT mean solving residential yard flooding
- **Examples**
 - Public Roadway Failure
 - Storm Sewer Failure/Sanitary Sewer Backup or Pipe Collapse
 - Water Quality Issues
 - Severe Erosion



Public vs. Private Benefit

Determining the Difference

- **Private benefit area**
 - Any area on private property that does not directly or indirectly effect public property or infrastructure
 - Isolated backyard flooding/low spots
- **Incidental private benefit**
 - If improving private property can be a benefit to public infrastructure it may be deemed a public benefit area
 - Extending erosion control or stabilization



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How Does the City Become Aware of Potential Projects?

- **Public reporting**

- To request assistance with a drainage problem, call (765) 807-1036
- To report a problem through the Action Center

<https://www.lafayette.in.gov/egov/apps/action/center.egov>

- **City maintenance staff**

- Issues observed during routine maintenance

The screenshot shows a web browser window displaying the City of Lafayette Action Center. The page title is "Report a Problem in Your Neighborhood" and it is labeled as "Step 1 of 2". The page contains a search bar, a navigation menu with links like "HOME", "EMPLOYMENT", "PAY UTILITIES", "DIGITAL MEDIA", "VISITOR INFO", "HOW DO I?", and "WEED & SEED". The main content area includes a "Report a Problem in Your Neighborhood" section with a "Step 1 of 2" indicator. Below this, there is a paragraph explaining the city's concern for neighborhood quality and a list of city code violations. A "NOTE" section provides contact information for criminal activity. The form fields include: Full Name, Address, City, State (dropdown), ZIP Code, Telephone (with ext. field), E-mail, Location of problem (dropdown), and Type of incident/situation (dropdown). A legend indicates that an asterisk (*) denotes required information.



Prioritization

- **Priority Rating System**
 - Evaluation rating form
 - Will enable the city to establish a defined rating system to assign a numerical value to the assessed area
- **GIS mapping**
 - Map the ratings and determine capital improvement project areas; a very effective planning tool
 - Enables the city to determine the greatest area of need
 - Map will illustrate where the highest ratings are located and determine issue overlap as well as recurring problems



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Evaluation Rating Forms

| City of Lafayette | | Stormwater Program | | | | |
|---|---|--|---------------------------------|---------------------|---------------|------------|
| Stormwater Problem Area | | Initial Priority Rating Evaluation Sheet | | | | |
| Street Address: | | DRAFT | | | | |
| Nearest address or intersection of problem: | | | | | | |
| Rating By: | Date: | | | | | |
| INSTRUCTIONS: Fill in only 1 "X" per Group Rating as applicable | | Revision Date: 08-12-2009 | | | | |
| STREET FLOODING | STREET CLASSIFICATION | STREET FLOODING OCCURRENCES | | | | Rating |
| | | Every Rain | Once/1-2 Yr | Once/5-10 Yr | Once/10-25 Yr | |
| | Primary Arterial | 4 | 3 | 2 | 1 | |
| | Secondary Arterial | 3 | | | | |
| INFRASTRUCTURE DETERIORATION | PUBLIC INFRASTRUCTURE TYPE | MAJOR FAILURE POSSIBLE WITHIN | | | | Rating |
| | (as applicable) | Immediate | 1-2 Years | 3-5 Years | 6-10+ Years | |
| | Arterial/Sanitary Int./Major Tributary | 4 | 3 | 2 | 1 | |
| | Collector/Storm/Sanitary Collector/Stream | 3 | | | | |
| FLOODED | PROPERTY OR FACILITY CLASSIFICATION | FLOODING FREQUENCY | | | | Rating |
| | | Every Rain | Once/1-2 Yr | Once/5-10 Yr | Once/10-25 Yr | |
| | Homes | 4 | | | | |
| | Business/Industry | 3 | | | | |
| NUMBER IMPACTED | PROPERTY CLASSIFICATION | NUMBER OF FEATURES AFFECTED | | | | Rating |
| | | 1-10 | 11-25 | 26-50 | > 50 | |
| | Homes | 4 | | | | |
| | Business/Industry | 2 | | | | |
| EXTENT OF EROSION | Erosion | LINEAL FEET OF EROSION | | | | Rating |
| | | 10-100 | 101-250 | 251-500 | > 500 | |
| | Observed Erosion | 10 | 20 | 30 | 40 | |
| | | | | | | |
| WATER QUALITY | (Area Type) | Non-Combined Sewer Area | Erosion Affecting Water Quality | Combined Sewer Area | | Rating |
| | Area Type | 5 | 10 | 15 | | |
| SOLUTIONS | Resolution Type | Storm Sewer | Structural | Bridge/Culvert | Open Channel | Rating |
| | Solution | 2 | 4 | 6 | 8 | |
| PUBLIC INVOLVE | COST SHARE (When property owner ask to participate or is required for a solution) | | | | | Rating |
| | | > 75% | 26-75% | 6-25% | 0-5% | |
| | % by Developer/Owner | 15 | 10 | 5 | 0 | |
| | | Subtotal | | | | 0 |
| Public or Private Benefit? | | Public | Private | | | IPR RATING |
| | | | | | | 0 |

• Evaluation criteria

- Street flooding – How often
- Infrastructure Deterioration – Possible failure
- Structure flooding – How often
- Number impacted – How many
- Extent of erosion - Severity
- Water quality impacts
- Solutions – Type of fix
- Public involvement – Cost share
- Public or Private Benefit

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Processing the Information and Summary

- **Database**
 - Enables the city to record and track citizen complaints
 - City can better identify continual problem areas and formulate capital projects
- **GIS mapping**
 - Enables the city to visually track evaluation ratings
 - City can better identify recurring problem areas and adjacent project areas and coordinate a more efficient approach for project designations



Questions or Comments?

