#### Memorandum



DATE February 13, 2015

Members of the Budget, Finance & Audit Committee: Jerry R. Allen (Chair), Jennifer S. Gates (Vice Chair), Tennell Atkins, Sheffie Kadane, Philip T. Kingston

SUBJECT Storm Water Utility Fee Study Update

On February 17, 2015, the Budget, Finance and Audit Committee will be briefed on the Storm Water Utility Fee Study Update. The briefing will be presented by Sarah Standifer, Interim Director of Trinity Watershed Management.

Please let me know if you need additional information.

Jill A. Jordán, P.E.

Assistant City Manager

#### Attachment

c: Honorable Mayor and Members of City Council A.C. Gonzalez, City Manager Warren M.S. Ernst, City Attorney Craig D. Kinton, City Auditor Rosa A. Rios, City Secretary Daniel F. Solis, Administrative Judge Ryan S. Evans, First Assistant City Manager

Jeanne Chipperfield, Chief Financial Officer Joey Zapata, Assistant City Manager Mark McDaniel, Assistant City Manager Eric D. Campbell, Assistant City Manager Forest E. Turner, Chief Wellness Officer Sana Syed, Public Information Officer Elsa Cantu, Assistant to the City Manager

# Storm Water Utility Fee Study Update

Budget Finance & Audit Committee February 17, 2015



### Introduction

- City hired Raftelis Financial Consultants to review the Stormwater Utility rate structure and associated fees
- Consultants have assessed the program and are recommending a change in the rate structure
- Remain revenue neutral
- Proposed rate structure utilizes measured data to assess fees
- Should Council concur, fee study will proceed concurrent to development of necessary interfaces and outreach efforts to citizens and businesses

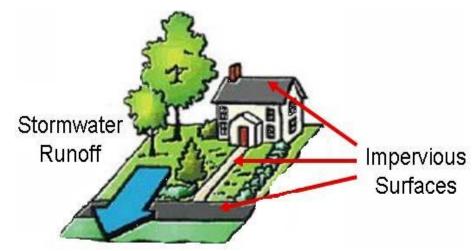
# Purpose

- Provide City Council with overview of fee study efforts to date
- Seek City Council direction on next steps

# **Key Definition**

## Impervious area

- Hard surface areas, such as buildings, roads and sidewalks that repel stormwater
- Amount of runoff is directly related to the amount of impervious surfaces



# Stormwater Utility Fee Study Status

# Fee Study Scope of Work

#### Work to date

- System assessment
- Reviewed billing accounts and GIS data analysis
- Financial planning
- Developed rate structure recommendations
- Began impact analysis
- Recommendations for the path ahead

#### **Future work**

- Recommend rates
- Public outreach
- Update data and develop systems interface
- Implementation

# System Assessment - Findings

- Program, rate structure and fees reviewed against benchmark cities
- Stormwater related activities are consistent with other utilities
  - Sound program
  - 2010 TCEQ and EPA audits found program to be compliant with permit
- Rate structure not consistent with most benchmark cities

# **Current Rate Structure**

# **Current Rate Structure**

### Rate classes

Rate class	Fee basis and calculation
Residential	Tiered rate structure based on <u>lot</u> area
Commercial	Per 100 sq ft of assumed impervious area by premise type
Vacant	Per 100 sq ft of 20% assumed impervious area

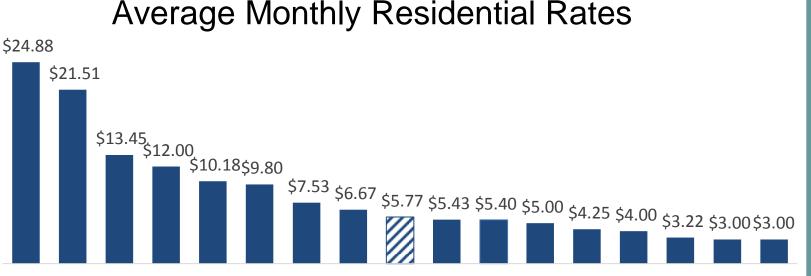
## **Current Rate Structure**

#### Rates by Residential Lot size

```
    ▶ Up to 6,000 sf $ 3.65 / Mo.
    ▶ 6,001 - 8,000 sf $ 5.77 / Mo.
    ▶ 8,001 - 17,000 sf $ 7.77 / Mo.
    ▶ 17,001 - 215,000 sf $ 13.87 / Mo.
    ▶ More Than 215,000 sf $ 43.87 / Mo.
```

<u>Vacant and commercial property</u> is calculated based on square footage and a runoff coefficient (\$0.1589 per 100 sq. ft. of impervious area). Minimum charge of \$5 per month; vacant properties have a maximum charge of \$57.10.

# Residential Rate Comparison



Portland, OR WA PA SEL NC 17 CA MM 17 OK 17 MO 17 IN STAND TO 18 THOUSE ON THE TOTAL ON THE TOT

# Best Management Practices

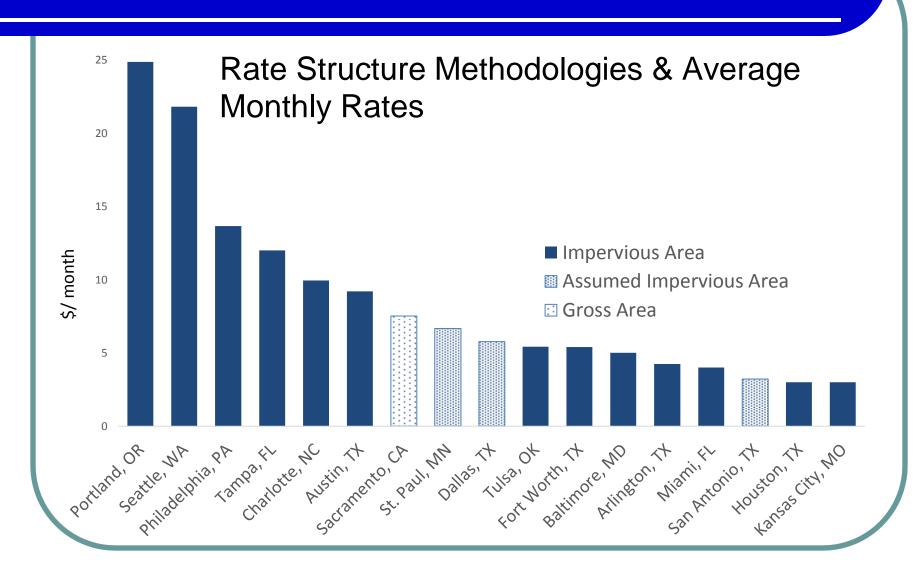
# Best Management Practices – Stormwater Utility Fee

- More than 80% of stormwater utilities base rates off of impervious area, using GIS data to manage the impervious data
- Most utilize tiers for billing residential

Impervious Areas



# Residential Methodology Comparison



# Recommendations

# Recommendation - Advantages

- More equitably distribute the costs
- Better defines properties' stormwater run-off
- Promotes environmental quality
- Current industry standard and best management practices
- Coincides with needs to manage impervious area data
- Clarifies billing adjustment processes and reduces requirement for site visits
- Enhanced customer service

# Recommendation

## Proposed rate structure

Element of rate structure	Recommendation
Basis of charge	Change to measure Impervious Area
Unit of charge	Change to 1,000 square foot impervious area units
Minimum charge	<b>Retain</b> – equitably recover costs from all properties
Residential tiers	Change – base on impervious area, not lot size

# Recommendation - Impacts

- Each developed property's fee based on its impervious area
- No assumptions required
- Properties lightly developed compared to assumed pay less
- Properties heavily developed compared to assumed pay more
- More than half residential accounts decrease in their fee

Note: Detail rate study required to finalize impacts.

# Implications Estimates (Residential)

- More than a 20% decrease in fees about 20%
- Fees within 20% of current about 50%
- More than a 20% increase in fees about 20%
- More than a 50% increase in fees about 10%

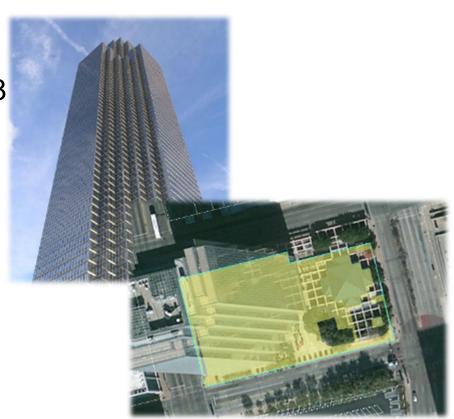
# Implications Estimates (Commercial)

- More than a 50% decrease in fees about 10%
- More than a 20% decrease in fees about 10%
- Fees within 20% of current about 45%
- More than a 20% increase in fees about 30%
- More than a 50% increase in fees about 5%

# Example: Office Building – High Rise

Current Monthly Fee: \$94

Proposed Rate Structure: \$118



# Example: Warehouse

Current Monthly Fee: \$523

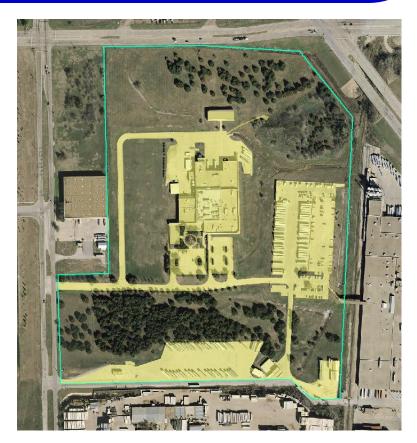
Proposed Rate Structure: \$512



# Example: Office Building – Campus Style

Current Monthly Fee: \$3,520

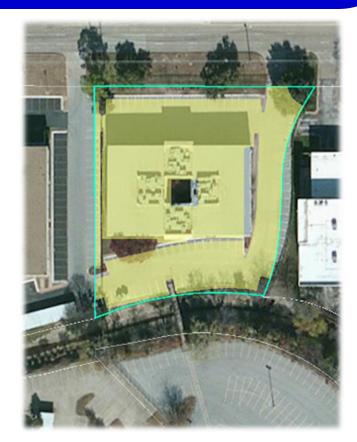
Proposed rate structure: \$1,458



# Example: Office Building – Traditional Higher Density

Current Monthly Fee: \$92

Proposed Rate Structure: \$96



# Example: Residential – R-7.5(A)

Properties moderately developed compared to assumed would remain relatively the same

Current Tier 2 Monthly Fee: \$5.77

Proposed Tier 2 Rate Structure: \$5.41



# Example: Residential

Properties lightly developed compared to assumed would pay less

Current Tier 3 Monthly Fee: \$7.77

Proposed Tier 1 Rate Structure: \$3.41



# Example: Residential

Properties heavily developed compared to assumed would pay more

Current Tier 1 Monthly Fee: \$3.65

Proposed Tier 4 Rate Structure: 12.25



# Why Change the Rate Structure?

- Empowers citizens and businesses to make decisions regarding development/redevelopment:
  - Encourages greening of neighborhoods and developments
  - Lowers the stormwater runoff footprint
- Reduces need for individualized adjustments and potential errors

# Next Steps

# **Next Steps**

- Complete rate structure and fee assessment work
- Recommend approval of supplemental agreement with Raftelis Financial Consultants, not to exceed \$675K, to develop associated data and systems improvements and interface, training and support for the rate structure change
- Briefing to provide results in Fall
- Following Fall briefing, public meetings will be held if applicable

# Appendix A – Background

# Background

- Stormwater regulations for large cities implemented by federal government in 1990
- Dallas City Council established Storm
   Drainage Management Fund in 1991
- Stormwater is completely separate from Sanitary Sewer
- Majority of stormwater drainage systems and associated rainfall ends up in the Trinity River

# Background

Stormwater utility fee revenues are used to:

- Ensure compliance with state and federal regulations
- Promote improved water quality
- Maintain stormwater drainage and flood protection systems

# Background

The Stormwater Utility Fund reimburses 15 departments for permit related activities:

City Attorney's Office

City Manager's Office

**Code Compliance** 

Communication

Information Systems

Court & Detention

Services

Dallas Fire-Rescue

Dallas Police Department

**Dallas Water Utilities** 

Equipment & Building Services

Office of Environmental Quality

Park and Recreation

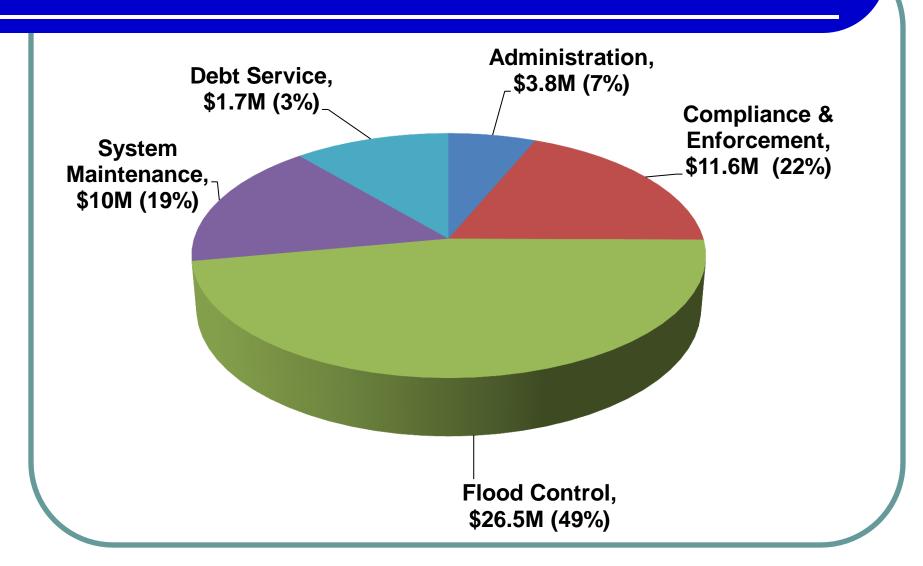
**Public Information Office** 

**Public Works** 

**Streets Services** 

Trinity Watershed Management

# Background (FY14-15 Adopted Budget)



# Background (FY14-15 Adopted Budget)



# Compliance & Enforcement \$11.6M

Stormwater Management Program

**Surface Water Monitoring** 

Compliance Inspections and Nuisance
Abatement

**Environmental Training/Education** 

#### Flood Control \$26.5M

Levee, Pump Stations, and Sumps

Floodplain Management

**Channel Maintenance** 

Inlet and Storm Sewer Pipe Maintenance





# Background (FY14-15 Adopted Budget)



#### **System Maintenance \$10M**

Debris and Litter Removal

Storm Drainage Maintenance Activities

Curb and Gutter Repair

Vegetation Management

#### **Debt & Administration \$5.5M**

**Debt Service** 

Billing and Customer Service

Geographic Information System Support

Communication and Information Systems Support



# Dallas Stormwater Utility System

- 65,000 inlets
- 1,800 miles storm sewers
- 11,000 drainage outfalls
- 168 miles creeks and channels
- 30 miles levees
- 13 pump stations with sumps
- 6 pressure sewers
- 8 street pump stations
- 100 inline stormwater interceptors
- 200 retention/detention ponds & lakes
- 60,000 service requests annually



# Appendix B – Regulatory History

- **1972** Federal Clean Water Act passed to limit raw sewage and other pollutants flowing into rivers, lakes, and streams
- **1987** Federal Clean Water Act amended requiring permits for stormwater discharges into waterways
- **1990** The first phase of the stormwater regulations concerning Municipal Separate Storm Sewer Systems (MS4), and construction and industrial facilities was implemented for large cities
- **1991** Dallas City Council approved City Code 2-167 establishing a Stormwater Drainage Utility, initial fee schedule, initial permit and Stormwater Drainage Utility
- **1996** New EPA stormwater regulations issued with more specific standards to reduce pollutants in stormwater and urban runoff

- **1997 -** EPA issued initial NPDES MS4 stormwater permit to the City of Dallas which was in place until February 2006
- **2003 -** EPA initiated an investigation of City's Stormwater Program for non-compliance with Federal & State regulations
- **2004 -** EPA Administrative Order and Notice of Violation concerning City violations of Clean Water Act, Resource Conservation and Recovery Act (RCRA), and Chapter 26 of the Texas Water Code
- **2006 -** TCEQ issued the TPDES MS4 permit to City of Dallas; City negotiated and entered into EPA's mandated **Environmental Management Consent Decree** which dictated specific program activities and staffing requirements

# TCEQ MS4 Permit 8 Key Elements:

- System Operations & Maintenance
- Capital Projects for Flood Control
- Illicit Discharge Detection & Elimination
- Pollution Prevention/Spill Response
- ▶ Industrial Site Inspections
- Construction Site Inspections
- Public Education/Outreach
- Water Quality Monitoring



#### The Consent Decree requires:

- Penalty, Notice and General Activities
  - Industrial and construction inspection/enforcement
  - Operations and maintenance of flood control and stormwater infrastructure
  - Quantified levels of staffing and Stormwater Management activities
- Environmental Management System
- Supplemental Environmental Projects
- Semi-annual Reporting

NOTE: If any of the above requirements are not met, financial and criminal penalties may be enforced

# Appendix C – Fee Study Information

- City's Financial Management Performance Criteria requires periodic review of fees and charges to:
  - Determine full cost of services to be recovered by revenues
  - Identify new revenue/fee sources and/or fee adjustments
- Through this process, stormwater fees have been adjusted six times since 1990 (1994, 2000, 2003, 2004, 2008, and 2009)

- Raftelis Financial Consultants were selected in 2013
  - More than 500 rate studies, financial plans, etc.
  - Many of the largest and most successful utilities nationwide have been reviewed and recommendations implemented:
    - Philadelphia
    - Charlotte-Mecklenburg
    - Baltimore
    - Northeast Ohio
  - Specific implementation expertise for:
    - Public outreach, stormwater billing, collections, customer service, data maintenance

### Project tasks include:

- Determine revenue requirements
- Update GIS impervious area
- Match parcels to accounts
- Recommend rate structure options
- Perform customer impacts analysis
- Public outreach

### Project tasks include:

- Recommend fee incentive program
- Develop 5-year financial plan
- Develop Financial Management
   Performance criteria for Storm Drainage
   Management Fund
- Develop web portal

# Appendix D – Current Rates

#### **Current Rate Structure**

- Current rate structure based on available data at time of utility implementation
- Assumed impervious area based on premise type
- Gross parcel land area
- Minimum monthly charge \$5/parcel unless exempted by state law

# Billing Summary (FY 2015)

