Memorandum

DATE: February 13, 2015

TO: 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. Jordan, 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

“Dallas-Together, we do it better!”
Storm Water Utility Fee Study Update

Budget Finance & Audit Committee
February 17, 2015
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
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
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

<table>
<thead>
<tr>
<th>Rate class</th>
<th>Fee basis and calculation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>Tiered rate structure based on <strong>lot</strong> area</td>
</tr>
<tr>
<td>Commercial</td>
<td>Per 100 sq ft of assumed impervious area by premise type</td>
</tr>
<tr>
<td>Vacant</td>
<td>Per 100 sq ft of 20% assumed impervious area</td>
</tr>
</tbody>
</table>
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.

Vacant and commercial property 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

Average Monthly Residential Rates

- Portland, OR: $24.88
- Seattle, WA: $21.51
- Philadelphia, PA: $13.45
- Tampa, FL: $12.00
- Charlotte, NC: $10.18
- Austin, TX: $9.80
- Sacramento, CA: $7.53
- St. Paul, MN: $6.67
- Dallas, TX: $5.77
- Tulsa, OK: $5.43
- Fort Worth, TX: $5.40
- Baltimore, MD: $5.00
- Arlington, TX: $4.25
- Miami, FL: $4.00
- San Antonio, TX: $3.22
- Houston, TX: $3.00
- Kansas City, MO: $3.00
Best Management Practices
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.
Residential Methodology Comparison

Rate Structure Methodologies & Average Monthly Rates

- Impervious Area
- Assumed Impervious Area
- Gross Area

Cities: Portland, OR; Seattle, WA; Philadelphia, PA; Tampa, FL; Charlotte, NC; Austin, TX; Sacramento, CA; St. Paul, MN; Dallas, TX; Tulsa, OK; Fort Worth, TX; Baltimore, MD; Arlington, TX; Miami, FL; San Antonio, TX; Houston, TX; Kansas City, MO
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
## Proposed rate structure

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

Note – although much analysis has been done, no rate study has been performed and all data contained herein is subject to change.
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%

Note – although much analysis has been done, no rate study has been performed and all data contained herein is subject to change.
Example: Office Building – High Rise

Current Monthly Fee: $94
Proposed Rate Structure: $118

Note – although much analysis has been done, no rate study has been performed and all data contained herein is subject to change.
Example: Warehouse

Current Monthly Fee: $523
Proposed Rate Structure: $512

Note – although much analysis has been done, no rate study has been performed and all data contained herein is subject to change.
Example: Office Building – Campus Style

Current Monthly Fee: $3,520
Proposed rate structure: $1,458

Note – although much analysis has been done, no rate study has been performed and all data contained herein is subject to change.
Example: Office Building – Traditional Higher Density

Current Monthly Fee: $92
Proposed Rate Structure: $96

Note – although much analysis has been done, no rate study has been performed and all data contained herein is subject to change.
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

Note – although much analysis has been done, no rate study has been performed and all data contained herein is subject to change.
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

Note – although much analysis has been done, no rate study has been performed and all data contained herein is subject to change.
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

Note – although much analysis has been done, no rate study has been performed and all data contained herein is subject to change.
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
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
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
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)

- **Flood Control, $26.5M (49%)**
- **Compliance & Enforcement, $11.6M (22%)**
- **System Maintenance, $10M (19%)**
- **Debt Service, $1.7M (3%)**
- **Administration, $3.8M (7%)**
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
Fee Study

**Project tasks include:**

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

*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)

Breakdown by Revenue ($51.1M)

- Residential: $30.1M
- Commercial: $20M
- Undeveloped (Vacant): $1 M

Total Revenue: $51.1M