



Stormwater Cost Recovery Study



Presented on: December 11, 2012

Prepared by: Public Resources Management Group, Inc.

Discussion Topics

- ▶ Summarize Existing Revenue Deficiency
- ▶ Discuss Property Attributes within the Current Service Area
- ▶ Review Budgeted Stormwater Fee Under Existing Methodology for the Current Service Area
- ▶ Identify Cost Recovery Alternatives
 - ▶ Define Service Area and Benefits to Properties
 - ▶ Cost Apportionment by Type of Cost
 - ▶ Projected Property Attributes (City-wide)
- ▶ Evaluate Proposed Rate Alternatives by Property Class
- ▶ Discuss Other Study Concerns or Issues

Existing Operating Conditions: FY 2013

<u>Description</u>	<u>Budget</u>
Projected Operating Results	
Revenues (\$8.00/mo. per ERU)	\$5,250,000
Less Annual Expenditures	
System-wide Facility Costs	\$3,100,000
Swale Maintenance	3,100,000
Drainage Improvements	<u>1,400,000</u>
Sub-total Annual Expenditures	\$7,600,000
Projected Revenue Deficiency	(\$2,350,000)
Revenue Deficiency - Percent of Revenue	45%

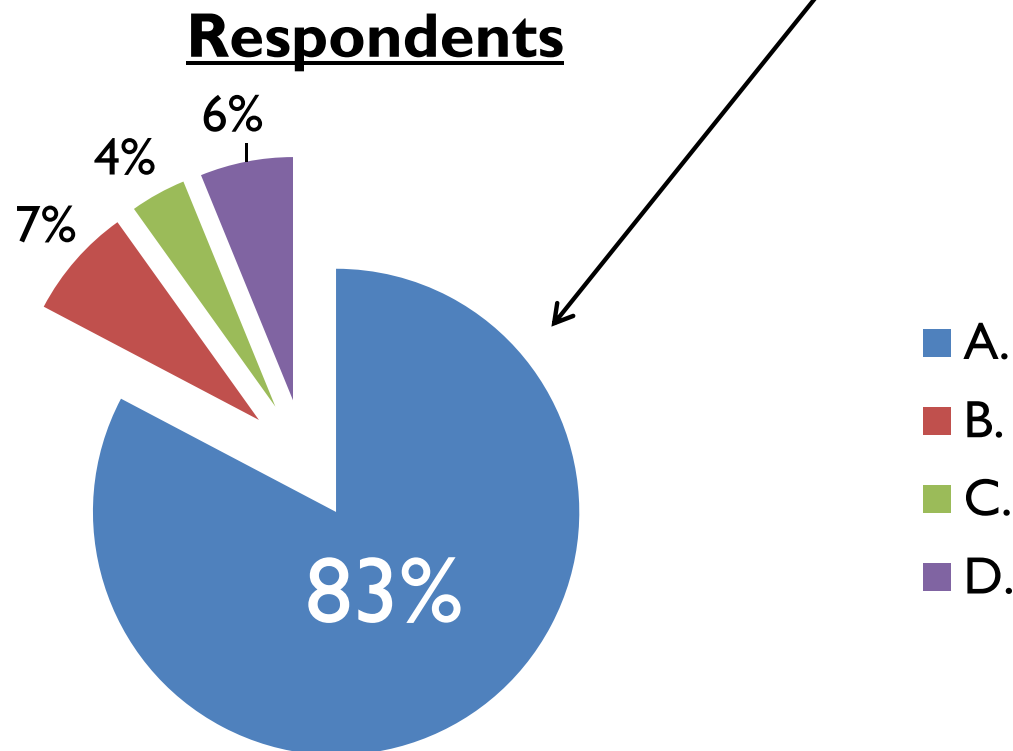
Recognized Fee Methods

FSA Storm Water Utility Survey (2011 Edition)

Question 2-3. What is the general basis for your fee?

- A. Impervious area (67 respondents)
- B. Both gross area and impervious area (6 respondents)
- C. Gross area with intensity of development factor (3 respondents)
- D. Other (5 respondents)

City Uses Impervious Area Method



Billing Approach

85% by User Fees

15% by Special Assessments

Existing Methodology - Per Drainage Unit

- ▶ Based on an Equivalent Residential Unit (ERU) or a unit of measure to estimate the average demands on a storm water system based on the average service requirements of a single family residential home as follows:
 - ▶ Single Family Developed = 1.0 ERU per Parcel
 - ▶ Single Family Vacant = 0.74 ERUs per Parcel
 - ▶ Commercial & Multi-family Developed = 6.02 ERUs per Impervious Acre and 2.96 ERUs per Pervious Acre
 - ▶ Commercial Vacant = 2.96 ERUs per Pervious Acre (reduced for service level credits if applicable)
 - ▶ Duplexes, Triplexes, Quad, Townhome = 0.75 ERUs per Unit
- ▶ Impervious area means the horizontal projection of areas on a customer's property that do not allow the infiltration of rainfall (i.e., buildings, structures, rooftops, driveways, parking lots, tennis courts, etc.)
- ▶ Pervious area means soft surface area characterized by lawns, forest, pasture and cropland that contribute less runoff than impervious area, but when substantially saturated with water can produce large volumes of runoff affecting adjacent properties, roads and drainage facilities

Summary of Property Attributes

Current Service Area Under Current Rates

Summary of Existing Property Attributes [1]								
Description	Existing Rev. [2]	% of Rev.	# of Parcels	% of Parcels	Total Acres	% of Acres	Total ERUs	% of ERUs
SF Developed	\$2.7	51%	28,332	58%	7,512	36%	28,125	51%
SF Vacant	\$1.3	24%	17,766	37%	4,579	22%	13,032	24%
Sub-total SF	\$4.0	75%	46,098	95%	12,091	58%	41,157	75%
CM Developed	\$0.6	13%	414	1%	3,266	16%	6,981	13%
CM Vacant [3]	\$0.4	8%	504	1%	4,916	24%	4,577	8%
MF Developed	\$0.1	2%	15	0%	165	1%	783	2%
Dupl, Tri, Quad [4]	\$0.1	2%	1,560	3%	396	1%	1,175	2%
Sub-total Non-SF	\$1.3	25%	2,493	5%	8,743	42%	13,516	25%
Total Properties	\$5.3	100%	48,591	100%	20,834	100%	54,673	100%

[1] Reflects existing properties within the current service area, excluding properties that are expected to obtain an agricultural exemption.

[2] Amounts shown in millions.

[3] ERUs for commercial vacant properties reflect service level credits equal to 3,400 ERUs or 43% for the class in total.

[4] Parcel count for duplexes, triplexes, quads and townhomes are not known. Amount reflects the number of units currently billed.

Summary of Existing to Budgeted Fee for Current Service Area / Current Methodology

Base Case Summary of Existing to Budgeted Fee [1]						
Description	Existing Rev. [2]	% of Rev.	Budgeted Rev. [2]	% of Rev.	Total [2] Increase	% Increase
SF Developed	\$2.7	51%	\$3.9	51%	\$1.2	45%
SF Vacant	\$1.3	24%	\$1.8	24%	\$0.5	45%
Sub-total SF	\$4.0	75%	\$5.7	75%	\$1.7	45%
CM Developed	\$0.6	13%	\$1.0	13%	\$0.4	45%
CM Vacant	\$0.4	8%	\$0.6	8%	\$0.2	45%
MF Developed	\$0.1	2%	\$0.1	2%	\$0.0	45%
Dupl, Tri, Quad	\$0.1	2%	\$0.2	2%	\$0.1	45%
Sub-total Non-SF	\$1.3	25%	\$1.9	25%	\$0.7	45%
Total Properties	\$5.3	100%	\$7.6	100%	\$2.3	45%

[1] Based on a rate of \$11.65/mo. per ERU based on the adopted Budget.
[2] Amounts shown in millions.

- Reflects the Council's Budget approval from \$8.00 to \$11.65/month per ERU

Stormwater Cost Recovery Alternatives



Evaluation of Service Area

- ▶ Stormwater Management Program benefits properties in one of two ways:
 - ▶ Hydrologic Connection: represents those properties that have a hydrologic connection to the City's stormwater facilities, directly or indirectly. The City's current service area is based on hydrologic connection to its system.
 - ▶ Includes the existing 48,591 parcels or 20,834 acres of property
 - ▶ Comprehensive Management Area: represents those properties within a defined benefit area (within City Limits) where the jurisdiction implements a comprehensive capital and maintenance stormwater program. The general benefit afforded each property within this area is related to the property's access from roadways managed within the drainage system. Such accessibility of the parcel allows for unencumbered use of the property providing real value. However, the level of service in total may vary between different benefit areas within the comprehensive system.
 - ▶ Approach recognizes an additional 2,589 parcels or 9,314 acres of property that receive a "reduced" level of service when compared to existing customers, but whom pay no charges today

Cost Apportionment (Eliminates Current Service Level Credits)

▶ Allocated Expenditures by Type:

- ▶ Base Fee: Reflects system-wide costs recovered from all properties within the Comprehensive Management Area
 - ▶ Includes the Current Service Area & Extended Benefit Area (i.e., all properties within City Limits)
- ▶ Drainage Fee: Reflects drainage system costs recovered from all properties within the Current Service Area only; except vacant commercial properties.
 - ▶ Excludes all properties within the Extended Benefit Area.
- ▶ Swale Maintenance Fee: Reflects swale maintenance costs recovered from all properties within the Current Service Area only; except vacant commercial properties and those single family residential properties that are not served by swales.
 - ▶ Excludes all properties within the Extended Benefit Area.

Cost Apportionment – Examples (Eliminates Current Service Level Credits)

- ▶ Allocated Expenditures by Type:
 - ▶ Base Fee: Reflects 41% of System Costs
 - ▶ Control Structure Rehabilitation
 - ▶ System-wide Engineering
 - ▶ Drainage Fee: Reflects 18% of System Costs
 - ▶ Small Pipe Replacement
 - ▶ Valley Replacement
 - ▶ Culvert Maintenance
 - ▶ Swale Maintenance Fee: Reflects 41% of System Costs
 - ▶ Dredge / Regrade Swales

Summary of Property Attributes including the Extended Benefit Area (City-wide)

Summary of Proposed Property Attributes [1]

<u>Description</u>	<u>% of Rev. [2]</u>	<u># of Parcels</u>	<u>% of Parcels</u>	<u>Total Acres</u>	<u>% of Acres</u>	<u>Total ERUs</u>	<u>% of ERUs</u>
SF Developed	51%	29,576	58%	7,865	26%	29,447	35%
SF Vacant	24%	17,791	35%	4,590	15%	13,051	15%
Sub-total SF	75%	47,367	93%	12,455	41%	42,498	50%
CM Developed	13%	669	1%	4,747	16%	10,146	12%
CM Vacant [3]	8%	1,112	2%	12,290	41%	29,803	35%
MF Developed	2%	16	0%	181	1%	859	1%
Dupl, Tri, Quad [4]	2%	2,013	4%	476	1%	1,515	2%
Sub-total Non-SF	25%	3,810	7%	17,694	59%	42,323	50%
Total Properties	100%	51,177	100%	30,149	100%	84,821	100%

[1] Reflects existing properties within the current service area plus additional properties from the Extended Benefit Area (i.e., all properties within City Limits), excluding properties that are expected to obtain an agricultural exemption.

[2] Amounts shown in millions.

[3] ERUs for commercial vacant properties were increased to eliminate service level credits equal to 3,400 ERUs or 43% for the class in total.

[4] Parcel count for duplexes, triplexes, quads and townhomes are not known. Amount reflects the number of units currently billed.

Summary of Parcels by Acreage Size including the Extended Benefit Area (City-wide)

<u>Summary of Parcels by Acreage Size</u>					
<u>Description</u>	<u>SF Developed</u>	<u>SF Vacant</u>	<u>CM Developed</u>	<u>CM Vacant</u>	<u>MF Developed</u>
Less than 10 Acres	29,573	17,791	584	955	9
10 to 19 Acres	1	0	45	65	4
20 to 29 Acres	2	0	13	32	1
30 to 39 Acres	0	0	5	17	1
40 to 49 Acres	0	0	3	7	1
50 Acres or More [*]	0	0	19	39	0
Total	29,576	17,791	669	1,115	16
Additional Note: [*] 150 Acres or More	N/A	N/A	5	16	N/A

Cost Recovery Alternatives Evaluated

- ▶ Base Case – As presented: Budgeted \$11.65/month per ERU for the Current Service Area only
- ▶ Alternatives including Extended Service Area (City-wide)
 - ▶ System-wide Approach (No service level reductions)
 - ▶ Alternative I – Similar to existing method. All costs allocated per ERU.
 - ▶ Alternative II – All costs allocated per Parcel.
 - ▶ Alternative III – All costs allocated per Acre.
 - ▶ Cost Apportionment Approach (Fee based on service level)
 - ▶ Alternative IV – Base Fee All Properties per ERU / Drainage & Swale Fees per ERU
 - ▶ Alternative V – Base Fee All Properties per Parcel / Drainage & Swale Fees per ERU
 - ▶ Alternative VI – Base Fee All properties per ERU / Drainage & Swale Fees per Parcel

Alternative I – All Costs per ERU Summary of Existing to Proposed Fee [1]

Description	Existing Rates [2]		Base Case [3]		Alternative I [*]		Existing to Alt. I	
	Existing Rev.	% of Rev.	Budgeted Rev.	% of Rev.	Proposed Rev.	% of Rev.	Total Increase	% Increase
SF Developed	\$2.7	51%	\$3.9	51%	\$2.6	35%	(\$0.1)	(2%)
SF Vacant	\$1.3	24%	\$1.8	24%	\$1.2	15%	(\$0.1)	(6%)
Sub-total SF	\$4.0	75%	\$5.7	75%	\$3.8	50%	(\$0.2)	(5%)
CM Developed	\$0.6	13%	\$1.0	13%	\$0.9	12%	\$0.3	36%
CM Vacant	\$0.4	8%	\$0.6	8%	\$2.7	35%	\$2.3	508%
MF Developed	\$0.1	2%	\$0.1	2%	\$0.1	1%	\$0.0	2%
Dupl, Tri, Quad	\$0.1	2%	\$0.2	2%	\$0.2	2%	\$0.0	20%
Sub-total Non-SF	\$1.3	25%	\$1.9	25%	\$3.8	50%	\$2.5	92%
Total Properties	\$5.3	100%	\$7.6	100%	\$7.6	100%	\$2.3	45%

[1] Amounts shown in millions.

[2] Based on an existing rate of \$8.00/mo. per existing ERU.

[3] Based on a proposed rate of \$11.65/mo. per existing ERU.

[*] Proposed Fees:

All Properties \$7.47/month per ERU

No Service Level Credits

Alternative I – All Costs per ERU Monthly Bill Comparison (Selected Bills)

<u>Description</u>	<u>Existing Bill [1]</u>	<u>Base Case</u>			<u>Alternative I</u>		
		<u>Proposed Bill [2]</u>	<u>Increase (Decrease)</u>	<u>Pct. of Bill</u>	<u>Proposed Bill [3]</u>	<u>Increase (Decrease)</u>	<u>Pct. of Bill</u>
SF Developed	\$8.00	\$11.65	\$3.65	45%	\$7.47	(\$0.53)	(7%)
SF Vacant	\$5.92	\$8.62	\$2.70	45%	\$5.53	(\$0.39)	(7%)
CM Developed-1 ERU or ¼ Acre Lot	\$8.00	\$11.65	\$3.65	45%	\$7.47	(\$0.53)	(7%)
CM Developed-10 ERUs or 2 ½ Acre Lot	\$80.00	\$116.50	\$36.50	45%	\$74.70	(\$5.30)	(7%)
CM Developed-50 ERUs or 12 ½ Acre Lot	\$400.00	\$582.50	\$182.50	45%	\$373.50	(\$26.50)	(7%)
CM Vacant-1.91 ERUs to 38.2 ERUs or 12.91 Acres	\$15.28	\$22.25	\$6.97	45%	\$285.36	\$270.08	1767%
CM Vacant-3.59 ERUs to 71.83 ERUs or 36.22 Acres	\$28.73	\$41.84	\$13.11	45%	\$536.57	\$507.83	1767%
CM Vacant-15.06 ERUs to 301.17 ERUs or 116.41 Acres	\$120.47	\$175.43	\$54.96	45%	\$2,249.75	\$2,129.29	1767%

[1] Based on an existing rate of \$8.00/mo. per existing ERU.

[2] Based on a proposed rate of \$11.65/mo. per existing ERU.

[3] Based on a proposed rate of \$7.47/mo. per proposed ERU.

**2,600 properties not
currently receiving a bill.**

Alternative II – All Costs per Parcel Summary of Existing to Proposed Fee [1]

Description	Existing Rates [2]		Base Case [3]		Alternative II [*]		Existing to Alt. II	
	Existing Rev.	% of Rev.	Budgeted Rev.	% of Rev.	Proposed Rev.	% of Rev.	Total Increase	% Increase
SF Developed	\$2.7	51%	\$3.9	51%	\$4.4	58%	\$1.7	63%
SF Vacant	\$1.3	24%	\$1.8	24%	\$2.6	35%	\$1.3	111%
Sub-total SF	\$4.0	75%	\$5.7	75%	\$7.0	93%	\$3.0	75%
CM Developed	\$0.6	13%	\$1.0	13%	\$0.1	1%	(\$0.5)	(85%)
CM Vacant	\$0.4	8%	\$0.6	8%	\$0.2	2%	(\$0.2)	(62%)
MF Developed	\$0.1	2%	\$0.1	2%	\$0.0	0%	(\$0.1)	(97%)
Dupl, Tri, Quad	\$0.1	2%	\$0.2	2%	\$0.3	4%	\$0.2	165%
Sub-total Non-SF	\$1.3	25%	\$1.9	25%	\$0.6	7%	(\$0.7)	(54%)
Total Properties	\$5.3	100%	\$7.6	100%	\$7.6	100%	\$2.3	45%

[1] Amounts shown in millions.

[2] Based on an existing rate of \$8.00/mo. per existing ERU.

[3] Based on a proposed rate of \$11.65/mo. per existing ERU.

[*] Proposed Fees:
All Properties \$12.38/month per Parcel
No Service Level Credits

Alternative II – All Costs per Parcel Monthly Bill Comparison (Selected Bills)

Description	Existing Bill [1]	Base Case			Alternative II		
		Proposed Bill [2]	Increase (Decrease)	Pct. of Bill	Proposed Bill [3]	Increase (Decrease)	Pct. of Bill
SF Developed	\$8.00	\$11.65	\$3.65	45%	\$12.38	\$4.38	55%
SF Vacant	\$5.92	\$8.62	\$2.70	45%	\$12.38	\$6.46	109%
CM Developed-1 ERU or ¼ Acre Lot	\$8.00	\$11.65	\$3.65	45%	\$12.38	\$4.38	55%
CM Developed-10 ERUs or 2 ½ Acre Lot	\$80.00	\$116.50	\$36.50	45%	\$12.38	(\$67.62)	(85%)
CM Developed-50 ERUs or 12 ½ Acre Lot	\$400.00	\$582.50	\$182.50	45%	\$12.38	(\$387.62)	(97%)
CM Vacant-1.91 ERUs to 38.2 ERUs or 12.91 Acres	\$15.28	\$22.25	\$6.97	45%	\$12.38	(\$2.90)	(19%)
CM Vacant-3.59 ERUs to 71.83 ERUs or 36.22 Acres	\$28.73	\$41.84	\$13.11	45%	\$12.38	(\$16.35)	(57%)
CM Vacant-15.06 ERUs to 301.17 ERUs or 116.41 Acres	\$120.47	\$175.43	\$54.96	45%	\$12.38	(\$108.09)	(90%)

[1] Based on an existing rate of \$8.00/mo. per existing ERU.

[2] Based on a proposed rate of \$11.65/mo. per existing ERU.

[3] Based on a proposed rate of \$12.38/mo. per proposed Parcel.

**2,600 properties not
currently receiving a bill.**

Alternative III – All Costs per Acre

Summary of Existing to Proposed Fee [1]

Description	Existing Rates [2]		Base Case [3]		Alternative III [*]		Existing to Alt. III	
	Existing Rev.	% of Rev.	Budgeted Rev.	% of Rev.	Proposed Rev.	% of Rev.	Total Increase	% Increase
SF Developed	\$2.7	51%	\$3.9	51%	\$2.0	26%	(\$0.7)	(27%)
SF Vacant	\$1.3	24%	\$1.8	24%	\$1.1	15%	(\$0.2)	(8%)
Sub-total SF	\$4.0	75%	\$5.7	75%	\$3.1	41%	(\$0.9)	(23%)
CM Developed	\$0.6	13%	\$1.0	13%	\$1.2	16%	\$0.6	79%
CM Vacant	\$0.4	8%	\$0.6	8%	\$3.1	41%	\$2.7	605%
MF Developed	\$0.1	2%	\$0.1	2%	\$0.1	1%	\$0.0	(39%)
Dupl, Tri, Quad	\$0.1	2%	\$0.2	2%	\$0.1	2%	\$0.0	6%
Sub-total Non-SF	\$1.3	25%	\$1.9	25%	\$4.5	59%	\$3.2	146%
Total Properties	\$5.3	100%	\$7.6	100%	\$7.6	100%	\$2.3	45%

[1] Amounts shown in millions.

[2] Based on an existing rate of \$8.00/mo. per existing ERU.

[3] Based on a proposed rate of \$11.65/mo. per existing ERU.

[*] Proposed Fees:

All Properties \$21.01/month per Acre

(\$5.25 per SF ¼ Acre)

No Service Level Credits

Alternative III – All Costs per Acre Monthly Bill Comparison (Selected Bills)

Description	Existing Bill [1]	Base Case			Alternative III		
		Proposed Bill [2]	Increase (Decrease)	Pct. of Bill	Proposed Bill [3]	Increase (Decrease)	Pct. of Bill
SF Developed – ¼ Acre Lot	\$8.00	\$11.65	\$3.65	45%	\$5.25	(\$2.75)	(34%)
SF Vacant – ¼ Acre Lot	\$5.92	\$8.62	\$2.70	45%	\$5.25	(\$0.67)	(11%)
CM Developed-1 ERU or ¼ Acre Lot	\$8.00	\$11.65	\$3.65	45%	\$5.25	(\$2.75)	(34%)
CM Developed-10 ERUs or 2 ½ Acre Lot	\$80.00	\$116.50	\$36.50	45%	\$52.53	(\$27.48)	(34%)
CM Developed-50 ERUs or 12 ½ Acre Lot	\$400.00	\$582.50	\$182.50	45%	\$262.63	(\$137.38)	(34%)
CM Vacant-1.91 ERUs to 38.2 ERUs or 12.91 Acres	\$15.28	\$22.25	\$6.97	45%	\$271.24	\$255.96	1675%
CM Vacant-3.59 ERUs to 71.83 ERUs or 36.22 Acres	\$28.73	\$41.84	\$13.11	45%	\$760.98	\$732.25	2549%
CM Vacant-15.06 ERUs to 301.17 ERUs or 116.41 Acres	\$120.47	\$175.43	\$54.96	45%	\$2,445.77	\$2,325.31	1930%

[1] Based on an existing rate of \$8.00/mo. per existing ERU.

[2] Based on a proposed rate of \$11.65/mo. per existing ERU.

[3] Based on a proposed rate of \$21.01/mo. per proposed Acre.

**2,600 properties not
currently receiving a bill.**

Cost Apportionment Approach – Revisited (Applies to Alternatives IV to VI)

- ▶ **Allocates Expenditures by Type:**
 - ▶ **Base Fee**: Recovered from all properties within the Comprehensive Management Area (City Limits)
 - ▶ Includes all properties within the Extended Benefit Area
 - ▶ **Drainage Fee**: Recovered from all properties within the Current Service Area only; except vacant commercial properties.
 - ▶ Excludes all properties within the Extended Benefit Area.
 - ▶ **Swale Maintenance Fee**: Recovered from all properties within the Current Service Area only; except vacant commercial properties and those single family residential properties that are not served by swales.
 - ▶ Excludes all properties within the Extended Benefit Area.

Alternative IV – Base Fee per ERU / Collection System per ERU Summary of Existing to Proposed Fee [1]

Description	Existing Rates [2]		Base Case [3]		Alternative IV [*]		Existing to Alt. IV	
	Existing Rev.	% of Rev.	Budgeted Rev.	% of Rev.	Proposed Rev.	% of Rev.	Total Increase	% Increase
SF Developed	\$2.7	51%	\$3.9	51%	\$3.6	47%	\$0.9	33%
SF Vacant	\$1.3	24%	\$1.8	24%	\$1.6	22%	\$0.3	31%
Sub-total SF	\$4.0	75%	\$5.7	75%	\$5.2	69%	\$1.2	30%
CM Developed	\$0.6	13%	\$1.0	13%	\$1.0	13%	\$0.4	52%
CM Vacant	\$0.4	8%	\$0.6	8%	\$1.1	14%	\$0.7	147%
MF Developed	\$0.1	2%	\$0.1	2%	\$0.1	1%	\$0.0	38%
Dupl, Tri, Quad	\$0.1	2%	\$0.2	2%	\$0.2	2%	\$0.1	45%
Sub-total Non-SF	\$1.3	25%	\$1.9	25%	\$2.4	31%	\$1.1	85%
Total Properties	\$5.3	100%	\$7.6	100%	\$7.6	100%	\$2.3	45%

[1] Amounts shown in millions.

[2] Based on an existing rate of \$8.00/mo. per existing ERU.

[3] Based on a proposed rate of \$11.65/mo. per existing ERU.

[*] Proposed Fees:

Base Fee – \$3.03/mo. per ERU

Drainage Fee – \$2.29/mo. per ERU

Swale Maintenance Fee - \$5.44/mo. per ERU

Alternative IV – Base Fee per ERU / Collection System per ERU Monthly Residential Bill Comparison (Selected Bills)

Description	Existing Bill [1]	Base Case			Alternative IV		
		Proposed Bill [2]	Increase (Decrease)	Pct. of Bill	Proposed Bill [*]	Increase (Decrease)	Pct. of Bill
With Swale:							
SF Developed	\$8.00	\$11.65	\$3.65	45%	\$10.76	\$2.76	35%
SF Vacant	\$5.92	\$8.62	\$2.70	45%	\$7.96	\$2.04	35%
Without Swale:							
SF Developed	\$8.00	\$11.65	\$3.65	45%	\$5.32	(\$2.68)	(34%)
SF Vacant	\$5.92	\$8.62	\$2.70	45%	\$3.94	(\$1.98)	(34%)
Extended Benefit Area:							
SF Developed	\$0	N/A	N/A	N/A	\$3.03	\$3.03	N/A
SF Vacant	\$0	N/A	N/A	N/A	\$2.24	\$2.24	N/A

[1] Based on an existing rate of \$8.00/mo. per existing ERU.

[2] Based on a proposed rate of \$11.65/mo. per existing ERU.

2,600 properties not currently paying a bill.

[*] Proposed Fees:

Base Fee – \$3.03/mo. per ERU

Drainage Fee – \$2.29/mo. per ERU

Swale Maintenance Fee - \$5.44/mo. per ERU

Alternative IV – Base Fee per ERU / Collection System per ERU Monthly Commercial Bill Comparison (Selected Bills)

Description	Existing Bill [1]	Base Case			Alternative IV		
		Proposed Bill [2]	Increase (Decrease)	Pct. of Bill	Proposed Bill [*]	Increase (Decrease)	Pct. of Bill
CM Developed-1 ERU or ¼ Acre Lot	\$8.00	\$11.65	\$3.65	45%	\$10.76	\$2.76	35%
CM Developed-10 ERUs or 2 ½ Acre Lot	\$80.00	\$116.50	\$36.50	45%	\$107.60	\$27.60	35%
CM Developed-50 ERUs or 12 ½ Acre Lot	\$400.00	\$582.50	\$182.50	45%	\$538.00	\$138.00	35%
CM Vacant-1.91 ERUs to 38.2 ERUs or 12.91 Acres	\$15.28	\$22.25	\$6.97	45%	\$115.75	\$100.47	657%
CM Vacant-3.59 ERUs to 71.83 ERUs or 36.22 Acres	\$28.73	\$41.84	\$13.11	45%	\$217.64	\$188.91	657%
CM Vacant-15.06 ERUs to 301.17 ERUs or 116.41 Acres	\$120.47	\$175.43	\$54.96	45%	\$912.55	\$792.08	657%

[1] Based on an existing rate of \$8.00/mo. per existing ERU.

[2] Based on a proposed rate of \$11.65/mo. per existing ERU.

*150 CM Vacant properties would receive a 62% decrease.
2,600 properties not currently paying a bill.*

[*] Proposed Fees:

Base Fee – \$3.03/mo. per ERU

Drainage Fee – \$2.29/mo. per ERU

Swale Maintenance Fee - \$5.44/mo. per ERU

Alternative V – Base Fee per Parcel / Collection System per ERU Summary of Existing to Proposed Fee [1]

Description	Existing Rates [2]		Base Case [3]		Alternative V [*]		Existing to Alt.V	
	Existing Rev.	% of Rev.	Budgeted Rev.	% of Rev.	Proposed Rev.	% of Rev.	Total Increase	% Increase
SF Developed	\$2.7	51%	\$3.9	51%	\$4.3	57%	\$1.6	59%
SF Vacant	\$1.3	24%	\$1.8	24%	\$2.2	29%	\$0.9	79%
Sub-total SF	\$4.0	75%	\$5.7	75%	\$6.5	86%	\$2.5	63%
CM Developed	\$0.6	13%	\$1.0	13%	\$0.7	9%	\$0.1	3%
CM Vacant	\$0.4	8%	\$0.6	8%	\$0.1	1%	(\$0.3)	(85%)
MF Developed	\$0.1	2%	\$0.1	2%	\$0.1	1%	\$0.0	(2%)
Dupl, Tri, Quad	\$0.1	2%	\$0.2	2%	\$0.2	2%	\$0.1	104%
Sub-total Non-SF	\$1.3	25%	\$1.9	25%	\$1.1	14%	(\$0.2)	(15%)
Total Properties	\$5.3	100%	\$7.6	100%	\$7.6	100%	\$2.3	45%

[1] Amounts shown in millions.

[2] Based on an existing rate of \$8.00/mo. per existing ERU.

[3] Based on a proposed rate of \$11.65/mo. per existing ERU.

[*] Proposed Fees:

Base Fee – \$5.03/mo. per Parcel

Drainage Fee – \$2.29/mo. per ERU

Swale Maintenance Fee - \$5.44/mo. per ERU

Alternative V – Base Fee per Parcel / Collection System per ERU Monthly Residential Bill Comparison (Selected Bills)

Description	Existing Bill [1]	Base Case			Alternative V		
		Proposed Bill [2]	Increase (Decrease)	Pct. of Bill	Proposed Bill [*]	Increase (Decrease)	Pct. of Bill
With Swale:							
SF Developed	\$8.00	\$11.65	\$3.65	45%	\$12.76	\$4.76	60%
SF Vacant	\$5.92	\$8.62	\$2.70	45%	\$10.75	\$4.83	82%
Without Swale:							
SF Developed	\$8.00	\$11.65	\$3.65	45%	\$7.32	(\$0.68)	(9%)
SF Vacant	\$5.92	\$8.62	\$2.70	45%	\$6.72	\$0.80	14%
Extended Benefit Area:							
SF Developed	\$0	N/A	N/A	N/A	\$5.03	\$5.03	N/A
SF Vacant	\$0	N/A	N/A	N/A	\$5.03	\$5.03	N/A

[1] Based on an existing rate of \$8.00/mo. per existing ERU.

[2] Based on a proposed rate of \$11.65/mo. per existing ERU.

2,600 properties not currently paying a bill.

[*] Proposed Fees:

Base Fee – \$5.03/mo. per Parcel

Drainage Fee – \$2.29/mo. per ERU

Swale Maintenance Fee - \$5.44/mo. per ERU

Alternative V – Base Fee per Parcel / Collection System per ERU Monthly Commercial Bill Comparison (Selected Bills)

Description	Existing Bill [1]	Base Case			Alternative V		
		Proposed Bill [2]	Increase (Decrease)	Pct. of Bill	Proposed Bill [*]	Increase (Decrease)	Pct. of Bill
CM Developed-1 ERU or ¼ Acre Lot	\$8.00	\$11.65	\$3.65	45%	\$12.76	\$4.76	60%
CM Developed-10 ERUs or 2 ½ Acre Lot	\$80.00	\$116.50	\$36.50	45%	\$82.33	\$2.33	3%
CM Developed-50 ERUs or 12 ½ Acre Lot	\$400.00	\$582.50	\$182.50	45%	\$391.53	(\$8.47)	(2%)
CM Vacant-1.91 ERUs to 38.2 ERUs or 12.91 Acres	\$15.28	\$22.25	\$6.97	45%	\$5.03	(\$10.25)	(67%)
CM Vacant-3.59 ERUs to 71.83 ERUs or 36.22 Acres	\$28.73	\$41.84	\$13.11	45%	\$5.03	(\$23.70)	(82%)
CM Vacant-15.06 ERUs to 301.17 ERUs or 116.41 Acres	\$120.47	\$175.43	\$54.96	45%	\$5.03	(\$115.44)	(96%)

[1] Based on an existing rate of \$8.00/mo. per existing ERU.
 [2] Based on a proposed rate of \$11.65/mo. per existing ERU.

2,600 properties not currently paying a bill.

[*] Proposed Fees:

Base Fee – \$5.03/mo. per Parcel

Drainage Fee – \$2.29/mo. per ERU

Swale Maintenance Fee - \$5.44/mo. per ERU

Alternative VI – Base Fee per ERU / Collection System per Parcel Summary of Existing to Proposed Fee [1]

Description	Existing Rates [2]		Base Case [3]		Alternative VI [*]		Existing to Alt.VI	
	Existing Rev.	% of Rev.	Budgeted Rev.	% of Rev.	Proposed Rev.	% of Rev.	Total Increase	% Increase
SF Developed	\$2.7	51%	\$3.9	51%	\$3.7	49%	\$1.0	38%
SF Vacant	\$1.3	24%	\$1.8	24%	\$2.1	22%	\$0.8	71%
Sub-total SF	\$4.0	75%	\$5.7	75%	\$5.8	71%	\$1.8	45%
CM Developed	\$0.6	13%	\$1.0	13%	\$0.5	5%	(\$0.1)	(39%)
CM Vacant	\$0.4	8%	\$0.6	8%	\$1.1	14%	\$0.7	147%
MF Developed	\$0.1	2%	\$0.1	2%	\$0.0	0%	(\$0.1)	(57%)
Dupl, Tri, Quad	\$0.1	2%	\$0.2	2%	\$0.2	2%	\$0.1	83%
Sub-total Non-SF	\$1.3	25%	\$1.9	25%	\$1.8	29%	\$0.5	38%
Total Properties	\$5.3	100%	\$7.6	100%	\$7.6	100%	\$2.3	45%

[1] Amounts shown in millions.

[2] Based on an existing rate of \$8.00/mo. per existing ERU.

[3] Based on a proposed rate of \$11.65/mo. per existing ERU.

[*] Proposed Fees:

Base Fee – \$3.03/mo. per ERU

Drainage Fee – \$2.39/mo. per Parcel

Swale Maintenance Fee - \$5.71/mo. per Parcel

Alternative VI – Base Fee per ERU / Collection System per Parcel Monthly Residential Bill Comparison (Selected Bills)

Description	Existing Bill [1]	Base Case			Alternative VI		
		Proposed Bill [2]	Increase (Decrease)	Pct. of Bill	Proposed Bill [*]	Increase (Decrease)	Pct. of Bill
With Swale:							
SF Developed	\$8.00	\$11.65	\$3.65	45%	\$11.13	\$3.13	39%
SF Vacant	\$5.92	\$8.62	\$2.70	45%	\$10.34	\$4.42	75%
Without Swale:							
SF Developed	\$8.00	\$11.65	\$3.65	45%	\$5.42	(\$2.58)	(32%)
SF Vacant	\$5.92	\$8.62	\$2.70	45%	\$4.63	(\$1.29)	(22%)
Extended Benefit Area:							
SF Developed	\$0	N/A	N/A	N/A	\$3.03	\$3.03	N/A
SF Vacant	\$0	N/A	N/A	N/A	\$2.24	\$2.24	N/A

[1] Based on an existing rate of \$8.00/mo. per existing ERU.

[2] Based on a proposed rate of \$11.65/mo. per existing ERU.

2,600 properties not currently receiving a bill.

[*] Proposed Fees:

Base Fee – \$3.03/mo. per ERU

Drainage Fee – \$2.39/mo. per Parcel

Swale Maintenance Fee - \$5.71/mo. per Parcel

Alternative VI – Base Fee per ERU / Collection System per Parcel Monthly Commercial Bill Comparison (Selected Bills)

Description	Existing Bill [1]	Base Case			Alternative VI		
		Proposed Bill [2]	Increase (Decrease)	Pct. of Bill	Proposed Bill [*]	Increase (Decrease)	Pct. of Bill
CM Developed-1 ERU or ¼ Acre Lot	\$8.00	\$11.65	\$3.65	45%	\$11.13	\$3.13	60%
CM Developed-10 ERUs or 2 ½ Acre Lot	\$80.00	\$116.50	\$36.50	45%	\$38.40	(\$41.60)	(52%)
CM Developed-50 ERUs or 12 ½ Acre Lot	\$400.00	\$582.50	\$182.50	45%	\$159.60	(\$240.40)	(60%)
CM Vacant-1.91 ERUs to 38.2 ERUs or 12.91 Acres	\$15.28	\$22.25	\$6.97	45%	\$115.75	\$100.47	657%
CM Vacant-3.59 ERUs to 71.83 ERUs or 36.22 Acres	\$28.73	\$41.84	\$13.11	45%	\$217.64	\$188.91	657%
CM Vacant-15.06 ERUs to 301.17 ERUs or 116.41 Acres	\$120.47	\$175.43	\$54.96	45%	\$912.55	\$792.08	657%

[1] Based on an existing rate of \$8.00/mo. per existing ERU.

[2] Based on a proposed rate of \$11.65/mo. per existing ERU.

*150 CM Vacant properties would receive a 62% decrease.
2,600 properties not currently receiving a bill.*

[*] Proposed Fees:

Base Fee – \$3.03/mo. per ERU

Drainage Fee – \$2.39/mo. per Parcel

Swale Maintenance Fee - \$5.71/mo. per Parcel

Cost Recovery Alternatives - Revisited

- ▶ Base Case – As presented: Budgeted \$11.65/month per ERU for the Current Service Area only
- ▶ Alternatives including Extended Service Area (City-wide)
 - ▶ System-wide Approach (No service level reductions)
 - ▶ Alternative I – Similar to existing method. All costs allocated per ERU.
 - ▶ Alternative II – All costs allocated per Parcel.
 - ▶ Alternative III – All costs allocated per Acre.
 - ▶ Cost Apportionment Approach (Fee based on service level)
 - ▶ Alternative IV – Base Fee All Properties per ERU / Drainage & Swale Fees per ERU
 - ▶ Alternative V – Base Fee All Properties per Parcel / Drainage & Swale Fees per ERU
 - ▶ Alternative VI – Base Fee All properties per ERU / Drainage & Swale Fees per Parcel

Comparison of Proposed Fee Alternatives Revenues by Property Class

Comparison of Existing to Proposed Revenues by Class [1]

Description	Current Service Area		Current Service Area & Extended Benefit Area (City-wide)					
	Existing	Base Case	Alt. I	Alt. II	Alt. III	Alt. IV	Alt. V	Alt. VI
SF Developed	\$2.7	\$3.9	\$2.6	\$4.4	\$2.0	\$3.6	\$4.3	\$3.7
SF Vacant	\$1.3	\$1.8	\$1.2	\$2.6	\$1.1	\$1.6	\$2.2	\$2.1
Sub-total SF	\$4.0	\$5.7	\$3.8	\$7.0	\$3.1	\$5.2	\$6.5	\$5.8
CM Developed	\$0.6	\$1.0	\$0.9	\$0.1	\$1.2	\$1.0	\$0.7	\$0.5
CM Vacant	\$0.4	\$0.6	\$2.7	\$0.2	\$3.1	\$1.1	\$0.1	\$1.1
MF Developed	\$0.1	\$0.1	\$0.1	\$0.0	\$0.1	\$0.1	\$0.1	\$0.0
Dupl, Tri, Quad	\$0.1	\$0.2	\$0.2	\$0.3	\$0.1	\$0.2	\$0.2	\$0.2
Sub-total Non-SF	\$1.3	\$1.9	\$3.8	\$0.6	\$4.5	\$2.4	\$1.1	\$1.8
Total Properties	\$5.3	\$7.6	\$7.6	\$7.6	\$7.6	\$7.6	\$7.6	\$7.6

[1] Amounts shown in millions. All cases (Base Case through Alternative VI) estimated to increase revenues from \$5.3 million to \$7.6 million or approximately 45%.

Comparison of Proposed Fee Alternatives Percent of Revenues by Property Class

Comparison of Existing to Proposed Revenues by Class [1]

Description	Percent of ERUs	Current Service Area		Current Service Area & Extended Benefit Area (City-wide)					
		Existing	Base Case	Alt. I	Alt. II	Alt. III	Alt. IV	Alt.V	Alt.VI
SF Developed	35%	51%	51%	35%	58%	26%	47%	57%	49%
SF Vacant	15%	24%	24%	15%	35%	15%	22%	29%	22%
Sub-total SF	50%	75%	75%	50%	93%	41%	69%	86%	71%
CM Developed	12%	13%	13%	12%	1%	16%	13%	9%	5%
CM Vacant	35%	8%	8%	35%	2%	41%	14%	1%	14%
MF Developed	1%	2%	2%	1%	0%	1%	1%	1%	0%
Dupl, Tri, Quad	2%	2%	2%	2%	4%	2%	2%	2%	2%
Sub-total Non-SF	50%	25%	25%	50%	7%	59%	31%	14%	29%
Total Properties	100%	100%	100%	100%	100%	100%	100%	100%	100%

[1] All cases (Base Case through Alternative VI) estimated to increase revenues from \$5.3 million to \$7.6 million or approximately 45%.

Comparison of Proposed Fee Alternatives Percent Increase in Revenues by Class

Comparison of Existing to Proposed Revenues by Class [1]							
Description	Base Case	Alt. I	Alt. II	Alt. III	Alt. IV	Alt. V	Alt. VI
SF Developed	45%	(2%)	63%	(27%)	33%	59%	38%
SF Vacant	45%	(6%)	111%	(8%)	31%	79%	71%
Sub-total SF	45%	(5%)	75%	(23%)	30%	63%	45%
CM Developed	45%	36%	(85%)	79%	52%	3%	(39%)
CM Vacant	45%	508%	(62%)	605%	147%	(85%)	147%
MF Developed	45%	2%	(97%)	(39%)	38%	(2%)	(57%)
Dupl, Tri, Quad	45%	20%	165%	6%	45%	104%	83%
Sub-total Non-SF	45%	92%	(54%)	146%	85%	(15%)	38%
Total Properties	45%	45%	45%	45%	45%	45%	45%

[1] All cases (Base Case through Alternative VI) estimated to increase revenues from \$5.3 million to \$7.6 million or approximately 45%.

Comparison of Proposed Fee Alternatives Monthly Residential Bill Comparison (Selected Bills)

		Base Case			Alternative IV		
Description	Existing Bill [1]	Proposed Bill [2]	Increase (Decrease)	Pct. of Bill	Proposed Bill [*]	Increase (Decrease)	Pct. of Bill
With Swale:							
SF Developed	\$8.00	\$11.65	\$3.65	45%	\$10.76	\$2.76	35%
SF Vacant	\$5.92	\$8.62	\$2.70	45%	\$7.96	\$2.04	35%
Without Swale:							
SF Developed	\$8.00	\$11.65	\$3.65	45%	\$5.32	(\$2.68)	(34%)
SF Vacant	\$5.92	\$8.62	\$2.70	45%	\$3.94	(\$1.98)	(34%)
Extended Benefit Area:							
SF Developed	\$0	N/A	N/A	N/A	\$3.03	\$3.03	N/A
SF Vacant	\$0	N/A	N/A	N/A	\$2.24	\$2.24	N/A

[1] Based on an existing rate of \$8.00/mo. per existing ERU.

[2] Based on a proposed rate of \$11.65/mo. per existing ERU.

[*] Proposed Fees:

Base Fee – \$3.03/mo. per ERU

Drainage Fee – \$2.29/mo. per ERU

Swale Maintenance Fee - \$5.44/mo. per ERU

Comparison of Proposed Fee Alternatives Monthly Commercial Bill Comparison (Selected Bills)

Description	Existing Bill [1]	Base Case			Alternative IV		
		Proposed Bill [2]	Increase (Decrease)	Pct. of Bill	Proposed Bill [*]	Increase (Decrease)	Pct. of Bill
CM Developed-1 ERU or ¼ Acre Lot	\$8.00	\$11.65	\$3.65	45%	\$10.76	\$2.76	35%
CM Developed-10 ERUs or 2 ½ Acre Lot	\$80.00	\$116.50	\$36.50	45%	\$107.60	\$27.60	35%
CM Developed-50 ERUs or 12 ½ Acre Lot	\$400.00	\$582.50	\$182.50	45%	\$538.00	\$138.00	35%
CM Vacant-1.91 ERUs to 38.2 ERUs or 12.91 Acres	\$15.28	\$22.25	\$6.97	45%	\$115.75	\$100.47	657%
CM Vacant-3.59 ERUs to 71.83 ERUs or 36.22 Acres	\$28.73	\$41.84	\$13.11	45%	\$217.64	\$188.91	657%
CM Vacant-15.06 ERUs to 301.17 ERUs or 116.41 Acres	\$120.47	\$175.43	\$54.96	45%	\$912.55	\$792.08	657%

[1] Based on an existing rate of \$8.00/mo. per existing ERU.

[2] Based on a proposed rate of \$11.65/mo. per existing ERU.

[*] Proposed Fees:

Base Fee – \$3.03/mo. per ERU

Drainage Fee – \$2.29/mo. per ERU

Swale Maintenance Fee - \$5.44/mo. per ERU

Other Study Considerations - Implementation of Fee Alternatives

- ▶ Proposed Fees under the Base Case that are based on the Current Service Area only could be implemented immediately
- ▶ Proposed Fees under the Alternatives would require developing an alternative billing approach that will delay implementation of the proposed rates by approximately six (6) months, which may result in an under collection of up to \$1.2 million in revenue during the implementation period

Conclusions & Recommendations

- ▶ The proposed Base Case and Alternative IV are based on the Impervious Area Method, which is a recognized method of cost recovery implemented by approximately 83% of Florida Stormwater Utilities surveyed by the Florida Stormwater Association (2011)
- ▶ The Base Case is based on the Current Service Area only, which ascribes benefit based on each property's hydrologic connection to the City's stormwater system
- ▶ Alternative IV is based on the general benefit afforded all properties within the City Limits (City-wide) related to the property's access from roadways managed within the system
 - ▶ Alternative IV anticipates billing approximately 2,600 properties who do not currently receive a bill based on "reduced" levels of service compared to similar properties with a hydrologic connection

Conclusions & Recommendations

- ▶ Both the Base Case and Alternative IV are anticipated to increase stormwater revenues by \$2.3 million per year or 45% system-wide
 - ▶ The Base Case applies the 45% rate increase uniformly to all customer classes within the Current Service Area only and maintains existing Service Level Credits for vacant commercial properties
 - ▶ Alternative IV provides unique results based on each property's characteristics replacing Service Level Credits with a Cost Apportionment Approach as follows:
 - ▶ Base Fee: Recovered from all properties within the Comprehensive Management Area (City Limits)
 - ▶ Drainage Fee: Recovered from all properties within the Current Service Area only; except vacant commercial properties. Excludes all properties within the Extended Benefit Area.
 - ▶ Swale Maintenance Fee: Recovered from all properties within the Current Service Area only; except vacant commercial properties and those single family residential properties that are not served by swales. Excludes all properties within the Extended Benefit Area.

Conclusions & Recommendations

- ▶ The City should consider adopting the Base Case or Alternative IV
- ▶ The City should update this study within 1-2 years to account for changes in property attributes and actual charges paid over time

Discussion & Questions

