



**PUBLIC WORKS**

CITY OF DURHAM

# Stormwater Fund and Rates

May 5, 2022

# Stormwater Enterprise Fund

- Stormwater fee is the primary source of revenue.
- FY23 annual budget of \$11,736,877 (104 FTEs)
- Funds Stormwater Management, Stormwater Maintenance, and Street Cleaning.
- Capital projects address:
  - Stormwater infrastructure improvements
  - Watershed planning
  - Stormwater retrofit design and construction to meet Stage I Falls Lake rules and UNRBA Interim Alternative Implementation Approach
  - Begin to address TMDL response plans for Third Fork and NE Creek
  - Drainage repair of City owned property
  - Private property drainage
  - Floodplain Mitigation
- Activities are requirements of the ***National Pollution Discharge Elimination System (NPDES) permit*** including state regulations.

# Key Issues

- A rate increase is requested for FY23 to support ongoing operations.
- Rate increases are proposed through FY25 supporting Capital Spending to meet Stage I reduction for Falls Lake, UNRBA - IAIA, and begin addressing TMDL load reductions (bacteria/sediment).
- Last rate increase was implemented in FY21.
- Capital Projects will peak during FY23.
- SW Infrastructure replacement due to aging infrastructure. (ROW/COP/PP)
- Jordan Lake rules to be re-written beginning in FY22/FY23.
- Falls Lake rule re-adoption process begins Jan 2024
- Ongoing re-examination of Falls Lake through Upper Neuse River Basin Association (UNRBA).

# FY22 to FY29 Proposed Rates

	2022	2023	2024	2025	2026	2027	2028	2029
<b>Monthly Rates by Tier</b>								
Tier 1	\$ 3.75	\$ 4.20	\$ 5.50	\$ 5.70	\$ 5.70	\$ 5.50	\$ 5.50	\$ 5.50
Tier 2	\$ 7.76	\$ 8.70	\$ 11.39	\$ 11.80	\$ 11.80	\$ 11.39	\$ 11.39	\$ 11.39
Tier 3	\$ 15.55	\$ 17.42	\$ 22.81	\$ 23.64	\$ 23.64	\$ 22.81	\$ 22.81	\$ 22.81
Multi/ERU	\$ 7.76	\$ 8.70	\$ 11.39	\$ 11.80	\$ 11.80	\$ 11.39	\$ 11.39	\$ 11.39
Non-Res ERU's	\$ 7.76	\$ 8.70	\$ 11.39	\$ 11.80	\$ 11.80	\$ 11.39	\$ 11.39	\$ 11.39
End Balance before Operating Reserve (CAFR)	28,136,267	12,576,649	11,343,914	12,716,066	9,119,640	4,763,078	5,926,199	5,602,303
Total Surplus (Deficit) after Operating Reserve	24,483,269	8,907,594	7,323,622	8,554,071	4,715,787	210,809	1,247,233	792,958
<b>% Change from Prior Year</b>								
Tier 1	7.1%	12.0%	31.0%	3.6%	-	-3.5%	-	-
Tier 2	7.1%	12.0%	31.0%	3.6%	-	-3.5%	-	-
Tier 3	7.1%	12.0%	31.0%	3.6%	-	-3.5%	-	-
Multi/ERU	7.1%	12.0%	31.0%	3.6%	-	-3.5%	-	-
Non-Residential	7.1%	12.0%	31.0%	3.6%	-	-3.5%	-	-
<b>\$ Change from Prior Year, Monthly</b>								
Tier 1	\$ 0.25	\$ 0.45	\$ 1.30	\$ 0.20	\$ -	\$ (0.20)	\$ -	\$ -
Tier 2	\$ 0.52	\$ 0.93	\$ 2.69	\$ 0.41	\$ -	\$ (0.41)	\$ -	\$ -
Tier 3	\$ 1.04	\$ 1.87	\$ 5.39	\$ 0.83	\$ -	\$ (0.83)	\$ -	\$ -
Multi/ERU	\$ 0.52	\$ 0.93	\$ 2.69	\$ 0.41	\$ -	\$ (0.41)	\$ -	\$ -
Non-Residential	\$ 0.52	\$ 0.93	\$ 2.69	\$ 0.41	\$ -	\$ (0.41)	\$ -	\$ -
<b>\$ Change from Prior Year, Annual</b>								
Tier 1	\$ 3.00	\$ 5.40	\$ 15.60	\$ 2.40	\$ -	\$ (2.40)	\$ -	\$ -
Tier 2	\$ 6.21	\$ 11.18	\$ 32.30	\$ 4.97	\$ -	\$ (4.97)	\$ -	\$ -
Tier 3	\$ 12.44	\$ 22.40	\$ 64.70	\$ 9.95	\$ -	\$ (9.95)	\$ -	\$ -
Multi/ERU	\$ 6.21	\$ 11.18	\$ 32.30	\$ 4.97	\$ -	\$ (4.97)	\$ -	\$ -
Non-Residential	\$ 6.21	\$ 11.18	\$ 32.30	\$ 4.97	\$ -	\$ (4.97)	\$ -	\$ -

# FY22 – FY29 CIP spend projection

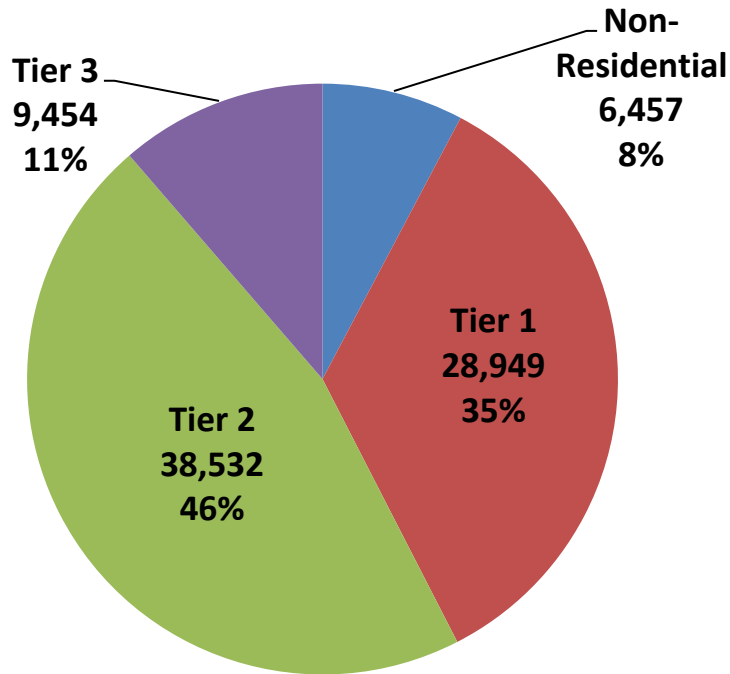
Fiscal Year	2022	2023	2024	2025	2026	2027	2028	2029
LK100 - Private Property Drainage Projects	500,000	500,000	500,000	500,000	500,000	500,000	600,000	600,000
LK102 - Watershed Planning and Design	330,289	1,342,705	624,250	1,099,250	369,250	839,250	209,250	509,250
LK105 - Drainage Repair City Owned Property	579,996	500,000	600,000	600,000	600,000	600,000	600,000	600,000
LK106 - Floodplain Mitigation	-	50,000	-	50,000	-	50,000	-	50,000
LK107 - Maj Strmtr Infrastr & BMP Imprv	3,174,708	2,500,000	2,500,000	2,500,000	3,000,000	3,000,000	3,000,000	3,000,000
LK109 - Stormwater Retrofitting	669,105	1,611,494	1,025,000	2,155,000	1,250,000	3,220,000	1,450,000	3,225,000
LK110 - South Ellerbee Restoration Project	1,962,594	11,135,669	3,654,557					
LK111 - Scrubber	16,495	2,148,000	650,000	1,805,000	5,225,000	2,387,000		
LK112 Emergency Watershed Protection	-	50,000	-	50,000	-	50,000	-	50,000
PWOC funding		1,050,000	1,050,000	1,050,000	1,050,000	1,050,000		
S4301 - Storm Water CIP Fleet	924,788	615,013	1,719,315	358,500	1,523,714	1,006,917	1,620,541	484,965
<b>Projects Total (Present Value)</b>	<b>8,157,975</b>	<b>21,502,881</b>	<b>12,323,122</b>	<b>10,167,750</b>	<b>13,517,964</b>	<b>12,703,167</b>	<b>7,479,791</b>	<b>8,519,215</b>
<b>Projects Total (Inflated)</b>	<b>8,157,975</b>	<b>22,147,967</b>	<b>13,062,509</b>	<b>11,082,848</b>	<b>15,140,120</b>	<b>14,608,642</b>	<b>8,826,153</b>	<b>10,308,250</b>

# Customer Bill Impact FY23

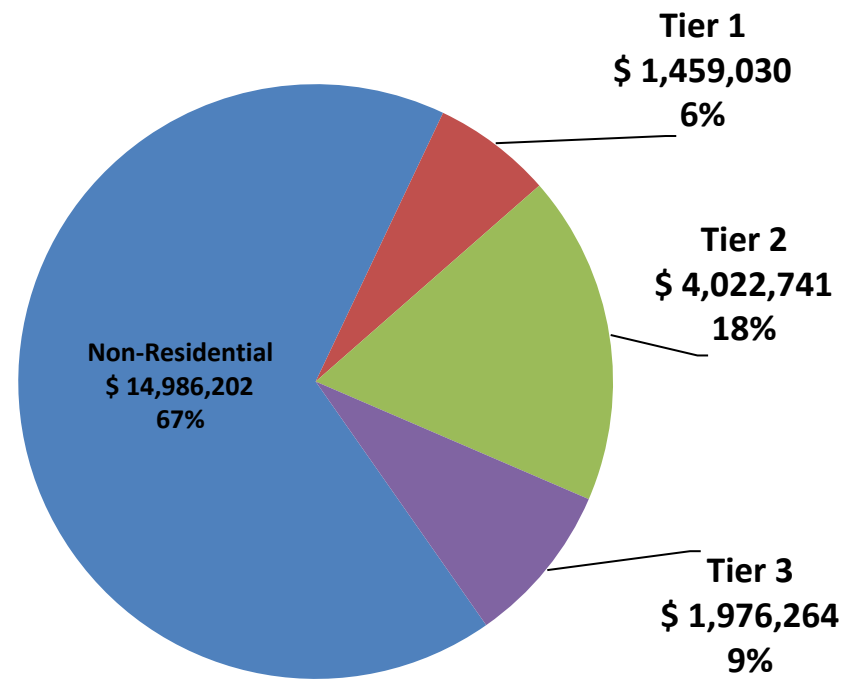
Tier	Current Monthly Rate	Monthly Rate with Increase	Monthly Increase Amount	Annual Increase Amount
1 - Residential	\$3.75	\$4.20	\$0.45	\$5.40
2 - Residential	\$7.76	\$8.70	\$0.94	\$11.28
3 - Residential	\$15.55	\$17.42	\$1.87	\$22.44
Non - Residential	\$7.76 per ERU = 2,400 sqft impervious surface	\$8.70 per ERU = 2,400 sqft impervious surface	\$0.94 per ERU = 2,400 sqft impervious surface	\$11.28 per ERU = 2,400 sqft impervious surface

# Estimated Accounts and Revenue by Tier FY23

## Accounts by Tier – 83,392 Est. Total



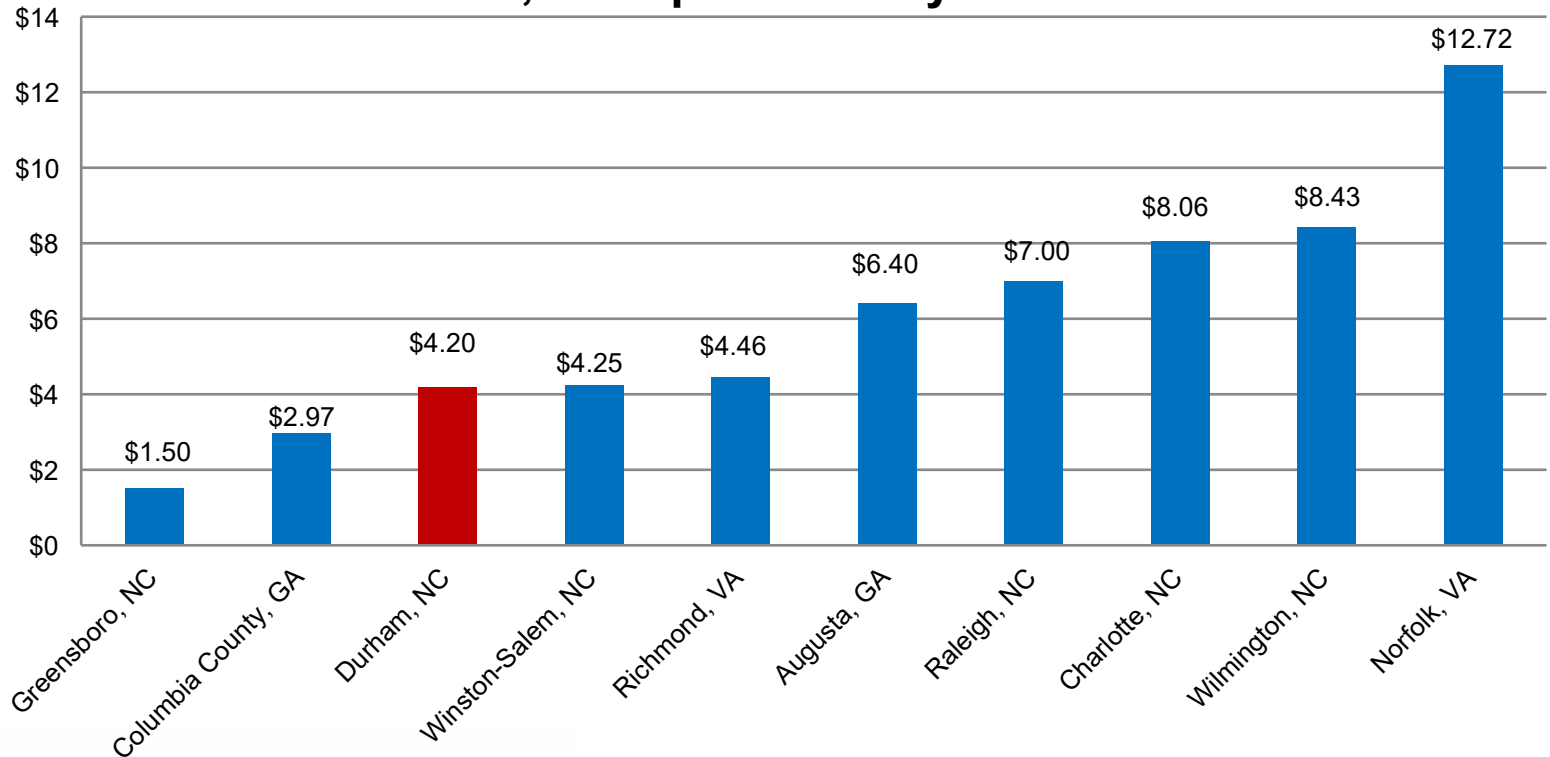
## Revenue by Tier - \$22.4M Est. Total



# Stormwater Enterprise Fund

## Monthly Bill Benchmarking

Equivalent Residential Tier 1  
< 2,000 sq. ft. Monthly Rate

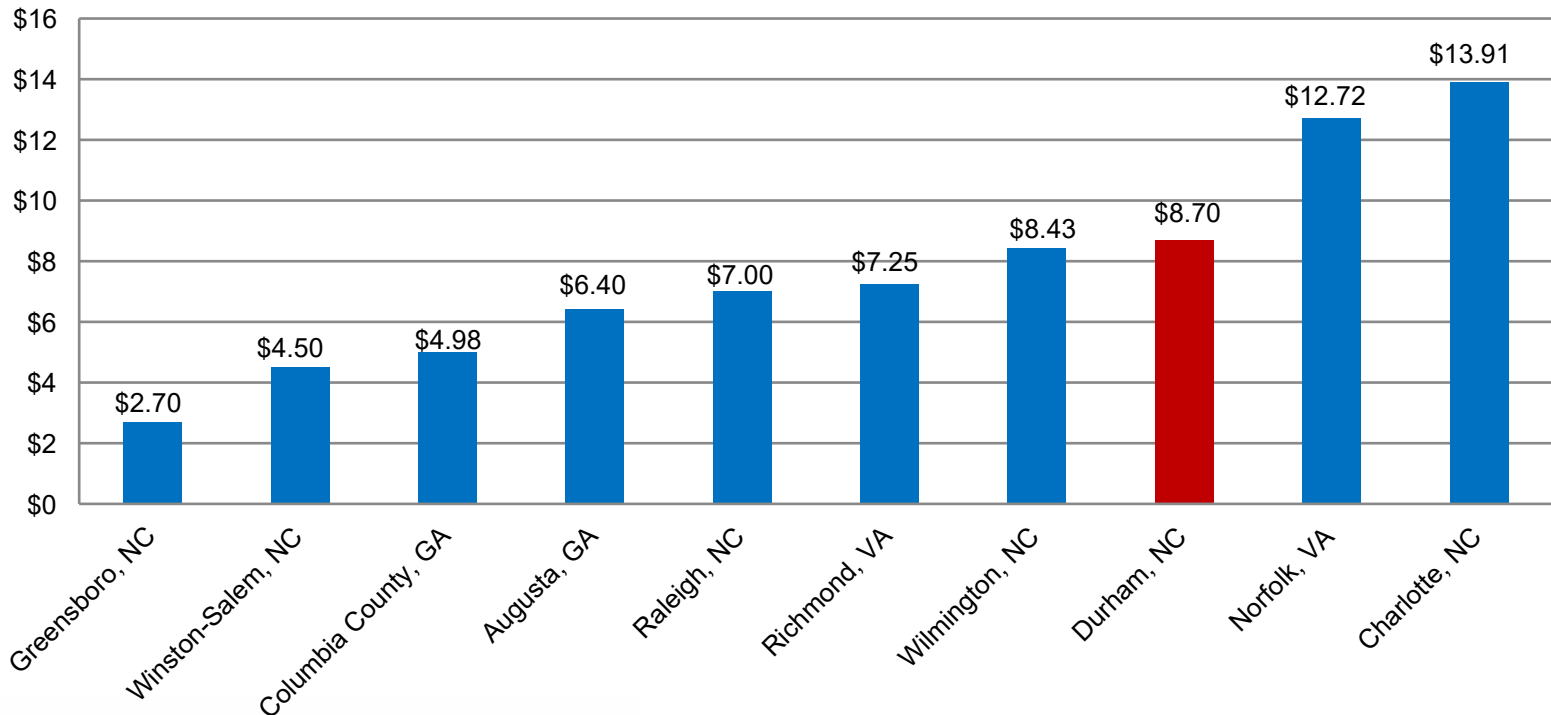




# Stormwater Enterprise Fund

## Monthly Bill Benchmarking

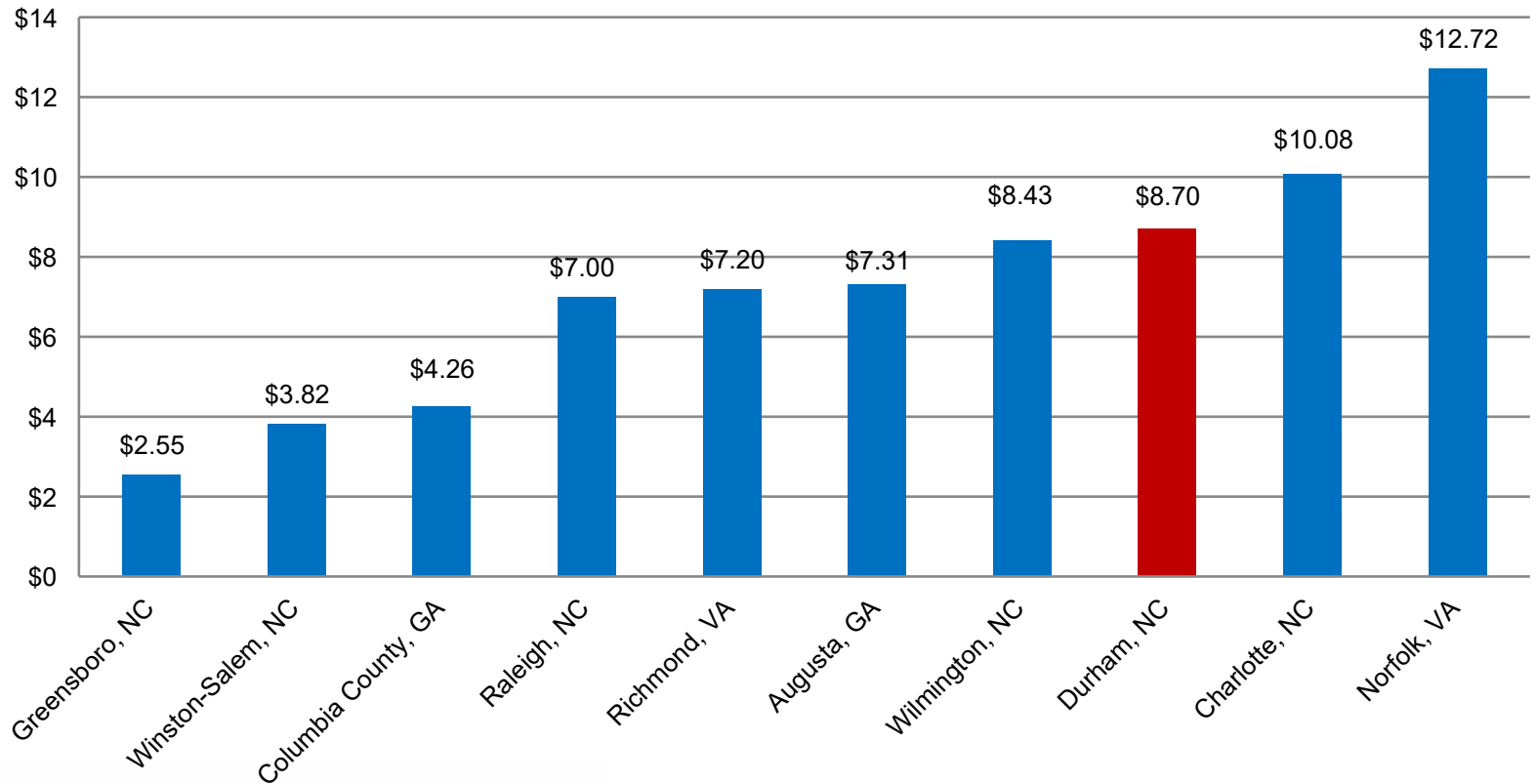
Equivalent Residential Tier 2  
2,000-4,000 sq. ft. Monthly Rate



# Stormwater Enterprise Fund

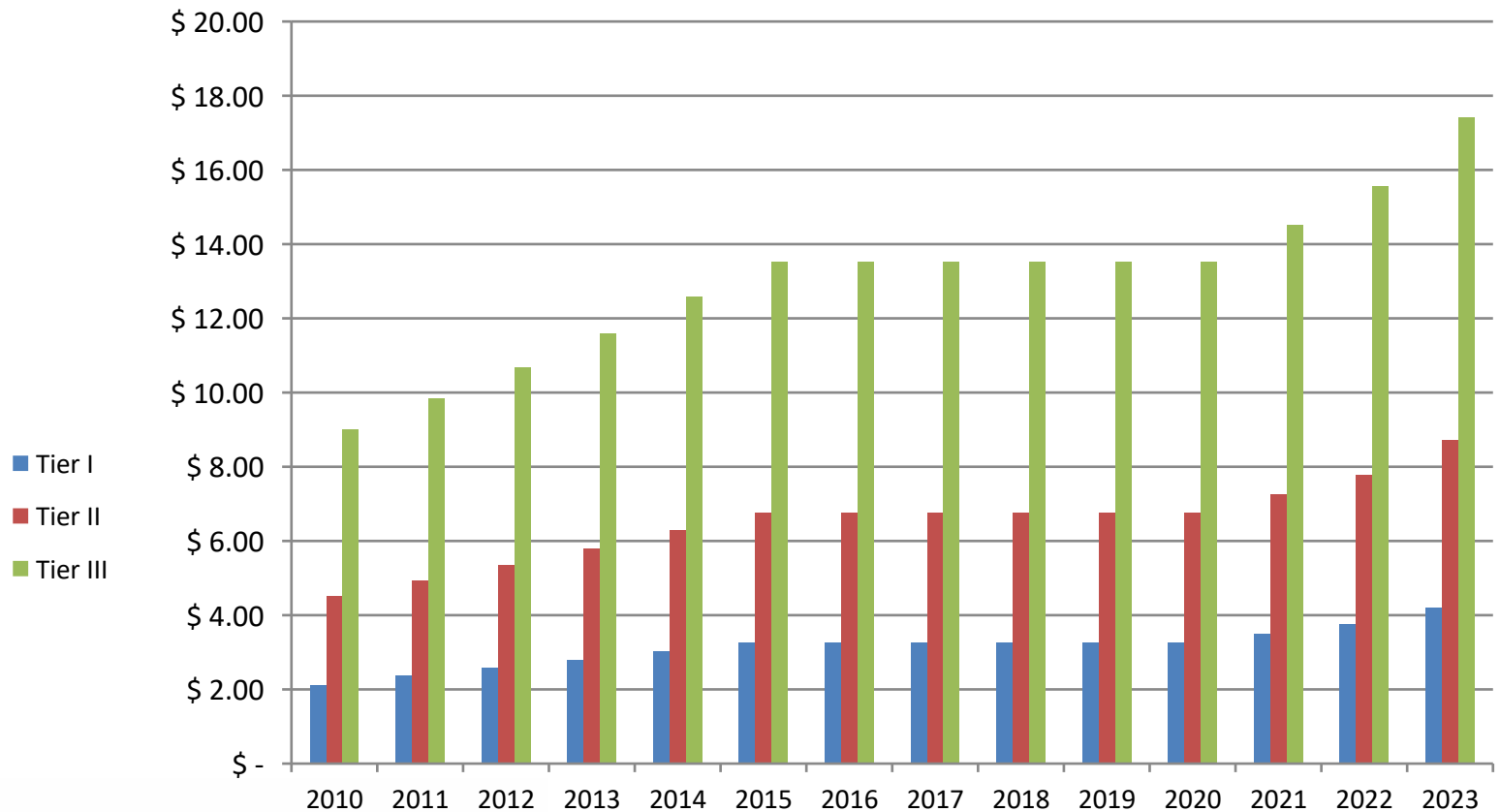
## Monthly Bill Benchmarking

### Multi-Family & Commercial Equivalent Monthly Rate

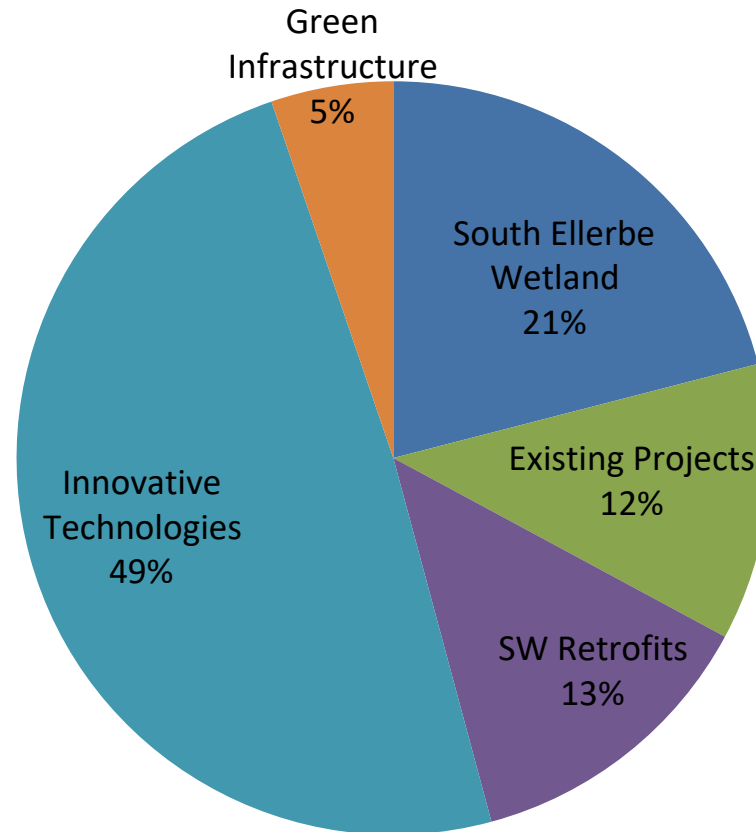


# Stormwater Enterprise Fund

## Monthly Residential Stormwater Rate History



# Falls Stage 1



# South Ellerbe Stormwater Restoration

Site soil removal and remediation NTP February 2022, completion  
June/July 2022

Bid Construction of Wetland Fall 2022

## Algae Turf Scrubber

Site selection process for Algae Turf Scrubber complete

Site suitable for 10 MGD plant identified

Developing Communications Plan