



City of Annapolis

Stormwater Rate Study

May 1, 2020

Agenda

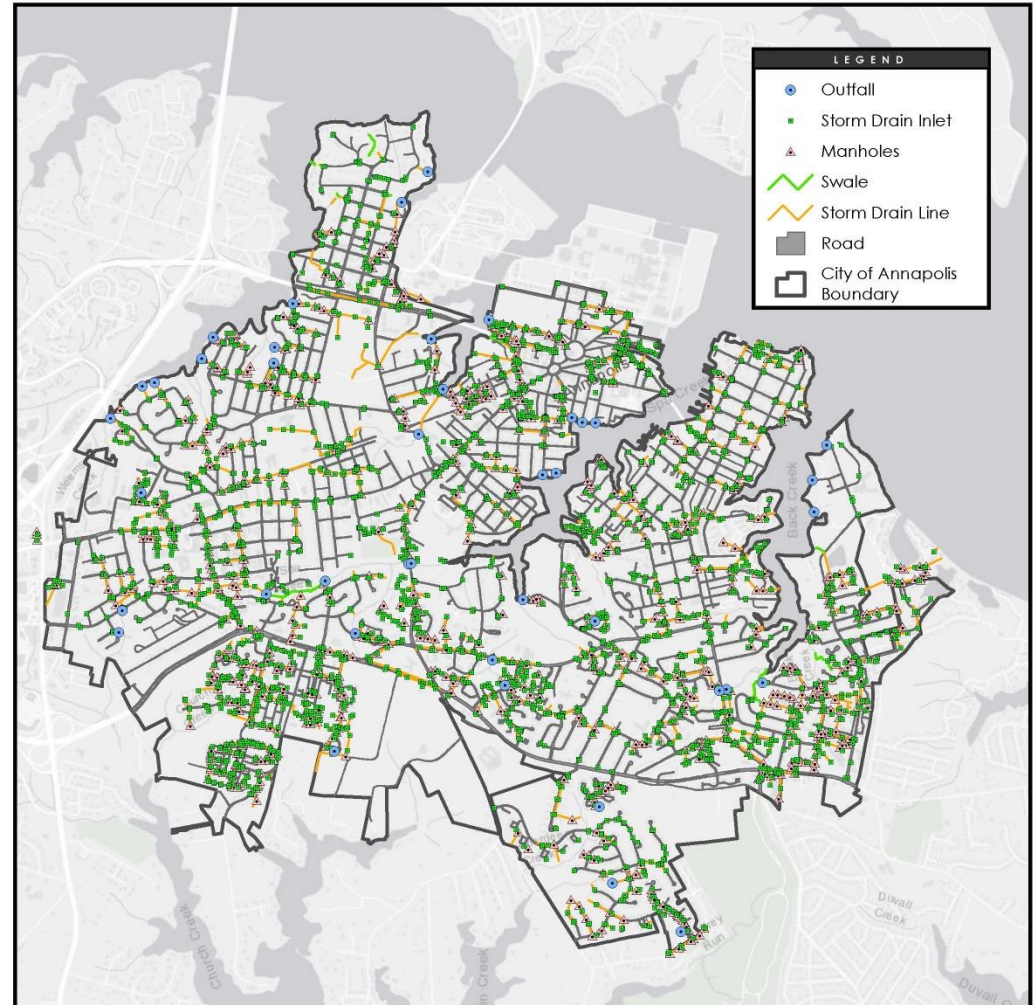
1 Background

2 Financial Plan Development

3 Stormwater Fee Structure Evaluation

City of Annapolis Stormwater System

- **58** miles of stormwater mains
- **2,500** catch basins / inlets
- **2,000** manholes
- **41** stormwater outfalls
- **307** miles of roadway curb and gutters



Background

In April of 2018, the City received its new Phase II MS4 permit

Stantec completed initial stormwater fee study in fall of 2018 and recommended:

- Increase in stormwater fees of 2% for FY20
- Consideration of modifications to fee structure

City increased stormwater fees for FY20 and determined that more analysis was required prior to implementing a modified fee structure

Scope of the Study

Financial Plan Development

- Examine the current and forecast the future cost of providing stormwater service in the City
- Evaluate the sufficiency of the Utility's existing revenues given updates in operational and capital spending plans
- Develop a financial plan including adjustments to stormwater fees to meet the funding requirements of the system

Stormwater Fee Structure Analysis

- Evaluate the City's updated impervious area data
- Identify alternative fee structures for consideration
- Assist City with development of new fee structure



Financial Analysis

Financial Plan Development

Revenue Requirements:

- Expenses based on FY 20 and FY21 budget, and escalated on line item level based on cost indices and staff input
- Capital improvement plan includes MS4 compliance projects and system retrofit projects from the WIP plus additional projects from the City.

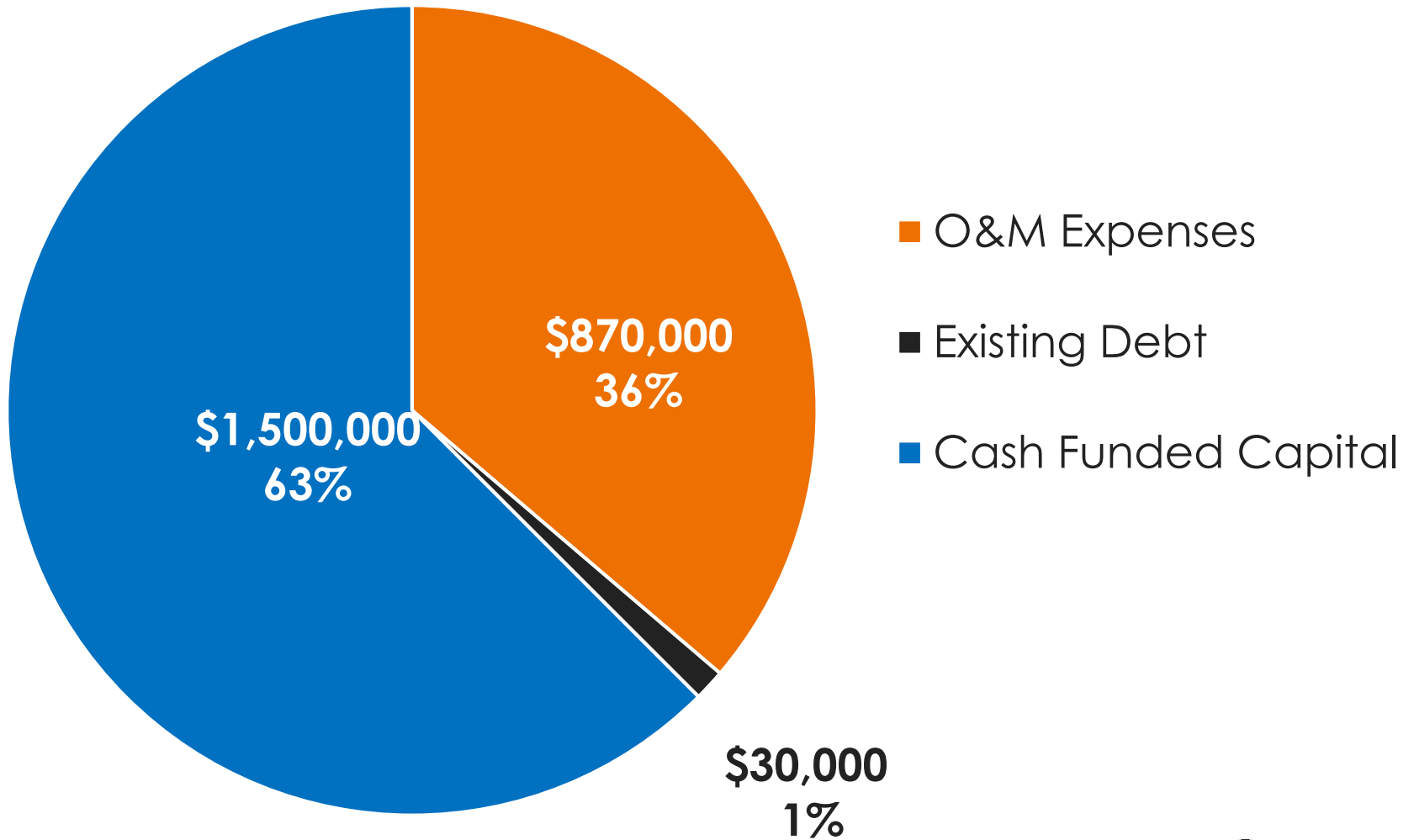
Revenue Forecast:

- Development of revenue forecast based on existing stormwater fees and customer base

Evaluate Key Metrics:

- Ability to maintain minimum reserve balances
- Ability to meet debt service requirements

2021 Stormwater Revenue Requirements

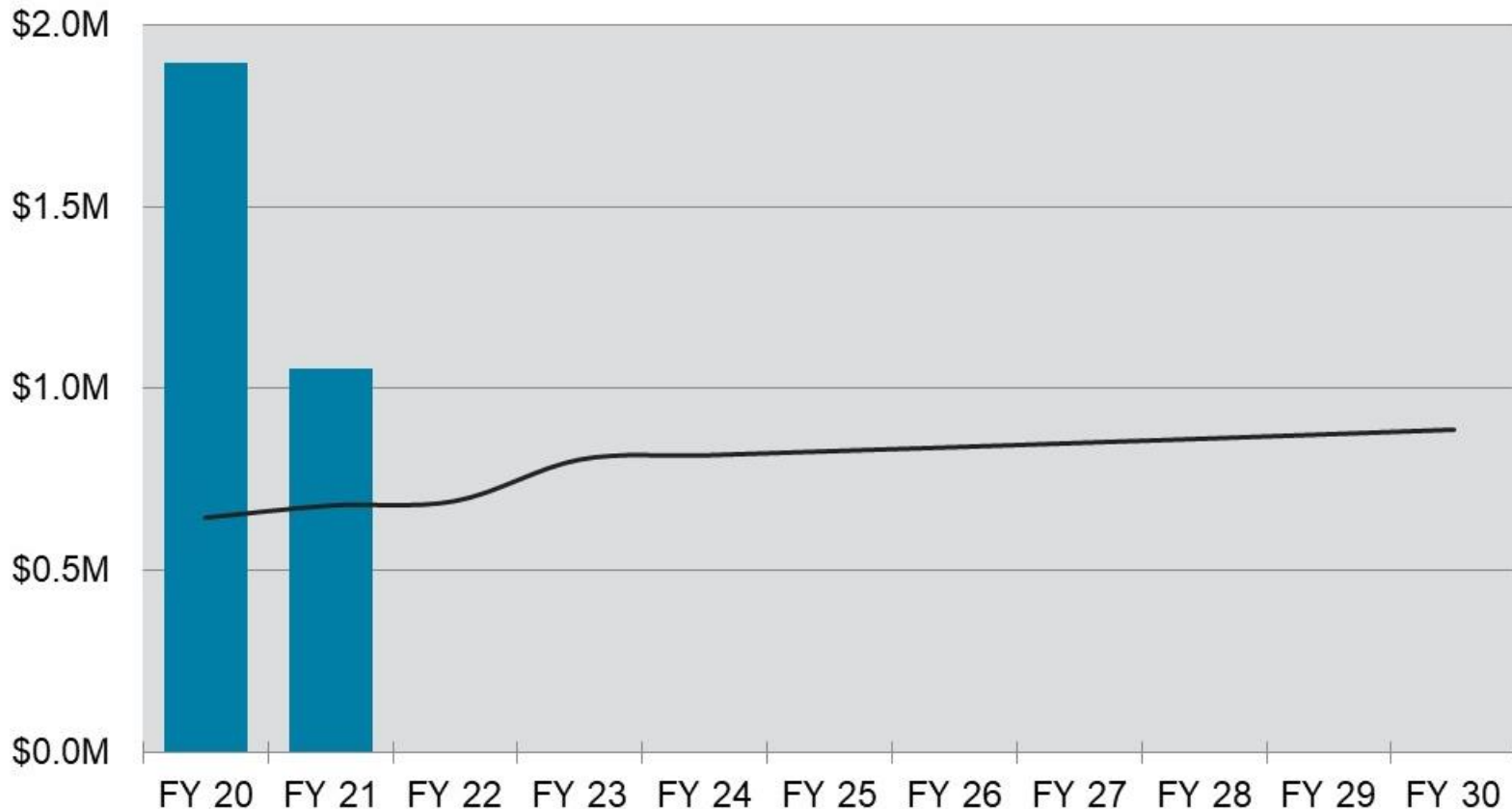


Revenue Sufficiency

(\$ Million)	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29
Total Operating Expenses	\$0.87	\$0.89	\$1.12	\$1.15	\$1.17	\$1.20	\$1.22	\$1.25	\$1.27
Cash Funded Capital*	1.50	4.65	1.22	1.26	1.29	1.33	1.37	1.41	1.46
Existing Debt Service	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01
Total Capital Expenses	\$1.53	\$4.68	\$1.25	\$1.28	\$1.32	\$1.35	\$1.39	\$1.43	\$1.47
Total Stormwater Expenses	\$2.39	\$5.58	\$2.37	\$2.42	\$2.49	\$2.55	\$2.61	\$2.67	\$2.74
Revenues from Existing Stormwater Fees	\$1.53	\$1.53	\$1.53	\$1.53	\$1.53	\$1.53	\$1.53	\$1.53	\$1.53

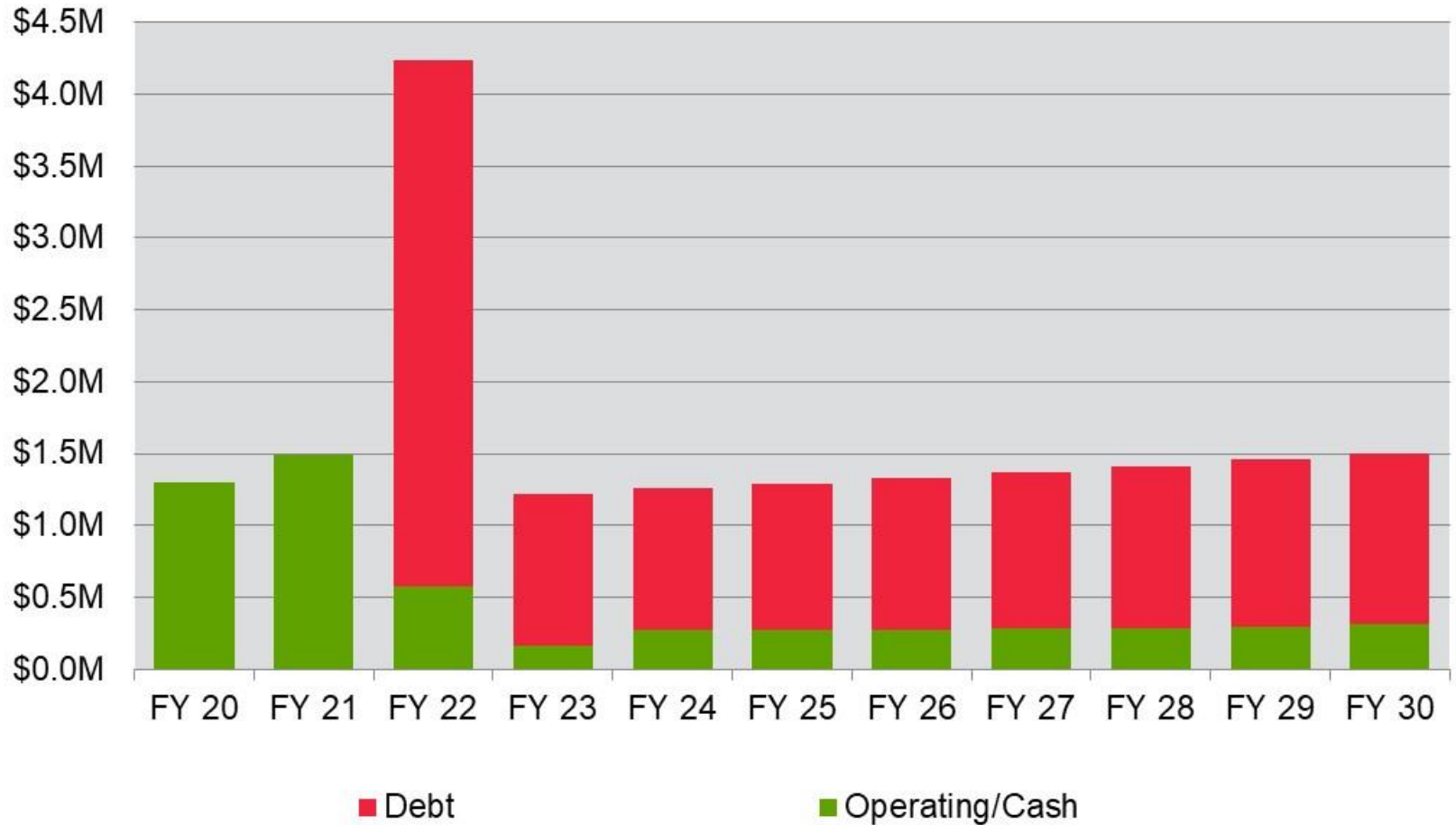
*Assumes all capital funded with cash

Stormwater Fund Forecast - Business as Usual



- No fee increases
- Cash funding all projects

Recommended Capital Funding



Financial Plan Considerations

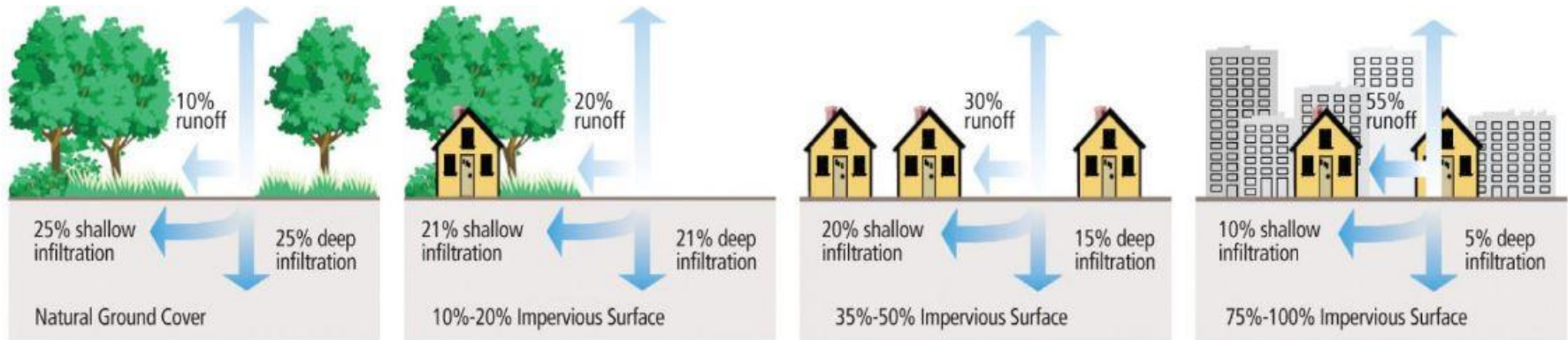
- The City will need to continue to escalate stormwater fees to comply with the new MS4 permit.
- Magnitude of adjustments
 - 1) Capital funding plan(cash vs. bond)
 - 2) Capital execution schedule
- A 10-year period and a cash/bond split results in annual increases of 5%.

	FY 21	FY 22	FY 23	FY 24
Stormwater Fee Increase	5.0%	5.0%	5.0%	5.0%



Stormwater Fee
Structure Analysis

Design of Stormwater Fees



Source: Lowimpactdevelopment.org

Increasing Impervious Surface = Increasing Runoff Generated

Stormwater fees typically based on impervious area as it reflects potential use of and contribution to the system

Current Stormwater Fee Structure

Residential	Quarterly Stormwater Fees
Single Family, Condos, Apartments*	\$15.30

*Charge per unit (i.e., 1 apartment unit \$15.30, single family home \$15.30)

Non-Residential	Quarterly Stormwater Fees
0 – 5,000 square feet of impervious area	\$61.20
5,001 – 10,000 square feet of impervious area	\$122.40
Over 10,000 square feet of impervious area	\$198.90

Current Structure Observations

Residential

- While it is common to charge single family residential all the same stormwater fee, it is less common for multi-family
- Equity concerns with an apartment or condo paying the same as single family

Non-Residential

- Current structure effectively caps the stormwater fee for non-residential property
- Property with 11,000 sq. ft. of impervious pays same as property with 110,000 sq. ft.

Alternative Structures Considered

Alternative 1 - Single Family Residential and Measured Impervious

- Single family residential all one fee
- Usage actual measured impervious for all other property types
- Common approach but data intensive and requires highly accurate impervious area measurements

Alternative 2 - Modified Current Approach

- Single family residential all one fee based on average impervious
- Multi-family residential all one fee (based on ratio of impervious for multi-family compared to single family)
- Non-residential based on appropriate tiers of impervious area

Recommended Fee Structure

Alternative 2 – Modified current approach recommended for implementation in FY21

Residential	Median Impervious Area (sq. ft)	ERUs
Single Family	2,100	1.0
Multi-Family	1,050	0.5

Non-Residential (Impervious Area)	Median Impervious Area (sq. ft)	ERUs
Tier 1: 0 - 5,000 sq. ft.	2,100	1.0
Tier 2: 5,001 - 25,000 sq. ft.	10,500	5.0
Tier 3: 25,001 - 80,000 sq. ft.	44,100	21.0
Over 80,000 sq. ft	136,500	65.0

Billing Units

Property Classification	Current Billable Units	Alternative Structure ERUs
Residential	10,068	10,068
Multi-Family Residential	6,416	3,206
Non-Residential	7,771	7,970
Total	24,255	21,224

Structure change results in a modest reduction in the number of billable units due to change in multi-family approach

FY 21 Fee Recommendation

Residential	FY 21
Single Family	\$19.00
Multi-Family (per unit)	\$9.50

Non-Residential (Impervious Area)	FY 21
Tier 1: 0 - 5,000 sq. ft.	\$19.00
Tier 2: 5,001 - 10,000 sq. ft.	\$95.00
Tier 3: 10,001 - 80,000 sq. ft.	\$399.00
Over 80,000 sq. ft	\$1,235.00

Structure Change Bill Impacts

Property Type	Total Properties	Average Quarterly Bill - Current Structure	Average Quarterly Bill - Alternative Structure	Quarterly Change
Apartment	501	\$148.76	\$92.00	(\$56.76)
Church	32	\$158.26	\$219.19	\$60.93
Condominium	96	\$249.26	\$154.47	(\$94.79)
Gas Station	16	\$194.12	\$169.14	(\$24.98)
Govt - County	5	\$198.90	\$501.67	\$302.77
Govt-State / Fed / Other	21	\$171.94	\$377.45	\$205.51
Group Home	20	\$15.30	\$19.27	\$3.97
Hotels & Motels	8	\$145.35	\$292.66	\$147.31
Housing Authority	79	\$202.77	\$101.79	(\$100.98)
Mixed Use	16	\$88.93	\$38.00	(\$50.93)
Offices	174	\$118.18	\$130.35	\$12.17
Restaurant	65	\$99.80	\$84.05	(\$15.75)
Retail	203	\$111.62	\$135.80	\$24.18
School - Not Public	6	\$173.40	\$523.50	\$350.10
Schools - County	9	\$198.90	\$826.37	\$627.47
Single Family Residential	10,062	\$15.30	\$19.00	\$3.70



Questions