



2019

Stormwater Rate Study

DRAFT
REPORT



**CITY OF COPPELL, TEXAS
STORMWATER UTILITY RATE STUDY
AND LONG-TERM FINANCIAL PLAN**

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Acknowledgements

During the course of this rate study, several City employees expended considerable time and effort in assisting the project team. These employees included the Mayor and Council, Mike Land, Kent Collins, Kimberly Tiehen, Noel Bernal, Michael Garza, Kumar Gali and Jeffry Alvarez and Maria Martinez of Halff Associates. The project team owes a debt of gratitude to the hard work, dedication and professionalism of these individuals, without whom this project would not have been successfully completed.

The project team has relied upon the extensive data supplied by the City. Thus, the integrity of the study is largely dependent upon the accuracy of this financial and volumetric data. Every effort has been made by the project team to validate and confirm the information contained herein prior to the preparation of the final study documents. This report presents no assurance or guarantee that the forecast contained herein will be consistent with actual results or performances. These represent forecasts based on a series of assumptions about future behavior, and are not guarantees. Any changes in assumptions or actual events may result in significant revisions to the forecast and its conclusions. The cash flow projections and debt service coverage calculations are not intended to present overall financial positions, results of operations, and/or cash flows for the periods indicated, in conformity with guidelines for presentation of a forecast established by the American Institute of Certified Public Accountants.

SECTION I

Introduction to Stormwater Utilities

Introduction



In late 2018 the City of Coppell ("The City") engaged **Willdan Financial Services** ("Willdan") and **Jenkins Consulting Group** to develop a schedule of stormwater utility fees, both for the current year and for a forecast period ten years into the future. Increasingly throughout the USA, cities have begun establishing separate stormwater utility funds both to capture the costs associated with stormwater management and to set a cost-based monthly fee for this service. The results of this analysis, and the recommended residential, multi-family and commercial monthly stormwater fees, are presented in this summary report. The stormwater cost of service model developed to calculate the recommended fees is presented in **Appendix A** of this report.

The principal purpose of this report is to present projections of the financial operating results of the System, and to present a proposed long-term stormwater rate plan.

In the preparation of this report, Willdan has relied upon financial, statistical, and operating data regarding the System which have been taken from the books of record and accounts prepared by or for the City. The project team has also relied on information provided by the management and staff of the City, as well as outside consultants contracted by the City. While the project team believes such sources to be reliable, it has not verified the accuracy of any of the information furnished by and obtained from such sources and offers no assurances with respect thereto. To Willdan's knowledge, the summaries presented herein accurately reflect the information obtained from such sources.

The projections set forth herein are subject to change based upon indeterminate future events that could impact the conclusions presented herein. For example, the actual results can be impacted by such factors as slower than predicted customer growth, unanticipated increases in operating or capital expenditures, and other costs of the System. Any such event could have an adverse effect on the financial operating results of the system.

Background on Stormwater Management

The National Research Council has released a study entitled *Urban Stormwater Management in the United States*, compiled by the Committee on Reducing Stormwater Discharge Contributions to Water Pollution. It presents a comprehensive history and analysis of stormwater challenges and impact for cities in the 21st century. The study notes that as urbanization and development have occurred in recent decades, it has had a significant impact on how water moves above and below the ground following storm events.

The report notes that the federal government authorized creation of the National Pollutant Discharge Elimination System (“NPDES”) under the Clean Water Act to address this problem. In 1987 Congress passed Section 402(p) of the Clean Water Act to bring stormwater into the NPDES program.

In 1990 the U.S. Environmental Protection Agency issued the Phase I Stormwater Rules, which required NPDES permits for operators of municipal storm sewer systems serving populations over 100,000, and for runoff associated with industry. In 1999 the EPA issued Phase II stormwater rules to expand these regulations to cities the size of Coppel and smaller.

These regulations have required cities to create and implement comprehensive stormwater pollution plans and stormwater management plans. As the report states on page 1:

“These plans document the stormwater control measures (SCMs) (sometimes known as best management practices or BMPs) that will be used to prevent stormwater emanating from these sources from degrading nearby waterbodies. These SCMs range from structural methods such as detention ponds and bioswales to nonstructural methods such as designing new development to reduce the percentage of impervious surfaces.”

As with many federal government mandates, these sections of the Clean Water Act pertaining to stormwater are unfunded. This has resulted in cities across the USA struggling to develop new methods for financing these additional costs. This has led directly to the increasing popularity of accounting for stormwater costs as separate stormwater utilities.

Stormwater Utility Survey

The national engineering firm Black and Veatch conducts biannual surveys of stormwater utilities in the United States. Their twelfth and latest survey was completed in 2018, and contained a significant amount of interesting data on the status of stormwater utilities in the United States. The survey included responses from 75 utilities in 21 states.

Chart I-1 shows that according to the Black and Veatch survey, 28% of cities operate their stormwater drainage systems as stand-alone departments. **Chart I-2** shows that 69% of these utilities bill their monthly charges on their water and wastewater bill. Only 4% bill as a separate stormwater bill, down from 5% in the 2014 survey.

Chart I-1

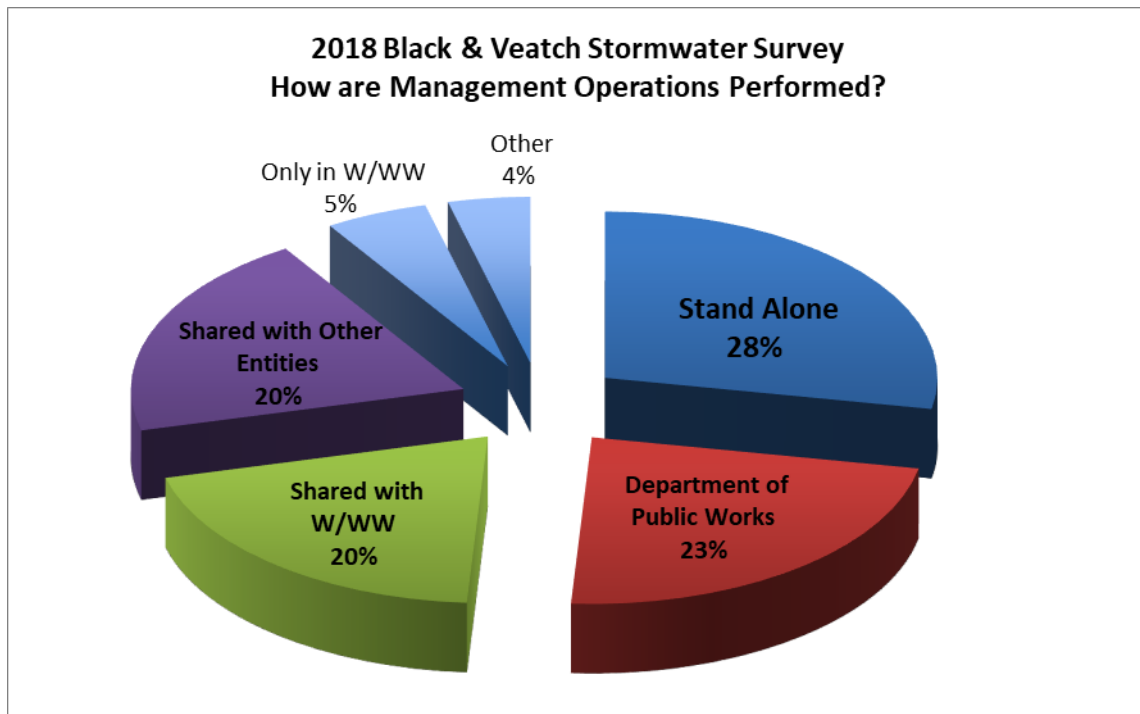
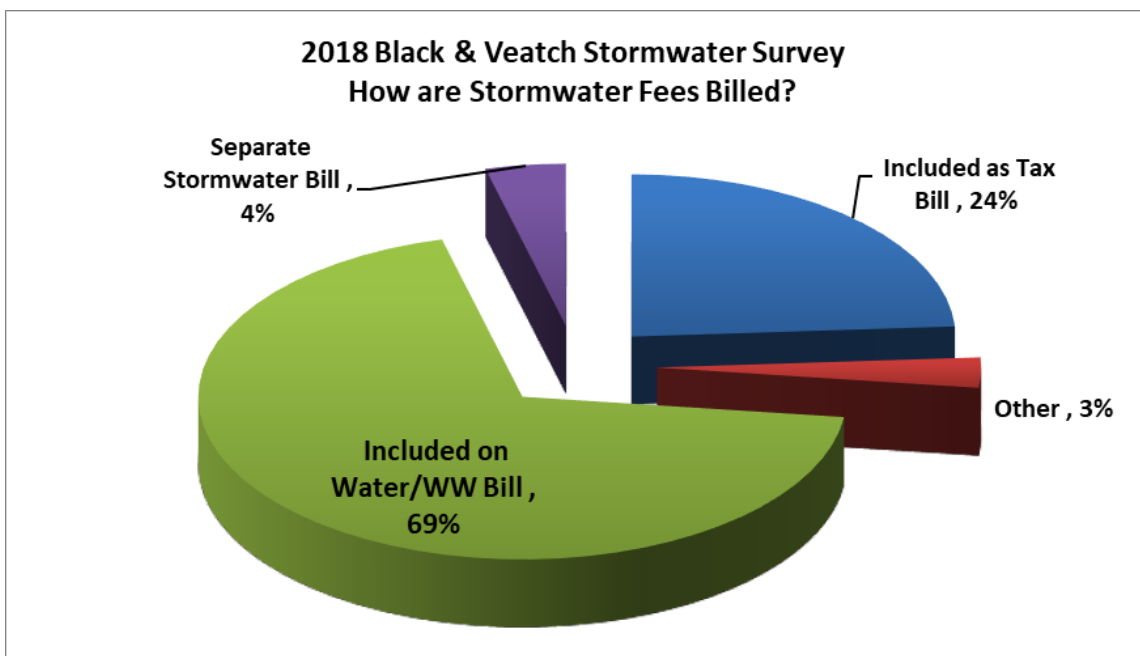


Chart I-2



Further, the Black and Veatch survey included a comparison of monthly residential rates throughout the USA. Results from that survey are presented in **Table I-3**. The table reveals that the median monthly charge for the cities in the survey is **\$5.46**.

Table I-3

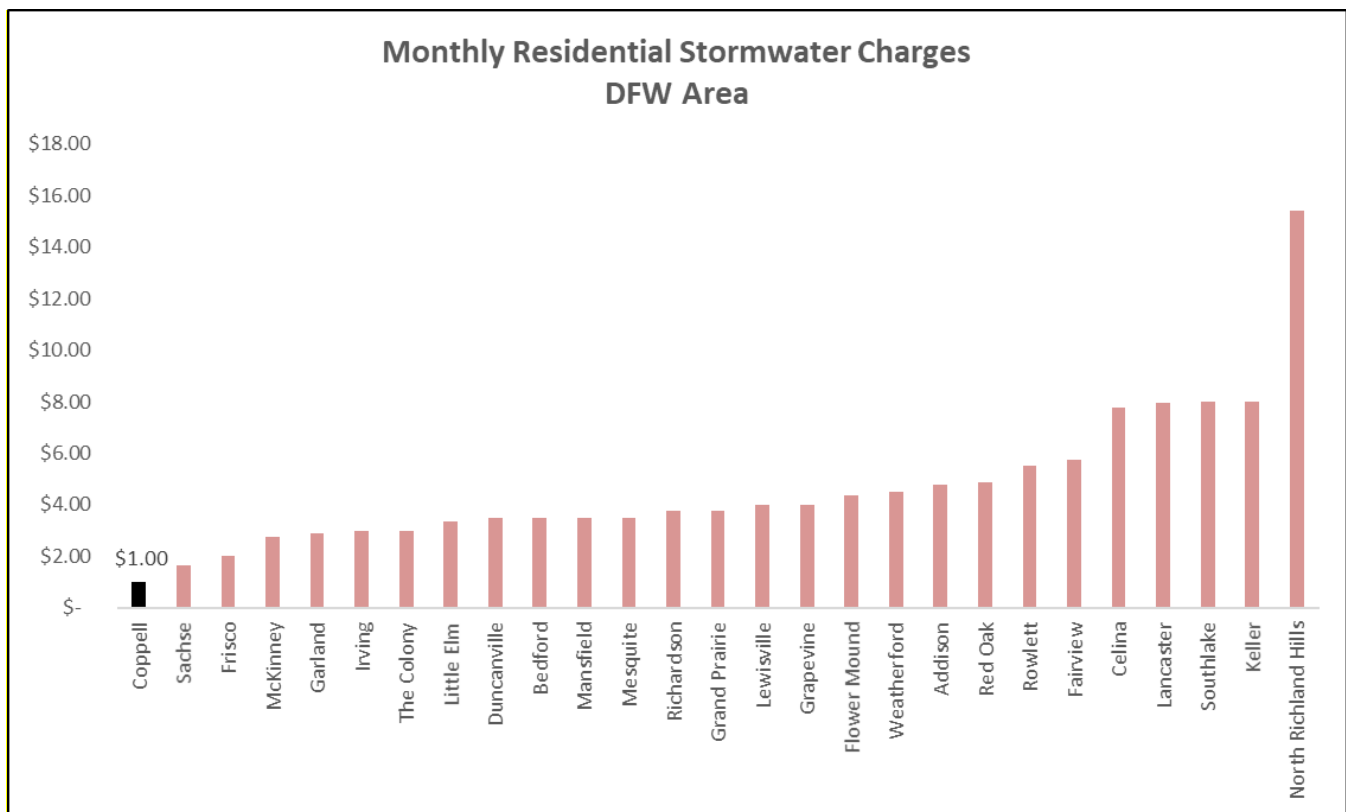
STORMWATER UTILITY					
AVERAGE MONTHLY SINGLE FAMILY RESIDENTIAL CHARGES					
Seattle WA	\$	40.07	Margate VA	\$	5.40
Redmond WA	\$	16.56	Fort Worth TX	\$	5.40
Lubbock TX	\$	16.23	Lawrence KS	\$	5.30
Fort Collins CO	\$	15.00	Griffin GA	\$	5.17
Bremerton WA	\$	14.90	Sanitation Dist 1 KY	\$	5.04
Naples, FL	\$	13.68	Wichita Falls TX	\$	5.00
Palo Alto CA	\$	13.65	Raleigh NC	\$	5.00
Loveland CO	\$	12.98	Round Rock TX	\$	4.75
Charlotte NC	\$	11.95	Rockledge FL	\$	4.75
Austin TX	\$	11.80	San Antonio TX	\$	4.74
Gresham, OR	\$	11.32	Niceville FL	\$	4.51
SE Metro Stormwater CO	\$	11.00	Topeka KS	\$	4.50
Pierce County , WA	\$	10.61	Mesquite TX	\$	4.50
Orlando, FL	\$	10.00	Rock Hill SC	\$	4.25
Edgewater FL	\$	10.00	Stuart FL	\$	4.18
Satelite Beach FL	\$	8.67	Frisco TX	\$	4.14
Cocoa Beach FL	\$	8.50	Monroe NC	\$	4.00
Ormond Beach FL	\$	8.00	McKinney TX	\$	4.00
Charleston SC	\$	8.00	Lynchburg VA	\$	4.00
Hampton VA	\$	7.83	Lakewood CO	\$	3.85
Sarasota County FL	\$	7.55	Charlottesville VA	\$	3.60
Meadville PA	\$	7.50	Cincinnati OH	\$	3.54
Bloomington MN	\$	7.29	Wichita KS	\$	3.50
Wilmington DE	\$	7.18	Murfreesboro TN	\$	3.25
Medford OR	\$	7.12	Newark DE	\$	2.95
Holly Hill FL	\$	7.00	Littleton CO	\$	2.75
Gwinnett CO GA	\$	6.97	Billings MT	\$	2.69
Adams CO CO	\$	6.90	Mecklenburg County NC	\$	2.68
Tampa FA	\$	6.83	West Miami FL	\$	2.50
Port Richie FL	\$	6.66	Kansas City MO	\$	2.50
Plymouth MN	\$	6.38	Columbia MO	\$	2.25
Killeen TX	\$	6.00	Santa Clarita CA	\$	2.12
Olathe KS	\$	5.77	San Diego CA	\$	1.90
Wooster OH	\$	5.75	Shelby County TN	\$	1.50
Great Falls MT	\$	5.71	Goshen IN	\$	1.25
Cedar Rapids IA	\$	5.48	Hamilton County , TN	\$	0.75
Margate FL	\$	5.46			
Source: 2018 B&V Stormwater Rate Survey					

The project team also compiled comparisons for monthly residential stormwater charges in the DFW area. The results of this survey are presented in **Chart I-4** below.

The following is notable about this survey:

- The Chart reveals that Coppell has the low residential stormwater charge of any City that assesses such a fee in the DFW area.
- Coppell's current monthly residential stormwater charges are well below the sample average of \$4.67.
- The highest recorded fee is \$15.41 from the City of North Richland Hills.
- The majority of cities charge residential monthly fees ranging from \$2.00 to \$6.00.

Chart I-4



SECTION II

Stormwater Utility Rate Calculation and Financial Forecast

Study Methodology

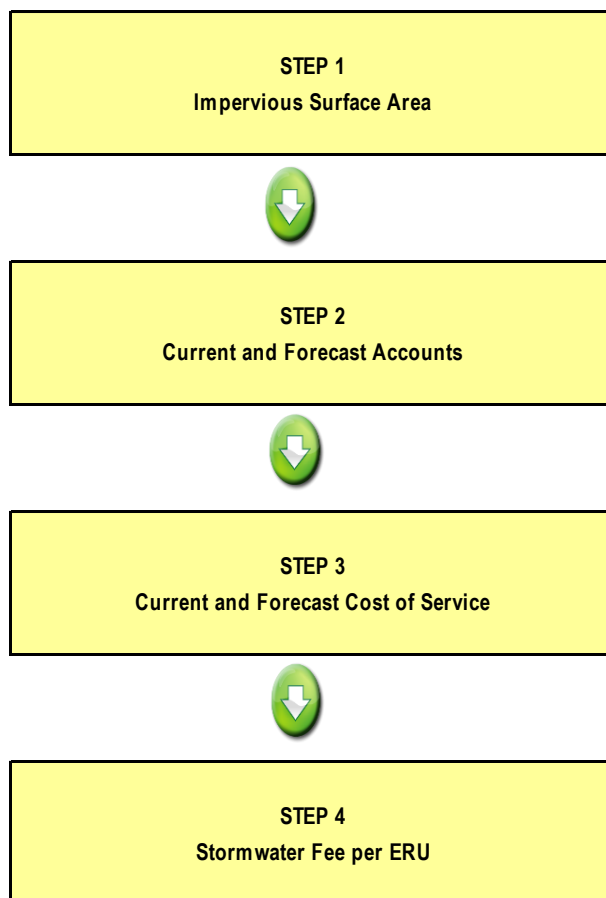
In order to calculate stormwater utility monthly fees for residential and non-residential ratepayers, the following steps are required:

1. The first step is to calculate the total **Impervious Surface Area** inside the City of Coppell. Detailed calculations have been completed by Halff Associates, and will be presented in the next section. This forms the basis for the cost of service and rate calculation.
2. The second step is to forecast total residential and non-residential stormwater accounts both for the current year and a forecast period ten years into the future.
3. The third step is to forecast the City's stormwater utility cost of service for the current year and a forecast period ten years into the future. The cost of service includes current and future operating expenses, capital outlays and debt service.
4. The final step is to calculate the stormwater fee for residential, multi-family and commercial units. The fee is based on the percentage and total impervious surface area based on equivalent residential units.

This process is illustrated in **Figure II-1**. The comprehensive stormwater utility cost of service rate model is presented in its entirety in **Appendix A**.



FIGURE II-1



Step 1 – Impervious Surface Area

During the course of this study project team members conferred on a regular basis with City staff and its engineering consultants, Halff Associates. At the request of the City and the project team, Halff Associates conducted a comprehensive review and survey of impervious surface area within the City of Coppell. The total calculation of residential, non-residential and street-related impervious surface area is presented in **Table II-2**. The table presents both the total parcels and the range by square footage.

Table II-2

CITY OF COPPELL IMPERVIOUS SURFACE AREA CALCULATIONS						
TOTAL IMPERVIOUS SURFACE AREA						
Low	Square Footage Range High	Average	Total Parcels	Percent	Square Feet	43,560 Acres
Residential						
-	2,499	1,250	1,793	15.1%	3,420,630	79
2,500	4,999	3,750	9,292	78.0%	33,035,747	758
5,000	9,999	7,500	795	6.7%	4,702,541	108
10,000	19,999	15,000	23	0.2%	289,974	7
20,000	29,999	25,000	3	0.0%	74,826	2
30,000	39,999	35,000	4	0.0%	137,241	3
40,000	Above	50,000	-	0.0%	-	-
			11,910	100.0%	41,660,959	956
Commercial						
-	2,499	1,250	147	26.1%	54,633	1
2,500	4,999	3,750	18	3.2%	64,456	1
5,000	9,999	7,500	14	2.5%	105,101	2
10,000	49,999	30,000	159	28.2%	4,481,539	103
50,000	99,999	75,000	46	8.2%	3,302,833	76
100,000	249,999	175,000	70	12.4%	12,352,570	284
250,000	499,999	375,000	58	10.3%	20,184,054	463
500,000	999,999	750,000	41	7.3%	28,791,712	661
1,000,000	1,999,999	1,500,000	10	1.8%	13,826,086	317
2,000,000	Above	2,500,000	1	0.2%	2,810,967	65
			564	100.0%	85,973,950	1,974
Multi Family						
-	2,499	1,250	-	0.0%	-	-
2,500	4,999	3,750	-	0.0%	-	-
5,000	9,999	7,500	-	0.0%	-	-
10,000	49,999	30,000	1	6.3%	30,278	1
50,000	99,999	75,000	-	0.0%	-	-
100,000	249,999	175,000	5	31.3%	918,784	21
250,000	499,999	375,000	6	37.5%	2,134,355	49
500,000	999,999	750,000	4	25.0%	2,168,495	50
1,000,000	1,999,999	1,500,000	-	0.0%	-	-
2,000,000	Above	2,500,000	-	0.0%	-	-
			16	100.0%	5,251,912	121

SOURCE: Half Associates

Step 2 – Actual and Forecast Stormwater Accounts

The second step in the stormwater fee development process is to examine the City's actual and projected customer growth and impervious surface area growth. For the purposes of assessing a stormwater utility fee, customers are identified as existing water accounts, both residential and non-residential.

Actual accounts and forecast account growth are presented in **Table II-3**. The growth projections are based on estimates presented in the City's most recent Water and Wastewater Rate Analysis, conducted by Willdan. It

shows modest but steady growth averaging 34 new accounts annually. Detailed calculations can be found in the stormwater utility model presented in Appendix A.

TABLE II-3

CITY OF COPPELL								
CUSTOMERS - HISTORICAL & FORECAST					IMPERVIOUS SURFACE AREA (SQUARE FEET)			
	Residential	Commercial	Multi Family	Total	Residential	Commercial	Multi Family	Total
STORMWATER Total Accounts								
2019	11,940	568	16	12,524	41,765,899	86,583,694	5,251,912	133,601,504
2020	11,970	572	16	12,558	41,870,838	87,193,438	5,251,912	134,316,188
2021	12,000	576	16	12,592	41,975,777	87,803,183	5,251,912	135,030,872
2022	12,030	580	16	12,626	42,080,717	88,412,927	5,251,912	135,745,556
2023	12,060	584	16	12,660	42,185,656	89,022,671	5,251,912	136,460,239
2024	12,090	588	16	12,694	42,290,596	89,632,416	5,251,912	137,174,923
2025	12,120	592	16	12,728	42,395,535	90,242,160	5,251,912	137,889,607
2026	12,150	596	16	12,762	42,500,475	90,851,904	5,251,912	138,604,291
2027	12,180	600	16	12,796	42,605,414	91,461,649	5,251,912	139,318,974
2028	12,210	604	16	12,830	42,710,353	92,071,393	5,251,912	140,033,658
STORMWATER Annual New Accounts								
2020	30	4	-	34	104,939	609,744	-	714,684
2021	30	4	-	34	104,939	609,744	-	714,684
2022	30	4	-	34	104,939	609,744	-	714,684
2023	30	4	-	34	104,939	609,744	-	714,684
2024	30	4	-	34	104,939	609,744	-	714,684
2025	30	4	-	34	104,939	609,744	-	714,684
2026	30	4	-	34	104,939	609,744	-	714,684
2027	30	4	-	34	104,939	609,744	-	714,684
2028	30	4	-	34	104,939	609,744	-	714,684

The Halff Associates study revealed that residential properties in the City of Coppell have a fairly consistent amount of impervious surface area per account. As shown in Table II-2, approximately 93.1% of residential properties have an impervious surface area of less than 5,000 square feet. The average square footage per property is 3,607, with only 30 residential accounts greater than 10,000 square feet.

However, commercial and multi-family properties can be subject to much wider variations in impervious surface area per property. The Halff Associates study undertook a thorough survey of non-residential and multi-family properties in the City and calculated the approximate amount of impervious surface area in each. The results of that survey are presented in **Table II-4** and **Table II-5**. Table II-4 reveals that commercial properties can have as little as 56 square feet of impervious surface area or as much as 2,800,000 square feet. The survey showed a total of 564 commercial properties in the City, with the average total square feet per account of 189,788. Table II-5 reveals that multi-family properties impervious surface area range between 30,000 square feet or as much as 572,000 square feet. The survey showed a total of 16 multi-family properties in the City, with the average total square feet per account of 328,244.

Table II-4

CITY OF COPPELL COMMERCIAL PROPERTY IMPERVIOUS SURFACE ANALYSIS			
Square Feet		Properties	
Impervious Surface Area		Number	Percent
-	2,499	147	26.1%
2,500	4,999	18	3.2%
5,000	9,999	14	2.5%
10,000	49,999	159	28.2%
50,000	99,999	46	8.2%
100,000	249,999	70	12.4%
250,000	499,999	58	10.3%
500,000	999,999	41	7.3%
1,000,000	1,999,999	10	1.8%
2,000,000	Above	1	<u>0.2%</u>
	Total	564	100.0%

-	9,999	179	31.7%
10,000	49,999	159	28.2%
50,000	99,999	46	8.2%
100,000	249,999	70	12.4%
250,000	499,999	58	10.3%
500,000	Above	52	<u>9.2%</u>
	Total	564	100.0%

Table II-5

CITY OF COPPELL MULTI-FAMILY PROPERTY IMPERVIOUS SURFACE ANALYSIS			
Square Feet		Properties	
Impervious Surface Area		Number	Percent
-	2,499	-	0.0%
2,500	4,999	-	0.0%
5,000	9,999	-	0.0%
10,000	49,999	1	6.3%
50,000	99,999	-	0.0%
100,000	249,999	5	31.3%
250,000	499,999	6	37.5%
500,000	999,999	4	25.0%
1,000,000	1,999,999	-	0.0%
2,000,000	Above	-	<u>0.0%</u>
	Total	16	100.0%

-	9,999	-	0.0%
10,000	49,999	1	6.3%
50,000	99,999	-	0.0%
100,000	249,999	5	31.3%
250,000	499,999	6	37.5%
500,000	Above	4	<u>25.0%</u>
	Total	16	100.0%

Step 3 – Current and Forecast Cost of Service

Operating Expenses – Current Year

The third step in the process of calculating stormwater utility fees is the determination of the total cost of service for the utility. The cost of service for stormwater drainage utilities is composed of the following elements:

Operating Expenses

Capital Outlays

Debt Principal and Interest

The City of Coppell has prepared a budget for FY 2019 to reflect expected costs of providing service. The budget and the net cost of service after adjustments are presented in **Table II-6** on the following page.

As the table shows, all operating expenses are in one fund, *Fund 14 – Municipal DUD*. Fund 14 is separated into three categories that capture all the operating expenses: personnel, services, and supplies. The total operating expenses for the test year are calculated to be \$684,282.

Table II-6 also shows that the project team is assuming that additional expenses will be incurred as a result of a contract O&M plan. This includes additional expenses for tree removal, street sweeping, channel moving, headwall repair and replacement, system inspection and assessment, and other expenses. These expenses were added after consultation with City staff and project team assessment.



Table II-6

CITY OF COPPELL TEST YEAR STORMWATER UTILITY BUDGET			
Scenario: 2019 11 15 -- Scenario I -- 7 Year	2019 Budget	Adjustments	Net 2019 Budget
OPERATING EXPENSE			
Fund 14 - Municipal DUD			
Personnel			
Asst/ DPW & Construction Inspector	\$ 73,284	\$ -	\$ 73,284
Longevity	489	-	489
Overtime	1,250	-	1,250
FLSA Overtime	60	-	60
Retirement	12,246	-	12,246
Medical/Dental Insurance	10,274	-	10,274
HRA Insurance	375	-	375
Medicare	1,151	-	1,151
Workers Compensation	133	-	133
Life Insurance	276	-	276
Merit/Salary Increase	2,931	-	2,931
Long Term Disability	170	-	170
Compensation Incentive	1,350	-	1,350
Total	103,989	0	103,989
Services			
Street System Maintenance	20,999	-	20,999
Water/Sewer Maintenance	-	-	-
Drainage Maintenance	158,588	-	158,588
Telephone	5,450	-	5,450
Other Professional Serv	54,256	-	54,256
Special Projects	8,000	-	8,000
Training Expense	5,000	-	5,000
Dues and Memberships	200	-	200
Publications/Subscription	200	-	200
Equipment Maintenance Costs	-	-	-
Tree Removal	-	45,000	45,000
Storm Sewer Cleaning	-	0	0
Inlet Cleaning and Repair	-	0	0
Street Sweeping	-	20,000	20,000
Channel Mowing	-	6,000	6,000
Erosion Control	-	5,000	5,000
Channel Grading	-	50,000	50,000
Headwall Repair	-	50,000	50,000
System Inspection	-	150,000	150,000
Total	252,693	326,000	578,693
Supplies			
Office Supplies	500	-	500
Other Supplies	1,000	-	1,000
Other Equipment	100	-	100
Total	1,600	-	1,600
TOTAL OPERATING EXPENSES	358,282	326,000	684,282
TOTAL CAPITAL OUTLAYS	-	-	-
TOTAL DEBT SERVICE	-	-	-
TOTAL COST OF SERVICE	\$ 358,282	\$ 326,000	\$ 684,282

Capital Outlays and Capital Improvement Plan

One of the key elements both in the current year cost of service and the City's forecast cost of service for the stormwater utility is the determination of the City's stormwater-related capital improvement plan. The City's stormwater CIP is summarized in **Table II-7** below. It should be noted that this CIP may be subject to potentially significant revision based on changes in future circumstances. In other words, it represents the best estimate of future CIP expenses based on information available at the present time.

Capital outlays are those expenditures normally incurred by the stormwater utility to fund small-ticket capital items, such as computers or vehicles. The City has expressed a desire to fund the capital outlays listed in Table II-7 through its ongoing rates while the Capital Improvement Plan will be funded through the issuance of debt.

Table II-7

CITY OF COPPELL		STORMWATER UTILITY CAPITAL IMPROVEMENT PLAN FY 2016 -- FY 2025						
SCENARIO:	2019 11 15 -- Scenario I -- 7 Year							
	Total	2019	2020	2021	2022	2023	2024	
Storm Drain Condition Study	\$ 200,000	\$ -	\$ 200,000	\$ -	\$ -	\$ -	\$ -	
Parker/Hollywood Headwall Repair	565,000	-	165,000	400,000	-	-	-	
Stream G-6	850,000	-	-	150,000	700,000	-	-	
Drainage Design Manual Update	200,000	-	200,000	-	-	-	-	
Kaye Street Lot Drainage	500,000	-	-	-	500,000	-	-	
Arbor Brook Channel Drainage	500,000	-	-	-	500,000	-	-	
Woodridge Channel Drainage	3,000,000	-	-	-	-	350,000	2,650,000	
Deforest Drainage	<u>1,000,000</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>120,000</u>	<u>880,000</u>	
Total	6,815,000	-	565,000	550,000	1,700,000	470,000	3,530,000	

Debt Service

The final element of the cost of service is debt principal and interest, to fund the long-term debt issued by the City to finance its stormwater utility capital improvement plan. At present, the City's stormwater utility fund carries no long-term debt. The City plans on issuing debt in FY 2021 for the amount of \$1,500,000 and in FY 2024 for the amount of \$2,750,000 to help fund the capital improvement plan. The City's annual debt service is summarized in **Table II-8** below.

Table II-8

CITY OF COPPELL										
STORMWATER UTILITY DEBT SERVICE FY 2019 -- FY 2028										
SCENARIO:	2019 11 15 -- Scenario I -- 7 Year									
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Debt Service - Current	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Debt Service - Future	-	-	-	100,824	100,824	100,824	285,667	285,667	285,667	285,667
Total Debt Service	-	-	-	100,824	100,824	100,824	285,667	285,667	285,667	285,667

Forecast Cost of Service

Table II-9 presents a summary of the forecast stormwater utility cost of service for the next ten years. Details behind the calculation, including the forecast of expenses by line item, can be found in the stormwater utility model presented in Appendix A. The following is notable about this forecast:

- The forecast assumes that total accounts and impervious surface area will increase at rates presented in Table II-3.
- The forecast assumes that most operating expenses increase at a rate of approximately 3.0% per year.
- Certain expenses, such as benefits, are assumed to increase at a higher annual rate, in accordance with actual performance and recent history.
- Certain expenses, such as maintenance, are forecast to increase at the rate of increase in total customers and impervious surface area.
- An additional program manager is expected to be added in FY 2021. This is shown in the detailed schedules in Appendix A.
- Additional needed operational and personnel expenses were developed by Jenkins Consulting Group and reviewed by City staff. Willdan incorporated these additional expenses into the development of the rate plan.
- The City is forecast to fund all identified capital outlays through rates whereas the capital improvement program is funded through issuance of debt.
- The table reveals that FY 2019 cost of service is calculated to be **\$679,282**. It is forecast to increase to **\$2,086,768** by FY 2028.

Table II-9

CITY OF COPPELL						
CURRENT AND FORECAST NET REVENUE REQUIREMENT						
SCENARIO: 2019 11 15 – Scenario I – 7 Year						
	Operating Expenses	Capital Outlays	Total Debt Service	Total Cost of Service	Less Non-Rate Revenues	Net Revenue Requirement
STORMWATER Utility Revenue Requirement						
2019	\$ 684,282	\$ -	\$ -	\$ 684,282	\$ 5,000	\$ 679,282
2020	770,529	200,000	-	970,529	5,000	965,529
2021	942,144	350,000	-	1,292,144	5,000	1,287,144
2022	1,018,287	500,000	100,824	1,619,110	5,000	1,614,110
2023	1,085,012	500,000	100,824	1,685,836	5,000	1,680,836
2024	1,152,346	500,000	100,824	1,753,169	5,000	1,748,169
2025	1,188,912	500,000	285,667	1,974,579	5,000	1,969,579
2026	1,226,696	500,000	285,667	2,012,363	5,000	2,007,363
2027	1,265,744	500,000	285,667	2,051,410	5,000	2,046,410
2028	1,306,101	500,000	285,667	2,091,768	5,000	2,086,768

Table II-10 presents the total net revenue requirement for each customer class. Details behind these calculations can be found in the stormwater utility model presented in Appendix A.

Table II-10

CITY OF COPPELL							
CURRENT AND FORECAST NET REVENUE REQUIREMENT							
SCENARIO: 2019 11 15 – Scenario I – 7 Year							
	Net Revenue Requirement	Cust. Class Allocations			Net Revenue Rqmt.		
		Residential	Commercial	Multi Family	Residential	Commercial	Multi Family
STORMWATER Utility Revenue Requirement							
2019	\$ 679,282	31.3%	64.8%	3.9%	\$ 212,354	\$ 440,225	\$ 26,703
2020	965,529	31.2%	64.9%	3.9%	300,988	626,788	37,753
2021	1,287,144	31.1%	65.0%	3.9%	400,122	836,959	50,062
2022	1,614,110	31.0%	65.1%	3.9%	500,369	1,051,292	62,449
2023	1,680,836	30.9%	65.2%	3.8%	519,618	1,096,528	64,690
2024	1,748,169	30.8%	65.3%	3.8%	538,955	1,142,283	66,931
2025	1,969,579	30.7%	65.4%	3.8%	605,567	1,288,995	75,017
2026	2,007,363	30.7%	65.5%	3.8%	615,521	1,315,780	76,062
2027	2,046,410	30.6%	65.6%	3.8%	625,817	1,343,450	77,144
2028	2,086,768	30.5%	65.7%	3.8%	636,466	1,372,039	78,263

Step 4 – Proposed Stormwater Utility Monthly Fee

The final step in the determination of stormwater utility fees involves the calculation of the monthly fee per account. The project team recommends continuing to offer two categories of fees, for residential and commercial/multi-family accounts. However, the project team recommends further dividing commercial and multi-family accounts into categories based on the amount of square feet of impervious surface area per account. The standard should be the ratio of average square footage by range category, as shown in **Table II-11**.

Table II-11

CITY OF COPPELL SQUARE FOOTAGE EQUIVALENT CALCULATION			
Square Footage Range		Average	Multiplier
Low	High		
-	9,999	5,000	-
10,000	49,999	30,000	6.00
50,000	99,999	75,000	15.00
100,000	249,999	175,000	35.00
250,000	499,999	350,000	70.00
500,000	Above	750,000	150.00

Fees are recommended to be assessed for all active water accounts within the city limits of Coppell. Average number of accounts by category of impervious surface area is presented in Table II-4 and Table II-5.

Table II-12 presents the project team's recommended stormwater monthly fee schedule for residential, commercial and multi-family customers. The following is notable about this schedule:

- The project team recommends that effective January 2020 or as soon as feasible the residential monthly fee be increased from its present \$1.00 per month to \$2.00 per month.
- **The project team recommends phasing in over a 7-year period a commercial and multi-family monthly fee tied to the general size of the property.** The project team has established 6 tiers as shown on Table II-12 and the multiplier is calculated in Table II-10.
- The initial fee for commercial and multi-family fees for properties of 10,000 square feet or less is recommended to be \$7.00 per month in January 2020, and increase to \$10.00 by October 2022.

- The fee for all larger commercial and multi-family properties would increase on a graduated scale on an annual basis over 7 years. While owners of the larger properties may take exception to the higher fees, it is only to correct a long-standing imbalance in the City's stormwater rate structure.
- The commercial and multi-family rate for larger properties would continue to be phased in each year through October 2026, when the phased in fee is complete.
- The fee structure is consistent with the project team's knowledge of stormwater fees for other utilities.

Table II-12

CITY OF COPPELL											
RECOMMENDED STORMWATER MONTHLY CHARGES											
SCENARIO: 2019 11 15 -- Scenario I -- 7 Year											
Square Feet	Approximate Acres	Current	Jan-20	Oct-20	Oct-21	Oct-22	Oct-23	Oct-24	Oct-25		
STORMWATER Utility Monthly Charge											
Residential		\$ 1.00	\$ 2.00	\$ 3.00	\$ 4.00	\$ 5.00	\$ 5.00	\$ 5.00	\$ 5.00	\$ 5.00	\$ 5.00
Commercial and Multi Family											
- 9,999	- 0.23	5.00	7.00	8.00	9.00	10.00	10.00	10.00	10.00	10.00	10.00
10,000 49,999	0.23 1.15	5.00-16.00	11.00	13.00	15.00	18.00	18.00	18.00	18.00	18.00	18.00
50,000 99,999	1.15 2.30	16.00-24.00	21.00	48.00	81.00	105.00	120.00	135.00	150.00	150.00	150.00
100,000 249,999	2.30 5.74	24.00-48.00	49.00	112.00	189.00	245.00	280.00	315.00	350.00	350.00	350.00
250,000 499,999	5.74 11.48	48.00-75.00	98.00	224.00	378.00	490.00	560.00	630.00	700.00	700.00	700.00
500,000 Above	11.48 Above	75.00	210.00	480.00	810.00	1,050.00	1,200.00	1,350.00	1,500.00	1,500.00	1,500.00

Table II-13 and **Table II-14** presents a comparison of current and proposed charges to other stormwater utilities in North Texas. Table 13 reveals that by October 2023 the City's proposed stormwater residential fee would be middle of the sample, assuming that no other utilities adjust their fees at any point in the next four years, an unlikely assumption.

Table II-14 shows that commercial monthly fees vary widely among other cities in the DFW metroplex, and that the City's commercial rates are generally not disproportionate in comparison to these others.

Chart II-13

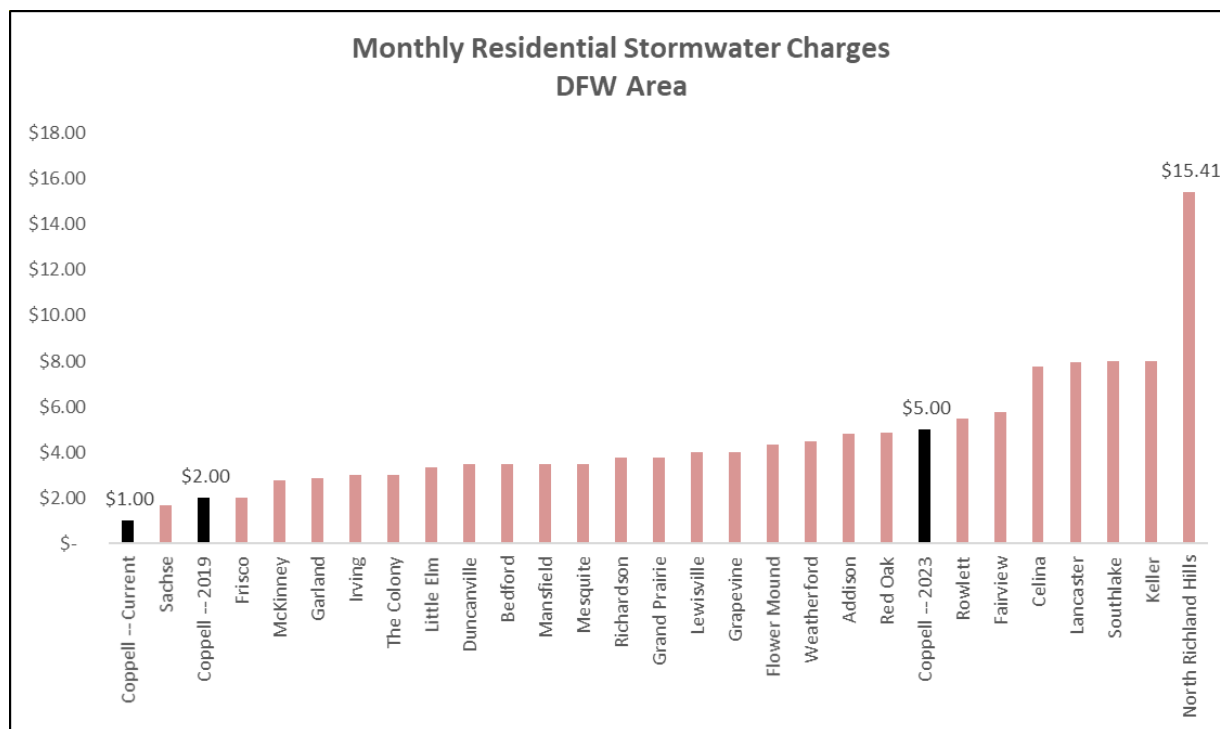


Table II-14

CITY OF COPPELL COMPARISON OF MONTHLY CHARGES								
Coppell								
	Square Feet	Jan-20	Oct-23	Flower Mound	Lewisville	Southlake	The Colony	Grapevine
Residential		\$ 2.00	\$ 5.00	\$ 4.35	\$ 4.00	\$ 8.00	\$ 3.00	\$ 4.00
Commercial								
Small	2,400	7.00	10.00	32.74	3.43	8.00	4.25	4.00
Medium	28,186	11.00	18.00	44.64	40.31	35.23	35.17	17.60
Large	2,810,967	210.00	1,200.00	56.55	4,019.68	3,513.71	3,507.52	1,755.21

Forecast Fees and Revenues

Table II-15 summarizes the stormwater utility revenue by customer class, total expenses and net revenues over the next decade. This forecast is presented in detail in **Appendix A**. The forecast reveals that with the recommended monthly fees the stormwater utility is projected to have sufficient revenues to fund all expenses by FY 2023. The table reveals that the City's current stormwater fee is collecting revenues below costs. However, revenues are forecast to reach parity with costs by 2023 with contingency balances generated in FY 2023 and beyond.

As indicated earlier, this revenue, expense and net revenue forecast is based on a series of assumptions about future conditions both nation-wide and in the City of Coppell. It is not a guarantee of future behavior, and it is subject to potentially significant revision should there be material changes to conditions either within or outside the City of Coppell.

Table II-16 reveals that over the next five years, under this rate plan, the General Fund would be required to support the Stormwater Fund with \$1,379,818 in order to assure that revenues fund all expenses.

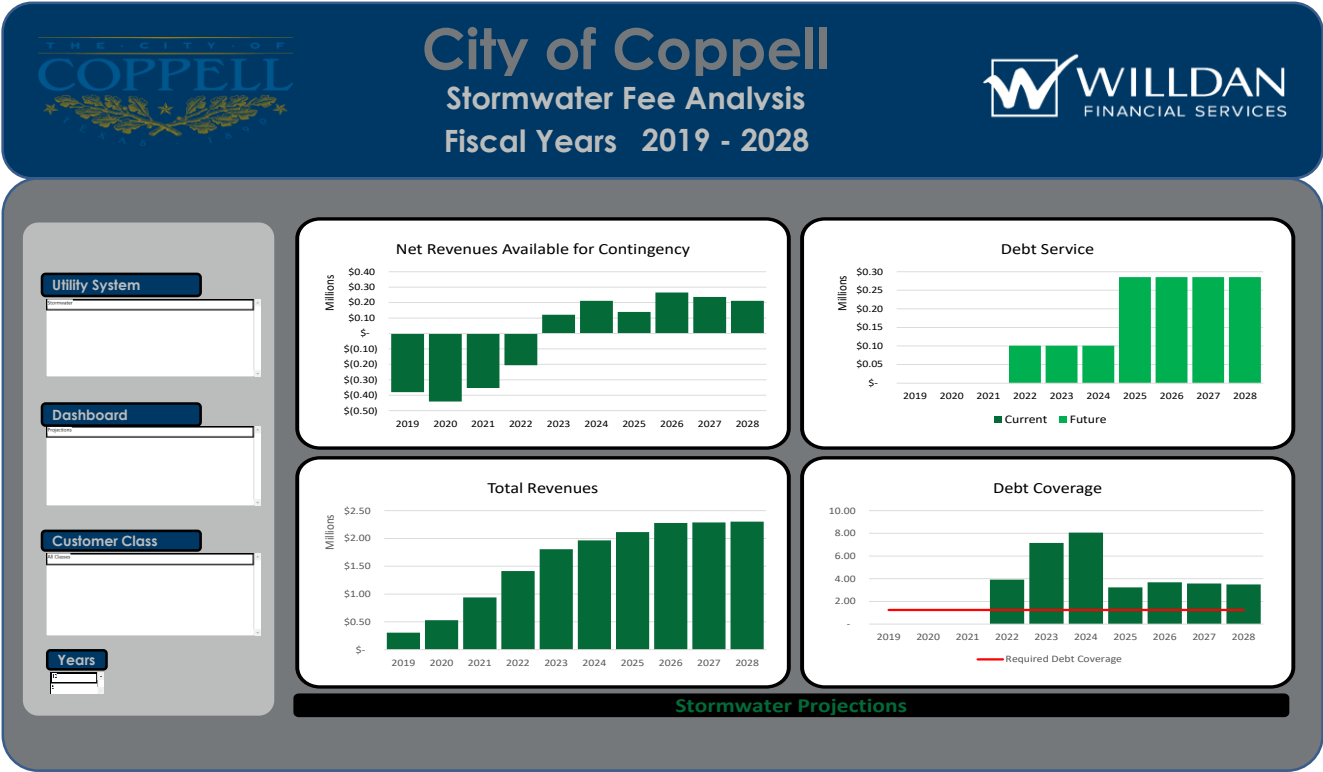
Table II-15

CITY OF COPPELL								
CURRENT AND FORECAST FEES AND REVENUE								
SCENARIO:	2019 11 15 -- Scenario I -- 7 Year							
	Forecast Revenue				Less		Net	
	Residential	Commercial	Multi Family	Total	Revenue Rqmt		Revenues	
2019	\$ 143,280	\$ 147,120	\$ 8,484	\$ 298,884	\$ 679,282		\$ (380,398)	
2020	287,280	221,844	15,672	524,796	965,529		(440,733)	
2021	432,000	466,392	35,676	934,068	1,287,144		(353,076)	
2022	577,440	770,940	60,120	1,408,500	1,614,110		(205,610)	
2023	723,600	1,000,320	77,916	1,801,836	1,680,836		121,000	
2024	725,400	1,145,496	89,016	1,959,912	1,748,169		211,743	
2025	727,200	1,281,732	100,116	2,109,048	1,969,579		139,469	
2026	729,000	1,432,368	111,216	2,272,584	2,007,363		265,221	
2027	730,800	1,441,104	111,216	2,283,120	2,046,410		236,710	
2028	732,600	1,454,160	111,216	2,297,976	2,086,768		211,208	

Table II-16

CITY OF COPPELL FORECAST STORMWATER REVENUES AND EXPENSES					
	2019	2020	2021	2022	2023
Revenues:					
Residential	\$ 143,280	\$ 287,280	\$ 432,000	\$ 577,440	\$ 723,600
Commercial	147,120	221,844	466,392	770,940	1,000,320
Multi Family	<u>8,484</u>	<u>15,672</u>	<u>35,676</u>	<u>60,120</u>	<u>77,916</u>
Total Fee Revenue	298,884	524,796	934,068	1,408,500	1,801,836
Non-Fee Revenue	<u>5,000</u>	<u>5,000</u>	<u>5,000</u>	<u>5,000</u>	<u>5,000</u>
Total Revenue	303,884	529,796	939,068	1,413,500	1,806,836
Cost of Service	<u>684,282</u>	<u>970,529</u>	<u>1,292,144</u>	<u>1,619,110</u>	<u>1,685,836</u>
Required General Fund Subsidy	380,398	440,733	353,076	205,610	-
Total Subsidy	1,379,818				

Appendix A



Future Debt Term

Stormwater Future Bond Issues		
	Alternative	Proposed
2019	-	\$ -
2020	-	\$ -
2021	-	\$ 1,500,000
2022	-	\$ -
2023	-	\$ -
2024	-	\$ 2,750,000
2025	-	\$ -
2026	-	\$ -
2027	-	\$ -
2028	-	\$ -

CITY OF COPPELL STORMWATER COST OF SERVICE MODEL												
	Current	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
Forecast Summary												
Scenario: 2019 11 15 -- Scenario I -- 7 Year												
1 Stormwater Monthly Fees												
Residential	\$ 1.00	\$ 1.00	\$ 2.00	\$ 3.00	\$ 4.00	\$ 5.00	\$ 5.00	\$ 5.00	\$ 5.00	\$ 5.00	\$ 5.00	\$ 5.00
Commercial												
- 9,999	5.00	5.00	7.00	8.00	9.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
10,000 49,999	8.00	8.00	11.00	13.00	15.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00
50,000 99,999	16.00	16.00	21.00	48.00	81.00	105.00	120.00	135.00	150.00	150.00	150.00	150.00
100,000 249,999	32.00	32.00	49.00	112.00	189.00	245.00	280.00	315.00	350.00	350.00	350.00	350.00
250,000 499,999	64.00	64.00	98.00	224.00	378.00	490.00	560.00	630.00	700.00	700.00	700.00	700.00
500,000 Above	75.00	75.00	210.00	480.00	810.00	1,050.00	1,200.00	1,350.00	1,500.00	1,500.00	1,500.00	1,500.00
-	-	-	-	-	-	-	-	-	-	-	-	-
2 Stormwater Accounts												
Residential	11,910	11,940	11,970	12,000	12,030	12,060	12,090	12,120	12,150	12,180	12,210	
Commercial	564	568	572	576	580	584	588	592	596	600	604	
Multi Family	16	16	16	16	16	16	16	16	16	16	16	
Other	-	-	-	-	-	-	-	-	-	-	-	
	12,490	12,524	12,558	12,592	12,626	12,660	12,694	12,728	12,762	12,796	12,830	
3 Forecast Annual Stormwater Fund Balance												
Beginning Fund Balance	\$ 449,842	\$ 69,444	\$ (371,289)	\$ (724,365)	\$ (929,976)	\$ (808,976)	\$ (597,233)	\$ (457,763)	\$ (192,543)	\$ 44,167		
Revenues												
Stormwater Fees	298,884	524,796	934,068	1,408,500	1,801,836	1,959,912	2,109,048	2,272,584	2,283,120	2,297,976		
Non-Fee Revenues	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	
Total Revenues	303,884	529,796	939,068	1,413,500	1,806,836	1,964,912	2,114,048	2,277,584	2,288,120	2,302,976		
Operating Expenses												
Fund 14 - Municipal DUD	684,282	770,529	942,144	1,018,287	1,085,012	1,152,346	1,188,912	1,226,696	1,265,744	1,306,101		
Other	-	-	-	-	-	-	-	-	-	-	-	
Total Operating	684,282	770,529	942,144	1,018,287	1,085,012	1,152,346	1,188,912	1,226,696	1,265,744	1,306,101		
Net Revenues for Non-Dept, Cap Outlays, Debt Sen	(380,398)	(240,733)	(3,076)	395,213	721,824	812,566	925,136	1,050,888	1,022,376	996,875		
Capital Outlays	-	200,000	350,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	
Debt Service - Current	-	-	-	-	-	-	-	-	-	-	-	
Debt Service - Future	-	-	-	100,824	100,824	100,824	285,667	285,667	285,667	285,667	285,667	
Total Cost of Service	684,282	970,529	1,292,144	1,619,110	1,685,836	1,753,169	1,974,579	2,012,363	2,051,410	2,091,768		
Net Revenues for Contingency/Fund Balance	(380,398)	(440,733)	(353,076)	(205,610)	121,000	211,743	139,469	265,221	236,710	211,208		
	-125.2%	-83.2%	-37.6%	-14.5%	6.7%	10.8%	6.6%	11.6%	10.3%	9.2%		
Ending Fund Balance	69,444	(371,289)	(724,365)	(929,976)	(808,976)	(597,233)	(457,763)	(192,543)	44,167	255,375		
Financial Ratios												
Days of Operating Expenses	37	(176)	(281)	(333)	(272)	(189)	(141)	(57)	13	71		
Days of Total Expenses	37	(140)	(205)	(210)	(175)	(124)	(85)	(35)	8	45		
Debt Coverage	-	-	-	3.92	7.16	8.06	3.24	3.68	3.58	3.49		

CITY OF COPPELL STORMWATER COST OF SERVICE MODEL										
Current	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028

Input Area -- Rate Calcula**Scenario: 2019 11 15 -- 7 Year****Stormwater Monthly Fee**

Date Rate In effect (October = 1)

Calculated Monthly Fee Per ERL

Residential	\$	1.48	\$	2.10	\$	2.78	\$	3.47	\$	3.59	\$	3.71	\$	4.16	\$	4.22	\$	4.28	\$	4.34
Commercial		64.59		91.32		121.09		151.05		156.47		161.89		181.45		183.97		186.59		189.30
Multi Family		139.08		196.63		260.74		325.25		336.93		348.60		390.71		396.16		401.79		407.62
Other		-		-		-		-		-		-		-		-		-		-

Recommended Monthly Fee Per

Residential	\$	1.00	\$	1.00	\$	2.00	\$	3.00	\$	4.00	\$	5.00	\$	5.00	\$	5.00	\$	5.00	\$	5.00
Commercial	Phase In				20.0%	40.0%	60.0%	70.0%	80.0%	90.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
-	9,999	5.00	5.00		7.00	8.00	9.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
10,000	49,999	8.00	8.00		11.00	13.00	15.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00
50,000	99,999	16.00	16.00		21.00	48.00	81.00	105.00	120.00	135.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00
100,000	249,999	32.00	32.00		49.00	112.00	189.00	245.00	280.00	315.00	350.00	350.00	350.00	350.00	350.00	350.00	350.00	350.00	350.00	350.00
250,000	499,999	64.00	64.00		98.00	224.00	378.00	490.00	560.00	630.00	700.00	700.00	700.00	700.00	700.00	700.00	700.00	700.00	700.00	700.00
500,000	Above	75.00	75.00		210.00	480.00	810.00	1,050.00	1,200.00	1,350.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00
-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Multi Family	Phase In				20.0%	40.0%	60.0%	70.0%	80.0%	90.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
-	9,999	7.00	7.00		7.00	8.00	9.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
10,000	49,999	7.00	7.00		11.00	13.00	15.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00
50,000	99,999	14.00	14.00		21.00	48.00	81.00	105.00	120.00	135.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00
100,000	249,999	28.00	28.00		49.00	112.00	189.00	245.00	280.00	315.00	350.00	350.00	350.00	350.00	350.00	350.00	350.00	350.00	350.00	350.00
250,000	499,999	56.00	56.00		105.00	240.00	405.00	525.00	600.00	675.00	750.00	750.00	750.00	750.00	750.00	750.00	750.00	750.00	750.00	750.00
500,000	Above	75.00	75.00		210.00	480.00	810.00	1,050.00	1,200.00	1,350.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00
-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	Phase In				100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
-	9,999	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10,000	49,999	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50,000	99,999	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
100,000	249,999	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
250,000	499,999	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
500,000	Above	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Summary of Results -- Rate Calc**Rate Revenue**

Residential	\$	143,280	\$	287,280	\$	432,000	\$	577,440	\$	723,600	\$	725,400	\$	727,200	\$	729,000	\$	730,800	\$	732,600
Commercial																				
-	9,999	10,800	15,288	17,568	19,872	22,200	22,440	22,560	22,680	22,800	23,040									
10,000	49,999	15,360	21,252	25,272	29,520	35,640	35,856	36,072	36,288	36,504	36,720									
50,000	99,999	8,832	11,844	27,072	45,684	60,480	69,120	77,760	88,200	88,200	88,200									
100,000	249,999	26,880	41,748	95,424	163,296	211,680	245,280	275,940	310,800	310,800	315,000									
250,000	499,999	85,248	131,712	301,056	512,568	670,320	772,800	869,400	974,400	982,800	991,200									
500,000	Above	-	-	-	-	-	-	-	-	-	-									
-	-	-	-	-	-	-	-	-	-	-	-									
Total Commercial		147,120	221,844	466,392	770,940	1,000,320	1,145,496	1,281,732	1,432,368	1,441,104	1,454,160									

CITY OF COPPELL STORMWATER COST OF SERVICE MODEL																				
	Current	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028									
Input Area -- Rate Calcula																				
Scenario: 2019 11 15 → 1 -- 7 Year																				
Multi Family																				
-	9,999	-	-	-	-	-	-	-	-	-	-									
10,000	49,999	84	132	156	180	216	216	216	216	216	216									
50,000	99,999	-	-	-	-	-	-	-	-	-	-									
100,000	249,999	1,680	2,940	6,720	11,340	14,700	16,800	18,900	21,000	21,000	21,000									
250,000	499,999	6,720	12,600	28,800	48,600	63,000	72,000	81,000	90,000	90,000	90,000									
500,000	Above	-	-	-	-	-	-	-	-	-	-									
-	-	-	-	-	-	-	-	-	-	-	-									
Total Multi Family		8,484	15,672	35,676	60,120	77,916	89,016	100,116	111,216	111,216	111,216									
Other																				
-	9,999	-	-	-	-	-	-	-	-	-	-									
10,000	49,999	-	-	-	-	-	-	-	-	-	-									
50,000	99,999	-	-	-	-	-	-	-	-	-	-									
100,000	249,999	-	-	-	-	-	-	-	-	-	-									
250,000	499,999	-	-	-	-	-	-	-	-	-	-									
500,000	Above	-	-	-	-	-	-	-	-	-	-									
-	-	-	-	-	-	-	-	-	-	-	-									
Total Other		-	-	-	-	-	-	-	-	-	-									
Total Rate Revenues		298,884	524,796	934,068	1,408,500	1,801,836	1,959,912	2,109,048	2,272,584	2,283,120	2,297,976									
Revenues to be Raised from Rates																				
Residential	\$	212,354	\$	300,988	\$	400,122	\$	500,369	\$	519,618	\$	538,955	\$	605,567	\$	615,521	\$	625,817	\$	636,466
Commercial		440,225		626,788		836,959		1,051,292		1,096,528		1,142,283		1,288,995		1,315,780		1,343,450		1,372,039
Multi Family		26,703		37,753		50,062		62,449		64,690		66,931		75,017		76,062		77,144		78,263
Other		-		-		-		-		-		-		-		-		-		-
Total		679,282		965,529		1,287,144		1,614,110		1,680,836		1,748,169		1,969,579		2,007,363		2,046,410		2,086,768
Net Revenues Available for Capital Projects																				
Residential	\$	(69,074)	\$	(13,708)	\$	31,878	\$	77,071	\$	203,982	\$	186,445	\$	121,633	\$	113,479	\$	104,983	\$	96,134
Commercial		(293,105)		(404,944)		(370,567)		(280,352)		(96,208)		3,213		(7,263)		116,588		97,654		82,121
Multi Family		(18,219)		(14,386)		(22,081)		(2,329)		13,226		22,085		25,099		35,154		34,072		32,953
Other		-		-		-		-		-		-		-		-		-		-
TOTAL Net Revenues		(380,398)		(440,733)		(353,076)		(205,610)		121,000		211,743		139,469		265,221		236,710		211,208
Percent of Revenues		-127.3%		-84.0%		-37.8%		-14.6%		6.7%		10.8%		6.6%		11.7%		10.4%		9.2%
Debt Coverage		-	-	-	3.92	7.16	8.06	3.24	3.68	3.58	3.43									

CITY OF COPPELL STORMWATER COST OF SERVICE MODEL											
	Current	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028

Input Area -- Rate Calcula**Scenario: 2019 11 15 -- 7 Year****Account Data****Total Accounts**

Residential			11,940	11,970	12,000	12,030	12,060	12,090	12,120	12,150	12,180	12,210
Commercial												
-	9,999	31.7%	180	182	183	184	185	187	188	189	190	192
10,000	49,999	28.2%	160	161	162	164	165	166	167	168	169	170
50,000	99,999	8.2%	46	47	47	47	48	48	48	49	49	49
100,000	249,999	12.4%	70	71	71	72	72	73	73	74	74	75
250,000	499,999	19.5%	111	112	112	113	114	115	115	116	117	118
500,000	Above	0.0%	-	-	-	-	-	-	-	-	-	-
-	-	0.0%	-	-	-	-	-	-	-	-	-	-
		100.0%	568	572	576	580	584	588	592	596	600	604
			567	573	575	580	584	589	591	596	599	604
Multi Family												
-	9,999	0.0%	-	-	-	-	-	-	-	-	-	-
10,000	49,999	6.3%	1	1	1	1	1	1	1	1	1	1
50,000	99,999	0.0%	-	-	-	-	-	-	-	-	-	-
100,000	249,999	31.3%	5	5	5	5	5	5	5	5	5	5
250,000	499,999	62.5%	10	10	10	10	10	10	10	10	10	10
500,000	Above	0.0%	-	-	-	-	-	-	-	-	-	-
-	-	0.0%	-	-	-	-	-	-	-	-	-	-
		100.0%	16	16	16	16	16	16	16	16	16	16
			16	16	16	16	16	16	16	16	16	16
Other												
-	9,999	0.0%	-	-	-	-	-	-	-	-	-	-
10,000	49,999	0.0%	-	-	-	-	-	-	-	-	-	-
50,000	99,999	0.0%	-	-	-	-	-	-	-	-	-	-
100,000	249,999	0.0%	-	-	-	-	-	-	-	-	-	-
250,000	499,999	0.0%	-	-	-	-	-	-	-	-	-	-
500,000	Above	0.0%	-	-	-	-	-	-	-	-	-	-
-	-	0.0%	-	-	-	-	-	-	-	-	-	-
		0.0%	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-
Total Accounts			12,524	12,558	12,592	12,626	12,660	12,694	12,728	12,762	12,796	12,830

CITY OF COPPELL STORMWATER COST OF SERVICE MODEL											
	Current	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Input Area -- Rate Calcula											
Scenario: 2019 11 15 -- 7 Year											
Total Monthly Bills											
Residential		143,280	143,640	144,000	144,360	144,720	145,080	145,440	145,800	146,160	146,520
Commercial											
-	9,999	2,160	2,184	2,196	2,208	2,220	2,244	2,256	2,268	2,280	2,304
10,000	49,999	1,920	1,932	1,944	1,968	1,980	1,992	2,004	2,016	2,028	2,040
50,000	99,999	552	564	564	564	576	576	576	588	588	588
100,000	249,999	840	852	852	864	864	876	876	888	888	900
250,000	499,999	1,332	1,344	1,344	1,356	1,368	1,380	1,380	1,392	1,404	1,416
500,000	Above	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
		6,804	6,876	6,900	6,960	7,008	7,068	7,092	7,152	7,188	7,248
Multi Family											
-	9,999	-	-	-	-	-	-	-	-	-	-
10,000	49,999	12	12	12	12	12	12	12	12	12	12
50,000	99,999	-	-	-	-	-	-	-	-	-	-
100,000	249,999	60	60	60	60	60	60	60	60	60	60
250,000	499,999	120	120	120	120	120	120	120	120	120	120
500,000	Above	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
		192	192	192	192	192	192	192	192	192	192
Other											
-	9,999	-	-	-	-	-	-	-	-	-	-
10,000	49,999	-	-	-	-	-	-	-	-	-	-
50,000	99,999	-	-	-	-	-	-	-	-	-	-
100,000	249,999	-	-	-	-	-	-	-	-	-	-
250,000	499,999	-	-	-	-	-	-	-	-	-	-
500,000	Above	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-
Total Monthly Bills		150,276	150,708	151,092	151,512	151,920	152,340	152,724	153,144	153,540	153,960

CITY OF COPPELL STORMWATER COST OF SERVICE MODEL										
10 Year Forecast 2020-2029										
	Test Year 2019	Forecast 2020	2021	2022	2023	2024	2025	2026	2027	2028

**Forecast SW 1.0 -- STORMWATER Department Revenue Requirement Raised from Rates
Scenario, 2019 11 15 -- Scenario I -- 7 Year**

NON-FEE REVENUES

Charges for Service (non-rate)										
Interest Income	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000
Storm Water Revenue	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
TOTAL	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000

OPERATING EXPENSES

Fund 14 - Municipal DUD

Personnel																				
Asst/ DPW & Construction Ins	\$	73,284	\$	75,483	\$	77,747	\$	80,079	\$	82,482	\$	84,956	\$	87,505	\$	90,130	\$	92,834	\$	95,619
Longevity		489		504		519		534		550		567		584		601		619		638
Overtime		1,250		1,288		1,326		1,366		1,407		1,449		1,493		1,537		1,583		1,631
FLSA Overtime		60		62		64		66		68		70		72		74		76		78
Retirement		12,246		12,613		12,992		13,382		13,783		14,196		14,622		15,061		15,513		15,978
Medical/Dental Insurance		10,274		11,096		11,984		12,942		13,978		15,096		16,304		17,608		19,016		20,538
HRA Insurance		375		405		437		472		510		551		595		643		694		750
Medicare		1,151		1,243		1,343		1,450		1,566		1,691		1,826		1,973		2,130		2,301
Workers Compensation		133		144		155		168		181		195		211		228		246		266
Life Insurance		276		298		322		348		375		406		438		473		511		552
Merit/Salary Increase		2,931		3,165		3,419		3,692		3,988		4,307		4,651		5,023		5,425		5,859
Long Term Disability		170		184		198		214		231		250		270		291		315		340
Compensation Incentive		1,350		1,458		1,575		1,701		1,837		1,984		2,142		2,314		2,499		2,699
Asst/ DPW & Construction Ins		-		-		-		-		-		-		-		-		-		-
Drainage Supervisor		-		-		-		-		-		-		-		-		-		-
Crew Leader		-		-		-		-		-		-		-		-		-		-
Maintenance Worker I		-		-		-		-		-		-		-		-		-		-
Maintenance Worker II		-		-		-		-		-		-		-		-		-		-
Equipment Operator		-		-		-		-		-		-		-		-		-		-
Administrative Technician		-		-		-		-		-		-		-		-		-		-
MS4 Program Manager		0		0		98,913		101,880		104,937		108,085		111,327		114,667		118,107		121,651
Other		-		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-	</			

<div> <div>10 Year Forecast 2020-2029</div> <div>CITY OF COPPELL STORMWATER COST OF SERVICE MODEL</div> </div>										
	Test Year 2019	Forecast 2020	2021	2022	2023	2024	2025	2026	2027	2028
Forecast SW 1.0 -- STORMWATER Department Revenue Requirement Raised from Rates										
Scenario, 2019 11 15 -- Scenario I -- 7 Year										
Other Professional Serv	54,256	56,031	57,864	59,756	61,710	63,727	65,809	67,959	70,179	72,471
Special Projects	8,000	8,240	8,487	8,742	9,004	9,274	9,552	9,839	10,134	10,438
Training Expense	5,000	5,164	5,332	5,507	5,687	5,873	6,065	6,263	6,467	6,679
Dues and Memberships	200	206	212	219	225	232	239	246	253	261
Publications/Subscription	200	206	212	219	225	232	239	246	253	261
Equipment Maintenance Cost:	-	-	-	-	-	-	-	-	-	-
Tree Removal	45,000	60,000	70,000	80,000	90,000	100,000	103,000	106,090	109,273	112,551
Storm Sewer Cleaning	0	15,000	25,000	35,000	40,000	50,000	51,500	53,045	54,636	56,275
Inlet Cleaning and Repair	0	15,000	25,000	35,000	40,000	50,000	51,500	53,045	54,636	56,275
Street Sweeping	20,000	30,000	40,000	55,000	65,000	75,000	77,250	79,568	81,955	84,413
Channel Mowing	6,000	10,000	15,000	20,000	25,000	25,000	25,750	26,523	27,318	28,138
Erosion Control	5,000	10,000	15,000	15,000	20,000	20,000	20,600	21,218	21,855	22,510
Channel Grading	50,000	50,000	50,000	50,000	50,000	50,000	51,500	53,045	54,636	56,275
Headwall Repair	50,000	60,000	70,000	80,000	90,000	100,000	103,000	106,090	109,273	112,551
System Inspection	150,000	150,000	150,000	150,000	150,000	150,000	154,500	159,135	163,909	168,826
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Total	578,693	660,937	729,448	798,235	857,306	916,672	944,941	974,080	1,004,118	1,035,081
Supplies										
Office Supplies	\$ 500	\$ 515	\$ 530	\$ 546	\$ 563	\$ 580	\$ 597	\$ 615	\$ 633	\$ 652
Other Supplies	1,000	1,033	1,066	1,101	1,137	1,175	1,213	1,253	1,293	1,336
Other Equipment	100	103	107	110	114	117	121	125	129	134
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Total	1,600	1,651	1,704	1,758	1,814	1,872	1,931	1,993	2,056	2,122
TOTAL	\$ 684,282	\$ 770,529	\$ 942,144	\$ 1,018,287	\$ 1,085,012	\$ 1,152,346	\$ 1,188,912	\$ 1,226,696	\$ 1,265,744	\$ 1,306,101
Other										
Other	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
TOTAL	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL OPERATING EXPENSES	\$ 684,282	\$ 770,529	\$ 942,144	\$ 1,018,287	\$ 1,085,012	\$ 1,152,346	\$ 1,188,912	\$ 1,226,696	\$ 1,265,744	\$ 1,306,101

<u>10 Year Forecast</u> 2020-2029		CITY OF COPPELL STORMWATER COST OF SERVICE MODEL									
Test Year	Forecast										
2019	2020	2021	2022	2023	2024	2025	2026	2027	2028		

Forecast SW 1.0 -- STORMWATER Department Revenue Requirement Raised from Rates
Scenario, 2019 11 15 -- Scenario I -- 7 Year

CAPITAL OUTLAYS

Capital Outlay	\$	-	\$	200,000	\$	350,000	\$	500,000	\$	500,000	\$	500,000	\$	500,000	\$	500,000	\$	500,000	\$	500,000
Capital Outlay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital Outlay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital Outlay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital Outlay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital Outlay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital Outlay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital Outlay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital Outlay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital Outlay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital Outlay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital Outlay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital Outlay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital Outlay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital Outlay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital Outlay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL CAPITAL OUTLAYS	\$	-	\$	200,000	\$	350,000	\$	500,000	\$	500,000	\$	500,000	\$	500,000	\$	500,000	\$	500,000	\$	500,000

<u>10 Year Forecast</u> 2020-2029		CITY OF COPPELL STORMWATER COST OF SERVICE MODEL									
	Test Year 2019	Forecast 2020	2021	2022	2023	2024	2025	2026	2027	2028	
Forecast SW 1.0 -- STORMWATER Department Revenue Requirement Raised from Rates											
Scenario, 2019 11 15 -- Scenario I -- 7 Year											
DEBT SERVICE											
Current Debt Service:											
Principal	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Interest	-	-	-	-	-	-	-	-	-	-	
Reserve	-	-	-	-	-	-	-	-	-	-	
Total Current Debt Service	-	-	-	-	-	-	-	-	-	-	
Future Debt Service:											
Principal	\$ -	\$ -	\$ -	\$ 55,824	\$ 57,498	\$ 59,223	\$ 163,343	\$ 168,243	\$ 173,291	\$ 178,489	
Interest	-	-	-	45,000	43,325	41,600	122,324	117,423	112,376	107,177	
Reserve	-	-	-	-	-	-	-	-	-	-	
Total Future Debt Service	-	-	-	100,824	100,824	100,824	285,667	285,667	285,667	285,667	
TOTAL DEBT SERVICE	\$ -	\$ -	\$ -	\$ 100,824	\$ 100,824	\$ 100,824	\$ 285,667	\$ 285,667	\$ 285,667	\$ 285,667	
TOTAL COST OF SERVICE											
TOTAL	\$ 684,282	\$ 970,529	\$ 1,292,144	\$ 1,619,110	\$ 1,685,836	\$ 1,753,169	\$ 1,974,579	\$ 2,012,363	\$ 2,051,410	\$ 2,091,768	

10 Year Forecast 2020-2029		CITY OF COPPELL STORMWATER COST OF SERVICE MODEL									
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	

Forecast SW 2.0 -- CASH BASIS Water Cost of Service by Customer Class
Scenario: 2019 11 15 -- Scenario I -- 7 Year

I. Total Cost of Service -- Cash Basis

Total Cost of Service											
Operating	\$ 684,282	\$ 770,529	\$ 942,144	\$ 1,018,287	\$ 1,085,012	\$ 1,152,346	\$ 1,188,912	\$ 1,226,696	\$ 1,265,744	\$ 1,306,101	
Capital Outlays	-	200,000	350,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	
Debt Service	-	-	-	100,824	100,824	100,824	285,667	285,667	285,667	285,667	
Total Cost of Service	684,282	970,529	1,292,144	1,619,110	1,685,836	1,753,169	1,974,579	2,012,363	2,051,410	2,091,768	
Less Non-Rate Revenues	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	
Net Revenues Raised from Rates	679,282	965,529	1,287,144	1,614,110	1,680,836	1,748,169	1,969,579	2,007,363	2,046,410	2,086,768	

II. Stormwater Fee Per Account

Total Accounts											
Residential	11,940	11,970	12,000	12,030	12,060	12,090	12,120	12,150	12,180	12,210	
Commercial	568	572	576	580	584	588	592	596	600	604	
Multi Family	16	16	16	16	16	16	16	16	16	16	
Other	-	-	-	-	-	-	-	-	-	-	
Total	12,524	12,558	12,592	12,626	12,660	12,694	12,728	12,762	12,796	12,830	

Impervious Surface Area

Total (Square Feet)

Residential	41,765,899	41,870,838	41,975,777	42,080,717	42,185,656	42,290,596	42,395,535	42,500,475	42,605,414	42,710,353	
Commercial	86,583,694	87,193,438	87,803,183	88,412,927	89,022,671	89,632,416	90,242,160	90,851,904	91,461,649	92,071,393	
Multi Family	5,251,912	5,251,912	5,251,912	5,251,912	5,251,912	5,251,912	5,251,912	5,251,912	5,251,912	5,251,912	
Other	-	-	-	-	-	-	-	-	-	-	
Total	133,601,504	134,316,188	135,030,872	135,745,556	136,460,239	137,174,923	137,889,607	138,604,291	139,318,974	140,033,658	

Percent

Residential	31.26%	31.17%	31.09%	31.00%	30.91%	30.83%	30.75%	30.66%	30.58%	30.50%	
Commercial	64.81%	64.92%	65.02%	65.13%	65.24%	65.34%	65.45%	65.55%	65.65%	65.75%	
Multi Family	3.93%	3.91%	3.89%	3.87%	3.85%	3.83%	3.81%	3.79%	3.77%	3.75%	
Other	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	

10 Year Forecast 2020-2029	CITY OF COPPELL STORMWATER COST OF SERVICE MODEL									
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028

Forecast SW 2.0 -- CASH BASIS Water Cost of Service by Customer Class**Scenario: 2019 11 15 -- Scenario I -- 7 Year****Stormwater Fee Per Account**Net Revenues Raised from Rates

Residential	\$	212,354	\$	300,988	\$	400,122	\$	500,369	\$	519,618	\$	538,955	\$	605,567	\$	615,521	\$	625,817	\$	636,466
Commercial		440,225		626,788		836,959		1,051,292		1,096,528		1,142,283		1,288,995		1,315,780		1,343,450		1,372,039
Multi Family		26,703		37,753		50,062		62,449		64,690		66,931		75,017		76,062		77,144		78,263
Other		-		-		-		-		-		-		-		-		-		-
Total		679,282		965,529		1,287,144		1,614,110		1,680,836		1,748,169		1,969,579		2,007,363		2,046,410		2,086,768

Stormwater Fee Per Account

Residential	\$	1.48	\$	2.10	\$	2.78	\$	3.47	\$	3.59	\$	3.71	\$	4.16	\$	4.22	\$	4.28	\$	4.34
Commercial	\$	64.59	\$	91.32	\$	121.09	\$	151.05	\$	156.47	\$	161.89	\$	181.45	\$	183.97	\$	186.59	\$	189.30
Multi Family	\$	139.08	\$	196.63	\$	260.74	\$	325.25	\$	336.93	\$	348.60	\$	390.71	\$	396.16	\$	401.79	\$	407.62
Other	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-

CITY OF COPPELL STORMWATER COST OF SERVICE MODEL														
IMPERVIOUS SURFACE AREA CALCULATIONS														
Square Footage Range			Total		Square		Square Footage Range				Total		Square	
Low	High	Average	Accounts	Percent	Feet	43,560 Acres	Low	High	Average	Multiplier	Parcels	Percent	Feet	43,560 Acres
Residential														
-	2,499	1,250	1,793	15.1%	3,420,630	79								
2,500	4,999	3,750	9,292	78.0%	33,035,747	758								
5,000	9,999	7,500	795	6.7%	4,702,541	108								
10,000	19,999	15,000	23	0.2%	289,974	7								
20,000	29,999	25,000	3	0.0%	74,826	2								
30,000	39,999	35,000	4	0.0%	137,241	3								
40,000	Above	50,000	-	0.0%	-	-								
			11,910	100.0%	41,660,959	956	3,498							
Commercial														
-	2,499	1,250	147	26.1%	54,633	1	-	9,999	5,000		179	31.7%	224,190	5
2,500	4,999	3,750	18	3.2%	64,456	1	10,000	49,999	30,000	6.00	159	28.2%	4,481,539	103
5,000	9,999	7,500	14	2.5%	105,101	2	50,000	99,999	75,000	15.00	46	8.2%	3,302,833	76
10,000	49,999	30,000	159	28.2%	4,481,539	103	100,000	249,999	175,000	35.00	70	12.4%	12,352,570	284
50,000	99,999	75,000	46	8.2%	3,302,833	76	250,000	499,999	350,000	70.00	110	19.5%	65,612,818	1,506
100,000	249,999	175,000	70	12.4%	12,352,570	284	500,000	Above	750,000	150.00		0.0%		
250,000	499,999	375,000	58	10.3%	20,184,054	463					564	100.0%	85,973,950	1,974
500,000	999,999	750,000	41	7.3%	28,791,712	661								
1,000,000	1,999,999	1,500,000	10	1.8%	13,826,086	317								
2,000,000	Above	2,500,000	1	0.2%	2,810,967	65								
			564	100.0%	85,973,950	1,974	152,436							
							43							
Multi Family														
-	2,499	1,250	-	0.0%	-	-	-	9,999	5,000		-	0.0%	-	-
2,500	4,999	3,750	-	0.0%	-	-	10,000	49,999	30,000	6.00	1	6.3%	30,278	1
5,000	9,999	7,500	-	0.0%	-	-	50,000	99,999	75,000	15.00	-	0.0%	-	-
10,000	49,999	30,000	1	6.3%	30,278	1	100,000	249,999	175,000	35.00	5	31.3%	918,784	21
50,000	99,999	75,000	-	0.0%	-	-	250,000	499,999	375,000	75.00	10	62.5%	4,302,850	99
100,000	249,999	175,000	5	31.3%	918,784	21	500,000	Above	750,000	150.00		0.0%		
250,000	499,999	375,000	6	37.5%	2,134,355	49					16	100.0%	5,251,912	121
500,000	999,999	750,000	4	25.0%	2,168,495	50								
1,000,000	1,999,999	1,500,000	-	0.0%	-	-								
2,000,000	Above	2,500,000	-	0.0%	-	-								
			16	100.0%	5,251,912	121								
Other														
-	2,499	1,250	-	0.0%	-	-	-	9,999	5,000		-	0.0%	-	-
2,500	4,999	3,750	-	0.0%	-	-	10,000	49,999	30,000	6.00	-	0.0%	-	-
5,000	9,999	7,500	-	0.0%	-	-	50,000	99,999	75,000	15.00	-	0.0%	-	-
10,000	49,999	30,000	-	0.0%	-	-	100,000	249,999	175,000	35.00	-	0.0%	-	-
50,000	99,999	75,000	-	0.0%	-	-	250,000	499,999	375,000	75.00	-	0.0%	-	-
100,000	249,999	175,000	-	0.0%	-	-	500,000	Above	750,000	150.00	-	0.0%	-	-
250,000	499,999	375,000	-	0.0%	-	-					-	0.0%	-	-
500,000	999,999	750,000	-	0.0%	-	-								
1,000,000	1,999,999	1,500,000	-	0.0%	-	-								
2,000,000	Above	2,500,000	-	0.0%	-	-								
			-	0.0%	-	-								

**CITY OF COPPELL
STORMWATER COST OF SERVICE MODEL**

10 Year Forecast**2020-2029****Input
Area****Test Year
2019****Forecast
2020****2021****2022****2023****2024****2025****2026****2027****2028****Input Area -- ERUs and Impervious Surface Area****Scenario: 2019 11 15 -- Scenario I -- 7 Year****Forecast Accounts****New Accounts****Residential**

-	2,499	15.1%	5	5	5	5	5	5	5	5	5	5
2,500	4,999	78.0%	23	23	23	23	23	23	23	23	23	23
5,000	9,999	6.7%	2	2	2	2	2	2	2	2	2	2
10,000	19,999	0.2%	-	-	-	-	-	-	-	-	-	-
20,000	29,999	0.0%	-	-	-	-	-	-	-	-	-	-
30,000	39,999	0.0%	-	-	-	-	-	-	-	-	-	-
40,000	Above	0.0%	-	-	-	-	-	-	-	-	-	-
Total		100.0%	30	30	30	30	30	30	30	30	30	30

Commercial

-	2,499	26.1%	1	1	1	1	1	1	1	1	1	1
2,500	4,999	3.2%	-	-	-	-	-	-	-	-	-	-
5,000	9,999	2.5%	-	-	-	-	-	-	-	-	-	-
10,000	49,999	28.2%	1	1	1	1	1	1	1	1	1	1
50,000	99,999	8.2%	-	-	-	-	-	-	-	-	-	-
100,000	249,999	12.4%	1	1	1	1	1	1	1	1	1	1
250,000	499,999	10.3%	1	1	1	1	1	1	1	1	1	1
500,000	999,999	7.3%	-	-	-	-	-	-	-	-	-	-
1,000,000	1,999,999	1.8%	-	-	-	-	-	-	-	-	-	-
2,000,000	Above	0.2%	-	-	-	-	-	-	-	-	-	-
Total		100.0%	5	5	5	5	5	5	5	5	5	5

Multi Family

-	2,499	0.0%	-	-	-	-	-	-	-	-	-	-
2,500	4,999	0.0%	-	-	-	-	-	-	-	-	-	-
5,000	9,999	0.0%	-	-	-	-	-	-	-	-	-	-
10,000	49,999	6.3%	-	-	-	-	-	-	-	-	-	-
50,000	99,999	0.0%	-	-	-	-	-	-	-	-	-	-
100,000	249,999	31.3%	-	-	-	-	-	-	-	-	-	-
250,000	499,999	37.5%	-	-	-	-	-	-	-	-	-	-
500,000	999,999	25.0%	-	-	-	-	-	-	-	-	-	-
1,000,000	1,999,999	0.0%	-	-	-	-	-	-	-	-	-	-
2,000,000	Above	0.0%	-	-	-	-	-	-	-	-	-	-
Total		100.0%	-	-	-	-	-	-	-	-	-	-

Other

-	2,499	0.0%	-	-	-	-	-	-	-	-	-	-
2,500	4,999	0.0%	-	-	-	-	-	-	-	-	-	-
5,000	9,999	0.0%	-	-	-	-	-	-	-	-	-	-
10,000	49,999	0.0%	-	-	-	-	-	-	-	-	-	-
50,000	99,999	0.0%	-	-	-	-	-	-	-	-	-	-
100,000	249,999	0.0%	-	-	-	-	-	-	-	-	-	-
250,000	499,999	0.0%	-	-	-	-	-	-	-	-	-	-
500,000	999,999	0.0%	-	-	-	-	-	-	-	-	-	-

**CITY OF COPPELL
STORMWATER COST OF SERVICE MODEL**

10 Year Forecast**2020-2029****Input
Area****Test Year
2019****Forecast
2020****2021****2022****2023****2024****2025****2026****2027****2028****Input Area -- ERUs and Impervious Surface Area****Scenario: 2019 11 15 -- Scenario I -- 7 Year**

1,000,000	1,999,999	0.0%	-	-	-	-	-	-	-	-	-	-	-
2,000,000	Above	0.0%	-	-	-	-	-	-	-	-	-	-	-
Total		0.0%	-	-	-	-	-	-	-	-	-	-	-
Total System			35	35	35	35	35	35	35	35	35	35	35
Total Accounts			2018										
Residential													
-	2,499	1,793	1,798	1,803	1,808	1,813	1,818	1,823	1,828	1,833	1,838	1,843	
2,500	4,999	9,292	9,315	9,338	9,361	9,384	9,407	9,430	9,453	9,476	9,499	9,522	
5,000	9,999	795	797	799	801	803	805	807	809	811	813	815	
10,000	19,999	23	23	23	23	23	23	23	23	23	23	23	
20,000	29,999	3	3	3	3	3	3	3	3	3	3	3	
30,000	39,999	4	4	4	4	4	4	4	4	4	4	4	
40,000	Above	-	-	-	-	-	-	-	-	-	-	-	
Total			11,910	11,940	11,970	12,000	12,030	12,060	12,090	12,120	12,150	12,180	12,210

**CITY OF COPPELL
STORMWATER COST OF SERVICE MODEL**

10 Year Forecast**2020-2029****Input
Area****Test Year
2019****Forecast
2020****2021****2022****2023****2024****2025****2026****2027****2028****Input Area -- ERUs and Impervious Surface Area****Scenario: 2019 11 15 -- Scenario I -- 7 Year****Commercial**

-	2,499	147	148	149	150	151	152	153	154	155	156	157
2,500	4,999	18	18	18	18	18	18	18	18	18	18	18
5,000	9,999	14	14	14	14	14	14	14	14	14	14	14
10,000	49,999	159	160	161	162	163	164	165	166	167	168	169
50,000	99,999	46	46	46	46	46	46	46	46	46	46	46
100,000	249,999	70	71	72	73	74	75	76	77	78	79	80
250,000	499,999	58	59	60	61	62	63	64	65	66	67	68
500,000	999,999	41	41	41	41	41	41	41	41	41	41	41
1,000,000	1,999,999	10	10	10	10	10	10	10	10	10	10	10
2,000,000	Above	1	1	1	1	1	1	1	1	1	1	1
Total		564	568	572	576	580	584	588	592	596	600	604

Multi Family

-	2,499	-	-	-	-	-	-	-	-	-	-	-
2,500	4,999	-	-	-	-	-	-	-	-	-	-	-
5,000	9,999	-	-	-	-	-	-	-	-	-	-	-
10,000	49,999	1	1	1	1	1	1	1	1	1	1	1
50,000	99,999	-	-	-	-	-	-	-	-	-	-	-
100,000	249,999	5	5	5	5	5	5	5	5	5	5	5
250,000	499,999	6	6	6	6	6	6	6	6	6	6	6
500,000	999,999	4	4	4	4	4	4	4	4	4	4	4
1,000,000	1,999,999	-	-	-	-	-	-	-	-	-	-	-
2,000,000	Above	-	-	-	-	-	-	-	-	-	-	-
Total		16	16	16	16	16	16	16	16	16	16	16

Other

-	2,499	-	-	-	-	-	-	-	-	-	-	-
2,500	4,999	-	-	-	-	-	-	-	-	-	-	-
5,000	9,999	-	-	-	-	-	-	-	-	-	-	-
10,000	49,999	-	-	-	-	-	-	-	-	-	-	-
50,000	99,999	-	-	-	-	-	-	-	-	-	-	-
100,000	249,999	-	-	-	-	-	-	-	-	-	-	-
250,000	499,999	-	-	-	-	-	-	-	-	-	-	-
500,000	999,999	-	-	-	-	-	-	-	-	-	-	-
1,000,000	1,999,999	-	-	-	-	-	-	-	-	-	-	-
2,000,000	Above	-	-	-	-	-	-	-	-	-	-	-
Total		-	-	-	-	-	-	-	-	-	-	-

Total System	12,490	12,524	12,558	12,592	12,626	12,660	12,694	12,728	12,762	12,796	12,830
		0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%

Impervious Surface Area

**CITY OF COPPELL
STORMWATER COST OF SERVICE MODEL**

10 Year Forecast**2020-2029****Input
Area****Test Year
2019****Forecast
2020****2021****2022****2023****2024****2025****2026****2027****2028****Input Area -- ERUs and Impervious Surface Area****Scenario: 2019 11 15 -- Scenario I -- 7 Year****Square Feet/Acre****43,560****Total City**

Acres	9,504	9,504	9,504	9,504	9,504	9,504	9,504	9,504	9,504	9,504	9,504
Square Feet	413,994,240	413,994,240	413,994,240	413,994,240	413,994,240	413,994,240	413,994,240	413,994,240	413,994,240	413,994,240	413,994,240

Impervious Surface Area Per Account -- Square Feet

Residential	3,498	3,498	3,498	3,498	3,498	3,498	3,498	3,498	3,498	3,498	3,498
Commercial	152,436	152,436	152,436	152,436	152,436	152,436	152,436	152,436	152,436	152,436	152,436
Multi Family	328,244	328,244	328,244	328,244	328,244	328,244	328,244	328,244	328,244	328,244	328,244
Other	-	-	-	-	-	-	-	-	-	-	-

Impervious Surface Area Total -- Square Feet

Residential	41,660,959	41,765,899	41,870,838	41,975,777	42,080,717	42,185,656	42,290,596	42,395,535	42,500,475	42,605,414	42,710,353
Commercial	85,973,950	86,583,694	87,193,438	87,803,183	88,412,927	89,022,671	89,632,416	90,242,160	90,851,904	91,461,649	92,071,393
Multi Family	5,251,912	5,251,912	5,251,912	5,251,912	5,251,912	5,251,912	5,251,912	5,251,912	5,251,912	5,251,912	5,251,912
Other	-	-	-	-	-	-	-	-	-	-	-
Total	132,886,821	133,601,504	134,316,188	135,030,872	135,745,556	136,460,239	137,174,923	137,889,607	138,604,291	139,318,974	140,033,658

Impervious Surface Area Total -- Acres

Residential	956	959	961	964	966	968	971	973	976	978	980
Commercial	1,974	1,988	2,002	2,016	2,030	2,044	2,058	2,072	2,086	2,100	2,114
Multi Family	121	121	121	121	121	121	121	121	121	121	121
Other	-	-	-	-	-	-	-	-	-	-	-
Total	3,051	3,067	3,083	3,100	3,116	3,133	3,149	3,166	3,182	3,198	3,215

Total City Acres	9,504	9,504	9,504	9,504	9,504	9,504	9,504	9,504	9,504	9,504	9,504
Percent Impervious Surface	32.1%	32.3%	32.4%	32.6%	32.8%	33.0%	33.1%	33.3%	33.5%	33.7%	33.8%

CITY OF COPPELL
STORMWATER COST OF SERVICE MODEL

Test Year
2019

Total Budget	Total Adjustments	Rev Rqmt	Forecast Increase in: 2020	2021	2022	2023	2024	2025	2026	2027	2028
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Input Area -- City Budget

Scenario: 2019 11 15 -- Scenario I -- 7 Year

INPUT VARIABLES

UTILITY: CITY OF COPPELL
 Test Year: 2019
 Forecast Period: 2020-2029
 Scenario: 2019 11 15 -- Scenario I -- 7 Year

ACCELERATORS

Salary Adjustment	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Inflation	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Expense Increase Premium	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Stormwater Accounts	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%

NON-FEE REVENUES**Charges for Service (non-rate)**

6400 Interest Income	\$	5,000	\$	-	\$	5,000	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
6635 Storm Water Revenue		230,000		(230,000)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other		-		-		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other		-		-		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other		-		-		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other		-		-		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other		-		-		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other		-		-		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other		-		-		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Non-Rate Revenues	\$	235,000	\$	(230,000)	\$	5,000													

CITY OF COPPELL
STORMWATER COST OF SERVICE MODEL

Test Year
2019

Total Budget	Total Adjustments	Rev Rqmt	Forecast Increase in:	2020	2021	2022	2023	2024	2025	2026	2027	2028
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Input Area -- City Budget

Scenario: 2019 11 15 -- Scenario I -- 7 Year

Fund 14 - Municipal DUD

Personnel												
1010	Asst/ DPW & Construction Inspect	\$ 73,284	\$ -	\$ 73,284	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
1030	Longevity	489	-	489	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
1040	Overtime	1,250	-	1,250	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
1041	FLSA Overtime	60	-	60	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
1070	Retirement	12,246	-	12,246	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
1080	Medical/Dental Insurance	10,274	-	10,274	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
1081	HRA Insurance	375	-	375	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
1100	Medicare	1,151	-	1,151	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
1110	Workers Compensation	133	-	133	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
1120	Life Insurance	276	-	276	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
1140	Merit/Salary Increase	2,931	-	2,931	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
1160	Long Term Disability	170	-	170	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
1170	Compensation Incentive	1,350	-	1,350	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
	Asst/ DPW & Construction Inspect	-	-	-	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
	Drainage Supervisor	-	-	-	0.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
x	Crew Leader	-	-	-	0.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
x	Maintenance Worker I	-	-	-	0.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
x	Maintenance Worker II	-	-	-	0.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
x	Equipment Operator	-	-	-	0.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
x	Administrative Technician	-	-	-	0.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
x	MS4 Program Manager	-	0	0	0.0%	989130000.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
x	Other	-	-	-	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
x	Other	-	-	-	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
x	Other	-	-	-	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
x	Other	-	-	-	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
x	Other	-	-	-	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
x	Other	-	-	-	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
x	Other	-	-	-	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
x	Other	-	-	-	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
x	Other	-	-	-	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
x	Other	-	-	-	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
x	Other	-	-	-	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
x	Other	-	-	-	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
x	Other	-	-	-	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Total		\$ 103,989	\$ 0	\$ 103,989	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%

Test Year
2019

Page: 20

Test Year
2019

Other

SUB-TOTAL	\$	-	\$	-	\$	-
TOTAL OPERATING	\$	358,282	\$	326,000	\$	684,282
CAPITAL OUTLAYS		-				-
TOTAL BUDGET		358,282		326,000		684,282

**CITY OF COPPELL
STORMWATER COST OF SERVICE MODEL**

**10 Year Forecast
2020-2029**

**Input
Area**

2019 2020 2021 2022 2023 2024 2025 2026 2027 2028

Input Area -- Capital Outlays

Scenario: 2019 11 15 -- Scenario I -- 7 Year

Capital Outlays

Capital Outlay	-	200,000	350,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000
Capital Outlay	-	-	-	-	-	-	-	-	-	-
Capital Outlay	-	-	-	-	-	-	-	-	-	-
Capital Outlay	-	-	-	-	-	-	-	-	-	-
Capital Outlay	-	-	-	-	-	-	-	-	-	-
Capital Outlay	-	-	-	-	-	-	-	-	-	-
Capital Outlay	-	-	-	-	-	-	-	-	-	-
Capital Outlay	-	-	-	-	-	-	-	-	-	-
Capital Outlay	-	-	-	-	-	-	-	-	-	-
Capital Outlay	-	-	-	-	-	-	-	-	-	-
Capital Outlay	-	-	-	-	-	-	-	-	-	-
Capital Outlay	-	-	-	-	-	-	-	-	-	-
Capital Outlay	-	-	-	-	-	-	-	-	-	-
Capital Outlay	-	-	-	-	-	-	-	-	-	-
Capital Outlay	-	-	-	-	-	-	-	-	-	-
Capital Outlay	-	-	-	-	-	-	-	-	-	-
Capital Outlay	-	-	-	-	-	-	-	-	-	-
Capital Outlay	-	-	-	-	-	-	-	-	-	-
TOTAL CAPITAL OUTLAYS	-	200,000	350,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000

Forecast 2020-2029	CITY OF COPPELL STORMWATER COST OF SERVICE MODEL									
	Total Cost	1 2019	2 2020	3 2021	4 2022	5 2023	6 2024	7 2025	8 2026	9 2027

Input Area -- Capital Improvement Plan**Scenario: 2019 11 15 -- Scenario I -- 7 Year****Annual Capital Expenditures**

Storm Drain Condition Study	\$ 200,000	\$ -	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Parker/Hollywood Headwall Repair	565,000	-	165,000	400,000	-	-	-	-	-	-	-
Stream G-6	850,000	-	-	150,000	700,000	-	-	-	-	-	-
Drainage Design Manual Update	200,000	-	200,000	-	-	-	-	-	-	-	-
Kaye Street Lot Drainage	500,000	-	-	-	500,000	-	-	-	-	-	-
Arbor Brook Channel Drainage	500,000	-	-	-	500,000	-	-	-	-	-	-
Woodridge Channel Drainage	3,000,000	-	-	-	-	350,000	2,650,000	-	-	-	-
Deforest Drainage	1,000,000	-	-	-	-	120,000	880,000	-	-	-	-
Dump Truck 12 Yd 50,000 GVW	-	-	-	-	-	-	-	-	-	-	-
Equipment Trailer	-	-	-	-	-	-	-	-	-	-	-
1/2 Ton Truck	-	-	-	-	-	-	-	-	-	-	-
1 Ton Truck	-	-	-	-	-	-	-	-	-	-	-
Walk Behind Pavement Saw	-	-	-	-	-	-	-	-	-	-	-
Backhoe Loader, Wheeled, Deere 410J	-	-	-	-	-	-	-	-	-	-	-
Air Compressor	-	-	-	-	-	-	-	-	-	-	-
Arrow Board	-	-	-	-	-	-	-	-	-	-	-
Vibratory Plate Compactor	-	-	-	-	-	-	-	-	-	-	-
Jumping Jack Compactor	-	-	-	-	-	-	-	-	-	-	-
Hydroscopic Excavator	-	-	-	-	-	-	-	-	-	-	-
Vac/Jetter Truck	-	-	-	-	-	-	-	-	-	-	-
Tractor, Deere 5083N	-	-	-	-	-	-	-	-	-	-	-
Flex Wing Rotary Cutter	-	-	-	-	-	-	-	-	-	-	-
Project	-	-	-	-	-	-	-	-	-	-	-
Project	-	-	-	-	-	-	-	-	-	-	-
Project	-	-	-	-	-	-	-	-	-	-	-
Future Projects	2,000,000	-	-	-	-	-	-	500,000	500,000	500,000	500,000
TOTAL CIP	8,815,000	-	565,000	550,000	1,700,000	470,000	3,530,000	500,000	500,000	500,000	500,000

Forecast 2020-2029	CITY OF COPPELL STORMWATER COST OF SERVICE MODEL								
	2 2020	3 2021	4 2022	5 2023	6 2024	7 2025	8 2026	9 2027	10 2028

Input Area -- Capital Improvement Plan FUNDING**Scenario: 2019 11 15 -- Scenario I -- 7 Year****1 Total Capital Improvement Plan**

Total	565,000	550,000	1,700,000	470,000	3,530,000	500,000	500,000	500,000	500,000
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CIP Funding Summary**2**

	2020	2021	2022	2023	2024	2025	2026				
Beginning Funds Available	\$ 449,842	\$ 98,337	\$ 1,401,287	\$ 243,326	\$ 280,626	\$ 9,045	\$ 9,316	\$ 9,595	\$ 9,883		
Interest	13,495	2,950	42,039	7,300	8,419	271	279	288	296		
Plus Capital Outlays	200,000	350,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000		
Sub-Total	663,337	451,287	1,943,326	750,626	789,045	509,316	509,595	509,883	510,180		
Plus Proceeds from Issuance of Debt	4,250,000	-	1,500,000	-	2,750,000	-	-	-	-		
Total Available Funds	663,337	1,951,287	1,943,326	750,626	3,539,045	509,316	509,595	509,883	510,180		
Less CIP	6,815,000	565,000	550,000	1,700,000	470,000	3,530,000	500,000	500,000	500,000	500,000	
Ending Funds Available	\$ 98,337	\$ 1,401,287	\$ 243,326	\$ 280,626	\$ 9,045	\$ 9,316	\$ 9,595	\$ 9,883	\$ 10,180		

10 Year Forecast 2020-2029		CITY OF COPPELL STORMWATER COST OF SERVICE MODEL								
Input Area		1 2019	2 2020	3 2021	4 2022	5 2023	6 2024	7 2025	8 2026	9 2027

Input Area -- Future Debt Service**Scenario: 2019 11 15 -- Scenario I -- 7 Year****Debt Financing Variables**

Issuing Cost Percentage	0.00%
Interest Rate	3.00%
Term (Years)	20
Reserve Years Funded	-

Debt Issues

Total Stormwater - CIP FUNDING INPUT	\$	4,250,000	\$	-	\$	-	\$	1,500,000	\$	-	\$	-	\$	2,750,000	\$	-	\$	-	\$	-	\$	-
Total Stormwater - DASHBOARD	\$	4,250,000	-	-	1,500,000	-	-	2,750,000	-	-	-	-	-	-	-	-	-	-	-	-	-	

Series: 2019

Principal	\$	-
Issuing Costs		-
Total Debt		-
Interest Rate		3.00%
Term		20
P&I		-

Beginning Principal

		1	2	3	4	5	6	7	8	9
Principal	\$	-	\$	-	\$	-	\$	-	\$	-
Interest	-	-	-	-	-	-	-	-	-	-
Reserve	-	-	-	-	-	-	-	-	-	-
Total	\$	-	\$	-	\$	-	\$	-	\$	-

Series: 2020

Principal	\$	-
Issuing Costs		-
Total Debt		-
Interest Rate		3.00%
Term		20
P&I		-

Beginning Principal

	1	2	3	4	5	6	7	8
Beginning Principal	-	-	-	-	-	-	-	-
Principal	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
Interest	-	-	-	-	-	-	-	-
Reserve	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-

CITY OF COPPELL									
STORMWATER COST OF SERVICE MODEL									
10 Year Forecast	Input	1	2	3	4	5	6	7	8
2020-2029	Area	2019	2020	2021	2022	2023	2024	2025	2026

Input Area -- Future Debt Service
Scenario: 2019 11 15 -- Scenario I -- 7 Year

Series: 2021

Principal	\$	1,500,000
Issuing Costs		-
Total Debt		1,500,000
Interest Rate		3.00%
Term		20
P&I		100,824

Beginning Principal

	1		2		3		4		5		6		7
\$	1,500,000	\$	1,444,176	\$	1,386,678	\$	1,327,455	\$	1,266,455	\$	1,203,625	\$	1,138,910
\$	55,824	\$	57,498	\$	59,223	\$	61,000	\$	62,830	\$	64,715	\$	66,656
	45,000		43,325		41,600		39,824		37,994		36,109		34,167
	-		-		-		-		-		-		-
\$	100,824	\$	100,824	\$	100,824	\$	100,824	\$	100,824	\$	100,824	\$	100,824

Series: 2022

Principal	\$	-
Issuing Costs		-
Total Debt		-
Interest Rate		3.00%
Term		20
P&I		-

Beginning Principal

	1		2		3		4		5		6
	-		-		-		-		-		-
\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	-		-		-		-		-		-
\$	-	\$	-	\$	-	\$	-	\$	-	\$	-

CITY OF COPPELL STORMWATER COST OF SERVICE MODEL										
10 Year Forecast 2020-2029	Input Area	1 2019	2 2020	3 2021	4 2022	5 2023	6 2024	7 2025	8 2026	9 2027
		2019	2020	2021	2022	2023	2024	2025	2026	2027

Input Area -- Future Debt Service
Scenario: 2019 11 15 -- Scenario I -- 7 Year

Series: 2023

Principal	\$	-
Issuing Costs		-
Total Debt		-
Interest Rate		3.00%
Term		20
P&I		-
Beginning Principal		
Principal		-
Interest		-
Reserve		-
Total		-

1	2	3	4	5
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
\$ -	\$ -	\$ -	\$ -	\$ -

Series: 2024

Principal	\$	2,750,000
Issuing Costs		-
Total Debt		2,750,000
Interest Rate		3.00%
Term		20
P&I		184,843
Beginning Principal		
Principal		-
Interest		-
Reserve		-
Total		-

1	2	3	4
2,750,000	2,647,657	2,542,243	2,433,667
\$ 102,343	\$ 105,413	\$ 108,576	\$ 111,833
82,500	79,430	76,267	73,010
-	-	-	-
\$ 184,843	\$ 184,843	\$ 184,843	\$ 184,843

CITY OF COPPELL									
STORMWATER COST OF SERVICE MODEL									
10 Year Forecast	Input	1	2	3	4	5	6	7	8
2020-2029	Area	2019	2020	2021	2022	2023	2024	2025	2026
									9
									2028

Input Area -- Future Debt Service
Scenario: 2019 11 15 -- Scenario I -- 7 Year

Series: 2025

Principal	\$	-
Issuing Costs		-
Total Debt		-
Interest Rate	3.00%	
Term	20	
P&I	-	
Beginning Principal		
Principal		
Interest		
Reserve		
Total		

	1	2	3
	-	-	-
\$	-	\$	-
	-	-	-
	-	-	-
\$	-	\$	-

Series: 2026

Principal	\$	-
Issuing Costs		-
Total Debt		-
Interest Rate	3.00%	
Term	20	
P&I	-	
Beginning Principal		
Principal		
Interest		
Reserve		
Total		

	1	2
	-	-
\$	-	\$
	-	-
	-	-
\$	-	\$

Input Area -- Future Debt Service
Scenario: 2019 11 15 -- Scenario I -- 7 Year

Principal	\$ -
Issuing Costs	-
Total Debt	-
Interest Rate	3.00%
Term	20
P&I	-

	1
	-
\$	-
	-
	-
<hr/>	<hr/>
\$	-

Principal	\$	-	\$	-	\$	-	\$	55,824	\$	57,498	\$	59,223	\$	163,343	\$	168,243	\$	173,291	\$	178,489
Interest		-		-		-		45,000		43,325		41,600		122,324		117,423		112,376		107,177
Reserve		-		-		-		-		-		-		-		-		-		-
Total		-		-		-		100,824		100,824		100,824		285,667		285,667		285,667		285,667



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