



City of Goodyear

Water, Wastewater, Solid Waste and Stormwater 2020 Rate Study and Long-Term Financial Plan Committee Briefing

August 2020

Updated: August 14 2020



Presentation Format



- Presentation Overview
- Current Rate Structure
- Accounts and Volumes
- Water and Wastewater Utility -- Cost of Service and Initial Rate Plan
- Solid Waste Utility – Cost of Service and Initial Rate Plan
- Stormwater Utility – Cost of Service and Initial Rate Plan
- Summary and Next Steps





Water and Wastewater Rate Analysis

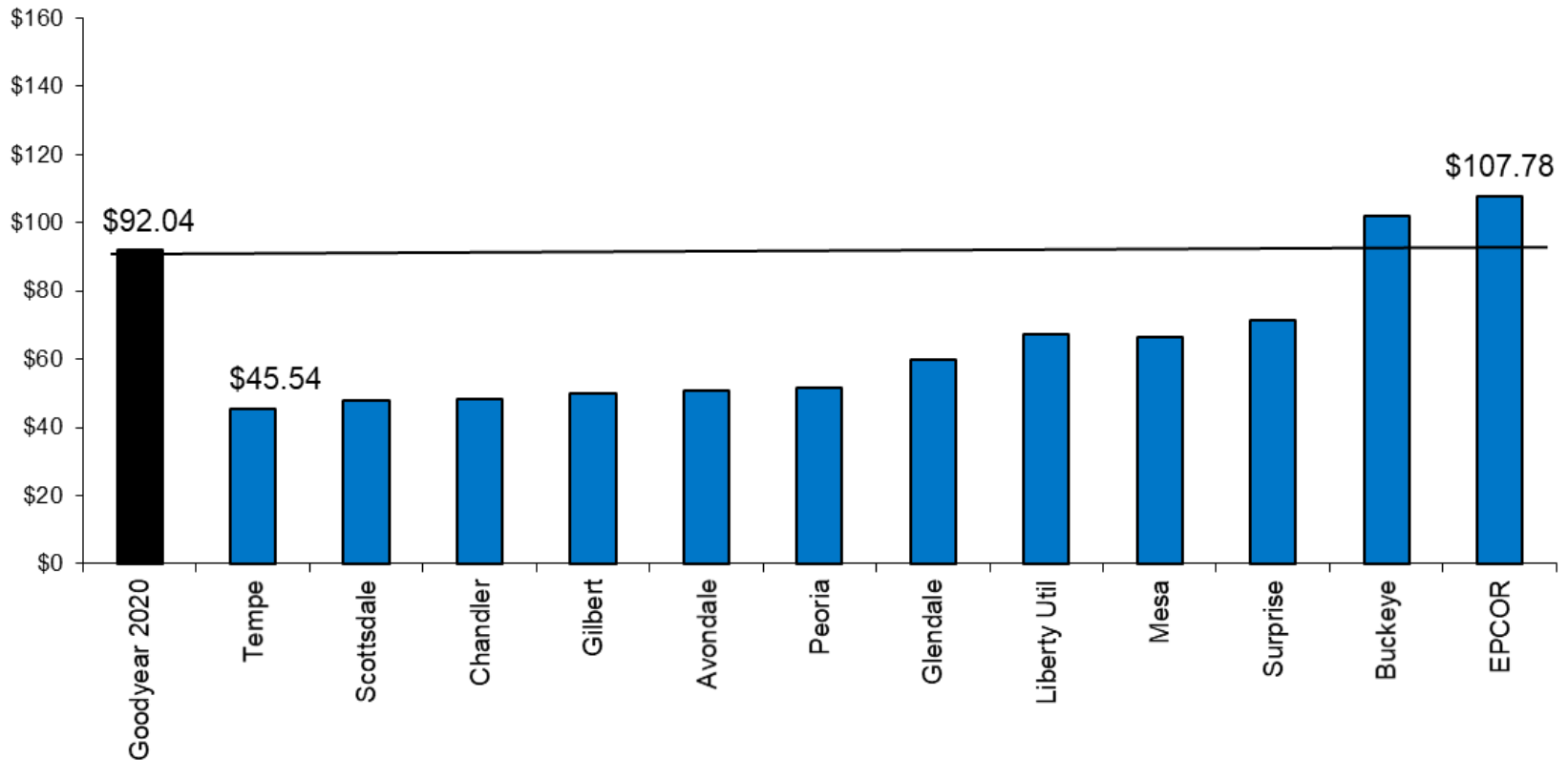


City of Goodyear Current Rate Structure



		Water	Wastewater
Monthly Minimum Charge			
3/4"		\$ 18.54	\$ 23.78
1"		25.64	36.49
1 1/2"		41.46	44.96
2"		67.11	87.35
3"		77.67	115.22
4"		126.65	152.86
6"		240.36	378.70
Volume Rate/1,000 Gal			
<u>Residential - City</u>			
-	6,000	2.15	6.51
6,001	12,000	4.27	6.51
12,001	30,000	6.42	6.51
30,001	Above	10.31	6.51
<u>Multi-Family/Commercial/Industrial</u>			
-	40,000	5.06	6.51
40,001	100,000	8.10	6.51
100,001	Above	10.50	6.51
<u>Irrigation</u>			
-	80,000	7.57	NA
80,001	Above	8.71	NA
<u>Reclaimed Water</u>			
Per 1,00 Gallons		NA	6.38

Residential Monthly Charges 7,000 Gal Water; 5,000 Gal WW



NOTE: Goodyear charges do not include CAP water charges

City of Goodyear

Test Year FY 2020 Water/WW Accounts



WATER Customers

Residential - City	19,138
Residential - County	93
Multi-Family	41
Commercial	378
Church	23
Industrial	45
Institutional	22
Schools	33
Hydrant	60
Irrigation	449
Total	20,282

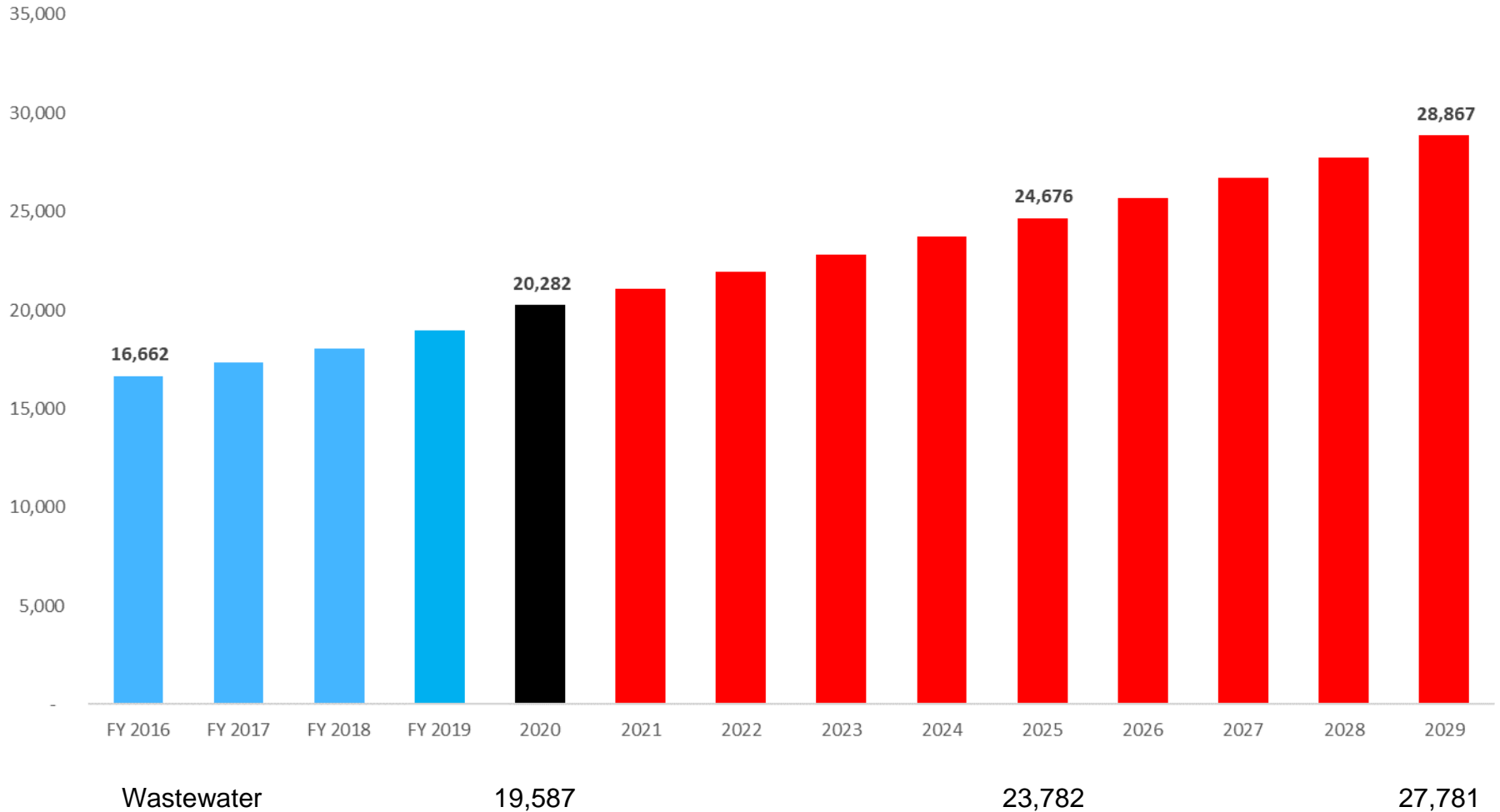
WASTEWATER Customers

Residential - City	19,112
Residential - County	5
Multi-Family	43
Commercial	322
Church	20
Industrial	31
Institutional	17
Schools	30
Perryville Prison	1
Effluent	6
	19,587

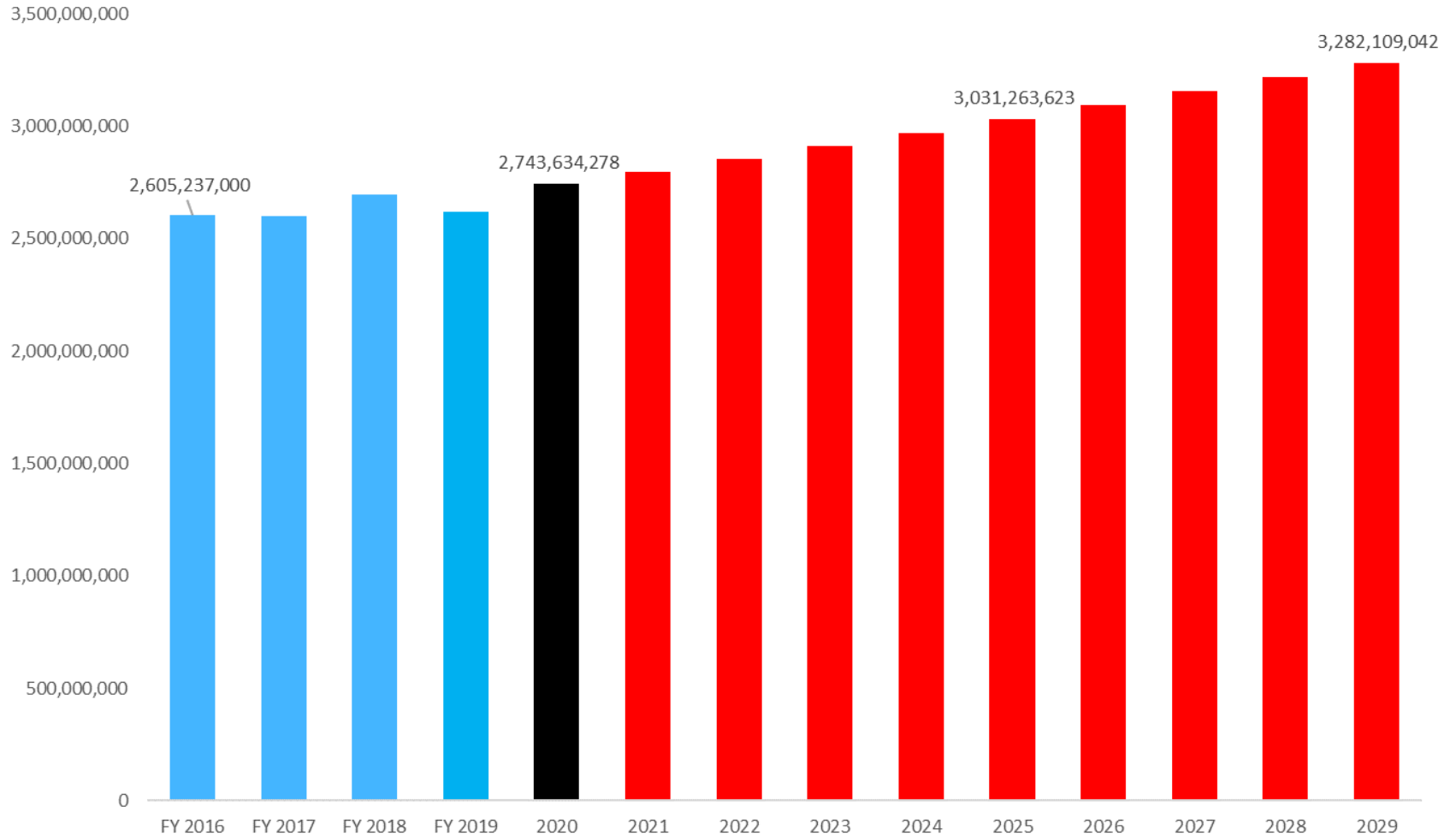
Solid Waste Customers

Residential	-- 31,242
Residential Additional Container	-- 783

Historical and Forecast Water Accounts



Historical and Forecast Water Consumption



City of Goodyear Residential Monthly Usage Per Account



Gallons



Water Utility – 5 Year Forecast

General Operating Cost Assumptions



- Most costs increase by 3-5% per year
- Some costs (insurance, energy) increase at higher rates
- Certain costs increase with the rise in accounts and consumption
- Increase in total numbers of department personnel as system continues to expand
- Surface water treatment plant on line in FY 2022



Water and Wastewater Utility Major Capital Improvements



WATER CIP Projects

Adaman Well #3	\$	2,195,000
CAP Subcontract Capital Charges		4,323,000
Differential Impact Fee Credits		5,943,400
Historic Goodyear Water Replacements		6,365,000
Potable Storage Reservoir Rehabilitation		3,557,000
Treatment Improvements at Site 18		3,264,000
Booster Station Rehabilitation & Replacement Program		2,100,000
Distribution Valve Replacement		2,500,000
Water Meter Replacement		3,890,000
Future Projects		3,763,000
Total Water Projects		40,728,600

WASTEWATER CIP Projects

Collection System Rehabilitation or Replacements	\$	8,048,000
Corgett WRF Rehabilitation and Replacement		3,377,000
Differential Impact Fee Credits		2,828,700
Goodyear WRF Rehabilitation and Replacement		4,755,000
Alternative to SAT Site		26,400,000
Brine Disposal		46,995,000
Future Projects		10,578,400
Total		102,982,100

Total 2020 -- 2025

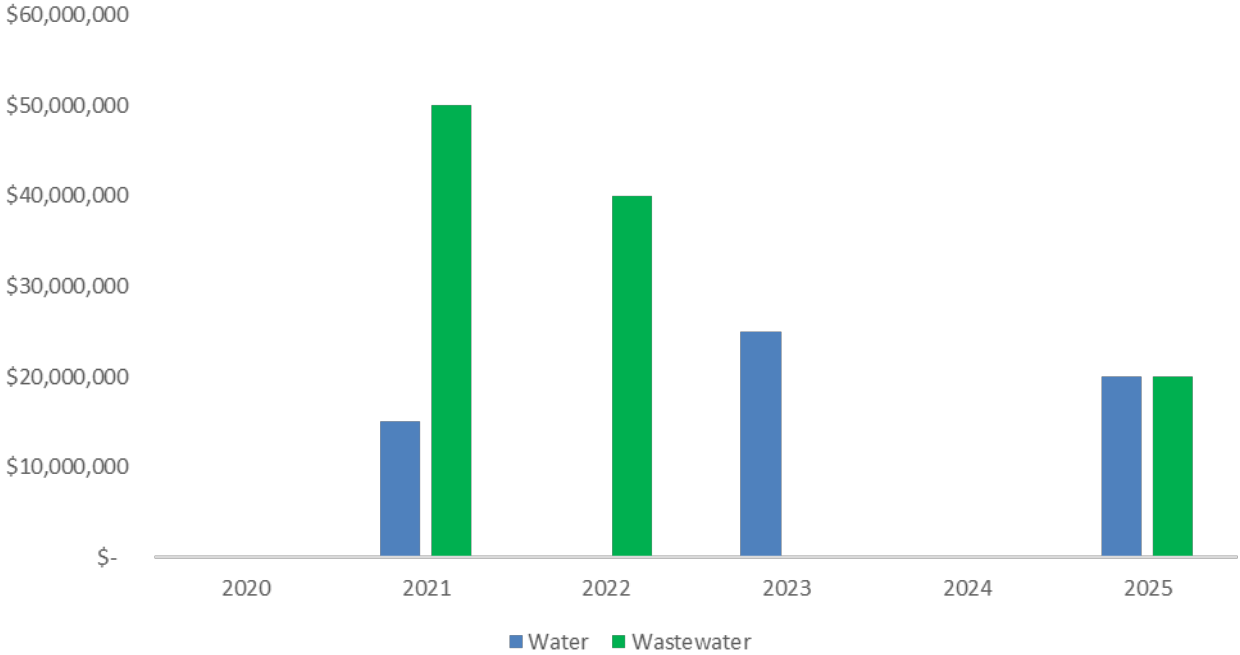
143,710,700

Source: City Staff

Water Utility Forecast Bond Issues 2020 -- 2025

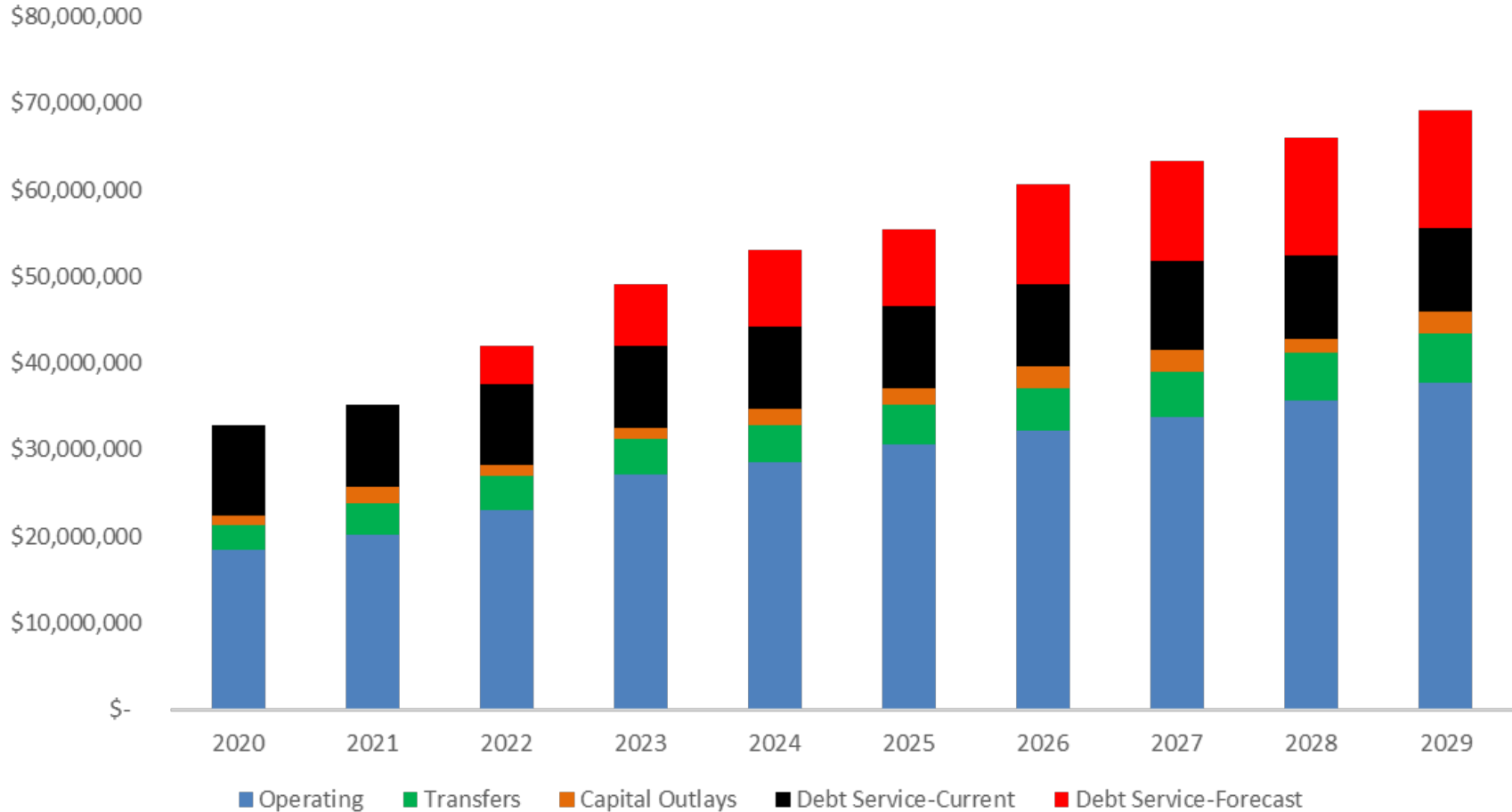


Water	--	\$60,000,000
Wastewater	--	<u>110,000,000</u>
Total	--	170,000,000



NOTE: All new debt assumed 20 year term, 3.0% interest rate, level payments
Series 2020 issued and contained in current debt

Forecast Revenue Requirement 2020 -- 2029



Forecast Revenue Requirement 2020 -- 2025



	2020	2021	2022	2023	2024	2025
WATER Revenue Requirement						
CAP Costs	\$ 3,517,174	\$ 4,187,112	\$ 4,354,596	\$ 4,710,501	\$ 4,919,857	\$ 5,192,019
Operating	8,542,301	9,282,849	11,309,248	14,408,992	14,951,818	16,261,089
Transfers	1,190,300	1,840,280	1,987,708	2,144,457	2,297,504	2,436,955
Capital Outlays	539,100	1,153,800	518,000	765,600	1,305,700	883,500
Debt Service-Current	5,076,449	5,823,300	5,832,550	5,857,750	5,905,050	5,863,750
Debt Service-Forecast	-	-	1,018,318	1,018,318	2,715,515	2,715,515
Total	18,865,324	22,287,341	25,020,420	28,905,618	32,095,443	33,352,828
Less Non-Rate Revs	(1,811,900)	(3,470,900)	(3,553,850)	(3,640,948)	(3,732,400)	(3,790,015)
Net Revenue Rqmt	17,053,424	18,816,441	21,466,570	25,264,670	28,363,043	29,562,813
WASTEWATER Revenue Requirement						
Operating	6,363,100	6,718,208	7,402,110	8,069,496	8,655,217	9,101,004
Transfers	1,707,800	1,791,132	1,928,837	2,078,527	2,239,944	2,393,790
Capital Outlays	574,400	719,100	758,900	513,500	578,400	1,122,200
Debt Service-Current	5,368,186	3,731,300	3,524,100	3,531,850	3,538,450	3,553,650
Debt Service-Forecast	-	-	3,394,393	6,109,908	6,109,908	6,109,908
Total	14,013,486	12,959,740	17,008,340	20,303,281	21,121,919	22,280,552
Less Non-Rate Revs	(145,600)	(659,890)	(685,605)	(712,605)	(740,955)	(758,816)
Net Revenue Rqmt	13,867,886	12,299,850	16,322,736	19,590,676	20,380,964	21,521,736

Water Rate Plan Assuming Full Budget Funding



Water Rates		Current	Effective Jan-21	Effective Jan-22	Effective Jan-23	Effective Jan-24	Effective Jan-25
CAP Water Charge		\$ 0.95	\$ 1.10	\$ 1.25	\$ 1.40	\$ 1.55	\$ 1.70
Monthly Minimum Charge	3/4"	\$ 18.54	\$ 19.28	\$ 19.86	\$ 20.46	\$ 21.07	\$ 21.70
	1"	25.64	26.67	27.47	28.29	29.14	30.01
	1 1/2"	41.46	43.12	44.41	45.74	47.12	48.53
	2"	67.11	69.79	71.89	74.04	76.27	78.55
	3"	77.67	80.78	83.20	85.70	88.27	90.92
	4"	126.65	131.72	135.67	139.74	143.93	148.25
Volume Rate Per 1,000 Gal							
<u>Residential - City</u>							
-	6,000	2.15	2.24	2.30	2.37	2.44	2.52
6,001	12,000	4.27	4.44	4.57	4.71	4.85	5.00
12,001	30,000	6.42	6.68	6.88	7.08	7.30	7.51
30,001	Above	10.31	10.72	11.04	11.38	11.72	12.07
<u>Non-Residential</u>							
-	40,000	5.06	5.26	5.42	5.58	5.75	5.92
40,001	100,000	8.10	8.42	8.68	8.94	9.21	9.48
100,001	Above	10.50	10.92	11.25	11.59	11.93	12.29
<u>Irrigation</u>							
-	80,000	7.57	7.87	8.11	8.35	8.60	8.86
80,001	Above	8.71	9.06	9.33	9.61	9.90	10.20

Wastewater Rate Plan Assuming Full Budget Funding



Wastewater Rates		Current	Effective Jan-21	Effective Jan-22	Effective Jan-23	Effective Jan-24	Effective Jan-25
Monthly Minimum Charge	3/4"	\$ 23.78	\$ 24.49	\$ 25.23	\$ 25.99	\$ 27.02	\$ 28.11
	1"	36.49	37.58	38.71	39.87	41.47	43.13
	1 1/2"	44.96	46.31	47.70	49.13	51.09	53.14
	2"	87.35	89.97	92.67	95.45	99.27	103.24
	3"	115.22	118.68	122.24	125.90	130.94	136.18
	4"	152.86	157.45	162.17	167.03	173.72	180.66
Volume Rate/1,000 Gal		6.51	6.71	6.91	7.11	7.40	7.69

Residential Rate Plan Impact on Monthly Charges



	Current	Effective Jan-21	Effective Jan-22	Effective Jan-23	Effective Jan-24	Effective Jan-25
Residential Standard Monthly Bill - 3/4"						
7,000 Gal Water Total	\$ 98.69	\$ 102.86	\$ 106.76	\$ 110.75	\$ 115.45	\$ 120.28
5,000 Gal WW Increase -- \$		4.17	3.90	3.99	4.69	4.83
Increase -- %		4.2%	3.8%	3.7%	4.2%	4.2%
10,000 Gal Water Total	114.35	119.48	124.24	129.09	134.66	140.37
5,000 Gal WW Increase -- \$		5.13	4.75	4.85	5.57	5.71
Increase -- %		4.5%	4.0%	3.9%	4.3%	4.2%
20,000 Gal Water Total	216.30	226.30	235.43	244.75	255.22	265.96
10,000 Gal WW Increase -- \$		10.00	9.13	9.31	10.47	10.74
Increase -- %		4.6%	4.0%	4.0%	4.3%	4.2%

NOTE: Includes CAP Water charges

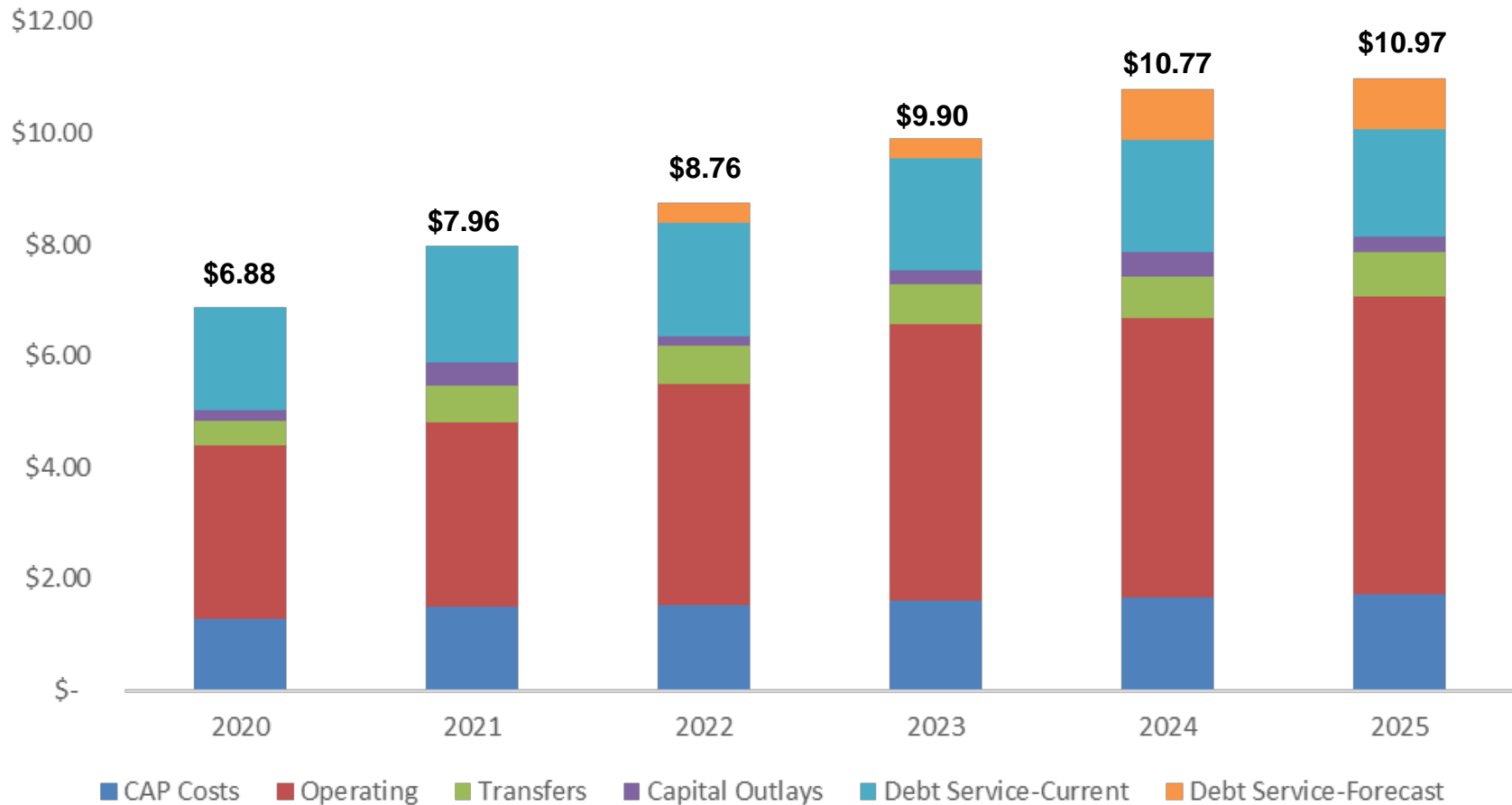
Non-Residential Rate Plan Impact on Monthly Charges



	Current	Effective Jan-21	Effective Jan-22	Effective Jan-23	Effective Jan-24	Effective Jan-25
Commercial Standard Monthly Bill - 2"						
25,000 Gal Water Total	\$ 434.91	\$ 452.93	\$ 469.44	\$ 486.34	\$ 506.01	\$ 526.25
20,000 Gal WW Increase -- \$		18.02	16.51	16.90	19.67	20.24
Increase -- %		4.1%	3.6%	3.6%	4.0%	4.0%
50,000 Gal Water Total	745.76	777.71	806.89	836.73	871.03	906.29
40,000 Gal WW Increase -- \$		31.95	29.18	29.83	34.30	35.26
Increase -- %		4.3%	3.8%	3.7%	4.1%	4.0%

NOTE: Includes CAP Water charges

Water Utility Cost per 1,000 Gallons



Non-Rate Fee Recommendations



Fee Code	Description	Current Fee	Proposed Fee	Basis for Recommendation	Percent Increase
	Late Payment Fee	1.50%	1.50%	Comps	0.0%
RC	Returned Check Fee	50.00	52.50	76.38	5.0%
SD	Security Deposit - Resid	200.00	200.00	203.34	0.0%
	Security Deposit - Non Resid	250.00	375.00	856.87	50.0%
CC	Cross Connection-Backflow	9.00	13.50	13.79	50.0%
CF	Same Day New Account	50.00	75.00	121.22	50.0%
CN	Activation Fee - Next Day	60.00	75.00	121.22	25.0%
DN	Disconnect Notice - Water	18.00	27.00	28.59	50.0%
RF	Admin Fee (Shut off)	50.00	50.00	50.77	0.0%
TO	Same Day Reinstatement	50.00	75.00	209.07	50.0%
WA	Water Audit Fee	54.00	81.00	211.23	50.0%
FV	Field Visit	55.00	82.50	176.95	0.0%
LH	Hydrant Connection	150.00	150.00	305.13	0.0%
MT	Meter Tampering	65.00	97.50	135.37	50.0%



Solid Waste Rate Analysis



Solid Waste Utility Cost Factors



- Service provided only to residential customers
- New contract with RAD effective July 2019, has significantly lowered costs
- No forecast long-term debt
- All capital costs to be funded directly from rates



Solid Waste Cost of Service 2020 -- 2025



	2020	2021	2022	2023	2024	2025
Contained	\$ 4,345,507	\$ 4,598,865	\$ 4,925,131	\$ 5,223,324	\$ 5,539,595	\$ 5,875,222
Uncontained	1,420,755	1,301,783	1,943,507	1,607,650	1,750,110	1,765,063
Administration	1,238,003	1,649,763	1,300,644	1,339,663	1,379,853	1,421,248
Customer Service	<u>403,050</u>	<u>495,511</u>	<u>583,555</u>	<u>610,345</u>	<u>638,646</u>	<u>668,560</u>
Total	7,407,316	8,045,924 8.6%	8,752,838 8.8%	8,780,982 0.3%	9,308,204 6.0%	9,730,094 4.5%

Solid Waste Monthly Calculated Cost Per Account



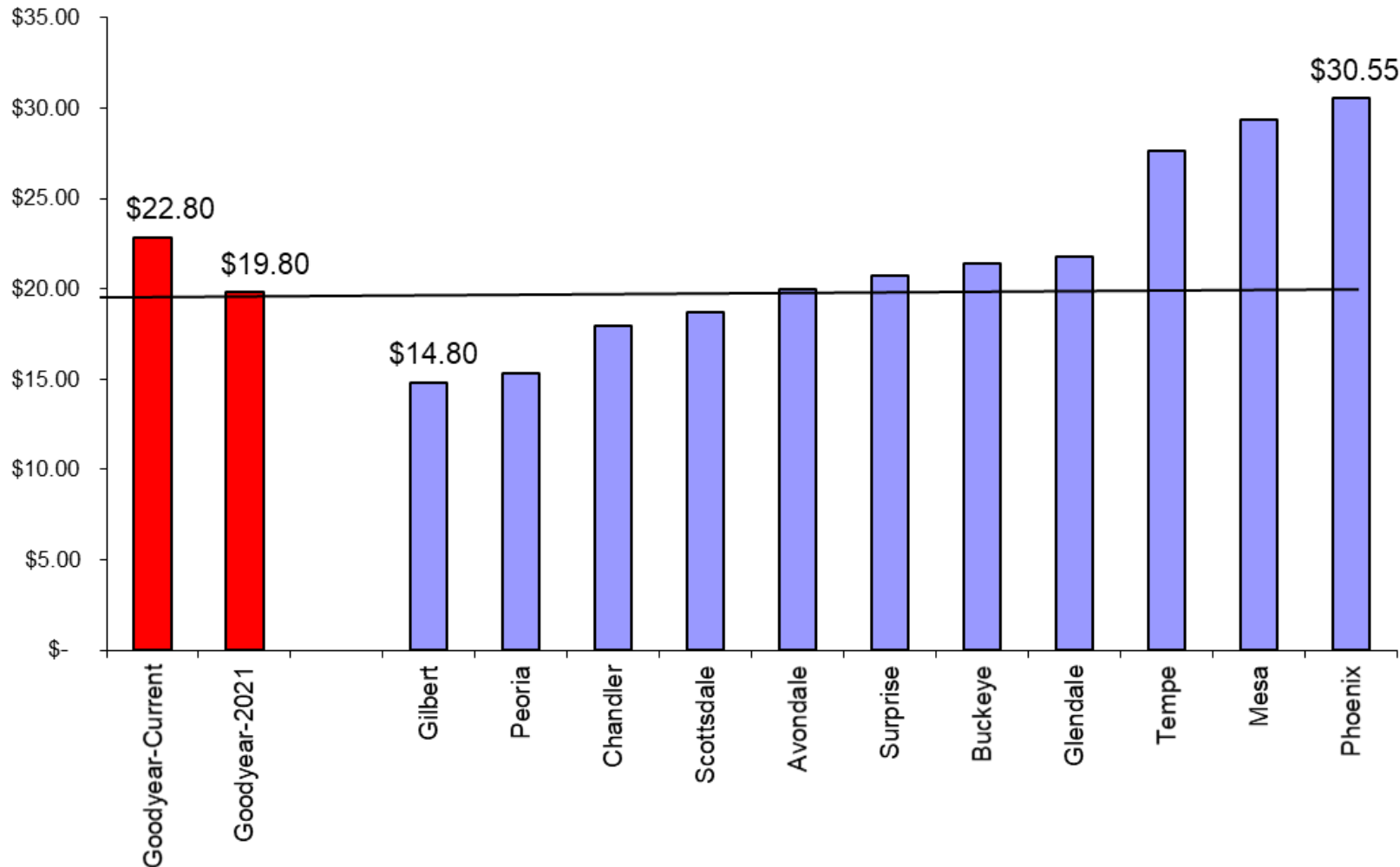
	2021	2022	2023	2024	2025
Residential					
Contained	\$ 8.14	\$ 7.92	\$ 8.23	\$ 8.42	\$ 8.65
Uncontained	4.24	5.74	4.65	4.89	4.78
Recycle	7.87	7.65	7.95	8.13	8.36
Total	20.25	21.32	20.83	21.44	21.78
Residential -- Additional					
Total	8.14	7.92	8.23	8.42	8.65

Solid Waste Rate Plan 2020 – 2025



	Monthly Charge						
	Current	Effective Jan-20	Effective Jan-21	Effective Jan-22	Effective Jan-23	Effective Jan-24	Effective Jan-25
Residential							
Total Monthly	\$ 22.80	\$ 22.80	\$ 19.80	\$ 20.55	\$ 21.40	\$ 22.25	\$ 23.15
Inc/(Dec) -- Dollars		-	(3.00)	0.75	0.85	0.85	0.90
Inc/(Dec) -- Percent			-13.0%	4.0%	4.0%	4.0%	4.0%
Residential -- Additional							
Residential -- Additional Container	6.26	6.26	7.50	7.80	8.11	8.43	8.77
Inc/(Dec) -- Dollars		-	1.24	0.30	0.31	0.32	0.34
Inc/(Dec) -- Percent			20.0%	4.0%	4.0%	4.0%	4.0%

Solid Waste Monthly Charge Comparison

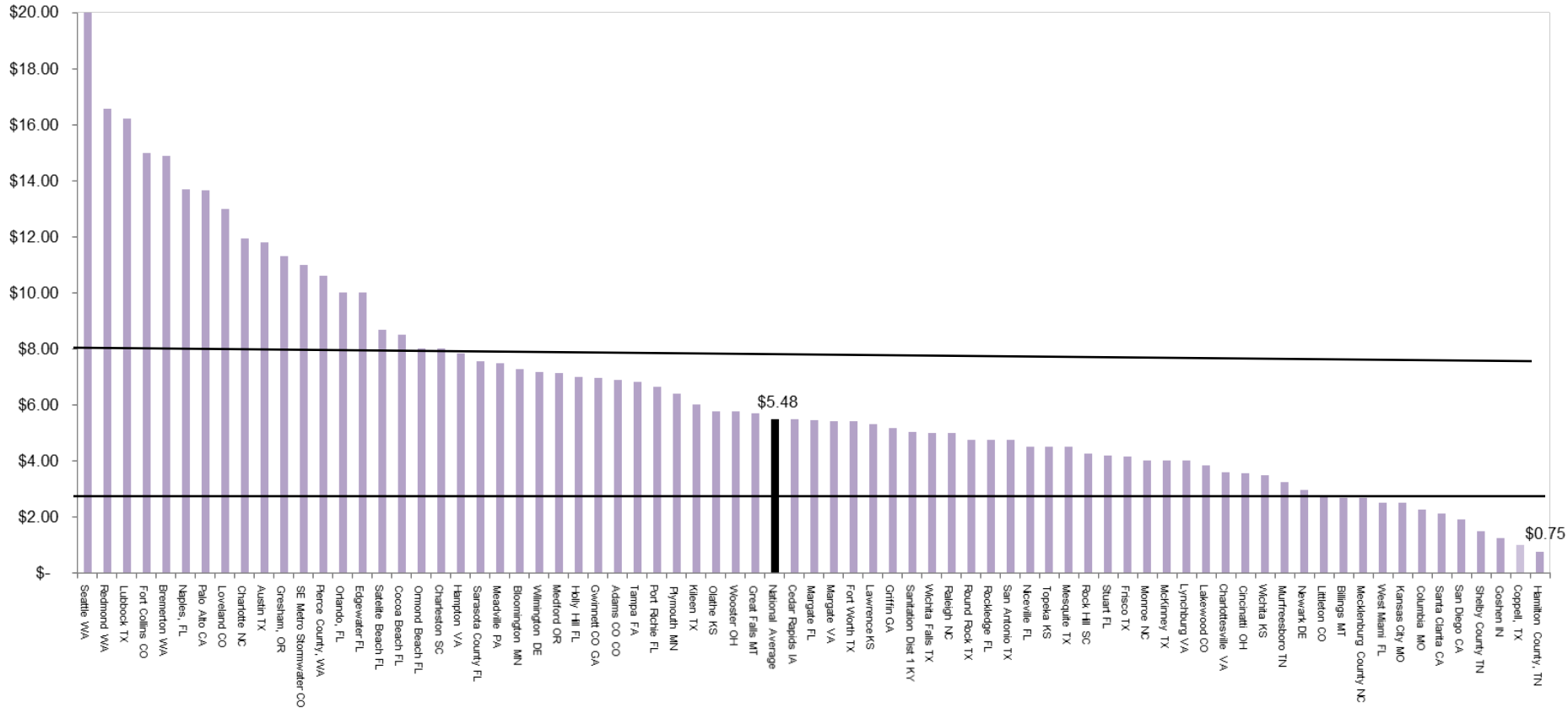




Stormwater Rate Analysis



National Survey Average Monthly Residential Stormwater Fee

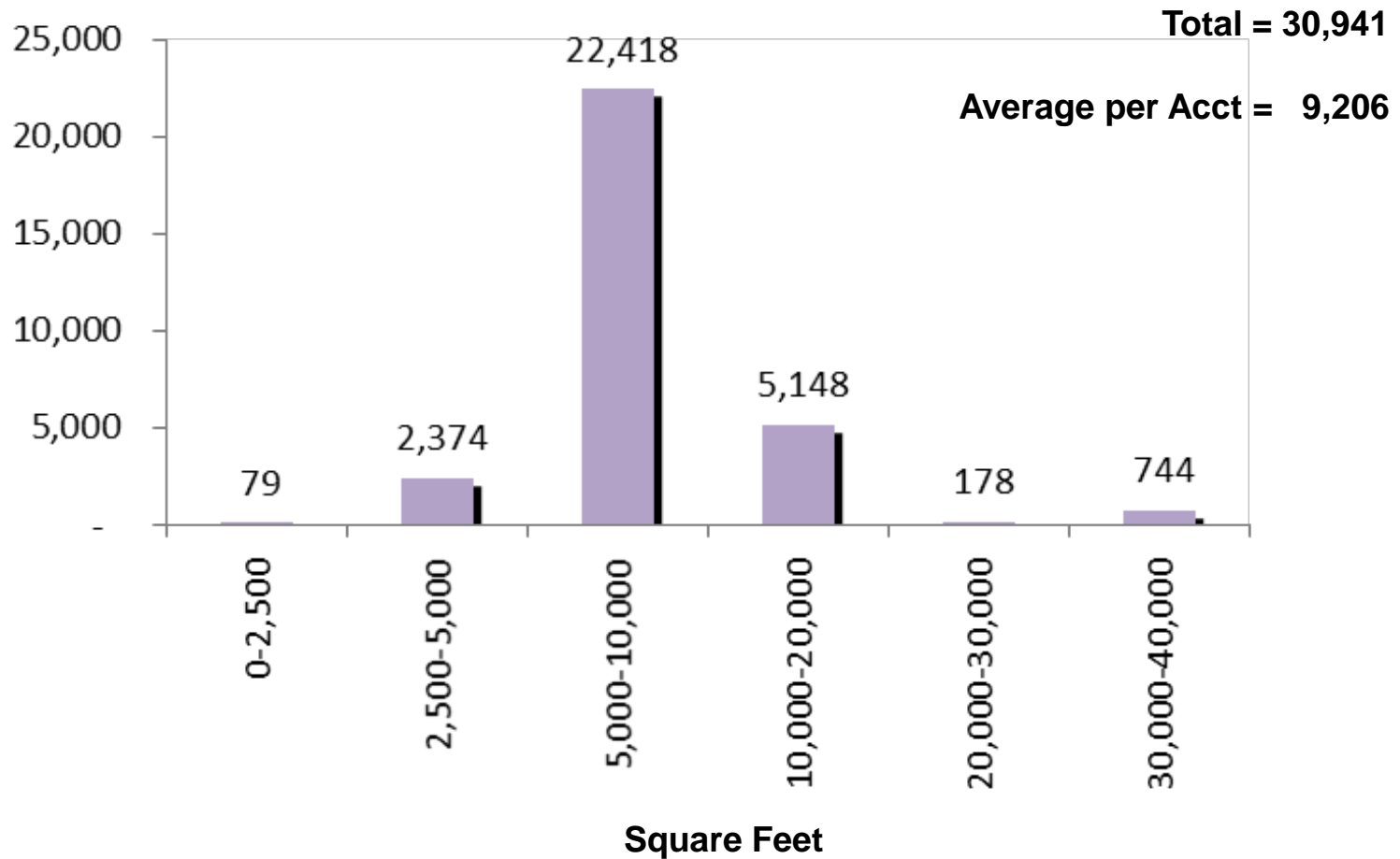


Residential Accounts

Number of Accounts per Square Foot Range



Number of Accounts



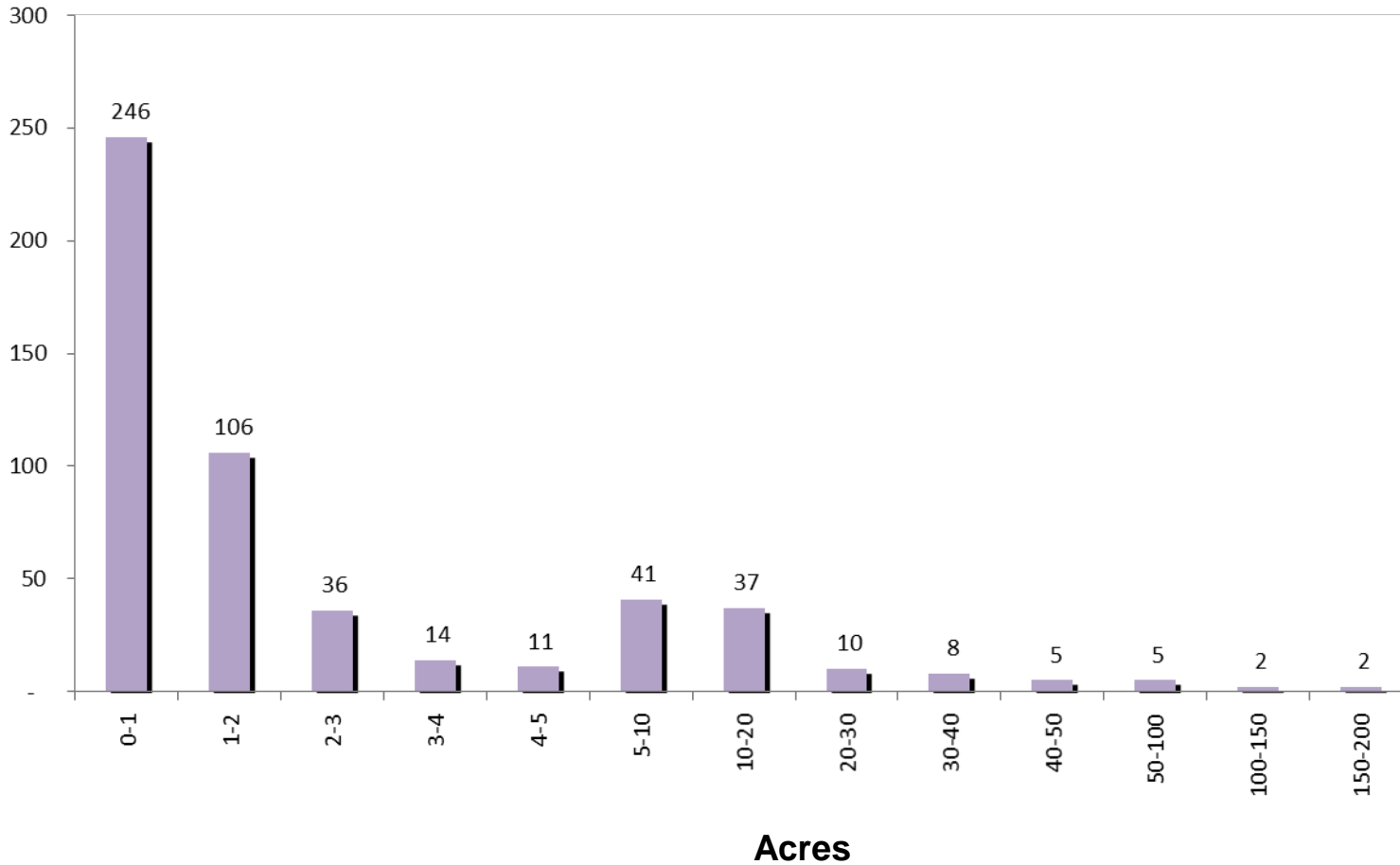
NOTE: Extrapolated from total parcels

Commercial Accounts Total Accounts per Acre Range



Number of Accounts

Total = 523



Forecast Stormwater Cost of Service



	2020	2021	2022	2023	2024	2025
Operating Expenses						
SW Program Management	\$ 295,495	\$ 304,700	\$ 314,100	\$ 323,800	\$ 333,800	\$ 344,200
System Maintenance	-	-	135,500	169,200	137,200	172,400
Water Quality Compliance	-	-	-	86,000	88,300	165,900
System Planning	-	-	276,300	456,900	299,500	311,700
Stormwater Utility	-	-	54,200	28,200	29,400	275,100
Stormwater Program Admir	-	-	-	-	-	-
Total Operating	295,495	304,700	780,100	1,064,100	888,200	1,269,300
Capital Outlays	188,600	-	-	58,600	44,400	9,300
Debt Service	-	-	235,255	235,255	436,902	436,902
Total Cost of Service	484,095	304,700	1,015,355	1,357,955	1,369,502	1,715,502

NOTE: Account growth forecast to equal wastewater accounts

SOURCE: Black and Veatch

Stormwater Utility Notes on Fee Proposal



- Recommend set initial uniform monthly fee for residential
- Commercial monthly fee to be based on acres of total property
- At some future point when sufficient data is tabulated, City should consider converting commercial accounts to be based on **impervious surface data**



Proposed Stormwater Monthly Charges



	Jan-21	Jan-22	Jan-23	Jan-24	Jan-25
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STORMWATER Utility Monthly Charge

Residential	\$ 1.00	\$ 2.00	\$ 2.50	\$ 2.50	\$ 3.50
Per Account					

Commercial	4.00	8.00	10.00	10.00	14.00
Per Acre					

Acres

1	4.00	8.00	10.00	10.00	14.00
3	12.00	24.00	30.00	30.00	42.00
5	20.00	40.00	50.00	50.00	70.00
10	40.00	80.00	100.00	100.00	140.00
20	80.00	160.00	200.00	200.00	280.00
50	200.00	400.00	500.00	500.00	700.00
100	400.00	800.00	1,000.00	1,000.00	1,400.00
150	600.00	1,200.00	1,500.00	1,500.00	2,100.00

Stormwater Residential Monthly Fee Comparison



Goodyear (proposed)	\$	1.00
Apache Junction		-
Buckeye		-
Chandler		-
Gilbert		-
Glendale		-
Mesa		-
Phoenix		-
Queen Creek		-
Tempe		-
Avondale *		1.00
Surprise		2.75
Flagstaff		3.74
Scottsdale		4.10

* Referred to as "Environmental Fee"

Water, Wastewater, Solid Waste, Stormwater Combined Impact on Monthly Charges



	Gallons	Current	Jan-21	Jan-22	Jan-23	Jan-24	Jan-25
Water	7,000	\$ 42.36	\$ 44.84	\$ 47.00	\$ 49.20	\$ 51.43	\$ 53.70
Wastewater	5,000	56.33	58.02	59.76	61.55	64.02	66.58
Solid Waste		22.80	19.80	20.55	21.40	22.25	23.15
Stormwater		-	1.00	2.00	2.50	2.50	3.50
Total		121.49	123.66	129.31	134.65	140.20	146.93
Difference			2.17	5.65	5.34	5.54	6.73
Water	10,000	\$ 58.02	\$ 61.46	\$ 64.47	\$ 67.53	\$ 70.64	\$ 73.79
Wastewater	5,000	56.33	58.02	59.76	61.55	64.02	66.58
Solid Waste		22.80	19.80	20.55	21.40	22.25	23.15
Stormwater		-	1.00	2.00	2.50	2.50	3.50
Total		137.15	140.28	146.79	152.99	159.41	167.02
Difference			3.13	6.50	6.20	6.42	7.61

NOTE: Includes CAP Water charges

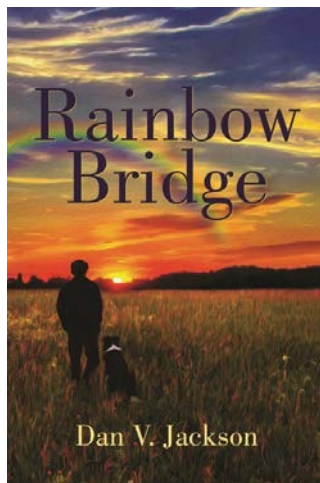
Presentation Summary

How Will Rate Plan Benefit City?



- u Will result in a financially-healthy utility that has the ability to funds all its financial needs
- u Will ensure that new water treatment plant and \$150 million in other water/ww CIP is adequately funded
- u Will enable City to fund stormwater infrastructure and operating costs
- u Ensures that customers only pay what it costs to provide service





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Questions?