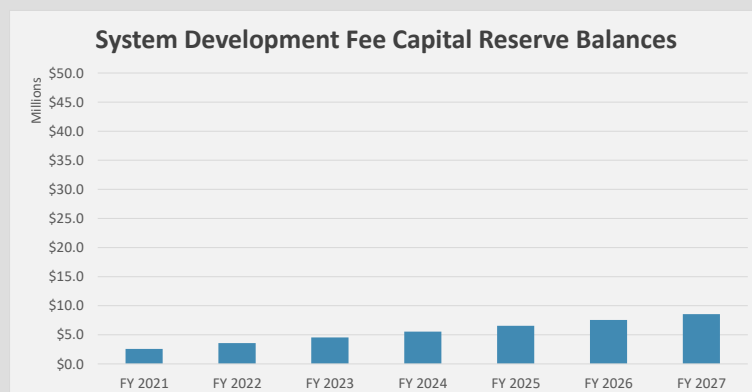
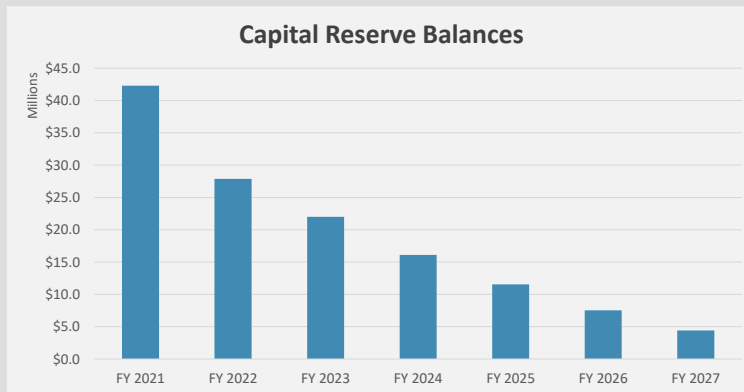
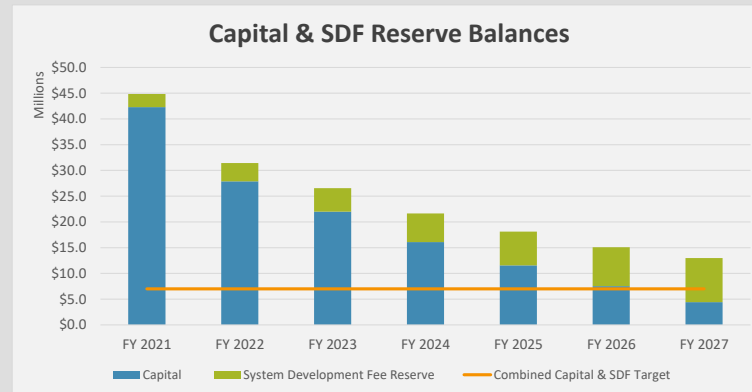
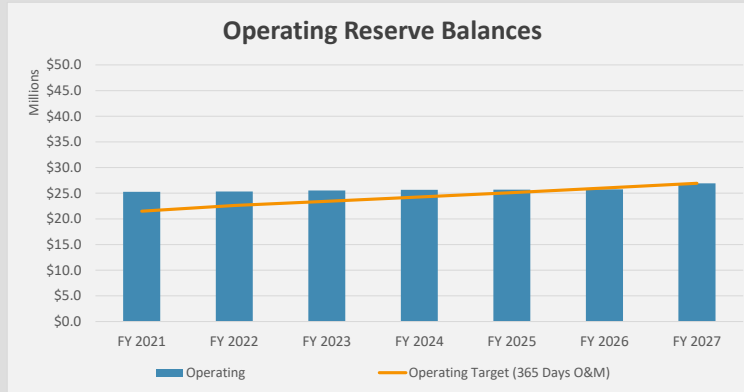
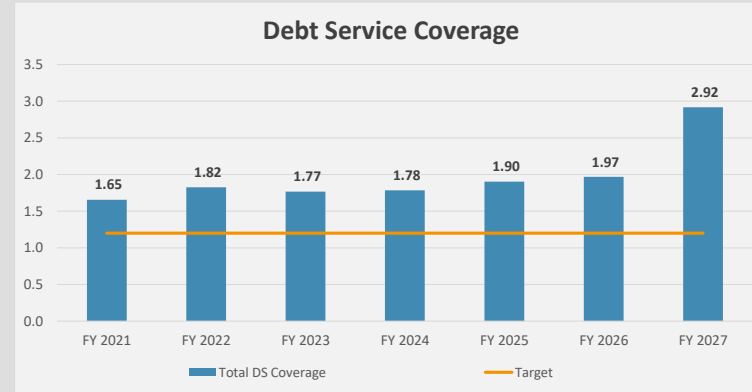
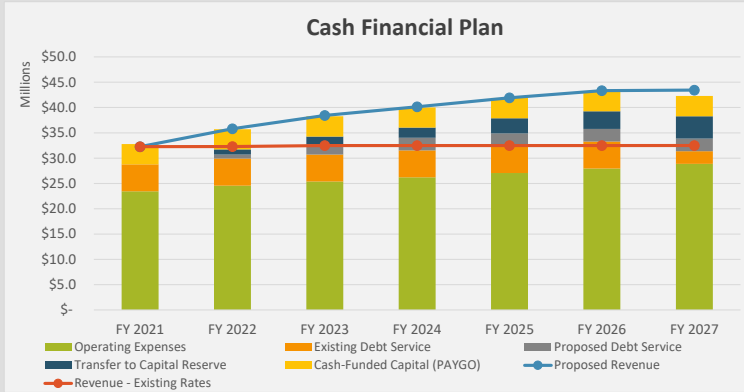


City of Asheville, NC

Financial Planning & Rate Model



RAFTELIS



City of Asheville, NC
Financial Planning & Rate Model
 Future Growth Assumptions

	2021 Forecast	2022 Forecast	2023 Forecast	2024 Forecast	2025 Forecast	2026 Forecast	2027 Forecast
O&M Escalators							
Salaries	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
Benefits	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
Misc.	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Supplies	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Vehicles	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Services	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Contingencies	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Utilities	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Land	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Equipment	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Maintenance	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Electricity	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
Gas	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Capital	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Indirect Cost Allocation	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
n/a	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Offset Escalators							
Delinquent & Interest Fee	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Water Availability	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Income from Investments	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Approp Fund Bal Res for Enc	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Utility Charges	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Account Setup Fees	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Wtr Serv Connection Fees	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Taps & Connections	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Reconnection Fees	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Fire Line Charges	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Capital Improvement Fees	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
M & R City Water	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Sale of Capital Assets	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Account Escalators							
5/8"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
3/4"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1.5"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
3"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
4"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
6"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
8"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
10"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Consumption Escalators							
Single Family Residential	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Irrigation	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Multi-Family Residential	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Commercial	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Manufacturer	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Wholesale	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Wholesale Capacity, per 10,000 gal/day	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%



City of Asheville, NC

Financial Planning & Rate Model

Actuals, Budget and Projected Operations and Maintenance Costs

2018 2019 2020 2021 2022 2023 2024 2025 2026 2027

Water O&M Summary

	2018 Actual	2019 Actual	2020 Actual	2021 Budget	2022 Forecast	2023 Forecast	2024 Forecast	2025 Forecast	2026 Forecast	2027 Forecast
Water O&M by Category										
Salaries	\$ 6,523,022	\$ 6,805,501	\$ 7,211,367	\$ 7,516,746	\$ 8,187,416	\$ 8,514,912	\$ 8,855,509	\$ 9,209,729	\$ 9,578,119	\$ 9,961,243
Benefits	3,871,633	3,667,735	3,874,259	4,377,381	4,552,476	4,734,575	4,923,958	5,120,917	5,325,753	5,538,783
Misc.	1,172,472	1,232,969	1,273,370	1,464,798	1,494,094	1,523,976	1,554,455	1,585,544	1,617,255	1,649,600
Supplies	3,124,927	3,895,605	4,103,257	3,565,000	3,671,950	3,782,109	3,895,572	4,012,439	4,132,812	4,256,796
Vehicles	518,971	571,155	525,026	658,373	678,124	698,468	719,422	741,005	763,235	786,132
Services	1,101,198	1,332,645	1,354,209	1,533,100	1,579,093	1,626,466	1,675,260	1,725,518	1,777,283	1,830,602
Contingencies	-	-	-	-	-	-	-	-	-	-
Utilities	115,846	8,526	263,600	259,000	266,770	274,773	283,016	291,507	300,252	309,260
Land	-	-	-	-	-	-	-	-	-	-
Equipment	-	-	-	-	-	-	-	-	-	-
Maintenance	1,109,434	1,063,041	782,393	1,221,850	1,258,506	1,296,261	1,335,148	1,375,203	1,416,459	1,458,953
Electricity	709,725	881,339	772,172	841,200	874,848	909,842	946,236	984,085	1,023,448	1,064,386
Gas	40,978	34,128	27,328	49,500	51,975	54,574	57,302	60,168	63,176	66,335
n/a	4,800	4,075	6,850	15,000	15,150	15,302	15,455	15,609	15,765	15,923
Total: Water O&M	\$ 18,293,006	\$ 19,496,720	\$ 20,193,830	\$ 21,501,948	\$ 22,630,402	\$ 23,431,257	\$ 24,261,333	\$ 25,121,723	\$ 26,013,558	\$ 26,938,013
Capital and Other Expenses by Category										
Capital	\$ 11,215,095	\$ 11,379,481	\$ 11,465,140	\$ 4,260,696	\$ 4,303,303	\$ 4,346,336	\$ 4,389,799	\$ 4,433,697	\$ 4,478,034	\$ 4,522,815
Indirect Cost Allocation	2,160,075	2,221,491	2,613,890	1,943,083	1,943,083	1,943,083	1,943,083	1,943,083	1,943,083	1,943,083
Unknown Department	(18,444,549)	(30,448,111)	(11,324,801)	-	-	-	-	-	-	-
Total: Capital & Other Expenses	\$ (5,069,379)	\$ (16,847,139)	\$ 2,754,229	\$ 6,203,779	\$ 6,246,386	\$ 6,289,419	\$ 6,332,882	\$ 6,376,780	\$ 6,421,117	\$ 6,465,898
Total Water O&M and Capital/Misc.	\$ 13,223,627	\$ 2,649,580	\$ 22,948,059	\$ 27,705,727	\$ 28,876,788	\$ 29,720,676	\$ 30,594,216	\$ 31,498,503	\$ 32,434,675	\$ 33,403,911
		(0)								

Water O&M by Department

61000910 Water Administration	\$ 1,177,643	\$ 1,108,020	\$ 1,030,901	\$ 1,388,750	\$ 1,619,612	\$ 1,679,594	\$ 1,741,858	\$ 1,806,491	\$ 1,873,586	\$ 1,943,238
61000911 Water General Operations Division	2,000,264	2,265,181	2,365,348	2,503,044	2,572,534	2,644,074	2,717,729	2,793,563	2,871,646	2,952,048
61000912 Customer Service Division	1,409,307	1,681,085	1,465,914	1,550,083	1,609,814	1,671,885	1,736,389	1,803,422	1,873,084	1,945,479
61000913 Water Production Division	434,435	447,889	434,124	531,442	549,846	568,912	588,662	609,123	630,322	652,284
61000914 Meter Services Division	2,505,612	2,558,898	2,832,202	2,973,800	3,078,944	3,187,886	3,300,767	3,417,732	3,538,931	3,664,520
61000915 Water Engineering Division	699,079	637,586	678,720	779,429	809,875	841,519	874,409	908,595	944,128	981,060
61000916 Construction Crew Division	-	-	-	-	-	-	-	-	-	-
61000917 Water Operating Equipment Division	810,415	530,681	374,525	600,248	618,255	636,803	655,907	675,584	695,852	716,728
61000918 Maintenance & Repairs Division	4,140,306	4,924,206	5,374,819	4,899,859	5,268,911	5,462,243	5,662,812	5,870,894	6,086,775	6,310,751
61000919 Water Conservation Division	-	-	-	-	-	-	-	-	-	-
61009101 Backflow	126,690	130,692	137,172	140,173	145,780	151,611	157,676	163,983	170,542	177,364
61009102 Patch Paving	-	-	-	-	-	-	-	-	-	-
61009103 Pumps & Reservoir	966,378	1,038,956	1,121,783	1,121,134	1,164,014	1,208,559	1,254,833	1,302,905	1,352,845	1,404,726
61009104 Watershed Forestry	146,351	150,819	157,423	174,323	181,113	188,170	195,505	203,128	211,052	219,287
61009105 North Fork Water Treatment Plant	1,423,401	1,587,309	1,443,673	1,581,002	1,634,332	1,689,505	1,746,587	1,805,645	1,866,749	1,929,971
61009106 William DeBruhl Water Treatment Pla	806,196	849,307	777,264	940,124	974,068	1,009,261	1,045,751	1,083,584	1,122,813	1,163,489
61009107 Laboratory	377,557	401,075	420,251	457,618	474,522	492,063	510,265	529,153	548,753	569,093
61009108 Mills River Water Treatment Plant	1,135,439	1,056,804	1,440,086	1,557,440	1,613,178	1,670,958	1,730,858	1,792,955	1,857,333	1,924,076
61009109 Water Maintenance - Inventory	133,936	128,210	139,625	303,479	315,604	328,213	341,327	354,965	369,148	383,898
Total: Water O&M	\$ 18,293,006	\$ 19,496,720	\$ 20,193,830	\$ 21,501,948	\$ 22,630,402	\$ 23,431,257	\$ 24,261,333	\$ 25,121,723	\$ 26,013,558	\$ 26,938,013
Capital and Other Expenses by Department										
61000911 Water General Operations Division	13,375,170	13,600,972	14,079,030	6,203,779	6,246,386	6,289,419	6,332,882	6,376,780	6,421,117	6,465,898
61000912 Customer Service Division	-	-	-	-	-	-	-	-	-	-
61000913 Water Production Division	-	-	-	-	-	-	-	-	-	-
61000916 Construction Crew Division	-	-	-	-	-	-	-	-	-	-
61000917 Water Operating Equipment Division	-	-	-	-	-	-	-	-	-	-
61000918 Maintenance & Repairs Division	-	-	-	-	-	-	-	-	-	-
61009105 North Fork Water Treatment Plant	-	-	-	-	-	-	-	-	-	-
61000999 & 61009999 Unknown Department	(18,444,549)	(30,448,111)	(11,324,801)	-	-	-	-	-	-	-
Total: Water O&M	\$ (5,069,379)	\$ (16,847,139)	\$ 2,754,229	\$ 6,203,779	\$ 6,246,386	\$ 6,289,419	\$ 6,332,882	\$ 6,376,780	\$ 6,421,117	\$ 6,465,898
Total Water O&M and Capital/Misc.	\$ 13,223,627	\$ 2,649,580	\$ 22,948,059	\$ 27,705,727	\$ 28,876,788	\$ 29,720,676	\$ 30,594,216	\$ 31,498,503	\$ 32,434,675	\$ 33,403,911
		(0)								



City of Asheville, NC
Financial Planning & Rate Model
Revenue Offsets

			<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>
			<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>
Offsets			<i>Actual</i>	<i>Actual</i>	<i>Actual</i>	<i>Budget</i>						
<u>Org Code</u>	<u>Object</u>	<u>Description</u>										
61000910	450010	Charges for Services	\$ (55)	\$ (12,460)	\$ -	\$ -						
61000910	450012	Delinquent & Interest Fee	(820,989)	(866,372)	(628,691)	(628,691)	(628,691)	(830,000)	(830,000)	(830,000)	(830,000)	(830,000)
61000910	450705	Water Availability	(131,141)	(114,050)	(95,200)	(130,000)	(130,000)	(130,000)	(130,000)	(130,000)	(130,000)	(130,000)
61000911	460000	Income from Investments	(771,713)	(1,244,480)	(1,184,794)	(400,000)	(400,000)	(400,000)	(400,000)	(400,000)	(400,000)	(400,000)
61000911	460001	Mark to Market - Investments	219,843	(416,752)	(325,399)							
61000911	499101	Approp Fund Bal Res for Enc										
61000914	450700	Utility Charges	(26,746,260)	(27,113,551)	(27,980,427)	(29,079,599)	(29,079,599)	(29,079,599)	(29,079,599)	(29,079,599)	(29,079,599)	(29,079,599)
61000914	450701	Account Setup Fees	(531,896)	(502,106)	(475,313)	(550,000)	(550,000)	(550,000)	(550,000)	(550,000)	(550,000)	(550,000)
61000914	450702	Wtr Serv Connection Fees	(589,789)	(616,819)	(690,405)	(605,000)	(605,000)	(605,000)	(605,000)	(605,000)	(605,000)	(605,000)
61000914	450704	Taps & Connections	(1,938,533)	(673,316)	(541,644)	(600,000)	(600,000)	(600,000)	(600,000)	(600,000)	(600,000)	(600,000)
61000914	450708	Reconnection Fees	(267,332)	(277,570)	(191,191)	(225,000)	(225,000)	(225,000)	(225,000)	(225,000)	(225,000)	(225,000)
61000914	450709	Fire Line Charges	(738,013)	(745,940)	(752,410)	(730,000)	(730,000)	(730,000)	(730,000)	(730,000)	(730,000)	(730,000)
61000918	450710	M & R City Water	(37,298)	(37,502)	(36,832)	(35,713)	(35,713)	(35,713)	(35,713)	(35,713)	(35,713)	(35,713)
61000914	450711	Capital Improvement Fees	(7,121,425)	(7,398,375)	(7,604,697)	-	-	-	-	-	-	-
61000914	450712	Water Meter Services	(409)	(25)	(751)							
61000914	481479	Fines & Fees Tamper Charges	(47,240)	(25,006)	(32,106)							
61000914	482482	Fines & Fees Interest - Late	(111)		(3)							
61000911	486000	Sale of Capital Assets	(115,338)	(190,891)	(168,067)	(50,000)	(50,000)	(50,000)	(50,000)	(50,000)	(50,000)	(50,000)
61090911	498400	Transfer from Sustainability	(12,000)									
61090911	489000	Miscellaneous Revenue	(63,585)	(10,468)	(9,638)							
61090912	489000	Miscellaneous Revenue	(1,200)	(1,200)	(1,097)							
Total: Water Offsets			\$ (39,714,485)	\$ (40,246,882)	\$ (40,718,663)	\$ (33,034,003)	\$ (33,034,003)	\$ (33,235,312)	\$ (33,235,312)	\$ (33,235,312)	\$ (33,235,312)	\$ (33,235,312)
Offsets Without Utility Charges & Capital Improvement Fees			\$ (5,846,745)	\$ (5,722,496)	\$ (5,133,539)	\$ (3,954,404)	\$ (3,954,404)	\$ (4,155,713)	\$ (4,155,713)	\$ (4,155,713)	\$ (4,155,713)	\$ (4,155,713)

City of Asheville, NC
 Financial Planning & Rate Model
 Schedule 3: Capital Improvements Plan

Projects	Bonds	Commercial Paper	SRF	Grant	Capital Reserve	Paygo	Project Total	2021	2022	2023	2024	2025	2026	2027
Fairview Service Area WL Improvements							3,150,000			1,500,000	1,500,000	150,000		
Master Plan/Large Waterline Replacement Projects							2,610,000	275,000	857,500	977,500	-	500,000		
Meter / Vault Projects							6,750,000	750,000	1,500,000	1,500,000	1,500,000	1,500,000		
NCDOT Projects							4,000,000	1,000,000	2,000,000	-	-	1,000,000		
Pump Station / Storage Tank Projects							3,125,000	125,000	750,000	750,000	750,000	750,000		
Small Waterline Replacement Projects							24,674,765	1,479,745	5,195,020	6,000,000	6,000,000	6,000,000		
System Enhancement Projects							825,000	125,000	250,000	150,000	150,000	150,000		
Water Treatment Plant Projects							7,017,951	505,951	2,512,000	500,000	2,000,000	1,500,000		
Meter Replacement Project	100%						20,000,000		20,000,000					
Placeholder							-						11,512,100	11,512,100
Total							72,152,716	4,260,696	33,064,520	11,377,500	11,900,000	11,550,000	11,512,100	11,512,100
Funding Sources														
Revenue Bonds								\$ -	\$ 20,000,000	\$ -	\$ -	\$ -	\$ -	\$ -
Commercial Paper Refunding								-	-	-	-	-	-	-
SRF Loans								-	-	-	-	-	-	-
Grant Funding								-	-	-	-	-	-	-
Capital Reserve Fund								260,696	9,064,520	7,377,500	7,900,000	7,550,000	7,512,100	7,512,100
Water Operating Funds (Paygo)								4,000,000	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000
Total								4,260,696	33,064,520	11,377,500	11,900,000	11,550,000	11,512,100	11,512,100
								-	-	-	-	-	-	-

Check



City of Asheville, NC
 Financial Planning & Rate Model
 Debt Service

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Existing Debt Service											
1996 State Water Loan - DENR Water Quality	\$ 155,145	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Principal	150,000										
Interest	5,145										
2007 Series Water Revenue Bonds	\$ 1,327,200	\$ 1,331,100	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Principal	1,250,000	1,305,000									
Interest	77,200	26,100									
2011 ARRA Loan	\$ 9,910	\$ 9,910	\$ 9,910	\$ 9,910	\$ 9,910	\$ 9,910	\$ 9,910	\$ 9,910	\$ 9,910	\$ 9,910	\$ 9,910
Principal	9,910	9,910	9,910	9,910	9,910	9,910	9,910	9,910	9,910	9,910	9,910
Interest	-	-	-	-	-	-	-	-	-	-	-
2015 Revenue Refunding Bonds	\$ 4,031,038	\$ 4,027,863	\$ 5,326,888	\$ 5,322,838	\$ 5,322,588	\$ 5,323,588	\$ 5,318,338	\$ 5,314,838	\$ 5,306,213	\$ 5,306,838	\$ 2,483,338
Principal	1,900,000	1,945,000	3,340,000	3,490,000	3,650,000	3,800,000	3,970,000	4,170,000	4,375,000	4,600,000	1,940,000
Interest	2,131,038	2,082,863	1,986,888	1,832,838	1,672,588	1,523,588	1,348,338	1,144,838	931,213	706,838	543,338
2018 BAN	\$ -	\$ -	\$ 186,244	\$ 368,627	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Principal	-	-	-	-	39,962,591	-	-	-	-	-	-
Interest	-	-	186,244	368,627	138,670	-	-	-	-	-	-
Total Existing Debt	\$ 5,523,292	\$ 5,368,872	\$ 5,523,041	\$ 5,701,375	\$ 45,433,758	\$ 5,333,497	\$ 5,328,247	\$ 5,324,747	\$ 5,316,122	\$ 5,316,747	\$ 2,493,247
Total Existing Debt					*formula edited to exclude BAN						
Principal	\$ 3,309,910	\$ 3,259,910	\$ 3,349,910	\$ 3,499,910	\$ 3,659,910	\$ 3,809,910	\$ 3,979,910	\$ 4,179,910	\$ 4,384,910	\$ 4,609,910	\$ 1,949,910
Interest	2,213,383	2,108,963	2,173,131	2,201,465	1,672,588	1,523,588	1,348,338	1,144,838	931,213	706,838	543,338
Total Water Existing Debt	\$ 5,523,292	\$ 5,368,872	\$ 5,523,041	\$ 5,701,375	\$ 5,332,497	\$ 5,333,497	\$ 5,328,247	\$ 5,324,747	\$ 5,316,122	\$ 5,316,747	\$ 2,493,247
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



City of Asheville, NC
Financial Planning & Rate Model
Schedule 2: Water Billing Data

2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027

Accounts

Feeds to Model (From billing database)

Bi-Monthly Billed Meters

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
5/8"	51,796	53,662	54,392	54,392	54,392	54,392	54,392	54,392	54,392	54,392	54,392	54,392
3/4"	410	308	448	448	448	448	466	485	504	524	545	567
1"	1,060	849	1,059	1,059	1,059	1,059	1,101	1,145	1,191	1,239	1,288	1,340
1.5"	855	817	869	869	869	869	886	904	922	941	959	979
2"	724	697	595	595	595	595	613	631	650	670	690	710
3"	-	-	-	-	-	-	-	-	-	-	-	-
4"	1	1	-	-	-	-	-	-	-	-	-	-
6"	70	-	-	-	-	-	-	-	-	-	-	-
8"	21	-	-	-	-	-	-	-	-	-	-	-
10"	1	-	-	-	-	-	-	-	-	-	-	-

Monthly Billed Meters

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
5/8"	38	3	2	2	2	2	2	2	2	2	2	2
3/4"	1	-	1	1	1	1	1	1	1	1	1	1
1"	-	6	1	1	1	1	1	1	1	1	1	1
1.5"	-	2	2	2	2	2	2	2	2	2	2	2
2"	4	7	8	8	8	8	8	8	9	9	9	10
3"	125	76	70	70	70	70	72	74	76	79	81	84
4"	75	40	73	73	73	73	75	77	80	82	85	87
6"	41	30	31	31	31	31	31	31	31	31	31	31
8"	5	3	5	5	5	5	5	5	5	6	6	6
10"	-	-	-	-	-	-	-	-	-	-	-	-

Total Water Accounts

	55,227	56,501	57,556	57,556	57,556	57,556	57,656	57,760	57,867	57,978	58,093	58,212
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Usage (CCF)

Feeds to Model

Single Family Residential	2,891,919	2,974,060	2,900,427	2,751,888	2,851,646	2,851,646	2,851,646	2,851,646	2,851,646	2,851,646	2,851,646	2,851,646
Irrigation	105,525	135,947	103,158	102,827	122,221	122,221	122,221	122,221	122,221	122,221	122,221	122,221
Multi-Family Residential	1,038,574	1,044,508	1,144,920	1,132,166	1,180,034	1,180,034	1,180,034	1,180,034	1,180,034	1,180,034	1,180,034	1,180,034
Commercial	2,336,942	2,470,179	2,476,721	2,519,824	2,384,659							
0-1,000 CCF Monthly / 0-2,000 CCF Monthly	1,921,479	2,031,029	2,036,408	2,071,848	1,960,713	1,960,713	1,960,713	1,960,713	1,960,713	1,960,713	1,960,713	1,960,713
> 1,000 CCF Monthly / > 2,000 CCF Monthly	415,463	439,150	440,313	447,976	423,946	423,946	423,946	423,946	423,946	423,946	423,946	423,946
Manufacturer	322,580	351,606	350,687	331,063	312,005							
0-1,000 CCF Monthly / 0-2,000 CCF Monthly	60,050	65,453	65,282	61,629	58,081	58,081	58,081	58,081	58,081	58,081	58,081	58,081
> 1,000 CCF Monthly / > 2,000 CCF Monthly	262,530	286,153	285,405	269,434	253,924	253,924	253,924	253,924	253,924	253,924	253,924	253,924
Wholesale	280,362	382,638	317,048	278,824	241,944	241,944	241,944	241,944	241,944	241,944	241,944	241,944
Wholesale Capacity, per 10,000 gal/day												
Total Water Usage	6,975,902	7,358,938	7,292,961	7,116,592	7,092,509	7,092,509	7,092,509	7,092,509	7,092,509	7,092,509	7,092,509	7,092,509
% Change		5.5%	-0.9%	-2.4%	-0.3%							



City of Asheville, NC
Financial Planning & Rate Model
Water Rates

2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027

<https://www.ashevillenc.gov/service/rates-fees/>

Existing Rate Structure	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Water											
Bimonthly/Monthly Base Fee	\$ 6.00	\$ 6.09	\$ 6.21	\$ 6.34	\$ 6.34	\$ 6.34	\$ 6.34	\$ 6.34	\$ 6.34	\$ 6.34	\$ 6.34
Volumetric Charge per CCF											
Single Family Residential	\$ 3.99	\$ 4.05	\$ 4.13	\$ 4.21	\$ 4.21	\$ 4.21	\$ 4.21	\$ 4.21	\$ 4.21	\$ 4.21	\$ 4.21
Irrigation	\$ 4.49	\$ 4.71	\$ 4.95	\$ 5.20	\$ 5.20	\$ 5.20	\$ 5.20	\$ 5.20	\$ 5.20	\$ 5.20	\$ 5.20
Multi-Family Residential	\$ 3.37	\$ 3.42	\$ 3.56	\$ 3.70	\$ 3.70	\$ 3.70	\$ 3.70	\$ 3.70	\$ 3.70	\$ 3.70	\$ 3.70
Commercial											
0-1,000 CCF Monthly / 0-2,000 CCF Bimonthly	\$ 3.37	\$ 3.42	\$ 3.49	\$ 3.56	\$ 3.56	\$ 3.56	\$ 3.56	\$ 3.56	\$ 3.56	\$ 3.56	\$ 3.56
> 1,000 CCF Monthly / > 2,000 CCF Bimonthly	\$ 1.93	\$ 2.00	\$ 2.10	\$ 2.21	\$ 2.21	\$ 2.21	\$ 2.21	\$ 2.21	\$ 2.21	\$ 2.21	\$ 2.21
Manufacturer											
0-1,000 CCF Monthly / 0-2,000 CCF Bimonthly	\$ 3.37	\$ 3.42	\$ 3.49	\$ 3.56	\$ 3.56	\$ 3.56	\$ 3.56	\$ 3.56	\$ 3.56	\$ 3.56	\$ 3.56
> 1,000 CCF Monthly / > 2,000 CCF Bimonthly	\$ 1.87	\$ 1.94	\$ 1.98	\$ 2.02	\$ 2.02	\$ 2.02	\$ 2.02	\$ 2.02	\$ 2.02	\$ 2.02	\$ 2.02
Wholesale	\$ 1.13	\$ 1.19	\$ 1.21	\$ 1.23	\$ 1.23	\$ 1.23	\$ 1.23	\$ 1.23	\$ 1.23	\$ 1.23	\$ 1.23
Wholesale Capacity, per 10,000 gal/day	\$ 184.00	\$ 184.00	\$ 184.00	\$ 184.00	\$ 184.00	\$ 184.00	\$ 184.00	\$ 184.00	\$ 184.00	\$ 184.00	\$ 184.00

Capital Improvement Monthly Charge by Meter Size

*this charge ends FY 2021

5/8"	\$ 4.03	\$ 4.09	\$ 4.17	\$ 4.26							
3/4"	\$ 4.62	\$ 4.68	\$ 4.77	\$ 4.87							
1"	\$ 55.36	\$ 56.19	\$ 57.31	\$ 58.46							
1.5"	\$ 92.26	\$ 93.65	\$ 95.52	\$ 97.43							
2"	\$ 161.46	\$ 163.88	\$ 167.16	\$ 170.50							
3"	\$ 507.45	\$ 515.06	\$ 525.36	\$ 535.87							
4"	\$ 888.04	\$ 901.36	\$ 919.39	\$ 937.77							
6"	\$ 1,141.77	\$ 1,158.89	\$ 1,182.07	\$ 1,205.71							
8"	\$ 1,395.49	\$ 1,416.42	\$ 1,444.75	\$ 1,473.64							
10"	\$ 1,649.22	\$ 1,673.96	\$ 1,707.44	\$ 1,741.59							

6%

Proposed Rates

New Base Charge (Begins FY 2022) - Bi-Monthly

5/8"	\$ 9.78	\$ 11.10	\$ 12.33	\$ 12.51	\$ 12.86	\$ 13.07
3/4"	\$ 14.05	\$ 16.03	\$ 17.87	\$ 18.14	\$ 18.59	\$ 18.80
1"	\$ 22.58	\$ 25.88	\$ 28.95	\$ 29.40	\$ 30.04	\$ 30.25
1.5"	\$ 43.90	\$ 50.50	\$ 56.65	\$ 57.55	\$ 58.66	\$ 58.87
2"	\$ 69.49	\$ 80.05	\$ 89.89	\$ 91.33	\$ 93.01	\$ 93.22
3"	\$ 137.73	\$ 158.85	\$ 178.53	\$ 181.41	\$ 184.61	\$ 184.82
4"	\$ 214.50	\$ 247.50	\$ 278.25	\$ 282.75	\$ 287.66	\$ 287.87
6"	\$ 427.75	\$ 493.75	\$ 555.25	\$ 564.25	\$ 573.91	\$ 574.12
8"	\$ 683.65	\$ 789.25	\$ 887.65	\$ 902.05	\$ 917.41	\$ 917.62
10"	\$ 1,792.55	\$ 2,069.75	\$ 2,328.05	\$ 2,365.85	\$ 2,405.91	\$ 2,406.12

New Base Charge (Begins FY 2022) - Monthly

5/8"	\$ 5.52	\$ 6.18	\$ 6.79	\$ 6.88	\$ 7.14	\$ 7.35
3/4"	\$ 7.65	\$ 8.64	\$ 9.56	\$ 9.70	\$ 10.00	\$ 10.21
1"	\$ 11.92	\$ 13.57	\$ 15.10	\$ 15.33	\$ 15.73	\$ 15.94
1.5"	\$ 22.58	\$ 25.88	\$ 28.95	\$ 29.40	\$ 30.04	\$ 30.25
2"	\$ 35.37	\$ 40.65	\$ 45.57	\$ 46.29	\$ 47.21	\$ 47.42
3"	\$ 69.49	\$ 80.05	\$ 89.89	\$ 91.33	\$ 93.01	\$ 93.22
4"	\$ 107.88	\$ 124.38	\$ 139.75	\$ 142.00	\$ 144.54	\$ 144.75
6"	\$ 214.50	\$ 247.50	\$ 278.25	\$ 282.75	\$ 287.66	\$ 287.87
8"	\$ 342.45	\$ 395.25	\$ 444.45	\$ 451.65	\$ 459.41	\$ 459.62
10"	\$ 896.90	\$ 1,035.50	\$ 1,164.65	\$ 1,183.55	\$ 1,203.66	\$ 1,203.87

Proposed Volumetric Charge per CCF

Single Family Residential	\$ 4.47	\$ 4.77	\$ 4.96	\$ 5.23	\$ 5.43	\$ 5.43
Irrigation	\$ 5.53	\$ 5.90	\$ 6.13	\$ 6.46	\$ 6.71	\$ 6.71
Multi-Family Residential	\$ 3.93	\$ 4.20	\$ 4.36	\$ 4.60	\$ 4.78	\$ 4.78
Commercial						
0-1,000 CCF Monthly / 0-2,000 CCF Bimonthly	\$ 3.78	\$ 4.04	\$ 4.20	\$ 4.43	\$ 4.60	\$ 4.60
> 1,000 CCF Monthly / > 2,000 CCF Bimonthly	\$ 2.35	\$ 2.51	\$ 2.61	\$ 2.75	\$ 2.86	\$ 2.86
Manufacturer						
0-1,000 CCF Monthly / 0-2,000 CCF Bimonthly	\$ 3.78	\$ 4.04	\$ 4.20	\$ 4.43	\$ 4.60	\$ 4.60
> 1,000 CCF Monthly / > 2,000 CCF Bimonthly	\$ 2.15	\$ 2.29	\$ 2.36	\$ 2.51	\$ 2.61	\$ 2.61
Wholesale	\$ 1.23	\$ 1.23	\$ 1.23	\$ 1.23	\$ 1.23	\$ 1.23
Wholesale Capacity, per 10,000 gal/day	\$ 184.00	\$ 184.00	\$ 184.00	\$ 184.00	\$ 184.00	\$ 184.00

Water Rates
Bimonthly Base Charge (1)

5/8"	\$ 6.34	\$ 6.34	\$ 9.78
3/4"	\$ 6.34	\$ 6.34	\$ 14.05
1"	\$ 6.34	\$ 6.34	\$ 22.58
1.5"	\$ 6.34	\$ 6.34	\$ 43.90
2"	\$ 6.34	\$ 6.34	\$ 69.49
3"	\$ 6.34	\$ 6.34	\$ 137.73
4"	\$ 6.34	\$ 6.34	\$ 214.50
6"	\$ 6.34	\$ 6.34	\$ 427.75
8"	\$ 6.34	\$ 6.34	\$ 683.65
10"	\$ 6.34	\$ 6.34	\$ 1,792.55

Monthly Capital Charge

5/8"	\$ 4.26	\$ -	\$ -
3/4"	\$ 4.87	\$ -	\$ -
1"	\$ 58.46	\$ -	\$ -
1.5"	\$ 97.43	\$ -	\$ -
2"	\$ 170.50	\$ -	\$ -
3"	\$ 535.87	\$ -	\$ -
4"	\$ 937.77	\$ -	\$ -
6"	\$ 1,205.71	\$ -	\$ -
8"	\$ 1,473.64	\$ -	\$ -
10"	\$ 1,741.59	\$ -	\$ -

(1) Some commercial and manufacturing customers are billed monthly rather than bimonthly. Beginning in FY 2022, these customers will be billed half the bimonthly base fee, plus a small fee to cover the administrative cost of more frequent billing.

Proposed Volumetric Charge per CCF

Single Family Residential	\$ 4.21	\$ 4.21	\$ 4.47
Irrigation	\$ 5.20	\$ 5.20	\$ 5.53
Multi-Family Residential	\$ 3.70	\$ 3.70	\$ 3.93
Commercial			
0-1,000 CCF Monthly / 0-2,000 CCF Bimonthly	\$ 3.56	\$ 3.56	\$ 3.78
> 1,000 CCF Monthly / > 2,000 CCF Bimonthly	\$ 2.21	\$ 2.21	\$ 2.35
Manufacturer			
0-1,000 CCF Monthly / 0-2,000 CCF Bimonthly	\$ 3.56	\$ 3.56	\$ 3.78
> 1,000 CCF Monthly / > 2,000 CCF Bimonthly	\$ 2.02	\$ 2.02	\$ 2.15
Wholesale	\$ 1.23	\$ 1.23	\$ 1.23
Wholesale Capacity, per 10,000 gal/day	\$ 184.00	\$ 184.00	\$ 184.00



City of Asheville, NC
Financial Planning & Rate Model
Schedule 4a: Revenue Requirements - Cash Basis

Rate Calculation Test Year:

	2021	2022	2023	2024	2025	2026	2027	2022	Base	Readiness-to-Serve	Volume	Base	Readiness-to-Serve	Volume	Base	Readiness-to-Serve	Volume
Water Operating Expenses																	
Water Administration	\$ 1,388,750	\$ 1,619,612	\$ 1,679,594	\$ 1,741,858	\$ 1,806,491	\$ 1,873,586	\$ 1,943,238	\$ 1,619,612	0%	0%	100%	-	-	-	-	-	-
Water General Operations Division	2,503,044	2,572,534	2,644,074	2,717,729	2,793,563	2,871,646	2,952,048	2,572,534	0%	0%	100%	-	-	-	-	-	-
Customer Service Division	1,550,083	1,609,814	1,671,885	1,736,389	1,803,422	1,873,084	1,945,479	1,609,814	100%	0%	0%	-	-	-	-	-	-
Water Production Division	531,442	549,846	568,912	588,662	609,123	630,322	652,284	549,846	0%	0%	100%	-	-	-	-	-	-
Meter Services Division	2,973,800	3,078,944	3,187,886	3,300,767	3,417,732	3,538,931	3,664,520	3,078,944	0%	100%	0%	-	-	-	-	-	-
Water Engineering Division	779,429	809,875	841,519	874,409	908,595	944,128	981,060	809,875	0%	0%	100%	-	-	-	-	-	-
Construction Crew Division	-	-	-	-	-	-	-	-	0%	0%	100%	-	-	-	-	-	-
Water Operating Equipment Division	600,248	618,255	636,803	655,907	675,584	695,852	716,728	618,255	0%	0%	100%	-	-	-	-	-	-
Maintenance & Repairs Division	4,899,859	5,268,911	5,462,243	5,662,812	5,870,894	6,086,775	6,310,751	5,268,911	0%	0%	100%	-	-	-	-	-	-
Water Conservation Division	-	-	-	-	-	-	-	-	0%	0%	100%	-	-	-	-	-	-
Backflow	140,173	145,780	151,611	157,676	163,983	170,542	177,364	145,780	0%	0%	100%	-	-	-	-	-	-
Patch Paving	-	-	-	-	-	-	-	-	0%	0%	100%	-	-	-	-	-	-
Pumps & Reservoir	1,121,194	1,164,014	1,208,559	1,254,833	1,302,905	1,352,845	1,404,726	1,164,014	0%	0%	100%	-	-	-	-	-	-
Watershed Forestry	174,323	181,113	188,170	195,505	203,128	211,052	219,287	181,113	0%	0%	100%	-	-	-	-	-	-
North Fork Water Treatment Plant	1,581,002	1,634,332	1,689,505	1,746,587	1,805,645	1,866,749	1,929,971	1,634,332	0%	0%	100%	-	-	-	-	-	-
William DeBruhl Water Treatment Plant	940,124	974,068	1,009,261	1,045,751	1,083,584	1,122,813	1,163,489	974,068	0%	0%	100%	-	-	-	-	-	-
Laboratory	457,618	474,522	492,063	510,265	529,163	548,753	569,093	474,522	0%	0%	100%	-	-	-	-	-	-
Mills River Water Treatment Plant	1,557,440	1,613,178	1,670,958	1,730,858	1,792,955	1,857,333	1,924,076	1,613,178	0%	0%	100%	-	-	-	-	-	-
Water Maintenance - Inventory	303,479	315,604	328,213	341,327	354,965	369,148	383,898	315,604	0%	0%	100%	-	-	-	-	-	-
Indirect Cost Allocation	1,943,083	1,943,083	1,943,083	1,943,083	1,943,083	1,943,083	1,943,083	1,943,083	0%	0%	100%	-	-	-	-	-	-
Total Operating Expenses	\$ 23,445,031	\$ 24,573,485	\$ 25,374,340	\$ 26,204,416	\$ 27,064,806	\$ 27,956,641	\$ 28,881,096	\$ 24,573,485									
Check	-	-	-	-	-	-	-	-									
Capital Expenses																	
Debt Service																	
Existing Debt	\$ 5,332,497	\$ 5,333,497	\$ 5,328,247	\$ 5,324,747	\$ 5,316,122	\$ 5,316,747	\$ 2,493,247										
Parity Debt																	
2007 Revenue Bonds	-	-	-	-	-	-	-	\$ -	0%	10%	90%	0%	15%	85%	0%	20%	80%
2015 Revenue Refunding Bond	5,322,588	5,323,588	5,318,338	5,314,838	5,306,213	5,306,838	2,483,338	5,323,588	0%	10%	90%	0%	15%	85%	0%	20%	80%
2018 BAN	-	-	-	-	-	-	-	-	0%	10%	90%	0%	15%	85%	0%	20%	80%
Commercial Paper	-	-	-	-	-	-	-	-	0%	10%	90%	0%	15%	85%	0%	20%	80%
Subordinate Debt	-	-	-	-	-	-	-	-	0%	10%	90%	0%	15%	85%	0%	20%	80%
2011 ARRA Loan	9,910	9,910	9,910	9,910	9,910	9,910	9,910	9,910	0%	10%	90%	0%	15%	85%	0%	20%	80%
Proposed Debt	\$ -	\$ 815,710	\$ 2,069,039	\$ 2,497,750	\$ 2,497,750	\$ 2,497,750	\$ 2,497,750										
Parity Debt																	
Series 2022 Revenue Bonds	-	419,299	848,000	848,000	848,000	848,000	848,000	-	0%	10%	90%	0%	15%	85%	0%	20%	80%
Series 2021 Refunding Bonds	-	815,710	1,649,750	1,649,750	1,649,750	1,649,750	1,649,750	815,710	0%	10%	90%	0%	15%	85%	0%	20%	80%
Subordinate Debt	-	-	-	-	-	-	-	-	0%	10%	90%	0%	15%	85%	0%	20%	80%
SRF Loans	-	-	-	-	-	-	-	-	0%	10%	90%	0%	15%	85%	0%	20%	80%
Total Debt Service	\$ 5,332,497	\$ 6,149,207	\$ 7,397,286	\$ 7,822,497	\$ 7,813,872	\$ 7,814,497	\$ 4,990,997	\$ 6,149,207									
Other Capital Expenditures																	
Paygo	\$ 4,000,000	\$ 4,000,000	\$ 4,000,000	\$ 4,000,000	\$ 4,000,000	\$ 4,000,000	\$ 4,000,000	\$ 4,000,000	0%	0%	100%	-	-	-	-	-	-
Budgeted Capital Outlay	-	-	-	-	-	-	-	-	0%	0%	100%	-	-	-	-	-	-
Additional Transfer to Capital Reserve	-	1,000,000	1,500,000	2,000,000	3,000,000	3,500,000	4,400,000	1,000,000	0%	0%	100%	-	-	-	-	-	-
Total Other Capital Expenditures	\$ 4,000,000	\$ 5,000,000	\$ 5,500,000	\$ 6,000,000	\$ 7,000,000	\$ 7,500,000	\$ 8,400,000	\$ 5,000,000									
Total Capital Expenses	\$ 9,332,497	\$ 11,149,207	\$ 12,897,286	\$ 13,822,497	\$ 14,813,872	\$ 15,314,497	\$ 13,390,997	\$ 11,149,207									
Total Water Revenue Requirements	\$ 32,777,528	\$ 35,722,692	\$ 38,271,626	\$ 40,026,914	\$ 41,878,678	\$ 43,271,138	\$ 42,272,093	\$ 35,722,692									
Offset Allocations																	
Wholesale Revenue - Billing & Capacity	\$ (474,231)	\$ (474,231)	\$ (474,231)	\$ (474,231)	\$ (474,231)	\$ (474,231)	\$ (474,231)	\$ (474,231)	0%	0%	100%	-	-	-	-	-	-
Delinquent & Interest Fee	(628,691)	(628,691)	(830,000)	(830,000)	(830,000)	(830,000)	(830,000)	(628,691)	100%	0%	0%	-	-	-	-	-	-
Water Availability	(130,000)	(130,000)	(130,000)	(130,000)	(130,000)	(130,000)	(130,000)	(130,000)	0%	0%	100%	-	-	-	-	-	-
Income from Investments	(400,000)	(400,000)	(400,000)	(400,000)	(400,000)	(400,000)	(400,000)	(400,000)	0%	0%	100%	-	-	-	-	-	-
Mark to Market Investments	-	-	-	-	-	-	-	-	0%	0%	100%	-	-	-	-	-	-
Approp Fund Bal Res for Enc	-	-	-	-	-	-	-	-	0%	0%	100%	-	-	-	-	-	-
Account Setup Fees	(550,000)	(550,000)	(550,000)	(550,000)	(550,000)	(550,000)	(550,000)	(550,000)	100%	0%	0%	-	-	-	-	-	-
Wtr Serv Connection Fees	(605,000)	(605,000)	(605,000)	(605,000)	(605,000)	(605,000)	(605,000)	(605,000)	0%	0%	100%	-	-	-	-	-	-
Taps & Connections	(600,000)	(600,000)	(600,000)	(600,000)	(600,000)	(600,000)	(600,000)	(600,000)	0%	0%	100%	-	-	-	-	-	-
Reconnection Fees	(225,000)	(225,000)	(225,000)	(225,000)	(225,000)	(225,000)	(225,000)	(225,000)	0%	0%	100%	-	-	-	-	-	-
Fire Line Charges	(730,000)	(730,000)	(730,000)	(730,000)	(730,000)	(730,000)	(730,000)	(730,000)	0%	0%	100%	-	-	-	-	-	-
M & R City Water	(35,713)	(35,713)	(35,713)	(35,713)	(35,713)	(35,713)	(35,713)	(35,713)	0%	0%	100%	-	-	-	-	-	-
Water Meter Services	-	-	-	-	-	-	-	-	0%	0%	100%	-	-	-	-	-	-
Fines & Fees Tamper Charges	-	-	-	-	-	-	-	-	0%	0%	100%	-	-	-	-	-	-
Fines & Fees Interest - Late	-	-	-	-	-	-	-	-	0%	0%	100%	-	-	-	-	-	-
Sale of Capital Assets	(50,000)	(50,000)	(50,000)	(50,000)	(50,000)	(50,000)	(50,000)	(50,000)	0%	0%	100%	-	-	-	-	-	-
Transfer from Sustainability	-	-	-	-	-	-	-	-	0%	0%	100%	-	-	-	-	-	-
Miscellaneous Revenue (61090911)	-	-	-	-	-	-	-	-	0%	0%	100%	-	-	-	-	-	-
Miscellaneous Revenue (61090912)	-	-	-	-	-	-	-	-	0%	0%	100%	-	-	-	-	-	-
Total Water Offsets	\$ (4,428,635)	\$ (4,428,635)	\$ (4,629,944)	\$ (4,629,944)	\$ (4,629,944)	\$ (4,629,944)	\$ (4,629,944)	\$ (4,428,635)									
Water Net Revenue Requirements	\$ 28,348,894	\$ 31,294,057	\$ 33,641,682	\$ 35,396,970	\$ 37,248,734	\$ 38,641,194	\$ 37,642,149	\$ 31,294,057									



City of Asheville, NC
 Financial Planning & Rate Model
 Rate Calculations

	Test Year: 2022	Other Years: 2023	2024	2025	2026	2027
Costs - Recovered through the Base Charge						
Operating Expenses	\$ 1,609,814	\$ 1,671,885	\$ 1,736,389	\$ 1,803,422	\$ 1,873,084	\$ 1,945,479
Debt Service	-	-	-	-	-	-
Paygo and other Capital Costs	-	-	-	-	-	-
Additional Transfer to Capital Reserve	-	-	-	-	-	-
<i>Phase-In Formulas</i>						
Total Base Charge Costs	\$ 1,609,814	\$ 1,671,885	\$ 1,736,389	\$ 1,803,422	\$ 1,873,084	\$ 1,945,479
Revenue Offsets - Recovered through the Base Charge						
	\$ (1,178,691)	\$ (1,380,000)	\$ (1,380,000)	\$ (1,380,000)	\$ (1,380,000)	\$ (1,380,000)
Total Costs to be Recovered from Base Charges	\$ 431,123	\$ 291,885	\$ 356,389	\$ 423,422	\$ 493,084	\$ 565,479
Number of Accounts						
Bi-Monthly	57,459	57,557	57,660	57,765	57,875	57,988
Monthly	198	203	208	213	218	224
Total Accounts	57,656	57,760	57,867	57,978	58,093	58,212
Estimated Customer Bills	347,125	347,777	348,451	349,149	349,870	350,616
<i>Check</i>						
Calculated Base Charge Per Bill	\$ 1.25	\$ 1.25	\$ 1.25	\$ 1.25	\$ 1.41	\$ 1.62
Revenue Generated from Calculated Charges	\$ 433,906	\$ 434,721	\$ 435,564	\$ 436,436	\$ 493,317	\$ 567,998
Surplus/(Deficit) from Allocation	2,783	142,836	79,175	13,014	233	2,519
Costs - Recovered through Readiness-to-Serve						
Operating Expenses	\$ 3,078,944	\$ 3,187,886	\$ 3,300,767	\$ 3,417,732	\$ 3,538,931	\$ 3,664,520
Debt Service	614,921	1,109,593	1,564,499	1,562,774	1,562,899	998,199
Paygo and other Capital Costs	-	-	-	-	-	-
Additional Transfer to Capital Reserve	-	-	-	-	-	-
<i>Phase-In Formulas</i>						
Total Meter Costs	\$ 3,693,864	\$ 4,297,479	\$ 4,865,267	\$ 4,980,506	\$ 5,101,830	\$ 4,662,720
Revenue Offsets - Recovered through Readiness-to-Serve						
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Costs to be Recovered from Meter Charge	\$ 3,693,864	\$ 4,297,479	\$ 4,865,267	\$ 4,980,506	\$ 5,101,830	\$ 4,662,720

Alternative Rate Structure: Base Charges Scaled by **AWWA Ratios**

Meter	Asheville Ratios	Asheville Ratios	Asheville Ratios	Asheville Ratios	Asheville Ratios	Asheville Ratios
5/8"	1.00	1.00	1.00	1.00	1.00	1.00
3/4"	1.14	1.14	1.14	1.14	1.14	1.14
1"	13.72	13.72	13.72	13.72	13.72	13.72
1.5"	22.87	22.87	22.87	22.87	22.87	22.87
2"	40.02	40.02	40.02	40.02	40.02	40.02
3"	125.79	125.79	125.79	125.79	125.79	125.79
4"	220.13	220.13	220.13	220.13	220.13	220.13
6"	283.03	283.03	283.03	283.03	283.03	283.03
8"	345.92	345.92	345.92	345.92	345.92	345.92
10"	408.82	408.82	408.82	408.82	408.82	408.82
Meter	AWWA Ratios	AWWA Ratios	AWWA Ratios	AWWA Ratios	AWWA Ratios	AWWA Ratios
5/8"	1.00	1.00	1.00	1.00	1.00	1.00
3/4"	1.50	1.50	1.50	1.50	1.50	1.50
1"	2.50	2.50	2.50	2.50	2.50	2.50
1.5"	5.00	5.00	5.00	5.00	5.00	5.00
2"	8.00	8.00	8.00	8.00	8.00	8.00
3"	16.00	16.00	16.00	16.00	16.00	16.00
4"	25.00	25.00	25.00	25.00	25.00	25.00
6"	50.00	50.00	50.00	50.00	50.00	50.00
8"	80.00	80.00	80.00	80.00	80.00	80.00
10"	210.00	210.00	210.00	210.00	210.00	210.00

Meter	Bi-Monthly	Bi-Monthly	Bi-Monthly	Bi-Monthly	Bi-Monthly	Bi-Monthly
5/8"	54,392	54,392	54,392	54,392	54,392	54,392
3/4"	466	485	504	524	545	567
1"	1,101	1,145	1,191	1,239	1,288	1,340
1.5"	886	904	922	941	959	979
2"	613	631	650	670	690	710
3"	-	-	-	-	-	-
4"	-	-	-	-	-	-
6"	-	-	-	-	-	-
8"	-	-	-	-	-	-
10"	-	-	-	-	-	-
Meter	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly
5/8"	2	2	2	2	2	2
3/4"	1	1	1	1	1	1
1"	1	1	1	1	1	1
1.5"	2	2	2	2	2	2
2"	8	8	9	9	9	10
3"	72	74	76	79	81	84
4"	75	77	80	82	85	87
6"	31	31	31	31	31	31
8"	5	5	5	6	6	6
10"	-	-	-	-	-	-
Meter	Total Bills					
5/8"	326,364	326,364	326,364	326,364	326,364	326,364
3/4"	2,802	2,914	3,030	3,152	3,278	3,409
1"	6,614	6,879	7,154	7,440	7,738	8,047
1.5"	5,331	5,437	5,546	5,657	5,770	5,885
2"	3,727	3,838	3,953	4,072	4,194	4,320
3"	433	446	459	473	487	502
4"	451	465	479	493	508	523
6"	186	186	186	186	186	186
8"	31	32	33	34	35	36
10"	-	-	-	-	-	-
Meter	Equivalent Bills					
5/8"	326,364	326,364	326,364	326,364	326,364	326,364
3/4"	4,203	4,371	4,546	4,727	4,916	5,113
1"	16,536	17,197	17,885	18,601	19,345	20,119
1.5"	26,653	27,186	27,729	28,284	28,850	29,427
2"	29,812	30,707	31,628	32,577	33,554	34,561
3"	6,922	7,129	7,343	7,563	7,790	8,024
4"	11,279	11,617	11,965	12,324	12,694	13,075
6"	9,300	9,300	9,300	9,300	9,300	9,300
8"	2,472	2,546	2,623	2,701	2,782	2,866
10"	-	-	-	-	-	-
Total Equivalent Bills	433,540	436,417	439,383	442,442	445,596	448,848
Equivalent Unit Cost (\$ per Bill)	\$ 8.53	\$ 9.85	\$ 11.08	\$ 11.26	\$ 11.45	\$ 11.45

Previous Combined Charge: Scaled Readiness-to-Serve Charges

Meter	5/8"	3/4"	1"	1.5"	2"	3"	4"	6"	8"	10"
5/8"	\$ 10.60	\$ 11.21	\$ 12.80	\$ 14.78	\$ 16.62	\$ 18.89	\$ 21.18	\$ 24.63	\$ 28.15	\$ 32.63
3/4"	\$ 11.21	\$ 12.80	\$ 14.78	\$ 16.62	\$ 18.89	\$ 21.18	\$ 24.63	\$ 28.15	\$ 32.63	\$ 37.25
1"	\$ 12.80	\$ 14.78	\$ 16.62	\$ 18.89	\$ 21.18	\$ 24.63	\$ 28.15	\$ 32.63	\$ 37.25	\$ 42.00
1.5"	\$ 14.78	\$ 16.62	\$ 18.89	\$ 21.18	\$ 24.63	\$ 28.15	\$ 32.63	\$ 37.25	\$ 42.00	\$ 47.25
2"	\$ 16.62	\$ 18.89	\$ 21.18	\$ 24.63	\$ 28.15	\$ 32.63	\$ 37.25	\$ 42.00	\$ 47.25	\$ 52.50
3"	\$ 18.89	\$ 21.18	\$ 24.63	\$ 28.15	\$ 32.63	\$ 37.25	\$ 42.00	\$ 47.25	\$ 52.50	\$ 58.25
4"	\$ 21.18	\$ 24.63	\$ 28.15	\$ 32.63	\$ 37.25	\$ 42.00	\$ 47.25	\$ 52.50	\$ 58.25	\$ 64.50
6"	\$ 28.15	\$ 32.63	\$ 37.25	\$ 42.00	\$ 47.25	\$ 52.50	\$ 58.25	\$ 64.50	\$ 71.25	\$ 78.75
8"	\$ 32.63	\$ 37.25	\$ 42.00	\$ 47.25	\$ 52.50	\$ 58.25	\$ 64.50	\$ 71.25	\$ 78.75	\$ 86.75
10"	\$ 37.25	\$ 42.00	\$ 47.25	\$ 52.50	\$ 58.25	\$ 64.50	\$ 71.25	\$ 78.75	\$ 86.75	\$ 95.25

Bimonthly total Base Fee - Every Other Month

5/8"	\$ 9.78	\$ 11.10	\$ 12.33	\$ 12.51	\$ 12.86	\$ 13.07
3/4"	\$ 14.05	\$ 16.03	\$ 17.87	\$ 18.14	\$ 18.59	\$ 18.80
1"	\$ 22.58	\$ 25.88	\$ 28.95	\$ 29.40	\$ 30.04	\$ 30.25
1.5"	\$ 43.90	\$ 50.50	\$ 56.65	\$ 57.55	\$ 58.66	\$ 58.87
2"	\$ 69.49	\$ 80.05	\$ 89.89	\$ 91.33	\$ 93.01	\$ 93.22
3"	\$ 137.73	\$ 158.85	\$ 178.53	\$ 181.41	\$ 184.61	\$ 184.82
4"	\$ 214.50	\$ 247.50	\$ 278.25	\$ 282.75	\$ 287.66	\$ 287.87
6"	\$ 427.75	\$ 493.75	\$ 555.25	\$ 564.25	\$ 573.91	\$ 574.12
8"	\$ 683.65	\$ 789.25	\$ 887.65	\$ 902.05	\$ 917.41	\$ 917.62
10"	\$ 1,792.55	\$ 2,069.75	\$ 2,328.05	\$ 2,365.85	\$ 2,405.91	\$ 2,406.12

Monthly Total Base Fee - Every Month

5/8"	\$ 5.52	\$ 6.18	\$ 6.79	\$ 6.88	\$ 7.14	\$ 7.35
3/4"	\$ 7.65	\$ 8.64	\$ 9.56	\$ 9.70	\$ 10.00	\$ 10.21
1"	\$ 11.92	\$ 13.57	\$ 15.10	\$ 15.33	\$ 15.73	\$ 15.94
1.5"	\$ 22.58	\$ 25.88	\$ 28.95	\$ 29.40	\$ 30.04	\$ 30.25
2"	\$ 35.37	\$ 40.65	\$ 45.57	\$ 46.29	\$ 47.21	\$ 47.42
3"	\$ 69.49	\$ 80.05	\$ 89.89	\$ 91.33	\$ 93.01	\$ 93.22
4"	\$ 107.88	\$ 124.38	\$ 139.75	\$ 142.00	\$ 144.54	\$ 144.75
6"	\$ 214.50	\$ 247.50	\$ 278.25	\$ 282.75	\$ 287.66	\$ 287.87
8"	\$ 342.45	\$ 395.25	\$ 444.45	\$ 451.65	\$ 459.41	\$ 459.62
10"	\$ 896.90	\$ 1,035.50	\$ 1,164.65	\$ 1,183.55	\$ 1,203.66	\$ 1,203.87

Meter	5/8"	3/4"	1"	1.5"	2"	3"	4"	6"	8"	10"
5/8"	\$ 3,191,855	\$ 3,622,655	\$ 4,024,083	\$ 4,082,829	\$ 4,197,058	\$ 4,265,597				
3/4"	\$ 39,373	\$ 46,717	\$ 54,161	\$ 57,179	\$ 60,942	\$ 64,097				
1"	\$ 149,361	\$ 178,036	\$ 207,121	\$ 218,754	\$ 232,457	\$ 243,447				
1.5"	\$ 234,025	\$ 274,591	\$ 314,190	\$ 325,565	\$ 338,483	\$ 346,491				
2"	\$ 259,019	\$ 307,322	\$ 355,444	\$ 371,972	\$ 390,186	\$ 402,811				
3"	\$ 60,123	\$ 71,337	\$ 82,509	\$ 86,346	\$ 90,572	\$ 93,500				
4"	\$ 97,333	\$ 115,588	\$ 133,773	\$ 140,004	\$ 146,779	\$ 151,402				
6"	\$ 79,794	\$ 92,070	\$ 103,509	\$ 105,183	\$ 107,010	\$ 107,088				
8"	\$ 21,163	\$ 25,159	\$ 29,140	\$ 30,500	\$ 31,955	\$ 32,929				
10"	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				

Check - extra revenue due to not letting rates dip lower year over year, and roundup function
 Additional Revenue generated vs. Across the Board

\$ 4,132,046	\$ 4,733,475	\$ 5,303,930	\$ 5,418,330	\$ 5,595,441	\$ 5,707,361
7,059	144,111	82,275	14,402	527	479,162
\$ 1,931,276	\$ 2,528,570	\$ 3,094,749	\$ 3,204,727	\$ 3,377,265	\$ 3,484,454

Costs to be Recovered through the Volumetric Charge						
Operating Expenses	\$ 19,884,727	\$ 20,514,569	\$ 21,167,260	\$ 21,843,652	\$ 22,544,626	\$ 23,271,096
Debt Service	5,534,286	6,287,693	6,257,998	6,251,098	6,251,598	3,992,798
Paygo and other Capital Costs	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000
Additional Transfer to Capital Reserve	1,000,000	1,500,000	2,000,000	3,000,000	3,500,000	4,400,000
	\$ 30,419,014	\$ 32,302,262	\$ 33,425,258	\$ 35,094,750	\$ 36,296,223	\$ 35,663,894
	-	-	-	-	-	-
Revenue Offsets	\$ (3,249,944)	(3,249,944)	(3,249,944)	(3,249,944)	(3,249,944)	(3,249,944)
	-	-	-	-	-	-
Total Costs to be Recovered from Volumetric Charges	\$ 27,169,069	\$ 29,052,318	\$ 30,175,314	\$ 31,844,806	\$ 33,046,279	\$ 32,413,950

Actual Equivalent Ratios						
Residential	1.00	1.00	1.00	1.00	1.00	1.00
Irrigation	1.24	1.24	1.24	1.24	1.24	1.24
Multi-Family	0.88	0.88	0.88	0.88	0.88	0.88
Commercial						
0-1,000 CCF	0.85	0.85	0.85	0.85	0.85	0.85
>1,000 CCF	0.52	0.52	0.52	0.52	0.52	0.52
Manufacturer						
0-1,000 CCF	0.85	0.85	0.85	0.85	0.85	0.85
>1,000 CCF	0.48	0.48	0.48	0.48	0.48	0.48
Equivalent Water Consumption (CCF)	6,091,178	6,091,178	6,091,178	6,091,178	6,091,178	6,091,178
Equivalent Unit Cost (\$ per CCF)	\$ 4.47	\$ 4.77	\$ 4.96	\$ 5.23	\$ 5.43	\$ 5.43

Previous Model Proposed Rate Increases

Water Volumetric Rate Options

Keeping the same rate structure

Usage (CCF)						
Residential	2,851,646	2,851,646	2,851,646	2,851,646	2,851,646	2,851,646
Irrigation	122,221	122,221	122,221	122,221	122,221	122,221
Multi-Family	1,180,034	1,180,034	1,180,034	1,180,034	1,180,034	1,180,034
Commercial						
0-1,000 CCF	1,960,713	1,960,713	1,960,713	1,960,713	1,960,713	1,960,713
>1,000 CCF	423,946	423,946	423,946	423,946	423,946	423,946
Manufacturer						
0-1,000 CCF	58,081	58,081	58,081	58,081	58,081	58,081
>1,000 CCF	253,924	253,924	253,924	253,924	253,924	253,924
	-	-	-	-	-	-

Check

Calculated Rates		<i>FY22 Existing:</i>												
Residential	\$	4.21	\$	4.47	\$	4.77	\$	4.96	\$	5.23	\$	5.43	\$	5.43
Irrigation	\$	5.20	\$	5.53	\$	5.90	\$	6.13	\$	6.46	\$	6.71	\$	6.71
Multi-Family	\$	3.70	\$	3.93	\$	4.20	\$	4.36	\$	4.60	\$	4.78	\$	4.78
Commercial														
0-1,000 CCF	\$	3.56	\$	3.78	\$	4.04	\$	4.20	\$	4.43	\$	4.60	\$	4.60
>1,000 CCF	\$	2.21	\$	2.35	\$	2.51	\$	2.61	\$	2.75	\$	2.86	\$	2.86
Manufacturer														
0-1,000 CCF	\$	3.56	\$	3.78	\$	4.04	\$	4.20	\$	4.43	\$	4.60	\$	4.60
>1,000 CCF	\$	2.02	\$	2.15	\$	2.29	\$	2.38	\$	2.51	\$	2.61	\$	2.61
Calculated Revenues														
Residential	\$	12,746,858	\$	13,602,351	\$	14,144,164	\$	14,914,109	\$	15,484,438	\$	15,484,438	\$	15,484,438
Irrigation	\$	675,882	\$	721,104	\$	749,215	\$	789,548	\$	820,103	\$	820,103	\$	820,103
Multi-Family	\$	4,637,534	\$	4,956,143	\$	5,144,948	\$	5,428,156	\$	5,640,563	\$	5,640,563	\$	5,640,563
Commercial														
0-1,000 CCF	\$	7,411,494	\$	7,921,280	\$	8,234,994	\$	8,685,958	\$	9,019,279	\$	9,019,279	\$	9,019,279
>1,000 CCF	\$	996,274	\$	1,064,105	\$	1,106,500	\$	1,165,852	\$	1,212,486	\$	1,212,486	\$	1,212,486
Manufacturer														
0-1,000 CCF	\$	219,547	\$	234,648	\$	243,941	\$	257,300	\$	267,174	\$	267,174	\$	267,174
>1,000 CCF	\$	545,936	\$	581,485	\$	604,339	\$	637,349	\$	662,741	\$	662,741	\$	662,741
	\$	27,233,525	\$	29,081,116	\$	30,228,100	\$	31,878,271	\$	33,106,783	\$	33,106,783	\$	33,106,783
<i>Check - extra revenue due to not letting rates dip lower year over year, and roundup function</i>		64,455		28,799		52,786		33,465		60,504		692,833		692,833
Vs. Existing Vol. Rates	\$	1,115,435	\$	2,963,027	\$	4,110,011	\$	5,760,181	\$	6,988,693	\$	6,988,693	\$	6,988,693
Total Additional Base & Vol. Rev.	\$	3,046,711	\$	5,491,597	\$	7,204,760	\$	8,964,909	\$	10,365,958	\$	10,473,147	\$	10,473,147



City of Asheville, NC
 Financial Planning & Rate Model
 Revenue Proof with Proposed Rates

	2020	2021	2022	2023	2024	2025	2026	2027
Water Revenues - Proposed Rates			<i>Proposed Rates</i>	<i>Proposed Rates</i>	<i>Proposed Rates</i>	<i>Proposed Rates</i>	<i>Proposed Rates</i>	<i>Proposed Rates</i>
Water User Revenues								
Minimum Charge Revenue	\$ 2,196,772	\$ 2,196,772	\$ 4,132,046	\$ 4,733,475	\$ 5,303,930	\$ 5,418,330	\$ 5,595,441	\$ 5,707,361
Capital Charge Revenue	7,611,108							
Volumetric Revenue	25,643,859	25,643,859	27,233,525	29,081,116	30,228,100	31,878,271	33,106,783	33,106,783
Total Water User Revenues	\$ 35,451,739	\$ 27,840,631	\$ 31,365,571	\$ 33,814,592	\$ 35,532,030	\$ 37,296,601	\$ 38,702,224	\$ 38,814,144
<i>Check</i>	-	-	-11.5%	7.8%	5.1%	5.0%	3.8%	0.3%
Water Offsets								
Wholesale Revenue - Billing & Capacity	\$ 474,231	\$ 474,231	\$ 474,231	\$ 474,231	\$ 474,231	\$ 474,231	\$ 474,231	\$ 474,231
Delinquent & Interest Fee	628,691	628,691	628,691	830,000	830,000	830,000	830,000	830,000
Water Availability	95,200	130,000	130,000	130,000	130,000	130,000	130,000	130,000
Income from Investments	1,184,794	400,000	400,000	400,000	400,000	400,000	400,000	400,000
Mark to Market Investments	325,399	-	-	-	-	-	-	-
Approp Fund Bal Res for Enc	-	-	-	-	-	-	-	-
Account Setup Fees	475,313	550,000	550,000	550,000	550,000	550,000	550,000	550,000
Wtr Serv Connection Fees	690,405	605,000	605,000	605,000	605,000	605,000	605,000	605,000
Taps & Connections	541,644	600,000	600,000	600,000	600,000	600,000	600,000	600,000
Reconnection Fees	191,191	225,000	225,000	225,000	225,000	225,000	225,000	225,000
Fire Line Charges	752,410	730,000	730,000	730,000	730,000	730,000	730,000	730,000
M & R City Water	36,832	35,713	35,713	35,713	35,713	35,713	35,713	35,713
Water Meter Services	751	-	-	-	-	-	-	-
Fines & Fees Tamper Charges	32,106	-	-	-	-	-	-	-
Fines & Fees Interest - Late	3	-	-	-	-	-	-	-
Sale of Capital Assets	168,067	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Transfer from Sustainability	-	-	-	-	-	-	-	-
Miscellaneous Revenue (61090911)	9,638	-	-	-	-	-	-	-
Miscellaneous Revenue (61090912)	1,097	-	-	-	-	-	-	-
Total Water Offsets	\$ 5,607,770	\$ 4,428,635	\$ 4,428,635	\$ 4,629,944	\$ 4,629,944	\$ 4,629,944	\$ 4,629,944	\$ 4,629,944
<i>Check</i>	-	-	-	-	-	-	-	-
Total Water Revenues	\$ 41,059,509	\$ 32,269,265	\$ 35,794,205	\$ 38,444,536	\$ 40,161,974	\$ 41,926,546	\$ 43,332,168	\$ 43,444,088
Water Expenditures								
Water Operating Expenditures								
Water Administration	\$ 1,030,901	\$ 1,388,750	\$ 1,619,612	\$ 1,679,594	\$ 1,741,858	\$ 1,806,491	\$ 1,873,586	\$ 1,943,238
Water General Operations Division	2,365,348	2,503,044	2,572,534	2,644,074	2,717,729	2,793,563	2,871,646	2,952,048
Customer Service Division	1,465,914	1,550,083	1,609,814	1,671,885	1,736,389	1,803,422	1,873,084	1,945,479
Water Production Division	434,124	531,442	549,846	568,912	588,662	609,123	630,322	652,284
Meter Services Division	2,832,202	2,973,800	3,078,944	3,187,886	3,300,767	3,417,732	3,538,931	3,664,520
Water Engineering Division	678,720	779,429	809,875	841,519	874,409	908,595	944,128	981,060
Construction Crew Division	-	-	-	-	-	-	-	-
Water Operating Equipment Division	374,525	600,248	618,255	636,803	655,907	675,584	695,852	716,728
Maintenance & Repairs Division	5,374,819	4,899,859	5,268,911	5,462,243	5,662,812	5,870,894	6,086,775	6,310,751
Water Conservation Division	-	-	-	-	-	-	-	-
Backflow	137,172	140,173	145,780	151,611	157,676	163,983	170,542	177,364
Patch Paving	-	-	-	-	-	-	-	-
Pumps & Reservoir	1,121,783	1,121,134	1,164,014	1,208,559	1,254,833	1,302,905	1,352,845	1,404,726
Watershed Forestry	157,423	174,323	181,113	188,170	195,505	203,128	211,052	219,287
North Fork Water Treatment Plant	1,443,673	1,581,002	1,634,332	1,689,505	1,746,587	1,805,645	1,866,749	1,929,971
William DeBruhl Water Treatment Plant	777,264	940,124	974,068	1,009,261	1,045,751	1,083,584	1,122,813	1,163,489
Laboratory	420,251	457,618	474,522	492,063	510,265	529,153	548,753	569,093
Mills River Water Treatment Plant	1,440,086	1,557,440	1,613,178	1,670,958	1,730,858	1,792,955	1,857,333	1,924,076
Water Maintenance - Inventory	139,625	303,479	315,604	328,213	341,327	354,965	369,148	383,898
Indirect Cost Allocation	2,613,890	1,943,083	1,943,083	1,943,083	1,943,083	1,943,083	1,943,083	1,943,083
Total Water O&M	\$ 22,807,720	\$ 23,445,031	\$ 24,573,485	\$ 25,374,340	\$ 26,204,416	\$ 27,064,806	\$ 27,956,641	\$ 28,881,096
<i>Check</i>	-	-	-	-	-	-	-	-
Debt Service and Capital Expenditures								
Existing Debt	\$ 5,701,375	\$ 5,332,497	\$ 5,333,497	\$ 5,328,247	\$ 5,324,747	\$ 5,316,122	\$ 5,316,747	\$ 2,493,247
Parity Debt								
2007 Revenue Bonds	-	-	-	-	-	-	-	-
2015 Revenue Refunding Bonds	5,322,838	5,322,588	5,323,588	5,318,338	5,314,838	5,306,213	5,306,838	2,483,338
2018 BAN	368,627	-	-	-	-	-	-	-
Commercial Paper	-	-	-	-	-	-	-	-
Subordinate Debt								
2011 ARRA Loan	9,910	9,910	9,910	9,910	9,910	9,910	9,910	9,910
Proposed Debt	\$ -	\$ -	\$ 815,710	\$ 2,069,039	\$ 2,497,750	\$ 2,497,750	\$ 2,497,750	\$ 2,497,750
Parity Debt								
Series 2022 Revenue Bonds	-	-	-	419,289	848,000	848,000	848,000	848,000
Series 2021 Refunding Bonds	-	-	815,710	1,649,750	1,649,750	1,649,750	1,649,750	1,649,750
Subordinate Debt								
SRF Loans	-	-	-	-	-	-	-	-
Paygo	\$ -	\$ 4,000,000	\$ 4,000,000	\$ 4,000,000	\$ 4,000,000	\$ 4,000,000	\$ 4,000,000	\$ 4,000,000
Budgeted Capital Outlay	\$ 11,465,140	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Additional Transfer to Capital Reserve	\$ -	\$ -	\$ 1,000,000	\$ 1,500,000	\$ 2,000,000	\$ 3,000,000	\$ 3,500,000	\$ 4,400,000
Total Water Capital	\$ 17,166,515	\$ 9,332,497	\$ 11,149,207	\$ 12,897,286	\$ 13,822,497	\$ 14,813,872	\$ 15,314,497	\$ 13,390,997
Total Water Expenditures	\$ 39,974,235	\$ 32,777,528	\$ 35,722,692	\$ 38,271,626	\$ 40,026,914	\$ 41,878,678	\$ 43,271,138	\$ 42,272,093
System Surplus/ (Deficit)	\$ 1,085,274	\$ (508,263)	\$ 71,514	\$ 172,910	\$ 135,061	\$ 47,867	\$ 61,030	\$ 1,171,995
Debt Service Coverage								
Total Revenues	\$ 41,059,509	\$ 32,269,265	\$ 35,794,205	\$ 38,444,536	\$ 40,161,974	\$ 41,926,546	\$ 43,332,168	\$ 43,444,088
Less: O&M	(22,807,720)	(23,445,031)	(24,573,485)	(25,374,340)	(26,204,416)	(27,064,806)	(27,956,641)	(28,881,096)
Net Revenues Available for D/S	\$ 18,251,788	\$ 8,824,234	\$ 11,220,721	\$ 13,070,196	\$ 13,957,558	\$ 14,861,740	\$ 15,375,528	\$ 14,562,992
Total Debt Service	\$ 5,701,375	\$ 5,332,497	\$ 6,149,207	\$ 7,397,286	\$ 7,822,497	\$ 7,813,872	\$ 7,814,497	\$ 4,990,997
Total Debt Service Coverage	3.20	1.65	1.82	1.77	1.78	1.90	1.97	2.92

	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>
	2021	2022	2023	2024	2025	2026	2027
	<i>Unaudited</i>						
Operating Reserve Fund							
Starting Balance	\$ 25,786,092	\$ 25,277,829	\$ 25,349,342	\$ 25,522,253	\$ 25,657,313	\$ 25,705,181	\$ 25,766,211
Surplus/Deficit	(508,263)	71,514	172,910	135,061	47,867	61,030	1,171,995
Transfer to Capital Projects							
Ending Balance	\$ 25,277,829	\$ 25,349,342	\$ 25,522,253	\$ 25,657,313	\$ 25,705,181	\$ 25,766,211	\$ 26,938,206
<i>Percent Change</i>	-2.0%	0.3%	0.7%	0.5%	0.2%	0.2%	4.5%
Days O&M							
Target: 365	\$ 21,501,948	\$ 22,630,402	\$ 23,431,257	\$ 24,261,333	\$ 25,121,723	\$ 26,013,558	\$ 26,938,013
<i>Delta to Target</i>	\$ 3,775,881	\$ 2,718,941	\$ 2,090,996	\$ 1,395,980	\$ 583,458	\$ (247,346)	\$ 193
Days Cash on Hand	429.1	408.9	397.6	386.0	373.5	361.5	365.0
Water Capital Projects Fund							
Starting Balance	\$ 32,556,070	\$ 35,937,981	\$ 27,873,461	\$ 21,995,961	\$ 16,095,961	\$ 11,545,961	\$ 7,533,861
Transfer from BAN Refunding	10,000,000						
Transfer from Operating Reserve							
Additional Transfer to Capital Reserve		1,000,000	1,500,000	2,000,000	3,000,000	3,500,000	4,400,000
Transfers Out for CIP	(260,696)	(9,064,520)	(7,377,500)	(7,900,000)	(7,550,000)	(7,512,100)	(7,512,100)
Ending Balance	\$ 42,295,374	\$ 27,873,461	\$ 21,995,961	\$ 16,095,961	\$ 11,545,961	\$ 7,533,861	\$ 4,421,760
<i>Percent Change</i>		-34.1%	-21.1%	-26.8%	-28.3%	-34.7%	-41.3%
Water Capital Reserve Fund							
Starting Balance	\$ 2,562,019	\$ 2,562,019	\$ 3,562,019	\$ 4,562,019	\$ 5,562,019	\$ 6,562,019	\$ 7,562,019
SDF Revenues		1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Ending Balance	\$ 2,562,019	\$ 3,562,019	\$ 4,562,019	\$ 5,562,019	\$ 6,562,019	\$ 7,562,019	\$ 8,562,019
<i>Percent Change</i>		39.0%	28.1%	21.9%	18.0%	15.2%	13.2%
Combined Capital Reserve Balances	\$ 44,857,393	\$ 31,435,480	\$ 26,557,980	\$ 21,657,980	\$ 18,107,980	\$ 15,095,880	\$ 12,983,779
Target	\$ 7,000,000	\$ 7,000,000	\$ 7,000,000	\$ 7,000,000	\$ 7,000,000	\$ 7,000,000	\$ 7,000,000
<i>Delta to Target</i>	\$ 37,857,393	\$ 24,435,480	\$ 19,557,980	\$ 14,657,980	\$ 11,107,980	\$ 8,095,880	\$ 5,983,779

Water & Sewer Customer Impacts

Bimonthly Water Bill Examples:

Usage (CCF)

	2020	2021	2022	2023	2024	2025	2026	2027
Commercial - Low Volume	12							
Minimum Charge (5/8" Meter)	\$ 6.34	\$ 6.34	\$ 9.78	\$ 11.10	\$ 12.33	\$ 12.51	\$ 12.86	\$ 13.07
Capital Charge	8.52	-	-	-	-	-	-	-
Volumetric Charge	42.72	42.72	45.36	48.48	50.40	53.16	55.20	55.20
<i>Total</i>	\$ 57.58	\$ 49.06	\$ 55.14	\$ 59.58	\$ 62.73	\$ 65.67	\$ 68.06	\$ 68.27
		-14.8%	12.4%	8.1%	5.3%	4.7%	3.6%	0.3%
Commercial - Medium Volume	30							
Minimum Charge (2" Meter)	\$ 6.34	\$ 6.34	\$ 69.49	\$ 80.05	\$ 89.89	\$ 91.33	\$ 93.01	\$ 93.22
Capital Charge	341.00	-	-	-	-	-	-	-
Volumetric Charge	106.80	106.80	113.40	121.20	126.00	132.90	138.00	138.00
<i>Total</i>	\$ 454.14	\$ 113.14	\$ 182.89	\$ 201.25	\$ 215.89	\$ 224.23	\$ 231.01	\$ 231.22
		-75.1%	61.6%	10.0%	7.3%	3.9%	3.0%	0.1%
Commercial - High Volume	50							
Minimum Charge (4" Meter)	\$ 6.34	\$ 6.34	\$ 214.50	\$ 247.50	\$ 278.25	\$ 282.75	\$ 287.66	\$ 287.87
Capital Charge	1,875.54	-	-	-	-	-	-	-
Volumetric Charge	178.00	178.00	189.00	202.00	210.00	221.50	230.00	230.00
<i>Total</i>	\$ 2,059.88	\$ 184.34	\$ 403.50	\$ 449.50	\$ 488.25	\$ 504.25	\$ 517.66	\$ 517.87
		-91.1%	118.9%	11.4%	8.6%	3.3%	2.7%	0.0%
Manufacturing - Low Volume	40							
Minimum Charge (4" Meter)	\$ 6.34	\$ 6.34	\$ 214.50	\$ 247.50	\$ 278.25	\$ 282.75	\$ 287.66	\$ 287.87
Capital Charge	1,875.54	-	-	-	-	-	-	-
Volumetric Charge	142.40	142.40	151.20	161.60	168.00	177.20	184.00	184.00
<i>Total</i>	\$ 2,024.28	\$ 148.74	\$ 365.70	\$ 409.10	\$ 446.25	\$ 459.95	\$ 471.66	\$ 471.87
		-92.7%	145.9%	11.9%	9.1%	3.1%	2.5%	0.0%
Manufacturing - Medium Volume	60							
Minimum Charge (6" Meter)	\$ 6.34	\$ 6.34	\$ 427.75	\$ 493.75	\$ 555.25	\$ 564.25	\$ 573.91	\$ 574.12
Capital Charge	2,411.42	-	-	-	-	-	-	-
Volumetric Charge	213.60	213.60	226.80	242.40	252.00	265.80	276.00	276.00
<i>Total</i>	\$ 2,631.36	\$ 219.94	\$ 654.55	\$ 736.15	\$ 807.25	\$ 830.05	\$ 849.91	\$ 850.12
		-91.6%	197.6%	12.5%	9.7%	2.8%	2.4%	0.0%
Manufacturing - High Volume	80							
Minimum Charge (8" Meter)	\$ 6.34	\$ 6.34	\$ 683.65	\$ 789.25	\$ 887.65	\$ 902.05	\$ 917.41	\$ 917.62
Capital Charge	2,947.28	-	-	-	-	-	-	-
Volumetric Charge	284.80	284.80	302.40	323.20	336.00	354.40	368.00	368.00
<i>Total</i>	\$ 3,238.42	\$ 291.14	\$ 986.05	\$ 1,112.45	\$ 1,223.65	\$ 1,256.45	\$ 1,285.41	\$ 1,285.62
		-91.0%	238.7%	12.8%	10.0%	2.7%	2.3%	0.0%