

CWSNC W-354 Sub 398 - Carteret FMV Bill Analysis
Average Residential Bill - CWSNC Uniform Water

W-354, Sub 398 - Carteret FMV
Prepared by Matthew Schellinger

	Sub 384 Current Rates	Year 4 Revenue Requirement Carteret Incorporated into Sub 384 Uniform Water Rates	
Fixed	\$ 24.53	24.93	
Volumetric per 1,000 G	\$ 11.71	11.92	
Average Usage (Gals)	4000	4000	
Avg Monthly Bill	\$ 71.37	\$ 72.61	
Increase in Average Bills			1.74%

Note: Assumed no customer growth in Carteret over next four years.

Line No.	Item		Year 1	Year 2	Year 3	Year 4
1	Opening Plant		\$9,675,000	\$9,481,500	\$9,288,000	\$9,094,500
2	Average accumulated depreciation:					
3	Depreciation rate					
4	Depreciation on Rate Base	2.00%	(193,500)	(193,500)	(193,500)	(193,500)
5	Cumulative ADIT	4.00%	(44,505)	(89,010)	(133,515)	(178,020)
6	Net Rate Base		9,436,995	9,198,990	8,960,985	8,722,980
7	Pre tax rate of return	Per Sub 384	8.542%	8.542%	8.542%	8.542%
8	Return on plant in service		806,108	785,778	765,447	745,117
9	Annual depreciation expense		193,500	193,500	193,500	193,500
	Incremental O&M Expenses		426,707	426,707	426,707	426,707
10	Revenue requirement before GRT		1,426,315	1,405,985	1,385,654	1,365,324
11	GRT gross up factor		99.86%	99.86%	99.86%	99.86%
12	Annual revenue requirement		\$1,428,315	\$1,407,956	\$1,387,597	\$1,367,238

Depreciation Expense (2%)	(193,500)	(193,500)	(193,500)	(193,500)
MACRS Depreciation (4%)	(387,000)	(387,000)	(387,000)	(387,000)
Tax Rate	23%	23%	23%	23%
ADIT	(44,505)	(44,505)	(44,505)	(44,505)
Regulatory Rate Base	\$9,481,500	\$9,288,000	\$9,094,500	\$8,901,000
Tax Rate Base	\$9,288,000	\$8,901,000	\$8,514,000	\$8,127,000
Timing Differences	(\$193,500)	(\$387,000)	(\$580,500)	(\$774,000)
Tax Rate	23%	23%	23%	23%
Cumulative ADIT	(\$44,505)	(\$89,010)	(\$133,515)	(\$178,020)

CWSNC Revenue Requirement		3,342.59					
Meter Size	Customers	Usage	Sub 384 Fixed	Sub 384 Vol	Sub 384 Revenue	Sub 384 Avg Bill	
3/4"		1251	50,178,934	\$ 24.53	\$ 11.71	955,839.68	\$ 63.67
1"		22	882,443	\$ 61.33	\$ 11.71	26,523.21	\$ 61.33
2"		3	120,333	\$ 196.24	\$ 11.71	8,473.74	\$ 196.24
4"		1	40,111	\$ 613.25	\$ 11.71	7,828.70	\$ 613.25
						998,665.33	
						CWSNC Rev Req:	1,367,238.35
						Revenue Deficiency per CWSNC:	(368,573.02)

Total deductions	16,994,116	Sub 384 Final Order
depreciation	(3,432,026)	
amortization of CIAC	721,315	
amortization of PAA	115,247	
amortization of ITC	326	
franchise taxes	(71,356)	
property taxes	(214,840)	
payroll taxes	(273,285)	
regulatory fee	(28,447)	
deferred income tax	26,375	
state income tax	(104,080)	
federal income tax	(852,413)	
Additional Non Incremental Expenses:		
Purchased Water	(1,541,632)	Carteret is not a PW System
Office Supplies	(50,216)	Leave Printing/Credit Card Fees
Salaries and Wages	(3,526,923)	Majority of Salaries is not Incremental, added coverage for headcount below
Captive	275,825	Majority of Captive not incremental to Carteret
Pension and Other Benefits	(726,368)	Majority of Benefits is not incremental, added direct costs below
Rate Case Expense	(178,383)	RCE is not incremental to Carteret
Rent	(137,657)	Rent is not incremental to Carteret Acquisition
Office Utilities	(207,887)	Office Utilities is not incremental to Carteret
Meter Reading	(214,533)	Carteret has AMR customers, will only require drive by
Miscellaneous	(2,581,151)	Misc. Expenses including Corporate Allocations is not incremental to Carteret, this would be representative of a reallocation and reduction to others
Incremental O&M Expenses	3,992,007	
customer counts	29,317	Per Feasel
O&M per customer	\$ 136.17	
Carteret Customers	1277	
O&M Revenue Req per CWSNC	173,885.22	Based on Sub 384 Order pg 32
Add: Corporate Allocations	109,822.00	Corporate Allocations - \$86/cust
		2 FTE @ 55,000, 30% benefits, 10% payroll taxes, -10% captive
Add: Salaries, Benefits of 2 FTE	143,000.00	
Incremental Rev Requirement for Carteret	\$ 426,707.22	

	Cust Billed	Billed Gallons	Avg/Cust
7/1/2020	1244	4,951,500	3,980.31
8/31/2020	1257	4,282,700	3,407.08
9/30/2020	1248	4,287,400	3,435.42
10/31/2020	1255	4,356,200	3,471.08
11/30/2020	1255	3,673,500	2,927.09
12/31/2020	1254	3,815,300	3,042.50
1/31/2021	1263	4,478,600	3,546.00
2/28/2021	1278	3,769,100	2,949.22
3/31/2021	1268	3,814,700	3,008.44
4/30/2021	1269	3,641,800	2,869.82
5/31/2021	1275	4,673,704	3,665.65
6/30/2021	1277	4,872,309	3,815.43
	15143	50,616,813	3,342.59

CWSNC LATE-FILED EXHIBIT 1
W-354 SUB 398

From Junis Attachment 3a

Billing Analysis

CWSNC Uniform Service Area

End of Period Revenue at Present Rates

Water

Residential						
Charge Type	EOP Customers	EOP Bills	EOP Usage	Base Rate	Usage Rate	Total Revenue
Unmetered	-	0		\$58.54		\$0
5/8"	26,144	313,728		\$28.92		\$9,073,014
3/4"	1,897	22,764		\$28.92		\$658,335
1"	101	1,212		\$72.30		\$87,628
1.5"	35	420		\$144.60		\$60,732
2"	23	276		\$231.36		\$63,855
3"	-	0		\$433.80		\$0
4"	-	0		\$723.00		\$0
6"	-	0		\$1,446.00		\$0
8"	-	0		\$2,313.60		\$0
Volumetric - Uniform Water			1,017,600,237		\$8.27	\$8,415,554
Volumetric - Irrigation					\$4.23	\$0
Purchased Water:						
Carolina Forest	Montgomery County		7,597,431		\$3.19	\$24,236
Eastgate	Fayetteville PWC		2,633,000		\$8.27	\$21,775
Tanglewood South	Fayetteville PWC		3,992,540		\$8.27	\$33,018
High Vista Estates	Hendersonville		11,864,109		\$4.72	\$55,999
Riverbend	Town of Franklin		6,081,974		\$8.10	\$49,264
Riverpointe	Charlotte Water		14,760,478		\$7.07	\$104,357
Whispering Pines	Town of Southern Pines		91,294,761		\$3.52	\$321,358
White Oak/Lee Forest/Winston	Johnston County		32,715,395		\$3.02	\$98,800
Willowbrook	Johnston County		5,669,326		\$8.27	\$46,885
Woodrun	Montgomery County		19,212,796		\$3.19	\$61,289
Yorktown	City of Winston Salem		3,596,470		\$5.79	\$20,824
Zemosas Acres	City of Concord		11,972,873		\$5.52	\$66,090
Carolina Trace	City of Sanford		63,653,716		\$2.21	\$140,675
Commercial						

Billing Analysis

Unmetered	16	192		\$58.54	\$11,240
5/8"	314	3,768		\$28.92	\$108,971
3/4"	34	408		\$28.92	\$11,799
1"	77	924		\$72.30	\$66,805
1.5"	32	384		\$144.60	\$55,526
2"	76	912		\$231.36	\$211,000
3"	5	60		\$433.80	\$26,028
4"	3	36		\$723.00	\$26,028
6"	2	24		\$1,446.00	\$34,704
8"	-	0		\$2,313.60	\$0
Volumetric - Uniform Water			60,836,393	\$8.27	\$503,117
Purchased Water:					
Carolina Forest	Montgomery County		129,865	\$3.19	\$414
Eastgate	Fayetteville PWC		4,610	\$8.27	\$38
Tanglewood South	Fayetteville PWC				
High Vista Estates	Hendersonville		258,837	\$4.72	\$1,222
Riverbend	Town of Franklin			\$8.10	\$0
Riverpointe	Charlotte Water		372,620	\$7.07	\$2,634
Whispering Pines	Town of Southern Pines		4,934,450	\$3.52	\$17,369
White Oak/Lee Forest/Winston	Johnston County		433,700	\$3.02	\$1,310
Willowbrook	Johnston County		141,650	\$8.27	\$1,171
Woodrun	Montgomery County		491,840	\$3.19	\$1,569
Yorktown	City of Winston Salem			\$5.79	\$0
Zemosa Acres	City of Concord		183,858	\$5.52	\$1,015
Carolina Trace	City of Sanford		5,940,960	\$2.21	\$13,130
Availability - Connestee Falls	375	4,500		\$5.30	\$23,850
Availability - Fairfield Sapphire Valley	716	8,592		\$10.05	\$86,350
Availability - Carolina Forest/Woodrun	1,341	2,682		\$27.15	\$72,816
Availability - Linville Ridge	41	492		\$13.60	\$6,691
WSIC/SSIC Revenue Eff 10/01/21					\$182,157
TOTAL					\$20,870,641

Billing Analysis

End of Period Revenue at Proposed Rates

Water

Residential						
Charge Type	EOP Customers	EOP Bills	EOP Usage	Base Rate	Usage Rate	Total Revenue
Unmetered	-	0		\$69.94		\$0
5/8"	26,144	313,728		\$24.93		\$7,821,239
3/4"	1,897	22,764		\$24.93		\$567,507
1"	101	1,212		\$62.33		\$75,538
1.5"	35	420		\$124.65		\$52,353
2"	23	276		\$199.44		\$55,045
3"	-	0		\$373.95		\$0
4"	-	0		\$623.25		\$0
6"	-	0		\$1,246.50		\$0
8"	-	0		\$1,994.40		\$0
Volumetric - Uniform Water			1,017,600,237		\$11.92	\$12,129,795
Volumetric - Irrigation			0		\$6.10	\$0
Purchased Water:						
Carolina Forest	Montgomery County		7,597,431		\$3.19	\$24,236
Eastgate	Fayetteville PWC		2,633,000		\$5.55	\$14,613
Tanglewood South	Fayetteville PWC		3,992,540		\$5.55	\$22,159
High Vista Estates	Hendersonville		11,864,109		\$4.72	\$55,999
Riverbend	Town of Franklin		6,081,974		\$8.10	\$49,264
Riverpointe	Charlotte Water		14,760,478		\$7.07	\$104,357
Whispering Pines	Town of Southern Pines		91,294,761		\$3.52	\$321,358
White Oak/Lee Forest/Winston	Johnston County		32,715,395		\$3.02	\$98,800
Willowbrook	Johnston County		5,669,326		\$3.02	\$17,121
Woodrun	Montgomery County		19,212,796		\$3.19	\$61,289
Yorktown	City of Winston Salem		3,596,470		\$5.79	\$20,824
Zemosa Acres	City of Concord		11,972,873		\$5.52	\$66,090
Carolina Trace	City of Sanford		63,653,716		\$2.21	\$140,675
Commercial						
Unmetered	16	192		\$69.94		\$13,428
5/8"	314	3,768		\$24.93		\$93,936
3/4"	34	408		\$24.93		\$10,171
1"	77	924		\$62.33		\$57,588

Billing Analysis

1.5"		32	384	\$124.65	\$47,866
2"		76	912	\$199.44	\$181,889
3"		5	60	\$373.95	\$22,437
4"		3	36	\$623.25	\$22,437
6"		2	24	\$1,246.50	\$29,916
8"		0	0	\$1,994.40	\$0
Volumetric - Uniform Water			60,836,393	\$11.92	\$725,170
Purchased Water:					
Carolina Forest	Montgomery County		129,865	\$3.19	\$414
Eastgate	Fayetteville PWC		4,610	\$5.55	\$26
Tanglewood South	Fayetteville PWC		0	\$5.55	\$0
High Vista Estates	Hendersonville		258,837	\$4.72	\$1,222
Riverbend	Town of Franklin		0	\$8.10	\$0
Riverpointe	Charlotte Water		372,620	\$7.07	\$2,634
Whispering Pines	Town of Southern Pines		4,934,450	\$3.52	\$17,369
White Oak/Lee Forest/Winston	Johnston County		433,700	\$3.02	\$1,310
Willowbrook	Johnston County		141,650	\$3.02	\$428
Woodrun	Montgomery County		491,840	\$3.19	\$1,569
Yorktown	City of Winston Salem		0	\$5.79	\$0
Zemoso Acres	City of Concord		183,858	\$5.52	\$1,015
Carolina Trace	City of Sanford		5,940,960	\$2.21	\$13,130
Availability - Connetsee Falls		375	4,500	\$5.88	\$26,457
Availability - Fairfield Sapphire Valley		716	8,592	\$11.15	\$95,787
Availability - Carolina Forest/Woodrun		1,341	2,682	\$30.12	\$80,775
Availability - Linville Ridge		41	492	\$15.09	\$7,422
WSIC/SSIC Revenue Eff 10/01/21					\$0
TOTAL					\$23,152,656

Billing Analysis

CWSNC Uniform Service Area

End of Period Revenue at Present Rates

Sewer

Residential							
	Charge Type	EOP Customers	EOP Bills	EOP Usage	Base Rate	Usage Rate	Total Revenue
Flat		2,884	34,608		\$73.73		\$2,551,648
Base Charge		11,323	135,876		\$58.91		\$8,004,455
Collection Only		738	8,856		\$41.24		\$365,221
Volumetric - Uniform Sewer				478,169,360		\$4.59	\$2,194,797
Purchased Sewer Treatment:							
White Oak/Lee Forest/Winston				27,451,855		\$6.45	\$177,064
Kings Grant				7,829,200		\$4.39	\$34,370
College Park				2,408,770		\$7.77	\$18,716
Mt. Carmel		379	4,548	15,305,857	\$48.73	\$6.51	\$321,265
Fairfield Mountain		404	4,848	12,111,640	\$131.24		\$636,252
The Ridges		46	552	1,500,300	\$59.66		\$32,932
Commercial							
Flat		79	948		\$73.73		\$69,896
5/8"		496	5,952		\$58.91		\$350,632
3/4"		4	48		\$58.91		\$2,828
1"		33	396		\$147.28		\$58,323
1.5"		16	192		\$294.55		\$56,554
2"		54	648		\$471.28		\$305,389
3"		4	48		\$883.65		\$42,415
4"		1	12		\$1,472.75		\$17,673
6"		2	24		\$2,945.50		\$70,692
8"		1	12		\$4,712.80		\$56,554
Collection Only		0	-		\$41.24		\$0
Volumetric - Uniform Sewer				85,317,472		\$4.59	\$391,607
Fairfield Mountain - Base		0	0		\$131.24		\$0
Dwelling Unit - Small		6	72	188,360	\$103.00	\$13.93	\$10,040
Dwelling Unit - Medium		11	132	1,256,203	\$182.00	\$13.93	\$41,523

Billing Analysis

Dwelling Unit - Large	3	36	350,744	\$286.00	\$13.93	\$15,182
The Ridges - < 1"	1	12		\$59.66		\$716
The Ridges - < 2"	1	12		\$188.60		\$2,263
Regalwood/White Oak - Flat, Included Above	0	0		\$73.73		\$0
White Oak School	1	12		\$2,187.33		\$26,248
White Oak Daycare	1	12		\$280.41		\$3,365
White Oak Pantry	0	0		\$119.49		\$0
Lancaster Highway Daycare	1	12		\$901.32		\$10,816
Availability - Fairfield Sapphire Valley	88	1056		\$10.20		\$10,771
Availability - Connetsee Falls	177	2124		\$5.75		\$12,213
WSIC/SSIC Revenue Eff 10/01/21						\$128,729
TOTAL						\$16,021,150

Billing Analysis

End of Period Revenue at Proposed Rates

Sewer

Residential		EOP Customers	EOP Bills	EOP Usage	Base Rate	Usage Rate	Total Revenue
Charge Type							
Flat		2,884	34,608		\$85.12		\$2,945,833
Base Charge		11,323	135,876		\$41.03		\$5,574,992
Collection Only		738	8,856		\$28.72		\$254,344
Volumetric - Uniform Sewer				478,169,360		\$11.69	\$5,589,800
Purchased Sewer Treatment:							
White Oak/Lee Forest/Winston				27,451,855		\$6.45	\$177,064
Kings Grant				7,829,200		\$4.39	\$34,370
College Park				2,408,770		\$7.77	\$18,716
Mt. Carmel		379	4,548	15,305,857	\$36.21	\$6.51	\$264,324
Fairfield Mountain		404	4,848	12,111,640	\$118.72		\$575,555
The Ridges		46	552	1,500,300	\$45.67		\$25,210
Commercial							
Flat		79	948		\$85.12		\$80,694
5/8"		496	5,952		\$41.03		\$244,211
3/4"		4	48		\$41.03		\$1,969
1"		33	396		\$102.58		\$40,620
1.5"		16	192		\$205.15		\$39,389
2"		54	648		\$328.24		\$212,700
3"		4	48		\$615.45		\$29,542
4"		1	12		\$1,025.75		\$12,309
6"		2	24		\$2,051.50		\$49,236
8"		1	12		\$3,282.40		\$39,389
Collection Only		0	-		\$28.72		\$0
Volumetric - Uniform Sewer				85,317,472		\$11.69	\$997,361
Fairfield Mountain - Base		0	0	0	\$118.72		\$0
Dwelling Unit - Small		6	72	188,360	\$103.00	\$13.93	\$10,040
Dwelling Unit - Medium		11	132	1,256,203	\$182.00	\$13.93	\$41,523
Dwelling Unit - Large		3	36	350,744	\$286.00	\$13.93	\$15,182
The Ridges - < 1"		1	12		\$45.67		\$548
The Ridges - < 2"		1	12		\$164.32		\$1,972

Billing Analysis

Regalwood/White Oak	0	0	\$85.12	\$0
White Oak School	1	12	\$2,525.23	\$30,303
White Oak Daycare	1	12	\$323.73	\$3,885
White Oak Pantry	0	0	\$177.51	\$0
Lancaster Highway Daycare	1	12	\$1,302.34	\$15,628
Availability - Fairfield Sapphire Valley	88	1056	\$11.05	\$11,665
Availability - Connetsee Falls	177	2124	\$6.23	\$13,227
WSIC/SSIC Revenue Eff 10/01/21				\$0
TOTAL				\$17,351,599

Billing Analysis

Bradfield Farms/ Fairfield Harbor/Treasure Cove Service Area

End of Period Revenue at Present Rates

Water

Residential		EOP Customers	EOP Bills	EOP Usage	Base Rate	Usage Rate	Total Revenue
Charge Type							
5/8" - 3/4"		3,272	39,264		\$17.30		\$679,267
1"		2	24		\$43.25		\$1,038
1.5"		0	0		\$86.50		\$0
2"		1	12		\$138.40		\$1,661
Volume - BF/FH/TC/PU				162,638,417		\$4.20	\$683,081
Commercial		EOP Customers	EOP Bills	EOP Usage	Base Rate	Usage Rate	Total Revenue
Charge Type							
5/8" - 3/4"		19	228		\$17.30		\$3,944
1"		5	60		\$43.25		\$2,595
1.5"		5	60		\$86.50		\$5,190
2"		2	24		\$138.40		\$3,322
Volume - BF/FH/TC/PU				2,797,241		\$4.20	\$11,748
Availability - Fairfield Harbour		901	10,812		\$3.55		\$38,383
WSIC/SSIC Revenue Eff 10/01/21							\$2,574
TOTAL							\$1,432,803

End of Period Revenue at Proposed Rates

Water

Residential		EOP Customers	EOP Bills	EOP Usage	Base Rate	Usage Rate	Total Revenue
Charge Type							
5/8" - 3/4"		3,272	39,264		\$17.08		\$670,629
1"		2	24		\$42.70		\$1,025
1.5"		0	0		\$85.40		\$0
2"		1	12		\$136.64		\$1,640
Volume - BF/FH/TC/PU				162,638,417		\$6.68	\$1,086,425
Commercial		EOP Customers	EOP Bills	EOP Usage	Base Rate	Usage Rate	Total Revenue
Charge Type							

Billing Analysis

5/8" - 3/4"	19	228		\$17.08		\$3,894
1"	5	60		\$42.70		\$2,562
1.5"	5	60		\$85.40		\$5,124
2"	2	24		\$136.64		\$3,279
Volume - BF/FH/TC/PU			2,797,241		\$6.68	\$18,686
Availability - Fairfield Harbour	901	10,812		\$4.57		\$49,359
WSIC/SSIC Revenue Eff 10/01/21						\$0
TOTAL						\$1,842,622

Billing Analysis

Bradfield Farms/ Fairfield Harbor/Treasure Cove Service Area

End of Period Revenue at Present Rates

Sewer							
	Residential						
	Charge Type	EOP Customers	EOP Bills	EOP Usage	Base Rate	Usage Rate	Total Revenue
Flat		2,956	35,472		\$53.91		\$1,912,296
Bulk Sewer		159	1,908		\$53.91		\$102,860
Beaver Farms		7.5	90		\$53.91		\$4,852
Apartments		320	3,840		\$53.91		\$207,014
	Commercial						
5/8"		11	132		\$44.62		\$5,890
3/4"		3	36		\$44.62		\$1,606
1"		1	12		\$111.55		\$1,339
1.5"		4	48		\$223.10		\$10,709
2"		0	-		\$356.96		\$0
Volume - Fairfield Harbour				1,273,890		\$2.25	\$2,866
Availability - Fairfield Harbour		902	10,824		\$2.85		\$30,848
WSIC/SSIC Revenue Eff 10/01/21							\$15,734
TOTAL							\$2,296,014

End of Period Revenue at Proposed Rates

Sewer							
	Residential						
	Charge Type	EOP Customers	EOP Bills	EOP Usage	Base Rate	Usage Rate	Total Revenue
Flat		2,956	35,472		\$61.58		\$2,184,366
Bulk Sewer		159	1,908		\$61.58		\$117,495
Beaver Farms		7.5	90		\$61.58		\$5,542
Apartments		320	3,840		\$61.58		\$236,467
	Commercial						
5/8"		11	132		\$50.97		\$6,728
3/4"		3	36		\$50.97		\$1,835

Billing Analysis

1"	1	12.00		\$127.42		\$1,529
1.5"	4	48		\$254.84		\$12,232
2"	0	0		\$407.75		\$0
Volume - Fairfield Harbour			1,273,890		\$2.65	\$3,376
Availability - Fairfield Harbour	902	10,824		\$3.23		\$34,992
WSIC/SSIC Revenue Eff 10/01/21						\$0
TOTAL						\$2,604,561