

Utility Discussion Materials

Town of Pittsboro, North Carolina

PITTSBORO
North Carolina

November 10, 2016

- This information is a follow up to the Discussion Materials presented to Town Council on October 24th.
 - The assumptions utilized in this presentation are based off of the assumptions found in the October 24th presentation.

- Chatham Park has indicated a willingness to participate in certain fixed cost components associated with obtaining additional Wastewater Capacity. These components include:
 - Sanford wastewater capacity charge to partially reimburse Sanford for certain capital improvements to the Sanford Water Reclamation Facility.

 - State Revolving Fund Loan Debt Service related to the capital cost of constructing the force main to Sanford and the conversion of the Town’s existing Wastewater Treatment Plant to an equalization basin.

- To provide perspective, Davenport has analyzed a series of scenarios that assume the following Chatham Park allocations of wastewater treatment capacity costs. In exchange for this participation, Chatham Park would be guaranteed wastewater treatment equal to their allocable share of the costs.
 - Base Case: 0.00% Share (0.00 MGD Guaranteed)
 - Alternative 1: 25.00% Share (0.50 MGD Guaranteed)
 - Alternative 2: 50.00% Share (1.00 MGD Guaranteed)
 - Alternative 3: 62.50% Share (1.25 MGD Guaranteed)

Sanford Capacity Charge

Fixed Annual Payments

Capacity Charge

- Pittsboro shall pay to Sanford a Capacity Charge to partially reimburse Sanford for certain capital improvements to the Sanford Water Reclamation Facility constructed prior to the Effective Date of this Agreement. Pittsboro agrees to pay a proportionate share of said costs calculated at 16.67% of the principal balance of Sanford's long term bond indebtedness as of June 30, 2016 amortized over a term of not more than 25 years at 3.51% payable as follows:
 - In equal annual installments beginning on the first anniversary of the connection of the Pittsboro force main to the Sanford Water Reclamation Facility; or
 - As a "Unit Price" for each 1,000 U.S. gallons of Wastewater transmitted by Pittsboro to Sanford's Water Reclamation Facility. The unit price shall be calculated so as to repay the capacity charge over a term of 25 years with interest as aforesaid upon the projected flow on a monthly basis as billed by Sanford.
 - The Capacity Charge may be prepaid in whole or in part at any time by Pittsboro.
- For purposes of calculating the Capacity Charge in this analysis, Option 1: Fixed Annual Payments is utilized.

Capacity Charge Calculation – Fixed Annual Payments

A	B	C	D	E
Fiscal Year	Principal	Interest	Total Payment	Principal Balance
2019	\$ -	\$ -	\$ -	\$ 7,357,494
2020	188,645	258,248	446,893	7,168,849
2021	195,267	251,627	446,893	6,973,582
2022	202,121	244,773	446,893	6,771,461
2023	209,215	237,678	446,893	6,562,246
2024	216,559	230,335	446,893	6,345,687
2025	224,160	222,734	446,893	6,121,527
2026	232,028	214,866	446,893	5,889,499
2027	240,172	206,721	446,893	5,649,327
2028	248,602	198,291	446,893	5,400,725
2029	257,328	189,565	446,893	5,143,397
2030	266,360	180,533	446,893	4,877,037
2031	275,709	171,184	446,893	4,601,328
2032	285,387	161,507	446,893	4,315,941
2033	295,404	151,490	446,893	4,020,537
2034	305,773	141,121	446,893	3,714,764
2035	316,505	130,388	446,893	3,398,259
2036	327,615	119,279	446,893	3,070,644
2037	339,114	107,780	446,893	2,731,530
2038	351,017	95,877	446,893	2,380,514
2039	363,337	83,556	446,893	2,017,176
2040	376,091	70,803	446,893	1,641,086
2041	389,291	57,602	446,893	1,251,794
2042	402,955	43,938	446,893	848,839
2043	417,099	29,794	446,893	431,739
2044	431,739	15,154	446,893	-
Total	\$ 7,357,494	\$ 3,814,843	\$ 11,172,337	

Note: Assumes 25 level payments at 3.51%.

Sanford Capacity Charge – Allocation Breakdown

Fixed Annual Payments

A Fiscal Year	B Base Case		D Alternative 1		F Alternative 2		H Alternative 3	
	C Town Share (100%)	CP Share (0%)	Town Share (75%)	E CP Share (25%)	Town Share (50%)	G CP Share (50%)	Town Share (37.5%)	I CP Share (62.5%)
2019	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2020	446,893	-	335,170	111,723	223,447	223,447	167,585	279,308
2021	446,893	-	335,170	111,723	223,447	223,447	167,585	279,308
2022	446,893	-	335,170	111,723	223,447	223,447	167,585	279,308
2023	446,893	-	335,170	111,723	223,447	223,447	167,585	279,308
2024	446,893	-	335,170	111,723	223,447	223,447	167,585	279,308
2025	446,893	-	335,170	111,723	223,447	223,447	167,585	279,308
2026	446,893	-	335,170	111,723	223,447	223,447	167,585	279,308
2027	446,893	-	335,170	111,723	223,447	223,447	167,585	279,308
2028	446,893	-	335,170	111,723	223,447	223,447	167,585	279,308
2029	446,893	-	335,170	111,723	223,447	223,447	167,585	279,308
2030	446,893	-	335,170	111,723	223,447	223,447	167,585	279,308
2031	446,893	-	335,170	111,723	223,447	223,447	167,585	279,308
2032	446,893	-	335,170	111,723	223,447	223,447	167,585	279,308
2033	446,893	-	335,170	111,723	223,447	223,447	167,585	279,308
2034	446,893	-	335,170	111,723	223,447	223,447	167,585	279,308
2035	446,893	-	335,170	111,723	223,447	223,447	167,585	279,308
2036	446,893	-	335,170	111,723	223,447	223,447	167,585	279,308
2037	446,893	-	335,170	111,723	223,447	223,447	167,585	279,308
2038	446,893	-	335,170	111,723	223,447	223,447	167,585	279,308
2039	446,893	-	335,170	111,723	223,447	223,447	167,585	279,308
2040	446,893	-	335,170	111,723	223,447	223,447	167,585	279,308
2041	446,893	-	335,170	111,723	223,447	223,447	167,585	279,308
2042	446,893	-	335,170	111,723	223,447	223,447	167,585	279,308
2043	446,893	-	335,170	111,723	223,447	223,447	167,585	279,308
2044	446,893	-	335,170	111,723	223,447	223,447	167,585	279,308
Total	\$ 11,172,337	\$ -	\$ 8,379,253	\$ 2,793,084	\$ 5,586,168	\$ 5,586,168	\$ 4,189,626	\$ 6,982,711

State Revolving Fund Loan Overview

Overview

- The Town has secured a Letter of Intent to Fund from the Clean Water State Revolving Fund program for a loan with a maximum interest rate of 1.84% and a 20-year final maturity.
- Under the State Revolving Fund loan, principal is repaid on a level basis beginning the May 1 after the placed in service date. Interest is paid each May 1 and November 1 beginning six months after the placed in service date.
- For purposes of this analysis, it is assumed that the Project is completed in May 2019 and the Town makes its first debt service payments in FY 2020.
- A summary of the key assumptions are below:
 - Amount: \$19,669,000
 - Interest Rate: 1.84%
 - Amortization: 20-year Level Principal
 - First Interest: November 1, 2019
 - First Principal: May 1, 2020
 - Final Maturity: May 1, 2039

Estimated Debt Service Payments

Fiscal Year	Principal	Interest	Total
Total	\$ 19,669,000	\$ 3,800,051	\$ 23,469,051
2020	\$ 983,450	\$ 361,910	\$ 1,345,360
2021	983,450	343,814	1,327,264
2022	983,450	325,719	1,309,169
2023	983,450	307,623	1,291,073
2024	983,450	289,528	1,272,978
2025	983,450	271,432	1,254,882
2026	983,450	253,337	1,236,787
2027	983,450	235,241	1,218,691
2028	983,450	217,146	1,200,596
2029	983,450	199,050	1,182,500
2030	983,450	180,955	1,164,405
2031	983,450	162,859	1,146,309
2032	983,450	144,764	1,128,214
2033	983,450	126,668	1,110,118
2034	983,450	108,573	1,092,023
2035	983,450	90,477	1,073,927
2036	983,450	72,382	1,055,832
2037	983,450	54,286	1,037,736
2038	983,450	36,191	1,019,641
2039	983,450	18,095	1,001,545

State Revolving Fund Loan Debt Service – Allocation Breakdown PITTSBORO *North Carolina*

A Fiscal Year	B Base Case		D Alternative 1		F Alternative 2		H Alternative 3	
	C Town Share (100%)	C CP Share (0%)	D Town Share (75%)	E CP Share (25%)	F Town Share (50%)	G CP Share (50%)	H Town Share (37.5%)	I CP Share (62.5%)
2020	\$ 1,345,360	\$ -	\$ 1,009,020	\$ 336,340	\$ 672,680	\$ 672,680	\$ 504,510	\$ 840,850
2021	1,327,264	-	995,448	331,816	663,632	663,632	497,724	829,540
2022	1,309,169	-	981,876	327,292	654,584	654,584	490,938	818,230
2023	1,291,073	-	968,305	322,768	645,537	645,537	484,152	806,921
2024	1,272,978	-	954,733	318,244	636,489	636,489	477,367	795,611
2025	1,254,882	-	941,162	313,721	627,441	627,441	470,581	784,301
2026	1,236,787	-	927,590	309,197	618,393	618,393	463,795	772,992
2027	1,218,691	-	914,018	304,673	609,346	609,346	457,009	761,682
2028	1,200,596	-	900,447	300,149	600,298	600,298	450,223	750,372
2029	1,182,500	-	886,875	295,625	591,250	591,250	443,438	739,063
2030	1,164,405	-	873,304	291,101	582,202	582,202	436,652	727,753
2031	1,146,309	-	859,732	286,577	573,155	573,155	429,866	716,443
2032	1,128,214	-	846,160	282,053	564,107	564,107	423,080	705,134
2033	1,110,118	-	832,589	277,530	555,059	555,059	416,294	693,824
2034	1,092,023	-	819,017	273,006	546,011	546,011	409,509	682,514
2035	1,073,927	-	805,446	268,482	536,964	536,964	402,723	671,205
2036	1,055,832	-	791,874	263,958	527,916	527,916	395,937	659,895
2037	1,037,736	-	778,302	259,434	518,868	518,868	389,151	648,585
2038	1,019,641	-	764,731	254,910	509,820	509,820	382,365	637,276
2039	1,001,545	-	751,159	250,386	500,773	500,773	375,580	625,966
Total	\$ 23,469,051	\$ -	\$ 17,601,788	\$ 5,867,263	\$ 11,734,525	\$ 11,734,525	\$ 8,800,894	\$ 14,668,157

Projected Cost of Service: Modified Alternative 4

Base Case (0% Chatham Park Fixed Participation): Existing Town Limit Flow Only

Fiscal Year	2020	2021	2022	2023	2024	2025
1) Sanford Wastewater Treatment Contract Cost						
2 Treatment Charge per 1,000 Gallons ¹	\$ 1.11	\$ 1.11	\$ 1.11	\$ 1.11	\$ 1.11	\$ 1.11
3 Treatment Charge (\$)	218,529	220,203	221,890	223,589	225,302	227,028
4 Capacity Charge	446,893	446,893	446,893	446,893	446,893	446,893
5 Less: Chatham Park Participation in Capacity Charge - 0%	-	-	-	-	-	-
6 Net Town Sanford Contract Cost	\$ 665,423	\$ 667,097	\$ 668,783	\$ 670,483	\$ 672,195	\$ 673,921
8 2) Forcemain & Equalization Basin Costs						
9 Capital Costs - Revolving Loan Debt Service	\$ 1,345,360	\$ 1,327,264	\$ 1,309,169	\$ 1,291,073	\$ 1,272,978	\$ 1,254,882
10 Less: Chatham Park Participation in SRF Debt Service - 0%	-	-	-	-	-	-
11 Operating Costs ^{2,3}	453,100	466,693	480,694	495,115	509,968	525,267
12 Net Town Forcemain & Equalization Basin Costs	\$ 1,798,460	\$ 1,793,957	\$ 1,789,862	\$ 1,786,188	\$ 1,782,946	\$ 1,780,149
14 3) Existing System Costs						
15 Administrative Costs ²	\$ 222,091	\$ 228,754	\$ 235,616	\$ 242,685	\$ 249,965	\$ 257,464
16 Public Utility Maintenance ²	250,992	258,522	266,278	274,266	282,494	290,969
17 Debt Service	94,651	80,619	80,684	80,718	80,719	80,689
18 Capital Outlay ⁴	18,225	18,225	18,225	18,225	18,225	18,225
19 Total Existing System Costs	\$ 585,959	\$ 586,120	\$ 600,803	\$ 615,894	\$ 631,403	\$ 647,347
21 Grand Total	\$ 3,049,842	\$ 3,047,173	\$ 3,059,449	\$ 3,072,564	\$ 3,086,544	\$ 3,101,418
23 Projected Flow (1,000 Gallons) - Town Limits⁵	197,100	198,610	200,131	201,664	203,209	204,765
25 Cost per 1,000 Gallons	\$ 15.47	\$ 15.34	\$ 15.29	\$ 15.24	\$ 15.19	\$ 15.15

¹ Assumed to be constant at the average Sanford Treatment Charge from FY 2014 - 2016.

² Future Town Wastewater Costs are assumed to grow at 3.00% annually.

³ Certain costs in the Wooten projections may be variable based upon flow. For purposes of this analysis, all costs are assumed to grow at an inflationary rate of 3.00%.

⁴ Capital Outlay is assumed to be held constant at the FY 2017 Budget level.

⁵ Estimated based upon projections provided in the Wooten Report and information from Wooten Staff.

Projected Cost of Service: Modified Alternative 4

Base Case (0% Chatham Park Fixed Participation): Existing Town Limits & ETJ Flow

Fiscal Year	2020	2021	2022	2023	2024	2025
1) Sanford Wastewater Treatment Contract Cost						
2 Treatment Charge per 1,000 Gallons ¹	\$ 1.11	\$ 1.11	\$ 1.11	\$ 1.11	\$ 1.11	\$ 1.11
3 Treatment Charge (\$)	323,666	344,906	367,539	391,658	417,360	444,748
4 Capacity Charge	446,893	446,893	446,893	446,893	446,893	446,893
5 Less: Chatham Park Participation in Capacity Charge - 0%	-	-	-	-	-	-
6 Net Town Sanford Contract Cost	\$ 770,560	\$ 791,799	\$ 814,433	\$ 838,552	\$ 864,253	\$ 891,641
8 2) Forcemain & Equalization Basin Costs						
9 Capital Costs - Revolving Loan Debt Service	\$ 1,345,360	\$ 1,327,264	\$ 1,309,169	\$ 1,291,073	\$ 1,272,978	\$ 1,254,882
10 Less: Chatham Park Participation in SRF Debt Service - 0%	-	-	-	-	-	-
11 Operating Costs ^{2,3}	453,100	466,693	480,694	495,115	509,968	525,267
12 Net Town Forcemain & Equalization Basin Costs	\$ 1,798,460	\$ 1,793,957	\$ 1,789,862	\$ 1,786,188	\$ 1,782,946	\$ 1,780,149
14 3) Existing System Costs						
15 Administrative Costs ²	\$ 222,091	\$ 228,754	\$ 235,616	\$ 242,685	\$ 249,965	\$ 257,464
16 Public Utility Maintenance ²	250,992	258,522	266,278	274,266	282,494	290,969
17 Debt Service	94,651	80,619	80,684	80,718	80,719	80,689
18 Capital Outlay ⁴	18,225	18,225	18,225	18,225	18,225	18,225
19 Total Existing System Costs	\$ 585,959	\$ 586,120	\$ 600,803	\$ 615,894	\$ 631,403	\$ 647,347
21 Grand Total	\$ 3,154,978	\$ 3,171,876	\$ 3,205,098	\$ 3,240,633	\$ 3,278,602	\$ 3,319,137
23 Projected Flow (1,000 Gallons) - Town Limits & ETJ⁵	291,927	311,084	331,498	353,252	376,433	401,135
25 Cost per 1,000 Gallons	\$ 10.81	\$ 10.20	\$ 9.67	\$ 9.17	\$ 8.71	\$ 8.27

¹ Assumed to be constant at the average Sanford Treatment Charge from FY 2014 - 2016.

² Future Town Wastewater Costs are assumed to grow at 3.00% annually.

³ Certain costs in the Wooten projections may be variable based upon flow. For purposes of this analysis, all costs are assumed to grow at an inflationary rate of 3.00%.

⁴ Capital Outlay is assumed to be held constant at the FY 2017 Budget level.

⁵ Estimated based upon projections provided in the Wooten Report and information from Wooten Staff.

Projected Cost of Service: Modified Alternative 4

Base Case (0% Chatham Park Fixed Participation): Existing Town Limits, ETJ, & Chatham Park Flow

Fiscal Year	2020	2021	2022	2023	2024	2025
1) Sanford Wastewater Treatment Contract Cost						
2 Treatment Charge per 1,000 Gallons ¹	\$ 1.11	\$ 1.11	\$ 1.11	\$ 1.11	\$ 1.11	\$ 1.11
3 Treatment Charge (\$)	480,279	546,166	621,091	706,295	803,187	809,368
4 Capacity Charge	446,893	446,893	446,893	446,893	446,893	446,893
5 Less: Chatham Park Participation in Capacity Charge - 0%	-	-	-	-	-	-
6 Net Town Sanford Contract Cost	\$ 927,172	\$ 993,059	\$ 1,067,984	\$ 1,153,188	\$ 1,250,081	\$ 1,256,261
8 2) Forcemain & Equalization Basin Costs						
9 Capital Costs - Revolving Loan Debt Service	\$ 1,345,360	\$ 1,327,264	\$ 1,309,169	\$ 1,291,073	\$ 1,272,978	\$ 1,254,882
10 Less: Chatham Park Participation in SRF Debt Service - 0%	-	-	-	-	-	-
11 Operating Costs ^{2,3}	453,100	466,693	480,694	495,115	509,968	525,267
12 Net Town Forcemain & Equalization Basin Costs	\$ 1,798,460	\$ 1,793,957	\$ 1,789,862	\$ 1,786,188	\$ 1,782,946	\$ 1,780,149
14 3) Existing System Costs						
15 Administrative Costs ²	\$ 222,091	\$ 228,754	\$ 235,616	\$ 242,685	\$ 249,965	\$ 257,464
16 Public Utility Maintenance ²	250,992	258,522	266,278	274,266	282,494	290,969
17 Debt Service	94,651	80,619	80,684	80,718	80,719	80,689
18 Capital Outlay ⁴	18,225	18,225	18,225	18,225	18,225	18,225
19 Total Existing System Costs	\$ 585,959	\$ 586,120	\$ 600,803	\$ 615,894	\$ 631,403	\$ 647,347
21 Grand Total	\$ 3,311,591	\$ 3,373,136	\$ 3,458,650	\$ 3,555,270	\$ 3,664,430	\$ 3,683,758
23 Projected Flow (1,000 Gallons) - Town Limits, ETJ & Chatham Park⁵	433,182	492,608	560,186	637,034	724,425	730,000
25 Cost per 1,000 Gallons	\$ 7.64	\$ 6.85	\$ 6.17	\$ 5.58	\$ 5.06	\$ 5.05

¹ Assumed to be constant at the average Sanford Treatment Charge from FY 2014 - 2016.

² Future Town Wastewater Costs are assumed to grow at 3.00% annually.

³ Certain costs in the Wooten projections may be variable based upon flow. For purposes of this analysis, all costs are assumed to grow at an inflationary rate of 3.00%.

⁴ Capital Outlay is assumed to be held constant at the FY 2017 Budget level.

⁵ Estimated based upon projections provided in the Wooten Report and information from Wooten Staff. FY 2025 is capped at 2.0 MGD.

Projected Cost of Service Under Sanford Proposal

Summary – Cost per 1,000 Gallons

Fiscal Year	2015	2020	2021	2022	2023	2024	2025
1 Base Case: 0% Chatham Park Participation							
2 Existing Town Flows Only	\$ 7.20	\$ 15.47	\$ 15.34	\$ 15.29	\$ 15.24	\$ 15.19	\$ 15.15
3 % Change from FY 2015 Cost of Service		114.8%	113.0%	112.2%	111.5%	110.8%	110.3%
4							
5 Existing Town & ETJ Flows	\$ 7.20	\$ 10.81	\$ 10.20	\$ 9.67	\$ 9.17	\$ 8.71	\$ 8.27
6 % Change from FY 2015 Cost of Service		50.0%	41.5%	34.2%	27.3%	20.9%	14.9%
7							
8 Existing Town, ETJ, & Chatham Park Flows	\$ 7.20	\$ 7.64	\$ 6.85	\$ 6.17	\$ 5.58	\$ 5.06	\$ 5.05
9 % Change from FY 2015 Cost of Service		6.1%	-4.9%	-14.3%	-22.5%	-29.8%	-30.0%
10							
11 Alternative Case 1: 25% Chatham Park Participation							
12 Existing Town Flows Only	\$ 7.20	\$ 13.20	\$ 13.11	\$ 13.09	\$ 13.08	\$ 13.07	\$ 13.07
13 % Change from FY 2015 Cost of Service		83.2%	82.0%	81.8%	81.6%	81.5%	81.4%
14							
15 Existing Town & ETJ Flows	\$ 7.20	\$ 9.27	\$ 8.77	\$ 8.34	\$ 7.94	\$ 7.57	\$ 7.21
16 % Change from FY 2015 Cost of Service		28.7%	21.7%	15.8%	10.3%	5.0%	0.1%
17							
18 Existing Town, ETJ, & Chatham Park Flows	\$ 7.20	\$ 6.61	\$ 5.95	\$ 5.39	\$ 4.90	\$ 4.46	\$ 4.46
19 % Change from FY 2015 Cost of Service		-8.2%	-17.4%	-25.2%	-32.0%	-38.0%	-38.0%
20							
21 Alternative Case 2: 50% Chatham Park Participation							
22 Existing Town Flows Only	\$ 7.20	\$ 10.93	\$ 10.88	\$ 10.90	\$ 10.93	\$ 10.96	\$ 10.99
23 % Change from FY 2015 Cost of Service		51.7%	51.0%	51.3%	51.7%	52.1%	52.6%
24							
25 Existing Town & ETJ Flows	\$ 7.20	\$ 7.74	\$ 7.34	\$ 7.02	\$ 6.71	\$ 6.43	\$ 6.15
26 % Change from FY 2015 Cost of Service		7.4%	2.0%	-2.6%	-6.8%	-10.8%	-14.6%
27							
28 Existing Town, ETJ, & Chatham Park Flows	\$ 7.20	\$ 5.58	\$ 5.05	\$ 4.61	\$ 4.22	\$ 3.87	\$ 3.88
29 % Change from FY 2015 Cost of Service		-22.6%	-29.9%	-36.1%	-41.5%	-46.3%	-46.1%
30							
31 Alternative Case 3: 62.5% Chatham Park Participation							
32 Existing Town Flows Only	\$ 7.20	\$ 9.79	\$ 9.76	\$ 9.80	\$ 9.85	\$ 9.90	\$ 9.95
33 % Change from FY 2015 Cost of Service		35.9%	35.5%	36.1%	36.7%	37.4%	38.1%
34							
35 Existing Town & ETJ Flows	\$ 7.20	\$ 6.97	\$ 6.63	\$ 6.36	\$ 6.10	\$ 5.85	\$ 5.62
36 % Change from FY 2015 Cost of Service		-3.2%	-7.9%	-11.7%	-15.3%	-18.7%	-21.9%
37							
38 Existing Town, ETJ, & Chatham Park Flows	\$ 7.20	\$ 5.06	\$ 4.60	\$ 4.21	\$ 3.88	\$ 3.57	\$ 3.59
39 % Change from FY 2015 Cost of Service		-29.8%	-36.2%	-41.5%	-46.2%	-50.4%	-50.2%

Estimated Average Monthly Wastewater Residential Bill PITTSBORO North Carolina

FY 2015 Estimated Average Monthly Residential Bill

- The chart below outlines the estimated average monthly residential bill for an in-Town customer based upon an estimated average monthly residential usage of 3,200 gallons (meters less than or equal to 1 inch).

1	FY 2015 Average Monthly Usage (Gallons)	3,200
2		
3	Fixed Monthly Charge	\$ 14.00
4		
5	Variable Monthly Charges (1,000 Gallons)	
6	0 to 2,000 Gallons	\$ 6.89
7	Monthly Charge (2,000 Gallons)	\$ 13.78
8		
9	2,001 to 6,000 Gallons	\$ 8.30
10	Monthly Charge (1,200 Gallons)	\$ 9.96
11		
12	Total Estimated Monthly Charge	\$ 37.74

Estimated Average FY 2020 Bill Based on Projections

- In order to provide perspective on the potential change to the average monthly bill for an in-Town residential user, the chart below assumes the average monthly bill will increase at the same level as the projected cost of service increase under Modified Alternative 4 (page 29).

1	FY 2015 Average Monthly Bill	\$ 37.74
2		
3	Existing Town Flows Only	
4	% Growth in Cost of Service FY 15-20	114.8%
5	Estimated FY 2020 Average Monthly Bill	\$ 81.06
6		
7	Existing Town Flows & ETJ	
8	% Growth in Cost of Service FY 15-20	50.0%
9	Estimated FY 2020 Average Monthly Bill	\$ 56.62
10		
11	Existing Town Flows, ETJ and Chatham Park	
12	% Growth in Cost of Service FY 15-20	6.1%
13	Estimated FY 2020 Average Monthly Bill	\$ 40.05

Estimated Average Monthly Wastewater Residential Bill PITTSBORO North Carolina

Summary – Monthly Bill Based on 3,200 Gallons

	Base Case 0% CP	Alternative Case 1 25% CP	Alternative Case 2 50% CP	Alternative Case 3 62.5% CP
1 FY 2015 Average Monthly Bill	\$37.74	\$37.74	\$37.74	\$37.74
2				
3 Existing Town Flows Only				
4 % Growth in Cost of Service FY 15-20	114.8%	83.2%	51.7%	35.9%
5 Estimated FY 2020 Average Monthly Bill	\$81.06	\$69.16	\$57.25	\$51.29
6				
7 Existing Town Flows & ETJ				
8 % Growth in Cost of Service FY 15-20	50.0%	28.7%	7.4%	-3.2%
9 Estimated FY 2020 Average Monthly Bill	\$56.62	\$48.58	\$40.54	\$36.52
10				
11 Existing Town Flows, ETJ and Chatham Park				
12 % Growth in Cost of Service FY 15-20	6.1%	-8.2%	-22.6%	-29.8%
13 Estimated FY 2020 Average Monthly Bill	\$40.05	\$34.63	\$29.21	\$26.50

Appendix

Case Details

Alternative 1

25% Chatham Park Participation

Projected Cost of Service: Modified Alternative 4

Existing Town Limit Flow Only

Fiscal Year	2020	2021	2022	2023	2024	2025
1) Sanford Wastewater Treatment Contract Cost						
2 Treatment Charge per 1,000 Gallons ¹	\$ 1.11	\$ 1.11	\$ 1.11	\$ 1.11	\$ 1.11	\$ 1.11
3 Treatment Charge (\$)	218,529	220,203	221,890	223,589	225,302	227,028
4 Capacity Charge	446,893	446,893	446,893	446,893	446,893	446,893
5 Less: Chatham Park Participation in Capacity Charge - 25%	(111,723)	(111,723)	(111,723)	(111,723)	(111,723)	(111,723)
6 Net Town Sanford Contract Cost	\$ 553,699	\$ 555,373	\$ 557,060	\$ 558,759	\$ 560,472	\$ 562,198
8 2) Forcemain & Equalization Basin Costs						
9 Capital Costs - Revolving Loan Debt Service	\$ 1,345,360	\$ 1,327,264	\$ 1,309,169	\$ 1,291,073	\$ 1,272,978	\$ 1,254,882
10 Less: Chatham Park Participation in SRF Debt Service - 25%	(336,340)	(331,816)	(327,292)	(322,768)	(318,244)	(313,721)
11 Operating Costs ^{2,3}	453,100	466,693	480,694	495,115	509,968	525,267
12 Net Town Forcemain & Equalization Basin Costs	\$ 1,462,120	\$ 1,462,141	\$ 1,462,570	\$ 1,463,419	\$ 1,464,701	\$ 1,466,429
14 3) Existing System Costs						
15 Administrative Costs ²	\$ 222,091	\$ 228,754	\$ 235,616	\$ 242,685	\$ 249,965	\$ 257,464
16 Public Utility Maintenance ²	250,992	258,522	266,278	274,266	282,494	290,969
17 Debt Service	94,651	80,619	80,684	80,718	80,719	80,689
18 Capital Outlay ⁴	18,225	18,225	18,225	18,225	18,225	18,225
19 Total Existing System Costs	\$ 585,959	\$ 586,120	\$ 600,803	\$ 615,894	\$ 631,403	\$ 647,347
21 Grand Total	\$ 2,601,778	\$ 2,603,634	\$ 2,620,433	\$ 2,638,073	\$ 2,656,577	\$ 2,675,974
23 Projected Flow (1,000 Gallons) - Town Limits⁵	197,100	198,610	200,131	201,664	203,209	204,765
25 Cost per 1,000 Gallons	\$ 13.20	\$ 13.11	\$ 13.09	\$ 13.08	\$ 13.07	\$ 13.07

¹ Assumed to be constant at the average Sanford Treatment Charge from FY 2014 - 2016.

² Future Town Wastewater Costs are assumed to grow at 3.00% annually.

³ Certain costs in the Wooten projections may be variable based upon flow. For purposes of this analysis, all costs are assumed to grow at an inflationary rate of 3.00%.

⁴ Capital Outlay is assumed to be held constant at the FY 2017 Budget level.

⁵ Estimated based upon projections provided in the Wooten Report and information from Wooten Staff.

Projected Cost of Service: Modified Alternative 4

Existing Town Limits & ETJ Flow

Fiscal Year	2020	2021	2022	2023	2024	2025
1) Sanford Wastewater Treatment Contract Cost						
2 Treatment Charge per 1,000 Gallons ¹	\$ 1.11	\$ 1.11	\$ 1.11	\$ 1.11	\$ 1.11	\$ 1.11
3 Treatment Charge (\$)	323,666	344,906	367,539	391,658	417,360	444,748
4 Capacity Charge	446,893	446,893	446,893	446,893	446,893	446,893
5 Less: Chatham Park Participation in Capacity Charge - 25%	(111,723)	(111,723)	(111,723)	(111,723)	(111,723)	(111,723)
6 Net Town Sanford Contract Cost	\$ 658,836	\$ 680,076	\$ 702,709	\$ 726,828	\$ 752,530	\$ 779,918
8 2) Forcemain & Equalization Basin Costs						
9 Capital Costs - Revolving Loan Debt Service	\$ 1,345,360	\$ 1,327,264	\$ 1,309,169	\$ 1,291,073	\$ 1,272,978	\$ 1,254,882
10 Less: Chatham Park Participation in SRF Debt Service - 25%	(336,340)	(331,816)	(327,292)	(322,768)	(318,244)	(313,721)
11 Operating Costs ^{2,3}	453,100	466,693	480,694	495,115	509,968	525,267
12 Net Town Forcemain & Equalization Basin Costs	\$ 1,462,120	\$ 1,462,141	\$ 1,462,570	\$ 1,463,419	\$ 1,464,701	\$ 1,466,429
14 3) Existing System Costs						
15 Administrative Costs ²	\$ 222,091	\$ 228,754	\$ 235,616	\$ 242,685	\$ 249,965	\$ 257,464
16 Public Utility Maintenance ²	250,992	258,522	266,278	274,266	282,494	290,969
17 Debt Service	94,651	80,619	80,684	80,718	80,719	80,689
18 Capital Outlay ⁴	18,225	18,225	18,225	18,225	18,225	18,225
19 Total Existing System Costs	\$ 585,959	\$ 586,120	\$ 600,803	\$ 615,894	\$ 631,403	\$ 647,347
21 Grand Total	\$ 2,706,915	\$ 2,728,337	\$ 2,766,083	\$ 2,806,141	\$ 2,848,634	\$ 2,893,694
23 Projected Flow (1,000 Gallons) - Town Limits & ETJ⁵	291,927	311,084	331,498	353,252	376,433	401,135
25 Cost per 1,000 Gallons	\$ 9.27	\$ 8.77	\$ 8.34	\$ 7.94	\$ 7.57	\$ 7.21

¹ Assumed to be constant at the average Sanford Treatment Charge from FY 2014 - 2016.

² Future Town Wastewater Costs are assumed to grow at 3.00% annually.

³ Certain costs in the Wooten projections may be variable based upon flow. For purposes of this analysis, all costs are assumed to grow at an inflationary rate of 3.00%.

⁴ Capital Outlay is assumed to be held constant at the FY 2017 Budget level.

⁵ Estimated based upon projections provided in the Wooten Report and information from Wooten Staff.

Projected Cost of Service: Modified Alternative 4

Existing Town Limits, ETJ, & Chatham Park Flow

Fiscal Year	2020	2021	2022	2023	2024	2025
1) Sanford Wastewater Treatment Contract Cost						
2 Treatment Charge per 1,000 Gallons ¹	\$ 1.11	\$ 1.11	\$ 1.11	\$ 1.11	\$ 1.11	\$ 1.11
3 Treatment Charge (\$)	480,279	546,166	621,091	706,295	803,187	809,368
4 Capacity Charge	446,893	446,893	446,893	446,893	446,893	446,893
5 Less: Chatham Park Participation in Capacity Charge - 25%	(111,723)	(111,723)	(111,723)	(111,723)	(111,723)	(111,723)
6 Net Town Sanford Contract Cost	\$ 815,449	\$ 881,336	\$ 956,261	\$ 1,041,465	\$ 1,138,357	\$ 1,144,538
8 2) Forcemain & Equalization Basin Costs						
9 Capital Costs - Revolving Loan Debt Service	\$ 1,345,360	\$ 1,327,264	\$ 1,309,169	\$ 1,291,073	\$ 1,272,978	\$ 1,254,882
10 Less: Chatham Park Participation in SRF Debt Service - 25%	(336,340)	(331,816)	(327,292)	(322,768)	(318,244)	(313,721)
11 Operating Costs ^{2,3}	453,100	466,693	480,694	495,115	509,968	525,267
12 Net Town Forcemain & Equalization Basin Costs	\$ 1,462,120	\$ 1,462,141	\$ 1,462,570	\$ 1,463,419	\$ 1,464,701	\$ 1,466,429
14 3) Existing System Costs						
15 Administrative Costs ²	\$ 222,091	\$ 228,754	\$ 235,616	\$ 242,685	\$ 249,965	\$ 257,464
16 Public Utility Maintenance ²	250,992	258,522	266,278	274,266	282,494	290,969
17 Debt Service	94,651	80,619	80,684	80,718	80,719	80,689
18 Capital Outlay ⁴	18,225	18,225	18,225	18,225	18,225	18,225
19 Total Existing System Costs	\$ 585,959	\$ 586,120	\$ 600,803	\$ 615,894	\$ 631,403	\$ 647,347
21 Grand Total	\$ 2,863,528	\$ 2,929,596	\$ 3,019,634	\$ 3,120,778	\$ 3,234,462	\$ 3,258,314
23 Projected Flow (1,000 Gallons) - Town Limits, ETJ & Chatham Park⁵	433,182	492,608	560,186	637,034	724,425	730,000
25 Cost per 1,000 Gallons	\$ 6.61	\$ 5.95	\$ 5.39	\$ 4.90	\$ 4.46	\$ 4.46

¹ Assumed to be constant at the average Sanford Treatment Charge from FY 2014 - 2016.

² Future Town Wastewater Costs are assumed to grow at 3.00% annually.

³ Certain costs in the Wooten projections may be variable based upon flow. For purposes of this analysis, all costs are assumed to grow at an inflationary rate of 3.00%.

⁴ Capital Outlay is assumed to be held constant at the FY 2017 Budget level.

⁵ Estimated based upon projections provided in the Wooten Report and information from Wooten Staff. FY 2025 is capped at 2.0 MGD.

Alternative 2

50% Chatham Park Participation

Projected Cost of Service: Modified Alternative 4

Existing Town Limit Flow Only

Fiscal Year	2020	2021	2022	2023	2024	2025
1) Sanford Wastewater Treatment Contract Cost						
2 Treatment Charge per 1,000 Gallons ¹	\$ 1.11	\$ 1.11	\$ 1.11	\$ 1.11	\$ 1.11	\$ 1.11
3 Treatment Charge (\$)	218,529	220,203	221,890	223,589	225,302	227,028
4 Capacity Charge	446,893	446,893	446,893	446,893	446,893	446,893
5 Less: Chatham Park Participation in Capacity Charge - 50%	(223,447)	(223,447)	(223,447)	(223,447)	(223,447)	(223,447)
6 Net Town Sanford Contract Cost	\$ 441,976	\$ 443,650	\$ 445,337	\$ 447,036	\$ 448,749	\$ 450,474
8 2) Forcemain & Equalization Basin Costs						
9 Capital Costs - Revolving Loan Debt Service	\$ 1,345,360	\$ 1,327,264	\$ 1,309,169	\$ 1,291,073	\$ 1,272,978	\$ 1,254,882
10 Less: Chatham Park Participation in SRF Debt Service - 50%	(672,680)	(663,632)	(654,584)	(645,537)	(636,489)	(627,441)
11 Operating Costs ^{2,3}	453,100	466,693	480,694	495,115	509,968	525,267
12 Net Town Forcemain & Equalization Basin Costs	\$ 1,125,780	\$ 1,130,325	\$ 1,135,278	\$ 1,140,651	\$ 1,146,457	\$ 1,152,708
14 3) Existing System Costs						
15 Administrative Costs ²	\$ 222,091	\$ 228,754	\$ 235,616	\$ 242,685	\$ 249,965	\$ 257,464
16 Public Utility Maintenance ²	250,992	258,522	266,278	274,266	282,494	290,969
17 Debt Service	94,651	80,619	80,684	80,718	80,719	80,689
18 Capital Outlay ⁴	18,225	18,225	18,225	18,225	18,225	18,225
19 Total Existing System Costs	\$ 585,959	\$ 586,120	\$ 600,803	\$ 615,894	\$ 631,403	\$ 647,347
21 Grand Total	\$ 2,153,715	\$ 2,160,095	\$ 2,181,418	\$ 2,203,581	\$ 2,226,609	\$ 2,250,530
23 Projected Flow (1,000 Gallons) - Town Limits⁵	197,100	198,610	200,131	201,664	203,209	204,765
25 Cost per 1,000 Gallons	\$ 10.93	\$ 10.88	\$ 10.90	\$ 10.93	\$ 10.96	\$ 10.99

¹ Assumed to be constant at the average Sanford Treatment Charge from FY 2014 - 2016.

² Future Town Wastewater Costs are assumed to grow at 3.00% annually.

³ Certain costs in the Wooten projections may be variable based upon flow. For purposes of this analysis, all costs are assumed to grow at an inflationary rate of 3.00%.

⁴ Capital Outlay is assumed to be held constant at the FY 2017 Budget level.

⁵ Estimated based upon projections provided in the Wooten Report and information from Wooten Staff.

Projected Cost of Service: Modified Alternative 4

Existing Town Limits & ETJ Flow

Fiscal Year	2020	2021	2022	2023	2024	2025
1) Sanford Wastewater Treatment Contract Cost						
2 Treatment Charge per 1,000 Gallons ¹	\$ 1.11	\$ 1.11	\$ 1.11	\$ 1.11	\$ 1.11	\$ 1.11
3 Treatment Charge (\$)	323,666	344,906	367,539	391,658	417,360	444,748
4 Capacity Charge	446,893	446,893	446,893	446,893	446,893	446,893
5 Less: Chatham Park Participation in Capacity Charge - 50%	(223,447)	(223,447)	(223,447)	(223,447)	(223,447)	(223,447)
6 Net Town Sanford Contract Cost	\$ 547,113	\$ 568,353	\$ 590,986	\$ 615,105	\$ 640,806	\$ 668,194
8 2) Forcemain & Equalization Basin Costs						
9 Capital Costs - Revolving Loan Debt Service	\$ 1,345,360	\$ 1,327,264	\$ 1,309,169	\$ 1,291,073	\$ 1,272,978	\$ 1,254,882
10 Less: Chatham Park Participation in SRF Debt Service - 50%	(672,680)	(663,632)	(654,584)	(645,537)	(636,489)	(627,441)
11 Operating Costs ^{2,3}	453,100	466,693	480,694	495,115	509,968	525,267
12 Net Town Forcemain & Equalization Basin Costs	\$ 1,125,780	\$ 1,130,325	\$ 1,135,278	\$ 1,140,651	\$ 1,146,457	\$ 1,152,708
14 3) Existing System Costs						
15 Administrative Costs ²	\$ 222,091	\$ 228,754	\$ 235,616	\$ 242,685	\$ 249,965	\$ 257,464
16 Public Utility Maintenance ²	250,992	258,522	266,278	274,266	282,494	290,969
17 Debt Service	94,651	80,619	80,684	80,718	80,719	80,689
18 Capital Outlay ⁴	18,225	18,225	18,225	18,225	18,225	18,225
19 Total Existing System Costs	\$ 585,959	\$ 586,120	\$ 600,803	\$ 615,894	\$ 631,403	\$ 647,347
21 Grand Total	\$ 2,258,852	\$ 2,284,797	\$ 2,327,067	\$ 2,371,650	\$ 2,418,666	\$ 2,468,250
23 Projected Flow (1,000 Gallons) - Town Limits & ETJ⁵	291,927	311,084	331,498	353,252	376,433	401,135
25 Cost per 1,000 Gallons	\$ 7.74	\$ 7.34	\$ 7.02	\$ 6.71	\$ 6.43	\$ 6.15

¹ Assumed to be constant at the average Sanford Treatment Charge from FY 2014 - 2016.

² Future Town Wastewater Costs are assumed to grow at 3.00% annually.

³ Certain costs in the Wooten projections may be variable based upon flow. For purposes of this analysis, all costs are assumed to grow at an inflationary rate of 3.00%.

⁴ Capital Outlay is assumed to be held constant at the FY 2017 Budget level.

⁵ Estimated based upon projections provided in the Wooten Report and information from Wooten Staff.

Projected Cost of Service: Modified Alternative 4

Existing Town Limits, ETJ, & Chatham Park Flow

Fiscal Year	2020	2021	2022	2023	2024	2025
1) Sanford Wastewater Treatment Contract Cost						
2 Treatment Charge per 1,000 Gallons ¹	\$ 1.11	\$ 1.11	\$ 1.11	\$ 1.11	\$ 1.11	\$ 1.11
3 Treatment Charge (\$)	480,279	546,166	621,091	706,295	803,187	809,368
4 Capacity Charge	446,893	446,893	446,893	446,893	446,893	446,893
5 Less: Chatham Park Participation in Capacity Charge - 50%	(223,447)	(223,447)	(223,447)	(223,447)	(223,447)	(223,447)
6 Net Town Sanford Contract Cost	\$ 703,726	\$ 769,612	\$ 844,538	\$ 929,741	\$ 1,026,634	\$ 1,032,815
8 2) Forcemain & Equalization Basin Costs						
9 Capital Costs - Revolving Loan Debt Service	\$ 1,345,360	\$ 1,327,264	\$ 1,309,169	\$ 1,291,073	\$ 1,272,978	\$ 1,254,882
10 Less: Chatham Park Participation in SRF Debt Service - 50%	(672,680)	(663,632)	(654,584)	(645,537)	(636,489)	(627,441)
11 Operating Costs ^{2,3}	453,100	466,693	480,694	495,115	509,968	525,267
12 Net Town Forcemain & Equalization Basin Costs	\$ 1,125,780	\$ 1,130,325	\$ 1,135,278	\$ 1,140,651	\$ 1,146,457	\$ 1,152,708
14 3) Existing System Costs						
15 Administrative Costs ²	\$ 222,091	\$ 228,754	\$ 235,616	\$ 242,685	\$ 249,965	\$ 257,464
16 Public Utility Maintenance ²	250,992	258,522	266,278	274,266	282,494	290,969
17 Debt Service	94,651	80,619	80,684	80,718	80,719	80,689
18 Capital Outlay ⁴	18,225	18,225	18,225	18,225	18,225	18,225
19 Total Existing System Costs	\$ 585,959	\$ 586,120	\$ 600,803	\$ 615,894	\$ 631,403	\$ 647,347
21 Grand Total	\$ 2,415,465	\$ 2,486,057	\$ 2,580,619	\$ 2,686,286	\$ 2,804,494	\$ 2,832,870
23 Projected Flow (1,000 Gallons) - Town Limits, ETJ & Chatham Park⁵	433,182	492,608	560,186	637,034	724,425	730,000
25 Cost per 1,000 Gallons	\$ 5.58	\$ 5.05	\$ 4.61	\$ 4.22	\$ 3.87	\$ 3.88

¹ Assumed to be constant at the average Sanford Treatment Charge from FY 2014 - 2016.

² Future Town Wastewater Costs are assumed to grow at 3.00% annually.

³ Certain costs in the Wooten projections may be variable based upon flow. For purposes of this analysis, all costs are assumed to grow at an inflationary rate of 3.00%.

⁴ Capital Outlay is assumed to be held constant at the FY 2017 Budget level.

⁵ Estimated based upon projections provided in the Wooten Report and information from Wooten Staff. FY 2025 is capped at 2.0 MGD.

Alternative 3

62.5% Chatham Park Participation

Projected Cost of Service: Modified Alternative 4

Existing Town Limit Flow Only

Fiscal Year	2020	2021	2022	2023	2024	2025
1) Sanford Wastewater Treatment Contract Cost						
2 Treatment Charge per 1,000 Gallons ¹	\$ 1.11	\$ 1.11	\$ 1.11	\$ 1.11	\$ 1.11	\$ 1.11
3 Treatment Charge (\$)	218,529	220,203	221,890	223,589	225,302	227,028
4 Capacity Charge	446,893	446,893	446,893	446,893	446,893	446,893
5 Less: Chatham Park Participation in Capacity Charge - 62.5%	(279,308)	(279,308)	(279,308)	(279,308)	(279,308)	(279,308)
6 Net Town Sanford Contract Cost	\$ 386,114	\$ 387,788	\$ 389,475	\$ 391,174	\$ 392,887	\$ 394,613
8 2) Forcemain & Equalization Basin Costs						
9 Capital Costs - Revolving Loan Debt Service	\$ 1,345,360	\$ 1,327,264	\$ 1,309,169	\$ 1,291,073	\$ 1,272,978	\$ 1,254,882
10 Less: Chatham Park Participation in SRF Debt Service - 62.5%	(840,850)	(829,540)	(818,230)	(806,921)	(795,611)	(784,301)
11 Operating Costs ^{2,3}	453,100	466,693	480,694	495,115	509,968	525,267
12 Net Town Forcemain & Equalization Basin Costs	\$ 957,610	\$ 964,417	\$ 971,632	\$ 979,267	\$ 987,335	\$ 995,848
14 3) Existing System Costs						
15 Administrative Costs ²	\$ 222,091	\$ 228,754	\$ 235,616	\$ 242,685	\$ 249,965	\$ 257,464
16 Public Utility Maintenance ²	250,992	258,522	266,278	274,266	282,494	290,969
17 Debt Service	94,651	80,619	80,684	80,718	80,719	80,689
18 Capital Outlay ⁴	18,225	18,225	18,225	18,225	18,225	18,225
19 Total Existing System Costs	\$ 585,959	\$ 586,120	\$ 600,803	\$ 615,894	\$ 631,403	\$ 647,347
21 Grand Total	\$ 1,929,683	\$ 1,938,325	\$ 1,961,910	\$ 1,986,335	\$ 2,011,625	\$ 2,037,808
23 Projected Flow (1,000 Gallons) - Town Limits⁵	197,100	198,610	200,131	201,664	203,209	204,765
25 Cost per 1,000 Gallons	\$ 9.79	\$ 9.76	\$ 9.80	\$ 9.85	\$ 9.90	\$ 9.95

¹ Assumed to be constant at the average Sanford Treatment Charge from FY 2014 - 2016.

² Future Town Wastewater Costs are assumed to grow at 3.00% annually.

³ Certain costs in the Wooten projections may be variable based upon flow. For purposes of this analysis, all costs are assumed to grow at an inflationary rate of 3.00%.

⁴ Capital Outlay is assumed to be held constant at the FY 2017 Budget level.

⁵ Estimated based upon projections provided in the Wooten Report and information from Wooten Staff.

Projected Cost of Service: Modified Alternative 4

Existing Town Limits & ETJ Flow

Fiscal Year	2020	2021	2022	2023	2024	2025
1) Sanford Wastewater Treatment Contract Cost						
2 Treatment Charge per 1,000 Gallons ¹	\$ 1.11	\$ 1.11	\$ 1.11	\$ 1.11	\$ 1.11	\$ 1.11
3 Treatment Charge (\$)	323,666	344,906	367,539	391,658	417,360	444,748
4 Capacity Charge	446,893	446,893	446,893	446,893	446,893	446,893
5 Less: Chatham Park Participation in Capacity Charge - 62.5%	(279,308)	(279,308)	(279,308)	(279,308)	(279,308)	(279,308)
6 Net Town Sanford Contract Cost	\$ 491,251	\$ 512,491	\$ 535,124	\$ 559,243	\$ 584,945	\$ 612,333
8 2) Forcemain & Equalization Basin Costs						
9 Capital Costs - Revolving Loan Debt Service	\$ 1,345,360	\$ 1,327,264	\$ 1,309,169	\$ 1,291,073	\$ 1,272,978	\$ 1,254,882
10 Less: Chatham Park Participation in SRF Debt Service - 62.5%	(840,850)	(829,540)	(818,230)	(806,921)	(795,611)	(784,301)
11 Operating Costs ^{2,3}	453,100	466,693	480,694	495,115	509,968	525,267
12 Net Town Forcemain & Equalization Basin Costs	\$ 957,610	\$ 964,417	\$ 971,632	\$ 979,267	\$ 987,335	\$ 995,848
14 3) Existing System Costs						
15 Administrative Costs ²	\$ 222,091	\$ 228,754	\$ 235,616	\$ 242,685	\$ 249,965	\$ 257,464
16 Public Utility Maintenance ²	250,992	258,522	266,278	274,266	282,494	290,969
17 Debt Service	94,651	80,619	80,684	80,718	80,719	80,689
18 Capital Outlay ⁴	18,225	18,225	18,225	18,225	18,225	18,225
19 Total Existing System Costs	\$ 585,959	\$ 586,120	\$ 600,803	\$ 615,894	\$ 631,403	\$ 647,347
21 Grand Total	\$ 2,034,820	\$ 2,063,028	\$ 2,107,559	\$ 2,154,404	\$ 2,203,683	\$ 2,255,528
23 Projected Flow (1,000 Gallons) - Town Limits & ETJ⁵	291,927	311,084	331,498	353,252	376,433	401,135
25 Cost per 1,000 Gallons	\$ 6.97	\$ 6.63	\$ 6.36	\$ 6.10	\$ 5.85	\$ 5.62

¹ Assumed to be constant at the average Sanford Treatment Charge from FY 2014 - 2016.

² Future Town Wastewater Costs are assumed to grow at 3.00% annually.

³ Certain costs in the Wooten projections may be variable based upon flow. For purposes of this analysis, all costs are assumed to grow at an inflationary rate of 3.00%.

⁴ Capital Outlay is assumed to be held constant at the FY 2017 Budget level.

⁵ Estimated based upon projections provided in the Wooten Report and information from Wooten Staff.

Projected Cost of Service: Modified Alternative 4

Existing Town Limits, ETJ, & Chatham Park Flow

Fiscal Year	2020	2021	2022	2023	2024	2025
1) Sanford Wastewater Treatment Contract Cost						
2 Treatment Charge per 1,000 Gallons ¹	\$ 1.11	\$ 1.11	\$ 1.11	\$ 1.11	\$ 1.11	\$ 1.11
3 Treatment Charge (\$)	480,279	546,166	621,091	706,295	803,187	809,368
4 Capacity Charge	446,893	446,893	446,893	446,893	446,893	446,893
5 Less: Chatham Park Participation in Capacity Charge - 62.5%	(279,308)	(279,308)	(279,308)	(279,308)	(279,308)	(279,308)
6 Net Town Sanford Contract Cost	\$ 647,864	\$ 713,751	\$ 788,676	\$ 873,880	\$ 970,772	\$ 976,953
8 2) Forcemain & Equalization Basin Costs						
9 Capital Costs - Revolving Loan Debt Service	\$ 1,345,360	\$ 1,327,264	\$ 1,309,169	\$ 1,291,073	\$ 1,272,978	\$ 1,254,882
10 Less: Chatham Park Participation in SRF Debt Service - 62.5%	(840,850)	(829,540)	(818,230)	(806,921)	(795,611)	(784,301)
11 Operating Costs ^{2,3}	453,100	466,693	480,694	495,115	509,968	525,267
12 Net Town Forcemain & Equalization Basin Costs	\$ 957,610	\$ 964,417	\$ 971,632	\$ 979,267	\$ 987,335	\$ 995,848
14 3) Existing System Costs						
15 Administrative Costs ²	\$ 222,091	\$ 228,754	\$ 235,616	\$ 242,685	\$ 249,965	\$ 257,464
16 Public Utility Maintenance ²	250,992	258,522	266,278	274,266	282,494	290,969
17 Debt Service	94,651	80,619	80,684	80,718	80,719	80,689
18 Capital Outlay ⁴	18,225	18,225	18,225	18,225	18,225	18,225
19 Total Existing System Costs	\$ 585,959	\$ 586,120	\$ 600,803	\$ 615,894	\$ 631,403	\$ 647,347
21 Grand Total	\$ 2,191,433	\$ 2,264,287	\$ 2,361,111	\$ 2,469,040	\$ 2,589,510	\$ 2,620,148
23 Projected Flow (1,000 Gallons) - Town Limits, ETJ & Chatham Park⁵	433,182	492,608	560,186	637,034	724,425	730,000
25 Cost per 1,000 Gallons	\$ 5.06	\$ 4.60	\$ 4.21	\$ 3.88	\$ 3.57	\$ 3.59

¹ Assumed to be constant at the average Sanford Treatment Charge from FY 2014 - 2016.

² Future Town Wastewater Costs are assumed to grow at 3.00% annually.

³ Certain costs in the Wooten projections may be variable based upon flow. For purposes of this analysis, all costs are assumed to grow at an inflationary rate of 3.00%.

⁴ Capital Outlay is assumed to be held constant at the FY 2017 Budget level.

⁵ Estimated based upon projections provided in the Wooten Report and information from Wooten Staff. FY 2025 is capped at 2.0 MGD.

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