



WATER AND WASTEWATER RATE STUDY AND LONG-TERM FINANCIAL PLAN

TOWN OF FLORENCE

February 2012

Prepared by:



Dallas Office Address:

5500 Democracy Drive, Ste. 130

Plano, Texas 75024

(972) 378-6588

(972) 378-6988 fax

www.economists.com

Project Manager: Dan V. Jackson

**TOWN OF FLORENCE, ARIZONA
WATER AND WASTEWATER RATE STUDY
TABLE OF CONTENTS**

Executive Summary 3
 Water and Wastewater Rate Design 9

Introduction 15
 Background 15
 Report Organization 16
 Water and Wastewater Current Rates 17
 Water and Wastewater Rate Comparison 18

Water and Wastewater Test Year and Forecast Volumes 21
 Water and Wastewater Customers and Meters – Test Year & Ten Year Forecast..... 21
 Historical and Current Water Consumption 25
 Water Billed Consumption – Ten Year Forecast 25
 Peaking Factors 27
 Wastewater Flows – Test Year and Forecast 28
 Wastewater Strengths – Test Year and Forecast..... 28

Water & Wastewater Forecast Revenue Requirement 30
 Operating Expenses – Test Year 31
 Operating Expenses – Ten Year Forecast 34
 Capital Outlays and Existing Debt Service 35
 Capital Improvement Plan 35
 Debt Service – Forecast 38
 Non-Rate Revenues 39
 Net Revenue Requirement 40
 Water Utility Cost Functionalization 41
 Water Utility Cost Classification 42
 Water Utility Cost Allocation 43
 Wastewater Utility Cost Functionalization and Classification 45
 Wastewater Utility Cost Allocation..... 46

Water and Wastewater Rate Design 47
 Proposed Rate Plan 47
 Partial Year Rates 51
 Notes on Rate Recommendations..... 53

Appendix A – Water and Wastewater Rate Model

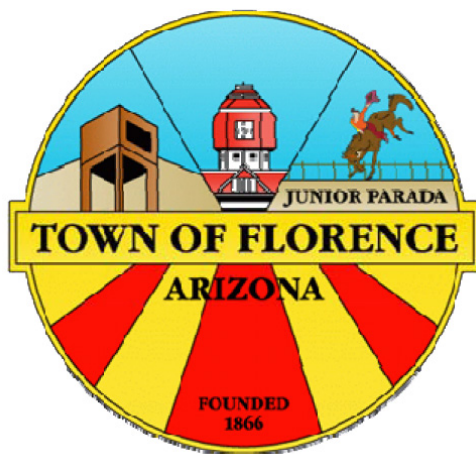
Acknowledgements

During the course of this rate study, several Town employees expended considerable time and effort in assisting the project team. These employees included the Mayor and Council, Mr. Himanshu Patel, Ms. Becki Guilin and Mr. Wayne Costas. The project team owes a debt of gratitude to the hard work, dedication and professionalism of these individuals, without whom this project would not have been successfully completed.

The project team has relied upon the extensive data supplied by the Town, and thus the integrity of the study is largely dependent upon the accuracy of this financial and volumetric data. Every effort has been made by the project team to validate and confirm the information contained herein prior to the preparation of the final study documents.

This report presents no assurance or guarantee that the forecast contained herein will be consistent with actual results or performances. These represent forecasts based on a series of assumptions about future behavior, and are not guarantees. ANY changes in assumptions or actual events may result in significant revisions to the forecast and its conclusions. The cash flow projections and debt service coverage calculations are not intended to present overall financial positions, results of operations, and/or cash flows for the periods indicated, in conformity with guidelines for presentation of a forecast established by the American Institute of Certified Public Accountants.

Executive Summary



Background

In September 2011 the Town of Florence, Arizona ("the Town") engaged **Economists.com** to conduct an update to its 2009 water and wastewater rate study and long-term financial plan. The Town identified numerous objectives for this study, including but not limited to the following:

- A comprehensive analysis and evaluation of the water and wastewater systems' current cost of service and revenue requirements
- A forecast of water and wastewater operating and capital costs for the test year and a period ten years into the future
- An estimate of current and forecast accounts, volumes and billing units for the ten year forecast period
- A thorough review and update of the water and wastewater system's known capital improvement needs, as well as a determination of the need for funding capital requirements through the issuance of long-term debt
- A review of the adequacy and appropriateness of existing water and wastewater customer classes
- An evaluation of the current water and wastewater rate structures and revenue recovered versus the revenue requirement, both overall and for each customer class
- The development of a rate structure that would recover the Town's cost of service, ensure equitable, just and reasonable treatment of identified customer classes, and maintain critical financial ratios
- A review of fixed and variable costs to determine the total percentage of cost allocated to each as well as the minimum monthly charge for a Partial Year rate analysis.

The analysis and recommendations presented in this study achieve all of the objectives outlined.

Water and Wastewater Rate Comparison

Table ES-1 compares Florence’s monthly water and wastewater charges to thirteen cities primarily in southeastern Arizona. The average residential user in the Town consumes 4,178 gallons monthly. A volume of 7,500 gallons water was used for the residential comparison as it represents an industry standard typical usage levels for an average household.

The rate data is based on the Water Infrastructure Finance Authority of Arizona’s (WIFA) 2010 Water and Wastewater Residential Rate Survey. These rates do not include sales tax, activation or other charges beyond the basic minimum and volume charges. Additionally, where appropriate, certain cities that charge for service based on cubic feet of water have had their rates converted to an equivalent charge per 1,000 gallons. The table reveals that the Town’s rates are below the state average and below several similarly-sized cities.

TABLE ES-1

Town of Florence				
Total Monthly Residential Charges for 7,500 Gallons Water and Wastewater				
	2010 Population	7,500 Gallons Water	7,500 Gallons Wastewater	TOTAL
State of AZ	6,392,017	35.71	28.35	64.06
Pinal County	375,770	33.47	33.33	66.80
Florence	25,536	\$ 28.21	\$ 32.02	\$ 60.23
San Luis	25,505	16.61	17.79	34.40
Gila Bend	1,922	26.73	10.23	36.96
Wickenburg	6,363	14.68	25.53	40.21
Collidge^	11,825	27.61	15.23	42.84
Casa Grande^	48,571	24.36	19.18	43.54
Benson	5,105	20.50	29.68	50.18
Sommerton	14,287	17.75	34.79	52.54
Prescott Valley	38,822	30.14	31.60	61.74
Snowflake	5,590	23.71	38.39	62.10
Kingman	28,068	26.12	44.94	71.06
Prescott	38,822	34.53	37.82	72.35
Johnson Utilities		44.00	39.65	83.65
Goodyear	65,275	35.55	50.89	86.44

Source: 2010 US Census Bureau & 2010 Water Infrastructure Finance Authority of Arizona’s Water and Wastewater Residential Rate Survey
^ Served by Arizona Water

Water and Wastewater Customers and Volumes – Test Year & Ten Year Forecast

The Town's water and wastewater customer classes and account growth forecasts are listed in **Table ES-2** and **Table ES-3**. Water cubic foot and gallon-based meters are added together for each meter size. As of July 2011, the Town maintained 2,482 gallon meters (70.65%) and 1,152 cubic foot meters (29.34%).

It should be noted that these represent highly conservative growth rates that could be exceeded if the current economic downturn ends in the next several years.

TABLE ES-2

TOWN OF FLORENCE												
FORECAST TOTAL CUSTOMERS												
WATER Customer Classes												
	1	2	3	4	5	6	7	8	9	10	12	Total
	5/8" Inside	5/8" Outside	1" Inside	1" Outside	2" Inside	3" Compound	3" Turbine	4" Compound	4" Turbine	6" Turbine	CCA/New Prison	
WATER Total Customers												
TY 2012	3,319	44	78	2	72	6	5	2	4	6	2	3,541
2013	3,324	44	79	2	73	6	5	2	4	6	3	3,549
2014	3,333	44	81	2	74	6	7	2	4	6	3	3,563
2015	3,341	44	82	2	75	6	7	2	4	6	3	3,573
2016	3,349	44	83	2	76	6	7	2	4	6	3	3,583
2017	3,357	44	84	2	77	6	7	2	4	6	4	3,594
2018	3,365	44	85	2	78	6	7	2	4	6	4	3,604
2019	3,373	44	86	2	79	6	7	2	4	6	4	3,614
2020	3,381	44	87	2	80	6	7	2	4	6	4	3,624
2021	3,389	44	88	2	81	6	7	2	4	6	5	3,635

TABLE ES-3

TOWN OF FLORENCE						
FORECAST TOTAL CUSTOMERS						
WASTEWATER Customer Classes						
	1	2	3	4,5,6	0	Total
	Residential	Commercial	Non-Residential	Institutional/CCA/ADOC	Other	
WASTEWATER Total Customers						
TY 2012	2,677	231	16	21	-	2,945
2013	2,682	231	16	22	-	2,951
2014	2,690	232	16	22	-	2,960
2015	2,698	233	16	22	-	2,969
2016	2,706	234	16	22	-	2,978
2017	2,714	235	16	23	-	2,988
2018	2,722	236	16	23	-	2,997
2019	2,730	237	16	23	-	3,006
2020	2,738	238	16	23	-	3,015
2021	2,746	239	16	24	-	3,025

The Town's water and wastewater volumes are presented in **Table ES-4**, **Table ES-5** and **Table ES-6**. Detailed calculations of consumption billing units and strength levels are presented in Section II of this report and in the rate model presented in Appendix A.

As part of the process of determining the wastewater cost of service by customer class, the project team used sampling data for both the prisons and the Town's wastewater treatment plants to determine the total pounds of BOD and TSS generated by each customer class. Table ES-6 presents total billing units, BOD and TSS strengths in mg/l, and total pounds of BOD and TSS forecast to be treated by the Town for each of the next ten

years. The table separates out volumes, BOD and TSS for the institutional customer class, which incorporates all of the prisons, and the domestic customer classes, which include residential, commercial, non-residential and mobile homes.

TABLE ES-4

TOWN OF FLORENCE						
FORECAST CONSUMPTION - GALLONS WATER by Customer Class (Meter Size)						
	1 5/8" Inside	2 5/8" Outside	3 1" Inside	5 2" Inside	4 and 6-11 Other classes	Total
WATER Forecast Volume						
2012	166,325,655	3,048,970	10,239,640	32,165,907	379,051,439	590,831,611
2013	166,450,937	3,048,970	10,305,279	32,389,282	415,551,439	627,745,907
2014	166,676,277	3,048,970	10,435,725	32,611,126	416,695,779	629,467,878
2015	166,876,309	3,048,970	10,500,143	32,831,471	416,695,779	629,952,673
2016	167,076,101	3,048,970	10,564,169	33,050,348	416,695,779	630,435,366
2017	167,275,654	3,048,970	10,627,808	33,267,784	489,695,779	703,915,996
2018	167,474,970	3,048,970	10,691,069	33,483,809	489,695,779	704,394,597
2019	167,674,049	3,048,970	10,753,958	33,698,449	489,695,779	704,871,204
2020	167,872,891	3,048,970	10,816,481	33,911,730	489,695,779	705,345,851
2021	168,071,499	3,048,970	10,878,644	34,123,678	562,695,779	778,818,570

TABLE ES-5

TOWN OF FLORENCE								
FORECAST WASTEWATER BILLING UNITS WASTEWATER Customer Classes								
FY	1 Residential	2 Commercial	3 Non-Residential	4 Institutional	5 ADOC	6 CCA/New Prison	0 Other	Total
WASTEWATER Forecast Billing Units								
2012	118,575,051	46,393,005	877,464	237,544,979	163,693,900	139,331,125	-	706,415,524
2013	118,929,801	46,393,005	877,464	237,544,979	163,693,900	175,831,125	-	743,270,274
2014	119,284,550	46,593,841	877,464	237,544,979	163,693,900	175,831,125	-	743,825,859
2015	119,639,300	46,794,676	877,464	237,544,979	163,693,900	175,831,125	-	744,381,444
2016	119,994,049	46,995,512	877,464	237,544,979	163,693,900	175,831,125	-	744,937,029
2017	120,348,799	47,196,347	877,464	237,544,979	163,693,900	267,954,634	-	837,616,123
2018	120,703,548	47,397,183	877,464	237,544,979	163,693,900	267,954,634	-	838,171,708
2019	121,058,298	47,598,018	877,464	237,544,979	163,693,900	267,954,634	-	838,727,293
2020	121,413,048	47,798,854	877,464	237,544,979	163,693,900	267,954,634	-	839,282,878
2021	121,767,797	47,999,690	877,464	237,544,979	163,693,900	408,344,574	-	980,228,403

TABLE ES-6

TOWN OF FLORENCE					
FORECAST WASTEWATER BILLING UNITS					
WASTEWATER Customer Classes					
FY	Total Billing Units	Total MG/L		Total Lbs	
		BOD	TSS	BOD	TSS
Total System					
2012	706,548,555	255	188	1,504,796	1,108,638
2013	743,270,274	255	188	1,583,005	1,166,258
2014	743,825,859	255	188	1,584,188	1,167,130
2015	744,381,444	255	188	1,585,372	1,168,001
2016	744,937,029	255	188	1,586,555	1,168,873
2017	837,616,123	255	188	1,783,941	1,314,295
2018	838,171,708	255	188	1,785,125	1,315,167
2019	838,727,293	255	188	1,786,308	1,316,039
2020	839,282,878	255	188	1,787,491	1,316,910
2021	980,228,403	255	188	2,087,675	1,538,067
Institutional					
2012	540,570,004	256	209	350,657	166,392
2013	577,070,004	256	209	350,937	160,390
2014	577,070,004	256	209	352,121	161,262
2015	577,070,004	256	209	353,304	162,134
2016	577,070,004	256	209	354,487	163,006
2017	669,193,513	256	209	355,186	147,851
2018	669,193,513	256	209	356,370	148,722
2019	669,193,513	256	209	357,553	149,594
2020	669,193,513	256	209	358,736	150,466
2021	809,583,453	256	209	359,182	126,914
Domestic (Residential/Commercial/Mobile Homes)					
2012	165,978,551	253	120	1,154,139	942,246
2013	166,200,270	253	116	1,232,068	1,005,868
2014	166,755,855	253	116	1,232,068	1,005,868
2015	167,311,440	253	116	1,232,068	1,005,868
2016	167,867,025	253	116	1,232,068	1,005,868
2017	168,422,610	253	105	1,428,755	1,166,444
2018	168,978,195	253	106	1,428,755	1,166,444
2019	169,533,780	253	106	1,428,755	1,166,444
2020	170,089,365	253	106	1,428,755	1,166,444
2021	170,644,951	252	89	1,728,493	1,411,153

Water and Wastewater Capital Improvement Plan

Like most municipalities, Florence maintains an extensive and detailed capital improvement program to repair, maintain and expand its water and wastewater system. Minor capital improvements are contained in the Town's budget. Major capital improvements have historically been funded primarily through operating revenue though some have been funded by debt issued by the Town.

Town staff and the project team developed the Town's forecast capital improvements needs over the next decade. The forecast CIP is summarized in **Chart ES-7**. As the chart reveals, the Town is forecast to spend **\$72,540,150** in total capital improvements in the next decade. The majority of these improvements are forecast to be in the wastewater division.

CHART ES-7

TOWN OF FLORENCE			
CAPITAL IMPROVEMENT PLAN			
SCENARIO:	ALT 1		
	Total	Years 1-5	Years 6-10
WATER CIP	\$ 20,363,000	\$ 18,403,000	\$ 1,960,000
WASTEWATER CIP	52,177,150	52,177,150	-
Total CIP	\$ 72,540,150	\$ 70,580,150	\$ 1,960,000
Percent	100.0%	97.3%	2.7%

The CIP is forecast to be funded through a combination of private sector CFD financing, private sector development agreement financing, impact fees, grants, and private sector donations. Certain projects within the CIP are expressly designated for these alternative funding instruments. The difference between the amount required by the Town to fund the CIP and the amount provided by the financing tools described above must be financed through the issuance of long-term debt. The debt forecast to be issued by the Town is summarized in **Table ES-8**. The table reveals that the Town is forecast to issue approximately \$38 million in long-term debt to finance its capital improvement plan. The first issue, scheduled for 2013, is based on preliminary estimates by the Town’s financial advisor, Stone and Youngberg. All new debt is assumed to be over a 25-year term at a 4.5% interest rate with payments of interest only for the first 2 years and principal and interest for the remaining 23 years. The principal balance is increased by 10.0% to cover expected closing costs and a one-year reserve requirement.

TABLE ES-8

TOWN OF FLORENCE			
FORECAST BOND ISSUES			
SCENARIO:	ALT 1		
	Total	Water	Wastewater
2012	\$ -	\$ -	\$ -
2013	10,000,000	10,000,000	-
2014	28,000,000	-	28,000,000
2015	-	-	-
2016	-	-	-
2017	-	-	-
2018	-	-	-
2019	-	-	-
2020	-	-	-
2021	-	-	-
Total Bonds	\$ 38,000,000	\$ 10,000,000	\$ 28,000,000

Water and Wastewater Test Year and Forecast Net Revenue Requirement

Table ES-9 presents the test year and ten year forecast for the Town’s net revenue requirement to be raised

from rates for the water and wastewater utilities. As the table reveals, debt service becomes an increasing portion of the total revenue requirement in future years.

TABLE ES-9

TOWN OF FLORENCE								
CURRENT AND FORECAST REVENUE REQUIREMENT								
SCENARIO:	ALT 1							
	Operating Expenses	Capital Outlays	Current Debt Service	Future Debt Service	Operating Transfers	Total Cost of Service	Less Non-Rate Revenues	Net Revenue Requirement
WATER Revenue Requirement								
2012	\$ 1,893,363	\$ -	\$ -	\$ -	\$ 474,045	\$ 2,367,408	\$ 341,600	\$ 2,025,808
2013	2,072,047	-	-	-	493,007	2,565,054	246,600	2,318,454
2014	2,190,718	-	-	495,000	512,727	3,198,445	246,600	2,951,845
2015	2,314,351	-	-	495,000	533,236	3,342,587	246,600	3,095,987
2016	2,446,072	-	-	777,507	554,566	3,778,145	246,600	3,531,545
2017	2,768,561	-	-	777,507	576,748	4,122,817	246,600	3,876,217
2018	2,928,589	-	-	777,507	599,818	4,305,915	246,600	4,059,315
2019	3,099,356	-	-	777,507	623,811	4,500,674	246,600	4,254,074
2020	3,281,681	-	-	777,507	648,763	4,707,951	246,600	4,461,351
2021	3,702,584	-	-	777,507	674,714	5,154,805	246,600	4,908,205
WASTEWATER Revenue Requirement								
2012	\$ 1,948,650	\$ 9,000	\$ 627,792	\$ -	\$ 284,959	\$ 2,870,401	\$ 77,500	\$ 2,792,901
2013	2,125,243	-	627,792	-	296,357	3,049,392	77,500	2,971,892
2014	2,261,139	-	627,792	-	308,212	3,197,142	77,500	3,119,642
2015	2,406,940	-	627,791	1,386,000	320,540	4,741,271	77,500	4,663,771
2016	3,183,190	-	627,794	1,386,000	333,362	5,530,346	77,500	5,452,846
2017	3,615,772	-	627,790	2,177,021	346,696	6,767,280	77,500	6,689,780
2018	3,863,372	-	627,791	2,177,021	360,564	7,028,749	77,500	6,951,249
2019	4,129,984	-	627,792	2,177,021	374,987	7,309,783	77,500	7,232,283
2020	4,417,188	-	627,790	2,177,021	389,986	7,611,985	77,500	7,534,485
2021	5,166,956	-	627,793	2,177,021	405,586	8,377,355	77,500	8,299,855
TOTAL Revenue Requirement								
2012	\$ 3,842,013	\$ 9,000	\$ 627,792	\$ -	\$ 759,004	\$ 5,237,809	\$ 419,100	\$ 4,818,709
2013	4,197,290	-	627,792	-	789,364	5,614,447	324,100	5,290,347
2014	4,451,856	-	627,792	495,000	820,939	6,395,587	324,100	6,071,487
2015	4,721,291	-	627,791	1,881,000	853,776	8,083,858	324,100	7,759,758
2016	5,629,262	-	627,794	2,163,507	887,927	9,308,490	324,100	8,984,390
2017	6,384,334	-	627,790	2,954,528	923,444	10,890,097	324,100	10,565,997
2018	6,791,962	-	627,791	2,954,528	960,382	11,334,664	324,100	11,010,564
2019	7,229,339	-	627,792	2,954,528	998,797	11,810,457	324,100	11,486,357
2020	7,698,869	-	627,790	2,954,528	1,038,749	12,319,936	324,100	11,995,836
2021	8,869,540	-	627,793	2,954,528	1,080,299	13,532,160	324,100	13,208,060

Water and Wastewater Rate Design

Table ES-10 and Table ES-11 present the project team’s recommended long-term water and wastewater rate plan for the Town. **What is notable about this proposed plan is that it is substantively identical to the rate plan adopted by the Town in 2010.** The project team has determined, based on the update of costs, accounts and volumes, that the existing rate plan remains sufficient to fund the Town’s water and wastewater costs for the next five years. The Town originally adopted this rate plan in 2010.

The Tables present the recommended rate design for the first five years; the rate model contained in Appendix A presents rates for a ten year forecast period. The following is notable about this proposed rate design:

- The rate design assumes that the Town chooses to fund all debt service through monthly water and wastewater rates.
- Because of the more significant needs of the wastewater capital improvement plan, the rate design presents higher annual increases for wastewater customers and lower annual increases for water customers.

- The rate design ensures that water rates will recover the water cost of service and wastewater rates will recover the wastewater cost of service.
- The rate design continues the Town's policy of implementing uniform percent adjustments for water and wastewater ratepayers.

Table ES-12 calculates the average impact on monthly water and wastewater bills of the proposed rate design at various usage levels. The average monthly per meter water usage in the Town is approximately 5,000 gallons, and few customers outside the Town's institutions use more than 50,000 gallons in a month.

TABLE ES-10

TOWN OF FLORENCE		WATER Utility – Recommended Rate Plan						
		Prior	Effective Jul-11	Effective Jul-12	Effective Jul-13	Effective Jul-14	Effective Jul-15	Effective Jul-16
Scen: Base Scenario - 1								
Water Inside Town Limits								
Base Charge								
5/8" Inside		\$ 18.38	\$ 19.30	\$ 20.27	\$ 21.28	\$ 22.34	\$ 23.46	\$ 24.63
1" Inside		30.54	32.17	33.78	35.47	37.24	39.10	41.06
2" Inside		122.54	128.67	135.10	141.86	148.95	156.40	164.22
3" Compound		196.08	205.88	216.17	226.98	238.33	250.25	262.76
3" Turbine		214.46	225.18	236.44	248.26	260.67	273.71	287.39
4" Compound		306.36	321.68	337.76	354.65	372.38	391.00	410.55
4" Turbine		386.02	405.32	425.59	446.87	469.21	492.67	517.30
6" Compound		612.74	643.37	675.54	709.32	744.78	782.02	821.12
6" Turbine		857.82	900.71	945.75	993.03	1,042.68	1,094.82	1,149.56
8" Turbine		1,470.56	1,544.09	1,621.29	1,702.36	1,787.48	1,876.85	1,970.69
10" Turbine		2,328.39	2,444.81	2,567.05	2,695.40	2,830.17	2,971.68	3,120.27
12" Turbine		3,063.67	3,216.85	3,377.69	3,546.58	3,723.91	3,910.10	4,105.61
Usage Charge -- Gallons								
-	10,000	1.31	1.38	1.45	1.52	1.60	1.68	1.76
10,001	18,700	1.82	1.91	2.01	2.11	2.21	2.32	2.44
18,701	Above	3.23	3.39	3.56	3.74	3.92	4.12	4.33
Usage Charge -- Cubic Feet								
-	1,337	0.98	1.03	1.08	1.14	1.19	1.25	1.31
1,338	2,500	1.36	1.42	1.49	1.57	1.64	1.73	1.81
2,501	Above	2.43	2.55	2.68	2.81	2.95	3.10	3.25
Water Outside Town Limits								
Base Charge								
5/8" Outside		\$ 23.89	\$ 25.09	\$ 26.34	\$ 27.66	\$ 29.04	\$ 30.50	\$ 32.02
1" Outside		39.82	41.81	43.90	46.10	48.40	50.82	53.36
2" Outside		159.31	167.28	175.64	184.43	193.65	203.33	213.50
3" Compound		254.90	267.64	281.02	295.07	309.83	325.32	341.58
3" Turbine		273.28	286.94	301.29	316.35	332.17	348.78	366.22
4" Compound		398.28	418.19	439.10	461.05	484.11	508.31	533.73
4" Turbine		477.93	501.83	526.92	553.27	580.93	609.98	640.48
6" Compound		796.66	836.38	878.20	922.11	968.21	1,016.63	1,067.46
6" Turbine		1,041.64	1,093.72	1,148.41	1,205.83	1,266.12	1,329.42	1,395.89
8" Turbine		1,911.72	2,007.31	2,107.68	2,213.06	2,323.71	2,439.90	2,561.89
10" Turbine		3,026.90	3,178.25	3,337.16	3,504.02	3,679.22	3,863.18	4,056.34
12" Turbine		3,762.18	3,950.29	4,147.80	4,355.19	4,572.95	4,801.60	5,041.68
Usage Charge -- Gallons								
-	10,000	1.68	1.76	1.85	1.94	2.04	2.14	2.25
10,001	18,700	2.33	2.44	2.56	2.69	2.83	2.97	3.12
18,701	Above	4.12	4.33	4.55	4.77	5.01	5.26	5.53
Usage Charge -- Cubic Feet								
-	1,337	1.26	1.32	1.39	1.46	1.53	1.61	1.69
1,338	2,500	1.74	1.83	1.92	2.02	2.12	2.23	2.34
2,501	Above	3.09	3.24	3.40	3.57	3.75	3.94	4.14

TABLE ES-11

TOWN OF FLORENCE		WASTEWATER Utility -- Recommended Rate Plan						
Scen:	Base Scenario - 1	Effective	Effective	Effective	Effective	Effective	Effective	
	Prior	Jul-11	Jul-12	Jul-13	Jul-14	Jul-15	Jul-16	
Residential								
Base Charge	\$ 11.62	\$ 12.78	\$ 15.34	\$ 16.88	\$ 18.59	\$ 19.53	\$ 20.49	
Usage Charge	2.72	2.99	3.59	3.95	4.35	4.57	4.79	
Commercial								
Base Charge	11.62	12.78	15.33	16.86	18.55	19.48	20.46	
Usage Charge	2.73	3.01	3.61	3.97	4.37	4.59	4.82	
Non-Residential								
Base Charge	11.62	12.78	15.34	16.87	18.57	19.52	20.49	
Usage Charge	2.73	3.01	3.61	3.97	4.37	4.60	4.83	
Institutional								
Base Charge	11.62	12.78	15.34	16.87	18.56	19.48	20.45	
Usage Charge	3.89	4.20	5.74	5.97	6.94	7.36	7.64	

TABLE ES-12

TOWN OF FLORENCE		WATER AND WASTEWATER Utility -- Impact of Rate Plan on Monthly Charges						
Scen:	Base Scenario - 1	Effective	Effective	Effective	Effective	Effective	Effective	
	Prior	Jul-11	Jul-12	Jul-13	Jul-14	Jul-15	Jul-16	
Monthly Gallons								
Water								
5,000	\$ 46.75	\$ 50.19	\$ 56.32	\$ 60.58	\$ 65.24	\$ 68.52	\$ 71.91	
		3.44	6.12	4.26	4.65	3.28	3.39	
10,000	63.50	68.31	77.02	83.00	89.54	94.04	98.69	
		4.80	8.72	5.98	6.53	4.51	4.65	
20,000	103.21	110.99	125.22	134.96	145.61	152.94	160.50	
		7.78	14.23	9.74	10.65	7.33	7.56	
30,000	155.91	167.32	187.74	201.96	217.48	228.42	239.72	
		11.41	20.43	14.22	15.52	10.94	11.30	
40,000	208.61	223.64	250.26	268.96	289.35	303.90	318.94	
		15.04	26.62	18.70	20.39	14.55	15.04	
50,000	261.31	279.97	312.78	335.96	361.22	379.38	398.16	
		18.66	32.82	23.18	25.26	18.17	18.78	

Partial Year Rates

Town Staff requested a review of fixed and variable costs to determine the total percentage of cost allocated to each as well as the minimum monthly charge for a Partial Year rate analysis. Like many other Arizona cities, the Town of Florence has residents that visit for approximately 6 months a year. The Town has received complaints from some of these residents asking for a Partial Year water and wastewater rate.

A fixed cost analysis was prepared as part of the water and wastewater rate study. Operating Expenses were individually reviewed by Town Staff to determine the percent of each expense that is fixed and variable. This analysis was used to calculate the total fixed and variable cost per connection.

Table ES-13 and ES-14 illustrates the water and wastewater monthly fixed and variable costs per connection. Monthly Cost Per connection is calculated based on the Town's total number of connections. Average Connections with Partial Year Residence is calculated based on an average of six months of total town residence and six months of residence being out of town.

Table ES-13

TOWN OF FLORENCE			
WATER Utility - Fixed And Variable Costs			
Scen:	Base Scenario - 1		
Current Minimum Charge 5/8" Inside	\$ 19.30		
	Cost Allocated to		
	Fixed	Variable	Total
Total Revenue Requirement	\$ 1,466,786	\$ 563,523	\$ 2,030,308
Percent	72%	28%	100%
<i>Total Active Connections - All Customers</i>	3,537	3,537	3,537
Monthly Cost Per Connection-W/O Partial Year	\$ 34.56	\$ 13.28	\$ 47.83

Table ES-14

TOWN OF FLORENCE			
WASTEWATER Utility - Fixed And Variable Costs			
Scen:	Base Scenario - 1		
<u>Current Minimum Charge</u>	\$	12.78	
Residential			
		Cost Allocated to	
		Fixed	Variable
			Total
Total Revenue Requirement	\$	1,960,602	\$ 832,299
Percent		70%	30%
			\$ 2,792,901
			100%
<i>Total Active Connections - All Customers</i>		-	-
		2,942	2,942
		-	-
Monthly Cost Per Connection-W/O Partial Year	\$	55.53	\$ 23.58
			\$ 79.11

SECTION I

Introduction

Background



In September 2011 the Town of Florence, Arizona (“the Town”) engaged **Economists.com** to conduct an update to its 2009 water and wastewater rate study and long-term financial plan.

The Town identified numerous objectives for this study, including but not limited to the following:

- A comprehensive analysis and evaluation of the water and wastewater systems’ current cost of service and revenue requirements
- A forecast of water and wastewater operating and capital costs for the test year and a period ten years into the

future

- An estimate of current and forecast accounts, volumes and billing units for the ten year forecast period
- A forecast of operating expenses over the next decade, taking into consideration such factors as inflation, system growth, and increases in staffing levels
- A thorough review and update of the water and wastewater system’s known capital improvement needs, as well as a determination of the need for funding capital requirements through the issuance of long-term debt
- A review of the adequacy and appropriateness of existing water and wastewater customer classes
- An evaluation of the current water and wastewater rate structures and revenue recovered versus the revenue requirement, both overall and for each customer class
- The development of a rate structure that would recover the Town’s cost of service, ensure equitable, just and reasonable treatment of identified customer classes, and maintain critical financial ratios
- A review of fixed and variable costs to determine the total percentage of cost allocated to each as well as the minimum monthly charge for a Partial Year rate analysis.

In conjunction with Town staff, the project team evaluated several alternative rate structures, all of which would enable the Town to achieve these objectives while continuing to provide ratepayers with a superior quality of municipal water and wastewater services. After a series of meetings with Town officials at which these

objectives and rate scenarios were thoroughly analyzed, the project team narrowed its recommendation to the water and wastewater alternative contained in this study. The analysis and recommendations presented in this study achieve all of the objectives outlined above.

Report Organization

This report is organized into the following sections:

Section I – Introduction - outlines objectives and scope of this rate study and long-term financial plan. Also presents the Town's current rate structures and a comparison of the Town's water and wastewater charges with other Arizona cities.

Section II – Water and Wastewater Test Year and Forecast Volumes – analyzes the Town's customer base, total accounts and current volumes of treated water and wastewater. This section presents totals for the current year and a forecast ten years into the future.

Section III – Water and Wastewater Test Year and Forecast Revenue Requirement – outlines the process of analyzing the Town's current water and wastewater utility cost structure. The total current or "test year" revenue requirements are developed, and costs are functionalized. Using the test year as a basis, costs are forecast for a ten-year period.

Section IV – Water and Wastewater Rate Design – Presents the final rate recommendation for the Town, which would enable it to meet its revenue requirements over the next decade. Also presents an analysis of the impact of these rate alternatives on each defined customer class. Analysis of the Town's fixed and variable costs as the basis for Partial Year Rates.

Appendix A – presents a hard copy printout of the interactive Microsoft Excel spreadsheet model developed for the Town to calculate water and wastewater current and future revenue requirements. The model automatically generates all calculations based on a set of defined user inputs.

Water and Wastewater Current Rates

Table I-1 and Table I-2 summarize the Town's current water and wastewater rate structure:

Table I-1

TOWN OF FLORENCE			
Current Water Rates Effective 7/6/2011			
	<u>Inside Municipality</u>		<u>Outside Municipality</u>
Monthly Service Charge:			
5/8"-3/4" Meter	\$ 19.30	\$	25.09
1" Meter	32.17		41.81
2" Meter	128.67		167.28
3" Compound	205.88		267.64
3" Turbine	225.18		286.94
4" Compound	321.68		418.19
4" Turbine	405.32		501.83
6" Compound	643.37		836.38
6" Turbine	900.71		1,093.72
Monthly Consumption Rate per 1,000 Gallons/100 Cubic Feet:			
0 - 10,000 gallons	1.38		1.85
10,001 to 18,700 gallons	1.91		2.56
Over 18,700 gallons	3.39		4.55
Under 1,337 cubic feet	1.03		1.32
1,337 to 2,500 cubic feet	1.42		1.83
Over 2,500 cubic feet	2.55		3.24

Table I-2

TOWN OF FLORENCE			
Current Monthly Wastewater Rates Effective 7/6/2011			
Monthly Service Fee (all ratepayers)		\$ 12.78	
	<u>Monthly Rate Per CCF</u>		<u>Monthly Rate Per 1,000 Gal</u>
Residential	\$2.24	\$	2.99
Commercial	\$2.25	\$	3.01
Institutional	\$3.14	\$	4.20

The monthly service charge for all water accounts includes a monthly base charge based on the size and type of meter serving the customer. The majority of customers are residential with a 5/8"-3/4" meter size and are currently charged a base charge of \$19.30 per month if they are inside the municipality and \$25.09 if they are outside. Commercial class customers who have a larger meter size are assessed a larger base charge commiserate with their respective meter size.

Residential customers who have the smallest meter size are charged a rate dependent on their meter and billing protocol. Some older customers have cubic foot meters and have been billed using cubic feet as the measure of their usage. These cubic foot meters and billing protocol are being phased out and within the next 5 years, after which all customers are expected to be billed using gallons as the measure of their variable usage. Table I-1 reflects the rate to customers by meter size based on whether they are billed using gallons or cubic feet.

The Town charges all residential, commercial, and institutional accounts a combination of a fixed monthly sewer charge and a usage-based volume rate. All accounts are charged a monthly base charge of \$12.78. Once again, there are two billing protocols utilizing gallons and cubic feet as the measuring stick for usage. As with water billing, the Town plans to phase out the use of cubic feet over the next 5 years.

Usage charges for residential, commercial, and institutional customers are reflected in Table I-2.

Water and Wastewater Rate Comparison

Table I-3 compares Florence's monthly water and wastewater charges to thirteen cities primarily in southeastern Arizona. The average residential user in the Town consumes 4,178 gallons monthly. A volume of 7,500 gallons water was used for the residential comparison as it represents an industry standard typical usage levels for an average household.

The rate data is based on the Water Infrastructure Finance Authority of Arizona's (WIFA) 2010 Water and Wastewater Residential Rate Survey. These rates do not include sales tax, activation or other charges beyond the basic minimum and volume charges. Additionally, where appropriate, certain cities that charge for service based on cubic feet of water have had their rates converted to an equivalent charge per 1,000 gallons. The table reveals that the Town's rates are below the state average and below several similarly-sized cities.

TABLE I-3

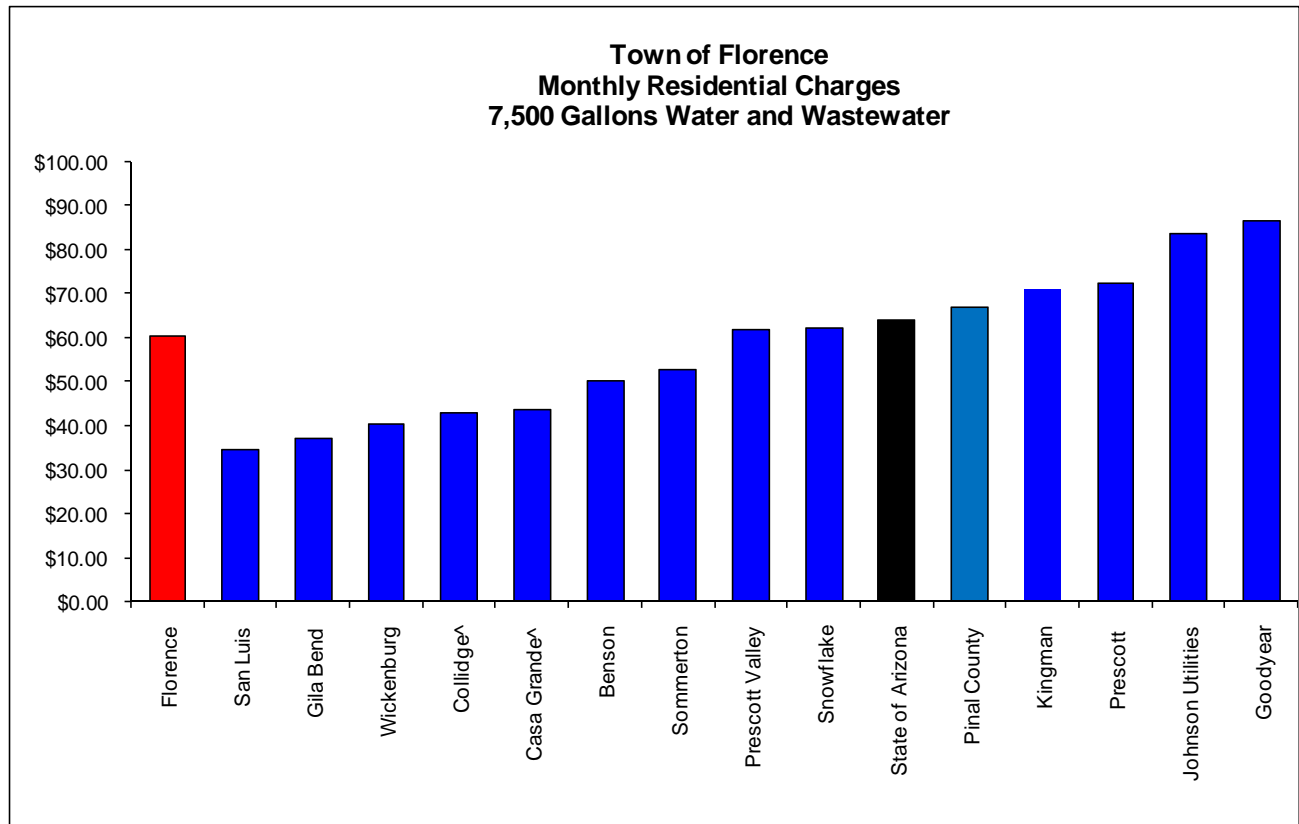
Town of Florence				
Total Monthly Residential Charges for 7,500 Gallons Water and Wastewater				
	2010 Population	7,500 Gallons Water	7,500 Gallons Wastewater	TOTAL
State of AZ	6,392,017	35.71	28.35	64.06
Pinal County	375,770	33.47	33.33	66.80
Florence	25,536	\$ 28.21	\$ 32.02	\$ 60.23
San Luis	25,505	16.61	17.79	34.40
Gila Bend	1,922	26.73	10.23	36.96
Wickenburg	6,363	14.68	25.53	40.21
Collidge^	11,825	27.61	15.23	42.84
Casa Grande^	48,571	24.36	19.18	43.54
Benson	5,105	20.50	29.68	50.18
Sommerton	14,287	17.75	34.79	52.54
Prescott Valley	38,822	30.14	31.60	61.74
Snowflake	5,590	23.71	38.39	62.10
Kingman	28,068	26.12	44.94	71.06
Prescott	38,822	34.53	37.82	72.35
Johnson Utilities		44.00	39.65	83.65
Goodyear	65,275	35.55	50.89	86.44

Source: 2010 US Census Bureau & 2010 Water Infrastructure Finance Authority of Arizona's Water and Wastewater Residential Rate Survey
 ^ Served by Arizona Water

Comparisons such as these are for usage charges only. This type of comparison may have the unintended effect of discriminating against communities who choose to finance system expansions through current rates or revenue bonds, which are included in rates, as opposed to those who utilize general obligation bonds, which are funded through taxes. All else being equal, a Town that primarily or exclusively uses general obligation bonds will have a lower water rate per 1,000 gallons but a higher tax rate.

With these caveats in mind, **Chart I-4** presents a graphic comparison of residential water and wastewater monthly charges for 7,500 gallons.

CHART I-4



SECTION II

Water and Wastewater Test Year and Forecast Volumes



In order to accurately forecast future revenues and expenses, it is necessary to examine current water and wastewater utility conditions. The first step in developing cost of service rates is to analyze patterns of usage, both for the system as a whole and for specified customer classes.

For the Town of Florence, water consumption records maintained by the Town were reviewed for a five-year period dating back to 2007. These records provided information on the monthly water volumes distributed system-wide by account type as well as

the number of accounts by meter size for each month and the associated revenues.

According to standard utility ratemaking methodology, in order to allocate revenue requirements equitably among system users, customers must be classified into relatively homogeneous groups with similar usage characteristics or service demands. Costs are then allocated to the customer classes in proportion to the usage characteristics of each class. For the water system, costs are typically allocated to customers based on their average and peak water demands. For the wastewater system, costs are allocated to customers based on their estimated wastewater flows, and in some cases, based on wastewater strengths.

After thoroughly examining volume and customer data, the project team made no revisions to the Town's rate classifications. The project team finds these customer class distinctions to be reasonable and appropriate for the Town of Florence, meeting the criteria of homogenous groups with similar usage patterns. However, the project team notes that the Town is moving forward with its plans to phase out its cubic foot meters and classifications over the next five years and consolidate all of its ratepayers into gallon-based customer classes.

In this section the Town's functional customer classes and test year usage patterns will be thoroughly analyzed. A ten-year projection of customers and usage will also be presented. These forecasts, along with the revenue requirements, will form the basis of the rate design recommendations.

Water and Wastewater Customers and Meters – Test Year & Ten Year Forecast

The Town's water customer classes by meter size and assigned numbering are listed in **Table II-1**. The Town has provided the project team with account data for all months from January 2009 through July 2011. The project team has used the May 2011 data as the basis for the test year.

The table lists all accounts by meter size both inside and outside the Town of Florence. Water cubic foot and gallon-based meters are added together for each meter size. As of July 2011, the Town maintained 2,482 gallon meters (70.65%) and 1,152 cubic foot meters (29.34%).

Table II-1

TOWN OF FLORENCE		
WATER Customers -- May 2011		
1	5/8" Inside	3,316
2	5/8" Outside	45
3	1" Inside	78
4	1" Outside	2
5	2" Inside	72
6	3" Compound	7
7	3" Turbine	5
8	4" Compound	2
9	4" Turbine	4
10	6" Turbine	6
12	CCA/New Prison	2
Total		3,539

Table II-2 details the growth projections used by the project team for the Town's water customers beginning in the Test Year and continuing through Fiscal Year 2021.



Table II-2

TOWN OF FLORENCE												
FORECAST TOTAL CUSTOMERS												
WATER Customer Classes												
	1 5/8" Inside	2 5/8" Outside	3 1" Inside	4 1" Outside	5 2" Inside	6 3" Compound	7 3" Turbine	8 4" Compound	9 4" Turbine	10 6" Turbine	12 CCA/New Prison	Total
WATER Total Customers												
TY 2012	3,319	44	78	2	72	6	5	2	4	6	2	3,541
2013	3,324	44	79	2	73	6	5	2	4	6	3	3,549
2014	3,333	44	81	2	74	6	7	2	4	6	3	3,563
2015	3,341	44	82	2	75	6	7	2	4	6	3	3,573
2016	3,349	44	83	2	76	6	7	2	4	6	3	3,583
2017	3,357	44	84	2	77	6	7	2	4	6	4	3,594
2018	3,365	44	85	2	78	6	7	2	4	6	4	3,604
2019	3,373	44	86	2	79	6	7	2	4	6	4	3,614
2020	3,381	44	87	2	80	6	7	2	4	6	4	3,624
2021	3,389	44	88	2	81	6	7	2	4	6	5	3,635
WATER Annual New Customers												
TY 2012	3	-	-	-	-	-	-	-	-	-	-	3
2013	5	-	1	-	1	-	-	-	-	-	1	8
2014	9	-	2	-	1	-	2	-	-	-	-	14
2015	8	-	1	-	1	-	-	-	-	-	-	10
2016	8	-	1	-	1	-	-	-	-	-	-	10
2017	8	-	1	-	1	-	-	-	-	-	1	11
2018	8	-	1	-	1	-	-	-	-	-	-	10
2019	8	-	1	-	1	-	-	-	-	-	-	10
2020	8	-	1	-	1	-	-	-	-	-	-	10
2021	8	-	1	-	1	-	-	-	-	-	1	11

As revealed in the tables above, the test year includes the forecast addition of 3 new connections, raising the total to 3,541. Most of the Town’s water accounts are 5/8”-3/4” metered and, thus, are presumably residential. Table II-2 reveals that water accounts are forecast to continue to remain primarily comprised of residential accounts during the forecast period and total water accounts will increase by approximately 8 annually from TY 2012 – FY 2021. This translates to an increase in water accounts from 3,541 in the test year to 3,635 in FY 2021, an average annual increase of 0.29%, or a total increase of 2.59%. It should be noted that this is a highly conservative growth rate that could be exceeded if the current economic downturn ends in the next several years.

This overall growth is illustrated further in **Chart II-3**.

CHART II-3

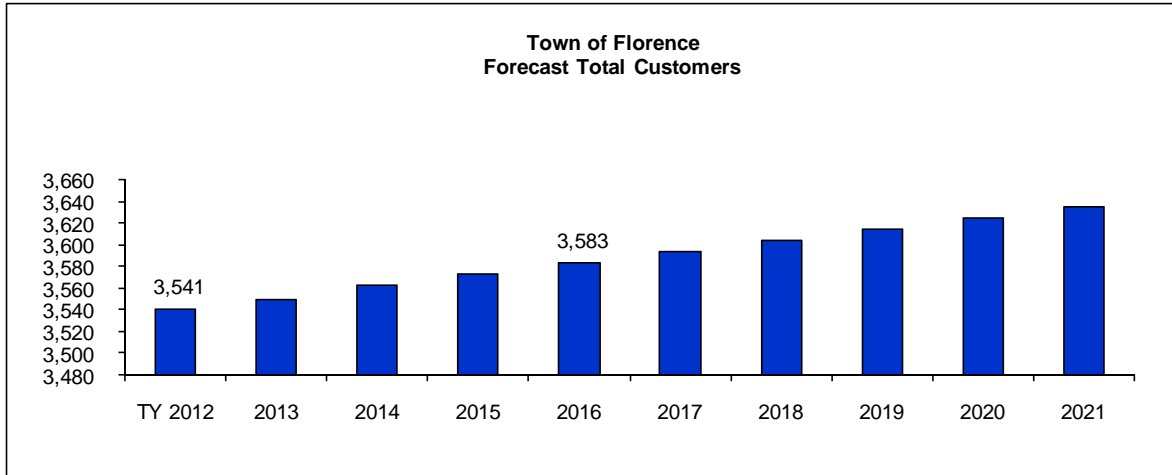


Table II-4 presents the project team’s ten-year forecast of wastewater account growth. It reveals that the wastewater customer base will also remain primarily residential, and is forecast to increase by 3-10 accounts per year through FY 2021. Wastewater accounts are forecast to increase from 2,945 in the test year to 3,025 in FY 2021, for an average annual increase of 0.30%. As with the water tables, for illustrative purposes gallon and cubic foot meters have been added together for each customer class.

TABLE II-4

TOWN OF FLORENCE						
FORECAST TOTAL CUSTOMERS						
WASTEWATER Customer Classes						
	1	2	3	4,5,6	0	
	Residential	Commercial	Non-Residential	Institutional/CCA/ADOC	Other	Total
WASTEWATER Total Customers						
TY 2012	2,677	231	16	21	-	2,945
2013	2,682	231	16	22	-	2,951
2014	2,690	232	16	22	-	2,960
2015	2,698	233	16	22	-	2,969
2016	2,706	234	16	22	-	2,978
2017	2,714	235	16	23	-	2,988
2018	2,722	236	16	23	-	2,997
2019	2,730	237	16	23	-	3,006
2020	2,738	238	16	23	-	3,015
2021	2,746	239	16	24	-	3,025
WASTEWATER Annual New Customers						
TY 2012	3	-	-	-	-	3
2013	5	-	-	1	-	6
2014	8	1	-	-	-	9
2015	8	1	-	-	-	9
2016	8	1	-	-	-	9
2017	8	1	-	1	-	10
2018	8	1	-	-	-	9
2019	8	1	-	-	-	9
2020	8	1	-	-	-	9
2021	8	1	-	1	-	10

Historical and Current Water Consumption

The project team reviewed the Town's water consumption data for the period January 2007 through July 2011. Table II-5 presents total water consumption as well as consumption by customer class. Town data for cubic foot meters has been converted to gallons for the purposes of this exhibit. The exhibit reveals that while usage has increased in the past year, the FY 2011 level of 592,404,599 is only nominally higher than the 581,552,249 total consumed in FY 2007.

TABLE II-5

Town of Florence		Historical Water Consumption Water Consumption By Meter Size (Gallons)		
		Calendar Year 2010	Fiscal Year 2011	Last 12 Months ending July 2011
5/8"-3/4"	Inside	172,897,017	169,901,109	166,250,451
5/8"-3/4"	Outside	3,737,462	3,157,096	3,048,970
1"	Inside	9,952,286	10,064,234	10,239,640
1"	Outside	322,650	375,922	432,621
2"	Inside	30,042,743	31,341,441	32,165,907
2"	Outside	-	-	-
3"	Compnd	7,187,295	6,982,360	6,968,324
3"	Turbine	4,766,900	5,624,300	5,721,700
4"	Compnd	1,816,400	1,579,390	1,321,490
4"	Turbine	5,536,550	6,488,700	6,075,850
6"	Turbine	223,913,165	235,222,761	219,200,330
6"	CCA	82,562,000	121,667,285	139,331,125
	Total	542,734,468	592,404,599	590,756,407

Water Billed Consumption – Ten Year Forecast

Table II-6 presents the project team's ten-year forecast of water consumption in gallons for the Town. Once again data for cubic foot meters has been converted to gallons for the purposes of this exhibit. Consistent with the growth of accounts presented above, the project team has tracked the increase in consumption for the customer classes impacted and grouped the other classes for which growth is not projected.

Despite account growth, consumption levels often decrease when rainfall levels are higher since a substantial portion of water consumption is used for irrigation. Factors such as account growth, existing rate structure and rainfall totals each exercise various degrees of influence over the ultimate level of water consumption. Therefore, the development of the test year for the volume forecast requires that each of these factors be analyzed.

The project team's forecast is based on the following factors:

- Florence's account growth is forecast to continue to increase by approximately 0.30% per year. This forecast is conservative in accordance with the preferences of the project team and Town Staff.
- The forecast assumes that the Prison will expand by 1,000 beds in 2013, 2,000 beds in 2017 and 2,000 beds in 2021. This accounts for the majority of the forecast increase in total consumption.

Table II-7 presents average consumption by meter size by month. The table reveals that 5/8" meters, which represent residential accounts, have a very low monthly total of 4,178 gallons.

TABLE II-6

TOWN OF FLORENCE						
FORECAST CONSUMPTION - GALLONS WATER by Customer Class (Meter Size)						
	1 5/8" Inside	2 5/8" Outside	3 1" Inside	5 2" Inside	4 and 6-11 Other classes	Total
WATER Forecast Volume						
2012	166,325,655	3,048,970	10,239,640	32,165,907	379,051,439	590,831,611
2013	166,450,937	3,048,970	10,305,279	32,389,282	415,551,439	627,745,907
2014	166,676,277	3,048,970	10,435,725	32,611,126	416,695,779	629,467,878
2015	166,876,309	3,048,970	10,500,143	32,831,471	416,695,779	629,952,673
2016	167,076,101	3,048,970	10,564,169	33,050,348	416,695,779	630,435,366
2017	167,275,654	3,048,970	10,627,808	33,267,784	489,695,779	703,915,996
2018	167,474,970	3,048,970	10,691,069	33,483,809	489,695,779	704,394,597
2019	167,674,049	3,048,970	10,753,958	33,698,449	489,695,779	704,871,204
2020	167,872,891	3,048,970	10,816,481	33,911,730	489,695,779	705,345,851
2021	168,071,499	3,048,970	10,878,644	34,123,678	562,695,779	778,818,570

TABLE II-7

TOWN OF FLORENCE CONSUMPTION PER MONTH BY METER SIZE AUG 2010 - JUL 2011		
Consumption by Meter Size		
1	5/8" Inside	4,178
2	5/8" Outside	5,775
3	1" Inside	10,940
4	1" Outside	18,026
5	2" Inside	37,229
6	3" Compound	96,782
7	3" Turbine	95,362
8	4" Compound	55,062
9	4" Turbine	126,580
10	6" Turbine	3,044,449
12	CCA/New Prison	5,805,464

Peaking Factors

The cost of providing water to customers depends not only on the amount of water each class uses, but also on how that usage occurs over time. The maximum-day peaking requirements of a water utility's customers are an important influence on the utility's costs. Because water utilities attempt to meet all of the demands of their customers, water systems are sized to meet customers' peak requirements. Therefore, during off-peak periods, there are costs associated with the unused capacity of the system. Ratemaking guidelines direct that these costs must be allocated to customers in proportion to the contribution of each customer class to the system peak. Thus, it is necessary to determine the peak rate of use relative to the average rate of use for each class. This ratio is called a *Peaking Factor*.

The calculation of peaking factors for individual classes relies on available pumping and consumption information as well as professional judgment. If customer meters could record daily flow rates for each customer, more refined information could be obtained on peaking factors. This is not feasible because of the enormous cost that would be imposed on the utility. Therefore, it is accepted practice in the water industry to develop peaking factor estimates based on standard formulas using system peak day information and monthly customer class use records. This is a conservative methodology, since customer class peaking factors based on peak months will inevitably be lower than the system-wide peaking factor, which is based on the peak day.

Based on AWWA guidelines, the customer class peaking factors calculated in this study are for non-coincidental peaks. The peaking factors developed for this analysis are based on actual monthly water consumption by customer class for the recent twelve-month period, August 2010 – July 2011. The calculations of the monthly peaking factors by class are calculated in **Table II-8**. While some classes had higher than normal peaking factors, the project team has assumed that they are due to monthly accounting fluctuations and are not truly representative of the true peak to average ratio. The combined peak day to average ratio used in the rate model is 2.0.

TABLE II-8

TOWN OF FLORENCE				
	Water Consumption and Peak to Average Ratios			
	Last 12 Months Consumption	Monthly Average	Peak Month	Peak/Avg Ratio
5/8" Inside	166,250,451	13,854,204	28,284,199	2.04
5/8" Outside	3,048,970	254,081	384,611	1.51
1" Inside	10,239,640	853,303	1,261,986	1.48
1" Outside	432,621	36,052	89,730	2.49
2" Inside	32,165,907	2,680,492	3,905,226	1.46
3" Compound	6,968,324	580,694	915,333	1.58
3" Turbine	5,721,700	476,808	587,400	1.23
4" Compound	1,321,490	110,124	707,700	6.43
4" Turbine	6,075,850	506,321	730,080	1.44
6" Turbine	219,200,330	18,266,694	27,170,488	1.49
CCA/New Prison	139,331,125	11,610,927	24,639,018	2.12
Total	590,756,407	49,229,701	64,172,282	1.30

Wastewater Flows – Test Year and Forecast

Like many cities across the country, the Town uses monthly water sales as a basis for determining wastewater billing units for a majority of its wastewater accounts. All customers are charged a flat rate of \$12.78 regardless of their water consumption. The forecast for billing units is derived using anticipated growth in accounts as depicted in Table II-4. The results of the forecast are presented in **Table II-9**.

Three points are notable about this table. First, many water accounts do not return wastewater to the system, particularly if they are outside Town limits and are currently using a septic system. Second, wastewater usage is not subject to the significant fluctuations experienced by water accounts. This is because the water volume fluctuation is due to outdoor usage that is not returned to the wastewater system. Third, the forecast spike in usage in FY 2013, 2017 and 2021 is due to the anticipated addition of a new bed at the Prison.

TABLE II-9

TOWN OF FLORENCE								
FORECAST WASTEWATER BILLING UNITS								
WASTEWATER Customer Classes								
FY	1 Residential	2 Commercial	3 Non-Residential	4 Institutional	5 ADOC	6 CCA/New Prison	0 Other	Total
WASTEWATER Forecast Billing Units								
2012	118,575,051	46,393,005	877,464	237,544,979	163,693,900	139,331,125	-	706,415,524
2013	118,929,801	46,393,005	877,464	237,544,979	163,693,900	175,831,125	-	743,270,274
2014	119,284,550	46,593,841	877,464	237,544,979	163,693,900	175,831,125	-	743,825,859
2015	119,639,300	46,794,676	877,464	237,544,979	163,693,900	175,831,125	-	744,381,444
2016	119,994,049	46,995,512	877,464	237,544,979	163,693,900	175,831,125	-	744,937,029
2017	120,348,799	47,196,347	877,464	237,544,979	163,693,900	267,954,634	-	837,616,123
2018	120,703,548	47,397,183	877,464	237,544,979	163,693,900	267,954,634	-	838,171,708
2019	121,058,298	47,598,018	877,464	237,544,979	163,693,900	267,954,634	-	838,727,293
2020	121,413,048	47,798,854	877,464	237,544,979	163,693,900	267,954,634	-	839,282,878
2021	121,767,797	47,999,690	877,464	237,544,979	163,693,900	408,344,574	-	980,228,403

Wastewater Strengths – Test Year and Forecast

As part of the process of determining the wastewater cost of service by customer class, the project team used sampling data for both the prisons and the Town’s wastewater treatment plants to determine the total pounds of BOD and TSS generated by each customer class. **Table II-10** presents total billing units, BOD and TSS strengths in mg/l, and total pounds of BOD and TSS forecast to be treated by the Town for each of the next ten years. The table separates out volumes, BOD and TSS for the institutional customer class, which incorporates all of the prisons, and the domestic customer classes, which include residential, commercial, non-residential and mobile homes. Detailed calculations of strength levels are presented in the rate model presented in Appendix A.

TABLE II-10

TOWN OF FLORENCE						
FORECAST WASTEWATER BILLING UNITS						
WASTEWATER Customer Classes						
FY	Total Billing Units	Total MG/L		Total Lbs		
		BOD	TSS	BOD	TSS	
Total System						
2012	706,548,555	255	188	1,504,796	1,108,638	
2013	743,270,274	255	188	1,583,005	1,166,258	
2014	743,825,859	255	188	1,584,188	1,167,130	
2015	744,381,444	255	188	1,585,372	1,168,001	
2016	744,937,029	255	188	1,586,555	1,168,873	
2017	837,616,123	255	188	1,783,941	1,314,295	
2018	838,171,708	255	188	1,785,125	1,315,167	
2019	838,727,293	255	188	1,786,308	1,316,039	
2020	839,282,878	255	188	1,787,491	1,316,910	
2021	980,228,403	255	188	2,087,675	1,538,067	
Institutional						
2012	540,570,004	256	209	350,657	166,392	
2013	577,070,004	256	209	350,937	160,390	
2014	577,070,004	256	209	352,121	161,262	
2015	577,070,004	256	209	353,304	162,134	
2016	577,070,004	256	209	354,487	163,006	
2017	669,193,513	256	209	355,186	147,851	
2018	669,193,513	256	209	356,370	148,722	
2019	669,193,513	256	209	357,553	149,594	
2020	669,193,513	256	209	358,736	150,466	
2021	809,583,453	256	209	359,182	126,914	
Domestic (Residential/Commercial/Mobile Homes)						
2012	165,978,551	253	120	1,154,139	942,246	
2013	166,200,270	253	116	1,232,068	1,005,868	
2014	166,755,855	253	116	1,232,068	1,005,868	
2015	167,311,440	253	116	1,232,068	1,005,868	
2016	167,867,025	253	116	1,232,068	1,005,868	
2017	168,422,610	253	105	1,428,755	1,166,444	
2018	168,978,195	253	106	1,428,755	1,166,444	
2019	169,533,780	253	106	1,428,755	1,166,444	
2020	170,089,365	253	106	1,428,755	1,166,444	
2021	170,644,951	252	89	1,728,493	1,411,153	

SECTION III

Water & Wastewater Forecast Revenue Requirement



In this section of the rate study and long-term financial plan, the Town of Florence's test year and forecast water and wastewater utility revenue requirements are developed. As noted in Section I, the test year consists of the Town's current fiscal year, July 1, 2011 through June 30, 2012.

The estimates presented in this section are based on the Town's Council-adopted budget for FY 2012, as well as a forecast of the Town's future capital improvements.

The calculation of a revenue requirement differs from a utility's budget in that it represents only that amount that must be raised through the Town's user rates. This means that non-rate revenue (such as

connection fees, late payment charges and interest) must be subtracted from the budgeted operating and capital expenditures to determine the net revenue requirement to be raised from rates.

As is typical for publicly owned utilities, Florence's system revenue requirements were developed using the cash basis of ratemaking. Under the cash basis, as defined by the AWWA Manual M-1, system revenue requirements consist of cash expenditures and other financial commitments (such as debt service coverage or reserves) that must be met through system operating revenues and other revenue sources.

The following specific items are included in the Town's revenue requirements raised from rates:

O&M expenses

Operating Transfers

Capital Outlays Funded from Rates

Debt service -- Current

Debt Service – Forecast

All data used in the development of the revenue requirements was obtained from the financial statements, budgets and other information provided by Town staff. The revenue requirements presented in this section are for the rate scenario to be labeled in this study as Alternative #1. Rate scenarios are described in further detail in Section IV of this report.

Operating Expenses – Test Year

Table III-1 summarizes the test year FY 2012 operating costs and fund transfers for the Town.

TABLE III-1

TOWN OF FLORENCE		TEST YEAR OPERATING EXPENSES		
SCENARIO:	Base Scenario - 1	Operating Expenses	Transfers	Total Operating/Transfers
Water		\$ 1,893,363	\$ 474,045	\$ 2,367,408
Wastewater		1,948,650	284,959	1,948,650
TOTAL WATER/WASTEWATER		\$ 3,842,013	\$ 759,004	\$ 4,316,058

As shown in Table III-1, the Town’s operating expenses for its water utility are forecast to be **\$1,893,363** in the test year, and **\$1,948,650** for the wastewater utility. Table III-2 and Table III-3 present the FY 2012 operating budget in detail by category. These totals are derived from the Town’s FY 2012 budget. General fund transfers are presented separately because these totals are not included for the purposes of calculating debt coverage factors. Capital outlays and debt service are examined separately and in detail later in this section.

TABLE III-2

TOWN OF FLORENCE		
WATER TEST YEAR OPERATING EXPENSES		
SCENARIO:	Base Scenario - 1	Test Year FY 2012
PERSONNEL SERVICES		
101.000	Salaries and Wages	\$ 213,805
102.000	Part-time Salaries	11,350
103.000	Overtime	28,000
105.000	Holiday Pay	6,825
106.000	Stand-By	7,300
111.000	AZ Retirement	27,025
121.000	FICA - Employer's Portion	20,500
122.000	Unemployment	-
123.000	Workers Compensation	7,550
124.000	Health, Accident & Life Insurance	69,300
		391,655
CONTRACTUAL SERVICES/MAINT		
201.000	Telephone	2,860
202.000	Postage	1,000
203.000	Reproduction/ Printing	300
204.000	Data Processing	-
205.000	Legal Publications	600
206.000	Liability Insurance	66,000
209.000	Vehicle Repair and Maint	7,700
210.000	Radio Repair and Maint	-
211.000	Maintenance Other	70,000
212.000	Water Charge	500
215.000	Electrical Charge	300,000
217.000	Professional Services	200,000
218.000	Engineering and Architectural	3,000
219.000	Financial Audit	5,500
222.000	Rental Charges	330
226.000	Facility Repair	3,300
231.000	Computer Lease	-
	Total Contractual Services	661,090
COMMODITIES		
301.000	Office Supplies	4,400
302.000	Operating Supplies	24,200
304.000	Uniform Allowance	4,400
305.000	Tires - Batteries, etc.	4,500
306.000	Fuel - Oil	32,500
308.000	Books	385
310.000	Chemicals	12,000
311.000	Small Tools	3,500
312.000	Safety Equipment	6,000
313.000	Training Materials	2,000
315.000	Janitorial Supplies	-
316.000	Facilities Maintenance	3,025
317.000	Land Maintenance	1,705
318.000	Sidewalk Repair and Manintenance	4,950
320.000	Utility Lines Repair and Maintenance	93,500
324.000	Computers/ Printers	400
	Total Commodities	197,465
OTHER CHARGES		
401.000	Dues, Subscriptions	1,000
402.000	Conferences, Business Meetings	-
403.000	Training & Development	1,353
408.000	Miscellaneous Charges	7,700
409.000	Water Fees, Assessments, Replace	633,100
	Total Other Charges	643,153
	Total Water Operating Expense	\$ 1,893,363

TABLE III-3

TOWN OF FLORENCE		
		TEST YEAR OPERATING EXPENSES
SCENARIO:	Base Scenario - 1	Test Year FY 2012
PERSONNEL SERVICES		
101.000	Salaries and Wages	\$342,585
102.000	Part-time Salaries	5,700
103.000	Overtime	26,000
105.000	Holiday Pay	12,775
106.000	Stand-By	6,450
111.000	AZ Retirement	39,825
121.000	FICA - Employer's Portion	30,150
122.000	Unemployment	0
123.000	Workers Compensation	11,475
124.000	Health, Accident & Life Insurance	<u>92,400</u>
Total Personnel Services		\$567,360
CONTRACTUAL SERVICES/MAINT		
201.000	Telephone	\$5,060
202.000	Postage	2,000
203.000	Reproduction/ Printing	495
204.000	Data Processing	0
205.000	Legal Publications	550
206.000	Liability Insurance	59,400
209.000	Vehicle Repair and Maint	7,500
210.000	Radio Repair and Maint	0
211.000	Maintenance Other	244,000
212.000	Water Charge	73,200
215.000	Electrical Charge	507,500
217.000	Professional Services	217,000
218.000	Engineering and Architectural	5,750
219.000	Financial Audit	6,000
222.000	Rental Charges	0
226.000	Facility Repair	0
231.000	Computer Lease	<u>0</u>
Total Contractual Services		\$1,128,455
COMMODITIES		
301.000	Office Supplies	\$2,540
302.000	Operating Supplies	20,940
304.000	Uniform Allowance	7,150
305.000	Tires - Batteries, etc.	4,400
306.000	Fuel - Oil	29,000
308.000	Books	935
310.000	Chemicals	73,400
311.000	Small Tools	4,400
312.000	Safety Equipment	9,700
313.000	Training Materials	935
315.000	Janitorial Supplies	0
316.000	Facilities Maintenance	21,050
317.000	Land Maintenance	2,530
318.000	Sidewalk Repair and Manintenance	0
320.000	Utility Lines Repair and Maintenance	46,400
324.000	Computers/ Printers	<u>2,420</u>
Total Commodities		\$225,800
OTHER CHARGES		
401.000	Dues, Subscriptions	\$550
402.000	Confrences, Business Meetings	400
403.000	Training & Development	1,500
408.000	Miscellaneous Charges	24,585
409.000	Water Fees, Assessments, Replace	<u>0</u>
Total Other Charges		\$27,035
Total WW Operating Expenditures		\$1,948,650

Operating Expenses – Ten Year Forecast

Table III-4 presents the water and wastewater utility operating expense forecast for the ten year period FY 2012 – FY 2021. Details behind these calculations can be found in the rate model contained in Appendix A. This forecast is based on the following set of assumptions:

- Most water and wastewater operating expenses are expected to increase at the rate of inflation, which is assumed to be 4.0% per year. This annual increase is higher than previous year actuals due to the expectation that the local and national inflation rates will increase in the coming years.
- In addition to anticipated inflationary increases there are other factors that are taken into account when forecasting various expense items. One such factor is that certain expense categories are expected to increase at rates greater than the average inflation rate. Account growth and volume growth will also affect certain expense categories, and some of the expense items are vulnerable to a combination of these greater than average increases. Items that are considered to be affected by general inflation, premium escalation, and account growth are primarily energy related items such as gas and electric expenses, fuels and lubricants.
- Certain personnel related expenses such as insurance are projected to increase at 5.0% annually.
- Certain water and wastewater expenses are forecast to increase at a rate which takes into account both inflation and the growth of new accounts. As there is a less than 1:1 correlation between account growth and water consumption, a Volume Adjustment factor is calculated for each year relative to the growth in accounts, but discounted by 50% to more accurately align the increased expense of the account growth with the additional cost of service.

TABLE III-4

TOWN OF FLORENCE							
FORECAST OPERATING EXPENSES AND TRANSFERS							
	Water		Wastewater		Total		
	Operating	Transfer	Operating	Transfer	Operating	Transfer	
2012	\$ 1,893,363	\$ 474,045	\$ 1,948,650	\$ 284,959	\$ 3,842,013	\$ 759,004	
2013	2,072,047	493,007	2,125,243	296,357	4,197,290	789,364	
2014	2,190,718	512,727	2,261,139	308,212	4,451,856	820,939	
2015	2,314,351	533,236	2,406,940	320,540	4,721,291	853,776	
2016	2,446,072	554,566	3,183,190	333,362	5,629,262	887,927	
2017	2,768,561	576,748	3,615,772	346,696	6,384,334	923,444	
2018	2,928,589	599,818	3,863,372	360,564	6,791,962	960,382	
2019	3,099,356	623,811	4,129,984	374,987	7,229,339	998,797	
2020	3,281,681	648,763	4,417,188	389,986	7,698,869	1,038,749	
2021	3,702,584	674,714	5,166,956	405,586	8,869,540	1,080,299	

Capital Outlays and Existing Debt Service

Like most utilities, the Town funds a portion of its capital requirements with its current system rates and fees. These capital outlays are typically for minor assets such as trucks and computers, as opposed to major capital expenditures such as treatment plants.

The Town currently maintains two outstanding loans: a WIFA loan with an original principal balance of \$7,500,000 which was issued for the expansion of the South Wastewater Treatment Plant and a \$1,300,000 loan to finance the Sewer Plant Expansion.

Table III-5 presents forecast capital outlays and debt service for the debt currently outstanding.

TABLE III-5

TOWN OF FLORENCE			
CAPITAL OUTLAYS AND EXISTING DEBT SERVICE			
SCENARIO: Base Scenario - 1			
	Total Capital Outlays	Existing Debt Service WIFA Loan	Total Existing Debt Service
WATER Capital Outlays/Existing Debt Service			
2012	\$ -	\$ -	\$ -
2013	-	-	-
2014	-	-	-
2015	-	-	-
2016	-	-	-
2017	-	-	-
2018	-	-	-
2019	-	-	-
2020	-	-	-
2021	-	-	-
WASTEWATER Capital Outlays/Existing Debt Service			
2012	\$ 9,000	\$ 627,792	\$ 627,792
2013	-	627,792	627,792
2014	-	627,792	627,792
2015	-	627,791	627,791
2016	-	627,794	627,794
2017	-	627,790	627,790
2018	-	627,791	627,791
2019	-	627,792	627,792
2020	-	627,790	627,790
2021	-	627,793	627,793

Capital Improvement Plan

Like most towns, Florence maintains an extensive and detailed capital improvement program to repair, maintain and expand its water and wastewater system. Minor capital improvements are contained in the Town’s budget. Major capital improvements are funded through a series of bonds issued by the Town.

Town staff and the project team developed the Town’s forecast capital improvements needs over the next decade. The forecast CIP is summarized in Table III-6 and Chart III-7 and presented in detail in Table III-8 and Table III-9. As the chart reveals, the Town is forecast to spend \$72,540,150 in total capital improvements in the next decade. The majority of these improvements are forecast to be in the wastewater division.

TABLE III-6

TOWN OF FLORENCE			
CAPITAL IMPROVEMENT PLAN			
SCENARIO:	ALT 1		
	Total	Years 1-5	Years 6-10
WATER CIP	\$ 20,363,000	\$ 18,403,000	\$ 1,960,000
WASTEWATER CIP	52,177,150	52,177,150	-
Total CIP	\$ 72,540,150	\$ 70,580,150	\$ 1,960,000
Percent	100.0%	97.3%	2.7%

CHART III-7

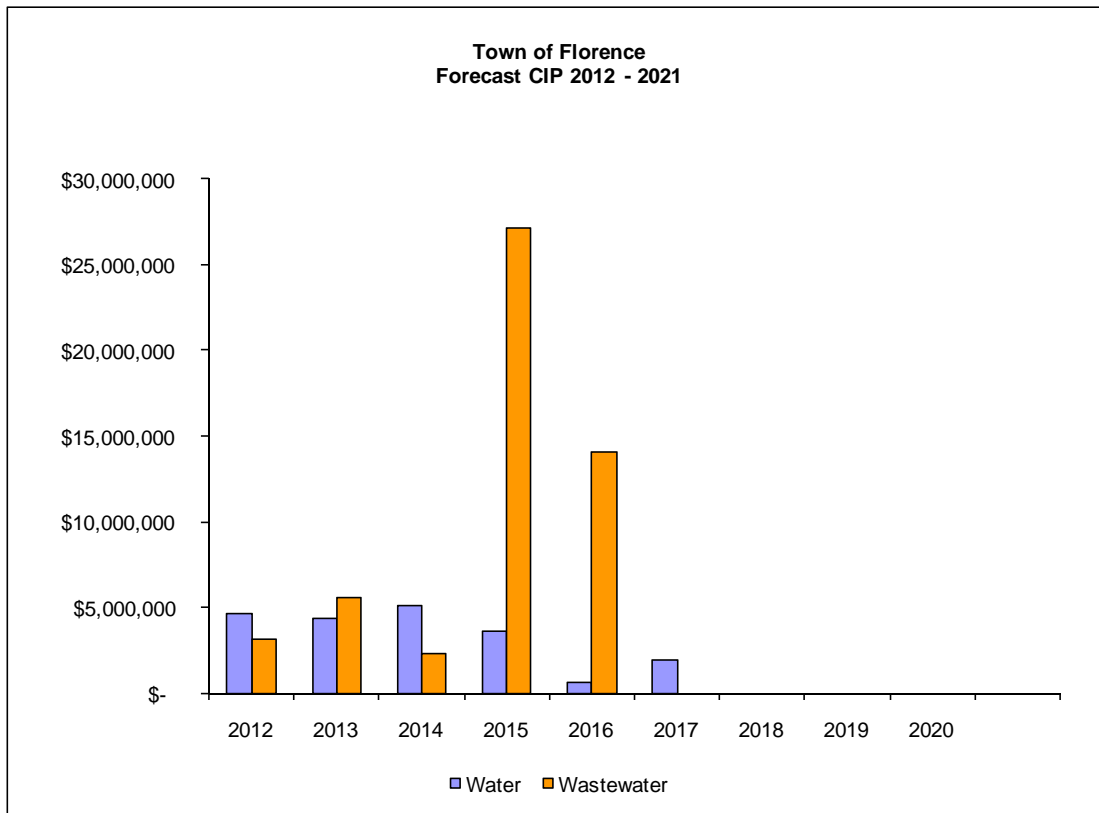


Table III-8

TOWN OF FLORENCE		CAPITAL IMPROVEMENT PLAN							
10 Year Forecast 2012-2022	Total Period	2012	2013	2014	2015	2016	2017	2018	2019
Input Area -- CIP FUNDING ASSUMPTIONS									
Scenario: Base Scenario - 1									
1A Water Capital Improvement Plan									
U-23 New Water Well	895,000	-	45,000	750,000	100,000	-	-	-	-
U-25 INS Waterline Relocation	95,000	95,000	-	-	-	-	-	-	-
U-26 Water Storage Tank	1,200,000	1,200,000	-	-	-	-	-	-	-
U-27 Waterline Extension	187,000	187,000	-	-	-	-	-	-	-
U-30 Fire Hydrant Replacement	120,000	40,000	40,000	40,000	-	-	-	-	-
U-32 New Well	1,120,000	-	1,120,000	-	-	-	-	-	-
U-33 Storage Tank	1,050,000	-	-	1,050,000	-	-	-	-	-
U-34 New Well #3	975,000	975,000	-	-	-	-	-	-	-
U-35 Unusable Valve Replacement	170,000	75,000	45,000	30,000	20,000	-	-	-	-
U-36 Main St. Water Line Replacement	257,000	257,000	-	-	-	-	-	-	-
U-37 Water System Tie In	-	-	-	-	-	-	-	-	-
U-38 Waterline Replacements for 2"-4" lines	700,000	250,000	200,000	150,000	100,000	-	-	-	-
U-40 Water Distribution Lines/Fire Hydrants	50,000	50,000	-	-	-	-	-	-	-
U-42 Electronic Water Meters	382,500	-	192,500	150,000	40,000	-	-	-	-
U-57 Generator Replacement	177,000	177,000	-	-	-	-	-	-	-
U-60 Lancaster Circle Line@Florence Blvd	70,000	70,000	-	-	-	-	-	-	-
U-64 SCADA Tie-Ins	-	-	-	-	-	-	-	-	-
U-65 Well #5 Booster Pumps	-	-	-	-	-	-	-	-	-
U-66 Adamsville Water Line	938,000	938,000	-	-	-	-	-	-	-
U-67 Merrill Ranch Well	-	-	-	-	-	-	-	-	-
U-68 N. Florence Water Storage Distribution Line	1,150,000	105,000	1,045,000	-	-	-	-	-	-
U-69 Water Transmission Line Extension - #5 to #4	1,048,000	130,000	918,000	-	-	-	-	-	-
U-70 Prison Complex Water Line	732,000	70,000	662,000	-	-	-	-	-	-
U-71 Valley Farms Area Well #1 (Zone B1)& Storage T.	1,930,000	-	-	1,930,000	-	-	-	-	-
U-72 Merrill Ranch Well and Storage Tank	1,920,000	-	-	-	1,920,000	-	-	-	-
U-73 Water Line Extension at Bailey Street	783,000	-	100,000	683,000	-	-	-	-	-
U-74 Water Transmission Line Extension	1,665,000	-	-	200,000	1,465,000	-	-	-	-
U-75 Valley Farms Area Well #2	980,000	-	-	-	-	-	980,000	-	-
U-76 Felix Road Well (Zone A1)	980,000	-	-	-	-	-	980,000	-	-
U-77 Water Line Extension	731,000	-	-	110,000	-	621,000	-	-	-
U-78 Booster Pumps	-	-	-	-	-	-	-	-	-
U-79 Renovation of Lab Space	57,500	-	57,500	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
Total Water Projects	\$ 20,363,000	\$ 4,619,000	\$ 4,425,000	\$ 5,093,000	\$ 3,645,000	\$ 621,000	\$ 1,960,000	\$ -	\$ -

Table III-9

TOWN OF FLORENCE		CAPITAL IMPROVEMENT PLAN								
10 Year Forecast 2012-2022		Total Period	2012	2013	2014	2015	2016	2017	2018	2019
Input Area – CIP FUNDING ASSUMPTIONS										
Scenario:		Base Scenario - 1								
1B Wastewater										
U-03 Manhole Replacement	\$ 67,500	\$ 67,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
U-04 Main Interceptor	4,679,400	-	-	-	-	4,679,400	-	-	-	-
U-05 Recharge Injection Wells	330,000	-	330,000	-	-	-	-	-	-	-
U-06 Sewer Main Extensions and Replacements	650,000	300,000	150,000	100,000	100,000	-	-	-	-	-
U-08 WWTP Expansion	18,825,000	1,325,000	-	-	-	17,500,000	-	-	-	-
U-19 Aerated Lagoon Closure	500,000	200,000	-	-	-	300,000	-	-	-	-
U-20 Polishing Lagoons	314,000	-	314,000	-	-	-	-	-	-	-
U-21 Cleaner/Manhole	375,000	-	-	375,000	-	-	-	-	-	-
U-51 Office Lab Space at WWTP	688,000	338,000	-	-	-	350,000	-	-	-	-
U-54 Lift Station @ Valley Farms	920,000	-	-	120,000	800,000	-	-	-	-	-
U-79 Office Space Renovations	28,750	-	28,750	-	-	-	-	-	-	-
U-80 Sewer Main Extension	72,000	-	-	-	10,000	62,000	-	-	-	-
U-83 Effluent Discharge System	850,000	850,000	-	-	-	-	-	-	-	-
U-84 8th Street Sewer Line Extension	68,500	68,500	-	-	-	-	-	-	-	-
U-11 18" Bore across SH79	100,000	-	100,000	-	-	-	-	-	-	-
U-12 WWTP Expansion	2,549,000	-	465,000	-	2,084,000	-	-	-	-	-
U-13 Sewer Main Extension	500,000	-	30,000	470,000	-	-	-	-	-	-
U-14 Lift Station (Hunt Hwy and SH 79)	370,000	-	40,000	330,000	-	-	-	-	-	-
U-15 Lift Station	800,000	-	80,000	720,000	-	-	-	-	-	-
U-16 Recharge Facility Expension	540,000	-	40,000	200,000	300,000	-	-	-	-	-
U-81 Merrill Ranch WRF (Phase 1)	4,000,000	-	4,000,000	-	-	-	-	-	-	-
U-82 Merrill Ranch WRF (Phase 2)	14,950,000	-	-	-	950,000	14,000,000	-	-	-	-
	-	-	-	-	-	-	-	-	-	-
Total Wastewater Projects	\$ 52,177,150	\$ 3,149,000	\$ 5,577,750	\$ 2,315,000	\$ 27,073,400	\$ 14,062,000	\$ -	\$ -	\$ -	\$ -
Total Water and WW CIP	\$ 72,540,150	\$ 7,768,000	\$ 10,002,750	\$ 7,408,000	\$ 30,718,400	\$ 14,683,000	\$ 1,960,000	\$ -	\$ -	\$ -
Percent Water	28.1%	59.5%	44.2%	68.8%	11.9%	4.2%	100.0%	0.0%	0.0%	0.0%
Percent WW	71.9%	40.5%	55.8%	31.3%	88.1%	95.8%	0.0%	100.0%	100.0%	100.0%

It should be noted that the Town’s current plan does not include any forecast capital improvements for FY 2017 through FY 2021 at this time.

Table III-10 presents the project team’s assumptions for how the water and wastewater capital improvement plan will be financed over the next decade. The table reveals that the CIP is forecast to be funded through a combination of private sector CFD financing, private sector development agreement financing, impact fees, grants, and private sector donations. Certain projects within the CIP are expressly designated for these alternative funding instruments. The difference between the amount required by the Town to fund the CIP and the amount provided by the financing tools described above must be financed through the issuance of long-term debt.

Debt Service – Forecast

A key assumption for the Town’s long-term water and wastewater rate plan is that the Town issues additional debt to fund those projects not funded through impact fees or the other sources described in the previous section. The debt forecast to be issued by the Town is shown in Table III-10 and summarized in Table III-11. Both tables reveal that the Town is forecast to issue approximately \$38 million in long-term debt to finance its capital improvement plan.

Two debt issuances, one scheduled for 2013 and one in 2014, are assumed to be over a 25 year term at a 4.5% interest rate with payments of interest only for the first 2 years and principal and interest for the remaining 23

TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL										
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
10 Year Forecast										
2012-2022										
Total										
CIP										

Input Area -- CIP FUNDING ASSUMPTIONS

Scenario:

Base Scenario - 1

3 CIP Funding Summary

Capital Improvement Plan Funding -- WATER		9/31/2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Beginning Capital Funds Available		\$ 7,062,946	\$ 7,062,946	\$ 2,428,405	\$ 8,038,371	\$ 5,001,216	\$ 1,406,330	\$ 2,767,951	\$ 2,823,202	\$ 2,881,216	\$ 2,942,131	\$ 3,006,092
Non-Rate Funding					1,920,000							
Developer Contribution												
Private Sector Development Agreement Funding							1,930,000	1,890,000				
Donations												
Unfunded Total												
Sub-Total					1,920,000		1,930,000	1,860,000				
Impact Fees -- WATER		563,304	(15,541)	34,966	135,845	50,115	52,620	55,252	58,014	60,915	63,961	67,159
Plus Proceeds from Issuance of Debt -- WATER				10,000,000								
Total Available Funds		23,436,250	7,047,405	12,463,371	10,094,216	5,051,330	3,388,951	4,783,202	2,881,216	2,942,131	3,006,092	3,073,250
Less CIP -- WATER		20,363,000	4,619,000	4,425,000	5,093,000	3,645,000	621,000	1,960,000				
Ending Capital Funds Available		\$ 3,073,250	\$ 2,428,405	\$ 8,038,371	\$ 5,001,216	\$ 1,406,330	\$ 2,767,951	\$ 2,823,202	\$ 2,881,216	\$ 2,942,131	\$ 3,006,092	\$ 3,073,250

Capital Improvement Plan Funding -- WASTEWATER		9/31/2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Beginning Capital Funds Available		\$ 3,630,002	\$ 3,630,002	\$ 1,793,317	\$ 750,010	\$ 26,944,433	\$ 1,161,758	\$ 1,141,826	\$ 1,190,112	\$ 1,235,003	\$ 1,281,375	\$ 1,329,277
Non-Rate Funding				479,000								
Grants												
Private Sector												
Private Sector -- CFD												
Developer Contribution					470,000	1,250,000	14,000,000					
Outside Finance (WIFA)												
Prior Funded Total			1,300,000									
Sub-Total			1,300,000	4,508,000	470,000	1,250,000	14,000,000					
Impact Fees -- WASTEWATER		402,407	12,315	25,443	39,424	40,725	42,068	48,285	44,891	46,372	47,903	54,981
Plus Proceeds from Issuance of Debt -- WASTEWATER					28,000,000							
Total Available Funds		53,561,409	4,942,317	6,327,760	29,259,433	28,235,158	15,203,826	1,190,112	1,235,003	1,281,375	1,329,277	1,384,259
Less CIP -- WASTEWATER		52,177,150	3,149,000	5,577,750	2,315,000	27,073,400	14,062,000					
Ending Capital Funds Available		\$ 1,384,259	\$ 1,793,317	\$ 750,010	\$ 26,944,433	\$ 1,161,758	\$ 1,141,826	\$ 1,190,112	\$ 1,235,003	\$ 1,281,375	\$ 1,329,277	\$ 1,384,259

years. The principal balance is increased by 10.0% to cover expected closing costs and a one-year reserve requirement.

TABLE III-11

TOWN OF FLORENCE						
FORECAST BOND ISSUES						
SCENARIO:	ALT 1					
	Total		Water		Wastewater	
2012	\$ -	\$	-	\$	-	\$ -
2013	10,000,000		10,000,000			-
2014	28,000,000		-		28,000,000	
2015	-		-		-	
2016	-		-		-	
2017	-		-		-	
2018	-		-		-	
2019	-		-		-	
2020	-		-		-	
2021	-		-		-	
Total Bonds	\$ 38,000,000	\$	10,000,000	\$	28,000,000	

Table III-12 presents total forecast annual debt service.

TABLE III-12

TOWN OF FLORENCE						
TOTAL FORECAST DEBT SERVICE						
SCENARIO:	ALT 1					
	Total		Water		Wastewater	
2012	\$ -	\$	-	\$	-	\$ -
2013	-		-		-	
2014	495,000		495,000			-
2015	1,881,000		495,000		1,386,000	
2016	2,163,507		777,507		1,386,000	
2017	2,954,528		777,507		2,177,021	
2018	2,954,528		777,507		2,177,021	
2019	2,954,528		777,507		2,177,021	
2020	2,954,528		777,507		2,177,021	
2021	2,954,528		777,507		2,177,021	

SOURCE: Total Debt Service Input

Non-Rate Revenues

Although sales revenues constitute the majority of the revenue received by the Town for water and wastewater service, a certain amount of revenue is accrued from non-rate sources. These revenues include other general revenues, surcharges, development charges, and service revenues. These non-rate revenues are subtracted from the overall budget to determine the revenue requirement to be raised from rates. Non-rate revenues are presented in Table III-13.

TABLE III-13

TOWN OF FLORENCE				
FORECAST NON-RATE REVENUES				
SCENARIO: ALT 1				
	Total	Water	Wastewater	
2012	\$ 419,100	\$ 341,600	\$ 77,500	
2013	324,100	246,600	77,500	
2014	324,100	246,600	77,500	
2015	324,100	246,600	77,500	
2016	324,100	246,600	77,500	
2017	324,100	246,600	77,500	
2018	324,100	246,600	77,500	
2019	324,100	246,600	77,500	
2020	324,100	246,600	77,500	
2021	324,100	246,600	77,500	

Net Revenue Requirement

Table III-14 presents the test year and ten year forecast for the Town’s net revenue requirement to be raised from rates. As the table reveals, debt service becomes an increasing portion of the total revenue requirement in future years. Detailed calculations are presented in the rate model contained in Appendix A of this report.



TABLE III-14

TOWN OF FLORENCE									
CURRENT AND FORECAST REVENUE REQUIREMENT									
SCENARIO:	ALT 1								
	Operating Expenses	Capital Outlays	Current Debt Service	Future Debt Service	Operating Transfers	Total Cost of Service	Less Non-Rate Revenues	Net Revenue Requirement	
WATER Revenue Requirement									
2012	\$ 1,893,363	\$ -	\$ -	\$ -	\$ 474,045	\$ 2,367,408	\$ 341,600	\$ 2,025,808	
2013	2,072,047	-	-	-	493,007	2,565,054	246,600	2,318,454	
2014	2,190,718	-	-	495,000	512,727	3,198,445	246,600	2,951,845	
2015	2,314,351	-	-	495,000	533,236	3,342,587	246,600	3,095,987	
2016	2,446,072	-	-	777,507	554,566	3,778,145	246,600	3,531,545	
2017	2,768,561	-	-	777,507	576,748	4,122,817	246,600	3,876,217	
2018	2,928,589	-	-	777,507	599,818	4,305,915	246,600	4,059,315	
2019	3,099,356	-	-	777,507	623,811	4,500,674	246,600	4,254,074	
2020	3,281,681	-	-	777,507	648,763	4,707,951	246,600	4,461,351	
2021	3,702,584	-	-	777,507	674,714	5,154,805	246,600	4,908,205	
WASTEWATER Revenue Requirement									
2012	\$ 1,948,650	\$ 9,000	\$ 627,792	\$ -	\$ 284,959	\$ 2,870,401	\$ 77,500	\$ 2,792,901	
2013	2,125,243	-	627,792	-	296,357	3,049,392	77,500	2,971,892	
2014	2,261,139	-	627,792	-	308,212	3,197,142	77,500	3,119,642	
2015	2,406,940	-	627,791	1,386,000	320,540	4,741,271	77,500	4,663,771	
2016	3,183,190	-	627,794	1,386,000	333,362	5,530,346	77,500	5,452,846	
2017	3,615,772	-	627,790	2,177,021	346,696	6,767,280	77,500	6,689,780	
2018	3,863,372	-	627,791	2,177,021	360,564	7,028,749	77,500	6,951,249	
2019	4,129,984	-	627,792	2,177,021	374,987	7,309,783	77,500	7,232,283	
2020	4,417,188	-	627,790	2,177,021	389,986	7,611,985	77,500	7,534,485	
2021	5,166,956	-	627,793	2,177,021	405,586	8,377,355	77,500	8,299,855	
TOTAL Revenue Requirement									
2012	\$ 3,842,013	\$ 9,000	\$ 627,792	\$ -	\$ 759,004	\$ 5,237,809	\$ 419,100	\$ 4,818,709	
2013	4,197,290	-	627,792	-	789,364	5,614,447	324,100	5,290,347	
2014	4,451,856	-	627,792	495,000	820,939	6,395,587	324,100	6,071,487	
2015	4,721,291	-	627,791	1,881,000	853,776	8,083,858	324,100	7,759,758	
2016	5,629,262	-	627,794	2,163,507	887,927	9,308,490	324,100	8,984,390	
2017	6,384,334	-	627,790	2,954,528	923,444	10,890,097	324,100	10,565,997	
2018	6,791,962	-	627,791	2,954,528	960,382	11,334,664	324,100	11,010,564	
2019	7,229,339	-	627,792	2,954,528	998,797	11,810,457	324,100	11,486,357	
2020	7,698,869	-	627,790	2,954,528	1,038,749	12,319,936	324,100	11,995,836	
2021	8,869,540	-	627,793	2,954,528	1,080,299	13,532,160	324,100	13,208,060	

Water Utility Cost Functionalization

Once the total water and wastewater system costs have been identified, the next step in the rate development process is to isolate the costs associated with each system function. Some of these expenditures are a function of base water demand; others are based on the peak demands placed on the system. Certain costs are associated with serving customers regardless of the volume of water use or wastewater discharge. The basic steps used to allocate the Town’s water revenue requirements include the following:

1. Each system’s costs (revenue requirements) are categorized by utility function (i.e. treatment, distribution, administrative, customer). This process is known as *functionalization*.
2. Functionalized costs are classified based on the service characteristics or the types of demand served by the utility (base and maximum day). This process is known as *classification*.
3. Costs by service characteristic are allocated to customer classes in proportion to the service demands demonstrated by each class.

This three-step process allows for the allocation of system costs in the same terms as customer classes. The approaches described in this section follow standard industry practices. Water system costs are allocated to the following functions:

Treatment – the process by which raw water is converted to potable water

Distribution – the lines that carry water to individual customers’ properties

Administration – miscellaneous overhead and other non-operating costs

Customer Billing – the processes involved in billing and providing other services to customers

The project team allocated operating budget line item expenses individually to system functions based on general guidelines, specific research and input from Town staff. The results of the allocation process for the test year are presented in **Table III-15**. The rate model presented in Appendix A includes a detailed listing of the allocations by line item.

TABLE III-15

TOWN OF FLORENCE			
TEST YEAR WATER COST FUNCTIONALIZATION			
SCENARIO: Base Scenario - 1			
Function		2012 Revenue Requirement	Percent
Treatment	\$	1,042,992	51.5%
Distribution		427,625	21.1%
Administration		519,020	25.6%
Customer		<u>36,171</u>	<u>1.8%</u>
Total	\$	2,025,808	100.0%

Water Utility Cost Classification

The allocation of functionalized water system costs to service characteristics follows the base-extra capacity cost allocation method recommended by AWWA. Using this method, costs are segregated into the following categories:

Base costs – capital costs and O&M expenses associated with service to customers under average demand conditions. This category does not include any costs attributable to variations in water use resulting from peaks in demand. Base costs tend to vary directly with the total quantity of water used.

Maximum Day/Extra Capacity costs – costs attributable to facilities that are designed to meet peaking requirements. These costs include capital and operating charges for additional plant and system capacity beyond that required for average usage.

Customer Billing costs – costs associated with any aspect of customer service, including billing, accounting, and meter services. These costs are independent of the amount of water used and the size of the customer’s meter, and are not subject to peaking factors.

Limitations in the availability of information resulted in the decision not to attempt to allocate costs further to the maximum hour component.

According to AWWA Manual M-1 (p. 12), in the base-extra capacity method, care must be taken in separating costs between those devoted to base capacity and those devoted to extra capacity. Based on general industry standards, the Town’s peak to average capacity factor is assumed to be 2.00. The peak to average factor is calculated by dividing the volume on the peak day of the year by the average daily volume. This means that facilities designed to meet maximum-day requirements, such as the treatment and distribution functions, are allocated 50.00% to base, and 50.00% to extra capacity.

All customer service-related costs are allocated 100% to customer billing. Administration costs are generally not directly-assignable to individual classifications. Therefore, it is standard rate-making practice to allocate these costs on an indirect basis to service characteristics.

The rate model in Appendix A provides the detailed allocations of costs to service characteristics. The system-wide costs by service characteristic are shown in **Table III-16**. As with cost functionalization, these percentages are not expected to change significantly in the forecast period.

TABLE III-16

TOWN OF FLORENCE			
TEST YEAR WATER COST CLASSIFICATION			
SCENARIO: Base Scenario - 1			
2012			
Function	Revenue Requirement		Percent
Base	\$ 988,589		48.80%
Maximum Day	988,589		48.80%
Customer	<u>48,631</u>		<u>2.40%</u>
Total	\$ 2,025,794		100.0%

Water Utility Cost Allocation

Allocation of costs by service characteristic to customer classes is based on the proportionate use levels of each characteristic by each class. The water utility costs for Test Year 2012 by customer classes are presented in **Table III-17**. The total water utility costs by customer class for the entire term of the study are summarized in **Table III-18**. Overall cost calculations are presented in detail in the rate model contained in Appendix A.

TABLE III-17

TOWN OF FLORENCE		
TEST YEAR WATER COST ALLOCATION		
SCENARIO: Base Scenario - 1		
2012		
Function	Revenue Requirement	Percent
5/8" Inside	\$ 690,873	34.1%
5/8" Outside	9,024	0.4%
1" Inside	28,594	1.4%
1" Outside	2,116	0.1%
2" Inside	85,943	4.2%
3" Compound	20,249	1.0%
3" Turbine	12,454	0.6%
4" Compound	3,088	0.2%
4" Turbine	15,909	0.8%
6" Turbine	593,196	29.3%
CCA/New Prison	564,347	27.9%
Total	\$ 2,025,794	100.0%

TABLE III-18

TOWN OF FLORENCE										
FORECAST WATER COST ALLOCATION										
SCENARIO: Base Scenario - 1										
Year	5/8" Inside	5/8" Outside	1" Inside	1" Outside	2" Inside	3" Compound	3" Turbine	4" Compound	4" Turbine	6" Turbine
2012	\$ 690,873	\$ 9,024	\$ 28,594	\$ 2,116	\$ 85,943	\$ 20,249	\$ 12,454	\$ 3,088	\$ 15,909	\$ 593,196
2013	738,337	9,675	30,807	2,246	92,488	21,599	13,347	3,307	16,995	633,182
2014	939,459	12,289	39,650	2,854	118,306	27,441	20,363	4,200	21,589	804,392
2015	985,751	12,878	41,819	2,992	124,837	28,759	21,341	4,402	22,627	843,054
2016	1,124,909	14,677	47,966	3,410	143,253	32,781	24,325	5,017	25,791	960,959
2017	1,093,620	14,342	47,013	3,274	140,004	31,723	23,725	4,886	25,018	930,900
2018	1,145,846	15,007	49,504	3,427	147,484	33,200	24,829	5,113	26,183	974,249
2019	1,201,417	15,715	52,160	3,589	155,461	34,771	26,003	5,355	27,421	1,020,342
2020	1,260,580	16,467	54,994	3,761	163,973	36,442	27,252	5,612	28,739	1,069,380
2021	1,248,173	16,363	54,805	3,682	162,918	35,880	26,996	5,553	28,347	1,053,617

Wastewater Utility Cost Functionalization and Classification

Wastewater system costs are allocated to the following functions:

Treatment -- Volume – the costs associated with treating wastewater volume discharges

Treatment -- BOD – the costs associated with treating wastewater BOD discharges

Treatment -- TSS – the costs associated with treating wastewater suspended solids (TSS) discharges

Collection – the lines that transport wastewater from customers’ properties to the wastewater treatment plant

Administration – miscellaneous overhead and other non-operating costs

Customer Billing – the processes involved in billing and other services to customers

As was the case for the water system, wastewater utility operating budget line item expenses are allocated individually to functions. The results of the allocation process are presented in **Table III-19**. The rate model in Appendix A presents a detailed listing of the cost allocations by line item. As with the water utility, these percentages are not forecast to change significantly during the next ten years.

TABLE III-19

TOWN OF FLORENCE			
TEST YEAR WASTEWATER COST FUNCTIONALIZATION			
SCENARIO:	ALT 1		
	2012		
Function	Revenue Requirement	Percent	
Treatment -- Volume	\$ 720,934	25.1%	
Treatment -- BOD	667,224	23.2%	
Treatment -- TSS	607,284	21.2%	
Collection	167,637	5.8%	
Administration	645,329	22.5%	
Customer	61,992	2.2%	
Total	\$ 2,870,401	100.0%	

Wastewater Utility Cost Allocation

Allocation of wastewater utility costs by service characteristic to customer classes is performed in the same manner as described for the water utility. The total wastewater utility costs by customer class are summarized in **Table III-20**. The rate model in Appendix A presents a detailed listing of the cost calculations by line item.

TABLE III-20

TOWN OF FLORENCE						
FORECAST WASTEWATER COST ALLOCATION						
SCENARIO:	ALT 1					
Year	Residential	Commercial	Non-Residential	Institutional	Total	
2012	\$ 479,520	\$ 165,865	\$ 3,444	\$ 2,143,992	\$ 2,792,822	
2013	488,186	166,915	3,493	2,313,183	2,971,777	
2014	514,893	176,000	3,671	2,424,955	3,119,519	
2015	730,346	260,784	5,242	3,667,278	4,663,650	
2016	869,155	307,176	6,203	4,270,151	5,452,685	
2017	936,567	330,155	6,659	5,416,175	6,689,556	
2018	979,635	344,800	6,940	5,619,634	6,951,009	
2019	1,025,971	360,550	7,242	5,838,263	7,232,027	
2020	1,075,851	377,500	7,568	6,073,293	7,534,211	
2021	1,025,274	349,936	7,145	6,917,115	8,299,469	

SECTION IV

Water and Wastewater Rate Design



Rate design involves determining charges for each class of customers that will generate a desired level of revenue. This section of the rate study will begin by analyzing the extent to which the Town's current rate plan will recover revenues sufficient to fund water and wastewater operating and capital costs in the test year and over the forecast period.

Over the course of the engagement, the project team has participated in numerous conversations and meetings with Town staff at which various alternative rate plans were discussed. As a result of these conversations and work sessions, the project team has developed the long-term rate plan presented in this section.

The plan is designed to allow the Town to recover sufficient and equivalent revenues to meet all operating and capital obligations, including the debt service required to fund the Town's forecast capital improvements.

Proposed Rate Plan

Table IV-1 presents the Town's proposed water rate plan, while Table IV-2 presents the Town's proposed wastewater rate plan. **What is notable about this proposed plan is that it is substantively identical to the rate plan adopted by the Town in 2010.** The project team has determined, based on the update of costs, accounts and volumes, that the existing rate plan remains sufficient to fund the Town's water and wastewater costs for the next five years.

The Town adopted this rate plan in 2010, based on a rate study prepared for the Town that incorporated a forecast period ending with FY 2017. Table IV-3 presents an analysis of the updated forecast revenues and expenses for the Town's water and wastewater system under this existing rate plan.

The following is notable about this rate plan:

- The 2010 rate plan required annual adjustments for both water and wastewater ratepayers.
- The average percentage adjustment is greater for the wastewater utility than the water utility.
- Table IV-3 reveals that while overall revenues are forecast to be sufficient to meet operating and capital expenses through FY 2017, it shows the need for significant annual water and wastewater rate increases beyond FY 2012 to fund operating and capital expenses.

TABLE IV-1

TOWN OF FLORENCE		WATER Utility -- Recommended Rate Plan						
		Prior	Effective Jul-11	Effective Jul-12	Effective Jul-13	Effective Jul-14	Effective Jul-15	Effective Jul-16
Scen: Base Scenario - 1								
Water Inside Town Limits								
Base Charge								
5/8" Inside		\$ 18.38	\$ 19.30	\$ 20.27	\$ 21.28	\$ 22.34	\$ 23.46	\$ 24.63
1" Inside		30.54	32.17	33.78	35.47	37.24	39.10	41.06
2" Inside		122.54	128.67	135.10	141.86	148.95	156.40	164.22
3" Compound		196.08	205.88	216.17	226.98	238.33	250.25	262.76
3" Turbine		214.46	225.18	236.44	248.26	260.67	273.71	287.39
4" Compound		306.36	321.68	337.76	354.65	372.38	391.00	410.55
4" Turbine		386.02	405.32	425.59	446.87	469.21	492.67	517.30
6" Compound		612.74	643.37	675.54	709.32	744.78	782.02	821.12
6" Turbine		857.82	900.71	945.75	993.03	1,042.68	1,094.82	1,149.56
8" Turbine		1,470.56	1,544.09	1,621.29	1,702.36	1,787.48	1,876.85	1,970.69
10" Turbine		2,328.39	2,444.81	2,567.05	2,695.40	2,830.17	2,971.68	3,120.27
12" Turbine		3,063.67	3,216.85	3,377.69	3,546.58	3,723.91	3,910.10	4,105.61
Usage Charge -- Gallons								
-	10,000	1.31	1.38	1.45	1.52	1.60	1.68	1.76
10,001	18,700	1.82	1.91	2.01	2.11	2.21	2.32	2.44
18,701	Above	3.23	3.39	3.56	3.74	3.92	4.12	4.33
Usage Charge -- Cubic Feet								
-	1,337	0.98	1.03	1.08	1.14	1.19	1.25	1.31
1,338	2,500	1.36	1.42	1.49	1.57	1.64	1.73	1.81
2,501	Above	2.43	2.55	2.68	2.81	2.95	3.10	3.25
Water Outside Town Limits								
Base Charge								
5/8" Outside		\$ 23.89	\$ 25.09	\$ 26.34	\$ 27.66	\$ 29.04	\$ 30.50	\$ 32.02
1" Outside		39.82	41.81	43.90	46.10	48.40	50.82	53.36
2" Outside		159.31	167.28	175.64	184.43	193.65	203.33	213.50
3" Compound		254.90	267.64	281.02	295.07	309.83	325.32	341.58
3" Turbine		273.28	286.94	301.29	316.35	332.17	348.78	366.22
4" Compound		398.28	418.19	439.10	461.05	484.11	508.31	533.73
4" Turbine		477.93	501.83	526.92	553.27	580.93	609.98	640.48
6" Compound		796.66	836.38	878.20	922.11	968.21	1,016.63	1,067.46
6" Turbine		1,041.64	1,093.72	1,148.41	1,205.83	1,266.12	1,329.42	1,395.89
8" Turbine		1,911.72	2,007.31	2,107.68	2,213.06	2,323.71	2,439.90	2,561.89
10" Turbine		3,026.90	3,178.25	3,337.16	3,504.02	3,679.22	3,863.18	4,056.34
12" Turbine		3,762.18	3,950.29	4,147.80	4,355.19	4,572.95	4,801.60	5,041.68
Usage Charge -- Gallons								
-	10,000	1.68	1.76	1.85	1.94	2.04	2.14	2.25
10,001	18,700	2.33	2.44	2.56	2.69	2.83	2.97	3.12
18,701	Above	4.12	4.33	4.55	4.77	5.01	5.26	5.53
Usage Charge -- Cubic Feet								
-	1,337	1.26	1.32	1.39	1.46	1.53	1.61	1.69
1,338	2,500	1.74	1.83	1.92	2.02	2.12	2.23	2.34
2,501	Above	3.09	3.24	3.40	3.57	3.75	3.94	4.14

TABLE IV-2

TOWN OF FLORENCE		WASTEWATER Utility -- Recommended Rate Plan						
Scen:	Base Scenario - 1	Effective	Effective	Effective	Effective	Effective	Effective	
	Prior	Jul-11	Jul-12	Jul-13	Jul-14	Jul-15	Jul-16	
Residential								
Base Charge	\$ 11.62	\$ 12.78	\$ 15.34	\$ 16.88	\$ 18.59	\$ 19.53	\$ 20.49	
Usage Charge	2.72	2.99	3.59	3.95	4.35	4.57	4.79	
Commercial								
Base Charge	11.62	12.78	15.33	16.86	18.55	19.48	20.46	
Usage Charge	2.73	3.01	3.61	3.97	4.37	4.59	4.82	
Non-Residential								
Base Charge	11.62	12.78	15.34	16.87	18.57	19.52	20.49	
Usage Charge	2.73	3.01	3.61	3.97	4.37	4.60	4.83	
Institutional								
Base Charge	11.62	12.78	15.34	16.87	18.56	19.48	20.45	
Usage Charge	3.89	4.20	5.74	5.97	6.94	7.36	7.64	

TABLE IV-3

TOWN OF FLORENCE		WASTEWATER Utility -- Recommended Rate Plan						
Scen:	Base Scenario - 1							
	Revenues	Cost of Service	Net Revenues	Revenues	Cost of Service	Net Revenues	Water/WW Net Revenues	
WATER Utility			WASTEWATER Utility					
2012	\$ 3,026,217	\$2,367,408	\$ 658,809	\$3,275,606	\$2,870,401	\$ 405,205	\$1,064,014	
2013	3,209,689	2,565,054	644,635	4,440,887	3,049,392	1,391,494	2,036,130	
2014	3,373,974	3,198,445	175,529	4,761,242	3,197,142	1,564,101	1,739,630	
2015	3,535,955	3,342,588	193,368	5,416,141	4,741,271	674,870	868,237	
2016	3,706,296	3,778,145	(71,849)	5,764,598	5,530,346	234,252	162,403	
2017	4,211,741	4,122,817	88,924	6,711,658	6,767,280	(55,622)	33,302	
2018	4,416,458	4,305,915	110,542	7,036,102	7,028,749	7,353	117,895	
2019	4,631,731	4,500,675	131,057	7,388,723	7,309,783	78,940	209,996	
2020	4,858,101	4,707,952	150,149	7,759,912	7,611,985	147,927	298,075	
2021	5,492,742	5,154,806	337,936	9,446,849	8,377,355	1,069,494	1,407,429	

Table IV-4 calculates the average impact on monthly water and wastewater bills of the proposed rate design at various usage levels. The average monthly per meter water usage in the Town is approximately 5,000 gallons, and few customers outside the Town's institutions use more than 50,000 gallons in a month.

Table IV-5 forecasts annual water and wastewater revenues under the proposed rate plan. These revenues are forecast to be sufficient to fund all operating and capital expenses.

Table IV-6 forecasts annual wastewater BOD and TSS charges per lb. under the proposed rate plan. The Rate Plan BOD and TSS costs per unit are calculated based on total functionalized treatment costs for the entire system and differ slightly from currently approved Town Rates. It is recommended that current rates remain in effect and will be evaluated further at the time of the next rate review.

TABLE IV-4

TOWN OF FLORENCE		WATER AND WASTEWATER Utility -- Impact of Rate Plan on Monthly Charges						
Scen:	Base Scenario - 1	Effective Jul-11	Effective Jul-12	Effective Jul-13	Effective Jul-14	Effective Jul-15	Effective Jul-16	
	Prior							
Monthly Gallons								
<u>Water</u>								
5,000	\$ 46.75	\$ 50.19 3.44	\$ 56.32 6.12	\$ 60.58 4.26	\$ 65.24 4.65	\$ 68.52 3.28	\$ 71.91 3.39	
10,000	63.50	68.31 4.80	77.02 8.72	83.00 5.98	89.54 6.53	94.04 4.51	98.69 4.65	
20,000	103.21	110.99 7.78	125.22 14.23	134.96 9.74	145.61 10.65	152.94 7.33	160.50 7.56	
30,000	155.91	167.32 11.41	187.74 20.43	201.96 14.22	217.48 15.52	228.42 10.94	239.72 11.30	
40,000	208.61	223.64 15.04	250.26 26.62	268.96 18.70	289.35 20.39	303.90 14.55	318.94 15.04	
50,000	261.31	279.97 18.66	312.78 32.82	335.96 23.18	361.22 25.26	379.38 18.17	398.16 18.78	

TABLE IV-5

TOWN OF FLORENCE		FORECAST ANNUAL REVENUES			
SCENARIO: Base Scenario - 1					
	Water	Wastewater	Non-Rate Revs	Total Revenues	
2012	\$ 2,684,617	\$ 3,198,106	\$ 419,100	\$ 6,301,823	
2013	2,963,089	4,363,387	324,100	7,650,576	
2014	3,127,374	4,683,742	324,100	8,135,217	
2015	3,289,355	5,338,641	324,100	8,952,096	
2016	3,459,696	5,687,098	324,100	9,470,894	
2017	3,965,141	6,634,158	324,100	10,923,399	
2018	4,169,858	6,958,602	324,100	11,452,560	
2019	4,385,131	7,311,223	324,100	12,020,454	
2020	4,611,501	7,682,412	324,100	12,618,012	
2021	5,246,142	9,369,349	324,100	14,939,590	

TABLE IV-6

TOWN OF FLORENCE		WASTEWATER Utility - Town's Current Rate Plan					
Scen:	Base Scenario - 1	Effective Jul-11	Effective Jul-12	Effective Jul-13	Effective Jul-14	Effective Jul-15	Effective Jul-16
<u>BOD Charges</u>							
Per lb.		\$ 0.56	\$ 0.80	\$ 0.83	\$ 0.97	\$ 1.03	\$ 1.06
<u>TSS Charges</u>							
Per lb.		\$ 0.38	\$ 0.56	\$ 0.58	\$ 0.69	\$ 0.72	\$ 0.75

Partial Year Rates

Town Staff requested a review of fixed and variable costs to determine the total percentage of cost allocated to each as well as the minimum monthly charge for a Partial Year rate analysis. Like many other Arizona cities, the Town of Florence has residents that visit for approximately 6 months a year. The Town has received complaints from some of these residents asking for a Partial Year Water and Wastewater Rate.

A fixed cost analysis was prepared as part of the water and wastewater rate study. Operating Expenses were individually reviewed by Town Staff to determine the percent of each expense that is fixed and variable. This analysis was used to calculate the total fixed and variable cost per connection.

Table IV-7 illustrates that 72% of Water Costs are fixed and 28% are variable. The table also presents the Monthly Cost Per Connection for Total Active Customers and Partial Year Connections. The Monthly Cost Per connection is calculated based on the Town's total number of connections. Average Connections with Partial Year Residence is calculated based on an average of six months of total town residence and six months 30% of residence being out of town.

Table IV-7

TOWN OF FLORENCE			
WATER Utility - Fixed And Variable Costs			
Scen:	Base Scenario - 1		
<u>Current Minimum Charge</u>	\$	19.30	
5/8" Inside			
		Cost Allocated to	
		Fixed	Variable
			Total
Total Revenue Requirement	\$	1,466,786	\$ 563,523
Percent		72%	28%
			\$ 2,030,308
<i>Total Active Connections - All Customers</i>		3,537	3,537
			3,537
Monthly Cost Per Connection-W/O Partial Year	\$	34.56	\$ 13.28
			\$ 47.83

Table IV-8 illustrates that 70% of wastewater costs are fixed and 30% are variable. This table also presents the Monthly Cost Per Connection for Total Active Customers and Partial Year Connections. Wastewater Monthly Cost Per Connection is calculated based on the Town's total number of connections. Average Connections with Partial Year Residence is calculated based on an average of six months of total town residence and six months 50% of residence being out of town.

Table IV-8

TOWN OF FLORENCE			
WASTEWATER Utility - Fixed And Variable Costs			
Scen:	Base Scenario - 1		
Current Minimum Charge	\$ 12.78		
Residential		Cost Allocated to	
	Fixed	Variable	Total
Total Revenue Requirement	\$ 1,960,602	\$ 832,299	\$ 2,792,901
Percent	70%	30%	100%
<i>Total Active Connections - All Customers</i>	-	-	-
	2,942	2,942	2,942
	-	-	-
Monthly Cost Per Connection-W/O Partial Year	\$ 55.53	\$ 23.58	\$ 79.11

Notes on Rate Recommendations

The forecast and recommendations presented in this study represent a combination of the best information available from the Town and the project team’s expertise. However, this forecast relies in part on assumptions about future events and events beyond the control of the project team (such as account growth rates within the Town). The forecast and recommendations contained in this study may be subject to revision if any of the following events occurs:

- Actual growth in accounts and consumed volumes is less than (or significantly greater than) forecast
- Capital improvement plan funding costs increase significantly due to the rising cost of materials or other factors
- An unforeseen event impacts the Town, such as an extended recession, natural catastrophe or terrorist attack
- Town budget levels or priorities change significantly from those forecast in this study

It should be noted that none of these events are foreseen by the project team or the Town at this time.

If any of these events occur the Town may be compelled to consider further adjustments to its water and wastewater rates.

**TOWN OF FLORENCE
WATER/WASTEWATER COST OF SERVICE MODEL**

Prior 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

Forecast Summary

Scenario: Base Scenario - 1

1 Water and Wastewater Rates

Water Rates -- Residential

Monthly Minimum Charge

5/8" - 3/4"	\$ 18.38	\$ 19.30	\$ 20.27	\$ 21.28	\$ 22.34	\$ 23.46	\$ 24.63	\$ 25.86	\$ 27.16	\$ 28.51	\$ 29.94
1"	30.54	32.17	33.78	35.47	37.24	39.10	41.06	43.11	45.27	47.53	49.91
2"	122.54	128.67	135.10	141.86	148.95	156.40	164.22	172.43	181.05	190.10	199.61
3" Compound	196.08	205.88	216.17	226.98	238.33	250.25	262.76	275.90	289.69	304.18	319.39
3" Turbine	214.46	225.18	236.44	248.26	260.67	273.71	287.39	301.76	316.85	332.69	349.33
4" Compound	306.36	321.68	337.76	354.65	372.38	391.00	410.55	431.08	452.64	475.27	499.03

Volume Rate Per 1,000 Gal

- 10,000	\$ 1.31	\$ 1.38	\$ 1.45	\$ 1.52	\$ 1.60	\$ 1.68	\$ 1.76	\$ 1.85	\$ 1.94	\$ 2.04	\$ 2.14
10,001 18,700	1.82	1.91	2.01	2.11	2.21	2.32	2.44	2.56	2.69	2.82	2.96
18,700 Above	3.23	3.39	3.56	3.74	3.92	4.12	4.33	4.54	4.77	5.01	5.26

Wastewater Rates -- Residential

Monthly Charge	\$ 11.62	\$ 12.78	\$ 15.34	\$ 16.88	\$ 18.59	\$ 19.53	\$ 20.49	\$ 21.51	\$ 22.59	\$ 23.72	\$ 24.91
Volume Rate Per 1,000 Gallons	2.72	2.99	3.59	3.95	4.35	4.57	4.79	5.03	5.29	5.55	5.83

2 Residential Monthly Bill -- 3/4" Meter

Water

Gallons

5,000	Water	\$ 24.93	\$ 26.20	\$ 27.51	\$ 28.89	\$ 30.33	\$ 31.85	\$ 33.44	\$ 35.11	\$ 36.87	\$ 38.71	\$ 40.64
	WW	21.82	23.99	28.81	31.70	34.91	36.67	38.47	40.39	42.41	44.53	46.76
	Total	46.75	50.19	56.32	60.58	65.24	68.52	71.91	75.50	79.28	83.24	87.40
	Increase		3.44	6.12	4.26	4.65	3.28	3.39	3.60	3.78	3.96	4.16
10,000	Water	\$ 31.48	\$ 33.10	\$ 34.76	\$ 36.49	\$ 38.32	\$ 40.23	\$ 42.24	\$ 44.36	\$ 46.58	\$ 48.90	\$ 51.35
	WW	32.02	35.21	42.27	46.51	51.22	53.81	56.44	59.27	62.23	65.34	68.61
	Total	63.50	68.31	77.02	83.00	89.54	94.04	98.69	103.62	108.81	114.25	119.96
	Increase		4.81	8.72	5.98	6.53	4.51	4.65	4.93	5.18	5.44	5.71
20,000	Water	\$ 51.51	\$ 54.12	\$ 56.83	\$ 59.67	\$ 62.66	\$ 65.79	\$ 69.08	\$ 72.53	\$ 76.16	\$ 79.97	\$ 83.96
	WW	52.42	57.63	69.19	76.13	83.84	88.08	92.40	97.02	101.87	106.96	112.31
	Total	103.93	111.75	126.02	135.80	146.50	153.87	161.48	169.55	178.03	186.93	196.28
	Increase		7.82	14.27	9.78	10.69	7.37	7.61	8.07	8.48	8.90	9.35

**TOWN OF FLORENCE
WATER/WASTEWATER COST OF SERVICE MODEL**

Prior 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

Forecast Summary**Scenario: Base Scenario - 1****3 Annual Revenues and Expenses****Revenues and Expenses**

Water Rate Revenues	\$ 2,684,617	\$ 2,963,089	\$ 3,127,374	\$ 3,289,355	\$ 3,459,696	\$ 3,965,141	\$ 4,169,858	\$ 4,385,131	\$ 4,611,501	\$ 5,246,142
Wastewater Revenues	3,198,106	4,363,387	4,683,742	5,338,641	5,687,098	6,634,158	6,958,602	7,311,223	7,682,412	9,369,349
Non-Rate Revenues	<u>419,100</u>	<u>324,100</u>	<u>324,100</u>	<u>324,100</u>	<u>324,100</u>	<u>324,100</u>	<u>324,100</u>	<u>324,100</u>	<u>324,100</u>	<u>324,100</u>
Total Revenues	6,301,823	7,650,576	8,135,217	8,952,096	9,470,894	10,923,399	11,452,560	12,020,454	12,618,012	14,939,590
Operating Expenses	<u>3,842,013</u>	<u>4,197,290</u>	<u>4,451,856</u>	<u>4,721,292</u>	<u>5,629,262</u>	<u>6,384,334</u>	<u>6,791,962</u>	<u>7,229,340</u>	<u>7,698,869</u>	<u>8,869,541</u>
Net Revenues Available for Transfers/Capital Outlays/Debt :	2,459,810	3,453,286	3,683,360	4,230,804	3,841,631	4,539,065	4,660,597	4,791,114	4,919,143	6,070,050
Transfers	759,004	789,364	820,939	853,776	887,927	923,444	960,382	998,797	1,038,749	1,080,299
Capital Outlays	<u>9,000</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Total Operating/Transfers/Capital Outlays	4,610,017	4,986,655	5,272,795	5,575,068	6,517,190	7,307,778	7,752,344	8,228,137	8,737,619	9,949,840
Net Revenues Available for Debt Service	2,450,810	3,453,286	3,683,360	4,230,804	3,841,631	4,539,065	4,660,597	4,791,114	4,919,143	6,070,050
Water Debt Service	-	-	495,000	495,000	777,507	777,507	777,507	777,507	777,507	777,507
Wastewater Debt Service	<u>627,792</u>	<u>627,792</u>	<u>627,792</u>	<u>2,013,791</u>	<u>2,013,794</u>	<u>2,804,811</u>	<u>2,804,812</u>	<u>2,804,813</u>	<u>2,804,811</u>	<u>2,804,814</u>
Total Debt Service	627,792	627,792	1,122,792	2,508,791	2,791,301	3,582,319	3,582,320	3,582,320	3,582,318	3,582,321
Total Cost of Service	5,237,809	5,614,447	6,395,587	8,083,859	9,308,491	10,890,097	11,334,664	11,810,458	12,319,937	13,532,161
Net Revenues Available for Contingency	1,064,014	2,036,130	1,739,630	868,237	162,403	33,302	117,895	209,996	298,075	1,407,429
Percent of COS	20.3%	36.3%	27.2%	10.7%	1.7%	0.3%	1.0%	1.8%	2.4%	10.4%

**TOWN OF FLORENCE
WATER/WASTEWATER COST OF SERVICE MODEL**

Prior 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

Forecast Summary**Scenario: Base Scenario - 1****4 Revenue Adequacy Tests****Total Capital Fund Balance**

Beginning Fund Balance	\$ 10,692,948	\$ 4,221,722	\$ 8,788,381	\$ 31,945,649	\$ 2,568,088	\$ 3,909,777	\$ 4,013,314	\$ 4,116,219	\$ 4,223,506	\$ 4,335,369
Plus Non-Rate Funding Sources	1,300,000	4,509,000	2,390,000	1,250,000	15,930,000	1,960,000	-	-	-	-
Plus Impact Fees	(3,226)	60,409	175,268	90,839	94,689	103,537	102,905	107,287	111,863	122,140
Plus Proceeds from the Issuance of Debt \$38,000,000	-	10,000,000	28,000,000	-	-	-	-	-	-	-
Total Available Funds	11,989,722	18,791,131	39,353,649	33,286,488	18,592,777	5,973,314	4,116,219	4,223,506	4,335,369	4,457,509
Less Capital Improvement Plan	7,768,000	10,002,750	7,408,000	30,718,400	14,683,000	1,960,000	-	-	-	-
Ending Capital Fund Balance	4,221,722	8,788,381	31,945,649	2,568,088	3,909,777	4,013,314	4,116,219	4,223,506	4,335,369	4,457,509

Total Operating Fund Balance

Beginning Fund Balance	\$ 2,935,113	\$ 3,999,127	\$ 6,035,257	\$ 7,774,887	\$ 8,643,124	\$ 8,805,527	\$ 8,838,829	\$ 8,956,724	\$ 9,166,721	\$ 9,464,796
Net Revenues Available for Contingency	1,064,014	2,036,130	1,739,630	868,237	162,403	33,302	117,895	209,996	298,075	1,407,429
Ending Operating Fund Balance	3,999,127	6,035,257	7,774,887	8,643,124	8,805,527	8,838,829	8,956,724	9,166,721	9,464,796	10,872,225
Days of Operating Expenditures	380	525	637	668	571	505	481	463	449	447

Debt Coverage

Debt Coverage -- Water and Wastewater Fund	3.92	5.50	3.28	1.69	1.38	1.27	1.30	1.34	1.37	1.69
--	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------

5 Total Accounts**Water Accounts**

Total Accounts	3,540	3,548	3,562	3,572	3,582	3,593	3,603	3,613	3,623	3,634
New Accounts	-	8	14	10	10	11	10	10	10	11
Avg. Annual Growth Rate		0.23%	0.39%	0.28%	0.28%	0.31%	0.28%	0.28%	0.28%	0.30%

Wastewater Accounts

Total Accounts	2,945	2,951	2,960	2,969	2,978	2,988	2,997	3,006	3,015	3,025
New Accounts	-	6	9	9	9	10	9	9	9	10
Avg. Annual Growth Rate		0.20%	0.30%	0.30%	0.30%	0.34%	0.30%	0.30%	0.30%	0.33%

**TOWN OF FLORENCE
WATER/WASTEWATER COST OF SERVICE MODEL**

Prior 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

Forecast Summary

Scenario: Base Scenario - 1

6 Annual Volume

Water Volume

5/8" Inside	166,325,655	166,450,937	166,676,277	166,876,309	167,076,101	167,275,654	167,474,970	167,674,049	167,872,891	168,071,499
5/8" Outside	3,048,970	3,048,970	3,048,970	3,048,970	3,048,970	3,048,970	3,048,970	3,048,970	3,048,970	3,048,970
1" Inside	10,239,640	10,305,279	10,435,725	10,500,143	10,564,169	10,627,808	10,691,069	10,753,958	10,816,481	10,878,644
1" Outside	432,621	432,621	432,621	432,621	432,621	432,621	432,621	432,621	432,621	432,621
2" Inside	32,165,907	32,389,282	32,611,126	32,831,471	33,050,348	33,267,784	33,483,809	33,698,449	33,911,730	34,123,678
3" Compound	6,968,324	6,968,324	6,968,324	6,968,324	6,968,324	6,968,324	6,968,324	6,968,324	6,968,324	6,968,324
3" Turbine	5,721,700	5,721,700	6,866,040	6,866,040	6,866,040	6,866,040	6,866,040	6,866,040	6,866,040	6,866,040
4" Compound	1,321,490	1,321,490	1,321,490	1,321,490	1,321,490	1,321,490	1,321,490	1,321,490	1,321,490	1,321,490
4" Turbine	6,075,850	6,075,850	6,075,850	6,075,850	6,075,850	6,075,850	6,075,850	6,075,850	6,075,850	6,075,850
6" Turbine	219,200,330	219,200,330	219,200,330	219,200,330	219,200,330	219,200,330	219,200,330	219,200,330	219,200,330	219,200,330
8" Turbine	-	-	-	-	-	-	-	-	-	-
CCA/New Prison	139,331,125	175,831,125	175,831,125	175,831,125	175,831,125	248,831,125	248,831,125	248,831,125	248,831,125	321,831,125
Total System	590,831,611	627,745,907	629,467,878	629,952,673	630,435,366	703,915,996	704,394,597	704,871,204	705,345,851	778,818,570

Wastewater Billing Units

Residential	118,708,082	118,929,801	119,284,550	119,639,300	119,994,049	120,348,799	120,703,548	121,058,298	121,413,048	121,767,797
Commercial	46,393,005	46,393,005	46,593,841	46,794,676	46,995,512	47,196,347	47,397,183	47,598,018	47,798,854	47,999,690
Non-Residential	877,464	877,464	877,464	877,464	877,464	877,464	877,464	877,464	877,464	877,464
Institutional	237,544,979	237,544,979	237,544,979	237,544,979	237,544,979	237,544,979	237,544,979	237,544,979	237,544,979	237,544,979
ADOC	163,693,900	163,693,900	163,693,900	163,693,900	163,693,900	163,693,900	163,693,900	163,693,900	163,693,900	163,693,900
CCA/New Prison	139,331,125	175,831,125	175,831,125	175,831,125	175,831,125	267,954,634	267,954,634	267,954,634	267,954,634	408,344,574
Total System	706,548,555	743,270,274	743,825,859	744,381,444	744,937,029	837,616,123	838,171,708	838,727,293	839,282,878	980,228,403

**TOWN OF FLORENCE
WATER/WASTEWATER COST OF SERVICE MODEL**

Current 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

WATER Summary

Scenario: Base Scenario - 1

1 Water Rates -- Residential

Monthly Minimum Charge

5/8" - 3/4"	\$ 18.38	\$ 19.30	\$ 20.27	\$ 21.28	\$ 22.34	\$ 23.46	\$ 24.63	\$ 25.86	\$ 27.16	\$ 28.51	\$ 29.94
1"	30.54	32.17	33.78	35.47	37.24	39.10	41.06	43.11	45.27	47.53	49.91
2"	122.54	128.67	135.10	141.86	148.95	156.40	164.22	172.43	181.05	190.10	199.61
3" Compound	196.08	205.88	216.17	226.98	238.33	250.25	262.76	275.90	289.69	304.18	319.39
3" Turbine	214.46	225.18	236.44	248.26	260.67	273.71	287.39	301.76	316.85	332.69	349.33
4" Compound	306.36	321.68	337.76	354.65	372.38	391.00	410.55	431.08	452.64	475.27	499.03

Volume Rate Per 1,000 Gal

-	\$ 1.31	\$ 1.38	\$ 1.45	\$ 1.52	\$ 1.60	\$ 1.68	\$ 1.76	\$ 1.85	\$ 1.94	\$ 2.04	\$ 2.14
10,000	1.82	1.91	2.01	2.11	2.21	2.32	2.44	2.56	2.69	2.82	2.96
18,700	3.23	3.39	3.56	3.74	3.92	4.12	4.33	4.54	4.77	5.01	5.26
Above											

2 Residential Monthly WATER Bill -- 3/4" Meter

5,000 Gal	Total	\$ 24.93	\$ 26.20	\$ 27.51	\$ 28.89	\$ 30.33	\$ 31.85	\$ 33.44	\$ 35.11	\$ 36.87	\$ 38.71	\$ 40.64
	Total Increase		1.27	1.31	1.38	1.44	1.52	1.59	1.67	1.76	1.84	1.94
10,000 Gal	Total	\$ 31.48	\$ 33.10	\$ 34.76	\$ 36.49	\$ 38.32	\$ 40.23	\$ 42.24	\$ 44.36	\$ 46.58	\$ 48.90	\$ 51.35
	Total Increase		1.62	1.65	1.74	1.82	1.92	2.01	2.11	2.22	2.33	2.45
30,000 Gal	Total	83.81	88.02	92.43	97.05	101.90	106.99	112.34	117.96	123.86	130.05	136.55
	Percent Inc		4.21	4.40	4.62	4.85	5.09	5.35	5.62	5.90	6.19	6.50
50,000 Gal	Total	148.41	155.82	163.62	171.80	180.39	189.41	198.88	208.82	219.26	230.22	241.73
	Percent Inc		7.41	7.79	8.18	8.59	9.02	9.47	9.94	10.44	10.96	11.51

**TOWN OF FLORENCE
WATER/WASTEWATER COST OF SERVICE MODEL**

Current 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

WATER Summary**Scenario: Base Scenario - 1****3 Annual Revenues and Expenses****Revenues and Expenses**

Water Rate Revenues	\$ 2,684,617	\$ 2,963,089	\$ 3,127,374	\$ 3,289,355	\$ 3,459,696	\$ 3,965,141	\$ 4,169,858	\$ 4,385,131	\$ 4,611,501	\$ 5,246,142
Non-Rate Revenues	341,600	246,600	246,600	246,600	246,600	246,600	246,600	246,600	246,600	246,600
Total Revenues	3,026,217	3,209,689	3,373,974	3,535,955	3,706,296	4,211,741	4,416,458	4,631,731	4,858,101	5,492,742
Operating Expenses	1,893,363	2,072,047	2,190,718	2,314,351	2,446,072	2,768,561	2,928,590	3,099,356	3,281,681	3,702,585
Net Revenues Available for Transfers/Capital Outlays/Debt	1,132,854	1,137,642	1,183,256	1,221,604	1,260,224	1,443,180	1,487,868	1,532,375	1,576,419	1,790,157
Transfers	474,045	493,007	512,727	533,236	554,566	576,748	599,818	623,811	648,763	674,714
Capital Outlays	-	-	-	-	-	-	-	-	-	-
Total Operating Expense/Capital Outlays	2,367,408	2,565,054	2,703,445	2,847,588	3,000,638	3,345,310	3,528,408	3,723,167	3,930,445	4,377,299
Net Revenues Available for Debt Service	1,132,854	1,137,642	1,183,256	1,221,604	1,260,224	1,443,180	1,487,868	1,532,375	1,576,419	1,790,157
Water Debt Service	-	-	495,000	495,000	777,507	777,507	777,507	777,507	777,507	777,507
Total Cost of Service	2,367,408	2,565,054	3,198,445	3,342,588	3,778,145	4,122,817	4,305,915	4,500,675	4,707,952	5,154,806
Net Revenues Available for Contingency	658,809	644,635	175,529	193,368	(71,849)	88,924	110,542	131,057	150,149	337,936
Percent of COS	27.8%	25.1%	5.5%	5.8%	-1.9%	2.2%	2.6%	2.9%	3.2%	6.6%

4 Revenue Adequacy Tests**Total Capital Fund Balance**

Beginning Fund Balance	7,062,946	2,428,405	8,038,371	5,001,216	1,406,330	2,767,951	2,823,202	2,881,216	2,942,131	3,006,092
Plus Non-Rate Funding Sources	-	-	1,920,000	-	1,930,000	1,960,000	-	-	-	-
Plus Impact Fees	(15,541)	34,966	135,845	50,115	52,620	55,252	58,014	60,915	63,961	67,159
Plus Proceeds from the Issuance of Deb \$10,000,000	-	10,000,000	-	-	-	-	-	-	-	-
Total Available Funds	7,047,405	12,463,371	10,094,216	5,051,330	3,388,951	4,783,202	2,881,216	2,942,131	3,006,092	3,073,250
Less WATER Capital Improvement Plan	4,619,000	4,425,000	5,093,000	3,645,000	621,000	1,960,000	-	-	-	-
Ending Capital Fund Balance	2,428,405	8,038,371	5,001,216	1,406,330	2,767,951	2,823,202	2,881,216	2,942,131	3,006,092	3,073,250

Total Operating Fund Balance

Beginning Fund Balance	\$ 1,724,338	\$ 2,383,147	\$ 3,027,782	\$ 3,203,312	\$ 3,396,679	\$ 3,324,830	\$ 3,413,754	\$ 3,524,296	\$ 3,655,353	\$ 3,805,502
Net Revenues Available for Contingency	658,809	644,635	175,529	193,368	(71,849)	88,924	110,542	131,057	150,149	337,936
Ending Operating Fund Balance	2,383,147	3,027,782	3,203,312	3,396,679	3,324,830	3,413,754	3,524,296	3,655,353	3,805,502	4,143,437
Days of Operating Expenditures	459	533	534	536	496	450	439	430	423	408
Debt Coverage	-	-	2.39	2.47	1.62	1.86	1.91	1.97	2.03	2.30

**TOWN OF FLORENCE
WATER/WASTEWATER COST OF SERVICE MODEL**

Current 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

WATER Summary

Scenario: Base Scenario - 1

5 Total Accounts

Water Accounts

Total Accounts	3,540	3,548	3,562	3,572	3,582	3,593	3,603	3,613	3,623	3,634
New Accounts	-	8	14	10	10	11	10	10	10	11
Avg. Annual Growth Rate		0.23%	0.39%	0.28%	0.28%	0.31%	0.28%	0.28%	0.28%	0.30%

6 Annual Water Consumed Volume

Water Consumed Volume

5/8" Inside	166,325,655	166,450,937	166,676,277	166,876,309	167,076,101	167,275,654	167,474,970	167,674,049	167,872,891	168,071,499
5/8" Outside	3,048,970	3,048,970	3,048,970	3,048,970	3,048,970	3,048,970	3,048,970	3,048,970	3,048,970	3,048,970
1" Inside	10,239,640	10,305,279	10,435,725	10,500,143	10,564,169	10,627,808	10,691,069	10,753,958	10,816,481	10,878,644
1" Outside	432,621	432,621	432,621	432,621	432,621	432,621	432,621	432,621	432,621	432,621
2" Inside	32,165,907	32,389,282	32,611,126	32,831,471	33,050,348	33,267,784	33,483,809	33,698,449	33,911,730	34,123,678
3" Compound	6,968,324	6,968,324	6,968,324	6,968,324	6,968,324	6,968,324	6,968,324	6,968,324	6,968,324	6,968,324
3" Turbine	5,721,700	5,721,700	6,866,040	6,866,040	6,866,040	6,866,040	6,866,040	6,866,040	6,866,040	6,866,040
4" Compound	1,321,490	1,321,490	1,321,490	1,321,490	1,321,490	1,321,490	1,321,490	1,321,490	1,321,490	1,321,490
4" Turbine	6,075,850	6,075,850	6,075,850	6,075,850	6,075,850	6,075,850	6,075,850	6,075,850	6,075,850	6,075,850
6" Turbine	219,200,330	219,200,330	219,200,330	219,200,330	219,200,330	219,200,330	219,200,330	219,200,330	219,200,330	219,200,330
8" Turbine	-	-	-	-	-	-	-	-	-	-
CCA/New Prison	139,331,125	175,831,125	175,831,125	175,831,125	175,831,125	248,831,125	248,831,125	248,831,125	248,831,125	321,831,125
Total System	590,831,611	627,745,907	629,467,878	629,952,673	630,435,366	703,915,996	704,394,597	704,871,204	705,345,851	778,818,570

**TOWN OF FLORENCE
WATER/WASTEWATER COST OF SERVICE MODEL**

Current 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

Forecast Summary

Scenario: Base Scenario - 1

1 Wastewater Rates

Residential Monthly Rates

Monthly Charge	\$	11.62	\$	12.78	\$	15.34	\$	16.88	\$	18.59	\$	19.53	\$	20.49	\$	21.51	\$	22.59	\$	23.72	\$	24.91
Volume Rate Per 1,000 Gal		2.72		2.99		3.59		3.95		4.35		4.57		4.79		5.03		5.29		5.55		5.83

Non-Residential

Monthly Chantry Charge	\$	11.62	\$	12.78	\$	15.33	\$	16.86	\$	18.55	\$	19.48	\$	20.46	\$	21.48	\$	22.55	\$	23.68	\$	24.86
Volume Rate Per 1,000 Gal		2.73		3.01		3.61		3.97		4.37		4.59		4.82		5.06		5.31		5.58		5.86

2 Monthly Charges

Residential Water Usage

5,000 Gal	Total	\$	21.82	\$	23.99	\$	28.81	\$	31.70	\$	34.91	\$	36.67	\$	38.47	\$	40.39	\$	42.41	\$	44.53	\$	46.76
	Total Increase				2.17		4.81		2.89		3.21		1.77		1.80		1.92		2.02		2.12		2.23
	Avg. Annual Increase		7.92%																				

10,000 Gal	Total		32.02		35.21		42.27		46.51		51.22		53.81		56.44		59.27		62.23		65.34		68.61
	Total Increase				3.19		7.06		4.24		4.71		2.59		2.64		2.82		2.96		3.11		3.27
	Avg. Annual Increase		7.92%																				

Commercial

20,000 Gal	Total		66.22		72.98		87.53		96.26		105.95		111.25		116.81		122.66		128.79		135.23		141.99
	Total Increase				6.76		14.55		8.73		9.70		5.30		5.56		5.84		6.13		6.44		6.76
	Avg. Annual Increase		7.68%																				

50,000 Gal	Total		148.12		163.28		195.83		215.36		237.05		248.91		261.35		274.42		288.14		302.55		317.68
	Total Increase				15.16		32.55		19.53		21.70		11.85		12.45		13.07		13.72		14.41		15.13
	Avg. Annual Increase		7.68%																				

**TOWN OF FLORENCE
WATER/WASTEWATER COST OF SERVICE MODEL**

Current 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

Forecast Summary**Scenario: Base Scenario - 1****3 Annual Revenues and Expenses**

Wastewater Revenues	\$ 3,198,106	\$ 4,363,387	\$ 4,683,742	\$ 5,338,641	\$ 5,687,098	\$ 6,634,158	\$ 6,958,602	\$ 7,311,223	\$ 7,682,412	\$ 9,369,349
Non-Rate Revenues	77,500	77,500	77,500	77,500	77,500	77,500	77,500	77,500	77,500	77,500
Total Revenues	3,275,606	4,440,887	4,761,242	5,416,141	5,764,598	6,711,658	7,036,102	7,388,723	7,759,912	9,446,849
Operating Expenses	1,948,650	2,125,243	2,261,139	2,406,940	3,183,190	3,615,772	3,863,372	4,129,984	4,417,188	5,166,956
Net Revenues Available for Transfers/Capital Outlays/Debt Ser	1,326,956	2,315,644	2,500,104	3,009,200	2,581,408	3,095,885	3,172,730	3,258,739	3,342,724	4,279,893
Transfers	284,959	296,357	308,212	320,540	333,362	346,696	360,564	374,987	389,986	405,586
Capital Outlays	9,000	-	-	-	-	-	-	-	-	-
Total Operating Expense/Capital Outlays	2,242,609	2,421,600	2,569,350	2,727,480	3,516,552	3,962,469	4,223,936	4,504,970	4,807,174	5,572,541
Net Revenues Available for Debt Service	1,317,956	2,315,644	2,500,104	3,009,200	2,581,408	3,095,885	3,172,730	3,258,739	3,342,724	4,279,893
Wastewater Debt Service	627,792	627,792	627,792	2,013,791	2,013,794	2,804,811	2,804,812	2,804,813	2,804,811	2,804,814
Total Cost of Service	2,870,401	3,049,392	3,197,142	4,741,271	5,530,346	6,767,280	7,028,749	7,309,783	7,611,985	8,377,355
Net Revenues Available for Contingency	405,205	1,391,494	1,564,101	674,870	234,252	(55,622)	7,353	78,940	147,927	1,069,494
Percent of COS	14.1%	45.6%	48.9%	14.2%	4.2%	-0.8%	0.1%	1.1%	1.9%	12.8%

4 Revenue Adequacy Tests

Total Capital Fund Balance										
Beginning Fund Balance	\$ 3,630,002	\$ 1,793,317	\$ 750,010	\$ 26,944,433	\$ 1,161,758	\$ 1,141,826	\$ 1,190,112	\$ 1,235,003	\$ 1,281,375	\$ 1,329,277
Plus Non-Rate Funding Sources	1,300,000	4,509,000	470,000	1,250,000	14,000,000	-	-	-	-	-
Plus Impact Fees	12,315	25,443	39,424	40,725	42,068	48,285	44,891	46,372	47,903	54,981
Plus Proceeds from the Issuance of Debt \$ 28,000,000	-	-	28,000,000	-	-	-	-	-	-	-
Total Available Funds	4,942,317	6,327,760	29,259,433	28,235,158	15,203,826	1,190,112	1,235,003	1,281,375	1,329,277	1,384,259
Less WASTEWATER Capital Improvement Plan	3,149,000	5,577,750	2,315,000	27,073,400	14,062,000	-	-	-	-	-
Ending Capital Fund Balance	1,793,317	750,010	26,944,433	1,161,758	1,141,826	1,190,112	1,235,003	1,281,375	1,329,277	1,384,259
Total Operating Fund Balance										
Beginning Fund Balance	\$ 1,210,775	\$ 1,615,980	\$ 3,007,474	\$ 4,571,575	\$ 5,246,444	\$ 5,480,697	\$ 5,425,074	\$ 5,432,428	\$ 5,511,367	\$ 5,659,294
Net Revenues Available for Contingency	405,205	1,391,494	1,564,101	674,870	234,252	(55,622)	7,353	78,940	147,927	1,069,494
Ending Operating Fund Balance	1,615,980	3,007,474	4,571,575	5,246,444	5,480,697	5,425,074	5,432,428	5,511,367	5,659,294	6,728,788
Days of Operating Expenditures	303	517	738	796	628	548	513	487	468	475
Debt Coverage										
Debt Coverage	2.11	3.69	3.98	1.49	1.28	1.10	1.13	1.16	1.19	1.53

**TOWN OF FLORENCE
WATER/WASTEWATER COST OF SERVICE MODEL**

Current 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

Forecast Summary

Scenario: Base Scenario - 1

5 Total Accounts

Wastewater Accounts

Total Accounts	2,945	2,951	2,960	2,969	2,978	2,988	2,997	3,006	3,015	3,025
New Accounts	-	6	9	9	9	10	9	9	9	10
Avg. Annual Growth Rate		0.20%	0.30%	0.30%	0.30%	0.34%	0.30%	0.30%	0.30%	0.33%

6 Annual Volume

Wastewater Billing Units

Residential	118,708,082	118,929,801	119,284,550	119,639,300	119,994,049	120,348,799	120,703,548	121,058,298	121,413,048	121,767,797
Commercial	46,393,005	46,393,005	46,593,841	46,794,676	46,995,512	47,196,347	47,397,183	47,598,018	47,798,854	47,999,690
Non-Residential	877,464	877,464	877,464	877,464	877,464	877,464	877,464	877,464	877,464	877,464
Institutional	237,544,979	237,544,979	237,544,979	237,544,979	237,544,979	237,544,979	237,544,979	237,544,979	237,544,979	237,544,979
ADOC	163,693,900	163,693,900	163,693,900	163,693,900	163,693,900	163,693,900	163,693,900	163,693,900	163,693,900	163,693,900
CCA/New Prison	139,331,125	175,831,125	175,831,125	175,831,125	175,831,125	267,954,634	267,954,634	267,954,634	267,954,634	408,344,574
Total System	706,548,555	743,270,274	743,825,859	744,381,444	744,937,029	837,616,123	838,171,708	838,727,293	839,282,878	980,228,403

TOWN OF FLORENCE											
WATER/WASTEWATER COST OF SERVICE MODEL											
Prior	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	

Input Area -- Rate Calculator

Scenario: Base Scenario - 1

Water Rates

Month of Adjustment (July = 1)

Annual Adjustment

5/8" Inside	0.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
5/8" Outside	0.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
1" Inside	0.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
1" Outside	0.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
2" Inside	0.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
3" Compound	0.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
3" Turbine	0.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
4" Compound	0.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
4" Turbine	0.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
6" Turbine	0.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
8" Turbine	0.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
CCA/New Prison	0.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%

5/8" Inside

Base Charge	5/8" - 3/4"	\$ 18.38	\$ 19.30	\$ 20.27	\$ 21.28	\$ 22.34	\$ 23.46	\$ 24.63	\$ 25.86	\$ 27.16	\$ 28.51	\$ 29.94
	1"	30.54	32.17	33.78	35.47	37.24	39.10	41.06	43.11	45.27	47.53	49.91
	2"	122.54	128.67	135.10	141.86	148.95	156.40	164.22	172.43	181.05	190.10	199.61
	3" Compound	196.08	205.88	216.17	226.98	238.33	250.25	262.76	275.90	289.69	304.18	319.39
	3" Turbine	214.46	225.18	236.44	248.26	260.67	273.71	287.39	301.76	316.85	332.69	349.33
	4" Compound	306.36	321.68	337.76	354.65	372.38	391.00	410.55	431.08	452.64	475.27	499.03
	4" Turbine	386.02	405.32	425.59	446.87	469.21	492.67	517.30	543.17	570.33	598.84	628.78
	6" Compound	612.74	643.37	675.54	709.32	744.78	782.02	821.12	862.18	905.29	950.55	998.08
	6" Turbine	857.82	900.71	945.75	993.03	1,042.68	1,094.82	1,149.56	1,207.04	1,267.39	1,330.76	1,397.30
	8" Turbine	1,470.56	1,544.09	1,621.29	1,702.36	1,787.48	1,876.85	1,970.69	2,069.23	2,172.69	2,281.32	2,395.39
	10" Turbine	2,328.39	2,444.81	2,567.05	2,695.40	2,830.17	2,971.68	3,120.27	3,276.28	3,440.09	3,612.10	3,792.70
	12" Turbine	3,063.67	3,216.85	3,377.69	3,546.58	3,723.91	3,910.10	4,105.61	4,310.89	4,526.43	4,752.75	4,990.39

Usage Charge

	-	10,000	1.31	1.38	1.45	1.52	1.60	1.68	1.76	1.85	1.94	2.04
	10,001	18,700	1.82	1.91	2.01	2.11	2.21	2.32	2.44	2.56	2.69	2.82
	18,700	Above	3.23	3.39	3.56	3.74	3.92	4.12	4.33	4.54	4.77	5.01
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-

5/8" Outside

Base Charge	5/8" - 3/4"	\$ 23.89	\$ 25.09	\$ 26.34	\$ 27.66	\$ 29.04	\$ 30.50	\$ 32.02	\$ 33.62	\$ 35.30	\$ 37.07	\$ 38.92
	1"	39.82	41.81	43.90	46.10	48.40	50.82	53.36	56.03	58.83	61.77	64.86
	2"	159.31	167.28	175.64	184.43	193.65	203.33	213.50	224.17	235.38	247.15	259.51
	3" Compound	254.90	267.64	281.02	295.07	309.83	325.32	341.58	358.66	376.60	395.43	415.20
	3" Turbine	273.28	286.94	301.29	316.35	332.17	348.78	366.22	384.53	403.75	423.94	445.14
	4" Compound	398.28	418.19	439.10	461.05	484.11	508.31	533.73	560.41	588.44	617.86	648.75
	4" Turbine	477.93	501.83	526.92	553.27	580.93	609.98	640.48	672.50	706.13	741.43	778.50
	6" Compound	796.66	836.38	878.20	922.11	968.21	1,016.63	1,067.46	1,120.83	1,176.87	1,235.71	1,297.50
	6" Turbine	1,041.64	1,093.72	1,148.41	1,205.83	1,266.12	1,329.42	1,395.89	1,465.69	1,538.97	1,615.92	1,696.72
	8" Turbine	1,911.72	2,007.31	2,107.68	2,213.06	2,323.71	2,439.90	2,561.89	2,689.99	2,824.49	2,965.71	3,114.00
	10" Turbine	3,026.90	3,178.25	3,337.16	3,504.02	3,679.22	3,863.18	4,056.34	4,259.16	4,472.12	4,695.72	4,930.51
	12" Turbine	3,762.18	3,950.29	4,147.80	4,355.19	4,572.95	4,801.60	5,041.68	5,293.77	5,558.45	5,836.38	6,128.20

Usage Charge

	-	10,000	1.68	1.76	1.85	1.94	2.04	2.14	2.25	2.36	2.48	2.60
	10,001	18,700	2.33	2.44	2.56	2.69	2.83	2.97	3.12	3.27	3.43	3.61
	18,700	Above	4.12	4.33	4.55	4.77	5.01	5.26	5.53	5.80	6.09	6.39
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-

TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL												
		Prior	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021

Input Area -- Rate Calculator

Scenario: Base Scenario - 1

1" Inside

Base Charge	5/8" - 3/4"	\$ 18.38	\$ 19.30	\$ 20.27	\$ 21.28	\$ 22.34	\$ 23.46	\$ 24.63	\$ 25.86	\$ 27.16	\$ 28.51	\$ 29.94	
	1"	30.54	32.17	33.78	35.47	37.24	39.10	41.06	43.11	45.27	47.53	49.91	
	2"	122.54	128.67	135.10	141.86	148.95	156.40	164.22	172.43	181.05	190.10	199.61	
	3" Compound	196.08	205.88	216.17	226.98	238.33	250.25	262.76	275.90	289.69	304.18	319.39	
	3" Turbine	214.46	225.18	236.44	248.26	260.67	273.71	287.39	301.76	316.85	332.69	349.33	
	4" Compound	306.36	321.68	337.76	354.65	372.38	391.00	410.55	431.08	452.64	475.27	499.03	
	4" Turbine	386.02	405.32	425.59	446.87	469.21	492.67	517.30	543.17	570.33	598.84	628.78	
	6" Compound	612.74	643.37	675.54	709.32	744.78	782.02	821.12	862.18	905.29	950.55	998.08	
	6" Turbine	857.82	900.71	945.75	993.03	1,042.68	1,094.82	1,149.56	1,207.04	1,267.39	1,330.76	1,397.30	
	8" Turbine	1,470.56	1,544.09	1,621.29	1,702.36	1,787.48	1,876.85	1,970.69	2,069.23	2,172.69	2,281.32	2,395.39	
	10" Turbine	2,328.39	2,444.81	2,567.05	2,695.40	2,830.17	2,971.68	3,120.27	3,276.28	3,440.09	3,612.10	3,792.70	
	12" Turbine	3,063.67	3,216.85	3,377.69	3,546.58	3,723.91	3,910.10	4,105.61	4,310.89	4,526.43	4,752.75	4,990.39	
Usage Charge	-	10,000	1.31	1.38	1.45	1.52	1.60	1.68	1.76	1.85	1.94	2.04	2.14
	10,001	18,700	1.82	1.91	2.01	2.11	2.21	2.32	2.44	2.56	2.69	2.82	2.96
	18,700	Above	3.23	3.39	3.56	3.74	3.92	4.12	4.33	4.54	4.77	5.01	5.26
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-

1" Outside

Base Charge	5/8" - 3/4"	\$ 23.89	\$ 25.09	\$ 26.34	\$ 27.66	\$ 29.04	\$ 30.50	\$ 32.02	\$ 33.62	\$ 35.30	\$ 37.07	\$ 38.92	
	1"	39.82	41.81	43.90	46.10	48.40	50.82	53.36	56.03	58.83	61.77	64.86	
	2"	159.31	167.28	175.64	184.43	193.65	203.33	213.50	224.17	235.38	247.15	259.51	
	3" Compound	254.90	267.64	281.02	295.07	309.83	325.32	341.58	358.66	376.60	395.43	415.20	
	3" Turbine	273.28	286.94	301.29	316.35	332.17	348.78	366.22	384.53	403.75	423.94	445.14	
	4" Compound	398.28	418.19	439.10	461.05	484.11	508.31	533.73	560.41	588.44	617.86	648.75	
	4" Turbine	477.93	501.83	526.92	553.27	580.93	609.98	640.48	672.50	706.13	741.43	778.50	
	6" Compound	796.66	836.38	878.20	922.11	968.21	1,016.63	1,067.46	1,120.83	1,176.87	1,235.71	1,297.50	
	6" Turbine	1,041.64	1,093.72	1,148.41	1,205.83	1,266.12	1,329.42	1,395.89	1,465.69	1,538.97	1,615.92	1,696.72	
	8" Turbine	1,911.72	2,007.31	2,107.68	2,213.06	2,323.71	2,439.90	2,561.89	2,689.99	2,824.49	2,965.71	3,114.00	
	10" Turbine	3,026.90	3,178.25	3,337.16	3,504.02	3,679.22	3,863.18	4,056.34	4,259.16	4,472.12	4,695.72	4,930.51	
	12" Turbine	3,762.18	3,950.29	4,147.80	4,355.19	4,572.95	4,801.60	5,041.68	5,293.77	5,558.45	5,836.38	6,128.20	
Usage Charge	-	10,000	1.68	1.85	1.94	2.04	2.14	2.25	2.36	2.48	2.60	2.73	2.87
	10,001	18,700	2.33	2.56	2.69	2.82	2.96	3.11	3.27	3.43	3.60	3.78	3.97
	18,700	Above	4.12	4.55	4.78	5.02	5.27	5.53	5.81	6.10	6.40	6.72	7.06
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-

2" Inside

Base Charge	5/8" - 3/4"	\$ 18.38	\$ 19.30	\$ 20.27	\$ 21.28	\$ 22.34	\$ 23.46	\$ 24.63	\$ 25.86	\$ 27.16	\$ 28.51	\$ 29.94	
	1"	30.54	32.17	33.78	35.47	37.24	39.10	41.06	43.11	45.27	47.53	49.91	
	2"	122.54	128.67	135.10	141.86	148.95	156.40	164.22	172.43	181.05	190.10	199.61	
	3" Compound	196.08	205.88	216.17	226.98	238.33	250.25	262.76	275.90	289.69	304.18	319.39	
	3" Turbine	214.46	225.18	236.44	248.26	260.67	273.71	287.39	301.76	316.85	332.69	349.33	
	4" Compound	306.36	321.68	337.76	354.65	372.38	391.00	410.55	431.08	452.64	475.27	499.03	
	4" Turbine	386.02	405.32	425.59	446.87	469.21	492.67	517.30	543.17	570.33	598.84	628.78	
	6" Compound	612.74	643.37	675.54	709.32	744.78	782.02	821.12	862.18	905.29	950.55	998.08	
	6" Turbine	857.82	900.71	945.75	993.03	1,042.68	1,094.82	1,149.56	1,207.04	1,267.39	1,330.76	1,397.30	
	8" Turbine	1,470.56	1,544.09	1,621.29	1,702.36	1,787.48	1,876.85	1,970.69	2,069.23	2,172.69	2,281.32	2,395.39	
	10" Turbine	2,328.39	2,444.81	2,567.05	2,695.40	2,830.17	2,971.68	3,120.27	3,276.28	3,440.09	3,612.10	3,792.70	
	12" Turbine	3,063.67	3,216.85	3,377.69	3,546.58	3,723.91	3,910.10	4,105.61	4,310.89	4,526.43	4,752.75	4,990.39	
Usage Charge	-	10,000	1.31	1.38	1.45	1.52	1.60	1.68	1.76	1.85	1.94	2.04	2.14
	10,001	18,700	1.82	1.91	2.01	2.11	2.21	2.32	2.44	2.56	2.69	2.82	2.96
	18,700	Above	3.23	3.39	3.56	3.74	3.92	4.12	4.33	4.54	4.77	5.01	5.26
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-

TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL											
Prior	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	

Input Area -- Rate Calculator

Scenario: Base Scenario - 1

3" Compound

Base Charge	5/8" - 3/4"	\$ 23.89	\$ 25.09	\$ 26.34	\$ 27.66	\$ 29.04	\$ 30.50	\$ 32.02	\$ 33.62	\$ 35.30	\$ 37.07	\$ 38.92	
	1"	39.82	41.81	43.90	46.10	48.40	50.82	53.36	56.03	58.83	61.77	64.86	
	2"	159.31	167.28	175.64	184.43	193.65	203.33	213.50	224.17	235.38	247.15	259.51	
3" Compound		254.90	267.64	281.02	295.07	309.83	325.32	341.58	358.66	376.60	395.43	415.20	
	3" Turbine	273.28	286.94	301.29	316.35	332.17	348.78	366.22	384.53	403.75	423.94	445.14	
4" Compound		398.28	418.19	439.10	461.05	484.11	508.31	533.73	560.41	588.44	617.86	648.75	
	4" Turbine	477.93	501.83	526.92	553.27	580.93	609.98	640.48	672.50	706.13	741.43	778.50	
6" Compound		796.66	836.38	878.20	922.11	968.21	1,016.63	1,067.46	1,120.83	1,176.87	1,235.71	1,297.50	
	6" Turbine	1,041.64	1,093.72	1,148.41	1,205.83	1,266.12	1,329.42	1,395.89	1,465.69	1,538.97	1,615.92	1,696.72	
	8" Turbine	1,911.72	2,007.31	2,107.68	2,213.06	2,323.71	2,439.90	2,561.89	2,689.99	2,824.49	2,965.71	3,114.00	
	10" Turbine	3,026.90	3,178.25	3,337.16	3,504.02	3,679.22	3,863.18	4,056.34	4,259.16	4,472.12	4,695.72	4,930.51	
	12" Turbine	3,762.18	3,950.29	4,147.80	4,355.19	4,572.95	4,801.60	5,041.68	5,293.77	5,558.45	5,836.38	6,128.20	
Usage Charge	-	10,000	1.68	1.85	1.94	2.04	2.14	2.25	2.36	2.48	2.60	2.73	2.87
	10,001	18,700	2.33	2.56	2.69	2.82	2.96	3.11	3.27	3.43	3.60	3.78	3.97
	18,700	Above	4.12	4.55	4.78	5.02	5.27	5.53	5.81	6.10	6.40	6.72	7.06
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-

3" Turbine

Base Charge	5/8" - 3/4"	\$ 18.38	\$ 19.30	\$ 20.27	\$ 21.28	\$ 22.34	\$ 23.46	\$ 24.63	\$ 25.86	\$ 27.16	\$ 28.51	\$ 29.94	
	1"	30.54	32.17	33.78	35.47	37.24	39.10	41.06	43.11	45.27	47.53	49.91	
	2"	122.54	128.67	135.10	141.86	148.95	156.40	164.22	172.43	181.05	190.10	199.61	
3" Compound		196.08	205.88	216.17	226.98	238.33	250.25	262.76	275.90	289.69	304.18	319.39	
	3" Turbine	214.46	225.18	236.44	248.26	260.67	273.71	287.39	301.76	316.85	332.69	349.33	
4" Compound		306.36	321.68	337.76	354.65	372.38	391.00	410.55	431.08	452.64	475.27	499.03	
	4" Turbine	386.02	405.32	425.59	446.87	469.21	492.67	517.30	543.17	570.33	598.84	628.78	
6" Compound		612.74	643.37	675.54	709.32	744.78	782.02	821.12	862.18	905.29	950.55	998.08	
	6" Turbine	857.82	900.71	945.75	993.03	1,042.68	1,094.82	1,149.56	1,207.04	1,267.39	1,330.76	1,397.30	
	8" Turbine	1,470.56	1,544.09	1,621.29	1,702.36	1,787.48	1,876.85	1,970.69	2,069.23	2,172.69	2,281.32	2,395.39	
	10" Turbine	2,328.39	2,444.81	2,567.05	2,695.40	2,830.17	2,971.68	3,120.27	3,276.28	3,440.09	3,612.10	3,792.70	
	12" Turbine	3,063.67	3,216.85	3,377.69	3,546.58	3,723.91	3,910.10	4,105.61	4,310.89	4,526.43	4,752.75	4,990.39	
Usage Charge	-	10,000	1.31	1.38	1.45	1.52	1.60	1.68	1.76	1.85	1.94	2.04	2.14
	10,001	18,700	1.82	1.91	2.01	2.11	2.21	2.32	2.44	2.56	2.69	2.82	2.96
	18,700	Above	3.23	3.39	3.56	3.74	3.92	4.12	4.33	4.54	4.77	5.01	5.26
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-

4" Compound

Base Charge	5/8" - 3/4"	\$ 18.38	\$ 19.30	\$ 20.27	\$ 21.28	\$ 22.34	\$ 23.46	\$ 24.63	\$ 25.86	\$ 27.16	\$ 28.51	\$ 29.94	
	1"	30.54	32.17	33.78	35.47	37.24	39.10	41.06	43.11	45.27	47.53	49.91	
	2"	122.54	128.67	135.10	141.86	148.95	156.40	164.22	172.43	181.05	190.10	199.61	
3" Compound		196.08	205.88	216.17	226.98	238.33	250.25	262.76	275.90	289.69	304.18	319.39	
	3" Turbine	214.46	225.18	236.44	248.26	260.67	273.71	287.39	301.76	316.85	332.69	349.33	
4" Compound		306.36	321.68	337.76	354.65	372.38	391.00	410.55	431.08	452.64	475.27	499.03	
	4" Turbine	386.02	405.32	425.59	446.87	469.21	492.67	517.30	543.17	570.33	598.84	628.78	
6" Compound		612.74	643.37	675.54	709.32	744.78	782.02	821.12	862.18	905.29	950.55	998.08	
	6" Turbine	857.82	900.71	945.75	993.03	1,042.68	1,094.82	1,149.56	1,207.04	1,267.39	1,330.76	1,397.30	
	8" Turbine	1,470.56	1,544.09	1,621.29	1,702.36	1,787.48	1,876.85	1,970.69	2,069.23	2,172.69	2,281.32	2,395.39	
	10" Turbine	2,328.39	2,444.81	2,567.05	2,695.40	2,830.17	2,971.68	3,120.27	3,276.28	3,440.09	3,612.10	3,792.70	
	12" Turbine	3,063.67	3,216.85	3,377.69	3,546.58	3,723.91	3,910.10	4,105.61	4,310.89	4,526.43	4,752.75	4,990.39	
Usage Charge	-	10,000	1.31	1.38	1.45	1.52	1.60	1.68	1.76	1.85	1.94	2.04	2.14
	10,001	18,700	1.82	1.91	2.01	2.11	2.21	2.32	2.44	2.56	2.69	2.82	2.96
	18,700	Above	3.23	3.39	3.56	3.74	3.92	4.12	4.33	4.54	4.77	5.01	5.26
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-

TOWN OF FLORENCE											
WATER/WASTEWATER COST OF SERVICE MODEL											
	Prior	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021

Input Area -- Rate Calculator

Scenario: Base Scenario - 1

4" Turbine

Base Charge	5/8" - 3/4"												
	1"	\$ 18.38	\$ 19.30	\$ 20.27	\$ 21.28	\$ 22.34	\$ 23.46	\$ 24.63	\$ 25.86	\$ 27.16	\$ 28.51	\$ 29.94	
	2"	30.54	32.17	33.78	35.47	37.24	39.10	41.06	43.11	45.27	47.53	49.91	
	3" Compound	122.54	128.67	135.10	141.86	148.95	156.40	164.22	172.43	181.05	190.10	199.61	
	3" Turbine	196.08	205.88	216.17	226.98	238.33	250.25	262.76	275.90	289.69	304.18	319.39	
	4" Compound	214.46	225.18	236.44	248.26	260.67	273.71	287.39	301.76	316.85	332.69	349.33	
	4" Turbine	306.36	321.68	337.76	354.65	372.38	391.00	410.55	431.08	452.64	475.27	499.03	
	6" Compound	386.02	405.32	425.59	446.87	469.21	492.67	517.30	543.17	570.33	598.84	628.78	
	6" Turbine	612.74	643.37	675.54	709.32	744.78	782.02	821.12	862.18	905.29	950.55	998.08	
	8" Turbine	857.82	900.71	945.75	993.03	1,042.68	1,094.82	1,149.56	1,207.04	1,267.39	1,330.76	1,397.30	
	10" Turbine	1,470.56	1,544.09	1,621.29	1,702.36	1,787.48	1,876.85	1,970.69	2,069.23	2,172.69	2,281.32	2,395.39	
	12" Turbine	2,328.39	2,444.81	2,567.05	2,695.40	2,830.17	2,971.68	3,120.27	3,276.28	3,440.09	3,612.10	3,792.70	
		3,063.67	3,216.85	3,377.69	3,546.58	3,723.91	3,910.10	4,105.61	4,310.89	4,526.43	4,752.75	4,990.39	
Usage Charge	-	10,000	1.31	1.38	1.45	1.52	1.60	1.68	1.76	1.85	1.94	2.04	2.14
	10,001	18,700	1.82	1.91	2.01	2.11	2.21	2.32	2.44	2.56	2.69	2.82	2.96
	18,700	Above	3.23	3.39	3.56	3.74	3.92	4.12	4.33	4.54	4.77	5.01	5.26
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-

6" Turbine

Base Charge	5/8" - 3/4"												
	1"	\$ 18.38	\$ 19.30	\$ 20.27	\$ 21.28	\$ 22.34	\$ 23.46	\$ 24.63	\$ 25.86	\$ 27.16	\$ 28.51	\$ 29.94	
	2"	30.54	32.17	33.78	35.47	37.24	39.10	41.06	43.11	45.27	47.53	49.91	
	3" Compound	122.54	128.67	135.10	141.86	148.95	156.40	164.22	172.43	181.05	190.10	199.61	
	3" Turbine	196.08	205.88	216.17	226.98	238.33	250.25	262.76	275.90	289.69	304.18	319.39	
	4" Compound	214.46	225.18	236.44	248.26	260.67	273.71	287.39	301.76	316.85	332.69	349.33	
	4" Turbine	306.36	321.68	337.76	354.65	372.38	391.00	410.55	431.08	452.64	475.27	499.03	
	6" Compound	386.02	405.32	425.59	446.87	469.21	492.67	517.30	543.17	570.33	598.84	628.78	
	6" Turbine	612.74	643.37	675.54	709.32	744.78	782.02	821.12	862.18	905.29	950.55	998.08	
	8" Turbine	857.82	900.71	945.75	993.03	1,042.68	1,094.82	1,149.56	1,207.04	1,267.39	1,330.76	1,397.30	
	10" Turbine	1,470.56	1,544.09	1,621.29	1,702.36	1,787.48	1,876.85	1,970.69	2,069.23	2,172.69	2,281.32	2,395.39	
	12" Turbine	2,328.39	2,444.81	2,567.05	2,695.40	2,830.17	2,971.68	3,120.27	3,276.28	3,440.09	3,612.10	3,792.70	
		3,063.67	3,216.85	3,377.69	3,546.58	3,723.91	3,910.10	4,105.61	4,310.89	4,526.43	4,752.75	4,990.39	
Usage Charge	-	10,000	1.31	1.38	1.45	1.52	1.60	1.68	1.76	1.85	1.94	2.04	2.14
	10,001	18,700	1.82	1.91	2.01	2.11	2.21	2.32	2.44	2.56	2.69	2.82	2.96
	18,700	Above	3.23	3.39	3.56	3.74	3.92	4.12	4.33	4.54	4.77	5.01	5.26
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-

8" Turbine

Base Charge	5/8" - 3/4"												
	1"	\$ 18.38	\$ 19.30	\$ 20.27	\$ 21.28	\$ 22.34	\$ 23.46	\$ 24.63	\$ 25.86	\$ 27.16	\$ 28.51	\$ 29.94	
	2"	30.54	32.17	33.78	35.47	37.24	39.10	41.06	43.11	45.27	47.53	49.91	
	3" Compound	122.54	128.67	135.10	141.86	148.95	156.40	164.22	172.43	181.05	190.10	199.61	
	3" Turbine	196.08	205.88	216.17	226.98	238.33	250.25	262.76	275.90	289.69	304.18	319.39	
	4" Compound	214.46	225.18	236.44	248.26	260.67	273.71	287.39	301.76	316.85	332.69	349.33	
	4" Turbine	306.36	321.68	337.76	354.65	372.38	391.00	410.55	431.08	452.64	475.27	499.03	
	6" Compound	386.02	405.32	425.59	446.87	469.21	492.67	517.30	543.17	570.33	598.84	628.78	
	6" Turbine	612.74	643.37	675.54	709.32	744.78	782.02	821.12	862.18	905.29	950.55	998.08	
	8" Turbine	857.82	900.71	945.75	993.03	1,042.68	1,094.82	1,149.56	1,207.04	1,267.39	1,330.76	1,397.30	
	10" Turbine	1,470.56	1,544.09	1,621.29	1,702.36	1,787.48	1,876.85	1,970.69	2,069.23	2,172.69	2,281.32	2,395.39	
	12" Turbine	2,328.39	2,444.81	2,567.05	2,695.40	2,830.17	2,971.68	3,120.27	3,276.28	3,440.09	3,612.10	3,792.70	
		3,063.67	3,216.85	3,377.69	3,546.58	3,723.91	3,910.10	4,105.61	4,310.89	4,526.43	4,752.75	4,990.39	
Usage Charge	-	10,000	1.31	1.38	1.45	1.52	1.60	1.68	1.76	1.85	1.94	2.04	2.14
	10,001	18,700	1.82	1.91	2.01	2.11	2.21	2.32	2.44	2.56	2.69	2.82	2.96
	18,700	Above	3.23	3.39	3.56	3.74	3.92	4.12	4.33	4.54	4.77	5.01	5.26
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-

<div style="border: 1px solid black; padding: 5px; display: inline-block; margin: 0 auto; width: 80%;"> TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL </div>											
	Prior	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021

Input Area -- Rate Calculator

Scenario: Base Scenario - 1

CCA/New Prison

Base Charge	5/8" - 3/4"		\$ 18.38	\$ 19.30	\$ 20.27	\$ 21.28	\$ 22.34	\$ 23.46	\$ 24.63	\$ 25.86	\$ 27.16	\$ 28.51	\$ 29.94
	1"		30.54	32.17	33.78	35.47	37.24	39.10	41.06	43.11	45.27	47.53	49.91
	2"		122.54	128.67	135.10	141.86	148.95	156.40	164.22	172.43	181.05	190.10	199.61
	3" Compound		196.08	205.88	216.17	226.98	238.33	250.25	262.76	275.90	289.69	304.18	319.39
	3" Turbine		214.46	225.18	236.44	248.26	260.67	273.71	287.39	301.76	316.85	332.69	349.33
	4" Compound		306.36	321.68	337.76	354.65	372.38	391.00	410.55	431.08	452.64	475.27	499.03
	4" Turbine		386.02	405.32	425.59	446.87	469.21	492.67	517.30	543.17	570.33	598.84	628.78
	6" Compound		612.74	643.37	675.54	709.32	744.78	782.02	821.12	862.18	905.29	950.55	998.08
	6" Turbine		857.82	900.71	945.75	993.03	1,042.68	1,094.82	1,149.56	1,207.04	1,267.39	1,330.76	1,397.30
	8" Turbine		1,470.56	1,544.09	1,621.29	1,702.36	1,787.48	1,876.85	1,970.69	2,069.23	2,172.69	2,281.32	2,395.39
	10" Turbine		2,328.39	2,444.81	2,567.05	2,695.40	2,830.17	2,971.68	3,120.27	3,276.28	3,440.09	3,612.10	3,792.70
	12" Turbine		3,063.67	3,216.85	3,377.69	3,546.58	3,723.91	3,910.10	4,105.61	4,310.89	4,526.43	4,752.75	4,990.39
Usage Charge	-	10,000	1.31	1.38	1.45	1.52	1.60	1.68	1.76	1.85	1.94	2.04	2.14
	10,001	18,700	1.82	1.91	2.01	2.11	2.21	2.32	2.44	2.56	2.69	2.82	2.96
	18,700	Above	3.23	3.39	3.56	3.74	3.92	4.12	4.33	4.54	4.77	5.01	5.26
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-

TOWN OF FLORENCE											
WATER/WASTEWATER COST OF SERVICE MODEL											
	Prior	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021

Input Area -- Rate Calculator

Scenario: Base Scenario - 1

Wastewater Rates

Annual Adjustment

Residential		0.00%	20.07%	10.03%	10.13%	5.06%	4.90%	5.00%	5.00%	5.00%	5.00%
Commercial		0.00%	19.93%	9.97%	10.08%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Non-Residential		0.00%	20.00%	10.00%	10.10%	5.10%	4.95%	5.00%	5.00%	5.00%	5.00%
Institutional		0.00%	20.00%	10.00%	10.00%	5.00%	4.95%	5.00%	5.00%	5.00%	5.00%
Other		0.00%	0.00%	0.00%	0.00%	0.00%	5.00%	5.00%	5.00%	5.00%	5.00%

Residential

Base Charge		\$ 11.62	\$ 12.78	\$ 15.34	\$ 16.88	\$ 18.59	\$ 19.53	\$ 20.49	\$ 21.51	\$ 22.59	\$ 23.72	\$ 24.91
Usage Charge	- 20,000	2.72	2.99	3.59	3.95	4.35	4.57	4.79	5.03	5.29	5.55	5.83
	20,001	2.72	2.99	3.59	3.95	4.35	4.57	4.79	5.03	5.29	5.55	5.83

Commercial

Base Charge		\$ 11.62	\$ 12.78	\$ 15.33	\$ 16.86	\$ 18.55	\$ 19.48	\$ 20.46	\$ 21.48	\$ 22.55	\$ 23.68	\$ 24.86
Usage Charge	- 20,000	2.73	3.01	3.61	3.97	4.37	4.59	4.82	5.06	5.31	5.58	5.86
	20,001	2.73	3.01	3.61	3.97	4.37	4.59	4.82	5.06	5.31	5.58	5.86

Non-Residential

Base Charge		\$ 11.62	\$ 12.78	\$ 15.34	\$ 16.87	\$ 18.57	\$ 19.52	\$ 20.49	\$ 21.51	\$ 22.59	\$ 23.72	\$ 24.90
Usage Charge	- 20,000	2.73	3.01	3.61	3.97	4.37	4.60	4.83	5.07	5.32	5.59	5.87
	20,001	2.73	3.01	3.61	3.97	4.37	4.60	4.83	5.07	5.32	5.59	5.87

Institutional and Prison Rates

1 -- Based on COS		\$ 3.97	\$ 4.01	\$ 4.20	\$ 6.35	\$ 7.40	\$ 8.09	\$ 8.40	\$ 8.72	\$ 9.08	\$ 8.54	
2 -- Based on Current Rate		3.89	4.20	5.74	5.97	6.94	7.36	7.64	8.01	8.41	8.83	9.27

Institutional

Base Charge		\$ 11.62	\$ 12.78	\$ 15.34	\$ 16.87	\$ 18.56	\$ 19.48	\$ 20.45	\$ 21.47	\$ 22.54	\$ 23.67	\$ 24.86
Usage Charge	2	3.89	4.20	5.74	5.97	6.94	7.36	7.64	8.01	8.41	8.83	9.27
		3.80	4.20	5.74	5.97	6.94	7.36	7.64	8.01	8.41	8.83	9.27

ADOC

Base Charge		\$ 11.62	\$ 12.78	\$ 15.34	\$ 16.87	\$ 18.56	\$ 19.48	\$ 20.45	\$ 21.47	\$ 22.54	\$ 23.67	\$ 24.86
Usage Charge	2	3.89	4.20	5.74	5.97	6.94	7.36	7.64	8.01	8.41	8.83	9.27
		3.80	4.20	5.74	5.97	6.94	7.36	7.64	8.01	8.41	8.83	9.27

CCA/New Prison

Base Charge		\$ 11.62	\$ 12.78	\$ 15.34	\$ 16.87	\$ 18.56	\$ 19.48	\$ 20.45	\$ 21.47	\$ 22.54	\$ 23.67	\$ 24.86
Usage Charge	2	3.89	4.20	5.74	5.97	6.94	7.36	7.64	8.01	8.41	8.83	9.27
		3.80	4.20	5.74	5.97	6.94	7.36	7.64	8.01	8.41	8.83	9.27

Other

Base Charge		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Usage Charge	- 20,000	-	-	-	-	-	-	-	-	-	-	-
	20,001	-	-	-	-	-	-	-	-	-	-	-

Summary of Results -- Rate Calculator

Revenues Less Revenue Requirement

Water	658,809	644,635	175,529	193,368	(71,849)	88,924	110,542	131,057	150,149	337,936
Wastewater	405,284	1,391,610	1,564,223	674,991	234,413	(55,398)	7,593	79,196	148,201	1,069,880
Net Revenues Available for Contingency	1,064,093	2,036,245	1,739,753	868,358	162,564	33,526	118,135	210,253	298,350	1,407,815
Debt Coverage	18.1%	27.8%	22.3%	10.1%	1.8%	0.3%	1.1%	1.8%	2.4%	9.6%

TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL											
	Prior	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021

Input Area -- Rate Calculator
Scenario: Base Scenario - 1

WATER Rate Revenues

<u>5/8" Inside</u>											
Base	765,627	805,123	847,668	892,187	939,040	988,347	1,040,238	1,094,846	1,152,315	1,212,794	
Usage	230,664	242,441	254,908	267,974	281,710	296,149	311,327	327,282	344,053	361,683	
5/8" Inside	996,291	1,047,564	1,102,576	1,160,162	1,220,750	1,284,496	1,351,564	1,422,128	1,496,369	1,574,477	
<u>5/8" Outside</u>											
Base	13,195	13,855	14,547	15,275	16,039	16,840	17,682	18,567	19,495	20,470	
Usage	5,445	5,721	6,001	6,309	6,619	6,958	7,300	7,664	8,047	8,450	
5/8" Outside	18,639	19,576	20,548	21,583	22,658	23,799	24,982	26,231	27,542	28,919	
<u>1" Inside</u>											
Base	29,984	31,895	34,338	36,500	38,792	41,222	43,799	46,530	49,424	52,492	
Usage	14,330	15,147	16,106	17,015	17,975	18,987	20,055	21,182	22,370	23,624	
1" Inside	44,314	47,042	50,443	53,515	56,767	60,210	63,854	67,712	71,795	76,116	
<u>1" Outside</u>											
Base	999	1,049	1,102	1,157	1,215	1,276	1,339	1,406	1,477	1,550	
Usage	846	892	936	983	1,032	1,084	1,138	1,195	1,255	1,317	
1" Outside	1,846	1,941	2,038	2,140	2,247	2,359	2,477	2,601	2,731	2,868	
<u>2" Inside</u>											
Base	110,730	117,881	125,471	133,524	142,070	151,136	160,754	170,956	181,776	193,250	
Usage	103,022	108,921	115,151	121,725	128,663	135,985	143,712	151,865	160,467	169,544	
2" Inside	213,752	226,802	240,621	255,250	270,733	287,122	304,466	322,820	342,243	362,794	
<u>3" Compound</u>											
Base	19,194	20,153	21,161	22,219	23,330	24,496	25,721	27,007	28,358	29,776	
Usage	18,687	19,695	20,680	21,714	22,799	23,939	25,136	26,393	27,713	29,099	
3" Compound	37,880	39,848	41,841	43,933	46,129	48,436	50,858	53,401	56,071	58,874	
<u>3" Turbine</u>											
Base	13,457	14,130	20,771	21,810	22,900	24,045	25,247	26,510	27,835	29,227	
Usage	18,326	19,241	24,244	25,456	26,729	28,066	29,469	30,942	32,489	34,114	
3" Turbine	31,783	33,371	45,015	47,266	49,629	52,111	54,716	57,452	60,325	63,341	
<u>4" Compound</u>											
Base	7,690	8,074	8,478	8,902	9,347	9,814	10,305	10,820	11,361	11,929	
Usage	2,624	2,756	2,894	3,038	3,190	3,350	3,517	3,693	3,878	4,072	
4" Compound	10,314	10,830	11,371	11,940	12,537	13,164	13,822	14,513	15,239	16,001	
<u>4" Turbine</u>											
Base	19,378	20,347	21,364	22,433	23,554	24,732	25,969	27,267	28,630	30,062	
Usage	20,258	21,270	22,333	23,450	24,622	25,853	27,146	28,503	29,929	31,425	
4" Turbine	39,636	41,617	43,698	45,882	48,177	50,585	53,115	55,770	58,559	61,487	

TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL											
	Prior	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021

Input Area -- Rate Calculator
Scenario: Base Scenario - 1

6" Turbine											
Base		64,594	67,823	71,215	74,775	78,514	82,440	86,562	90,890	95,434	100,206
Usage		736,614	773,418	812,089	852,694	895,328	940,095	987,099	1,036,454	1,088,277	1,142,691
6" Turbine		801,208	841,242	883,304	927,469	973,842	1,022,535	1,073,661	1,127,344	1,183,712	1,242,897

8" Turbine											
Base		-	-	-	-	-	-	-	-	-	-
Usage		-	-	-	-	-	-	-	-	-	-
8" Turbine		-	-	-	-	-	-	-	-	-	-

CCA/New Prison											
Base		21,531	33,912	35,607	37,388	39,257	54,960	57,708	60,593	63,623	83,505
Usage		467,423	619,345	650,312	682,827	716,969	1,065,365	1,118,634	1,174,565	1,233,293	1,674,862
CCA/New Prison		488,955	653,256	685,919	720,215	756,226	1,120,325	1,176,341	1,235,158	1,296,916	1,758,367

Total Water Revenue \$ 2,684,617 \$ 2,963,089 \$ 3,127,374 \$ 3,289,355 \$ 3,459,696 \$ 3,965,141 \$ 4,169,858 \$ 4,385,131 \$ 4,611,501 \$ 5,246,142

Less Revenues to be Raised from Rates:

5/8" Inside	\$	690,886	\$	738,351	\$	939,477	\$	985,771	\$	1,124,931	\$	1,093,645	\$	1,145,872	\$	1,201,444	\$	1,260,608	\$	1,248,204
5/8" Outside		9,024		9,675		12,289		12,878		14,677		14,342		15,008		15,715		16,467		16,364
1" Inside		28,594		30,808		39,650		41,819		47,967		47,013		49,504		52,160		54,994		54,805
1" Outside		2,116		2,246		2,854		2,992		3,410		3,274		3,427		3,589		3,761		3,682
2" Inside		85,944		92,488		118,306		124,838		143,253		140,004		147,484		155,461		163,973		162,918
3" Compound		20,249		21,599		27,441		28,759		32,781		31,723		33,200		34,771		36,442		35,880
3" Turbine		12,454		13,347		20,363		21,341		24,325		23,725		24,829		26,003		27,252		26,996
4" Compound		3,088		3,307		4,200		4,402		5,017		4,886		5,113		5,355		5,612		5,553
4" Turbine		15,909		16,995		21,590		22,627		25,791		25,018		26,183		27,421		28,739		28,347
6" Turbine		593,196		633,182		804,392		843,054		960,959		930,900		974,249		1,020,342		1,069,380		1,053,618
8" Turbine		-		-		-		-		-		-		-		-		-		-
CCA/New Prison		564,347		756,456		961,282		1,007,506		1,148,434		1,561,686		1,634,447		1,711,814		1,794,124		2,271,838
Sub-Total		2,025,808		2,318,454		2,951,845		3,095,988		3,531,545		3,876,217		4,059,315		4,254,075		4,461,352		4,908,206

Rate Revenue Less RRRR:

5/8" Inside	\$	305,405	\$	309,212	\$	163,098	\$	174,391	\$	95,819	\$	190,851	\$	205,693	\$	220,684	\$	235,761	\$	326,273
5/8" Outside		9,615		9,901		8,259		8,705		7,981		9,457		9,975		10,516		11,075		12,555
1" Inside		15,720		16,234		10,793		11,695		8,800		13,196		14,350		15,551		16,800		21,310
1" Outside		(270)		(305)		(816)		(852)		(1,163)		(915)		(949)		(988)		(1,030)		(814)
2" Inside		127,808		134,314		122,315		130,412		127,480		147,117		156,982		167,359		178,270		199,876
3" Compound		17,632		18,249		14,400		15,173		13,348		16,712		17,657		18,630		19,629		22,994
3" Turbine		19,329		20,024		24,653		25,925		25,305		28,386		29,887		31,449		33,073		36,345
4" Compound		7,226		7,523		7,171		7,538		7,520		8,278		8,709		9,158		9,627		10,448
4" Turbine		23,726		24,622		22,108		23,256		22,385		25,567		26,932		28,349		29,820		33,140
6" Turbine		208,012		208,060		78,912		84,415		12,884		91,635		99,412		107,002		114,332		189,280
8" Turbine		-		-		-		-		-		-		-		-		-		-
CCA/New Prison		(75,393)		(103,200)		(275,363)		(287,291)		(392,208)		(441,361)		(458,105)		(476,655)		(497,207)		(513,471)
Total		658,809		644,635		175,529		193,368		(71,849)		88,924		110,542		131,057		150,149		337,936

TOWN OF FLORENCE											
WATER/WASTEWATER COST OF SERVICE MODEL											
	Prior	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021

Input Area -- Rate Calculator
Scenario: Base Scenario - 1

WW Rate Revenues

WW Rate Revenue

Residential	\$	759,706	\$	907,982	\$	1,008,448	\$	1,113,796	\$	1,177,914	\$	1,239,433	\$	1,305,142	\$	1,374,426	\$	1,447,377	\$	1,524,186
Commercial		173,719		207,058		230,152		254,415		269,272		283,944		299,409		315,712		332,896		351,010
Non-Residential		5,056		6,029		6,674		7,348		7,751		8,135		8,542		8,969		9,417		9,888
Institutional		994,292		1,336,290		1,417,207		1,633,338		1,744,209		1,813,701		1,900,030		1,994,794		2,094,534		2,199,261
ADOC		683,438		918,777		974,316		1,123,025		1,199,291		1,247,046		1,306,398		1,371,554		1,440,131		1,512,138
CCA/New Prison		581,896		987,250		1,046,944		1,206,718		1,288,662		2,041,899		2,139,081		2,245,767		2,358,056		3,772,866
Total Institutional		2,259,625		3,242,317		3,438,467		3,963,081		4,232,161		5,102,646		5,345,509		5,612,115		5,892,721		7,484,265

Sub-Total \$ 3,198,106 \$ 4,363,387 \$ 4,683,742 \$ 5,338,641 \$ 5,687,098 \$ 6,634,158 \$ 6,958,602 \$ 7,311,223 \$ 7,682,412 \$ 9,369,349

Less Revenues to be Raised from Rates:

Residential	\$	479,520	\$	488,186	\$	514,893	\$	730,346	\$	869,155	\$	936,567	\$	979,635	\$	1,025,971	\$	1,075,851	\$	1,025,274
Commercial		165,865		166,915		176,000		260,784		307,176		330,155		344,800		360,550		377,500		349,936
Non-Residential		3,444		3,493		3,671		5,242		6,203		6,659		6,940		7,242		7,568		7,145
Institutional		2,143,992		2,313,183		2,424,955		3,667,278		4,270,151		5,416,175		5,619,634		5,838,263		6,073,293		6,917,115
Sub-Total		2,792,822		2,971,777		3,119,519		4,663,650		5,452,685		6,689,556		6,951,009		7,232,027		7,534,211		8,299,469

Rate Revenue Less RRRR:

Residential	\$	280,185	\$	419,796	\$	493,556	\$	383,450	\$	308,759	\$	302,866	\$	325,507	\$	348,455	\$	371,526	\$	498,912
Commercial		7,854		40,143		54,152		(6,369)		(37,904)		(46,211)		(45,390)		(44,838)		(44,603)		1,074
Non-Residential		1,611		2,536		3,003		2,106		1,547		1,476		1,602		1,726		1,850		2,743
Institutional		115,633		929,134		1,013,513		295,803		(37,990)		(313,530)		(274,125)		(226,147)		(180,571)		567,150

Rate Revenue less Revenue Rqmt 405,284 1,391,610 1,564,223 674,991 234,413 (55,398) 7,593 79,196 148,201 1,069,880

616 91,227 1,868

Coverage Calculation

Revenues

Water Rate Revenues	\$	2,684,617	\$	2,963,089	\$	3,127,374	\$	3,289,355	\$	3,459,696	\$	3,965,141	\$	4,169,858	\$	4,385,131	\$	4,611,501	\$	5,246,142
WW Rate Revenues		3,198,106		4,363,387		4,683,742		5,338,641		5,687,098		6,634,158		6,958,602		7,311,223		7,682,412		9,369,349
Non-Rate Revenues		419,100		324,100		324,100		324,100		324,100		324,100		324,100		324,100		324,100		324,100
		6,301,823		7,650,576		8,135,217		8,952,096		9,470,894		10,923,399		11,452,560		12,020,454		12,618,012		14,939,590

Personnel/Operating Expenses

Total Water Operating Expenses	1,893,363	2,072,047	2,190,718	2,314,351	2,446,072	2,768,561	2,928,590	3,099,356	3,281,681	3,702,585
Total Wastewater Operating Expenses	1,948,650	2,125,243	2,261,139	2,406,940	3,183,190	3,615,772	3,863,372	4,129,984	4,417,188	5,166,956
	3,842,013	4,197,290	4,451,856	4,721,292	5,629,262	6,384,334	6,791,962	7,229,340	7,698,869	8,869,541

Net Revenues Available for Debt Service 2,459,810 3,453,286 3,683,360 4,230,804 3,841,631 4,539,065 4,660,597 4,791,114 4,919,143 6,070,050

Debt Service -- P&I

Water	-	-	495,000	495,000	777,507	777,507	777,507	777,507	777,507	777,507
Wastewater	627,792	627,792	627,792	2,013,791	2,013,794	2,804,811	2,804,812	2,804,813	2,804,811	2,804,814
Total	627,792	627,792	1,122,792	2,508,791	2,791,301	3,582,319	3,582,320	3,582,320	3,582,318	3,582,321

Debt Coverage 3.92 5.50 3.28 1.69 1.38 1.27 1.30 1.34 1.37 1.69
Check with Forecast Summary 3.92 5.50 3.28 1.69 1.38 1.27 1.30 1.34 1.37 1.69

TOWN OF FLORENCE											
WATER/WASTEWATER COST OF SERVICE MODEL											
	Prior	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021

Input Area -- Rate Calculator
Scenario: Base Scenario - 1

WATER -- Customer and Usage Data

Net Annual Volume after Minimum:

		Avg/Meter		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
5/8" Inside			4,176										
-	10,000	99.0%		164,662,398	164,786,428	165,009,514	165,207,546	165,405,340	165,602,898	165,800,220	165,997,308	166,194,162	166,390,784
10,001	18,700	0.5%		831,628	832,255	833,381	834,382	835,381	836,378	837,375	838,370	839,364	840,357
18,700	Above	0.5%		831,628	832,255	833,381	834,382	835,381	836,378	837,375	838,370	839,364	840,357
-	-	0.0%		-	-	-	-	-	-	-	-	-	-
-	-	0.0%		-	-	-	-	-	-	-	-	-	-
		100.0%		166,325,655	166,450,937	166,676,277	166,876,309	167,076,101	167,275,654	167,474,970	167,674,049	167,872,891	168,071,499
5/8" Outside			5,775										
-	10,000	98.0%		2,987,990	2,987,990	2,987,990	2,987,990	2,987,990	2,987,990	2,987,990	2,987,990	2,987,990	2,987,990
10,001	18,700	1.0%		30,490	30,490	30,490	30,490	30,490	30,490	30,490	30,490	30,490	30,490
18,700	Above	1.0%		30,490	30,490	30,490	30,490	30,490	30,490	30,490	30,490	30,490	30,490
-	-	0.0%		-	-	-	-	-	-	-	-	-	-
-	-	0.0%		-	-	-	-	-	-	-	-	-	-
		100.0%		3,048,970	3,048,970	3,048,970	3,048,970	3,048,970	3,048,970	3,048,970	3,048,970	3,048,970	3,048,970
1" Inside			10,940										
-	10,000	98.0%		10,034,847	10,099,173	10,227,011	10,290,141	10,352,885	10,415,252	10,477,248	10,538,879	10,600,151	10,661,072
10,001	18,700	1.0%		102,396	103,053	104,357	105,001	105,642	106,278	106,911	107,540	108,165	108,786
18,700	Above	1.0%		102,396	103,053	104,357	105,001	105,642	106,278	106,911	107,540	108,165	108,786
-	-	0.0%		-	-	-	-	-	-	-	-	-	-
-	-	0.0%		-	-	-	-	-	-	-	-	-	-
		100.0%		10,239,640	10,305,279	10,435,725	10,500,143	10,564,169	10,627,808	10,691,069	10,753,958	10,816,481	10,878,644
1" Outside			18,026										
-	10,000	90.0%		389,359	389,359	389,359	389,359	389,359	389,359	389,359	389,359	389,359	389,359
10,001	18,700	7.5%		32,447	32,447	32,447	32,447	32,447	32,447	32,447	32,447	32,447	32,447
18,700	Above	2.5%		10,816	10,816	10,816	10,816	10,816	10,816	10,816	10,816	10,816	10,816
-	-	0.0%		-	-	-	-	-	-	-	-	-	-
-	-	0.0%		-	-	-	-	-	-	-	-	-	-
		100.0%		432,621	432,621	432,621	432,621	432,621	432,621	432,621	432,621	432,621	432,621
2" Inside			37,229										
-	10,000	5.0%		1,608,295	1,619,464	1,630,556	1,641,574	1,652,517	1,663,389	1,674,190	1,684,922	1,695,587	1,706,184
10,001	18,700	5.0%		1,608,295	1,619,464	1,630,556	1,641,574	1,652,517	1,663,389	1,674,190	1,684,922	1,695,587	1,706,184
18,700	Above	90.0%		28,949,316	29,150,353	29,350,013	29,548,324	29,745,313	29,941,006	30,135,428	30,328,604	30,520,557	30,711,311
-	-	0.0%		-	-	-	-	-	-	-	-	-	-
-	-	0.0%		-	-	-	-	-	-	-	-	-	-
		100.0%		32,165,907	32,389,282	32,611,126	32,831,471	33,050,348	33,267,784	33,483,809	33,698,449	33,911,730	34,123,678
3" Compound			96,782										
-	10,000	50.0%		3,484,162	3,484,162	3,484,162	3,484,162	3,484,162	3,484,162	3,484,162	3,484,162	3,484,162	3,484,162
10,001	18,700	25.0%		1,742,081	1,742,081	1,742,081	1,742,081	1,742,081	1,742,081	1,742,081	1,742,081	1,742,081	1,742,081
18,700	Above	25.0%		1,742,081	1,742,081	1,742,081	1,742,081	1,742,081	1,742,081	1,742,081	1,742,081	1,742,081	1,742,081
-	-	0.0%		-	-	-	-	-	-	-	-	-	-
-	-	0.0%		-	-	-	-	-	-	-	-	-	-
		100.0%		6,968,324	6,968,324	6,968,324	6,968,324	6,968,324	6,968,324	6,968,324	6,968,324	6,968,324	6,968,324
3" Turbine			95,362										
-	10,000	5.0%		286,085	286,085	343,302	343,302	343,302	343,302	343,302	343,302	343,302	343,302
10,001	18,700	5.0%		286,085	286,085	343,302	343,302	343,302	343,302	343,302	343,302	343,302	343,302
18,700	Above	90.0%		5,149,530	5,149,530	6,179,436	6,179,436	6,179,436	6,179,436	6,179,436	6,179,436	6,179,436	6,179,436
-	-	0.0%		-	-	-	-	-	-	-	-	-	-
-	-	0.0%		-	-	-	-	-	-	-	-	-	-
		100.0%		5,721,700	5,721,700	6,866,040	6,866,040	6,866,040	6,866,040	6,866,040	6,866,040	6,866,040	6,866,040

TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL													
	Prior	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021		

Input Area -- Rate Calculator

Scenario: Base Scenario - 1

		Avg/Meter		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
4" Compound			55,062										
-	10,000	40.0%		528,596	528,596	528,596	528,596	528,596	528,596	528,596	528,596	528,596	528,596
10,001	18,700	40.0%		528,596	528,596	528,596	528,596	528,596	528,596	528,596	528,596	528,596	528,596
18,700	Above	20.0%		264,298	264,298	264,298	264,298	264,298	264,298	264,298	264,298	264,298	264,298
-	-	0.0%		-	-	-	-	-	-	-	-	-	-
-	-	0.0%		-	-	-	-	-	-	-	-	-	-
		100.0%		1,321,490	1,321,490	1,321,490	1,321,490	1,321,490	1,321,490	1,321,490	1,321,490	1,321,490	1,321,490
4" Turbine			126,580										
-	10,000	1.3%		78,712	78,712	78,712	78,712	78,712	78,712	78,712	78,712	78,712	78,712
10,001	18,700	1.1%		68,479	68,479	68,479	68,479	68,479	68,479	68,479	68,479	68,479	68,479
18,700	Above	97.6%		5,928,659	5,928,659	5,928,659	5,928,659	5,928,659	5,928,659	5,928,659	5,928,659	5,928,659	5,928,659
-	-	0.0%		-	-	-	-	-	-	-	-	-	-
-	-	0.0%		-	-	-	-	-	-	-	-	-	-
		100.0%		6,075,850	6,075,850	6,075,850	6,075,850	6,075,850	6,075,850	6,075,850	6,075,850	6,075,850	6,075,850
6" Turbine			3,044,449										
-	10,000	0.5%		1,081,291	1,081,291	1,081,291	1,081,291	1,081,291	1,081,291	1,081,291	1,081,291	1,081,291	1,081,291
10,001	18,700	0.4%		940,723	940,723	940,723	940,723	940,723	940,723	940,723	940,723	940,723	940,723
18,700	Above	99.1%		217,178,316	217,178,316	217,178,316	217,178,316	217,178,316	217,178,316	217,178,316	217,178,316	217,178,316	217,178,316
-	-	0.0%		-	-	-	-	-	-	-	-	-	-
-	-	0.0%		-	-	-	-	-	-	-	-	-	-
		100.0%		219,200,330	219,200,330	219,200,330	219,200,330	219,200,330	219,200,330	219,200,330	219,200,330	219,200,330	219,200,330
8" Turbine			-										
-	10,000	0.5%		-	-	-	-	-	-	-	-	-	-
10,001	18,700	0.4%		-	-	-	-	-	-	-	-	-	-
18,700	Above	99.1%		-	-	-	-	-	-	-	-	-	-
-	-	0.0%		-	-	-	-	-	-	-	-	-	-
-	-	0.0%		-	-	-	-	-	-	-	-	-	-
		100.0%		-	-	-	-	-	-	-	-	-	-
CCA/New Prison			5,805,464										
-	10,000	0.7%		928,874	1,172,208	1,172,208	1,172,208	1,172,208	1,658,874	1,658,874	1,658,874	1,658,874	2,145,541
10,001	18,700	0.6%		808,121	1,019,821	1,019,821	1,019,821	1,019,821	1,443,221	1,443,221	1,443,221	1,443,221	1,866,621
18,700	Above	98.8%		137,594,130	173,639,097	173,639,097	173,639,097	173,639,097	245,729,030	245,729,030	245,729,030	245,729,030	317,818,964
-	-	0.0%		-	-	-	-	-	-	-	-	-	-
-	-	0.0%		-	-	-	-	-	-	-	-	-	-
		100.0%		139,331,125	175,831,125	175,831,125	175,831,125	175,831,125	248,831,125	248,831,125	248,831,125	248,831,125	321,831,125
Total				186,070,609	186,513,467	186,932,700	187,204,878	187,476,361	188,233,824	188,503,943	188,773,394	189,042,185	189,796,991
				6,979,341	7,203,492	7,274,233	7,286,894	7,299,477	7,735,383	7,747,814	7,760,170	7,772,453	8,208,066
				397,781,661	434,028,948	435,260,945	435,460,900	435,659,528	507,946,788	508,142,840	508,337,640	508,531,213	580,813,514
				-	-	-	-	-	-	-	-	-	-
				-	-	-	-	-	-	-	-	-	-
				590,831,611	627,745,907	629,467,878	629,952,673	630,435,366	703,915,996	704,394,597	704,871,204	705,345,851	778,818,570
				590,831,611	627,745,907	629,467,878	629,952,673	630,435,366	703,915,996	704,394,597	704,871,204	705,345,851	778,818,570

TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL											
	Prior	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021

Input Area -- Rate Calculator
Scenario: Base Scenario - 1

Customer Class Units -- Total Bills

5/8" Inside		39,828	39,888	39,996	40,092	40,188	40,284	40,380	40,476	40,572	40,668
5/8" - 3/4"	100.00%	39,828	39,888	39,996	40,092	40,188	40,284	40,380	40,476	40,572	40,668
1"	0.00%	-	-	-	-	-	-	-	-	-	-
2"	0.00%	-	-	-	-	-	-	-	-	-	-
3" Compound	0.00%	-	-	-	-	-	-	-	-	-	-
3" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
4" Compound	0.00%	-	-	-	-	-	-	-	-	-	-
4" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
6" Compound	0.00%	-	-	-	-	-	-	-	-	-	-
6" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
8" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
10" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
12" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
Total	100.00%	39,828	39,888	39,996	40,092	40,188	40,284	40,380	40,476	40,572	40,668
5/8" Outside		528	528	528	528	528	528	528	528	528	528
5/8" - 3/4"	100.00%	528	528	528	528	528	528	528	528	528	528
1"	0.00%	-	-	-	-	-	-	-	-	-	-
2"	0.00%	-	-	-	-	-	-	-	-	-	-
3" Compound	0.00%	-	-	-	-	-	-	-	-	-	-
3" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
4" Compound	0.00%	-	-	-	-	-	-	-	-	-	-
4" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
6" Compound	0.00%	-	-	-	-	-	-	-	-	-	-
6" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
8" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
10" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
12" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
Total	100.00%	528	528	528	528	528	528	528	528	528	528
1" Inside		936									
5/8" - 3/4"	0.00%	-	-	-	-	-	-	-	-	-	-
1"	100.00%	936	948	972	984	996	1,008	1,020	1,032	1,044	1,056
2"	0.00%	-	-	-	-	-	-	-	-	-	-
3" Compound	0.00%	-	-	-	-	-	-	-	-	-	-
3" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
4" Compound	0.00%	-	-	-	-	-	-	-	-	-	-
4" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
6" Compound	0.00%	-	-	-	-	-	-	-	-	-	-
6" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
8" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
10" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
12" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
Total	100.00%	936	948	972	984	996	1,008	1,020	1,032	1,044	1,056
1" Outside		24	24	24	24	24	24	24	24	24	24
5/8" - 3/4"	0.00%	-	-	-	-	-	-	-	-	-	-
1"	100.00%	24	24	24	24	24	24	24	24	24	24
2"	0.00%	-	-	-	-	-	-	-	-	-	-
3" Compound	0.00%	-	-	-	-	-	-	-	-	-	-
3" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
4" Compound	0.00%	-	-	-	-	-	-	-	-	-	-
4" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
6" Compound	0.00%	-	-	-	-	-	-	-	-	-	-
6" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
8" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
10" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
12" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
Total		24	24	24	24	24	24	24	24	24	24

TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL											
	Prior	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021

Input Area -- Rate Calculator
Scenario: Base Scenario - 1

		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
2" Inside		864	876	888	900	912	924	936	948	960	972
5/8" - 3/4"	0.00%	-	-	-	-	-	-	-	-	-	-
1"	0.00%	-	-	-	-	-	-	-	-	-	-
2"	100.00%	864	876	888	900	912	924	936	948	960	972
3" Compound	0.00%	-	-	-	-	-	-	-	-	-	-
3" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
4" Compound	0.00%	-	-	-	-	-	-	-	-	-	-
4" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
6" Compound	0.00%	-	-	-	-	-	-	-	-	-	-
6" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
8" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
10" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
12" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
Total		864	876	888	900	912	924	936	948	960	972
3" Compound		72	72	72	72	72	72	72	72	72	72
5/8" - 3/4"	0.00%	-	-	-	-	-	-	-	-	-	-
1"	0.00%	-	-	-	-	-	-	-	-	-	-
2"	0.00%	-	-	-	-	-	-	-	-	-	-
3" Compound	100.00%	72	72	72	72	72	72	72	72	72	72
3" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
4" Compound	0.00%	-	-	-	-	-	-	-	-	-	-
4" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
6" Compound	0.00%	-	-	-	-	-	-	-	-	-	-
6" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
8" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
10" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
12" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
Total		72	72	72	72	72	72	72	72	72	72
3" Turbine		60	60	84	84	84	84	84	84	84	84
5/8" - 3/4"	0.00%	-	-	-	-	-	-	-	-	-	-
1"	0.00%	-	-	-	-	-	-	-	-	-	-
2"	0.00%	-	-	-	-	-	-	-	-	-	-
3" Compound	0.00%	-	-	-	-	-	-	-	-	-	-
3" Turbine	100.00%	60	60	84	84	84	84	84	84	84	84
4" Compound	0.00%	-	-	-	-	-	-	-	-	-	-
4" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
6" Compound	0.00%	-	-	-	-	-	-	-	-	-	-
6" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
8" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
10" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
12" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
Total		60	60	84	84	84	84	84	84	84	84
4" Compound		24	24	24	24	24	24	24	24	24	24
5/8" - 3/4"	0.00%	-	-	-	-	-	-	-	-	-	-
1"	0.00%	-	-	-	-	-	-	-	-	-	-
2"	0.00%	-	-	-	-	-	-	-	-	-	-
3" Compound	0.00%	-	-	-	-	-	-	-	-	-	-
3" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
4" Compound	100.00%	24	24	24	24	24	24	24	24	24	24
4" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
6" Compound	0.00%	-	-	-	-	-	-	-	-	-	-
6" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
8" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
10" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
12" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
Total		24	24	24	24	24	24	24	24	24	24

TOWN OF FLORENCE											
WATER/WASTEWATER COST OF SERVICE MODEL											
	Prior	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021

Input Area -- Rate Calculator

Scenario: Base Scenario - 1

4" Turbine		48	48	48	48	48	48	48	48	48	48
5/8" - 3/4"	0.00%	-	-	-	-	-	-	-	-	-	-
1"	0.00%	-	-	-	-	-	-	-	-	-	-
2"	0.00%	-	-	-	-	-	-	-	-	-	-
3" Compound	0.00%	-	-	-	-	-	-	-	-	-	-
3" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
4" Compound	0.00%	-	-	-	-	-	-	-	-	-	-
4" Turbine	100.00%	48	48	48	48	48	48	48	48	48	48
6" Compound	0.00%	-	-	-	-	-	-	-	-	-	-
6" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
8" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
10" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
12" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
Total		48	48	48	48	48	48	48	48	48	48

6" Turbine		72	72	72	72	72	72	72	72	72	72
5/8" - 3/4"	0.00%	-	-	-	-	-	-	-	-	-	-
1"	0.00%	-	-	-	-	-	-	-	-	-	-
2"	0.00%	-	-	-	-	-	-	-	-	-	-
3" Compound	0.00%	-	-	-	-	-	-	-	-	-	-
3" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
4" Compound	0.00%	-	-	-	-	-	-	-	-	-	-
4" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
6" Compound	0.00%	-	-	-	-	-	-	-	-	-	-
6" Turbine	100.00%	72	72	72	72	72	72	72	72	72	72
8" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
10" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
12" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
Total		72	72	72	72	72	72	72	72	72	72

8" Turbine		-	-	-	-	-	-	-	-	-	-
5/8" - 3/4"	0.00%	-	-	-	-	-	-	-	-	-	-
1"	0.00%	-	-	-	-	-	-	-	-	-	-
2"	0.00%	-	-	-	-	-	-	-	-	-	-
3" Compound	0.00%	-	-	-	-	-	-	-	-	-	-
3" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
4" Compound	0.00%	-	-	-	-	-	-	-	-	-	-
4" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
6" Compound	0.00%	-	-	-	-	-	-	-	-	-	-
6" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
8" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
10" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
12" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
Total		-	-	-	-	-	-	-	-	-	-

CCA/New Prison		24	36	36	36	36	48	48	48	48	60
5/8" - 3/4"	0.00%	-	-	-	-	-	-	-	-	-	-
1"	0.00%	-	-	-	-	-	-	-	-	-	-
2"	0.00%	-	-	-	-	-	-	-	-	-	-
3" Compound	0.00%	-	-	-	-	-	-	-	-	-	-
3" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
4" Compound	0.00%	-	-	-	-	-	-	-	-	-	-
4" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
6" Compound	0.00%	-	-	-	-	-	-	-	-	-	-
6" Turbine	100.00%	24	36	36	36	36	48	48	48	48	60
8" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
10" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
12" Turbine	0.00%	-	-	-	-	-	-	-	-	-	-
Total		24	36	36	36	36	48	48	48	48	60

<div style="border: 1px solid black; padding: 5px; display: inline-block; margin: 0 auto; width: 80%;"> TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL </div>											
	Prior	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021

Input Area -- Rate Calculator

Scenario: Base Scenario - 1

TOTAL BILLS	42,480	42,576	42,744	42,864	42,984	43,116	43,236	43,356	43,476	43,608	
5/8" - 3/4"	40,356	40,416	40,524	40,620	40,716	40,812	40,908	41,004	41,100	41,196	
1"	960	972	996	1,008	1,020	1,032	1,044	1,056	1,068	1,080	
2"	864	876	888	900	912	924	936	948	960	972	
3" Compound	72	72	72	72	72	72	72	72	72	72	
3" Turbine	60	60	60	60	60	60	60	60	60	60	
4" Compound	24	24	24	24	24	24	24	24	24	24	
4" Turbine	48	48	48	48	48	48	48	48	48	48	
6" Compound	-	-	-	-	-	-	-	-	-	-	
6" Turbine	96	108	108	108	108	120	120	120	120	132	
8" Turbine	-	-	-	-	-	-	-	-	-	-	
10" Turbine	-	-	-	-	-	-	-	-	-	-	
12" Turbine	-	-	-	-	-	-	-	-	-	-	
Total	42,480	42,576	42,744	42,864	42,984	43,116	43,236	43,356	43,476	43,608	
Total System	42,480	42,576	42,744	42,864	42,984	43,116	43,236	43,356	43,476	43,608	
TOTAL ACCOUNTS											
5/8" - 3/4"	3,363	3,368	3,377	3,385	3,393	3,401	3,409	3,417	3,425	3,433	
1"	80	81	83	84	85	86	87	88	89	90	
2"	72	73	74	75	76	77	78	79	80	81	
3" Compound	6	6	6	6	6	6	6	6	6	6	
3" Turbine	5	5	7	7	7	7	7	7	7	7	
4" Compound	2	2	2	2	2	2	2	2	2	2	
4" Turbine	4	4	4	4	4	4	4	4	4	4	
6" Compound	-	-	-	-	-	-	-	-	-	-	
6" Turbine	8	9	9	9	9	10	10	10	10	11	
8" Turbine	-	-	-	-	-	-	-	-	-	-	
10" Turbine	-	-	-	-	-	-	-	-	-	-	
12" Turbine	-	-	-	-	-	-	-	-	-	-	
Total	3,540	3,548	3,562	3,572	3,582	3,593	3,603	3,613	3,623	3,634	

TOWN OF FLORENCE											
WATER/WASTEWATER COST OF SERVICE MODEL											
Prior	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	

Input Area -- Rate Calculator
Scenario: Base Scenario - 1

WASTEWATER -- Customer & Usage Data

Customer Class Units -- Base Annual Usage

Residential			118,708,082	118,929,801	119,284,550	119,639,300	119,994,049	120,348,799	120,703,548	121,058,298	121,413,048	121,767,797
Commercial			46,393,005	46,393,005	46,593,841	46,794,676	46,995,512	47,196,347	47,397,183	47,598,018	47,798,854	47,999,690
Non-Residential			877,464	877,464	877,464	877,464	877,464	877,464	877,464	877,464	877,464	877,464
Institutional			237,544,979	237,544,979	237,544,979	237,544,979	237,544,979	237,544,979	237,544,979	237,544,979	237,544,979	237,544,979
ADOC			163,693,900	163,693,900	163,693,900	163,693,900	163,693,900	163,693,900	163,693,900	163,693,900	163,693,900	163,693,900
CCA/New Prison			139,331,125	175,831,125	175,831,125	175,831,125	175,831,125	267,954,634	267,954,634	267,954,634	267,954,634	408,344,574
Total Wastewater			706,548,555	743,270,274	743,825,859	744,381,444	744,937,029	837,616,123	838,171,708	838,727,293	839,282,878	980,228,403

Base Annual Usage

Residential	-	20,000	100%	118,708,082	118,929,801	119,284,550	119,639,300	119,994,049	120,348,799	120,703,548	121,058,298	121,413,048	121,767,797
	20,001	Above	0%	-	-	-	-	-	-	-	-	-	-
	Total			118,708,082	118,929,801	119,284,550	119,639,300	119,994,049	120,348,799	120,703,548	121,058,298	121,413,048	121,767,797
Commercial	-	20,000	100%	46,393,005	46,393,005	46,593,841	46,794,676	46,995,512	47,196,347	47,397,183	47,598,018	47,798,854	47,999,690
	20,001	Above	0%	-	-	-	-	-	-	-	-	-	-
	Total			46,393,005	46,393,005	46,593,841	46,794,676	46,995,512	47,196,347	47,397,183	47,598,018	47,798,854	47,999,690
Non-Residential	-	20,000	100%	877,464	877,464	877,464	877,464	877,464	877,464	877,464	877,464	877,464	877,464
	20,001	Above	0%	-	-	-	-	-	-	-	-	-	-
	Total			877,464	877,464	877,464	877,464	877,464	877,464	877,464	877,464	877,464	877,464
Institutional	-	20,000	100%	237,544,979	237,544,979	237,544,979	237,544,979	237,544,979	237,544,979	237,544,979	237,544,979	237,544,979	237,544,979
	20,001	Above	0%	-	-	-	-	-	-	-	-	-	-
	Total			237,544,979	237,544,979	237,544,979	237,544,979	237,544,979	237,544,979	237,544,979	237,544,979	237,544,979	237,544,979
ADOC	-	20,000	100%	163,693,900	163,693,900	163,693,900	163,693,900	163,693,900	163,693,900	163,693,900	163,693,900	163,693,900	163,693,900
	20,001	Above	0%	-	-	-	-	-	-	-	-	-	-
	Total			163,693,900	163,693,900	163,693,900	163,693,900	163,693,900	163,693,900	163,693,900	163,693,900	163,693,900	163,693,900
CCA/New Prison	-	20,000	100%	139,331,125	175,831,125	175,831,125	175,831,125	175,831,125	267,954,634	267,954,634	267,954,634	267,954,634	408,344,574
	20,001	Above	0%	-	-	-	-	-	-	-	-	-	-
	Total			139,331,125	175,831,125	175,831,125	175,831,125	175,831,125	267,954,634	267,954,634	267,954,634	267,954,634	408,344,574
Total Wastewater			706,548,555	743,270,274	743,825,859	744,381,444	744,937,029	837,616,123	838,171,708	838,727,293	839,282,878	980,228,403	

Customer Class Units -- Total Bills

Residential			32,124	32,184	32,280	32,376	32,472	32,568	32,664	32,760	32,856	32,952
Commercial			2,772	2,772	2,784	2,796	2,808	2,820	2,832	2,844	2,856	2,868
Non-Residential			192	192	192	192	192	192	192	192	192	192
Institutional			216	216	216	216	216	216	216	216	216	216
ADOC			12	12	12	12	12	12	12	12	12	12
CCA/New Prison			24	36	36	36	36	48	48	48	48	60
Total Wastewater			35,340	35,412	35,520	35,628	35,736	35,856	35,964	36,072	36,180	36,300

<p>Test Year 2012</p>	<p>TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL</p>				
	Water Budget	Supply/ Treatment	Distribution	Admin	Customer Billing

Test Year W 1.0 -- WATER Service Cost Functionalization
Scenario: Base Scenario - 1

NON-RATE REVENUES

Non-Rate Revenues

51-345-682 Interest Earnings	\$ 40,000	na	na	na	na
51-350-375 Operating Agreement fee	50,000	na	na	na	na
51-350-697 Recovery from Bad Debt	500	na	na	na	na
51-350-698 Miscellaneous	-	na	na	na	na
51-355-686 Operating Transfers In	95,000	na	na	na	na
51-371-445 Service Fees	16,000	na	na	na	na
51-371-446 Water User Fees	-	na	na	na	na
51-371-447 Water Standpipe Fees	4,500	na	na	na	na
51-371-448 Water connection Fees	4,000	na	na	na	na
51-371-449 Hydro-Sprinklers	600	na	na	na	na
51-371-450 Effluent Charges	16,000	na	na	na	na
51-371-696 CentralAZ Project	115,000	na	na	na	na
Total Non-Rate Revenues	\$ 341,600				

OPERATING EXPENSES

PERSONNEL SERVICES

101.000 Salaries and Wages	\$ 213,805	53,451	117,593	21,381	21,381
102.000 Part-time Salaries	11,350	2,838	6,243	1,135	1,135
103.000 Overtime	28,000	7,000	15,400	2,800	2,800
105.000 Holiday Pay	6,825	1,706	3,754	683	683
106.000 Stand-By	7,300	1,825	4,015	730	730
111.000 AZ Retirement	27,025	6,756	14,864	2,703	2,703
121.000 FICA - Employer's Portion	20,500	5,125	11,275	2,050	2,050
122.000 Unemployment	-	-	-	-	-
123.000 Workers Compensation	7,550	1,888	4,153	755	755
124.000 Health, Accident & Life Insurance	69,300	17,325	38,115	6,930	6,930
	\$ 391,655	\$ 97,914	\$ 215,410	\$ 39,166	\$ 39,166

TOWN OF FLORENCE					
WATER/WASTEWATER COST OF SERVICE MODEL					
<u>Test Year</u> 2012	Water Budget	Supply/ Treatment	Distribution	Admin	Customer Billing

Test Year W 1.0 -- WATER Service Cost Functionalization**Scenario: Base Scenario - 1****CONTRACTUAL SERVICES/MAINT**

201.000	Telephone	\$ 2,860	\$ -	\$ -	\$ 2,145	\$ 715
202.000	Postage	1,000	-	-	250	750
203.000	Reproduction/ Printing	300	-	-	300	-
204.000	Data Processing	-	-	-	-	-
205.000	Legal Publications	600	-	-	600	-
206.000	Liability Insurance	66,000	-	-	66,000	-
209.000	Vehicle Repair and Maint	7,700	770	6,930	-	-
210.000	Radio Repair and Maint	-	-	-	-	-
211.000	Maintenance Other	70,000	7,000	63,000	-	-
212.000	Water Charge	500	500	-	-	-
215.000	Electrical Charge	300,000	300,000	-	-	-
217.000	Professional Services	200,000	50,000	150,000	-	-
218.000	Engineering and Architectura	3,000	750	2,250	-	-
219.000	Financial Audit	5,500	-	-	5,500	-
222.000	Rental Charges	330	83	248	-	-
226.000	Facility Repair	3,300	-	-	3,300	-
231.000	Computer Lease	-	-	-	-	-
Total Contractual Services		\$ 661,090	\$ 359,103	\$ 222,428	\$ 78,095	\$ 1,465

COMMODITIES

301.000	Office Supplies	\$ 4,400	\$ -	\$ -	\$ 3,300	\$ 1,100
302.000	Operating Supplies	24,200	6,050	18,150	-	-
304.000	Uniform Allowance	4,400	1,100	2,420	440	440
305.000	Tires - Batteries, etc.	4,500	1,125	3,375	-	-
306.000	Fuel - Oil	32,500	8,125	24,375	-	-
308.000	Books	385	-	-	385	-
310.000	Chemicals	12,000	12,000	-	-	-
311.000	Small Tools	3,500	875	2,625	-	-
312.000	Safety Equipment	6,000	1,500	4,500	-	-
313.000	Training Materials	2,000	500	1,500	-	-
315.000	Janitorial Supplies	-	-	-	-	-
316.000	Facilities Maintenance	3,025	2,269	-	756	-
317.000	Land Maintenance	1,705	1,705	-	-	-
318.000	Sidewalk Repair and Manintenance	4,950	-	4,950	-	-
320.000	Utility Lines Repair and Maintenance	93,500	93,500	-	-	-
324.000	Computers/ Printers	400	-	-	300	100
Total Commodities		\$ 197,465	\$ 128,749	\$ 61,895	\$ 5,181	\$ 1,640

<p>Test Year 2012</p>	<p>TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL</p>				
	<p>Water Budget</p>	<p>Supply/ Treatment</p>	<p>Distribution</p>	<p>Admin</p>	<p>Customer Billing</p>

Test Year W 1.0 -- WATER Service Cost Functionalization
Scenario: Base Scenario - 1

OTHER CHARGES

401.000	Dues, Subscriptions	\$	1,000	\$	-	\$	1,000	\$	-
402.000	Conferences, Business Meetings		-		-		-		-
403.000	Training & Development		1,353		-		1,353		-
408.000	Miscellaneous Charges		7,700		-		7,700		-
409.000	Water Fees, Assessments, Replace		633,100		633,100		-		-
Total Other Charges		\$	643,153	\$	633,100	\$	-	\$	10,053
Total Water Operating Exp		\$	1,893,363	\$	1,218,865	\$	499,733	\$	132,495
Percent			100.0%		64.4%		26.4%		7.0%
									2.2%

TRANSFERS

596.000	Debt Service Transfers	\$	-	\$	-	\$	-	\$	-
597.000	Operating Transfers		474,045		-		474,045		-
0.000	Other		-		-		-		-
0.000	Other		-		-		-		-
0.000	Other		-		-		-		-
Total Transfers		\$	474,045	\$	-	\$	-	\$	474,045
Percent			100.0%		0.0%		0.0%		100.0%
									0.0%

CAPITAL OUTLAYS

Total Capital Outlays		\$	-	\$	-	\$	-	\$	-
Percent			0.0%		0.0%		0.0%		0.0%
TOTAL OPERATING/TRANSFERS/CAPITAL OUTLAYS		\$	2,367,408	\$	1,218,865	\$	499,733	\$	606,540
Percent			100.0%		51.5%		21.1%		25.6%
									1.8%

DEBT SERVICE

	Water Debt Service								
	P&I	\$	-		na		na		na
	Reserve		-		na		na		na
TOTAL DEBT SERVICE -- WATER		\$	-	\$	-	\$	-	\$	-
Percent			0.0%		0.0%		0.0%		0.0%

<u>Test Year</u> 2012	TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL				
	Water Budget	Supply/ Treatment	Distribution	Admin	Customer Billing

Test Year W 1.0 -- WATER Service Cost Functionalization
Scenario: Base Scenario - 1

TOTAL COST OF SERVICE

TOTAL COST OF SERVICE	\$	2,367,408	\$	1,218,865	\$	499,733	\$	606,540	\$	42,271
		100.0%		51.5%		21.1%		25.6%		1.8%

NON RATE REVENUES

TOTAL NON-RATE REVENUES	\$	341,600	\$	175,873	\$	72,108	\$	87,519	\$	6,099
		100.0%		51.5%		21.1%		25.6%		1.8%

TOTAL REVENUE REQUIREMENT

TOTAL REVENUE REQUIREMENT	\$	2,025,808	\$	1,042,992	\$	427,625	\$	519,020	\$	36,171
		100.0%		51.5%		21.1%		25.6%		1.8%

TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL						
Test Year 2012	Test Year Annual Use	Test Year Daily Average	Capacity Factor	Max Day Total Capacity	Extra Capacity	Test Year Water Bills

Test Year W 2.0 -- WATER Cost Allocations to Defined Customer Class Units
Scenario: Base Scenario - 1

Customer Class Units -- Test Year Volume

5/8" Inside	166,325,655	455,687	204	930,312	474,625	39,828
5/8" Outside	3,048,970	8,353	151	12,645	4,291	528
1" Inside	10,239,640	28,054	148	41,490	13,436	936
1" Outside	432,621	1,185	249	2,950	1,765	24
2" Inside	32,165,907	88,126	146	128,391	40,265	864
3" Compound	6,968,324	19,091	158	30,093	11,002	72
3" Turbine	5,721,700	15,676	123	19,312	3,636	60
4" Compound	1,321,490	3,621	130	4,719	1,099	24
4" Turbine	6,075,850	16,646	144	24,003	7,356	48
6" Turbine	219,200,330	600,549	149	893,276	292,727	72
8" Turbine	-	-	-	-	-	-
CCA/New Prison	139,331,125	381,729	212	810,050	428,321	24
Total System	590,831,611	1,618,717		2,897,241	1,278,524	42,480
Peaking Factor				1.79		

Allocation Factors

Base	100.00%		
Maximum Day	50.00%		50.00%

Customer Class Units -- Percent of Annual Volumes

5/8" Inside	28.15%		37.12%	93.76%
5/8" Outside	0.52%		0.34%	1.24%
1" Inside	1.73%		1.05%	2.20%
1" Outside	0.07%		0.14%	0.06%
2" Inside	5.44%		3.15%	2.03%
3" Compound	1.18%		0.86%	0.17%
3" Turbine	0.97%		0.28%	0.14%
4" Compound	0.22%		0.09%	0.06%
4" Turbine	1.03%		0.58%	0.11%
6" Turbine	37.10%		22.90%	0.17%
8" Turbine	0.00%		0.00%	0.00%
CCA/New Prison	<u>23.58%</u>		<u>33.50%</u>	<u>0.06%</u>
Total System	100.00%		100.00%	100.00%

SOURCE: Volume Input spreadsheet

Test Year 2012	TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL						
	Base	Max Day	Cust Billing	Total Water	Base	Max Day	Cust Billing

Test Year W 3.0 -- Water Cost Functionalization Scenario: Base Scenario - 1

OPERATING EXPENSES/TRANSFERS/CAPITAL OUTLAYS

Treatment

Operating	50.00%	50.00%	0.00%	\$ 1,218,865	\$ 609,433	\$ 609,433	\$ -
Transfers	50.00%	50.00%	0.00%	-	-	-	-
Capital Outlays	50.00%	50.00%	0.00%	-	-	-	-
Total Treatment				\$ 1,218,865	\$ 609,433	\$ 609,433	\$ -

Distribution

Operating	50.00%	50.00%	0.00%	\$ 499,733	\$ 249,866	\$ 249,866	\$ -
Transfers	50.00%	50.00%	0.00%	-	-	-	-
Capital Outlays	50.00%	50.00%	0.00%	-	-	-	-
Total Distribution				\$ 499,733	\$ 249,866	\$ 249,866	\$ -

Customer Billing

Operating	0.00%	0.0%	100.0%	\$ 42,271	\$ -	\$ -	\$ 42,271
Transfers	0.00%	0.0%	100.0%	-	-	-	-
Capital Outlays	0.00%	0.0%	100.0%	-	-	-	-
Total Customer Billing				\$ 42,271	\$ -	\$ -	\$ 42,271

Sub-Total				\$ 1,760,868	\$ 859,299	\$ 859,299	\$ 42,271
Percentage				100.00%	48.80%	48.80%	2.40%

Administration

Operating	48.80%	48.80%	2.40%	\$ 132,495	\$ 64,657	\$ 64,657	\$ 3,181
Transfers	48.80%	48.80%	2.40%	474,045	231,333	231,333	11,380
Capital Outlays	48.80%	48.80%	2.40%	-	-	-	-
Total Administration				\$ 606,540	\$ 295,990	\$ 295,990	\$ 14,560

Total Operating/Cap Outlays				\$ 2,367,408	\$ 1,155,289	\$ 1,155,289	\$ 56,831
------------------------------------	--	--	--	---------------------	---------------------	---------------------	------------------

DEBT SERVICE

Revenue Bond Debt Service	50.00%	50.00%	0.00%	\$ -	\$ -	\$ -	\$ -
---------------------------	--------	--------	-------	------	------	------	------

Sub-Total				\$ 2,367,408	\$ 1,155,289	\$ 1,155,289	\$ 56,831
Sub-Total Percentage				100.00%	48.80%	48.80%	2.40%

NON-RATE REVENUES

Non-Rate Revenues	48.80%	48.80%	2.40%	\$ 341,600	\$ 166,700	\$ 166,700	\$ 8,200
-------------------	--------	--------	-------	------------	------------	------------	----------

TOTAL COST OF SERVICE

TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL							
<u>Test Year</u> 2012							
	Base	Max Day	Cust Billing	Total Water	Base	Max Day	Cust Billing

Test Year W 3.0 -- Water Cost Functionalization
Scenario: Base Scenario - 1

Total Water Cost Classification				\$ 2,025,808	\$ 988,589	\$ 988,589	\$ 48,631
---------------------------------	--	--	--	--------------	------------	------------	-----------

10 Year Forecast 2012-2022	TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL									
	Test Year 2012	Forecast 2013	2014	2015	2016	2017	2018	2019	2020	2021

Forecast W 4.0 -- WATER Service Revenue Requirement Raised from Rates
Scenario: Base Scenario - 1

NON-RATE REVENUES

Non-Rate Revenues - Water

51-345-682 Interest Earnings	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000
51-350-375 Operating Agreement fee	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
51-350-697 Recovery from Bad Debt	500	500	500	500	500	500	500	500	500	500	500
51-350-698 Miscellaneous	-	-	-	-	-	-	-	-	-	-	-
51-355-686 Operating Transfers In	95,000	-	-	-	-	-	-	-	-	-	-
51-371-445 Service Fees	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000
51-371-446 Water User Fees	-	-	-	-	-	-	-	-	-	-	-
51-371-447 Water Standpipe Fees	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500
51-371-448 Water connection Fees	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000
51-371-449 Hydro-Sprinklers	600	600	600	600	600	600	600	600	600	600	600
51-371-450 Effluent Charges	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000
51-371-696 CentralAZ Project	115,000	115,000	115,000	115,000	115,000	115,000	115,000	115,000	115,000	115,000	115,000
Total Non-Rate Revenues	\$ 341,600	\$ 246,600	\$ 246,600	\$ 246,600	\$ 246,600	\$ 246,600	\$ 246,600	\$ 246,600	\$ 246,600	\$ 246,600	\$ 246,600

OPERATING EXPENSES

PERSONNEL SERVICES

101.000 Salaries and Wages	\$ 213,805	\$ 224,495	\$ 235,720	\$ 247,506	\$ 259,881	\$ 272,875	\$ 286,519	\$ 300,845	\$ 315,887	\$ 331,682
102.000 Part-time Salaries	11,350	11,918	12,513	13,139	13,796	14,486	15,210	15,971	16,769	17,608
103.000 Overtime	28,000	29,400	30,870	32,414	34,034	35,736	37,523	39,399	41,369	43,437
105.000 Holiday Pay	6,825	7,166	7,525	7,901	8,296	8,711	9,146	9,603	10,084	10,588
106.000 Stand-By	7,300	7,665	8,048	8,451	8,873	9,317	9,783	10,272	10,785	11,325
111.000 AZ Retirement	27,025	28,376	29,795	31,285	32,849	34,492	36,216	38,027	39,928	41,925
121.000 FICA - Employer's Portion	20,500	21,525	22,601	23,731	24,918	26,164	27,472	28,846	30,288	31,802
122.000 Unemployment	-	-	-	-	-	-	-	-	-	-
123.000 Workers Compensation	7,550	8,305	9,136	10,049	11,054	12,159	13,375	14,713	16,184	17,803
124.000 Health, Accident & Life Insurance	69,300	76,230	83,853	92,238	101,462	111,608	122,769	135,046	148,551	163,406
	\$ 391,655	\$ 415,080	\$ 440,061	\$ 466,713	\$ 495,164	\$ 525,548	\$ 558,013	\$ 592,721	\$ 629,845	\$ 669,574

CONTRACTUAL SERVICES/MAINT

201.000 Telephone	\$ 2,860	2,981	3,112	3,245	3,384	3,530	3,681	3,838	4,002	4,175
202.000 Postage	1,000	1,042	1,088	1,135	1,183	1,234	1,287	1,342	1,399	1,460
203.000 Reproduction/ Printing	300	313	326	340	355	370	386	403	420	438
204.000 Data Processing	-	-	-	-	-	-	-	-	-	-
205.000 Legal Publications	600	624	649	675	702	730	759	790	821	854
206.000 Liability Insurance	66,000	72,089	78,862	86,181	94,178	102,943	112,495	122,931	134,336	146,834
209.000 Vehicle Repair and Maint	7,700	8,489	8,852	9,213	9,588	11,090	11,541	12,010	12,499	14,300
210.000 Radio Repair and Maint	-	-	-	-	-	-	-	-	-	-
211.000 Maintenance Other	70,000	77,173	80,472	83,753	87,167	100,814	104,915	109,182	113,623	130,004
212.000 Water Charge	500	551	575	598	623	720	749	780	812	929
215.000 Electrical Charge	300,000	345,744	377,809	412,103	449,508	542,356	591,537	645,175	703,675	840,305
217.000 Professional Services	200,000	208,000	216,320	224,973	233,972	243,331	253,064	263,186	273,714	284,662
218.000 Engineering and Architectural	3,000	3,120	3,245	3,375	3,510	3,650	3,796	3,948	4,106	4,270
219.000 Financial Audit	5,500	5,720	5,949	6,187	6,434	6,692	6,959	7,238	7,527	7,828
222.000 Rental Charges	330	343	357	371	386	401	418	434	452	470
226.000 Facility Repair	3,300	3,432	3,569	3,712	3,861	4,015	4,176	4,343	4,516	4,697
231.000 Computer Lease	-	-	-	-	-	-	-	-	-	-
Total Contractual Services	\$ 661,090	\$ 729,622	\$ 781,185	\$ 835,860	\$ 894,850	\$ 1,021,875	\$ 1,095,761	\$ 1,175,600	\$ 1,261,902	\$ 1,441,225

10 Year Forecast 2012-2022	TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL								
Test Year 2012	Forecast 2013	2014	2015	2016	2017	2018	2019	2020	2021

Forecast W 4.0 -- WATER Service Revenue Requirement Raised from Rates
Scenario: Base Scenario - 1

COMMODITIES

301.000	Office Supplies	\$	4,400	4,576	4,759	4,949	5,147	5,353	5,567	5,790	6,022	6,263
302.000	Operating Supplies		24,200	26,680	27,820	28,955	30,135	34,853	36,271	37,746	39,281	44,944
304.000	Uniform Allowance		4,400	4,576	4,759	4,949	5,147	5,353	5,567	5,790	6,022	6,263
305.000	Tires - Batteries, etc.		4,500	4,961	5,173	5,384	5,604	6,481	6,745	7,019	7,304	8,357
306.000	Fuel - Oil		32,500	37,456	40,929	44,644	48,697	58,755	64,083	69,894	76,232	91,033
308.000	Books		385	400	416	433	450	468	487	507	527	548
310.000	Chemicals		12,000	13,830	15,112	16,484	17,980	21,694	23,661	25,807	28,147	33,612
311.000	Small Tools		3,500	3,859	4,024	4,188	4,358	5,041	5,246	5,459	5,681	6,500
312.000	Safety Equipment		6,000	6,615	6,898	7,179	7,471	8,641	8,993	9,358	9,739	11,143
313.000	Training Materials		2,000	2,205	2,299	2,393	2,490	2,880	2,998	3,119	3,246	3,714
315.000	Janitorial Supplies		-	-	-	-	-	-	-	-	-	-
316.000	Facilities Maintenance		3,025	3,335	3,478	3,619	3,767	4,357	4,534	4,718	4,910	5,618
317.000	Land Maintenance		1,705	1,773	1,844	1,918	1,995	2,074	2,157	2,244	2,333	2,427
318.000	Sidewalk Repair and Manintenance		4,950	5,148	5,354	5,568	5,791	6,022	6,263	6,514	6,774	7,045
320.000	Utility Lines Repair and Maintenance		93,500	103,082	107,488	111,870	116,431	134,658	140,136	145,837	151,768	173,648
324.000	Computers/ Printers		400	416	433	450	468	487	506	526	547	569
Total Commodities		\$	197,465	218,911	230,786	242,984	255,932	297,119	313,215	330,328	348,535	401,685

OTHER CHARGES

401.000	Dues, Subscriptions	\$	1,000	1,040	1,082	1,125	1,170	1,217	1,265	1,316	1,369	1,423
402.000	Conferences, Business Meetings		-	-	-	-	-	-	-	-	-	-
403.000	Training & Development		1,353	1,407	1,463	1,522	1,583	1,646	1,712	1,780	1,852	1,926
408.000	Miscellaneous Charges		7,700	8,008	8,328	8,661	9,008	9,368	9,743	10,133	10,538	10,960
409.000	Water Fees, Assessments, Replace		633,100	697,979	727,813	757,486	788,366	911,789	948,880	987,478	1,027,642	1,175,792
Total Other Charges		\$	643,153	708,434	738,686	768,794	800,126	924,020	961,601	1,000,707	1,041,400	1,190,101

TOTAL WATER OPERATING EXPENSES

		\$	1,893,363	2,072,047	2,190,718	2,314,351	2,446,072	2,768,561	2,928,590	3,099,356	3,281,681	3,702,585
--	--	-----------	------------------	------------------	------------------	------------------	------------------	------------------	------------------	------------------	------------------	------------------

TRANSFERS

596.000	Debt Service Transfers	\$	-	-	-	-	-	-	-	-	-	-
597.000	Operating Transfers		474,045	493,007	512,727	533,236	554,566	576,748	599,818	623,811	648,763	674,714
0.000	Other		-	-	-	-	-	-	-	-	-	-
0.000	Other		-	-	-	-	-	-	-	-	-	-
0.000	Other		-	-	-	-	-	-	-	-	-	-
TOTAL TRANSFERS		\$	474,045	493,007	512,727	533,236	554,566	576,748	599,818	623,811	648,763	674,714

CAPITAL OUTLAYS

Treatment	Distribution	\$	-	-	-	-	-	-	-	-	-	-
	Administration		-	-	-	-	-	-	-	-	-	-
	Customer		-	-	-	-	-	-	-	-	-	-
TOTAL WATER CAPITAL OUTLAYS		\$	-	-	-	-	-	-	-	-	-	-

10 Year Forecast 2012-2022	TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL									
	Test Year 2012	Forecast 2013	2014	2015	2016	2017	2018	2019	2020	2021

Forecast W 4.0 -- WATER Service Revenue Requirement Raised from Rates
Scenario: Base Scenario - 1

DEBT SERVICE - WATER

Water Debt Service												
Principal & Interest	\$ -	\$ -	\$ 495,000	\$ 495,000	\$ 777,507	\$ 777,507	\$ 777,507	\$ 777,507	\$ 777,507	\$ 777,507	\$ 777,507	\$ 777,507
Reserve	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL DEBT SERVICE -- WATER	\$ -	\$ -	\$ 495,000	\$ 495,000	\$ 777,507	\$ 777,507	\$ 777,507	\$ 777,507	\$ 777,507	\$ 777,507	\$ 777,507	\$ 777,507

TOTAL COST OF SERVICE

TOTAL COST OF SERVICE - WATER	\$ 2,367,408	\$ 2,565,054	\$ 3,198,445	\$ 3,342,588	\$ 3,778,145	\$ 4,122,817	\$ 4,305,915	\$ 4,500,675	\$ 4,707,952	\$ 5,154,806
-------------------------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------

NON RATE REVENUES

TOTAL WATER NON-RATE REVENUES	\$ 341,600	\$ 246,600	\$ 246,600	\$ 246,600	\$ 246,600	\$ 246,600	\$ 246,600	\$ 246,600	\$ 246,600	\$ 246,600
-------------------------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------

TOTAL REVENUE REQUIREMENT

TOTAL WATER REVENUE REQUIREMENT	\$ 2,025,808	\$ 2,318,454	\$ 2,951,845	\$ 3,095,988	\$ 3,531,545	\$ 3,876,217	\$ 4,059,315	\$ 4,254,075	\$ 4,461,352	\$ 4,908,206
---------------------------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------

<p>10 Year Forecast 2012-2022</p>	<p>TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL</p>									
	Test Year 2012	Forecast 2013	2014	2015	2016	2017	2018	2019	2020	2021

Forecast W 5.0 – WATER Service Cost Functionalization
Scenario: Base Scenario - 1

OPERATING EXPENSES

<u>Allocation Factor</u>											
Treatment	64.4%	64.4%	64.4%	64.4%	64.4%	64.4%	64.4%	64.4%	64.4%	64.4%	64.4%
Distribution	26.4%	26.4%	26.4%	26.4%	26.4%	26.4%	26.4%	26.4%	26.4%	26.4%	26.4%
Administration	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
Customer	<u>2.2%</u>	<u>2.2%</u>	<u>2.2%</u>	<u>2.2%</u>	<u>2.2%</u>	<u>2.2%</u>	<u>2.2%</u>	<u>2.2%</u>	<u>2.2%</u>	<u>2.2%</u>	<u>2.2%</u>
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<u>Total Cost</u>											
Treatment	\$ 1,218,865	\$ 1,333,894	\$ 1,410,289	\$ 1,489,879	\$ 1,574,675	\$ 1,782,280	\$ 1,885,299	\$ 1,995,231	\$ 2,112,604	\$ 2,383,563	
Distribution	499,733	546,895	578,216	610,848	645,614	730,732	772,970	818,042	866,164	977,257	
Administration	132,495	144,999	153,303	161,955	171,173	193,740	204,938	216,888	229,647	259,101	
Customer	<u>42,271</u>	<u>46,260</u>	<u>48,909</u>	<u>51,669</u>	<u>54,610</u>	<u>61,810</u>	<u>65,383</u>	<u>69,195</u>	<u>73,266</u>	<u>82,662</u>	
Total	\$ 1,893,363	\$ 2,072,047	\$ 2,190,718	\$ 2,314,351	\$ 2,446,072	\$ 2,768,561	\$ 2,928,590	\$ 3,099,356	\$ 3,281,681	\$ 3,702,585	

TRANSFERS

<u>Allocation Factor</u>											
Treatment	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Distribution	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Administration	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Customer	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<u>Total Cost</u>											
Treatment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Distribution	-	-	-	-	-	-	-	-	-	-	-
Administration	474,045	493,007	512,727	533,236	554,566	576,748	599,818	623,811	648,763	674,714	
Customer	-	-	-	-	-	-	-	-	-	-	
Total	\$ 474,045	\$ 493,007	\$ 512,727	\$ 533,236	\$ 554,566	\$ 576,748	\$ 599,818	\$ 623,811	\$ 648,763	\$ 674,714	

<p>10 Year Forecast 2012-2022</p>	<p>TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL</p>									
	Test Year 2012	Forecast 2013	2014	2015	2016	2017	2018	2019	2020	2021

Forecast W 5.0 – WATER Service Cost Functionalization
Scenario: Base Scenario - 1

CAPITAL OUTLAYS

Water Capital Outlays

Treatment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Distribution	-	-	-	-	-	-	-	-	-	-	-
Admin	-	-	-	-	-	-	-	-	-	-	-
Customer	-	-	-	-	-	-	-	-	-	-	-
Total Water Capital Outlays	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

DEBT SERVICE

Water Debt Service

Treatment	\$ -	\$ -	\$ 123,750	\$ 123,750	\$ 194,377	\$ 194,377	\$ 194,377	\$ 194,377	\$ 194,377	\$ 194,377	\$ 194,377
Distribution	-	-	371,250	371,250	583,131	583,131	583,131	583,131	583,131	583,131	583,131
Admin	-	-	-	-	-	-	-	-	-	-	-
Customer	-	-	-	-	-	-	-	-	-	-	-
Total Water Debt Service	\$ -	\$ -	\$ 495,000	\$ 495,000	\$ 777,507	\$ 777,507	\$ 777,507	\$ 777,507	\$ 777,507	\$ 777,507	\$ 777,507

TOTAL COST OF SERVICE

Total Water COS

Treatment	\$ 1,218,865	\$ 1,333,894	\$ 1,534,039	\$ 1,613,629	\$ 1,769,052	\$ 1,976,657	\$ 2,079,676	\$ 2,189,608	\$ 2,306,981	\$ 2,577,940
Distribution	499,733	546,895	949,466	982,098	1,228,745	1,313,863	1,356,100	1,401,172	1,449,295	1,560,388
Admin	606,540	638,006	666,030	695,191	725,738	770,488	804,757	840,699	878,411	933,815
Customer	42,271	46,260	48,909	51,669	54,610	61,810	65,383	69,195	73,266	82,662
Total	\$ 2,367,408	\$ 2,565,054	\$ 3,198,445	\$ 3,342,588	\$ 3,778,145	\$ 4,122,817	\$ 4,305,915	\$ 4,500,675	\$ 4,707,952	\$ 5,154,806

10 Year Forecast 2012-2022	TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL										
Allocation											
%	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	

Forecast W 6.0 -- Water Cost Classification
Scenario: Base Scenario - 1

Total Water Costs

Treatment	\$	1,218,865	\$	1,333,894	\$	1,534,039	\$	1,613,629	\$	1,769,052	\$	1,976,657	\$	2,079,676	\$	2,189,608	\$	2,306,981	\$	2,577,940
Distribution		499,733		546,895		949,466		982,098		1,228,745		1,313,863		1,356,100		1,401,172		1,449,295		1,560,388
Admin		606,540		638,006		666,030		695,191		725,738		770,488		804,757		840,699		878,411		933,815
Customer		42,271		46,260		48,909		51,669		54,610		61,810		65,383		69,195		73,266		82,662
Total Water Costs	\$	2,367,408	\$	2,565,054	\$	3,198,445	\$	3,342,588	\$	3,778,145	\$	4,122,817	\$	4,305,915	\$	4,500,675	\$	4,707,952	\$	5,154,806

Water Cost Classification

Base	48.80%	\$	1,155,289	\$	1,251,739	\$	1,560,832	\$	1,631,174	\$	1,843,724	\$	2,011,923	\$	2,101,275	\$	2,196,317	\$	2,297,468	\$	2,515,531
Max Day/Extra Capacity	48.80%		1,155,289		1,251,739		1,560,832		1,631,174		1,843,724		2,011,923		2,101,275		2,196,317		2,297,468		2,515,531
Customer Billing	2.40%		56,831		61,575		76,780		80,240		90,696		98,970		103,366		108,041		113,017		123,744
Sub-Total	100.00%	\$	2,367,408	\$	2,565,054	\$	3,198,445	\$	3,342,588	\$	3,778,145	\$	4,122,817	\$	4,305,915	\$	4,500,675	\$	4,707,952	\$	5,154,806

Less Non-Rate Revenues

Base	48.80%	\$	166,700	\$	120,340	\$	120,340	\$	120,340	\$	120,340	\$	120,340	\$	120,340	\$	120,340	\$	120,340	\$	120,340
Max Day/Extra Capacity	48.80%		166,700		120,340		120,340		120,340		120,340		120,340		120,340		120,340		120,340		120,340
Customer Billing	2.40%		8,200		5,920		5,920		5,920		5,920		5,920		5,920		5,920		5,920		5,920
Sub-Total	100.00%	\$	341,600	\$	246,600	\$	246,600	\$	246,600	\$	246,600	\$	246,600	\$	246,600	\$	246,600	\$	246,600	\$	246,600

Net Water Cost Classification

Base		\$	988,589	\$	1,131,399	\$	1,440,492	\$	1,510,833	\$	1,723,384	\$	1,891,583	\$	1,980,935	\$	2,075,977	\$	2,177,128	\$	2,395,191
Max Day/Extra Capacity			988,589		1,131,399		1,440,492		1,510,833		1,723,384		1,891,583		1,980,935		2,075,977		2,177,128		2,395,191
Customer Billing			48,631		55,656		70,860		74,321		84,776		93,050		97,446		102,121		107,097		117,824
Total		\$	2,025,808	\$	2,318,454	\$	2,951,845	\$	3,095,988	\$	3,531,545	\$	3,876,217	\$	4,059,315	\$	4,254,075	\$	4,461,352	\$	4,908,206

TOWN OF FLORENCE											
WATER/WASTEWATER COST OF SERVICE MODEL											
<u>10 Year Forecast</u> 2012-2022	Test Year 2012	Forecast 2013	2014	2015	2016	2017	2018	2019	2020	2021	

Forecast W 7.0 -- Customer and Volume Totals
Scenario: Base Scenario - 1

WATER VOLUMES

Customer Class Units -- Base Annual Usage

5/8" Inside	166,325,655	166,450,937	166,676,277	166,876,309	167,076,101	167,275,654	167,474,970	167,674,049	167,872,891	168,071,499
5/8" Outside	3,048,970	3,048,970	3,048,970	3,048,970	3,048,970	3,048,970	3,048,970	3,048,970	3,048,970	3,048,970
1" Inside	10,239,640	10,305,279	10,435,725	10,500,143	10,564,169	10,627,808	10,691,069	10,753,958	10,816,481	10,878,644
1" Outside	432,621	432,621	432,621	432,621	432,621	432,621	432,621	432,621	432,621	432,621
2" Inside	32,165,907	32,389,282	32,611,126	32,831,471	33,050,348	33,267,784	33,483,809	33,698,449	33,911,730	34,123,678
3" Compound	6,968,324	6,968,324	6,968,324	6,968,324	6,968,324	6,968,324	6,968,324	6,968,324	6,968,324	6,968,324
3" Turbine	5,721,700	5,721,700	6,866,040	6,866,040	6,866,040	6,866,040	6,866,040	6,866,040	6,866,040	6,866,040
4" Compound	1,321,490	1,321,490	1,321,490	1,321,490	1,321,490	1,321,490	1,321,490	1,321,490	1,321,490	1,321,490
4" Turbine	6,075,850	6,075,850	6,075,850	6,075,850	6,075,850	6,075,850	6,075,850	6,075,850	6,075,850	6,075,850
6" Turbine	219,200,330	219,200,330	219,200,330	219,200,330	219,200,330	219,200,330	219,200,330	219,200,330	219,200,330	219,200,330
8" Turbine	-	-	-	-	-	-	-	-	-	-
CCA/New Prison	139,331,125	175,831,125	175,831,125	175,831,125	175,831,125	248,831,125	248,831,125	248,831,125	248,831,125	321,831,125
Total System	590,831,611	627,745,907	629,467,878	629,952,673	630,435,366	703,915,996	704,394,597	704,871,204	705,345,851	778,818,570
Annual Growth		6.25%	0.27%	0.08%	0.08%	11.66%	0.07%	0.07%	0.07%	10.42%

Percent of Total

5/8" Inside	28.15%	26.52%	26.48%	26.49%	26.50%	23.76%	23.78%	23.79%	23.80%	21.58%
5/8" Outside	0.52%	0.49%	0.48%	0.48%	0.48%	0.43%	0.43%	0.43%	0.43%	0.39%
1" Inside	1.73%	1.64%	1.66%	1.67%	1.68%	1.51%	1.52%	1.53%	1.53%	1.40%
1" Outside	0.07%	0.07%	0.07%	0.07%	0.07%	0.06%	0.06%	0.06%	0.06%	0.06%
2" Inside	5.44%	5.16%	5.18%	5.21%	5.24%	4.73%	4.75%	4.78%	4.81%	4.38%
3" Compound	1.18%	1.11%	1.11%	1.11%	1.11%	0.99%	0.99%	0.99%	0.99%	0.89%
3" Turbine	0.97%	0.91%	1.09%	1.09%	1.09%	0.98%	0.97%	0.97%	0.97%	0.88%
4" Compound	0.22%	0.21%	0.21%	0.21%	0.21%	0.19%	0.19%	0.19%	0.19%	0.17%
4" Turbine	1.03%	0.97%	0.97%	0.96%	0.96%	0.86%	0.86%	0.86%	0.86%	0.78%
6" Turbine	37.10%	34.92%	34.82%	34.80%	34.77%	31.14%	31.12%	31.10%	31.08%	28.15%
8" Turbine	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CCA/New Prison	23.58%	28.01%	27.93%	27.91%	27.89%	35.35%	35.33%	35.30%	35.28%	41.32%
Total System	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

TOWN OF FLORENCE											
WATER/WASTEWATER COST OF SERVICE MODEL											
10 Year Forecast	Test Year	Forecast	2014	2015	2016	2017	2018	2019	2020	2021	
2012-2022	2012	2013									

Forecast W 7.0 -- Customer and Volume Totals
Scenario: Base Scenario - 1

Net Annual Volume after Minimum:

5/8" Inside	166,325,655	166,450,937	166,676,277	166,876,309	167,076,101	167,275,654	167,474,970	167,674,049	167,872,891	168,071,499
5/8" Outside	3,048,970	3,048,970	3,048,970	3,048,970	3,048,970	3,048,970	3,048,970	3,048,970	3,048,970	3,048,970
1" Inside	10,239,640	10,305,279	10,435,725	10,500,143	10,564,169	10,627,808	10,691,069	10,753,958	10,816,481	10,878,644
1" Outside	432,621	432,621	432,621	432,621	432,621	432,621	432,621	432,621	432,621	432,621
2" Inside	32,165,907	32,389,282	32,611,126	32,831,471	33,050,348	33,267,784	33,483,809	33,698,449	33,911,730	34,123,678
3" Compound	6,968,324	6,968,324	6,968,324	6,968,324	6,968,324	6,968,324	6,968,324	6,968,324	6,968,324	6,968,324
3" Turbine	5,721,700	5,721,700	6,866,040	6,866,040	6,866,040	6,866,040	6,866,040	6,866,040	6,866,040	6,866,040
4" Compound	1,321,490	1,321,490	1,321,490	1,321,490	1,321,490	1,321,490	1,321,490	1,321,490	1,321,490	1,321,490
4" Turbine	6,075,850	6,075,850	6,075,850	6,075,850	6,075,850	6,075,850	6,075,850	6,075,850	6,075,850	6,075,850
6" Turbine	219,200,330	219,200,330	219,200,330	219,200,330	219,200,330	219,200,330	219,200,330	219,200,330	219,200,330	219,200,330
8" Turbine	-	-	-	-	-	-	-	-	-	-
CCA/New Prison	139,331,125	175,831,125	175,831,125	175,831,125	175,831,125	248,831,125	248,831,125	248,831,125	248,831,125	321,831,125
Total System	590,831,611	627,745,907	629,467,878	629,952,673	630,435,366	703,915,996	704,394,597	704,871,204	705,345,851	778,818,570

Customer Class Units -- Base Daily Average

5/8" Inside	455,687	456,030	456,647	457,195	457,743	458,289	458,836	459,381	459,926	460,470
5/8" Outside	8,353	8,353	8,353	8,353	8,353	8,353	8,353	8,353	8,353	8,353
1" Inside	28,054	28,234	28,591	28,768	28,943	29,117	29,291	29,463	29,634	29,805
1" Outside	1,185	1,185	1,185	1,185	1,185	1,185	1,185	1,185	1,185	1,185
2" Inside	88,126	88,738	89,346	89,949	90,549	91,145	91,736	92,325	92,909	93,490
3" Compound	19,091	19,091	19,091	19,091	19,091	19,091	19,091	19,091	19,091	19,091
3" Turbine	15,676	15,676	18,811	18,811	18,811	18,811	18,811	18,811	18,811	18,811
4" Compound	3,621	3,621	3,621	3,621	3,621	3,621	3,621	3,621	3,621	3,621
4" Turbine	16,646	16,646	16,646	16,646	16,646	16,646	16,646	16,646	16,646	16,646
6" Turbine	600,549	600,549	600,549	600,549	600,549	600,549	600,549	600,549	600,549	600,549
8" Turbine	-	-	-	-	-	-	-	-	-	-
CCA/New Prison	381,729	481,729	481,729	481,729	481,729	681,729	681,729	681,729	681,729	881,729
Total System	1,618,717	1,719,852	1,724,570	1,725,898	1,727,220	1,928,537	1,929,848	1,931,154	1,932,454	2,133,750

<div style="border: 1px solid black; padding: 5px; display: inline-block; margin: 0 auto; width: 80%;"> TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL </div>										
10 Year Forecast	Test Year	Forecast	2014	2015	2016	2017	2018	2019	2020	2021
2012-2022	2012	2013								

Forecast W 7.0 -- Customer and Volume Totals
Scenario: Base Scenario - 1

Customer Class Units -- Capacity Factor

5/8" Inside	204	204	204	204	204	204	204	204	204	204
5/8" Outside	151	151	151	151	151	151	151	151	151	151
1" Inside	148	148	148	148	148	148	148	148	148	148
1" Outside	249	249	249	249	249	249	249	249	249	249
2" Inside	146	146	146	146	146	146	146	146	146	146
3" Compound	158	158	158	158	158	158	158	158	158	158
3" Turbine	123	123	123	123	123	123	123	123	123	123
4" Compound	130	130	130	130	130	130	130	130	130	130
4" Turbine	144	144	144	144	144	144	144	144	144	144
6" Turbine	149	149	149	149	149	149	149	149	149	149
8" Turbine	-	-	-	-	-	-	-	-	-	-
CCA/New Prison	212	212	212	212	212	212	212	212	212	212

Customer Class Units -- Total Capacity

5/8" Inside	930,312	931,013	932,273	933,392	934,510	935,626	936,741	937,854	938,966	940,077
5/8" Outside	12,645	12,645	12,645	12,645	12,645	12,645	12,645	12,645	12,645	12,645
1" Inside	41,490	41,756	42,284	42,545	42,805	43,063	43,319	43,574	43,827	44,079
1" Outside	2,950	2,950	2,950	2,950	2,950	2,950	2,950	2,950	2,950	2,950
2" Inside	128,391	129,283	130,168	131,048	131,921	132,789	133,651	134,508	135,359	136,205
3" Compound	30,093	30,093	30,093	30,093	30,093	30,093	30,093	30,093	30,093	30,093
3" Turbine	19,312	19,312	23,174	23,174	23,174	23,174	23,174	23,174	23,174	23,174
4" Compound	4,719	4,719	4,719	4,719	4,719	4,719	4,719	4,719	4,719	4,719
4" Turbine	24,003	24,003	24,003	24,003	24,003	24,003	24,003	24,003	24,003	24,003
6" Turbine	893,276	893,276	893,276	893,276	893,276	893,276	893,276	893,276	893,276	893,276
8" Turbine	-	-	-	-	-	-	-	-	-	-
CCA/New Prison	810,050	1,022,255	1,022,255	1,022,255	1,022,255	1,446,666	1,446,666	1,446,666	1,446,666	1,871,077
Total System	2,897,241	3,111,305	3,117,842	3,120,101	3,122,352	3,549,004	3,551,238	3,553,463	3,555,680	3,982,299

TOWN OF FLORENCE											
WATER/WASTEWATER COST OF SERVICE MODEL											
10 Year Forecast											
2012-2022	Test Year	Forecast	2014	2015	2016	2017	2018	2019	2020	2021	
	2012	2013									

Forecast W 7.0 -- Customer and Volume Totals
Scenario: Base Scenario - 1

Customer Class Units -- Extra Capacity

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
5/8" Inside	474,625	474,983	475,626	476,197	476,767	477,336	477,905	478,473	479,041	479,607
5/8" Outside	4,291	4,291	4,291	4,291	4,291	4,291	4,291	4,291	4,291	4,291
1" Inside	13,436	13,522	13,693	13,778	13,862	13,945	14,029	14,111	14,193	14,275
1" Outside	1,765	1,765	1,765	1,765	1,765	1,765	1,765	1,765	1,765	1,765
2" Inside	40,265	40,545	40,823	41,098	41,372	41,645	41,915	42,184	42,451	42,716
3" Compound	11,002	11,002	11,002	11,002	11,002	11,002	11,002	11,002	11,002	11,002
3" Turbine	3,636	3,636	4,363	4,363	4,363	4,363	4,363	4,363	4,363	4,363
4" Compound	1,099	1,099	1,099	1,099	1,099	1,099	1,099	1,099	1,099	1,099
4" Turbine	7,356	7,356	7,356	7,356	7,356	7,356	7,356	7,356	7,356	7,356
6" Turbine	292,727	292,727	292,727	292,727	292,727	292,727	292,727	292,727	292,727	292,727
8" Turbine	-	-	-	-	-	-	-	-	-	-
CCA/New Prison	428,321	540,526	540,526	540,526	540,526	764,937	764,937	764,937	764,937	989,348
Total System	1,278,524	1,391,453	1,393,272	1,394,203	1,395,131	1,620,467	1,621,390	1,622,309	1,623,225	1,848,550

Percent of Total

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
5/8" Inside	37.12%	34.14%	34.14%	34.16%	34.17%	29.46%	29.48%	29.49%	29.51%	25.95%
5/8" Outside	0.34%	0.31%	0.31%	0.31%	0.31%	0.26%	0.26%	0.26%	0.26%	0.23%
1" Inside	1.05%	0.97%	0.98%	0.99%	0.99%	0.86%	0.87%	0.87%	0.87%	0.77%
1" Outside	0.14%	0.13%	0.13%	0.13%	0.13%	0.11%	0.11%	0.11%	0.11%	0.10%
2" Inside	3.15%	2.91%	2.93%	2.95%	2.97%	2.57%	2.59%	2.60%	2.62%	2.31%
3" Compound	0.86%	0.79%	0.79%	0.79%	0.79%	0.68%	0.68%	0.68%	0.68%	0.60%
3" Turbine	0.28%	0.26%	0.31%	0.31%	0.31%	0.27%	0.27%	0.27%	0.27%	0.24%
4" Compound	0.09%	0.08%	0.08%	0.08%	0.08%	0.07%	0.07%	0.07%	0.07%	0.06%
4" Turbine	0.58%	0.53%	0.53%	0.53%	0.53%	0.45%	0.45%	0.45%	0.45%	0.40%
6" Turbine	22.90%	21.04%	21.01%	21.00%	20.98%	18.06%	18.05%	18.04%	18.03%	15.84%
8" Turbine	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CCA/New Prison	33.50%	38.85%	38.80%	38.77%	38.74%	47.20%	47.18%	47.15%	47.12%	53.52%
Total System	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

<div style="border: 1px solid black; padding: 5px; display: inline-block; margin: 0 auto; width: 80%;"> TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL </div>										
10 Year Forecast	Test Year	Forecast	2014	2015	2016	2017	2018	2019	2020	2021
2012-2022	2012	2013								

Forecast W 7.0 -- Customer and Volume Totals
Scenario: Base Scenario - 1

Customer Class Units -- Annual Bills

Total Bills	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
5/8" Inside	39,828	39,888	39,996	40,092	40,188	40,284	40,380	40,476	40,572	40,668
5/8" Outside	528	528	528	528	528	528	528	528	528	528
1" Inside	936	948	972	984	996	1,008	1,020	1,032	1,044	1,056
1" Outside	24	24	24	24	24	24	24	24	24	24
2" Inside	864	876	888	900	912	924	936	948	960	972
3" Compound	72	72	72	72	72	72	72	72	72	72
3" Turbine	60	60	84	84	84	84	84	84	84	84
4" Compound	24	24	24	24	24	24	24	24	24	24
4" Turbine	48	48	48	48	48	48	48	48	48	48
6" Turbine	72	72	72	72	72	72	72	72	72	72
8" Turbine	-	-	-	-	-	-	-	-	-	-
CCA/New Prison	24	36	36	36	36	48	48	48	48	60
Total System	42,480	42,576	42,744	42,864	42,984	43,116	43,236	43,356	43,476	43,608

Percentage of Total

5/8" Inside	93.76%	93.69%	93.57%	93.53%	93.50%	93.43%	93.39%	93.36%	93.32%	93.26%
5/8" Outside	1.24%	1.24%	1.24%	1.23%	1.23%	1.22%	1.22%	1.22%	1.21%	1.21%
1" Inside	2.20%	2.23%	2.27%	2.30%	2.32%	2.34%	2.36%	2.38%	2.40%	2.42%
1" Outside	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%
2" Inside	2.03%	2.06%	2.08%	2.10%	2.12%	2.14%	2.16%	2.19%	2.21%	2.23%
3" Compound	0.17%	0.17%	0.17%	0.17%	0.17%	0.17%	0.17%	0.17%	0.17%	0.17%
3" Turbine	0.14%	0.14%	0.20%	0.20%	0.20%	0.19%	0.19%	0.19%	0.19%	0.19%
4" Compound	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%
4" Turbine	0.11%	0.11%	0.11%	0.11%	0.11%	0.11%	0.11%	0.11%	0.11%	0.11%
6" Turbine	0.17%	0.17%	0.17%	0.17%	0.17%	0.17%	0.17%	0.17%	0.17%	0.17%
8" Turbine	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CCA/New Prison	0.06%	0.08%	0.08%	0.08%	0.08%	0.11%	0.11%	0.11%	0.11%	0.14%
Total System	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

TOWN OF FLORENCE										
WATER/WASTEWATER COST OF SERVICE MODEL										
10 Year Forecast										
2012-2022	Test Year	Forecast	2014	2015	2016	2017	2018	2019	2020	2021
	2012	2013								

Forecast W 7.0 -- Customer and Volume Totals
Scenario: Base Scenario - 1

Total Customers

5/8" Inside	3,319	3,324	3,333	3,341	3,349	3,357	3,365	3,373	3,381	3,389
5/8" Outside	44	44	44	44	44	44	44	44	44	44
1" Inside	78	79	81	82	83	84	85	86	87	88
1" Outside	2	2	2	2	2	2	2	2	2	2
2" Inside	72	73	74	75	76	77	78	79	80	81
3" Compound	6	6	6	6	6	6	6	6	6	6
3" Turbine	5	5	7	7	7	7	7	7	7	7
4" Compound	2	2	2	2	2	2	2	2	2	2
4" Turbine	4	4	4	4	4	4	4	4	4	4
6" Turbine	6	6	6	6	6	6	6	6	6	6
8" Turbine	-	-	-	-	-	-	-	-	-	-
CCA/New Prison	2	3	3	3	3	4	4	4	4	5
Total System	3,540	3,548	3,562	3,572	3,582	3,593	3,603	3,613	3,623	3,634
Annual Growth		0.23%	0.39%	0.28%	0.28%	0.31%	0.28%	0.28%	0.28%	0.30%

NEW Customers

5/8" Inside		5	9	8	8	8	8	8	8	8
5/8" Outside		-	-	-	-	-	-	-	-	-
1" Inside		1	2	1	1	1	1	1	1	1
1" Outside		-	-	-	-	-	-	-	-	-
2" Inside		1	1	1	1	1	1	1	1	1
3" Compound		-	-	-	-	-	-	-	-	-
3" Turbine		-	2	-	-	-	-	-	-	-
4" Compound		-	-	-	-	-	-	-	-	-
4" Turbine		-	-	-	-	-	-	-	-	-
6" Turbine		-	-	-	-	-	-	-	-	-
8" Turbine		-	-	-	-	-	-	-	-	-
CCA/New Prison		1	-	-	-	1	-	-	-	1
Total System		8	14	10	10	11	10	10	10	11

Monthly Volume Per Meter

5/8" Inside	4,176	4,173	4,167	4,162	4,157	4,152	4,147	4,143	4,138	4,133
5/8" Outside	5,775	5,775	5,775	5,775	5,775	5,775	5,775	5,775	5,775	5,775
1" Inside	10,940	10,871	10,736	10,671	10,607	10,543	10,481	10,421	10,361	10,302
1" Outside	18,026	18,026	18,026	18,026	18,026	18,026	18,026	18,026	18,026	18,026
2" Inside	37,229	36,974	36,724	36,479	36,239	36,004	35,773	35,547	35,325	35,107
3" Compound	96,782	96,782	96,782	96,782	96,782	96,782	96,782	96,782	96,782	96,782
3" Turbine	95,362	95,362	81,739	81,739	81,739	81,739	81,739	81,739	81,739	81,739
4" Compound	55,062	55,062	55,062	55,062	55,062	55,062	55,062	55,062	55,062	55,062
4" Turbine	126,580	126,580	126,580	126,580	126,580	126,580	126,580	126,580	126,580	126,580
6" Turbine	3,044,449	3,044,449	3,044,449	3,044,449	3,044,449	3,044,449	3,044,449	3,044,449	3,044,449	3,044,449
8" Turbine	-	-	-	-	-	-	-	-	-	-
CCA/New Prison	5,805,464	4,884,198	4,884,198	4,884,198	4,884,198	5,183,982	5,183,982	5,183,982	5,183,982	5,363,852
Total System	13,908	14,744	14,726	14,697	14,667	16,326	16,292	16,258	16,224	17,860

10 Year Forecast 2012-2022	TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL
---------------------------------------	--

Forecast W 8.0 -- WATER Cost of Service by Customer Class

Scenario: Base Scenario - 1

Total Cost of Service

	Test Year 2012	Forecast 2013	2014	2015	2016	2017	2018	2019	2020	2021
Base	\$ 988,589	\$ 1,131,399	\$ 1,440,492	\$ 1,510,833	\$ 1,723,384	\$ 1,891,583	\$ 1,980,935	\$ 2,075,977	\$ 2,177,128	\$ 2,395,191
Max Day/Extra Capacity	988,589	1,131,399	1,440,492	1,510,833	1,723,384	1,891,583	1,980,935	2,075,977	2,177,128	2,395,191
Sub-Total Non Customer	1,977,177	2,262,799	2,880,985	3,021,667	3,446,769	3,783,167	3,961,870	4,151,954	4,354,255	4,790,382
Customer Billing	48,631	55,656	70,860	74,321	84,776	93,050	97,446	102,121	107,097	117,824
Total Cost of Service	2,025,808	2,318,454	2,951,845	3,095,988	3,531,545	3,876,217	4,059,315	4,254,075	4,461,352	4,908,206

Customer Class Allocation Factors:

Base

5/8" Inside	28.15%	26.52%	26.48%	26.49%	26.50%	23.76%	23.78%	23.79%	23.80%	21.58%
5/8" Outside	0.52%	0.49%	0.48%	0.48%	0.48%	0.43%	0.43%	0.43%	0.43%	0.39%
1" Inside	1.73%	1.64%	1.66%	1.67%	1.68%	1.51%	1.52%	1.53%	1.53%	1.40%
1" Outside	0.07%	0.07%	0.07%	0.07%	0.07%	0.06%	0.06%	0.06%	0.06%	0.06%
2" Inside	5.44%	5.16%	5.18%	5.21%	5.24%	4.73%	4.75%	4.78%	4.81%	4.38%
3" Compound	1.18%	1.11%	1.11%	1.11%	1.11%	0.99%	0.99%	0.99%	0.99%	0.89%
3" Turbine	0.97%	0.91%	1.09%	1.09%	1.09%	0.98%	0.97%	0.97%	0.97%	0.88%
4" Compound	0.22%	0.21%	0.21%	0.21%	0.21%	0.19%	0.19%	0.19%	0.19%	0.17%
4" Turbine	1.03%	0.97%	0.97%	0.96%	0.96%	0.86%	0.86%	0.86%	0.86%	0.78%
6" Turbine	37.10%	34.92%	34.82%	34.80%	34.77%	31.14%	31.12%	31.10%	31.08%	28.15%
8" Turbine	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CCA/New Prison	23.58%	28.01%	27.93%	27.91%	27.89%	35.35%	35.33%	35.30%	35.28%	41.32%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Max Day/Extra Capacity

5/8" Inside	37.12%	34.14%	34.14%	34.16%	34.17%	29.46%	29.48%	29.49%	29.51%	25.95%
5/8" Outside	0.34%	0.31%	0.31%	0.31%	0.31%	0.26%	0.26%	0.26%	0.26%	0.23%
1" Inside	1.05%	0.97%	0.98%	0.99%	0.99%	0.86%	0.86%	0.87%	0.87%	0.77%
1" Outside	0.14%	0.13%	0.13%	0.13%	0.13%	0.11%	0.11%	0.11%	0.11%	0.10%
2" Inside	3.15%	2.91%	2.93%	2.95%	2.97%	2.57%	2.59%	2.60%	2.62%	2.31%
3" Compound	0.86%	0.79%	0.79%	0.79%	0.79%	0.68%	0.68%	0.68%	0.68%	0.60%
3" Turbine	0.28%	0.26%	0.31%	0.31%	0.31%	0.27%	0.27%	0.27%	0.27%	0.24%
4" Compound	0.09%	0.08%	0.08%	0.08%	0.08%	0.07%	0.07%	0.07%	0.07%	0.06%
4" Turbine	0.58%	0.53%	0.53%	0.53%	0.53%	0.45%	0.45%	0.45%	0.45%	0.40%
6" Turbine	22.90%	21.04%	21.01%	21.00%	20.98%	18.06%	18.05%	18.04%	18.03%	15.84%
8" Turbine	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CCA/New Prison	33.50%	38.85%	38.80%	38.77%	38.74%	47.20%	47.18%	47.15%	47.12%	53.52%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Customer

5/8" Inside	93.76%	93.69%	93.57%	93.53%	93.50%	93.43%	93.39%	93.36%	93.32%	93.26%
5/8" Outside	1.24%	1.24%	1.24%	1.23%	1.23%	1.22%	1.22%	1.22%	1.21%	1.21%
1" Inside	2.20%	2.23%	2.27%	2.30%	2.32%	2.34%	2.36%	2.38%	2.40%	2.42%
1" Outside	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%
2" Inside	2.03%	2.06%	2.08%	2.10%	2.12%	2.14%	2.16%	2.19%	2.21%	2.23%
3" Compound	0.17%	0.17%	0.17%	0.17%	0.17%	0.17%	0.17%	0.17%	0.17%	0.17%
3" Turbine	0.14%	0.14%	0.20%	0.20%	0.20%	0.19%	0.19%	0.19%	0.19%	0.19%
4" Compound	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%
4" Turbine	0.11%	0.11%	0.11%	0.11%	0.11%	0.11%	0.11%	0.11%	0.11%	0.11%
6" Turbine	0.17%	0.17%	0.17%	0.17%	0.17%	0.17%	0.17%	0.17%	0.17%	0.17%
8" Turbine	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CCA/New Prison	0.06%	0.08%	0.08%	0.08%	0.08%	0.11%	0.11%	0.11%	0.11%	0.14%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

10 Year Forecast 2012-2022	TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL									
	Test Year 2012	Forecast 2013	2014	2015	2016	2017	2018	2019	2020	2021

Forecast W 8.0 -- WATER Cost of Service by Customer Class

Scenario: Base Scenario - 1

Total Cost by Customer Class

5/8" Inside

Base	\$ 278,299	\$ 299,998	\$ 381,427	\$ 400,224	\$ 456,726	\$ 449,508	\$ 470,982	\$ 493,831	\$ 518,158	\$ 516,890
Max Day/Extra Capacity	366,993	386,212	491,746	516,032	588,943	557,198	583,881	612,275	642,506	621,434
Customer	45,595	52,142	66,305	69,514	79,262	86,939	91,009	95,338	99,943	109,880
Total Cost of Service	\$ 690,886	\$ 738,351	\$ 939,477	\$ 985,771	\$ 1,124,931	\$ 1,093,645	\$ 1,145,872	\$ 1,201,444	\$ 1,260,608	\$ 1,248,204

Calculation of Customer Costs/Bill

Total Customer Costs	\$ 45,595	\$ 52,142	\$ 66,305	\$ 69,514	\$ 79,262	\$ 86,939	\$ 91,009	\$ 95,338	\$ 99,943	\$ 109,880
Total Bills	39,828	39,888	39,996	40,092	40,188	40,284	40,380	40,476	40,572	40,668
Customer Cost/Bill	\$ 1.14	\$ 1.31	\$ 1.66	\$ 1.73	\$ 1.97	\$ 2.16	\$ 2.25	\$ 2.36	\$ 2.46	\$ 2.70

Calculation of Non-Customer Charge

Total Non-Customer Costs	\$ 645,292	\$ 686,210	\$ 873,172	\$ 916,257	\$ 1,045,669	\$ 1,006,706	\$ 1,054,863	\$ 1,106,106	\$ 1,160,664	\$ 1,138,323
Total Volume	166,325,655	166,450,937	166,676,277	166,876,309	167,076,101	167,275,654	167,474,970	167,674,049	167,872,891	168,071,499
Total Non-Customer Cost	\$ 3.88	\$ 4.12	\$ 5.24	\$ 5.49	\$ 6.26	\$ 6.02	\$ 6.30	\$ 6.60	\$ 6.91	\$ 6.77

Calculation of Customer Charge

Monthly Minimum Volume	-	-	-	-	-	-	-	-	-	-
Non-Customer Charge/1,000 Gallons	\$ 3.88	\$ 4.12	\$ 5.24	\$ 5.49	\$ 6.26	\$ 6.02	\$ 6.30	\$ 6.60	\$ 6.91	\$ 6.77
Monthly Non-Customer Charge	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Monthly Customer Charge	\$ 1.14	\$ 1.31	\$ 1.66	\$ 1.73	\$ 1.97	\$ 2.16	\$ 2.25	\$ 2.36	\$ 2.46	\$ 2.70

Monthly Customer Charge	\$ 1.14	\$ 1.31	\$ 1.66	\$ 1.73	\$ 1.97	\$ 2.16	\$ 2.25	\$ 2.36	\$ 2.46	\$ 2.70
--------------------------------	----------------	----------------	----------------	----------------	----------------	----------------	----------------	----------------	----------------	----------------

Calculation of Volumetric Charge

Monthly Customer Charge	\$ 1.14	\$ 1.31	\$ 1.66	\$ 1.73	\$ 1.97	\$ 2.16	\$ 2.25	\$ 2.36	\$ 2.46	\$ 2.70
Total Bills	39,828	39,888	39,996	40,092	40,188	40,284	40,380	40,476	40,572	40,668
Revenue from Customer Charge	\$ 45,595	\$ 52,142	\$ 66,305	\$ 69,514	\$ 79,262	\$ 86,939	\$ 91,009	\$ 95,338	\$ 99,943	\$ 109,880
Total Cost of Service	\$ 690,886	\$ 738,351	\$ 939,477	\$ 985,771	\$ 1,124,931	\$ 1,093,645	\$ 1,145,872	\$ 1,201,444	\$ 1,260,608	\$ 1,248,204
Net Cost of Service	\$ 645,292	\$ 686,210	\$ 873,172	\$ 916,257	\$ 1,045,669	\$ 1,006,706	\$ 1,054,863	\$ 1,106,106	\$ 1,160,664	\$ 1,138,323
Test Year Annual Volume after Minimum	166,325,655	166,450,937	166,676,277	166,876,309	167,076,101	167,275,654	167,474,970	167,674,049	167,872,891	168,071,499
Net Volumetric Charge	\$ 3.88	\$ 4.12	\$ 5.24	\$ 5.49	\$ 6.26	\$ 6.02	\$ 6.30	\$ 6.60	\$ 6.91	\$ 6.77

10 Year Forecast 2012-2022	TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL										
	Test Year	Forecast									
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	

Forecast W 8.0 -- WATER Cost of Service by Customer Class

Scenario: **Base Scenario - 1**

5/8" Outside																				
Base	\$	5,102	\$	5,495	\$	6,977	\$	7,312	\$	8,335	\$	8,193	\$	8,574	\$	8,980	\$	9,411	\$	9,377
Max Day/Extra Capacity		3,318		3,489		4,437		4,650		5,301		5,009		5,243		5,491		5,756		5,560
Customer		604		690		875		915		1,041		1,139		1,190		1,244		1,301		1,427
Total Cost of Service	\$	9,024	\$	9,675	\$	12,289	\$	12,878	\$	14,677	\$	14,342	\$	15,008	\$	15,715	\$	16,467	\$	16,364
Calculation of Customer Costs/Bill																				
Total Customer Costs	\$	604	\$	690	\$	875	\$	915	\$	1,041	\$	1,139	\$	1,190	\$	1,244	\$	1,301	\$	1,427
Total Bills		528		528		528		528		528		528		528		528		528		528
Customer Cost/Bill	\$	1.14	\$	1.31	\$	1.66	\$	1.73	\$	1.97	\$	2.16	\$	2.25	\$	2.36	\$	2.46	\$	2.70
Calculation of Non-Customer Charge																				
Total Non-Customer Costs	\$	8,420	\$	8,985	\$	11,414	\$	11,963	\$	13,636	\$	13,203	\$	13,817	\$	14,471	\$	15,167	\$	14,937
Total Volume		3,048,970		3,048,970		3,048,970		3,048,970		3,048,970		3,048,970		3,048,970		3,048,970		3,048,970		3,048,970
Total Non-Customer Cost	\$	2.76	\$	2.95	\$	3.74	\$	3.92	\$	4.47	\$	4.33	\$	4.53	\$	4.75	\$	4.97	\$	4.90
Calculation of Customer Charge																				
Monthly Minimum Volume		-		-		-		-		-		-		-		-		-		-
Non-Customer Charge/1,000 Gallons	\$	2.76	\$	2.95	\$	3.74	\$	3.92	\$	4.47	\$	4.33	\$	4.53	\$	4.75	\$	4.97	\$	4.90
Monthly Non-Customer Charge	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Monthly Customer Charge	\$	1.14	\$	1.31	\$	1.66	\$	1.73	\$	1.97	\$	2.16	\$	2.25	\$	2.36	\$	2.46	\$	2.70
Monthly Customer Charge	\$	1.14	\$	1.31	\$	1.66	\$	1.73	\$	1.97	\$	2.16	\$	2.25	\$	2.36	\$	2.46	\$	2.70
Calculation of Volumetric Charge																				
Monthly Customer Charge	\$	1.14	\$	1.31	\$	1.66	\$	1.73	\$	1.97	\$	2.16	\$	2.25	\$	2.36	\$	2.46	\$	2.70
Total Bills		528		528		528		528		528		528		528		528		528		528
Revenue from Customer Charge	\$	604	\$	690	\$	875	\$	915	\$	1,041	\$	1,139	\$	1,190	\$	1,244	\$	1,301	\$	1,427
Total Cost of Service	\$	9,024	\$	9,675	\$	12,289	\$	12,878	\$	14,677	\$	14,342	\$	15,008	\$	15,715	\$	16,467	\$	16,364
Net Cost of Service	\$	8,420	\$	8,985	\$	11,414	\$	11,963	\$	13,636	\$	13,203	\$	13,817	\$	14,471	\$	15,167	\$	14,937
Test Year Annual Volume after Minimum		3,048,970		3,048,970		3,048,970		3,048,970		3,048,970		3,048,970		3,048,970		3,048,970		3,048,970		3,048,970
Net Volumetric Charge	\$	2.76	\$	2.95	\$	3.74	\$	3.92	\$	4.47	\$	4.33	\$	4.53	\$	4.75	\$	4.97	\$	4.90

10 Year Forecast 2012-2022	TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL										
	Test Year	Forecast									
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	

Forecast W 8.0 -- WATER Cost of Service by Customer Class

Scenario: Base Scenario - 1

1" Inside																				
Base	\$	17,133	\$	18,573	\$	23,881	\$	25,183	\$	28,879	\$	28,559	\$	30,066	\$	31,672	\$	33,386	\$	33,456
Max Day/Extra Capacity		10,389		10,995		14,158		14,931		17,124		16,279		17,139		18,057		19,036		18,496
Customer		1,072		1,239		1,611		1,706		1,964		2,175		2,299		2,431		2,572		2,853
Total Cost of Service	\$	28,594	\$	30,808	\$	39,650	\$	41,819	\$	47,967	\$	47,013	\$	49,504	\$	52,160	\$	54,994	\$	54,805
Calculation of Customer Costs/Bill																				
Total Customer Costs	\$	1,072	\$	1,239	\$	1,611	\$	1,706	\$	1,964	\$	2,175	\$	2,299	\$	2,431	\$	2,572	\$	2,853
Total Bills		936		948		972		984		996		1,008		1,020		1,032		1,044		1,056
Customer Cost/Bill	\$	1.14	\$	1.31	\$	1.66	\$	1.73	\$	1.97	\$	2.16	\$	2.25	\$	2.36	\$	2.46	\$	2.70
Calculation of Non-Customer Charge																				
Total Non-Customer Costs	\$	27,522	\$	29,568	\$	38,039	\$	40,113	\$	46,002	\$	44,838	\$	47,205	\$	49,729	\$	52,423	\$	51,952
Total Volume		10,239,640		10,305,279		10,435,725		10,500,143		10,564,169		10,627,808		10,691,069		10,753,958		10,816,481		10,878,644
Total Non-Customer Cost	\$	2.69	\$	2.87	\$	3.65	\$	3.82	\$	4.35	\$	4.22	\$	4.42	\$	4.62	\$	4.85	\$	4.78
Calculation of Customer Charge																				
Monthly Minimum Volume		-		-		-		-		-		-		-		-		-		-
Non-Customer Charge/1,000 Gallons	\$	2.69	\$	2.87	\$	3.65	\$	3.82	\$	4.35	\$	4.22	\$	4.42	\$	4.62	\$	4.85	\$	4.78
Monthly Non-Customer Charge	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Monthly Customer Charge	\$	1.14	\$	1.31	\$	1.66	\$	1.73	\$	1.97	\$	2.16	\$	2.25	\$	2.36	\$	2.46	\$	2.70
Monthly Customer Charge	\$	1.14	\$	1.31	\$	1.66	\$	1.73	\$	1.97	\$	2.16	\$	2.25	\$	2.36	\$	2.46	\$	2.70
Calculation of Volumetric Charge																				
Monthly Customer Charge	\$	1.14	\$	1.31	\$	1.66	\$	1.73	\$	1.97	\$	2.16	\$	2.25	\$	2.36	\$	2.46	\$	2.70
Total Bills		936		948		972		984		996		1,008		1,020		1,032		1,044		1,056
Revenue from Customer Charge	\$	1,072	\$	1,239	\$	1,611	\$	1,706	\$	1,964	\$	2,175	\$	2,299	\$	2,431	\$	2,572	\$	2,853
Total Cost of Service	\$	28,594	\$	30,808	\$	39,650	\$	41,819	\$	47,967	\$	47,013	\$	49,504	\$	52,160	\$	54,994	\$	54,805
Net Cost of Service	\$	27,522	\$	29,568	\$	38,039	\$	40,113	\$	46,002	\$	44,838	\$	47,205	\$	49,729	\$	52,423	\$	51,952
Test Year Annual Volume after Minimum		10,239,640		10,305,279		10,435,725		10,500,143		10,564,169		10,627,808		10,691,069		10,753,958		10,816,481		10,878,644
Net Volumetric Charge	\$	2.69	\$	2.87	\$	3.65	\$	3.82	\$	4.35	\$	4.22	\$	4.42	\$	4.62	\$	4.85	\$	4.78

10 Year Forecast 2012-2022	TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL										
	Test Year	Forecast									
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	

Forecast W 8.0 -- WATER Cost of Service by Customer Class

Scenario: **Base Scenario - 1**

1" Outside																				
Base	\$	724	\$	780	\$	990	\$	1,038	\$	1,183	\$	1,163	\$	1,217	\$	1,274	\$	1,335	\$	1,330
Max Day/Extra Capacity		1,365		1,435		1,825		1,912		2,180		2,060		2,156		2,258		2,367		2,287
Customer		27		31		40		42		47		52		54		57		59		65
Total Cost of Service	\$	2,116	\$	2,246	\$	2,854	\$	2,992	\$	3,410	\$	3,274	\$	3,427	\$	3,589	\$	3,761	\$	3,682
Calculation of Customer Costs/Bill																				
Total Customer Costs	\$	27	\$	31	\$	40	\$	42	\$	47	\$	52	\$	54	\$	57	\$	59	\$	65
Total Bills		24		24		24		24		24		24		24		24		24		24
Customer Cost/Bill	\$	1.14	\$	1.31	\$	1.66	\$	1.73	\$	1.97	\$	2.16	\$	2.25	\$	2.36	\$	2.46	\$	2.70
Calculation of Non-Customer Charge																				
Total Non-Customer Costs	\$	2,088	\$	2,215	\$	2,815	\$	2,950	\$	3,363	\$	3,223	\$	3,373	\$	3,532	\$	3,702	\$	3,617
Total Volume		432,621		432,621		432,621		432,621		432,621		432,621		432,621		432,621		432,621		432,621
Total Non-Customer Cost	\$	4.83	\$	5.12	\$	6.51	\$	6.82	\$	7.77	\$	7.45	\$	7.80	\$	8.17	\$	8.56	\$	8.36
Calculation of Customer Charge																				
Monthly Minimum Volume		-		-		-		-		-		-		-		-		-		-
Non-Customer Charge/1,000 Gallons	\$	4.83	\$	5.12	\$	6.51	\$	6.82	\$	7.77	\$	7.45	\$	7.80	\$	8.17	\$	8.56	\$	8.36
Monthly Non-Customer Charge	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Monthly Customer Charge	\$	1.14	\$	1.31	\$	1.66	\$	1.73	\$	1.97	\$	2.16	\$	2.25	\$	2.36	\$	2.46	\$	2.70
Monthly Customer Charge	\$	1.14	\$	1.31	\$	1.66	\$	1.73	\$	1.97	\$	2.16	\$	2.25	\$	2.36	\$	2.46	\$	2.70
Calculation of Volumetric Charge																				
Monthly Customer Charge	\$	1.14	\$	1.31	\$	1.66	\$	1.73	\$	1.97	\$	2.16	\$	2.25	\$	2.36	\$	2.46	\$	2.70
Total Bills		24		24		24		24		24		24		24		24		24		24
Revenue from Customer Charge	\$	27	\$	31	\$	40	\$	42	\$	47	\$	52	\$	54	\$	57	\$	59	\$	65
Total Cost of Service	\$	2,116	\$	2,246	\$	2,854	\$	2,992	\$	3,410	\$	3,274	\$	3,427	\$	3,589	\$	3,761	\$	3,682
Net Cost of Service	\$	2,088	\$	2,215	\$	2,815	\$	2,950	\$	3,363	\$	3,223	\$	3,373	\$	3,532	\$	3,702	\$	3,617
Test Year Annual Volume after Minimum		432,621		432,621		432,621		432,621		432,621		432,621		432,621		432,621		432,621		432,621
Net Volumetric Charge	\$	4.83	\$	5.12	\$	6.51	\$	6.82	\$	7.77	\$	7.45	\$	7.80	\$	8.17	\$	8.56	\$	8.36

10 Year Forecast 2012-2022	TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL										
	Test Year	Forecast									
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	

Forecast W 8.0 -- WATER Cost of Service by Customer Class

Scenario: **Base Scenario - 1**

2" Inside

Base	\$ 53,821	\$ 58,376	\$ 74,628	\$ 78,741	\$ 90,348	\$ 89,398	\$ 94,165	\$ 99,248	\$ 104,672	\$ 104,945
Max Day/Extra Capacity	31,134	32,967	42,206	44,536	51,107	48,612	51,210	53,980	56,936	55,348
Customer	989	1,145	1,472	1,560	1,799	1,994	2,110	2,233	2,365	2,626
Total Cost of Service	\$ 85,944	\$ 92,488	\$ 118,306	\$ 124,838	\$ 143,253	\$ 140,004	\$ 147,484	\$ 155,461	\$ 163,973	\$ 162,918

Calculation of Customer Costs/Bill

Total Customer Costs	\$ 989	\$ 1,145	\$ 1,472	\$ 1,560	\$ 1,799	\$ 1,994	\$ 2,110	\$ 2,233	\$ 2,365	\$ 2,626
Total Bills	864	876	888	900	912	924	936	948	960	972
Customer Cost/Bill	\$ 1.14	\$ 1.31	\$ 1.66	\$ 1.73	\$ 1.97	\$ 2.16	\$ 2.25	\$ 2.36	\$ 2.46	\$ 2.70

Calculation of Non-Customer Charge

Total Non-Customer Costs	\$ 84,955	\$ 91,343	\$ 116,834	\$ 123,277	\$ 141,454	\$ 138,010	\$ 145,375	\$ 153,228	\$ 161,609	\$ 160,292
Total Volume	32,165,907	32,389,282	32,611,126	32,831,471	33,050,348	33,267,784	33,483,809	33,698,449	33,911,730	34,123,678
Total Non-Customer Cost	\$ 2.64	\$ 2.82	\$ 3.58	\$ 3.75	\$ 4.28	\$ 4.15	\$ 4.34	\$ 4.55	\$ 4.77	\$ 4.70

Calculation of Customer Charge

Monthly Minimum Volume	-	-	-	-	-	-	-	-	-	-
Non-Customer Charge/1,000 Gallons	\$ 2.64	\$ 2.82	\$ 3.58	\$ 3.75	\$ 4.28	\$ 4.15	\$ 4.34	\$ 4.55	\$ 4.77	\$ 4.70
Monthly Non-Customer Charge	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Monthly Customer Charge	\$ 1.14	\$ 1.31	\$ 1.66	\$ 1.73	\$ 1.97	\$ 2.16	\$ 2.25	\$ 2.36	\$ 2.46	\$ 2.70
Monthly Customer Charge	\$ 1.14	\$ 1.31	\$ 1.66	\$ 1.73	\$ 1.97	\$ 2.16	\$ 2.25	\$ 2.36	\$ 2.46	\$ 2.70

Calculation of Volumetric Charge

Monthly Customer Charge	\$ 1.14	\$ 1.31	\$ 1.66	\$ 1.73	\$ 1.97	\$ 2.16	\$ 2.25	\$ 2.36	\$ 2.46	\$ 2.70
Total Bills	864	876	888	900	912	924	936	948	960	972
Revenue from Customer Charge	\$ 989	\$ 1,145	\$ 1,472	\$ 1,560	\$ 1,799	\$ 1,994	\$ 2,110	\$ 2,233	\$ 2,365	\$ 2,626
Total Cost of Service	\$ 85,944	\$ 92,488	\$ 118,306	\$ 124,838	\$ 143,253	\$ 140,004	\$ 147,484	\$ 155,461	\$ 163,973	\$ 162,918
Net Cost of Service	\$ 84,955	\$ 91,343	\$ 116,834	\$ 123,277	\$ 141,454	\$ 138,010	\$ 145,375	\$ 153,228	\$ 161,609	\$ 160,292
Test Year Annual Volume after Minimum	32,165,907	32,389,282	32,611,126	32,831,471	33,050,348	33,267,784	33,483,809	33,698,449	33,911,730	34,123,678
Net Volumetric Charge	\$ 2.64	\$ 2.82	\$ 3.58	\$ 3.75	\$ 4.28	\$ 4.15	\$ 4.34	\$ 4.55	\$ 4.77	\$ 4.70

10 Year Forecast 2012-2022	TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL										
	Test Year	Forecast									
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	

Forecast W 8.0 -- WATER Cost of Service by Customer Class

Scenario: Base Scenario - 1

3" Compound

Base	\$ 11,660	\$ 12,559	\$ 15,947	\$ 16,712	\$ 19,049	\$ 18,725	\$ 19,597	\$ 20,523	\$ 21,508	\$ 21,430
Max Day/Extra Capacity	8,507	8,946	11,375	11,922	13,590	12,843	13,442	14,078	14,756	14,255
Customer	82	94	119	125	142	155	162	170	177	195
Total Cost of Service	\$ 20,249	\$ 21,599	\$ 27,441	\$ 28,759	\$ 32,781	\$ 31,723	\$ 33,200	\$ 34,771	\$ 36,442	\$ 35,880

Calculation of Customer Costs/Bill

Total Customer Costs	\$ 82	\$ 94	\$ 119	\$ 125	\$ 142	\$ 155	\$ 162	\$ 170	\$ 177	\$ 195
Total Bills	72	72	72	72	72	72	72	72	72	72
Customer Cost/Bill	\$ 1.14	\$ 1.31	\$ 1.66	\$ 1.73	\$ 1.97	\$ 2.16	\$ 2.25	\$ 2.36	\$ 2.46	\$ 2.70

Calculation of Non-Customer Charge

Total Non-Customer Costs	\$ 20,166	\$ 21,505	\$ 27,321	\$ 28,635	\$ 32,639	\$ 31,568	\$ 33,038	\$ 34,601	\$ 36,265	\$ 35,686
Total Volume	6,968,324	6,968,324	6,968,324	6,968,324	6,968,324	6,968,324	6,968,324	6,968,324	6,968,324	6,968,324
Total Non-Customer Cost	\$ 2.89	\$ 3.09	\$ 3.92	\$ 4.11	\$ 4.68	\$ 4.53	\$ 4.74	\$ 4.97	\$ 5.20	\$ 5.12

Calculation of Customer Charge

Monthly Minimum Volume	-	-	-	-	-	-	-	-	-	-
Non-Customer Charge/1,000 Gallons	\$ 2.89	\$ 3.09	\$ 3.92	\$ 4.11	\$ 4.68	\$ 4.53	\$ 4.74	\$ 4.97	\$ 5.20	\$ 5.12
Monthly Non-Customer Charge	-	-	-	-	-	-	-	-	-	-
Monthly Customer Charge	\$ 1.14	\$ 1.31	\$ 1.66	\$ 1.73	\$ 1.97	\$ 2.16	\$ 2.25	\$ 2.36	\$ 2.46	\$ 2.70
Monthly Customer Charge	\$ 1.14	\$ 1.31	\$ 1.66	\$ 1.73	\$ 1.97	\$ 2.16	\$ 2.25	\$ 2.36	\$ 2.46	\$ 2.70

Calculation of Volumetric Charge

Monthly Customer Charge	\$ 1.14	\$ 1.31	\$ 1.66	\$ 1.73	\$ 1.97	\$ 2.16	\$ 2.25	\$ 2.36	\$ 2.46	\$ 2.70
Total Bills	72	72	72	72	72	72	72	72	72	72
Revenue from Customer Charge	\$ 82	\$ 94	\$ 119	\$ 125	\$ 142	\$ 155	\$ 162	\$ 170	\$ 177	\$ 195
Total Cost of Service	\$ 20,249	\$ 21,599	\$ 27,441	\$ 28,759	\$ 32,781	\$ 31,723	\$ 33,200	\$ 34,771	\$ 36,442	\$ 35,880
Net Cost of Service	\$ 20,166	\$ 21,505	\$ 27,321	\$ 28,635	\$ 32,639	\$ 31,568	\$ 33,038	\$ 34,601	\$ 36,265	\$ 35,686
Test Year Annual Volume after Minimum	6,968,324	6,968,324	6,968,324	6,968,324	6,968,324	6,968,324	6,968,324	6,968,324	6,968,324	6,968,324
Net Volumetric Charge	\$ 2.89	\$ 3.09	\$ 3.92	\$ 4.11	\$ 4.68	\$ 4.53	\$ 4.74	\$ 4.97	\$ 5.20	\$ 5.12

10 Year Forecast 2012-2022	TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL										
	Test Year	Forecast									
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	

Forecast W 8.0 -- WATER Cost of Service by Customer Class

Scenario: **Base Scenario - 1**

3" Turbine																					
Base	\$	9,574	\$	10,312	\$	15,712	\$	16,467	\$	18,769	\$	18,451	\$	19,309	\$	20,222	\$	21,193	\$	21,116	
Max Day/Extra Capacity		2,811		2,956		4,511		4,728		5,390		5,093		5,331		5,583		5,852		5,653	
Customer		69		78		139		146		166		181		189		198		207		227	
Total Cost of Service	\$	12,454	\$	13,347	\$	20,363	\$	21,341	\$	24,325	\$	23,725	\$	24,829	\$	26,003	\$	27,252	\$	26,996	
Calculation of Customer Costs/Bill																					
Total Customer Costs	\$	69	\$	78	\$	139	\$	146	\$	166	\$	181	\$	189	\$	198	\$	207	\$	227	
Total Bills		60		60		84		84		84		84		84		84		84		84	
Customer Cost/Bill	\$	1.14	\$	1.31	\$	1.66	\$	1.73	\$	1.97	\$	2.16	\$	2.25	\$	2.36	\$	2.46	\$	2.70	
Calculation of Non-Customer Charge																					
Total Non-Customer Costs	\$	12,385	\$	13,269	\$	20,223	\$	21,195	\$	24,159	\$	23,544	\$	24,640	\$	25,805	\$	27,045	\$	26,769	
Total Volume		5,721,700		5,721,700		6,866,040		6,866,040		6,866,040		6,866,040		6,866,040		6,866,040		6,866,040		6,866,040	
Total Non-Customer Cost	\$	2.16	\$	2.32	\$	2.95	\$	3.09	\$	3.52	\$	3.43	\$	3.59	\$	3.76	\$	3.94	\$	3.90	
Calculation of Customer Charge																					
Monthly Minimum Volume		-		-		-		-		-		-		-		-		-		-	
Non-Customer Charge/1,000 Gallons	\$	2.16	\$	2.32	\$	2.95	\$	3.09	\$	3.52	\$	3.43	\$	3.59	\$	3.76	\$	3.94	\$	3.90	
Monthly Non-Customer Charge	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	
Monthly Customer Charge	\$	1.14	\$	1.31	\$	1.66	\$	1.73	\$	1.97	\$	2.16	\$	2.25	\$	2.36	\$	2.46	\$	2.70	
Monthly Customer Charge	\$	1.14	\$	1.31	\$	1.66	\$	1.73	\$	1.97	\$	2.16	\$	2.25	\$	2.36	\$	2.46	\$	2.70	
Calculation of Volumetric Charge																					
Monthly Customer Charge	\$	1.14	\$	1.31	\$	1.66	\$	1.73	\$	1.97	\$	2.16	\$	2.25	\$	2.36	\$	2.46	\$	2.70	
Total Bills		60		60		84		84		84		84		84		84		84		84	
Revenue from Customer Charge	\$	69	\$	78	\$	139	\$	146	\$	166	\$	181	\$	189	\$	198	\$	207	\$	227	
Total Cost of Service	\$	12,454	\$	13,347	\$	20,363	\$	21,341	\$	24,325	\$	23,725	\$	24,829	\$	26,003	\$	27,252	\$	26,996	
Net Cost of Service	\$	12,385	\$	13,269	\$	20,223	\$	21,195	\$	24,159	\$	23,544	\$	24,640	\$	25,805	\$	27,045	\$	26,769	
Test Year Annual Volume after Minimum		5,721,700		5,721,700		6,866,040		6,866,040		6,866,040		6,866,040		6,866,040		6,866,040		6,866,040		6,866,040	
Net Volumetric Charge	\$	2.16	\$	2.32	\$	2.95	\$	3.09	\$	3.52	\$	3.43	\$	3.59	\$	3.76	\$	3.94	\$	3.90	

10 Year Forecast 2012-2022	TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL										
	Test Year	Forecast									
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	

Forecast W 8.0 -- WATER Cost of Service by Customer Class

Scenario: Base Scenario - 1

4" Compound																				
Base	\$	2,211	\$	2,382	\$	3,024	\$	3,169	\$	3,612	\$	3,551	\$	3,716	\$	3,892	\$	4,079	\$	4,064
Max Day/Extra Capacity		850		894		1,136		1,191		1,357		1,283		1,343		1,406		1,474		1,424
Customer		27		31		40		42		47		52		54		57		59		65
Total Cost of Service	\$	3,088	\$	3,307	\$	4,200	\$	4,402	\$	5,017	\$	4,886	\$	5,113	\$	5,355	\$	5,612	\$	5,553
Calculation of Customer Costs/Bill																				
Total Customer Costs	\$	27	\$	31	\$	40	\$	42	\$	47	\$	52	\$	54	\$	57	\$	59	\$	65
Total Bills		24		24		24		24		24		24		24		24		24		24
Customer Cost/Bill	\$	1.14	\$	1.31	\$	1.66	\$	1.73	\$	1.97	\$	2.16	\$	2.25	\$	2.36	\$	2.46	\$	2.70
Calculation of Non-Customer Charge																				
Total Non-Customer Costs	\$	3,061	\$	3,275	\$	4,160	\$	4,360	\$	4,970	\$	4,834	\$	5,059	\$	5,298	\$	5,553	\$	5,488
Total Volume		1,321,490		1,321,490		1,321,490		1,321,490		1,321,490		1,321,490		1,321,490		1,321,490		1,321,490		1,321,490
Total Non-Customer Cost	\$	2.32	\$	2.48	\$	3.15	\$	3.30	\$	3.76	\$	3.66	\$	3.83	\$	4.01	\$	4.20	\$	4.15
Calculation of Customer Charge																				
Monthly Minimum Volume		-		-		-		-		-		-		-		-		-		-
Non-Customer Charge/1,000 Gallons	\$	2.32	\$	2.48	\$	3.15	\$	3.30	\$	3.76	\$	3.66	\$	3.83	\$	4.01	\$	4.20	\$	4.15
Monthly Non-Customer Charge	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Monthly Customer Charge	\$	1.14	\$	1.31	\$	1.66	\$	1.73	\$	1.97	\$	2.16	\$	2.25	\$	2.36	\$	2.46	\$	2.70
Monthly Customer Charge	\$	1.14	\$	1.31	\$	1.66	\$	1.73	\$	1.97	\$	2.16	\$	2.25	\$	2.36	\$	2.46	\$	2.70
Calculation of Volumetric Charge																				
Monthly Customer Charge	\$	1.14	\$	1.31	\$	1.66	\$	1.73	\$	1.97	\$	2.16	\$	2.25	\$	2.36	\$	2.46	\$	2.70
Total Bills		24		24		24		24		24		24		24		24		24		24
Revenue from Customer Charge	\$	27	\$	31	\$	40	\$	42	\$	47	\$	52	\$	54	\$	57	\$	59	\$	65
Total Cost of Service	\$	3,088	\$	3,307	\$	4,200	\$	4,402	\$	5,017	\$	4,886	\$	5,113	\$	5,355	\$	5,612	\$	5,553
Net Cost of Service	\$	3,061	\$	3,275	\$	4,160	\$	4,360	\$	4,970	\$	4,834	\$	5,059	\$	5,298	\$	5,553	\$	5,488
Test Year Annual Volume after Minimum		1,321,490		1,321,490		1,321,490		1,321,490		1,321,490		1,321,490		1,321,490		1,321,490		1,321,490		1,321,490
Net Volumetric Charge	\$	2.32	\$	2.48	\$	3.15	\$	3.30	\$	3.76	\$	3.66	\$	3.83	\$	4.01	\$	4.20	\$	4.15

10 Year Forecast 2012-2022	TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL										
	Test Year	Forecast									
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	

Forecast W 8.0 -- WATER Cost of Service by Customer Class

Scenario: Base Scenario - 1

4" Turbine

Base	\$ 10,166	\$ 10,951	\$ 13,904	\$ 14,572	\$ 16,609	\$ 16,327	\$ 17,087	\$ 17,895	\$ 18,754	\$ 18,686
Max Day/Extra Capacity	5,688	5,982	7,606	7,972	9,087	8,587	8,988	9,414	9,867	9,532
Customer	55	63	80	83	95	104	108	113	118	130
Total Cost of Service	\$ 15,909	\$ 16,995	\$ 21,590	\$ 22,627	\$ 25,791	\$ 25,018	\$ 26,183	\$ 27,421	\$ 28,739	\$ 28,347

Calculation of Customer Costs/Bill

Total Customer Costs	\$ 55	\$ 63	\$ 80	\$ 83	\$ 95	\$ 104	\$ 108	\$ 113	\$ 118	\$ 130
Total Bills	48	48	48	48	48	48	48	48	48	48
Customer Cost/Bill	\$ 1.14	\$ 1.31	\$ 1.66	\$ 1.73	\$ 1.97	\$ 2.16	\$ 2.25	\$ 2.36	\$ 2.46	\$ 2.70

Calculation of Non-Customer Charge

Total Non-Customer Costs	\$ 15,854	\$ 16,932	\$ 21,510	\$ 22,544	\$ 25,697	\$ 24,914	\$ 26,075	\$ 27,308	\$ 28,621	\$ 28,218
Total Volume	6,075,850	6,075,850	6,075,850	6,075,850	6,075,850	6,075,850	6,075,850	6,075,850	6,075,850	6,075,850
Total Non-Customer Cost	\$ 2.61	\$ 2.79	\$ 3.54	\$ 3.71	\$ 4.23	\$ 4.10	\$ 4.29	\$ 4.49	\$ 4.71	\$ 4.64

Calculation of Customer Charge

Monthly Minimum Volume	-	-	-	-	-	-	-	-	-	-
Non-Customer Charge/1,000 Gallons	\$ 2.61	\$ 2.79	\$ 3.54	\$ 3.71	\$ 4.23	\$ 4.10	\$ 4.29	\$ 4.49	\$ 4.71	\$ 4.64
Monthly Non-Customer Charge	-	-	-	-	-	-	-	-	-	-
Monthly Customer Charge	\$ 1.14	\$ 1.31	\$ 1.66	\$ 1.73	\$ 1.97	\$ 2.16	\$ 2.25	\$ 2.36	\$ 2.46	\$ 2.70

Monthly Customer Charge	\$ 1.14	\$ 1.31	\$ 1.66	\$ 1.73	\$ 1.97	\$ 2.16	\$ 2.25	\$ 2.36	\$ 2.46	\$ 2.70
--------------------------------	----------------	----------------	----------------	----------------	----------------	----------------	----------------	----------------	----------------	----------------

Calculation of Volumetric Charge

Monthly Customer Charge	\$ 1.14	\$ 1.31	\$ 1.66	\$ 1.73	\$ 1.97	\$ 2.16	\$ 2.25	\$ 2.36	\$ 2.46	\$ 2.70
Total Bills	48	48	48	48	48	48	48	48	48	48
Revenue from Customer Charge	\$ 55	\$ 63	\$ 80	\$ 83	\$ 95	\$ 104	\$ 108	\$ 113	\$ 118	\$ 130
Total Cost of Service	\$ 15,909	\$ 16,995	\$ 21,590	\$ 22,627	\$ 25,791	\$ 25,018	\$ 26,183	\$ 27,421	\$ 28,739	\$ 28,347
Net Cost of Service	\$ 15,854	\$ 16,932	\$ 21,510	\$ 22,544	\$ 25,697	\$ 24,914	\$ 26,075	\$ 27,308	\$ 28,621	\$ 28,218
Test Year Annual Volume after Minimum	6,075,850	6,075,850	6,075,850	6,075,850	6,075,850	6,075,850	6,075,850	6,075,850	6,075,850	6,075,850
Net Volumetric Charge	\$ 2.61	\$ 2.79	\$ 3.54	\$ 3.71	\$ 4.23	\$ 4.10	\$ 4.29	\$ 4.49	\$ 4.71	\$ 4.64

<p>10 Year Forecast 2012-2022</p>	<p>TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL</p>										
	Test Year	Forecast									
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	

Forecast W 8.0 -- WATER Cost of Service by Customer Class

Scenario: **Base Scenario - 1**

6" Turbine

Base	\$ 366,769	\$ 395,069	\$ 501,624	\$ 525,714	\$ 599,215	\$ 589,041	\$ 616,446	\$ 645,586	\$ 676,586	\$ 674,132
Max Day/Extra Capacity	226,345	238,019	302,648	317,215	361,602	341,703	357,640	374,587	392,617	379,291
Customer	82	94	119	125	142	155	162	170	177	195
Total Cost of Service	\$ 593,196	\$ 633,182	\$ 804,392	\$ 843,054	\$ 960,959	\$ 930,900	\$ 974,249	\$ 1,020,342	\$ 1,069,380	\$ 1,053,618

Calculation of Customer Costs/Bill

Total Customer Costs	\$ 82	\$ 94	\$ 119	\$ 125	\$ 142	\$ 155	\$ 162	\$ 170	\$ 177	\$ 195
Total Bills	72	72	72	72	72	72	72	72	72	72
Customer Cost/Bill	\$ 1.14	\$ 1.31	\$ 1.66	\$ 1.73	\$ 1.97	\$ 2.16	\$ 2.25	\$ 2.36	\$ 2.46	\$ 2.70

Calculation of Non-Customer Charge

Total Non-Customer Costs	\$ 593,114	\$ 633,088	\$ 804,273	\$ 842,930	\$ 960,817	\$ 930,744	\$ 974,087	\$ 1,020,173	\$ 1,069,202	\$ 1,053,423
Total Volume	219,200,330	219,200,330	219,200,330	219,200,330	219,200,330	219,200,330	219,200,330	219,200,330	219,200,330	219,200,330
Total Non-Customer Cost	\$ 2.71	\$ 2.89	\$ 3.67	\$ 3.85	\$ 4.38	\$ 4.25	\$ 4.44	\$ 4.65	\$ 4.88	\$ 4.81

Calculation of Customer Charge

Monthly Minimum Volume	-	-	-	-	-	-	-	-	-	-
Non-Customer Charge/1,000 Gallons	\$ 2.71	\$ 2.89	\$ 3.67	\$ 3.85	\$ 4.38	\$ 4.25	\$ 4.44	\$ 4.65	\$ 4.88	\$ 4.81
Monthly Non-Customer Charge	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Monthly Customer Charge	\$ 1.14	\$ 1.31	\$ 1.66	\$ 1.73	\$ 1.97	\$ 2.16	\$ 2.25	\$ 2.36	\$ 2.46	\$ 2.70

Monthly Customer Charge	\$ 1.14	\$ 1.31	\$ 1.66	\$ 1.73	\$ 1.97	\$ 2.16	\$ 2.25	\$ 2.36	\$ 2.46	\$ 2.70
--------------------------------	----------------	----------------	----------------	----------------	----------------	----------------	----------------	----------------	----------------	----------------

Calculation of Volumetric Charge

Monthly Customer Charge	\$ 1.14	\$ 1.31	\$ 1.66	\$ 1.73	\$ 1.97	\$ 2.16	\$ 2.25	\$ 2.36	\$ 2.46	\$ 2.70
Total Bills	72	72	72	72	72	72	72	72	72	72
Revenue from Customer Charge	\$ 82	\$ 94	\$ 119	\$ 125	\$ 142	\$ 155	\$ 162	\$ 170	\$ 177	\$ 195
Total Cost of Service	\$ 593,196	\$ 633,182	\$ 804,392	\$ 843,054	\$ 960,959	\$ 930,900	\$ 974,249	\$ 1,020,342	\$ 1,069,380	\$ 1,053,618
Net Cost of Service	\$ 593,114	\$ 633,088	\$ 804,273	\$ 842,930	\$ 960,817	\$ 930,744	\$ 974,087	\$ 1,020,173	\$ 1,069,202	\$ 1,053,423
Test Year Annual Volume after Minimum	219,200,330	219,200,330	219,200,330	219,200,330	219,200,330	219,200,330	219,200,330	219,200,330	219,200,330	219,200,330

Net Volumetric Charge	\$ 2.71	\$ 2.89	\$ 3.67	\$ 3.85	\$ 4.38	\$ 4.25	\$ 4.44	\$ 4.65	\$ 4.88	\$ 4.81
------------------------------	----------------	----------------	----------------	----------------	----------------	----------------	----------------	----------------	----------------	----------------

10 Year Forecast 2012-2022	TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL									
	Test Year 2012	Forecast 2013	2014	2015	2016	2017	2018	2019	2020	2021

Forecast W 8.0 -- WATER Cost of Service by Customer Class

Scenario: Base Scenario - 1

8" Turbine	Test Year 2012	Forecast 2013	2014	2015	2016	2017	2018	2019	2020	2021
Base	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Max Day/Extra Capacity	-	-	-	-	-	-	-	-	-	-
Customer	-	-	-	-	-	-	-	-	-	-
Total Cost of Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Calculation of Customer Costs/Bill										
Total Customer Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Bills	-	-	-	-	-	-	-	-	-	-
Customer Cost/Bill	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Calculation of Non-Customer Charge										
Total Non-Customer Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Volume	-	-	-	-	-	-	-	-	-	-
Total Non-Customer Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Calculation of Customer Charge										
Monthly Minimum Volume	-	-	-	-	-	-	-	-	-	-
Non-Customer Charge/1,000 Gallons	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Monthly Non-Customer Charge	-	-	-	-	-	-	-	-	-	-
Monthly Customer Charge	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Monthly Customer Charge	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Calculation of Volumetric Charge										
Monthly Customer Charge	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Bills	-	-	-	-	-	-	-	-	-	-
Revenue from Customer Charge	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Cost of Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Cost of Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Test Year Annual Volume after Minimum	-	-	-	-	-	-	-	-	-	-
Net Volumetric Charge	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CCA/New Prison										
Base	\$ 233,131	\$ 316,904	\$ 402,377	\$ 421,701	\$ 480,659	\$ 668,666	\$ 699,776	\$ 732,854	\$ 768,045	\$ 989,765
Max Day/Extra Capacity	331,189	439,505	558,846	585,743	667,704	892,917	934,563	978,847	1,025,961	1,281,912
Customer	27	47	60	62	71	104	108	113	118	162
Total Cost of Service	\$ 564,347	\$ 756,456	\$ 961,282	\$ 1,007,506	\$ 1,148,434	\$ 1,561,686	\$ 1,634,447	\$ 1,711,814	\$ 1,794,124	\$ 2,271,838
Calculation of Customer Costs/Bill										
Total Customer Costs	\$ 27	\$ 47	\$ 60	\$ 62	\$ 71	\$ 104	\$ 108	\$ 113	\$ 118	\$ 162
Total Bills	24	36	36	36	36	48	48	48	48	60
Customer Cost/Bill	\$ 1.14	\$ 1.31	\$ 1.66	\$ 1.73	\$ 1.97	\$ 2.16	\$ 2.25	\$ 2.36	\$ 2.46	\$ 2.70
Calculation of Non-Customer Charge										
Total Non-Customer Costs	\$ 564,320	\$ 756,409	\$ 961,222	\$ 1,007,444	\$ 1,148,363	\$ 1,561,583	\$ 1,634,339	\$ 1,711,701	\$ 1,794,006	\$ 2,271,676
Total Volume	139,331,125	175,831,125	175,831,125	175,831,125	175,831,125	248,831,125	248,831,125	248,831,125	248,831,125	321,831,125
Total Non-Customer Cost	\$ 4.05	\$ 4.30	\$ 5.47	\$ 5.73	\$ 6.53	\$ 6.28	\$ 6.57	\$ 6.88	\$ 7.21	\$ 7.06
Calculation of Customer Charge										
Monthly Minimum Volume	-	-	-	-	-	-	-	-	-	-
Non-Customer Charge/1,000 Gallons	\$ 4.05	\$ 4.30	\$ 5.47	\$ 5.73	\$ 6.53	\$ 6.28	\$ 6.57	\$ 6.88	\$ 7.21	\$ 7.06
Monthly Non-Customer Charge	-	-	-	-	-	-	-	-	-	-
Monthly Customer Charge	\$ 1.14	\$ 1.31	\$ 1.66	\$ 1.73	\$ 1.97	\$ 2.16	\$ 2.25	\$ 2.36	\$ 2.46	\$ 2.70

<p>10 Year Forecast 2012-2022</p>	<p>TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL</p>										
	Test Year	Forecast									
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	

Forecast W 8.0 -- WATER Cost of Service by Customer Class

Scenario: Base Scenario - 1

Monthly Customer Charge	\$	1.14	\$	1.31	\$	1.66	\$	1.73	\$	1.97	\$	2.16	\$	2.25	\$	2.36	\$	2.46	\$	2.70
Calculation of Volumetric Charge																				
Monthly Customer Charge	\$	1.14	\$	1.31	\$	1.66	\$	1.73	\$	1.97	\$	2.16	\$	2.25	\$	2.36	\$	2.46	\$	2.70
Total Bills		24		36		36		36		36		48		48		48		48		60
Revenue from Customer Charge	\$	27	\$	47	\$	60	\$	62	\$	71	\$	104	\$	108	\$	113	\$	118	\$	162
Total Cost of Service	\$	564,347	\$	756,456	\$	961,282	\$	1,007,506	\$	1,148,434	\$	1,561,686	\$	1,634,447	\$	1,711,814	\$	1,794,124	\$	2,271,838
Net Cost of Service	\$	564,320	\$	756,409	\$	961,222	\$	1,007,444	\$	1,148,363	\$	1,561,583	\$	1,634,339	\$	1,711,701	\$	1,794,006	\$	2,271,676
Test Year Annual Volume after Minimum		139,331,125		175,831,125		175,831,125		175,831,125		175,831,125		248,831,125		248,831,125		248,831,125		248,831,125		321,831,125
Net Volumetric Charge	\$	4.05	\$	4.30	\$	5.47	\$	5.73	\$	6.53	\$	6.28	\$	6.57	\$	6.88	\$	7.21	\$	7.06

10 Year Forecast 2012-2022	TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL									
	Test Year 2012	Forecast 2013	2014	2015	2016	2017	2018	2019	2020	2021

Forecast W 9.0 -- WATER Residential Fixed and Variable Cost Analysis

Scenario: Base Scenario - 1

Total System

Base	\$ 988,589	\$ 1,131,399	\$ 1,440,492	\$ 1,510,833	\$ 1,723,384	\$ 1,891,583	\$ 1,980,935	\$ 2,075,977	\$ 2,177,128	\$ 2,395,191
Max Day/Extra Capacity	988,589	1,131,399	1,440,492	1,510,833	1,723,384	1,891,583	1,980,935	2,075,977	2,177,128	2,395,191
Customer	48,631	55,656	70,860	74,321	84,776	93,050	97,446	102,121	107,097	117,824
Total Cost of Service	\$ 2,025,808	\$ 2,318,454	\$ 2,951,845	\$ 3,095,988	\$ 3,531,545	\$ 3,876,217	\$ 4,059,315	\$ 4,254,075	\$ 4,461,352	\$ 4,908,206
Total Bills	42,480	42,576	42,744	42,864	42,984	43,116	43,236	43,356	43,476	43,608
Monthly Cost per Bill	\$ 47.69	\$ 54.45	\$ 69.06	\$ 72.23	\$ 82.16	\$ 89.90	\$ 93.89	\$ 98.12	\$ 102.62	\$ 112.55
Percentage Fixed/Variable										
Fixed	72.2%	72.2%	72.2%	72.2%	72.2%	72.2%	72.2%	72.2%	72.2%	72.2%
Variable	27.8%	27.8%	27.8%	27.8%	27.8%	27.8%	27.8%	27.8%	27.8%	27.8%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Monthly Fixed Cost	\$ 34.45	\$ 39.34	\$ 49.89	\$ 52.18	\$ 59.36	\$ 64.95	\$ 67.83	\$ 70.89	\$ 74.13	\$ 81.31
Monthly Minimum Charge (Rate Calculator)	19.30	20.27	21.28	22.34	23.46	24.63	25.86	27.16	28.51	29.94
Difference	15.15	19.08	28.61	29.84	35.90	40.32	41.96	43.73	45.62	51.37

5/8" Inside

Base	\$ 278,299	\$ 299,998	\$ 381,427	\$ 400,224	\$ 456,726	\$ 449,508	\$ 470,982	\$ 493,831	\$ 518,158	\$ 516,890
Max Day/Extra Capacity	366,993	386,212	491,746	516,032	588,943	557,198	583,881	612,275	642,506	621,434
Customer	45,595	52,142	66,305	69,514	79,262	86,939	91,009	95,338	99,943	109,880
Total Cost of Service	\$ 690,886	\$ 738,351	\$ 939,477	\$ 985,771	\$ 1,124,931	\$ 1,093,645	\$ 1,145,872	\$ 1,201,444	\$ 1,260,608	\$ 1,248,204
Total Bills	39,828	39,888	39,996	40,092	40,188	40,284	40,380	40,476	40,572	40,668
Monthly Cost per Bill	\$ 17.35	\$ 18.51	\$ 23.49	\$ 24.59	\$ 27.99	\$ 27.15	\$ 28.38	\$ 29.68	\$ 31.07	\$ 30.69
Percentage Fixed/Variable										
Fixed	72.2%	72.2%	72.2%	72.2%	72.2%	72.2%	72.2%	72.2%	72.2%	72.2%
Variable	27.8%	27.8%	27.8%	27.8%	27.8%	27.8%	27.8%	27.8%	27.8%	27.8%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Monthly Fixed Cost	\$ 12.53	\$ 13.37	\$ 16.97	\$ 17.76	\$ 20.22	\$ 19.61	\$ 20.50	\$ 21.44	\$ 22.45	\$ 22.17
Monthly Minimum Charge (Rate Calculator)	19.30	20.27	21.28	22.34	23.46	24.63	25.86	27.16	28.51	29.94
Difference	(6.77)	(6.89)	(4.31)	(4.58)	(3.24)	(5.02)	(5.36)	(5.71)	(6.07)	(7.77)

Test Year 2012	TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL					
	Water Budget	Treatment				Customer Billing
		Volume	BOD	TSS	Collection	Admin

**Test Year WW 1.0 – WASTEWATER Service Cost Functionalization
Scenario: Base Scenario - 1**

NON-RATE REVENUES

Non-Rate Revenues									
52-345-682	Florence WW - Int Earnings	\$	20,000	na	na	na	na	na	na
52-350-375	Florence WW - Op Agreement Fee		50,000	na	na	na	na	na	na
52-350-697	Florence WW - Recovery from Bad Debt		-	na	na	na	na	na	na
52-350-698	Florence WW - Miscellaneous		1,500	na	na	na	na	na	na
52-389-690	Proceeds from WIFA		-	na	na	na	na	na	na
52-371-450	Sewer User Fees		-	na	na	na	na	na	na
52-371-452	DOC Sewer Usage Fee		-	na	na	na	na	na	na
62-345-682	N. Florence WW - Int Earnings		6,000	na	na	na	na	na	na
62-350-691	N. Florence - Adjustments		-	na	na	na	na	na	na
62-345-697	N. Florence WW - Recovery from Bad Debt		-	na	na	na	na	na	na
0	Other		-	na	na	na	na	na	na
0	Other		-	na	na	na	na	na	na
0	Other		-	na	na	na	na	na	na
0	Other		-	na	na	na	na	na	na
0	Other		-	na	na	na	na	na	na
0	Other		-	na	na	na	na	na	na
Total Non-Rate Revenues		\$	77,500						

OPERATING EXPENSES

PERSONNEL SERVICES

101.000	Salaries and Wages	\$	342,585	102,776	51,388	51,388	68,517	34,259	34,259
102.000	Part-time Salaries		5,700	1,710	855	855	1,140	570	570
103.000	Overtime		26,000	7,800	3,900	3,900	5,200	2,600	2,600
105.000	Holiday Pay		12,775	3,833	1,916	1,916	2,555	1,278	1,278
106.000	Stand-By		6,450	1,935	968	968	1,290	645	645
111.000	AZ Retirement		39,825	11,948	5,974	5,974	7,965	3,983	3,983
121.000	FICA - Employer's Portion		30,150	9,045	4,523	4,523	6,030	3,015	3,015
122.000	Unemployment		-	-	-	-	-	-	-
123.000	Workers Compensation		11,475	3,443	1,721	1,721	2,295	1,148	1,148
124.000	Health, Accident & Life Insurance		92,400	27,720	13,860	13,860	18,480	9,240	9,240
Total Personnel Services		\$	567,360	\$ 170,208	\$ 85,104	\$ 85,104	\$ 113,472	\$ 56,736	\$ 56,736

TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL							
Test Year 2012							
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 15%;">Water Budget</th> <th style="width: 15%;">Volume</th> <th style="width: 15%;">Treatment BOD</th> <th style="width: 15%;">TSS</th> <th style="width: 15%;">Collection</th> <th style="width: 15%;">Admin</th> <th style="width: 15%;">Customer Billing</th> </tr> </table>	Water Budget	Volume	Treatment BOD	TSS	Collection	Admin	Customer Billing
Water Budget	Volume	Treatment BOD	TSS	Collection	Admin	Customer Billing	

Test Year WW 1.0 – WASTEWATER Service Cost Functionalization Scenario: Base Scenario - 1

	Water Budget	Volume	Treatment BOD	TSS	Collection	Admin	Customer Billing
CONTRACTUAL SERVICES/MAINT							
201.000 Telephone	\$ 5,060	-	-	-	-	3,795	1,265
202.000 Postage	2,000	-	-	-	-	500	1,500
203.000 Reproduction/ Printing	495	-	-	-	-	495	-
204.000 Data Processing	-	-	-	-	-	-	-
205.000 Legal Publications	550	-	-	-	-	550	-
206.000 Liability Insurance	59,400	-	-	-	-	59,400	-
209.000 Vehicle Repair and Maint	7,500	7,500	-	-	-	-	-
210.000 Radio Repair and Maint	-	-	-	-	-	-	-
211.000 Maintenance Other	244,000	48,800	-	195,200	-	-	-
212.000 Water Charge	73,200	73,200	-	-	-	-	-
215.000 Electrical Charge	507,500	101,500	355,250	50,750	-	-	-
217.000 Professional Services	217,000	-	-	-	-	217,000	-
218.000 Engineering and Architectural	5,750	-	-	-	-	5,750	-
219.000 Financial Audit	6,000	-	-	-	-	6,000	-
222.000 Rental Charges	-	-	-	-	-	-	-
226.000 Facility Repair	-	-	-	-	-	-	-
231.000 Computer Lease	-	-	-	-	-	-	-
Total Contractual Services	\$ 1,128,455	\$ 231,000	\$ 355,250	\$ 245,950	\$ -	\$ 293,490	\$ 2,765
COMMODITIES							
301.000 Office Supplies	\$ 2,540	-	-	-	-	1,905	635
302.000 Operating Supplies	20,940	10,470	5,235	5,235	-	-	-
304.000 Uniform Allowance	7,150	1,073	536	536	715	3,039	1,251
305.000 Tires - Batteries, etc.	4,400	4,400	-	-	-	-	-
306.000 Fuel - Oil	29,000	29,000	-	-	-	-	-
308.000 Books	935	-	-	-	-	935	-
310.000 Chemicals	73,400	36,700	-	36,700	-	-	-
311.000 Small Tools	4,400	2,200	-	-	2,200	-	-
312.000 Safety Equipment	9,700	4,850	-	-	4,850	-	-
313.000 Training Materials	935	935	-	-	-	-	-
315.000 Janitorial Supplies	-	-	-	-	-	-	-
316.000 Facilities Maintenance	21,050	6,947	6,947	7,157	-	-	-
317.000 Land Maintenance	2,530	835	835	860	-	-	-
318.000 Sidewalk Repair and Maintenance	-	-	-	-	-	-	-
320.000 Utility Lines Repair and Maintenance	46,400	-	-	-	46,400	-	-
324.000 Computers/ Printers	2,420	-	-	-	-	1,815	605
Total Commodities	\$ 225,800	\$ 97,409	\$ 13,553	\$ 50,488	\$ 54,165	\$ 7,694	\$ 2,491
OTHER CHARGES							
401.000 Dues, Subscriptions	\$ 550	-	-	-	-	550	-
402.000 Conferences, Business Meetings	400	-	-	-	-	400	-
403.000 Training & Development	1,500	-	-	-	-	1,500	-
408.000 Miscellaneous Charges	24,585	6,146	6,146	12,293	-	-	-
409.000 Water Fees, Assessments, Replace	-	-	-	-	-	-	-
Total Other Charges	\$ 27,035	\$ 6,146	\$ 6,146	\$ 12,293	\$ -	\$ 2,450	\$ -
Total WW Operating Expense	\$ 1,948,650	\$ 504,763	\$ 460,053	\$ 393,835	\$ 167,637	\$ 360,370	\$ 61,992
Percent	100.0%	25.9%	23.6%	20.2%	8.6%	18.5%	3.2%

Test Year 2012	TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL						
	Water Budget	Treatment				Admin	Customer Billing
		Volume	BOD	TSS	Collection		

**Test Year WW 1.0 – WASTEWATER Service Cost Functionalization
Scenario: Base Scenario - 1**

TRANSFERS

596.000	Debt Service Transfers	\$	-	-	-	-	-	-
597.000	Operating Transfers		284,959				284,959	
0.000	Other							
0.000	Other							
0.000	Other							
Total Transfers		\$	284,959	\$	-	\$	-	\$
Percent			100.0%		0.0%		0.0%	0.0%

CAPITAL OUTLAYS

Total Capital Outlays	\$	9,000	\$	9,000	\$	-	\$	-
Percent		100.0%		100.0%		0.0%		0.0%

TOTAL OPERATING/TRANSFERS/CAPITAL OUTLAYS	\$	2,242,609	\$	513,763	\$	460,053	\$	393,835
Percent		100.0%		22.9%		20.5%		17.6%

DEBT SERVICE

Wastewater Debt Service								
P&I	\$	627,792		na		na		na
Reserve		-		na		na		na
TOTAL DEBT SERVICE -- WASTEWATER	\$	627,792	\$	207,171	\$	207,171	\$	213,449
		100.0%		33.0%		33.0%		34.0%

TOTAL COST OF SERVICE

TOTAL COST OF SERVICE	\$	2,870,401	\$	720,934	\$	667,224	\$	607,284
		100.0%		25.1%		23.2%		21.2%

NON RATE REVENUES

TOTAL NON-RATE REVENUES	\$	77,500	\$	19,465	\$	18,015	\$	16,396
		100.0%		25.1%		23.2%		21.2%

TOTAL REVENUE REQUIREMENT

TOTAL REVENUE REQUIREMENT	\$	2,792,901	\$	701,469	\$	649,209	\$	590,888
		100.0%		25.1%		23.2%		21.2%

Test Year 2012	TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL						
	Water Budget	Treatment			Collection	Admin	Customer Billing
		Volume	BOD	TSS			

Test Year WW 2.0 -- WASTEWATER Service Cost Functionalization
Scenario: Base Scenario - 1

TOTAL WASTEWATER COST OF SERVICE

<u>Operating Costs</u>														
Personnel	\$	567,360	\$	170,208	\$	85,104	\$	85,104	\$	113,472	\$	56,736	\$	56,736
Total Contractual Services		1,128,455		231,000		355,250		245,950		-		293,490		2,765
Total Commodities		225,800		97,409		13,553		50,488		54,165		7,694		2,491
Total Other Charges		27,035		6,146		6,146		12,293		-		2,450		-
Total		1,948,650		504,763		460,053		393,835		167,637		360,370		61,992
Percent		100.0%		25.9%		23.6%		20.2%		8.6%		18.5%		3.2%
Transfers		284,959		-		-		-		-		284,959		-
Percent		100.0%		0.0%		0.0%		0.0%		0.0%		100.0%		0.0%
<u>Capital Expenses</u>														
Capital Outlays		9,000		9,000		-		-		-		-		-
Debt Service		627,792		207,171		207,171		213,449		-		-		-
Total		636,792		216,171		207,171		213,449		-		-		-
Total Cost of Service	\$	2,870,401	\$	720,934	\$	667,224	\$	607,284	\$	167,637	\$	645,329	\$	61,992
Percent		100.0%		25.1%		23.2%		21.2%		5.8%		22.5%		2.2%

ALLOCATION OF ADMINISTRATION EXPENSES

Cost of Service net of Administration	\$	2,225,072	\$	720,934	\$	667,224	\$	607,284	\$	167,637	\$	61,992	
Percent		100.0%		32.4%		30.0%		27.3%		7.5%		0.0%	2.8%
Administration		645,329		209,090		193,512		176,128		48,619		-	17,979
Percent		100.0%		32.4%		30.0%		27.3%		7.5%		0.0%	2.8%
Allocated Cost of Service		2,870,401		930,024		860,737		783,412		216,256		-	79,972
Percent		100.0%		32.4%		30.0%		27.3%		7.5%		0.0%	2.8%
Less Non-Rate Revenues		77,500		25,110		23,240		21,152		5,839		-	2,159
Percent		100.0%		32.4%		30.0%		27.3%		7.5%		0.0%	2.8%
Allocated Wastewater Revenue Requirement	\$	2,792,901	\$	904,914	\$	837,497	\$	762,260	\$	210,417	\$	-	77,812
Percent		100.0%		32.4%		30.0%		27.3%		7.5%		0.0%	2.8%

<p>10 Year Forecast 2012-2022</p>	<p>TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL</p>								
<p>Test Year 2012</p>	<p>Forecast 2013</p>	<p>2014</p>	<p>2015</p>	<p>2016</p>	<p>2017</p>	<p>2018</p>	<p>2019</p>	<p>2020</p>	<p>2021</p>

Forecast WW 3.0 -- WASTEWATER Service Revenue Requirement Raised from Rates
Scenario: Base Scenario - 1

NON-RATE REVENUES

Non-Rate Revenues

52-345-682 Florence WW - Int Earnings	\$	20,000	\$	20,000	\$	20,000	\$	20,000	\$	20,000	\$	20,000	\$	20,000	\$	20,000	\$	20,000	\$	20,000
52-350-375 Florence WW - Op Agreement Fee		50,000		50,000		50,000		50,000		50,000		50,000		50,000		50,000		50,000		50,000
52-350-697 Florence WW - Recovery from Bad Debt		-		-		-		-		-		-		-		-		-		-
52-350-698 Florence WW - Miscellaneous		1,500		1,500		1,500		1,500		1,500		1,500		1,500		1,500		1,500		1,500
52-389-690 Proceeds from WIFA		-		-		-		-		-		-		-		-		-		-
52-371-450 Sewer User Fees		-		-		-		-		-		-		-		-		-		-
52-371-452 DOC Sewer Usage Fee		-		-		-		-		-		-		-		-		-		-
62-345-682 N. Florence WW - Int Earnings		6,000		6,000		6,000		6,000		6,000		6,000		6,000		6,000		6,000		6,000
62-350-691 N. Florence - Adjustments		-		-		-		-		-		-		-		-		-		-
62-345-697 N. Florence WW - Recovery from Bad Debt		-		-		-		-		-		-		-		-		-		-
0 Other		-		-		-		-		-		-		-		-		-		-
0 Other		-		-		-		-		-		-		-		-		-		-
0 Other		-		-		-		-		-		-		-		-		-		-
0 Other		-		-		-		-		-		-		-		-		-		-
0 Other		-		-		-		-		-		-		-		-		-		-
Total Non-Rate Revenues	\$	77,500	\$	77,500	\$	77,500	\$	77,500	\$	77,500	\$	77,500	\$	77,500	\$	77,500	\$	77,500	\$	77,500

OPERATING EXPENSES

PERSONNEL SERVICES

101.000 Salaries and Wages	\$	342,585	\$	359,714	\$	377,700	\$	396,585	\$	594,877	\$	624,621	\$	655,852	\$	688,645	\$	723,077	\$	759,231
102.000 Part-time Salaries		5,700		5,985		6,284		6,598		9,898		10,393		10,912		11,458		12,031		12,632
103.000 Overtime		26,000		27,300		28,665		30,098		45,147		47,405		49,775		52,264		54,877		57,621
105.000 Holiday Pay		12,775		13,414		14,084		14,789		22,183		23,292		24,457		25,680		26,964		28,312
106.000 Stand-By		6,450		6,773		7,111		7,467		11,200		11,760		12,348		12,965		13,614		14,294
111.000 AZ Retirement		39,825		41,816		43,907		46,102		69,154		72,611		76,242		80,054		84,057		88,259
121.000 FICA - Employer's Portion		30,150		31,658		33,240		34,902		52,354		54,971		57,720		60,606		63,636		66,818
122.000 Unemployment		-		-		-		-		-		-		-		-		-		-
123.000 Workers Compensation		11,475		12,623		13,885		15,273		22,910		25,201		27,721		30,493		33,542		36,897
124.000 Health, Accident & Life Insurance		92,400		101,640		111,804		122,984		184,477		202,924		223,217		245,538		270,092		297,101
Total Personnel Services		567,360		600,922		636,681		674,799		1,012,199		1,073,178		1,138,244		1,207,703		1,281,889		1,361,166

<p>10 Year Forecast 2012-2022</p>	<p>TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL</p>								
<p>Test Year 2012</p>	<p>Forecast 2013</p>	<p>2014</p>	<p>2015</p>	<p>2016</p>	<p>2017</p>	<p>2018</p>	<p>2019</p>	<p>2020</p>	<p>2021</p>

Forecast WW 3.0 -- WASTEWATER Service Revenue Requirement Raised from Rates
Scenario: Base Scenario - 1

CONTRACTUAL SERVICES/MAINT

201.000 Telephone	\$ 5,060	\$ 5,273	\$ 5,500	\$ 5,736	\$ 5,983	\$ 6,243	\$ 6,511	\$ 6,791	\$ 7,083	\$ 7,390
202.000 Postage	2,000	2,084	2,174	2,267	2,365	2,467	2,574	2,684	2,800	2,921
203.000 Reproduction/ Printing	495	516	538	561	585	611	637	664	693	723
204.000 Data Processing	-	-	-	-	-	-	-	-	-	-
205.000 Legal Publications	550	572	595	619	643	669	696	724	753	783
206.000 Liability Insurance	59,400	64,867	70,903	77,500	84,710	92,618	101,233	110,647	120,937	132,222
209.000 Vehicle Repair and Maint	7,500	8,190	8,524	8,871	9,232	10,750	11,187	11,642	12,116	14,635
210.000 Radio Repair and Maint	-	-	-	-	-	-	-	-	-	-
211.000 Maintenance Other	244,000	266,442	277,298	288,597	300,357	349,739	363,960	378,760	394,161	476,122
212.000 Water Charge	73,200	79,932	83,189	86,579	90,107	104,922	109,188	113,628	118,248	142,836
215.000 Electrical Charge	507,500	579,551	632,144	689,509	1,034,264	1,256,023	1,369,898	1,494,097	1,629,555	2,049,876
217.000 Professional Services	217,000	225,680	234,707	244,095	253,859	264,014	274,574	285,557	296,979	308,859
218.000 Engineering and Architectural	5,750	5,980	6,219	6,468	6,727	6,996	7,276	7,567	7,869	8,184
219.000 Financial Audit	6,000	6,240	6,490	6,749	7,019	7,300	7,592	7,896	8,211	8,540
222.000 Rental Charges	-	-	-	-	-	-	-	-	-	-
226.000 Facility Repair	-	-	-	-	-	-	-	-	-	-
231.000 Computer Lease	-	-	-	-	-	-	-	-	-	-
Total Contractual Services	1,128,455	1,245,327	1,328,281	1,417,553	1,795,852	2,102,351	2,255,326	2,420,658	2,599,406	3,153,091

COMMODITIES

301.000 Office Supplies	\$ 2,540	\$ 2,642	\$ 2,747	\$ 2,857	\$ 2,971	\$ 3,090	\$ 3,214	\$ 3,342	\$ 3,476	\$ 3,615
302.000 Operating Supplies	20,940	22,866	23,798	24,767	25,777	30,014	31,235	32,505	33,827	40,861
304.000 Uniform Allowance	7,150	7,436	7,733	8,043	8,364	8,699	9,047	9,409	9,785	10,177
305.000 Tires - Batteries, etc.	4,400	4,805	5,000	5,204	5,416	6,307	6,563	6,830	7,108	8,586
306.000 Fuel - Oil	29,000	33,117	36,123	39,401	42,976	52,191	56,922	62,083	67,712	85,177
308.000 Books	935	972	1,011	1,052	1,094	1,138	1,183	1,230	1,280	1,331
310.000 Chemicals	73,400	83,821	91,427	99,724	149,586	181,659	198,129	216,092	235,683	296,475
311.000 Small Tools	4,400	4,805	5,000	5,204	5,416	6,307	6,563	6,830	7,108	8,586
312.000 Safety Equipment	9,700	10,592	11,024	11,473	11,940	13,904	14,469	15,057	15,670	18,928
313.000 Training Materials	935	1,021	1,063	1,106	1,151	1,340	1,395	1,451	1,510	1,824
315.000 Janitorial Supplies	-	-	-	-	-	-	-	-	-	-
316.000 Facilities Maintenance	21,050	22,986	23,923	24,897	25,912	30,172	31,399	32,676	34,004	41,075
317.000 Land Maintenance	2,530	2,631	2,736	2,846	2,960	3,078	3,201	3,329	3,462	3,601
318.000 Sidewalk Repair and Manintenance	-	-	-	-	-	-	-	-	-	-
320.000 Utility Lines Repair and Maintenance	46,400	50,668	52,732	54,881	57,117	66,508	69,212	72,027	74,955	90,541
324.000 Computers/ Printers	2,420	2,517	2,617	2,722	2,831	2,944	3,062	3,185	3,312	3,444
Total Commodities	225,800	250,878	266,936	284,177	343,512	407,351	435,595	466,047	498,893	614,221

OTHER CHARGES

401.000 Dues, Subscriptions	\$ 550	\$ 572	\$ 595	\$ 619	\$ 643	\$ 669	\$ 696	\$ 724	\$ 753	\$ 783
402.000 Conferences, Business Meetings	400	416	433	450	468	487	506	526	547	569
403.000 Training & Development	1,500	1,560	1,622	1,687	1,755	1,825	1,898	1,974	2,053	2,135
408.000 Miscellaneous Charges	24,585	25,568	26,591	27,655	28,761	29,911	31,108	32,352	33,646	34,992
409.000 Water Fees, Assessments, Replace	-	-	-	-	-	-	-	-	-	-
Total Other Charges	27,035	28,116	29,241	30,411	31,627	32,892	34,208	35,576	36,999	38,479

TOTAL WASTEWATER OPERATING \$ 1,948,650 \$ 2,125,243 \$ 2,261,139 \$ 2,406,940 \$ 3,183,190 \$ 3,615,772 \$ 3,863,372 \$ 4,129,984 \$ 4,417,188 \$ 5,166,956

10 Year Forecast 2012-2022	TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL									
	Test Year 2012	Forecast 2013	2014	2015	2016	2017	2018	2019	2020	2021

Forecast WW 3.0 -- WASTEWATER Service Revenue Requirement Raised from Rates
Scenario: Base Scenario - 1

TRANSFERS

596,000 Debt Service Transfers	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
597,000 Operating Transfers		284,959		296,357		308,212		320,540		333,362		346,696		360,564
0,000 Other		-		-		-		-		-		-		-
0,000 Other		-		-		-		-		-		-		-
0,000 Other		-		-		-		-		-		-		-
TOTAL TRANSFERS		284,959		296,357		308,212		320,540		333,362		346,696		360,564

CAPITAL OUTLAYS - WASTEWATER

Treatment -- Volume	\$	9,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Treatment -- BOD		-		-		-		-		-		-		-
Treatment -- TSS		-		-		-		-		-		-		-
Collection		-		-		-		-		-		-		-
Administration		-		-		-		-		-		-		-
Customer		-		-		-		-		-		-		-
TOTAL WW CAPITAL OUTLAYS	\$	9,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-

DEBT SERVICE

Wastewater Debt Service														
Principal & Interest	\$	627,792	\$	627,792	\$	627,792	\$	2,013,791	\$	2,013,794	\$	2,804,811	\$	2,804,812
Reserve		-		-		-		-		-		-		-
TOTAL DEBT SERVICE	\$	627,792	\$	627,792	\$	627,792	\$	2,013,791	\$	2,013,794	\$	2,804,811	\$	2,804,812

TOTAL COST OF SERVICE

TOTAL WASTEWATER COST OF SERVICE	\$	2,870,401	\$	3,049,392	\$	3,197,142	\$	4,741,271	\$	5,530,346	\$	6,767,280	\$	7,028,749	\$	7,309,783	\$	7,611,985	\$	8,377,355
---	-----------	------------------	-----------	------------------	-----------	------------------	-----------	------------------	-----------	------------------	-----------	------------------	-----------	------------------	-----------	------------------	-----------	------------------	-----------	------------------

NON RATE REVENUES

TOTAL NON-RATE REVENUES	\$	77,500	\$	77,500	\$	77,500	\$	77,500	\$	77,500	\$	77,500	\$	77,500	\$	77,500	\$	77,500	\$	77,500
--------------------------------	-----------	---------------	-----------	---------------	-----------	---------------	-----------	---------------	-----------	---------------	-----------	---------------	-----------	---------------	-----------	---------------	-----------	---------------	-----------	---------------

TOTAL REVENUE REQUIREMENT

TOTAL WASTEWATER REVENUE REQUIREMENT	\$	2,792,901	\$	2,971,892	\$	3,119,642	\$	4,663,771	\$	5,452,846	\$	6,689,780	\$	6,951,249	\$	7,232,283	\$	7,534,485	\$	8,299,855
---	-----------	------------------	-----------	------------------	-----------	------------------	-----------	------------------	-----------	------------------	-----------	------------------	-----------	------------------	-----------	------------------	-----------	------------------	-----------	------------------

TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL										
	Test Year	Forecast								
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021

Forecast WW 4.0 -- Wastewater Service Cost Functionalization
Scenario: Base Scenario - 1

OPERATING EXPENSES

<u>Allocation Factor</u>										
Treatment -- Volume	25.9%	25.9%	25.9%	25.9%	25.9%	25.9%	25.9%	25.9%	25.9%	25.9%
Treatment -- BOD	23.6%	23.6%	23.6%	23.6%	23.6%	23.6%	23.6%	23.6%	23.6%	23.6%
Treatment -- TSS	20.2%	20.2%	20.2%	20.2%	20.2%	20.2%	20.2%	20.2%	20.2%	20.2%
Collection	8.6%	8.6%	8.6%	8.6%	8.6%	8.6%	8.6%	8.6%	8.6%	8.6%
Administration	18.5%	18.5%	18.5%	18.5%	18.5%	18.5%	18.5%	18.5%	18.5%	18.5%
Customer	<u>3.2%</u>	<u>3.2%</u>	<u>3.2%</u>	<u>3.2%</u>	<u>3.2%</u>	<u>3.2%</u>	<u>3.2%</u>	<u>3.2%</u>	<u>3.2%</u>	<u>3.2%</u>
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

<u>Total Cost</u>										
Treatment -- Volume	\$ 504,763	\$ 550,506	\$ 585,708	\$ 623,475	\$ 824,549	\$ 936,602	\$ 1,000,738	\$ 1,069,799	\$ 1,144,194	\$ 1,338,408
Treatment -- BOD	460,053	501,744	533,828	568,250	751,513	853,641	912,096	975,040	1,042,845	1,219,856
Treatment -- TSS	393,835	429,526	456,991	486,458	643,344	730,771	780,813	834,697	892,743	1,044,276
Collection	167,637	182,829	194,520	207,062	273,841	311,055	332,355	355,291	379,999	444,499
Administration	360,370	393,028	418,159	445,123	588,677	668,676	714,465	763,770	816,884	955,541
Customer	61,992	67,610	71,933	76,572	101,267	115,028	122,905	131,387	140,524	164,376
Total	\$ 1,948,650	\$ 2,125,243	\$ 2,261,139	\$ 2,406,940	\$ 3,183,190	\$ 3,615,772	\$ 3,863,372	\$ 4,129,984	\$ 4,417,188	\$ 5,166,956

TRANSFERS

<u>Allocation Factor</u>										
Treatment -- Volume	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Treatment -- BOD	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Treatment -- TSS	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Collection	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Administration	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Customer	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

<u>Total Cost</u>										
Treatment -- Volume	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Treatment -- BOD	-	-	-	-	-	-	-	-	-	-
Treatment -- TSS	-	-	-	-	-	-	-	-	-	-
Collection	-	-	-	-	-	-	-	-	-	-
Administration	284,959	296,357	308,212	320,540	333,362	346,696	360,564	374,987	389,986	405,586
Customer	-	-	-	-	-	-	-	-	-	-
Total	\$ 284,959	\$ 296,357	\$ 308,212	\$ 320,540	\$ 333,362	\$ 346,696	\$ 360,564	\$ 374,987	\$ 389,986	\$ 405,586

TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL										
	Test Year	Forecast								
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021

Forecast WW 4.0 -- Wastewater Service Cost Functionalization
Scenario: Base Scenario - 1

CAPITAL OUTLAYS

Treatment -- Volume	\$ 9,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Treatment -- BOD	-	-	-	-	-	-	-	-	-	-	-
Treatment -- TSS	-	-	-	-	-	-	-	-	-	-	-
Collection	-	-	-	-	-	-	-	-	-	-	-
Administration	-	-	-	-	-	-	-	-	-	-	-
Customer	-	-	-	-	-	-	-	-	-	-	-
Total Capital Outlays	\$ 9,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

DEBT SERVICE

Treatment -- Volume	\$ 207,171	\$ 207,171	\$ 207,171	\$ 664,551	\$ 664,552	\$ 925,588	\$ 925,588	\$ 925,588	\$ 925,588	\$ 925,588	\$ 925,589
Treatment -- BOD	207,171	207,171	207,171	664,551	664,552	925,588	925,588	925,588	925,588	925,588	925,589
Treatment -- TSS	213,449	213,449	213,449	684,689	684,690	953,636	953,636	953,636	953,636	953,636	953,637
Collection	-	-	-	-	-	-	-	-	-	-	-
Administration	-	-	-	-	-	-	-	-	-	-	-
Customer	-	-	-	-	-	-	-	-	-	-	-
Total Debt Service	\$ 627,792	\$ 627,792	\$ 627,792	\$ 2,013,791	\$ 2,013,794	\$ 2,804,811	\$ 2,804,812	\$ 2,804,813	\$ 2,804,811	\$ 2,804,811	\$ 2,804,814

TOTAL COST OF SERVICE

Total Wastewater Cost of Service

Treatment -- Volume	\$ 720,934	\$ 757,678	\$ 792,879	\$ 1,288,026	\$ 1,489,101	\$ 1,862,189	\$ 1,926,326	\$ 1,995,387	\$ 2,069,782	\$ 2,263,997
Treatment -- BOD	667,224	708,916	740,999	1,232,801	1,416,065	1,779,228	1,837,684	1,900,628	1,968,433	2,145,445
Treatment -- TSS	607,284	642,975	670,440	1,171,147	1,328,033	1,684,407	1,734,449	1,788,333	1,846,378	1,997,912
Collection	167,637	182,829	194,520	207,062	273,841	311,055	332,355	355,291	379,999	444,499
Administration	645,329	689,385	726,371	765,663	922,039	1,015,372	1,075,029	1,138,757	1,206,870	1,361,126
Customer	61,992	67,610	71,933	76,572	101,267	115,028	122,905	131,387	140,524	164,376
Total	\$ 2,870,401	\$ 3,049,392	\$ 3,197,142	\$ 4,741,271	\$ 5,530,346	\$ 6,767,280	\$ 7,028,749	\$ 7,309,783	\$ 7,611,985	\$ 8,377,355

<div style="border: 1px solid black; padding: 5px; display: inline-block; background-color: white; color: black;"> TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL </div>										
	Test Year	Forecast								
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021

Forecast WW 4.0 -- Wastewater Service Cost Functionalization
Scenario: Base Scenario - 1

ALLOCATION OF ADMINISTRATION EXPENSES

Cost of Service Net of Administration

Treatment -- Volume	\$ 720,934	\$ 757,678	\$ 792,879	\$ 1,288,026	\$ 1,489,101	\$ 1,862,189	\$ 1,926,326	\$ 1,995,387	\$ 2,069,782	\$ 2,263,997
Treatment -- BOD	667,224	708,916	740,999	1,232,801	1,416,065	1,779,228	1,837,684	1,900,628	1,968,433	2,145,445
Treatment -- TSS	607,284	642,975	670,440	1,171,147	1,328,033	1,684,407	1,734,449	1,788,333	1,846,378	1,997,912
Collection	167,637	182,829	194,520	207,062	273,841	311,055	332,355	355,291	379,999	444,499
Administration	na	na	na	na	na	na	na	na	na	na
Customer	61,992	67,610	71,933	76,572	101,267	115,028	122,905	131,387	140,524	164,376
Total	\$ 2,225,072	\$ 2,360,007	\$ 2,470,771	\$ 3,975,608	\$ 4,608,307	\$ 5,751,908	\$ 5,953,719	\$ 6,171,026	\$ 6,405,115	\$ 7,016,229

Percent Allocation

Treatment -- Volume	32.4%	32.1%	32.1%	32.4%	32.3%	32.4%	32.4%	32.3%	32.3%	32.3%
Treatment -- BOD	30.0%	30.0%	30.0%	31.0%	30.7%	30.9%	30.9%	30.8%	30.7%	30.6%
Treatment -- TSS	27.3%	27.2%	27.1%	29.5%	28.8%	29.3%	29.1%	29.0%	28.8%	28.5%
Collection	7.5%	7.7%	7.9%	5.2%	5.9%	5.4%	5.6%	5.8%	5.9%	6.3%
Administration	na	na	na	na	na	na	na	na	na	na
Customer	2.8%	2.9%	2.9%	1.9%	2.2%	2.0%	2.1%	2.1%	2.2%	2.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Allocation of Administration

Treatment -- Volume	\$ 209,090	\$ 221,326	\$ 233,095	\$ 248,061	\$ 297,942	\$ 328,728	\$ 347,826	\$ 368,214	\$ 389,994	\$ 439,208
Treatment -- BOD	193,512	207,082	217,843	237,425	283,329	314,083	331,820	350,728	370,898	416,210
Treatment -- TSS	176,128	187,820	197,100	225,551	265,715	297,345	313,180	330,006	347,900	387,589
Collection	48,619	53,406	57,186	39,878	54,791	54,910	60,012	65,563	71,600	86,231
Administration	na	na	na	na	na	na	na	na	na	na
Customer	17,979	19,750	21,147	14,747	20,262	20,306	22,192	24,245	26,478	31,888
Total	645,329	689,385	726,371	765,663	922,039	1,015,372	1,075,029	1,138,757	1,206,870	1,361,126

Allocated Cost of Service

Treatment -- Volume	\$ 930,024	\$ 979,004	\$ 1,025,974	\$ 1,536,087	\$ 1,787,043	\$ 2,190,918	\$ 2,274,152	\$ 2,363,601	\$ 2,459,776	\$ 2,703,205
Treatment -- BOD	860,737	915,998	958,842	1,470,226	1,699,394	2,093,312	2,169,504	2,251,356	2,339,330	2,561,654
Treatment -- TSS	783,412	830,795	867,540	1,396,699	1,593,749	1,981,752	2,047,629	2,118,339	2,194,278	2,385,501
Collection	216,256	236,235	251,705	246,941	328,632	365,965	392,367	420,854	451,599	530,730
Administration	na	na	na	na	na	na	na	na	na	na
Customer	79,972	87,360	93,081	91,319	121,528	135,334	145,097	155,632	167,002	196,264
Total	2,870,401	3,049,392	3,197,142	4,741,271	5,530,346	6,767,280	7,028,749	7,309,783	7,611,985	8,377,355

<div style="border: 1px solid black; padding: 5px; display: inline-block;"> TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL </div>										
	Test Year	Forecast								
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021

Forecast WW 4.0 -- Wastewater Service Cost Functionalization
Scenario: Base Scenario - 1

Less Non-Rate Revenues

Treatment -- Volume	\$	25,110	\$	24,881	\$	24,870	\$	25,109	\$	25,043	\$	25,091	\$	25,075	\$	25,059	\$	25,044	\$	25,008
Treatment -- BOD		23,240		23,280		23,243		24,032		23,815		23,973		23,921		23,869		23,817		23,698
Treatment -- TSS		21,152		21,115		21,030		22,830		22,334		22,695		22,577		22,459		22,341		22,069
Collection		5,839		6,004		6,101		4,036		4,605		4,191		4,326		4,462		4,598		4,910
Administration		na		na		na		na		na		na		na		na		na		na
Customer		2,159		2,220		2,256		1,493		1,703		1,550		1,600		1,650		1,700		1,816
Total		77,500		77,500		77,500		77,500		77,500		77,500		77,500		77,500		77,500		77,500

Allocated Net Revenue Requirement

Treatment -- Volume	\$	904,914	\$	954,123	\$	1,001,104	\$	1,510,979	\$	1,762,000	\$	2,165,827	\$	2,249,077	\$	2,338,542	\$	2,434,732	\$	2,678,197
Treatment -- BOD		837,497		892,718		935,599		1,446,194		1,675,579		2,069,339		2,145,583		2,227,487		2,315,513		2,537,956
Treatment -- TSS		762,260		809,681		846,510		1,373,868		1,571,415		1,959,057		2,025,051		2,095,880		2,171,938		2,363,432
Collection		210,417		230,231		245,604		242,904		324,026		361,774		388,041		416,392		447,001		525,821
Administration		na		na		na		na		na		na		na		na		na		na
Customer		77,812		85,140		90,824		89,826		119,825		133,784		143,498		153,982		165,301		194,449
Total		2,792,901		2,971,892		3,119,642		4,663,771		5,452,846		6,689,780		6,951,249		7,232,283		7,534,485		8,299,855

<div style="border: 1px solid black; padding: 5px; margin: 0 auto; width: 80%;"> <p style="margin: 0;">TOWN OF FLORENCE</p> <p style="margin: 0;">WATER/WASTEWATER COST OF SERVICE MODEL</p> </div>										
10 Year Forecast										
2012-2022	Test Year	Forecast								
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021

Forecast WW 5.0 -- Customer and Volume Totals

Scenario: Base Scenario - 1

WASTEWATER BILLING UNITS

Customer Class Units -- Base Annual Usage

Residential	118,708,082	118,929,801	119,284,550	119,639,300	119,994,049	120,348,799	120,703,548	121,058,298	121,413,048	121,767,797
Commercial	46,393,005	46,393,005	46,593,841	46,794,676	46,995,512	47,196,347	47,397,183	47,598,018	47,798,854	47,999,690
Non-Residential	877,464	877,464	877,464	877,464	877,464	877,464	877,464	877,464	877,464	877,464
Institutional	237,544,979	237,544,979	237,544,979	237,544,979	237,544,979	237,544,979	237,544,979	237,544,979	237,544,979	237,544,979
ADOC	163,693,900	163,693,900	163,693,900	163,693,900	163,693,900	163,693,900	163,693,900	163,693,900	163,693,900	163,693,900
CCA/New Prison	139,331,125	175,831,125	175,831,125	175,831,125	175,831,125	267,954,634	267,954,634	267,954,634	267,954,634	408,344,574
Total System	706,548,555	743,270,274	743,825,859	744,381,444	744,937,029	837,616,123	838,171,708	838,727,293	839,282,878	980,228,403
Percent Growth		5.20%	0.07%	0.07%	0.07%	12.44%	0.07%	0.07%	0.07%	16.79%

Total Billing Units

Total System	706,548,555	743,270,274	743,825,859	744,381,444	744,937,029	837,616,123	838,171,708	838,727,293	839,282,878	980,228,403
Percent Growth		5.20%	0.07%	0.07%	0.07%	12.44%	0.07%	0.07%	0.07%	16.79%

BOD -- mg/l	255	255	255	255	255	255	255	255	255	255
TSS -- mg/l	188	188	188	188	188	188	188	188	188	188
BOD -- Total mg	683,998,049,287	719,547,741,701	720,085,594,521	720,623,447,341	721,161,300,161	810,882,408,475	811,420,261,296	811,958,114,116	812,495,966,936	948,943,014,242
TSS -- Total mg	503,926,491,341	530,117,255,752	530,513,511,684	530,909,767,616	531,306,023,548	597,406,860,180	597,803,116,112	598,199,372,044	598,595,627,976	699,121,180,460
BOD -- Total lbs.	1,504,796	1,583,005	1,584,188	1,585,372	1,586,555	1,783,941	1,785,125	1,786,308	1,787,491	2,087,675
TSS -- Total lbs.	1,108,638	1,166,258	1,167,130	1,168,001	1,168,873	1,314,295	1,315,167	1,316,039	1,316,910	1,538,067

Institutional

Institutional	237,544,979	237,544,979	237,544,979	237,544,979	237,544,979	237,544,979	237,544,979	237,544,979	237,544,979	237,544,979
ADOC	163,693,900	163,693,900	163,693,900	163,693,900	163,693,900	163,693,900	163,693,900	163,693,900	163,693,900	163,693,900
CCA/New Prison	139,331,125	175,831,125	175,831,125	175,831,125	175,831,125	267,954,634	267,954,634	267,954,634	267,954,634	408,344,574
Total	540,570,004	577,070,004	577,070,004	577,070,004	577,070,004	669,193,513	669,193,513	669,193,513	669,193,513	809,583,453
BOD -- mg/l	256	256	256	256	256	256	256	256	256	256
TSS -- mg/l	209	209	209	209	209	209	209	209	209	209
BOD -- Total mg	524,608,446,161	560,030,700,706	560,030,700,706	560,030,700,706	560,030,700,706	649,434,053,558	649,434,053,558	649,434,053,558	649,434,053,558	785,678,661,396
TSS -- Total mg	428,293,614,248	457,212,564,248	457,212,564,248	457,212,564,248	457,212,564,248	530,202,020,288	530,202,020,288	530,202,020,288	530,202,020,288	641,432,969,655
BOD -- Total lbs.	1,154,139	1,232,068	1,232,068	1,232,068	1,232,068	1,428,755	1,428,755	1,428,755	1,428,755	1,728,493
TSS -- Total lbs.	942,246	1,005,868	1,005,868	1,005,868	1,005,868	1,166,444	1,166,444	1,166,444	1,166,444	1,411,153

TOWN OF FLORENCE										
WATER/WASTEWATER COST OF SERVICE MODEL										
10 Year Forecast										
2012-2022	Test Year	Forecast								
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021

Forecast WW 5.0 -- Customer and Volume Totals

Scenario: Base Scenario - 1

Net Loadings -- Retail

Residential	118,708,082	118,929,801	119,284,550	119,639,300	119,994,049	120,348,799	120,703,548	121,058,298	121,413,048	121,767,797
Commercial	46,393,005	46,393,005	46,593,841	46,794,676	46,995,512	47,196,347	47,397,183	47,598,018	47,798,854	47,999,690
Non-Residential	877,464	877,464	877,464	877,464	877,464	877,464	877,464	877,464	877,464	877,464
Total Retail	165,978,551	166,200,270	166,755,855	167,311,440	167,867,025	168,422,610	168,978,195	169,533,780	170,089,365	170,644,951

BOD -- mg/l	253.3	253.2	253.2	253.2	253.2	252.9	252.9	252.9	252.9	252.9
TSS -- mg/l	120.2	115.7	116.0	116.2	116.4	105.3	105.5	105.8	106.1	89.2

BOD -- Total mg	159,389,603,126	159,517,040,994	160,054,893,815	160,592,746,635	161,130,599,455	161,448,354,917	161,986,207,737	162,524,060,557	163,061,913,378	163,264,352,846
TSS -- Total mg	75,632,877,093	72,904,691,504	73,300,947,436	73,697,203,368	74,093,459,300	67,204,839,892	67,601,095,824	67,997,351,756	68,393,607,688	57,688,210,804

BOD -- Total lbs.	350,657	350,937	352,121	353,304	354,487	355,186	356,370	357,553	358,736	359,182
TSS -- Total lbs.	166,392	160,390	161,262	162,134	163,006	147,851	148,722	149,594	150,466	126,914

Customer Class Units -- BOD Total mg

Residential	113,995,657,522	114,147,407,201	114,491,188,454	114,834,967,356	115,178,743,930	115,365,244,466	115,709,071,488	116,052,895,889	116,396,717,696	116,501,194,691
Commercial	44,551,314,962	44,527,454,442	44,721,501,758	44,915,551,585	45,109,603,900	45,241,981,737	45,435,980,148	45,629,981,360	45,823,985,344	45,923,645,672
Non-Residential	842,630,642	842,179,351	842,203,603	842,227,693	842,251,624	841,128,714	841,156,101	841,183,308	841,210,338	839,512,482
Total	159,389,603,126	159,517,040,994	160,054,893,815	160,592,746,635	161,130,599,455	161,448,354,917	161,986,207,737	162,524,060,557	163,061,913,378	163,264,352,846

Customer Class Units -- TSS Total mg

Residential	54,092,734,943	52,169,231,927	52,433,964,290	52,698,618,837	52,963,196,342	48,022,185,097	48,288,432,321	48,554,592,821	48,820,667,447	41,164,806,409
Commercial	21,140,300,639	20,350,555,084	20,481,275,964	20,612,079,991	20,742,966,339	18,832,524,745	18,961,626,985	19,090,821,891	19,220,108,555	16,226,769,079
Non-Residential	399,841,511	384,904,493	385,707,182	386,504,540	387,296,619	350,130,050	351,036,517	351,937,043	352,831,686	296,635,317
Total	75,632,877,093	72,904,691,504	73,300,947,436	73,697,203,368	74,093,459,300	67,204,839,892	67,601,095,824	67,997,351,756	68,393,607,688	57,688,210,804

Customer Class Units -- BOD Total Lbs.

Residential	250,790	251,124	251,881	252,637	253,393	253,804	254,560	255,316	256,073	256,303
Commercial	98,013	97,960	98,387	98,814	99,241	99,532	99,959	100,386	100,813	101,032
Non-Residential	1,854	1,853	1,853	1,853	1,853	1,850	1,851	1,851	1,851	1,847
Total	350,657	350,937	352,121	353,304	354,487	355,186	356,370	357,553	358,736	359,182

Customer Class Units -- TSS Total Lbs.

Residential	119,004	114,772	115,355	115,937	116,519	105,649	106,235	106,820	107,405	90,563
Commercial	46,509	44,771	45,059	45,347	45,635	41,432	41,716	42,000	42,284	35,699
Non-Residential	880	847	849	850	852	770	772	774	776	653
Total	166,392	160,390	161,262	162,134	163,006	147,851	148,722	149,594	150,466	126,914

TOWN OF FLORENCE											
WATER/WASTEWATER COST OF SERVICE MODEL											
10 Year Forecast	2012-2022	Test Year	Forecast	2014	2015	2016	2017	2018	2019	2020	2021
		2012	2013								

Forecast WW 5.0 -- Customer and Volume Totals

Scenario: Base Scenario - 1

WASTEWATER CUSTOMERS

Total Bills

Residential	32,124	32,184	32,280	32,376	32,472	32,568	32,664	32,760	32,856	32,952
Commercial	2,772	2,772	2,784	2,796	2,808	2,820	2,832	2,844	2,856	2,868
Non-Residential	192	192	192	192	192	192	192	192	192	192
Institutional	216	216	216	216	216	216	216	216	216	216
ADOC	12	12	12	12	12	12	12	12	12	12
CCA/New Prison	24	36	36	36	36	48	48	48	48	60
Total System	35,340	35,412	35,520	35,628	35,736	35,856	35,964	36,072	36,180	36,300
Percent Growth		0.20%	0.30%	0.30%	0.30%	0.34%	0.30%	0.30%	0.30%	0.33%

Percentage of Total

Residential	90.90%	90.88%	90.88%	90.87%	90.87%	90.83%	90.82%	90.82%	90.81%	90.78%
Commercial	7.84%	7.83%	7.84%	7.85%	7.86%	7.86%	7.87%	7.88%	7.89%	7.90%
Non-Residential	0.54%	0.54%	0.54%	0.54%	0.54%	0.54%	0.53%	0.53%	0.53%	0.53%
Institutional	0.61%	0.61%	0.61%	0.61%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%
ADOC	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%
CCA/New Prison	0.07%	0.10%	0.10%	0.10%	0.10%	0.13%	0.13%	0.13%	0.13%	0.17%
Total System	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Total Customers

Residential	2,677	2,682	2,690	2,698	2,706	2,714	2,722	2,730	2,738	2,746
Commercial	231	231	232	233	234	235	236	237	238	239
Non-Residential	16	16	16	16	16	16	16	16	16	16
Institutional	18	18	18	18	18	18	18	18	18	18
ADOC	1	1	1	1	1	1	1	1	1	1
CCA/New Prison	2	3	3	3	3	4	4	4	4	5
Total System	2,945	2,951	2,960	2,969	2,978	2,988	2,997	3,006	3,015	3,025
Percent Growth		0.20%	0.30%	0.30%	0.30%	0.34%	0.30%	0.30%	0.30%	0.33%

New Customers

Residential	5	8	8	8	8	8	8	8	8	8
Commercial	-	1	1	1	1	1	1	1	1	1
Non-Residential	-	-	-	-	-	-	-	-	-	-
Institutional	-	-	-	-	-	-	-	-	-	-
ADOC	-	-	-	-	-	-	-	-	-	-
CCA/New Prison	1	-	-	-	1	-	-	-	-	1
Total System	6	9	9	9	10	9	9	9	9	10

<p>10 Year Forecast 2012-2022</p>	<p>TOWN OF FLORENCE WATER/WASTEWATER COST OF SERVICE MODEL</p>									
	Test Year 2012	Forecast 2013	2014	2015	2016	2017	2018	2019	2020	2021

Forecast WW 6.0 -- WASTEWATER Cost of Service by Customer Class
Scenario: Base Scenario - 1

Total Functionalized Cost

Treatment -- Volume	\$ 904,914	\$ 954,123	\$ 1,001,104	\$ 1,510,979	\$ 1,762,000	\$ 2,165,827	\$ 2,249,077	\$ 2,338,542	\$ 2,434,732	\$ 2,678,197
Treatment -- BOD	837,497	892,718	935,599	1,446,194	1,675,579	2,069,339	2,145,583	2,227,487	2,315,513	2,537,956
Treatment -- TSS	762,260	809,681	846,510	1,373,868	1,571,415	1,959,057	2,025,051	2,095,880	2,171,938	2,363,432
Total	2,504,671	2,656,521	2,783,213	4,331,041	5,008,994	6,194,222	6,419,711	6,661,909	6,922,182	7,579,586

Estimated Total Pounds Removed

BOD	1,504,796	1,583,005	1,584,188	1,585,372	1,586,555	1,783,941	1,785,125	1,786,308	1,787,491	2,087,675
TSS	1,108,638	1,166,258	1,167,130	1,168,001	1,168,873	1,314,295	1,315,167	1,316,039	1,316,910	1,538,067

Unit Cost Per Pound -- Total System

BOD	\$ 0.56	\$ 0.56	\$ 0.59	\$ 0.91	\$ 1.06	\$ 1.16	\$ 1.20	\$ 1.25	\$ 1.30	\$ 1.22
TSS	\$ 0.69	\$ 0.69	\$ 0.73	\$ 1.18	\$ 1.34	\$ 1.49	\$ 1.54	\$ 1.59	\$ 1.65	\$ 1.54

TOWN OF FLORENCE										
WATER/WASTEWATER COST OF SERVICE MODEL										
	Test Year	Forecast								
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021

Forecast WW 7.0 -- Wastewater Service Cost Functionalization
Scenario: Base Scenario - 1

NET REVENUE REQUIREMENT

Allocated Net Revenue Requirement

Treatment -- Volume	\$ 904,914	\$ 954,123	\$ 1,001,104	\$ 1,510,979	\$ 1,762,000	\$ 2,165,827	\$ 2,249,077	\$ 2,338,542	\$ 2,434,732	\$ 2,678,197
Treatment -- BOD	837,497	892,718	935,599	1,446,194	1,675,579	2,069,339	2,145,583	2,227,487	2,315,513	2,537,956
Treatment -- TSS	762,260	809,681	846,510	1,373,868	1,571,415	1,959,057	2,025,051	2,095,880	2,171,938	2,363,432
Collection	210,417	230,231	245,604	242,904	324,026	361,774	388,041	416,392	447,001	525,821
Administration	na	na	na	na	na	na	na	na	na	na
Customer	77,812	85,140	90,824	89,826	119,825	133,784	143,498	153,982	165,301	194,449
Total	2,792,901	2,971,892	3,119,642	4,663,771	5,452,846	6,689,780	6,951,249	7,232,283	7,534,485	8,299,855

COST OF SERVICE CALCULATION -- INSTITUTIONAL

Units of Measurement

Treatment -- Volume	Gallons	706,548,555	743,270,274	743,825,859	744,381,444	744,937,029	837,616,123	838,171,708	838,727,293	839,282,878	980,228,403
Treatment -- BOD	lbs	1,504,796	1,583,005	1,584,188	1,585,372	1,586,555	1,783,941	1,785,125	1,786,308	1,787,491	2,087,675
Treatment -- TSS	lbs	1,108,638	1,166,258	1,167,130	1,168,001	1,168,873	1,314,295	1,315,167	1,316,039	1,316,910	1,538,067
Collection	Gallons	706,548,555	743,270,274	743,825,859	744,381,444	744,937,029	837,616,123	838,171,708	838,727,293	839,282,878	980,228,403
Administration	Bills	35,340	35,412	35,520	35,628	35,736	35,856	35,964	36,072	36,180	36,300
Customer	Bills	35,340	35,412	35,520	35,628	35,736	35,856	35,964	36,072	36,180	36,300

Cost Per Unit

Treatment -- Volume	\$ 1.28	\$ 1.28	\$ 1.35	\$ 2.03	\$ 2.37	\$ 2.59	\$ 2.68	\$ 2.79	\$ 2.90	\$ 2.73
Treatment -- BOD	0.56	0.56	0.59	0.91	1.06	1.16	1.20	1.25	1.30	1.22
Treatment -- TSS	0.69	0.69	0.73	1.18	1.34	1.49	1.54	1.59	1.65	1.54
Collection	0.30	0.31	0.33	0.33	0.43	0.43	0.46	0.50	0.53	0.54
Administration	na	na	na	na	na	na	na	na	na	na
Customer	2.20	2.40	2.56	2.52	3.35	3.73	3.99	4.27	4.57	5.36

Institutional

Units of Measurement

Treatment -- Volume	Gallons	540,570,004	577,070,004	577,070,004	577,070,004	577,070,004	669,193,513	669,193,513	669,193,513	669,193,513	809,583,453
Treatment -- BOD	lbs	1,154,139	1,232,068	1,232,068	1,232,068	1,232,068	1,428,755	1,428,755	1,428,755	1,428,755	1,728,493
Treatment -- TSS	lbs	942,246	1,005,868	1,005,868	1,005,868	1,005,868	1,166,444	1,166,444	1,166,444	1,166,444	1,411,153
Collection	Gallons	540,570,004	577,070,004	577,070,004	577,070,004	577,070,004	669,193,513	669,193,513	669,193,513	669,193,513	809,583,453
Administration	Bills	216	216	216	216	216	216	216	216	216	216
Customer	Bills	216	216	216	216	216	216	216	216	216	216

Total Cost

Treatment -- Volume	\$ 692,336	\$ 740,774	\$ 776,670	\$ 1,171,362	\$ 1,364,944	\$ 1,730,336	\$ 1,795,655	\$ 1,865,847	\$ 1,941,308	\$ 2,211,958
Treatment -- BOD	642,338	694,811	727,642	1,123,906	1,301,201	1,657,329	1,717,254	1,781,626	1,850,807	2,101,304
Treatment -- TSS	647,855	698,329	729,548	1,183,158	1,352,273	1,738,674	1,796,053	1,857,641	1,923,779	2,168,413
Collection	160,987	178,750	190,543	188,308	251,009	289,031	309,810	332,226	356,412	434,282
Administration	na	na	na	na	na	na	na	na	na	na
Customer	476	552	545	545	724	806	862	922	987	1,157
Total	2,143,992	2,313,183	2,424,955	3,667,278	4,270,151	5,416,175	5,619,634	5,838,263	6,073,293	6,917,115

Billing Units	540,570,004	577,070,004	577,070,004	577,070,004	577,070,004	669,193,513	669,193,513	669,193,513	669,193,513	809,583,453
---------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------

Rate Per 1,000 Gallons	\$ 3.97	\$ 4.01	\$ 4.20	\$ 6.35	\$ 7.40	\$ 8.09	\$ 8.40	\$ 8.72	\$ 9.08	\$ 8.54
-------------------------------	----------------	----------------	----------------	----------------	----------------	----------------	----------------	----------------	----------------	----------------

COST OF SERVICE CALCULATION -- RETAIL

TOWN OF FLORENCE										
WATER/WASTEWATER COST OF SERVICE MODEL										
	Test Year	Forecast								
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021

Forecast WW 7.0 -- Wastewater Service Cost Functionalization
Scenario: Base Scenario - 1

Net Revenue Requirement

Treatment -- Volume	\$	212,577	\$	212,577	\$	213,348	\$	224,434	\$	339,616	\$	397,056	\$	435,491	\$	453,421	\$	472,695	\$	493,424	\$	466,239
Treatment -- BOD		195,159		195,159		197,907		207,958		322,288		374,378		412,010		428,329		445,861		464,706		436,652
Treatment -- TSS		114,405		114,405		111,352		116,962		190,711		219,142		220,383		228,998		238,239		248,159		195,019
Collection		49,430		49,430		51,481		55,061		54,597		73,017		72,743		78,230		84,166		90,589		91,538
Administration		na		na		na		na		na		na		na		na		na		na		na
Customer		77,258		77,337		84,620		90,272		89,282		119,101		132,978		142,636		153,060		164,314		193,292
Total		648,909		658,709		694,687		996,493		1,182,695		1,273,604		1,331,614		1,394,020		1,461,192		1,382,741		

Units of Measurement

Treatment -- Volume	Gallons	165,978,551	166,200,270	166,755,855	167,311,440	167,867,025	168,422,610	168,978,195	169,533,780	170,089,365	170,644,951
Treatment -- BOD	lbs	350,657	350,937	352,121	353,304	354,487	355,186	356,370	357,553	358,736	359,182
Treatment -- TSS	lbs	166,392	160,390	161,262	162,134	163,006	147,851	148,722	149,594	150,466	126,914
Collection	Gallons	165,978,551	166,200,270	166,755,855	167,311,440	167,867,025	168,422,610	168,978,195	169,533,780	170,089,365	170,644,951
Administration	Bills	35,124	35,196	35,304	35,412	35,520	35,640	35,748	35,856	35,964	36,084
Customer	Bills	35,124	35,196	35,304	35,412	35,520	35,640	35,748	35,856	35,964	36,084

Cost Per Unit

Treatment -- Volume	\$	1.28	\$	1.28	\$	1.35	\$	2.03	\$	2.37	\$	2.59	\$	2.68	\$	2.79	\$	2.90	\$	2.73
Treatment -- BOD		0.56		0.56		0.59		0.91		1.06		1.16		1.20		1.25		1.30		1.22
Treatment -- TSS		0.69		0.69		0.73		1.18		1.34		1.49		1.54		1.59		1.65		1.54
Collection		0.30		0.31		0.33		0.43		0.43		0.43		0.46		0.50		0.53		0.54
Administration		na		na		na		na		na		na		na		na		na		na
Customer		2.20		2.40		2.56		2.52		3.35		3.73		3.99		4.27		4.57		5.36

Residential

Units of Measurement

Treatment -- Volume	Gallons	165,978,551	118,929,801	119,284,550	119,639,300	119,994,049	120,348,799	120,703,548	121,058,298	121,413,048	121,767,797
Treatment -- BOD	lbs	250,790	251,124	251,881	252,637	253,393	253,804	254,560	255,316	256,073	256,303
Treatment -- TSS	lbs	119,004	114,772	115,355	115,937	116,519	105,649	106,235	106,820	107,405	90,563
Collection	Gallons	118,708,082	118,929,801	119,284,550	119,639,300	119,994,049	120,348,799	120,703,548	121,058,298	121,413,048	121,767,797
Administration	Bills	na	na	na	na	na	na	na	na	na	na
Customer	Bills	32,124	32,184	32,280	32,376	32,472	32,568	32,664	32,760	32,856	32,952

Total Cost

Treatment -- Volume	\$	152,036	\$	152,668	\$	160,543	\$	242,849	\$	283,822	\$	311,186	\$	323,885	\$	337,535	\$	352,215	\$	332,696
Treatment -- BOD		139,578		141,619		148,757		230,458		267,612		294,407		305,962		318,374		331,716		311,583
Treatment -- TSS		81,823		79,681		83,666		136,372		156,646		157,478		163,577		170,118		177,140		139,161
Collection		35,352		36,839		39,387		39,040		52,194		51,980		55,881		60,100		64,664		65,319
Administration		na		na		na		na		na		na		na		na		na		na
Customer		70,731		77,379		82,540		81,627		108,881		121,516		130,330		139,844		150,114		176,514
Total		479,520		488,186		514,893		730,346		869,155		936,567		979,635		1,025,971		1,075,851		1,025,274

Billing Units		118,708,082	118,929,801	119,284,550	119,639,300	119,994,049	120,348,799	120,703,548	121,058,298	121,413,048	121,767,797
---------------	--	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------

Rate Per 1,000 Gallons	\$	4.04	\$	4.10	\$	4.32	\$	6.10	\$	7.24	\$	7.78	\$	8.12	\$	8.48	\$	8.86	\$	8.42
-------------------------------	-----------	-------------	-----------	-------------	-----------	-------------	-----------	-------------	-----------	-------------	-----------	-------------	-----------	-------------	-----------	-------------	-----------	-------------	-----------	-------------

TOWN OF FLORENCE										
WATER/WASTEWATER COST OF SERVICE MODEL										
	Test Year	Forecast								
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021

Forecast WW 7.0 -- Wastewater Service Cost Functionalization
Scenario: Base Scenario - 1

Commercial

Units of Measurement

Treatment -- Volume	Gallons	46,393,005	46,393,005	46,593,841	46,794,676	46,995,512	47,196,347	47,397,183	47,598,018	47,798,854	47,999,690
Treatment -- BOD	lbs	98,013	97,960	98,387	98,814	99,241	99,532	99,959	100,386	100,813	101,032
Treatment -- TSS	lbs	46,509	44,771	45,059	45,347	45,635	41,432	41,716	42,000	42,284	35,699
Collection	Gallons	46,393,005	46,393,005	46,593,841	46,794,676	46,995,512	47,196,347	47,397,183	47,598,018	47,798,854	47,999,690
Administration	Bills	na	na	na	na	na	na	na	na	na	na
Customer	Bills	2,772	2,772	2,784	2,796	2,808	2,820	2,832	2,844	2,856	2,868

Total Cost

Treatment -- Volume	\$	59,418	\$	59,554	\$	62,710	\$	94,986	\$	111,159	\$	122,036	\$	127,181	\$	132,713	\$	138,663	\$	131,146
Treatment -- BOD		54,549		55,244		58,106		90,139		104,810		115,456		120,143		125,179		130,593		122,823
Treatment -- TSS		31,978		31,083		32,681		53,339		61,350		61,757		64,232		66,888		69,738		54,856
Collection		13,816		14,370		15,385		15,270		20,442		20,385		21,943		23,630		25,458		25,748
Administration		na		na		na		na		na		na		na		na		na		na
Customer		6,103		6,665		7,119		7,049		9,415		10,522		11,300		12,140		13,049		15,363
Total		165,865		166,915		176,000		260,784		307,176		330,155		344,800		360,550		377,500		349,936

Billing Units		46,393,005		46,393,005		46,593,841		46,794,676		46,995,512		47,196,347		47,397,183		47,598,018		47,798,854		47,999,690
---------------	--	------------	--	------------	--	------------	--	------------	--	------------	--	------------	--	------------	--	------------	--	------------	--	------------

Rate Per 1,000 Gallons	\$	3.58	\$	3.60	\$	3.78	\$	5.57	\$	6.54	\$	7.00	\$	7.27	\$	7.57	\$	7.90	\$	7.29
-------------------------------	-----------	-------------	-----------	-------------	-----------	-------------	-----------	-------------	-----------	-------------	-----------	-------------	-----------	-------------	-----------	-------------	-----------	-------------	-----------	-------------

Non-Residential

Units of Measurement

Treatment -- Volume	Gallons	877,464	877,464	877,464	877,464	877,464	877,464	877,464	877,464	877,464	877,464
Treatment -- BOD	lbs	1,854	1,853	1,853	1,853	1,853	1,850	1,851	1,851	1,851	1,847
Treatment -- TSS	lbs	880	847	849	850	852	770	772	774	776	653
Collection	Gallons	877,464	877,464	877,464	877,464	877,464	877,464	877,464	877,464	877,464	877,464
Administration	Bills	na	na	na	na	na	na	na	na	na	na
Customer	Bills	192	192	192	192	192	192	192	192	192	192

Total Cost

Treatment -- Volume	\$	1,124	\$	1,126	\$	1,181	\$	1,781	\$	2,075	\$	2,269	\$	2,355	\$	2,447	\$	2,545	\$	2,397
Treatment -- BOD		1,032		1,045		1,094		1,690		1,957		2,147		2,224		2,308		2,397		2,245
Treatment -- TSS		605		588		615		1,000		1,145		1,148		1,189		1,233		1,280		1,003
Collection		261		272		290		286		382		379		406		436		467		471
Administration		na		na		na		na		na		na		na		na		na		na
Customer		423		462		491		484		644		716		766		820		877		1,028
Total		3,444		3,493		3,671		5,242		6,203		6,659		6,940		7,242		7,568		7,145

Billing Units		877,464		877,464		877,464		877,464		877,464		877,464		877,464		877,464		877,464		877,464
---------------	--	---------	--	---------	--	---------	--	---------	--	---------	--	---------	--	---------	--	---------	--	---------	--	---------

Rate Per 1,000 Gallons	\$	3.93	\$	3.98	\$	4.18	\$	5.97	\$	7.07	\$	7.59	\$	7.91	\$	8.25	\$	8.62	\$	8.14
-------------------------------	-----------	-------------	-----------	-------------	-----------	-------------	-----------	-------------	-----------	-------------	-----------	-------------	-----------	-------------	-----------	-------------	-----------	-------------	-----------	-------------