

# Water Management

Mark Hilty, Water Management Director

	2014	2015	2016		2017	2016 v.	2017
	Actual	Actual	Budget Estimated		Budget	\$	%
Beginning Balance	15,043,450	18,318,852	28,478,454	28,478,454	33,549,525		
Revenues	23,187,312	31,082,159	24,708,803	27,486,959	26,150,977	1,442,174	5.8%
Expenses							
Personnel	4,765,815	4,944,757	5,485,616	4,859,279	6,173,894	688,277	12.5%
Operations	11,847,191	11,334,843	12,545,682	12,901,581	13,131,062	585,380	4.7%
Capital	3,298,904	4,642,956	5,171,107	4,655,028	5,401,035	229,928	4.4%
Expenses	19,911,910	20,922,557	23,202,405	22,415,889	24,705,991	1,503,585	6.5%
Ending Balance	18,318,852	28,478,454	29,984,852	33,549,525	34,994,511		

**Budget Summary - By Division** 

	2014	2015	2016		2017	2016 vs	s. 2017	
	Actual	Actual	Budget	Estimated	Budget	\$	%	
Beginning Balance	15,043,450	18,318,852	28,478,454	28,478,454	33,549,525			
Revenues	23,187,312	31,082,159	24,708,803	27,486,959	26,150,977	1,442,174	5.8%	
Expenses								
Water	8,863,912	8,926,520	10,109,760	9,929,580	10,540,843	431,083	4.3%	
Wastewater	10,904,872	11,831,590	12,889,815	12,381,942	13,961,073	1,071,258	8.3%	
Reclaimed	143,126	164,447	202,831	104,366	204,075	1,244	0.6%	
Expenses	19,911,910	20,922,557	23,202,405	22,415,889	24,705,991	1,503,585	6.5%	
Ending Balance	18,318,852	28,478,454	29,984,852	33,549,525	34,994,511			

### **Departmental Summary**

The Water Management Department's vision, in support of the City's vision statement, is to continually strive to enhance quality of life through exceptional, responsive, and cost effective water resources services. These services include drinking water treatment and distribution, wastewater collection and treatment, and reclaimed water distribution for customers located primarily in the City of Franklin.

To achieve this vision it is necessary to safely and efficiently deliver drinking water, sanitary sewer and reclaimed water services to our customers. The Water Management Department continues to evolve through formalization and refinement of practices and through the implementation of the Integrated Water Resources Plan.



## Water Management

Mark Hilty, Water Management Director

#### **Departmental Summary (con't)**

This fiscal year 2016 and 2017 biennial budget was developed to further refine operations to achieve the department's vision, in support of the City of Franklin's goals and objectives. Revenues and expenditures for each division are presented in consolidated Sections as follows:

Division	Section
Water Distribution	Water
Water Treatment	Water
Utility Billing	Water
Wastewater Collection	Wastewater
Wastewater Treatment	Wastewater
Utility Administration	Wastewater
Reclaimed Water	Reclaimed Water

Water and wastewater are independent business units of the City of Franklin and are required to be selfsufficient entities. These utilities are not subsidized by local taxes, reimbursing the General Fund monies to cover the costs of administrative oversight and support services such as payroll, human resources, finance and engineering. Reclaimed water, while presented as its own section, is an alternative disposal method of treated sanitary sewer. This disposal method in effect, increases the discharge capacity of the wastewater treatment plant (primarily during summer months) and provides a cost effective source of irrigation water within the reclaimed water distribution system while providing revenue to support its operation.



### Performance Measures

How a community utilizes its resources must be governed in accordance with its citizens wishes and its plans for the future. Therefore, beginning in FY 2015, The City of Franklin has established **Franklin***Forward* : A Vision for 2033. This Strategic Plan has specific and demonstrable objectives for each department which, when achieved individually, will cohesively move Franklin forward to meet the challenges and demands of the future.

Each budget has a series of performance measures and benchmarks attached to it which demonstrate the workload, effectiveness and outcome of taxpayer support for the annual operations of the City of Franklin and its pursuit of the goals of the Strategic Plan. Together, these measures demonstrate a proper and diligent use of taxpayer dollars in the pursuit of a greater community.

## Franklin*Forward* : A Vision for 2033 | Objectives for Developing a Strategic Plan

#### Theme: A Safe Clean and Livable City



Franklin will provide high-quality water and wastewater treatment services that will meet the needs of our growing community.

Franklin will establish standards for the quality of its infrastructure (i.e., water lines, sewer services) Goal: To have a reliable, efficient, and scalable infrastructure

Baseline: Baseline energy costs for water and sewage delivery is \$1,595,352 (FY2012 sum actual expenditures from water fund and wastewater fund)

Baseline: Baseline of unaccounted water within the system is 20.8% (FY2012)

Baseline: Baseline of sanitary score is 97 (2012)

Franklin will continue to meet or exceed regulatory requirements for water quality.

Goal: To have no violations of regulatory requirements for water quality.

Baseline: Zero water quality violations in 2012. (TN Dept. of Environment & Conservation monitoring requirements and regulatory standards.)

Franklin will pursue completion of the recently approved Integrated Water Resource Plan (IWRP) by 2042.

Goal: To fully complete the Franklin Integrated Water Resource Plan by 2042 in five year increments as set in the plan.

Baseline: 5% completed (2012). (Franklin Integrated Water Resource Plan.)

Baseline: Adopted Strategic Schedule for each of the 5-year increments. (2013).

#### Franklin will be a model for environmental quality and a sustainable city.

Goal: Franklin will achieve platinum status within the TVA sustainable Communities Program.

[Baseline: Achieved Goal status, 2013]

Key:	Strategic Plan: FranklinForward	Ô
	Sustainable Franklin	(H)
	Tennessee Municipal Benchmarking Project	۲

### Workload (Output) Measures

	2013	2014	2015	2016*	2017*
TBD					

 Efficiency Measures
 2013
 2014
 2015
 2016\*
 2017\*

 TBD
 TBD</td



Performance Measures

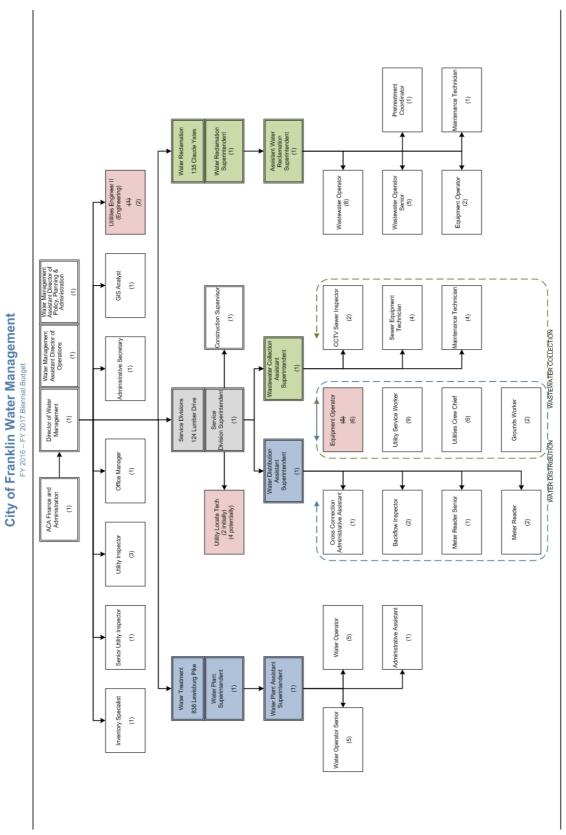
### **Outcome (Effectiveness) Measures**

		2013	2014	2015	2016*	2017*
	Franklin will establish standards for the quality of its	infrastructure	(i.e., water l	ines, sewer		
	services)					
	Goal: To have a reliable, efficient, and scalable infr	rastructure				
	Declining or steady energy costs for water and sewage delivery	\$ 1,596,686	\$ 1,543,096	\$ 1,293,381	\$ 1,689,572	\$ 1,729,025
	<b>Target</b> (FY2012 sum actual expenditures from waterfund and wastewater fund)	\$ 1,595,352	\$ 1,595,352	\$ 1,595,352	\$ 1,595,352	\$ 1,595,352
	Meets Target?	No	Yes	Yes	No	No
	Unaccounted water within the system decreases	20.8%	16%	16%	16%	16%
	Target (20.8% unaccounted for in FY 2012)	20.8%	20.8%	20.8%	20.8%	20.8%
	Meets Target?	Yes	Yes	Yes	Yes	Yes
	Sanitary score remains or improves	Yes	Yes	TBD	TBD	TBD
	<b>Target</b> (97 from FY 2012)	97	97	97	97	97
	Meets Target?	Yes	Yes	TBD	TBD	TBD
	Franklin will continue to meet or exceed regulatory	requirements f	or water qua	ality.		
	Goal: To have no violations of regulatory requiren	nents for water	r quality.			
-	Franklin Water Quality Violations	0	0	0	0	0
•	<b>Target</b> (TN Dept. of Environment & Conservation monitoring requirements and regulatory standards.)	0	0	0	0	0
	Meets Target?	Yes	Yes	Yes	Yes	Yes
	Franklin will pursue completion of the recently appr	oved Integrate	d Water Res	ource Plan (I	WRP) by 204	2.
	Goal: To fully complete the Franklin Integrated W increments as set in the plan.	ater Resource	Plan by 2042	in five year		
	5% completed (2012). (Franklin Integrated Water Resource Plan.)	8.0%	10.0%	11.0%	12.0%	15.0%
	Target	8.0%	10.0%	11.0%	12.0%	15.0%
	Meets Target?	Yes	Yes	Yes	Yes	Yes
	Baseline: Adopted Strategic Schedule for each	of the 5-year i	ncrements. (	2013).		
	Franklin Status	Adopted	Adopted	Adopted	Adopted	Adopted
	Target (Adopted?)	Adopted	Adopted	Adopted	Adopted	Adopted
	Meets Target?	Yes	Yes	Yes	Yes	Yes
	Franklin will achieve platinum status within the TV			-		
	Franklin status	Platinum	Gold	Gold	TBD	TBD
0	Target (Platinum)	Platinum	Platinum	Platinum	Platinum	Platinum
	Meets Target?	Yes	No	No	TBD	TBD
*201	6 and 2017 are estimates					

\*2016 and 2017 are estimates



Organizational Chart



Note: For detailed counts and authorized positions, please see following page entitled "Staffing by Position"

Staffing by Position						
Desition	Dev Crede	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Position	Pay Grade	F-T	F-T	F-T	F-T	F-T
Water Section						
Utility Billing						
Meter Reader Sr	С	1	1	1	1	1
Meter Reader	В	2	2	2	2	2
TOTALS		3	3	3	3	3
		•	•	•	•	
Water Distribution						
Service Division Superintendent	1	1	1	1	1	1
Water Distribution Assistant Superintendent	G	1	1	1	1	1
Utilities Crew Chief	E	3	3	3	3	3
Backflow Inspector	E	2	2	2	2	2
Administrative Assistant	D	1	1	1	1	1
Inventory Specialist	D	1	1	1	1	1
Equipment Operator	D	2	2	2	2	3
Utility Locate Technician	TBD	0	0	0	0	2
Utility Service Worker	C	4	4	4	4	4
TOTALS		15	15	15	15	18
Water Treatment Plant						
Water Treatment Superintendent	Н	1	1	1	1	1
Water Treatment Assistant Superintendent	G	1	1	1	1	1
Water Operator Sr	E	5	5	5	5	5
Water Operator 2	TBD	2	2	2	2	0
Administrative Assistant	D	1	1	1	1	1
Water Operator	D	3	3	3	3	5
TOTALS		13	13	13	13	13
Water Section Totals		31	31	31	31	34
Wastewater Section						
Utility Administration						
Director	L	1	1	1	1	1
Assistant Director of Operations	J	1	1	1	1	1
Assistant Director of Administration and Policy	J	1	1	1	1	1
GIS Analyst	E	1	1	1	1	1
Administrative Assistant	D	1	1	0	0	1
Administrative Secretary	В	0	0	1	1	0
Utility Inspector	F	3	3	3	3	3
Senior Utility Inspector	G	0	0	1	1	1
Office Manager	F	0	1	1	1	1
Utilities Engineer II	H	1	1	1	1	2
Grounds Worker	В	0	2	2	2	2
TOTALS		9	12	13	13	14
Wastewater Collection	1	1	T	1	1	1
Wastewater Collection Assistant Superintendent	G	1	1	1	1	1
Construction Supervisor	TBD	1	1	1	1	1
TV Truck Sewer Inspector	D	2	2	2	2	2
Maintenance Technician	E	0	0	4	4	4
Utilities Crew Chief	E	4	3	3	3	3

# City of Franklin, Tennessee

FRANKLIN FY 2016-2017 Biennial Operating Budget

Position	Pay Grade	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Fosition	Pay Glade	F-T	F-T	F-T	F-T	F-T
Equipment Operator	D	2	2	2	3	3
Sewer Equipment Technician	D	4	4	4	4	4
Utility Locate Technician	TBD	0	0	0	0	2
Utility Service Worker	С	5	5	5	5	5
TOTALS		19	18	22	23	25
Water Reclamation Water Reclamation Superintendent		1	1	1	1	1
Water Reclamation						
Assistant Water Reclamation Superintendent	G	1	1	1	1	1
Pretreatment Coordinator	F	1	1	1	1	1
Wastewater Operator Sr	E	3	5	5	5	5
Maintenance Technician	E	0	0	1	1	1
Equipment Operator	D	2	2	2	2	2
Wastewater Operator	D	10	8	8	8	8
TOTALS		18	18	19	19	19
WASTEWATER SECTION TOTALS		46	48	54	55	58



# Budget - All Divisions

The following table presents the Water, Wastewater and Reclaimed Water divisions of the Water & Wastewater Fund in a composite presentation.

	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F (E-C)</u>	<u>G (E/C)</u>
	Actual	Actual	Budget	Estd	Budget	Differer	nce
	2014	2015	2016	2016	2017	\$	%
Personnel							
Salaries & Wages	3,252,872	3,528,409	3,891,978	3,449,826	4,320,228	428,250	11.0%
Employee Benefits	1,512,943	1,416,348	1,593,638	1,409,453	1,853,666	260,028	16.3%
Total Personnel	4,765,815	4,944,757	5,485,616	4,859,279	6,173,894	688,277	12.5%
Operations							
Transportation Services	5,755	6,936	5,365	10,028	6,800	1,435	26.7%
Operating Services	416,462	362,544	405,411	419,020	442,173	36,762	9.1%
Notices, Subscriptions, etc.	17,987	21,381	26,456	19,418	26,650	194	0.7%
Utilities	1,543,096	1,293,381	1,689,572	1,607,335	1,729,025	39,453	2.3%
Contractual Services	231,778	510,985	529,500	888,861	496,875	(32,625)	-6.2%
Repair & Maintenance Services	460,808	304,486	346,732	340,897	346,000	(732)	-0.2%
Employee programs	1,223	2,563	12,150	6,270	12,300	150	1.2%
Professional Development/Travel	31,203	24,582	28,400	18,007	29,600	1,200	4.2%
Office Supplies	11,696	12,460	11,650	11,944	11,650	-	0.0%
Operating Supplies	749,945	676,431	699,050	670,661	730,351	31,301	4.5%
Fuel & Mileage	158,461	112,527	147,589	94,100	108,050	(39,539)	-26.8%
Supplies for Resale	3,466,520	2,989,286	3,744,000	3,780,000	3,893,760	149,760	4.0%
Machinery & Equipment (<\$25,000)	80,467	116,271	174,891	119,154	237,131	62,240	35.6%
Repair & Maintenance Supplies	757,210	611,599	410,800	605,407	410,800	-	0.0%
Operational Units	2,000,000	2,187,240	2,205,728	2,205,728	2,299,094	93,366	4.2%
Property & Liability Costs	222,967	234,307	201,364	221,512	232,655	31,291	15.5%
Rentals	4,652	2,215	5,500	10,944	5,500	-	0.0%
Financial Fees	25,266	21,387	86,800	34,947	61,800	(25,000)	-28.8%
Permits	48,662	53,933	55,100	77,634	55,100	-	0.0%
Debt Service and Lease Payments	1,613,033	1,790,329	1,759,624	1,759,714	1,995,747	236,123	13.4%
Total Operations	11,847,191	11,334,843	12,545,682	12,901,581	13,131,062	585,380	4.7%
Buildings	(33,269)	89	3,859	-	4,051	192	5.0%
Improvements	2,968,778	4,524,037	3,987,500	4,100,000	4,200,000	212,500	5.3%
Machinery & Equipment (>\$25,000)	363,395	118,830	1,179,748	555,028	1,196,984	17,236	1.5%
Capital	3,298,904	4,642,956	5,171,107	4,655,028	5,401,035	229,928	4.4%
Total Water & Wastewater Fund	19,911,910	20,922,557	23,202,405	22,415,889	24,705,991	1,503,585	6.5%

Note: Definitions of each category can be found in the appendices.

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## *City of Franklin, Tennessee* FY 2016-2017 Biennial Operating Budget

### Water Budget

#### Section Summary

The Water Section comprises the Water Treatment and Distribution Divisions and the Utility Billing Division. The activities of these divisions are summarized below.

The Water Treatment facility is located on Lewisburg Pike. Staff at the plant perform numerous functions including water treatment, compliance sampling, and assisting Water Distribution service crews with system maintenance and operation.

The Water Distribution service crews maintain approximately 280 miles of distribution lines, six (6) booster stations, and seven (7) finished water reservoirs with a capacity of 11.5 million gallons.

The Utility Billing Division is the interface between the Water Management Department and Revenue Management. The division is responsible for collecting metering data and working with the Water Distribution Division to perform meter repairs, replacements, and to restore or terminate water service.

#### Section Goals & Strategic Initiatives

The primary goal for the Water Section is to continue to provide safe, reliable drinking water to customers. The Water Section has been working to refine practices and policies to better serve customers including the drafting of revisions to municipal code, review of internal work flow related to customer service requests and work orders and training and educating staff.

A key strategic initiative is the Water Treatment Plant Upgrade project. Contract start for the upgrades was October 26, 2015 with substantial completion and final completion scheduled for October 24, 2017 and November 23, 2017, respectively.

The upgrade to the facility includes installation of membrane filtration, ultraviolet (UV) disinfection and advanced oxidation processes and carbon contactors to address current and future regulatory requirements, taste and odor, lifecycle costs and operational considerations.

Coupled with the upgrade project is the reapplication for an aquatic resources alteration permit (ARAP). City staff has been working through this process for over two years and on July 2, 2015 received a new permit. The main permit conditions are similar to the previous permit which includes provisions for withdrawal of up to 20% of flow with a 10 ft3/s cutoff. Additional protective measures in the new permit includes a withdrawal cutoff when the river is below 5 mg/L of dissolved oxygen (DO) as suggested by the City during permit development collaboration with TDEC.



### Water Budget

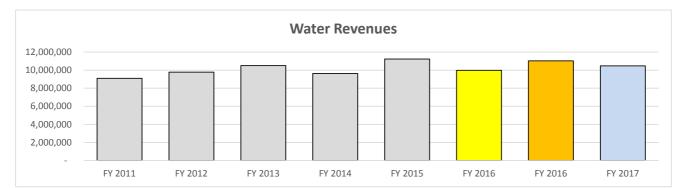
#### Consumption

The water customer base has witnessed steady growth since FY 2011. The average consumption for both residential and commercial customers has declined significantly over the last decade, with FY 2015 the second lowest total since FY 2007. The table below presents the account information and consumption values (residential and commercial totals) from FY 2007 through FY 2015.

Year	Customer Accounts	Annual Total (Million Gallons)	Monthly Average - Residential and Commercial (Gallons)
FY 07	16,194	1,662	8,553
FY 08	16,360	1,628	8,293
FY 09	16,444	1,576	7,987
FY 10	16,426	1,443	7,321
FY 11	16,454	1,489	7,541
FY 12	16,530	1,508	7,602
FY 13	16,711	1,499	7,475
FY 14	16,918	1,404	6,916
FY 15	17,094	1,436	7,002

#### Revenues

Rate based revenues for FY 2016-2017 are projected to be at approximately 110% of the budget. The tables below present historic revenue by category FY 2011-FY 2015, estimated for the budgeted and projected revenues for FY 2016 and the projected revenues for FY 2017.



	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2016	FY 2017
	Actual	Actual	Actual	Actual	Actual	Budget	Estd	Budget
Intergovernmental	179,082	-	(484)	-	-	-	-	-
Interest Income	16,089	18,726	16,193	7,002	4,924	5,000	8,601	7,500
Rental Income	26,100	23,273	21,800	24,000	23,412	24,000	24,000	24,000
Sale of Surplus Assets	11,775	(26,066)	1,660	33,277	-	-	-	-
Customer Service (Rates)	8,691,274	9,252,143	9,182,126	9,293,143	9,987,026	9,721,988	10,706,513	10,213,128
Inspection Fees	38,738	60,877	73,444	72,422	83,765	60,000	55,964	60,000
Other Service Revenue	61,640	68,766	105,329	109,136	90,459	95,000	115,378	95,000
Capital Contributions	71,660	383,203	1,102,508	94,021	1,041,862	75,000	119,350	75,000
Total Water Revenues	9,096,358	9,780,922	10,502,576	9,633,001	11,231,448	9,980,988	11,029,806	10,474,628

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*City of Franklin, Tennessee* FY 2016-2017 Biennial Operating Budget

### Water Budget

#### **Budget Summary**

**Personnel** – The Water Management Department is requesting that one Equipment Operator be hired within the Water Section in FY 2017. This request is in lieu of hiring a full utility crew in FY 2017 and an equipment operator in FY 2018, as discussed in the FY 2016 budget summaries.

**Operations** – The largest operations expense in the Water Section continues to be the purchase of finished water. Expenditures on purchased water can fluctuate depending on a number of factors. Some of these factors include Franklin Water Treatment capacities, weather, financial considerations, and water resource conservation efforts. The expenditure for FY 2017 is approximately \$3,780,000.

Indirect expenses also is a large expense item in the Water Section. These expenses include the interfund reimbursement the General Fund for administrative support functions (customer service, utility billing, and other support functions such as Engineering and Human Resources).

Utilities are estimated to be approximately \$222,000 for FY 2017. Electricity is the primary cost, and is necessary for booster pump stations in the distribution system, high service and raw water pumps at the Water Treatment Plant, and other day to day needs. The Water Section continues to evaluate energy needs and practices to reduce electrical consumption. The high service pumps and the raw water pumps are planned for replacement during the upgrade project at the Water Treatment Plant.

**Operations Capital** – Operations Capital expenditures are related to equipment and vehicles directly related to operations versus system replacement or expansion. The Water Management Department has evaluated the annual cost of replacement of operations capital items based on present day replacement value, anticipated lifecycle, and a projected annual increase in replacement cost of five percent. The department hopes to achieve the following goals by using this approach:

- Provide for adequate funding of operations capital,
- Avoid significant swings in required funding from one budget to another, and
- Provide more stable data in performing cost of service analyses.

This process was applied to operations capital expenditures on machinery and equipment, vehicles, information technology expenditures, and buildings.

In terms of capital projects, the City has been working through the IWRP priority projects established by the BOMA. The key projects in the Water Section include the Water Treatment Plant Upgrade which is currently being constructed and several distribution projects. The distribution projects are renewal of existing infrastructure which include upgrades to the water lines in Old Carters Creek Pike, Bobby Drive in the Grassland Community, and in the area of James Street and Avondale Street.



Budget							
	<u>A</u>	<u>B</u>	<u>c</u>	<u>D</u>	<u>E</u>	<u>F (E-C)</u>	G (E/C)
	Actual 2014	Actual 2015	Budget 2016	Estd 2016	Budget 2017	Difference '1 \$	
Divisions	2014	2013	2010	2010	2017	Ŷ	70
Water Distribution	1,807,883	1,647,635	1,739,186	1,567,563	1,970,789	231,603	13.3%
Water Treatment/Plant	5,164,279	4,424,588	5,266,371	5,264,687	5,450,233	183,862	3.5%
Utility Billing	161,988	4,424,588 155,419	167,173	156,589	167,207	34	0.0%
Water General	1,729,762	2,698,878	2,937,030	2,940,741	2,952,613	15,583	0.5%
Total Water	8,863,912	8,926,520	10,109,760	9,929,580	10,540,843	431,083	4.3%
	· ·		· ·	· ·	· ·	·	
Expense by Category							
Personnel							
Salaries & Wages	1,296,318	1,306,598	1,371,479	1,268,507	1,545,934	174,455	12.7%
Employee Benefits	571,838	506,573	607,859	525,430	693,033	85,174	14.0%
Total Personnel	1,868,156	1,813,171	1,979,338	1,793,937	2,238,967	259,630	13.1%
Operations							
Transportation Services	2,806	3,961	1,600	3,400	3,050	1,450	90.6%
Operating Services	24,648	16,701	21,651	28,275	26,800	5,149	23.8%
Notices, Subscriptions, etc.	8,150	13,996	9,750	4,550	9,750	-	0.0%
Utilities	225,727	200,451	235,528	224,850	231,753	(3,775)	-1.6%
Contractual Services	104,116	43,736	214,000	65,375	144,125	(69,875)	-32.7%
Repair & Maintenance Services	158,834	119,105	96,000	106,392	96,000	-	0.0%
Employee programs	472	1,005	7,400	2,100	7,550	150	2.0%
Professional Development/Travel	17,601	7,079	8,900	6,845	8,900	-	0.0%
Office Supplies	5,351	3,187	4,500	4,796	4,500	-	0.0%
Operating Supplies	393,906	321,726	314,000	346,420	329,598	15,598	5.0%
Fuel & Mileage	40,037	38,011	34,606	25,100	27,400	(7,206)	-20.8%
Supplies for Resale	3,466,520	2,989,286	3,744,000	3,780,000	3,893,760	149,760	4.0%
Machinery & Equipment (<\$25,000)	66,214	55,489	63,451	57,397	92,217	28,766	45.3%
Repair & Maintenance Supplies	503,830	440,219	244,300	325,016	244,300	-	0.0%
Operational Units	1,058,823	1,157,951	1,167,738	1,167,738	1,217,167	49,429	4.2%
Property & Liability Costs	76,833	84,464	75,330	74,327	80,845	5,515	7.3%
Rentals	641	357	2,000	7,428	2,000	-	0.0%
Financial Fees	12,164	9,911	41,800	14,910	16,800	(25,000)	-59.8%
Permits	33,222	6,639	38,100	32,654	38,100	-	0.0%
Debt Service and Lease Payments	209,933	307,936	309,851	309,941	326,548	16,697	5.4%
Total Operations	6,409,828	5,821,210	6,634,505	6,587,514	6,801,163	166,658	2.5%
Buildings	(33,269)	89	2,205	-	2,315	110	5.0%
Improvements	575,002	1,261,482	1,300,000	1,500,000	1,300,000	-	0.0%
Machinery & Equipment (>\$25,000)	44,195	30,567	193,712	48,129	198,398	4,686	2.4%
Capital	585,928	1,292,138	1,495,917	1,548,129	1,500,713	4,796	0.3%
Total Water Summary	8,863,912	8,926,520	10,109,760	9,929,580	10,540,843	431,083	4.3%

Note: Definitions of each category can be found in the appendices.



Budget							
	<u>A</u>	<u>B</u>	<u>c</u>	<u>D</u>	<u>E</u>	<u>F (E-C)</u>	<u>G (E/C)</u>
	Actual	Actual	Budget	Estd	Budget	Difference '	16 v. '17
	2014	2015	2016	FY 2024	2017	\$	%
Divisions							
Wastewater Collection	2,236,032	1,852,057	2,184,709	2,138,282	2,699,823	515,114	23.6%
Wastewater Plant	3,235,158	3,003,978	4,191,527	3,535,226	4,310,374	118,847	2.8%
Utility Administration	662,152	916,161	1,007,930	963,293	1,100,650	92,720	9.2%
Wastewater General	4,771,530	6,059,394	5,505,650	5,745,141	5,850,225	344,575	6.3%
Total Water	10,904,872	11,831,590	12,889,816	12,381,942	13,961,073	1,071,257	8.3%
Expense by Category							
Personnel							
Salaries & Wages	1,956,554	2,221,811	2,520,500	2,181,319	2,774,294	253,794	10.1%
Employee Benefits	941,105	909,775	985,779	884,023	1,160,632	174,853	17.7%
Total Personnel	2,897,659	3,131,586	3,506,279	3,065,342	3,934,926	428,648	12.2%
Operations							
Transportation Services	2,949	2,975	3,500	6,628	3,500	-	0.0%
Operating Services	391,814	345,843	383,760	390,745	415,373	31,613	8.2%
Notices, Subscriptions, etc.	9,837	7,385	16,600	14,868	16,800	200	1.2%
Utilities	1,317,357	1,092,921	1,453,991	1,382,470	1,497,223	43,232	3.0%
Contractual Services*	127,662	467,249	315,500	823,486	352,750	37,250	11.8%
Repair & Maintenance Services	301,974	185,381	238,000	234,505	238,000	-	0.0%
Employee programs	751	1,558	4,750	4,170	4,750	-	0.0%
Professional Development/Travel	13,602	17,503	19,500	11,162	20,700	1,200	6.2%
Office Supplies	6,345	7,389	7,150	7,148	7,150	-	0.0%
Operating Supplies	278,656	267,949	278,850	289,241	292,553	13,703	4.9%
Fuel & Mileage	118,424	74,516	112,983	69,000	80,650	(32,333)	-28.6%
Supplies for Resale	-	-	-	-	-	-	#DIV/0!
Machinery & Equipment (<\$25,000)	14,253	60,782	109,440	61,757	142,914	33,474	30.6%
Repair & Maintenance Supplies	248,737	156,670	151,000	277,015	151,000	-	0.0%
Operational Units	941,177	1,029,289	1,037,990	1,037,990	1,081,927	43,937	4.2%
Property & Liability Costs	146,134	149,843	126,034	147,185	151,811	25,777	20.5%
Rentals	4,011	1,858	3,500	3,516	3,500	-	0.0%
Financial Fees	13,102	11,476	45,000	20,037	45,000	-	0.0%
Permits	15,440	47,294	17,000	44,980	17,000	-	0.0%
Debt Service and Lease Payments	1,342,012	1,421,305	1,383,798	1,383,798	1,603,224	219,426	15.9%
Total Operations	5,294,237	5,349,186	5,708,346	6,209,701	6,125,825	417,479	7.3%
Buildings	-	-	1,654	-	1,736	82	5.0%
Improvements	2,393,776	3,262,555	2,687,500	2,600,000	2,900,000	212,500	7.9%
Machinery & Equipment (>\$25,000)	319,200	88,263	986,036	506,899	998,586	12,550	1.3%
Capital	2,712,976	3,350,818	3,675,190	3,106,899	3,900,322	225,132	6.1%
Total Wastewater	10,904,872	11,831,590	12,889,815	12,381,942	13,961,073	1,071,258	8.3%

Note: Definitions of each category can be found in the appendices.

Note 2: \*Estimated Overage in FY 2015 Contractual Services attributable to legal expenses.



#### Wastewater Budget

#### Section Summary

The Wastewater Section includes the Wastewater Collection, Water Reclamation, Maintenance, and Utility Administration Divisions.

The City of Franklin operates an activated sludge treatment facility located at 135 Claude Yates Drive. The facility is currently operating under an expired National Pollutant Discharge Elimination System Permit (NPDES) for treatment and discharge of twelve (12) million gallons of treated effluent per day. Limits and procedures are incorporated into the NPDES Permit that allows the City of Franklin to operate a reclaimed water network. This Division is facing increasing regulatory constraints from EPA and TDEC primarily related to nutrient loading to the Harpeth River and additional Capacity Management Operation Maintenance (CMOM) Initiative requirements. The City has been in negotiations with TDEC with respect to the expired NPDES permit, and looks forward to issuance of a new permit from TDEC.



The Wastewater Collection Division is responsible for the operation and maintenance of the wastewater collection system including gravity sewer lines, force main lines and sewage lift stations located throughout the service area. Under this division, there are crews that are assigned to the replacement and extension of the wastewater collection system which collects and transports wastewater to the treatment plant.

#### Section Goals & Strategic Initiatives

The primary goal for the Wastewater Section is to effectively operate the collection system with no sanitary sewer overflows and to produce high quality effluent water for distribution in the reclaimed water system and discharge to the Harpeth River that meets or exceeds permit requirements. As with the Water Section, the Wastewater Section is enhancing and implementing various programs to improve customer service, regulatory compliance, and overall operations.

The Water Management Department continues to refine operations efforts consistent with components of the EPA's Capacity Management, Operations and Maintenance (CMOM) program. In part, these activities include refinements to documentation and operations, development of a capacity management tool, and installation of permanent flow monitors within the collection system. These activities are intended to help monitor the system, reduce sanitary sewer overflows and provide better management tools for the system.

The wastewater collection division continues to perform inspections of the sanitary sewer system to evaluate condition, risk and maintenance needs. This year the division worked with the IT Department to further refine the manhole inspection tool and process to help manage the data from ongoing manhole inspections. Additionally, the division has started using a sanitary sewer rapid assessment tool to provide for more efficient inspections and maintenance activities.



### Wastewater Budget

#### **Consumption & Revenues**

The sanitary sewer customer base has shown greater signs of growth primarily due to areas within the Mallory Valley and HB&TS Utility Districts.

Year	Customer Accounts	Annual Total (Million Gallons)	Monthly Average - Residential and Commercial (Gallons)
FY 07	16,708	1,582	7,889
FY 08	16,215	1,619	8,323
FY 09	18,617	1,900	8,504
FY 10	19,923	2,068	8,649
FY 11	20,201	2,334	9,627
FY 12	20,646	2,204	8,898
FY 13	21,221	2,332	9,157
FY 14	21,735	2,224	8,528
FY 15	22,601	2,147	7,917

#### Revenues

Rate based revenues for FY 2016 are projected to be at approximately 105% of the budget. The tables below present historic revenue by category FY 2010-FY 2015, estimated for the budgeted and projected revenues for FY 2016 and the projected revenues for FY 2017.



	Actual	Actual	Actual	Actual	Actual	Budget	Forecast	Budget
Intergovernmental	258,890	42,219	-	-	-	-	-	-
Interest Income	17,918	46,064	39,658	20,277	69,963	80,000	73,260	70,000
Rental Income	2,480	-	1,800	2,700	2,635	2,800	2,800	2,800
Sale of Surplus Assets	22	(152,425)	6,133	-	13,714	-	646,682	-
Customer Service (Rates)	10,410,071	11,500,187	12,241,583	13,072,915	14,568,762	14,200,515	15,286,176	15,159,049
Inspection Fees	33,228	32,290	75,298	90,563	133,940	75,000	55,784	75,000
Other Service Revenue	23,992	31,745	60,610	44,146	21,646	40,000	55,766	40,000
Capital Contributions	230,628	2,267,716	2,641,148	184,209	4,918,077	125,000	188,336	125,000
Total Wastewater Reven	10.977.229	13.767.796	15.066.230	13.414.810	19.728.737	14.523.315	16.308.804	15.471.849

#### Wastewater Budget

#### **Budget Summary**

**Personnel** – The Water Management Department is requesting the following personnel changes within the Wastewater Section:

- Water Distribution and Wastewater Collection: Add four Utility Locator positions (two in each division) to provide for adequate staffing for compliance with Title 65 Public Utilities and Carriers, Chapter 31 Underground Utility Damage Prevention Act (Tenn. Code Ann. § 65-31-101 (2014)) requiring the City to become part of TN One Call by January 1, 2017. It is anticipated that two of the four positions will be hired in September 2016 to initiate the program and to help determine the need to hire additional staff.
- Utility Administration: Add one Utilities Engineer (this position would be managed through the Engineering Department and Funded through the Water Management Department) – FY 2017.
- Utility Administration: Reclassify Administrative Secretary to Administrative Assistant to better align the job description with the duties being required. These duties include assistance with payroll, purchase card reconciliations, assistance with accounts payable, and managing record keeping for various operations programs.

**Operations and Maintenance** – Operations and maintenance accounts for the largest costs in the Wastewater Section. Utility costs are a large expense item in Wastewater, exceeding \$1,000,000 annually. These costs are associated with aeration of the wastewater for biological processes, pumping, odor control and various other processes and operations.

Indirect Expenses also is a large expense item in the Wastewater Section. As with the Water Section, these expenses include reimbursement to the General Fund for customer service, utility billing, and other support functions such as Engineering and Human Resources.

The City has started implementation of a sanitary sewer rapid assessment too. The equipment uses sonic technology to determine blockage condition which helps determine further action such as inspection, cleaning or maintenance activities. The crews have had positive results during initial testing and have been able to evaluate over 50,000 LF of pipe during approximately six weeks of field time.

The Wastewater Collection Division responded to five overflows this fiscal year through the end of March 2016. Of these overflows, three reached a receiving stream (less than 1 overflow per 100 miles of collection system thus far in FY 2016). In response to these overflows, the City brought one facility into the pretreatment program to provide for better oversight of their operations with respect to wastewater discharge to the City's system.

**Operations Capital** – Operations Capital expenditures are related to equipment and vehicles directly related to operations versus system replacement or expansion. The Water Management Department has evaluated the annual cost of replacement of operations capital items based on present day replacement value, anticipated lifecycle, and a projected annual increase in replacement cost of five percent. The department hopes to achieve the following goals by using this approach:

- Provide for adequate funding of operations capital,
- Avoid significant swings in required funding from one budget to another, and
- Provide more stable data in performing cost of service analyses.

This process was applied to operations capital expenditures on machinery and equipment, vehicles, information technology expenditures, and buildings.

Similar to the Water Section, the City has been working through the IWRP priority projects established by the BOMA. The key project in the Wastewater Section is the Water Reclamation Facility Upgrade and Expansion. This project is also proposed to be funded through State Revolving Fund loans through the TDEC. Due to delays with permitting, bidding for the project has been delayed. Staff is working with TDEC to evaluate the potential value of splitting the project into phases. Should it prove to be a benefit, staff will present the information to the BOMA for consideration.



### **Reclaimed Water**

#### Section Summary

On February 10, 2004, the City of Franklin Board of Mayor and Aldermen officially created the Reclaimed Division through adoption of Title 18, Chapter 4, of the Franklin Municipal Code. The Reclaimed Water Section produces and distributes water for commercial and residential irrigation use within the City's water service area. There are no dedicated personnel assigned to this division. Personnel from the Service



Divisions currently maintain the reclaimed water lines and personnel from the Water Reclamation Plant operate and maintain the pumps and sampling stations.

#### Section Goals & Strategic Initiatives

The primary goal for the Reclaimed Water Section is to distribute high quality effluent water for irrigation needs of customers. A benefit of reclaimed water, in addition to a low cost alternative for irrigation water, is that it reduces loading of effluent to the Harpeth River. While the use of reclaimed water is typically seasonal, the department has been and will continue to evaluate other disposal concepts that would reduce effluent discharge to the river that are consistent with the permit.

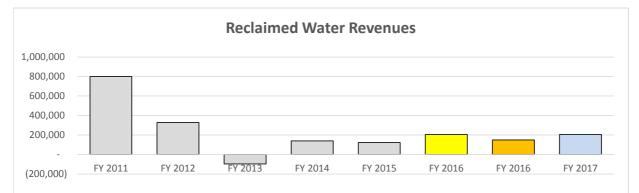
Though reclaimed water is not an essential service, it is imperative that the Department be able to serve the demands for the system. Depending on growth and technical issues, it is anticipated that the existing Long Lane Water Tank (500,000 gallons) will be converted to a reclaimed storage facility in the coming years. Additional storage facilities are being considered using existing Department property.

### **Reclaimed Water**

#### Revenues

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Rate based revenues for FY 2016 are projected to be at approximately 69% of the forecast. The tables below present historic revenue by category FY 2010-FY 2015, estimated for the budgeted and projected revenues for FY 2016 and the projected revenues for FY 2017.



	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2016	FY 2017
	Actual	Actual	Actual	Actual	Actual	Forecast	Est.	Forecast
Intergovernmental	648,132	178,887	(240,183)	-	-	-		-
Interest Income	872	1,840	839	170	14	500	25	500
Sale of Surplus Assets	-	-	-	-	-	-		-
Customer Service (Rates)	146,237	147,006	135,305	130,570	82,488	200,500	137,656	200,500
Inspection Fees	-	-	2,337	-	-	1,000	8,668	1,000
Other Service Revenue	-	-	600	333	3,287	500	-	500
Contributions from Develop.					22,200			
Capital Contributions	3,780	-	4,234	8,428	13,985	2,000	2,000	2,000
Total Reclaimed Revenues	799,021	327,733	(96,868)	139,501	121,974	204,500	148,349	204,500



	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F (E-C)</u>	G (E/C)
	Actual	Actual	Budget	Estd	Budget	Difference '16 vs. '17	
<b>D</b>	2014	2015	2016	2016	2017	\$	%
Personnel							
Salaries & Wages	-	-	-	-	-	-	0.09
Employee Benefits	-	-	-	-	-	-	0.0%
Total Personnel	-	-	-	-	-	-	0.0%
Operations							
Transportation Services	-	-	265	-	250	(15)	-5.7%
Operating Services	-	-	-	-	-	-	0.0%
Notices, Subscriptions, etc.	-	-	106	-	100	(6)	-5.7%
Utilities	12	9	53	15	50	(3)	-5.7%
Contractual Services	-	-	-	-	-	-	100.09
Repair & Maintenance Services	-	-	12,732	-	12,000	(732)	-5.79
Employee programs	-	-	-	-	-	-	0.09
Professional Development/Travel	-	-	-	-	-	-	0.09
Office Supplies	-	1,884	-	-	-	-	0.0%
Operating Supplies	77,383	86,756	106,200	35,000	108,200	2,000	1.9%
Fuel & Mileage	-	-	-	-	-	-	0.0%
Supplies for Resale	-	-	-	-	-	-	0.0%
Machinery & Equipment (<\$25,000)	-	-	2,000	-	2,000	-	0.0%
Repair & Maintenance Supplies	4,643	14,710	15,500	3,376	15,500	-	0.0%
Operational Units	-	-	-	-	-	-	0.0%
Property & Liability Costs	-	-	-	-	-	-	0.0%
Rentals	-	-	-	-	-	-	0.0%
Financial Fees	-	-	-	-	-	-	0.0%
Permits	-	-	-	-	-	-	0.0%
Debt Service and Lease Payments	61,088	61,088	65,975	65,975	65,975	-	0.0%
Total Operations	143,126	164,447	202,831	104,366	204,075	1,244	0.6%
Capital	-	-	-	-	-	-	#DIV/0!
Total Reclaimed Water	143,126	164,447	202,831	104,366	204,075	1,244	0.6%

Note: Definitions of each category can be found in the appendices.



Reclaimed Water

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