#### **RESOLUTION NO. 2019-45**

A RESOLUTION OF THE BOARD OF MAYOR AND ALDERMEN FOR THE CITY OF FRANKLIN ADOPTING THE ESTIMATE OF REVENUES AND EXPENDITURES FOR THE WATER AND SANITARY SEWER UTILITY FUND FOR FISCAL YEAR 2019-2020; PROVIDING AN EFFECTIVE DATE

**WHEREAS,** the City of Franklin owns and operates a water and sanitary sewer utility system under authorization of the Municipal Charter, and

**WHEREAS,** this Utility Fund is an enterprise fund of the City in accordance with generally accepted accounting principles, and

**WHEREAS,** it is now deemed in the public interest to provide for authorization of the amendment to the estimate of revenues and expenditures for such fund.

NOW THEREFORE, BE IT RESOLVED BY THE BOARD OF MAYOR AND ALDERMEN OF THE CITY OF FRANKLIN, TENNESSEE THAT:

**SECTION 1:** That the amendment to the Statement of Estimated Revenues and Expenditures for the Water and Sewer Utility Fund, for Fiscal Year 2019-2020, as set forth more fully in the document entitled "City of Franklin, Tennessee, Annual Operating & Capital Equipment Budget, July 1, 2019 – June 30, 2020" which is found on pages 243-268 attached hereto as if set forth herein and is approved and adopted.

**SECTION 2:** That this Resolution shall be effective upon adoption.

ADOPTED THIS DAY OF 2019	•
ATTEST:	CITY OF FRANKLIN, TENNESSEE
By:	Ву:
Eric S. Stuckey	Dr. Ken Moore
City Administrator/Recorder	Mayor
Approved as to Form:	
By:	
Shauna R. Billingsley	
City Attorney	



## Water Management

Michelle Hatcher, Director

	2017	2018	20	19	2020 2019 v		. 2020	
	Actual	Actual	Budget Estimated		Budget	\$	%	
Beginning Balance*	18,470,570	23,340,291	25,501,060	25,501,060	31,546,739			
Revenues	28,624,641	30,595,709	31,768,874	31,768,874	34,573,488	2,804,614	8.8%	
Expenses								
Personnel	5,755,052	6,352,580	7,009,480	6,539,012	7,301,099	291,619	4.2%	
Operations	14,176,848	15,013,037	14,960,022	14,507,922	15,799,393	839,371	5.6%	
Capital	3,823,020	118,466	6,727,850	4,676,260	7,502,850	775,000	11.5%	
Expenses	23,754,920	21,484,083	28,697,352	25,723,195	30,603,342	1,905,990	6.6%	
Use of F/B**		\$ 6,950,858						
Ending Balance*	23,340,291	25,501,060	28,572,582	31,546,739	35,516,886			

### **Budget Summary - By Division**

	2017	2018	20:	19	2020	2019 v. 2	020
	Actual	Actual	Budget	Estimated	Budget	\$	%
Beginning Balance*	18,470,570	23,340,291	25,501,060	25,501,060	31,546,739		
Revenues	28,624,641	30,595,709	31,768,874	31,768,874	34,573,488	2,804,614	8.8%
Expenses							
Water	11,381,127	10,470,175	12,801,538	12,045,607	12,959,497	157,959	1.2%
Wastewater	12,188,233	10,810,245	15,504,089	13,284,607	16,852,370	1,348,281	8.7%
Reclaimed	185,560	203,663	391,725	392,980	791,475	399,750	102.0%
Expenses	23,754,920	21,484,083	28,697,352	25,723,195	30,603,342	1,905,990	6.6%
Use of F/B**		\$ 6,950,858					
Ending Balance*	23,340,291	25,501,060	28,572,582	31,546,739	35,516,886		

<sup>\*</sup>Beginning and Ending Balance representative of the cash basis of the Enterprise Fund. Does not include accrual of fixed assets.

Remaining Ending Balance will be used to subsidize larger capital projects, namely as a cash contribution for the Water Reclamation Facility.

Water & Wastewater Fund Page 243

<sup>\*\*</sup>Use of F/B includes monies raised by operations spent on capital projects for the Water Management Fund expensed outside of the operational funds. This includes monies dedicated to emergency repairs to the 54" wastewater line.



### Water Management

Michelle Hatcher, Director

#### 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.

This 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 self-sufficient 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.

Water & Wastewater Fund Page 244

# 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 **FranklinForward**: 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

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

[Baseline: Achieved Goal status, 2013]

Key	: Strategic Plan: Franklin <i>Forward</i>	
' <u>-</u>	Sustainable Franklin	<b>(III)</b>
	Tennessee Municipal Benchmarking Project	●
	Franklin Citizens Survey	V

Workload (Output) Measures									
	2016	2017	2018	2019*	2020*				
Water Production (in MGD) - Average	1.21	0.68	1.40	1.40	1.40				
Water Production (in MGD) - Maximum	2.35	1.90	2.50	2.50	2.50				

Effici	ency Measures					
		2016	2017	2018	2019*	2020*
	TBD					
Outc	ome (Effectiveness) Measures					



# Performance Measures

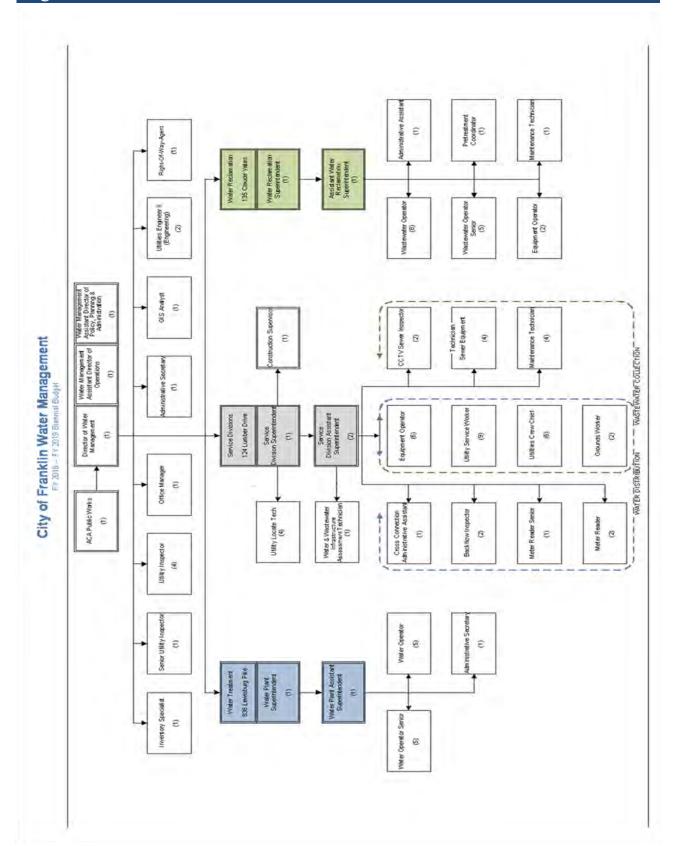
		2016	2017	2018	2019*	2020*				
	Franklin will establish standards for the quality of it	s infrastructu	re (i.e., water	lines, sewer	services)					
	Goal: To have a reliable, efficient, and scalable inf	rastructure								
	Declining or steady energy costs for water and sewage delivery	\$ 1,568,533	\$ 1,502,802	\$ 1,650,384	\$ 1,483,011	\$ 1,538,225				
	<b>Target</b> (FY2012 sum actual expenditures from water fund and wastewater fund)	\$ 1,595,352	\$ 1,595,352	\$ 1,595,352	\$ 1,595,352	\$ 1,595,352				
	Meets Target?	No	Yes	No	TBD	TBD				
	Unaccounted water within the system decreases	16%	16%	17%	16%	15%				
	Target (20.8% unaccounted for in FY 2012)	20.8%	20.8%	20.8%	20.8%	20.8%				
	Meets Target?	Yes	Yes	No	Yes	TBD				
	Sanitary score remains or improves	TBD	99	TBD	TBD	TBD				
	Target (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 for water quality.									
	Goal: To have no violations of regulatory requires	ments for wat	er quality.							
	Franklin Water Quality Violations	0	0	2	0	0				
	<b>Target</b> (TN Dept. of Environment & Conservation monitoring requirements and regulatory standards.)	0	0	0	0	0				
	Meets Target?	Yes	Yes	No	TBD	TBD				
	Franklin will pursue completion of the recently app	roved Integra	ted Water Re	source Plan (I	WRP) by 204:	2.				
	Goal: To fully complete the Franklin Integrated W 2042 in five year increments as set in the plan.	ater Resourc	e Plan by							
•	5% completed (2012). (Franklin Integrated Water Resource Plan.)	12.0%	20.0%	25.0%	30.0%	35.0%				
	Target	12.0%	15.0%	15.0%	15.0%	15.0%				
	Meets Target?	Yes	Yes	Yes	Yes	TBD				
	Baseline: Adopted Strategic Schedule for each of th	e 5-year incre	ements.							
	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 TVA	sustainable (	Communities	Program.						
	Franklin status	Platinum	Platinum	Platinum	Platinum	TBD				
	Target (Platinum)	Platinum	Platinum	Platinum	Platinum	Platinum				
	Meets Target?	Yes	Yes	Yes	Yes	TBD				

<sup>\*2019</sup> and 2020 are estimates

Franklin Citizens Survey								
	2016 Citize	ens Survey	2019 Citizens Survey					
	Excellent/ Good	Fair/Poor	Excellent/ Good	Fair/Poor				
☑ % rating the quality of Drinking water	73%	27%	76%	24%				
✓ % rating the quality of Sewer services	88%	12%	87%	13%				



# Organizational Chart



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

Organization Chart Page 247



# City of Franklin, Tennessee

# **FY 2020 Operating Budget**

Staffing by Position						
		FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Position	Pay Grade	F-T	F-T	F-T	F-T	F-T
Water Section						
Utility Billing	-	4	4	4	4	4
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
Service Division Assistant Superintendent	H	0	0	1	1	1
Water Distribution Assistant Superintendent	Н	1	1	0	0	0
Utilities Crew Chief	F	3	3	3	3	3
Backflow Inspector	 E	2	2	2	2	2
Water & Wastewater Infrastructure Assessment Technician	E	0	0	0	0	1
Administrative Assistant	D	1	1	1	1	1
Inventory Specialist	D	1	1	1	1	1
Equipment Operator	D	2	3	3	3	3
Utility Locate Technician	D	0	2	2	2	3
Utility Service Worker	C	4	4	4	4	4
Administrative Secretary	В	0	0	1	1	0
TOTALS		15	18	19	19	20
Water Treatment Plant						
Water Treatment Superintendent	ı	1	1	1	1	1
Water Treatment Assistant Superintendent	Н	1	1	1	1	1
Water Operator Sr	E	5	5	5	5	5
Water Operator 2		2	0	0	0	0
Administrative Assistant	D	1	1	1	1	1
Water Operator	D	3	5	5	5	5
Administrative Secretary	В	0	0	0	0	1
TOTALS		13	13	13	13	14
						•
Water Section Totals		31	34	35	35	37
Wastewater Section						
Utility Administration						
				1	1	1
Director	L	1	1			
Assistant Director of Operations	L J	1	1	1	1	1
					1 1	1 1
Assistant Director of Operations	J	1	1	1		
Assistant Director of Operations Assistant Director of Administration and Policy	J	1 1	1	1 1	1	1
Assistant Director of Operations Assistant Director of Administration and Policy Utilities Engineer II	J	1 1 1	1 1 2	1 1 2	1 2	1 2
Assistant Director of Operations Assistant Director of Administration and Policy Utilities Engineer II Right of Way Inspector Water Information Systems Mgr Senior Utility Inspector	J I H H G	1 1 1 0	1 1 2 0	1 1 2 0	1 2 1	1 2 1
Assistant Director of Operations Assistant Director of Administration and Policy Utilities Engineer II Right of Way Inspector Water Information Systems Mgr Senior Utility Inspector GIS Analyst	J I H	1 1 1 0 0	1 1 2 0	1 1 2 0	1 2 1 0	1 2 1 1
Assistant Director of Operations Assistant Director of Administration and Policy Utilities Engineer II Right of Way Inspector Water Information Systems Mgr Senior Utility Inspector	J I H H G	1 1 1 0 0	1 1 2 0 0	1 1 2 0 0	1 2 1 0 1	1 2 1 1
Assistant Director of Operations Assistant Director of Administration and Policy Utilities Engineer II Right of Way Inspector Water Information Systems Mgr Senior Utility Inspector GIS Analyst	J J H H G	1 1 0 0 1 1	1 1 2 0 0 1	1 1 2 0 0 1	1 2 1 0 1	1 2 1 1 1 0
Assistant Director of Operations Assistant Director of Administration and Policy Utilities Engineer II Right of Way Inspector Water Information Systems Mgr Senior Utility Inspector GIS Analyst Utility Inspector	J J H H G F	1 1 0 0 1 1 3	1 1 2 0 0 1 1 3	1 1 2 0 0 1 1 3	1 2 1 0 1 1 4	1 2 1 1 1 0 4
Assistant Director of Operations Assistant Director of Administration and Policy Utilities Engineer II Right of Way Inspector Water Information Systems Mgr Senior Utility Inspector GIS Analyst Utility Inspector Office Manager	J J H H F F	1 1 0 0 1 1 3	1 1 2 0 0 1 1 3	1 1 2 0 0 1 1 3 1	1 2 1 0 1 1 4	1 2 1 1 1 0 4
Assistant Director of Operations Assistant Director of Administration and Policy Utilities Engineer II Right of Way Inspector Water Information Systems Mgr Senior Utility Inspector GIS Analyst Utility Inspector Office Manager Administrative Assistant	J I H H F F D	1 1 0 0 1 1 3 1	1 2 0 0 1 1 3 1	1 1 2 0 0 1 1 3 1	1 2 1 0 1 1 4 1	1 2 1 1 1 0 4 1



# City of Franklin, Tennessee

# FRANKLIN FY 2020 Operating Budget

Don't in a	Day Guada	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Position	Pay Grade	F-T	F-T	F-T	F-T	F-T
Wastewater Collection						
Service Division Assistant Superintendent	Н	0	0	1	1	1
Wastewater Collection Assistant Superintendent	G	1	1	0	0	0
Construction Supervisor	F	1	1	1	1	1
Utilities Crew Chief	F	3	3	3	3	3
TV Truck Sewer Inspector	Е	2	2	2	2	2
Maintenance Technician	Е	4	4	4	4	4
Equipment Operator	D	3	3	4	4	3
Sewer Equipment Technician	D	4	4	4	4	4
Utility Locate Technician	D	0	2	2	2	1
Utility Service Worker	С	5	5	5	5	5
TOTALS	-	23	25	26	26	24
Water Reclamation						
Water Reclamation Superintendent	l	1	1	1	1	1
Assistant Water Reclamation Superintendent	Н	1	1	1	1	1
Pretreatment Coordinator	F	1	1	1	1	1
Wastewater Operator Sr	E	5	5	5	5	5
Maintenance Technician	E	1	1	1	1	1
Equipment Operator	D	2	2	2	2	2
Wastewater Operator	D	8	8	8	8	8
TOTALS		19	19	19	19	19

Total All Employees, Water & Wastewater	86	92	94	96	96



# Budget - All Divisions

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

	<u>B</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	ice
	2017	2018	2019	2019	2020	\$	%
Personnel						•	
Salaries & Wages	3,995,029	4,298,696	4,906,785	4,486,528	4,999,133	92,348	1.9%
Employee Benefits	1,760,023	2,053,884	2,102,695	2,052,485	2,301,966	199,271	9.5%
Total Personnel	5,755,052	6,352,580	7,009,480	6,539,012	7,301,099	291,619	4.2%
Operations						1	
Transportation Services	8,360	9,507	8,525	7,389	7,300	(1,225)	
Operating Services	488,692	540,174	510,150	463,279	458,500	(51,650)	
Notices, Subscriptions, etc.	14,221	6,540	26,850	15,250	23,400	(3,450)	
Utilities	1,502,802	1,650,384	1,627,962	1,483,011	1,538,225	(89,737)	
Contractual Services	568,945	1,893,510	1,097,425	886,250	1,649,323	551,898	50.3%
Repair & Maintenance Services	313,590	626,940	394,460	401,374	381,908	(12,552)	-3.2%
Employee programs	8,682	10,860	11,300	5,712	12,650	1,350	11.9%
Professional Development/Travel	15,744	19,745	27,950	12,992	27,250	(700)	-2.5%
Office Supplies	11,094	13,315	10,950	9,750	11,950	1,000	9.1%
Operating Supplies	692,551	542,393	727,825	664,550	698,275	(29,550)	-4.1%
Fuel & Mileage	86,645	107,904	130,576	102,300	130,890	314	0.2%
Supplies for Resale	4,696,834	4,756,024	4,375,000	3,878,522	4,000,000	(375,000)	-8.6%
Machinery & Equipment (<\$25,000)	263,168	205,923	227,250	160,319	293,915	66,665	29.3%
Repair & Maintenance Supplies	1,131,593	868,943	444,000	811,611	612,250	168,250	37.9%
Operational Units	2,313,762	2,369,630	2,382,613	2,382,613	2,709,104	326,491	13.7%
Property & Liability Costs	331,886	402,734	319,855	430,196	339,710	19,855	6.2%
Rentals	6,069	14,947	5,500	23,547	8,650	3,150	57.3%
Financial Fees	35,031	(6,038)	44,050	156	44,150	100	0.2%
Permits	32,927	55,408	54,500	53,080	53,500	(1,000)	-1.8%
Debt Service and Lease Payments	1,654,252	924,194	2,533,281	2,716,021	2,798,444	265,163	10.5%
Total Operations	14,176,848	15,013,037	14,960,022	14,507,922	15,799,393	839,371	5.6%
				i		Ī	
Land	-	-	-	266,600	-	-	-100.0%
Buildings	600,000	118,466	-	142,766	500,000	500,000	0.0%
Improvements	2,790,304	-	5,427,850	3,684,594	6,322,850	895,000	16.5%
Machinery & Equipment (>\$25,000)	432,716	-	1,300,000	582,300	680,000	(620,000)	-47.7%
Capital	3,823,020	118,466	6,727,850	4,676,260	7,502,850	775,000	11.5%
<b>Total Water &amp; Wastewater Func</b>	23,754,920	21,484,083	28,697,352	25,723,195	30,603,342	1,905,990	6.6%

Budget Summary Page 250

### 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 scheduled for April 2018.

The upgrade to the facility included 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.

The Water Distribution team continues to perform leak detection services. In FY 2017 leak detection surveys were performed on 86.3 miles of the system. The surveys identified 35 leaks with an estimated loss of approximately 12,000,000 gallons per year. Included in the FY 2018 enhancements is equipment to perform these surveys in-house. This equipment has been purchased and the addition of the staff person to perform leak detection at various times throughout the year will be helpful in assessing the system.

Water Summary - Narrative Page 251

### Water Budget

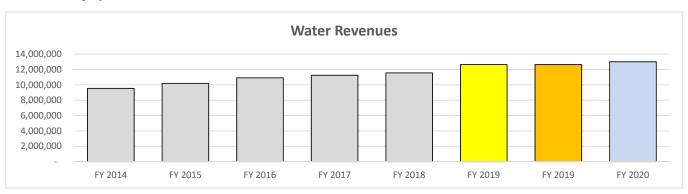
#### Consumption

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, however this average volume appears to be stabilizing over the last few years. The table below presents the account information and consumption values (residential and commercial totals) from FY 2012 through FY 2017. It is important to note that in 2016 the City updated the method by which it calculates customers to more accurately count each customer of each individual division of the system. This methodology was applied to the information presented below and may differ from prior information.

Year	Annual Total (Million Gallons)	Monthly Average - Residential and Commercial (Gallons)
FY 12	1,627	8,048
FY 13	1,599	7,827
FY 14	1,486	7,164
FY 15	1,548	7,338
FY 16	1,574	7,414
FY 17	1,505	7,160
FY 18	1,875	7,160

#### Revenues

Rate based revenues for FY 2020 are projected to be at approximately 102.9% of the 2019 estimated receipts. The tables below present historic revenue by category FY 2014-FY 2018, estimated for the budgeted and projected revenues for FY 2019 and the projected revenues for FY 2020.



	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2019	FY 2020
	Actual	Actual	Actual	Actual	Actual	Budget	Estd	Budget
Intergovernmental	-	-	-	-		-	-	-
Interest Income	7,002	4,924	10,735	11,032	69,046	13,778	13,778	14,178
Rental Income	24,000	24,000	24,000	24,000	21,075	24,000	24,000	24,000
Sale of Surplus Assets	33,277	-	11,432	54,960	41,046	-	-	-
Customer Service (Rates)	9,293,143	9,987,026	10,716,426	11,006,147	11,021,468	12,442,642	12,442,642	12,803,479
Inspection Fees	72,422	83,765	61,100	78,595	76,951	60,000	60,000	60,000
Other Service Revenue	109,136	90,459	84,615	70,550	327,010	95,000	95,000	95,000
Fund Balance	-	-	-	-				-
Total Water Revenues*	9,538,980	10,190,174	10,908,308	11,245,284	11,556,597	12,635,420	12,635,420	12,996,656

<sup>\*</sup>Total revenues less those received for Capital Contributions and accounted for elsewhere within the Water & Wastewater Fund.

Water Summary - Narrative Page 252



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	'19 v. '20
	2017	2018	2019	2019	2020	\$	%
Divisions							
Water Distribution	2,225,605	2,419,664	2,189,467	2,356,638	2,370,913	181,446	8.3%
Water Treatment/Plant	6,177,219	6,108,364	6,008,051	5,516,279	5,768,158	(239,893)	-4.0%
Utility Billing	186,884	135,602	184,723	151,450	205,329	20,606	11.2%
Water General	2,791,419	1,806,545	4,419,297	4,021,240	4,615,097	195,800	4.4%
Total Water	11,381,127	10,470,175	12,801,538	12,045,607	12,959,497	157,959	1.2%
Expense by Category							
Personnel							
Salaries & Wages	1,455,559	1,547,549	1,715,212	1,632,888	1,799,545	84,333	4.9%
Employee Benefits	699,791	772,805	787,734	760,805	840,795	53,061	6.7%
Total Personnel	2,155,350	2,320,354	2,502,946	2,393,693	2,640,340	137,394	5.5%
Operations							
Transportation Services	3,309	2,027	3,100	3,739	3,725	625	20.2%
Operating Services	33,711	36,243	28,400	65,906	65,300	36,900	129.9%
Notices, Subscriptions, etc.	3,708	1,290	13,450	4,400	11,250	(2,200)	-16.4%
Utilities	222,476	269,394	223,025	349,880	369,632	146,607	65.7%
Contractual Services	38,166	30,253	167,125	177,450	362,875	195,750	117.1%
Repair & Maintenance Services	64,887	66,857	82,310	83,374	90,438	8,128	9.9%
Employee programs	3,725	3,895	7,200	2,462	7,500	300	4.2%
Professional Development/Travel	3,069	5,635	8,250	2,980	7,100	(1,150)	-13.9%
Office Supplies	3,800	5,111	4,100	3,700	4,300	200	4.9%
Operating Supplies	346,771	217,122	318,600	336,100	336,950	18,350	5.8%
Fuel & Mileage	25,263	34,447	42,076	32,300	39,490	(2,586)	-6.1%
Supplies for Resale	4,696,834	4,756,024	4,375,000	3,878,522	4,000,000	(375,000)	-8.6%
Machinery & Equipment (<\$25,000)	118,141	145,314	93,100	100,219	123,542	30,442	32.7%
Repair & Maintenance Supplies	575,915	581,444	253,500	606,061	406,850	153,350	60.5%
Operational Units	1,231,835	1,254,510	1,261,384	1,261,384	1,354,552	93,168	7.4%
Property & Liability Costs	129,142	221,831	91,623	112,981	102,155	10,532	11.5%
Rentals	583	9,668	2,000	18,347	3,500	1,500	75.0%
Financial Fees	15,002	(13,196)	15,050	100	15,100	50	0.3%
Permits	32,313	37,096	37,500	36,125	36,500	(1,000)	-2.7%
Debt Service and Lease Payments	254,107	484,856	1,216,799	1,262,884	1,217,398	599	0.0%
<b>Total Operations</b>	7,802,757	8,149,821	8,243,592	8,338,914	8,558,157	314,565	3.8%
Buildings	-	-	-	-	-	-	
Improvements	1,290,304	-	1,815,000	1,313,000	1,701,000	(114,000)	-6.3%
Machinery & Equipment (>\$25,000)	132,716	<del>-</del>	240,000	-	60,000	(180,000)	-75.0%
Capital	1,423,020	-	2,055,000	1,313,000	1,761,000	(294,000)	-14.3%
Total Water Summary	11,381,127	10,470,175	12,801,538	12,045,607	12,959,497	157,959	1.2%

Water Summary Page 253

### Water Budget

### **Budget Summary**

**Personnel** – The Water Management Department is not requesting any additional water treatment or water distribution division staff this fiscal year

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, construction, and water resource conservation efforts. Since the construction has been complete, the facilities water production rate has increased and the quality of water has significantly increased.

Indirect expenses also is a large expense item in the Water Section. These expenses include the interfund reimbursement to 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 \$300,000 for FY 2019. 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 raw water pumps were replaced during the upgrade project at the Water Treatment Plant, in addition to several other energy reducing technologies to reduce our overall consumption.

Operations Capital – Operations Capital expenditures are related to equipment and vehicles directly related to operations versus system replacement or expansion. In previous years the Water Management Department has evaluated the annual cost of replacement of operations of capital items based on present day replacement value, anticipated lifecycle, and a projected annual increase in replacement cost of five percent. Due to budgeting requirements, the approach has been modified to be consistent with other City departments, however, this practice will continue to be used during rate analyses to ensure long term costs are captured. Enhancement requests have been provided and are largely related to replacement of existing equipment.

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 at Bobby Drive in the Grassland community, increasing the level of service along the new Long Lane alignment, and Franklin Road from downtown to Harlinsdale.

A key project to both water and wastewater systems is the supervisory control and data acquisition (SCADA) project. This project touches over 40 facilities in both the water and wastewater systems and provides necessary data and remote operations capabilities to the Department. The system was brought online Spring 2018 and has been critical to maintaining operations during various events.

Water Summary - Narrative Page 254



### Wastewater Budget

#### **Section Summary**

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

The City of Franklin operates a water reclamation facility utilizing activated sludge treatment at 135 Claude Yates Drive. The facility is currently operating under a new National Pollutant Discharge Elimination System Permit (NPDES) for treatment and discharge of twelve (12) million gallons per day (MGD) of treated effluent, with provisions to increase discharge to sixteen (16) MGD. The City of Franklin to operates a reclaimed water network, reducing irrigation demand on potable water. The WRF 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 Wastewater Collection Division is responsible for the operation and maintenance of the wastewater collection system including gravity sewer lines, force main lines and wastewater pump 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. This water produced will stive to meet or exceed 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. The City has continued working on implementation of a capacity assurance tool to aid with evaluation of new developments. To support this, refinements to the collection system model have been initiated which will use the City's flow monitoring data to help calibrate flows for dry and wet weather conditions.

The wastewater collection division continues to perform inspections of the sanitary sewer system to evaluate condition, risk and maintenance needs. Starting in 2017, the division has used a sanitary sewer rapid assessment tool to provide for more efficient inspections and maintenance activities, and guide resources more efficiently by prioritizing needs. In 2017, staff performed assessments of over 89,000 linear feet (16.9 miles) of the gravity collection system, approximately 5% of the system. This number will continue to increase as staff is dedicated to performing in this function.

### Wastewater Budget

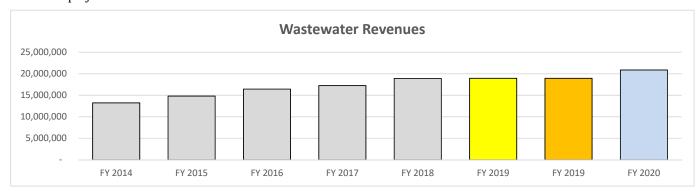
#### **Consumption & Revenues**

The sanitary sewer customer base has shown greater signs of growth primarily due to areas within the Mallory Valley and HB&TS Utility Districts. It is important to note that in 2016 the City updated the method by which it calculates customers to more accurately count each customer of each individual division of the system. This methodology was applied to the information presented below and may differ from prior information.

Year	Annual Total (Million Gallons)	Monthly Average - Residential and Commercial (Gallons)
FY 12	2,305	9,219
FY 13	2,345	9,159
FY 14	2,276	8,648
FY 15	2,357	8,698
FY 16	2,450	8,676
FY 17	3,209	11,350
FY 18	4,814	17,041

#### Revenues

Rate based revenues for FY 2020 are projected to be at approximately 103.2% of the estimated collections for FY 2019. The tables below present historic revenue by category FY 2014-FY 2018, estimated for the budgeted and estimated revenues for FY 2019 and the projected revenues for FY 2020.



	FY 2014 Actual	FY 2015 Actual	FY 2016 Actual	FY 2017 Actual	FY 2018 Actual	FY 2019 Budget	FY 2019 Estd	FY 2020 Budget
Intergovernmental	-	-	-			-	-	-
Interest Income	20,277	69,963	107,242	94,807	181,367	84,554	84,554	87,513
Rental Income	2,700	2,635	2,800	-	2,210	2,800	2,800	2,800
Sale of Surplus Assets	-	13,714	-	264	-	-	-	-
Customer Service (Rates)	13,072,915	14,568,762	16,236,044	17,036,817	18,652,030	18,726,250	18,726,250	19,381,669
Inspection Fees	90,563	133,940	70,968	94,503	51,488	75,000	75,000	75,000
Other Service Revenue	44,146	21,646	17,703	15,419	15,622	40,000	40,000	40,000
Transfer from Co. Fac. Tax								1,285,000
Total Wastewater Revenues*	13,230,601	14,810,660	16,434,757	17,241,810	18,902,717	18,928,604	18,928,604	20,871,982

 $<sup>*</sup> Total\ revenues\ less\ those\ received\ for\ Capital\ Contributions\ and\ accounted\ for\ elsewhere\ within\ the\ Water\ \&\ Wastewater\ Fund.$ 



Budget							
	<u>B</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 '19 v	. '20
	2017	2018	2019	2019	2020	\$	%
Divisions				-			
Wastewater Collection	2,470,827	2,936,055	3,079,412	3,306,488	3,529,408	449,996	14.6%
Wastewater Plant	4,312,825	3,876,165	4,386,840	3,695,262	3,934,938	(451,902)	-10.3%
Utility Administration	1,089,442	1,224,886	1,412,182	1,309,057	1,490,955	78,773	5.6%
Wastewater General	4,315,139	2,773,139	6,625,655	4,973,801	7,897,069	1,271,414	19.2%
Total Wastewater	12,188,233	10,810,245	15,504,089	13,284,607	16,852,370	1,348,281	8.7%
Expense by Category							
Personnel							
Salaries & Wages	2,539,470	2,751,147	3,191,573	2,853,640	3,199,588	8,015	0.3%
Employee Benefits	1,060,232	1,281,079	1,314,961	1,291,680	1,461,171	146,210	11.1%
Total Personnel	3,599,702	4,032,226	4,506,534	4,145,319	4,660,759	154,225	3.4%
Operations							
Transportation Services	5,051	7,480	5,225	3,650	3,475	(1,750)	-33.5%
Operating Services	454,981	503,931	481,750	397,373	393,200	(88,550)	-18.49
Notices, Subscriptions, etc.	10,513	5,250	13,300	10,850	12,150	(1,150)	-8.6%
Utilities	1,280,276	1,380,990	1,404,887	1,133,131	1,168,593	(236,294)	-16.89
Contractual Services	530,779	1,861,165	749,800	628,800	1,175,948	426,148	56.89
Repair & Maintenance Services	236,703	542,910	295,150	306,000	274,470	(20,680)	-7.0%
Employee programs	4,957	6,965	4,100	3,250	5,150	1,050	25.6%
Professional Development/Travel	12,675	14,110	19,700	10,012	20,150	450	2.3%
Office Supplies	7,294	8,204	6,850	6,050	7,650	800	11.79
Operating Supplies	280,280	287,471	298,825	253,050	280,925	(17,900)	-6.0%
Fuel & Mileage	61,382	73,457	88,500	70,000	91,400	2,900	3.3%
Supplies for Resale	-	-	-	-	-	-	
Machinery & Equipment (<\$25,000)	145,027	60,609	132,150	58,100	168,372	36,222	27.49
Repair & Maintenance Supplies	513,643	279,493	175,000	194,550	189,900	14,900	8.5%
Operational Units	1,081,927	1,115,120	1,121,229	1,121,229	1,354,552	233,323	20.89
Property & Liability Costs	202,744	180,903	228,232	317,215	237,555	9,323	4.1%
Rentals	5,486	5,279	3,500	5,200	5,150	1,650	47.1%
Financial Fees	20,029	7,158	29,000	56	29,050	50	0.2%
Permits	614	18,312	17,000	16,955	17,000	-	0.0%
Debt Service and Lease Payments	1,334,170	419,212	1,250,507	1,383,323	1,515,071	264,564	21.2%
Total Operations	6,188,531	6,778,019	6,324,705	5,918,794	6,949,761	625,056	9.9%
Land	-	-	-	266,600	-	-	0.0%
Buildings	600,000	-	-	-	-	-	0.0%
Improvements	1,500,000	-	3,612,850	2,371,594	4,621,850	1,009,000	27.9%
Machinery & Equipment (>\$25,000)	300,000	-	1,060,000	582,300	620,000	(440,000)	-41.5%
Capital	2,400,000	-	4,672,850	3,220,494	5,241,850	569,000	12.2%
Total Wastewater	12,188,233	10,810,245	15,504,089	13,284,607	16,852,370	1,348,281	8.7%

Water & Wastewater Fund Page 257



### Wastewater Budget

#### **Budget Summary**

Personnel – The Water Management Department is requesting no change to the personnel within the Wastewater Section.

**Operations and Maintenance** – Operations and maintenance accounts for the largest costs in the Wastewater Section. Utility costs are a large expense item in Wastewater, and were approximately \$1,024,200 for FY 2017. These costs are largely 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 also started implementation of a sanitary sewer rapid assessment tool. 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 89,000 LF of pipe during 2017.

The Wastewater Collection Division responded to nine overflows and nine releases in 2017. Of these nine overflows, only three reached receiving streams and six occurred because of wet weather. Staff responded to 10 releases in the system (wastewater not entering a receiving stream), however a number of these were due to Contractor error on construction projects.

Operations Capital – Operations Capital expenditures are related to equipment and vehicles directly related to operations versus system replacement or expansion. In previous years 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. Due to budgeting requirements, the approach has been modified to be consistent with other City departments, however, this practice will continue to be used during rate analyses to ensure long terms costs are captured. Enhancement requests have been provided and largely related to replacement of existing equipment.

Wastewater Plant: This Division is requesting the replacement purchase of a bio solids dump truck vactor truck that is used for transporting bio solids to the landfill for disposal.

Wastewater Collection: This Division is requesting the replacement of one of the utility service trucks. The existing truck is 10-years old and becoming increasingly harder to find tools and maintenance supplies.

Wastewater Collection: This Division is requesting the replacement of a tandem-axle dump truck. This truck is over 20 years old and can help in the repair, maintenance replacement of City's sewer.

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. At this time, the design has been completed and the project has bid, however bids came back higher than anticipated and the project is currently under redesign and will be rebid next month.

The Department is also working on various collection system projects that include the upgrade to the Holiday Court Lift Station, elimination of the Ladd Park Lift Station, and among other projects, finalizing design of the Spencer Creek interceptor project in the vicinity of Franklin Road.

A key project to both water and wastewater systems is the supervisory control and data acquisition (SCADA) project. This project touches over 40 facilities in both the water and wastewater systems and will provide necessary data and remote operations capabilities to the department.

### 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 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. It is projected that the existing Long Lane Water Tank (500,000 gallons) will be converted to a reclaimed storage facility in the future to provide for demands in the southern area of the City. Additional storage facilities are being considered using existing department property.

Water & Wastewater Fund Page 259



Budget	R	R	r	۱ م	E	E/EC)	G (E/C)
	<u>B</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 '1	
Davasanal	2017	2018	2019	2019	2020	\$	%
Personnel				1			0.00
Salaries & Wages	-	-	-	-	-	-	0.09
Employee Benefits					-	-	0.09
Total Personnel	•	-	•	•	•	-	0.0%
Operations							
Transportation Services	-	-	200	-	100	(100)	-50.0%
Operating Services	-	-	-	-	-	-	0.09
Notices, Subscriptions, etc.	-	-	100	-	-	(100)	-100.0%
Utilities	50	-	50	-	-	(50)	-100.09
Contractual Services	-	2,092	180,500	80,000	110,500	(70,000)	0.09
Repair & Maintenance Services	12,000	17,173	17,000	12,000	17,000	-	0.0%
Employee programs	-	-	-	-	-	-	0.09
Professional Development/Travel	-	-	-	-	-	-	0.0%
Office Supplies	-	-	-	-	-	-	0.0%
Operating Supplies	65,500	37,800	110,400	75,400	80,400	(30,000)	-27.29
Fuel & Mileage	-	-	-	-	-	-	0.0%
Supplies for Resale	-	-	-	-	-	-	0.0%
Machinery & Equipment (<\$25,000)	-	-	2,000	2,000	2,000	-	0.0%
Repair & Maintenance Supplies	42,035	8,006	15,500	11,000	15,500	-	0.0%
Operational Units	-	-	-	-	-	-	0.09
Property & Liability Costs	-	-	-	-	-	-	0.0%
Rentals	-	-	-	-	-	-	0.09
Financial Fees	-	-	-	-	-	-	0.09
Permits	-	-	-	-	-	-	0.09
Debt Service and Lease Payments	65,975	20,126	65,975	69,814	65,975	(0)	0.0%
Total Operations	185,560	85,197	391,725	250,214	291,475	(100,250)	-25.6%
Capital	-	118,466	-	142,766	500,000	500,000	-100.0%
Total Reclaimed Water		203,663	391,725	392,980	791,475	399,750	102.0%

Water & Wastewater Fund Page 260

Project		FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	TOTAL
Wastewater Renewal	_										
Spencer Creek Sanitary Sewer Replacement	\$	1,480,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 1,480,000
Henpeck Lane Sanitary Sewer Extension	\$	-	\$ 1,285,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 1,285,000
Sewer Interceptor Point Repair Projects (Contractor)	\$	100,000	\$ 400,000	\$ 350,000	\$ 2,950,000						
Sewer Lateral CIPP Rehab	\$	25,000	\$ 100,000	\$ 50,000	\$ 475,000						
Sewer Rehab On-Call Services (mains)	\$	30,000	\$ 450,000	\$ 400,000	\$ 2,880,000						
Sewer Rehab On-Call Services (MH)	\$	50,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 750,000
Southeast Municipal Complex	\$	500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 500,000
Mack Hatcher Alignment Sewer Design	\$	7,850	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,850
Frazier Drive Sanitary Sewer Rehabilitation (P.F. Changes)	\$	50,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 50,000
Adams Street Infrastructure Improvements	\$	-	\$ -	\$ -	\$ 60,000	\$ 750,000	\$ -	\$ -	\$ -		\$ 810,000
Holiday Court Lift Station Rehabilitation	\$	50,000	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 550,000
Church Street Infrastructure Improvements	\$	25,000	\$ 210,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 235,000
Evans Street Sewer Improvements	\$	-	\$ -	\$ -	\$ 32,000	\$ 420,500	\$ -	\$ -	\$ -		\$ 452,500
New Hope Academy Sewer Line Replacement	\$	-	\$ -	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ -		\$ 50,000
East McEwen Drive Improvements - Phase 4	\$	-	\$ 179,850	\$ 179,850	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 359,700
Forrest Street Infrastructure	\$	-	\$ -	\$ -	\$ 217,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 217,500
Franklin Road Improvements & Streetscape	\$	-	\$ 270,000	\$ 270,000	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 540,000

Project	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	TOTAL
Advanced Metering Infrastructure (AMI)	\$ -	\$ 1,007,000	\$ 1,007,000	\$ 1,007,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,021,000
Gist Street Infrastructure Improvements	\$ -		\$ 25,000	\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 275,000
Natchez Street Sewer Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 360,000	\$ 360,000	\$ 720,000
Battle Avenue Infrastructure Replacement	\$ -	\$ •	\$ -	\$ 120,000	\$ 1,165,000	\$ -	\$ -	\$ -		\$ 1,285,000
Jordan Road Improvements	\$ -	\$ -	\$ 36,000	\$ 36,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 72,000
Mallory/N Royal Oaks & Liberty Intersection Imp.	\$ -	\$ 90,000	\$ 90,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 180,000
S. Margin Infrastructure Upgrades (1st - Columbia)	\$ -	\$	\$ 216,000	\$ 216,000	\$ -	\$ -	\$ -	\$ -		\$ 432,000
Eastview Circle Infrastructure Improvements	\$ -		\$ -	\$ -	\$ 20,000	\$ 212,500	\$ -	\$ -	\$ -	\$ 232,500
Buckworth Infrastructure Improvements	\$ -	\$	\$ -	\$ 20,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,000
Maple Street Sewer Improvements	\$ -	\$ -	\$ -	\$ 306,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 306,000
Carolyn Avenue Infrastructure Improvements	\$ -	\$ -	\$ -	\$ -	\$ 270,000	\$ -	\$ -	\$ -	\$ -	\$ 270,000
West Main Infrastructure Improvements	\$ -	\$ -		\$ -	\$ 250,000	\$ 2,200,000	\$ 2,200,000	\$ -	\$ -	\$ 4,650,000
Lewisburg Avenue Sewer Improvements	\$ -	\$	\$ -	\$ -	\$ 30,000	\$ 200,000	\$ -	\$ -	\$ -	\$ 230,000
Confederate Drive Sewer Improvements	\$ -	\$	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 340,000	\$ -	\$ 340,000
N Royal Oaks Blvd (Alexander Plaza to Liberty Pk)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 179,280	\$ -	\$ -	\$ 179,280
Carothers Parkway Widening (Falcon Creek to SR-96)	\$ -	\$ -	\$ -	\$ -	\$ 	\$ -	\$ 734,760	\$ 734,760	\$ -	\$ 1,469,520
Beta Drive Extension	\$ 	\$ -	\$ 180,000	\$ -	\$ 	\$ -	\$ -	\$ -	\$ -	\$ 180,000
South Prong Sanitary Sewer Upgrade	\$ -	\$ 30,000	\$ 1,225,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,255,000

Project	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	TOTAL
Bishop Branch Interceptor	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 230,000	\$ 500,000	\$ 1,540,000	\$ 2,270,000
Unidentified Wastewater Infrastructure Improvements	\$ -	\$ 1,150,000	\$ -	\$ 1,150,000						
Wastewater Renewal	\$ 2,317,850	\$ 4,621,850	\$ 4,128,850	\$ 3,214,500	\$ 3,805,500	\$ 3,512,500	\$ 4,244,040	\$ 3,984,760	\$ 2,800,000	\$ 27,274,850

Water Renewal											
Bobby Drive Water Line Replacement	\$ 430,000	\$ -	\$ -	\$ -	\$	-	\$ -	\$ -	\$ -		\$ 430,000
Hillsboro Rd to Claude Yates WWTP water line replacement	\$ 600,000	\$ -	\$ -	\$ -	\$	-	\$ -	\$ -	\$ -		\$ 600,000
16" Water Line Long Lane Connector	\$ -	\$ -	\$ -	\$ 75,000	\$	75,000	\$ -	\$ -	\$ -		\$ 150,000
Adams Street Infrastructure Improvements	\$ -	\$ -	\$ -	\$ 45,000	\$	465,000	\$ -	\$ -	\$ -		\$ 510,000
Franklin Road Improvements & Streetscape	\$ -	\$ 450,000	\$ 450,000	\$ -	\$	-	\$ -	\$ -	\$ -		\$ 900,000
New Highway 96 Water Line Replacement	\$ 258,000	\$ -	\$ -	\$ -	\$	-	\$ -	\$ -	\$ -	\$ -	\$ 258,000
Church Street Infrastructure Improvements	\$ 25,000	\$ 136,500	\$ -	\$ -	\$	-	\$ -	\$ -	\$ -		\$ 161,500
Old Carters Creek Pike Water Line	\$ -	\$ -	\$ -	\$ -	\$	-	\$ 480,000	\$ -	\$ -		\$ 480,000
S. Margin Infrastructure Upgrades (1st - Columbia)	\$ -	\$ -	\$ 225,000	\$ 225,000	\$	-	\$ -	\$ -	\$ -		\$ 450,000
Mallory/N Royal Oaks & Liberty Intersection Improvements	\$ -	\$ 97,500	\$ 97,500	\$ -	\$	-	\$ -	\$ -	\$ -	\$ -	\$ 195,000
Forrest Street Infrastructure	\$ -	\$ -	\$ -	\$ 130,000	\$	-	\$ -	\$ -	\$ -		\$ 130,000
Walnut Drive Water Improvements	\$ -	\$ -	\$ -	\$ -	\$	180,000	\$ -	\$ -	\$ -		\$ 180,000
Oakwood Transmission Main Improvements	\$ -	\$ -	\$ -	\$ -	-		\$ 200,000	\$ 960,000	\$ 285,000	\$ 450,000	\$ 1,445,000

Project	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	TOTAL
West End Circle Infrastructure Improvements	\$ -	\$ -	\$ -	\$ -	\$ 117,000	\$ -	\$ -	\$ -		\$ 117,000
Advanced Metering Infrastructure (AMI)	\$ -	\$ 1,007,000	\$ 1,007,000	\$ 1,007,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,021,000
Long Lane/Old Peytonsville Rd Connector at I-65 - Reclaimed	\$ -	\$	\$ 7,500	\$ 12,500	\$ 150,000	\$ -	\$ -	\$ -		\$ 170,000
Gist Street Infrastructure Improvements	\$ -	\$ -	\$ 15,000	\$ 135,000	\$ -	\$ -	\$ -	\$ -		\$ 150,000
Alicia Drive Water Line Replacement	\$ -	\$ -	\$ -	\$ -	\$ 61,500	\$ -	\$ -	\$ -		\$ 61,500
Battle Avenue Infrastructure Replacement	\$ -	\$ -	\$ -	\$ 80,000	\$ 582,500	\$ -	\$ -	\$ -		\$ 662,500
Cummins Street Water Improvements	\$ -	\$ -	\$ -	\$ -	\$ 75,000	\$ -	\$ -	\$ -	\$ -	\$ 75,000
Water Line from Fourth Ave S to Berry Circle	\$ -	\$ •	\$ -	\$ 93,000	\$ -	\$ -	\$ -	\$ -		\$ 93,000
Old Hillsboro Rd Water Line	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 80,000	\$ 295,000	\$ 375,000
Murfreesboro Rd Water line Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 90,000	\$ 900,000	\$ -	\$ 990,000
Eastview Circle Infrastructure Improvements	\$ -	\$ -	\$ -	\$ -	\$ 30,000	\$ 303,000	\$ -	\$ -		\$ 333,000
Lewisburg Pike Water Line Replacement	\$ -	\$ •	\$ -	\$ -	\$ -	\$ 120,000	\$ -	\$ -		\$ 120,000
Bonsal Way Water Line Replacement	\$ -	\$ 10,000	\$ 110,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 120,000
Buckworth Infrastructure Improvements	\$ -	\$ -	\$ -	\$ 90,000	\$ -	\$ -	\$ -	\$ -		\$ 90,000
West Main Infrastructure Improvements		\$ -	\$ -		\$ 150,000	\$ 700,000	\$ 700,000	\$ -		\$ 1,550,000
Beta Drive Extension	\$ -	\$ -	\$ 75,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 75,000
Liberty Pike water line replacement	\$ -	\$ -	\$ _	\$ -	\$ -	\$ -	\$ -	\$ 25,000	\$ 330,000	\$ 355,000
Carolyn Avenue Infrastructure Improvements	\$ -	\$ -	\$ -	\$ -	\$ 140,000	\$ -	\$ -	\$ -	\$ -	\$ 140,000

Project		FY 19		FY 20		FY 21		FY 22		FY 23		FY 24		FY 25		FY 26		FY 27		TOTAL
Manley Lane Dead End Removal	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	50,000	\$	100,000	\$	345,000	\$	495,000
Lee Drive Water Line Replacement	\$	-	\$	-	\$	-	\$	-	\$	-	\$	15,000	\$	72,000	\$	-	\$	-	\$	87,000
Glass Lane Water Line Replacement	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	20,000	\$	20,000
Westview Apt Water Line Replacement (510 96W)	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	10,000	\$	100,000	\$	110,000
Carothers Parkway Widening (Falcon Creek to SR-96)	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	306,150	\$	306,150	\$	-	\$	612,300
Cothran Drive Water Improvements	\$	-	\$		\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	120,000	\$	120,000
Green Acres Drive	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	120,000	\$	120,000
Grassland Tank Demolition	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	270,000	\$	270,000
Scruggs Avenue Water Line Replacement	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	20,000	\$	175,000	\$	-	\$	195,000
Morning Side Drive	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	10,000	\$	10,000
Unidentified Water Infrastructure Improvement Projects	\$	-	\$		\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Water Renewal	\$	1,313,000	\$	1,701,000	\$	1,987,000	\$	1,892,500	\$	2,026,000	\$	1,818,000	\$	2,198,150	\$	1,881,150	\$	2,060,000	\$	13,417,300
Reclaimed Water																				
Reclaimed Water Masterplan Update	\$	180,500	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	195,500
Long Lane/Old Peytonsville Rd Connector at I-65 - Reclaimed	\$	-	\$	-	\$	7,500	\$	12,500	\$	150,000	\$		\$	-	\$				\$	170,000
Unidentified Reclaimed Water Infrastructure Improvement Projects	\$	-	\$	500,000	\$	492,500	\$	-	\$	-	\$	-	\$	-	\$	-	\$	_	\$	992,500
Reclaimed Water	Ś	180,500	Ś	500,000	Ś	500,000	Ś	12,500	Ś	150,000	Ś	-	Ś	_	Ś	_	Ś	_	Ś	1,358,000

### Debt Service - Water, Wastewater & Reclaimed Funds Schedule

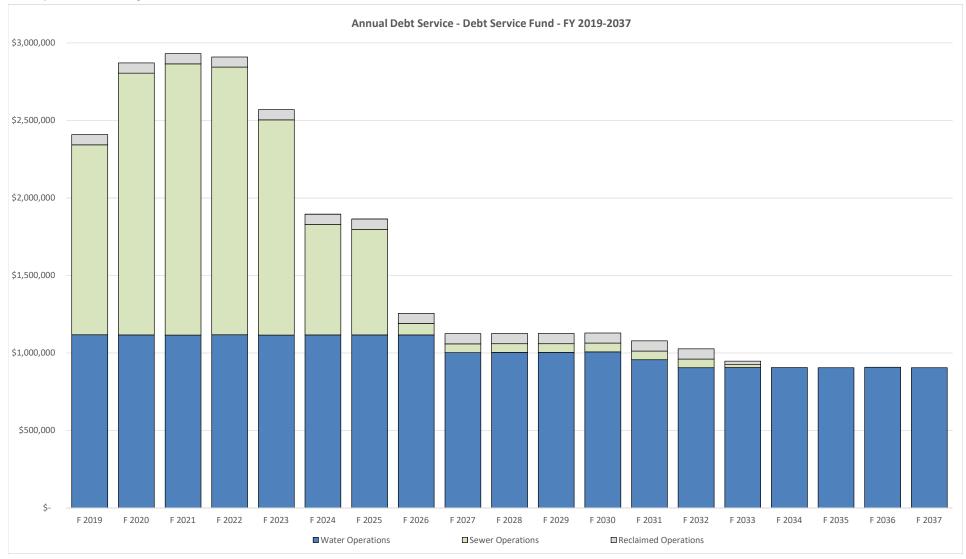
Purpose	Issue Year	Ori	Orig. Amt. Issued		F 2019	F 2020		F 2021		F 2022	1	F 2023	F 2024			Balance	Total Outstanding
ruipose	issue real	/ Interest Rate			F 2019		F 2020		F 2021	F 2022		F 2023	F 2024		(2025-2037)		(2021-2037)
Water Operations									•								
PRINCIPAL																	
Bonds 2011A \$19.43M (Refund 2008 TMBF)	2008 (2011 Refund)	\$	1,360,100	\$	91,700	\$	94,150	\$	96,600	\$ 99,050	\$	101,500	\$	103,950	\$	215,600	\$ 616,700
ARRA Loan 2011 \$1.5M - (Reservoir Rehabilitation)	2011	\$	1,500,000	\$	69,965	\$	71,964	\$	74,020	\$ 76,134	\$	78,310	\$	80,546	\$	582,669	\$ 891,680
Bonds 2017 - \$12m (Water Plant)	2017	\$	12,000,000	\$	400,000	\$	415,000	\$	430,000	\$ 450,000	\$	470,000	\$ 4	495,000	\$	8,970,000	\$ 10,815,000
PRINCIPAL		\$	14,860,100	\$	561,665	\$	581,114	\$	600,620	\$ 625,184	\$	649,810	\$ (	679,496	\$	9,768,269	\$ 12,323,380
INTEREST																	
Bonds 2011A \$19.43M (Refund 2008 TMBF)	2008 (2011 Refund)		2.48%	\$	19,714	\$	17,434	\$	15,095	\$ 12,694	\$	10,232	\$	7,710	\$	7,609	\$ 53,340
ARRA Loan 2011 \$1.5M - (Reservoir Rehabilitation)	2011		2.82%	\$	28,249	\$	26,250	\$	24,194	\$ 22,080	\$	19,904	\$	17,668	\$	55,713	\$ 139,558
Bonds 2017 - \$12m (Water Plant)	2017		3.29%	\$	508,000	\$	492,000	\$	475,400	\$ 458,200	\$	435,700	\$ 4	412,200	\$	2,813,100	\$ 4,594,600
INTEREST				\$	555,962	\$	535,684	\$	514,688	\$ 492,974	\$	465,836	\$ 4	437,578	\$	2,876,423	\$ 4,787,498
TOTAL EVERNINGE				<u> </u>	1 117 620	ć	1 116 700	<u> </u>	1 115 200	ć 1 110 1F0	ć	1 115 646	ć 1 ·	117.074	ć	12 644 601	ć 17.110.070
TOTAL EXPENDITURES				\$	1,117,628	\$	1,116,798	\$	1,115,309	\$ 1,118,158	\$	1,115,646	\$ 1,	117,074	<b>\$</b>	12,644,691	\$ 17,110,878
Purpose	Issue Year	Ori	ig. Amt. Issued		F 2019		F 2020		F 2021	F 2022	T	F 2023	F	2024		Balance	Total Outstanding
			Interest Rate						-						(2	025-2037)	(2021-2048)
Sewer Operations	- 1															,	<u> </u>
PRINCIPAL																	
Bonds 2005 \$24.67M (Refund 2001 / 2002)	2001, 2002, 2005	\$	9,868,000	\$	888,000	\$	896,000	\$	902,000	\$ 912,000	\$	622,000	\$ :	580,000	\$	580,000	\$ 3,596,000
Bonds 2011A \$19.43M (Refund 2008 TMBF)	2008 (2011 Refund)	\$	194,300	\$	13,100	\$	13,450			\$ 14,150		14,500		14,850		30,800	
ARRA Loan 2013 \$1.89M - (Sewer & Reclaimed Projects)	2012	\$	868,572	\$	38,712	\$	39,766	\$	40,849					44,278		419,142	
SRF Loan 2017 & Beyond	2017	Ś	100,000,000	Ť	n/a	ľ	n/a	l	n/a	n/a	Ι΄.	n/a		, -		,	\$ 100,000,000
PRINCIPAL	=	\$	110,930,872	\$	939,812	\$	949,216	\$		\$ 968,111	\$		\$ (	639,128	\$	1,029,942	\$ 104,273,435
							<u> </u>			•	Ť	,		•			, , , , , , , , , , , , , , , , , , ,
INTEREST									•								
Bonds 2005 \$24.67M (Refund 2001 / 2002)	2001, 2002, 2005	3	3.00%-5.00%	\$	264,650	\$	220,250	\$	175,450	\$ 130,350	\$	84,750	\$	53,650	\$	24,650	\$ 468,850
Bonds 2011A \$19.43M (Refund 2008 TMBF)	2008 (2011 Refund)		2.48%	\$	2,816	\$	2,491	\$	2,156	\$ 12,694	\$	10,232	\$	7,710	\$	7,609	\$ 40,402
ARRA Loan 2013 \$1.89M - (Sewer & Reclaimed Projects)	2012		2.69%	\$	17,489	\$	16,435	\$	15,352	\$ 14,239	\$	13,097	\$	11,923	\$	49,200	\$ 103,811
SRF Loan 2017 & Beyond	2017		1.47%		n/a	\$	500,000	\$	600,000	\$ 600,000	\$	600,000	-				\$ 1,800,000
INTEREST				\$	284,955	\$	739,175	\$	792,958	\$ 757,283	\$	708,079	\$	73,283	\$	81,460	\$ 2,413,063
TOTAL EXPENDITURES				\$	1,224,767	\$	1,688,391	\$	1,749,607	\$ 1,725,395	\$	1,387,683	\$ :	712,411	\$	1,111,402	\$ 6,686,498
Purpose	Issue Year	Ori	ig. Amt. Issued		F 2019		F 2020		F 2021	F 2022	Т	F 2023	F	2024		Balance	Total Outstanding
T di pose	issue real		Interest Rate		. 2013		1 2020		1 2021	1 2022		1 2023	•	2024		025-2037)	(2021-2037)
Reclaimed Operations																· .	,
PRINCIPAL																	
ARRA Loan 2013 \$1.89M - (Sewer & Reclaimed Projects)	2012	\$	1,019,628	\$	45,444	\$	46,682	\$	47,953	\$ 49,259	\$	50,600	\$	51,979	\$	492,037	\$ 691,828
PRINCIPAL		\$	1,019,628	\$	45,444	\$	46,682	\$	47,953	\$ 49,259	\$	50,600	\$	51,979	\$	492,037	\$ 691,828
INTEREST CONTROL OF THE CONTROL OF T		1									٠.						
ARRA Loan 2013 \$1.89M - (Sewer & Reclaimed Projects)	2012	┞	2.69%	\$	20,531		19,293	_	18,022		_	15,374	_	13,996	_	57,757	·
INTEREST				\$	20,531	\$	19,293	\$	18,022	\$ 16,716	\$	15,374	\$	13,996	\$	57,757	\$ 121,865
TOTAL EXPENDITURES				ċ	65.035	¢	6F 07F	ć	65.075	¢ 65.035	¢	65.075	ċ	65.075	¢	F40 704	ć 913.C03
IOTAL EXPENDITURES				\$	65,975	Ş	65,975	Þ	65,975	\$ 65,975	Þ	65,975	Þ	65,975	Ş	549,794	\$ 813,693

<sup>\*</sup>Debt Service shown above for Proprietary Funds only shows budgeted debt service within operational accounts. Additional debt service is paid out of development accounts (Access & Taps) for all three funds - Water, Wastewater & Reclaimed. For FY 2020, those amounts are \$207,228 for Water Access, \$47,822 for Water Taps, \$2,760,220 for Sewer Access, \$79,703 for Reclaimed Access and \$15,941 for Reclaimed Taps.



#### Debt Service - Water, Wastewater & Reclaimed Funds Schedule

The chart below shows annual debt service for the Proprietary Funds (Water, Wastewater & Reclaimed Water) for all bonds issued from FY 2019-2037. General Obligation Bond Debt Service for the City of Franklin is budgeted within the Debt Service Fund.



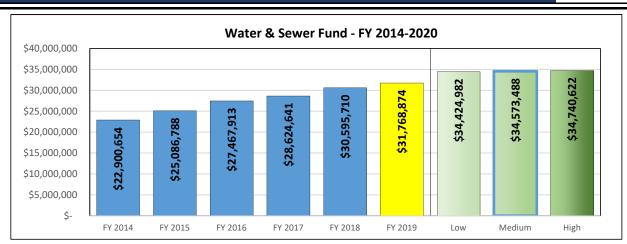
<sup>\*</sup>Debt Service shown above for Proprietary Funds only shows budgeted debt service within operational accounts. Additional debt service is paid out of development accounts (Access & Taps) for all three funds - Water, Wastewater & Reclaimed. For FY 2020, those amounts are \$207,228 for Water Access, \$47,822 for Water Taps, \$2,760,220 for Sewer Access, \$79,703 for Reclaimed Access and \$15,941 for Reclaimed Taps.

Fund: Water/Sewer Fund Percent of All Revenues 21.1%

<u>Water & Sewer Fund</u>: Water and wastewater are independent business units of the City of Franklin and are required to be self-sufficient entities. These utilities are not subsidized by local taxes, paying the General Fund monies to cover the costs of services such as payroll, human resources and other support activities.

Rates are approved to increase by 2.9% for Water and 3.5% for Sewer for CY 2019 and again in CY 2020 as per BOMA vote on October 23, 2018. These increases are consistent with the latest five-year rate plan.

\*Note: Revenues shown below are for operational & customer service only. Capital Contributions are not included within this total, and will not necessarily tie to audited financial information.



			Actual			Budget	Fo	Forecast (FY 2020)				
	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Low	Medium	High			
% yr/yr.	5.4%	9.5%	9.5%	4.2%	6.9%	3.8%	8.4%	8.8%	9.4%			
Water										3-yr Average		
Use of Money & Property	64,279	28,924	46,167	89,992	131,580	37,778	38,684	38,873	39,062	\$ 28,896,088		
Rates & Related Customer Service	9,474,701	10,161,250	10,862,141	11,155,292	11,425,017	12,597,642	12,899,985	12,957,783	13,025,962	3.3%		
Wastewater										5-Yr Average		
Use of Money & Property	22,977	86,477	110,042	95,071	183,627	87,354	89,975	90,411	90,848	\$ 26,935,141		
Rates & Related Customer Service	13,207,624	14,724,348	16,324,715	17,146,739	18,719,089	18,841,250	19,406,488	19,496,571	19,594,900	3.6%		
Transfer from Co. Fac. Tax.							1,285,000	1,285,000	1,285,000			
Reclaimed Water												
Use of Money & Property	170	14	38	196	691	100	100	100	100			
Rates & Related Customer Service	130,903	85 <i>,</i> 775	124,810	137,351	135,705	204,750	204,750	204,750	204,750			
Use of F/B							500,000	500,000	500,000			
Totals	\$ 22,900,654	\$ 25,086,788	\$27,467,913	\$28,624,641	\$30,595,710	\$31,768,874	\$34,424,982	\$34,573,488	\$34,740,622	•		

Source: City of Franklin, Comprehensive Annual Financial Reports - 1990-2018 & Estimates from Finance & Revenue Management Departments.