



**SEAGOVILLE, TEXAS  
CITY COUNCIL MEETING AGENDA  
MONDAY, JULY 22, 2019**

**City Council Chambers, City Hall  
702 N. Hwy 175  
Seagoville, Texas 75159**

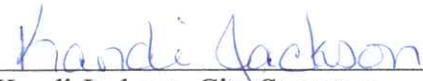
**WORKSHOP – 6:30 P.M.**

**Call to Order**

**A. Discuss water & sewer fund budget for FY 2020**

**Adjourn**

Posted Thursday, July 18, 2019 by 5:00 P.M.

  
Kandi Jackson, City Secretary



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As authorized by Section 551.071(2) of the Texas Government Code, this meeting may be convened into closed executive session for the purpose of seeking confidential legal advice from the City Attorney on any agenda item listed herein.

The City of Seagoville does not discriminate on the basis of disability in the admission or access to, or treatment or employment in, its programs or activities. If you have a request for services that will make this program accessible to you, please contact the City of Seagoville at least 72 hours in advance at (972) 287-6819. (TDD access 1-800-RELAY-TX)

**DATES TO REMEMBER**

- **Monday, July 29, 2019 Regular City Council meeting**
- **Monday, August 5, 2019 Regular City Council meeting**
- **Monday, August 19, 2019 Regular City Council meeting**

## *Workshop Agenda Item: 1*

**Meeting Date: July 22, 2019**

**ITEM DESCRIPTION:**

Discuss water & sewer fund budget for FY 2020.

**BACKGROUND OF ISSUE:**

Patrick Harvey, Director of Finance to present considerations for FY 2020 W&S Fund Budget.

**FINANCIAL IMPACT:**

None

**EXHIBITS:**

W&S Budget

**City of Seagoville  
Budget Summary  
Water and Sewer Fund**

	Actual 2016-2017	Actual 2017-2018	Adopted 2018-2019	Projected 2018-2019	Proposed 2019-2020
<b>Beginning Unrestricted Net Asset Balance</b>	<b>\$2,301,078</b>	<b>\$3,925,046</b>	<b>\$6,233,537</b>	<b>\$6,233,537</b>	<b>\$6,271,537</b>
<b>Revenues</b>					
Water Services	\$3,273,533	\$3,782,109	\$3,517,634	\$3,552,810	\$3,693,520
Waste Water Service	3,426,901	3,457,593	3,120,468	3,245,287	3,276,490
Refunded Debt	-	200,000	-	-	-
Pension Reduction	-	102,821	-	-	-
Other Income	291,140	271,556	209,125	347,357	270,888
<b>Total Revenues</b>	<b>\$6,991,575</b>	<b>\$7,814,079</b>	<b>\$6,847,227</b>	<b>\$7,145,454</b>	<b>\$7,240,898</b>
<b>Total Available Funds</b>	<b>\$9,292,653</b>	<b>\$11,739,125</b>	<b>\$13,080,764</b>	<b>\$13,378,991</b>	<b>\$13,512,435</b>
<b>Expenditures</b>					
<b>Operating and Debt Expenses:</b>					
Administrative	\$173,781	\$174,293	\$172,809	\$182,744	\$185,199
Water	1,679,608	2,161,429	2,319,402	2,269,857	2,316,951
Sewer	1,436,763	2,157,888	2,422,788	2,363,903	2,545,735
Customer Service	201,159	220,182	222,500	226,383	225,850
Non-Departmental	19,527	53,158	93,363	97,709	103,591
Tuition Reimbursement Program	-	-	5,000	-	5,000
Transfers Out	352,304	352,304	352,304	352,304	352,304
Cityworks renewal fee (FY 2019)	-	29,883	15,250	17,100	18,925
Debt	599,467	152,988	516,559	543,288	1,135,900
	4,462,609	5,302,125	6,119,975	6,053,288	6,889,455
<b>Capital Outlay:</b>					
Transfer to Equipment Replacement	-	-	68,000	68,000	68,000
Replacement Vehicle	-	-	48,000	48,000	-
Zero Turn Mower	-	-	16,435	16,435	-
Water & Sewer Rate Study	-	-	-	-	27,500
Woodhaven Water line Project	313,323	-	-	-	-
Highway 175 Lift station service area condition assessment	-	27,232	103,895	150,000	128,895
Ace Hardware Major Sewer Repair	-	-	-	120,320	-
Jetter Truck	375,255	-	-	-	-
Professional Engineering Fees	150,549	106,541	-	32,310	-
Holt Cat Track Hoe	42,788	-	-	-	-
Replacement Meter Services Truck	23,083	-	-	-	-
Ard Road Pump Station Upgrades	-	-	300,000	150,000	300,000
Reserved for Smart Meter Acquisition	-	-	-	-	1,270,808
Capital Projects	-	69,690	532,000	469,100	275,000
	904,998	203,463	1,068,330	1,054,165	2,070,203
<b>Total Expenditures and Capital</b>	<b>5,367,606</b>	<b>5,505,588</b>	<b>7,188,305</b>	<b>7,107,453</b>	<b>8,959,658</b>
<b>Ending Unrestricted Net Asset Balance</b>	<b>\$3,925,046</b>	<b>\$6,233,537</b>	<b>\$5,892,459</b>	<b>\$6,271,537</b>	<b>\$4,552,777</b>
<b>Required Reserve Balance (60 Days)</b>	<b>\$733,580</b>	<b>\$871,582</b>	<b>\$1,006,023</b>	<b>\$995,061</b>	<b>\$1,132,513</b>
<b>Amount over Required Reserve</b>	<b>\$3,191,467</b>	<b>\$5,361,955</b>	<b>\$4,886,435</b>	<b>\$5,276,476</b>	<b>\$3,420,264</b>
<i>1 day of operations</i>	<i>\$12,226</i>	<i>\$14,526</i>	<i>\$16,767</i>	<i>\$16,584</i>	<i>\$18,875</i>



## **FY 2019 ACCOMPLISHMENTS**

On April 14, 2015, the Environmental Protection Agency (EPA) conducted an inspection of our sanitary sewer system. During the inspection, the EPA inspected our 11 lift stations and reviewed our existing procedures and compared them to the Best Management Practices. At the end of the process, staff felt the inspection went well and did not anticipate any adverse action by the EPA. However, on December 15, 2015, the EPA issued an Administrative Order (CWA-06-2016-1710), placing the City of Seagoville on official notice of violation in respect to the EPA's 2015 Inspection. The following alleged violations were cited by the EPA:

- Failure to properly report Sanitary Sewer Overflows (SSO's);
- Failure to prevent unauthorized unpermitted discharges and sanitary sewer overflows; and
- Failure to implement proper operation and maintenance of the collection system.

The EPA identified additional concerns in their report:

1. City should address wastewater engineering issues that leave the City vulnerable to SSO's at the US 175 Manhole.
2. City should implement a Capacity Management Operation and Maintenance Program (CMOM).

The EPA further identified recommendations and suggestions:

1. City should create a formal Capital Improvement Plan.
2. City should install a Supervisory Control and Data Acquisition (SCADA) System, which would allow the City to implement automated emergency response processes.

**By fiscal year end 2019 the City will have performed the following initiatives to address the concerns mentioned above:**

### **Issue:**

City should address wastewater engineering issues that leave the City vulnerable to SSO's at the US 175 Manhole.

### **Initiative:**

The City completed an inspection and subsequent repairs of the Glenn Road Lift Station, which is the lift station serving the US 175 corridor. This work has eliminated the US 175 manhole sanitary sewer overflows. However, additional work is required on the station



which will be addressed in future years, pending the development of the Capital Improvements Program.

**Initiative:**

In the FY 2019 Budget, staff recommended allocating \$103,895 for the Highway 175 lift station service area condition assessment, which includes manhole inspection, smoke testing, preparatory cleaning, CCTV inspection, defect analysis, cost estimates, mapping and final reports. Currently, the Highway 175 lift station service area has an infiltration/inflow (I/I) problem during heavy rain events. Additionally staff desires to control costs levied by North Texas Municipal Water District for treating the City's I/I issues from this service area. This assessment will meet EPA and CMOM requirement of inspecting 10% of the citywide system every year. The analysis has been completed by Pipeline Analysis. Staff is awaiting the final report from Pipeline, which will contain a detail report of all problems requiring City attention. The City expects to have sufficient resources to begin mitigation of I/I problems. These issues are scheduled to be addressed in FY 2020.

**Initiative:**

In the FY 2020 Proposed Budget, staff recommends allocating \$128,895 for the Water Street Interceptor service area condition assessment, which includes manhole inspection, smoke testing, preparatory cleaning, CCTV inspection, defect analysis, cost estimates, mapping and final reports.

**Initiative:**

A FY 2019 identified project replaced the Highway 175 gravity main crossing at Environmental Way. The project installed a new 15-inch composite plastic gravity main eliminating I/I problems under the Highway. Construction of the project was performed by Wilco Contractors in the amount of \$455,952.75. Engineering services totaling \$82,800 was provided by Halff Associates. The total project cost of \$538,752.75 was within the project estimate of \$750,000.00.

**Issues:**

City should prepare a standard operating procedure for emergency response and other critical operations.

City should implement a Capacity Management Operation and Maintenance Program (CMOM).

**Initiatives:**

In FY 2016, the City contracted with the engineering firm of Pipeline Analysis, LLC and their Engineer Jim Forbes to create the City's first CMOM Plan. The standard operating procedure for emergency response and other critical operations was developed in conjunction with the CMOM Plan. The CMOM plan was completed in the first quarter of FY 2017, and was sent to the EPA for approval. The City awaits approval from EPA.



**Issue:**

City should create a formal Capital Improvement Plan.

**Initiative:**

In late FY 2016, the City contracted with Halff Associates, Inc. to complete a Wastewater Master Plan. An integral element of the Wastewater Master Plan is the development of a wastewater system analysis to indicate areas of infrastructure improvement given certain flowrate conditions. This analysis will serve as the foundation for the creation of the Capital Improvement Plan, scheduled for completion in late September, 2017. This plan was presented to Council in May 2018.

In the FY 2018 Proposed Budget, staff recommends contracting with Halff Associates, Inc. to develop a Water System Master Plan and Water Conservation Plan. The proposed plan will contain provisions to ensure that new mains are properly sized. This initiative will also create a Capital Improvement Plan for the water system which will include total projected costs and a timeframe for each identified upgrade. The Water Conservation Plan was last updated in 2010 and is required by TCEQ to be updated every 5 years (\$115,200). Upon Council approval, work began on this initiative in October 2017 and is scheduled for completion in the fall of 2019.

Upon completion of the Wastewater Master Plan and the Water Master Plan, staff anticipates having all pertinent information to complete a Utility Capital Improvement Plan.

**Issue:**

City should install a SCADA System for sanitary sewer, which would allow the City to implement automated emergency response processes.

**Initiative:**

A SCADA system acquisition for sanitary sewer will be considered for inclusion in the Capital Improvement Plan.

**Issue:**

The Texas Commission on Environmental Quality (TCEQ) requires minimum system capacities be maintained for pumps, ground storage and elevated storage in the water system.

**Initiative:**

Staff recommends allocating \$300,000 for Ard Road water pump station improvements. Seagoville is in good shape for storage, but is nearing a required pump upgrade based on the number of connections the City serves. One of the 4 pumps at the station is currently out of service and needs to be repaired or replaced. This pump's motor has had to be serviced multiple times in recent years. Because of its maintenance history and the need to upgrade a pump before too long to meet TCEQ minimum capacity requirements,



staff is recommending that the pump be replaced. The power supply will need to be upgraded to accommodate the larger pump horsepower, and the yard piping will need to be increased to accommodate the higher flows. The plan is to accomplish both power and pipe upgrades in two phases to meet the ultimate needs of the station. Phase One includes all pipe upgrades. Phase Two includes electrical and pump upgrades.

### **Other Initiatives**

#### **Acquisition of Smart Water Meter Technology**

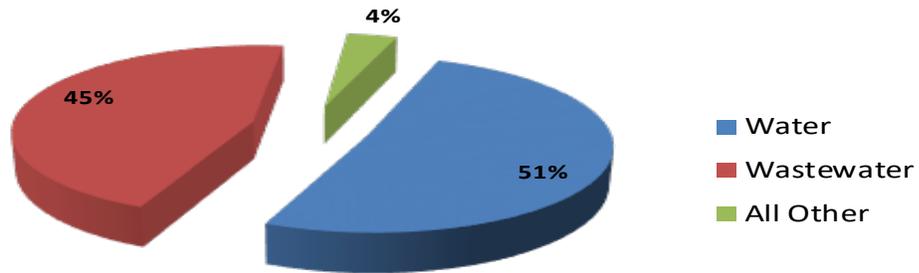
The City proposes the acquisition of Advanced Metering Infrastructure (AMI) technology. The system will include a complete meter change out of the whole city customer base, 2 antennas to collect water meter readings throughout the City, and a customer portal that will allow the customer to see hourly usage. It is estimated that the installation of this technology will take 8 to 10 months. It is possible that the improved accuracy of the new meters may increase customer revenue depending upon the age of the replaced meter.

#### **Engineering Services – Northern Basin Interceptor System**

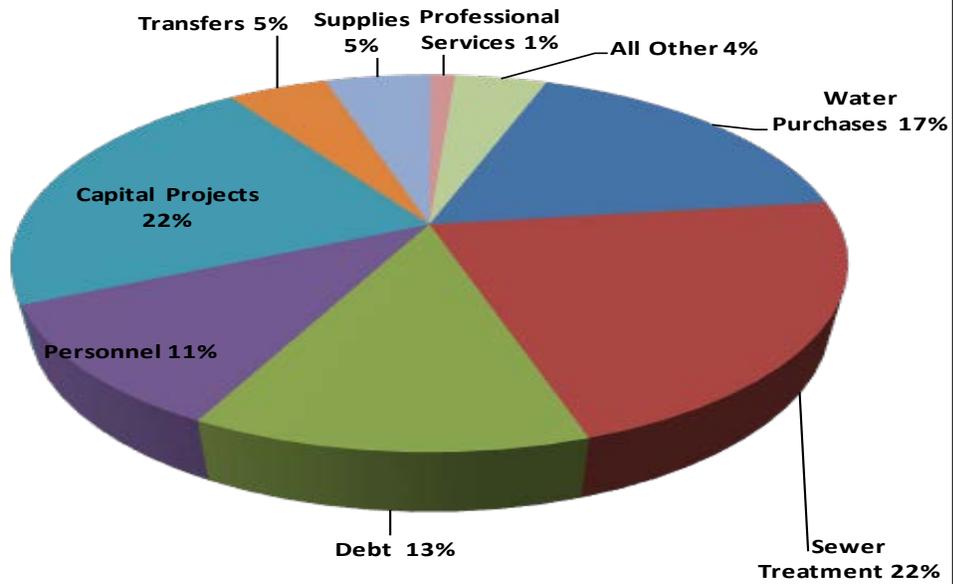
This project consists of providing professional engineering services to facilitate the pre-design study for the Northern Basin Interceptor System and to begin property acquisition. These interceptors are outlined in the City of Seagoville's Wastewater Master Plan. This effort is intended to determine the right alignment for placement of the sewer line. This infrastructure will allow sewer services to be provided by the City to neighborhoods in northwest Seagoville. Currently this area is not served by sewer infrastructure. Providing sewer infrastructure in this area is expected to open the area for future development. This project is budgeted for \$275,000.

*Seagoville* ★

**Water & Sewer Revenues**  
**Total Budget \$7,240,898**



**Water & Sewer Expenditures**  
**Total Budget \$8,944,007**





**Program: Water and Sewer Fund**

GOAL	FY 2018 Actual	FY 2019 Budget	FY 2019 Projected	FY 2020 Budget
<b>Enhance the Quality of Life in Seagoville</b>				
<b>Objectives</b>				
Participate in hosting the City's civic academy	Yes	Yes	Yes	Yes
<b>Maintain Seagoville As A Safe, Clean and Attractive Community</b>				
<b>Objectives</b>				
<b>Continue to comply with the CMOM standards as required by the Environmental Protection Agency</b>				
Indicator: Perform an annual assessment of the Water Street interceptor (year 4 of 10 assessment of all lift stations)	Yes	Yes	Yes	Yes
Note: FY 2019 the City conducted the third assessment of its lift stations (Hwy 175). The City has 11 list stations.	Glenn Road	Hwy 175	Hwy 175	Water Street
Indicator: Number of Citiworks work order system users	5	NA	7	9
Annual staff training on Cityworks work order system	Yes	Yes	Yes	Yes
Indicator: Reporting all Sanitary Sewer Outflows to TCEQ				
Number of Sanitary Sewer Outflows	13	2	2	2
Indicator: Council acceptance of Wastewater Capital Improvement Program	Yes	Yes	Yes	Yes
Council acceptance of Water Capital Improvement Program	NA	Yes	No	Yes
<b>Continue to maintain a superior rating by the state of Texas for water quality</b>				
Indicator: Collecting monthly water samples for lab evaluations submitted to TCEQ				
Number of failed inspections	-	-	-	-
Submission and distribution of Annual Report of Water Quality - Consumer confidence report	Yes	Yes	Yes	Yes



# Water and Sewer Administration

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## Water and Sewer Administration

1. Provides department management, field supervision and clerical support.

**PROGRAM SUMMARY**

<b>DEPARTMENT/PROGRAM NAME:</b>	<b>FUND/ DEPARTMENT/ PROGRAM CODE:</b>
WATER AND SEWER ADMINISTRATION	20/05

**PROGRAM EXPENDITURES:**

	FY 18	FY 19	FY 19	FY 20
	ACTUAL	AMENDED BUDGET	PROJECTED	PROPOSED
PERSONNEL	174,293	172,809	182,744	185,199
SUPPLIES				
CONTRACTUAL SERVICES				
CAPITAL OUTLAY				
<b>PROGRAM TOTAL</b>	<b>174,293</b>	<b>172,809</b>	<b>182,744</b>	<b>185,199</b>

**PERSONNEL SUMMARY:**

	FY 18	FY 19	FY 19	FY 20
	ACTUAL	AMENDED BUDGET	PROJECTED	PROPOSED
<b>FULL TIME POSITIONS:</b>				
Director	1	1	1	1
Assistant Director	1	1	0	0
Operations Support Technician	1	1	1	1
<b>TOTAL FULL TIME:</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>2</b>
<b>PART TIME POSITIONS:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>TOTAL PART TIME:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>TOTAL FULL TIME EQUIVALENT</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>2</b>

**SIGNIFICANT BUDGET CHANGES:**



# Water Services

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## Water Services

1. Responsible for all water system maintenance, elevated and ground storage tanks.

**PROGRAM SUMMARY**

<b>DEPARTMENT/PROGRAM NAME:</b>	<b>FUND/ DEPARTMENT/ PROGRAM CODE:</b>
WATER SERVICES	20/10

**PROGRAM EXPENDITURES:**

	FY 18	FY 19	FY 19	FY 20
	ACTUAL	AMENDED	PROJECTED	PROPOSED
		BUDGET		
PERSONNEL	335,002	349,152	351,357	346,701
SUPPLIES	293,956	212,400	215,400	213,900
CONTRACTUAL SERVICES	1,512,827	1,745,850	1,691,100	1,736,850
CAPITAL OUTLAY	19,643	12,000	12,000	19,500
<b>PROGRAM TOTAL</b>	<b>2,161,429</b>	<b>2,319,402</b>	<b>2,269,857</b>	<b>2,316,951</b>

**PERSONNEL SUMMARY:**

	FY 18	FY 19	FY 19	FY 20
	ACTUAL	AMENDED	PROJECTED	PROPOSED
		BUDGET		
<b>FULL TIME POSITIONS:</b>				
Assistant Director	0	0	1	1
Public Works Superintendent	1	1	0	0
Water Supervisor	1	1	1	1
Maintenance Worker	1	1	1	1
Meter Service Technician	2	2	2	2
<b>TOTAL FULL TIME:</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>
<b>PART TIME POSITIONS:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>TOTAL PART TIME:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>TOTAL FULL TIME EQUIVALENT</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>

**SIGNIFICANT BUDGET CHANGES:**



# Sewer Services

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## Sewer Services

1. Responsible for all sewer system maintenance, including eleven (11) wastewater lift stations.

**PROGRAM SUMMARY**

<b>DEPARTMENT/PROGRAM NAME:</b>	<b>FUND/ DEPARTMENT/ PROGRAM CODE:</b>
SEWER SERVICES	20/20

**PROGRAM EXPENDITURES:**

	FY 18	FY 19	FY 19	FY 20
	ACTUAL	AMENDED	PROJECTED	PROPOSED
		BUDGET		
PERSONNEL	219,605	238,398	238,289	249,412
SUPPLIES	57,636	211,560	194,160	209,900
CONTRACTUAL SERVICES	1,880,647	1,972,830	1,931,454	2,086,423
CAPITAL OUTLAY				
<b>PROGRAM TOTAL</b>	<b>2,157,888</b>	<b>2,422,788</b>	<b>2,363,903</b>	<b>2,545,735</b>

**PERSONNEL SUMMARY:**

	FY 18	FY 19	FY 19	FY 20
	ACTUAL	AMENDED	PROJECTED	PROPOSED
		BUDGET		
<b>FULL TIME POSITIONS:</b>				
Maintenance Worker	4	4	4	4
<b>TOTAL FULL TIME:</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>
<b>PART TIME POSITIONS:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>TOTAL PART TIME:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>TOTAL FULL TIME EQUIVALENT</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>

**SIGNIFICANT BUDGET CHANGES:**



# Customer Service

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## Customer Service

1. Maintains utility billing records and accounts.
2. Bills and collects from utility customers.

**PROGRAM SUMMARY**

<b>DEPARTMENT/PROGRAM NAME:</b>	<b>FUND/ DEPARTMENT/ PROGRAM CODE:</b>
CUSTOMER SERVICE	20/30

**PROGRAM EXPENDITURES:**

	FY 18	FY 19	FY 19	FY 20
	ACTUAL	AMENDED	PROJECTED	PROPOSED
		BUDGET		
PERSONNEL	153,896	156,549	155,687	159,899
SUPPLIES	20,450	23,050	23,050	23,050
CONTRACTUAL SERVICES	45,837	42,901	47,646	42,901
CAPITAL OUTLAY				
<b>PROGRAM TOTAL</b>	<b>220,182</b>	<b>222,500</b>	<b>226,383</b>	<b>225,850</b>

**PERSONNEL SUMMARY:**

	FY 18	FY 19	FY 19	FY 20
	ACTUAL	AMENDED	PROJECTED	PROPOSED
		BUDGET		
<b>FULL TIME POSITIONS:</b>				
Customer Service Manager	1	1	1	1
Customer Service/UB Technician	3	3	3	2
<b>TOTAL FULL TIME:</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>3</b>
<b>PART TIME POSITIONS:</b>				
<b>TOTAL PART TIME:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>TOTAL FULL TIME EQUIVALENT</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>3</b>

**SIGNIFICANT BUDGET CHANGES:**



# Non-Departmental

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## Non-Departmental

1. Accounts for unemployment, property insurance and other enterprise fund expenditures not identified with a specific department.

**PROGRAM SUMMARY**

<b>DEPARTMENT/PROGRAM NAME:</b>	<b>FUND/ DEPARTMENT/ PROGRAM CODE:</b>
NONDEPARTMENTAL	20/50

**PROGRAM EXPENDITURES:**

	FY 17	FY 18	FY 18	FY 19
	ACTUAL	AMENDED	PROJECTED	PROPOSED
		BUDGET		
PERSONNEL	16,425	19,631	19,882	21,340
SUPPLIES				
CONTRACTUAL SERVICES	200,389	197,877	277,237	262,571
CAPITAL OUTLAY	69,690	896,435	803,855	1,845,808
TRANSFERS	352,304	420,304	420,304	420,304
<b>PROGRAM TOTAL</b>	<b>638,808</b>	<b>1,534,247</b>	<b>1,521,278</b>	<b>2,550,023</b>

**PERSONNEL SUMMARY:**

	FY 17	FY 18	FY 18	FY 19
	ACTUAL	AMENDED	PROJECTED	PROPOSED
		BUDGET		
FULL TIME POSITIONS:				
TOTAL FULL TIME:	0	0	0	0
PART TIME POSITIONS:	0	0	0	0
TOTAL PART TIME:	0	0	0	0
<b>TOTAL FULL TIME EQUIVALENT</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

**SIGNIFICANT BUDGET CHANGES:**



# Debt Service

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## Debt Service

1. Accounts for semiannual principal and interest payments on enterprise fund debt obligations.

**PROGRAM SUMMARY**

<b>DEPARTMENT/PROGRAM NAME:</b>	<b>FUND/ DEPARTMENT/ PROGRAM CODE:</b>
DEBT SERVICE	21/1

**PROGRAM EXPENDITURES:**

	FY 18	FY 19	FY 19	FY 20
	ACTUAL	AMENDED	PROJECTED	PROPOSED
		BUDGET		
PERSONNEL				
SUPPLIES				
CONTRACTUAL SERVICES	152,988	516,559	543,288	1,135,900
CAPITAL OUTLAY				
<b>PROGRAM TOTAL</b>	<b>152,988</b>	<b>516,559</b>	<b>543,288</b>	<b>1,135,900</b>

**PERSONNEL SUMMARY:**

	FY 18	FY 19	FY 19	FY 20
	ACTUAL	AMENDED	PROJECTED	PROPOSED
		BUDGET		
FULL TIME POSITIONS:				
TOTAL FULL TIME:	0	0	0	0
PART TIME POSITIONS:	0	0	0	0
TOTAL PART TIME:	0	0	0	0
<b>TOTAL FULL TIME EQUIVALENT</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

**SIGNIFICANT BUDGET CHANGES:**

FY 2020 - Includes \$499,360 in bond principal and interest, \$1,500 in paying agent fees and lease payment of \$635,040 for year 1 of 3 for smart water meters

**W&S CERTIFICATE OF OBLIGATION BONDS  
ANNUAL DEBT SERVICE REQUIREMENTS  
ALL SERIES**

<b>FISCAL YEAR</b>	<b>BONDS DUE</b>	<b>INTEREST DUE</b>	<b>TOTAL PRINCIPAL &amp; INTEREST</b>
2020	358,000.00	141,360.46	499,360.46
2021	368,500.00	131,139.06	499,639.06
2022	373,500.00	120,611.50	494,111.50
2023	384,000.00	109,883.96	493,883.96
2024	399,500.00	98,850.26	498,350.26
2025	410,000.00	87,310.40	497,310.40
2026	420,000.00	75,464.40	495,464.40
2027	383,750.00	66,218.40	449,968.40
2028	394,250.00	57,643.52	451,893.52
2029	220,000.00	48,837.50	268,837.50
2030	225,000.00	43,337.50	268,337.50
2031	230,000.00	37,150.00	267,150.00
2032	235,000.00	30,825.00	265,825.00
2033	245,000.00	23,775.00	268,775.00
2034	250,000.00	16,425.00	266,425.00
2035	255,000.00	8,925.00	263,925.00
<b>TOTAL</b>	<b>5,151,500.00</b>	<b>1,097,756.96</b>	<b>6,249,256.96</b>

**DEBT SERVICE  
SCHEDULE OF REQUIREMENTS  
COMBINATION TAX AND REVENUE CERTIFICATES OF OBLIGATION  
SERIES 2015**

<b>FISCAL YEAR</b>	<b>BONDS DUE</b>	<b>INTEREST DUE</b>	<b>TOTAL PRINCIPAL &amp; INTEREST</b>
2020	160,000.00	106,012.50	266,012.50
2021	165,000.00	99,612.50	264,612.50
2022	170,000.00	93,012.50	263,012.50
2023	175,000.00	86,212.50	261,212.50
2024	185,000.00	79,212.50	264,212.50
2025	190,000.00	71,812.50	261,812.50
2026	200,000.00	64,212.50	264,212.50
2027	205,000.00	59,212.50	264,212.50
2028	210,000.00	54,087.50	264,087.50
2029	220,000.00	48,837.50	268,837.50
2030	225,000.00	43,337.50	268,337.50
2031	230,000.00	37,150.00	267,150.00
2032	235,000.00	30,825.00	265,825.00
2033	245,000.00	23,775.00	268,775.00
2034	250,000.00	16,425.00	266,425.00
2035	255,000.00	8,925.00	263,925.00
<b>TOTAL</b>	<b><u>3,320,000.00</u></b>	<b><u>922,662.50</u></b>	<b><u>4,242,662.50</u></b>

**DEBT SERVICE  
SCHEDULE OF REQUIREMENTS  
COMBINATION TAX AND REVENUE CERTIFICATES OF OBLIGATION  
REFUNDING SERIES 2017**

<b>FISCAL YEAR</b>	<b>BONDS DUE</b>	<b>INTEREST DUE</b>	<b>TOTAL PRINCIPAL &amp; INTEREST</b>
2020	198,000.00	35,347.96	233,347.96
2021	203,500.00	31,526.56	235,026.56
2022	203,500.00	27,599.00	231,099.00
2023	209,000.00	23,671.46	232,671.46
2024	214,500.00	19,637.76	234,137.76
2025	220,000.00	15,497.90	235,497.90
2026	220,000.00	11,251.90	231,251.90
2027	178,750.00	7,005.90	185,755.90
2028	184,250.00	3,556.02	187,806.02
<b>TOTAL</b>	<b><u>1,831,500.00</u></b>	<b><u>175,094.46</u></b>	<b><u>2,006,594.46</u></b>

# Annual Water and Sewer Debt Service Requirements

