CIP OVERVIEW (2020-2024 City Manager Proposed)

Water Resources - Water

FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
1,555,000	2,188,000	2,198,000	1,723,000	1,505,000	1,562,000	16,687,000	9,176,000
1,272,000	250,000	555,000	650,000	355,000	600,000	1,880,000	2,410,000
-	-	-	-	-	2,770,000	1,880,000	2,770,000
350,000	2,250,000	-	-	-	-	-	2,250,000
-	-	1,250,000	1,250,000	-	-	-	2,500,000
\$3,177,000	\$4,688,000	\$4,003,000	\$3,623,000	\$1,860,000	\$4,932,000	\$20,447,000	\$19,106,000
			Year)				
d Widening Utility F		Betterment	-	-	-	-	1,680,000
	· · ·	400.000	400.000	400.000	400.000	12 150 000	
	Utility Coordinat		400,000	400,000	400,000	13,130,000	2,000,000
- leter Reading	400,000	-	-	-	-	-	400,000
250,000	250,000	250,000	250,000	250,000	250,000	800,000	1,250,000
250,000	250,000	250,000	250,000	250,000	250,000	-	1,250,000
-	250,000	250,000	-	-	-	-	500,000
	230.000	235.000	240.000	245,000	250,000	1,250,000	1,200,000
Sunset basins		,	,	210,000	200,000	.,_00,000	
		· · · · ·	150,000	-	-	-	550,000
Road Roundabour	180,000 t - Utility Reloca	180,000 tion	-	-	-	-	360,000
-	170,000	-	-	-	-	-	170,000
-	125,000	125,000	-	-	-	-	250,000
t Management Plar 155,000	n 115,000	150,000	145,000	150,000	150,000	145,000	710,000
		100.000	100.000	100.000	100.000		500,000
		100,000	100,000	100,000	100,000		
- mentation Renewal		-	-	-	-	-	100,000
ment and Main Ext	80,000 rensions	80,000	80,000	-	-	-	240,000
75,000	75,000	75,000	75,000	75,000	75,000	100,000	375,000
-	50,000	ITS -	-	-	-	-	50,000
and Implementation		33.000	33.000	35.000	37.000	-	171,000
Project (Water)	·			_	· _	_	2,500,000
	Inset WTP						
	- Tanks	200,000	500,000	-	-	-	700,000
ment - Water	-	120,000	-	-	-	-	120,000
-	-	105,000	150,000	105,000	150,000	-	510,000
-	-	-	-	250,000	-		250,000
Sunset WTP	-	-	-	-	1,800.000	-	1,800,000
Nater Improvement	ts at Water Trea	tment				1 880 000	970,000
ter Pump Renewals	- S	-	-	-		1,000,000	
tional Amendment	-	-	-	-	450,000	-	450,000
-	- Annex Area 13)	-	-	-	50,000	650,000	50,000
-	-	-	-	-	-	500,000	-
i. vvater iviain -	-	-	-	-	-	315,000	-
	1,272,000 350,000 \$3,177,000 I Maintenance d Widening Utility F ant Program 250,000 idening - U-4762 - Meter Reading 250,000 iater Mains 250,000 iater Mains 250,000 in Sludge Clarifiers hance 225,000 Sunset basins 50,000 Replacement 0 Road Roundabou vash piping improve at Management Plan 155,000 TP Valve Rehab/Re 100,000 iater Interconnect mentation Renewal ment and Main Ext 75,000 pply Reservoir Acce and Implementation Project (Water) gh Duty Pumps - Su 672,000 k Chemical Storage ment - Water Feed Point Sunset WTP Water Improvemen ter Pump Renewals tional Amendment	1,272,000 250,000 350,000 2,250,000 \$3,177,000 \$4,688,000 I Maintenance (Order of Ft d Widening Utility Relocation and E - 1,680,000 int Program 250,000 250,000 400,000 idening - U-4762 - Utility Coordinat - 400,000 Ater Reading 250,000 250,000 250,000 ater Mains 250,000 250,000 230,000 Sunset basins 50,000 50,000 200,000 Replacement 180,000 ater Management Plan 125,000 150,000 115,000 TP Valve Rehab/Replacement 100,000 ater Interconnect 100,000 ater Interconnect 50,000 ater Interconnect 33,000 Project (Water) 33,000 Project (Water) - ater Implementation (Water) - ater Pump Renewals - - - - - - - <	1,272,000 250,000 555,000 350,000 2,250,000 - 350,000 2,250,000 - 1,250,000 \$4,688,000 \$4,003,000 \$3,177,000 \$4,688,000 \$4,003,000 Imaintenance (Order of Funding, by dwidening Utility Relocation and Betterment - 1,680,000 400,000 400,000 - etr Program 250,000 250,000 250,000 250,000 250,000 250,000 250,000 ater Mains 250,000 200,000 Replacement 180,000 200,000 Replacement 170,000 ater Anagement Plan 155,000 150,000 150,000 TP Valve Rehab/Replacement 100,000 100,000 - ater Interconnect 100,000 - - ater Interconnect 33,0	1,272,000 250,000 555,000 650,000 350,000 2,250,000 - - - 1,250,000 \$3,623,000 \$3,177,000 \$4,688,000 \$4,003,000 \$3,623,000 Maintenance (Order of Funding, by Year) - - - d Widening Utility Relocation and Betterment - - - 250,000 400,000 400,000 400,000 400,000 idening - U-4762 - Utility Coordination - - - 250,000 250,000 250,000 250,000 - 250,000 250,000 250,000 250,000 - ance 225,000 230,000 235,000 - ance 225,000 230,000 240,000 Sunset basins 50,000 200,000 - - stast piping improvements - 125,000 - - 100,000 115,000 150,000 145,000 - - TP Valve Rehab/Replacement 100,000 100,000 - - - 1010,000	1,272,000 250,000 555,000 650,000 355,000 350,000 2,250,000 - - - 350,000 2,250,000 - - - 1,250,000 1,250,000 - - - Maintenance (Order of Funding, by Year) - - - - d Widening Utility Relocation and Betterment - - - - 250,000 400,000 400,000 400,000 - - 16ter Reading 250,000 250,000 250,000 250,000 250,000 250,000 101der Mains 250,000 250,000 250,000 250,000 - - 1025,000 230,000 235,000 240,000 245,000 - - 1026,000 150,000 150,000 - - - - 1026,000 230,000 235,000 240,000 245,000 - - 1026,000 150,000 150,000 - -	1,272,000 250,000 555,000 650,000 355,000 600,000 350,000 2,250,000 - - - 2,770,000 \$3,177,000 \$4,688,000 \$4,003,000 \$3,623,000 \$1,860,000 \$4,932,000 Maintenance (Order of Funding, by Year) dWdening Utily Relocation and Betterment - - - 1,680,000 400,000 400,000 400,000 400,000 400,000 250,000 250,000 250,000 250,000 250,000 250,000 250,000 250,000 250,000 250,000 250,000 250,000 250,000 250,000 250,000 250,000 250,000 250,000 250,000 250,000 250,000 250,000 250,000 250,000 250,000 250,000 250,000 250,000 250,000 250,000 250,000 250,000 - - - - 100,000 180,000 150,000 150,000 - - - 1	1,272,000 250,000 555,000 650,000 355,000 600,000 1,880,000 350,000 2,250,000 -

CIP OVERVIEW (2020-2024 City Manager Proposed)

Water Resources - Water

(Current Year 🗖		2020-2024	CIP Funding	Period			
Description	FY 2019 Proj	FY 2020 Prop	FY 2021 Prop	FY 2022 Prop	FY 2023 Prop	FY 2024 Prop	Future Years	CIP Total
WD:Southeast Water			•	•			070.000	
Tar River WTP - Air So	- cour Backwash	-	-	-	-	-	270,000	-
	-	-	-	-	-	-	250,000	-
Old Hanson Quarry Fil	I						100.000	
Water System SCADA	- Svstem	-	-	-	-	-	190,000	-
	-	-	-	-	-	-	180,000	-
WTP Sludge Application	on Upgrade						450.000	
Tar River Reservoir Da	- m Renovations	-	-	-	-	-	150,000	-
	-	-	-	-	-	-	100,000	-
Tar River Water Supply	y Dam Maintena	ance						
WD: Carriage Trail-We	- st Hampton Wa	- ator	-	-	-	-	100,000	-
-	-	-	-	-	-	-	100,000	-
WD:Battleboro System	n Improvements	Gainor Ave., D	enzel Ln.					
Heavy Equipment Stor	- rago Building	-	-	-	-	-	72,000	-
rieavy Equipment Stor	-	-	-	-	-	-	60,000	-
Segmented Flow Anal	yzer						,	
Water Resources Tech	-	-	-	-	-	-	60,000	-
Water Resources leci	-		-	-	-	-	60.000	-
TOC Analyzer / Tech S	Services						,	
Leggett Park Sanitary	-	-	-	-	-	-	45,000	-
Leggell Park Sanilary	Sewer improve	ments, Phase 3	-	-	-	-	20,000	-
Hypochlorite System								
	600,000	-	-	-	-	-	-	-
Hunter Hill Widening:	350,000	on and Betterme	-	-	-	-	-	-
Tar River Water Suppl	y Reservoir Inta	ike Valves						
	120,000	-	-	-	-	-	-	-
Chemical Transfer Pur	mp Replacemer 80,000		-	-	-	-	-	-
Group Expenditures	\$3,177,000	\$4,688,000	\$4,003,000	\$3,623,000	\$1,860,000	\$4,932,000	\$20,447,000	\$19,106,000
Total Expenditures	\$3,177,000	\$4,688,000	\$4,003,000	\$3,623,000	\$1,860,000	\$4,932,000	\$20,447,000	\$19,106,000

Wesleyan Boulevard Widening Utility Relocation and Betterment

Description

This project entails the relocation and renewal of water related infrastructure impacted by the widening of Wesleyan Blvd from May Drive to Tiffany Blvd

Justification

Category 12 - Other as needed

Current & Future Plans

FY2020 - Payment due to NCDOT (estimated).

Bauranuaa	Current Year		2020-	2024 CIP Fur	iding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Fund Balance	-	1,680,000	-	-	-	-	-	1,680,000
Total Revenues	\$-	\$1,680,000	\$-	\$-	\$-	\$-	\$-	\$1,680,000
Even and it was a	Current Year		2020-	2024 CIP Fur	iding			
Expenditures	Current Year FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	iding FY 2023	FY 2024	Future	CIP
Expenditures Description		FY 2020 Prop		- · ·	0	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023			-

2" Main Replacement Program

Description

This program is intended to improve water quality to customers and reduce water losses due to leaks by replacing selected sections of 2" galvanized water mains throughout the City with PVC products. Currently, there are about 166,000 linear feet of 2" galvanized steel water lines remaining in the water distribution system. Nearly all of it is beyond its 20 year useful life.

Justification

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective C-1 in that it provides for planning service line extensions and replacement. These improvements are tied to the justificiation for FY 2016 rate increases.

Category

06 - Current level of service cannot be assured unless work is done

Past Progress

FY2016 - Continue with replacement

FY2017 - Continue with replacement

FY2018 - Continue with replacement

FY2019 - Continue with replacement

Current & Future Plans

FY2020 - Continue with replacement

FY2021 - Continue with replacement

FY2022 - Continue with replacement

FY2023 - Continue with replacement

D	Current Year		2020-	2024 CIP Fun	iding			
Revenues	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	250,000	400,000	400,000	400,000	400,000	400,000	13,150,000	2,000,000
Total Revenues	\$250,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$13,150,000	\$2,000,000
	Current Year		2020-	2024 CIP Fur	iding			
Expenditures	Current Year FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	ding	FY 2024	Future	CIP
<u>Expenditures</u> Description		FY 2020 Prop		Ph. 1 1	5	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023			

Springfield Road Widening - U-4762 - Utility Coordination

Description

Utility Coordinaton for widening of Springfield Road from US 64 Business to Leggett Road

Justification

Category

05 - Current level of service cannot be continued unless work is done

Past Progress

FY2018 - Project to be let and construction to begin

Current & Future Plans

FY2020 - Scheduled payment after completion of construction

Deveenee	Current Year		2020-	2024 CIP Fur	nding			
Revenues	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Fund Balance	-	400,000	-	-	-	-	-	400,000
Total Revenues	\$-	\$400,000	\$-	\$-	\$-	\$-	\$-	\$400,000
	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	Current Year FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP
<u>Expenditures</u> Description		FY 2020 Prop			0	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023	•		

Water Automated Meter Reading

Description

Project will fund the installation of electronic water meters in conjunction with electronic gas and electric meters. Cost are shared with Sewer Fund: 55% Water Fund / 45% Sewer Fund. Approximately 26,000 meters will be replaced at a cost of \$180 per meter, including installation. Funding also takes into consideration new taps beyond subdivision construction.

Justification

Project is consistent with the Community Facilities Element of the Comprehensive Plan; Strategy B-2 & F-1 in that it upgrades existing utility service and improves the management of utilities.

Category

11 - Needed to implement a new program or activity being requested in an upcoming operating budget

Past Progress

FY2014 - Replaced approximately 1,282 AMR Meters for FY

FY2016 - Continue with AMR replacement

FY2017 - Continue with AMR replacement

FY2018 - Continue with AMR replacement

FY2019 - Continue with AMR replacement

Current & Future Plans

FY2020 - Continue with AMR replacement

FY2021 - Continue with AMR replacement

FY2022 - Continue with AMR replacement

FY2023 - Continue with AMR replacement

D	Current Year		2020-	2024 CIP Fun	iding			
Revenues	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	250,000	250,000	250,000	250,000	250,000	250,000	800,000	1,250,000
Total Revenues	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$800,000	\$1,250,000
F	Current Year		2020-	2024 CIP Fur	iding			
Expenditures	Current Year FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	iding	FY 2024	Future	CIP
<u>Expenditures</u> Description		FY 2020 Prop			0	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023	•		-

Relining Existing Water Mains

Description

MECHANICAL REMOVAL OF TUBERCULATION, FOLLOWED BY CEMENT RELINING OF EXISTING WATER MAINS

Justification

DRIVEN BY CONCENTRATED CUSTOMER COMPLAINTS OF DICOLORED WATER. WILL IMPROVE WATER QUALITY AND EXTEND LIFE OF EXISTING PIPE.

Category

07 - Extends life of facility more than five (5) years

Past Progress

FY2019 - INITIATE RELINING OF WATER MAINS

Devenue	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	250,000	250,000	250,000	250,000	250,000	250,000	-	1,250,000
Total Revenues	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$-	\$1,250,000
F! '4	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	Current Year FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP
<u>Expenditures</u> Description		FY 2020 Prop			5	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023			

Sedimentation Basin Sludge Clarifiers

Description

We have two Water Treatment Facilities of very different designs. The Sunset Avenue WTP has fifteen (15) treatment basins while Tar River WTP has two (2). Sludge removal from basins requires the basin to be out of service, limiting output of TRR and labor consuming at SAP.

The funding would install a sludge withdrawal system in the two Tar River WTP treatment basins which would nearly eliminate the need to shut down the plant; drawing portions of the sludge blanket to storage as needed. The project would be performed in back-to-back years.

Justification

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective B-3 in that it updates the CIP, to continue to providing quality utility service.

Category

07 - Extends life of facility more than five (5) years

Past Progress

FY2019 - TRR sedimentation basin #1 renewal of sludge removal clarifier with stainless. Clarifier steel is corroded.

Current & Future Plans

FY2020 - Renewal of TRR basin #2 with stainless clarifier mechanism

FY2021 - Renewal of TRR Basin #1 with Stainless steel clarifier mechanism.

Bauanuaa	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Installment Debt	-	250,000	250,000	-	-	-	-	500,000
Total Revenues	\$-	\$250,000	\$250,000	\$-	\$-	\$-	\$-	\$500,000
	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	Current Year _F FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP
<u>Expenditures</u> Description		FY 2020 Prop		- · ·	0	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023	•		

Water Tank Maintenance

Description

This project funds the repainting of the city's overhead storage water tanks in a timely manner. Over a period of seven (7) years, each tank will be painted and maintained in a manner consistent with acceptable practice and the provisions of the City's RFP. Before the summer of 2016 repainting, the Marigold Tank was well behind its acceptable maintenance schedule.

Justification

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective B-3 in that it updates the CIP to continue to providing quality utility service.

Category

07 - Extends life of facility more than five (5) years

Past Progress

FY2014 - Painting and Reconditioning of Nash CC and Airport Road Tanks completed November 2013

FY2016 - Continue program (Paul)

FY2017 - Continue program (Marigold)

FY2018 - Continue replacement program (Whitakers, Mitchell), washout Goldrock

FY2019 - Continue program (Goldrock) and Nash CC inspection

Current & Future Plans

FY2020 - Continue program

FY2021 - Continue program

Devenues	Current Year		2020-	2024 CIP Fun	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	225,000	230,000	235,000	240,000	245,000	250,000	1,250,000	1,200,000
Total Revenues	\$225,000	\$230,000	\$235,000	\$240,000	\$245,000	\$250,000	\$1,250,000	\$1,200,000
	Current Year		2020-	2024 CIP Fur	nding			
Expenditures		FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding	FY 2024	Future	CIP
<u>Expenditures</u> Description	Current Year	FY 2020 Prop			0	FY 2024 Prop	Future Years	CIP Total
	Current Year FY 2019		FY 2021	FY 2022	FY 2023			

Concrete repair of Sunset basins

Description

Concrete corrosion requires remedial work on the 15 sedimentation basins and the influent and effluent troughts

Justification

Category

07 - Extends life of facility more than five (5) years

Devenues	Current Year		2020-	2024 CIP Fun	iding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	50,000	200,000	200,000	150,000	-	-	-	550,000
Total Revenues	\$50,000	\$200,000	\$200,000	\$150,000	\$-	\$-	\$-	\$550,000
F	Current Year		2020-	2024 CIP Fur	iding			
Expenditures	Current Year FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	iding FY 2023	FY 2024	Future	CIP
Expenditures Description		FY 2020 Prop			5	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023	•		

Raw Water Screen Replacement

Description

The two raw water intake screens, which will remove any obstacle or debris 1/4" or larger, have been replaced in years past, and, following repairs in 2004 years, are approaching a second replacement threshold. The two target units are still the original 1954 construction and are in need of a planned replacement schedule.

Justification

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Object B-3 in that it updates the CIP to continue to provide quality utility service.

Category

06 - Current level of service cannot be assured unless work is done

Past Progress

FY2019 - Screens are to be rehabilitated

Current & Future Plans

FY2020 - Traveling Screens are to be rehabilitated at Sunset WTP.

Devenues	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	-	180,000	180,000	-	-	-	-	360,000
Total Revenues	\$-	\$180,000	\$180,000	\$-	\$-	\$-	\$-	\$360,000
F	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	Current Year _C FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP
Expenditures Description		FY 2020 Prop		- · ·	0	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023			

Red Oak/Battleboro Road Roundabout - Utility Relocation

Description The NCDOT will be reconfiguring this intersection to better accommodate tractor trailer traffic associated with the

Justification

Category

01 - Legally mandated

Devenues	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Fund Balance	-	170,000	-	-	-	-	-	170,000
Total Revenues	\$-	\$170,000	\$-	\$-	\$-	\$-	\$-	\$170,000
F	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	Current Year FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP
Expenditures Description		FY 2020 Prop			0	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023	•		

Sunset WTP backwash piping improvements

Description

This project will address corroded hangars which support the 18" backwash piping below water plant. General pipe condition will also be evaluated

Justification

Category

07 - Extends life of facility more than five (5) years

Devenues	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	-	125,000	125,000	-	-	-	-	250,000
Total Revenues	\$-	\$125,000	\$125,000	\$-	\$-	\$-	\$-	\$250,000
F	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	Current Year FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP
Expenditures Description		FY 2020 Prop			5	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023	•		

Water System Asset Management Plan

Description

Develop an updated water system asset management master plan combining the existing resources of the existing water distribution model along with GIS and field assessment. Produce comprehensive plan to guide future investment in distribution system such as extension, rehab, replacement and expansion.

Justification

The current water system master plan was produced in 2003 and no longer reflects the capacity and demand of the distribution system. Preparation of this report would help to guide future capital projects and aide in the evaluation by state fund granting programs for justification of fund expenditures. These improvements are tied to the justificiation for FY 2016 rate increases and findings of the asset management plan.

Category

06 - Current level of service cannot be assured unless work is done

Past Progress

FY2014 - Consultant selection planned for spring 2014

FY2015 - Start of development of asset management plan

FY2017 - Identify and complete projects consistent with recommendations of asset management plan

FY2018 - Identify and complete projects consistent with recommendations of asset management plan

FY2019 - Identify and complete projects consistent with recommendations of asset management plan. Current & Future Plans

FY2020 - Identify and complete projects consistent with recommendations of asset management plan.

FY2021 - Identify and complete projects consistent with recommendations of asset management plan.

FY2022 - Identify and complete projects consistent with recommendations of asset management plan.

FY2023 - Identify and complete projects consistent with recommendations of asset management plan.

FY2024 - Identify and complete projects consistent with recommendations of Asset Management Plan.

Devenues	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	155,000	115,000	150,000	145,000	150,000	150,000	145,000	710,000
Total Revenues	\$155,000	\$115,000	\$150,000	\$145,000	\$150,000	\$150,000	\$145,000	\$710,000
F !'(Current Year		2020-	2024 CIP Fur	nding			
Expenditures	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Planning/Design	155,000	115,000	150,000	145,000	150,000	150,000	145,000	710,000
Total Expenditures					-			

Sunset and TRR WTP Valve Rehab/Replacement

Description

This program maintains the operability of the 14 MGD Sunset Plant by renewing the valves between flocculators and filters. This program covers 126 critical valves which have been heavily degraded by time and corrosion. These include 30 basin effluent valves (18" sluice with rising stem manual operators), 30 basin influent valves (lifting disc with manual operators) 51 lifting disc drain valves (aka mud valves with non rising stem keyed operators), and 15 filter influent valves (30" sluice gates with electric operators).

Justification

Project is consistent with the Community Facilities Section fo the Comprehensive Plan; Objective B-3 in that it updates the CIP in order to provide quality utility service.

Category

06 - Current level of service cannot be assured unless work is done

Past Progress

FY2014 - Work has been initiated to rehab filter #2 influent, several basin efluent, and mud valves through the use of operational funds. Future years will be funded through CIP.

FY2018 - Work will continue to complete \$100,000 in valve rehab/replacement.

FY2019 - Six 18" mud valves and two 30" butterfly valves for TRR procured FY 2019

D	Current Year		2020-	2024 CIP Fun	nding				
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP	
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total	
Enterprise Fund	100,000	100,000	100,000	100,000	100,000	100,000	-	500,000	
Total Revenues	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$-	\$500,000	
	Current Year		2020-	2024 CIP Fun	ding				
Expenditures	Current Year FY 2019	FY 2020	2020- FY 2021	2024 CIP Fun FY 2022	ding	FY 2024	Future	CIP	
<u>Expenditures</u> Description		FY 2020 Prop			5	FY 2024 Prop	Future Years	CIP Total	
	FY 2019		FY 2021	FY 2022	FY 2023	•			

Bethlehem Road Water Interconnect

Description

Interconnect of the existing distribution system to improve redundancy and back feed to the Applewood / Bethlehem Woods portion of the service area

Justification

Recent public works projects have revealed the benefits of moving forward with this portion of the project

Category

02 - Eliminates hazards to persons

Past Progress

FY2014 - Project identified and planned. Research and design phase complete in Januray 2014

FY2015 - Construction of proposed improvements to begin

FY2017 - Permitting and construction

FY2018 - Permitting and construction

D	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	-	100,000	-	-	-	-	-	100,000
Total Revenues	\$-	\$100,000	\$-	\$-	\$-	\$-	\$-	\$100,000
F	Current Year		2020-	2024 CIP Fur	nding			
<u>Expenditures</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Construction	-	100,000	-	-	-	-	-	100,000
Total Expenditures	\$-	\$100.000	\$-	\$-	\$-	\$0.00	\$-	\$100,000

Water Plants Instrumentation Renewal

Description

The Sunset and TR WTP continuous measurement tools to monitor filter turbidity and plant chlorine and ammonia require periodic replacement. As of 2018 the turbidimeters are year 2000 and scheduled to be unsupported by vendor, chlorine and ammonia equipment is similar vintage.

Justification

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Object B-3 in that it updates the CIP to provide quality utility service

Category

06 - Current level of service cannot be assured unless work is done

Current & Future Plans

FY2021 - Goal is to replace Chloramine monitoring equipment APA 600

FY2022 - Goal is to replace chlorine and ammonia monitoring equipment at both WTP

Devenues	Current Year		2020-	2024 CIP Fun	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	-	80,000	80,000	80,000	-	-	-	240,000
Total Revenues	\$-	\$80,000	\$80,000	\$80,000	\$-	\$-	\$-	\$240,000
	Current Year		2020-	2024 CIP Fun	nding			
Expenditures	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Expenditures Description	FY 2019 Proj	FY 2020 Prop	FY 2021 Prop	FY 2022 Prop	FY 2023 Prop	FY 2024 Prop	Future Years	CIP Total
_						•		

WD:Minor Enhancement and Main Extensions

Description

This project provides for small scale system enhancement projects, water main extensions required for fire protection, and water service requests as approved by the City Council through the petition process. In addition, it allows for developer agreements for oversizing and extensions as required by the city.

Justification

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective C-1 in that it provides for planning service line extensions and replacement. These improvements are tied to the justificiation for FY 2016 rate increases.

Category

01 - Legally mandated

Past Progress

FY2014 - Identify project needs to maintain and improve service to customers

FY2015 - Identify project needs to maintain and improve service to customers

FY2016 - Meet needs as identified to maintain and improve service to customers.

FY2017 - Meet needs as identified to maintain and improve service to customers.

FY2018 - Meet needs as identified to maintain and improve service to customers.

FY2019 - Meet needs as identified to maintain and improve service to customers.

Current & Future Plans

FY2020 - Meet needs as identified to maintain and improve service to customers.

FY2021 - Meet needs as identified to maintain and improve service to customers.

Devenues	Current Year		2020-:	2024 CIP Fun	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	75,000	75,000	75,000	75,000	75,000	75,000	100,000	375,000
Total Revenues	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$100,000	\$375,000
F	Current Year		2020-:	2024 CIP Fur	iding			
Expenditures	Current Year FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	iding FY 2023	FY 2024	Future	CIP
Expenditures Description		FY 2020 Prop			5	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023			

Tar River Water Supply Reservoir Access Improvements

Description

The existing paved access to the reservoir dam is in need of repair/rehabilitation. This project will allow for needed repairs to be completed.

Justification

Category

03 - Eliminates hazards to property

Past Progress

FY2018 - Repair access road.

Devenues	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	-	50,000	-	-	-	-	-	50,000
Total Revenues	\$-	\$50,000	\$-	\$-	\$-	\$-	\$-	\$50,000
	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	Current Year FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP
<u>Expenditures</u> Description		FY 2020 Prop			0	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023	•		

CMMS Acquisition and Implementation (Water)

Description

This project entails acquiring, populating, training, and then implementing a CMMS for use in PWWR.

Justification

Category

08 - Improves efficiency or generates additional revenue with initial cost being recovered by savings within less than five (5) years

Devenues	Current Year		2020-2	2024 CIP Fur	iding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	-	33,000	33,000	33,000	35,000	37,000	-	171,000
Total Revenues	\$-	\$33,000	\$33,000	\$33,000	\$35,000	\$37,000	\$-	\$171,000
F	Current Year		2020-:	2024 CIP Fur	iding			
Expenditures	Current Year FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	iding FY 2023	FY 2024	Future	CIP
Expenditures Description		FY 2020 Prop		- · ·	0	FY 2024 Prop	Future Years	CIP Total
	FY 2019	•_•	FY 2021	FY 2022	FY 2023			

AMR/AMI Metering Project (Water)

Description

This project will entail upgrading the metering technology for the water utility (and will be jointly funded by the sewer utility) in order to provide for remote reading and improved customer awareness regarding utility consumption.

Justification

This project will improve operational efficiency and better equip the customer to assess and monitor end user consumption. This project will also be coordinated with a similar project in electric and in gas.

Category

08 - Improves efficiency or generates additional revenue with initial cost being recovered by savings within less than five (5) years

Devenues	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Unmet Needs	-	-	1,250,000	1,250,000	-	-	-	2,500,000
Total Revenues	\$-	\$-	\$1,250,000	\$1,250,000	\$-	\$-	\$-	\$2,500,000
Even and it was a	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	Current Year FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP
<u>Expenditures</u> Description		FY 2020 Prop		- · ·	0	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023	•		

Replacement of High Duty Pumps - Sunset WTP

Description

Target is High Duty #2 ; This 400 HP horizontal split case pumps require vacuum priming, is not variable speed. Replacements will be a vertical turbine, variable speed specification with one pump for 9- 15 MGD. High Duty #3 was converted to a similar configuration in 2002.

Justification

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective B-3 in that it updates the CIP to continue to provide quality utility service.

Category

08 - Improves efficiency or generates additional revenue with initial cost being recovered by savings within less than five (5) years

Past Progress

FY2019 - Purchase order has been issued to TA Loving for \$644,300 for HD#2 replacement

D	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Installment Debt	672,000	-	200,000	500,000	-	-	-	700,000
Total Revenues	\$672,000	\$-	\$200,000	\$500,000	\$-	\$-	\$-	\$700,000
	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Construction	644,000	-	100,000	500,000	-	-	-	600,000
Planning/Design	28,000	-	100,000	-	-	-	-	100,000
Total Expenditures	\$672,000	\$-	\$200,000	\$500,000	\$-	\$0.00	\$-	\$700,000

Reservoir WTP Bulk Chemical Storage Tanks

Description

This project would replace the two (2) fiberglass 20,000 gal bulk Ferric Sulfate storage tanks at the Tar River Water Treatment Plant. Tanks have been in service since 1974 when the Tar River WTP was built. Tanks are constructed of fiberglass and have received regular maintenance and inspections. However, time and the weather has taken its toll on the tanks. We have had one minor failure of one of the Ferric Sulfate bulk storage tanks. Tanks are contained within a berm, but a failure could shut the treatment plant down until repairs could be made.

Justification

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective B-3 in that it updates the CIP, to continue to provide quality utility service .

Category

06 - Current level of service cannot be assured unless work is done

Past Progress

FY2019 - Replace storage tanks at Tar River WTP

D	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	-	-	120,000	-	-	-	-	120,000
Total Revenues	\$-	\$-	\$120,000	\$-	\$-	\$-	\$-	\$120,000
F	Current Year		2020-	2024 CIP Fur	iding			
Expenditures	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Description Construction	Proj	Prop -	Prop 120,000	Prop -	Prop -	Prop -	Years	Total 120,000

Construction Equipment - Water

Description

Timely replacement of existing aged equipment and the need for new equipment to obtain the long range goals of the Department. Replacements are in accord with records and recommendations by Fleet Maintenance and the Public Works Department while new equipment represents opportunities for existing workforce to be more efficient and productive.

Justification

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective B-3 in that it updates the CIP to continue providing quality utility service.

Category

06 - Current level of service cannot be assured unless work is done

Past Progress

FY2016 - Equipment purchased per expenditure schedule below.

FY2017 - Per schedule

FY2018 - Replace unit # 8606, 1990 John Deere Front Loader

FY2019 - -

Current & Future Plans

FY2021 - Addition of new mini excavator

FY2022 - Replace 12 CY tandem axle dump truck unit # 8407.

FY2023 - Replace rubber tire back-hoe, unit # 8610

FY2024 - Replace 12CY tandem dump truck unit # 8408

Deveenee	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Installment Debt	-	-	105,000	150,000	105,000	150,000	-	510,000
Total Revenues	\$-	\$-	\$105,000	\$150,000	\$105,000	\$150,000	\$-	\$510,000
	Current Year		2020-	2024 CIP Fur	nding			
<u>Expenditures</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
10 CY Dump Truck [R]	-	-	-	150,000	-	150,000	-	300,000
Mini Excavator [N]	-	-	105,000	-	-	-	-	105,000
RT Backhoe [R]	-	-	-	-	105,000	-	-	105,000
Total Expenditures	\$-	\$-	\$105,000	\$150,000	\$105,000	\$150,000.00	\$-	\$510,000

Relocate Ammonia Feed Point

Description

The Tar River Plant was modified for chloramine feed in 2002. At the present feed point, it requires 6 hours to determine if feed rates are correct. Funds would move the ammonia feed location to the inflow of Clearwell #1. Liabilities of this misfeed can be very costly from the standpoint of being a water provider.

Justification

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Object B-3 in that it updates the CIP to continue providing quality utility service and Object D-2 as it addresses State/Federal Mandates.

Category

06 - Current level of service cannot be assured unless work is done

Devenues	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Installment Debt	-	-	-	-	250,000	-	-	250,000
Total Revenues	\$-	\$-	\$-	\$-	\$250,000	\$-	\$-	\$250,000
Expenditures	Current Year			2024 CIP Fur	0		- .	CID
	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Construction	-	-	-	-	100,000	-	-	100,000
Equipment/Furnishing	-	-	-	-	100,000	-	-	100,000
Planning/Design	-	-	-	-	50,000	-	-	50,000
Total Expenditures	\$-	\$-	\$-	\$-	\$250,000	\$0.00	\$-	\$250,000

Filter Rehabilitation Sunset WTP

Description

Rebuild 15 sand/ anthracite filters

Justification

Last rebuilt in 1991. Integral to Water Purification

Category

05 - Current level of service cannot be continued unless work is done

D	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Project Loan	-	-	-	-	-	1,800,000	-	1,800,000
Total Revenues	\$-	\$-	\$-	\$-	\$-	\$1,800,000	\$-	\$1,800,000
Free an eliteration	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	Current Year FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP
Expenditures Description		FY 2020 Prop			0	FY 2024 Prop	Future Years	CIP Total
	FY 2019	2020	FY 2021	FY 2022	FY 2023	•		

Sludge and Waste Water Improvements at Water Treatment

Description

Additional trac vac basins and 567,000 gallon sludge tanks and sludge loading facilities at Both Water Plants

Justification

Additional sludge production due to DBP regulations. These improvements are tied to the justificiation for FY 2016 rate increases and findings of the asset management plan.

Category

06 - Current level of service cannot be assured unless work is done

Past Progress

FY2017 - Trac Vac improvements

Current & Future Plans

FY2022 - Increase capacity

Devenues	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Project Loan	-	-	-	-	-	970,000	1,880,000	970,000
Total Revenues	\$-	\$-	\$-	\$-	\$-	\$970,000	\$1,880,000	\$970,000
E	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	Current Year FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP
<u>Expenditures</u> Description		FY 2020 Prop		- · ·	0	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023			

TRR WTP Raw Water Pump Renewals

Description

Existing Raw water pumps are 200 hp vertical turbines installed in 2000.

Justification

Extends life and improves reliability of raw water pumping system to water plant.

Category

07 - Extends life of facility more than five (5) years

D	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Installment Debt	-	-	-	-	-	450,000	-	450,000
Total Revenues	\$-	\$-	\$-	\$-	\$-	\$450,000	\$-	\$450,000
F! '(Current Year		2020-	2024 CIP Fur	nding			
Expenditures	Current Year _C FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP
<u>Expenditures</u> Description		FY 2020 Prop			5	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023			

Sunset WTP Operational Amendment

Description

Sunset Avenue underwent three (3) upgrades which amended its production capabilities as follows: 3 MGD / 6 MGD / 14 MGD. The configuration is quite unusual compared to most as the Clear Well Storage is located on the City Lake side of Sunset Avenue while the Operational Plant is on the City Park side. The Clear Wells are sized correctly at two each 1 million gallon vessels; however, an amendment to PWS Regulations in the early 2000's; relative to a process called chlorine contact time (CT) created an Achilles Heel. The Sunset WTP facility pumps water to the clear wells from the WTP and then pulls the water back again to the plant for distribution of the finished product. The bottom line is that the CT values are too close for comfort at higher production rates during the winter when CT requirements are higher, we can only produce 6 MGD. The corrective action is to evaluate systems to increase CT and from the Clear Wells.

Justification

This project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective D-2 in that it provides for insuring regulatory permit compliance.

Category

07 - Extends life of facility more than five (5) years

Current & Future Plans

FY2024 - Planning

Devenues	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	-	-	-	-	-	50,000	-	50,000
Installment Debt	-	-	-	-	-	-	650,000	-
Total Revenues	\$-	\$-	\$-	\$-	\$-	\$50,000	\$650,000	\$50,000
	Current Year		2020-	2024 CIP Fur	nding			
<u>Expenditures</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Construction	-	-	-	-	-	-	650,000	-
Planning/Design	-	-	-	-	-	50,000	-	50,000

WD:Peele Road/Hornbeam (Formerly Annex Area 13)

Description

This project provides for extension of a water main on Peele Road to serve annexation area 13 as well as extension of service lines to Toddsberry Rd, Muscadine Rd, and Ely Rd

Justification

Project provides fire protection and water service within annexation area 13 (Toddsberry Rd, Muscadine Rd, Ely Rd).

Category

01 - Legally mandated

Current & Future Plans

FY2020 - Project scheduled to begin with land acquisition and engineering design

Devenues	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	-	-	-	-	-	-	40,000	-
Installment Debt	-	-	-	-	-	-	460,000	-
Total Revenues	\$-	\$-	\$-	\$-	\$-	\$-	\$500,000	\$-
–	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Construction	-	-	-	-	-	-	460,000	-
Land Acquisition	-	-	-	-	-	-	15,000	-
Planning/Design	-	-	-	-	-	-	25,000	-
Total Expenditures	\$-	\$-	\$-	\$-	\$-	\$0.00	\$500,000	\$-

WD:E. Battleboro St. Water Main

Description

Construction 3,200 feet of 12" water main along E. Battleboro St. from Hathaway St. to Daniel Ave.

Justification

This project is identified in the 2003 Water System Master Plan (WSMP 2010-7) to enhance pressures in Battleboro.

Category

09 - Improves efficiency or generates additional revenue with initial cost being recovered by savings within less than ten (10) years

Devenues	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	-	-	-	-	-	-	35,000	-
Installment Debt	-	-	-	-	-	-	280,000	-
Total Revenues	\$-	\$-	\$-	\$-	\$-	\$-	\$315,000	\$-
	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Construction	-	-	-	-	-	-	280,000	-
Planning/Design	-	-	-	-	-	-	35,000	-
Total Expenditures	\$-	\$-	\$-	\$-	\$-	\$0.00	\$315,000	\$-

WD:Southeast Water System Improvements

Description

Project was identified in the 2003 Water System Master Plan and provides for installation of new water mains to enhance pressures and fire flow in the area. Project involves new water main along Norfolk Road, WSMP 2025-1.

Justification

This project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective C-3 in that it provides for promoting an adequate and safe supply of water for the City and neighboring counties.

Category

10 - Expansion of service is deemed necessary

D	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	-	-	-	-	-	-	30,000	-
Installment Debt	-	-	-	-	-	-	240,000	-
Total Revenues	\$-	\$-	\$-	\$-	\$-	\$-	\$270,000	\$-
	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	Current Year _C FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP
Expenditures Description		FY 2020 Prop		- · ·	0	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023			
Description	FY 2019		FY 2021	FY 2022	FY 2023	Prop	Years	

Tar River WTP - Air Scour Backwash

Description

Using compressed air to fluidize media improves efficiency and speed of backwash and increases time between backwash

Justification

Category

08 - Improves efficiency or generates additional revenue with initial cost being recovered by savings within less than five (5) years

Devenues	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Installment Debt	-	-	-	-	-	-	250,000	-
Total Revenues	\$-	\$-	\$-	\$-	\$-	\$-	\$250,000	\$-
	Current Year		2020-	2024 CIP Fur	ndina			
<u>Expenditures</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Expenditures Description	FY 2019 Proj	FY 2020 Prop			0	FY 2024 Prop	Future Years	CIP Total
			FY 2021	FY 2022	FY 2023			

Old Hanson Quarry Fill

Description

CRM was scheduled to take ownership of the NC-97 Hanson Quarry in 2011. We have several options on its use; however, each approach requires that the quarry have a means of being filled from the Tar River. Funds would cause a 60" pipe to gravity feed from the Tar River at elevations above the 7Q10 mark of flow.

Justification

Project is consistent with the Community Facilities Section of the Comprehensive Plan; C-3 in that it provides for promoting an adequate and safe supply of water for the City and customers and attempts to assure a high quality stream state of the Tar River.

Category

06 - Current level of service cannot be assured unless work is done

D	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	-	-	-	-	-	-	190,000	-
Total Revenues	\$-	\$-	\$-	\$-	\$-	\$-	\$190,000	\$-
F	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Construction	-	-	-	-	-	-	145,000	-
Planning/Design	-	-	-	-	-	-	45,000	-
Total Expenditures	\$-	\$-	\$-	\$-	\$-	\$0.00	\$190,000	\$-

Water System SCADA System

Description

Project funds will update existing utility with new server and a Windows based platform to better supervise and control the City of Rocky Mount's water system. Additional controls will allow remote operations rather than visitations. Our existing software allows review, minimal equipment controls, literally no primary component telemetry, and acknowledgement of condition state only.

Justification

This project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective D-2 in that it provides for insuring regulatory permit compliance.

Category

06 - Current level of service cannot be assured unless work is done

Past Progress

FY2019 - System improvements deferred until 2019.

D	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	-	-	-	-	-	-	180,000	-
Total Revenues	\$-	\$-	\$-	\$-	\$-	\$-	\$180,000	\$-
	Current Year		2020-	2024 CIP Fur	nding			
<u>Expenditures</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Equipment/Furnishing	-	-	-	-	-	-	180,000	-
Total Expenditures	\$-	\$-	\$-	\$-	\$-	\$0.00	\$180,000	\$-

WTP Sludge Application Upgrade

Description

State Regulations for ferric sludge are much different than those of WWTP sludge. Our target is to locate approximately 20 acres within 5 miles of the Tar & Sunset Water Plants dedicated solely to ferric sludge disposal.

Justification

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective B-3 in that it updates the CIP to continue to provide quality utility operation.

Category

09 - Improves efficiency or generates additional revenue with initial cost being recovered by savings within less than ten (10) years

Devenue	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	-	-	-	-	-	-	150,000	-
Total Revenues	\$-	\$-	\$-	\$-	\$-	\$-	\$150,000	\$-
– – –	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	FY 2023	FY 2024	Future	CIP
Expenditures Description		FY 2020 Prop			0	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023			

Tar River Reservoir Dam Renovations

Description

This project includes activities pertaining to necessary renovations to the infrastructure of Tar River Reservoir Dam. Necessity arose from damage and condition issues resulting in the aftermath of Hurricane Matthew.

Justification

Category

05 - Current level of service cannot be continued unless work is done

Past Progress

FY2017 - Work scheduled to address immediate needs.

Current & Future Plans

FY2025 - Plan to replace one of six hydraulic cyldinders in 2027, Evaluate condition of the removed cylinder

Devenues	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	-	-	-	-	-	-	100,000	-
Total Revenues	\$-	\$-	\$-	\$-	\$-	\$-	\$100,000	\$-
Free an difference	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	Current Year FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP
Expenditures Description		FY 2020 Prop			5	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023			

Tar River Water Supply Dam Maintenance

Description

The six hydraulic cylinders supporting bascule required emergency rebuild in 2016-2017 after installation in 2001. The southern most cylinder will be replaced and evaluated in 2027. Price of a new cylinder in 2017 is \$65,000 with rigging for the task at \$35,000.

Justification

Category

06 - Current level of service cannot be assured unless work is done

Current & Future Plans

FY2025 - Purchase replacement cylinder for bascule and install in 2027

Bauanuaa	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	-	-	-	-	-	-	100,000	-
Total Revenues	\$-	\$-	\$-	\$-	\$-	\$-	\$100,000	\$-
— •••	Current Year		2020-	2024 CIP Fur	ndina			
					5			
Expenditures	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Expenditures Description	ٰFY 2019 Proj	FY 2020 Prop	FY 2021 Prop	FY 2022 Prop	0	FY 2024 Prop	Future Years	CIP Total
		0_0		•	FY 2023			

WD: Carriage Trail-West Hampton Water

Description

This project provides for extension of 16" DIP Watermain from the terminus of the line on Old Carriage Road adjacent to Nash Community College northward, under U.S. 64, to the West Hampton subdivision.

Justification

This trunk main is needed to adequately serve the annexation area north of U.S. 64 with water.

Category

10 - Expansion of service is deemed necessary

Past Progress

FY2014 - Development intrest in tracts north of 64 will require this extension

FY2016 - Planned construction

D	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	-	-	-	-	-	-	100,000	-
Total Revenues	\$-	\$-	\$-	\$-	\$-	\$-	\$100,000	\$-
F	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	Current Year _□ FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP
<u>Expenditures</u> Description		FY 2020 Prop			5	FY 2024 Prop	Future Years	CIP Total
	FY 2019	2020	FY 2021	FY 2022	FY 2023			

WD:Battleboro System Improvements-Gainor Ave., Denzel Ln.

Description

This project is identified in the 2003 Water System Master Plan to enhance pressures in Battleboro; Gainor Ave (WSMP I-2); and Denzel Ln (WSMP 2010-6).

Justification

This project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective C-3 in that it provides for promoting an adequate and safe supply of water for the City and neighboring counties.

Category

06 - Current level of service cannot be assured unless work is done

D	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	-	-	-	-	-	-	72,000	-
Total Revenues	\$-	\$-	\$-	\$-	\$-	\$-	\$72,000	\$-
	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	Current Year _C FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP
Expenditures Description		FY 2020 Prop			0	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023			

Heavy Equipment Storage Building

Description

A supplemental equipment storage building is needed for storing of emergency response equipment as well as miscellaneous materials that must be climate controlled. Funds will extend existing bay building and construct an open shelter bay along back fenced area.

Justification

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective B-3 in that it updates the CIP to continue to providing quality service.

Category

07 - Extends life of facility more than five (5) years

D	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	-	-	-	-	-	-	60,000	-
Total Revenues	\$-	\$-	\$-	\$-	\$-	\$-	\$60,000	\$-
- "	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Construction	-	-	-	-	-	-	60,000	-
Total Expenditures	\$-	\$-	\$-	\$-	\$-	\$0.00	\$60,000	\$-

Segmented Flow Analyzer

Description

A Segmented Flow Analyzer is used in the lab to measure the nitrate and nitrite components of Total Nitrogen and Total Phosphorus. Monitoring for both Total Nitrogen and Total Phosphorus is required under the conditions of our existing NPDES wastewater discharge permit. This equipment automates these wet-chemistry procedures, removing individual technician error from the analytical process and frees up the technician to perform other duties while the test is running. The existing analyzer was purchased in 2002, making it twelve years old, and will be replaced with newer technology.

Justification

Project is consistent with the Community Facilities Section fo the Comprehensive Plan; Objective B-3 in that it updates the CIP in order to provide quality utility service.

Category

06 - Current level of service cannot be assured unless work is done

Past Progress

FY2018 - Existing unit continues to serve the needs of the laboratory. However, unit is getting old so funds should be allocated for emergency failure.

D	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	-	-	-	-	-	-	60,000	-
Total Revenues	\$-	\$-	\$-	\$-	\$-	\$-	\$60,000	\$-
F	Current Year		2020-	2024 CIP Fur	nding			
<u>Expenditures</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Equipment/Furnishing	-	-	-	-	-	-	60,000	-

Water Resources Technical Services LIMS Upgrade

Description

The LIMS is utilized to track test results in the lab in order to compile the monthly reports required by the NC Department of Environment, Health, and Natural Resources, to track lab supplies in order to validate lab results, to comply with a variety of state issued permits at the plant sites, and to assist in retrieving historical information necessary to evaluate plant efficiencies in both water and wastewater.

Justification

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective B-3 in that it updates the CIP to continue to provide quality utility services.

Category

06 - Current level of service cannot be assured unless work is done

Past Progress

FY2018 - The current system is working in a satisfactory manner but may require additional components as warranted by changing technology or work flow.

Devenues	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	-	-	-	-	-	-	60,000	-
Total Revenues	\$-	\$-	\$-	\$-	\$-	\$-	\$60,000	\$-
F	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Equipment/Furnishing	-	-	-	-	-	-	60,000	-
Total Expenditures	\$-	\$-	\$-	\$-	\$-	\$0.00	\$60,000	\$-

TOC Analyzer / Tech Services

Description

TOC measurement is important as there are TOC removal regulations and it is a disinfection byproduct precursor. Our Lab provides these analyses testing on a continuous basis. Funds would replace the existing equipment with updated equipment meeting the requirements of Standard Methods.

Justification

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective D-2 in that it provides for insuring regulatory permit compliance.

Category

05 - Current level of service cannot be continued unless work is done

Past Progress

FY2017 - Existing equipment continues to meet State testing thresholds.

FY2018 - Existing unit continues to serve the needs of the laboratory

Current & Future Plans

FY2023 - Funds for replacing equipment in future years

D	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	-	-	-	-	-	-	45,000	-
Total Revenues	\$-	\$-	\$-	\$-	\$-	\$-	\$45,000	\$-
	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	Current Year FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP
<u>Expenditures</u> Description		FY 2020 Prop			0	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023			

Leggett Park Sanitary Sewer Improvements, Phase 3

Description

Provides for 410 ft of 6" water main extensions and 4 water service connections associated with the sewer project

Justification

Sewer project includes septic tank abandonment and connection of residents to water and sewer. City policy requires sewer customers to connect to water when available.

Category

02 - Eliminates hazards to persons

Past Progress

FY2019 - Scheduled construction

Devenues	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	-	-	-	-	-	-	20,000	-
Total Revenues	\$-	\$-	\$-	\$-	\$-	\$-	\$20,000	\$-
F	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	Current Year FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP
Expenditures Description		FY 2020 Prop			0	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023	•		

Hypochlorite System

Description

Replacement of gas chlorine feeds system @ Sunset WTP with a bleach feed system in 2012, the Tar River Facility and WWTP in 2019. Basically, chemical costs will increase only slightly as bleach does not drop the pH as gas chlorine. Our primary target in this program is to remove liability and eliminate our Risk Management Program in chemical safety. Eight tons of gas chlorine in a populated area is a significant risk.

Justification

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective B-3 in that it updates the CIP, to continue to providing quality utility service.

Category

02 - Eliminates hazards to persons

Past Progress

FY2019 - Design is 60% complete in November 2018 for Hypochlorite conversion. Project is scheduled to bid this fiscal year

Current & Future Plans

FY2020 - Installation of system at Tar River Reservoir WTP

Devenues	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Installment Debt	600,000	-	-	-	-	-	-	-
Total Revenues	\$600,000	\$-	\$-	\$-	\$-	\$-	\$-	\$-
	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	Current Year _C FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP
<u>Expenditures</u> Description		FY 2020 Prop			0	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023			

Hunter Hill Widening: Utility Relocation and Betterment

Description

Relocation of utilities in conflict with widening project

Justification

Required due to conflicts with roadway improvements

Category

05 - Current level of service cannot be continued unless work is done

Past Progress

FY2014 - Scheduled final payment. Work complete

FY2018 - Third / Final phase of widening to be bid by NCDOT

FY2019 - Scheduled payment (after construction completed)

Devenues	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Fund Balance	350,000	-	-	-	-	-	-	-
Total Revenues	\$350,000	\$-	\$-	\$-	\$-	\$-	\$-	\$-
	Current Year		2020-	2024 CIP Fur	ding			
Expenditures					0		_	
Expenditures	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Expenditures Description		FY 2020 Prop			0	FY 2024 Prop	Future Years	CIP Total
	FY 2019	2020	FY 2021	FY 2022	FY 2023			
Description	FY 2019 Proj	2020	FY 2021	FY 2022	FY 2023			

Tar River Water Supply Reservoir Intake Valves

Description

The 4 valves on intake structure are to be renewed. There are currently three 48" and one 60" sluice gate valves.

Justification

Category

06 - Current level of service cannot be assured unless work is done

Past Progress

FY2019 - Three 48" valves on intake are on order and scheduled to be installed in fy 2019, Will postpone replacement of 60 inch valve which is in better condition.

Devenues	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	120,000	-	-	-	-	-	-	-
Total Revenues	\$120,000	\$-	\$-	\$-	\$-	\$-	\$-	\$-
France diterrore	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	Current Year FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP
Expenditures Description		FY 2020 Prop			0	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023			

Chemical Transfer Pump Replacements

Description

Replacement of existing Ferric and Sodium Hydroxide recirculation and transfer pumps at both Water Treatment Facilities. Plan represents timely replacement of existing pumps with like equipment. These are our primary treatment chemicals, and both are extremely aggressive to metals. Our existing pumps are well worn, and replacement parts are becoming more and more difficult to find.

Justification

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective B-3 in that it updates the CIP, to continue to provide quality utility service.

Category

07 - Extends life of facility more than five (5) years

Past Progress

FY2019 - A replacement caustic recirculation pump is on order for SAP. Upon satisfactory installation and checkout, three similar pumps will be ordered for SAP. Completion of these pumps will close the CIP item

Devenues	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	80,000	-	-	-	-	-	-	-
Total Revenues	\$80,000	\$-	\$-	\$-	\$-	\$-	\$-	\$-
	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	Current Year _⊢ FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP
Expenditures Description		FY 2020 Prop		- · ·	0	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023	•		



CIP OVERVIEW (2020-2024 City Manager Proposed)

Water Resources - Sewer

	Current Year		2020-2024	CIP Funding	Period	1		
Description	FY 2019 Proj	FY 2020 Prop	FY 2021 Prop	FY 2022 Prop	FY 2023 Prop	FY 2024 Prop	Future Years	CIP Total
Revenues								
Enterprise Fund	1,920,000	1,733,000	1,318,000	1,148,000	785,000	920,000	1,890,300	5,904,000
Installment Debt	750,000	1,788,000	1,005,000	775,000	700,000	170,000	6,969,250	4,438,000
Project Loan	-	10,500,000	3,250,000	2,000,000	1,000,000	500,000	-	17,250,000
Fund Balance	150,000	455,000	600,000	-	-	-	-	1,055,000
Unmet Needs	-	-	1,250,000	1,250,000	-	-	-	2,500,000
Total Revenues	\$2,820,000	\$14,476,000	\$7,423,000	\$5,173,000	\$2,485,000	\$1,590,000	\$8,859,550	\$31,147,000
Annual Capita Beech Branch Out	Al Maintenance		Funding, by	<u>Year)</u>				
Replace Webbs Lif	- ft Station	10,500,000	-	-	-	-	-	10,500,000
Screw Pump Repla	-	650,000	-	-	-	-	-	650,000
	-	600,000	-	300,000	-	-	-	900,000
Aeration Basin Rel	habilitation	500,000	515,000	525,000	540,000	-	-	2,080,000
Wesleyan Bouleva	rd Widening Utility I	Relocation and 455,000	Betterment	<u> </u>		_	_	455,000
Sewer Rehabilitation			250.000	250.000	050.000	200.000	250.000	
NC 97 Switch Gea	250,000 r	450,000	250,000	250,000	250,000	300,000	250,000	1,500,000
Sewer Automated	- Meter Reading	290,000	-	-	-	-	-	290,000
	250,000 Cabinets,Tertiary an	250,000 d Rectangular	250,000	250,000	250,000	250,000	800,000	1,250,000
	-	250,000	-	-	-	-	-	250,000
Tertiary Filter Reha	ab -	120,000	60,000	-	-	-	-	180,000
Sewer Asset Mana	igement Plan 155,000	115,000	150,000	145,000	150,000	150,000	145,000	710,000
Construction Equip	oment - Sewer		· ·					
SC:Minor Enhance	450,000 ements and Main Ex		230,000	250,000	160,000	170,000	280,000	908,000
C&D RAS pump re	75,000 ehab	75,000	75,000	75,000	75,000	75,000	75,000	375,000
	and Implementation	65,000	-	-	-	-	-	65,000
	-	33,000	33,000	33,000	35,000	-	-	134,000
Sewer Lift Station	Generators -	25,000	25,000	25,000	25,000	30,000	30,000	130,000
54" Outfall Rehabil	litation -	-	3,250,000	-	-	-	-	3,250,000
AMR/AMI Metering	g Project (Sewer)		1,250,000	1 250 000				
Springfield Road W	- Videning - U-4762 -	Utility Coordin	ation	1,250,000	-	-	-	2,500,000
Replace Backwash	- Troughs for Tertiar	- y Filters	600,000	-	-	-	-	600,000
WWTP Road Pavir	- -	-	260,000	-	-	-	-	260,000
	sor for VPSA system	-	255,000	-	-	-	-	255,000
	-	-	75,000	-	-	-	-	75,000
C Grit Collector En	-		75,000					75,000
Scum Trough Repl	acement	_	70,000		_			70,000
Gold Rock Lift Stat	tion Rehab 70,000		. 0,000	2 000 000				
Blowers and Motor	Inspection/Rehabil	- litation-VPSA s	- system	2,000,000	-	-	-	2,000,000
Concrete Repairs	- on Basins and Clari	- fiers	-	70,000	-	-	-	70,000
	s on Screw Pumps	-	-	-	1,000,000	-	-	1,000,000
	-	-	-	-	-	500,000	-	500,000
ROOT Replacement	for Administration I	building at WV	- vir	-	-	115,000	-	115,000
07-Ma	ay-2019 17:41		P	age 4-51				

CIP OVERVIEW (2020-2024 City Manager Proposed)

Water Resources - Sewer

	Current Year		2020-2024	CIP Funding	Period			
	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Tota
SC:Maple Creek Pum	p Station and Fo	orcemain						
00.0	-	-	-	-	-	-	3,400,000	-
SC:Compass Creek C	Jutfall, Phase 2	_	_	_	_	-	1,300,000	-
SC:Cokey Road/Glen	dale Drive Sewe	er (Former Anne	x Area 7B)				1,000,000	
	-	-	-	-	-	-	600,000	-
Johnson Street Force	Main							
	-	-	-	-	-	-	500,000	-
Leggett Park Sanitary	Sewer Improve	ments, Phase 3	5				202 550	
SC:Grape Branch Sev	- Ner	-	-	-	-	-	382,550	-
00.01apc Branch 00	-	-	-	-	-	-	267,000	-
WWTP Generators, P	URPA Additions						201,000	
	-	-	-	-	-	-	250,000	-
SC:College Road Sev	ver (Formerly Ar	nnex Area 4A)						
Ash David Mitiantian	-	-	-	-	-	-	175,000	-
Ash Pond Mitigation	_	_	_	_	_	_	150,000	_
WWTP SCADA							130,000	
	-	-	-	-	-	-	100,000	-
WWTP Storage Shelt	er							
		-	-	-	-	-	85,000	-
Vertical Turbine Pump	Motor Replace	ments					70.000	
Hypochlorite System	-	-	-	-	-	-	70,000	-
Typochionite System	600,000	_	-	-	-	-	-	-
WWTP Switch Gear	000,000							
	520,000	-	-	-	-	-	-	-
Hunter Hill Widening:		on and Betterme	ent					
	150,000	-	-	-	-	-	-	-
Chlorinator & Sulfona	tor Replacemen 50,000	t						
Group Expenditures	\$0,000 \$2,570,000	\$14,476,000	\$7,423,000	\$5,173,000	\$2,485,000	\$1,590,000	\$8,859,550	\$31,147,000
· ·						,	.,,,	
Total Expenditures	\$2,570,000	\$14,476,000	\$7,423,000	\$5,173,000	\$2,485,000	\$1,590,000	\$8,859,550	\$31,147,000

Beech Branch Outfall Rehabilitation

Description

Rehabilitation and replacement of 27" corrugated metal outfall line.

Justification

Category

07 - Extends life of facility more than five (5) years

Past Progress

FY2018 - Address immediate line needs.

FY2019 - Planning and design.

Current & Future Plans

FY2020 - Construction scheduled, pending funding availability.

Devenues	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Project Loan	-	10,500,000	-	-	-	-	-	10,500,000
Total Revenues	\$-	\$10,500,000	\$-	\$-	\$-	\$-	\$-	\$10,500,000
	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	Current Year _F FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP
<u>Expenditures</u> Description		FY 2020 Prop			0	FY 2024 Prop	Future Years	CIP Total
<u>.</u>	FY 2019		FY 2021	FY 2022	FY 2023			

Replace Webbs Lift Station

Description

Design and construct a new duplex lift station to replace the existing outdated facility.

Justification

Replace below grade lift station which is flood prone and is in excess of 33 years old.

Category

06 - Current level of service cannot be assured unless work is done

Current & Future Plans

FY2020 - Allocate funding to design and construct replacement lift station.

Bauanuaa	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Installment Debt	-	650,000	-	-	-	-	-	650,000
Total Revenues	\$-	\$650,000	\$-	\$-	\$-	\$-	\$-	\$650,000
	0							
Europe and difference a	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	FY 2023	FY 2024	Future	CIP
Expenditures Description		FY 2020 Prop		- · ·	0	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023	•		

Screw Pump Replacement

Description

We have two sets of screw pumps; one at the WWTP and the other at the NC-97 Lift Station. Both have four screws, and both are rated at 40 MGD. In 2002, both screws were rebuilt at a cost exceeding \$2 million. Our approach is to replace the four (4) pumps at the plant and then schedule the replacement of the four pumps at the 97 lift station in years 2020 and 2021. This project will also include trough relining and replacement of the lower bearing. The screw flights will be constructed with stainless steel, which is more durable to the corrosive nature of wastewater.

Justification

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective B-1 in that it provides for utility master planning for expansion and maintenance needs.

Category

06 - Current level of service cannot be assured unless work is done

Past Progress

FY2017 - Contractor was selected the replacement of two screw pumps at the WWTP will commence in the spring of 2017.

FY2018 - Screw Pump Maintenance scheduled.

FY2018 - Screw pump maintenance scheduled.

FY2018 - Pump 3 and 4 at the WWTP main wet well were completed. Construction of pumps 1 and 2 is on going with installation in January 2018.

Bayanyaa	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	-	600,000	-	300,000	-	-	-	900,000
Total Revenues	\$-	\$600,000	\$-	\$300,000	\$-	\$-	\$-	\$900,000
F	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	Current Year FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP
<u>Expenditures</u> Description		FY 2020 Prop		- · ·	0	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023			

Aeration Basin Rehabilitation

Description

Project will address the removal of inert material from the aeration basins to increase rentention time and capacity. Ancillary equipment will also be evaluated and replaced if necessary.

Justification

Category

06 - Current level of service cannot be assured unless work is done

Devenues	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Installment Debt	-	500,000	515,000	525,000	540,000	-	-	2,080,000
Total Revenues	\$-	\$500,000	\$515,000	\$525,000	\$540,000	\$-	\$-	\$2,080,000
F	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	Current Year FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP
Expenditures Description		FY 2020 Prop		- · ·	0	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023	•		

Wesleyan Boulevard Widening Utility Relocation and Betterment

Description

Reimbursement to NCDOT of expenses associated with relocation and betterment of utility lines for Wesleyan Boulevard widening project.

Justification

Category

01 - Legally mandated

Past Progress

FY2017 - Project in Utility Coordination / Planning stage currently

FY2018 - Project to be advertised / let

Current & Future Plans

FY2020 - Scheduled payment to NCDOT based on completed construction

Devenues	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Fund Balance	-	455,000	-	-	-	-	-	455,000
Total Revenues	\$-	\$455,000	\$-	\$-	\$-	\$-	\$-	\$455,000
F	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	Current Year FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP
Expenditures Description		FY 2020 Prop			0	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023	•		

Sewer Rehabilitation Program

Description

This project will continue the Infiltration/Inflow reduction program currently in progress through renovation and repairs to old sewer system to reduce groundwater infiltration and stormwater inflow. These funds are used for purchase of replacement piping, contracting of grouting services, amendments to MH Elevations, and other ongoing rehabilitation projects.

Justification

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective D-3 in that it provides for sewer line upgrades and replacement to minimize overflows and infiltration in wet weather, minimizing the chance for treatment plant overloading.

Category

07 - Extends life of facility more than five (5) years

Past Progress

FY2016 - Needs identified and addressed with project funds

- FY2017 Needs identified and addressed with project funds
- FY2018 Needs identified and addressed with project funds
- FY2019 Needs identified and addressed, continue with projected funds

Current & Future Plans

- FY2020 Continue with manhole rehab and main CIPP relining
- FY2021 Continue with manhole rehab and main CIPP relining
- FY2022 Continue with manhole rehab and main CIPP relining
- FY2023 Continue with manhole rehab and main CIPP relining

Devenues	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	250,000	450,000	250,000	250,000	250,000	300,000	250,000	1,500,000
Total Revenues	\$250,000	\$450,000	\$250,000	\$250,000	\$250,000	\$300,000	\$250,000	\$1,500,000
Even en diture e	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	Current Year _C FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP
Expenditures Description		FY 2020 Prop		- · · ·	0	FY 2024 Prop	Future Years	CIP Total
<u>-</u>	FY 2019		FY 2021	FY 2022	FY 2023	•		

NC 97 Switch Gear

Description

The switch gear at the 97 lift station has experienced significant corrosion to its internal components and will require a rebuilt or replacement project in the near future.

Justification

Category

06 - Current level of service cannot be assured unless work is done

Past Progress

FY2018 - Replace and rebuild electrical components for switch gear.

FY2018 - Cost estimate submitted by Engineering Firm

D	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Installment Debt	-	290,000	-	-	-	-	-	290,000
Total Revenues	\$-	\$290,000	\$-	\$-	\$-	\$-	\$-	\$290,000
	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	Current Year FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP
Expenditures Description		FY 2020 Prop				FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023	•		

Sewer Automated Meter Reading

Description

This project will share with the Water Fund the cost of installation of electronic water meters in conjunction with electronic gas and electric meters. Cost are shared with Water Fund: 55% Water Fund / 45% Sewer Fund. Funding request provided in this account reflects that cost share.

Justification

Project is consistent with the Community Facilities Element of the Comprehensive Plan; Strategy B-2 & F-1 in that it upgrades existing utility service and improves the management of utilities.

Category

11 - Needed to implement a new program or activity being requested in an upcoming operating budget

Past Progress

FY2016 - Funds scheduled to continue AMR conversions.

FY2017 - Funds scheduled to continue AMR conversions.

FY2018 - Funds scheduled to continue AMR conversions.

FY2019 - Funds scheduled to continue AMR conversions.

Current & Future Plans

FY2020 - Funds scheduled to continue AMR conversion

FY2021 - Funds scheduled to continue AMR conversions

FY2022 - Funds scheduled to continue AMR conversion

FY2023 - Funds scheduled to continue AMR conversions

Deveenee	Current Year		2020-2	2024 CIP Fur	ding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	250,000	250,000	250,000	250,000	250,000	250,000	800,000	1,250,000
Total Revenues	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$800,000	\$1,250,000
F	Current Year		2020-	2024 CIP Fur	ding			
Expenditures	Current Year FY 2019	FY 2020	2020-: FY 2021	2024 CIP Fur FY 2022	ding	FY 2024	Future	CIP
Expenditures Description		FY 2020 Prop		Ph. 1 1	5	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023			

Electrical Control Cabinets, Tertiary and Rectangular Clarifiers

Description

All cabinets, Eight (8) Tertiary and Four (4) Rectangular Clarifiers have exceeded their expected lifespan. The existing technology (switches and relays) must be upgraded to newer electronic systems in all cabinets

Justification

Category

06 - Current level of service cannot be assured unless work is done

Devenues	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Installment Debt	-	250,000	-	-	-	-	-	250,000
Total Revenues	\$-	\$250,000	\$-	\$-	\$-	\$-	\$-	\$250,000
F	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	Current Year FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP
<u>Expenditures</u> Description		FY 2020 Prop			0	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023	•		

Tertiary Filter Rehab

Description

The third treatment method of Wastewater are beds of several size media that performs a final filtration prior to disinfection. We have added media over the years as needed to the final filters, and the media size ratio has been altered to a point whereby the gallons/square foot design flows have dropped below the facilities treatment capacities. On high flow days, this will cause us to by-pass the final filters with a portion of the flow. Areas of deterioration in the media containment have also become evident.

A reconstruction of the media ratio and repairs to containment should be addressed in a four year plan.

Justification

We must notify NCDEQ each time we are forced to bypass the tertiary filters and document a trend signaling a weakness/flaw in our process. While we have not been assessed with a NPDES violation for these bypasses to date, the door is open for NCDEQ to implement an SOC. Our preference is to address the problem before it becomes a liability.

Category

05 - Current level of service cannot be continued unless work is done

Past Progress

FY2016 - Funds will be utilized to replace four tertiary troughs with stainless.

FY2016 - Filter media (sand) was replaced in 4 of the 8 filters but under drain inspection and remedial work will be necessary in the coming years.

FY2016 - Replacement of filter sand is ongoing

FY2017 - Continue sand replacement as needed.

FY2017 - Funds will be utilized to replace remaining four tertiary troughs with stainless.

FY2018 - Continue filter assessment to determine operational efficiency.

Deveryone	Current Year		2020-	2024 CIP Fur	iding			
Revenues	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	-	120,000	60,000	-	-	-	-	180,000
Total Revenues	\$-	\$120,000	\$60,000	\$-	\$-	\$-	\$-	\$180,000
F !'(Current Year		2020-	2024 CIP Fur	iding			
Expenditures	Current Year FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	ding FY 2023	FY 2024	Future	CIP
<u>Expenditures</u> Description		FY 2020 Prop			0	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023			

Sewer Asset Management Plan

Description

Project would compile information on sewer pump station equipment, condition, inflow and capacity in standardized electronic format readily accessible to appropriate staff. Data would then be used to develop a sewer system model asset management and master plan to evaluate impacts of new flows to the system and guide investment decisions on system rehab and expansion.

Justification

Improved operation and maintenance capabilities. Meet statutory requirements for certifying that the system has the capacity to accept new permitted flow.

Category

09 - Improves efficiency or generates additional revenue with initial cost being recovered by savings within less than ten (10) years

Past Progress

FY2014 - Consultant Selection and preliminay system evaluation plannded for current year

FY2017 - Wrapped up Phase 3 of AMP - (CMMS Software Selection, Build R&R Model)

Devenues	Current Year		2020-	2024 CIP Fur	iding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	155,000	115,000	150,000	145,000	150,000	150,000	145,000	710,000
Total Revenues	\$155,000	\$115,000	\$150,000	\$145,000	\$150,000	\$150,000	\$145,000	\$710,000
F	Current Year		2020-	2024 CIP Fur	iding			
Expenditures	Current Year _C FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	iding FY 2023	FY 2024	Future	CIP
<u>Expenditures</u> Description		FY 2020 Prop			5	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023	•		

Construction Equipment - Sewer

Description

Funding for this project is intended to schedule large equipment replacement. Such equipment includes rubber-tire backhoes, tracked backhoe, dump trucks, bulldozers, and a sewer jet. Replacement is scheduled from data compiled by the Public Works Department, including frequency of use and age. Opportunities are also realized in addition of new equipment, which will increase productivity and efficiency.

Justification

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective B-3 in that it updates the CIP to continue providing quality utility service.

Category

05 - Current level of service cannot be continued unless work is done

Past Progress

FY2016 - Equipment purchased according to expenditure schedule below.

FY2017 - Equipment purchased according to expenditure schedule below, replace unit 8436 with vac unit.

FY2018 - Equipment purchased according to expenditure schedule below, unit # 8617 and 8601

FY2019 - Replace unit # 8437 Vac Truck and addition of Skid Steer

Current & Future Plans

FY2020 - Replace 5CY dump truck, unit # 8403 and unit 8608 mini excavator, Tandem Dump Truck

FY2021 - Replace unit # 8616 mini excavator,

Replace unit # 8404, 4Cy dump truck and unit 8616, mini excavator.

FY2022 - Replace unit # 8603, back-hoe and unit # 8408 12 CY tandem dump truck

FY2023 - Addition of a tandem dump truck

B	Current Year		2020-	2024 CIP Fur	iding			
Revenues	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Installment Debt	450,000	98,000	230,000	250,000	160,000	170,000	280,000	908,000
Total Revenues	\$450,000	\$98,000	\$230,000	\$250,000	\$160,000	\$170,000	\$280,000	\$908,000
- "	Current Year		2020-	2024 CIP Fur	iding			
<u>Expenditures</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
4CY Dump Truck [R]	-	98,000	-	-	-	-	-	98,000
Jet truck Unit [R]	-	-	-	-	-	-	280,000	-
Mini Excavator [R]	-	-	95,000	100,000	-	-	-	195,000
RT Backhoe	-	-	135,000	-	-	-	-	135,000
Sewer Vacuum Truck [R]	365,000	-	-	-	-	-	-	-
Tandem Dump Truck [R]	-	-	-	150,000	160,000	170,000	-	480,000
Tracked Skid Steer (N)	85,000	-	-	-	-	-	-	-
Total Expenditures	\$450,000	\$98,000	\$230,000	\$250,000	\$160,000	\$170,000.00	\$280,000	\$908,000

SC:Minor Enhancements and Main Extensions

Description

This project provides for small scale system enhancement projects and sewer main extensions requests as approved by the City Council through the petition process and funding of developer agreements for the extension or oversizing of sewer mains installed as part of a development project.

Justification

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective D-1 in that it provides for utility growth into un-served or underserved areas of Nash and Edgecombe Counties.

Category

07 - Extends life of facility more than five (5) years

Past Progress

FY2016 - Complete identified priority improvements and extensions

FY2017 - Complete identified priority improvements and extensions

FY2018 - Complete identified priority improvements and extensions

FY2019 - Complete identified priority improvements and extensions

Devenues	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	75,000	75,000	75,000	75,000	75,000	75,000	75,000	375,000
Total Revenues	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$375,000
E	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	Current Year _□ FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP
<u>Expenditures</u> Description		FY 2020 Prop			5	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023			

C&D RAS pump rehab

Description

Due to the abrasive nature of the material passing through these pumps, the casings must be replaced before the pumps fail.

Justification

WWTP operates 24/7 every day. These pumps are an integral part of the plant operation.

Category

06 - Current level of service cannot be assured unless work is done

Devenues	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	-	65,000	-	-	-	-	-	65,000
Total Revenues	\$-	\$65,000	\$-	\$-	\$-	\$-	\$-	\$65,000
F !'(Current Year		2020-	2024 CIP Fur	nding			
Expenditures	Current Year FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP
<u>Expenditures</u> Description		FY 2020 Prop			0	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023	•		

CMMS Acquisition and Implementation (Sewer)

Description

This project entails acquiring, populating, training, and then implementing a CMMS for use in PWWR.

Justification

Category

08 - Improves efficiency or generates additional revenue with initial cost being recovered by savings within less than five (5) years

Deveen	Current Year		2020-2	2024 CIP Fur	iding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	-	33,000	33,000	33,000	35,000	-	-	134,000
Total Revenues	\$-	\$33,000	\$33,000	\$33,000	\$35,000	\$-	\$-	\$134,000
F	Current Year		2020-:	2024 CIP Fur	iding			
Expenditures	Current Year _C FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	iding FY 2023	FY 2024	Future	CIP
<u>Expenditures</u> Description		FY 2020 Prop			0	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023			

Sewer Lift Station Generators

Description

Natural gas powered generators are to be installed at the major sewer lift stations. These generators will provide power for pump operation during electrical power failure (hurricanes and ice storms) as required by the City's National Pollution Discharge Elimination System (NPDES) permit thus preventing sewage spills from the pump stations. Generators may also be used for elec. load management. Additional installations will be at Fenner Road and Johnson St. in 07-08 continuing with other sewer lift stations in the future. A portable unit will also be acquired to support the remaining stations as needed. Funds assume installing two generators per year, with only one generator per year in FY 2010-11 and FY 2011-12.

Justification

Project is consistent with the Natural Hazards Element of the Comprehensive Plan; Strategy A-6 in that it provides for evaluation of the vulnerability to flooding or loss of power as a factor in determining CIP improvements or changes.

Category

02 - Eliminates hazards to persons

Past Progress

FY2016 - Installation of generator @ Cooley Rd & Purchase of generator set for Deer Run Lift Stations.

FY2017 - Schediuled to add new portable unit

FY2017 - Refurbish unit at NCHS and purchase of additional portable unit.

FY2018 - In process of acquisition of new portable unit.

FY2019 -

Begin cycle to replace aging units

Current & Future Plans

FY2020 - Begin cycle to replace or refurbish aging generator sets

FY2021 - Continue to replace or refurbish aging generator sets

FY2022 - Continue to replace or refurbish aging generator sets

FY2023 - Continue refurbish or replacement of aging generators

Devenues	Current Year		2020-	2024 CIP Fur	iding			
Revenues	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	-	25,000	25,000	25,000	25,000	30,000	30,000	130,000
Total Revenues	\$-	\$25,000	\$25,000	\$25,000	\$25,000	\$30,000	\$30,000	\$130,000
– "	Current Year		2020-	2024 CIP Fur	iding			
Expenditures	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Construction	-	7,000	7,000	7,000	7,000	9,000	9,000	37,000
Equipment/Furnishing	-	18,000	18,000	18,000	18,000	21,000	21,000	93,000
Total Expenditures	\$-	\$25,000	\$25,000	\$25,000	\$25,000	\$30,000.00	\$30,000	\$130,000

54" Outfall Rehabilitation

Description

Rehabilitation of 54" outfall line that originally failed in 2014. The line runs along Atlantic Avenue.

Justification

This project reflects the focus on recent rate increases and the intentions of the Asset Management Plan.

Category

07 - Extends life of facility more than five (5) years

Past Progress

FY2018 - Rehabilitation work

D	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Project Loan	-	-	3,250,000	-	-	-	-	3,250,000
Total Revenues	\$-	\$-	\$3,250,000	\$-	\$-	\$-	\$-	\$3,250,000
F	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	Current Year _C FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP
<u>Expenditures</u> Description		FY 2020 Prop			5	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023			

AMR/AMI Metering Project (Sewer)

Description

This project will entail upgrading the metering technology for the sewer utility (which relies on water consumption data from water meters) in order to provide for remote reading and improved customer awareness regading utility consumption.

Justification

This project will inprove operational efficiency and better equip the customer to assess and monitor end user consumption. This project will also be coordinated with a similar project in electric and in gas.

Category

12 - Other as needed

D	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Unmet Needs	-	-	1,250,000	1,250,000	-	-	-	2,500,000
Total Revenues	\$-	\$-	\$1,250,000	\$1,250,000	\$-	\$-	\$-	\$2,500,000
	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	Current Year FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP
<u>Expenditures</u> Description		FY 2020 Prop			5	FY 2024 Prop	Future Years	CIP Total
	FY 2019	2020	FY 2021	FY 2022	FY 2023	•		

Springfield Road Widening - U-4762 - Utility Coordination

Description

Widening of Springfield Road from US 64 Business to Legget Road

Justification

Category

05 - Current level of service cannot be continued unless work is done

Past Progress

FY2017 - Utility Coordination planning

FY2018 - Project to be let, Construction to begin

Current & Future Plans

FY2021 - Payment scheduled

Devenues	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Fund Balance	-	-	600,000	-	-	-	-	600,000
Total Revenues	\$-	\$-	\$600,000	\$-	\$-	\$-	\$-	\$600,000
Free an eliteration	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	Current Year FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP
Expenditures Description		FY 2020 Prop			0	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023			

Replace Backwash Troughs for Tertiary Filters

Description

There are six (6) backwash troughs that carry the water that is backwashed up through the tertiary filters to a line that goes back to the head of the plant. These troughs were originally made of carbon steel and have been regularly painted. The inside of the troughs handles water with a high grit content which results in wear and tear.

Justification

Troughs are approximately 30 years old and the carbon steel is significantly worn and corroded. The plan is to replace the troughs with stainless steel which is more durable.

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective B-1 in that it provides for utility master planning for expansion and maintenance needs.

Category

06 - Current level of service cannot be assured unless work is done

B	Current Year		2020-	2024 CIP Fur	iding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Installment Debt	-	-	260,000	-	-	-	-	260,000
Total Revenues	\$-	\$-	\$260,000	\$-	\$-	\$-	\$-	\$260,000
E	Current Year		2020-	2024 CIP Fur	iding			
Expenditures	Current Year FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	iding FY 2023	FY 2024	Future	CIP
<u>Expenditures</u> Description		FY 2020 Prop			0	FY 2024 Prop	Future Years	CIP Total
	FY 2019	2020	FY 2021	FY 2022	FY 2023			

WWTP Road Paving

Description

This project will continue the repaving of roads within the Wastewater Treatment Plant (WWTP). Light duty roads were built in 1980 when the plant was constructed. Sub-grade needs work as well as repaving roads surfaces.

Justification

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective B-1 in that it provides for utility master planning for expansion and maintenance needs.

Category

10 - Expansion of service is deemed necessary

Past Progress

FY2014 - Paving of entrance road to WWTP completed and pavement repairs at office / lab building completed. Pavement study of remaining internal roads performed and prioritization is ongoing.

FY2017 - Infrastructure maintenance has been postponed for several years and failures are becoming more and more pronounced. Project year cost increases reflect the additional failures which will need additional attention.

FY2018 - Additional paving work.

FY2018 - Request delay on paving until FY19 due to electrical upgrade project.

D	Current Year		2020-	2024 CIP Fur	nding				
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP	
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total	
Enterprise Fund	-	-	255,000	-	-	-	-	255,000	
Total Revenues	\$-	\$-	\$255,000	\$-	\$-	\$-	\$-	\$255,000	
From a statistic second	Current Year		2020-	2024 CIP Fur	nding				
Expenditures	Current Year FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP	
Expenditures Description		FY 2020 Prop			5	FY 2024 Prop	Future Years	CIP Total	
	FY 2019		FY 2021	FY 2022	FY 2023				

Back up Compressor for VPSA system

Description

This compressor will serve as back-up in the event of a total failure of the current unit.

Justification

Category

D	Current Year		2020-	2024 CIP Fur	nding						
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP			
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total			
Enterprise Fund	-	-	75,000	-	-	-	-	75,000			
Total Revenues	\$-	\$-	\$75,000	\$-	\$-	\$-	\$-	\$75,000			
F	Current Year		2020-	2024 CIP Fur	nding						
Expenditures	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP			
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total			
Equipment/Furnishing	-	-	75,000	-	-	-	-	75,000			
Total Expenditures	\$-	\$-	\$75,000	\$-	\$-	\$0.00	\$-	\$75,000			

C Grit Collector Encasement

<u>Description</u> The discharge point encasement of the C Grit Collector was initially constructed of carbon steel which has eroded to the point of replacement.

Justification

Category

Deveenee	Current Year	Current Year 2020-2024 CIP Funding							
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP	
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total	
Enterprise Fund	-	-	75,000	-	-	-	-	75,000	
Total Revenues	\$-	\$-	\$75,000	\$-	\$-	\$-	\$-	\$75,000	
E-man ditana a	Current Year		2020-	2024 CIP Fur	nding				
Expenditures	Current Year _┌ FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP	
Expenditures Description		FY 2020 Prop				FY 2024 Prop	Future Years	CIP Total	
	FY 2019	2020	FY 2021	FY 2022	FY 2023	•			

Scum Trough Replacement

Description

Scum troughs for circular clarifiers (4) the thickener clarifiers (2) and the reclaim clarifiers (2) need to be replaced due to excessive corrosion

Justification

Category

Deveenee	Current Year							
Revenues	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	-	-	70,000	-	-	-	-	70,000
Total Revenues	\$-	\$-	\$70,000	\$-	\$-	\$-	\$-	\$70,000
E	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	Current Year FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP
Expenditures Description		FY 2020 Prop				FY 2024 Prop	Future Years	CIP Total
	FY 2019	2020	FY 2021	FY 2022	FY 2023	•		

Gold Rock Lift Station Rehab

Description

In order to provide capacity for planned industrial development in the Gold Rock Area, the Gold Rock pump station and force main will need to be upsized. The pump station would be upgraded from 400 gpm to 1000 gpm capacity (with the potential to increase to 1,300 gpm as the area develops) and the force main (5,600 ft) would be upsized from 6" to 12."

Justification

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective D-1 in that it provides for utility growth into un-served or underserved areas of Nash and Edgecombe Counties.

Category

06 - Current level of service cannot be assured unless work is done

Past Progress

FY2019 - Engineering firm is currently preparing a study to evaluate the potential sanitary sewer, force main, and pump station improvements to support future build out of the industrial center. Report is anticipated to be submitted in early spring.

Deveen	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	70,000	-	-	-	-	-	-	-
Project Loan	-	-	-	2,000,000	-	-	-	2,000,000
Total Revenues	\$70,000	\$-	\$-	\$2,000,000	\$-	\$-	\$-	\$2,000,000
F	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Construction	70,000	-	-	2,000,000	-	-	-	2,000,000
Total Expenditures	\$70,000	\$-	\$-	\$2,000,000	\$-	\$0.00	\$-	\$2,000,000

Blowers and Motor Inspection/Rehabilitation-VPSA system

Description

The inspection and possible rebuilding of the blowers and motor for the VPSA system was highly recommended by the manufacturer to be conducted after five years of operation. System was commissioned in 2012.

Justification

Category

07 - Extends life of facility more than five (5) years

Past Progress

FY2018 - Rebuilding of the motor was suspended following the decision to install a "TAP" to monitor the performance of the unit.

The blowers will be serviced as scheduled.

D	Current Year		2020-	2024 CIP Fur	iding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	-	-	-	70,000	-	-	-	70,000
Total Revenues	\$-	\$-	\$-	\$70,000	\$-	\$-	\$-	\$70,000
F	Current Year		2020-	2024 CIP Fur	iding			
Expenditures	Current Year FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	ding FY 2023	FY 2024	Future	CIP
<u>Expenditures</u> Description		FY 2020 Prop			0	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023	•		

Concrete Repairs on Basins and Clarifiers

Description

Basins, chambers, clarifiers and tanks are made of concrete. Over time, the cement in the concrete physically and chemically deterioates exposing the agregate (stones) in the concrete. These stones will fall into the process system creating additional problems for moving parts and machinery. The integrity of the structures are slowly declining. The surface of the concrete will be assessed and covered over with the appropriate material.

Justification

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective B-1 in that it provides for utility master planning for expansion and maintenance needs.

Category

Devenues	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Project Loan	-	-	-	-	1,000,000	-	-	1,000,000
Total Revenues	\$-	\$-	\$-	\$-	\$1,000,000	\$-	\$-	\$1,000,000
Even en diture e	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	Current Year FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP
<u>Expenditures</u> Description		FY 2020 Prop			0	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023	•		

Replace Gearboxes on Screw Pumps

Description

All Screw pumps have gearboxes that convert the electrical power of a 100 HP motor to mechanical power for rotating the screw. There is a significant amount of torque on these gearboxes. Lubrication oil is monitored and analysed for metals which would indicate metal breakdown.

Justification

Gearboxes are approximately 30 years old. They run continously and if a gearbox fails, pumping capability would be negatively impacted.

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective B-1 in that it provides for utility master planning for expansion and maintenance needs.

Category

Devenue	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Project Loan	-	-	-	-	-	500,000	-	500,000
Total Revenues	\$-	\$-	\$-	\$-	\$-	\$500,000	\$-	\$500,000
Francisco d'Arrison	Current Year		2020-	2024 CIP Fur	iding			
Expenditures	Current Year FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	iding FY 2023	FY 2024	Future	CIP
<u>Expenditures</u> Description		FY 2020 Prop			0	FY 2024 Prop	Future Years	CIP Total
	FY 2019	0_0	FY 2021	FY 2022	FY 2023	•		-

Roof Replacement for Administration Building at WWTP

Description

The roof over portions of the administrative building has deterioated with cracks and fissures resulting in leaks.

Justification

Category

03 - Eliminates hazards to property Current & Future Plans

FY2020 - Secure quotes and proceed with repairs

D	Current Year	Current Year 2020-2024 CIP Funding						
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	-	-	-	-	-	115,000	-	115,000
Total Revenues	\$-	\$-	\$-	\$-	\$-	\$115,000	\$-	\$115,000
F	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	Current Year FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	rding FY 2023	FY 2024	Future	CIP
Expenditures Description		FY 2020 Prop			5	FY 2024 Prop	Future Years	CIP Total
	FY 2019	2020	FY 2021	FY 2022	FY 2023			

SC:Maple Creek Pump Station and Forcemain

Description

Remediation of wet weather inflows in the sewer shed and upgrades to the Maple Creek Pump Station and forcemain to provide additional pumping capacity to meet future anticipated demand resulting from extension of the Maple Creek Outfall.

Justification

Significant increase in flow due to the extensions of the Maple Creek Outfall will require increases in the station's capacity.

Category

08 - Improves efficiency or generates additional revenue with initial cost being recovered by savings within less than five (5) years

Devenues	Current Year		2020-	2024 CIP Fur	nding		1					
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP				
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total				
Installment Debt	-	-	-	-	-	-	3,400,000	-				
Total Revenues	\$-	\$-	\$-	\$-	\$-	\$-	\$3,400,000	\$-				
	Current Year		2020-	2024 CIP Fur	nding							
Expenditures	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP Total				
Description	FY 2019 Proj	FY 2020 Prop	FY 2021 Prop	FY 2022 Prop	FY 2023 Prop	Prop	Years	CIP Total				
Description Construction						Prop	Years 2,950,000					

SC:Compass Creek Outfall, Phase 2

Description

This project provides for the extension of the Compass Creek Outfall sewer to Fenner Rd. and removal of the pump station on Fenner Road. The pump station is currently running at capacity and needs to be reconstructed or removed to be able to handle projected flow increases due to pending development projects. This project was recommended in the Sewer Master Plan.

Justification

Upgrade of the pump station was initially identified in the 2003 Sewer Master Plan. The need to provide sewer service in annexation area 4b and reduce flow on the S. Church Street pump stations has caused a re-evaluation of project resulting in construction of a new outfall sewer that will allow for abandonment of the pump station.

Category

12 - Other as needed Current & Future Plans

FY2021 - Planning scheduled.

FY2022 - Scheduled construction.

Baumana	Current Year		2020-	2024 CIP Fun	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	-	-	-	-	-	-	50,000	-
Installment Debt	-	-	-	-	-	-	1,250,000	-
Total Revenues	\$-	\$-	\$-	\$-	\$-	\$-	\$1,300,000	\$-
	Current Year		2020-	2024 CIP Fur	nding			
Expenditures								
Experiances	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	FY 2019 Proj	FY 2020 Prop	FY 2021 Prop	FY 2022 Prop	FY 2023 Prop	FY 2024 Prop	Future Years	CIP Total
			-	•		•		
Description			-	•		Prop	Years	

SC:Cokey Road/Glendale Drive Sewer (Former Annex Area 7B)

Description

This project will establish the Cokey Road Pump Station near the intersection of Cokey Road and S. Glendale Ave and an 8" sewer collection system along Glendale Drive and Cokey Road to serve annexation area 7B.

Justification

This collector system is required to adequately serve the area; however, there were no supplemental request for annexed property owners.

Category

10 - Expansion of service is deemed necessary

Devenues	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	-	-	-	-	-	-	50,000	-
Installment Debt	-	-	-	-	-	-	550,000	-
Total Revenues	\$-	\$-	\$-	\$-	\$-	\$-	\$600,000	\$-
F	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Construction	-	-	-	-	-	-	550,000	-
Planning/Design	-	-	-	-	-	-	50,000	-
Total Expenditures	\$-	\$-	\$-	\$-	\$-	\$0.00	\$600,000	\$-

Johnson Street Force Main

Description

In order to meet compliance with DENR 2T regulations, a new force main from the Johnson Street Lift Station to an intercept at Cokey Road must be addressed within a two-year period. Pumps are being replaced in this fiscal year, but the amendments to the force main is also required to meet our permit requirements

Justification

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective D-3 in that it provides for sewer line upgrades and replacement to minimize overflows and infiltration in wet weather. It also opens the avenue of further development of Sharpsburg and Nash County.

Category

05 - Current level of service cannot be continued unless work is done

Past Progress

FY2017 - Due to I&I repairs and data collected from the Lift Station SCADA system, the \$400,000 project can be postponed until new development forces an upgrade.

FY2018 - Begin Design / Scope of force main upgrade

Devenues	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Installment Debt	-	-	-	-	-	-	500,000	-
Total Revenues	\$-	\$-	\$-	\$-	\$-	\$-	\$500,000	\$-
F !!(Current Year		2020-	2024 CIP Fur	nding			
Expenditures	Current Year FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP
Expenditures Description		FY 2020 Prop			0	FY 2024 Prop	Future Years	CIP Total
	FY 2019	2020	FY 2021	FY 2022	FY 2023			

Leggett Park Sanitary Sewer Improvements, Phase 3

Description

CWSRF approved project for low interest loan to complete sewer service extension and septic tank abandonment project in the Leggett Park area. Project will connect 18 existing residents to sewer that were deleted from the CWMTF grant project due to funding shortfall in the original grant.

Justification

Eliminates public health hazard.

Category

02 - Eliminates hazards to persons

D	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	-	-	-	-	-	-	10,300	-
Installment Debt	-	-	-	-	-	-	372,250	-
Total Revenues	\$-	\$-	\$-	\$-	\$-	\$-	\$382,550	\$-
F	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Construction	-	-	-	-	-	-	372,250	-
Planning/Design	-	-	-	-	-	-	10,300	-
Total Expenditures	\$-	\$-	\$-	\$-	\$-	\$0.00	\$382,550	\$-

SC:Grape Branch Sewer

Description

This project will provide for the extension of the Grape Branch 12" sewer line approximately 2,200 feet from the end of the existing line to Beechwood Drive. This project will provide gravity sewer service to the Beechwood Drive area.

Justification

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective D-1 in that it provides for utility growth into un-served or underserved areas of Nash and Edgecombe Counties.

Category

10 - Expansion of service is deemed necessary

D	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	-	-	-	-	-	-	75,000	-
Installment Debt	-	-	-	-	-	-	192,000	-
Total Revenues	\$-	\$-	\$-	\$-	\$-	\$-	\$267,000	\$-
F	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Construction	-	-	-	-	-	-	192,000	-
Land Acquisition	-	-	-	-	-	-	45,000	-
Planning/Design	-	-	-	-	-	-	30,000	-
Total Expenditures	\$-	\$-	\$-	\$-	\$-	\$0.00	\$267,000	\$-

WWTP Generators, PURPA Additions

Description

In order for the WWTP generators to meet the requirements of the City's contracts with ElectriCities and the Power Agency, it will be necessary to provide for additional operational purpose. It is proposed to use the waste heat from the generators to warm the plant process water. Warm water is more conducive to a high level of biological activity in the aeration basins.

Justification

Meet PURPA requirements for use of generators other than for emergencies.

Category

12 - Other as needed

Past Progress

FY2018 - Project was re-evaluated and moved to future years.

D	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Installment Debt	-	-	-	-	-	-	250,000	-
Total Revenues	\$-	\$-	\$-	\$-	\$-	\$-	\$250,000	\$-
Expenditures	Current Year FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Construction	-	-	-	-	-	-	225,000	-
Planning/Design	-	-	-	-	-	-	25,000	-
Total Expenditures	\$-	\$-	\$-	\$-	\$-	\$0.00	\$250,000	\$-

SC:College Road Sewer (Formerly Annex Area 4A)

Description

This project would extend a 10[°] gravity sewer approximately 1400 feet along College Road from US301 to the golf course (driving range) property. Currently, this property is the only requesting property within the annexation area, and its average daily flow would be less than 250 gpd. If no further interest is within Annexation Area 4A, the property could be served via a private grinder pump pumping into a 2[°] public force main along College Road. Below are the cost for each option

10" Gravity Line: \$175,000 2" Public FM: \$35,000

Justification

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective D-1 in that it provides for utility growth into un-served or underserved areas of Nash and Edgecombe Counties.

Category

10 - Expansion of service is deemed necessary

D	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Installment Debt	-	-	-	-	-	-	175,000	-
Total Revenues	\$-	\$-	\$-	\$-	\$-	\$-	\$175,000	\$-
Expenditures	Current Year			2024 CIP Fur	0			CIP
<u></u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Construction	-	-	-	-	-	-	160,000	-
Planning/Design	-	-	-	-	-	-	15,000	-
Total Expenditures	\$-	\$-	\$-	\$-	\$-	\$0.00	\$175,000	\$-

Ash Pond Mitigation

Description

Decades ago, the City of Rocky Mount abandoned the process of burning the sludge product and began land applying. A component of this abandoned process was the two ash ponds located on the north side of the facility. At the time of the furnace closure, the ash was not removed from the ponds.

These ponds have been tested as inert and the ash may be simply spread on the City's Farm at this time of regulations. We propose that this be placed in the CIP at future years, as the Ash Ponds become a valuable piece of infrastructure when the City employs a water reuse program.

Justification

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective B-1 in that it provides for utility master planning for expansion and maintenance needs.

Category

03 - Eliminates hazards to property

Decomore	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	-	-	-	-	-	-	150,000	-
Total Revenues	\$-	\$-	\$-	\$-	\$-	\$-	\$150,000	\$-
	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	Current Year FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP
Expenditures Description		FY 2020 Prop			0	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023			

WWTP SCADA

Description

Project proposes to develop an in-house SCADA system allowing monitoring and control of operating equipment and recording control parameters at WWTP. The NC97 lift station would be a part of this network. Observation of operational basins and storage tank levels, start and stopping of pumps, and instrumental monitoring of control parameters would be possible with current radio communication and computer equipment. This system would be done on a build it by pieces, much as the Water Plant SCADA has been done.

Justification

This project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective D-2 in that it provides for insuring regulatory permit compliance.

Category

10 - Expansion of service is deemed necessary

Past Progress

FY2016 - This project was completed.

Devenues	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	-	-	-	-	-	-	100,000	-
Total Revenues	\$-	\$-	\$-	\$-	\$-	\$-	\$100,000	\$-
	Current Year_		2020		all in ai			
— 114	ourrent reur		2020-	2024 CIP Fur	naing			
Expenditures	FY 2019	FY 2020	2020- FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
<u>Expenditures</u> Description		FY 2020 Prop			0	FY 2024 Prop	Future Years	CIP Total
	FY 2019	2020	FY 2021	FY 2022	FY 2023			

WWTP Storage Shelter

Description

Construction of a 6 bay open air shelter to house and protect the heavy equipment of the Division.

Justification

Division has used every available space in abandoned buildings and still has key equipment exposed to the elements.

Category

07 - Extends life of facility more than five (5) years

Past Progress

FY2017 - Construction of shelter will be delayed due to competing projects

Bauanuaa	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	-	-	-	-	-	-	85,000	-
Total Revenues	\$-	\$-	\$-	\$-	\$-	\$-	\$85,000	\$-
F	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	Current Year FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP
Expenditures Description		FY 2020 Prop		- · ·	0	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023	•		

Vertical Turbine Pump/Motor Replacements

Description

The Wastewater Treatment Facility uses a massive amount of water for washing, de-foaming, and pressure blasting. At the effluent following chlorination is four (4) vertical turbine pumps which direct to the 200,000 gallon elevated tank. These pumps are 30 years old and are in need of replacement. We are seeking the new technology VFD motors and new bowl assembles for this improvement.

Justification

Motors are high electrical cost and bowls are beyond rebuilding.

Category

06 - Current level of service cannot be assured unless work is done

Past Progress

FY2016 - Project was re-evaluated and moved to future years.

B	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	-	-	-	-	-	-	70,000	-
Total Revenues	\$-	\$-	\$-	\$-	\$-	\$-	\$70,000	\$-
_	Current Year		2020-	2024 CIP Fur	nding			
<u>Expenditures</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Equipment/Furnishing	-	-	-	-	-	-	70,000	-
Total Expenditures	\$-	\$-	\$-	\$-	\$-	\$0.00	\$70,000	\$-

Hypochlorite System

Description

Replacement of gas chlorine feeds system @ Tar River Regional WWTP with a bleach feed system. Basically, this will eliminate our need for a Risk Management Program and the liability to our neighbors. This project displaces the 8 tons of gas chlorine which the facility keeps in stock for disinfection of the wastewater effluent.

Justification

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective B-3 in that it updates the CIP, to continue to providing quality utility service.

Category

02 - Eliminates hazards to persons

Past Progress

FY2019 - Purchase and installation of system

FY2019 - As of November 2018 at 60% engineering design completed. Will have 90% by Jan 2019.

D	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	550,000	-	-	-	-	-	-	-
Installment Debt	300,000	-	-	-	-	-	-	-
Total Revenues	\$850,000	\$-	\$-	\$-	\$-	\$-	\$-	\$-
	Current Year		2020-	2024 CIP Fur	nding			
<u>Expenditures</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Equipment/Furnishing	550,000	-	-	-	-	-	-	-
Planning/Design	50,000	-	-	-	-	-	-	-
Total Expenditures	\$600,000	\$-	\$-	\$-	\$-	\$0.00	\$-	\$-

WWTP Switch Gear

Description

The switch gear at the WWTP has experienced significant corrosion to its internal components over the years. The potential for electrical failure at the screw pumps is high and requires a rebuilt or replacement project to address this concern in the near future.

Justification

Category

06 - Current level of service cannot be assured unless work is done

Past Progress

FY2018 - Replace switch gear housing and electrical components

FY2018 - Cost estimate was submitted by Engineering Firm

December	Current Year		2020-	2024 CIP Fur	nding								
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP					
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total					
Enterprise Fund	520,000	-	-	-	-	-	-	-					
Total Revenues	\$520,000	\$-	\$-	\$-	\$-	\$-	\$-	\$-					
	Current Year		2020-	2024 CIP Fur	nding								
Expenditures	Current Year FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP					
Expenditures Description		FY 2020 Prop			5	FY 2024 Prop	Future Years	CIP Total					
	FY 2019		FY 2021	FY 2022	FY 2023	•							

Hunter Hill Widening: Utility Relocation and Betterment

Description

Relocation of utilities associated with widening project U3621B

Justification

Required due to conflicts with roadway improvements

Category

05 - Current level of service cannot be continued unless work is done

Past Progress

FY2019 - Scheduled payment (after construction complete)

-	Current Year		2020-	2024 CIP Fur	nding			
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Fund Balance	150,000	-	-	-	-	-	-	-
Total Revenues	\$150,000	\$-	\$-	\$-	\$-	\$-	\$-	\$-
	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Construction	150,000	-	-	-	-	-	-	-
Total Expenditures	\$150,000	\$-	\$-	\$-	\$-	\$0.00	\$-	\$-

Chlorinator & Sulfonator Replacement

Description

The chlorinator and Sulfonator are critical pieces of equipment that delivers chlorine and sulfur dioxide gases for disinfection and dechlorination at the wastewater plant. The units are obsolete and spare parts are no longer available for repairs.

Justification

Category

06 - Current level of service cannot be assured unless work is done

Past Progress

FY2018 - The Chlorinator portion of the project was suspended to evaluate alternative disinfection solutions. However the need to replace the sulfonator will proceed as planned.

D	Current Year 2020-2024 CIP Funding							
<u>Revenues</u>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	CIP
Description	Proj	Prop	Prop	Prop	Prop	Prop	Years	Total
Enterprise Fund	50,000	-	-	-	-	-	-	-
Total Revenues	\$50,000	\$-	\$-	\$-	\$-	\$-	\$-	\$-
	Current Year 2020-2024 CIP Funding							
F	Current Year		2020-	2024 CIP Fur	nding			
Expenditures	Current Year FY 2019	FY 2020	2020- FY 2021	2024 CIP Fur FY 2022	nding FY 2023	FY 2024	Future	CIP
<u>Expenditures</u> Description		FY 2020 Prop		- · ·	0	FY 2024 Prop	Future Years	CIP Total
	FY 2019		FY 2021	FY 2022	FY 2023			