



Capital Improvements Program
Fiscal Years
2020 – 2024



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Board of Directors

Vicki H. Campbell
District 1



Lois Benson
District 2



Vacant
District 3

Dale Perkins
District 4



Dr. Larry Walker
District 5





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Human Resources/Admin. Services

Kimberly Scruggs

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Affairs

Tim Haag

Engineering

Stacy Hayden

Water Reclamation

Randy Sears

Regional Services

Brian Reid



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Emerald Coast Utilities Authority

2020 Approved CIP Budget

Budget Office Staff

Patricia L. Sheldon
Director of Finance

Justin Smith
Assistant Director of Finance

Ronda Branton-McCurley
Confidential Assistant

Sherry Rawleigh
Accountant II



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Introduction





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P.O. Box 17089 9255 Sturdevant Street
Pensacola, Florida 32522-7089
ph: 850 476-5110 • fax: 850 494-7346

October 1, 2019

Dear Chairman and Board Members:

I am pleased to deliver herewith, the approved Emerald Coast Utilities Authority Capital Improvements Program. This five-year program includes fiscal years 2020 through 2024.

Input during the process of formulating this plan came from the Board, the Citizens' Advisory Committee, members of the public, and the ECUA staff. After holding numerous meetings, the staff developed a plan that clearly expresses the capital needs of the ECUA through FY 2024. The FY 2020 CIP budget provides a programmed approach targeting system repairs along with the Sanitary Sewer Overflow/Inflow & Infiltration (SSO/I&I) Consent Order requirements. The staff has continued making a concerted effort to be frugal with expenditures, which helps to keep annual rate increases as small as possible. Almost fifty percent of the CIP budget in the Water/Wastewater System for FY 2020 is comprised of projects addressing the SSO/I&I Program (\$146 million) in response to the FDEP Consent Order (CO), which the ECUA Board approved in May 2012. This will be the eighth year of a 16-year program that we have established to make repairs to the system as required in the CO. With "shovel-ready" projects addressing the CO requirements, it is imperative for the ECUA to initiate construction on the affected lines and systems both methodically and aggressively. Additionally, this plan allows for new infrastructure in the system as well.

Shown below is a combined summary, by fund, of the Water & Wastewater System, the Sanitation System, and the Materials Recycling Facility.

COMBINED SUMMARY BY SYSTEM FY 2020-2024

In 000's

SYSTEM	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FUND TOTAL
Water & Wastewater Systems Programs	\$30,390	\$102,900	\$76,186	\$55,249	\$24,996	\$289,721
Sanitation System Programs	5,000	6,150	7,500	4,650	4,650	27,950
Materials Recycling Facility Programs	400	100	100	100	100	800
TOTAL	\$35,790	\$109,150	\$83,786	\$59,999	\$29,746	\$318,471

Vicki Campbell
District One

Lois Benson
District Two

District Three

Dale Perkins
District Four

Larry Walker
District Five

Water/Wastewater Systems

Total new capital improvement requirements for the Water & Wastewater Systems through FY 2024 are estimated at \$289.7 million. Funding in FY 2020 is scheduled to come from existing balances, operating revenues, and the Capital Improvement Fee. There are no plans for new debt issuance for FY 2020. However, the major portions of some projects may need funding in later years from additional debt, which will require annual rate increases at the time of issuance.

WATER & WASTEWATER SYSTEM
FY 2020-2024
FUNDS (000)

	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FUND TOTAL
Water Production	\$2,985	\$18,505	\$7,302	\$4,335	\$4,138	\$37,265
Water Distribution	8,055	16,350	17,155	9,725	5,925	57,210
Water Reclamation	200	7,250	11,300	1,500	1,500	21,750
Wastewater Collection	14,500	54,915	34,730	33,550	8,175	145,870
Utility Relocations	1,890	1,190	2,190	2,690	1,650	9,610
General Projects	2,760	4,690	3,509	3,449	3,608	18,016
Total all programs	<u>\$30,390</u>	<u>\$102,900</u>	<u>\$76,186</u>	<u>\$55,249</u>	<u>\$24,996</u>	<u>\$289,721</u>

Sanitation System

Total new capital improvement requirements for the Sanitation Systems through FY 2024 are estimated at \$27.9 million and includes funds for new equipment to serve additional customers, funds to replace a portion of our fleet, funds to develop plans for a new transfer station, and funds to provide equipment replacement for the composting activity. Funding in FY 2020 is scheduled to come from the newly authorized capital funding fee, existing balances, and operating revenues along with a second installment of the Master Equipment Lease that will fund the purchase of Sanitation trucks and vehicles. ECUA contracts with the Santa Rosa Board of County Commissioners to provide solid waste collection to certain areas of Santa Rosa County. We have also contracted with the Town of Jay in Santa Rosa County. Currently, between both Escambia and Santa Rosa County, the ECUA provides residential garbage collection to approximately 115,000 customers. Since 1992, the ECUA has been the exclusive provider of dumpster service on Pensacola Beach. The commercial operation on the mainland includes automated can and roll-off container services.

The composting activity grinds the collected yard waste into mulch, mixes it with bio-solids, and then further processes it into high quality compost. The composting activity keeps yard waste out of the landfill, thereby reducing the cost of tipping fees while the sale of the compost material generates a modest source of revenue.

SANITATION SYSTEM						
FY 2020 – 2024						
In 000's						
	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FUND TOTAL
Containers	\$600	\$650	\$700	\$750	\$750	\$3,450
Transfer Station	300	1700	3000	100	100	5,200
Routeware	300	0	0	0	0	300
Vehicles	6,167	3,600	3,600	3,600	3,600	18,000
Equipment	200	200	200	200	200	1,000
Total Sanitation	\$5,000	\$6,150	\$7,500	\$4,650	\$4,650	\$27,950

Materials Recycling Facility

The new requirements for the MRF total \$800,000 to accomplish storage modifications and annual MRF equipment upgrades at the facility. The storage modifications are necessary to house replacement parts and other equipment needed for timely repair of the equipment.

Material Recycling Facility						
FY 2020 - 2024						
	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FUND TOTAL
MRF Storage Modifications	\$300					\$300
Annual MRF Equipment Upgrades	\$100	100	100	100	100	500
Total Materials Recycling Facility	\$400	\$100	\$100	\$100	\$100	\$800

Summary

These five-year CIP plans, updated annually, ensure the continuing integrity of our operation.

Detail for each of the program descriptions is located within each departmental tab. To assist in your reading of the Data Sheets provided, the following explanations help identify the program area and the type of project listed on the Data Sheet.

Projects are assigned project numbers identifying them as either CIP or Renewal & Replacement (R&R) projects. CIP items expand or add new infrastructure to the utility systems, while the R&R projects enhance and/or extend the life of the existing infrastructure.

The following prefixes to identify type:

C = CIP project
R = R&R Project

The letter following the prefix identifies the functional program area:

A = General Project
S = Wastewater Project
W = Water Project
R = Utility Relocation
T = Sanitation

The quality of this plan is a testimony to the commitment to excellence and the tireless efforts of all who participated in the process. We would like to express our sincere appreciation for their work toward its successful conclusion.

Respectfully submitted,



William E. Johnson, Jr.
Executive Director



Patricia L. Sheldon
Director of Finance

SUMMARY BY SYSTEM
FY 2020-2024
(in 000's)

FUNDS DESCRIPTION	PRIOR YEARS	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	5 YR REQUIREMENTS	PROJECT TOTAL
Water & Wastewater Systems Programs	\$110,837	\$30,390	\$102,900	\$76,186	\$55,249	\$24,996	\$289,721	\$400,558
Sanitation System Programs	6,882	5,000	6,150	7,500	4,650	4,650	27,950	34,832
Materials Recycling Facility Programs	50	400	100	100	100	100	800	850
Total all programs	\$117,769	\$35,790	\$109,150	\$83,786	\$59,999	\$29,746	\$318,471	\$436,240

Capital Improvement Program Summary of All Systems FY 2020 - FY 2024



Water & Wastewater





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SUMMARY BY PROGRAM
WATER & WASTEWATER SYSTEM
(in 000's)

FUNDS DESCRIPTION	PRIOR YEARS	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	5 YR REQUIREMENTS	PROJECT TOTAL
Water Production	\$13,112	\$2,985	\$18,505	\$7,302	\$4,335	\$4,138	\$37,265	\$50,377
Water Distribution	9,870	8,055	16,350	17,155	9,725	5,925	57,210	67,080
Water Reclamation	7,789	200	7,250	11,300	1,500	1,500	21,750	29,539
Wastewater Collection	61,598	14,500	54,915	34,730	33,550	8,175	145,870	207,468
Utility Relocations	5,668	1,890	1,190	2,190	2,690	1,650	9,610	15,278
General Projects	12,800	2,760	4,690	3,509	3,449	3,608	18,016	30,816
Total all programs	\$110,837	\$30,390	\$102,900	\$76,186	\$55,249	\$24,996	\$289,721	\$400,558

Water & Wastewater System 5 Yr Capital Requirements by Program FY 2020 - FY 2024



SUMMARY BY TYPE
WATER & WASTEWATER SYSTEM
(in 000's)

FUNDS DESCRIPTION	PRIOR YEARS	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	5 YR REQUIREMENTS	PROJECT TOTAL
Water Production:								
CIP	\$992	\$1,325	\$8,255	\$1,802	\$1,235	\$325	\$12,942	\$13,934
R & R	12,120	1,660	10,250	5,500	3,100	3,813	24,323	36,443
Water Distribution:								
CIP	700	5,405	2,450	3,380	1,300	100	12,635	13,335
R & R	9,170	2,650	13,900	13,775	8,425	5,825	44,575	53,745
Water Reclamation:								
CIP	2,995	50	7,150	11,300	1,500	1,500	21,500	24,495
R & R	4,794	150	100	0	0	0	250	5,044
Wastewater Collection:								
CIP	12,695	4,550	25,165	13,275	17,100	7,300	67,390	80,085
R & R	48,903	9,950	29,750	21,455	16,450	875	78,480	127,383
Utility Relocations:								
CIP	5,668	1,890	1,190	2,190	2,690	1,650	9,610	15,278
R & R	0	0	0	0	0	0	0	0
General Projects:								
CIP	8,438	460	1,550	1,025	1,025	1,025	5,085	13,523
R & R	4,362	2,300	3,140	2,484	2,424	2,583	12,931	17,293
Total all programs	\$110,837	\$30,390	\$102,900	\$76,186	\$55,249	\$24,996	\$289,721	\$400,558



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Water Production





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**WATER PRODUCTION
CAPITAL IMPROVEMENT
FISCAL YEARS 2020-2024**
(in 000's)

PROJECT NUMBER	PROJECT TITLE	PRIOR YEARS	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	5 YR TOTAL REQUIREMENT	PROJECT TOTAL
CA917	Water System Optimization		\$25	\$320	\$177	\$410		\$932	\$932
CW	Well Water pH Adjustment		250	3,000				3,250	3,250
CW223	Central Well Field	305		3,800				3,800	4,105
CW315D	Aquifer Modeling Update	151		100	50	50	50	250	401
CW601	Perdido Key Pump Station Rehabilitation				800			800	800
CW606F	Facility Site Acquisition	497		250	250	250	250	1,000	1,497
CW610	Hydraulic Modeling		50	25	25	25	25	150	150
CW614	Blue Angel SCADA Zone Valve	39		260				260	299
CW702B	GAC Filters New and Replacements		1,000	500	500	500		2,500	2,500
TOTALS		\$992	\$1,325	\$8,255	\$1,802	\$1,235	\$325	\$12,942	13,934

LESS PRIOR YEARS 992
5 YR PROJECTION **\$12,942**

**WATER PRODUCTION
RENEWAL & REPLACEMENT
FISCAL YEARS 2020-2024**
(in 000's)

PROJECT NUMBER	PROJECT TITLE	PRIOR YEARS	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	5 YR TOTAL REQUIREMENT	PROJECT TOTAL
RW001N	GAC Filter Vessel Maintenance	\$454		\$600	\$600	\$600	\$600	\$2,400	\$2,854
RW001S	Gulf Breeze/ECUA Permanent Connection	22		350				350	372
RW034	Water Treatment Facility Replacement - F & Scott	205			1,200			1,200	1,405
RW038	Water Treatment Facility Replacement - OLF 4A	353			1,200			1,200	1,553
RW047	Royce St. Water Well Facility Replacement	1,200						0	1,200
RW048	Cantonment Well Water Facility Replacement	1,200						0	1,200
RW049	Davis Hwy. Well WTF Replacement	1,917					1,013	1,013	2,930
RW052	Water Treatment Facility Expansion - Tennant			1,200				1,200	1,200
RW053	Water Treatment Facility Expansion - McCrory			1,200				1,200	1,200
RW060	Water Treatment Facility Replacement - Olive			1,200				1,200	1,200
RW522B	Annual Pump Repair - Water Production	546	200	200	200	200	200	1,000	1,546
RW523	Water Production Electrical Repairs	900	300	300	300	300		1,200	2,100
RW717R	Pensacola Beach Tanks - Site Protection Bulkhead	483	160					160	643
RW817	Elevated Tank Maintenance Program	275	1,000	1,000	1,000	1,000	1,000	5,000	5,275
RW819	West Well Water Facility Replacement	2,500		2,000				2,000	4,500
RW901Z	Well Maintenance & Testing	1,158		500	500	500	500	2,000	3,158
RW916S	Water - Mechanical Needs	907		500	500	500	500	2,000	2,907
RW___	Water Treatment Facility Replacement Hagler			1,200				1,200	1,200
TOTALS		\$12,120	\$1,660	\$10,250	\$5,500	\$3,100	\$3,813	\$24,323	36,443

PRIOR YEARS 12,120
5 YR PROJECTION **\$24,323**

**WATER PRODUCTION
CAPITAL IMPROVEMENT
FISCAL YEARS 2020-2024**
(in 000's)

PROJECT NUMBER	PROJECT TITLE	PRIOR YEARS	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	5 YR TOTAL REQUIREMENT	PROJECT TOTAL
CA917	Water System Optimization		\$25	\$320	\$177	\$410		\$932	\$932
CW	Well Water pH Adjustment		250	3,000				3,250	3,250
CW223	Central Well Field	305		3,800				3,800	4,105
CW315D	Aquifer Modeling Update	151		100	50	50	50	250	401
CW601	Perdido Key Pump Station Rehabilitation				800			800	800
CW606F	Facility Site Acquisition	497		250	250	250	250	1,000	1,497
CW610	Hydraulic Modeling		50	25	25	25	25	150	150
CW614	Blue Angel SCADA Zone Valve	39		260				260	299
CW702B	GAC Filters New and Replacements		1,000	500	500	500		2,500	2,500
TOTALS		\$992	\$1,325	\$8,255	\$1,802	\$1,235	\$325	\$12,942	13,934

LESS PRIOR YEARS	992
5 YR PROJECTION	<u>\$12,942</u>



Project Title: Water System Optimization

ESTIMATED PROJECT COSTS		MAP
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A water system optimization effort with predictive water demand operating protocols would enhance the efficiency of water production.



PROJECT NO: CW_____

Program: Water Production

Project Title: Well Water pH Adjustment

		FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
FUNDS (000)	PRIOR YEARS						
CIP							
OPERATING		250	3000				3250
RENEWAL & REPLACEMENT							
TOTAL		250	3000				3250

ESTIMATED PROJECT COSTS		<div>MAP</div> <div>VARIOUS LOCATIONS</div>
1/22/2019		
ENV. ASSESS		
ENGINEERING	250,000	
SURVEY		
INSPECTION		
TESTING		
CONSTRUCTION	3,000,000	
EQUIPMENT		
MATERIAL		
FURNISHING		
LAND		
MISCELLANEOUS		
INDIRECT		
TOTAL	\$3,250,000	

DESCRIPTION:

Bagged hydrated lime costs are significantly increasing. A pH adjustment report performed by Baskerville Donovan indicates that the most cost efficient replacement would be bulk lime. New bulk lime storage, mixing, and delivery infrastructure will be required for this change.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CW025

Program: Water Production

Project Title: SCADA Radio System Upgrade

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING	2000						2000
RENEWAL & REPLACEMENT							
TOTAL	2000						2000

ESTIMATED PROJECT COSTS		MAP
1/31/2013		
ENV. ASSESS		
ENGINEERING	250000	
SURVEY	50000	
INSPECTION		
TESTING		
CONSTRUCTION	650000	
EQUIPMENT	650000	
MATERIAL	150000	
FURNISHING		
LAND		
MISCELLANEOUS	250000	
INDIRECT		
TOTAL	\$2,000,000	

SYSTEM WIDE

SYSTEM WIDE

DESCRIPTION:

The ECUA SCADA System operates, controls and monitors 450 water production and lift station sites via radio communication. The current SCADA system has been in service for over 14 years. FDEP has recommended duplicate SCADA systems located in separate locations in case the primary SCADA System is out of service; therefore providing redundant systems. The SCADA system also requires a robust and reliable means of communication which should also be redundant. Funds will be utilized for the purchase of new equipment and for construction at new sites. Communication signal transport options are being reviewed by staff.



PROJECT DATA SHEET

Capital Improvements Program


Fiscal Years
2020-2024

PROJECT NO: CW115

Program: Water Production

Project Title: Humphreys Well Replacement

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING	1743						1743
RENEWAL & REPLACEMENT							
TOTAL	1743						1743

ESTIMATED PROJECT COSTS		MAP
1/31/2014		
ENV. ASSESS		
ENGINEERING	100000	
SURVEY	25000	
INSPECTION		
TESTING		
CONSTRUCTION	1443000	
EQUIPMENT		
MATERIAL		
FURNISHING		
LAND	100000	
MISCELLANEOUS	75000	
INDIRECT		
TOTAL	\$1,743,000	

DESCRIPTION:

Staff continues to monitor the movement of contaminants from the identified contaminant site southwest of the well to see if the well needs to be abandoned with a replacement well in another location.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CW223

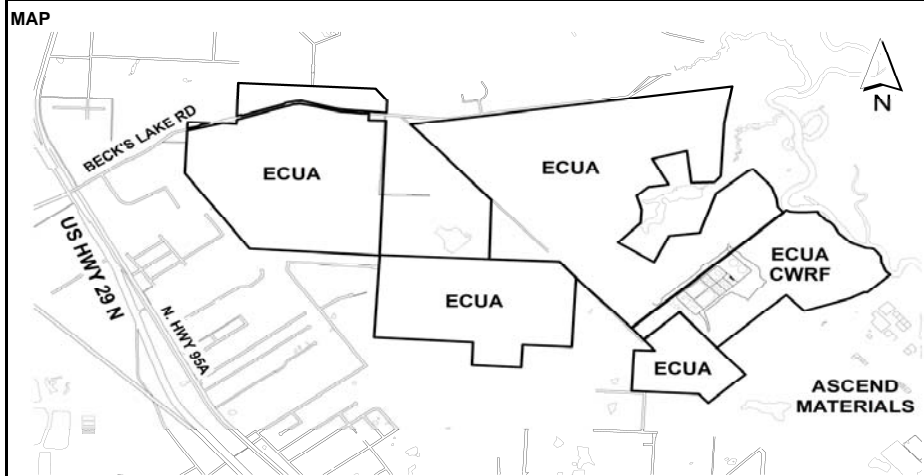
Program: Water Production

Project Title: Central Well Field Phase 1

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING	305		3800				4105
RENEWAL & REPLACEMENT							
TOTAL	305		3800				4105

ESTIMATED PROJECT COSTS	
4/1/2019	
ENV. ASSESS	
ENGINEERING	998,100
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	3,106,900
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$4,105,000

MAP



DESCRIPTION:

For years Staff has been looking into the possibility of siting and developing a potable water well field. ECUA owns approximately 2000 acres adjacent to our Central Water Reclamation Facility (CWRP). Investigation into the volume and quality of groundwater available at the CWRP property is ongoing. Once a permissible pumpage (volume) total has been established with the Northwest Florida Management District (NFWMD), a cost feasibility study will be performed based on the actual permitted flows. Costs estimates shown in FY 20, 21, 22, 23 and FY 24 are estimates that will be further refined based on the results of feasibility study.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CW315D

Program: Water Production

Project Title: Aquifer Modeling Update

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING	151		100	50	50	50	401
RENEWAL & REPLACEMENT							
TOTAL	151		100	50	50	50	401

ESTIMATED PROJECT COSTS	MAP
1/31/2014	SYSTEM WIDE
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION 401000	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL \$401,000	

DESCRIPTION:
ECUA's aquifer model was developed in 1992. As conditions change this model is updated periodically to include all upgrades relevant to our water system as well as the newer technology available to run the model.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CW601

Program: Water Production

Project Title: Innerarity Point Road Pump

Station Rehab

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING			800				800
RENEWAL & REPLACEMENT							
TOTAL			800				800

ESTIMATED PROJECT COSTS		MAP
1/9/2019		
ENV. ASSESS		
ENGINEERING	40000	
SURVEY		
INSPECTION		
TESTING		
CONSTRUCTION	660000	
EQUIPMENT	100000	
MATERIAL		
FURNISHING		
LAND		
MISCELLANEOUS		
INDIRECT		
TOTAL	\$800,000	

DESCRIPTION:

The existing 30 HP and 60 HP motors/pumps will be replaced with two new 40 HP and 60 HP motors/pumps and will be fitted with variable frequency drives. Electrical wiring at the station will be upgraded. Yard piping will be upgraded to 16" in diameter to accommodate larger flows. Rechlorination will be included in the improvements along with site pumping improvements.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CW606F

Program: Water Production

Project Title: Facility Site Acquisition

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING	497		250	250	250	250	1497
RENEWAL & REPLACEMENT							
TOTAL	497		250	250	250	250	1497

ESTIMATED PROJECT COSTS		MAP
1/31/2014		
ENV. ASSESS		
ENGINEERING	175000	
SURVEY		
INSPECTION	42000	
TESTING		
CONSTRUCTION		
EQUIPMENT		
MATERIAL		
FURNISHING		
LAND	1280000	
MISCELLANEOUS		
INDIRECT		
TOTAL	\$1,497,000	

SYSTEM WIDE

SYSTEM WIDE

DESCRIPTION:

ECUA's hydraulic model analysis and associated master plan identify future needs for water production facilities. Prospective sites for these water production facilities need to be identified and evaluated. Actions involved include searching for available properties, research of possible contamination sources, performance of test well for well sites, soil boring for well and tank sites, property purchase costs and other related items.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CW610

Program: Water Production

Project Title: Hydraulic Modeling (Potable)

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING		50	25	25	25	25	150
RENEWAL & REPLACEMENT							
TOTAL		50	25	25	25	25	150

ESTIMATED PROJECT COSTS		MAP
2/13/2019		
ENV. ASSESS		
ENGINEERING	150,000	
SURVEY		
INSPECTION		
TESTING		
CONSTRUCTION		
EQUIPMENT		
MATERIAL		
FURNISHING		
LAND		
MISCELLANEOUS		
INDIRECT		
TOTAL	\$150,000	

DESCRIPTION:
<p>This work includes further development of the potable water system hydraulic model. The model will be used for water system master planning and determining the impacts of new development to the ECUA water distribution system. The model may also be used to determine fire flow needs and assist with operating ECUA's water well systems in a more efficient manner.</p>



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

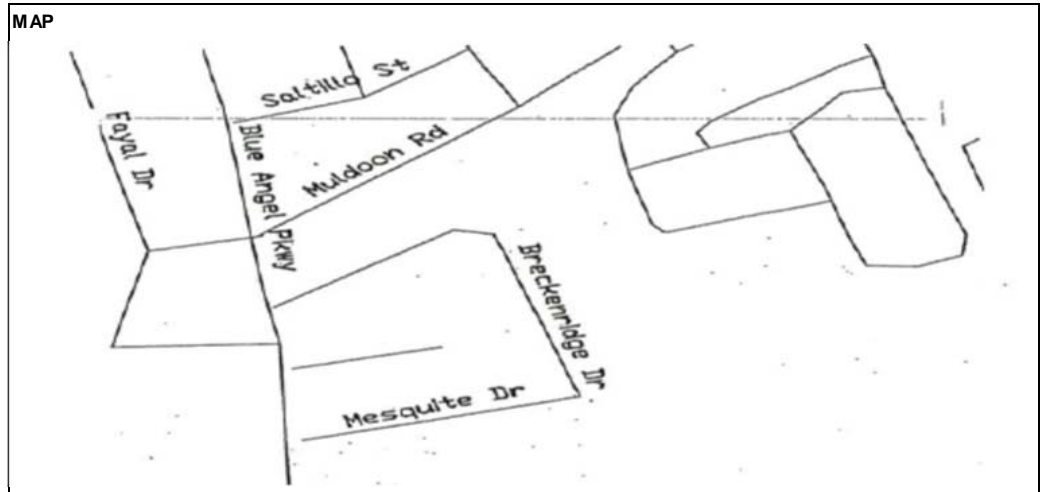
PROJECT NO: CW614

Program: Water Production

Project Title: Blue Angel SCADA Zone Valve

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING	39		260				299
RENEWAL & REPLACEMENT							
TOTAL	39		260				299

ESTIMATED PROJECT COSTS	
4/1/2019	
ENV. ASSESS	
ENGINEERING	39,000
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	260,000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$299,000



DESCRIPTION:

Having a SCADA actuated zone valve between the 24" line in the north zone and the 18" line in the south zone at Muldoon and Blue Angel would provide a much more flexible system at a critical location. This would reduce response time in an emergency situation.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CW702B

Program: Water Production

Project Title: GAC Filters New & Replacement

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING		1000	500	500	500		2500
RENEWAL & REPLACEMENT							
TOTAL		1000	500	500	500		2500

ESTIMATED PROJECT COSTS	<p>MAP</p> <p style="text-align: center; font-size: 2em;">VARIOUS LOCATIONS</p>
2/9/2019	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION 1,875,000	
EQUIPMENT 625,000	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL \$2,500,000	

<p>DESCRIPTION:</p> <p>There are currently 13 wells that use GAC filters and 3 wells that have VOC levels below the MCL. Granular activated carbon (GAC) filters are the available technology for this type of contaminant removal. This project calls for installing new GAC filter vessels at well sites when a water's contaminant approaches the MCL. For existing wells with GAC filters, the vessels need to be replaced when they are no longer serviceable.</p>
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**WATER PRODUCTION
RENEWAL & REPLACEMENT
FISCAL YEARS 2020-2024**
(in 000's)

PROJECT NUMBER	PROJECT TITLE	PRIOR YEARS	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	5 YR TOTAL REQUIREMENT	PROJECT TOTAL
RW001N	GAC Filter Vessel Maintenance	\$454		\$600	\$600	\$600	\$600	\$2,400	\$2,854
RW001S	Gulf Breeze/ECUA Permanent Connection	22		350				350	372
RW034	Water Treatment Facility Replacement - F & Scott	205			1,200			1,200	1,405
RW038	Water Treatment Facility Replacement - OLF 4A	353			1,200			1,200	1,553
RW047	Royce St. Water Well Facility Replacement	1,200						0	1,200
RW048	Cantonment Well Water Facility Replacement	1,200						0	1,200
RW049	Davis Hwy. Well WTF Replacement	1,917					1,013	1,013	2,930
RW052	Water Treatment Facility Expansion - Tennant			1,200				1,200	1,200
RW053	Water Treatment Facility Expansion - McCrory			1,200				1,200	1,200
RW060	Water Treatment Facility Replacement - Olive			1,200				1,200	1,200
RW522B	Annual Pump Repair - Water Production	546	200	200	200	200	200	1,000	1,546
RW523	Water Production Electrical Repairs	900	300	300	300	300		1,200	2,100
RW717R	Pensacola Beach Tanks - Site Protection Bulkhead	483	160					160	643
RW817	Elevated Tank Maintenance Program	275	1,000	1,000	1,000	1,000	1,000	5,000	5,275
RW819	West Well Water Facility Replacement	2,500		2,000				2,000	4,500
RW901Z	Well Maintenance & Testing	1,158		500	500	500	500	2,000	3,158
RW916S	Water - Mechanical Needs	907		500	500	500	500	2,000	2,907
RW____	Water Treatment Facility Replacement Hagler			1,200				1,200	1,200
TOTALS		\$12,120	\$1,660	\$10,250	\$5,500	\$3,100	\$3,813	\$24,323	36,443

PRIOR YEARS 12,120
5 YR PROJECTION **\$24,323**



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PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RW001N

Program: Water Production

Project Title: GAC Filter Vessel Maintenance

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	454		600	600	600	600	2854
TOTAL	454		600	600	600	600	2854

ESTIMATED PROJECT COSTS	MAP
2/9/2017	VARIOUS LOCATIONS
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION 2854000	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL \$2,854,000	

DESCRIPTION:
<p>ECUA has 13 wells with GAC vessels in operation. This vessel manufacturer recommended that the vessels be inspected periodically to determine needed repairs. The inspection included the internal lining, pressure diaphragms, screens, nozzles and all surfaces. Exterior surfaces must also be inspected for any deficiencies such as paint chipping, or pressure gauge damage and valve operation. Vessels should be inspected during every carbon change. Any repair work identified during the inspection will be scheduled as appropriate.</p>



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RW001S

Program: Water Production

Project Title: Gulf Breeze/ECUA Permanent
Connection

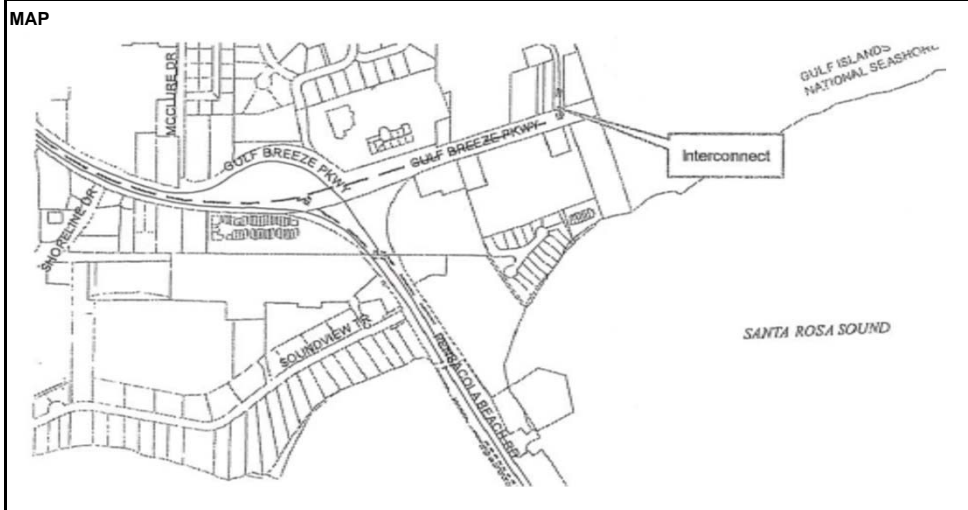
FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	22		350				372
TOTAL	22		350				372

ESTIMATED PROJECT COSTS	
2/26/2018	
ENV. ASSESS	
ENGINEERING	35000
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	337000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$372,000

MAP

The map illustrates a coastal development project. Key features include:

- Roads:** GULF BREEZE PKWY, SOUNDVIEW DR, and MCCLELLAN DR.
- Interconnect:** A box labeled 'Interconnect' is connected to the road network.
- Coastal Features:** GULF ISLANDS NATIONAL SEASHORE and SANTA ROSA SOUND.
- Residential Area:** Houses and a parking lot are shown in the upper left.
- Beach Area:** A beach and a building are shown in the lower right.



DESCRIPTION:

For ECUA and Gulf Breeze to provide each other with water in an emergency, permanent water main connection improvements between the two entities are needed. A short term temporary connection is being established under a separate project.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RW034

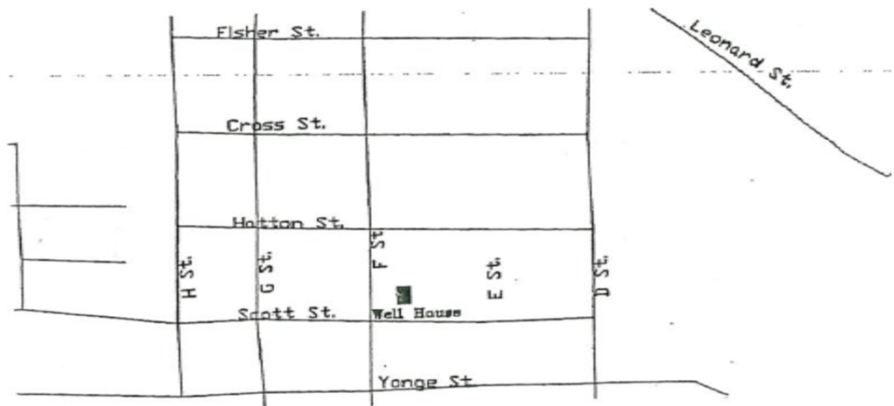
Program: Water Production

Project Title: WTF Replacement - F & Scott

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	205			1200			1405
TOTAL	205			1200			1405

ESTIMATED PROJECT COSTS	
2/9/2017	
ENV. ASSESS	
ENGINEERING	120000
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	1285000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$1,405,000

MAP



DESCRIPTION:

The current water treatment facility is aging and in need of extensive repair. This project will provide replacement with an up to date facility, designed with newer technology and possibly a standby generator. The new building will have separate chemical rooms for safety reasons. Work will include stormwater facilities, paving and other site work.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RW038

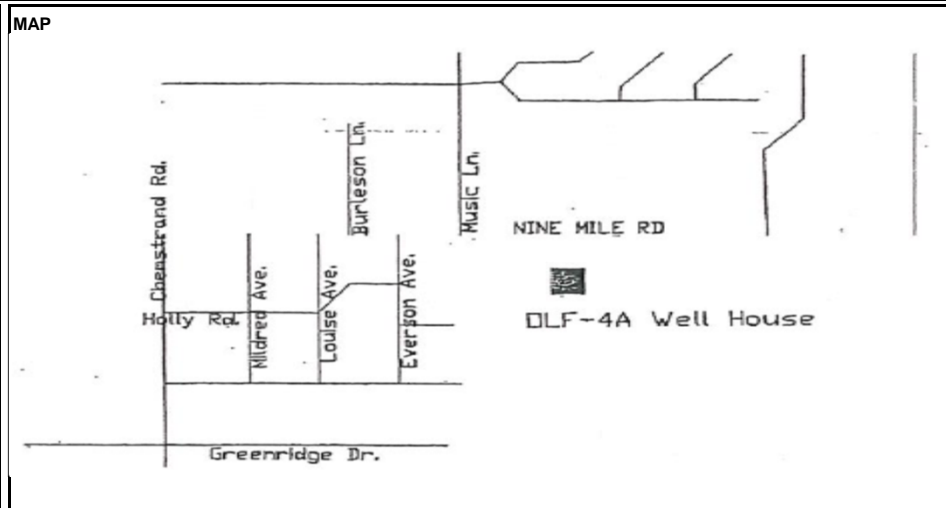
Program: Water Production

Project Title: Water Treatment Facility

Replacement - OLF 4A

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	353			1200			1553
TOTAL	353			1200			1553

ESTIMATED PROJECT COSTS	
2/9/2017	
ENV. ASSESS	
ENGINEERING	70000
SURVEY	10000
INSPECTION	25000
TESTING	
CONSTRUCTION	795000
EQUIPMENT	653000
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$1,553,000



DESCRIPTION:

The current water treatment facility is aging and in need of extensive repair. This project will provide replacement with an up to date facility, designed with newer technology and possibly a standby generator. The new building will have separate chemical rooms for safety reasons. Work will include stormwater facilities, paving and other site work. Treatment will be installed for the removal of a volatile organic compound.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RW047

Program: Water Production

Project Title: Royce St. Water Well Facility

Replacement

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	1200						1200
TOTAL	1200						1200

ESTIMATED PROJECT COSTS		MAP
2/9/2017		
ENV. ASSESS		
ENGINEERING	70000	
SURVEY	10000	
INSPECTION	25000	
TESTING		
CONSTRUCTION	795000	
EQUIPMENT	300000	
MATERIAL		
FURNISHING		
LAND		
MISCELLANEOUS		
INDIRECT		
TOTAL	\$1,200,000	

DESCRIPTION:

The current water treatment facility is aging and in need of extensive repair. This project will provide replacement with an up to date facility, designed with newer technology and possibly a standby generator. The new building will have separate chemical rooms for safety reasons. Work will include stormwater facilities, paving and other site work.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RW048

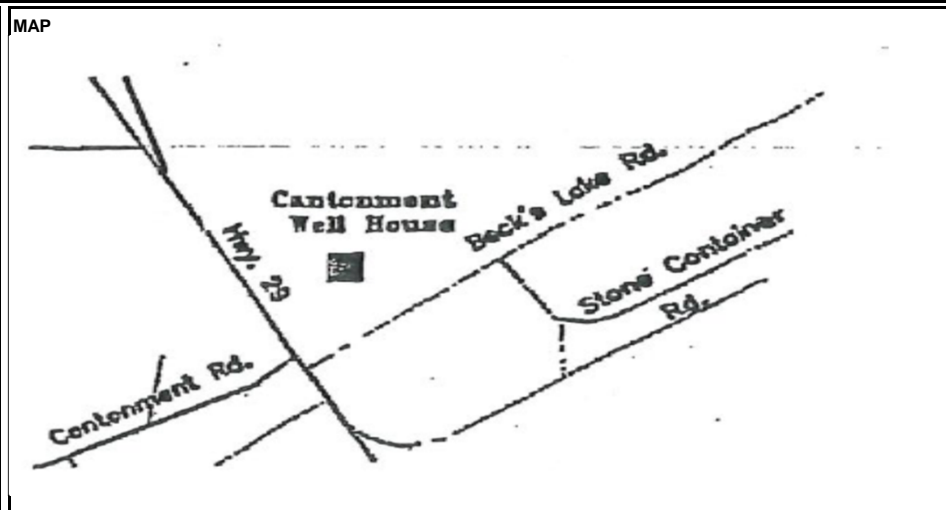
Program: Water Production

Project Title: Cantonment Well Water

Facility Replacement

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	1200						1200
TOTAL	1200						1200

ESTIMATED PROJECT COSTS	
2/9/2017	
ENV. ASSESS	
ENGINEERING	70000
SURVEY	10000
INSPECTION	25000
TESTING	
CONSTRUCTION	795000
EQUIPMENT	300000
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$1,200,000



DESCRIPTION:

The current water treatment facility is aging and in need of extensive repair. This project will provide replacement with an up to date facility, designed with newer technology and possibly a standby generator. The new building will have separate chemical rooms for safety reasons. Work will include stormwater facilities, paving and other site work.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

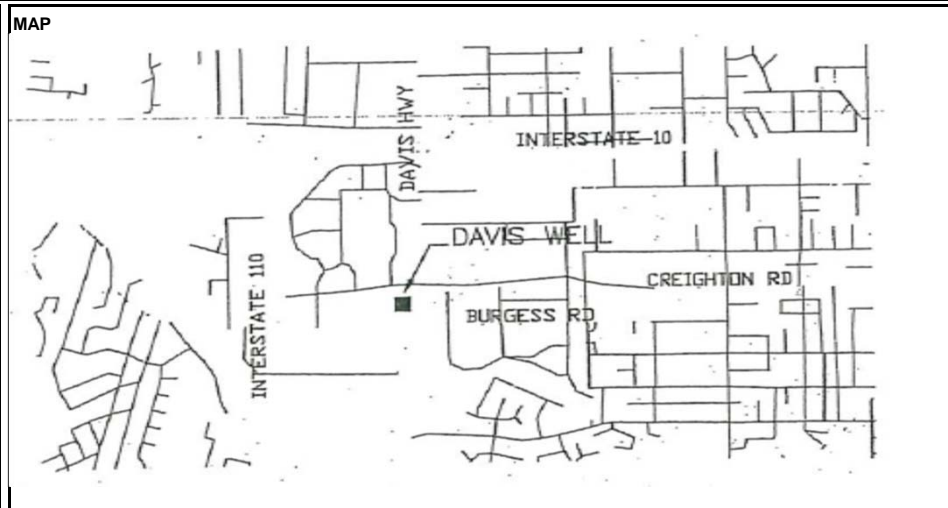
PROJECT NO: RW049

Program: Water Production

Project Title: Davis Hwy. Well WTF Replacement

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	1917					1013	2930
TOTAL	1917					1013	2930

ESTIMATED PROJECT COSTS	
2/9/2017	
ENV. ASSESS	
ENGINEERING	250000
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	2500000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	180000
INDIRECT	
TOTAL	\$2,930,000



DESCRIPTION:

Replace the existing well house with current design for additional chemical treatment (fluoridation) and install a standby generator. Additional water treatment will be included for iron and manganese. Flush the affected area.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RW052

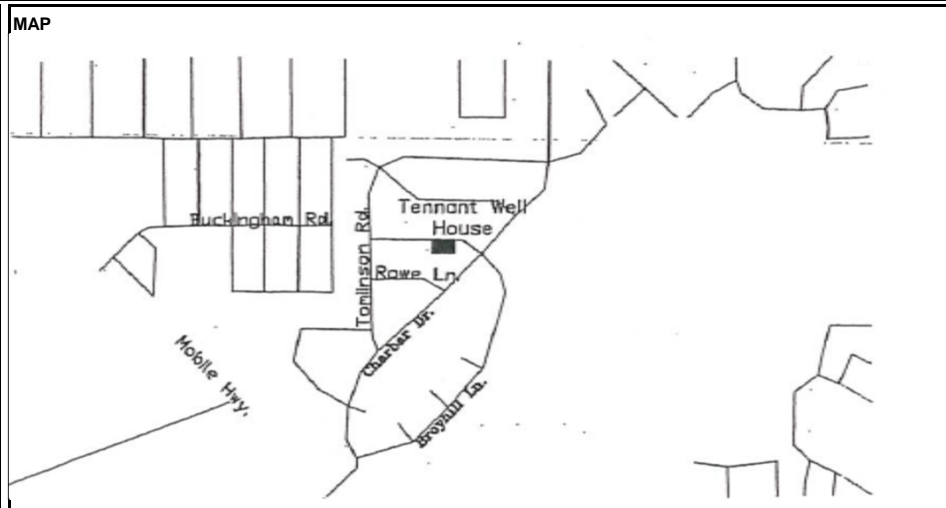
Program: Water Production

Project Title: Water Treatment Facility

Expansion - Tennant

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT			1200				1200
TOTAL			1200				1200

ESTIMATED PROJECT COSTS	
2/9/2017	
ENV. ASSESS	
ENGINEERING	70000
SURVEY	10000
INSPECTION	25000
TESTING	
CONSTRUCTION	795000
EQUIPMENT	300000
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$1,200,000



DESCRIPTION:

The current water treatment facility is aging and in need of extensive repair. This project will provide replacement with an up to date facility, designed with newer technology and possibly a standby generator. The new building will have separate chemical rooms for safety reasons. Work will include stormwater facilities, paving and other site work.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RW053

Program: Water Production

Project Title: McCrory -Water Treatment

Facility Expansion

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT			1200				1200
TOTAL			1200				1200

ESTIMATED PROJECT COSTS	
2/9/2019	
ENV. ASSESS	
ENGINEERING	70,000
SURVEY	10,000
INSPECTION	25,000
TESTING	
CONSTRUCTION	795,000
EQUIPMENT	300,000
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$1,200,000

MAP

The map displays a street network. Breezy Acres Rd runs horizontally across the upper middle. Chenstrand Rd runs vertically on the right side. E. Ten Mile Rd runs horizontally across the bottom. North Creek Dr. runs horizontally just above E. Ten Mile Rd. Motley Ct. runs vertically on the far right. A north arrow points upwards in the top right corner. A callout box labeled 'McCRORY WTF' points to a circled 'W' located at the intersection of Breezy Acres Rd and Chenstrand Rd.

DESCRIPTION:

The current water treatment facility is aging and in need of extensive repair. This project will provide replacement with an up to date facility, designed with newer technology and possibly a standby generator. The new building will have separate chemical rooms for safety reasons. Work will include stormwater facilities, paving and other site work.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RW060

Program: Water Production

Project Title: Water Treatment Facility

Expansion - Olive

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT			1200				1200
TOTAL			1200				1200

ESTIMATED PROJECT COSTS	
2/9/2017	
ENV. ASSESS	
ENGINEERING	70000
SURVEY	10000
INSPECTION	25000
TESTING	
CONSTRUCTION	795000
EQUIPMENT	300000
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$1,200,000

MAP

DESCRIPTION:

The current water treatment facility is aging and in need of extensive repair. This project will provide replacement with an up to date facility, designed with newer technology and possibly a standby generator. The new building will have separate chemical rooms for safety reasons. Work will include stormwater facilities, paving and other site work.



Project Title: Water Production Pump Repair and Replacement

ESTIMATED PROJECT COSTS		MAP
01/31/14		
ENV. ASSESS		
ENGINEERING		
SURVEY		
INSPECTION		
TESTING		
CONSTRUCTION	1546000	
EQUIPMENT		
MATERIAL		
FURNISHING		
LAND		
MISCELLANEOUS		
INDIRECT		
TOTAL	\$1,546,000	

SYSTEM WIDE

To fund costs to perform upgrades of pumps and motors at Water Production facilities.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RW523

Program: Water Production

Project Title: Water Production Electrical

Repairs

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	900	300	300	300	300		2100
TOTAL	900	300	300	300	300		2100

ESTIMATED PROJECT COSTS		MAP <
----------------------------	--	--

DESCRIPTION:
Funds are used to perform electrical repairs and replacements at Water Production facilities.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

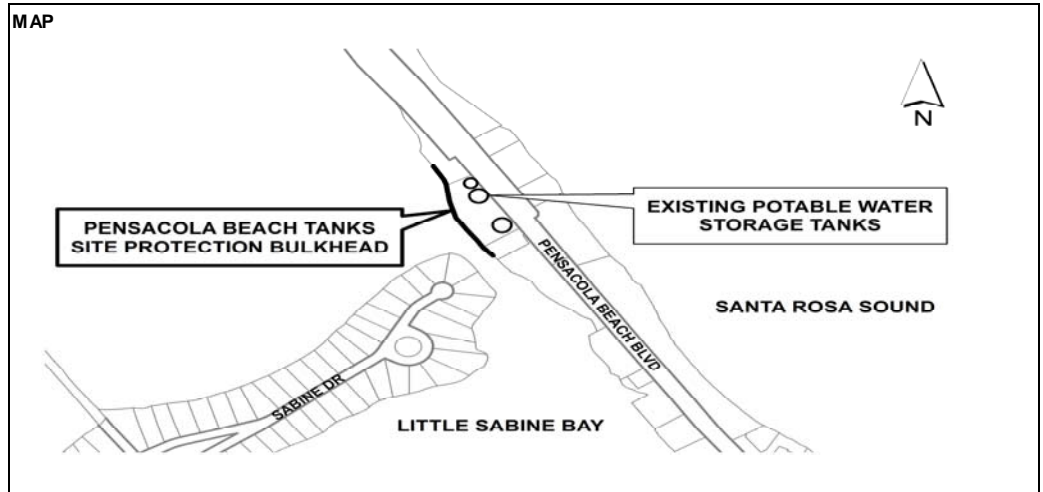
PROJECT NO: RW717R

Program: Water Production

Project Title: Pensacola Beach Tanks - Site
Protection Bulkhead

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	483	160					643
TOTAL	483	160					643

ESTIMATED PROJECT COSTS	
02/09/19	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	643,000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$643,000



DESCRIPTION:

A joint project has been initiated to construct a new bulkhead along the western portion of the existing potable water ground storage tanks on Pensacola Beach. This bulkhead will help protect the existing ECUA infrastructure from erosion and storm damage. As part of the permitting process ECUA is also attempting to reclaim some of the shoreline that is currently eroded away.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RW817

Program: Water Production

Project Title: Elevated Tank Maintenance
Program

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	275	1000	1000	1000	1000	1000	5275
TOTAL	275	1000	1000	1000	1000	1000	5275

ESTIMATED PROJECT COSTS	MAP
2/9/2017	VARIOUS LOCATIONS
ENV. ASSESS	
ENGINEERING 700,000	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION 4,575,000	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL \$5,275,000	

DESCRIPTION:
<p>The ECUA water system has 6 ground and 7 elevated water storage tanks. An annual maintenance program of inspection, cleaning, coating touchup and routine maintenance insures structural safety and prevents premature failure on internal and external coatings. When needed, interior and exterior recoating work is done along with other required work.</p>



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RW819

Program: Water Production

Project Title: West Well Water Facility

Replacement

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	2500		2000				4500
TOTAL	2500		2000				4500

ESTIMATED PROJECT COSTS	
02/28/17	
ENV. ASSESS	
ENGINEERING	450,000
SURVEY	50,000
INSPECTION	
TESTING	
CONSTRUCTION	4,000,000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$4,500,000

MAP

W. GONZALEZ ST

W. DESOTO ST

W. CERVANTES ST

NORTH "I" ST

CURRENT WEST TANK SITE

ECUA PROPERTY

CURRENT WEST PLANT WELL SITE

DESCRIPTION:

It has been recommended to build a new treatment facility for the well at a new location due to the limitations of the smaller parcel for the existing potable water well and treatment building on I St. and Cervantes. This ties into the water system master plan in that the elevated storage tank on I St. is slated to be replaced with a larger volume ground storage tank. Two options are being reviewed, one utilizing the existing well where it is currently located and pumping the water to a new treatment facility in a location adjacent to the proposed ground storage tank on I St, and the other abandoning the existing well and drilling a new well at the tank site. New GAC filters will also be constructed at the new treatment facility and ground storage tank site. Property was recently acquired adjacent to the existing elevated tank site which will provide the area needed in order to construct all of the proposed facilities.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RW901Z

Program: Water Production

Project Title: Well Maintenance and Testing

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	1158		500	500	500	500	3158
TOTAL	1158		500	500	500	500	3158

ESTIMATED PROJECT COSTS		MAP
2/9/2017		
ENV. ASSESS	#REF!	
ENGINEERING		
SURVEY		
INSPECTION		
TESTING	#REF!	
CONSTRUCTION	3158000	
EQUIPMENT		
MATERIAL		
FURNISHING	#REF!	
LAND	#REF!	
MISCELLANEOUS	#REF!	
INDIRECT	#REF!	
TOTAL	#REF!	

SYSTEM WIDE

SYSTEM WIDE

DESCRIPTION:

Well capacity is tested to make sure the well is pumping at optimum capacity. If the well capacity drops, work is performed to return the well to it's optimum capacity. A well system overhaul may include repairing/relining the pump housing and impeller as well as repairing or replacing the well casing and the lubrication system. With 32 wells in production, we need to test and perform restoration work (as required) on 3 to 4 wells per year. This is a continuing project which addresses every well once every 10-12 years.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RW916S

Program: Water Production

Project Title: Water - Mechanical Needs

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	907		500	500	500	500	2907
TOTAL	907		500	500	500	500	2907

ESTIMATED PROJECT COSTS	<div>MAP</div> <div>SYSTEM WIDE</div>
2/9/2017	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	

DESCRIPTION:
<p>This project consists of building maintenance and equipment maintenance and procurement needed to keep water production facilities operating at the required level of service.</p>



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

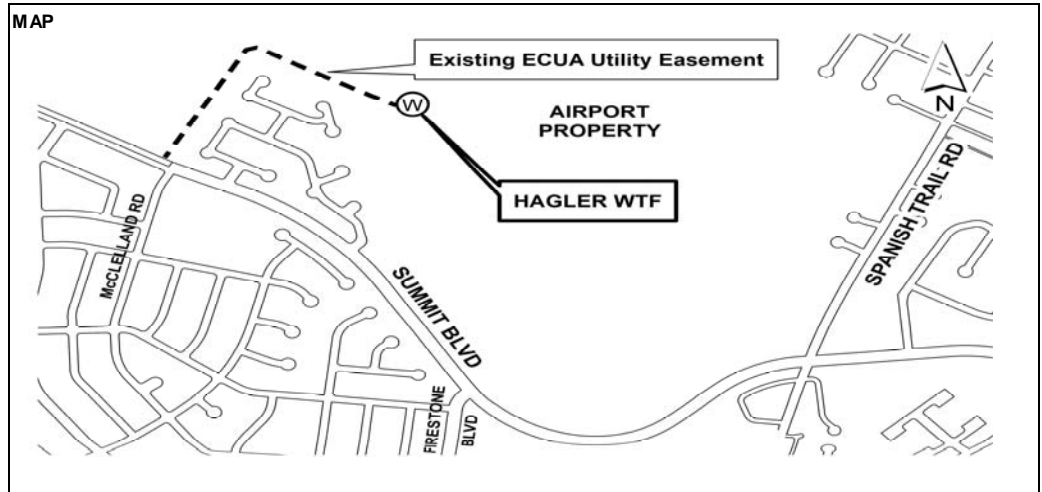
PROJECT NO: RW _____

Program: Water Production

Project Title: WTF Replacement - Hagler

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT			1200				1200
TOTAL			1200				1200

ESTIMATED PROJECT COSTS	
2/9/2019	
ENV. ASSESS	
ENGINEERING	70,000
SURVEY	10,000
INSPECTION	25,000
TESTING	
CONSTRUCTION	795,000
EQUIPMENT	300,000
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$1,200,000



DESCRIPTION:

The current water treatment facility is aging and in need of extensive repair. This project will provide replacement with an up to date facility, designed with newer technology and possibly a standby generator. The new building will have separate chemical rooms for safety reasons. Work will include paving and other site work.

Water Distribution





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**WATER DISTRIBUTION
CAPITAL IMPROVEMENT PROJECTS
FISCAL YEARS 2020-2024**
(in 000's)

PROJECT NUMBER	PROJECT TITLE	PRIOR YEARS	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	5 YR TOTAL REQUIREMENT	PROJECT TOTAL
CA ____	EPA Resiliency Study - Water		\$75					\$75	\$75
CW611	Michigan Ave. Transmission Main Ph I		800		2,280			3,080	3,080
CW810	Misc Area Wide Water System Extensions			100	100	200	100	500	500
CW880	PB Emergency WA Supply Line	700						0	700
CW	Cantonment Water Service Transfers			150				150	150
CW	Gaberonne Swamp Water Main			200				200	200
CW	Michigan Ave. Transmission Main Ph II		30	1,400				1,430	1,430
CW	Michigan Ave. Transmission Main Ph III				1,000			1,000	1,000
CW	Michigan Ave. Transmission Main Ph IV					1,100		1,100	1,100
CW	Pensacola Bay WA Main Replacement		4,500					4,500	4,500
CW	Scenic/Langley WL Replacment			300				300	300
CW	Spanish Trail WM			300				300	300
TOTALS		\$700	\$5,405	\$2,450	\$3,380	\$1,300	\$100	\$12,635	\$13,335

LESS PRIOR YEARS	700
5 YR PROJECTION	\$12,635

**WATER DISTRIBUTION
RENEWAL & REPLACEMENT
FISCAL YEARS 2020-2024**

(in 000's)

PROJECT NUMBER	PROJECT TITLE	PRIOR YEARS	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	5 YR TOTAL REQUIREMENT	PROJECT TOTAL
RW002D	Cantonment Water Line Upgrade			\$1,000				\$1,000	\$1,000
RW061	Greenbay, Eureka, La Rosa Water Line Upgrade				750			750	750
RW067	Water Quality Pipe Upgrades	250		200	200	200	400	1,000	1,250
RW067I	Kersey Street Water Main Upgrade			150				150	150
RW111	Meadson Water Line Upgrade				600			600	600
RW308	Lucy Street Water Main Upgrade				500			500	500
RW402R	Valve Location and Maintenance	719	500	500	500	500	500	2,500	3,219
RW402S	Innerarity Rd./Perdido Key Water System Improvements		200					200	200
RW503	Central Business District Grid Study						200	200	200
RW513	Donelson Water Line Upgrade				150			150	150
RW619	Becks Lake Road 12" Water Main Replacement				350			350	350
RW621	East Hill Water Line Upgrade Ph I	600						0	600
RW626	Mobile Highway Booster Pump Station	245						0	245
RW627	Perdido Key Tank Booster Pump Addition	235						0	235
RW706	Saufley Pines - Turkey Road Upgrade					200	200	400	400
RW722	Detroit Area Water Line Upgrade			1,000				1,000	1,000
RW723	East Hill Water Line Upgrade			1,000	1,000	1,000	0	3,000	3,000
RW724	Englewood Area Water Line Replacement				500	500	500	1,500	1,500
RW725	Highway 29 Water Main Upgrade		200	2,100				2,300	2,300
RW818	Water Service Renewals	500	500	500	500	500	500	2,500	3,000
RW819	West Well Water Facility Replacement	2,500		2,000				2,000	4,500
RW820	Downtown Water System Grid Improvements	1,822		500	500	500		1,500	3,322
RW906	Antiquated Water Line Replacement	2,284		2,000	2,000	2,000	2,000	8,000	10,284
RW907M	Commercial Fire Protection	15		25	25	25	25	100	115
RW909N	CDBG Fire Hydrant Program			225	250	250	250	975	975
RW922	Water Meter Replacement		1,250	1,250	1,250	1,250	1,250	6,250	6,250
RW	Royce St. Area Water Main Replacement			500	1,000	1,000		2,500	2,500
RW	Kersey Street Water Main Upgrade			150				150	150
RW	South Region Water Main Renewal			200	1,800			2,000	2,000
RW	Scenic Hills Country Club Water Main Upgrade			100	1,400			1,500	1,500
RW	Osceola Country Club Area Water Main Upgrade			500	500	500		1,500	1,500
TOTALS		\$9,170	\$2,650	\$13,900	\$13,775	\$8,425	\$5,825	\$44,575	\$53,745

LESS PRIOR YEARS	9,170
5 YR PROJECTION	\$44,575

**WATER DISTRIBUTION
CAPITAL IMPROVEMENT PROJECTS
FISCAL YEARS 2020-2024**
(in 000's)

PROJECT NUMBER	PROJECT TITLE	PRIOR YEARS	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	5 YR TOTAL REQUIREMENT	PROJECT TOTAL
CA ____	EPA Resiliency Study - Water		\$75					\$75	\$75
CW611	Michigan Ave. Transmission Main Ph I		800		2,280			3,080	3,080
CW810	Misc Area Wide Water System Extensions			100	100	200	100	500	500
CW880	PB Emergency WA Supply Line	700						0	700
CW	Cantonment Water Service Transfers			150				150	150
CW	Gaberonne Swamp Water Main			200				200	200
CW	Michigan Ave. Transmission Main Ph II		30	1,400				1,430	1,430
CW	Michigan Ave. Transmission Main Ph III				1,000			1,000	1,000
CW	Michigan Ave. Transmission Main Ph IV					1,100		1,100	1,100
CW	Pensacola Bay WA Main Replacement		4,000	500				4,500	4,500
CW	Scenic/Langley WL Replacment			300				300	300
CW	Spanish Trail WM			300				300	300
TOTALS		\$700	\$4,905	\$2,950	\$3,380	\$1,300	\$100	\$12,635	\$13,335

LESS PRIOR YEARS	700
5 YR PROJECTION	<u><u>\$12,635</u></u>



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CW

Program: Water Distribution

Project Title: EPA Resiliency Study Water

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING		75					75
RENEWAL & REPLACEMENT							
TOTAL		75					75

ESTIMATED PROJECT COSTS	MAP
2/13/2019	
ENV. ASSESS	
ENGINEERING	75,000
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$75,000

DESCRIPTION:

On October 23, 2018, America's Water Infrastructure Act (AWIA) was signed into law. The law requires community (drinking) water systems serving more than 3,300 people to develop or update risk assessments and emergency response plans (ERPs). The law specifies the components that the risk assessments and ERPs must address, and establishes deadlines by which water systems must certify to EPA completion of the risk assessment and ERP. Each community water system serving a population of greater than 3,300 persons shall assess the risks to, and resilience of, its system. Such an assessment shall include:

- the risk to the system from malevolent acts and natural hazards;
- the resilience of the pipes and constructed conveyances, physical barriers, source water, water collection and intake, pretreatment, treatment, storage and distribution facilities, electronic, computer, or other automated systems (including the security of such systems) which are utilized by the system;
- the monitoring practices of the system;
- the financial infrastructure of the system;
- the use, storage, or handling of various chemicals by the system; and
- the operation and maintenance of the system.

The assessment may include an evaluation of capital and operational needs for risk and resilience management for the system.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CW611

Program: Water Distribution

Project Title: Michigan Ave. Transmission

Main Phase I

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING		800		2280			3080
RENEWAL & REPLACEMENT							
TOTAL		800		2280			3080

ESTIMATED PROJECT COSTS	
2/11/2019	
ENV. ASSESS	
ENGINEERING	280,000
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	2,800,000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$3,080,000

MAP

The map displays a street grid with a highlighted project area. A dashed line represents the 'EXISTING WATER MAIN' running horizontally across the middle. A solid line represents the 'PROPOSED WATER MAIN', which follows the existing main for a short distance and then branches off diagonally to the right, ending at a circle labeled 'W'. This circle is identified as the 'CARRIAGE HILLS WATER TANK'. The main horizontal street is labeled 'W MICHIGAN AVE'. Other streets shown include 'MITCHELL LN' (vertical on the left), 'MOBILE HWY' (diagonal on the left), and 'ESPERANTO DR' (diagonal on the right). A north arrow is located in the top right corner.

DESCRIPTION:

A new 12" transmission main is proposed to be constructed down Michigan Ave. from the Carriage Hills tank and booster station (recently constructed) to east W Street. This is Phase II of IV and is needed in order to supply water to the north and south zone. The existing water mains on Michigan Ave. are undersized (6" and 8"). The size restriction of the existing transmission main prevents the Carriage Hills Booster Pump Station from operating efficiently.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CW810

Program: Water Distribution

Project Title: Miscellaneous Area Wide Water
Systems Extensions

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING			100	100	200	100	500
RENEWAL & REPLACEMENT							
TOTAL			100	100	200	100	500

ESTIMATED PROJECT COSTS		MAP
01/09/16		
ENV. ASSESS		
ENGINEERING		
SURVEY	70000	
INSPECTION		
TESTING		
CONSTRUCTION	430000	
EQUIPMENT		
MATERIAL		
FURNISHING		
LAND		
MISCELLANEOUS		
INDIRECT		
TOTAL	\$500,000	

SYSTEM WIDE

DESCRIPTION:
Some parts of ECUA's service area are not currently served by water lines. This program would provide funds for water line extension to reach existing neighborhoods currently served by individual potable supply wells. Individual projects such as Innerarity Point, Bauer Road, Mobile Highway and Beulah have been identified. Other individual projects will be identified on a case by case basis.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CW880

Program: Water Distribution

Project Title: Pensacola Beach Emergency

Water Supply Line

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING	700						700
RENEWAL & REPLACEMENT							
TOTAL	700						700

ESTIMATED PROJECT COSTS	MAP
2/1/2017	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	

DESCRIPTION:
<p>There is currently a single large diameter waterline from the Pensacola Beach Tank and Pump Station to the main business district around Casino Beach. If failure were to occur in this section of waterline, then an adequate amount of water could not be provided to most of the Pensacola Beach area. This project will result in the selection, design, and construction of a redundant feed from the tank and pump station to Pensacola Beach.</p>



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CW

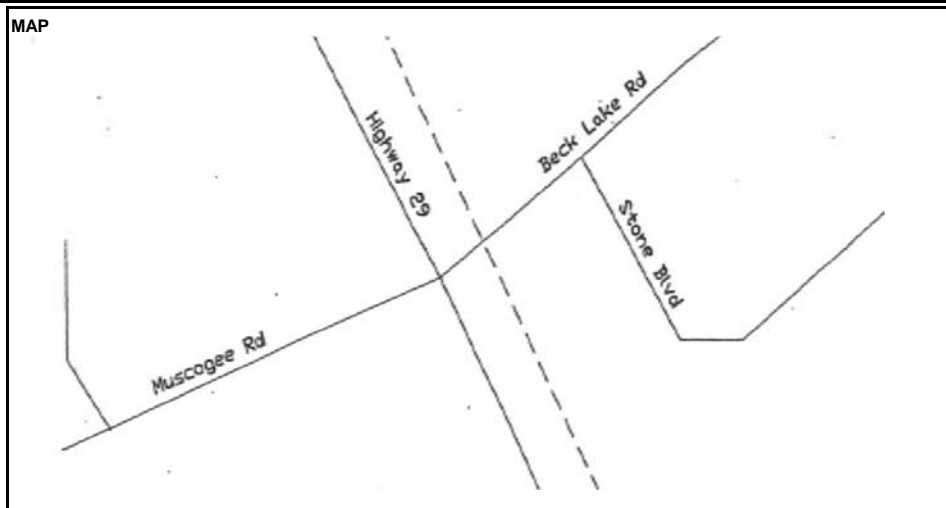
Program: Water Distribution

Project Title: Cantonment Water Service

Transfers

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING			150				150
RENEWAL & REPLACEMENT							
TOTAL			150				150

ESTIMATED PROJECT COSTS	
2/11/2016	
ENV. ASSESS	
ENGINEERING	10000
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	140000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$150,000



DESCRIPTION:

There are currently a number of services for the businesses at the intersection of Muscogee and Hwy. 29 which are located at the back of the buildings. This makes it difficult for Regional Services to respond to any complaints or malfunctions in the water service. This project will consist of moving all of the current water meters to the front of the businesses inside the ROW. The services will also be transferred to the 12" water main at Muscogee. The 6" water main on Hwy. 29 will be extended north with a fire hydrant on the end in order to pick up those businesses which are currently serviced from the rear of the building.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CW
 Program: Water Distribution
 Project Title: Gaberonne Swamp Water Main

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING			200				200
RENEWAL & REPLACEMENT							
TOTAL			200				200

ESTIMATED PROJECT COSTS	
2/28/2018	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	200000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$200,000

MAP

DESCRIPTION:

In the summer of 2016, there was a water main break on the existing 8" cast iron water main along Scenic Highway, just south of Langley Avenue. ECUA was able to valve this location off with no customer outages. Due to Gaberonne Swamp, it has been determined more feasible to install a 10" HDPE water main via directional bore. Staff has prepared plans in-house and obtained the FDOT permit to complete the construction.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

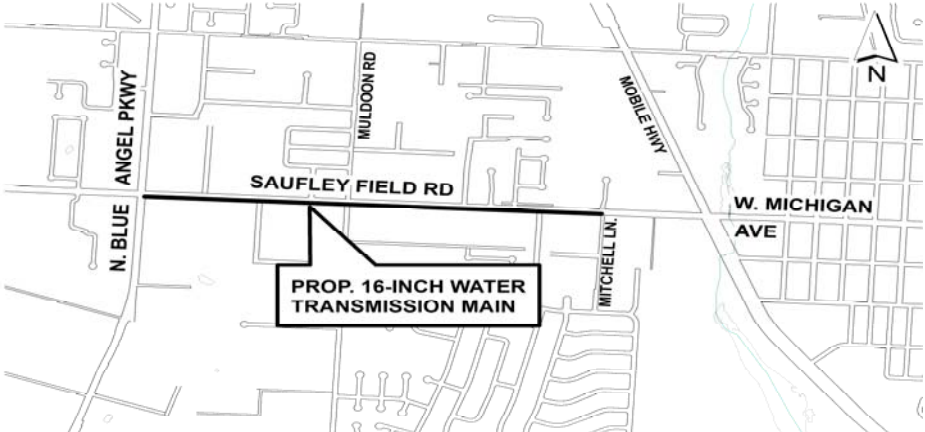
PROJECT NO: CW

Program: Water Distribution

Project Title: Michigan Ave. Transmission

Main Phase II

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING		30	1400				1430
RENEWAL & REPLACEMENT							
TOTAL		30	1400				1430

ESTIMATED PROJECT COSTS		MAP
2/11/2019		
ENV. ASSESS		
ENGINEERING	130,000	
SURVEY		
INSPECTION		
TESTING		
CONSTRUCTION	1,300,000	
EQUIPMENT		
MATERIAL		
FURNISHING		
LAND		
MISCELLANEOUS		
INDIRECT		
TOTAL	\$1,430,000	

DESCRIPTION:

A new 16" transmission main is proposed to be constructed down Michigan Ave. from the Mitchell Lane west to Blue Angel Parkway. This is Phase II of IV and is needed in order to supply water to the north and south zones. The existing water main on Saufley Field Rd. is undersized. The size restriction of the existing transmission main will prevent the Carriage Hills Booster Pump Station from operating efficiently.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CW

Program: Water Distribution

Project Title: Michigan Ave. Transmission

Main Phase III

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING				1000			1000
RENEWAL & REPLACEMENT							
TOTAL				1000			1000

ESTIMATED PROJECT COSTS	
2/11/2016	
ENV. ASSESS	
ENGINEERING	80000
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	920000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$1,000,000

MAP

The map displays a street grid with several roads labeled: ANGEL PKWY, N. BLUE, MULDOON RD, SAUFLEY FIELD RD, MOBILE HWY, MITCHELL LN., and W. MICHIGAN AVE. A callout box points to a section of Saufley Field Rd, indicating the 'PROP. 16-INCH WATER TRANSMISSION MAIN'. A north arrow is located in the top right corner.

DESCRIPTION:

A new 16" transmission main is proposed to be constructed down Michigan Ave. from the Mitchell Lane west to Blue Angel Parkway. This is Phase III of IV and is needed in order to supply water to the north and south zones. The existing water mains on Michigan Ave. are undersized (6" and 8"). The size restriction of the existing transmission main prevent the well from operating efficiently.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

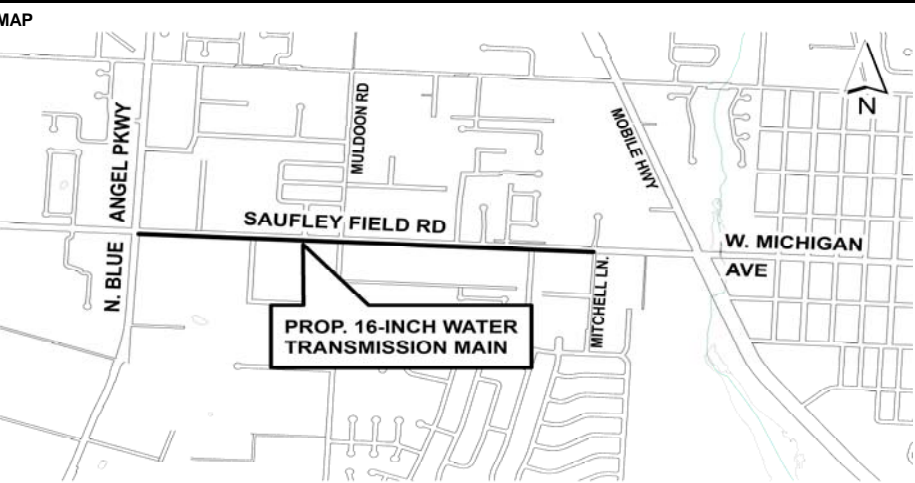
PROJECT NO: CW

Program: Water Distribution

Project Title: Michigan Ave. Transmission

Main Phase IV

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING					1100		1100
RENEWAL & REPLACEMENT							
TOTAL					1100		1100

ESTIMATED PROJECT COSTS		<div>MAP</div> 
2/11/2016		
ENV. ASSESS		
ENGINEERING	100000	
SURVEY		
INSPECTION		
TESTING		
CONSTRUCTION	1000000	
EQUIPMENT		
MATERIAL		
FURNISHING		
LAND		
MISCELLANEOUS		
INDIRECT		
TOTAL	\$1,100,000	

DESCRIPTION:

A new 12" transmission main is proposed to be constructed down Michigan Ave. from W St. east to Pensacola Blvd. This is Phase IV of IV and is needed in order to supply water to the north and south zones. The existing water mains on Michigan Ave. are undersized (6" and 8"). The size restriction of the existing transmission main prevents the Carriage Hills booster pump station from operating efficiently.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CW _____
 Program: Water Distribution
 Project Title: Pensacola Bay Water Main
Replacement

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING		4000	500				4500
RENEWAL & REPLACEMENT							
TOTAL		4000	500				4500

ESTIMATED PROJECT COSTS		MAP
4/1/2019		
ENV. ASSESS		
ENGINEERING	500,000	
SURVEY		
INSPECTION		
TESTING		
CONSTRUCTION	4,000,000	
EQUIPMENT		
MATERIAL		
FURNISHING		
LAND		
MISCELLANEOUS		
INDIRECT		
TOTAL	\$4,500,000	

DESCRIPTION:

During the FDOT's Pensacola Bay Bridge Design-Build project, ECUA had water main relocations at both the north and south approaches. ECUA has been made aware of chlorine degradation over time in HDPE water pipe by local failures. ECUA sent three samples of the HDPE water pipe that was placed out of service during this relocation to be tested. It was determined that the existing HDPE water pipe has signs of chlorine degradation and needs to be replaced. The first phase of this project will provide the study to replace the subaqueous water mains that provide water to Pensacola Beach. Subsequent phases will provide the Engineering and Construction.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

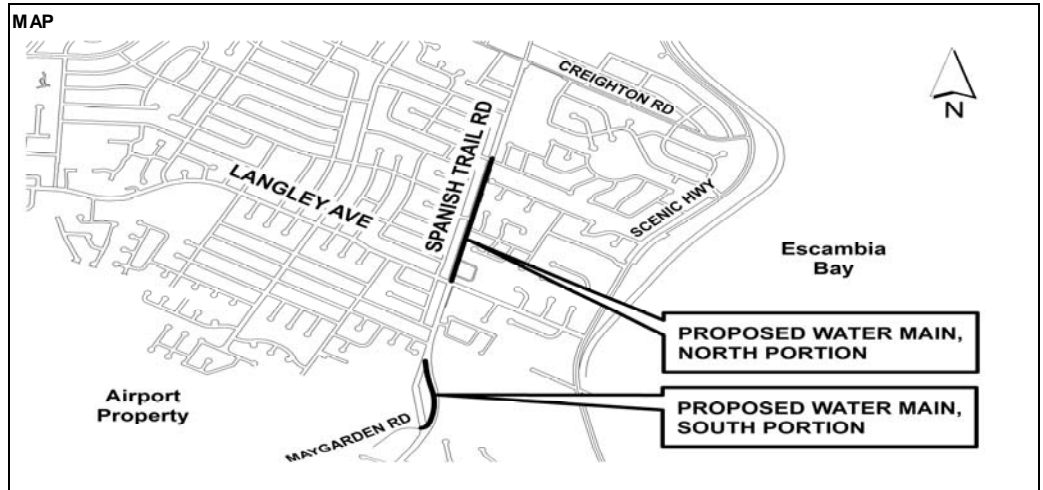
PROJECT NO: CW

Program: Water Distribution

Project Title: Scenic/Langley WL Replacement

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT			300				300
TOTAL			300				300

ESTIMATED PROJECT COSTS	
2/13/2019	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	300,000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$300,000



DESCRIPTION:

Due to re-occurring line breaks on a water main located along Scenic Hwy (supply main paralleling Spanish Trail Rd), the main has been valved shut. Having wetlands along Scenic Hwy, the addition of a new main on Spanish Trail Rd to take the place of the main on Scenic Hwy was deemed an acceptable alternative. In addition, an existing dead-end main on Spanish Trail Rd would be addressed by this project. The project consists of a South portion (Maygarden Rd north for approx. 1500 feet) and a North portion (Langley Ave to La Mirage). The required work would consist of approximately 4,000-foot of 8-inch PVC water main. A preliminary design by in-house staff has been completed.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CW

Program: Water Distribution

Project Title: Spanish Trail WM

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING			300				300
RENEWAL & REPLACEMENT							
TOTAL			300				300

ESTIMATED PROJECT COSTS		MAP
2/11/2016		
ENV. ASSESS		
ENGINEERING	20000	
SURVEY		
INSPECTION		
TESTING		
CONSTRUCTION	280000	
EQUIPMENT		
MATERIAL		
FURNISHING		
LAND		
MISCELLANEOUS		
INDIRECT		
TOTAL	\$300,000	

DESCRIPTION:
<p>New 8" and 12" water main proposed between Jerry Maygarden Rd and La Mirage on Spanish Trail. This will replace inactive and inadequate water main on Scenic Hwy.</p>



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**WATER DISTRIBUTION
RENEWAL & REPLACEMENT
FISCAL YEARS 2020-2024**

(in 000's)

PROJECT NUMBER	PROJECT TITLE	PRIOR YEARS	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	5 YR TOTAL REQUIREMENT	PROJECT TOTAL
RW002D	Cantonment Water Line Upgrade			\$1,000				\$1,000	\$1,000
RW061	Greenbay, Eureka, La Rosa Water Line Upgrade				750			750	750
RW067	Water Quality Pipe Upgrades	250		200	200	200	400	1,000	1,250
RW067I	Kersey Street Water Main Upgrade			150				150	150
RW111	Meadson Water Line Upgrade				600			600	600
RW308	Lucy Street Water Main Upgrade				500			500	500
RW402R	Valve Location and Maintenance	719	500	500	500	500	500	2,500	3,219
RW402S	Innerarity Rd./Perdido Key Water System Improvements		200					200	200
RW503	Central Business District Grid Study						200	200	200
RW513	Donelson Water Line Upgrade				150			150	150
RW619	Becks Lake Road 12" Water Main Replacement				350			350	350
RW621	East Hill Water Line Upgrade Ph I	600						0	600
RW626	Mobile Highway Booster Pump Station	245						0	245
RW627	Perdido Key Tank Booster Pump Addition	235						0	235
RW706	Saufley Pines - Turkey Road Upgrade					200	200	400	400
RW722	Detroit Area Water Line Upgrade			1,000				1,000	1,000
RW723	East Hill Water Line Upgrade			1,000	1,000	1,000	0	3,000	3,000
RW724	Englewood Area Water Line Replacement				500	500	500	1,500	1,500
RW725	Highway 29 Water Main Upgrade		200	2,100				2,300	2,300
RW818	Water Service Renewals	500	500	500	500	500	500	2,500	3,000
RW819	West Well Water Facility Replacement	2,500		2,000				2,000	4,500
RW820	Downtown Water System Grid Improvements	1,822		500	500	500		1,500	3,322
RW906	Antiquated Water Line Replacement	2,284		2,000	2,000	2,000	2,000	8,000	10,284
RW907M	Commercial Fire Protection	15		25	25	25	25	100	115
RW909N	CDBG Fire Hydrant Program			225	250	250	250	975	975
RW922	Water Meter Replacement		1,250	1,250	1,250	1,250	1,250	6,250	6,250
RW	Royce St. Area Water Main Replacement			500	1,000	1,000		2,500	2,500
RW	Kersey Street Water Main Upgrade			150				150	150
RW	South Region Water Main Renewal			200	1,800			2,000	2,000
RW	Scenic Hills Country Club Water Main Upgrade			100	1,400			1,500	1,500
RW	Osceola Country Club Area Water Main Upgrade			500	500	500		1,500	1,500
TOTALS		\$9,170	\$2,650	\$13,900	\$13,775	\$8,425	\$5,825	\$44,575	\$53,745

LESS PRIOR YEARS	9,170
5 YR PROJECTION	<u>\$44,575</u>



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

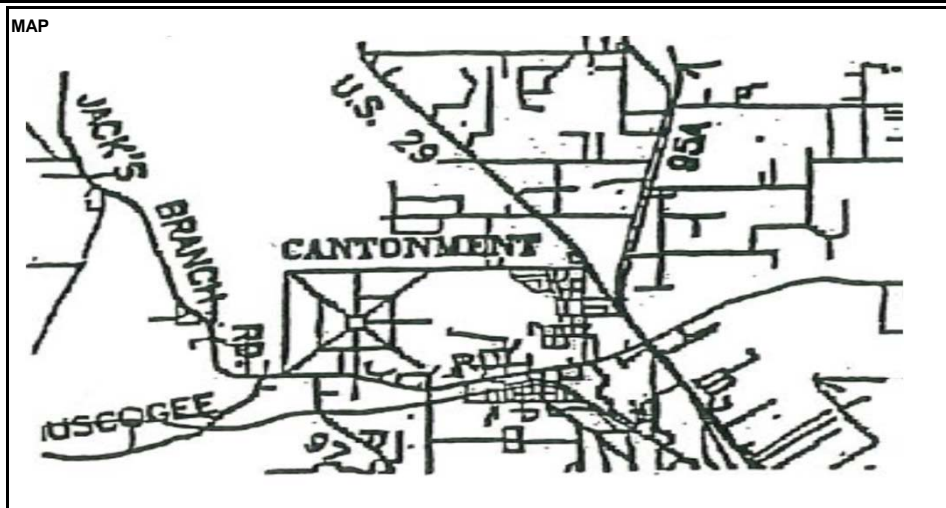
PROJECT NO: RW002D

Program: Water Distribution

Project Title: Cantonment Water Line Upgrade

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT			1000				1000
TOTAL			1000				1000

ESTIMATED PROJECT COSTS	
01/15/2009	
ENV. ASSESS	
ENGINEERING	50000
SURVEY	25000
INSPECTION	
TESTING	
CONSTRUCTION	925000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$1,000,000



DESCRIPTION:

This project will increase ECUA's ability to serve present customers and increase the reliability of the system by eliminating galvanized and steel water lines and providing better fire service.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RW061

Program: Water Distribution

Project Title: Greenbay and Midland Park Area

Waterline Upgrade

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT				750			750
TOTAL				750			750

ESTIMATED PROJECT COSTS	
1/15/09	
ENV. ASSESS	
ENGINEERING	50000
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	700000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$750,000

MAP

DESCRIPTION:
Combine CIP projects RW061 and RW703 into one project. These are adjacent streets with 2-inch glavanized lines. The substandard lines need to be replaced. New fire hydrants will improve fire protection for these streets.



PROJECT DATA SHEET
Capital Improvements Program
 Fiscal Years
2020-2024

PROJECT NO: RW067
 Program: Water Distribution
 Project Title: Water Quality Pipe Upgrades

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	250		200	200	200	400	1250
TOTAL	250		200	200	200	400	1250

ESTIMATED PROJECT COSTS		MAP
2/16/2019		
ENV. ASSESS		
ENGINEERING	100,000	
SURVEY		
INSPECTION		
TESTING		
CONSTRUCTION	1,150,000	
EQUIPMENT		
MATERIAL		
FURNISHING		
LAND		
MISCELLANEOUS		
INDIRECT		
TOTAL	\$1,250,000	

VARIOUS LOCATIONS

DESCRIPTION:

There are dead-end lines throughout ECUA's water distribution system that can be eliminated by connections to the existing water distribution system. The purpose of this project would be to identify areas where water circulation can be improved by tying to adjacent distribution lines. A looped system provides better water circulation and can improve both water quality and pressure.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RW0671

Program: Water Distribution

Project Title: Kersey Street Water Main

Upgrade

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT			150				150
TOTAL			150				150

ESTIMATED PROJECT COSTS		MAP
1/20/17		
ENV. ASSESS		
ENGINEERING		
SURVEY	10000	
INSPECTION		
TESTING		
SURVEY	140000	
EQUIPMENT		
MATERIAL		
FURNISHING		
LAND		
MISCELLANEOUS		
INDIRECT		
TOTAL	\$150,000	

DESCRIPTION:
Replacement of existing thin walled 4" PVC with new 6" C900 water main. The existing 4" water main on Kersey St. and Reeders Lane will be abandoned in place. 1 or 2 new fire hydrant assemblies will be installed to improve fire protection in the area. Regional Services has informed ECUA Engineering staff of multiple maintenance issues and provided documentation.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

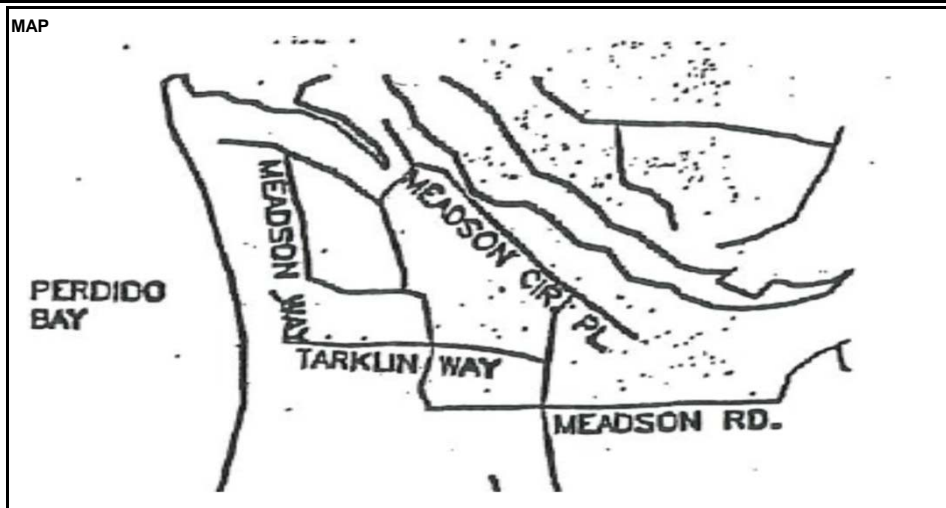
PROJECT NO: RW111

Program: Water Distribution

Project Title: Meadson Water Line Upgrade

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT				600			600
TOTAL				600			600

ESTIMATED PROJECT COSTS	
1/15/2009	
ENV. ASSESS	
ENGINEERING	60000
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	540000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$600,000



DESCRIPTION:

In July 1999, a petition signed by 28 residents in the Meadson Subdivision was presented to the ECUA board. The residents requested an upgrade of their waterlines because they are old and undersized. Mr. Mead President of Meadson Roadway Association Inc. expressed concerns about fire protection, low pressure and dirty water. This proposed waterline upgrade is in response to the petition. Because the subdivision is unplatted with privately owned roads, rights-of-way and easement issues will need to be addressed. Portions of the existing waterlines are under the gravel roadways. New lines should be placed out from under the roadways. Meadson Circle crosses a stream, so a stream crossing will also be part of this project. A looped system should be designed to improve circulation. Waterlines will be installed on Tarklin Way, Meadson Lane and Meadson Point Road which are currently supplied only by long service lines. New hydrants will be installed.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

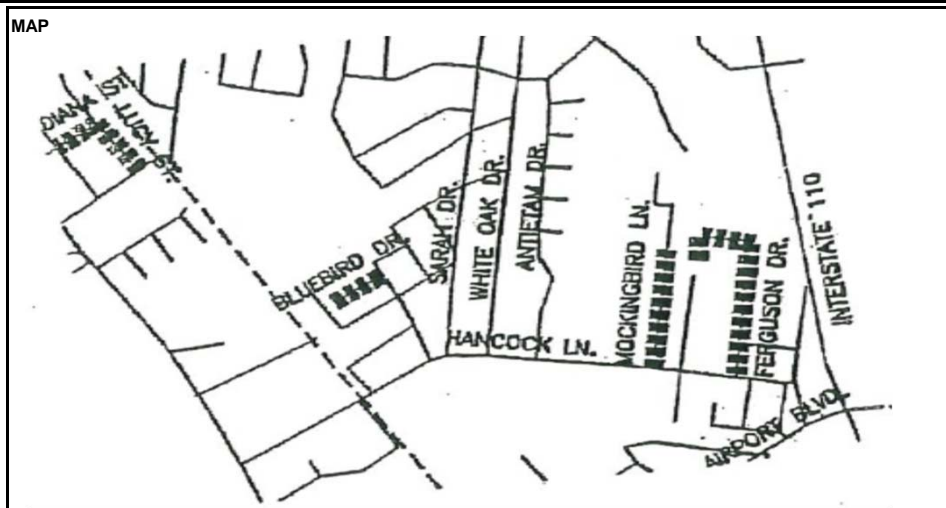
PROJECT NO: RW308

Program: Water Distribution

Project Title: Lucy Street Water Line Upgrade

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT				500			500
TOTAL				500			500

ESTIMATED PROJECT COSTS	
2/16/2018	
ENV. ASSESS	
ENGINEERING	30000
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	470000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$500,000



DESCRIPTION:

ECUA staff discovered that Lucy Street is supplied by a 2-inch water line while doing utility relocates. Customers on Lucy Street have complained of low pressure. The original Lucy Street CIP data sheet involved replacing a 2-inch water line on Lucy and Diane Streets. Bluebird Drive, Mockingbird Lane, and Ferguson Drive also need water line upgrades and are close to Lucy. This project will involve replacement of these small lines with 4 or 6 inch pipe and renewing water services.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RW402R

Program: Water Distribution

Project Title: Valve Location and Maintenance

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	719	500	500	500	500	500	3219
TOTAL	719	500	500	500	500	500	3219

ESTIMATED PROJECT COSTS	MAP
02/20/19	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	

N/A

<p>DESCRIPTION:</p> <p>The ECUA Water Distribution System contains more that 18,000 valves. There are valves that must be repaired or replaced. Many of these are large diameter valves in areas with a high ground water table. The funds in this project will be used to hire a contractor to repair or replace valves where the conditions exceed the capabilities of ECUA equipment and skill.</p>



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

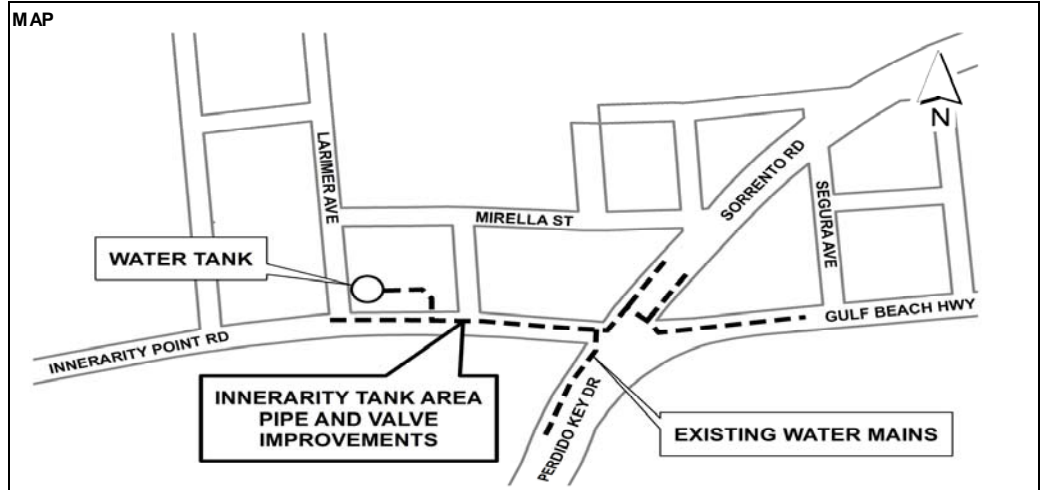
PROJECT NO: RW402S

Program: Water Distribution

Project Title: Innerarity Tank Area Pipe and
Valve Improvements

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT			200				200
TOTAL			200				200

ESTIMATED PROJECT COSTS	
2/9/2019	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	200,000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$200,000



DESCRIPTION:

The Water System near the Innerarity Tank needs improvements.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RW503

Program: Water Distribution

Project Title: Central Business District Grid

Study

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT						200	200
TOTAL						200	200

ESTIMATED PROJECT COSTS		MAP
2/13/14		
ENV. ASSESS		
ENGINEERING	200000	
SURVEY		
INSPECTION		
TESTING		
CONSTRUCTION		
EQUIPMENT		
MATERIAL		
FURNISHING		
LAND		
MISCELLANEOUS		
INDIRECT		
TOTAL	\$200,000	

DESCRIPTION:

Due to the high number of very old water mains in the Central Business District, an engineering study is necessary to define the condition of the water main grid and its ability to provide potable water service to existing customers as well as adequate fire protection. The engineering study will provide sufficient information to determine the necessary scope of work and resultant cost of capital improvements.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RW513

Program: Water Distribution

Project Title: Donelson Water Line Upgrade

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT				150			150
TOTAL				150			150

ESTIMATED PROJECT COSTS	
2/13/14	
ENV. ASSESS	
ENGINEERING	10000
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	140000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$150,000

MAP

DESCRIPTION:
<p>Donelson Street is located downtown between Gregory and Garden Streets. The customer on these two city blocks are being supplied by 1 1/4-inch galvanized waterline. Pressure and flow to these customers is inadequate. The existing waterline is under pavement. The line needs to be replaced and services renewed and transferred to the new line.</p>



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RW619

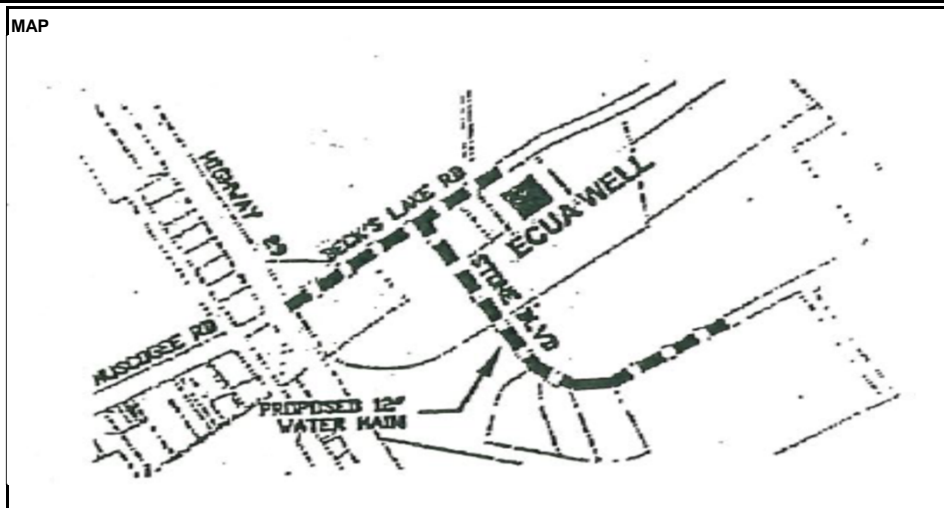
Program: Water Distribution

Project Title: Becks Lake Road 12" Water Line

Replacement

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT				350			350
TOTAL				350			350

ESTIMATED PROJECT COSTS	
1/31/08	
ENV. ASSESS	
ENGINEERING	30000
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	320000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$350,000



DESCRIPTION:

Over the years the existing 12" main on Becks Lake Road from the well to U.S. Highway 29 has experienced numerous leaks. The replacement of this main approximately 1800 L. F. with 12" ductile iron water main should alleviate the problem.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RW621

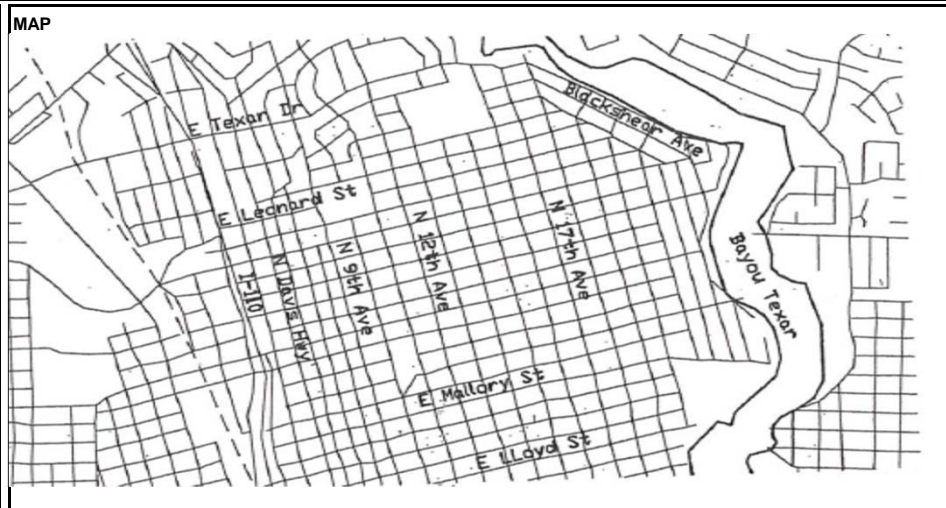
Program: Water Distribution

Project Title: East Hill Water Main Upgrade

Phase I

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	600						600
TOTAL	600						600

ESTIMATED PROJECT COSTS	
2/11/16	
ENV. ASSESS	
ENGINEERING	50000
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	550000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$600,000



DESCRIPTION:

The area of the East Hill neighborhood in Southeast Pensacola is in need of extensive water main upgrades. There is a large amount of cast iron and galvanized steel water mains in the area. The project will consist of upgrading the water mains throughout the north eastern portion of East Hill.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RW626

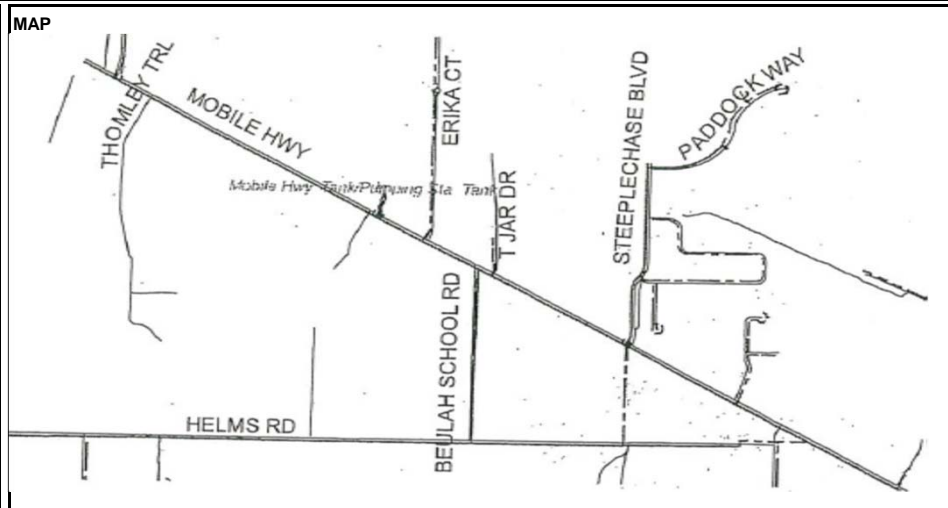
Program: Water Distribution

Project Title: Mobile Highway Booster Pump

Station

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	245						245
TOTAL	245						245

ESTIMATED PROJECT COSTS	
03/16/16	
ENV. ASSESS	
ENGINEERING	50000
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	195000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$245,000



DESCRIPTION:

When the Mobile Hwy. tank fills, it produces low pressure on Erica Ct. This has necessitated only filling the tank during low demand times, such as night time. Installing a booster pump along Mobile Hwy. would alleviate this issue and allow the Mobile Hwy. tank to be filled during the day without low pressure issues.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RW627

Program: Water Distribution

Project Title: Perdido Key Tank Booster

Pump Addition

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	235						235
TOTAL	235						235

ESTIMATED PROJECT COSTS	
03/16/16	
ENV. ASSESS	
ENGINEERING	50000
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	185000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$235,000

MAP

DESCRIPTION:

The Perdido Key elevated storage tank is unable to discharge to the system unless pressures are lowered throughout Perdido Key. A booster pump installed on the discharge line would allow the tank to discharge to the system without lowering pressures in Perdido Key.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RW706

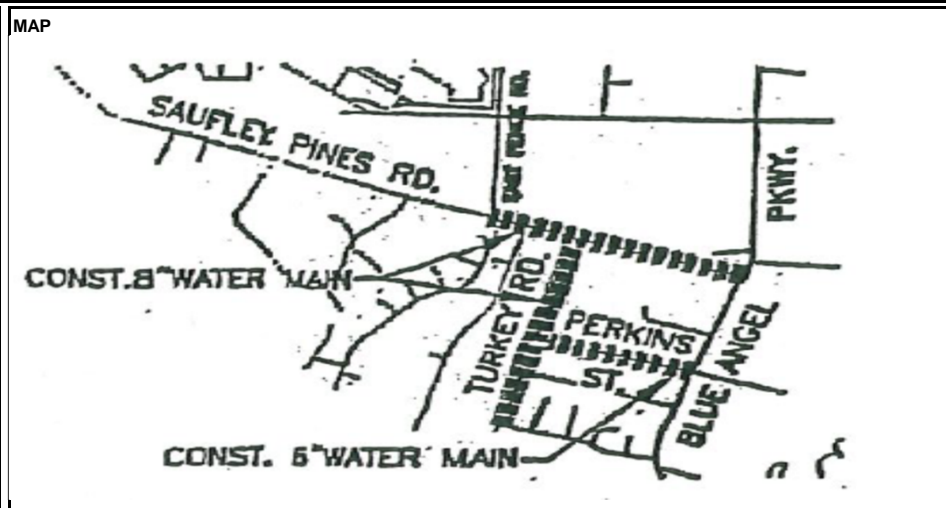
Program: Water Distribution

Project Title: Saufley Pines-Turkey Rd.

Upgrade

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT					200	200	400
TOTAL					200	200	400

ESTIMATED PROJECT COSTS	
1/31/08	
ENV. ASSESS	
ENGINEERING	35000
SURVEY	15000
INSPECTION	
TESTING	
CONSTRUCTION	350000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$400,000



DESCRIPTION:

This area is currently served by 4" and smaller lines and experiences low pressure. This project will upgrade the subsystem, provide fire protection, and capacity for growth.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

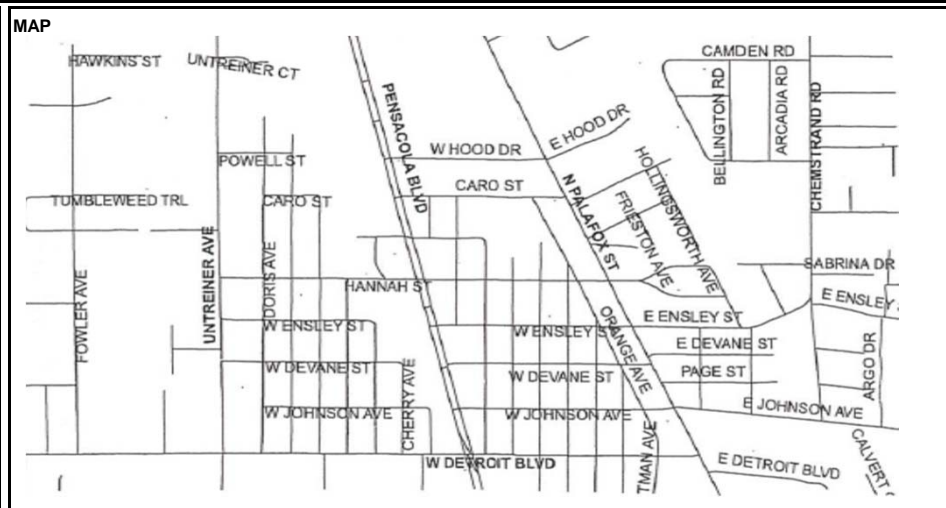
PROJECT NO: RW722

Program: Water Distribution

Project Title: Detroit Area Water Line Upgrade

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT			1000				1000
TOTAL			1000				1000

ESTIMATED PROJECT COSTS	
1/15/08	
ENV. ASSESS	
ENGINEERING	120000
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	880000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$1,000,000



DESCRIPTION:

Hundreds of ECUA Customers in the vicinity of Detroit and Old Palafax are being supplied by 2 1/4" C. I. water lines. These long stretches of small diameter pipe supply too many services to be able to provide adequate pressure and flow. The water lines in this area need to be upgraded. Approximately 21,000 L. F. of water main to be upgraded.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RW723

Program: Water Distribution

Project Title: East Hill Water Line Upgrade

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT			1000	1000	1000		3000
TOTAL			1000	1000	1000		3000

ESTIMATED PROJECT COSTS	
2/16/2018	
ENV. ASSESS	
ENGINEERING	500000
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	2500000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$3,000,000



DESCRIPTION:

East Hill is a neighborhood in the City of Pensacola with significant amounts of 2-inch galvanized water lines. Replacement of these two-inch lines will improve pressure, flow, and water quality to the City. We propose to divide this project into five phases consisting of 50,000 feet of pipe each.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RW724

Program: Water Distribution

Project Title: Englewood Area Water Line

Upgrade

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT				500	500	500	1500
TOTAL				500	500	500	1500

ESTIMATED PROJECT COSTS	
1/15/09	
ENV. ASSESS	
ENGINEERING	50000
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	1450000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$1,500,000

MAP

A street map of a neighborhood in Englewood, Colorado. The map shows a grid of streets. Major streets include W Fairfield Dr at the top, W Leonard St, W Cross St, W Scott St, and W Bobe St running horizontally. Vertical streets include N V St, N U St, N T St, N R St, N Q St, N P St, N O St, N S St, N Face Blvd, N L St, N J St, N I St, N H St, N G St, N F St, N E St, N D St, N C St, N B St, N A St, N M St, N N St, N O St, N P St, N Q St, N R St, N S St, N T St, N U St, N V St, N W St, N X St, N Y St, N Z St, N AA St, N AB St, N AC St, N AD St, N AE St, N AF St, N AG St, N AH St, N AI St, N AJ St, N AK St, N AL St, N AM St, N AN St, N AO St, N AP St, N AQ St, N AR St, N AS St, N AT St, N AU St, N AV St, N AW St, N AX St, N AY St, N AZ St, N BA St, N BB St, N BC St, N BD St, N BE St, N BF St, N BG St, N BH St, N BI St, N BJ St, N BK St, N BL St, N BM St, N BN St, N BO St, N BP St, N BQ St, N BR St, N BS St, N BT St, N BU St, N BV St, N BW St, N BX St, N BY St, N BZ St, N CA St, N CB St, N CC St, N CD St, N CE St, N CF St, N CG St, N CH St, N CI St, N CJ St, N CK St, N CL St, N CM St, N CN St, N CO St, N CP St, N CQ St, N CR St, N CS St, N CT St, N CU St, N CV St, N CW St, N CX St, N CY St, N CZ St, N DA St, N DB St, N DC St, N DD St, N DE St, N DF St, N DG St, N DH St, N DI St, N DJ St, N DK St, N DL St, N DM St, N DN St, N DO St, N DP St, N DQ St, N DR St, N DS St, N DT St, N DU St, N DV St, N DW St, N DX St, N DY St, N DZ St, N EA St, N EB St, N EC St, N ED St, N EE St, N EF St, N EG St, N EH St, N EI St, N EJ St, N EK St, N EL St, N EM St, N EN St, N EO St, N EP St, N EQ St, N ER St, N ES St, N ET St, N EU St, N EV St, N EW St, N EX St, N EY St, N EZ St, N FA St, N FB St, N FC St, N FD St, N FE St, N FF St, N FG St, N FH St, N FI St, N FJ St, N FK St, N FL St, N FM St, N FN St, N FO St, N FP St, N FQ St, N FR St, N FS St, N FT St, N FU St, N FV St, N FW St, N FX St, N FY St, N FZ St, N GA St, N GB St, N GC St, N GD St, N GE St, N GF St, N GG St, N GH St, N GI St, N GJ St, N GK St, N GL St, N GM St, N GN St, N GO St, N GP St, N GQ St, N GR St, N GS St, N GT St, N GU St, N GV St, N GW St, N GX St, N GY St, N GZ St, N HA St, N HB St, N HC St, N HD St, N HE St, N HF St, N HG St, N HH St, N HI St, N HJ St, N HK St, N HL St, N HM St, N HN St, N HO St, N HP St, N HQ St, N HR St, N HS St, N HT St, N HU St, N HV St, N HW St, N HX St, N HY St, N HZ St, N IA St, N IB St, N IC St, N ID St, N IE St, N IF St, N IG St, N IH St, N II St, N IJ St, N IK St, N IL St, N IM St, N IN St, N IO St, N IP St, N IQ St, N IR St, N IS St, N IT St, N IU St, N IV St, N IW St, N IX St, N IY St, N IZ St, N JA St, N JB St, N JC St, N JD St, N JE St, N JF St, N JG St, N JH St, N JI St, N JJ St, N JK St, N JL St, N JM St, N JN St, N JO St, N JP St, N JQ St, N JR St, N JS St, N JT St, N JU St, N JV St, N JW St, N JX St, N JY St, N JZ St, N KA St, N KB St, N KC St, N KD St, N KE St, N KF St, N KG St, N KH St, N KI St, N KJ St, N KK St, N KL St, N KM St, N KN St, N KO St, N KP St, N KQ St, N KR St, N KS St, N KT St, N KU St, N KV St, N KW St, N KX St, N KY St, N KZ St, N LA St, N LB St, N LC St, N LD St, N LE St, N LF St, N LG St, N LH St, N LI St, N LJ St, N LK St, N LM St, N LN St, N LO St, N LP St, N LQ St, N LR St, N LS St, N LT St, N LU St, N LV St, N LW St, N LX St, N LY St, N LZ St, N MA St, N MB St, N MC St, N MD St, N ME St, N MF St, N MG St, N MH St, N MI St, N MJ St, N MK St, N ML St, N MM St, N MN St, N MO St, N MP St, N MQ St, N MR St, N MS St, N MT St, N MU St, N MV St, N MW St, N MX St, N MY St, N MZ St, N NA St, N NB St, N NC St, N ND St, N NE St, N NF St, N NG St, N NH St, N NI St, N NJ St, N NK St, N NL St, N NM St, N NN St, N NO St, N NP St, N NQ St, N NR St, N NS St, N NT St, N NU St, N NV St, N NW St, N NX St, N NY St, N NZ St, N OA St, N OB St, N OC St, N OD St, N OE St, N OF St, N OG St, N OH St, N OI St, N OJ St, N OK St, N OL St, N OM St, N ON St, N OO St, N OP St, N OQ St, N OR St, N OS St, N OT St, N OU St, N OV St, N OW St, N OX St, N OY St, N OZ St, N PA St, N PB St, N PC St, N PD St, N PE St, N PF St, N PG St, N PH St, N PI St, N PJ St, N PK St, N PL St, N PM St, N PN St, N PO St, N PP St, N PQ St, N PR St, N PS St, N PT St, N PU St, N PV St, N PW St, N PX St, N PY St, N PZ St, N QA St, N QB St, N QC St, N QD St, N QE St, N QF St, N QG St, N QH St, N QI St, N QJ St, N QK St, N QL St, N QM St, N QN St, N QO St, N QP St, N QQ St, N QR St, N QS St, N QT St, N QU St, N QV St, N QW St, N QX St, N QY St, N QZ St, N RA St, N RB St, N RC St, N RD St, N RE St, N RF St, N RG St, N RH St, N RI St, N RJ St, N RK St, N RL St, N RM St, N RN St, N RO St, N RP St, N RQ St, N RR St, N RS St, N RT St, N RU St, N RV St, N RW St, N RX St, N RY St, N RZ St, N SA St, N SB St, N SC St, N SD St, N SE St, N SF St, N SG St, N SH St, N SI St, N SJ St, N SK St, N SL St, N SM St, N SN St, N SO St, N SP St, N SQ St, N SR St, N SS St, N ST St, N SU St, N SV St, N SW St, N SX St, N SY St, N SZ St, N TA St, N TB St, N TC St, N TD St, N TE St, N TF St, N TG St, N TH St, N TI St, N TJ St, N TK St, N TL St, N TM St, N TN St, N TO St, N TP St, N TQ St, N TR St, N TS St, N TT St, N TU St, N TV St, N TW St, N TX St, N TY St, N TZ St, N UA St, N UB St, N UC St, N UD St, N UE St, N UF St, N UG St, N UH St, N UI St, N UJ St, N UK St, N UL St, N UM St, N UN St, N UO St, N UP St, N UQ St, N UR St, N US St, N UT St, N UV St, N UW St, N UX St, N UY St, N UZ St, N VA St, N VB St, N VC St, N VD St, N VE St, N VF St, N VG St, N VH St, N VI St, N VJ St, N VK St, N VL St, N VM St, N VN St, N VO St, N VP St, N VQ St, N VR St, N VS St, N VT St, N VU St, N VV St, N VW St, N VX St, N VY St, N VZ St, N WA St, N WB St, N WC St, N WD St, N WE St, N WF St, N WG St, N WH St, N WI St, N WJ St, N WK St, N WL St, N WM St, N WN St, N WO St, N WP St, N WQ St, N WR St, N WS St, N WT St, N WU St, N WV St, N WW St, N WX St, N WY St, N WZ St, N XA St, N XB St, N XC St, N XD St, N XE St, N XF St, N XG St, N XH St, N XI St, N XJ St, N XK St, N XL St, N XM St, N XN St, N XO St, N XP St, N XQ St, N XR St, N XS St, N XT St, N XU St, N XV St, N XW St, N XX St, N XY St, N XZ St, N YA St, N YB St, N YC St, N YD St, N YE St, N YF St, N YG St, N YH St, N YI St, N YJ St, N YK St, N YL St, N YM St, N YN St, N YO St, N YP St, N YQ St, N YR St, N YS St, N YT St, N YU St, N YV St, N YW St, N YX St, N YY St, N YZ St, N ZA St, N ZB St, N ZC St, N ZD St, N ZE St, N ZF St, N ZG St, N ZH St, N ZI St, N ZJ St, N ZK St, N ZL St, N ZM St, N ZN St, N ZO St, N ZP St, N ZQ St, N ZR St, N ZS St, N ZT St, N ZU St, N ZV St, N ZW St, N ZX St, N ZY St, N ZZ St.

DESCRIPTION:

In the Englewood area of Escambia County, South of Fairfield Drive and west of Pace Blvd., there are many streets supplied by old 2-inch galvanized water lines. These substandard lines are in poor, tuberculate condition and need to be replaced. These upgrades are planned to be completed in conjunction with the Englewood sewer expansion which is planned as a cost-sharing project with Escambia County.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RW725

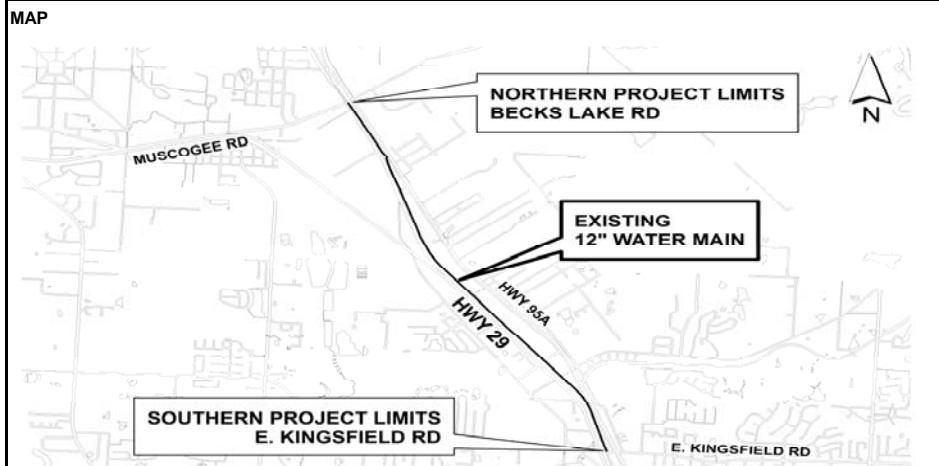
Program: Water Distribution

Project Title: Highway 29 Water Line Upgrade

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT		200	2100				2300
TOTAL		200	2100				2300

ESTIMATED PROJECT COSTS	
2/13/2019	
ENV. ASSESS	
ENGINEERING	300,000
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	2,000,000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$2,300,000

MAP



DESCRIPTION:

The existing 12" water main along a portion of Highway 29 approximately 21,000 L. F. has a history of breaks.



	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
FUNDS (000)							
CIP							
OPERATING							
RENEWAL & REPLACEMENT	500	500	500	500	500	500	3000
TOTAL	500	500	500	500	500	500	3000

ESTIMATED PROJECT COSTS		<div>MAP</div> <div>VARIOUS LOCATIONS</div>
2/16/2019		
ENV. ASSESS		
ENGINEERING		
SURVEY		
INSPECTION		
TESTING		
CONSTRUCTION	3,000,000	
EQUIPMENT		
MATERIAL		
FURNISHING		
LAND		
MISCELLANEOUS		
INDIRECT		
TOTAL	\$3,000,000	

ECUA maintenance crews continue to repair leaking water services. The ECUA is responsible for the service from the main to the meter. The majority of these leaks are because of faulty service material. The impact on our operation is cost in overtime to make unscheduled repairs/replacements coupled with customer dissatisfaction from the system outage.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RW819
 Program: Water Production
 Project Title: West Well Water Facility
Replacement

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	2500		2000				4500
TOTAL	2500		2000				4500

ESTIMATED PROJECT COSTS	
02/28/17	
ENV. ASSESS	
ENGINEERING	450,000
SURVEY	50,000
INSPECTION	
TESTING	
CONSTRUCTION	4,000,000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$4,500,000

MAP

DESCRIPTION:

It has been recommended to build a new treatment facility for the well at a new location due to the limitations of the smaller parcel for the existing potable water well and treatment building on I St. and Cervantes. This ties into the water system master plan in that the elevated storage tank on I St. is slated to be replaced with a larger volume ground storage tank. Two options are being reviewed, one utilizing the existing well where it is currently located and pumping the water to a new treatment facility in a location adjacent to the proposed ground storage tank on I St, and the other abandoning the existing well and drilling a new well at the tank site. New GAC filters will also be constructed at the new treatment facility and ground storage tank site. Property was recently acquired adjacent to the existing elevated tank site which will provide the area needed in order to construct all of the proposed facilities.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RW820

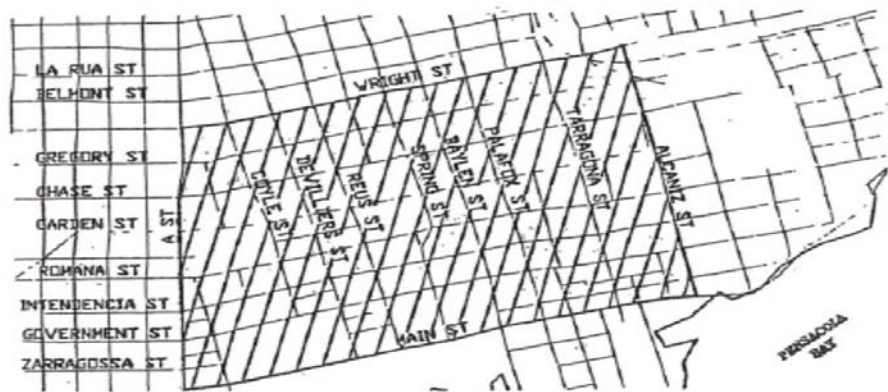
Program: Water Distribution

Project Title: Downtown Water System Grid
Improvements

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	1822		500	500	500		3322
TOTAL	1822		500	500	500		3322

ESTIMATED PROJECT COSTS	
2/16/2018	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	3322000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$3,322,000

MAP



DESCRIPTION:

This downtown Pensacola area is the oldest part of ECUA's water system. There is a limited amount of information available regarding the area. The target area of this project is from Wright St. south and from Alacaniz west to "A" St. The first phase of the project will be an engineering study to determine the condition of the water system and the capacity to provide potable water service and adequate fire protection to customers in the area. This study will include the following: a review of system maps, field inspections, flow testing water mains and hydraulic modeling. It is known that the area does not have a sufficient number of valves and long sections of water mains must be shut down when maintenance is required. This results in an interruption of normal water service and fire protection for an excessive number of customers, it is expected, based on the age of the water mains, that some will be in poor condition. This will require cleaning and replacement. The second phase will be to implement some of the immediate improvements recommended by the engineering study such as cleaning or replacing water mains, installing new valves, and making new connections between existing water mains. The study will also make long term recommendations to be implemented in future projects.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RW906

Program: Water Distribution

Project Title: Antiquated Water Lines

Replacement

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	2284		2000	2000	2000	2000	10284
TOTAL	2284		2000	2000	2000	2000	10284

ESTIMATED PROJECT COSTS		MAP
2/13/14		
ENV. ASSESS		
ENGINEERING	400000	
SURVEY		
INSPECTION		
TESTING		
CONSTRUCTION	9884000	
EQUIPMENT		
MATERIAL		
FURNISHING		
LAND		
MISCELLANEOUS		
INDIRECT		
TOTAL	\$10,284,000	

SYSTEM WIDE

SYSTEM WIDE

DESCRIPTION:

ECUA's water system contains numerous areas where water lines were installed many years ago. Many of the lines were installed utilizing small (2" or 4") diameter galvanized iron pipe material. Over many years trace minerals have accumulated on the pipe walls reducing capacity and pressure and sometimes causing water quality issues. This program provides for replacement and upgrade of antiquated lines as problem areas are identified, subject to availability of funds.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RW907M

Program: Water Distribution

Project Title: Commercial Fire Protection

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	15		25	25	25	25	115
TOTAL	15		25	25	25	25	115

ESTIMATED PROJECT COSTS	MAP
12/30/16	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	115000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$115,000

VARIOUS LOCATIONS

DESCRIPTION:
When a new commercial development is required to upgrade or extend a water line for purposes of fire protection ECUA policy is to pay for one-half the cost of the line not to exceed \$5000. ECUA receives an average of 3 to 5 of these requests each year.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RW909N

Program: Water Distribution

Project Title: CDBG Fire Hydrant Program

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT			225	250	250	250	975
TOTAL			225	250	250	250	975

ESTIMATED PROJECT COSTS		MAP
4/01/19		
ENV. ASSESS		
ENGINEERING	100,000	
SURVEY		
TESTING		
CONSTRUCTION	875,000	
EQUIPMENT		
MATERIAL		
FURNISHING		
LAND		
MISCELLANEOUS		
INDIRECT		
TOTAL	\$975,000	

N/A

N/A

DESCRIPTION:

Escambia County has chosen to use Community Development Block Grant (CDBG) funds to upgrade water line in selected area sufficient to provide for fire protection. The County has entered into an agreement with ECUA to provide engineering services on the projects.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RW922

Program: Water Distribution

Project Title: Water Meter Replacement

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT		1250	1250	1250	1250	1250	6250
TOTAL		1250	1250	1250	1250	1250	6250

ESTIMATED PROJECT COSTS	MAP
2/28/2018	VARIOUS LOCATIONS
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION 6250000	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL \$6,250,000	

DESCRIPTION:
<p>ECUA has approximately 91,000 residential meters currently in service. The water meters are backed by a 10-year warranty. The majority of these meters were installed between 2007-2009. As such, the warranty period has ended for many of these meters or it will in the near future. The replacement of meters or components has become much more frequent since 2016. By budgeting to replace 10% of these meters every year, the meters can be replaced in a timely manner without having to estimate customers' usage. The 10-year replacement cycle will also result in the majority of meters being under warranty.</p>



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RW

Program: Water Distribution

Project Title: Royce St. Area Water Main

Replacement

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT			500	1000	1000		2500
TOTAL			500	1000	1000		2500

ESTIMATED PROJECT COSTS	
01/23/2017	
ENV. ASSESS	
ENGINEERING	
SURVEY	500000
INSPECTION	
TESTING	
CONSTRUCTION	2000000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$2,500,000

MAP

WISDOM LN
BRENT LN
LYNN ST
SPRINGHILL DR
BIRCHWOOD DR
ROYCE ST
BROOKVIEW CIR
DREW CIR
SELINA ST
AMBER ST
HEWITT ST
SKYLINE DR
CHADWICK ST
WYNNHURST ST
BERKLEY DR
N 9TH AVE
N DAVIS HWY
INTERSTATE 110

DESCRIPTION:

Approximately 40,000 L. F. of CA water main in this area is nearing the end of it's life span and is beginning to break in multiple locations.



PROJECT DATA SHEET

Capital Improvements Program

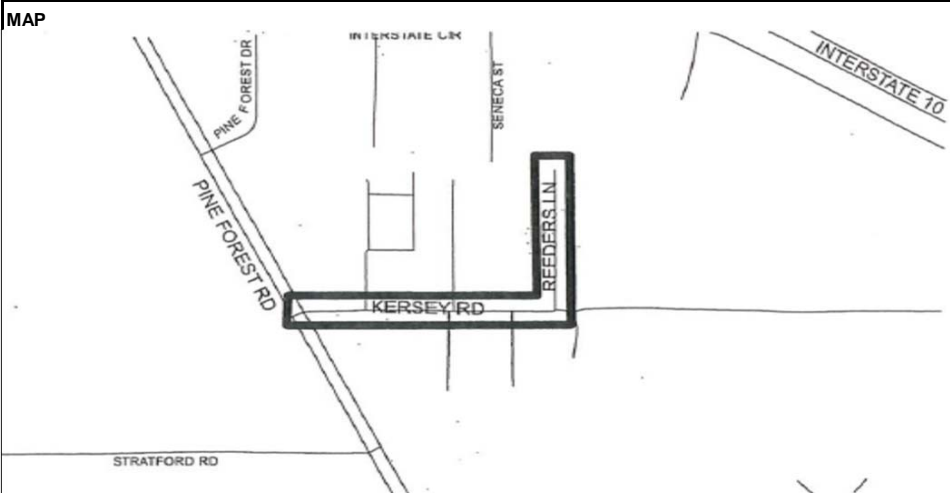
Fiscal Years
2020-2024

PROJECT NO: RW

Program: Water Distribution

Project Title: Kersey Street Water Main
Upgrade

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT			150				150
TOTAL			150				150

ESTIMATED PROJECT COSTS		<div>MAP</div> 
1/20/17		
ENV. ASSESS		
ENGINEERING		
SURVEY	10000	
INSPECTION		
TESTING		
CONSTRUCTION	140000	
EQUIPMENT		
MATERIAL		
FURNISHING		
LAND		
MISCELLANEOUS		
INDIRECT		
TOTAL	\$150,000	

DESCRIPTION:

Replacement of existing thin walled 4" PVC with new 6" C900 water main. The existing 4" water main on Kersey St. and Reiders Lane will be abandoned in place. 1 or 2 new fire hydrant assemblies will be installed to improve fire protection in the area. Regional Services has informed ECUA Engineering staff of multiple maintenance issues and provided documentation.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years

2020-2024

PROJECT NO: RW

Program: Water Distribution

Project Title: Scenic Hills Country Club Water

Main Upgrade

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT			100	1400			1500
TOTAL			100	1400			1500

ESTIMATED PROJECT COSTS	
1/20/17	
ENV. ASSESS	
ENGINEERING	
SURVEY	100000
INSPECTION	
TESTING	
CONSTRUCTION	1400000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$1,500,000

MAP

EXISTING WATER MAINS

SCENIC HILLS COUNTRY CLUB SUBDIVISION

DESCRIPTION:

The area of Scenic Hills Country Club in Northeast Pensacola is in need of extensive water main upgrades. There is a large amount of transite water main throughout the neighborhood. Breaks have been reported dated back to 2013 and have increased in frequency becoming more periodic in 2015 and 2016. This project will consist of upgrading the water mains throughout the Scenic Hills Country Club neighborhood to new PVC water mains.

PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years

2020-2024

PROJECT NO: RW

Program: Water Distribution

Project Title: Osceola Country Club Area

Water Main Upgrade

	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
FUNDS (000)							
CIP							
OPERATING							
RENEWAL & REPLACEMENT			500	500	500		1500
TOTAL			500	500	500		1500

ESTIMATED PROJECT COSTS	
2/11/16	
ENV. ASSESS	
ENGINEERING	50000
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	1450000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$1,500,000

The map shows the layout of the Osceola Country Club and surrounding streets. Key streets include Oakcliff Rd, Jen Sasser Dr, Brenda Ave, Sandra Dr, N 51st Ave, N 50th Ave, N 58th Ave, Will Shiver Ln, 19th Ave, 15th Ave, 57th Ave, 14th Ave, 50th Ave, Tulip Dr, Pen Haven Dr, 13th Ave, Tohawanda Dr, Seminole Trl, Mohawk Trl, Cherokee Trl, Gilbert Cir, Bruce St, W Fairfield Dr, Emory Dr, Pen Haven Dr, and 13th Ave. The map also shows the location of the Osceola Country Club and the surrounding area, including the Mobile Hwy and the IAP (Interstate Access Point) area.

DESCRIPTION:

Replacement of existing 6" water mains with new 6" PVC water main. The existing 6" water mains will be abandoned in place. Regional Services has informed ECUA Engineering staff of multiple maintenance issues with this area.

Water Reclamation





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**WATER RECLAMATION
CAPITAL IMPROVEMENT PROJECTS
FISCAL YEARS 2020-2024**

(in 000's)

PROJECT NUMBER	PROJECT TITLE	PRIOR YEARS	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	5 YR TOTAL REQUIREMENT	PROJECT TOTAL
CS419	PB Reclaimed Tank & Booster Pump Station	\$2,555		\$1,000	\$300	\$500	\$500	\$2,300	\$4,855
CS419A	PB Reclaimed & Potable Transmission Main	240		3,000	1,000	1,000	1,000	6,000	6,240
CS880	Bayou Marcus Basin Addition	100		600	10,000			10,600	10,700
CS881	CWRF Effluent Disposal Capacity Investigation	100	50					50	150
CS	CWRF Influent Equalization Tank			2,250				2,250	2,250
CS	PB Storm Hardening			300				300	300
TOTALS		\$2,995	\$50	\$7,150	\$11,300	\$1,500	\$1,500	\$21,500	\$24,495

LESS PRIOR YEARS 2,995
5 YR PROJECTION **\$21,500**

**WATER RECLAMATION
RENEWAL & REPLACEMENTS PROJECTS
FISCAL YEARS 2020-2024**

(in 000's)

PROJECT NUMBER	PROJECT TITLE	PRIOR YEARS	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	5 YR TOTAL REQUIREMENT	PROJECT TOTAL
RS234	Bayou Marcus Disinfection Modification Upgrade	\$2,150							\$2,150
RS332	Bayou Marcus Broadwalk Effluent Pipe Repair	1,544		100				100	1,644
RS732	CWRF Troughs & Chlorine Chamber Coating Rpr	800	150					150	950
RS882	Bayou Marcus Clarifier Coating Repairs	300							300
TOTALS		\$4,794	\$150	\$100				\$250	\$5,044

PRIOR YEARS 4,794
5 YR PROJECTION **\$250**



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**WATER RECLAMATION
CAPITAL IMPROVEMENT PROJECTS
FISCAL YEARS 2020-2024**

(in 000's)

PROJECT NUMBER	PROJECT TITLE	PRIOR YEARS	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	5 YR TOTAL REQUIREMENT	PROJECT TOTAL
CS419	PB Reclaimed Tank & Booster Pump Station	\$2,555		\$1,000	\$300	\$500	\$500	\$2,300	\$4,855
CS419A	PB Reclaimed & Potable Transmission Main	240		3,000	1,000	1,000	1,000	6,000	6,240
CS880	Bayou Marcus Basin Addition	100		600	10,000			10,600	10,700
CS881	CWRF Effluent Disposal Capacity Investigation	100	50					50	150
CS	CWRF Influent Equalization Tank			2,250				2,250	2,250
CS	PB Storm Hardening			300				300	300
TOTALS		\$2,995	\$50	\$7,150	\$11,300	\$1,500	\$1,500	\$21,500	\$24,495

LESS PRIOR YEARS	2,995
5 YR PROJECTION	<u>\$21,500</u>



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CS419

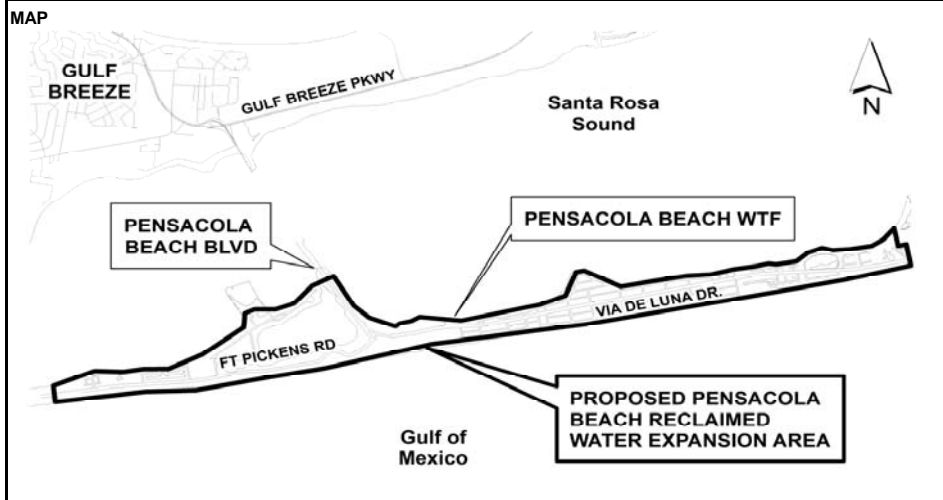
Program: Water Reclamation

Project Title: Pensacola Beach Reclaimed

Tank & Booster Pump Station

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING	2555		1800				4355
RENEWAL & REPLACEMENT							
TOTAL	2555		1800				4355

ESTIMATED PROJECT COSTS	MAP
1/28/13	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	4355000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$4,355,000



DESCRIPTION:

As part of the Pensacola Beach Reclaimed Water System Master Plan, a new Ground Storage Tank and Booster Pump Station has been planned in order to meet the needs of the irrigation cycle on the beach. The storage tank will allow for the diurnal flows of wastewater, which peak during the day, to be treated and stored in the proposed tank so that the reclaimed water may be used for irrigation during the night, when waste flow is low. The project will also help to reduce the nutrient loading into the Sound as well as preserve potable drinking water for human consumption. A site has been chosen south of the existing potable water storage tanks on the Beach. The storage tank is complete and temporarily being utilized for potable water until the necessary line work and booster pump building are complete. The necessary line work and associated infrastructures will be constructed under project CS419A. Grant funding is being pursued for the line work and booster pump building.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

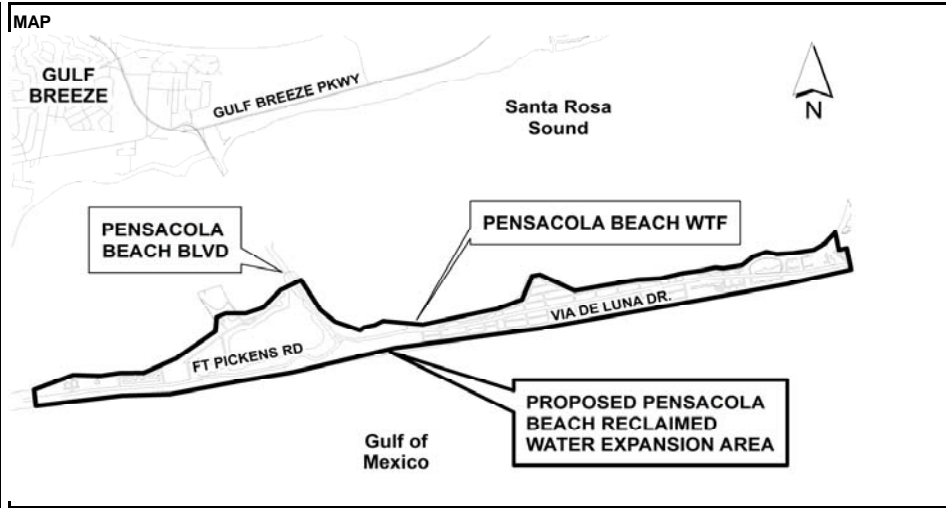
PROJECT NO: CS419A

Program: Water Reclamation

Project Title: Pensacola Beach Reclaimed &
Potable Water Transmission Mains

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING	240		3000	1000	1000	1000	6240
RENEWAL & REPLACEMENT							
TOTAL	240		3000	1000	1000	1000	6240

ESTIMATED PROJECT COSTS	MAP
1/28/13	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	6240000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$6,240,000



DESCRIPTION:

As part of the Pensacola Beach Reclaimed Water System Master Plan, new reclaimed water transmission mains are proposed. One reclaimed water main will extend from the treatment plant to the new reclaimed water ground storage tank located directly south of the existing potable tanks on Pensacola Beach. The other reclaimed water main will extend from the tank back out into the distribution system and extend along Via de Luna before connecting to the existing SRIA 12" reclaimed water transmission main in the median of Via de Luna, just past the treatment plant. This transmission main will act as the first distribution main in the reclaimed system that would allow for large commercial users to tie-into. Plans are under design by BDI and grant funding is being pursued. In an effort to save on construction costs the redundant potable water transmission main that was originally proposed under a separate project is being added to the scope of work this project. This is because of the sensitivity of the construction area and the amount of effort that it will take to construct these facilities within the beach ROW.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

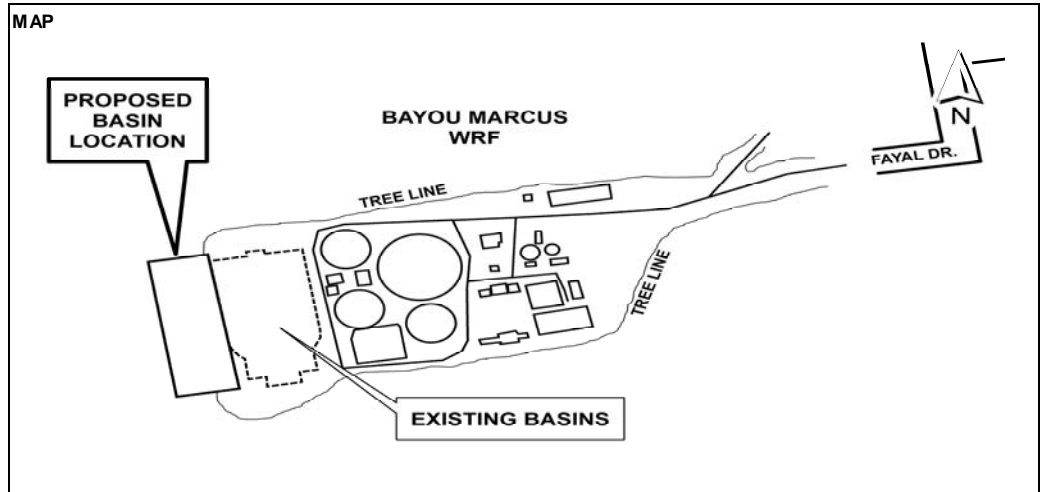
PROJECT NO: CS880

Program: Water Reclamation

Project Title: Bayou Marcus Basin Addition

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING	100		600	10000			10700
RENEWAL & REPLACEMENT							
TOTAL	100		600	10000			10700

ESTIMATED PROJECT COSTS	
4/1/2019	
ENV. ASSESS	
ENGINEERING	700,000
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	10,000,000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$10,700,000



DESCRIPTION:

This project provides for the design, permitting and construction of upgrades to the Bayou Marcus Water Reclamation Facility. Flows have been increasing and are expected to continue with growth. This project will expand the capacity from 8.2 mgd to 11.4 mgd, but does not include additional effluent disposal that will be needed. It includes a new BNR basin, filter addition, effluent pumping, increased reject storage and ancillary components such as piping, electrical, and instrumentation. The last increase was completed in the 1990s. The first phase includes preliminary design necessary to start the environmental permitting process for expansion into the wetlands and wetland delineation and environmental impacts.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CS881

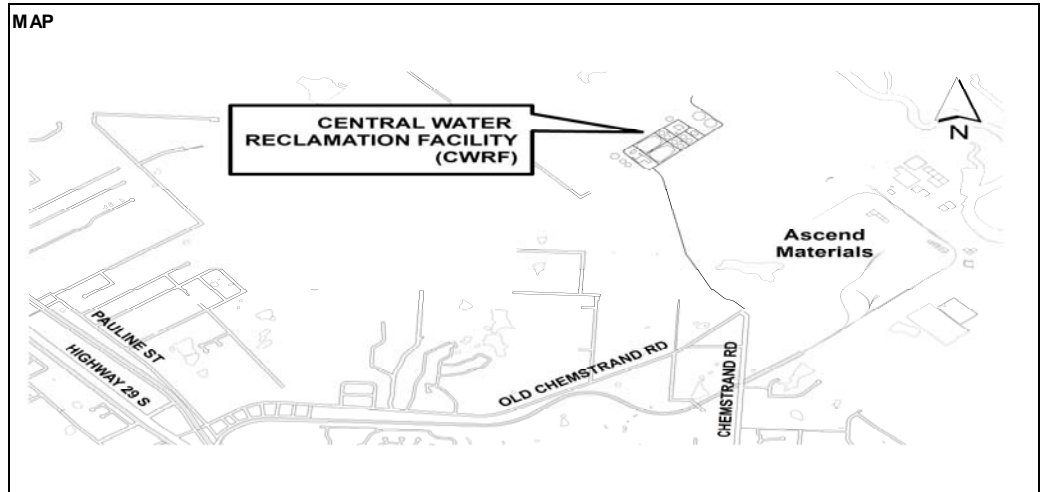
Program: Water Reclamation

Project Title: CWRf Effluent Disposal

Capacity Investigation

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING	100	50					150
RENEWAL & REPLACEMENT							
TOTAL	100	50					150

ESTIMATED PROJECT COSTS	
2/13/2019	
ENV. ASSESS	
ENGINEERING	150,000
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$150,000



DESCRIPTION:

The CWRf has limited options available for effluent disposal. Gulf Power and International Paper are the major users of reclaimed water and are subject to extended outages. The first phase on the project is a study to determine cost estimates for various options to expand reclaimed water disposal options. These options would include Aquifer Storage and Recovery, deep well injections, constructed wetlands, and limited wet weather discharge.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CS

Program: Water Reclamation

Project Title: CWRW Effluent Equalization Tank

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING			2250				2250
RENEWAL & REPLACEMENT							
TOTAL			2250				2250

ESTIMATED PROJECT COSTS	MAP
2/10/2015	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	

<p>DESCRIPTION:</p> <p>When the influent equalization tank was built a connection for an additional tank was made and room for the tank was planned. During high flow events the influent EQ tank has filled on several occasions and additional storage is needed. This project involves building a new 3 million gallon tank at the CWRW to be used for influent equalization.</p>



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CS

Program: Water Reclamation

Project Title: PB Storm Hardening

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING			300				300
RENEWAL & REPLACEMENT							
TOTAL			300				300

ESTIMATED PROJECT COSTS		MAP
2/14/2014		
ENV. ASSESS		
ENGINEERING	25000	
SURVEY		
INSPECTION		
TESTING		
CONSTRUCTION	275000	
EQUIPMENT		
MATERIAL		
FURNISHING		
LAND		
MISCELLANEOUS		
INDIRECT		
TOTAL	\$300,000	

DESCRIPTION:

The Pensacola Beach Wastewater Treatment Plant has some structures that open with grates near the ground level. Flooding in the area due to storm surge can cause some flooding in the plant once these structures are flooded. This flooding begins at approximately 4.7 feet. It should be noted that much of Santa Rosa Islands has flooded at this point, including the buildings around the treatment plant. This project would involve raising the sides of the influent pump station, the headworks and potentially raising the diesel tanks, generators and effluent structures.



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**WATER RECLAMATION
RENEWAL & REPLACEMENTS PROJECTS
FISCAL YEARS 2020-2024**
(in 000's)

PROJECT NUMBER	PROJECT TITLE	PRIOR YEARS	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	5 YR TOTAL REQUIREMENT	PROJECT TOTAL
RS234	Bayou Marcus Disinfection Modification Upgrade	\$2,150						\$0	\$2,150
RS332	Bayou Marcus Broadwalk Effluent Pipe Repair	1,544		100				100	1,644
RS732	CWRF Troughs & Chlorine Chamber Coating Rpr	800	150					150	950
RS882	Bayou Marcus Clarifier Coating Repairs	300						0	300
TOTALS		\$4,794	\$150					\$250	\$5,044

PRIOR YEARS	<u>4,794</u>
5 YR PROJECTION	<u>\$250</u>



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RS234

Program: Water Reclamation

Project Title: Bayou Marcus Disinfection

Modifications/Upgrade

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	2150						2150
TOTAL	2150						2150

ESTIMATED PROJECT COSTS		MAP
2/10/2014		
ENV. ASSESS		
ENGINEERING	125000	
SURVEY	5000	
INSPECTION	40000	
TESTING		
CONSTRUCTION	1430000	
EQUIPMENT	550000	
MATERIAL		
FURNISHING		
LAND		
MISCELLANEOUS		
INDIRECT		
TOTAL	\$2,150,000	

Map showing the location of the Bayou Marcus Treatment Plant. The plant is situated near the intersection of Breckenridge Rd and Muldoon Rd. Other nearby streets include Valdez St, Faval Dr, N Blue Angel Pkwy, Red Bean Dr, Creole Way, Lenoir Ct, Mesquite Dr, and Kennedy Dr. Cayenne Way is also shown as a curved street.

DESCRIPTION:
<p>The effluent from the Bayou Marcus WRF is currently disinfected utilizing an ultraviolet (UV) system that is over 15 years old. We have been notified by the manufacturer that they will be discontinuing support for the existing equipment in the next few years. This project involves removing the old UV system and installing a newer more energy efficient system, that would be sized for future increase in permitted capacity.</p>



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RS332

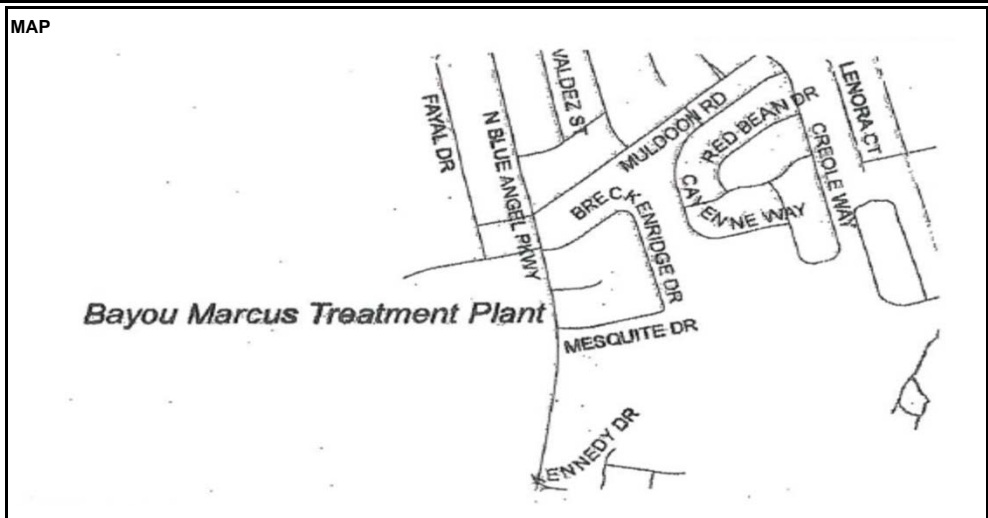
Program: Water Reclamation

Project Title: Bayou Marcus Boardwalk

Effluent Pipe Repair

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	1544		100				1644
TOTAL	1544		100				1644

ESTIMATED PROJECT COSTS	
1/31/08	
ENV. ASSESS	
ENGINEERING	50000
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	1144000
EQUIPMENT	
MATERIAL	450000
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$1,644,000



DESCRIPTION:

The existing boardwalk was designed in 1997 by Carlan Killan Consulting Group and maintained by ECUA. The boardwalk is approximately 7740' long x 8' wide and is constructed of southern pressure treated white pine with a structural life of 15 years at most. The boardwalk serves as a nature trail and provides a means for treated effluent to be discharged back into the natural ecosystem. The boardwalk has been maintained over the years by replacing boards as they fail. The piecemeal effort is unable to keep up with the rapidly aging structure. Based on the analysis conducted by HMM on the condition of the boardwalk and the decaying condition of the handrail and distribution piping, several repair methods were reviewed and the most cost effective option to properly repair the boardwalk and provide structural reinforcement to the distribution piping was to use Brazilian hardwood (60 year life span) deck planks with a HDPE effluent pipe system including an auxiliary aluminum tray support system as the optimal configuration for construction. This would remove the weight of the distribution from the hand rail system and transfer it to the columns supporting the boardwalk. The report is available for review.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

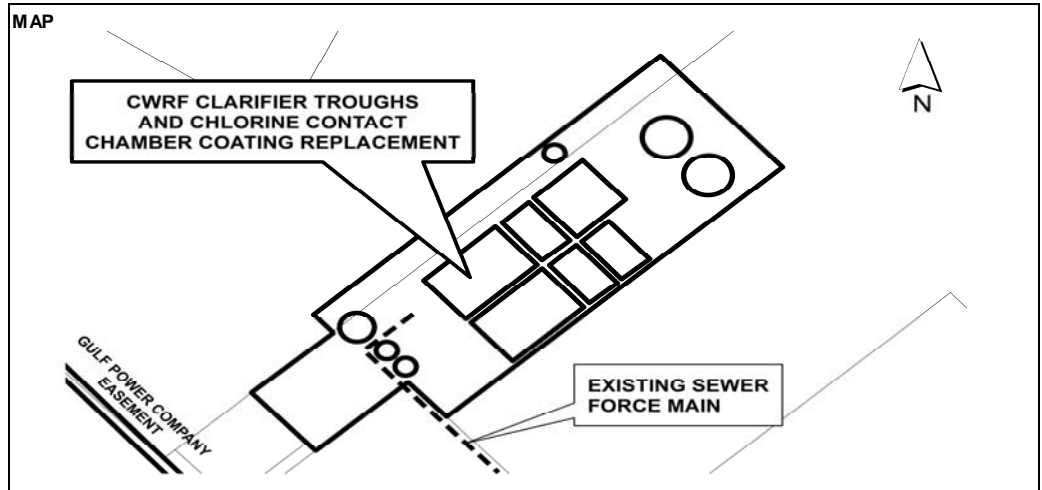
PROJECT NO: RS732

Program: Water Reclamation

Project Title: CWRf Clarifier Troughs and Chlorine
Contact Chamber Coating Repl.

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	800	150					950
TOTAL	800	150					950

ESTIMATED PROJECT COSTS	
2/13/2019	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	475,000
EQUIPMENT	
MATERIAL	475,000
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$950,000



DESCRIPTION:

The CWRf clarifier troughs and the chlorine contact chambers coating system are failing and delaminating exposing the concrete within these structures and causing degradation. Additionally, as the coatings fail, the pieces of the coating system are washed down stream into the tertiary filters causing extensive damage to the filter media in the filters and can cause filter down time and can lead to the plant being forced to reject its effluent due to tears in the filter media. The repairs have become critical because as monthly cleanings are performed, more and more of the coating systems delaminate and accelerate the need to address the issue. Repairs to the clarifiers and the contact chamber can be done on an individual basis and avoid an impact to the plants operational capabilities while the work is performed.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RS882

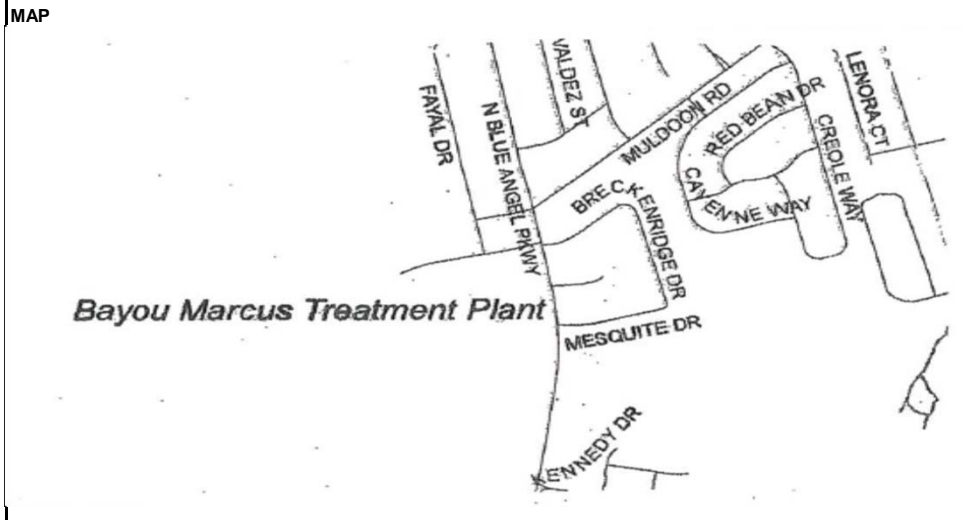
Program: Water Reclamation

Project Title: Bayou Marcus Clarifier

Coating Repairs

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	300						300
TOTAL	300						300

ESTIMATED PROJECT COSTS	MAP
1/30/2017	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	300000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$300,000



DESCRIPTION:

The Bayou Marcus clarifier troughs and clarifier basin coating system have begun to delaminate exposing the concrete aggregate within these structures and causing degradation. Additionally, as the weirs and troughs are regularly cleaned, the coating system is repeatedly being abraded. The coating system has been in place since 2006. The repairs are now required to cover the exposed aggregate and properly protect the concrete structure beneath before its structural rebar becomes exposed. Repairs to the two clarifiers can be done on an individual basis and avoid an impact to the plants operational capabilities while the work is performed.



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Wastewater Collection





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**WASTEWATER COLLECTION
CAPITAL IMPROVEMENT PROJECTS
FISCAL YEARS 2020-2024**
(in 000's)

PROJECT NUMBER	PROJECT TITLE	PRIOR YEARS	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	5 YR TOTAL REQUIREMENT	PROJECT TOTAL
CS039	Gravity Sewer Relief			\$200	\$200			\$400	\$400
CS041	Lincoln Park Force Main Replacement				100	400		500	500
CS129	Cantonment Trunk Force Main Upgrade	1,550							1,550
CS132	Beach Haven Sewer Expansion Northeast Zone Phase II			2,000				2,000	2,000
CS135	Beach Haven South Zone					3,000		3,000	3,000
CS138	West Gulf Beach Hwy. Gravity Sewer (Area 7)					2,400		2,400	2,400
CS317	Sewer Expansion	3,257		3,500	3,000	3,000	3,000	12,500	15,757
CS317Y	Brownsville Sewer Expansion			1,500	1,500	1,500		4,500	4,500
CS317Z	Navy Point Gravity Sewer Ph IV			3,250				3,250	3,250
CS318	Non-Gravity Sewer Connection Assistance	310			25			25	335
CS318D	Beach Haven Northeast Sewer Expansion Ph. II	4,273							4,273
CS318P	South Brownsville Sewer Expansion	685		500	500			1,000	1,685
CS318U	Navy Point Phase IV Sewer Expansion		3,250					3,250	3,250
CS318V	Airway/Stockdale Sewer Exp		1,000	3,000				4,000	4,000
CS415	CWRF Transmission Main Interruption Plan (TMIRP)	760							760
CS423A	Odor Control Scrubbers	397		300	300	300	300	1,200	1,597
CS514C	Generators	338	300					300	638
CS515	Stonebrook Drive Sewer Expansion			440				440	440
CS516	Brooklyn Street Sewer Expansion				850			850	850
CS518	Perdido Key Gravity Sewer System-Master Plan			2,750				2,750	2,750
CS519	Central County Sewer Collection System Expansion				2,800			2,800	2,800
CS525	Lift Station #14 Force Main Reroute to CWRF	1,000				1,500		1,500	2,500
CS810	Brook Hollow Lift Station and Force Main Replacement					1,000		1,000	1,000
CS811	Village Oaks Sewer Bypass			200				200	200
CS822	CWRF Sludge Loading Protection	125		175				175	300
CS	Atwood Sewer Expansion			1,200	1,000	1,000	1,000	4,200	4,200
CS	Englewood Sewer Expansion			1,000	1,000	1,000	1,000	4,000	4,000
CS	Ensley Sewer Expansion			2,000	2,000	2,000	2,000	8,000	8,000
CS	Holsberry Sewer Expansion			2,500				2,500	2,500
CS	River Gardens Sewer Expansion			400				400	400
CS	Cost Sharing w/County Sewer Expansion			250				250	250
TOTALS		\$12,695	\$4,550	\$25,165	\$13,275	\$17,100	\$7,300	\$67,390	80,085

LESS PRIOR YEARS 12,695
5 YR PROJECTION **\$67,390**

**WASTEWATER COLLECTION
RENEWAL & REPLACEMENT PROJECTS
FISCAL YEARS 2020-2024
(in 000's)**

PROJECT NUMBER	PROJECT TITLE	PRIOR YEARS	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	5 YR TOTAL REQUIREMENT	PROJECT TOTAL
RI700	Inflow & Infiltration (I & I)	\$23,496	\$8,000	\$8,000	\$8,000	\$8,000		\$32,000	\$55,496
RS008X	Pump Repair & Replacement	644	200	250	200	300	300	1,250	1,894
RS121	Lift Station Replacement and Upgrade	9,237	1,000	6,000	6,000	6,000		19,000	28,237
RS121A	Graveyard L/S # 58 Upgrade	1,368							1,368
RS121H	L/S # 118 Replacement	584							584
RS121R	L/S # 13 Abandonment -L/S #56 Upgrade	123		840				840	963
RS121S	Charbar L/S #107 Upgrade	243							243
RS121W	L/S # 96 (Lake Estelle) Upgrade	103		700				700	803
RS121X	L/S # 220 (Bayou Grande West) Upgrade	15							15
RS121Y	L/S # 50 Replacement (Detroit) (L/S, FM and Gravity Mains	25		3,700				3,700	3,725
RS121Z	L/S # 307 Pinebrook Replacement	645			80			80	725
RS220	L/S # 120 Patton Dr. Force Main and L/S Replacement	1,000		815				815	1,815
RS307	L/S # 6 (Industries) Demolition Removal	1,000		1,800				1,800	2,800
RS332	Bayou Marcus Boardwalk Maintenance	1,554		200				200	1,754
RS420	Sherwood Force Main Rehabilitation			300				300	300
RS423D	Air Release Valve Renewal & Replacement	712		50	50	50	50	200	912
RS425	Bayou Marcus Generator Improvements	300							300
RS427	E. Baars St. Gravity Sewer Replacement			225				225	225
RS428	Miscellaneous Lift Station Abandonment			250	250	250	250	1,000	1,000
RS511I	Pensacola Beach PM Painting and Tank Rehabilitation	550							550
RS529	Carriage Hills Sewer System Rehabilitation			500				500	500
RS630	CWRF Reuse Pump Capacity Upgrade	590		150				150	740
RS638	Mackey Key Sewer Upgrade	200							200
RS728J	Lift Station Mechanical Needs	629		250	250	250		750	1,379
RS731	PCB Plant #2 Lift Station Replacement	800		50				50	850
RS732	CWRF Clarifier and Chlorine Contact Chamber Coatings	500		150				150	650
RS822	L/S # 37 Rhett Road Replacement	700							700
RS849	Lift Station Codes and Standards Upgrade	1,435							1,435
RS880	Detroit Blvd. Force Main	600							600
RS881	Pipeline Road L/S Valve Improvements	550							550
RS883	PB WWTP Influent Piping Repairs	300							300
RS886	Government Regional Pump Upgrades	1,000							1,000
RS934	Pine Forest Force Main Upgrade						275	275	275
RS936	Montclair Force Main Upgrade (Main Street Side)					1,600		1,600	1,600
RS951	Carpenters Creek Trunk Sewer Rehabilitation			1,600	1,600			3,200	3,200
RS	Coastal Lift Station Flood Prevention			300				300	300
RS	Detroit Blvd. Sewer Capacity Improvements		750					750	750
RS	CTM Restoration at Rolling Hills			1,480				1,480	1,480
RS	Government Regional Pump L/S Painting and Rehabilitation			500				500	500
RS	L/S # 143 Well Line Rd Replacement			1,030				1,030	1,030
RS	L/S # 206 (Panferio Dr.) Replacement			85	750			835	835
RS	L/S # 207,209,and 211 Upgrade and Piping Modifications			250	2,000			2,250	2,250
RS	L/S 245, 293 and 219 Abandon-Construct New Lift Station			175	1,275			1,450	1,450
RS	W. Roberts Rd. Sewer Exp. and Abandonment of L/S # 371 & 375			100	1,000			1,100	1,100
		\$48,903	\$9,950	\$29,750	\$21,455	\$16,450	\$875	\$78,480	127,383

PRIOR YEARS
5 YR PROJECTION

48,903
\$78,480

**WASTEWATER COLLECTION
CAPITAL IMPROVEMENT PROJECTS
FISCAL YEARS 2020-2024**
(in 000's)

PROJECT NUMBER	PROJECT TITLE	PRIOR YEARS	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	5 YR TOTAL REQUIREMENT	PROJECT TOTAL
CS039	Gravity Sewer Relief			\$200	\$200			\$400	\$400
CS041	Lincoln Park Force Main Replacement				100	400		500	500
CS129	Cantonment Trunk Force Main Upgrade	1,550							1,550
CS132	Beach Haven Sewer Expansion Northeast Zone Phase II			2,000				2,000	2,000
CS135	Beach Haven South Zone					3,000		3,000	3,000
CS138	West Gulf Beach Hwy. Gravity Sewer (Area 7)					2,400		2,400	2,400
CS317	Sewer Expansion	3,257		3,500	3,000	3,000	3,000	12,500	15,757
CS317Y	Brownsville Sewer Expansion			1,500	1,500	1,500		4,500	4,500
CS317Z	Navy Point Gravity Sewer Ph IV			3,250				3,250	3,250
CS318	Non-Gravity Sewer Connection Assistance	310			25			25	335
CS318D	Beach Haven Northeast Sewer Expansion Ph. II	4,273							4,273
CS318P	South Brownsville Sewer Expansion	685		500	500			1,000	1,685
CS318U	Navy Point Phase IV Sewer Expansion		3,250					3,250	3,250
CS318V	Airway/Stockdale Sewer Exp		1,000	3,000				4,000	4,000
CS415	CWRF Transmission Main Interruption Plan (TMIRP)	760							760
CS423A	Odor Control Scrubbers	397		300	300	300	300	1,200	1,597
CS514C	Generators	338	300					300	638
CS515	Stonebrook Drive Sewer Expansion			440				440	440
CS516	Brooklyn Street Sewer Expansion				850			850	850
CS518	Perdido Key Gravity Sewer System-Master Plan			2,750				2,750	2,750
CS519	Central County Sewer Collection System Expansion				2,800			2,800	2,800
CS525	Lift Station #14 Force Main Reroute to CWRF	1,000				1,500		1,500	2,500
CS810	Brook Hollow Lift Station and Force Main Replacement					1,000		1,000	1,000
CS811	Village Oaks Sewer Bypass			200				200	200
CS822	CWRF Sludge Loading Protection	125		175				175	300
CS	Atwood Sewer Expansion			1,200	1,000	1,000	1,000	4,200	4,200
CS	Englewood Sewer Expansion			1,000	1,000	1,000	1,000	4,000	4,000
CS	Ensley Sewer Expansion			2,000	2,000	2,000	2,000	8,000	8,000
CS	Holsberry Sewer Expansion			2,500				2,500	2,500
CS	River Gardens Sewer Expansion			400				400	400
CS	Cost Sharing w/County Sewer Expansion			250				250	250
TOTALS		\$12,695	\$4,550	\$25,165	\$13,275	\$17,100	\$7,300	\$67,390	80,085

LESS PRIOR YEARS 12,695
5 YR PROJECTION **\$67,390**



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CS039

Program: Wastewater Collection

Project Title: Gravity Sewer Relief

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING			200	200			400
RENEWAL & REPLACEMENT							
TOTAL			200	200			400

ESTIMATED PROJECT COSTS	MAP
1/16/2016	VARIOUS LOCATIONS
ENV. ASSESS	
ENGINEERING 40000	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION 360000	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL \$400,000	

DESCRIPTION:
Gravity sewer mains which exhibit capacity limitations such as surcharging or high infiltration or inflow are identified through routine operation and maintenance activities. As required, specific projects will be brought to the Board. This program will remain flexible to respond to changing development patterns.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CS041

Program: Wastewater Collection

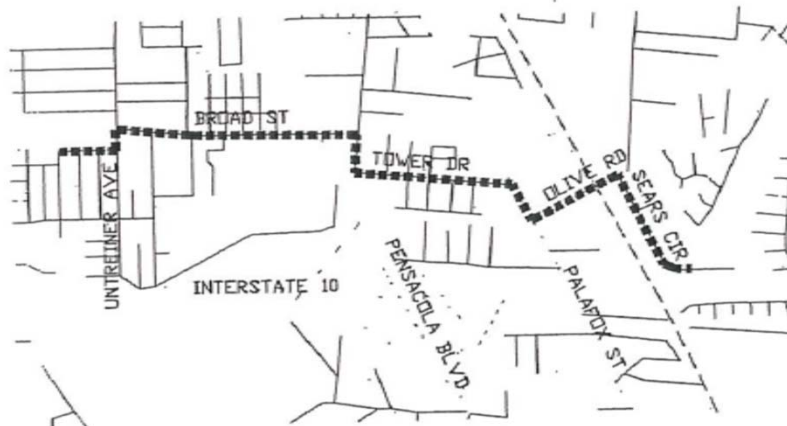
Project Title: Lincoln Park Force Main

Replacement

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING			100	1400			1500
RENEWAL & REPLACEMENT							
TOTAL			100	1400			1500

ESTIMATED PROJECT COSTS		MAP
1/9/2015		
ENV. ASSESS		
ENGINEERING	100000	
SURVEY	50000	
INSPECTION		
TESTING		
CONSTRUCTION	1350000	
EQUIPMENT		
MATERIAL		
FURNISHING		
LAND		
MISCELLANEOUS		
INDIRECT		
TOTAL	\$1,500,000	

MAP



DESCRIPTION:

The existing 10" ductile iron force main from the Lincoln Park lift station (No. 10), which runs under U.S. 29 and Olive Road, has been in service for approximately 30 years. At present, over 400,000 gallons of sewage passes through the 10" ductile iron force main each day. The line is a safety concern because hydrogen sulfide gas is damaging the existing ductile iron pipe and it has been repaired numerous times over the years. This project will consist of installing over 12,000 L. F. of new 10" force main-by various methods including direct bury, pipe bursting, jack and bore (for crossing railroad tracks at U. S. Hwy. 29), etc.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CS129

Program: Wastewater Collection

Project Title: Cantonment Trunk Force Main
Upgrade

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING	1550						1550
RENEWAL & REPLACEMENT							
TOTAL	1550						1550

ESTIMATED PROJECT COSTS	
1/30/2008	
ENV. ASSESS	
ENGINEERING	90000
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	1450000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	10000
MISCELLANEOUS	
INDIRECT	
TOTAL	\$1,550,000

MAP

DESCRIPTION:

This project is the upgrade of a 6-inch and 8-inch diameter force main serving multiple lift stations in the Cantonment area. This project will construct approximately 6,400 linear feet of 16-inch to 20-inch diameter PVC force main and 3,600 linear feet of 12-inch diameter PVC force main that will be used as a trunk sewage collection line which routes wastewater to the existing wastewater system south of Muscogee Road. Construction is planned to be completed in advance of the replacement of the Well Line Road lift station (LS143) that has a history of chronic sanitary sewer spills.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CS132

Program: Wastewater Collection

Project Title: North Gulf Beach Hwy. - West

Gravity Sewer (Area 2)

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING			2000				2000
RENEWAL & REPLACEMENT							
TOTAL			2000				2000

ESTIMATED PROJECT COSTS	MAP
1/16/2016	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	

<p>DESCRIPTION:</p> <p>Provide gravity sewer service to approximately 150 homes in the western area of Gulf Beach Hwy. Specifically, the work limits are Fairfield Drive (to the west), Gulf Beach Hwy (to the south), Colbert Ave. (to the east), and Cravatt St. (to the north).</p>



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

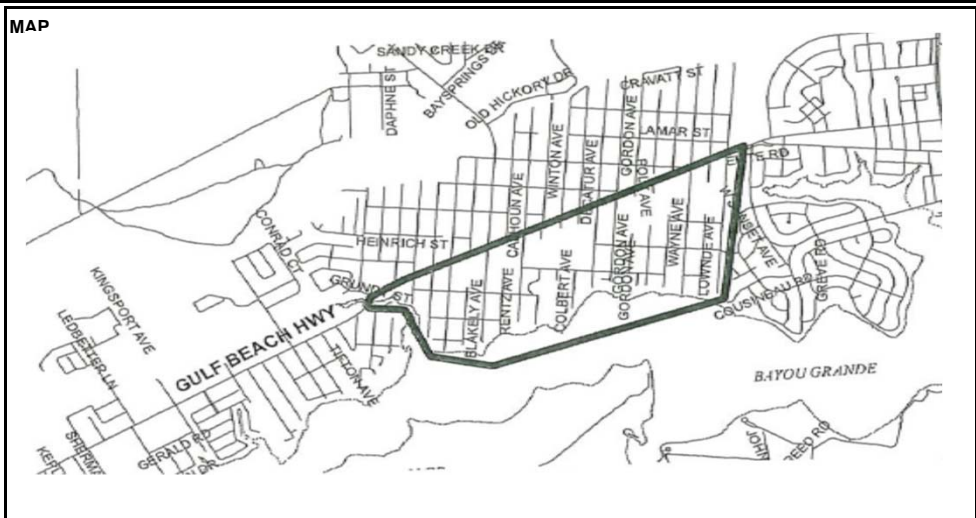
PROJECT NO: CS135

Program: Wastewater Collection

Project Title: Beach Haven-South Zone

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING					3000		3000
RENEWAL & REPLACEMENT							
TOTAL					3000		3000

ESTIMATED PROJECT COSTS	
1/16/2016	
ENV. ASSESS	
ENGINEERING	200000
SURVEY	100000
INSPECTION	
TESTING	
CONSTRUCTION	2700000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$3,000,000



DESCRIPTION:

Provide gravity sewer service to approximately 150 homes in the area west of Navy Point. This area is immediately adjacent and upgradient of Bayou Grande and contingent wetlands. It is possible that this may be done in conjunction with an Escambia County paving and drainage project. The current project is in design for Beach Haven area North of Gulf Beach Hwy. and East of Fairfield to Mills Ave. as a joint County drainage and gravity sewer project. This area could be part of Beach Haven south of Gulf Beach Highway. The needed lift station for this area is planned to be constructed in the Navy Point Phase IV project



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CS138

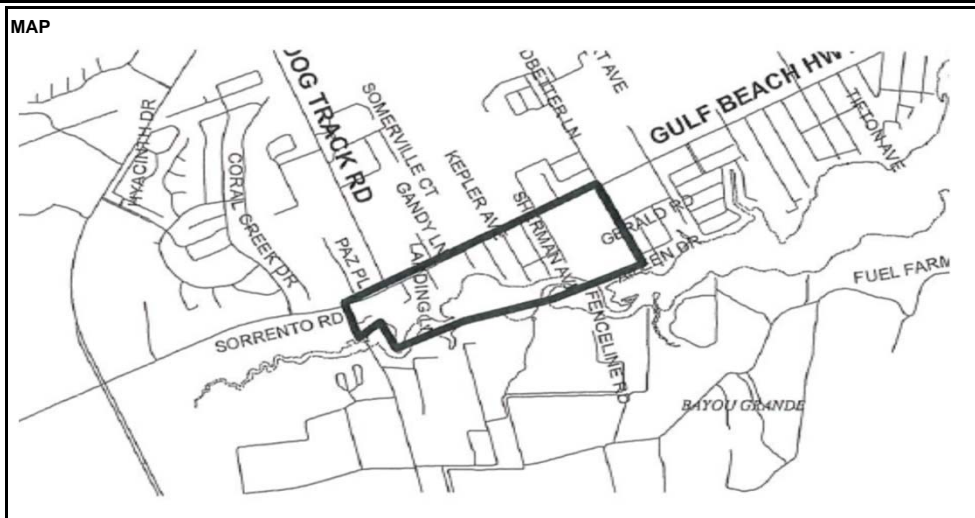
Program: Wastewater Collection

Project Title: West Gulf Beach Hwy. Gravity

Sewer (Area 7)

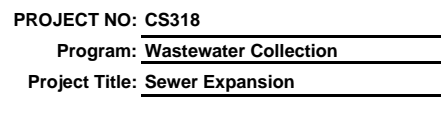
FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING					2400		2400
RENEWAL & REPLACEMENT							
TOTAL					2400		2400

ESTIMATED PROJECT COSTS	
1/16/2016	
ENV. ASSESS	
ENGINEERING	150000
SURVEY	50000
INSPECTION	
TESTING	#REF!
CONSTRUCTION	2200000
EQUIPMENT	
MATERIAL	
FURNISHING	#REF!
LAND	
MISCELLANEOUS	
INDIRECT	#REF!
TOTAL	#REF!



DESCRIPTION:

Provide gravity sewer service to approximately 140 homes in the area on the west end of Gulf Beach Hwy. This area is immediately adjacent and upgradient of Bayou Grande, west of Kingsport Ave.



DESCRIPTION:
<p>ECUA's Sewer Expansion Program is focused primarily on eliminating existing septic tanks which may be negatively impacting local surface waters (creeks, bayous, etc.) causing public health concerns, or impacting potable water sources. ECUA's Septic Tank Abatement Program is aimed at preventing the proliferation of new septic tanks especially in the southern portion of Escambia County. New development south of Well Line Road is required to connect to the ECUA sewer system subject to certain financial limitations. The project is intended to provide funding to address the needs of these two programs. Many neighborhoods currently service by septic tanks have been identified and will be considered for sewer expansions as funds become available.</p>



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CS317Y

Program: Wastewater Collection

Project Title: Brownsville Sewer Expansion

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING			1500	1500	1500		4500
RENEWAL & REPLACEMENT							
TOTAL			1500	1500	1500		4500

ESTIMATED PROJECT COSTS	
2/11/16	
ENV. ASSESS	
ENGINEERING	
SURVEY	400000
INSPECTION	
TESTING	
CONSTRUCTION	3600000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$4,000,000

MAP

DESCRIPTION:

The area of Brownsville does not have an ECUA gravity sewer system constructed. All residents are currently on septic tanks for sewer needs. The project will consist of the construction of new gravity sewer mains to accommodate the residents of Brownsville currently without ECUA sewer service. This project is planned to be constructed with funding participation from Escambia County.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CS318U

Program: Wastewater Collection

Project Title: Navy Point Gravity Sewer

Phase IV

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING		3250					3250
RENEWAL & REPLACEMENT							
TOTAL		3250					3250

ESTIMATED PROJECT COSTS		MAP
1/16/2016		
ENV. ASSESS		
ENGINEERING	180000	
SURVEY		
INSPECTION		
TESTING		
CONSTRUCTION	3070000	
EQUIPMENT		
MATERIAL		
FURNISHING		
LAND		
MISCELLANEOUS		
INDIRECT		
TOTAL	\$3,250,000	

DESCRIPTION:
<p>The proposed project will provide sewer service to approximately 180 homes in the Navy Point area. The construction of sewer in Navy Point was planned in phases. Phase I was completed in 2006. Phase 2A was completed in 2007 and Phase 2B was completed in 2012. Phase 3 was completed in 2016. The area designated Phase 4 (shown above) is immediately adjacent to Phases 1 and 3. A new ECUA lift station will be required. The lift station and collection system will be designed to serve future customers to the west (Beach Haven).</p>



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CS318

Program: Wastewater Collection

Project Title: Non-Gravity Sewer Connection
Assistance

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING	310			25			335
RENEWAL & REPLACEMENT							
TOTAL	310			25			335

ESTIMATED PROJECT COSTS	MAP
1/16/2016	SYSTEM WIDE
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION 335000	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL \$335,000	

<p>DESCRIPTION:</p> <p>In an area where a customer is abandoning an active septic tank and connecting a force main, ECUA will consider participating in the cost of the grinder pump station. This will include the wet well, pumps, controls, etc., but not the installation costs. Limit of cost sharing is \$1,500.00 per installation.</p>



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CS318D

Program: Wastewater Collection

Project Title: Beach Haven Sewer Expansion
Northeast Zone-Phase II

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING	4273						4273
RENEWAL & REPLACEMENT							
TOTAL	4273						4273

ESTIMATED PROJECT COSTS		MAP
2/16/2018		
ENV. ASSESS		
ENGINEERING	400000	
SURVEY		
INSPECTION		
TESTING		
CONSTRUCTION	3873000	
EQUIPMENT		
MATERIAL		
FURNISHING		
LAND		
MISCELLANEOUS		
INDIRECT		
TOTAL	\$4,273,000	



DESCRIPTION:

Provide gravity sewer service to homes in the eastern area of Gulf Beach Hwy. It is anticipated that an Escambia County drainage/paving project will be implemented in 2013-2018. Project design and plan development began in 2013 and construction is anticipated to start in 2017. Working jointly with the County would be the first phase on this project, also called "Beach Haven".

PROJECT DATA SHEET

PROJECT NO: CS318P

Program: Wastewater Collection

Project Title: South Brownsville Sewer

Expansion

Capital Improvements Program

Fiscal Years

2020-2024

	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING	685		500	500			1685
RENEWAL & REPLACEMENT							
TOTAL	685		500	500			1685

ESTIMATED PROJECT COSTS	
1/20/17	
ENV. ASSESS	
ENGINEERING	
SURVEY	30000
INSPECTION	
TESTING	
CONSTRUCTION	1655000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$1,685,000

MAP

DESCRIPTION:

The area of South Brownsville does not currently have an ECUA gravity sewer system constructed. All residents are currently on septic tanks for sewer needs. The project will consist of the construction of new gravity sewer mains to accommodate approximately 132 residential lots and 18 commercial. This has been proposed to be completed as a cost sharing project with Escambia County CRA.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CS318V

Program: Wastewater Collection

Project Title: Airway/Stockdale Sewer Exp.

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING		1000	3000				4000
RENEWAL & REPLACEMENT							
TOTAL		1000	3000				4000

ESTIMATED PROJECT COSTS	MAP
1/29/2018	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	

DESCRIPTION:
<p>The area to be included/addressed is primarily west of Stockdale Avenue, north of Johnson Avenue, east of Airway Drive, and south of Smiley Avenue. The area does not currently have an ECUA gravity sewer system. Required work will consist construction of new gravity sewer mains and one new regional lift station.</p>

PROJECT DATA SHEET

PROJECT NO: CS415

Program: Wastewater Collection

Capital Improvements Program

Project Title: Transmission Main Interruption

Fiscal Years

Plan (TMIRP)

2020-2024

		FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
FUNDS (000)	PRIOR YEARS						
CIP							
OPERATING	760						760
RENEWAL & REPLACEMENT							
TOTAL	760						760

ESTIMATED PROJECT COSTS	
2/12/2014	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	760000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$760,000

MAP

2/12/2014

DESCRIPTION:

This project will establish a response plan and strategy to mitigate a Sanitary Sewer Overflow (SSO) or other accidental sewage release in the event of a failure of the CWRP Transmission Main. The project entails establishing storage and alternate pumping capabilities within the wastewater collection system to allow the diversion of raw sewage away from the affected portion of the CWRP Transmission Main, for a period of time to allow repair(s). The project details would include: engineering; construction of storage; piping and pumping components; acquisition of necessary materials (piping, pipe repair, etc.); and emergency service contract(s) to conduct or assist the repairs. Also, included in the step process is the procurement of various pipes and fittings (size 16" diameter through 54" diameter) to store at ECUA for use in making emergency repairs. In addition, additions and modifications at the Warrington Facility will dictate replacement of the fuel storage and dispensing system., storm water management controls, and basic site work improvements.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CS423A

Program: Wastewater Collection

Project Title: Odor Control Scrubbers

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING	397		300	300	300	300	1597
RENEWAL & REPLACEMENT							
TOTAL	397		300	300	300	300	1597

ESTIMATED PROJECT COSTS	MAP
1/22/2015	VARIOUS LOCATIONS
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION 700,000	
EQUIPMENT 897,000	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL \$1,597,000	

DESCRIPTION:

To control odors in the collection system and at lift stations. This funding will be used for the purchase and installation of package odor control scrubbers at key locations in the collection system and at lift stations. With the changes to the collection system and diverting of flow, longer force mains due to expansion of the collection system, and population growth in close proximity to our lift stations results in greater potential for odor complaints. Chemicals can be added to control odor and corrosion. But in all cases, chemicals are only effective for brief periods controlling odors, but are much more expensive to use. In these situations, permanent scrubbers are the best practical solution.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CS514C

Program: Wastewater Collection

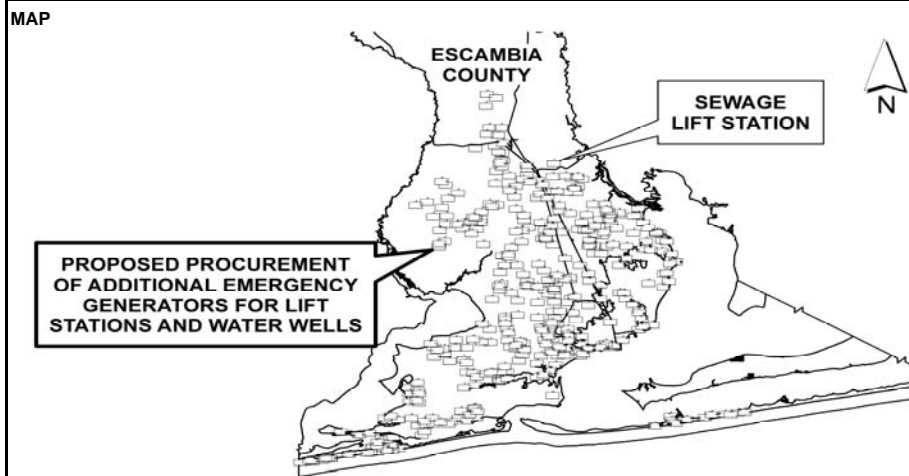
Project Title: Generators

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	338	300					638
TOTAL	338	300					638

ESTIMATED PROJECT COSTS	
2/13/2019	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	
EQUIPMENT	638,000
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$638,000

MAP

The map displays the geographical outline of Escambia County, Florida. A north arrow is positioned in the upper right corner. A callout box labeled 'SEWAGE LIFT STATION' points to a specific location on the county's coastline. Another callout box, labeled 'PROPOSED PROCUREMENT OF ADDITIONAL EMERGENCY GENERATORS FOR LIFT STATIONS AND WATER WELLS', points to a cluster of small rectangular symbols distributed across the central and western parts of the county, representing the locations of lift stations and water wells.



DESCRIPTION:

To procure additional emergency generators. Provide additional emergency backup power to sewage lift stations and water well facilities. Major storms (tropical storms, hurricanes, etc.) often cause numerous extended power outages at our sewer lift stations. Immediately following Hurricane Ivan the majority of our lift stations were without power. In some cases power wasn't restored for over a week. The purchase of additional portable generators would eliminate spills and reduce the recovery time following extended periods of power loss.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CS515

Program: Wastewater Collection

Project Title: Stonebrook Drive Sewer

Expansion

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING			440				440
RENEWAL & REPLACEMENT							
TOTAL			440				440

ESTIMATED PROJECT COSTS		MAP
1/16/2016		
ENV. ASSESS		
ENGINEERING	40000	
SURVEY		
INSPECTION		
TESTING		
CONSTRUCTION	400000	
EQUIPMENT		
MATERIAL		
FURNISHING		
LAND		
MISCELLANEOUS		
INDIRECT		
TOTAL	\$440,000	

DESCRIPTION:

The intend of this project is to expand sewer service to an area that is currently utilizing septic tanks. Many of the on-site tanks have experienced poor drainage problems. Construction of the ECUA Sanitary Sewer System will benefit both the homeowners and the environment. The sewer system is to be an 8-inch sewer placed under the existing Stonebrook Drive. Stonebrook Drive is located within the Carpenters Creek sewer expansion prioritized area.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CS516

Program: Wastewater Collection

Project Title: Brooklyn Street Sewer

Expansion

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING				850			850
RENEWAL & REPLACEMENT							
TOTAL				850			850

ESTIMATED PROJECT COSTS	
1/16/2014	
ENV. ASSESS	
ENGINEERING	50000
SURVEY	15000
INSPECTION	
TESTING	
CONSTRUCTION	785000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$850,000

MAP



DESCRIPTION:

To expand the sewer service into an area that is currently utilizing septic tanks. Complaints of poor drainage have been reported in the area. The sewer system is to be an 8-inch gravity sewer placed under existing roadways to provide sewer service to homes just south of Olive Road, adjacent to the Charter Oaks Subdivision.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CS518

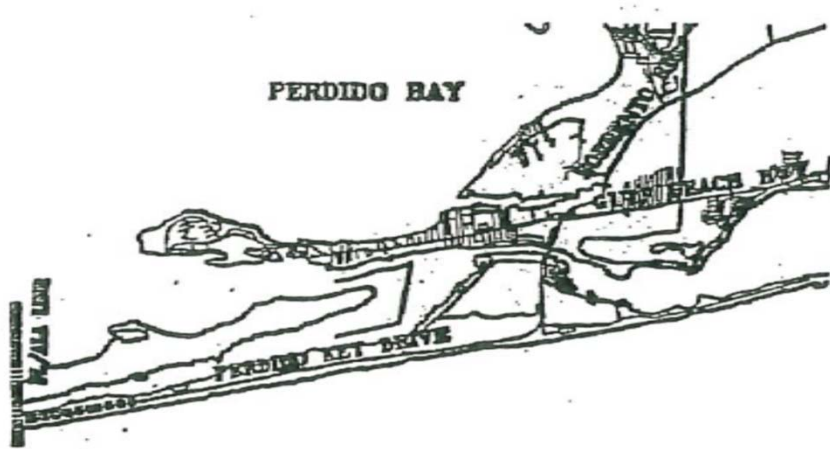
Program: Wastewater Collection

Project Title: Perdido Key Gravity Sewer
System-Master Plan

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING			2750				2750
RENEWAL & REPLACEMENT							
TOTAL			2750				2750

ESTIMATED PROJECT COSTS		MAP
1/16/2016		
ENV. ASSESS		
ENGINEERING	200000	
SURVEY	50000	
INSPECTION		
TESTING		
CONSTRUCTION	2500000	
EQUIPMENT		
MATERIAL		
FURNISHING		
LAND		
MISCELLANEOUS		
INDIRECT		
TOTAL	\$2,750,000	

MAP



DESCRIPTION:

This project is a recommendation from the Southeast Escambia County/Perdido Key Force Main system study to meet future system demands through year 2021. Project master planning may be required.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CS519

Program: Wastewater Collection

Project Title: Central County Sewer Collection
System Expansion

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING				2800			2800
RENEWAL & REPLACEMENT							
TOTAL				2800			2800

ESTIMATED PROJECT COSTS	MAP
1/16/2016	SYSTEM WIDE
ENV. ASSESS	
ENGINEERING 300000	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION 2500000	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL \$2,800,000	

DESCRIPTION:
ECUA plans to construct new wastewater treatment facilities in central Escambia County in anticipation of future growth. Extension of the collection system is necessary to provide a means of connection for new subdivisions and commercial developments.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

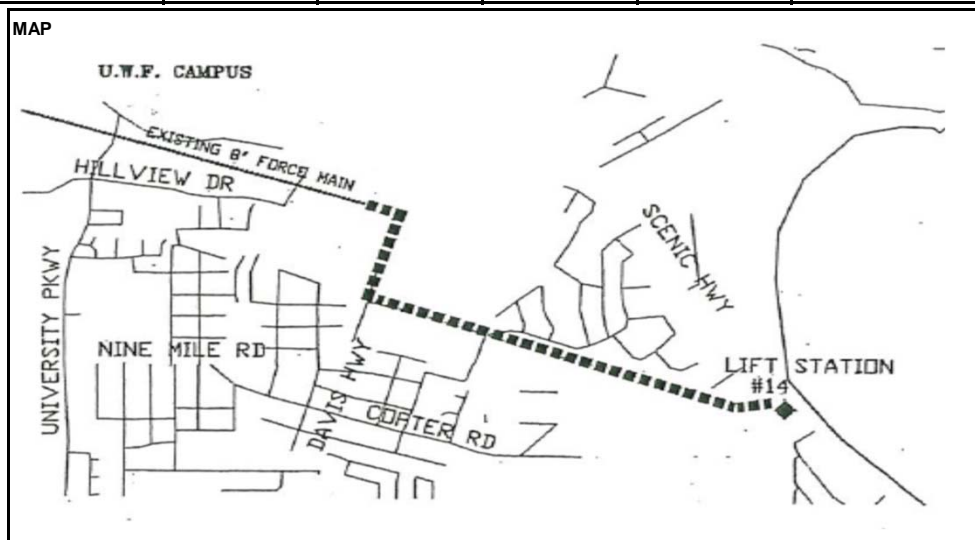
PROJECT NO: CS525

Program: Wastewater Collection

Project Title: L/S # 14 Force Main Reroute
to CWRP

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING	1000				1500		2500
RENEWAL & REPLACEMENT							
TOTAL	1000				1500		2500

ESTIMATED PROJECT COSTS	
1/16/2016	
ENV. ASSESS	
ENGINEERING	100000
SURVEY	50000
INSPECTION	
TESTING	
CONSTRUCTION	2350000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$2,500,000



DESCRIPTION:

This project will consist of approximately 9000' of new 16" force main from lift station #14 up Addison Dr. to Denton Rd., across Nine Mile and Davis Hwy. and connecting with the existing 8" force main on the UWF campus. The new force main will provide a direct connection through lift station # 11 on Greenbrier Rd. to the northern transmission main at Pate Dr. The upgrade of the 8' force main to a 16" is anticipated.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CS810

Program: Wastewater Collection

Project Title: Brook Hollow Lift Station and
Force Main Replacement

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING					1000		1000
RENEWAL & REPLACEMENT							
TOTAL					1000		1000

ESTIMATED PROJECT COSTS	MAP
1/16/2016	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	

DESCRIPTION:

The Brook Hollow Lift Station has reached the limit of its current capacity. New development in the area is expected to continue. One major limiting factor in accepting new flows is the capacity of the force main serving the lift station. Since the force main needs to be upgraded. It make sense to eliminate the force main and lift station by replacing the force main with gravity sewer in the same easement to a new lift station to be installed at Stefani and Greenhills Road. This is a more direct route to the Bayou Marcus Reclamation Facility, and a new lift station in this area also opens additional areas for sewer connections.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CS811

Program: Wastewater Collection

Project Title: Village Oaks Sewer Bypass

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING			200				200
RENEWAL & REPLACEMENT							
TOTAL			200				200

ESTIMATED PROJECT COSTS	
1/16/2019	
ENV. ASSESS	
ENGINEERING	15,000
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	185,000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$200,000

MAP

E. BURGESS RD

SCHUBERT DR.

N. DAVIS HWY

VILLAGE OAKS DR.

LANGLEY AVE

INTERSTATE 110

EXISTING SEWER

VILLAGE OAKS SHOPPING CENTER

DESCRIPTION:

There is an existing sewer line that was constructed as a part of Village Oaks Shopping Center. The line was constructed and in service before it was realized that it was on an out parcel to the rear of the Village Oaks property. A business was built on this property in 1996. The sewer line is within 5 feet of the building. Rerouting this sewer and abandoning the section of the out parcel will remove any maintenance problems the existing line may cause by being located so close to the building.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

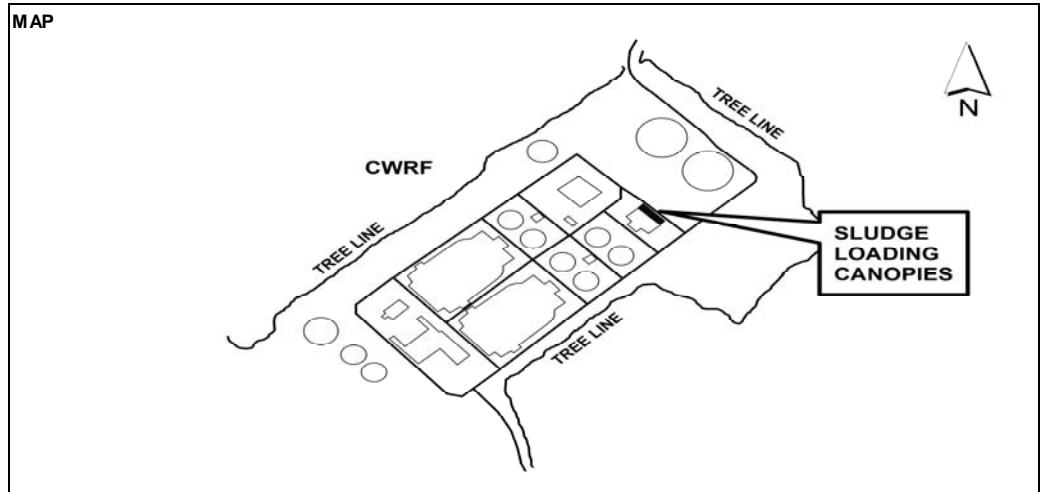
PROJECT NO: CS822

Program: Wastewater Collection

Project Title: CWRf Sludge Loading
Protection

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING	125		175				300
RENEWAL & REPLACEMENT							
TOTAL	125		175				300

ESTIMATED PROJECT COSTS	
2/22/2019	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	350,000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$350,000



DESCRIPTION:

The canopies are required to protect the sludge loading process from rain. The rain causes the sludge to become loose or sloppy and cause excessive moisture issues at composting.

* 20'-0" x 50'-0" open steel canopy structure to provide weather protection for sludge loading activities adjacent to the Biosolids Building at the CWRf. One canopy will be built for each process train (North/South) over the truck load out piping.

* 20'-0" clear height to lowest structural member on the east and west faces.

* Metal roofing.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CS

Program: Wastewater Collection

Project Title: Atwood Sewer Expansion

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING			1200	1000	1000	1000	4200
RENEWAL & REPLACEMENT							
TOTAL			1200	1000	1000	1000	4200

ESTIMATED PROJECT COSTS		MAP
1/20/17		
ENV. ASSESS		
ENGINEERING		
SURVEY	200000	
INSPECTION		
TESTING		
CONSTRUCTION	4000000	
EQUIPMENT		
MATERIAL		
FURNISHING		
LAND		
MISCELLANEOUS		
INDIRECT		
TOTAL	\$4,200,000	

DESCRIPTION:

The area of Atwood does not currently have an ECUA gravity sewer system constructed in the entire area. Many residents are currently on septic tanks for sewer needs. The project will consist of the construction of new gravity sewer mains to accommodate the residents of Atwood currently without ECUA sewer service. This project is planned to be constructed with funding participation from Escambia County.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CS

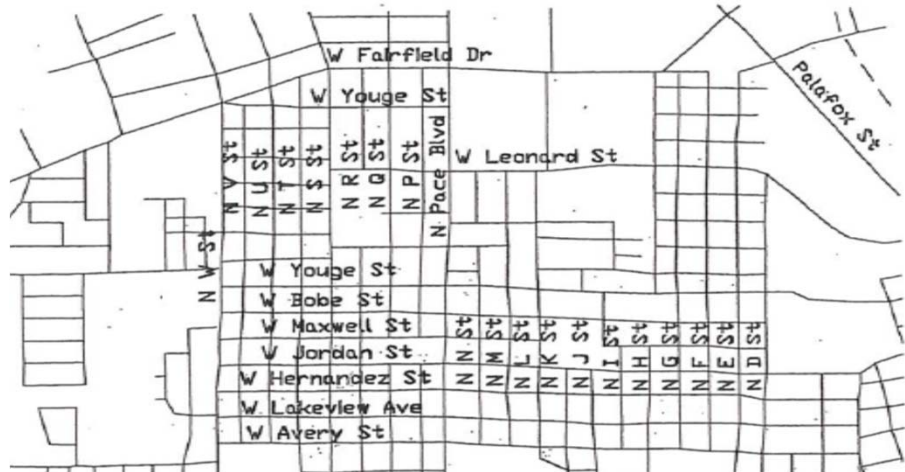
Program: Wastewater Collection

Project Title: Englewood Sewer Expansion

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING			1000	1000	1000	1000	4000
RENEWAL & REPLACEMENT							
TOTAL			1000	1000	1000	1000	4000

ESTIMATED PROJECT COSTS	
2/11/16	
ENV. ASSESS	
ENGINEERING	
SURVEY	400000
INSPECTION	
TESTING	
CONSTRUCTION	3600000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$4,000,000

MAP



DESCRIPTION:

Large portions of the Englewood CRA area do not currently have an ECUA gravity sewer system constructed. All residents are currently on septic tanks for sewer needs. The project will consist of the construction of new gravity sewer mains to accommodate the residents of Englewood currently without ECUA sewer service. This project is planned to be constructed with funding participation from Escambia County.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CS

Program: Wastewater Collection

Project Title: Ensley Sewer Expansion

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING			2000	2000	2000	2000	8000
RENEWAL & REPLACEMENT							
TOTAL			2000	2000	2000	2000	8000

ESTIMATED PROJECT COSTS	
2/16/2017	
ENV. ASSESS	
ENGINEERING	
SURVEY	500000
INSPECTION	
TESTING	
CONSTRUCTION	7500000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$8,000,000

MAP

DESCRIPTION:

The area of Ensley does not currently have an ECUA gravity sewer system constructed in the entire area. Many residents are currently on septic tanks for sewer needs. The project will consist of the construction of new gravity sewer mains to accommodate the residents of Ensley currently without ECUA sewer service. This project is planned to be constructed with funding participation from Escambia County.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CS

Program: Wastewater Collection

Project Title: Holsberry Sewer Expansion

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING			2500				2500
RENEWAL & REPLACEMENT							
TOTAL			2500				2500

ESTIMATED PROJECT COSTS		MAP
1/20/17		
ENV. ASSESS		
ENGINEERING		
SURVEY	100000	
INSPECTION		
TESTING		
CONSTRUCTION	2400000	
EQUIPMENT		
MATERIAL		
FURNISHING		
LAND		
MISCELLANEOUS		
INDIRECT		
TOTAL	\$2,500,000	

The map displays a street grid in Tulsa, Oklahoma. Key streets include Edith Ln, Strandview Dr, Craft St, Sprague Dr, Holsberry Ln, Allison Ln, E Nine Mile Rd, N Palafox St, Chandler St, Arnett St, Saletta St, Holsberry Rd, and Tulsa Dr. A proposed lift station site (50' x 50') is marked with a square and labeled. An existing county storm pond is also indicated. The map shows the intersection of major roads like Chemstrand Rd and E Nine Mile Rd.

DESCRIPTION:

The area of Holsberry does not currently have an ECUA gravity sewer system constructed in the entire area. Many residents are currently on septic tanks for sewer needs. The project will consist of the construction of new gravity sewer mains to accommodate the residents of Holsberry Rd. currently without ECUA sewer service.



PROJECT DATA SHEET

Capital Improvements Program

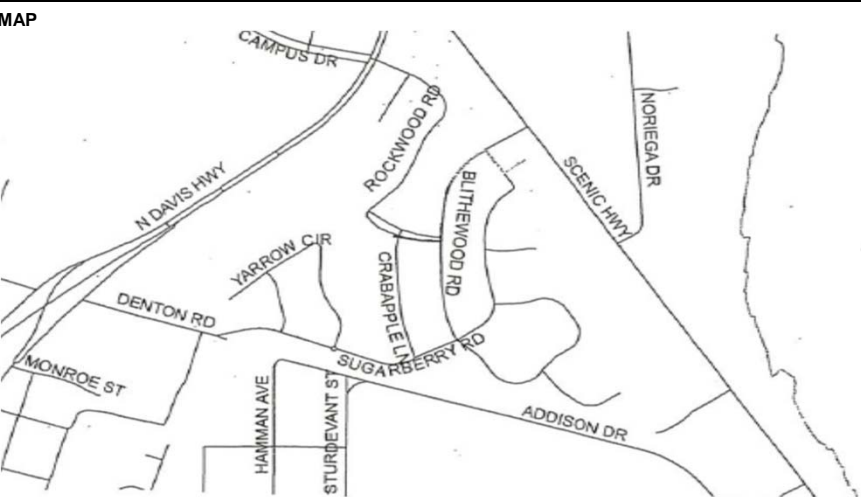
Fiscal Years
2020-2024

PROJECT NO: CS318__

Program: Wastewater Collection

Project Title: River Gardens Sewer Expansion

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING			400				400
RENEWAL & REPLACEMENT							
TOTAL			400				400

ESTIMATED PROJECT COSTS		MAP 
1/20/19		
ENV. ASSESS		
ENGINEERING		
SURVEY	25000	
INSPECTION		
TESTING		
CONSTRUCTION	375000	
EQUIPMENT		
MATERIAL		
FURNISHING		
LAND		
MISCELLANEOUS		
INDIRECT		
TOTAL	\$400,000	

DESCRIPTION:
<p>Some areas of River Gardens does not currently have an ECUA gravity sewer system constructed. Many residents are currently on septic tanks for sewer needs. The project will consist of the construction of new gravity sewer mains to accommodate the residents of River Gardens currently without ECUA sewer service. It is estimated that approximately 3,500 linear feet of 8" sanitary sewer (pvc) and 2,600 square yards of road cutting and patching would be required.</p>



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CS _____

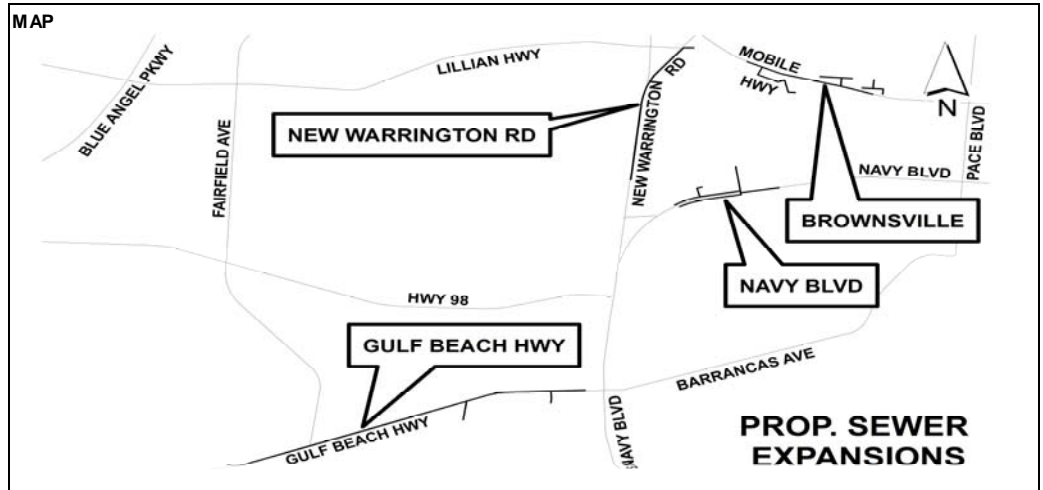
Program: Wastewater Collection

Project Title: Potential Cost Sharing with

County for Sewer Expansion

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING			250				250
RENEWAL & REPLACEMENT							
TOTAL			250				250

ESTIMATED PROJECT COSTS	
2/13/2019	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	250,000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$250,000



DESCRIPTION:

ECUA, in coordination with Escambia County, submitted an appropriations request for sewer expansion in several commercial corridors in the south region of ECUA's sanitary sewer collection system. The funding requested is for ECUA's partial match which may be required. The commercial areas that have been identified with the County's input are as follows: Navy Boulevard, Gulf Beach Highway, New Warrington, and the Brownsville area.



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**WASTEWATER COLLECTION
RENEWAL & REPLACEMENT PROJECTS
FISCAL YEARS 2020-2024
(in 000's)**

PROJECT NUMBER	PROJECT TITLE	PRIOR YEARS	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	5 YR TOTAL REQUIREMENT	PROJECT TOTAL
RI700	Inflow & Infiltration (I & I)	\$23,496	\$8,000	\$8,000	\$8,000	\$8,000		\$32,000	\$55,496
RS008X	Pump Repair & Replacement	644	200	250	200	300	300	1,250	1,894
RS121	Lift Station Replacement and Upgrade	9,237	1,000	6,000	6,000	6,000		19,000	28,237
RS121A	Graveyard L/S # 58 Upgrade	1,368							1,368
RS121H	L/S # 118 Replacement	584							584
RS121R	L/S # 13 Abandonment -L/S #56 Upgrade	123		840				840	963
RS121S	Charbar L/S #107 Upgrade	243							243
RS121W	L/S # 96 (Lake Estelle) Upgrade	103		700				700	803
RS121X	L/S # 220 (Bayou Grande West) Upgrade	15							15
RS121Y	L/S # 50 Replacement (Detroit) (L/S, FM and Gravity Mains	25		3,700				3,700	3,725
RS121Z	L/S # 307 Pinebrook Replacement	645			80			80	725
RS220	L/S # 120 Patton Dr. Force Main and L/S Replacement	1,000		815				815	1,815
RS307	L/S # 6 (Industries) Demolition Removal	1,000		1,800				1,800	2,800
RS332	Bayou Marcus Boardwalk Maintenance	1,554		200				200	1,754
RS420	Sherwood Force Main Rehabilitation			300				300	300
RS423D	Air Release Valve Renewal & Replacement	712		50	50	50	50	200	912
RS425	Bayou Marcus Generator Improvements	300							300
RS427	E. Baars St. Gravity Sewer Replacement			225				225	225
RS428	Miscellaneous Lift Station Abandonment			250	250	250	250	1,000	1,000
RS511I	Pensacola Beach PM Painting and Tank Rehabilitation	550							550
RS529	Carriage Hills Sewer System Rehabilitation			500				500	500
RS630	CWRF Reuse Pump Capacity Upgrade	590		150				150	740
RS638	Mackey Key Sewer Upgrade	200							200
RS728J	Lift Station Mechanical Needs	629		250	250	250		750	1,379
RS731	PCB Plant #2 Lift Station Replacement	800		50				50	850
RS732	CWRF Clarifier and Chlorine Contact Chamber Coatings	500		150				150	650
RS822	L/S # 37 Rhett Road Replacement	700							700
RS849	Lift Station Codes and Standards Upgrade	1,435							1,435
RS880	Detroit Blvd. Force Main	600							600
RS881	Pipeline Road L/S Valve Improvements	550							550
RS883	PB WWTP Influent Piping Repairs	300							300
RS886	Government Regional Pump Upgrades	1,000							1,000
RS934	Pine Forest Force Main Upgrade						275	275	275
RS936	Montclair Force Main Upgrade (Main Street Side)					1,600		1,600	1,600
RS951	Carpenters Creek Trunk Sewer Rehabilitation			1,600	1,600			3,200	3,200
RS	Coastal Lift Station Flood Prevention			300				300	300
RS	Detroit Blvd. Sewer Capacity Improvements		750					750	750
RS	CTM Restoration at Rolling Hills			1,480				1,480	1,480
RS	Government Regional Pump L/S Painting and Rehabilitation			500				500	500
RS	L/S # 143 Well Line Rd Replacement			1,030				1,030	1,030
RS	L/S # 206 (Panferio Dr.) Replacement			85	750			835	835
RS	L/S # 207,209,and 211 Upgrade and Piping Modifications			250	2,000			2,250	2,250
RS	L/S 245, 293 and 219 Abandon-Construct New Lift Station			175	1,275			1,450	1,450
RS	W. Roberts Rd. Sewer Exp. and Abandonment of L/S # 371 & 375			100	1,000			1,100	1,100
		\$48,903	\$9,950	\$29,750	\$21,455	\$16,450	\$875	\$78,480	127,383

PRIOR YEARS
5 YR PROJECTION

48,903
\$78,480



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RI700

Program: Wastewater Collection

Project Title: Inflow & Infiltration (I & I)

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	23496	8000	8000	8000	8000		55496
TOTAL	23496	8000	8000	8000	8000		55496

ESTIMATED PROJECT COSTS	MAP
1/29/2019	SYSTEM WIDE
ENV. ASSESS	
ENGINEERING 5,000,000	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION 50,496,000	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL \$55,496,000	

DESCRIPTION:
<p>I & I are contributing factors to sanitary sewer overflows (SSOs). ECUA has been under a DEP consent order since 2012, requiring a comprehensive evaluation of the ECUA collection system, and subsequent repair and rehabilitation aimed at reducing SSOs. ECUA's Capital Improvement Program has included a project for I & I reduction since 2006, and continues to use this project as the vehicle to address sewer rehabilitation, and ensure compliance with the consent order. This is a multi-phase, multi-year project to identify, quantify, and correct sources of I & I in the collection system. Work includes the installation of temporary and long-term flow monitors, physical assessment of gravity mains, force mains and lift stations, development and calibration of a hydraulic computer model to assist in the prioritization of work and rehabilitation efforts, and to identify future CIP projects.</p> <p>The first of three phases of the consent order has been completed, namely the comprehensive evaluation of the system. The information derived from this effort formed the basis for identification of priority rehabilitation projects, to be completed over a ten-year period (known as the Corrective Action Plan). The main elements of the Corrective Action Plan will be mainline points repairs (500) and lining (270 miles), lateral point repairs (3,700) and lining (18,500), replacement of 6-inch gravity mains (10 miles), force main replacement (65 miles), manhole rehabilitation (5,600) and replacement (450), lift station replacements and upgrades (50), and construction and rehabilitation completed over the last several years.</p>



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RS008X

Program: Wastewater Collection

Project Title: Pump Repair & Replacement

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	644	200	250	200	300	300	1894
TOTAL	644	200	250	200	300	300	1894

ESTIMATED PROJECT COSTS	MAP
2/13/2019	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	

VARIOUS LOCATIONS

DESCRIPTION:
<p>This program was originally designed to bring all lift stations up to our design standards, which will ultimately reduce operating costs. We are also facing the need to upgrade lift stations to accommodate new growth. Repair or replace pumps that are worn out and in need of upgrading. The program is part of a preventive maintenance program that is being carried out by the Lift Station Division. This program is targeted towards the small and medium size pumps. However, the pumps at our larger critical stations are also being repaired or replace due to wear and age as a part of this project. We have over 379 lift stations with more than 600 pumps in our system. With an average life expectancy of 15 years, we need to plan to replace as many as 40 pumps per year. As growth is continuing, many stations must be upgraded. This is particularly true of stations where we re-pump the sewage from several smaller stations.</p>



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RS121

Program: Wastewater Collection

Project Title: Lift Station Rehabilitation - (L/S #
120, 143, 13, 56, 57, 58, 220 etc.)

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	9237	1000	6000	6000	6000		28237
TOTAL	9237	1000	6000	6000	6000		28237

ESTIMATED PROJECT COSTS	MAP
2/21/2019	
ENV. ASSESS	
ENGINEERING 3,000,000	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION 24,637,000	
EQUIPMENT 1,000,000	
MATERIAL	
FURNISHING	
LAND 100,000	
MISCELLANEOUS	
INDIRECT	
TOTAL \$28,737,000	

VARIOUS LOCATIONS

DESCRIPTION:

ECUA's sanitary sewer collection system includes approximately 380 active lift stations. Many of these lift stations are in poor condition and in need of major repair or replacement. Many of these older, un-lined, concrete wet wells have deteriorated and need to be replaced with much more corrosion resistant fiberglass wet wells. Projects may also include more efficient pumps, pump guide rails systems which facilitates safer pump removal, and/or new electrical control panels. The lift stations to be addressed includes, but is not limited to, the list below:

L/S NUMBER	L/S NAME	ADDRESS
24	Green Street North	807 Garnet Street
52	Detroit Blvd./Carrollwood	1056 Stillbrook Road
98	Brook Hollow	1602 Eagle Street
103	Bay Meadows	7901 Bay Meadows Drive
106	Quezon Pines	8269 El Dorado
138	Lake Charlene	6418 Lake Charlene Drive
199	Perdido Beach	16790 Perdido Key Drive
62	Creighton/Scenic	Creighton/Scenic
70	19th & Blackshear	19th and Blackshear
263	Sandy Key	13575 Sandy Key Dr.
105	Canterbury Woods	13575 Sandy Key Dr.
18	Joe Patti's	
210	Avenida 21	
4	12th Avenue	
102	Avondale	
124	Sherwood	
150	Pen Haven	
261	Old Cantonment	
97	Kings Road	
125	Star Lake	



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RS121A

Program: Wastewater Collection

Project Title: Graveyard L/S #58 Upgrade

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	1368						1368
TOTAL	1368						1368

ESTIMATED PROJECT COSTS	
1/2/13	
ENV. ASSESS	
ENGINEERING	76000
SURVEY	10000
INSPECTION	20000
TESTING	
CONSTRUCTION	1250000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	12000
MISCELLANEOUS	
INDIRECT	
TOTAL	\$1,368,000

MAP

DESCRIPTION:

The Engineering Department has been working with Kenneth Horne & Associates on the abandonment of Lift Station 58 and the work associated with connecting the Lift Station 58 to the Lift Station 57 site via a new gravity sewer main. Originally, this project consisted of upgrades to the existing Lift Station 58 and in a separate project. Constantine Engineering was hired to handle the engineering services related to the replacement of Lift Station 57. During the design it was realized that Lift Station 58 could be completely abandoned and connected to Lift Station 57 with a new gravity sewer main. The scope for KHA was altered to include abandonment of the existing Lift Station 58 and design of a new gravity sewer main to Lift Station 57 as well as the associated return force main. Now, these originally separate projects are dependent on each other and it has been decided that transferring all engineering services to one party and combining the scopes of these projects would be the most feasible way to move forward with the project.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

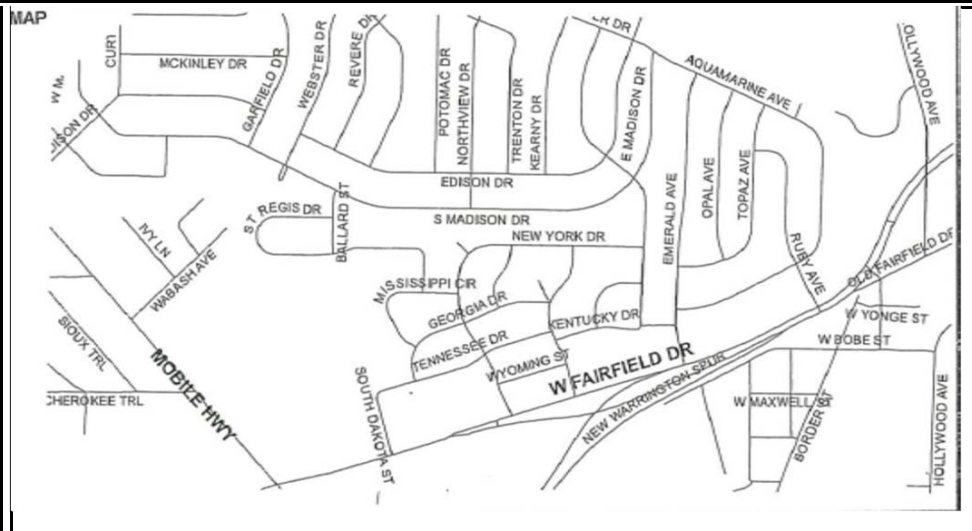
PROJECT NO: RS121H

Program: Wastewater Collection

Project Title: L/S # 118 Replacement

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	584						584
TOTAL	584						584

ESTIMATED PROJECT COSTS	
2/12/2016	
ENV. ASSESS	
ENGINEERING	64000
SURVEY	
INSPECTION	20000
TESTING	
CONSTRUCTION	484000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	16000
MISCELLANEOUS	
INDIRECT	
TOTAL	\$584,000



DESCRIPTION:

L/S # 118, located in the Oakcrest community near the Fairfield Drive and Mobile Highway intersection, was originally constructed in the 1960's. The station includes an approximately 8'x15'x15' wet well for influent collection, pumps and piping, and an approximate 12'x24'x8' above grade building (block walls and flat-slab roof) housing controls and equipment. L/S # 118 requires attention because (1) the station is located in 15'x110' easement which restricts access and impedes maintenance activities, (2) the structural integrity of the building is deteriorating (3) the current design lacks needed safety features, thus the staff fear bodily injury when working at this location and (4) existing electrical features do not meet current, applicable local and national codes. Ultimately, the existing lift station will be abandoned. A new lift station will be constructed on recently acquired property (property immediately west of the existing lift station) and provides with new pumps, electrical controls, safety features, etc.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RS121R

Program: Wastewater Collection

Project Title: L/S # 13 Abandonment -L/S # 56

Upgrade

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	123		840				963
TOTAL	123		840				963

ESTIMATED PROJECT COSTS	MAP
2/12/2016	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	

\$1,063,000

DESCRIPTION:

L/S # 13 named Evergreen (8598 Winding Lane), is an old lift station located near the intersection of Scenic Hwy. and East Olive Road. The facility is failing and needs to be addressed. It is located adjacent to a County stormwater facility and access to the site is difficult. Staff has determined it most feasible to abandon L/S # 13 by constructing gravity sewer pipe along Winding Lane and to direct flow to a new lift station-replacing L/S # 56 (named Coventry Estates). In the future, the new L/S # 56 will direct flow northward up Scenic Hwy. (reverse current flow direction) and west towards L/S # 11 for direction of flow to CWRF.

* Additional expenses will be funds from RS121 (Lift Station Replacement and Upgrade).



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RS121S

Program: Wastewater Collection

Project Title: Charbar L/S # 107

Upgrade

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	243						243
TOTAL	243						243

ESTIMATED PROJECT COSTS	MAP
2/12/2016	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	

<p>DESCRIPTION:</p> <p>L/S # 107, called the Charbar lift station, is located on Mobile Hwy. approximately 750' west of Massachusetts Ave. The existing lift station wet well, pumps, access road, etc. are in a flood prone area. The facilities have been damaged in the past due to high flood water elevation. While reviewing the job site, staff has found that a gravity sewer pipe and a force main pipe are exposed in the bottom of an adjacent creek. This project is required to replace exposed pipes and conduct needed safety, code related improvements to the lift stations. The current plan is to construct a new lift station to the west of the existing lift station and prepare the new lift station and equipment to resist flooding.</p> <p>* Additional expenses will be funded from RS121 (Lift Station Replacement and Upgrade).</p>



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RS121W

Program: Wastewater Collection

Project Title: L/S #96 (Lake Estelle) Upgrade

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	103		700				803
TOTAL	103		700				803

ESTIMATED PROJECT COSTS		MAP
2/12/2016		
ENV. ASSESS		
ENGINEERING	65000	
SURVEY		
INSPECTION		
TESTING		
CONSTRUCTION	738000	
EQUIPMENT		
MATERIAL		
FURNISHING		
LAND		
MISCELLANEOUS		
INDIRECT		
TOTAL	\$803,000	

DESCRIPTION:

L/S # 96, located on Pine Forest Road approximately 1/3 miles north of Five Flag Speedway, is located in a flood prone area and has been totally submerged during past rain events. During major rain events, crews basically have to wade through water to get to the lift station. Also, due to the lack of an established access road, ECUA crews have to cross private property to access the site. This project is required to : (1) provide an adequate access lane and driveway to the site on Pine Forest Rd., (2) raise the lift station top to prevent over topping, and (3) conduct required safety/code related issues.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RS121X

Program: Wastewater Collection

Project Title: L/S # 220 (Bayou Grande West)

Upgrade

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	15						15
TOTAL	15						15

ESTIMATED PROJECT COSTS	MAP
2/9/2014	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	

DESCRIPTION:
<p>Lift Station #220, located in the street at the intersection of Acapulco Camino and Sonora Calzada, was analyzed for possible abandonment. The property needed for the construction of a new lift station has been obtained. An impact to the existing roadway will occur for installation is approximately 320 L.F. of new 8" sanitary sewer-diversity flow to the new site. Electrical controls must be replaced and control panels must be elevated to minimize impact from storm surges/flooding.</p> <p>* Additional expenses will be funded from RS121 (Lift Station Replacement and Upgrade).</p>



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

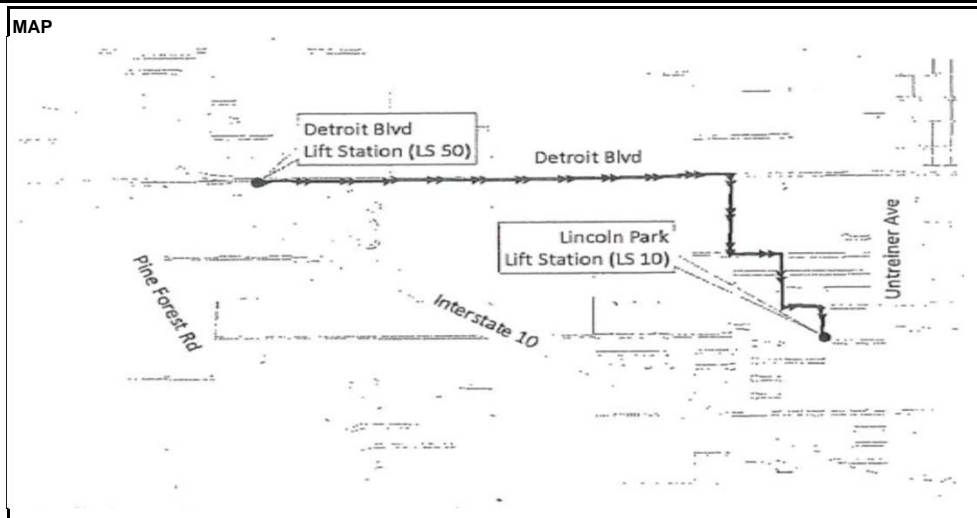
PROJECT NO: RS121Y

Program: Wastewater Collection

Project Title: (Detroit) L/S # 50 Replacement
(L/S, FM and Gravity Mains)

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	25		3700				3725
TOTAL	25		3700				3725

ESTIMATED PROJECT COSTS	
2/10/2017	
ENV. ASSESS	
ENGINEERING	290000
SURVEY	60000
INSPECTION	
TESTING	
CONSTRUCTION	3125000
EQUIPMENT	200000
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	50000
INDIRECT	
TOTAL	\$3,725,000



DESCRIPTION:

The older station is located in the Detroit Blvd. ROW, adjacent to the road itself, which provides unsafe conditions for repairs and maintenance due to the limited space and vehicular traffic. Also, the station is located next to a bridge/creek that floods regularly, to include flooding the lift station and making access impossible. The collection basin sending sewer to the station experiences high I & I, therefore the station may also require pump upgrades. The entire area is experiencing rapid development and the sewer system can not receive additional sewer as it is at capacity. Property in the Detroit Manor Subdivision was purchased for a suitable lift station site. Proposed with the lift station project is a 1.9 mile force main replacement to L/S #10 where development does not pay for upgrades to force mains. In addition a gravity expansion project to add additional homes in Detroit Manor Subdivision, will allow new development and eliminate 2 existing lift stations. This would also allow development in the lift station #50 and #387 sewer shed.

* Additional expenses will be funded from RS 121 (Lift Station Replacement and Upgrade).



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RS121Z

Program: Wastewater Collection

Project Title: L/S # 307 (Pinebrook)

Replacement

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	645			80			725
TOTAL	645			80			725

ESTIMATED PROJECT COSTS	
2/1/2017	
ENV. ASSESS	
ENGINEERING	50000
SURVEY	10000
INSPECTION	20000
TESTING	
CONSTRUCTION	595000
EQUIPMENT	50000
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$725,000

MAP

The map displays a residential area with several streets: Pinebrook Cir. running horizontally across the upper middle, S. Hwy 97 running diagonally from the bottom left towards the center, Sherrilane Dr. running horizontally at the bottom, and Hwy 297A running vertically on the right side. A black dot marks the location of the 'Pinebrook Estates Lift Station (LS 307)' on Pinebrook Cir. To the south of this station, a large rectangular area is labeled 'Nowak Dairy (Prop. S/D)'. Various residential lots and building footprints are depicted throughout the map.

DESCRIPTION:

ECUA's L/S # 307 (Pinebrook Estates) is located in the Pinebrook Estates subdivision. A new 152 lot subdivision, Nowak Dairy, is being proposed to the south of Pine Brook Estates, with sewer proposed to connect to Pinebrook Estates and L/S. This option would assist ECUA with the avoidance of another L/S being built exclusively for Nowak Dairy, but due to L/S # 307's limited pumping and wetwell volume would require a complete rebuild of the L/S. ECUA is negotiating with the developer of Nowak Dairy subdivision on cost-sharing arrangement whereas the developer would cost-participate on the L/S replacement, with ECUA performing the replacement as part of our CIP program. One of the prerequisites for this project to happen will be to find a parcel for the new liftstation sites.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RS220

Program: Wastewater Collection

Project Title: L/S # 120 Patton Dr. Force Main,
Sanitary Sewer and L/S Replace

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	1000		815				1815
TOTAL	1000		815				1815

ESTIMATED PROJECT COSTS	
1/31/2008	
ENV. ASSESS	
ENGINEERING	200000
SURVEY	5000
INSPECTION	20000
TESTING	
CONSTRUCTION	1390000
EQUIPMENT	200000
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$1,815,000

MAP

The map is a hand-drawn sketch. It features a diagonal line representing a creek, with the word 'CREEK' written above it and 'JOHN' written below it. A road, labeled 'PATTON DR.', runs horizontally across the middle of the map. Below the road, there is a building represented by a series of connected rectangles, suggesting a grid or a series of rooms. A small number '4' is written below the building. To the left of the building, there are several lines representing a fence or a boundary. The overall style is that of a rough, hand-drawn sketch.

DESCRIPTION:

The existing 12" force main at Patton Lift Station goes under Jones Creek and is made from A.C. pipe which may fail due to pipe deterioration. Portions of the A.C. pipe have already failed and had to be replaced. This project includes a directional drill under Jones Creek. The existing wet well and valve box have deteriorated to the point that high levels can result in sewage overflows into Jones Creek. At present, approximately 1800 L.F. of 21" VCP exists in wetlands/ flood-prone areas in the vicinity. To reduce inflow/infiltration, plans set forth include the abandonment of the 21" VCP and replacement with 2200 L.F. of 24" PVC sanitary sewer. The existing lift station will be abandoned in its current location and replaced away from Jones Creek closer to Patton Drive. A raised site will allow the wet well lid to remain above flood stage and and keep from flooding. A new force main to Highway 98 will also be built. Lift station #100 will require upgrades with lift station # 120 improvements. Lift station #100 does not have strong enough pump to compete for pressure with Lift station #120 and a new system pressure in the force mains. Lift station #100 requires electrical, safety and pump upgrades to be completed with as a part of this project.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RS307

Program: Waterwater Collection

Project Title: L/S # 6 (Industries) Demolition/
Removal

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	1000		1800				2800
TOTAL	1000		1800				2800

ESTIMATED PROJECT COSTS	
2/10/2019	
ENV. ASSESS	
ENGINEERING	100,000
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	2,700,000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$2,800,000

MAP

The map illustrates the proposed gravity sewer system. A thick black line represents the 'PROPOSED GRAVITY SEWER' running from the top left towards the bottom right. At the top left, a box labeled 'LIFT STATION #6 (INDUSTRIES)' points to a small box labeled 'LS'. Further down this line, another box labeled 'LIFT STATION #6 (INDUSTRIES) DEMOLITION AND REMOVAL' points to the same line. At the bottom right, a box labeled 'EXISTING GRAVITY SEWER ON MAIN ST' points to a line that joins the proposed sewer. The map shows a grid of streets: W. Government St, W. Zarragossa St, W. Gimble St, and Barrancas Ave running horizontally; and S. Pace Blvd, S. M St, and S. J St running vertically. A north arrow is located in the top right corner.

DESCRIPTION:

Lift Station # 6 serve three industries, Arizona Chemical, Reichold and Armstrong Industries. The lift station wet well is made of metal and is approximately 30 years old and deteriorating. A new gravity line will be installed to connect to the upgraded Main St. sewer lines thereby eliminating the need for a lift station. Upon completion, the top of the wet well will be cut-off below grade and filled with dirt.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

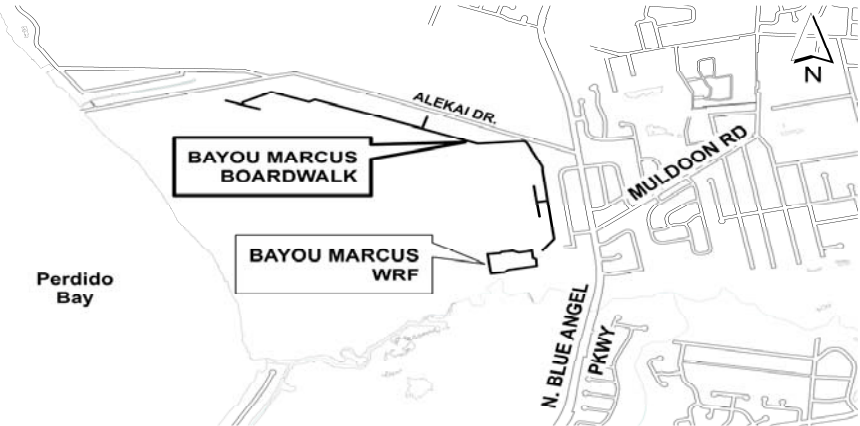
PROJECT NO: RS332

Program: Wastewater Collection

Project Title: Bayou Marcus Boardwalk

Maintenance

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	1554		200				1754
TOTAL	1554		200				1754

ESTIMATED PROJECT COSTS		<div>MAP</div> 
2/13/2019		
ENV. ASSESS		
ENGINEERING	50,000	
SURVEY		
INSPECTION		
TESTING		
CONSTRUCTION	1,254,000	
EQUIPMENT		
MATERIAL	450,000	
FURNISHING		
LAND		
MISCELLANEOUS		
INDIRECT		
TOTAL	\$1,754,000	

DESCRIPTION:

The existing boardwalk was constructed in 1997 and is maintained by ECUA. The boardwalk is approximately 7740' long x 8' wide and is constructed of southern pressure treated white pine with a structural life of 15 years at most. The boardwalk serves as a nature trail and provides a means for treated effluent to be discharged back into the natural ecosystem. The boardwalk has been maintained over the years by replacing boards as they fail. This peace meal effort is unable to keep up with the rapidly aging structure. Based on the analysis conducted by HMM on the condition of the boardwalk and the decaying condition of the handrail and distribution piping, several repair methods were reviewed and the most cost effective option to properly repair the boardwalk and provide structural reinforcement to the distribution piping is to use Brazillian hardwood (60 year life span) deck planks with an HDPE effluent pipe system including an auxiliary aluminum tray support system as the optimal configuration for construction. This would remove the weight of the effluent distribution piping from the hand rail system and transfer it to the columns supporting the boardwalk. The report is available for review.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RS420

Program: Wastewater Collection

Project Title: Sherwood Force Main
Rehabilitation

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT			300				300
TOTAL			300				300

ESTIMATED PROJECT COSTS	MAP
2/16/2018	
ENV. ASSESS	
ENGINEERING 30000	
SURVEY 7000	
INSPECTION	
TESTING	
CONSTRUCTION 263000	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL \$300,000	

DESCRIPTION:

The existing 6" c.a. force main leaving lift station #124 in Sherwood Subdivision has deteriorated to the extent that it is difficult to repair. The top half of the force main is very soft. If action is not taken soon, it may result in a major sewer spill on Fairfield Drive. The amount of pipe to be replaced would be approximately 2,100 L.F. The discharge force main is connected to existing gravity sewer on the south side of Fairfield Drive, thus one major roadway crossing would be required. Removal of the c.a. pipe may be mandatory.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RS423D

Program: Wastewater Collection

Project Title: Air Release Valve Renewal and Replacement

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	712		50	50	50	50	912
TOTAL	712		50	50	50	50	912

ESTIMATED PROJECT COSTS	MAP
02/20/14	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	

DESCRIPTION:

There are in excess of 420 Air Release Valves in the collection system which are essential to the proper operation of the force mains. The program will expedite the installation of valves through contractual support while the inspection and preventative maintenance responsibilities will be addressed with internal forces.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RS425

Program: Wastewater Collection

Project Title: Bayou Marcus Generator
Improvements

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	300						300
TOTAL	300						300

ESTIMATED PROJECT COSTS	MAP
2/22/2015	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION 300000	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL \$300,000	

DESCRIPTION:

Installation of a second generator at BMWRF to provide redundancy due to recent events which exposed a critical weakness in the plant's infrastructure. Install a second automatic transfer switch (ATS) capable of handling the entire plant's electrical load. Additionally, provide provisions to hook up a temporary generator large enough to run the plant in the event of an emergency. A recent experience revealed a critical flaw in the plant's infrastructure. At the point where the Gulf Power service transitions from above ground to below grade (not on ECUA property and controlled by Gulf Power), the locations is prone to car accidents and loss of power at the plant. To compound the loss of electrical service, the existing Caterpillar generator failed as well. Due to the critical nature on the BM wetlands, any loss of power results in a permit violation as the disinfection for the plant is provided by the UV system. The most cost effective way to address this is to install a second generator to provide the discharge required redundancy. PH II of this project would be to purchase and install the generator for the ATS. In the interim, a portable generator from L/S would be used. Additional funding requested to develop the basis of design for an electrical system master plan and ultimately complete a design for the electrical system.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RS427

Program: Wastewater Collection

Project Title: E. Baars St. Gravity Sewer
Replacement

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT			225				225
TOTAL			225				225

ESTIMATED PROJECT COSTS	
1/16/2016	
ENV. ASSESS	
ENGINEERING	20000
SURVEY	5000
INSPECTION	
TESTING	
CONSTRUCTION	200000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$225,000

MAP



DESCRIPTION:

Replace approximately 470 L. F. of 6-inch vitrified clay sewer line on Baars St. from 7th Avenue to 9th Avenue. This is a 6-inch vitrified clay gravity sewer pipe over 50 years old which has deteriorated and is in need of replacement. There have been multiple incidents of pipe failures and associated overflows and backups into businesses and residences.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RS428

Program: Wastewater Collection

Project Title: Miscellaneous Lift Station

Abandonment

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT			250	250	250	250	1000
TOTAL			250	250	250	250	1000

ESTIMATED PROJECT COSTS	MAP
2/12/2016	VARIOUS LOCATIONS
ENV. ASSESS	
ENGINEERING 200000	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION 600000	
EQUIPMENT 200000	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL \$1,000,000	

DESCRIPTION:

There are a number of lift stations in the ECUA system that either serve a single customer or could possibly be abandoned with the installation of additional gravity sewer pipe. The objective of this project is to locate, evaluate, plan and generate plans that allow ECUA to reduce the number of lift stations currently in operation. In this CIP, work will be performed to locate, evaluate, plan, and generate plans that will allow ECUA to take the following lift stations out of service: The table below is provided to show stations that have been identified for possible abandonment.

L/S NUMBER	L/S NAME	ADDRESS
1	South Palafox	800 S. Palafox
79	La Rua	2015 E. La Rua Street
239	Crown Pointe Phase I	8014 Castle Pointe Way
134	Bridle Trail Estates	7008 Clydesdale Drive
273	Barefoot Estates	6319 Barefoot Blvd.
238	Marcus Point	3430 Marcus Pointe Blvd.
48	Plantation Park	1601 Bradberry Pointe
178	"W" Street Park	906 Industrial Blvd.
44	Autumn Chase	10029 Autumn Lane
267	Sandy Creek	2231 Wyatt Street
71	Scott Street	East End
113	Jackson Square	501 Blanton Court
61	Baywoods # 2	4100 Baywoods Drive
18	B & Gimble	600 B Street
88	Brighton Place	444 W. Roberts Road



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RS511I

Program: Wastewater Collection

Project Title: Pensacola Beach PM Painting
and Tank Rehabilitation

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	550						550
TOTAL	550						550

ESTIMATED PROJECT COSTS	MAP
1/22/2015	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	

<p>DESCRIPTION:</p> <p>To conduct corrosion control and repairs to the carbon steel tanks at the Pensacola Beach Plant. Specifically the 2.4 million gallon storage tank, the clear well, the sludge holding tank for both plants and the carbon steel piping associated with the denitrification filter gallery. Replace any corroded bolts and repair damage to the ceramic coating on the steel plates. Additionally, repairs to the anode system, which provides cathodic protection, will also be required. It was determined during the annual inspection that the corrosion of the wind girder on the 2.4 million gallon tank required replacement, pinholeing and the decay of the upper ring were required.</p>



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RS529

Program: Wastewater Collection

Project Title: Carriage Hills Sewer System

Rehabilitation

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT			500				500
TOTAL			500				500

ESTIMATED PROJECT COSTS		MAP
1/16/2016		
ENV. ASSESS		
ENGINEERING	40000	
SURVEY	10000	
INSPECTION		
TESTING		
CONSTRUCTION	450000	
EQUIPMENT		
MATERIAL		
FURNISHING		
LAND		
MISCELLANEOUS		
INDIRECT		
TOTAL	\$500,000	

DESCRIPTION:

To reduce excessive inflow/infiltration and eliminate potential sewer overflows by the rehabilitation and upgrade on a portion of the existing Carriage Hills gravity sewer system.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RS630

Program: Wastewater Collection

Project Title: CWRF Reuse Pump Capacity Upgrade

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	590		150				740
TOTAL	590		150				740

ESTIMATED PROJECT COSTS		MAP
1/22/2015		
ENV. ASSESS		
ENGINEERING	25,000	
SURVEY		
INSPECTION		
TESTING		
CONSTRUCTION	250,000	
EQUIPMENT	465,000	
MATERIAL		
FURNISHING		
LAND		
MISCELLANEOUS		
INDIRECT		
TOTAL	\$740,000	

The map shows a site layout with a dashed line labeled 'GULF POWER COMPANY EASEMENT' and a solid line labeled 'EXIST. RECLAIMED WATER MAIN'. A callout points to the 'CWRF REUSE PUMP CAPACITY UPGRADE' location. A north arrow is present in the top right corner.

DESCRIPTION:

Due to pump capacity, CWRF is capable of sending reclaimed water to 2 or 3 directions from the International Paper pump station at any given time before total flow drops. This project will expand the International Paper pumps station capacity which will ensure that the CWRF has the ability to use all routes of dispersing reclaimed water during future rain events. Additionally, the pump upgrade is required to be able for the CWRF to meet it's disposal needs if either the Gulf Power Crist Plant were to shut down or in the event that the IP Mill were to shut down. The new pumps would provide enough flow and pressure to be able to discharge the majority of the plants flow to the IP Wetlands and allow the operation of Spray Field 19, a capability that the current pumps cannot support. The project would include the following:

- * 3 - 10' - 400 HP Fairbanks Morris horizontal splitcase pumps, Model: 2825A-400 HP; 1190 RPM.
- * 3 - 400 HP Allen Bradley VFD MCC Sections.
- * Demolition/Installation of old/new pumps; new piping and foundations.
- * Installation of new VFD's and cabling.
- * Revised Arc Flash Study.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RS638

Program: Wastewater Collection

Project Title: Mackey Key Sewer

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	200						200
TOTAL	200						200

ESTIMATED PROJECT COSTS	MAP
3/01/16	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	

DESCRIPTION:

ECUA was given the maintenance responsibility for this previously private low-pressure sewer system. This system has an estimated 2700 linear feet of pipe which needs replacing to bring it to ECUA standards. There are currently 28 active services and an additional 20 other vacant lots which may be sold. This is immediately adjacent to a body of water, the Escambia River, and is a prime candidate for sanitary sewer overflows.



Project Title: Lift Station Mechanical Needs

ESTIMATED PROJECT COSTS		MAP
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To provide funding for mechanical needs at ECUA's 379 lift stations. To make necessary capital improvements to lift stations and mechanical repairs as needed. To replace mechanical piping, pumps, or make wet well repairs as needed to ECUA's lift stations due to unforeseen conditions.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RS731

Program: Wastewater Collection

Project Title: PCB Plant #2 L/S Replacement

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	800		50				850
TOTAL	800		50				850

ESTIMATED PROJECT COSTS	MAP
3/1/2016	VARIOUS LOCATIONS
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION 400000	
EQUIPMENT 450000	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL \$850,000	

DESCRIPTION:
<p>The scope and purpose of this project is to replace and upgrade the influent L/S at Plant # 2 of the Pensacola Beach Wastewater Treatment Plant. The project would include replacement of the L/S pumps, base elbows and piping; upgrading the valve vault from underground to above ground; installation of new access hatches sized for the new pumps as well as personnel safety grates. Other items included in this upgrade would be a new coating system for the wetwell; a new flow meter and acutated valve to allow the control room to divert a portion of the influent flow from Plant # 2 L/S to the reject tank to avoid a process disruption of Plant # 2 during excessively high flows. The current L/S lacks this level of sophistication. Additionally, there would be an upgrade to the blowers on Plant # 1 by installing VFD's on each blower for better process control. All work would be conducted during the off peak season when Plant # 2 would be off-line.</p>



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RS732

Program: Wastewater Collection

Project Title: CWRP Clarifier and Chlorine

Contact Chamber Coatings

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	500		150				650
TOTAL	500		150				650

ESTIMATED PROJECT COSTS	MAP
1/22/2015	
ENV. ASSESS	
ENGINEERING 25000	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION 350000	
EQUIPMENT	
MATERIAL 275000	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL \$650,000	

DESCRIPTION:

The CWRP clarifier troughs and the chlorine contact chambers coating system are failing and delaminating exposing the concrete within these structures and causing degradation. Additionally, as the coatings fail, the pieces of the coating system are washed down stream into the tertiary filters causing extensive damage to the filters and can cause filter down time and can lead to the plant being forced to reject its effluent due to tears in the filter media. The repairs have become critical because as monthly cleanings are performed, more and more of the coating systems delaminate and accelerate the need to address the issue. Repairs to the clarifiers and the contact chamber can be done on an individual basis and avoid an impact to the plants operational capabilities when the work is performed.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RS822

Program: Wastewater Collection

Project Title: L/S # 37 (Rhett Road)

Replacement

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	700						700
TOTAL	700						700

ESTIMATED PROJECT COSTS		<div>MAP</div>
2/1/2017		
ENV. ASSESS		
ENGINEERING	60000	
SURVEY	20000	
INSPECTION		
TESTING		
CONSTRUCTION	600000	
EQUIPMENT		
MATERIAL		
FURNISHING		
LAND	10000	
MISCELLANEOUS	10000	
INDIRECT		
TOTAL	\$700,000	

DESCRIPTION:

ECUA's L/S # 37 (Rhett Road) is located in the Rhett Road ROW and is situated west of the Pensacola Christian College (PCC) campus on Brent Lane. The majority of the flow received by this L/S is generated from PCC. A new dormitory is being proposed by PCC, and the L/S is limited with respect to pumping and wetwell capacity. ECUA is negotiating with PCC on a cost-sharing arrangement whereas PCC would cost-participate on the L/S replacement, with ECUA performing the L/S replacement as part of our CIP program. One of the prerequisites for this project to happen will be to find a parcel for the new L/S site in order to relocate it out of the roadway/ROW.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RS849

Program: Wastewater Collection

Project Title: L/S Codes and Standards

Upgrades

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	1435						1435
TOTAL	1435						1435

ESTIMATED PROJECT COSTS	MAP
1/22/2015	VARIOUS LOCATIONS
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION 750000	
EQUIPMENT 685000	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL \$1,435,000	

DESCRIPTION:

To bring all of out existing lift stations up to current codes and standards. Many locations are single pump (simplex) can-style stations that are approximately 50 years old located in manholes in the center street and roads. This funding will be used to provide increased safety for lift station personnel by eliminating wet well entry requirements and to perform routine maintenance, by installing pump rail systems and upgrading stations to meet current federal, state and county codes, and bringing the aging infrastructure into compliance with Ten State Standards. To replace all rigid mount lift station pumps with guide rail system and pumps. Eliminate all stations with cans, single pump and manholes (using a standard manhole does not provide adequate room for entry or for the addition of a second pump.) Current standards require removal of lift station pumps without entry into wet wells. This project's goal would be to upgrade approximately 20 lift stations per year.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RS880

Program: Wastewater Collection

Project Title: Detroit Blvd. Force Main

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	600						600
TOTAL	600						600

ESTIMATED PROJECT COSTS	
2/1/2017	
ENV. ASSESS	
ENGINEERING	50000
SURVEY	20000
INSPECTION	
TESTING	
CONSTRUCTION	500000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	30000
INDIRECT	
TOTAL	\$600,000

MAP

DESCRIPTION:

The County is adding paved shoulders, drainage ditches, sidewalks, and resurfacing on Detroit Blvd. from Pine Forest Road to Highway 29. The existing FM in this corridor will require relocation in some places, not to mention ECUA is in the planning stages to either replace or upgrade the same FM. This project would replace the entire force main from L/S # 50 (Detroit Blvd.) to L/S # 10 (Lincoln Park). Approximately 6,200' of the FM replacement would be on Detroit Blvd, with another 3,800' of FM replacement on local streets connecting Detroit Blvd. to L/S # 50, for a total of approximately 10,000'. The FM size has not been determined as of the creation of this data sheet.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RS881

Program: Wastewater Collection

Project Title: Pipeline Road L/S Valve
Improvements

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	550						550
TOTAL	550						550

ESTIMATED PROJECT COSTS	MAP
1/22/2015	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	

DESCRIPTION:
<p>The project would consist of conducting three valve insertions into the 16" ductile iron piping coming from the two above ground storage tanks prior to the pipes entering the main building. The newly inserted valve would allow for the manifold to be isolated and leave half of the station operational and allow for the unobstructed maintenance of the opposite side of the station and pumps and vice versa. Presently this capability does not exist. Once the header isolation valves are installed, it will give Plant Maintenance the opportunity to replace the leaking knife gate valves located on the suction side of the pumps to be isolated and replaced with new valves. At this time, the only method to perform this repair would be to bypass this critical pump station entirely.</p>



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RS883

Program: Wastewater Collection

Project Title: Pensacola Beach WWTP Influent
Piping Repairs

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	300						300
TOTAL	300						300

ESTIMATED PROJECT COSTS	MAP
2/12/2016	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	

DESCRIPTION:

This project is for the rehabilitation and replacement of sanitary sewer manholes and/or piping in and around the Pensacola Beach Wastewater Treatment Facility. Inspections by ECUA crews have revealed that portions of the system in this area are in very poor condition. All sewage on the Island flows through this portion of the system and potential failures are a major concern. Repair and replacement of the collection system components may require dewatering and extensive bypass pumping.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

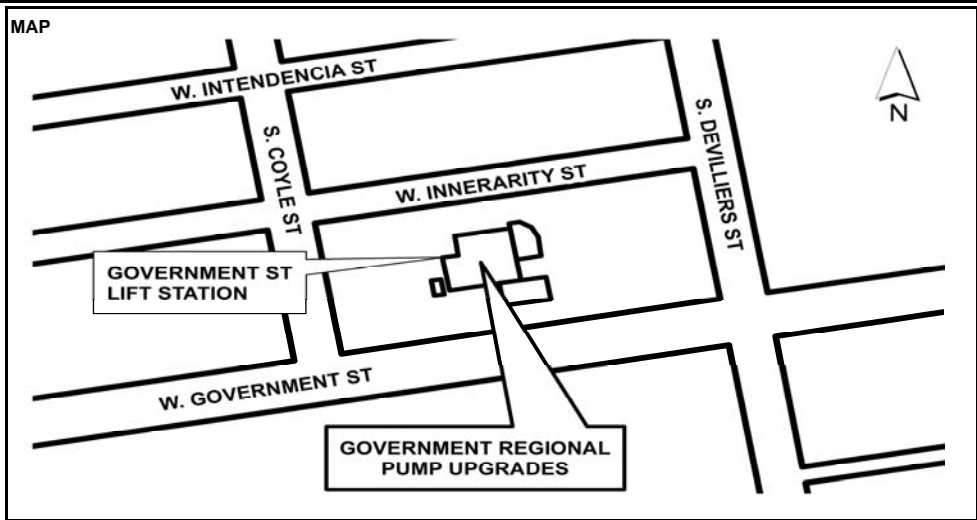
PROJECT NO: RS886

Program: Wastewater Collection

Project Title: Government Regional Pump
Upgrades

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	1000						1000
TOTAL	1000						1000

ESTIMATED PROJECT COSTS	
2/13/2019	
ENV. ASSESS	
ENGINEERING	40,000
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	50,000
EQUIPMENT	800,000
MATERIAL	110,000
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$1,000,000



DESCRIPTION:

This project is intended to replace the four pumps at Government Street with lower RPM pumps that are more reliable and better capable of meeting all pump conditions. The new pumps will require upgrading the pipe guide rails for installation and removal of the pumps as well as replacement of the riser pipe in each wet well.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RS934

Program: Wastewater Collection

Project Title: Pine Forest Force Main Upgrade

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT					275		275
TOTAL					275		275

ESTIMATED PROJECT COSTS	
1/30/1998	
ENV. ASSESS	
ENGINEERING	25000
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	250000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$275,000

MAP

DESCRIPTION:

The project is related to the Long Leaf Force Main (FM) which will divert flow from Lift Station (L/S) 41 to the Bayou Marcus Water Reclamation Facility Drainage Basin. Currently a 6" FM along Pine Forest collects sewage from several private lift stations and flows to the Long Leaf Lift Station. The proposed project would upgrade the 10,000 L. F. force main to an 8" line and connect with the Long Leaf FM with flow directed west toward Bayou Marcus.



PROJECT DATA SHEET

Capital Improvements Program

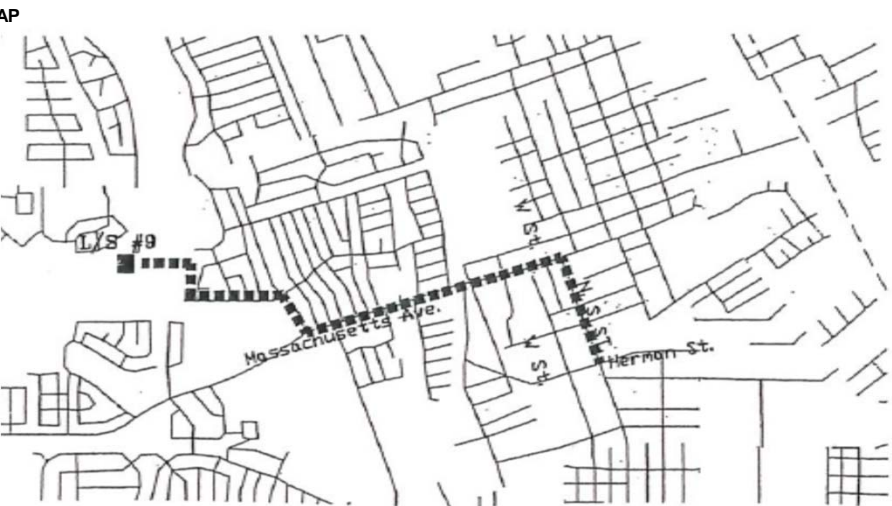
Fiscal Years
2020-2024

PROJECT NO: RS936

Program: Wastewater Collection

Project Title: Montclair Force Main Upgrade
(Main Street Side)

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT				1600			1600
TOTAL				1600			1600

ESTIMATED PROJECT COSTS		MAP 
2/10/2014		
ENV. ASSESS		
ENGINEERING	150000	
SURVEY	30000	
INSPECTION	30000	
TESTING		
CONSTRUCTION	1390000	
EQUIPMENT		
MATERIAL		
FURNISHING		
LAND		
MISCELLANEOUS		
INDIRECT		
TOTAL	\$1,600,000	

DESCRIPTION:

The 16" D I P force main coming from Montclair L/S # 9 has developed pin-hole leaks on Massachusetts Avenue. Part of this main has been replaced in the past on Herman St. from Pace Blvd. to "L" St. Even though flow from the lift station can be diverted to the Bayou Marcus WRF via the Montclair L/S diversion project (CS141W), for the foreseeable future this line should be maintained as the primary line. Additional information relative to the existing condition of this force main was gathered as part of the Force Main Evaluation. Based on that information, the force main replacement can be pushed out several years.



PROJECT DATA SHEET

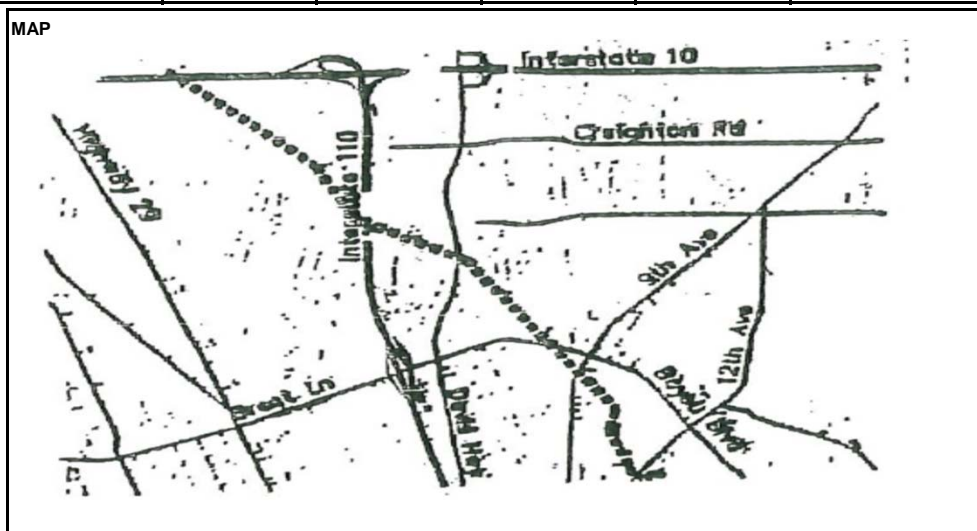
Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RS951
 Program: Wastewater Collection
 Project Title: Carpenters Creek Trunk Sewer Rehabilitation

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT			1600	1600			3200
TOTAL			1600	1600			3200

ESTIMATED PROJECT COSTS	
1/16/2016	
ENV. ASSESS	
ENGINEERING	200000
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	3000000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$3,200,000



DESCRIPTION:

The Carpenters Creek trunk sewer is a vital part of the ECUA sewer infrastructure. It consists of ductile iron sewer line varying in size from 18" to 36" and follows Carpenters Creek for approximately 25,000 feet. There are approximately 120 manholes associated with it that may require corrosion preventative coating, or repair and coating rehabilitation. This must be considered a high priority rehabilitation program due to the environmentally sensitive location and the difficulty of access if a collapse should occur. It is recommended that as a minimum a multi-year program of rehabilitation be undertaken to safeguard this valuable resource. The April 2014 rain event has caused severe erosion along Carpenters Creek. A re-inspection of the gravity sewer is necessary to evaluate current conditions and upgrade plans for rehabilitation as necessary.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RS
 Program: Wastewater Collection
 Project Title: Coastal Lift Station Flood
Prevention

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT			300				300
TOTAL			300				300

ESTIMATED PROJECT COSTS	MAP
3/8/2018	<p style="text-align: center; font-size: 2em;">VARIOUS LOCATIONS</p>
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION 300000	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL \$300,000	

DESCRIPTION:

To harden and improve resilience of the coastal lift stations, with focus on Pensacola Beach and Perdido Key area. In low to medium storm events as well as some instances of high tide some lift stations become inundated with sea water. Rain guards do not do enough when inundation occurs. Sea water at high quantities harms the biological process inside the treatment plants. This project looks to raise lift station lids, build short walls, or provide water tight lids on various lift stations as found appropriate.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RS _____
 Program: Wastewater Collection
 Project Title: Detroit Blvd Area Sewer
Capacity Improvements

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT		750					750
TOTAL		750					750

ESTIMATED PROJECT COSTS	
2/13/2019	
ENV. ASSESS	
ENGINEERING	75,000
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	675,000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$750,000

MAP

The map shows the project area around Detroit Boulevard. Key features include:

- LIFT STATION #387 TO BE ABANDONED**: Located near McGhee Dr.
- DETROIT BLVD AREA SEWER CAPACITY IMPROVEMENTS**: The main project area.
- PROPOSED SEWER MAIN**: A new line extending from the intersection of Detroit Blvd and Ashland Ave.
- LIFT STATION #50 TO BE RELOCATED**: Located near Interstate 10.
- LIFT STATION #50 PROPOSED SITE**: A new site for the relocated lift station.
- Streets shown**: McGhee Dr, Nestle Dr, Detroit Blvd, Ashland Ave, Raleigh Cir, and Interstate 10.

DESCRIPTION:

This work is to extend an existing 12-inch sewer main through an easment off of Stefani Road at the intersection of Detroit Boulevard. This sewer main will be routed to a new lift station that will be relocating the Detroit Boulevard Lift Station (LS50). This project will also include the abandonment of the McGhee Lift Station (LS387). This new gravity main is necessary to provide additional sewer capacity to the area for the significant growth due to the Navy Federal Expansion.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RS

Program: Wastewater Collection

Project Title: CTM Restoration at Rolling Hills

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT			1480				1480
TOTAL			1480				1480

ESTIMATED PROJECT COSTS		<div>MAP</div>
02/21/18		
ENV. ASSESS		
ENGINEERING	150000	
SURVEY	20000	
INSPECTION	60000	
TESTING		
CONSTRUCTION	1250000	
EQUIPMENT		
MATERIAL		
FURNISHING		
LAND		
MISCELLANEOUS		
INDIRECT		
TOTAL	\$1,480,000	

DESCRIPTION:

The April 2014 flood caused the loss of cover soil over the 42-inch diameter ductile iron transmission main in several locations where it runs through the former Rollings Hills Construction and Demolition Debris Landfill. This was primarily caused by stormwater runoff from the adjacent properties. The washout was so extensive in one area that the transmission main was completely exposed for a distance of about 40 feet. Temporary measures were taken to shore up the exposed pipe. The restoration involves bringing in fill to restore the pipe bedding and cover material, drainage improvements to direct future runoff away from the transmission mains, and armoring the embankments for protection of the transmission main and cover soil.

Application has been made to FEMA for financial assistance. If approved, the FEMA reimbursement would be about \$1,100,000, and the ECUA match would be about \$370,000 (25% match).



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RS

Program: Wastewater Collection

Project Title: Government Regional Pump

L/S Painting and Rehabilitation

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT			500				500
TOTAL			500				500

ESTIMATED PROJECT COSTS	
2/28/2018	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	500000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$500,000

MAP

DESCRIPTION:

To conduct corrosion and repairs to the three regional lift stations, their wet wells, buildings and tanks. Annual inspections have documented the beginning of coating system failures and pitting of steel structures. At Government Street, there is 40,000 square feet of metal louvers that have begun to corrode and degrade requiring replacement. These louvers also have screen materials behind them that have begun to fail which are installed to keep animals and pests out of the structure.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RS

Program: Wastewater Collection

Project Title: L/S # 143 Well Line Rd.

Replacement

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT			1030				1030
TOTAL			1030				1030

ESTIMATED PROJECT COSTS	MAP
2/9/2017	VARIOUS LOCATIONS
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION 1030000	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL \$1,030,000	

DESCRIPTION:
<p>ECUA L/S #143 (Well Line Road) is located in the Well Line Road ROW and is situated west of Hwy. 29. One of the prerequisites for this project to happen will be to find a parcel for the new L/S site in order to relocate in out of the roadway/ROW. The county has a road project proposed that will require moving this station. In addition the existing lift station is undersized and sees a great deal of I & I. The larger area is in the midst of major growth that cannot occur without upgrades to this lift station.</p>



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RS

Program: Wastewater Collection

Project Title: L/S # 206 (Panfario Dr.)

Replacement

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT			85	750			835
TOTAL			85	750			835

ESTIMATED PROJECT COSTS		MAP
2/15/2016		
ENV. ASSESS		
ENGINEERING	80000	
SURVEY	5000	
INSPECTION	25000	
TESTING		
CONSTRUCTION	625000	
EQUIPMENT	100000	
MATERIAL		
FURNISHING		
LAND		
MISCELLANEOUS		
INDIRECT		
TOTAL	\$835,000	

DESCRIPTION:
L/S # 206 located adjacent to 343 Panfario Drive, is in poor condition structurally and is in a flood prone location (within 100' of Santa Rosa Sound). Additionally, a concrete block structure is over the existing wet pit/dry pit wet well, thus maintenance (activities) is difficult and dangerous. Work should consist of constructing a new 8' diameter wet well with new pumps, removal rails, safety grates and raised top to minimize flooding from surcharged conditions. An elevated control platform would be required to allow electrical panels to be installed above the 100-year flood elevation and comply with applicable codes.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RS

Program: Wastewater Collection

Project Title: L/S # 207, 209 and 211 Upgrade
and Piping Modifications

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT			250	2000			2250
TOTAL			250	2000			2250

ESTIMATED PROJECT COSTS		MAP
2/12/2016		
ENV. ASSESS		
ENGINEERING	185000	
SURVEY	15000	
INSPECTION	50000	
TESTING		
CONSTRUCTION	1600000	
EQUIPMENT	400000	
MATERIAL		
FURNISHING		
LAND		
MISCELLANEOUS		
INDIRECT		
TOTAL	\$2,250,000	

Le Starboard Dr

Le Port Dr

Sabine Dr

Siguenza Dr

Fort Pickens Rd

LS 211

LS 209

LS 207

Little Sabine Bay

Gulf Of Mexico

DESCRIPTION:

L/S # 211 (west end of Fort Pickens Rd.) and L/S # 209 (Sabine Drive) currently pump through a common 8" force main on Fort Pickens Rd. and discharge into L/S #207 (Sandollar Condos) which repumps the flow to a manhole on Via De Luna Drive. There is an odor problem at L/S # 207 around the Sandollar Condo complex. Each station on Pensacola Beach has operational, safety, code, etc. issues. Approximately 80 L. F. of 6" force main would be required to accommodate flow from Margaritaville development*. The proposed project would upgrade/improve L/S's 207,209, and 211.

*Margaritaville is served by a private lift station that currently manifolds into the 8" FM on Fort Pickens Rd. (serving L/S #207, 209, and 211). To leave Margaritaville connected to this 8" FM, ECUA would be required to replace pumps. Installing a parallel 6" FM for Margaritaville would ensure proper operation of their current pumps.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RS

Program: Wastewater Collection

Project Title: L/S # 245, 293 and 219

Abandon-Construct New L/S

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT			175	1275			1450
TOTAL			175	1275			1450

ESTIMATED PROJECT COSTS	
4/24/2012	
ENV. ASSESS	
ENGINEERING	120000
SURVEY	20000
INSPECTION	35000
TESTING	
CONSTRUCTION	1000000
EQUIPMENT	250000
MATERIAL	
FURNISHING	
LAND	25000
MISCELLANEOUS	
INDIRECT	
TOTAL	\$1,450,000

MAP



DESCRIPTION:

On the west side of Pensacola service property/customers located south of Gulf Beach Hwy. and North of Bayou Grande, ECUA has three existing lift stations in flood prone areas and subject to storm damage. A study has been completed that shows that these three stations can be taken out of service with the construction of additional gravity sewer and one new lift station-centrally located. Adjacent to L/S #220 reconstruction project.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RS

Program: Wastewater Collection

Project Title: W. Roberts Rd. Sewer Exp. And
Abandonment of L/S 371 and 375

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT			100	1000			1100
TOTAL			100	1000			1100

ESTIMATED PROJECT COSTS		MAP
2/12/2016		
ENV. ASSESS		
ENGINEERING	95000	
SURVEY	10000	
INSPECTION	30000	
TESTING		
CONSTRUCTION	835000	
EQUIPMENT	130000	
MATERIAL		
FURNISHING		
LAND		
MISCELLANEOUS		
INDIRECT		
TOTAL	\$1,100,000	

DESCRIPTION:

The vacant property between Twisted Oak Drive and Millet Circle has recently been obtained by the County for a regional stormwater pond. ECUA has the opportunity to work with the County to construct a new lift station at the west end of the property to abandon L/S # 371 and L/S # 375 with the addition of approximately 6,000 L. F. of gravity sewer pipe, ECUA could provide sewer service to approximately 90 additional property owners.



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Utility Relocation





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**UTILITY RELOCATION
CAPITAL IMPROVEMENT PROJECTS
FISCAL YEARS 2020-2024**

(in 000's)

PROJECT NUMBER	PROJECT TITLE	PRIOR YEARS	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	5 YR TOTAL REQUIREMENT	PROJECT TOTAL
CR014A	Pinestead/Longleaf Utility Relocation Phase I	\$454	\$1,000					\$1,000	\$1,454
CR014B	Pinestead (Kemp to US 29) Utility Relocation	25			500	1,000		1,500	1,525
CR123	Manhole/Valve Box Adjustments	838		300	300	300	300	1,200	2,038
CR123A	MH/VB Materials	48	50	50	50	50	50	250	298
CR123E	City of Pensacola Resurfacing Manhole/Valve Box	2,100						0	2,100
CR302B	Olive Road Phase 2 Analyses	299						0	299
CR405	General Utility Relocation	1,813	800	800	800	800	800	4,000	5,813
CR411	Burgess/Creighton Utility Relocation	25				500		500	525
CR734	Materials and Supplies Utility Relocation	66	40	40	40	40		160	226
CR	I-10/Beulah Interchange UR	0			500			500	500
CR	I-10/Hwy. 29 Interchange Utility Relocation	0					500	500	500
TOTALS		\$5,668	\$1,890	\$1,190	\$2,190	\$2,690	\$1,650	\$9,610	\$15,278

LESS PRIOR YEARS	5,668
5 YR PROJECTION	\$9,610



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CR014A

Program: Utility Relocation

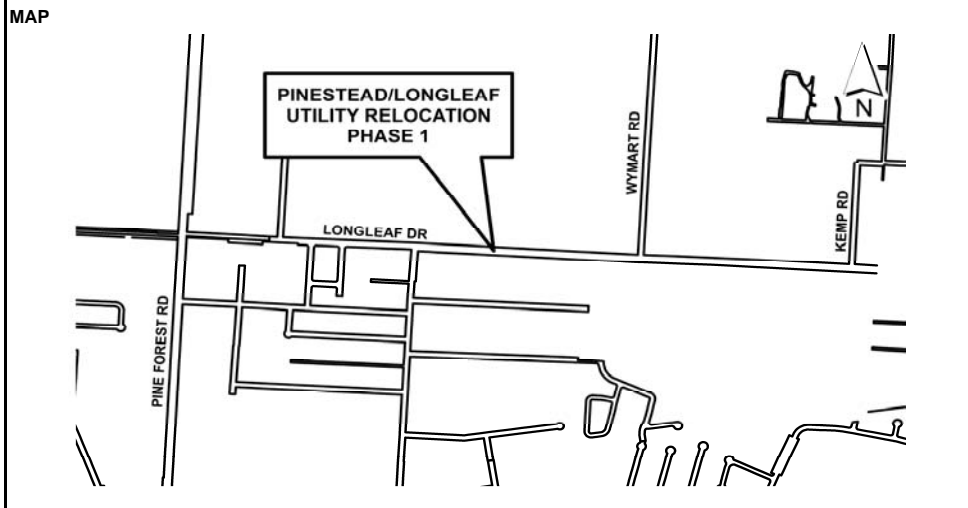
Project Title: Pinestead/Longleaf Utility

Relocation Phase I

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING	454	1000					1454
RENEWAL & REPLACEMENT							
TOTAL	454	1000					1454

ESTIMATED PROJECT COSTS	
02/10/19	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	1,350,000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$1,350,000

MAP



DESCRIPTION:
Escambia County is planning on 4-laning this west section of the Pinestead/Longleaf corridor (Pine Forest to Kemp). ECUA will have extensive utility relocation and possible sewer expansion and possible lift station replacement. The County does not have exact timing of when the project will be bid or started, however, as of January 2019, it is anticipated this project could go to construction in 2019/2020. ECUA will request 90% plans from the County in order for us to do our own utility relocation design at which time we will ask the County to incorporate design into their roadway plans, and reimburse them for the appropriate relocations.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CR014B

Program: Utility Relocation

Project Title: Pinestead (Kemp to US 29) Utility Relocation

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING	25			500	1000		1525
RENEWAL & REPLACEMENT							
TOTAL	25			500	1000		1525

ESTIMATED PROJECT COSTS	MAP
02/10/15	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	

DESCRIPTION:
Escambia County is planning on 4-laning this west section of the Pinestead/Longleaf corridor (Kemp to 29). ECUA will have extensive utility relocation and possible sewer expansion and possible lift station replacement. The County does not have exact timing of when the project will be bid or started, however, as of February 2017, it is anticipated this project could go to construction in 2019/2020. ECUA will request 90% plans from County in order to do our own utility relocation design at which time we will ask the County to incorporate design into their roadway plans, and reimburse them for the appropriate relocations.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CR123

Program: Utility Relocation

Project Title: Manhole/Valve Box Adjustments

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING	838		300	300	300	300	2038
RENEWAL & REPLACEMENT							
TOTAL	838		300	300	300	300	2038

ESTIMATED PROJECT COSTS	MAP
02/10/15	VARIOUS LOCATIONS
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	

DESCRIPTION:
This project is used to fund manhole and valve box adjustments for FDOT, County, and City road resurfacing projects. This project also funds the purchase of materials for these adjustments.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CR123A
Program: Utility Relocation
Project Title: MH/VB Materials

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING	48	50	50	50	50	50	298
RENEWAL & REPLACEMENT							
TOTAL	48	50	50	50	50	50	298

ESTIMATED PROJECT COSTS	MAP
02/10/19	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	

VARIOUS LOCATIONS

DESCRIPTION:
This project is used to fund manhole and valve box adjustments for FDOT, County, and City road resurfacing projects.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CR123E

Program: Utility Relocation

Project Title: City of Pensacola Resurfacing

2017 Manhole/Valve Box Adj.

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING	2100						2100
RENEWAL & REPLACEMENT							
TOTAL	2100						2100

ESTIMATED PROJECT COSTS	MAP
02/14/17	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	2100000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$2,100,000

VARIOUS LOCATIONS

DESCRIPTION:
<p>This project is used to fund manhole and valve box adjustments for the City of Pensacola's FY 17 road resurfacing project. The project is being constructed in 3 phases.</p>



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CR302B
Program: Utility Relocation
Project Title: Olive Road Phase 2
Analyses

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING	299						299
RENEWAL & REPLACEMENT							
TOTAL	299						299

ESTIMATED PROJECT COSTS	MAP
2/26/2018	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$374,000

DESCRIPTION:

The County has prepared plans make Olive Road from Davis Highway to Ninth Avenue three lanes. The County has phased the project into two phases. Phase One is from Davis Highway to Yancey Boulevard and Phase Two is from Yancey Boulevard to Ninth Avenue. The ECUA utility relocation for Phase One is completed. Phase Two has been bid and awarded to Panhandle Grading and Paving, Inc. Based on the awarded bid and cost sharing agreement, ECUA will need an additional \$100,000 to reimburse the County.



PROJECT DATA SHEET
Capital Improvements Program
 Fiscal Years
2020-2024

PROJECT NO: CR405
 Program: Utility Relocation
 Project Title: General Utility Relocation

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING	1813	800	800	800	800	800	5813
RENEWAL & REPLACEMENT							
TOTAL	1813	800	800	800	800	800	5813

ESTIMATED PROJECT COSTS		<div>MAP</div> <div align="center" style="font-size: 2em; margin-top: 100px;">VARIOUS LOCATIONS</div>
2/9/2019		
ENV. ASSESS		
ENGINEERING		
SURVEY		
INSPECTION		
TESTING		
CONSTRUCTION		
EQUIPMENT	5,813,000	
MATERIAL		
FURNISHING		
LAND		
MISCELLANEOUS		
INDIRECT		
TOTAL	\$5,813,000	

DESCRIPTION:

This project is used to fund FDOT, County and City projects where the small utility relocation scope and/or shortened response time doesn't allow for traditional bidding. It would be used to provide utility relocations in a timely manner to help to avoid road contractor delay claims.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CR411

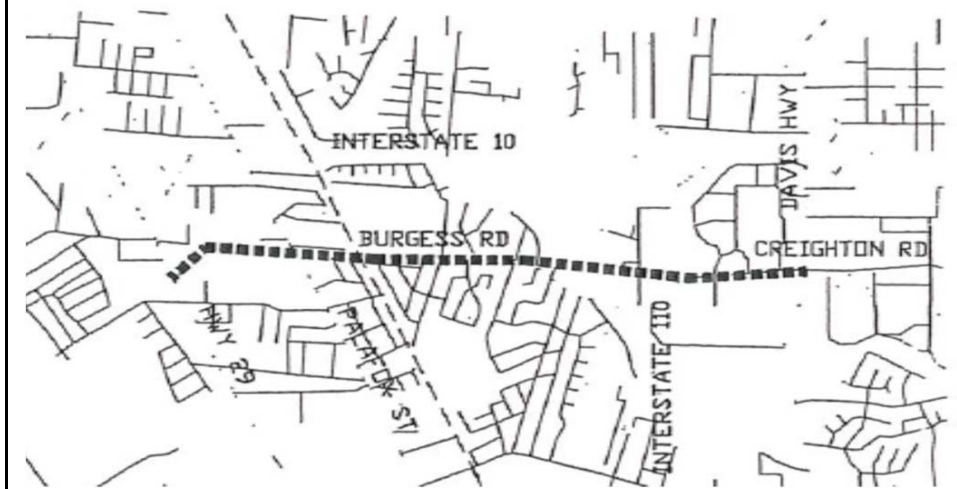
Program: Utility Relocation

Project Title: Burgess/Creighton Utility
Relocation

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING	25				500		525
RENEWAL & REPLACEMENT							
TOTAL	25				500		525

ESTIMATED PROJECT COSTS	
02/10/14	
ENV. ASSESS	
ENGINEERING	25000
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	500000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$525,000

MAP



DESCRIPTION:

The FDOT is preparing plans for the 4 lane construction of Burgess and Creighton Road from Hwy. 29 to Davis Highway. As of February 2019, construction of the project is not in the FDOT 5 year work plan. Initial funds will be used for planning and preliminary engineering. ECUA will monitor the FDOT progress and funding of this project and will update ECUA CIP funding needs accordingly.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CR734

Program: Utility Relocation

Project Title: Materials and Supplies U R

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING	66	40	40	40	40		226
RENEWAL & REPLACEMENT							
TOTAL	66	40	40	40	40		226

ESTIMATED PROJECT COSTS	MAP
01/31/19	VARIOUS LOCATIONS
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	

DESCRIPTION:
Provide funding to purchase miscellaneous materials such as valves, inserta-valves, fire hydrants, etc. as needed to support various utility relocation efforts when there is no CIP project identified. Project examples include City, County, or FDOT contractors performing minor ECUA relocation work without the need for ECUA reimbursement (hence no ECUA CIP #).
185



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CR

Program: Utility Relocation

Project Title: I-10/Beulah Interchange U R

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING				500			500
RENEWAL & REPLACEMENT							
TOTAL				500			500

ESTIMATED PROJECT COSTS	MAP
2/2/2018	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	

<p>DESCRIPTION:</p> <p>FDOT is making plans for a new I-10 interchange near vicinity of Beulah Road. The proposed interchange will not utilize the existing Beulah Rd. overpass, but rather incorporate a new overpass via an extension of Isaac's Lane. It is anticipated the FDOT will pay for ECUA water main and force main relocations along Beulah Road due to Federally funded Interstate Project. ECUA may choose to oversize some of the other relocated mains via what it known as betterment, thereby requiring us to pay the FDOT the difference between costs to relocate existing main sizes versus large main sizes. ECUA may also choose to install a large diameter water main under I-10 at the location of the new overpass, thereby givine ECUA future options to install a new transmission water main and a northern water supply to feed to the Beulah area. The ECUA betterment cost is estimated at \$ 250,000, and the ECUA transmission water main under I-10 is estimated at \$500,000, resulting in a total budget of \$ 750,000. The FDOT will utilize a D/B Contract which is estimated to advertise January 27, 2025.</p>
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PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CR

Program: Utility Relocation

Project Title: 1-10/Hwy. 29 Interchange U R

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING				500			500
RENEWAL & REPLACEMENT							
TOTAL				500			500

ESTIMATED PROJECT COSTS	MAP
02/13/17	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	

DESCRIPTION:
<p>The FDOT is currently under design to realign the I-10 and Hwy. 29 Interchange. This project will have a new bridge constructed over Hwy. 29 and the bridge at Palafox. ECUA will need to relocate the water main along Palafox and install a HDD under the I-10 at Palafox. We are also working diligently with the FDOT and HDR to locate and protect the 42" transmission force main to prevent conflict with it. This project's estimated testing date is scheduled for March 29, 2023.</p>

General Projects





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**GENERAL PROJECT
CAPITAL IMPROVEMENT PROJECTS
FISCAL YEARS 2020-2024**
(in 000's)

PROJECT NUMBER	PROJECT TITLE	PRIOR YEARS	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	5 YR TOTAL REQUIREMENT	PROJECT TOTAL
CA001	Oversizing - Water & Sewer Lines	\$1,389	\$250	\$500	\$300	\$300	\$300	\$1,650	\$3,039
CA406D	Water System Security (Production Wells)	641		700	500	500	500	2,200	2,841
CA515	Facility Easement/Access Maintenance	1,416		200	200	200	200	800	2,216
CA605	I.T. Master Plan	4,335	160					160	4,495
CA806	Godwin Regional Services Emergency Storage	600	50					50	650
CA807	Forest Restoration Plan	57		150	25	25	25	225	282
TOTALS		\$8,438	\$460	\$1,550	\$1,025	\$1,025	\$1,025	\$5,085	\$13,523

LESS PRIOR YEARS 8,438
5 YR PROJECTION **\$5,085**

**GENERAL PROJECTS
RENEWAL & REPLACEMENT PROJECTS
FISCAL YEARS 2020-2024**
(in 000's)

PROJECT NUMBER	PROJECT TITLE	PRIOR YEARS	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	5 YR TOTAL REQUIREMENT	PROJECT TOTAL
RA211	Control Panel/RTU/Instrument Controls	\$1,364		\$250				\$250	\$1,614
RA709	Ellyson Garage CNG Safety Improvements	798	500					500	1,298
RA805	Vehicle R & R Program	1,700	1,800	1,890	1,984	1,924	2,083	9,681	11,381
RA806	Ongoing Pipeline Cleaning (Pigging)	500		1,000	500	500	500	2,500	3,000
TOTALS		\$4,362	\$2,300	\$3,140	\$2,484	\$2,424	\$2,583	\$12,931	\$17,293

LESS PRIOR YEARS 4,362
5 YR PROJECTION **\$12,931**



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**GENERAL PROJECT
CAPITAL IMPROVEMENT PROJECTS
FISCAL YEARS 2020-2024**
(in 000's)

PROJECT NUMBER	PROJECT TITLE	PRIOR YEARS	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	5 YR TOTAL REQUIREMENT	PROJECT TOTAL
CA001	Oversizing - Water & Sewer Lines	\$1,389	\$250	\$500	\$300	\$300	\$300	\$1,650	\$3,039
CA406D	Water System Security (Production Wells)	641		700	500	500	500	2,200	2,841
CA515	Facility Easement/Access Maintenance	1,416		200	200	200	200	800	2,216
CA605	I.T. Master Plan	4,335	160					160	4,495
CA806	Godwin Regional Services Emergency Storage	600	50					50	650
CA807	Forest Restoration Plan	57		150	25	25	25	225	282
TOTALS		\$8,438	\$460	\$1,550	\$1,025	\$1,025	\$1,025	\$5,085	\$13,523

LESS PRIOR YEARS	8,438
5 YR PROJECTION	\$5,085



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CA001

Program: General Projects

Project Title: Oversizing-Water/Sewer Lines

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING	1389	250	500	300	300	300	3039
RENEWAL & REPLACEMENT							
TOTAL	1389	250	500	300	300	300	3039

ESTIMATED PROJECT COSTS		MAP
12/31/16		
ENV. ASSESS		
ENGINEERING		
SURVEY		
INSPECTION		
TESTING		
CONSTRUCTION	3,039,000	
EQUIPMENT		
MATERIAL		
FURNISHING		
LAND		
MISCELLANEOUS		
INDIRECT		
TOTAL	\$3,039,000	

SYSTEM WIDE

DESCRIPTION:
In reviewing developer-sponsored system expansions, there are sometimes circumstances when it is beneficial to ECUA to work with the project developer to install larger or deeper lines than required for the developer's project or make other adjustments consistent with ECUA's long term needs. These funds are needed to fund these types of "oversizing" activities.



PROJECT DATA SHEET
Capital Improvements Program
 Fiscal Years
2020-2024

PROJECT NO: CA406D
 Program: General Projects
 Project Title: Water System Security
 (Production Wells)

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING	641		700	500	500	500	2841
RENEWAL & REPLACEMENT							
TOTAL	641		700	500	500	500	2841

ESTIMATED PROJECT COSTS		MAP <
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DESCRIPTION:

A security Vulnerability Assessment was recently completed on ECUA's Water Production Facility. The assessment contains additional levels of security to consider at Water Production sites.



FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING	1416		200	200	200	200	2216
RENEWAL & REPLACEMENT							
TOTAL	1416		200	200	200	200	2216

DESCRIPTION:
Many of ECUA 15 lift stations, manholes, water and sewer mains and other facilities are located in area where access is limited or the rights of access are unclear. The project would provide means to review ECUA's property rights, perform title searches, surveys, and obtain easements as needed to construct new or stabilize and maintain existing access to roadways, and to clear vegetation as needed.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CA605

Program: General Projects

Project Title: I. T. Master Plan

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING	4335	160					4495
RENEWAL & REPLACEMENT							
TOTAL	4335	160					4495

ESTIMATED PROJECT COSTS	MAP
1/28/19	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	

N/A

DESCRIPTION:

This project includes the procurement of new Enterprise Resource Planning software system that touches all departments company-wide. It will also include training, data migration, and installation and testing of the new system.

PC Replacement: : 160,000



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CA806

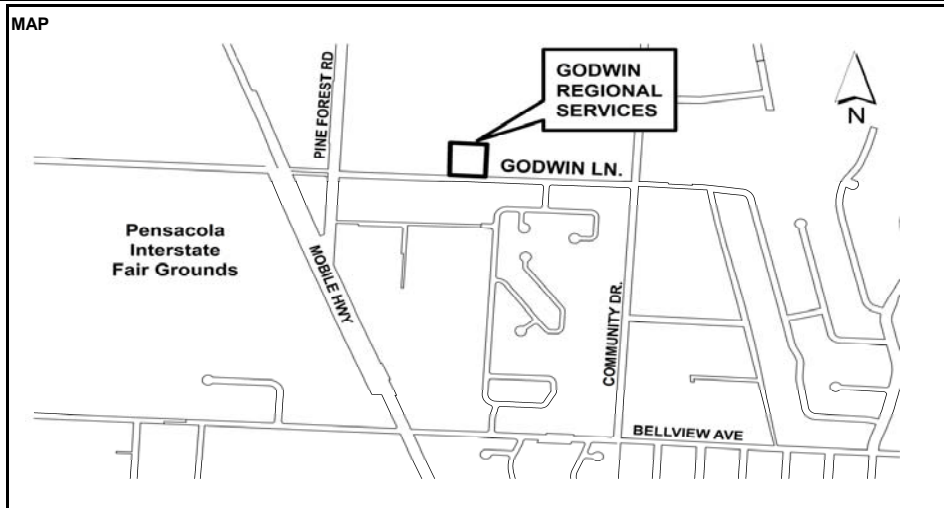
Program: General Projects

Project Title: Godwin Regional Services

Emergency Storage

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	600	50					650
TOTAL	600	50					650

ESTIMATED PROJECT COSTS	
1/30/2019	
ENV. ASSESS	
ENGINEERING	75,000
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	575,000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$650,000



DESCRIPTION:

The building will have room to store 2 - valve insertion trailers, and accessories, 2 Case backhoes, one double axle trailer and a Mini Excavator (Kubota) with trailer. It will also have room for repair parts for fire hydrants and water meters and other repair parts. The purpose of the pre-engineered metal building is to serve as a garage for equipment and service vehicles and critical inventory. Keeping this equipment from UV exposure and the weather in general will prolong all of the equipment's useful life.

Characteristics for the buildings are:

- * 75' x 60' with three 12' x 18' roll up doors on the north side and five 12' x 18' roll up doors on the south side and one 3' door on the east side.
- * 22' clear height to lowest structural member on the east and west faces.
- * Metal roofing with insulation.
- * Metal siding on all faces of the building with insulation.
- * Spread foundations.
- * Interior slab on grade.
- * Interior lighting.
- * Exterior lighting on the face of the building.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CA807
 Program: General Project
 Project Title: Forest Restoration Plan

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING	57		150	25	25	25	282
RENEWAL & REPLACEMENT							
TOTAL	57		150	25	25	25	282

ESTIMATED PROJECT COSTS	MAP
10/17/2017	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	

DESCRIPTION:

ECUA, working with Southern Forestry Consultants, has prepared a forest restoration and management plan covering the 2185 acres of property purchase in conjunction with the Central Water Reclamation Facility. Yearly operations include planting, harvesting, roller chopping, herbicide application and prescribed burning. The goal is to develop a self-sustaining native forested ecosystem capable of maximizing groundwater recharge capabilities while maximizing revenues over a 40-50 year planning horizon. Financial projections for the next 20 years show anticipated net revenues over expenses of approximately \$420,000.



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**GENERAL PROJECTS
RENEWAL & REPLACEMENT PROJECTS
FISCAL YEARS 2020-2024**
(in 000's)

PROJECT NUMBER	PROJECT TITLE	PRIOR YEARS	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	5 YR TOTAL REQUIREMENT	PROJECT TOTAL
RA211	Control Panel/RTU/Instrument Controls	\$1,364		\$250				\$250	\$1,614
RA709	Ellyson Garage CNG Safety Improvements	798	500					500	1,298
RA805	Vehicle R & R Program	1,700	1,800	1,890	1,984	1,924	2,083	9,681	11,381
RA806	Ongoing Pipeline Cleaning (Pigging)	500		1,000	500	500	500	2,500	3,000
TOTALS		\$4,362	\$2,300	\$3,140	\$2,484	\$2,424	\$2,583	\$12,931	\$17,293
LESS PRIOR YEARS									4,362
5 YR PROJECTION									\$12,931



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RA211

Program: General Projects

Project Title: Control Panels/RTU/Instrument

Emergency Parts

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	1364		250				1614
TOTAL	1364		250				1614

ESTIMATED PROJECT COSTS	MAP
1/22/2015	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	1614000
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	\$1,614,000

VARIOUS LOCATIONS

DESCRIPTION:

As a result of combining LS/Water Wells I/E with Plants I/E, the consolidation of three projects was approved to create RA211. They were RS118H, RS928P, and RW715. The scopes for these projects involved replacing the electrical panels and original SCADA RTU's at various lift stations and water wells because of deterioration and age. This program, when completed, would make all panels similar, which would make the electrical panels conform with the new NEMA codes and standards for arc flash and more troubleshooting and repair easier and reduce the types of spare parts required. Electrical panels are deteriorating, flows have increased and some of the original SCADA RTU'S are failing and out of date. The repair requires the new panels to meet current codes and additional costs which makes it more cost effective to replace the panels. The electrical panels are exposed to weather and initially were built for the pumps installed at the time of construction. An average electrical panel will last 10 to 15 years. With over 30 water wells and 379 lift stations in our system we must replace 25 to 30 panels per year to keep up. During the past few years we have only replaced 10-12 panels per year so we are still looking at a backlog of panels which require replacement. New regulatory requirements have increased in the cost per panel. This program in conjunction with our SCADA system has reduced our liabilities by reducing the sewer backups and overflows.



FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	798	500					1298
TOTAL	798	500					1298

DESCRIPTION:
<p>The Ellyson Vehicle Maintenance Garage is in need of updates to meet building code requirements to work on CNG vehicles. The number of vehicles maintained at the facility and the number of mechanics assigned to the Ellyson Garage have both increased. Therefore, additional work bays and expanded training room and restroom/locker room facilities are needed.</p>



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RA805
 Program: General Projects
 Project Title: Vehicle R & R

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	1700	1800	1890	1984	1924	2083	11381
TOTAL	1700	1800	1890	1984	1924	2083	11381

ESTIMATED PROJECT COSTS	MAP
2/14/2019	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	

DESCRIPTION:

This Project provides funding for the renewal and replacement of ECUA fleet vehicles and heavy equipment. An expected life span is assigned to each vehicle when it is purchased, based on the type of service it will provide. This replacement schedule was originally developed as a straight projection of the expected life span, using 5% increase in the cost of new vehicles each year. The ECUA replaces equipment based upon condition, annual costs of repairs and expectancy.



PROJECT NO:	RA806
Program:	General Project
Project Title:	Ongoing Pipeline Cleaning (Pigging)

	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
FUNDS (000)							
CIP							
OPERATING							
RENEWAL & REPLACEMENT	500		1000	500	500	500	3000
TOTAL	500		1000	500	500	500	3000

ESTIMATED PROJECT COSTS		MAP <
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This project is for ongoing pipeline cleaning for both potable water and wastewater (force main) pipelines. Pipelines to be cleaned will be prioritized by Engineering and Regional Services personnel to address water quality or pressure issues and will be cleaned as funds are available.



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Sanitation





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SUMMARY BY PROGRAM TYPE
SANITATION SYSTEM
(in 000's)

FUNDS DESCRIPTION	PRIOR YEARS	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	5 YR REQUIREMENTS	PROJECT TOTAL
Containers	\$515	\$600	\$650	\$700	\$750	\$750	\$3,450	\$3,965
Transfer Station	0	\$300	\$1,700	\$3,000	\$100	\$100	5,200	5,200
Routeware	0	\$300					300	300
Vehicles	6,167	3,600	3,600	3,600	3,600	3,600	18,000	24,167
Equipment	200	200	200	200	200	200	1,000	1,200
Total Sanitation System	\$6,882	\$5,000	\$6,150	\$7,500	\$4,650	\$4,650	\$27,950	\$34,832

Sanitation Systems 5 Yr Capital Requirements by Type FY 2020 - FY 2024



SANITATION
CAPITAL IMPROVEMENT PROJECTS
FISCAL YEARS 2020-2024
(in 000's)

PROJECT NUMBER	PROJECT TITLE	PRIOR YEARS	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	5 YR TOTAL REQUIREMENT	PROJECT TOTAL
CT503	Add'l Containers Commercial Customers	\$165	\$200	\$200	\$200	\$200	\$200	\$1,000	\$1,165
CT__	Transfer Station		300	1,700	3,000	100	100	5,200	5,200
CT__	Routeware Software for Collection Vehicles		300					300	300
TOTALS		\$165	800	1,900	3,200	300	300	\$6,500	6,665

LESS PRIOR YEARS 165
5 YR PROJECTION **\$6,500**

SANITATION
RENEWAL & REPLACEMENT PROJECTS
FISCAL YEARS 2020-2024
(in 000's)

PROJECT NUMBER	PROJECT TITLE	PRIOR YEARS	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	5 YR TOTAL REQUIREMENT	PROJECT TOTAL
RT400	Annual Residential Vehicle Replacement Program	\$6,145	\$3,300	\$3,300	\$3,300	\$3,300	\$3,300	\$16,500	\$22,645
RT803	Annual Commercial Vehicle Replacement Program	22	300	300	300	300	300	1,500	1,522
RT804	Annual Composting Equipment Replacement Program	200	200	200	200	200	200	1,000	1,200
RT902	Container Replacement Residential	350	400	450	500	550	550	2,450	2,800
TOTALS		\$6,717	4,200	4,250	4,300	4,350	4,350	\$21,450	28,167

LESS PRIOR YEARS 6,717
5 YR PROJECTION **\$21,450**

SANITATION
CAPITAL IMPROVEMENT PROJECTS
FISCAL YEARS 2020-2024
(in 000's)

PROJECT NUMBER	PROJECT TITLE	PRIOR YEARS	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	5 YR TOTAL REQUIREMENT	PROJECT TOTAL
CT503	Add'l Containers Commercial Customers	\$165	\$200	\$200	\$200	\$200	\$200	\$1,000	\$1,165
CT__	Transfer Station		300	1,700	3,000	100	100	5,200	5,200
CT__	Routeware Software for Collection Vehicles		300					300	300
TOTALS		\$165	800	1,900	3,200	300	300	\$6,500	6,665

LESS PRIOR YEARS 165
5 YR PROJECTION **\$6,500**



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CT503

Program: Sanitation

Project Title: Additional Containers for
Commercial Customers

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING	165	200	200	200	200	200	1165
RENEWAL & REPLACEMENT							
TOTAL	165	200	200	200	200	200	1165

ESTIMATED PROJECT COSTS	MAP
2/9/2019	N/A
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	
EQUIPMENT 1,165,000	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL \$1,165,000	

DESCRIPTION:					
To provide front-load dumpsters and roll-off containers for new commercial customers and replacement of existing dumpsters.					
Includes the following cost projections for purchase of commercial containers:					
	Fiscal Year 2020	Fiscal Year 2021	Fiscal Year 2022	Fiscal Year 2023	Fiscal Year 2024
Front-load Dumpsters	\$100,000.00	\$100,000.00	\$100,000.00	\$100,000.00	\$100,000.00
Roll-off Containers	\$100,000.00	\$100,000.00	\$100,000.00	\$100,000.00	\$100,000.00
	\$200,000.00	\$200,000.00	\$200,000.00	\$200,000.00	\$200,000.00



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: CT_____

Program: Sanitation

Project Title: Transfer Station

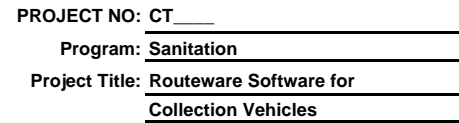
FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING		300	1700	3000	100	100	5200
RENEWAL & REPLACEMENT							
TOTAL		300	1700	3000	100	100	5200

ESTIMATED PROJECT COSTS		MAP
2/9/2019		
ENV. ASSESS		
ENGINEERING	520,000	
SURVEY		
INSPECTION		
TESTING		
CONSTRUCTION	4,680,000	
EQUIPMENT		
MATERIAL		
FURNISHING		
LAND		
MISCELLANEOUS		
INDIRECT		
TOTAL	\$5,200,000	

N/A

DESCRIPTION:

To provide funding for the design and construction of the transfer station at the Godwin Lane Facility and to purchase rolling stock equipment such as wheel loaders, semi-tractors and walking floor trailers.



DESCRIPTION:

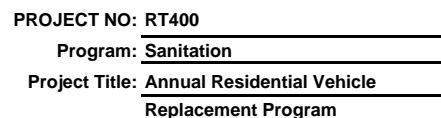


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SANITATION
RENEWAL & REPLACEMENT PROJECTS
FISCAL YEARS 2020-2024
(in 000's)

PROJECT NUMBER	PROJECT TITLE	PRIOR YEARS	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	5 YR TOTAL REQUIREMENT	PROJECT TOTAL
RT400	Annual Residential Vehicle Replacement Program	\$6,145	\$3,300	\$3,300	\$3,300	\$3,300	\$3,300	\$16,500	\$22,645
RT803	Annual Commercial Vehicle Replacement Program	22	300	300	300	300	300	1,500	1,522
RT804	Annual Composting Equipment Replacement Program	200	200	200	200	200	200	1,000	1,200
RT902	Container Replacement Residential	350	400	450	500	550	550	2,450	2,800
TOTALS		\$6,717	4,200	4,250	4,300	4,350	4,350	\$21,450	28,167

LESS PRIOR YEARS 6,717
5 YR PROJECTION **\$21,450**



DESCRIPTION:
<p>During FY18: ECUA Resolution 18-01 was passed approving a lease agreement with PNC Equipment Finance LLC. This lease was for replacement vehicles using Project Number RT803. The following were purchased utilizing this lease for a total amount of \$2,749,040:</p> <ul style="list-style-type: none">4 - Peterbilt Chassis with Rotopac Automated Side Loader Bodies2 - Dennis Eagle Chassis with New Way Rear Loader Bodies4 - Autocar chassis with AM Rep Side Loader Bodies <p>A lease addendum can be executed each year for the following 5 years to purchase additional trucks of a like nature.</p>



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RT803

Program: Sanitation

Project Title: Annual Commercial Vehicle

Replacement Program

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	22	300	300	300	300	300	1522
TOTAL	22	300	300	300	300	300	1522

ESTIMATED PROJECT COSTS	MAP
2/9/2019	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	

N/A

DESCRIPTION:
To set aside funds in order to purchase new commercial collection vehicles as needed.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RT804

Program: Sanitation

Project Title: Annual Composting Equipment

Replacement Program

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	200	200	200	200	200	200	1200
TOTAL	200	200	200	200	200	200	1200

ESTIMATED PROJECT COSTS	MAP
2/9/2019	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	

N/A

DESCRIPTION:
To set aside funds in order to purchase replacement grinders, screens, windrow turners and wheel loaders as needed.



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RT902

Program: Sanitation

Project Title: Container Replacement -

Residential

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT	350	400	450	500	550	550	2800
TOTAL	350	400	450	500	550	550	2800

ESTIMATED PROJECT COSTS	MAP
2/9/2019	
ENV. ASSESS	
ENGINEERING	
SURVEY	
INSPECTION	
TESTING	
CONSTRUCTION	
EQUIPMENT	
MATERIAL	
FURNISHING	
LAND	
MISCELLANEOUS	
INDIRECT	
TOTAL	

N/A

DESCRIPTION:

The capital reserve project will provide the necessary funding to purchase containers for new customers and replacement of containers that are beyond the warranty period for new and existing customers of the residential collection and recycling systems.



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Materials Recycling





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SUMMARY BY PROGRAM TYPE
MATERIALS RECYCLING FACILITY
(in 000's)

FUNDS DESCRIPTION	PRIOR YEARS	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	5 YR REQUIREMENTS	PROJECT TOTAL
Storage Modifications	\$50	\$300					\$300	\$350
Equipment		100	100	100	100	100	500	500
Total Sanitation System	\$50	\$400	\$100	\$100	\$100	\$100	\$800	\$850



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**MATERIALS RECYCLING FACILITY
CAPITAL IMPROVEMENT PROJECTS
FISCAL YEARS 2020-2024
(in 000's)**

PROJECT NUMBER	PROJECT TITLE	PRIOR YEARS	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	5 YR TOTAL REQUIREMENT	PROJECT TOTAL
CT804	Storage Modifications	\$50	\$300	0	0	0	0	\$300	\$350

LESS PRIOR YEARS	50
5 YR PROJECTION	<u>\$300</u>

**MATERIALS RECYCLING FACILITY
RENEWAL & REPLACEMENT PROJECTS
FISCAL YEARS 2020-2024
(in 000's)**

PROJECT NUMBER	PROJECT TITLE	PRIOR YEARS	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	5 YR TOTAL REQUIREMENT	PROJECT TOTAL
RT____	Annual MRF Equipment Upgrade		\$100	100	100	100	100	\$500	\$500

LESS PRIOR YEARS	0
5 YR PROJECTION	<u>\$500</u>



FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING	50	300					350
RENEWAL & REPLACEMENT							
TOTAL	50	300					350

DESCRIPTION:
<p>This project will provide funding to design and construct two additional concrete loading docks and covered storage for baled recyclables. Currently the MRF has one permanent loading dock and one portable loading dock. This limits the MRF's ability to load outbound semi-trailers to approximately 10 per day. The additional permanent loading docks are projected to increase loading capacity to approximately 24 semi-trailers per day, which will expedite shipment of recyclables from the MRF.</p>



PROJECT DATA SHEET

Capital Improvements Program

Fiscal Years
2020-2024

PROJECT NO: RT _____
 Program: MRF
 Project Title: Annual MRF Equipment
Upgrade

FUNDS (000)	PRIOR YEARS	FISCAL YEAR 2020	FISCAL YEAR 2021	FISCAL YEAR 2022	FISCAL YEAR 2023	FISCAL YEAR 2024	PROJECT TOTAL
CIP							
OPERATING							
RENEWAL & REPLACEMENT		100	100	100	100	100	500
TOTAL		100	100	100	100	100	500

ESTIMATED PROJECT COSTS		MAP
2/9/2019		
ENV. ASSESS		
ENGINEERING		
SURVEY		
INSPECTION		
TESTING		
CONSTRUCTION		
EQUIPMENT	500,000	
MATERIAL		
FURNISHING		
LAND		
MISCELLANEOUS		
INDIRECT		
TOTAL	\$500,000	

N/A

DESCRIPTION:

This project will establish a funding source for replacement and/or upgrades of sorting and rolling stock as the facility ages.



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