

CLAYTON COUNTY WATER
AUTHORITY

Adopted Budget

2019 - 2020

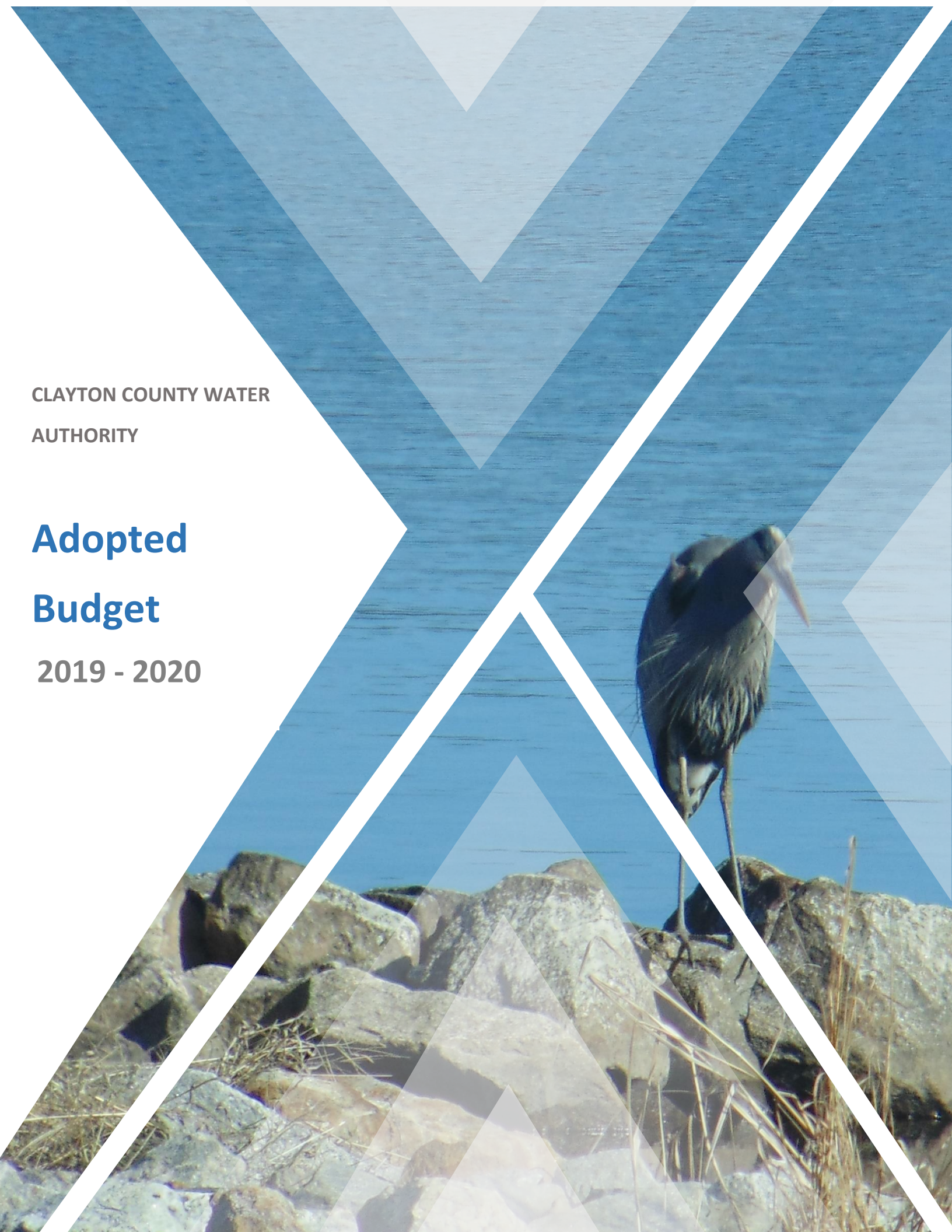




TABLE OF CONTENTS

TABLE OF CONTENTS.....	1
INTRODUCTION.....	6
Transmittal Letter	6
How to Navigate this Document.....	8
Consolidated Budget – FY 2019 – 2020	9
Organizational Chart	10
Board of Directors.....	11
Leadership Team.....	12
Distinguished Budget Presentation Award	14
General Information	15
Mission, Vision and Values.....	15
Governance	15
Structure	16
Schematic of Fund Structure and Cash Flow Diagram	18
Overview of the System	19
System Map	20
Water Operations	21
Wastewater Operations.....	21
Stormwater Operations	22
Interconnections	22
Distribution and Conveyance Infrastructure	22
Community Profile	23
Service Area Map	23
Transportation and Accessibility.....	24
Education	25
Demographics and Economic Outlook.....	25
Water and Sewer Bill Comparison	30
Financial Highlights and Trends	31
Annual Water Usage by Customer Type	31
Water Customers by Type.....	31
Average Monthly Water Usage by Customer Type.....	31
Annual Sewer Usage by Customer Type	32



Sewer Customers by Type.....	32
Average Monthly Sewer Usage by Customer Type.....	32
Stormwater Customers by Type	33
Top 10 Customers	33
Weather Conditions	34
Priorities and Challenges.....	35
Economic Factors	35
Workforce Continuity.....	36
Technology Advancement.....	36
Water Quality/Regulatory Issues	37
Managing Infrastructure and Assets.....	38
Summary of Factors Influencing the 2019 – 2020 Operating and Capital Budgets	40
EXECUTIVE SUMMARY	41
Consolidated Budget – FY 2019 – 2020	41
Budget Summary: Water and Sewer Fund.....	42
Water and Sewer Fund Revenues as Percent of FY 2019-2020 Budget	43
Water and Sewer Fund Expenses as Percent of FY 2019-2020 Budget	43
Analysis of Revenues – Water and Sewer Fund.....	44
Revenue Budget Assumptions FY 2019 – 2020.....	44
Analysis of Expenses – Water and Sewer Fund	45
Operating and Capital Expense Budget Assumptions FY 2019 – 2020	45
Capital Project Summary – Water and Sewer Fund.....	50
Budgetary Analysis – Revenues and Expenses: Actual Performance to Budget Comparison	51
Budgetary Analysis – Revenues: Budget to Budget Comparison.....	52
Budgetary Analysis – Expenses: Budget to Budget Comparison	52
Budget Summary: Stormwater Fund	53
Analysis of Revenues – Stormwater Fund.....	54
Revenue Budget Assumptions FY 2019 – 2020.....	54
Analysis of Expenses – Stormwater Fund	55
Operating and Capital Expense Budget Assumptions FY 2019 – 2020	55
Capital Projects Summary – Stormwater Fund	58
Budgetary Analysis – Revenues and Expenses: Actual Performance to Budget Comparison	59
Budgetary Analysis – Revenues and Expenses: Budget to Budget Comparison	60



Staffing Summary.....	61
Summary by Division.....	61
PLANNING AND DIRECTION	62
Strategic Master Plan.....	62
Information Technology Master Plan	63
Work Priorities	64
Financial Plan and Cash Flow Analysis	65
Capital Improvement Need and Cash Flow Generated from Operations.....	66
Cash Flow Projection – Water and Sewer Fund.....	75
Projected Net Position – Water and Sewer Fund	76
Debt.....	77
Projected Debt Service Coverage - Water and Sewer Fund	81
Projected Net Position – Stormwater Fund	82
Levels of Service and Key Performance Indicators	84
Levels of Service – Goals and Strategies Detail.....	85
Customer Service Survey	89
BUDGET DEVELOPMENT	90
Basis of Accounting	90
Budget Calendar.....	93
Rates and Charges.....	94
Stormwater Fees.....	94
Adopted Retail Water Rates	95
OPERATING BUDGET	96
Water and Sewer Fund	97
Executive Division – Business Unit Group 100.....	100
Executive Division Consolidated Operating Budget.....	104
Water Production Division – Business Unit Group 300	133
Water Production Division – Consolidated Operating Budget	141
Program Management and Engineering Division – Business Unit Group 500.....	161
Program Management and Engineering Division – Consolidated Operating Budget.....	166
Distribution and Conveyance Division – Business Unit Group 600.....	171
Distribution and Conveyance Division – Consolidated Operating Budget.....	180
Water Reclamation Division – Business Unit Group 700	191



Water Reclamation Division – Consolidated Operating Budget	198
General Services Division – Business Unit Group 900	210
General Services Division – Consolidated Operating Budget	215
Stormwater Fund – Business Unit Group 200.....	222
Stormwater Fund – Consolidated Operating Budget.....	228
CAPITAL BUDGET.....	233
Capital Budget Overview.....	234
Capital Improvement Program – Long-Term Goals and Objectives	235
Summary of Capital Improvement Program Expenditures	235
Work Priorities – 2019 – 2020	236
Capital Equipment – Summary	237
Capital Equipment: Water and Sewer Fund – Detail by Business Unit.....	239
Capital Equipment: Stormwater Fund – Detail by Business Unit.....	241
Capital Improvement Program (CIP) – Capital Projects	242
Historical Capital Project Spending	242
Projected Capital Project Spending.....	248
Current Capital Project Spending.....	251
Capital Project FY 2019 – 2020 Budget Funding Summary	265
Renewal and Extension Funded Projects.....	266
Impact Summary of Capital Projects on Operating Budget – Renewal and Extension Fund.....	289
Stormwater Funded Projects	290
Impact Summary of Capital Projects on Operating Budget – Stormwater Fund	293
FISCAL POLICIES	294
Fiscal Policies.....	294
Operating Budget Policy	294
Capital Budget Policy	295
Accounting, Auditing and Financial Reporting Policies.....	296
Revenue Administration Policy.....	297
Expenditure Administration Policy	297
Debt Policy	298
Investment Policy.....	298
Reserve Policy	299
Risk Management Policy	299



Purchasing Policies300

STATISCAL INFORMATION304

Operating Revenues by Source305

Operating Expenses by Function.....306

General Demographic Statistics.....307

Selected Demographic and Economic Statistics308

Percentage of Individuals below Poverty Line309

Unemployment Rates310

Number of Stormwater Customers by Type311

Number of Water and Wastewater Customers by Type312

Water and Wastewater Rates Per Thousand Gallons of Usage.....313

Gallons of Water Sold and Wastewater Treated314

Water and Sewer Rates – Survey of Metro Atlanta Counties.....315

Bill Comparison with EPA Standard316

Ten Largest Customers Measured by Water and Wastewater Revenues317

Ten Largest Customers Measured by Stormwater User Fees.....318

Ratio of Outstanding Debt by Type.....319

Debt Service Coverage320

BUDGET TERMINOLOGY.....321

Glossary.....322

Acronyms and Abbreviations329



INTRODUCTION

Transmittal Letter



"Providing Quality Water and Quality Services to Our Community"

www.ccwa.us | 770.961.2130 | 1600 Battle Creek Road, Morrow, GA 30260

Mr. John Chafin, Chairman
Members of the Board of Directors,
and Customers of the Clayton County Water Authority

I am pleased to present the Clayton County Water Authority's approved operating and capital budget for Fiscal Year 2019 - 2020. The budget supports our Strategic Master Plan to finance all the Authority's services, programs and capital needs during the upcoming fiscal year. It also positions the Authority for continued success in future years through steadfast commitment to provide quality water and quality services to our community. The budget is a product of the teamwork between our Board of Directors, Management Team and staff.

As our Executive Team goes through leadership changes, we remain confident that the Authority will continue to provide a quality product at a reasonable price with quality service. A true measure of our efficiency is a comparison of our rates to other utilities. The Authority's rates continue to be among the lowest in the Metro Atlanta region and below average for all water utilities in the State. The Authority does not receive any tax revenue or other significant sources of revenue other than our rates for water, sewer and stormwater service.

Thanks to the encouragement of our Board of Directors, our Leadership Team has developed a robust Succession and Leadership Development Plan and the results of that work are shown by the capable team members who are stepping up into new leadership positions. These fresh faces will bring new ideas and energy to an already innovative and industry leading organization.

Our revenues continue to increase despite three years without rate adjustments and we are also significantly exceeding our Board's target debt service ratio of 1.5 with a result of 2.7 for the last fiscal year. This has enabled us to fund our operational and capital needs for the coming year without a rate adjustment for our customers. The improving economy, the addition of new customers and the efficient operations by our staff have all helped us to avoid a rate adjustment. The 2019-2020 budget assumes our revenues will only increase 0.9% compared to the previous budget year. This estimate is significantly lower than the previous year's actual result, but this follows our conservative approach to revenue projections in anticipation of weather conditions, an economic contraction, or a potential drought that could lead to water use restrictions.



The consolidated budget request (water, sewer and stormwater services) is only slightly higher than last year based on the revenue estimate mentioned above. Operating expenses increased this year due to projects recommended by our Strategic Asset Management Plan (SAMP) completed last year. These projects focus on business processes that will help improve our asset management practices. With revenues remaining flat, capital project funding decreased in the FY 2019 – 2020 budget to offset these operating initiatives. This decrease in capital project funding does not reflect a slowdown in our infrastructure renewal programs because these programs are being partially funded by a low interest loan from the Georgia Environmental Finance Authority and our strong debt service coverage ratio provides a significant amount of capital funding from our annual operating surplus.

The capital projects budget continues to focus on pipeline replacement projects and improvements to our water production and water resource recovery facilities. We are also making significant investments in monitoring and treatment at our water reservoirs and water production facilities to always provide high quality drinking water.

The Authority's future financial position is strong with the retirement of our final bond series in 2023 allowing its annual debt service of \$20 million to be redirected into capital infrastructure. We are proud to be Clayton County's water professionals and look forward to continuing to provide quality water and quality services to our community.

Respectfully submitted,

Acknowledgement

A special thank you is extended to Lesley Rathburn, Plant Operator, Danielle Bunch, Senior Conservation Specialist, Dani Davis, Conservation Assistant and Suzanne Brown, Public Information Officer, for the cover photos and section introductory pages



How to Navigate this Document

For easier navigation when viewing this budget in electronic format, the table of contents serve as an active links to the sections that they reference. Additionally, hyperlinks have been placed throughout the document. These links can be identified by having both blue font and are underlined. They look like this: [Hyperlink](#) or [Hyperlink](#).

To follow the link, select **Ctrl + click**.

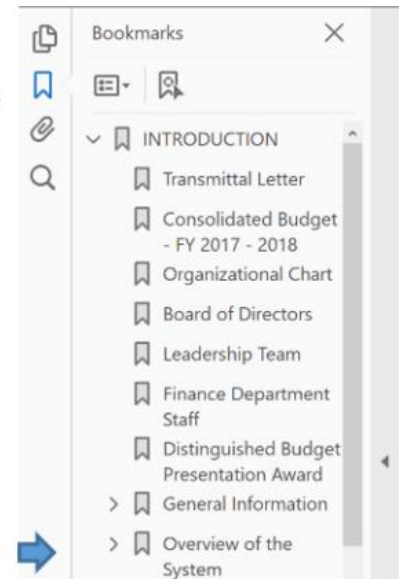
INTRODUCTION



From any page, go back to the Table of Contents by clicking on the CCWA Water Drop logo in the upper right corner of the page.

If you use **Ctrl + click** on an automated cross-reference to jump to the target location in your document, you can go back to your previous location by pressing **Alt + left arrow** key.

To take advantage of electronic bookmarks for this document, open the navigation display in internet browsers, by right clicking any page of the document, from the menu, select *Show Navigation Pane Buttons*. Once the pane is displayed select the bookmark icon, a ribbon. The arrows to the left of the menu items will expand or collapse when selected.

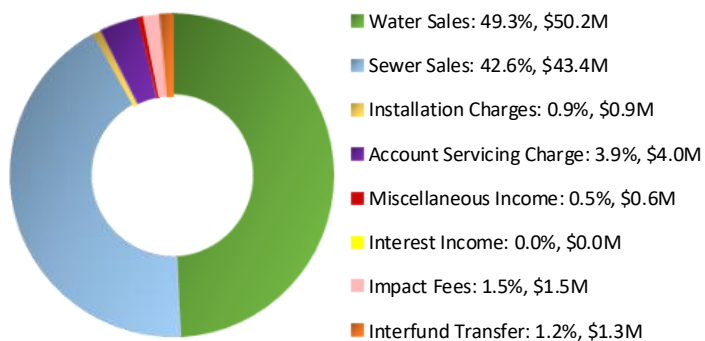




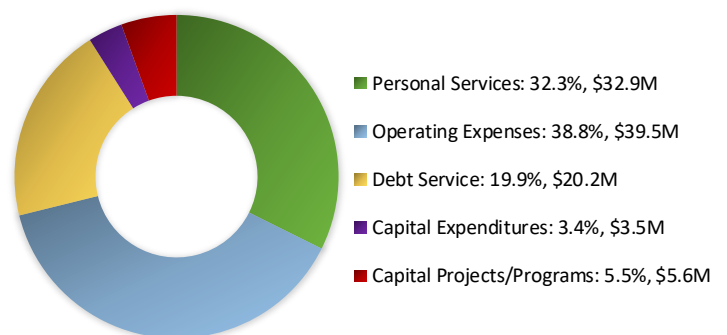
Consolidated Budget – FY 2019 – 2020

	Water and Sewer Fund	Stormwater Fund	Total	% Chg FY2018-19
Revenues				
Water Sales	\$ 50,165,164	\$ -	\$ 50,165,164	-0.8%
Sewer Sales	43,410,151	-	43,410,151	0.9%
Stormwater Fees	-	9,724,285	9,724,285	0.9%
Installation Charges	875,974	-	875,974	44.9%
Account Servicing Charge	3,956,849	157,205	4,114,054	-0.2%
Miscellaneous Income	553,747	3,098	556,845	29.3%
Interest Income	32,235	5,193	37,428	-15.9%
Impact Fees	1,539,088	-	1,539,088	75.4%
Interfund Transfer	1,271,151	-	1,271,151	-10.1%
Total Revenues	\$ 101,804,359	\$ 9,889,781	\$ 111,694,140	0.9%
Expenses				
Personal Services	\$ 32,923,306	\$ 1,809,428	\$ 34,732,734	-0.3%
Operating Expenses	39,498,061	3,084,005	42,582,066	12.5%
Debt Service	20,242,549	-	20,242,549	-10.6%
Interfund Transfer - Revenue Fund	-	1,271,151	1,271,151	-10.1%
Capital Expenditures	3,509,843	532,076	4,041,919	17.9%
Capital Projects	5,630,600	3,193,121	8,823,721	-16.0%
Total Expenses and Appropriations	\$ 101,804,359	\$ 9,889,781	\$ 111,694,140	0.9%

**REVENUES -
WATER AND SEWER FUND**

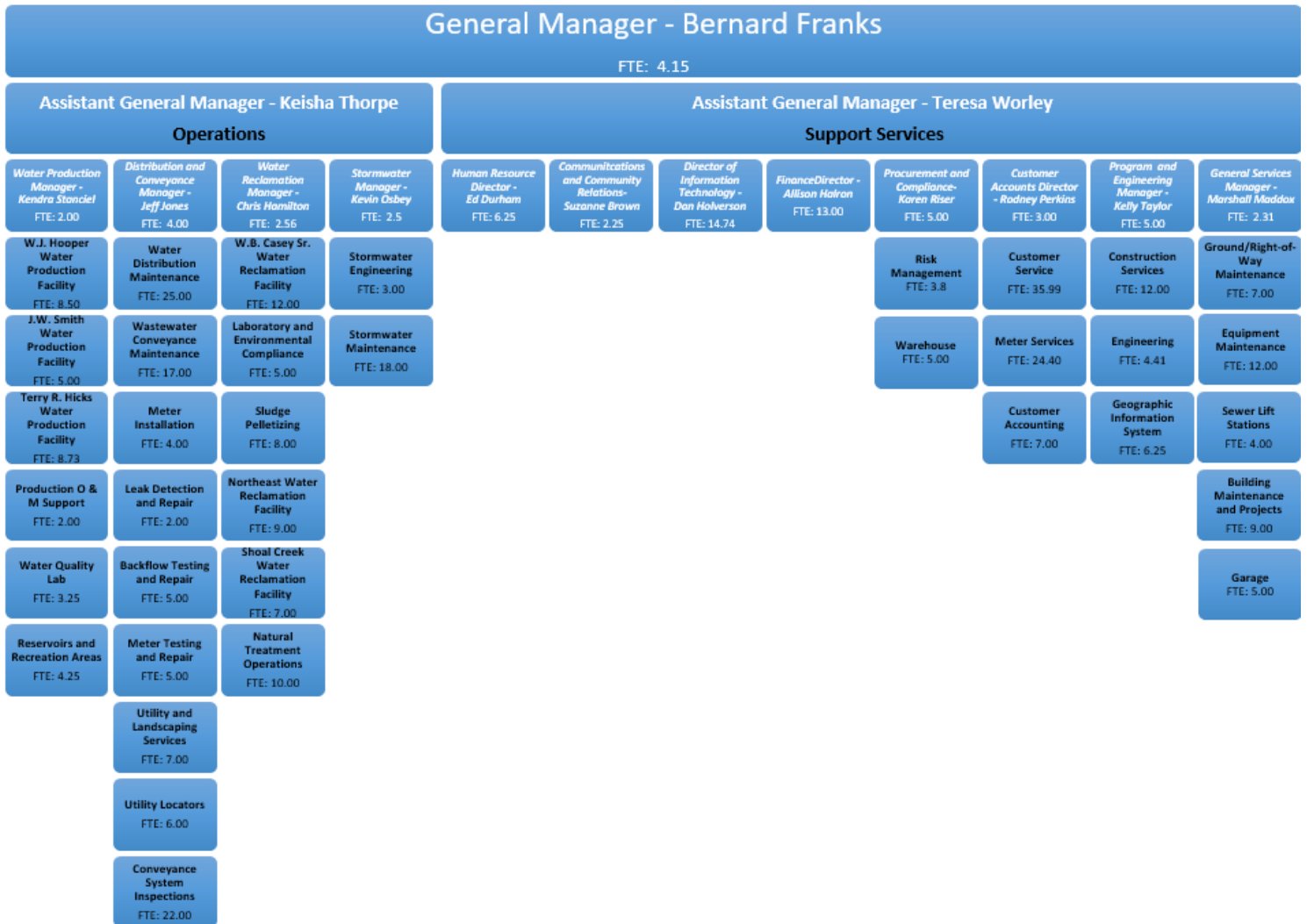


**EXPENSES -
WATER AND SEWER FUND**





Organizational Chart





Board of Directors



John M. Chafin
Chairman



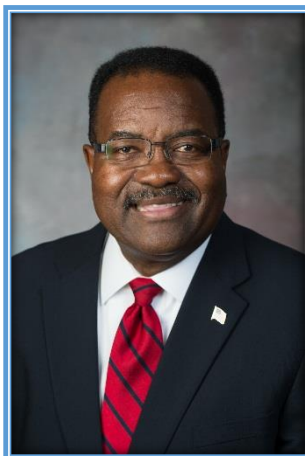
Marie Barber
Vice Chair



Rodney Givens
Secretary – Treasurer



John L. Westervelt
Member



Dr. Cephus Jackson
Member



Robin Malone
Member



Vivian Baldwin
Member



Leadership Team



Bernard Franks
General Manager



Teresa Worley
*Assistant General Manager
Support Services*



Keisha Thorpe
*Assistant General Manager
Operations*

Suzanne Brown

Ed Durham

Allison G. Halron

Chris Hamilton

Dan Holverson

Jeff Jones

Marshall Maddox

Kevin Osbey

Karen Riser

Kendra Staniel

Kelly Taylor

Rodney Perkins

Public Information Officer

Human Resource Director

Finance Director

Water Reclamation Manager

Information Technology Director

Distribution and Conveyance Manager

General Services Manager

Stormwater Program Manager

Risk Manager

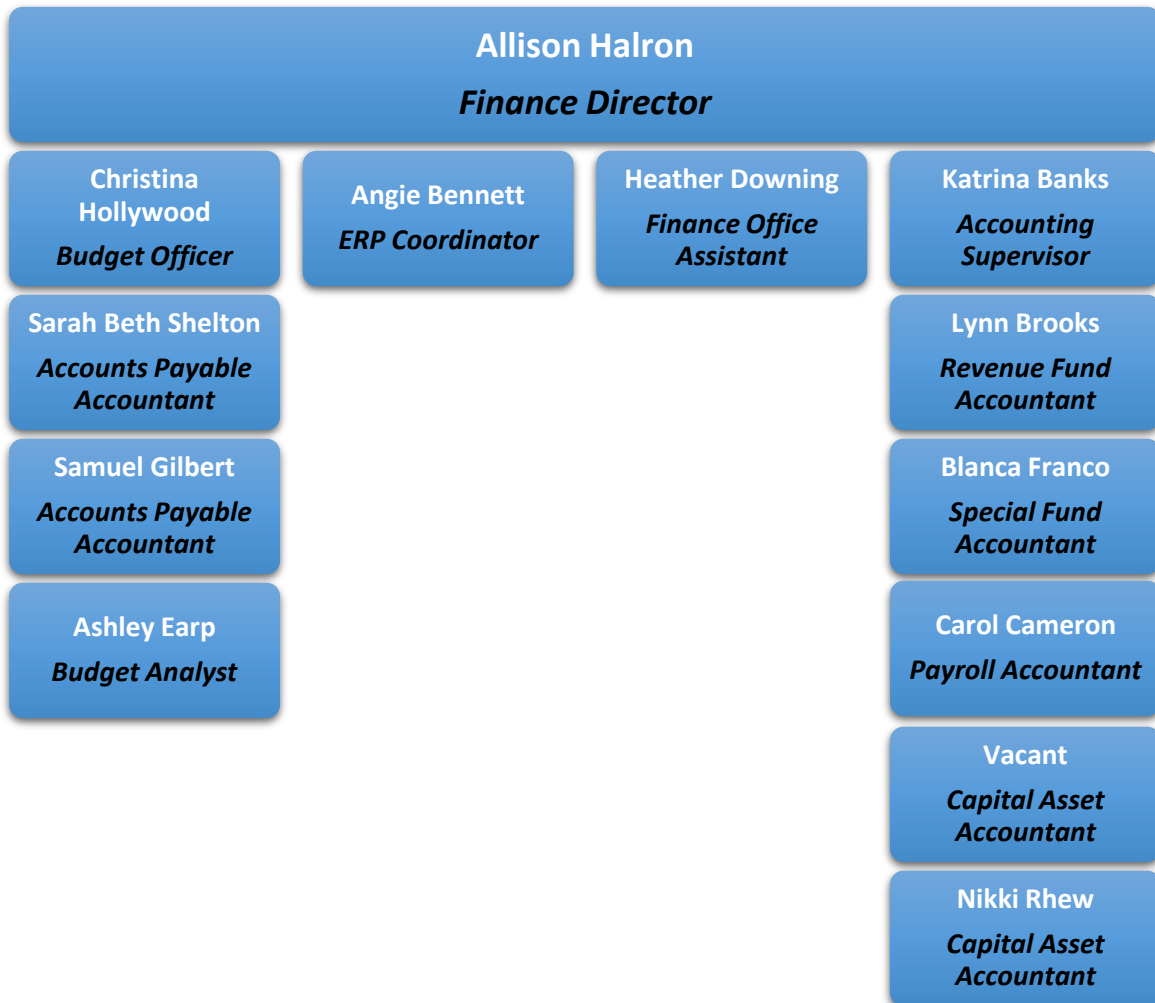
Water Production Manager

Program Management and Engineering Manager

Customer Accounts Director

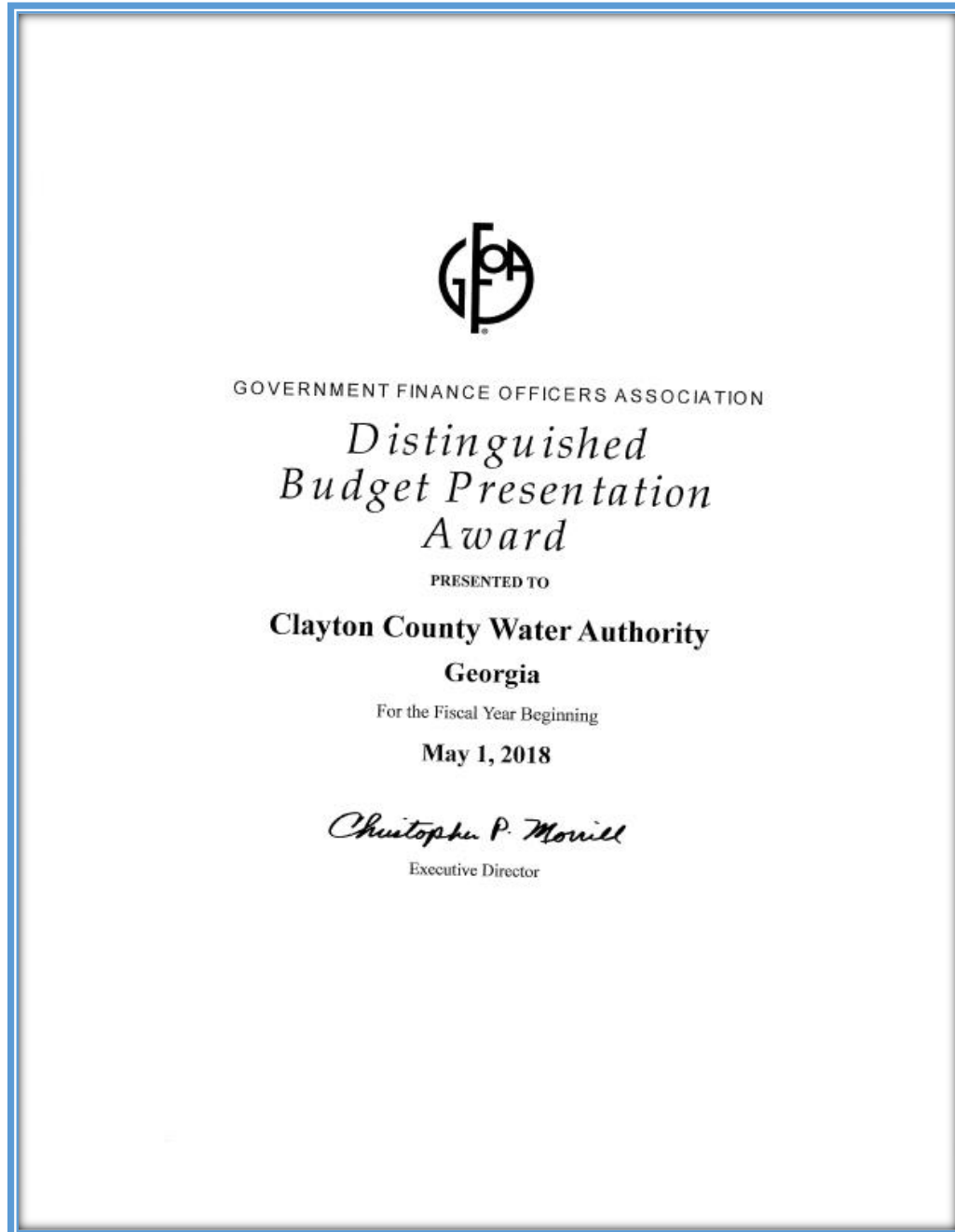


Finance Department Staff





Distinguished Budget Presentation Award



The Government Finance Officers Association of the United States and Canada (GFOA) presented a Distinguished Budget Presentation Award to Clayton County Water Authority, Clayton County, GA for the Annual Budget beginning May 1, 2018. To receive this award, a governmental unit must publish a budget document that meets program criteria as a policy document, as an operations guide, as a financial plan and as a communications device.

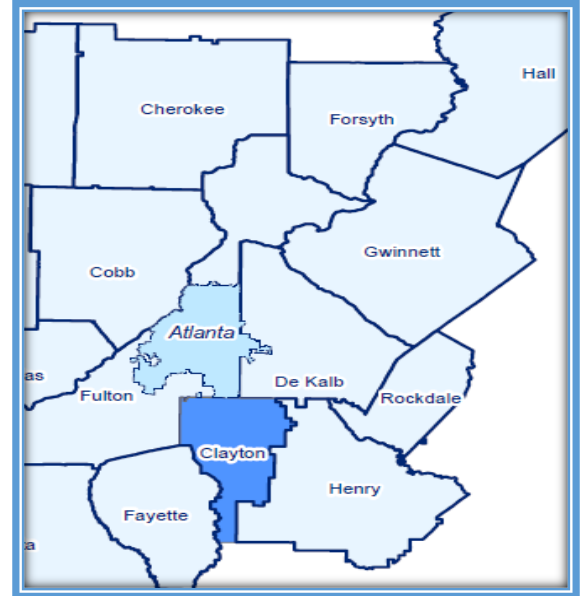
This award is valid for a period of one year only. We believe our current budget continues to conform to program requirements, and we are submitting it to GFOA to determine its eligibility for another award. This is the Authority's 13th year of receiving the award.



General Information

The Clayton County Water Authority (“CCWA” or the “Authority”) was created via enabling legislation of the Georgia General Assembly (Georgia Laws 1955, page 3344) on March 7, 1955. This provided for the establishment of an authority to acquire, construct and thereafter operate and maintain projects embracing sources of water supply, distribution, sale of water and related facilities. CCWA supplies water and wastewater services to over 285 thousand residents in Clayton County, in the metro Atlanta area. It is one of 15 counties included in the Metropolitan North Georgia Water Planning District.

In May 2007, the Stormwater Utility was created to help ensure compliance with stricter federal and state water quality standards. The Stormwater Utility is tasked with ensuring safe, efficient design and operation of stormwater management devices along with maintenance and repair of these structures and devices.



Mission, Vision and Values

The mission of CCWA is “Providing quality water and quality services to our community.” Our organization strives to value the environmental and community interests and sustain the resources entrusted in its care. Our Vision is “Utilizing Innovation to Provide Industry-Leading Service for Our Community.”

CCWA is a leader in the water utility industry, recognized for superior results in service, value, environmental stewardship and innovation. The CCWA’s values include the following:

- **Excellence:** Providing the best value in product quality and service.
- **Great Place to Work:** Providing competitive benefits, career-focused training and consistent and effective two-way communications while fostering a family-like spirit.
- **Integrity:** Employing the highest ethical standards, demonstrating honesty, fairness and trust while respecting the rights and beliefs of our fellow employees, our customers and our community.
- **Customer and Community Focused:** Anticipating and meeting customer expectations in both service and product while responding in a timely manner. Actively committed to the betterment of our community.

Governance

The Clayton County Water Authority is governed by a seven-member Board of Directors. Each of them serves on a part-time basis for a term of five years and may be reappointed for additional terms. Members of the Board are appointed by the Clayton County Board of Commissioners. To help ensure continuity in governance, appointments are structured in a staggered manner such that there should be no more than two new members in any given year. The Chairman, Vice-Chairman and Secretary-Treasurer are elected by and serve at the pleasure of the Water Authority Board.



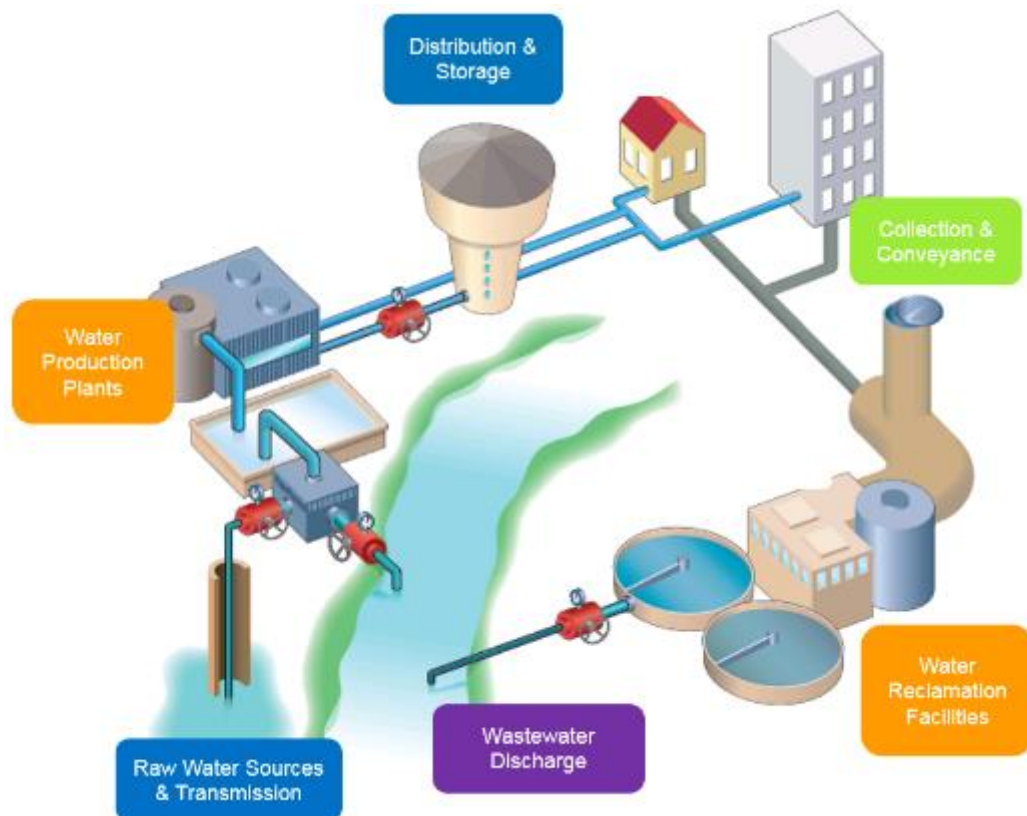
Structure

CCWA is comprised of **two enterprise funds** that utilize 70 business or budget units to track financial performance and budgetary oversight of its business-like operations.

The **Water and Sewer Fund** is used to account for water production activities, wastewater treatment services and all primary executive and administrative functions of the Authority. This fund's revenue is pledged for all long-term debt repayment. The fund's operations are broken down into the six primary divisions below:

- **Executive:** Provides organization oversight and all administrative functions of CCWA including inventory warehousing under procurement. **Business Units – 100's and 940**
- **Water Production:** Produces potable water within the standards promulgated by federal and state regulatory agencies. **Business Units - 300's**
- **Program Management and Engineering:** Plans and administers construction projects and major repairs of all plant facilities, facilities and distribution and collection systems. **Business Units – 500's**
- **Distribution (Water Pipe Infrastructure) and Conveyance (Sewer Pipe Infrastructure):** Installs and maintains waterlines, sewer lines and meters. **Business Units – 600's**
- **Water Reclamation:** Reclaims wastewater in conformity to highly regulated standards of federal and state regulatory agencies. **Business Units – 700's**
- **General Services:** Provides equipment and vehicle repairs, maintenance of lift stations (water) and pump stations (sewer) and building and grounds maintenance. **Business Units – 900's**

Water Cycle





The **Stormwater Fund** is used to comply with initiatives prompted by the Clean Water Act to improve stormwater infrastructure, minimize flooding and provide protection of local streams, rivers and lakes. Services provided by this fund include construction plan reviews, inspections, floodplain management, illicit discharge/illegal connection inspections and maintenance of stormwater infrastructure within the road right-of-way and directly connected to the right-of-way. To cover the cost of these services, user fees are charged based on the area of impervious surface located on a customer's property.

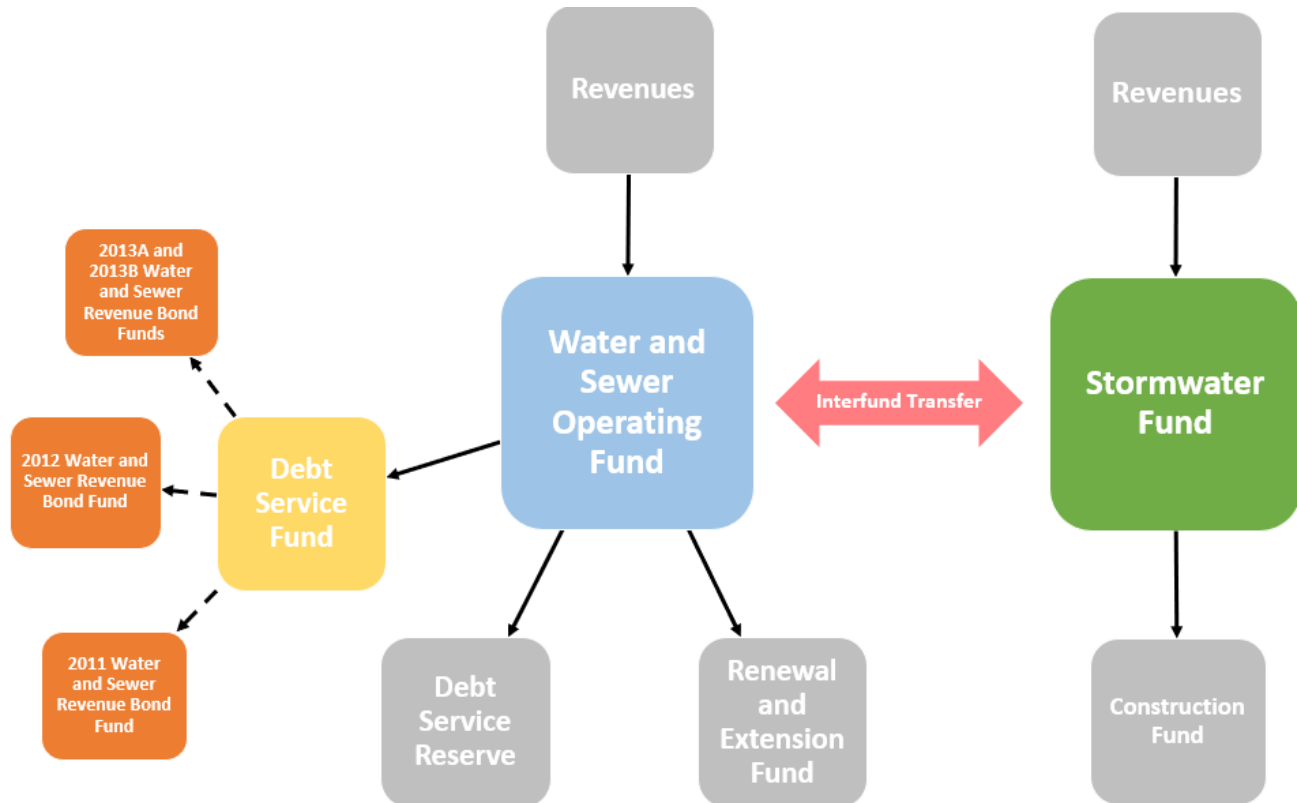
- **Stormwater Management:** Directs, manages and controls the efforts of the Stormwater Utility section.
- **Stormwater Engineering:** Manages construction plan to ensure compliance with State and Federal regulations and mandates.
- **Stormwater Maintenance:** Maintains and repairs stormwater infrastructure within County.





Schematic of Fund Structure and Cash Flow Diagram

All transactions for both the Water and Sewer Fund and the Stormwater Fund flow through the Water and Sewer Fund.





Overview of the System



Water Production

- **3 Production Facilities**
 - 47 MGD Capacity
 - 26 MGD Produced
- **5 Reservoirs**
- **Water Storage**
 - 3 Clear Wells: 6.7 MG
 - 7 Ground Storage Tanks: 23 MG
 - 4 Elevated Tanks: 2.5 MG



Water Reclamation

- **3 Reclamation Facilities**
 - 38.4 MGD Treatment Capacity
 - 21.2 MGD Treated
- **2 Constructed Wetlands systems**
- **44 Lift Stations**



Stormwater

- **6 city systems**
- **1 county system**
- **500 miles of piping**

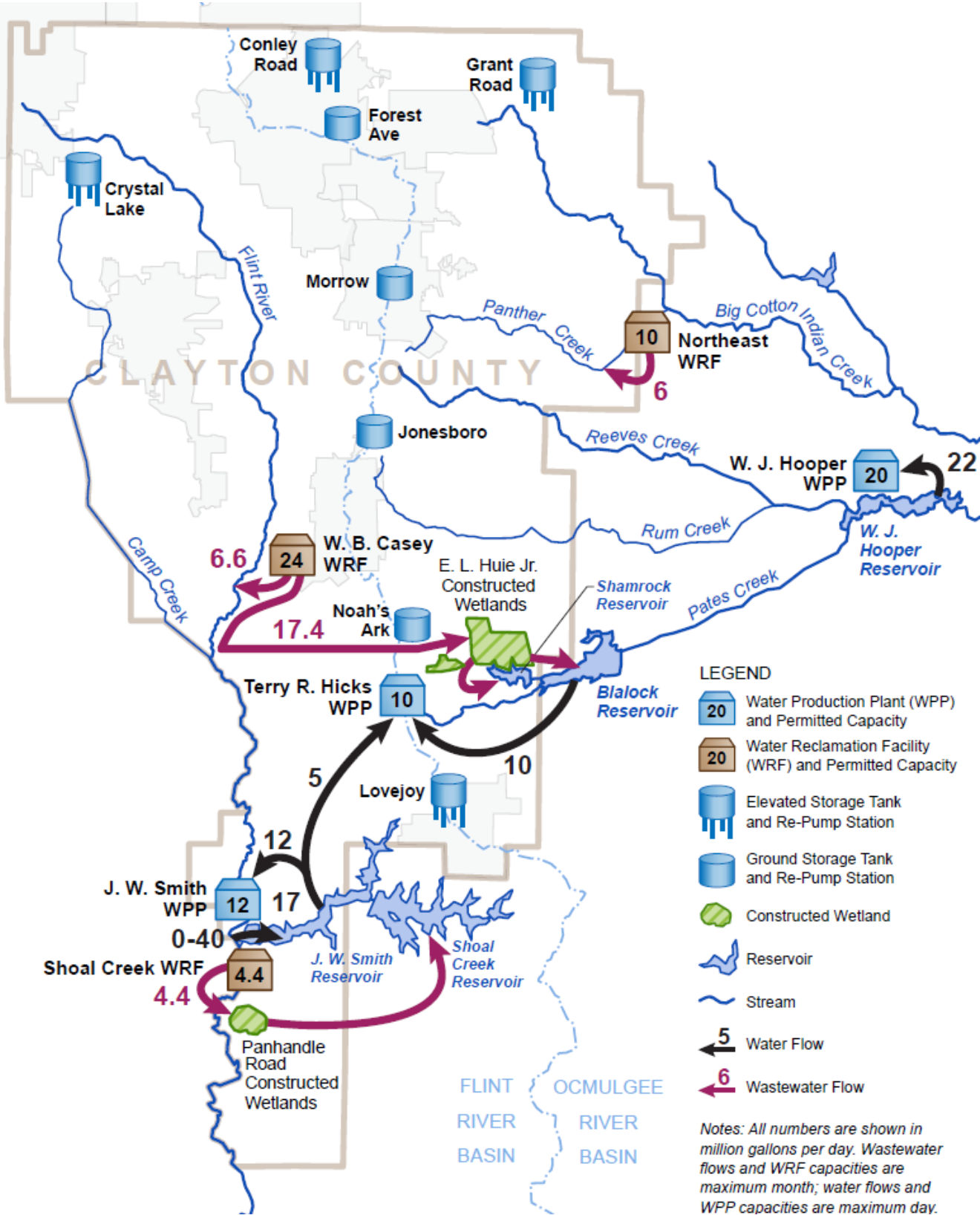
The Authority owns and operates five raw water reservoirs:

- **J.W. Smith** - 240 acres in size, holding approximately 844 million gallons of water at capacity
- **Shamrock** - 78 acres in size, holding approximately 260 million gallons of water at capacity
- **Edgar Blalock, Jr.** - 263 acres in size, holding approximately 889 million gallons of water at capacity
- **William J. "Billy" Hooper** - 143 acres in size, holding approximately 180 million gallons at capacity
- **Shoal Creek** - 387 acres in size, holding 2.19 billion gallons of water at capacity





System Map





Water Operations

The Authority's service area of approximately 143 square miles lies just south of the city of Atlanta. It is one of Georgia's smallest counties, in terms of land size, yet it is one of the most densely populated counties with more than 285,153 residents. There are six incorporated cities located within the county which are Forest Park, Lake City, Lovejoy, Morrow and the county seat of Jonesboro. The Authority is primarily a retail water utility that sells water directly to end users.



Our system annually delivers approximately 9.9 billion gallons of potable water and serves about 83,000 customers. Our customer base is comprised primarily of residential users (94%) followed by commercial (5%) and industrial and government customers (1%). The Authority produces its

potable water from raw water taken from its reservoirs and supplemental raw water withdrawals from the Flint River. In 1963, reservoirs were developed from flows from Little Cotton Indian River. The construction and development of water treatment facilities, companion reservoirs and the return of reclaimed water provides capacity of 42 MGD. Current operations have resulted in an average production of 25.8 MGD.

The Authority owns and operates three water treatment facilities: W.J. Hooper, J.W. Smith and Terry R. Hicks. The W.J. Hooper facility and its companion reservoirs: Hooper, Edgar J. Blalock and Shamrock supply sufficient resources to provide up to 20 MGD of potable water. The J.W. Smith facility has the capacity to pump up to 40 MGD of raw water from the Flint River into the Shoal Creek Reservoir and its companion, Smith Reservoir. This provides the J.W. Smith facility with the resources to provide up to 12 MGD of potable water. The Terry R. Hicks facility gets its raw water from the J.W. Smith and Edgar Blalock reservoirs. The Terry R. Hicks facility has the capacity to provide 10 MGD of potable water to the Authority's customers.



Wastewater Operations

This operation conveys, treats and reclaims its customers' wastewater. The Authority annually conveys and treats approximately 7.0 billion gallons of wastewater. Currently, the Authority serves approximately 67,339 customers. The Authority is comprised primarily of residential users (94%) followed by commercial (5%) and industrial and government customers (1%). Water reclamation facilities and wetlands provide the capacity to treat almost 39 MGD of wastewater. The Authority has also invested in the capacity of a neighboring facility (DeKalb Snapfinger WRF) to provide another 1 MGD of capacity. Currently, the average daily flow of these facilities is 18.3 MGD.



The Authority owns and operates three water reclamation facilities: W.B. Casey, Northeast and Shoal Creek. Located in the central portion of the

county, the W.B. Casey facility has the capacity to treat 24 MGD of wastewater while the Northeast WRF has a capacity to treat 10 MGD of wastewater. The Authority's most recent constructed facility, Shoal Creek WRF, has the capacity to treat 4.4 MGD of wastewater. Shoal Creek WRF has a companion constructed wetlands treatment system that also provides 4.4 MGD of treatment capacity. This industry renowned system receives the effluent of the Shoal Creek WRF and directs it through terraced wetlands with various plants acting as biological filters providing additional treatment.



The constructed wetlands, at the Huie site, provide a treatment capacity of 17.4 MGD of water. The Shoal Creek WRF and associated wetlands discharge indirectly into the Flint River, via the Shoal creek tributaries, while the Huie Wetlands are in the Ocmulgee basin.

Stormwater Operations



In response to the Clean Water Act of 1972, as amended, Clayton County established a Stormwater Utility to manage the quality and quantity of water flowing into our streams and rivers. Stormwater runoff is rainfall or snowmelt that flows from saturated permeable surfaces like roofs and paved driveways, sidewalks, parking lots and streets. Stormwater runoff creates drainage and flooding problems and picks up pollutants such as oils, grease, fertilizers, pesticides, litter and metal. This runoff is then collected and conveyed by ditches, culverts, intakes, catch basins and storm sewers that discharge directly into creeks, rivers, streams and lakes without being treated to remove the pollutants. The contaminants in stormwater negatively affect the quality of our local streams and lakes.

New federal laws regulating stormwater runoff require the Authority to develop and implement a comprehensive stormwater quality management program to protect and improve water quality. Clayton County is home to 28 large streams, 7 different lakes and the origins of the Flint River. The Authority is tasked with inspection for physical damages, monitoring of water quality, maintenance of constructed infrastructure and remediation of damages and serves over 81,650 customers.

Interconnections

Drinking Water: The Authority has six connections, all with the City of Atlanta, which can be activated on demand pursuant of a contract that expires December 31, 2023. The Authority has piping capable of providing about 8 MGD, in additional supply from these connections. Additional connections exist with the water systems of neighboring DeKalb and Fayette Counties, which can supply up to two MGD.

Wastewater Treatment: The Authority has a contract with DeKalb County for one MGD of capacity.

Distribution and Conveyance Infrastructure

The Authority maintains almost 1,500 miles of water distribution lines, 1,400 miles of sewer conveyance pipe and 500 miles of stormwater pipe. Our pipes, laid end to end, would span from Miami to Seattle.

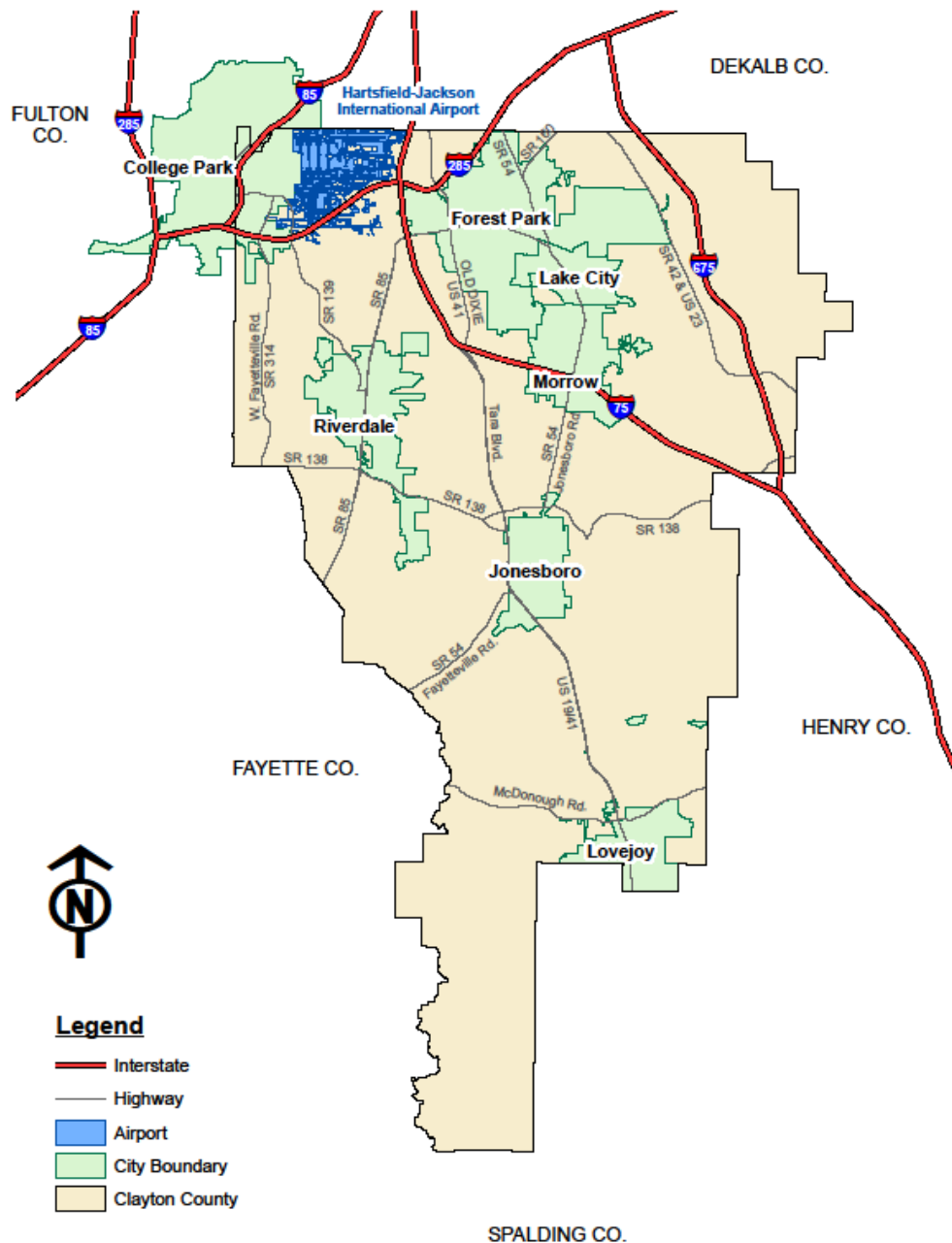




Community Profile

Service Area Map

Out of the 159 counties located in Georgia, Clayton County is one of the smallest, in terms of land size, with an area of only 143 square miles. With 285,153 residents, according to most recent 2017 population estimates, it is one of the most densely populated counties in Georgia. There are six incorporated cities located within the county: Forest Park, a portion of College Park, Jonesboro, Lake City, Lovejoy, Morrow and Riverdale, with the City of Jonesboro being the county seat. This suburban community is located just minutes south of downtown Atlanta and is an integral part of the Atlanta Metropolitan Statistical Area (MSA).





Transportation and Accessibility

An important attribute of Clayton County is its location in relationship to major transportation modes and the availability of several cost-effective alternatives for moving people and goods in the immediate area.

Air: Hartsfield-Jackson Atlanta International Airport, which lies mostly within Clayton County proper, is a major hub in the air transportation business and has been titled the busiest airport in the world since 2000. Hartsfield-Jackson Atlanta International Airport has annually recorded the largest amount of passenger traffic in the industry since 1998. In May 2012, the airport opened its new \$1.4 billion international concourse and handled over 9.8 million passengers in its first year of operation. In 2016, the airport began work on the \$6 billion in projects outlined in its 20-year master plan.



Additional Hartsfield-Jackson Atlanta International Airport statistics:

- Has a total regional economic impact of \$64.3 billion annually
- Has over 63,000 employees and estimated annual payroll of \$4.2 billion
- Largest employment center in the State of Georgia
- Terminal and parking areas of 4,750 acres
- Airport complex including parking is largely, physically located in Clayton County and is the Authority's largest Stormwater customer
- Atlanta is within a 2-hour flight of 80% of US population
- 105.2 million passengers annually; 288,000 passengers daily

Roadway/Motor Vehicle: Four different interstate highways, I-75, I-85, I-285 and I-675, have 19 exits throughout Clayton County. In terms of other major roads, U.S. highways 19, 23, 29 and 41 and eight state routes are also available to serve our citizens. There are approximately 1,400 miles of paved roads, expressways and streets located within the County. Atlanta's beltway, Interstate 285, provides easy access to all areas of Atlanta and to east/west bound Interstate 20.

Other transportation needs of the local community can also be easily accommodated. The Georgia Regional Transportation Authority (GRTA) offers express bus service that provides workday commuters an alternative to driving their vehicles to downtown Atlanta employment centers. A large, conveniently located park and ride lot situated on a major arterial in Jonesboro provides access to this service. MARTA has a large presence in Clayton County with 633 bus stops that support 13 routes and 7,000 passengers daily. Approximately, 560 County residents are employed by this transit service. In addition, MARTA will expand in the County with two recent major initiatives which include new bus routes along GA Highways 139 and 85 and adding a commuter rail on existing Norfolk Southern rail line.



Rail: For those businesses needing to move freight, there is direct rail service provided by the Norfolk Southern Railways System. In addition, Amtrak has passenger trains, which pass through nearby Atlanta. Approximately 30 freight truck lines serve the County with both intrastate and interstate service. In addition, the Greyhound Bus Line operates a local terminal in nearby Hapeville. Moreover, for international shipping, Savannah, Georgia and Jacksonville, Florida serve as major deep-water seaports, which can easily be reached by interstate highway in a matter of hours.



Education

The Clayton County Board of Education currently operates 65 public schools, twelve of which are high schools. There are also five private schools currently operating in the county. The higher education facility located in the County itself is Clayton State University, which is part of the University System of Georgia.

Some of the other institutions of higher education located in the Atlanta metropolitan area include Agnes Scott College, Atlanta University Complex, Emory University, Georgia Institute of Technology, Georgia State University, Kennesaw State University, Life University, Mercer University, Oglethorpe University and Southern Polytechnic State.

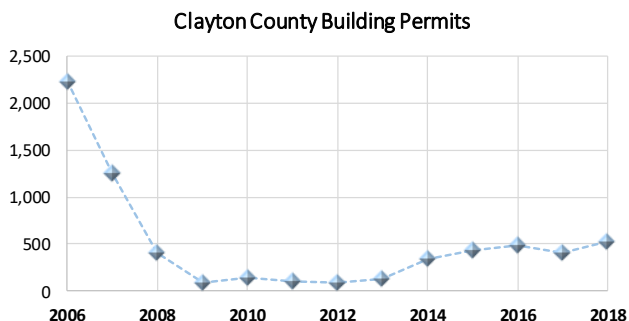
Demographics and Economic Outlook

Median Household and Per Capita Income Statistics



To determine the stability and strength of revenue potential of an organization, including CCWA, the overall economic health of an area is accessed. Of the several economic indicators analysts look at to evaluate fiscal condition, those related to income, jobs and general strength of the regional municipality provide the most meaningful data. Median Household Income (MHI) and Per Capita Income (PCI) are indicators of how much income people have available to spend. The higher the MHI and PCI, the more money people have to spend on discretionary items. Economists estimate that for every one-penny reduction in gas prices, the economy experiences an extra billion dollars in spending. When gas prices decrease, more income will be used for discretionary spending like dining out, shopping or home improvements.

Home values are rising in Clayton County due to increasing demand for affordable housing close to Atlanta. In Spring of 2019 there were only 1.9 months of housing inventory in the County compared to 2.6 months of inventory in metro Atlanta. Currently, there are ten residential developments, or new phases in these developments, in the County that are addressing this housing demand.



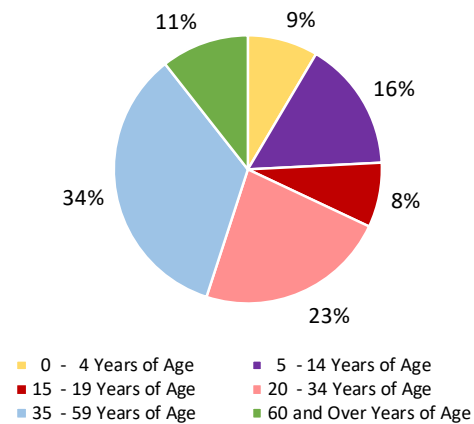


Top 10 Employers

2017

Employer	Rank	Employees	% of Total Employment
Clayton County Board of Education	1	7,300	4.68%
Delta Airlines, Inc.	2	6,200	3.97%
Clayton County Government	3	2,399	1.54%
Southern Regional Health System	4	1,450	0.93%
Gate Gourmet Inc.	5	1,200	0.77%
Fresh Express	6	800	0.51%
Walmart, Inc.	7	450	0.29%
Fedex Ground	8	800	0.51%
Clayton State University	9	675	0.43%
Southern Company/Georgia Power	10	543	0.35%
Subtotal (10 Largest Employers)		21,817	13.98%
Total Employment in Clayton County		121,278	100.00%

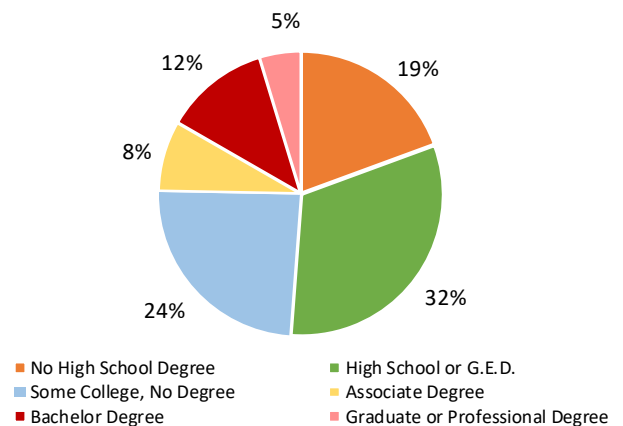
Age of County Residents



Income growth is positively correlated with job growth and lower unemployment rates. Since the 1990's, job growth in the southern crescent of Metro-Atlanta has largely been rooted in the construction that occurs during a strong housing market and economic expansion. Clayton County is now experiencing this type of expansion due to the growth in the **film industry** and the development surrounding **Hartsfield-Jackson Atlanta International Airport**.

A modern, extensive transportation and logistical infrastructure allows Georgia to compete effectively in a global marketplace. Hartsfield-Jackson International Airport is the world's busiest passenger airport and 10th-largest in the nation for cargo. Georgia's deep-water ports and inland barge terminals are a major reason Georgia now ranks second nationally in exports. With 5,000 miles of railroad track, Atlanta is the rail center of the South and the largest intermodal facility on the East Coast.

Education Level



Several recent transportation projects in Clayton and Henry counties have eased congestion on busy Interstate 75. Clayton County voters approved a 1 percent sales tax to fund Metropolitan Atlanta Rapid Transit Authority bus service (MARTA), which has over 160 stops. MARTA links the County's workforce to major employers and activity centers throughout the Metro-Atlanta area.

Hartsfield-Jackson Atlanta International Airport is a powerful economic driver and two community improvement districts (CIDs), Airport West and Airport South (North Clayton County), have joined forces as the *Atlanta Aerotropolis Alliance* to assist the airport into becoming a major economic hub. These CIDs are coordinating plans for the creation of an "Airport City" that will attract new commercial office space, first-class hotels, entertainment venues, condominiums, apartments and other residences. The airport currently has a total regional economic impact of \$64.3 billion annually.



The Atlanta Aerotropolis Alliance, comprised of businesses, local government representatives, nonprofits and other key stakeholders, are playing a major role in forging Hartsfield-Jackson into an even stronger economic development tool for the region. More than 50 percent of Fortune 500 corporate headquarters are located within 10 miles of U.S. hub airports and air travel. Both passengers and cargo are expected to triple between 2010 and 2030 in airports around the world. Airports are evolving into the actual destination of the traveler and not just places of departure and arrival.

As more businesses come into the area, more jobs will be created which spurs more amenities. This will start a perpetual cycle, as it will make the area an even more attractive choice for additional business relocations. The actual development and renovation of the airport will also provide additional jobs and economic impact. In 2016, Hartsfield-Jackson began construction on \$6 billion projects in listed in its 20-year master plan. The Authority's service area will see economic gains from the development surrounding Hartsfield-Jackson Atlanta International Airport.

In addition to offering some of the best tax incentives in the metro region, Clayton County is taking a proactive approach to bringing in new business with an innovative "Concierge Service" program. This initiative is designed to streamline the process of doing business in the County by streamlining processes and eliminating much of the bureaucratic red-tape and need to contract multiple departments or areas to get things done.

Georgia is taking a leading role in the movie industry, which contributes 55,000 jobs and \$7B in annual economic impact to the state. The **film industry** attracts multiple types of commercial and retail businesses to support its movie set building, actors and stage crews. EUE/Screen Gems Studios Atlanta opened a 10-stage, 33-acre studio complex in 2010 on the former Lakewood Fairgrounds. Fayette County, Clayton County's Southside neighbor, got an economic boost last year when Pinewood Atlanta Studios opened a 288-acre complex with five state of the art sound stages. Clayton County will now benefit directly from the movie industry growth as actor and producer, Tyler Perry purchased 330 acres of the 488-acre site at the closed Fort McPherson army base in East Point. His new studio now employs 2,000 people.

In February 2017, Los Angeles developer of film studios stated that it planned to build a five-stage, state-of-the-art studio complex in Clayton County, giving another boost to film production in the County. Managed by Pacifica Ventures, the new studio will be named Clayton County Studios. The new \$12 million studio was built between Lake City and Morrow on 27 acres directly across the street from the National Archives in Morrow. Five sound studios being between 18,000 and 20,000 square feet each were constructed under the first phase. The complex includes production offices, post-production space, a green screen, mill and construction space and a commissary. When completed, it will be the company's second film-production studio in the United States. It has a nine-stage studio in Albuquerque, N.M., where hits like "Breaking Bad" and "The Avengers" were produced. The company chose the location because of its proximity to Hartsfield-Jackson International Airport and downtown Atlanta.

BUSINESS EXPANSIONS

- 🔥 **Clorox: \$42M expansion; 100 new jobs.**
- 🔥 **Clayton Commerce Center: \$38M building constructed.**
- 🔥 **Cummins: \$10M New service and repair center and new parts redistribution center; 80 new jobs.**
- 🔥 **Waste Eliminator: \$7M new 41,000 square-foot building; 30 new jobs.**
- 🔥 **Low Temp Industries: \$17.5M new manufacturing headquarter building; 30 new jobs.**
- 🔥 **Fresh Express: \$10M expansion; 20 new jobs.**
- 🔥 **Kabobs Inc.: \$5M expansion; 7 new jobs.**
- 🔥 **TOTAL: \$130M investment; 267 new jobs.**

Source: Clayton County Office of Economic Development and Film



FACTORS INFLUENCING AREA

- ◆ Qualified opportunity zone which provides incentives to developers to invest in distressed areas.
- ◆ Atlanta Mayor has made economic development in southwest Atlanta a top priority.
- ◆ Near 2 Marta stations along with a proposed light rail project along Campbellton Road. A spur is planned to the Atlanta Beltline.
- ◆ New projects in area improving market:
 - Beltline's three-mile Westside Trail – a \$43 million pathway that opened in 2017 linking Washington Park to Adair Park
 - The trail spurred projects including Lee + White, 23-acre adaptive reuse of warehouses in Historic West End luring new businesses
 - Beltline is currently reviewing proposals for the redevelopment of 20-acres Murphy Crossing

Sources: *Atlanta Business Chronical*, April 26, 2019, "Fort Mac project making progress, \$760M plan"

In 2016, Georgia Motion Picture Studios announced they would be calling Tucker, Georgia home. It is expected to have an additional \$1 billion economic to the area's economy. The University System of Georgia began classes in January 2016 at its new Georgia Film Academy to train future industry workers in the State. Clayton State University has recently followed suite by adding relevant courses to its curriculum catalog. With local talent available, production companies will no longer need to bring crewmembers from New York and Los Angeles.

Film tourism has also had an economic impact on the state. With additional studios and movie productions, this revenue stream will continue to grow. Fans from all over the world visit Senoia, Georgia, which was redeveloped to film the popular television show *The Walking Dead*. Covington has had similar success from *The Vampire Diaries*, which has a real-life replica of the Mystic Grill, a familiar setting on the show. The State's film office has launched a website, TourGeorgiaFilm.com, to cater specifically to film tourism.

With its headquarters located just over the Clayton County border and Hartsfield-Jackson Atlanta International Airport its primary hub, Delta Airlines has a large impact on economic growth for the County. Based on *Flightglobal*; *Flight Airline* Business reports, Delta is the second leading airline worldwide transporting 186.4 million passengers annually in 2017. It is focusing growth in International markets and expanding its routes to China and Korea where air travel to Atlanta is expected to grow 56% and 33%, respectively by 2023.

Fort MacPherson was one of the military posts closed during a national draw down in 2011. Tyler Perry purchased 330 acres in 2015 and has built a film studio that employs 2,000 people. Macauley Investments LLC was selected to redevelop the remaining 145 acres of the site. The \$760M development will include new housing, retail, office, a hotel and community space to Fort Mac. Groundbreaking is anticipated in the Fall of 2019.

Porsche Cars North America completed the construction of its 26-acre complex at the former Ford Motor Company site in Hapeville. This complex includes its headquarters building, the Porsche Technical Service and Training Center and the Porsche Customer Experience Center that features a 1.6-mile test track and handling road course. Walmart completed a \$108M new fulfillment center to process online orders which has added 400 new jobs over the past couple of years.

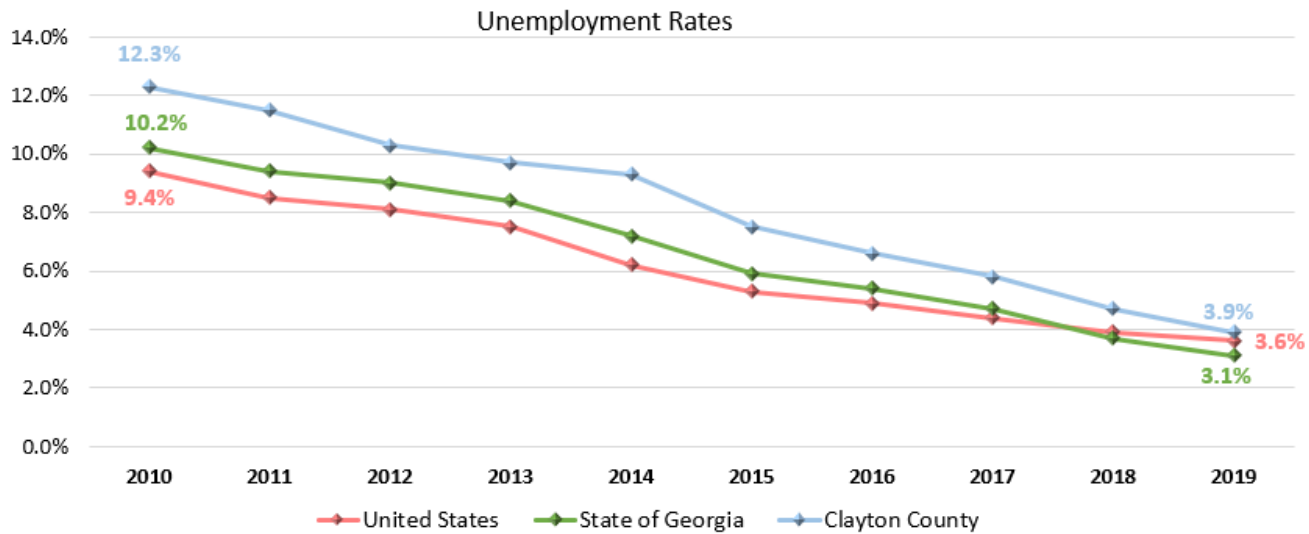
The Forest Park Urban Redevelopment Agency is developing the Fort Gillem Army site for new industry and distribution centers. Kroger has hired 120 employees and has recently invested another \$175M at that location. Castellini Group, a large distributor of fresh produce, completed a \$52M distribution facility in 2016 that created 300 new jobs.



Castellini is a complete vertical supply chain company that provides services from tomato ripening and repacking, to processing and transportation.

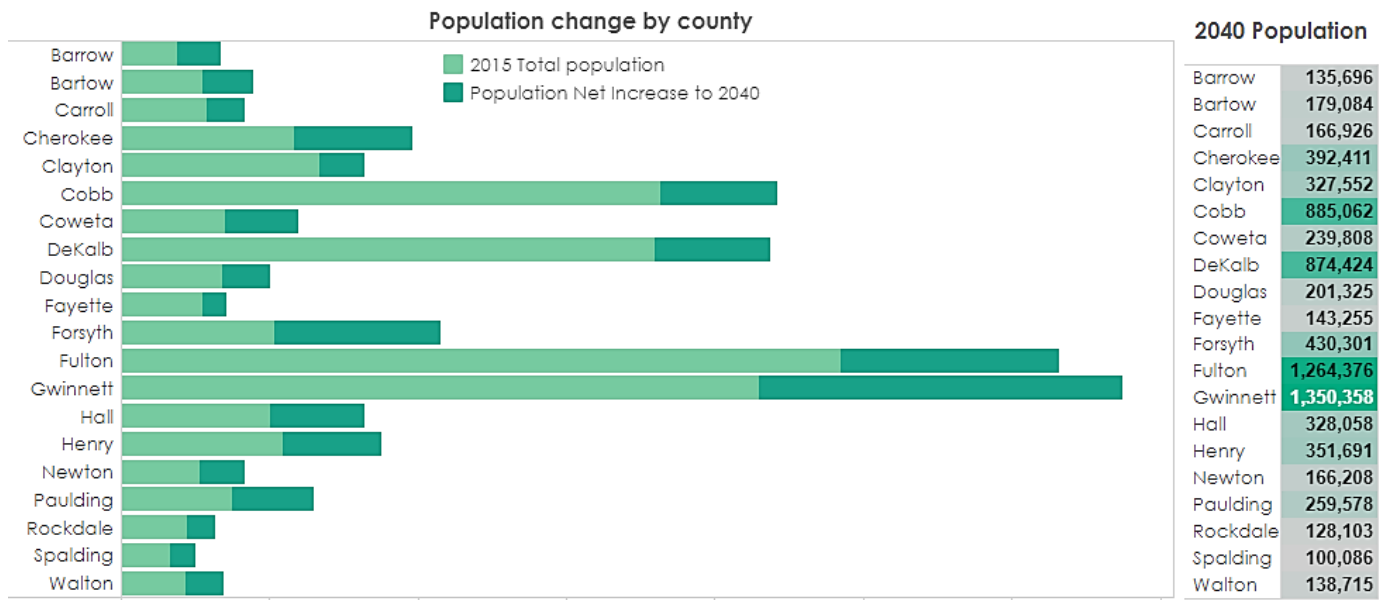
The Tri-Cities Urban Redevelopment Agency is comprised of three Urban Redevelopment Agencies; Forest Park, Lake City and Morrow. These redevelopment agencies have a total of 2,350 acres and 935 individual parcels along 11 miles of commercial corridors in Clayton County and help encourage economic development.

Job Growth and Unemployment Rates



Population Growth

In a high fixed cost business like water utilities, the best way to keep rates lower is to have a larger population in a smaller area. The larger the population, the more customers available to share in the cost of the system and the closer they are together the less pipe and pumping costs needed to distribute the water.



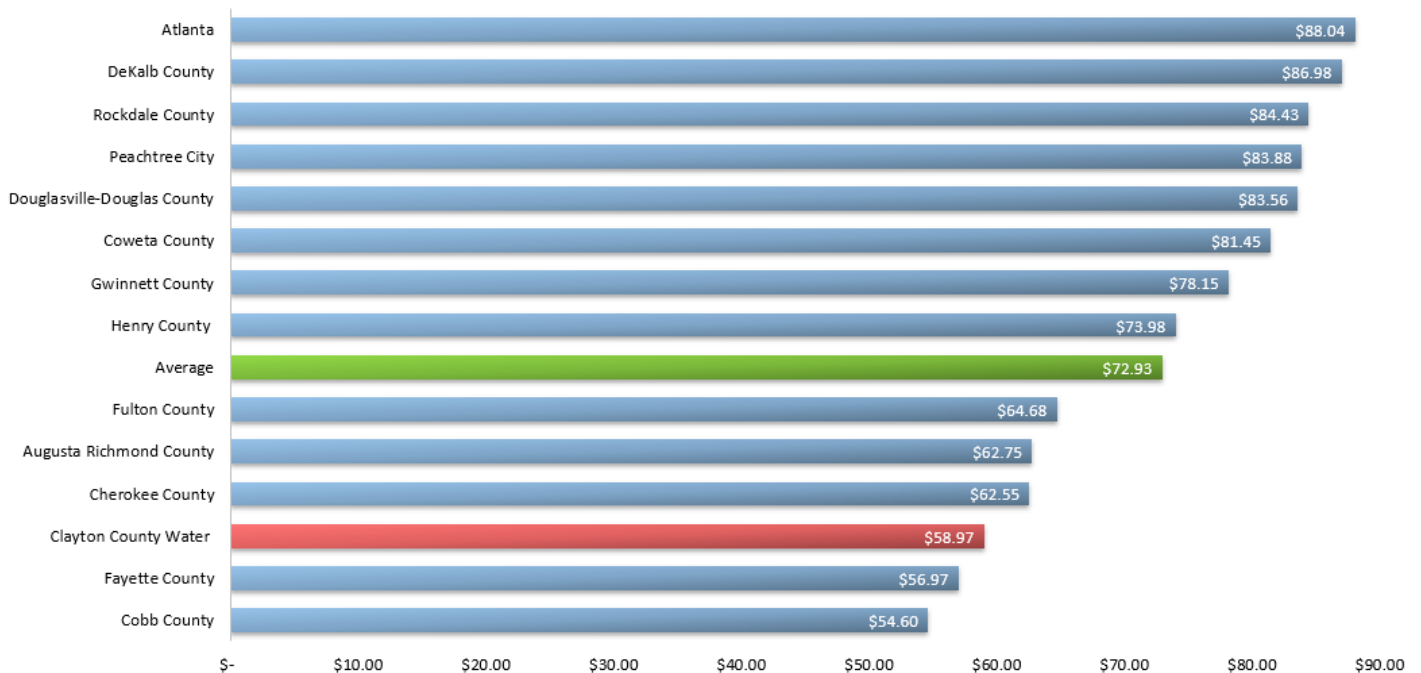


Chief Executive Officers and their company boards are attracted to Georgia's "pro-business" environment with state statutes that support low tax rates and prioritizes economic development. Georgia was the first southeastern state to pass single-factor corporate tax apportionment that applies the 6 percent corporate tax rate only to the portion of income earned inside the state. The state also consistently maintains one of the nation's lowest debt-per-capita levels. Quality and cost of labor are key drivers in every location decision. Georgia's Quick Start work force development program is one of the best in the nation and provides customized training at no cost to qualified companies in an array of industries. Nearly one million workers at 6,200 companies of all sizes have benefited from Quick Start.

Thirty Fortune 1000 companies have headquarters in Georgia including General Motors, Hitachi and Greenway Medical Technologies who are continuing to invest and expand in Georgia. Additionally, AT&T recently announced plans to build a research center in Atlanta to develop the company's latest technologies and applications.

Water and Sewer Bill Comparison

The chart below shows single-family residential water and sewer bills for a typical customer using 4,000 gallons of water in comparison to other benchmark water utilities.



At \$58.97, CCWA customers have an average combined water and sewer bill that is \$13.96, or about 19 percent, lower than our benchmark utilities charge their customers. The Authority can provide water to its customers at a reasonable cost by controlling its own costs.



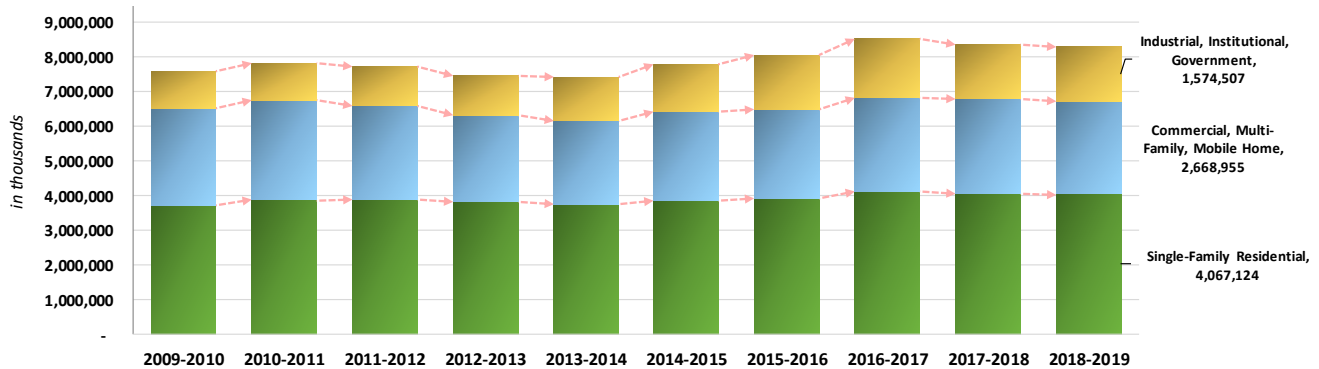


Financial Highlights and Trends

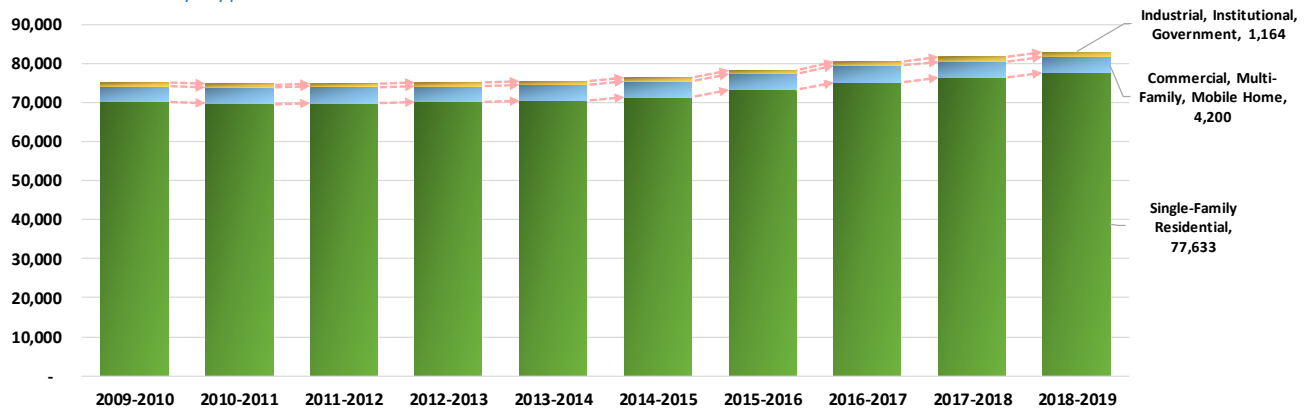
Water usage has steadily increased in all CCWA customer categories since FY 2014-2015. Usually, water usage is relatively flat with the prior year. Although down from peak usage due to drought conditions in FY 2016 – 2017, usage has steadily increased over the previous five years. Sewer usage, measured against water usage, has increased. The number of water and sewer customers has also increased each year since FY 2010 – 2011 in all CCWA customer categories, averaging 1.9 percent annual growth over the last five fiscal years.

The number of stormwater customers in all CCWA customer categories increased an average of 1.6 percent annually over the last three fiscal years. This customer growth is due to the continuing economic improvement in the County and surrounding metro area.

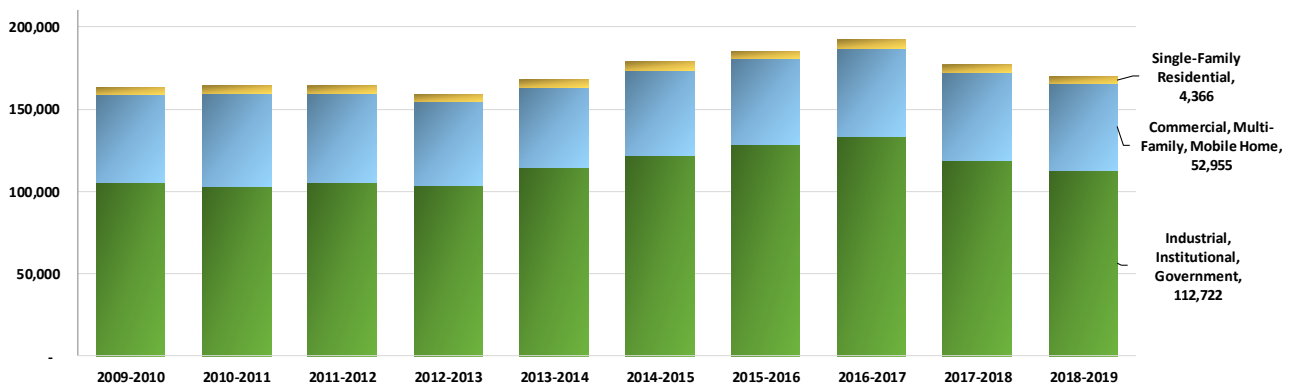
Annual Water Usage by Customer Type



Water Customers by Type

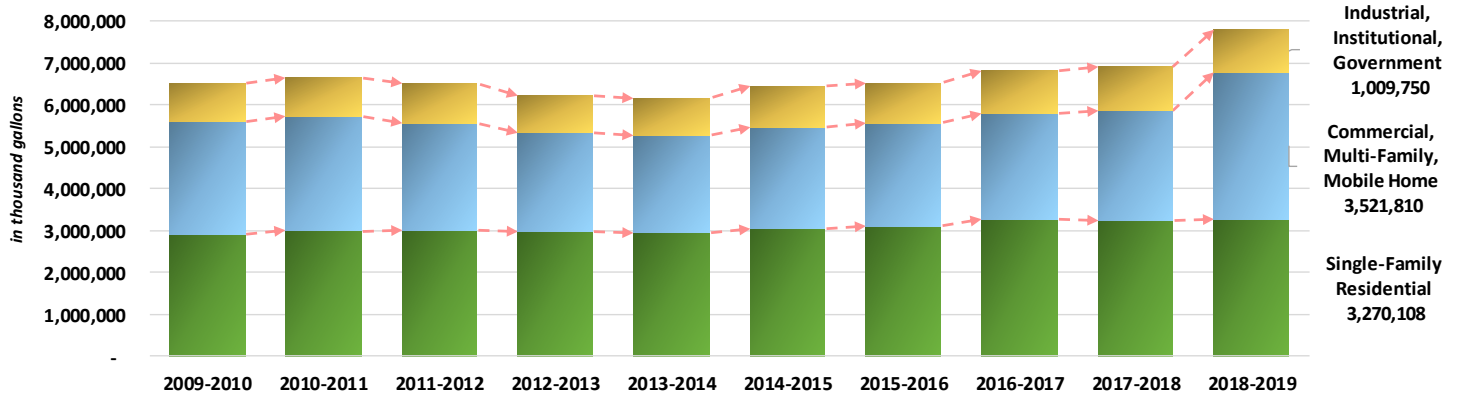


Average Monthly Water Usage by Customer Type

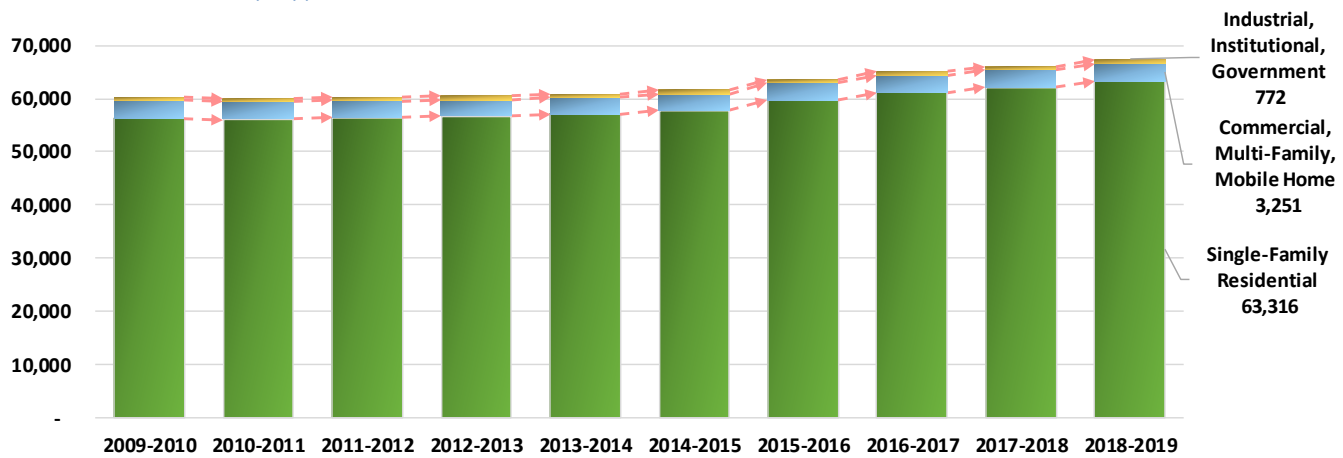




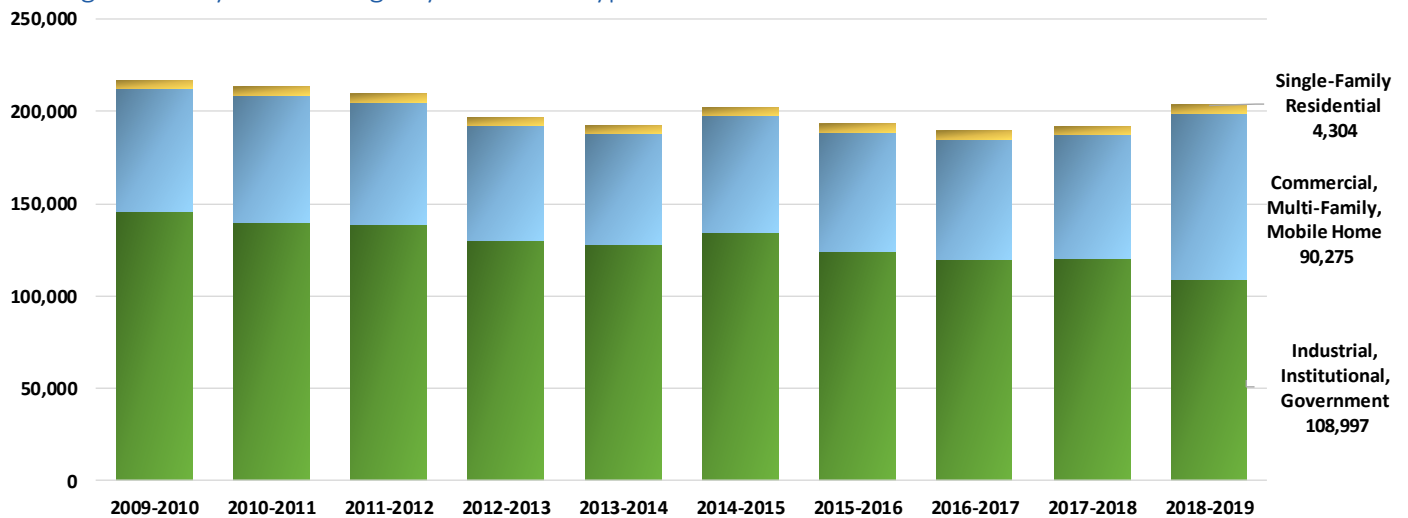
Annual Sewer Usage by Customer Type



Sewer Customers by Type

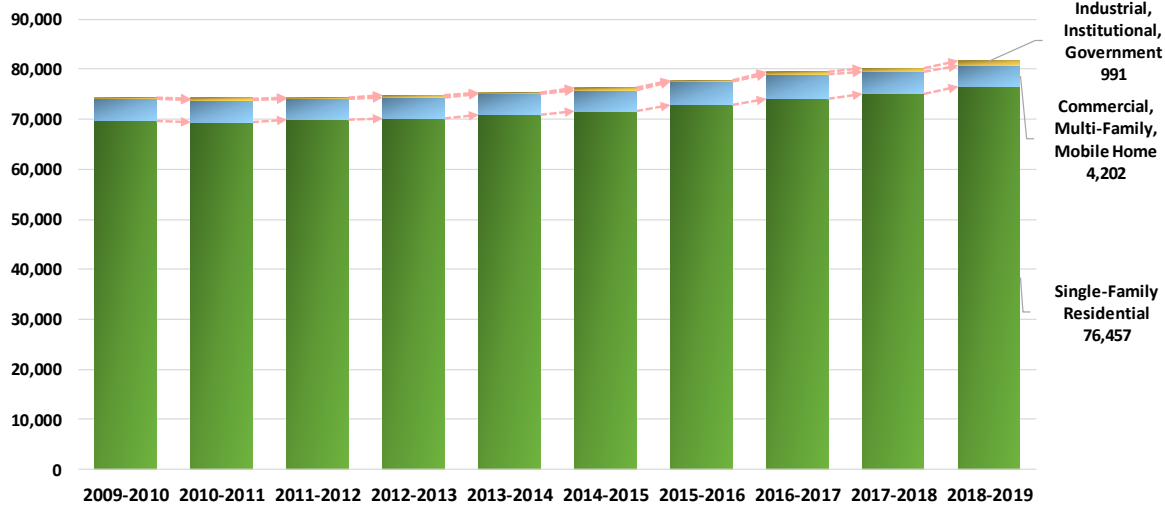


Average Monthly Sewer Usage by Customer Type





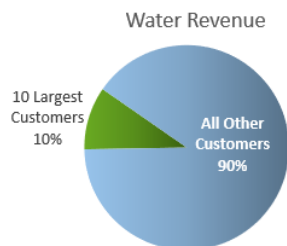
Stormwater Customers by Type



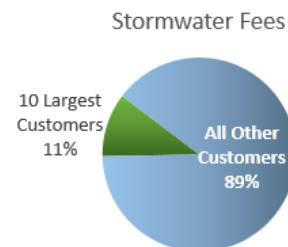
Top 10 Customers

The tables below list the Authority's customers by type of service for fiscal year ended April 30, 2018.

Customer	Water		Wastewater	
	Revenue	Percent	Revenue	Percent
Fresh Express	1,429,372	2.77%	\$ 1,787,308	4.03%
City of College Park	\$ 1,317,647	2.55%	359,894	0.81%
Clorox Company	736,166	1.43%	335,834	0.76%
Clayton County Board of Commissioners	316,812	0.61%	303,548	0.68%
Club Chef Southeast LLC	313,571	0.61%	296,750	0.67%
Atlanta South Properties LLC	222,501	0.43%	226,981	0.51%
Deer Creek Mobile Home Park LLC	214,044	0.41%	212,526	0.48%
Marcre Sales Inc	210,290	0.41%	202,882	0.46%
Toto USA Inc	191,369	0.37%	180,517	0.41%
Gateway At Hartsfield LLC	176,260	0.34%	149,459	0.34%
10 Largest Customers	\$ 5,128,033	9.93%	\$ 4,055,698	9.15%
All Other Customers	46,510,747	90.07%	40,261,258	90.85%
Total	\$51,638,780	100.00%	\$44,316,956	100.00%



Customer	Stormwater Fees	Percent
Department of Aviation (Hartsfield-Jackson Airport)	\$ 613,976	6.22%
Georgia Department of Agriculture	84,551	0.86%
Urban Redevelopment Agency	76,461	0.77%
J C Penney Catalog Division	62,823	0.64%
Kroger	52,843	0.54%
Fort Gillem - Site Manager	46,839	0.47%
Georgia Power	31,016	0.31%
Tindall Corporation GA Division	26,490	0.27%
Federal Express	25,672	0.26%
Gillem Logistics Center Building 200 LLC	25,400	0.26%
10 Largest Customers	\$ 1,046,072	10.60%
All Other Customers	8,823,213	89.40%
Total	\$ 9,869,285	100.00%





Weather Conditions

Weather influences both the supply and demand of water which also impacts the operating costs of a water and sewer utility. During severe drought conditions, water pulled from streams and rivers is less diluted and therefore contains a higher concentration of contaminants. This requires more chemicals to be used during the treatment of drinking water as does high temperatures and sunny days as it proliferates the growth of algae in our reservoirs. When surface water is the source of drinking water, more chemicals may be needed to treat drinking water.



The amount of rain received also impacts chemical usage as it changes the number of suspended solids in water through run-off. The rainwater picks up different particles and deposits them into our reservoirs creating more turbid waters. The more turbidity in the water, the more chemicals needed to remove those particles.

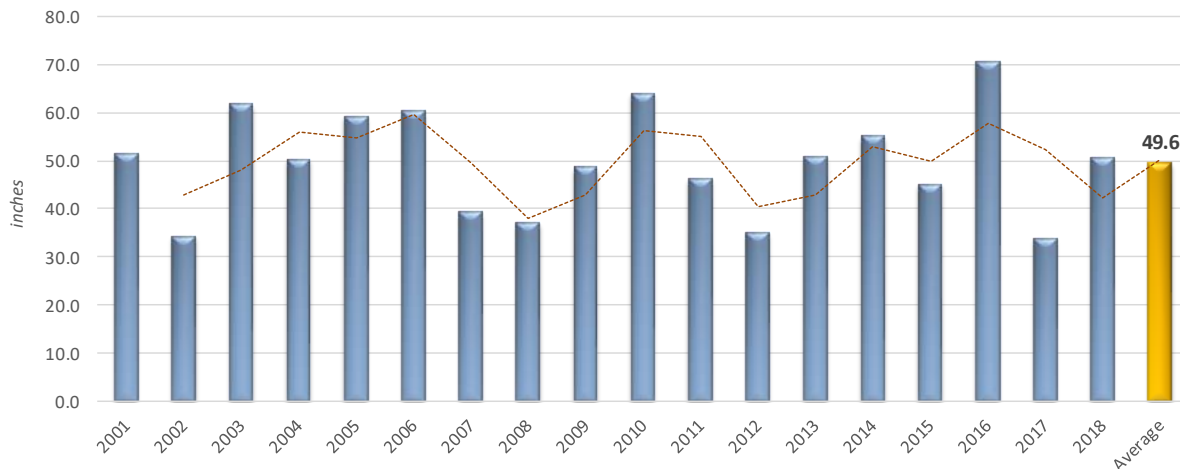
Heavy rain and wet conditions can cause infiltration and inflow (I/I) into sanitary sewer pipe systems meaning increased wastewater flows and chemical demands for treatment. Higher water flow levels increase utility costs because sewer pumps must run longer to manage the additional flow. With extremely rapid or heavy rainfall, additional labor hours are needed to maintain equipment at sewer pump stations and drain areas throughout the service area. It is estimated that up to 10% of water reclamation costs are due to the energy and treatment of the additional flows from I/I. The Authority has a major capital project initiative that will drastically reduce the amount of I/I into the system by replacing the largest sewer piping in our system.



This large pipe is referred to as “Trunk Sewers” or “Outfalls”. The project will take more than 10 years to complete and will replace 18 of the estimated 76 miles of this type of piping.

While operating costs increase due to rainier conditions, demand for the water *usually* decreases. Demand for water used for irrigation is the most obvious reason that demand drops during periods of high rainfall but also fewer showers, fewer laundry loads and less drinking water is consumed because less work is done outdoors, and average temperatures are lower on rainy days. If drought conditions are severe enough, the Georgia Environmental Protection Division (EPD) may restrict water consumption enforced by penalties and fines for violators.

The metro-Atlanta area received record-breaking rainfall during 2018, the highest amounts recorded in 70 years but water usage for the Authority remained relatively consistent with the previous year.





Priorities and Challenges

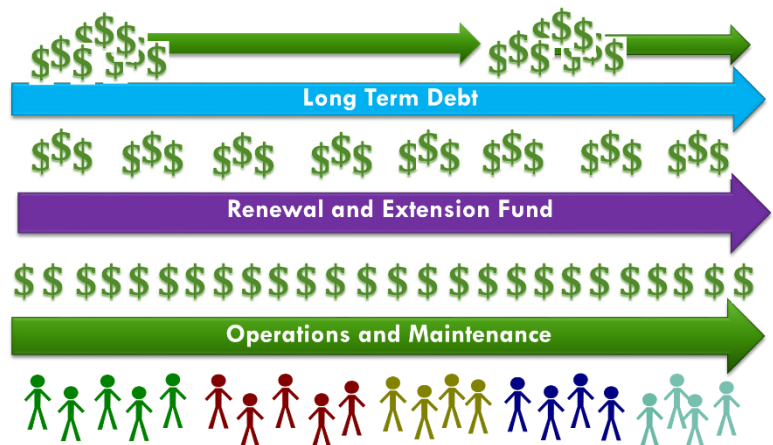
The table below lists the challenges that the Authority faces and managements approach to addressing these issues.

Challenge	CCWA Approach
Responding to Changing Economy	Continue balanced approach to funding projects: (1) focus on remaining debt from 2000 master plan, (2) “pay as you go approach” for most project needs and (3) consider accelerated funding for key large programs and projects.
Workforce Continuity	Plan for and anticipate changes in CCWA’s workforce to limit loss of institutional knowledge.
Technology Advancement	Ensure operations utilize technology to allow CCWA to make best use of its resources.
Water Quality/Regulatory Issues	Evaluate micro-constituents in CCWA’s water supply reservoirs to determine treatment options, potential impacts to indirect potable reuse system and the cost implications should regulations be implemented.
Managing Infrastructure and Assets	Utilize risk-based approaches to maintain, upgrade and operate existing physical assets in a cost-effective manner.

Economic Factors

Maintaining a balance between the costs of system renewal, while maintaining affordable rates for our customer base, plays a large role in the timing of capital improvements. With the current customer base and usage levels, rates for both water and sewer would have to be raised by 1 percent for every \$1M in additional cash flow would be needed. A major project underway is the Authority’s rehabilitation of its large sewer interceptors, or trunk sewers, which is estimated to cost \$64M and will require \$6 to \$14 million in capital funding per year. Other important capital projects are needed throughout the system and the risk of delaying work on these projects is too great to ignore until funding from general operations is available.

Intergenerational Equity is the concept that the beneficiaries of the service should be those that help pay for the service. Through monthly water bills, the customers of the system at any point in time pay for the everyday maintenance of the system plus help fund small to medium-sized projects through accumulation of funds in the Renewal and Extension Fund. For large projects that will benefit customers over several decades, funding through debt would be an equitable way to spread the cost of the project with those multiple generations of customers or citizens.



In January 2017, the Authority was awarded a \$25M loan from the Georgia Environmental Finance Authority (GEFA) to fund a portion of its Large Sewer Interceptor Rehabilitation. The loan has an interest rate of 0.65% with a repayment



term of 15-years beginning when construction is complete. There is no prepayment penalty. If all the funds are drawn, the annual debt service will be \$1.7M. Because this Clean Water SRF loan is subordinate debt to bonds, its debt service is not included in the calculation of our bond debt service coverage ratio covenant. The Authority has two additional GEFA loans that are in repayment. The first loan was used to finance the construction of one of the phases of the constructed wetlands. The outstanding principal balance at April 30, 2019 will be \$3.1M and the final payment will be November 1, 2025. The second loan funded the addition of backflow devices within our distribution system. As of April 30, 2019, the outstanding principal balance of this loan will be \$1.8M and its final payment will be made on April 1, 2026.

The Board of Directors approved a second GEFA loan for up to \$25M to fund three additional phases of the Authority's Large Outfall Replacement program that are projected to cost an estimated \$18.4M.

CCWA has five bond issues with a combined outstanding debt of \$89.4M at April 30, 2019. The final bond payment will be made on May 1, 2023 when the 2012 Series bond matures. The final retirement of bond debt will increase cash flow by \$20M, making it available for self-funding capital projects needed.

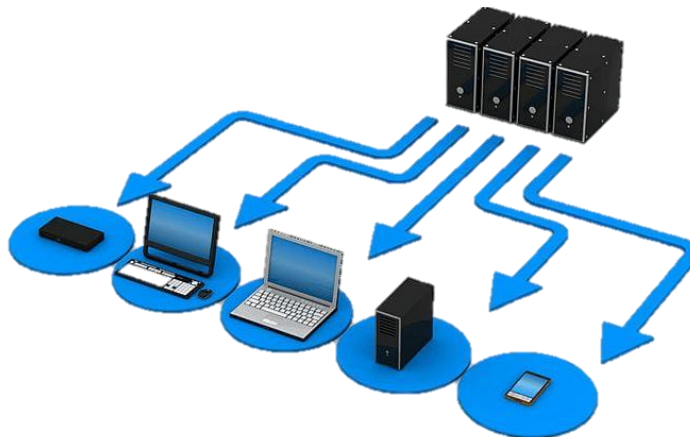
Additional detail about the Authority's debt can be found in the [PLANNING AND DIRECTION](#) section under [Debt](#).

Workforce Continuity

The Authority has implemented a succession planning process to maintain stability in its operations as changes in staffing occur. The process includes routine evaluation of staff and critical positions by department managers and supervisors. It also includes periodic reporting of this information by managers to a "Talent Development Committee" comprised of human resource personnel and executive leadership. In FY 2018 – 2019, the Authority completed a comprehensive compensation study that evaluated

Technology Advancement

Technology is a vital component of the Authority's operation. As part of its strategic planning, CCWA addresses its information technology needs through a separate information technology master plan that is updated every three years. Twenty-two projects with an estimated cost totaling \$15.5M are listed on the master plan. Of those projects, the largest is currently underway, the implementation of the new Customer Information System (estimated completion Spring 2020). This project is funded from the Renewal and Extension Fund, which accumulated funds from previous budget years. This new system requires the development of an interface to the GIS/Cityworks application used to track the location of pipe infrastructure throughout the County, as well as, manage the maintenance and work on that infrastructure. The FY 2019-2020 capital budget includes \$302K for software, network and other technology infrastructure improvements.





Water Quality/Regulatory Issues

Along with stormwater, the water and sewer industries are heavily impacted by both current and emerging regulations. The strategic plan lists eleven projects with total estimated costs of \$46M that address water quality and regulatory issues. Of those projects, five projects totaling \$5.4M will be funded with part of the surplus from FY 2018 – 2019 budget, as directed by the Board of Directors at FYE 2019. A list of sixteen of the regulatory issues that may impact the Authority's operations are described in the table that follows.

Regulation/Issue	Description	Water	Wastewater	Stormwater	Current	Evolving	Emerging
1. Nutrient Criteria	The Georgia Environmental Protection Division (GAEPD) is working on development of numeric nutrient criteria (NNC) for phosphorus and nitrogen in lakes, rivers, estuaries, and wetlands (natural), with a goal to complete all the NNC by 2021.		X	X			X
2. Capacity, Management, Operations, and Maintenance (CMOM)	Information requests on sanitary sewer overflows (SSOs) and ongoing CMOM activities suggest that U.S. Environmental Protection Agency (EPA) Region IV is looking more closely at GAEPD's program for compliance with CMOM. GAEPD could update existing CMOM requirements in the future.		X		X	X	
3. Biosolids	CCWA must comply with 40 Code of Federal Regulations (CFR) Part 503 for biosolids management.		X		X		
4. Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR)	This EPA rule provides additional public health protection against microbial pathogens in public water systems with potential water treatment and monitoring.	X			X		
5. Disinfection By-Product (DBP) Control (Stage 2D/DBPR)	DBPs have been regulated by EPA for the last 30 years with increasingly strict requirements on the amounts of DBPs allowed in the drinking water delivered to customers.	X			X		
6. Perchlorate	EPA is developing a new perchlorate rule that will limit the amount of perchlorate in finished water, which may be an issue for W.J. Hooper and J.W. Smith WPPs.	X				X	X
7. Fluoride	Health and Human Services (HHS) and EPA have proposed lowering the current allowable concentration of fluoride in potable water.	X				X	X
8. Lead and Copper	The National Drinking Water Advisory Council (NDWAC) has a new lead and copper rule working group, which is scheduled to submit recommendations in early 2015.	X			X	X	
9. National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4)	A Stormwater Management Plan (SWMP) must be submitted every 5 years to GAEPD, with a report submitted annually to demonstrate progress in implementing the SWMP. Requirements under the most-recent MS4 permit include requirements related to Green Infrastructure, an Enforcement Response Plan, and an Impaired Waterbodies Plan.			X	X	X	
10. Total Maximum Daily Loads (TMDLs) Program	The TMDL program is shifting focus from fecal coliform bacteria to biota and habitat. Biota is intensive to monitor and measure quantitatively; hence, alternate parameters are being considered (such as total suspended solids [TSS]). TMDLs for chlorophyll-a violations are likely in the future but are not anticipated in the next several years.		X	X	X	X	
11. Emerging Contaminants	GAEPD has suggested possible future treatment requirements for emerging contaminants, such as pharmaceuticals and personal care products (PPCPs), hormones, perchlorate, herbicides and pesticides, nanomaterials, and/or algal toxins.	X	X				X
12. Drought Management Rule	GAEPD has issued a draft drought management rule to clarify requirements for utilities during periods of drought.	X					X
13. Rules for Public Water Systems to Improve Water Supply Efficiency	GAEPD has issued the Draft Rules for Public Water Systems to Improve Water Supply Efficiency, which would require CCWA to develop and implement a water loss control program and to improve water supply efficiency.	X					X
14. 2010 Georgia Water Stewardship Act	CCWA must comply with the Stewardship Act, including water loss audits and enforcement of water restrictions.	X			X		
15. Georgia State Regional Water Plans	CCWA will need to track updates to the Upper Flint, Lower Flint, and Middle Ocmulgee Regional Water Plans, specifically with regard to instream flows, future point source nutrient load reductions, and nonpoint source pollutant loadings.	X	X	X	X	X	
16. Metropolitan North Georgia Water Planning District Requirements	MNGWPD Water Supply Plan and Wastewater Plan impact water, wastewater, and watershed management practices required of CCWA. These plans will be updated in 2015.	X	X	X	X	X	



Managing Infrastructure and Assets

The United States' aging infrastructure has been discussed frequently by news media in recent months. The American Society of Civil Engineers have voiced concern since the early 2000's. The Governmental Accounting Office (GAO) reported in 2017 that the Environmental Protection Agency (EPA) estimates that the US will need \$655B that over the next 20 years to repair and replace aging water and sewer infrastructure. In our nation's population centers, including the Metro-Atlanta area, sinkholes and water boiling notices are common occurrences as the underground water and wastewater pipe networks fail due to deterioration caused by age. Full replacement of Clayton County's water, sewer and stormwater pipes would range from about \$800M-\$1.6B and the Authority is systematically addressing the aging infrastructure in Clayton County with projects outlined in its strategic plan. This challenge consumes the lion's share of budget dollars addressing stormwater, sewer and water pipe projects that total an estimated \$220M over the ten years the plan covers. Of these projects, \$26.8M in funding will be needed in the upcoming year with \$8.3M of that amount included in the 2019 – 2020 budget. Loan disbursements will cover \$12M of the Large Interceptor Rehabilitation funding need and the remaining \$6.5M will be paid from the Renewal and Extension Fund with money accumulated from prior budget years.

As organized in the table that follows, the estimated annual cost of pipe replacement is \$16M to \$31M. Using an average lifespan of 50 years method and replacing 60 miles of line a year would cost \$16M to \$31M per year. Using the 90/10 rule that assumes that 90 percent of what is inspected is good and that 10 percent requires replacement, would cost \$16M to \$23M per year for inspection and renewal.

Renewal and Replacement Estimates

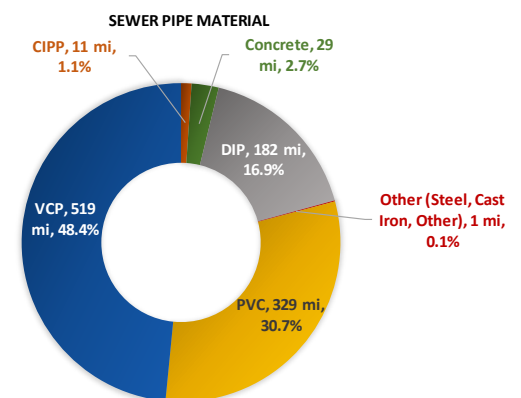
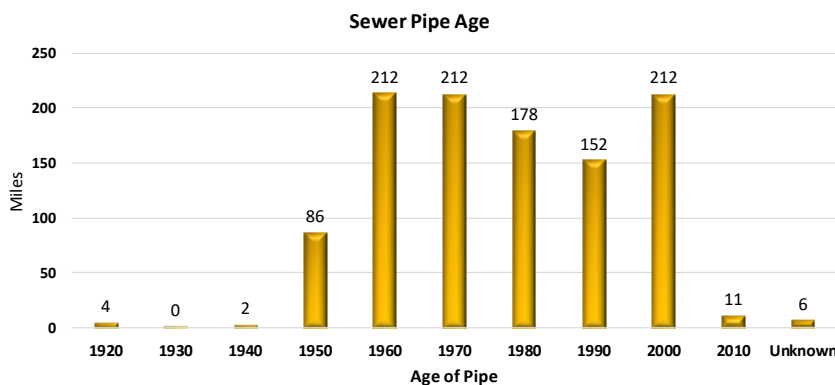
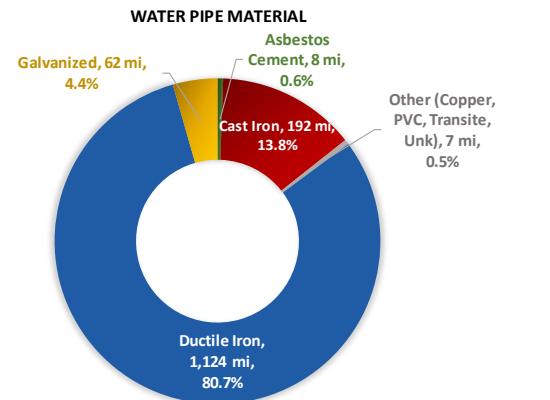
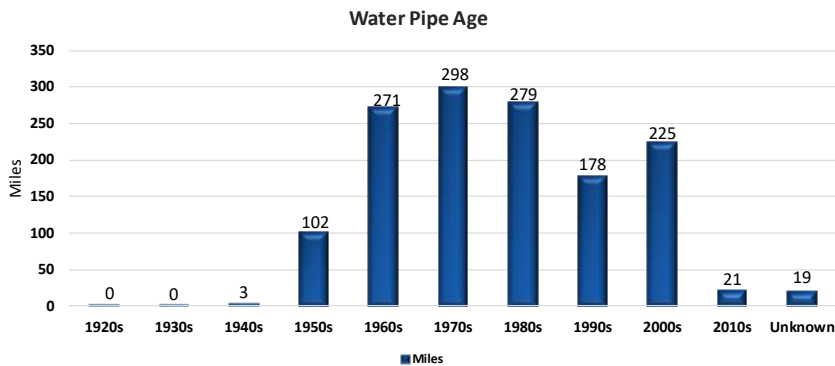
Estimate Methods	Basis	Unit Cost	10-year Cost	Annual Cost
<i>Lifespan (50 yrs.)</i>	60 miles year	\$50-\$100/foot		\$16-\$31M
<i>90/10 Rule</i>	Inspect 3000 miles	\$5/foot	\$160M	\$16-\$23M
	Replace 300 miles	\$50-\$100/foot		
<i>Strategic Master Plan</i>	--	--	\$162M	\$16M

Several factors contribute to the lifespan of pipeline assets:

- **Age:** Over 300 miles of sewer pipe is older than an average 50-year lifespan.
- **Material:** An important indicator of condition and lifespan.
- **Corrosion:** Significant issue that affects lifespan particularly in concrete and ductile iron sewer pipe.
- **Construction Quality:** Quality of construction and inspection at time of installation are key to maximizing lifespan of a pipe.



Pipe Material and Age



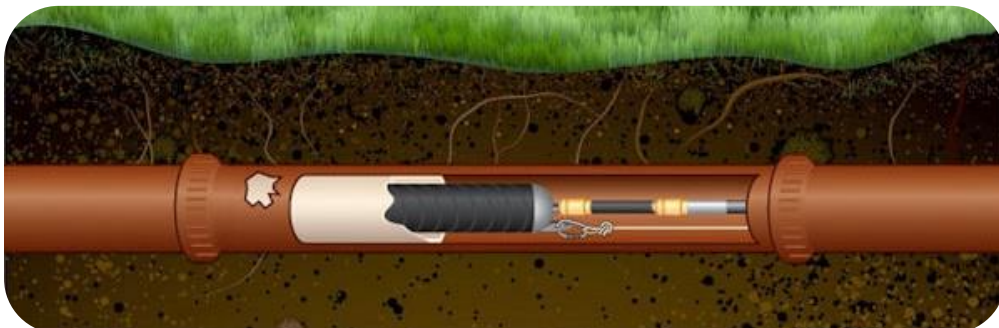
PIPE TYPES:

Used in sewer systems:

- PVC – Polyvinyl Chloride Pipe
- DIP – Ductile Iron Pipe
- HDPE– High Density Polyethylene Pipe
- VCP – Vitrified Clay Pipe
- CMP – Corrugated Metal Pipe
- RCP – Reinforced Concrete Pipe
- CIPP – Cured In Place Pipe
- Steel

Used in water systems:

- Concrete
- Cast Iron
- DIP – Ductile Iron Pipe
- Copper
- Galvanized
- PVC – PolyVinyl Chloride





Summary of Factors Influencing the 2019 – 2020 Operating and Capital Budgets

- ◆ A balanced budget supporting the goals of the [Strategic Master Plan](#)
- ◆ Maintaining affordable water and sewer rates for customer base
- ◆ [Intergenerational equity](#) of funding large projects
- ◆ [New loan proceeds](#) from a second loan through the Georgia Environmental Finance Authority (Clean Water State Revolving Fund program) for [Large Sewer Interceptor Rehabilitation](#). Principal of \$25M, interest rate of 1.25%, repayment term of 15 years.
- ◆ Water consumption consistent with previous two fiscal years
- ◆ No new rate or fee adjustments

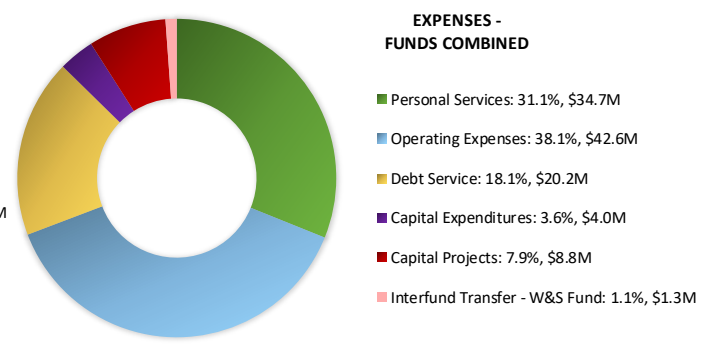
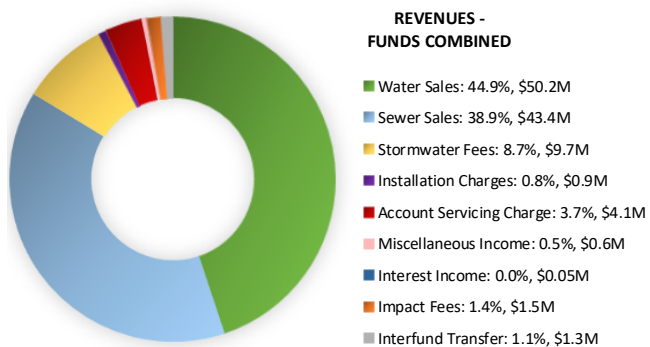




EXECUTIVE SUMMARY

Consolidated Budget – FY 2019 – 2020

	Water and Sewer Fund	Stormwater Fund	Total	% Chg FY2018-19
Revenues				
Water Sales	\$ 50,165,164	\$ -	\$ 50,165,164	-0.8%
Sewer Sales	43,410,151	-	43,410,151	0.9%
Stormwater Fees	-	9,724,285	9,724,285	0.9%
Installation Charges	875,974	-	875,974	44.9%
Account Servicing Charge	3,956,849	157,205	4,114,054	-0.2%
Miscellaneous Income	553,747	3,098	556,845	29.3%
Interest Income	32,235	5,193	37,428	-15.9%
Impact Fees	1,539,088	-	1,539,088	75.4%
Interfund Transfer	1,271,151	-	1,271,151	-10.1%
Total Revenues	\$ 101,804,359	\$ 9,889,781	\$ 111,694,140	0.9%
Expenses				
Personal Services	\$ 32,923,306	\$ 1,809,428	\$ 34,732,734	-0.3%
Operating Expenses	39,498,061	3,084,005	42,582,066	12.5%
Debt Service	20,242,549	-	20,242,549	-10.6%
Interfund Transfer - Revenue Fund	-	1,271,151	1,271,151	-10.1%
Capital Expenditures	3,509,843	532,076	4,041,919	17.9%
Capital Projects	5,630,600	3,193,121	8,823,721	-16.0%
Total Expenses and Appropriations	\$ 101,804,359	\$ 9,889,781	\$ 111,694,140	0.9%



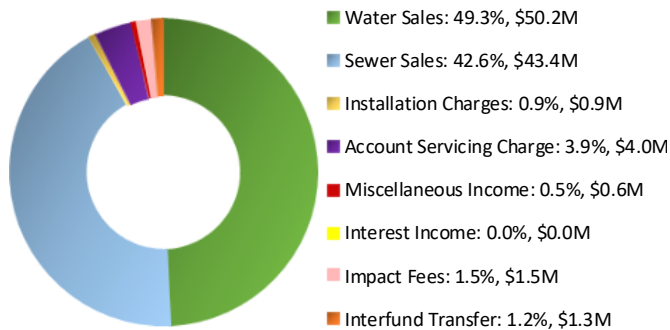


Budget Summary: Water and Sewer Fund

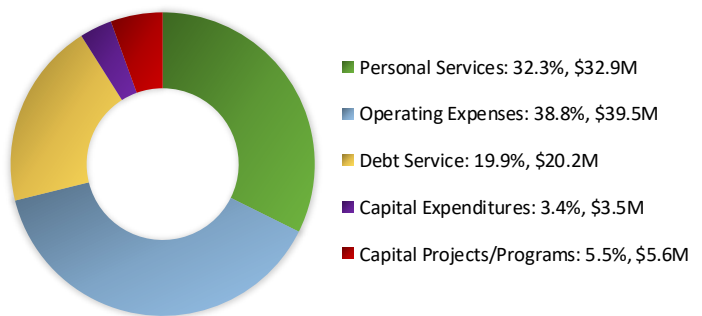
(in millions)

	Budget FY 2018 - 2019	Est Actual FY 2018 - 2019	Budget FY 2019 - 2020	% Chg Budget FYE 19 -FYE 20	% Chg Act FYE 2019 with Budget FY 2018-2019	% Chg Est Act FYE 19 to Budget FYE 20
REVENUES						
Water Sales	\$50.55 M	\$51.25 M	\$50.17 M	-0.8%	1.4%	-2.1%
Sewer Sales	43.04 M	43.93 M	43.41 M	0.9%	2.1%	-1.2%
Installation Charges	0.60 M	1.16 M	0.88 M	44.9%	92.7%	-24.8%
Account Service Charges	3.96 M	3.88 M	3.96 M	-0.2%	-2.1%	1.9%
Miscellaneous Income	0.43 M	0.90 M	0.55 M	30.0%	112.0%	-38.7%
Interest Income	0.04 M	0.03 M	0.03 M	-18.0%	-18.4%	0.4%
Impact Fees	0.88 M	1.63 M	1.54 M	75.4%	86.0%	-5.7%
Interfund Transfer	1.41 M	1.41 M	1.27 M	-10.1%	0.0%	-10.1%
TOTAL REVENUES	\$100.91 M	\$104.21 M	\$101.80 M	0.9%	3.3%	-2.3%
EXPENSES						
Personal Services	\$33.04 M	\$29.23 M	\$32.92 M	-0.4%	-11.5%	12.6%
Operating Expenses	34.97 M	28.58 M	39.50 M	12.9%	-18.3%	38.2%
Debt Service	22.65 M	21.92 M	20.24 M	-10.6%	-3.2%	-7.6%
Capital Expenditures	2.89 M	2.50 M	3.51 M	21.3%	-13.4%	40.2%
Capital Projects	7.36 M	8.67 M	5.63 M	-23.5%	17.8%	-35.0%
TOTAL EXPENSES	\$100.91 M	\$90.90 M	\$101.80 M	0.9%	-9.9%	12.0%

**REVENUES -
WATER AND SEWER FUND**



**EXPENSES -
WATER AND SEWER FUND**



The 2019 – 2020 annual operating and capital budget for the Water and Sewer Fund remained relatively flat with the prior year budget, up less than 1 percent. Actual revenues for the fiscal year ending April 30, 2019 are estimated at \$104.2M or 3.3 percent higher than budgeted.

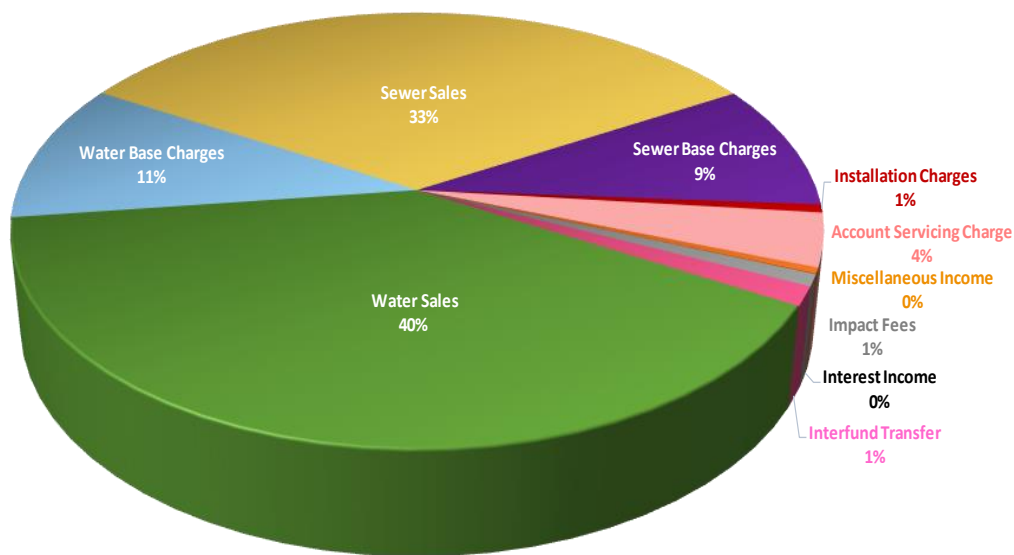
Forecasted revenues for FY 2019 – 2020 are expected to remain flat with this year's actual performance. To be conservative, budgeted revenues for water and sewer usage were discounted by 2 percent. Estimated actual revenue in the current fiscal year from Installation Charges (Tap Fees) and Impact Fees were \$1.2M and \$1.6M, respectively. Because these fees are based on new construction and vary significantly from year to year, revenues from these sources were budgeted at the average amount received over the previous 5 years.



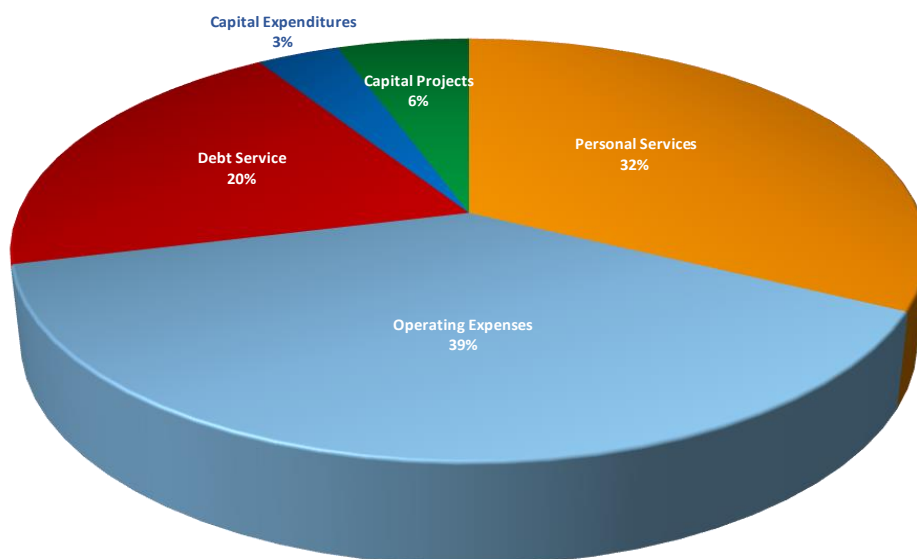
An additional favorable revenue variance to budget was due to the final payment of \$530K received from the Forest Park Urban Redevelopment Agency for the partial cost reimbursement for pipe infrastructure. The Authority entered into an intergovernmental agreement with the Forest Park Redevelopment Agency to assist in Clayton County's economic development effort to convert the Fort Gillem military base into a large industrial and commercial center. The agreement ended July 2018.

Of the \$101.8M in revenue generated in this budget year, \$9.1M or 9 percent, will be reinvested in the utility system via capital equipment and projects. Another \$20.2M or 20 percent will be used to repay debt utilized for previous capital projects and related interest. The remaining \$72.5M will cover the operating expenses of the Water and Sewer Fund including \$2.6M in contingency funds used to fund emergency projects if the need arises during the year.

Water and Sewer Fund Revenues as Percent of FY 2019-2020 Budget

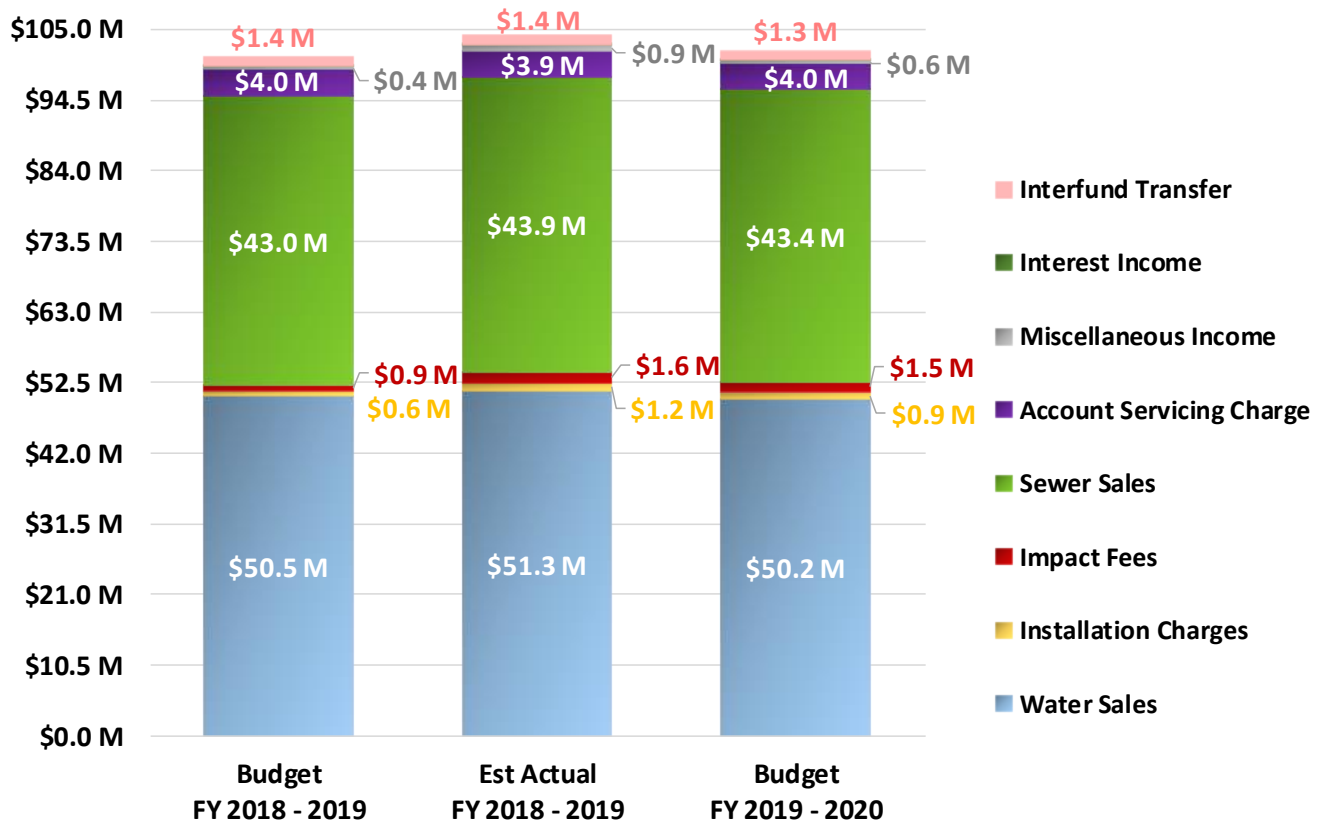


Water and Sewer Fund Expenses as Percent of FY 2019-2020 Budget





Analysis of Revenues – Water and Sewer Fund



Revenue Budget Assumptions FY 2019 – 2020

Water Sales are forecasted at \$50.2M in the upcoming budget year with \$10.7M of that amount coming from base charges. This is \$383K lower than the previous budget year and 2.1 percent lower than estimated actual performance of the year ending April 30, 2019. *Sewer sales* are projected to be \$43.4M in the current budget. This is 1.2 percent lower than estimated actual performance and 0.9 percent higher than the previous budget year. Base sewer charges comprise \$9.7M of the total sewer sales.

Water and Sewer Sales are forecasted using the assumption that usage and the number of customers will remain consistent with the previous year. To be conservative, revenues based on usage in this category were discounted 2 percent and are in line with the average of the previous three years when the last rate increase was implemented.

Estimated actual water sales to cities (City of College Park) will end \$127K higher than budgeted. Forecasted revenue from the City is budgeted in FY 2019 – 2020 at \$1.3M which is the average revenue received over the previous five years. The City of College Park has an agreement that it can purchase up to 3 MGD from the Authority but has no minimum purchase requirement. College Park also has a water purchase agreement with the City of Atlanta. Although there is no formal minimum purchase amount with CCWA, College Park has expressed its intent to continue to purchase at least 1.0 MGD. At this tier of usage, the City receives a reduction in its wholesale rate.

Installation Charges (tap fees) are revenues received from the installation of meters or other related infrastructure to provide water and sewer services. This revenue category was budgeted at \$876K, the average actual revenue received in the previous five fiscal years.

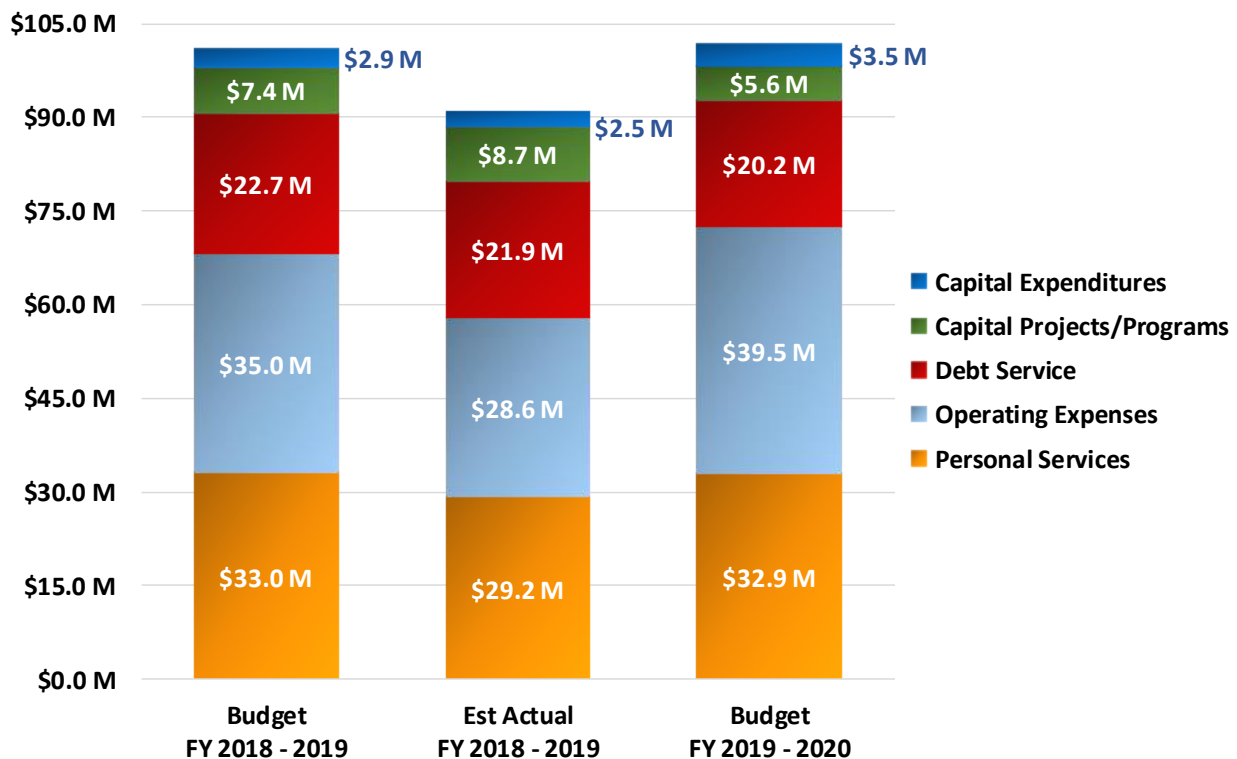


Account Service Charges are revenues associated with the fees and charges for late and delinquent payment of utility charges. This includes late fees and penalties, bad check charges and reconnection fees. These revenues are budgeted at \$4.0M, which is consistent with actual performance over the previous five fiscal years.

Miscellaneous Income includes revenues received from system repair charges, sale of scrap materials, sale of fertilizer pellets, intergovernmental transactions and property and cell tower rental fees. This revenue was budgeted at \$600K, \$200K higher than the prior year budget. Revenue is budgeted for this line by combining the minimum received for each category listed over the previous five years.

Interfund Transfer from the Stormwater Fund is the overhead that is allocated to the Stormwater Fund to cover its share of the Authority's administrative expenses. This year's budgeted amount is \$1.3M. This is a monthly charge of \$106K versus the \$118K per month charged in the previous year. This fee is calculated using a percentage of the prior fiscal year's actual expenses for certain administrative departments.

Analysis of Expenses – Water and Sewer Fund



Operating and Capital Expense Budget Assumptions FY 2019 – 2020

Personal Services

This expense category includes salaries, payroll taxes, pension and medical or related benefits. As has been budgetary practice at the Authority, salaries and benefits are budgeted as if all full-time positions are filled for the entire year. This amount also includes increases for cost of living (COLA) and merit of 2 percent and 3 percent, respectively, whether given or not. *Salaries* and *Payroll Taxes* of \$23.0M and \$1.7M combined for an overall budget increase of \$440K or 1.8 percent over the previous year budget. For the last five fiscal years, the budgeted amount for *Salaries* and *Payroll Taxes* had an average annual increase of 2.7 percent budget year to budget year. In addition to COLA and merit increases, changes in these accounts from year to year are due to net changes in new and eliminated positions



and upgrades and downgrades of current positions. Actual salary expenses have been 7 percent lower than budgeted over the most recent five fiscal years.

Medical and related *Benefits* of \$4.3M are \$673K or 13 percent lower than the previous year budget. The FY 2018 – 2019 budget increased 28 percent over the FY 2017 – 2018 budget due to anticipated increases in insurance costs. Actual employee benefits expense has averaged a 5 percent year over year increase for the previous five years. This year's budget was readjusted to better align with actual costs. In fiscal year 2015 - 2016, the Authority adopted a self-funded insurance program for its medical insurance, which has provided more control over the cost of these benefits but cannot completely curb the general escalation of cost. This year the cost to the employees will be increased 5 percent to help offset these rising expenses.

Pension expense of \$3.1M is \$85K or 2.8 percent higher than the previous budget year. This line item is budgeted as a percentage of salaries and also includes an additional contribution of \$133K necessary to maintain the set allocation between Clayton County employees and Authority employees of 84 percent and 16 percent, respectively. Because this line item is budgeted as a percentage of salaries, actual expenses for this line item averages less than the budgeted amount over the previous five years.

Retiree Benefits, Other Post-Employment Benefits (OPEB), of \$823K make up the remaining portion of the Personal Services category. This line item increased \$30K or 4 percent over the previous budget year due to increases in medical insurance.

Operating Expenses

Operating Expenses are \$39.5M for the new budget year and up 12.9 percent or \$4.5M from the previous budget. This increase is due to the upcoming year's initiatives which includes undertaking six of the thirty-two projects recommended in the Strategic Asset Management Plan [SAMP], the monitoring and maintenance of the water quality projects completed at the reservoirs and security monitoring for the newly implemented phases of security systems at facilities throughout the Authority as well as the placement of full-time security officers at both of our customer service centers.

The *Operating Materials and Supplies* category of \$5.1M is up \$906K or 22 percent from the previous year budget. *Chemical* expenses make up \$2.6M of this category and make up \$590K of the increase over the previous year budget. This increase is due to a combination of changes in pricing of certain chemicals, changes in the types of chemicals used and increases in the amount of water and sewer flow treated. Another large account in this category, is *Other Materials* budgeted at \$1.7M. This account is budgeted at \$247K higher than the previous year primarily due to additional meter setting materials required for the increased work anticipated in the upcoming year. This category includes various supply needs for maintenance of the Authority's infrastructure and facilities including pipe, pipefittings, manhole covers, shovels and other miscellaneous items often issued from the warehouse such as washers, gloves, duct tape and other miscellaneous supplies necessary in day-to-day utility activities. Other accounts in this category include *Lab Supplies*, *Tools and Shop Supplies*, *Uniforms* and *Technology and Software*. The budgeted amount for each of these accounts combine to increase this category \$58K over the previous budget year.

The *Vehicle Supplies* expense category includes gas, oil, diesel fuel and tires with gas prices being the primary budgetary factor used. This line item is budgeted at \$510K in the current fiscal year, which is up \$22K over last year's budget. Gasoline prices have increased over the previous year and make up almost the entire amount of this increase. Actual expenses in this category have averaged \$454K over the previous five years and \$417K over the previous three years due to lower gas prices. Over the last five fiscal years, the Authority has purchased an average of 200,000 gallons of fuel, 108,000 gallons of diesel and 92,000 gallons of unleaded. For every 1-cent drop in the price of fuel, CCWA saves about \$2K.



Administrative Supplies expense category includes office and janitorial supplies, printing and postage which is budgeted at \$345K and is up \$35K or 11 percent from the FY 2018 – 2019 budget. The increase in postage rates added \$20K to this year's budget.

The *Special Purchases* expense category contains the line items *Water Purchases*, *Employee Recognition*, *Toilet Rebate* and the *Hardship Assistance Program* which is funded by the revenue received from cell tower leases. These actual expenses are typically \$100K or less a year. Due to a taste and odor issue in early fall of 2017, water was purchased from the city of Atlanta which increases the actual expense in this category by \$866K. This category also includes the budgeted amount for *Contingencies* where additional funds are held after all budgetary requests are met. These funds are used for projects throughout the year, at the discretion of the General Manager and Board of Directors. This year the amount is budgeted at \$2.5M, which is \$276K higher than the previous year budget to accommodate estimated increases from the final outcome of the compensation study and medical insurance funding changes not solidified before the proposed budget is presented for approval.

Utility expense is budgeted at \$8.0M, which is \$225K or 3 percent higher than the previous budget year. This year's budget is the first year to include the newly completed General Services Building which added \$14K in additional utility costs. Changes in telephone service platforms and additional mobile and mobility cellular devices increased this expense category \$86K.

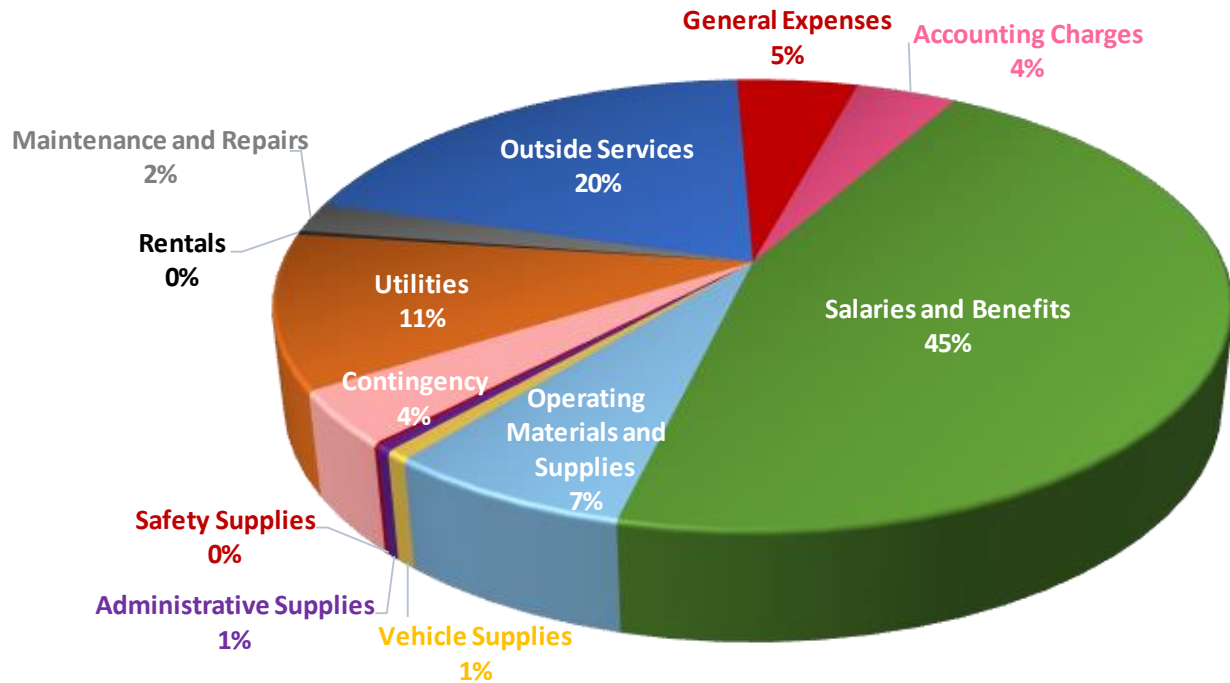
Maintenance and Repair expenses have been budgeted at \$1.6M, which is \$206K higher than the prior year budget. Actual expenses over the prior five fiscal years have averaged \$1.1M. The higher budgeted amount provides a safeguard against an unplanned repair caused by weather or emergency event.

Outside Services expense category consists of a wide range of professional services and third-party assistance including engineering and technology consulting, legal and audit fees, along with various types of maintenance on property facilities and equipment. This line item is budgeted at \$14.7M and is up \$2.2M or 18 percent from the previous year budget. With \$500M in capital assets and rapidly growing, a project was undertaken last year to develop a Strategic Asset Management Plan (SAMP). The FY 2019 – 2020 budget includes six of the thirty-two projects recommended in the plan. These projects account for \$1.25M of the increase in the *Outside Services* expense. Nine separate maintenance expense line items in this category increased a total of \$700K from the previous budget. *Collection System and Outfall Maintenance* increased \$153K due to additional planned work in this area. *Building and Grounds Maintenance* of \$800K increased \$311K in this year's budget. This increase is due to internal and external painting and sealing of several buildings throughout the Authority. Various changes in planned maintenance for equipment and the distribution and water supply system make up the remaining increase of \$236K in this subgroup. *Security Monitoring and Maintenance* increased this expense category by \$345K due to the implementation of the additional phases of the organization's security project along with hiring a security firm to place guards at both of our customer service locations. Finally, anticipated increases in the cost of solids disposal added \$353K to this expense category.

The *General Expenses* category contains the expense line items of *Employee Bonding*, *Property Insurance*, *Training* and *Annual Software License Fees*. At \$3.5M, the *General Expenses* category has increased \$256K or 8 percent from the previous year budget. Accounting for \$125K of the increase, was the purchase of additional *Annual Software Licenses* for various applications the Authority uses, as well as, the overlap in fees charged for our customer information system (CIS) as we transition from the current CIS to the new system in the upcoming year. *Property Insurance* and *Employee Bonding and Liability Insurance* added \$152K of the increase to this category of expenses.



Operating Expenses - Percentage by Category Type



Debt Service

Debt Service includes the required bond debt service for the upcoming year of \$19.3M; the principal and interest payments for two GEFA loans totaling \$798K; and estimated interest-only payments of \$78K for the new GEFA loan that will fund a portion of the large sewer interceptor rehabilitation project. Detailed information about long-term debt is in the [Planning and Direction](#) section of this document under the heading [Debt](#).





Capital Expenditures

Capital expenditures is the use of funds to obtain a long-term asset or extend the productive life of an existing asset used in the operations of a business over multiple year periods. Sometimes referred to as capital outlay, this category of the Capital Budget primarily accounts for the purchase of equipment and vehicles and can vary year to year. CCWA has 175 fleet trucks that range in age from 2000 through 2018. Approximately 10 percent are replaced annually based on a scoring factor that includes mileage, corrective maintenance cost and age. This year 15 were budgeted to be replaced. Vehicles and equipment replaced are sold at auction and proceeds from the sale have averaged \$147K over the last four years. The current year budgeted request is \$3.5M which is \$600K higher than the previous year budget. The budgeted amount over the previous five fiscal years, has averaged \$2.3M. The increase in this budget year is due to the atypical replacements of larger equipment that includes a two dump trucks (\$95K each), a crane truck (\$295K) and an excavator (\$119K). The Authority utilizes the State of Georgia contract pricing for the majority of its fleet replacement. Exceptions occur when larger equipment or trucks can be purchased at lower prices through a competitive bidding process. A list of planned capital expenditures can be found in the table that follows. A detailed listing of capital purchases is in the [Capital Budget](#) section of this document under the heading [Capital Expenditures – Water and Sewer Fund](#).



Description	Replacement	New	Total
Vehicles			
Trucks - Fleet	\$ 433,964	\$ 35,358	\$ 469,322
Trucks - Dump, Heavy	390,376	95,076	485,452
Trailers	-	-	-
Buildings and Structures			
Building, Roof, Paving	256,000	179,500	435,500
Tanks and Containers	375,000	-	375,000
Equipment			
Field Equipment - Construction Equipment	21,650	148,992	170,642
Data Processing/IT System Equipment	211,000	362,000	573,000
Plant Equipment	938,987	36,840	975,827
Other	25,000	100	25,100
Total Capital Equipment	\$ 2,651,977	\$ 857,866	\$ 3,509,843

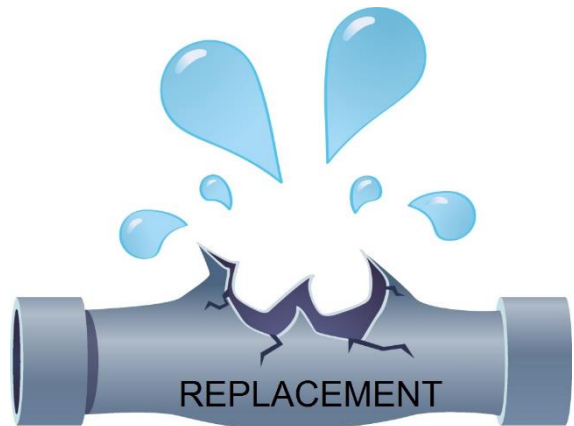
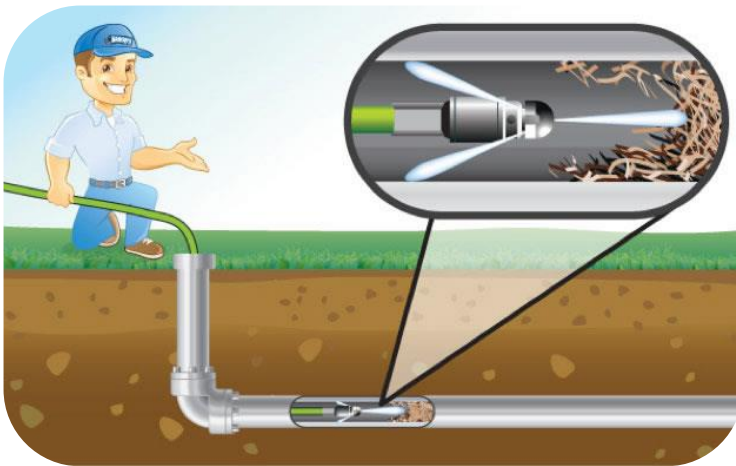


Capital Project

This category of the Capital Budget involves projects that benefit the operations of the Authority over multiple years. CCWA differentiates *Capital Projects* from *Capital Expenditures* by defining a Capital Project as one that requires multiple resources to complete. These resources could include any combination of inside labor, outside labor and various materials or products that require assembly or construction to become a long-term asset. The amount budgeted for the upcoming fiscal year of \$5.6M is \$1.8M lower than the previous budget year, based on project need. The average budgeted amount in this category, over the previous five years, is \$9.8M. Amounts budgeted in this category exclude inside labor costs, which are included in the operating budget in the Personal Services category. Additional detail of capital projects funded in the FY 2019 – 2020 budget, is located in the [Capital Budget](#) section of this document under the heading [Renewal and Extension Funded Projects – Detailed Listing by Project](#).

Capital Project Summary – Water and Sewer Fund

Construction Line	Project Description	Amount Budgeted	Construction Line	Project Description	Amount Budgeted
[RE146]	Outdoor Break Area - Meter Services	\$ 21,800	[RE225]	Water Line Inspection	\$ 40,000
[RE146]	Breakroom Remodel - Forest Park	20,000	[RE226]	Sewer Line Inspection	40,000
[RE146]	Drive-Thru Renovations - Forest Park	12,000	[RE227]	Water Meter Inspection	40,000
[RE146]	Call Center Furniture (Additional funds: 3-135-3)	6,800	[RE230]	Blade Server	45,000
[RE146]	Breakroom Renovations - Hooper Plant	10,000	[RE230]	DR Storage Replacement	48,000
[RE166]	Basin Level Sewer Rehab	2,500,000	[RE230]	San Switch Console	48,000
[RE174]	Galvanized Water Main Replacement	1,500,000	[RE230]	Network Equipment	35,000
[RE180]	DOT - Valley Hill Rd Connector and Bridge	318,000	[RE230]	SCADA Host Refresh	46,000
[RE180]	DOT - Tara Blvd	120,000	[RE230]	Hyperconverged Pilot	40,000
[RE219]	Walnut Creek Lift Station Evaluation and Design	500,000	[RE230]	IT Parts Room Equipment	10,000
[RE222]	Security Mgt System Phase 3	200,000	[RE230]	Automated Testing Software	30,000
				Total Capital Projects	\$ 5,630,600





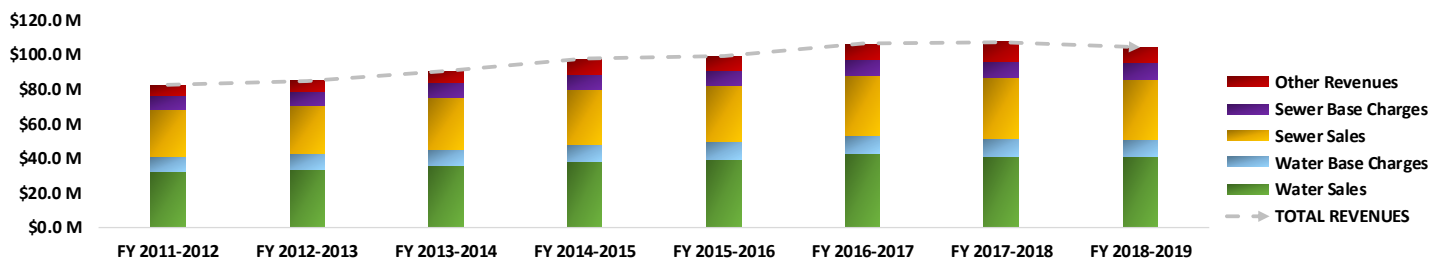
Budgetary Analysis – Revenues and Expenses: Actual Performance to Budget Comparison

(in millions)

	Actual FY 2016 - 2017	Actual FY 2017 - 2018	Est Actual FY 2018 - 2019	Budget FY 2019 - 2020	% Chg Budget FYE 19 -FYE 20	% Chg Est Act FYE 19 to Budget FYE 20
REVENUES						
Water Sales	\$53.11 M	\$51.64 M	\$51.25 M	\$50.17 M	-0.8%	-2.1%
Sewer Sales	44.19 M	44.33 M	43.93 M	43.41 M	0.9%	-1.2%
Installation Charges	0.93 M	1.31 M	1.16 M	0.88 M	44.9%	-24.8%
Account Service Charges	4.07 M	4.00 M	3.88 M	3.96 M	-0.2%	1.9%
Miscellaneous Income	0.88 M	2.59 M	0.90 M	0.55 M	30.0%	-38.7%
Interest Income	0.04 M	0.04 M	0.03 M	0.03 M	-18.0%	0.4%
Impact Fees	1.33 M	2.58 M	1.63 M	1.54 M	75.4%	-5.7%
Interfund Transfer	1.86 M	1.16 M	1.41 M	1.27 M	-10.1%	-10.1%
TOTAL REVENUES	\$106.41 M	\$107.64 M	\$104.21 M	\$101.80 M	0.9%	-2.3%
EXPENSES						
Personal Services	\$27.11 M	\$28.04 M	\$29.23 M	\$32.92 M	-0.4%	12.6%
Operating Expenses	25.87 M	27.72 M	28.58 M	39.50 M	12.9%	38.2%
Debt Service	20.99 M	20.89 M	21.92 M	20.24 M	-10.6%	-7.6%
Capital Expenditures	1.57 M	1.22 M	2.50 M	3.51 M	21.3%	40.2%
Capital Projects	26.87 M	30.54 M	8.67 M	5.63 M	-23.5%	-35.0%
TOTAL EXPENSES	\$102.41 M	\$108.40 M	\$90.90 M	\$101.80 M	0.9%	12.0%

The current budget year forecast assumes revenue from water and sewer sales will be consistent with estimated actual financial performance of fiscal year ending April 30, 2019. To be conservative, projected revenue based on usage from these sources were discounted 2 percent.

Actual Revenues – FY 2012 to FY 2019



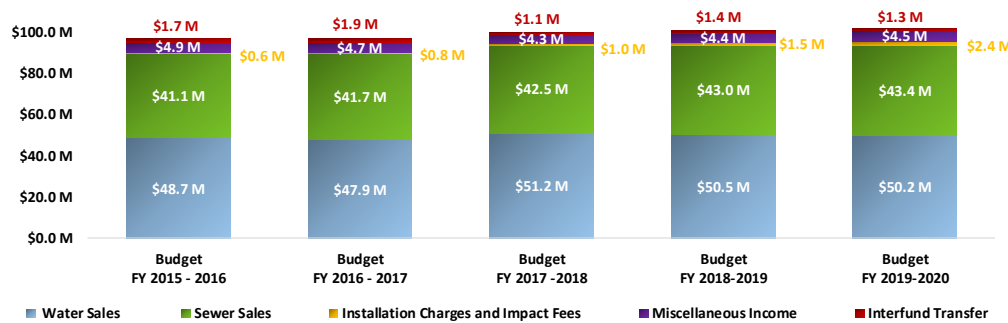


Budgetary Analysis – Revenues: Budget to Budget Comparison

(in millions)

	Budget FY 2015 - 2016	Budget FY 2016 - 2017	% Chg Budget FYE 16 -FYE 17	Budget FY 2017 - 2018	% Chg Budget FYE 17 -FYE 18	Budget FY 2018 - 2019	% Chg Budget FYE 18 -FYE 19	Budget FY 2019 - 2020	% Chg Budget FYE 19 -FYE 20
REVENUES									
Water Sales	\$48.69 M	\$47.91 M	-1.6%	\$51.21 M	6.9%	\$50.55 M	-1.3%	\$50.17 M	-0.8%
Sewer Sales	41.06 M	41.70 M	1.6%	42.54 M	2.0%	43.04 M	1.2%	43.41 M	0.9%
Installation Charges	0.21 M	0.25 M	18.2%	0.12 M	-53.1%	0.60 M	420.8%	0.88 M	44.9%
Account Service Charges	3.99 M	3.94 M	-1.1%	3.79 M	-3.8%	3.96 M	4.6%	3.96 M	-0.2%
Miscellaneous Income	0.87 M	0.68 M	-21.5%	0.50 M	-27.1%	0.43 M	-14.5%	0.55 M	30.0%
Interest Income	0.01 M	0.03 M	113.7%	0.04 M	22.9%	0.04 M	11.3%	0.03 M	-18.0%
Impact Fees	0.40 M	0.52 M	29.7%	0.86 M	65.1%	0.88 M	1.7%	1.54 M	75.4%
Interfund Transfer	1.68 M	1.86 M	11.2%	1.15 M	-38.5%	1.41 M	23.3%	1.27 M	-10.1%
TOTAL REVENUES	\$96.90 M	\$96.90 M	0.0%	\$100.20 M	3.4%	\$100.91 M	0.7%	\$101.80 M	0.9%

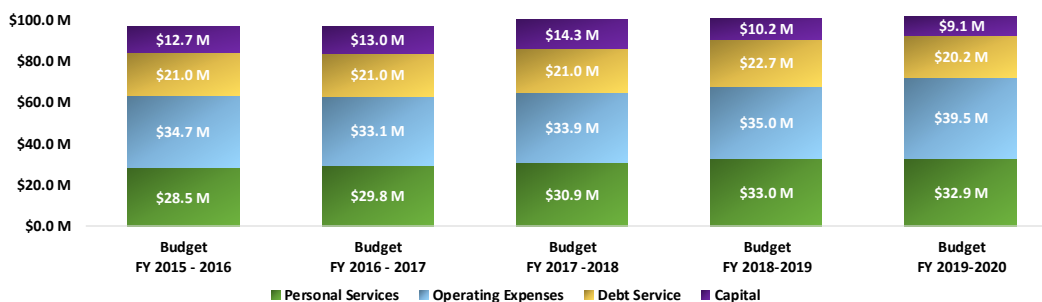
Annual revenues have been consistent budget year over budget year since FY 2015 – 2016 when the last rate increase was implemented. Revenue projections are made conservatively to assure that all planned expenses for the year are covered. *Miscellaneous Income* includes *Interest Income* and *Account Service Charges* in the graph below.



Budgetary Analysis – Expenses: Budget to Budget Comparison

(in millions)

	Budget FY 2015 - 2016	Budget FY 2016 - 2017	% Chg Budget FYE 16 -FYE 17	Budget FY 2017 - 2018	% Chg Budget FYE 17 -FYE 18	Budget FY 2018 - 2019	% Chg Budget FYE 18 -FYE 19	Budget FY 2019 - 2020	% Chg Budget FYE 19 -FYE 20
EXPENSES									
Personal Services	\$28.12 M	\$29.81 M	6.0%	\$30.86 M	3.6%	\$33.04 M	7.0%	\$32.92 M	-0.4%
Operating Expenses	35.08 M	33.13 M	-5.5%	33.94 M	2.4%	34.97 M	3.0%	39.50 M	12.9%
Debt Service	20.99 M	20.99 M	0.0%	21.05 M	0.3%	22.65 M	7.6%	20.24 M	-10.6%
Capital Expenditures	2.19 M	1.79 M	-18.4%	1.71 M	-4.2%	2.89 M	69.0%	3.51 M	21.3%
Capital Projects	10.52 M	11.18 M	6.3%	12.64 M	13.0%	7.36 M	-41.8%	5.63 M	-23.5%
TOTAL EXPENSES	\$96.89 M	\$96.90 M	0.0%	\$100.20 M	3.4%	\$100.91 M	0.7%	\$101.80 M	0.9%



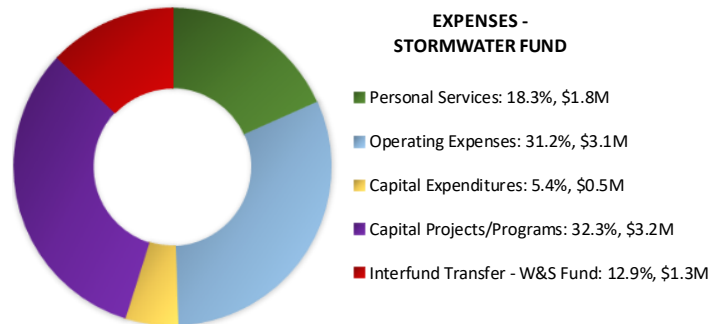
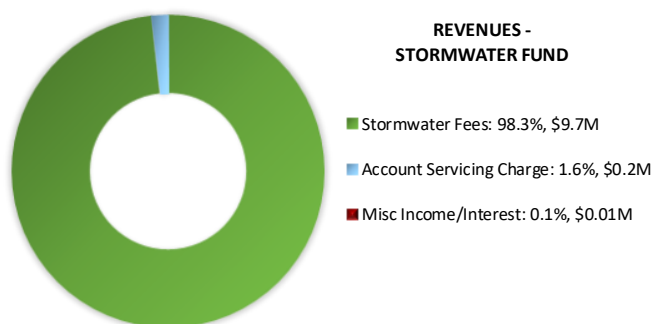


Budget Summary: Stormwater Fund

(in millions)

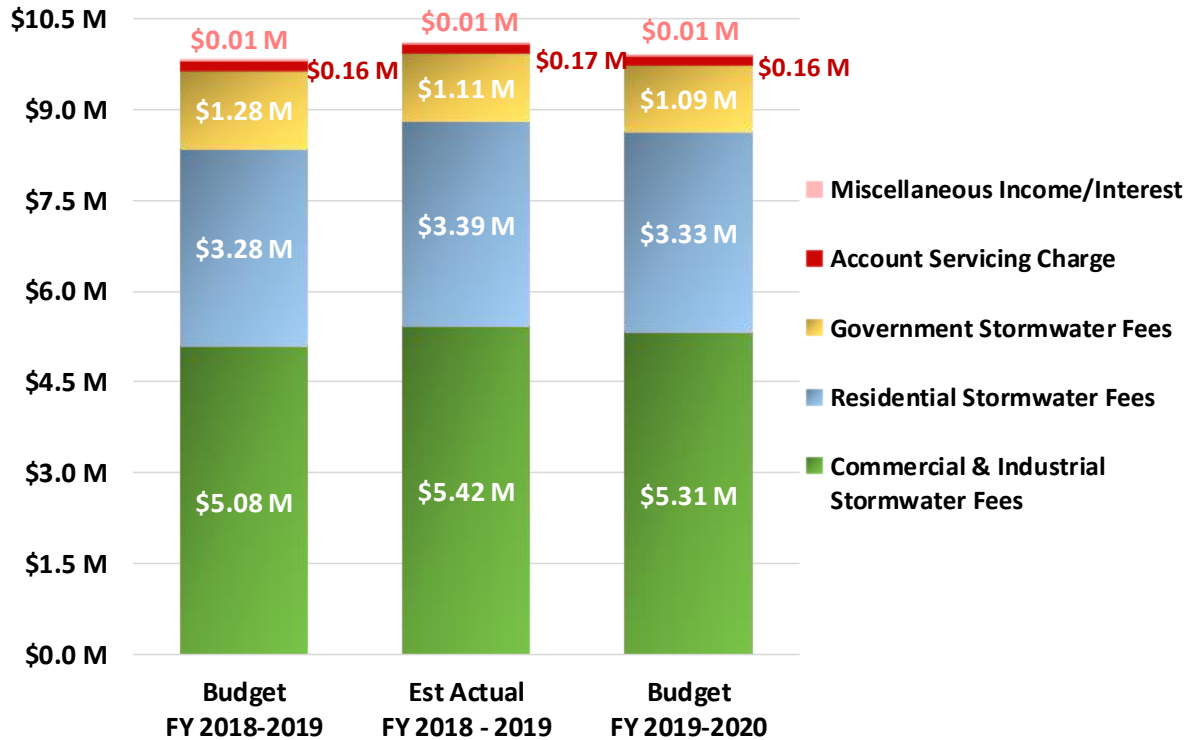
	Budget FY 2018-2019	Est Actual FY 2018 - 2019	Budget FY 2019-2020	% Chg Budget FYE 19 -FYE 20	% Chg Act FYE 2018 with Budget FY 2018-2019	% Chg Est Act FYE 19 to Budget FYE 20
REVENUES						
Stormwater Fees	\$9.64 M	\$9.92 M	\$9.72 M	0.9%	2.9%	-2.0%
Account Service Charges	0.16 M	0.17 M	0.16 M	0.0%	5.7%	-5.4%
Miscellaneous Income	0.01 M	0.01 M	0.01 M	-14.0%	10.2%	-22.0%
Grants	0.00 M	0.00 M	0.00 M	-	-	-
TOTAL REVENUES	\$9.81 M	\$10.10 M	\$9.89 M	0.8%	3.0%	-2.1%
EXPENSES						
Personal Services	\$1.78 M	\$1.58 M	\$1.81 M	1.7%	-11.1%	14.4%
Operating Expenses	2.78 M	2.53 M	3.08 M	10.7%	-9.3%	22.0%
Debt Service	0.00 M	0.00 M	0.00 M	-	-	-
Interfund Transfer -W&S	1.41 M	1.41 M	1.27 M	-10.1%	0.0%	-10.1%
Capital Expenditures	0.54 M	0.55 M	0.53 M	-0.9%	2.9%	-3.7%
Capital Projects	3.29 M	4.09 M	3.19 M	-3.0%	24.2%	-22.0%
TOTAL EXPENSES	\$9.81 M	\$10.17 M	\$9.89 M	0.8%	3.6%	-2.7%

The 2019 - 2020 Operating and Capital Budget of \$9.9M is up \$82K or 0.8 percent from the previous budget year. The fund has benefited from increases in occupancy rates as the economy continues to improve and new construction picks up. The additional revenue generated is being invested back into the system through the maintenance of system infrastructure. Estimated actual expenses are slightly higher than budgeted because the Board of Directors approved moving \$800K from cash reserves into the Stormwater Capital Projects Fund to complete additional work needed.





Analysis of Revenues – Stormwater Fund



Revenue Budget Assumptions FY 2019 – 2020

Stormwater Fees: Fees are budgeted at \$9.7M for the upcoming fiscal year. This is \$83K or 0.9 percent higher than the prior year budget and \$198K less than the actual revenue estimated for April 30, 2019. The FY 2019 - 2020 Stormwater Fees were budgeted with the assumption that revenues would remain consistent with estimated actual performance and discounted by 2 percent for a more conservative forecast.

Stormwater Fees are billed based on the amount of impervious service that a property owner has. With the creation of the Stormwater Fund in 2007, the impervious surface was determined based on aeriels performed in 2006 and existing CCWA account information. Digital tax parcel data, a much more accurate assessment of impervious surface, was not available at that time. In late 2013, CCWA acquired updated aerial photography and impervious surface data along with digital tax parcel data. All *Non-Residential Customers* were reassessed, and fees based on the new surface area became effective January 1, 2016. Approximately \$450K in additional Stormwater Fees have been generated using the new impervious surface data. Stormwater rates have remained constant since the fund's inception and are billed at a monthly rate of \$3.75 for residential customers and \$3.75 per 2,950 square feet of impervious surface for all non-residential customers.

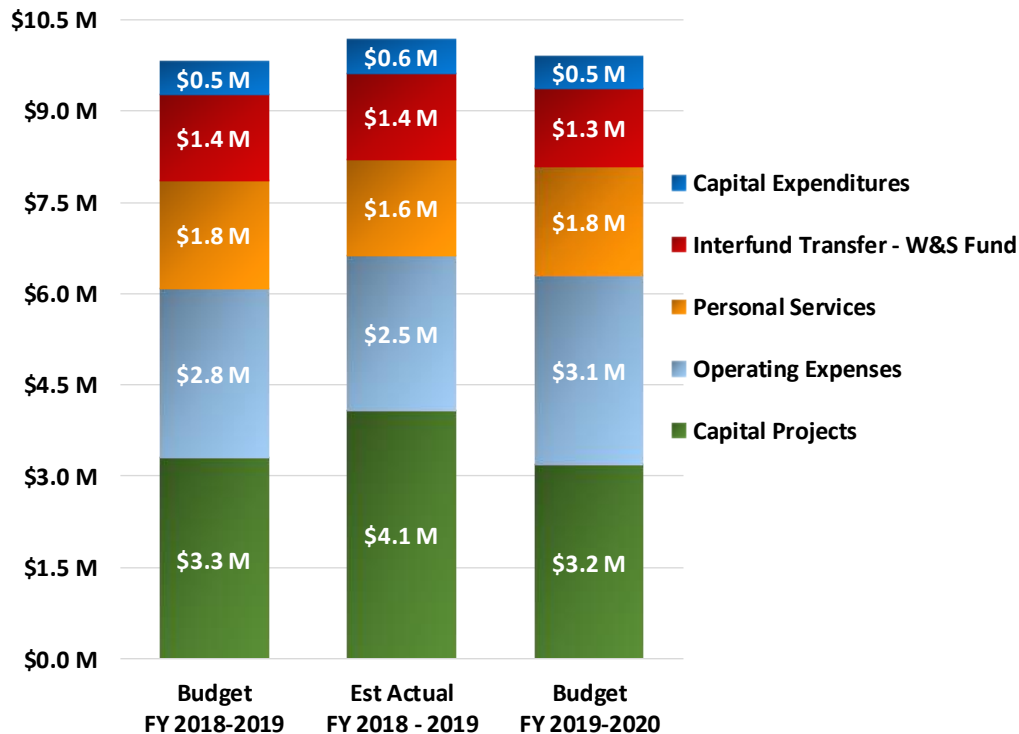
Account Service Charges are revenues associated with the fees and charges for late and delinquent payment of fees. This revenue was budgeted at \$157K for the year, which is the historical average of actual performance over the last five fiscal years.



Miscellaneous Income is revenue received from the sale of scrap materials and other minor revenues and was budgeted at \$3K, which is the minimum actual performance over the last five fiscal years.

Intergovernmental Revenues are primarily funds received from federal or state grants. No grant revenues are anticipated in the upcoming budget year.

Analysis of Expenses – Stormwater Fund



Operating and Capital Expense Budget Assumptions FY 2019 – 2020

Personal Services

This expense category includes salaries, payroll taxes, pension and medical or related benefits. As has been budgetary practice at the Authority, salaries and benefits are budgeted as if all full-time positions are filled for the entire year. This amount also includes increases for cost of living and merit of 2 percent and 3 percent, respectively. *Salaries* and *Payroll Taxes* of \$1.3M and \$96K increased \$79K or 6 percent from the previous year budget.

Estimated actual expenses for Medical and related *Benefits* at April 30, 2019 is \$196K which is \$99K lower than the FY 2018- 2019 budget. Actual employee benefits expense has averaged a 5 percent year over year increase for the previous five years. This year's budget was readjusted to better align with actual costs. In fiscal year 2015 - 2016, the Authority adopted a self-funded insurance program for its medical insurance, which has provided more control over the cost of these benefits but cannot completely curb the general escalation of cost. This year the cost to the employees will be increased 5 percent to help offset these rising expenses.

Pension expense, a percentage of *Salaries*, increased 5 percent from the previous budget year and is budgeted at \$173K.



Operating Expenses

Overall operating expenses, excluding *Personal Services*, of \$3.1M were \$299K or 11 percent higher than the previous budget year.

The *Operating Materials and Supplies* category is budgeted at \$141K and flat with the previous year budget. This category includes various supply needs for maintenance of the stormwater infrastructure including pipe, pipefittings, manhole covers, shovels and other miscellaneous items often issued from the warehouse such as washers, gloves, duct tape and other miscellaneous supplies necessary in day-to-day utility activities. Other accounts in this category include *Lab Supplies*, *Tools and Shop Supplies*, *Uniforms* and *Technology and Software*.

Administrative Supplies expense category includes office and janitorial supplies, printing and postage. This category was budgeted at \$15K, down \$3K from the previous year due to last year's purchase of office furniture for the new staff member and the replacement of existing office furniture and chairs.

The *Vehicle Supplies* expense has been budgeted at \$54K which is up slightly over last year's budget. This group of expenses includes gas, oil, diesel fuel and tires with gas prices being the primary budgetary factor used.

Utility expense at \$28K is up slightly from the previous year budget of \$27K.

Maintenance and Repair expenses have been budgeted at \$28K, which is \$2K lower than the previous year. This category of expenses includes maintenance or repairs of vehicles, construction equipment, non-construction equipment (i.e. trailers, light towers, generators, trash pumps, gas meters, pole cameras, chainsaws) and buildings and ground maintenance.

Outside Services expense category consists of a wide range of professional services and third-party assistance including engineering and technology consulting, legal and audit fees along with various types of maintenance on property facilities and equipment. Budgeted at \$2.3M is up \$243K or 12 percent from the previous year budget. This account increased due to changes in initiatives undertaken in the upcoming year.

The *General Expenses* category contains the expense line items of *Employee Bonding*, *Property Insurance*, *Training* and *Annual Software License Fees*. The budgeted amount of \$156K is \$21K higher than the previous year budget due to increases in *Property Insurance*.

Interfund Transfer to the Water and Sewer Fund is the overhead that is allocated to the Stormwater Fund to cover its share of the Authority's administrative expenses. This year's budgeted amount is \$1.3M. This is a monthly charge of \$106K versus the \$118K per month charged in the previous year. This fee is calculated using the prior fiscal year's actual expenses for certain administrative departments within the Water and Sewer Fund.



Capital Expenditures

Capital expenditures is the use of funds to obtain a long-term asset or extend the productive life of an existing asset used in the operations of a business over multiple year periods. Sometimes referred to as capital outlay, this category of the Capital Budget primarily accounts for the purchase of equipment and vehicles and can vary year to year. At \$532K, *Capital Equipment* is budgeted at \$5K lower than the previous budget year due to the differences in cost of equipment purchases from year to year. A detailed listing of capital purchases is located in the [Capital Budget](#) section of this document under the heading [Capital Expenditures – Stormwater Fund](#).

Budget Unit - Department	Description	Replacement	New	Total
STORMWATER FUND				
205 Stormwater Engineering	Video Equipment: Pole Inspection Camera	\$ 20,000		
210 Stormwater Maintenance	Easements: Easements		\$ 10,000	
	Construction Equipment: Backhoe Loader	120,000		
	Excavator	115,000		
	Drilling/Cutting Equipment: Hydraulic Hammer for CAT Track Loader	12,000		
	Trucks: Tandem Dump Truck	120,000	-	
	Flatbed Dump Truck	95,076		
	Video Equipment: Portable CCTV		40,000	
Total Capital Equipment		\$ 482,076	\$ 50,000	\$ 532,076





Capital Projects

This category of the Capital Budget involves projects that benefit the operations of the Authority over multiple years. CCWA differentiates *Capital Projects* from *Capital Expenditures* by defining a Capital Project as one that requires multiple resources to complete. These resources could include any combination of inside labor, outside labor and various materials or products that require assembly or construction to become a long-term asset. Capital Projects are budgeted at \$3.2M compared to the previous budget year amount of \$3.3M. The amount budgeted in this category over the previous five fiscal years has averaged \$3.2M. Amounts budgeted in this category exclude inside labor costs, which are included in the operating budget in the Personal Services category. Additional detail of capital projects funded in the FY 2019 – 2020 budget is in the [Capital Budget](#) section of this document under the heading [Stormwater Funded Projects - Summary](#).

Capital Projects Summary – Stormwater Fund

Construction Line	Project Description	Amount Budgeted
[SW004]	Cured In Place Pipe	1,500,000
[SW005]	Removal and Replacement	1,693,121
	Total Capital Projects	\$ 3,193,121

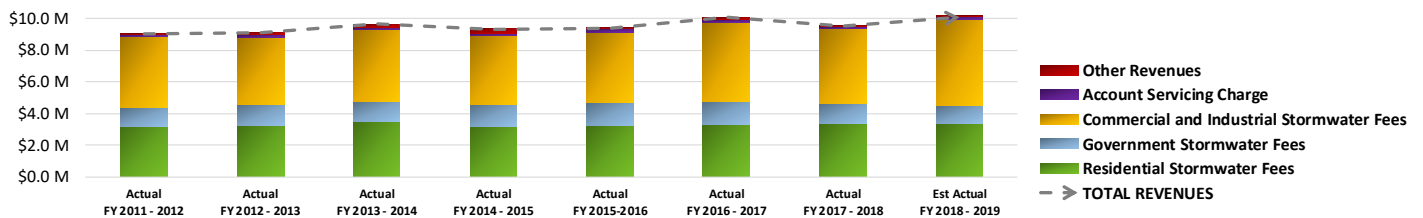




Budgetary Analysis – Revenues and Expenses: Actual Performance to Budget Comparison (in millions)

	Actual FY 2016 - 2017	Actual FY 2017 - 2018	Est Actual FY 2018 - 2019	Budget FY 2019-2020	% Chg Budget FYE 19 -FYE 20	% Chg Est Act FYE 19 to Budget FYE 20
REVENUES						
Stormwater Fees	\$9.76 M	\$9.34 M	\$9.92 M	\$9.72 M	0.9%	-2.0%
Account Service Charges	0.17 M	0.17 M	0.17 M	0.16 M	0.0%	-5.4%
Miscellaneous Income	0.02 M	0.01 M	0.01 M	0.01 M	-14.0%	-22.0%
Grants	0.13 M	0.00 M	0.00 M	0.00 M	-	-
TOTAL REVENUES	\$10.06 M	\$9.52 M	\$10.10 M	\$9.89 M	0.8%	-2.1%
EXPENSES						
Personal Services	\$1.50 M	\$1.51 M	\$1.58 M	\$1.81 M	1.7%	14.4%
Operating Expenses	2.78 M	2.30 M	2.53 M	3.08 M	10.7%	22.0%
Debt Service	0.00 M	0.00 M	0.00 M	0.00 M	-	-
Interfund Transfer -W&S	1.86 M	1.16 M	1.41 M	1.27 M	-10.1%	-10.1%
Capital Expenditures	0.15 M	0.48 M	0.55 M	0.53 M	-0.9%	-3.7%
Capital Projects	4.45 M	5.12 M	4.09 M	3.19 M	-3.0%	-22.0%
TOTAL EXPENSES	\$10.75 M	\$10.58 M	\$10.17 M	\$9.89 M	0.8%	-2.7%

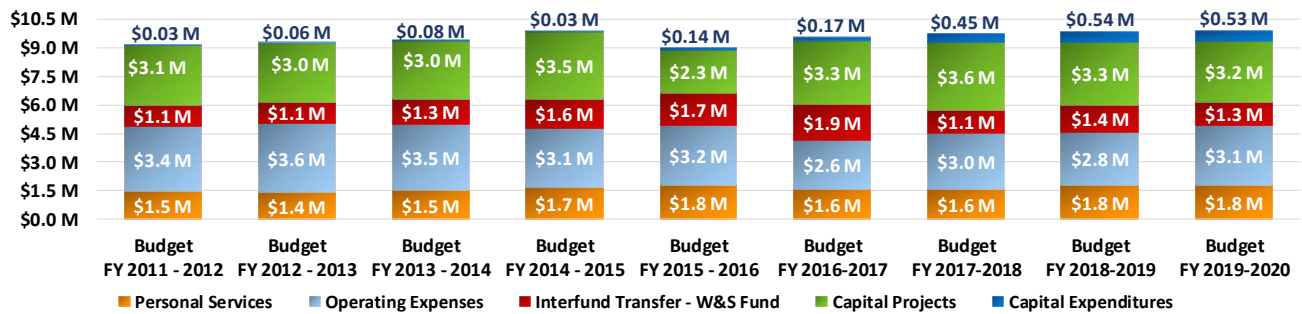
The 2019 - 2020 Operating and Capital Budget of \$9.9M is up \$82K from the previous budget year. These additional funds were used for increases in operating expenses.





Budgetary Analysis – Revenues and Expenses: Budget to Budget Comparison (in millions)

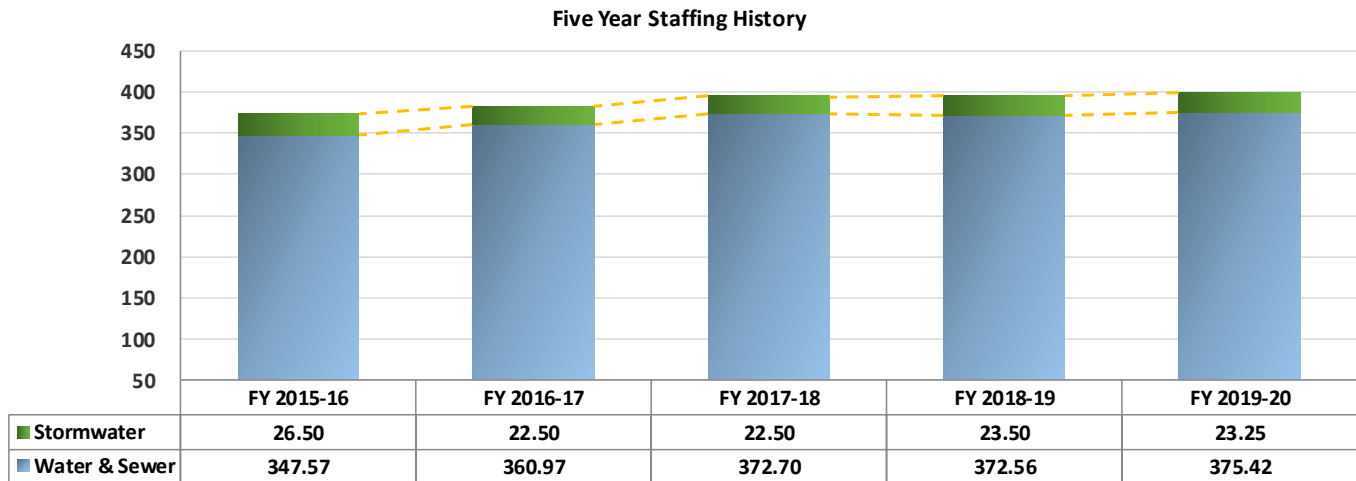
	Budget FY 2015 - 2016	Budget FY 2016-2017	% Chg Budget FYE 16 -FYE 17	Budget FY 2017-2018	% Chg Budget FYE 17 -FYE 18	Budget FY 2018-2019	% Chg Budget FYE 18 -FYE 19	Budget FY 2019-2020	% Chg Budget FYE 19 -FYE 20
REVENUES									
Stormwater Fees	\$8.84 M	\$9.34 M	5.7%	\$9.54 M	2.2%	\$9.64 M	1.0%	\$9.72 M	0.9%
Account Service Charges	0.16 M	0.17 M	6.3%	0.16 M	-6.4%	0.16 M	-1.0%	0.16 M	0.0%
Miscellaneous Income	0.01 M	0.01 M	-0.3%	0.01 M	-37.6%	0.01 M	13.7%	0.01 M	-14.0%
Grants	0.00 M	0.00 M	-	0.00 M	-	0.00 M	-	0.00 M	-
TOTAL REVENUES	\$9.01 M	\$9.53 M	5.7%	\$9.71 M	1.9%	\$9.81 M	1.0%	\$9.89 M	0.8%
EXPENSES									
Personal Services	\$1.78 M	\$1.58 M	-11.7%	\$1.57 M	-0.2%	\$1.78 M	13.3%	\$1.81 M	1.7%
Operating Expenses	3.15 M	2.59 M	-18.0%	2.98 M	15.3%	2.78 M	-6.6%	3.08 M	10.7%
Debt Service	0.00 M	0.00 M	-	0.00 M	-	0.00 M	-	0.00 M	-
Interfund Transfer -W&S	1.68 M	1.86 M	11.2%	1.15 M	-38.5%	1.41 M	23.3%	1.27 M	-10.1%
Capital Expenditures	0.14 M	0.17 M	22.0%	0.45 M	156.5%	0.54 M	20.0%	0.53 M	-0.9%
Capital Projects	2.26 M	3.33 M	47.5%	3.57 M	7.2%	3.29 M	-7.6%	3.19 M	-3.0%
TOTAL EXPENSES	\$9.01 M	\$9.53 M	5.7%	\$9.71 M	1.9%	\$9.81 M	1.0%	\$9.89 M	0.8%





Staffing Summary

The Authority's goal is to balance the impact of new positions within the framework of the direction provided by our Board and work priorities established by management. This includes careful consideration of any staff changes to meet those work priorities and challenges as well as the impact of on service delivery to our customers. A chart denoting the most recent five-year history of the full-time equivalent (FTE) positions is below. A table is provided for an annual comparison of personnel for the current budget the prior two budget years. The detail of personnel by both Division and Budget Unit is in the [OPERATING BUDGET](#) section.



Summary by Division

Authorized Personnel	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted	FY 2019-2020 Budgeted
Executive Department	123.60	122.21	124.16
Water Production	33.70	34.36	33.73
Program Management and Engineering	27.43	26.76	27.66
Distribution and Conveyance	98.00	97.00	97.00
Water Reclamation	53.23	53.23	53.56
General Services	38.00	39.00	39.31
Water and Sewer Fund	373.96	372.56	375.42
Stormwater Fund	22.50	23.50	23.25
Total Full-Time Employees (FTEs)	396.46	396.06	398.67

The Water and Sewer Fund overall staff was increased by 2.86 FTEs. The Stormwater Fund decreased 0.25 FTE for an overall increase in staffing at the Authority of 2.61 FTE, or 0.7 percent. This was the net difference of the addition new positions in the Executive Division in the Water and Sewer Fund combined with reducing the hours of part-time positions or consolidating fractional positions in all areas of the Authority.



PLANNING AND DIRECTION

To support and guide the utility into the near and distant future, CCWA has developed several programs and initiatives.

- **Strategic Master Plan (SMP):** A variant of the Master Plan. Created in 2010 and updated every 5 years. Most recently updated in June 2015.
- **Work Priorities:** Annual assessment and prioritization of capital projects and programs done as part of annual budget process.
- **Financial Plan and Cash Flow Analysis:** Financial and cash flow projections done as part of annual budget process.
- **Key Performance Indicators (KPIs) and Levels of Service (LOS):** Quantitative, measurable targets set to evaluate Board and Management priorities, reviewed on a monthly or quarterly basis.

Strategic Master Plan

Since 1960, the Clayton County Water Authority (CCWA) has developed 10-year master plans to identify regulatory challenges, growth drivers and identify the infrastructure needed to respond to these conditions. In response to a decrease in growth following the rapid growth of the 1990's, the development of another 10-year capital plan was not enough. In 2010, CCWA developed its first Strategic Master Plan (SMP). The change in our operating environment required that the Authority be more efficient and disciplined in not only in its operations, but also in how it prioritized its operating activities and its capital projects or programs. The first step in this process was to identify the major operational components or attributes that are required for our utility to effectively, efficiently and economically provide water, wastewater and stormwater services to our customers. From this effort emerged our strategic goals that provide the impetus for CCWA to address its challenges, improve its performance and continue its success. CCWA maintains the seven strategic goals first established in the Strategic Master Plan.

Strategy	Weighting	Description
Product Quality (PQ)	10	Consistently provide superior product quality and necessary quantity
Customer Satisfaction (CS)	18	Exceed customer expectations
Employee and Leadership Development (ED)	20	Hire and develop professional, highly motivated employees who will lead CCWA in the future
Operational Optimization/Resiliency (OO)	20	Optimize operations to control costs and to ensure effective response to changing regulatory, environmental and economic conditions
Financial Viability (FV)	5	Promote sound business practices and long-term planning
Infrastructure Stability (IS)	22	Develop and follow sound asset management practices
Stakeholder Understanding, Support and Community Sustainability (SS)	5	Develop strong stakeholder understanding, support and community sustainability

The SMP is a framework with tools for planning, managing and evaluating Authority-wide performance. It considers the long-term economic, environmental and social impacts – the triple bottom line – of CCWA's business activities. It also provides a design template to guide services, projects and operations for CCWA's departments and budget units.



The Authority plans to use the SMP for a variety of objectives, from individual job goal setting and performance evaluations, to the annual Authority Board retreat and planning session.

The 2015 Strategic Master Plan (SMP) serves as an update to the 2010 SMP and will become the comprehensive guide in continuing to achieve CCWA's vision of Quality Water, Quality Service. The approach taken to develop the plan prioritizes the operating and capital projects according to CCWA's strategic priorities. Additionally, the projects are scheduled based on the priority, predecessor or successor projects and other schedule requirements and a 10-year cash flow schedule.

Functional Area	Number of Projects	% of Total Projects	Total Project Cost	% of Overall SMP Cost
Utility-wide	17	17.9%	\$32,005,000	9%
Information Technology	13	13.7%	\$8,650,000	2%
Stormwater and Watersheds	10	10.5%	\$41,175,000	11%
Water Production	16	16.8%	\$27,525,000	8%
Distribution and Conveyance	19	20.0%	\$188,725,000	51%
Water Reclamation	12	12.6%	\$51,050,000	14%
General Services	8	8.4%	\$17,960,000	5%
Total Projects	95	100%	\$367,090,000	100%

Projects scheduled for FY 2017 - 2018 were incorporated into the budgeting process, and moving forward, this document will continue to support the strategic planning and budgeting process. A financial analysis was performed to assess the cash flow needs of the SMP projects, identify funding alternatives and provide a recommendation for funding the plan. The financial analysis detailing cash flow generated from operations and Capital Improvement Plan need is located under the heading: [Financial Plan and Cash Flow Analysis](#). Detailed cash flow need for projects within the Capital Improvement Plan is located with the [Capital Budget](#) section of this document under the heading [Capital Project Listing with Annual Cash Flow Requirements](#).

Information Technology Master Plan

Over a nine-month period beginning in September 2011, CCWA embarked and developed its first Information Technology Master Plan (ITMP) separate from the Strategic Master Plan. CCWA has a significant investment in technology and realizes that information, reporting, support and resources must be available at the right time, in the right place in the right format to empower our company. Coordinated by a third-party contractor, a Technology Steering Committee of various department representatives was charged with the goal of establishing a vision and plan for how information technology can best be utilized. The committee examined our business practices, various software applications, company-wide hardware, wireless communication capacity and CCWA's internal and external reporting or information requirements and needs. Because technologies evolve so rapidly, the ITMP will be updated every three years. The ITMP goals were:

- Improve the effectiveness of CCWA's use and reliability of information technology;
- Align the various enterprise architectures (business, systems and technology) with the objectives of the Strategic Master Plan (SMP);
- Assess the efficiency of systems and controls to limit deficiencies.

In May 2012, an ITMP was completed to meet the operation and informational challenges of CCWA. Originally developed as a separate plan, the ITMP was combined into the SMP during the 2015 update due to the integral part technology plays in all facets of operations.



Work Priorities

Work Priorities are the result of an annual assessment and prioritization of capital projects and programs that is done as part of the annual budget process. Work Priority projects may come from the Strategic Master Plan or they can come from a department's separate initiative. To prioritize and rank projects, a scoring template that contains the seven strategic goals is used.

During multiple workshops, beginning in September, the management team assesses each project's impact on the individual strategies as they walk through the scoring template. A score of 1, 3, 7 and 10 are collaboratively assigned for each of the strategies with a higher score indicating more of an impact on that strategy by the project.

A score of zero is assigned if the project's impact will have a negative or adverse effect on a strategy. The higher the overall score of a project, the more likely that it will be placed on the annual work priorities list and be included in the upcoming budget. The current list of Work Priorities can be found in the [CAPITAL BUDGET](#) section under [Work Priorities – 2017 – 2018](#). A portion of the scoring tool is provided as an example below.

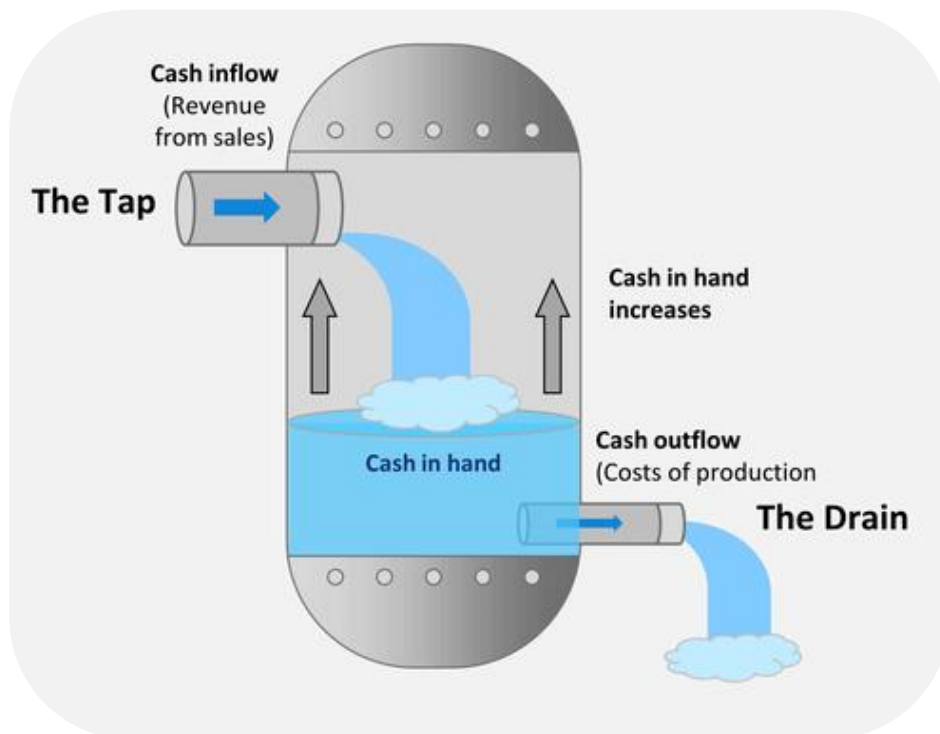
Project Name							
Project Category							
Total Benefit = 0		Project Rating (0 = lowest, 10 = highest)					
Performance Measure		0	Votes	1	Votes	3	Votes
Rating Objectives	PQ: PRODUCT QUALITY/QUANTITY 1. Impact on drinking water quality, effluent/reclaimed water quality, or stormwater quality 2. Regulatory compliance; 3. Impact on capacity	Potential Negative Impact	0	No Impact	0	SOME improvement in quality OR increases regulatory confidence OR provides needed capacity	0
	CS: CUSTOMER SATISFACTION 1. Customer satisfaction levels; 2. Customer complaints; 3. Customer responsiveness	Potential Negative Impact	0	No Impact	0	POSSIBLE improvements to satisfaction/complaints OR POSSIBLE increases in responsiveness	0
	ED: EMPLOYEE AND LEADERSHIP DEVELOPMENT 1. Morale, retention, interest in CCWA positions; 2. Staff competency, skill levels, opportunities for leadership positions; 3. Internal customer satisfaction	Potential Negative Impact	0	No Impact	0	MAY improve morale/retention OR MAY improve competency OR MAY improve internal customer satisfaction	0
	OO: OPERATIONAL OPTIMIZATION / RESILIENCY 1. Operational efficiency - likelihood of injury and/or insurance claims; 2. Responsiveness in emergency conditions, ability to recover from natural/ manmade incident; 3. Risk to employees, customers, community or property	Potential Negative Impact	0	No Impact	0	MAY improve efficiency OR MAY improve responsiveness/recovery OR MAY reduce risk	0



Financial Plan and Cash Flow Analysis

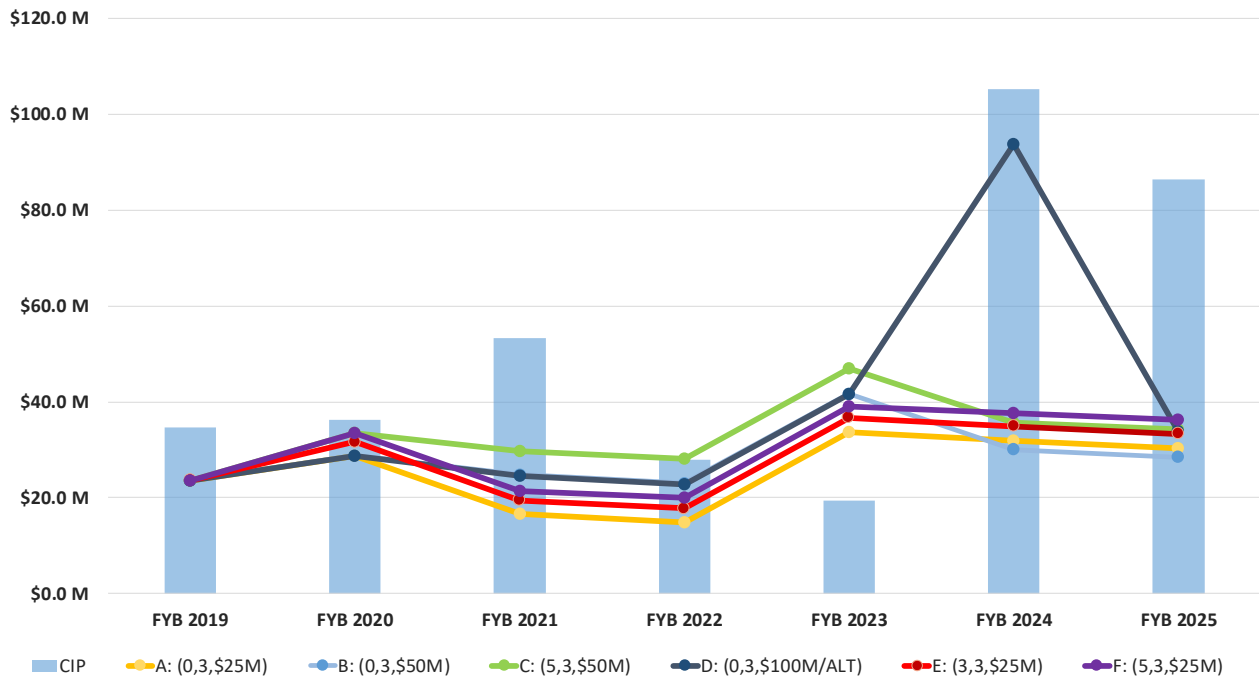
In conjunction with the Strategic Master Plan and updated annually as part of the budget process, a long-term financial plan and cash flow analysis is performed. This forecasting tool assists in determining if additional cash flow must be generated to meet projected capital projects and program needs while maintaining the debt service coverage required by bond covenants. The financial plans include applicable financial summaries for both the Water and Sewer and Stormwater Funds. The summary shows the cash flows generated by operations, annual debt service payments, debt service coverage ratio and the resulting increase to net position. Projected costs and revenues are estimates and subject to variations inherent in all projections. Consequently, the estimates are not precise predictions but rather as indications of expected trends given expenditure, revenue and financing assumptions. These assumptions are based on CCWA's policies, goals and objectives and represent management's best estimates at the time.

Of the types of project financing, organizational preference is given to deferment of projects when possible, water and sewer rate increases and use of the renewal and extension fund over use of debt. In cases of large projects that benefit multiple generations of customers, Intergenerational Equity is taken into consideration.





Capital Improvement Need and Cash Flow Generated from Operations



Assumptions for scenarios and cash flow projections are on the following page

The Authority's capital investments include projects defined in the Strategic Master Plan (SMP) in addition to projects defined annually as departmental work priorities if not have been included in the SMP. The project plan graphed includes all external costs associated with the projects and are included in the light blue segment of the vertical bars. Any internal expenses or labor associated with the Capital Improvement Program (CIP) are represented in the projected operating expenses and cash available to disburse. Between FY 2023 and FY 2024, the last bond series is retired adding \$20M to cash flow.

This graph represents estimated expenses associated with the optimal proposed Capital Improvement Program (CIP) projects and the projected cash flow available after all operating expenses and debt service payments are made. Project totals include a large interceptor, or trunk sewer, rehabilitation project that is estimated to cost \$69M dollars. It should be noted that these scenarios are created for general analysis and discussion purposes only. Depending on board approval, project timing or scope can be altered, or the project can be eliminated from the plan to accommodate funding preferences. Scenarios using debt as a financing option can vary significantly based on amount borrowed, interest rate fluctuations, term of repayment and structure of repayment.

Each line in the graph represents the available cash to spend on capital projects based on six different sample scenarios using combinations of three primary variables holding everything else constant. Each scenario forecasts cash flow based on four major variables; rate increases, customer growth, operating expense growth and the impact of debt – both proceeds and debt service. The latest rate adjustment was adopted for the 2016 – 2017 budget and became effective May 1, 2017. Rate increases for **Scenario C**, **Scenario E** and **Scenario F** have not been adopted are used in the tables and graphs below to demonstrate the impact to cash flow of these adjustments.

All six scenarios include \$25M in proceeds from a recently approved GEFA loan with an interest rate of 0.65 percent and a repayment term of 15 years, general customer growth of 1.5 percent and operating expense growth of 3 percent.



Assumptions for Cash Flow Projections

At current water and sewer sales levels, each 1 percent rate increase generates about \$1M in additional cash flow.

Scenario A (yellow line): Rate Increase-0%; Operating Expense Growth-3%; Debt Proceeds-\$25M; Customer Growth-1.5%.

Scenario B (medium blue line): Rate Increase-0%; Operating Expense Growth-3%; Debt Proceeds-\$50M; Customer Growth-1.5%.

Scenario C (light green line): Rate Increase-5% FY2020-21; Operating Expense Growth-3%; Debt Proceeds-\$50M; Customer Growth-1.5%.

Scenario D (dark blue line): Rate increase-0%; Operating Expense Growth-3%; Debt Proceeds-\$176M; Customer Growth-1.5%.

Scenario E (red line): Rate increase-3%; Operating Expense Growth-3%; Debt Proceeds-\$25M; Customer Growth-1.5%.

Scenario F (purple line): Rate Increase-5% FY2020-21; Operating Expense Growth-3%; Debt Proceeds-\$25M; Customer Growth-1.5%.

a) Operating Revenues: Held constant in all 5 scenarios; addition to revenue detailed in Cash Flows from Projected Changes – items c) through i).

b) Operating Expenses: 3% annual operating expense growth in all Scenarios.

c) thru f) Rev: Increased growth – base and consumption- Water and Sewer: Additional revenue generated from general customer base growth. Historical growth rate of 1.5% was used.

g) Rev: Increased customer base: Additional revenue generated from water and sewer usage from large new residential, commercial or industrial customers.

h) Rev: Tap Fees: Additional revenue generated from new development; connection fees. Historical growth rate of 1.5% was used.

i) Rev: Rate Increase: Water- base: (each 1%=\$107K); Sewer – base: (each 1%=\$97K); Water – consumption (each 1%=\$405K); Sewer – Consumption: (each 1%=\$343K). Additional revenue generated from rate increases. For every 1% increase in rates, approximately \$953K in additional revenue is generated. Scenarios with rate increases start in the next budget year. First year FY2020-21.

j) Exp: Decreased/ (Increased) Operating Expense: Unique expense in addition to 3% growth in item b)

k) Impact Fees: Additional revenue generated from new commercial and industrial development and expansions. Historical growth rate of 1.5% was used.

l) Operating Transfers in – from Stormwater: Interfund transfers from the Stormwater Fund to cover its share of administrative expenses incurred by the Water and Sewer Fund that budgets all administrative costs. A 3% annual growth rate is applied, consistent with the operating expense growth rate.

m) Existing Bond Debt Service: Bond debt service principal and interest payments are projected as payments made to the debt service accounts (sinking fund) and occur one fiscal year ahead of payments to bondholders (~\$20.3M annually). Latest maturity of existing debt is May 1, 2023 from accumulated payments made to the Debt Service Account through FY 2022-2023.

n) Existing GEFA Debt Service: GEFA Loan CW02008 (Wetlands) matures November 1, 2025 and Loan DW00002P (Backflows) matures April 1, 2026.

o) Proposed New Debt P&I Payments: Principal and Interest payments on new debt.

p) Interest Only Payments: Interest during construction phase of the project.

q) Capital Expenditures: Expense for equipment and assets not included in a Capital Projects. Projected asset replacement costs.

r) Cash Reserve for Contingency: Funding reserved for emergency projects.

s) Loan Proceeds: Loan disbursements for construction of the large interceptor project.



Scenario A (0%, 3%, \$25M):

Fiscal Year Ended April 30,	Projected - FYE					
	2020	2021	2022	2023	2024	2025
Cash Flows from Current Operations						
a) Operating Revenues	\$ 98,889,885	\$98,889,885	\$98,889,885	\$98,889,885	\$98,889,885	\$98,889,885
b) Less: Operating Expenses (net Depr)	54,900,741	56,547,763	58,244,196	59,991,522	61,791,268	63,645,006
Cash Flows from Operations	\$43,989,144	\$42,342,122	\$40,645,689	\$38,898,363	\$37,098,617	\$35,244,879
Cash Flows from Projected Changes						
c) Rev: Increased Growth - consumption- Water	\$ 394,642	\$ 400,561	\$ 406,570	\$ 412,668	\$ 418,858	\$ 425,141
d) Rev: Increased Growth - consumption - Sewer	337,325	342,384	347,520	352,733	358,024	363,394
e) Rev: Increased Growth - base - Water	107,010	108,615	110,244	111,898	113,576	115,280
f) Rev: Increased Growth - base - Sewer	96,777	98,229	99,702	101,197	102,715	104,256
g) Rev: Increased Customer Base	-	-	-	-	-	-
h) Rev: Tap Fees	8,760	8,891	9,025	9,160	9,298	9,437
i) Rev: Rate Increase - Water	-	-	-	-	-	-
Rev: Rate Increase - Sewer	-	-	-	-	-	-
j) Exp: Decreased / (Increased) Operating Expenses	-	-	-	-	-	-
Proposed Project-Related Cash Flows	\$ 944,513	\$ 958,681	\$ 973,061	\$ 987,657	\$ 1,002,472	\$ 1,017,509
Non-Operating Revenues (Expenses)						
k) Impact Fees-Water/Sewer	\$ 1,539,088	\$ 1,692,997	\$ 1,718,392	\$ 1,744,168	\$ 1,770,330	\$ 1,796,885
l) Operating Transfers in -from Stormwater	1,271,151	1,309,286	1,348,564	1,389,021	1,430,692	1,473,612
Available Cash Flows	\$ 47,743,896	\$46,303,085	\$44,685,706	\$43,019,209	\$41,302,111	\$39,532,886
Current Long-Term Obligations						
m) Existing Bond Debt Service	\$ 19,279,700	\$20,544,450	\$20,545,500	\$20,543,250	\$ -	\$ -
n) Existing GEFA Debt Service	797,647	797,647	797,647	797,647	797,647	797,647
Existing Long-term Debt Service	\$ 20,077,347	\$21,342,097	\$21,343,147	\$21,340,897	\$ 797,647	\$ 797,647
Proposed Debt Service						
o) New Debt: P&I Payments - GEFA 1 (\$25M, 15 yrs, 0.65%)	\$ -	\$ -	\$ 1,749,688	\$ 1,749,688	\$ 1,749,688	\$ 1,749,688
p) Interest Only Payment	104,000	162,500	-	-	-	-
Proposed Additional Obligations	\$ 104,000	\$ 162,500	\$ 1,749,688	\$ 1,749,688	\$ 1,749,688	\$ 1,749,688
Total Proposed Obligations	\$ 20,181,347	\$21,504,597	\$23,092,834	\$23,090,584	\$ 2,547,334	\$ 2,547,334
Debt Service Coverage - Bonds	2.46	2.24	2.00	1.93	23.61	22.59
Debt Service Coverage - Including GEFA Loans	2.37	2.15	1.94	1.86	16.21	15.52
Available Cash for Projects/Cap Expenditures	\$ 27,562,550	\$24,798,488	\$21,592,871	\$19,928,624	\$38,754,777	\$36,985,551
q) Capital Expenditures	3,509,843	3,000,000	3,090,000	3,090,000	3,090,000	3,090,000
Available Cash for Projects	\$ 24,052,707	\$21,798,488	\$18,502,871	\$16,838,624	\$35,664,777	\$33,895,551
r) Cash Reserve for Contingency	10,500,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
Available Cash to Disburse	\$ 13,552,707	\$19,798,488	\$16,502,871	\$14,838,624	\$33,664,777	\$31,895,551
s) Loan Proceeds	10,000,000	9,000,000	-	-	-	-
Net Cash	\$ 23,552,707	\$28,798,488	\$16,502,871	\$14,838,624	\$33,664,777	\$31,895,551

The graph on [page 74](#) illustrates the cumulative capital improvement funding need (blue vertical bar) in relationship to the cumulative cash flow available (horizontal line; per scenario) after operating expenses and debt service payments are made for each fiscal year. The yellow line shows the impact of **Scenario A** that assumes expense growth of 3 percent and is considered the most conservative option because cash flow is generated by tightly controlling operating expenses. This option produced the highest deficit of \$91.9M through FY 2025-2026 between proposed capital projects planned and the cash flow available to cover the estimated costs and timing of those projects. Between FY 2023 and FY 2024, the last bond series is retired adding \$20M to cash flow.



Scenario B (0%, 3%, \$50M):

Fiscal Year Ended April 30,	Projected - FYE					
	2020	2021	2022	2023	2024	2025
Cash Flows from Current Operations						
a) Operating Revenues	\$ 98,889,885	\$98,889,885	\$98,889,885	\$98,889,885	\$98,889,885	\$98,889,885
b) Less: Operating Expenses (net Depr)	54,900,741	56,547,763	58,244,196	59,991,522	61,791,268	63,645,006
Cash Flows from Operations	\$ 43,989,144	\$ 42,342,122	\$ 40,645,689	\$ 38,898,363	\$ 37,098,617	\$ 35,244,879
Cash Flows from Projected Changes						
c) Rev: Increased Growth - consumption- Water	\$ 394,642	\$ 400,561	\$ 406,570	\$ 412,668	\$ 418,858	\$ 425,141
d) Rev: Increased Growth - consumption - Sewer	337,325	342,384	347,520	352,733	358,024	363,394
e) Rev: Increased Growth - base - Water	107,010	108,615	110,244	111,898	113,576	115,280
f) Rev: Increased Growth - base - Sewer	96,777	98,229	99,702	101,197	102,715	104,256
g) Rev: Increased Customer Base	-	-	-	-	-	-
h) Rev: Tap Fees	8,760	8,891	9,025	9,160	9,298	9,437
i) Rev: Rate Increase - Water	-	-	-	-	-	-
Rev: Rate Increase - Sewer	-	-	-	-	-	-
j) Exp: Decreased / (Increased) Operating Expenses	-	-	-	-	-	-
Proposed Project-Related Cash Flows	\$ 944,513	\$ 958,681	\$ 973,061	\$ 987,657	\$ 1,002,472	\$ 1,017,509
Non-Operating Revenues (Expenses)						
k) Impact Fees-Water/Sewer	\$ 1,539,088	\$ 1,692,997	\$ 1,718,392	\$ 1,744,168	\$ 1,770,330	\$ 1,796,885
l) Operating Transfers in -from Stormwater	1,271,151	1,309,286	1,348,564	1,389,021	1,430,692	1,473,612
Available Cash Flows	\$ 47,743,896	\$ 46,303,085	\$ 44,685,706	\$ 43,019,209	\$ 41,302,111	\$ 39,532,886
Current Long-Term Obligations						
m) Existing Bond Debt Service	\$ 19,279,700	\$ 20,544,450	\$ 20,545,500	\$ 20,543,250	\$ -	\$ -
n) Existing GEFA Debt Service	797,647	797,647	797,647	797,647	797,647	797,647
Existing Long-term Debt Service	\$ 20,077,347	\$ 21,342,097	\$ 21,343,147	\$ 21,340,897	\$ 797,647	\$ 797,647
Proposed Debt Service						
o) New Debt: P&I Payments - GEFA 1 (\$25M, 15 yrs, 0.65%)	\$ -	\$ -	\$ 1,749,688	\$ 1,749,688	\$ 1,749,688	\$ 1,749,688
Proposed New Debt: P&I Payments - GEFA 2 (\$25M, 15 yrs, 1.25%)	-	-	-	-	-	1,828,662
p) Interest Only Payment	104,000	162,500	104,167	208,333	312,500	-
Proposed Additional Obligations	\$ 104,000	\$ 162,500	\$ 1,853,854	\$ 1,958,021	\$ 2,062,188	\$ 3,578,350
Total Proposed Obligations	\$ 20,181,347	\$ 21,504,597	\$ 23,197,001	\$ 23,298,918	\$ 2,859,834	\$ 4,375,996
Debt Service Coverage - Bonds	2.46	2.24	1.99	1.91	20.03	11.05
Debt Service Coverage - Including GEFA Loans	2.37	2.15	1.93	1.85	14.44	9.03
Available Cash for Projects/Cap Expenditures	\$ 27,562,550	\$ 24,798,488	\$ 21,488,705	\$ 19,720,291	\$ 38,442,277	\$ 35,156,889
q) Capital Expenditures	3,509,843	3,000,000	3,090,000	3,090,000	3,090,000	3,090,000
Available Cash for Projects	\$ 24,052,707	\$ 21,798,488	\$ 18,398,705	\$ 16,630,291	\$ 35,352,277	\$ 32,066,889
r) Cash Reserve for Contingency	10,500,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
Available Cash to Disburse	\$ 13,552,707	\$ 19,798,488	\$ 16,398,705	\$ 14,630,291	\$ 33,352,277	\$ 30,066,889
s) Loan Proceeds	10,000,000	9,000,000	8,333,333	8,333,333	8,333,333	-
Net Cash	\$ 23,552,707	\$ 28,798,488	\$ 24,732,038	\$ 22,963,624	\$ 41,685,610	\$ 30,066,889

The graph on [page 74](#) illustrates the cumulative capital improvement funding need (blue vertical bar) in relationship to the cumulative cash flow available (horizontal line; per scenario) after operating expenses and debt service payments are made for each fiscal year. **Scenario B** illustrates that an additional \$25M in debt could not compensate a rate increase. This scenario had a cumulative funding shortfall of \$71.2M over the remaining seven years of the forecasted period. Between FY 2023 and FY 2024, the last bond series is retired adding \$20M to cash flow.



Scenario C (5%, 3%, \$50M):

Fiscal Year Ended April 30,	Projected - FYE					
	2020	2021	2022	2023	2024	2025
<i>Cash Flows from Current Operations</i>						
a) Operating Revenues	\$ 98,889,885	\$ 98,889,885	\$ 98,889,885	\$ 98,889,885	\$ 98,889,885	\$ 98,889,885
b) Less: Operating Expenses (net Depr)	54,900,741	56,547,763	58,244,196	59,991,522	61,791,268	63,645,006
Cash Flows from Operations	\$ 43,989,144	\$ 42,342,122	\$ 40,645,689	\$ 38,898,363	\$ 37,098,617	\$ 35,244,879
<i>Cash Flows from Projected Changes</i>						
c) Rev: Increased rates - consumption- Water	\$ 394,642	\$ 400,561	\$ 406,570	\$ 412,668	\$ 418,858	\$ 425,141
d) Rev: Increased rates - consumption - Sewer	337,325	342,384	347,520	352,733	358,024	363,394
e) Rev: Increased rates - base - Water	107,010	108,615	110,244	111,898	113,576	115,280
f) Rev: Increased rates - base - Sewer	96,777	98,229	99,702	101,197	102,715	104,256
g) Rev: Increase Customer Base	-	-	-	-	-	-
h) Rev: Tap Fees	8,760	8,891	9,025	9,160	9,298	9,437
i) Rev: Rate Increase - Water	-	2,508,258	2,633,671	2,765,355	2,903,622	3,048,804
Rev: Rate Increase - Sewer	-	2,170,508	2,279,033	2,392,985	2,512,634	2,638,265
j) Exp: Decr / (Incr) Operating Expenses	-	-	-	-	-	-
Exp: Other	-	-	-	-	-	-
Proposed Project-Related Cash Flows	\$ 944,513	\$ 5,637,447	\$ 5,885,765	\$ 6,145,996	\$ 6,418,728	\$ 6,704,578
k) Impact Fees-Water/Sewer	\$ 1,539,088	\$ 1,692,997	\$ 1,718,392	\$ 1,744,168	\$ 1,770,330	\$ 1,796,885
l) Operating Transfers in -from Stormwater	1,271,151	1,309,286	1,348,564	1,389,021	1,430,692	1,473,612
Available Cash Flows	\$ 47,743,896	\$ 50,981,851	\$ 49,598,410	\$ 48,177,548	\$ 46,718,367	\$ 45,219,955
<i>Current Long-Term Obligations</i>						
m) Existing Bond Debt Service	\$ 19,279,700	\$ 20,544,450	\$ 20,545,500	\$ 20,543,250	\$ -	\$ -
n) Existing GEFA Debt Service	797,647	797,647	797,647	797,647	797,647	797,647
Existing Long-term Debt Service	\$ 20,077,347	\$ 21,342,097	\$ 21,343,147	\$ 21,340,897	\$ 797,647	\$ 797,647
<i>Proposed Debt Service</i>						
o) Proposed New Debt: P&I Payments - GEFA 1 (\$25M, 15 yrs, 0.65%)	\$ -	\$ -	\$ 1,749,688	\$ 1,749,688	\$ 1,749,688	\$ 1,749,688
Proposed New Debt: P&I Payments - GEFA 2 (\$25M, 15 yrs, 2.65%)	-	-	-	-	-	1,828,662
p) Interest Only Payment	104,000	162,500	104,167	208,333	312,500	-
Proposed Additional Obligations	\$ 104,000	\$ 162,500	\$ 1,853,854	\$ 1,958,021	\$ 2,062,188	\$ 3,578,350
Total Proposed Obligations	\$ 20,181,347	\$ 21,504,597	\$ 23,197,001	\$ 23,298,918	\$ 2,859,834	\$ 4,375,996
Debt Service Coverage - Bonds	2.46	2.46	2.21	2.14	22.65	12.64
Debt Service Coverage - Including GEFA Loans	2.37	2.37	2.14	2.07	16.34	10.33
Available Cash Produced	\$ 27,562,550	\$ 29,477,254	\$ 26,401,409	\$ 24,878,630	\$ 43,858,533	\$ 40,843,958
q) Capital Expenditures	3,509,843	3,000,000	3,090,000	3,182,700	3,182,700	3,278,181
Available Cash for Projects	\$ 24,052,707	\$ 26,477,254	\$ 23,311,409	\$ 21,695,930	\$ 40,675,833	\$ 37,565,777
r) Cash Reserve for Contingency	10,500,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
Available Cash to Disburse	\$ 13,552,707	\$ 24,477,254	\$ 21,311,409	\$ 19,695,930	\$ 38,675,833	\$ 35,565,777
s) Loan Proceeds	10,000,000	9,000,000	8,333,333	8,333,333	8,333,333	-
Net Cash	\$ 23,552,707	\$ 33,477,254	\$ 29,644,742	\$ 28,029,263	\$ 47,009,166	\$ 35,565,777

The graph on [page 74](#) illustrates the cumulative capital improvement funding need (blue vertical bar) in relationship to the cumulative cash flow available (horizontal line; per scenario) after operating expenses and debt service payments are made for each fiscal year. **Scenario C** with a rate increase of 5 percent in FY 2020-2021 and an additional \$25M in debt produced a shortfall of \$40M over the forecasted period. Between FY 2023 and FY 2024, the last bond series is retired adding \$20M to cash flow.



Scenario D (0%, 3%, \$100M/\$76M ALT):

Fiscal Year Ended April 30,	Projected - FYE					
	2020	2021	2022	2023	2024	2025
Cash Flows from Current Operations						
a) Operating Revenues	\$ 98,889,885	\$ 98,889,885	\$98,889,885	\$98,889,885	\$98,889,885	\$98,889,885
b) Less: Operating Expenses (net Depr)	54,900,741	56,547,763	58,244,196	59,991,522	61,791,268	63,645,006
Cash Flows from Operations	\$ 43,989,144	\$ 42,342,122	\$40,645,689	\$38,898,363	\$37,098,617	\$35,244,879
Cash Flows from Projected Changes						
c) Rev: Increased rates - consumption- Water	\$ 394,642	\$ 400,561	\$ 406,570	\$ 412,668	\$ 418,858	\$ 425,141
d) Rev: Increased rates - consumption - Sewer	337,325	342,384	347,520	352,733	358,024	363,394
e) Rev: Increased rates - base - Water	107,010	108,615	110,244	111,898	113,576	115,280
f) Rev: Increased rates - base - Sewer	96,777	98,229	99,702	101,197	102,715	104,256
g) Rev: Increased customer base	-	-	-	-	-	-
h) Rev: Tap Fees	8,760	8,891	9,025	9,160	9,298	9,437
i) Rev: Rate Increase - Water	-	-	-	-	-	-
Rev: Rate Increase - Sewer	-	-	-	-	-	-
j) Exp: Decreased / (Increased) Operating Expenses	-	-	-	-	-	-
Proposed Project-Related Cash Flows	\$ 944,513	\$ 958,681	\$ 973,061	\$ 987,657	\$ 1,002,472	\$1,017,509
Non-Operating Revenues (Expenses)						
k) Impact Fees-Water/Sewer	\$ 1,539,088	\$ 1,539,088	\$ 1,562,174	\$ 1,585,607	\$ 1,609,391	\$ 1,633,532
l) Operating Transfers in -from Stormwater	1,271,151	1,309,286	1,348,564	1,389,021	1,430,692	1,473,612
Available Cash Flows	\$ 47,743,896	\$ 46,149,176	\$44,529,488	\$42,860,648	\$41,141,172	\$39,369,533
Current Long-Term Obligations						
m) Existing Bond Debt Service	\$ 19,279,700	\$ 20,544,450	\$20,545,500	\$20,543,250	\$ -	\$ -
n) Existing GEFA Debt Service	797,647	797,647	797,647	797,647	797,647	797,647
Existing Long-term Debt Service	\$ 20,077,347	\$ 21,342,097	\$21,343,147	\$21,340,897	\$ 797,647	\$ 797,647
Proposed Debt Service						
o) Proposed New Debt: P&I Payments - GEFA 1 (\$25M, 15 yrs, 0.65%)	\$ -	\$ -	\$ 1,749,688	\$ 1,749,688	\$ 1,749,688	\$ 1,749,688
Proposed New Debt: P&I Payments - GEFA 2 (\$25M, 15 yrs, 2.65%)	-	-	-	-	-	1,828,662
Proposed New Debt: P&I Payments - GEFA 3 (\$25M, 15 yrs, 3.65%)	-	-	-	-	-	-
Proposed New Debt: P&I Payments - GEFA 4 (\$25M, 15 yr, 4.65%)	-	-	-	-	-	-
p) Interest Only Payment/Second Issue P&I	104,000	162,500	104,167	208,333	312,500	187,500
New Bond Interest - Hicks \$81.3M	-	-	-	-	-	-
New Bond Interest - WB Casey \$58M	-	-	-	-	-	2,320,000
Proposed Additional Obligations	\$ 104,000	\$ 162,500	\$ 1,853,854	\$ 1,958,021	\$ 2,062,188	\$ 6,085,850
Total Proposed Obligations	\$ 20,181,347	\$ 21,504,597	\$23,197,001	\$23,298,918	\$ 2,859,834	\$ 6,883,496
Debt Service Coverage - Bonds	2.46	2.23	1.99	1.90	19.95	6.47
Debt Service Coverage - Including GEFA Loans	2.37	2.15	1.92	1.84	14.39	5.72
Available Cash for Projects/Cap Expenditures	\$ 27,562,550	\$ 24,644,580	\$21,332,487	\$19,561,730	\$38,281,337	\$32,486,036
q) Capital Expenditures	3,509,843	3,000,000	3,090,000	3,090,000	3,090,000	3,090,000
Available Cash for Projects	\$ 24,052,707	\$ 21,644,580	\$18,242,487	\$16,471,730	\$35,191,337	29,396,036
r) Cash Reserve for Contingency	10,500,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
Available Cash to Disburse	\$ 13,552,707	\$ 19,644,580	\$16,242,487	\$14,471,730	\$33,191,337	27,396,036
s) Loan Proceeds	10,000,000	9,000,000	8,333,333	8,333,333	8,333,333	8,333,333
t) Bond Proceeds	-	-	-	-	-	58,000,000
Net Cash	\$ 23,552,707	\$ 28,644,580	\$24,575,821	\$22,805,064	\$41,524,671	\$93,729,369

The graph on [page 74](#) illustrates the cumulative capital improvement funding need (blue vertical bar) in relationship to the cumulative cash flow available (horizontal line; per scenario) after operating expenses and debt service payments are made for each fiscal year. **Scenario D** assumed an additional \$75M in loans for the large interceptor project and additional funding for the expansion of Casey WRRF (from 24 mgd to 32 mgd) and associated conversion costs of \$76M. This scenario had the lowest funding shortfall of \$2.7M over the forecasted period. Between FY 2023 and FY 2024, the last bond series is retired adding \$20M to cash flow.



Scenario E (3%, 3%, \$25M):

Fiscal Year Ended April 30,	Projected - FYE					
	2019	2020	2021	2022	2023	2024
Cash Flows from Current Operations						
a) Operating Revenues	\$ 97,935,672	\$ 97,935,672	\$ 97,935,672	\$ 97,935,672	\$ 97,935,672	\$ 97,935,672
b) Less: Operating Expenses (net Depr)	68,013,217	61,211,895	63,048,252	64,939,700	66,887,891	68,894,527
Cash Flows from Operations	\$29,922,455	\$36,723,777	\$34,887,420	\$32,995,972	\$31,047,781	\$29,041,144
Cash Flows from Projected Changes						
c) Rev: Increased rates - consumption- Water	410,181	416,333	422,578	428,917	435,351	441,881
d) Rev: Increased rates - consumption - Sewer	342,433	347,569	352,783	358,074	363,446	368,897
e) Rev: Increased rates - base - Water	105,364	106,945	108,549	110,177	111,830	113,507
f) Rev: Increased rates - base - Sewer	95,133	96,560	98,008	99,478	100,970	102,485
g) Rev: Increased customer base	-	-	-	-	-	-
h) Rev: Tap Fees	9,686	9,831	9,979	10,129	10,280	10,435
i) Exp: Decreased / (Increased) Operating Expenses	-	-	(1,470,000)	(1,514,100)	(1,559,523)	(1,606,309)
Proposed Project-Related Cash Flows	\$ 962,796	\$ 977,238	\$ (478,103)	\$ (507,325)	\$ (537,646)	\$ (569,104)
Non-Operating Revenues (Expenses)						
r) Impact Fees-Water/Sewer	877,530	1,009,160	1,110,075	1,126,727	1,143,627	1,160,782
j) Operating Transfers in -Water/Sewer	1,413,558	1,455,965	1,499,644	1,544,633	1,590,972	1,638,701
Available Cash Flows	\$ 33,176,339	\$ 40,166,139	\$ 37,019,035	\$ 35,160,007	\$ 33,244,734	\$ 31,271,524
Current Long-Term Obligations						
k) Existing Bond Debt Service	\$ 20,192,955	\$ 21,070,230	\$ 19,279,700	\$ 20,544,450	\$ 20,545,500	\$ -
l) Existing GEFA Debt Service	797,647	797,647	797,647	797,647	797,647	797,647
Existing Long-term Debt Service	\$ 20,990,602	\$ 21,867,877	\$ 20,077,347	\$ 21,342,097	\$ 21,343,147	\$ 797,647
Proposed Debt Service						
m) Proposed New Debt: P&I Payments	\$ -	\$ -	\$ -	\$ 1,749,688	\$ 1,749,688	\$ 1,749,688
n) Interest Only Payment	104,000	133,250	162,500	-	166,667	333,333
Proposed Additional Obligations	\$ 104,000	\$ 133,250	\$ 162,500	\$ 1,749,688	\$ 1,916,354	\$ 2,083,021
Total Proposed Obligations	\$ 21,094,602	\$ 22,001,127	\$ 20,239,847	\$ 23,091,784	\$ 23,259,501	\$ 2,880,668
Debt Service Coverage - Bonds	1.63	1.89	1.90	1.58	1.48	15.01
Debt Service Coverage - Including GEFA Loans	1.57	1.83	1.83	1.52	1.43	10.86
Available Cash Produced	\$ 12,081,737	\$ 18,165,012	\$ 16,779,189	\$ 12,068,222	\$ 9,985,233	\$ 28,390,856
o) Capital Expenditures	2,892,335	2,040,000	2,040,000	2,040,000	2,040,000	2,040,000
Available Cash for Projects	\$ 9,189,402	\$ 16,125,012	\$ 14,739,189	\$ 10,028,222	\$ 7,945,233	\$ 26,350,856
p) Cash Reserve for Contingency	2,100,000	2,100,000	2,100,000	2,100,000	2,100,000	2,100,000
Available Cash to Disburse	\$ 7,089,402	\$ 14,025,012	\$ 12,639,189	\$ 7,928,222	\$ 5,845,233	\$ 24,250,856
q) Loan Proceeds	6,000,000	6,000,000	6,000,000	6,000,000	7,000,000	6,000,000
Net Cash	\$ 13,089,402	\$ 20,025,012	\$ 18,639,189	\$ 13,928,222	\$ 12,845,233	\$ 30,250,856

The graph on [page 74](#) illustrates the cumulative capital improvement funding need (blue vertical bar) in relationship to the cumulative cash flow available (horizontal line; per scenario) after operating expenses and debt service payments are made for each fiscal year. **Scenario E** illustrates that a 3 percent rate increase cannot supply the funding provided by additional debt. This scenario produced the second highest shortfall of \$74M over the forecasted period. Between FY 2023 and FY 2024, the last bond series is retired adding \$20M to cash flow.



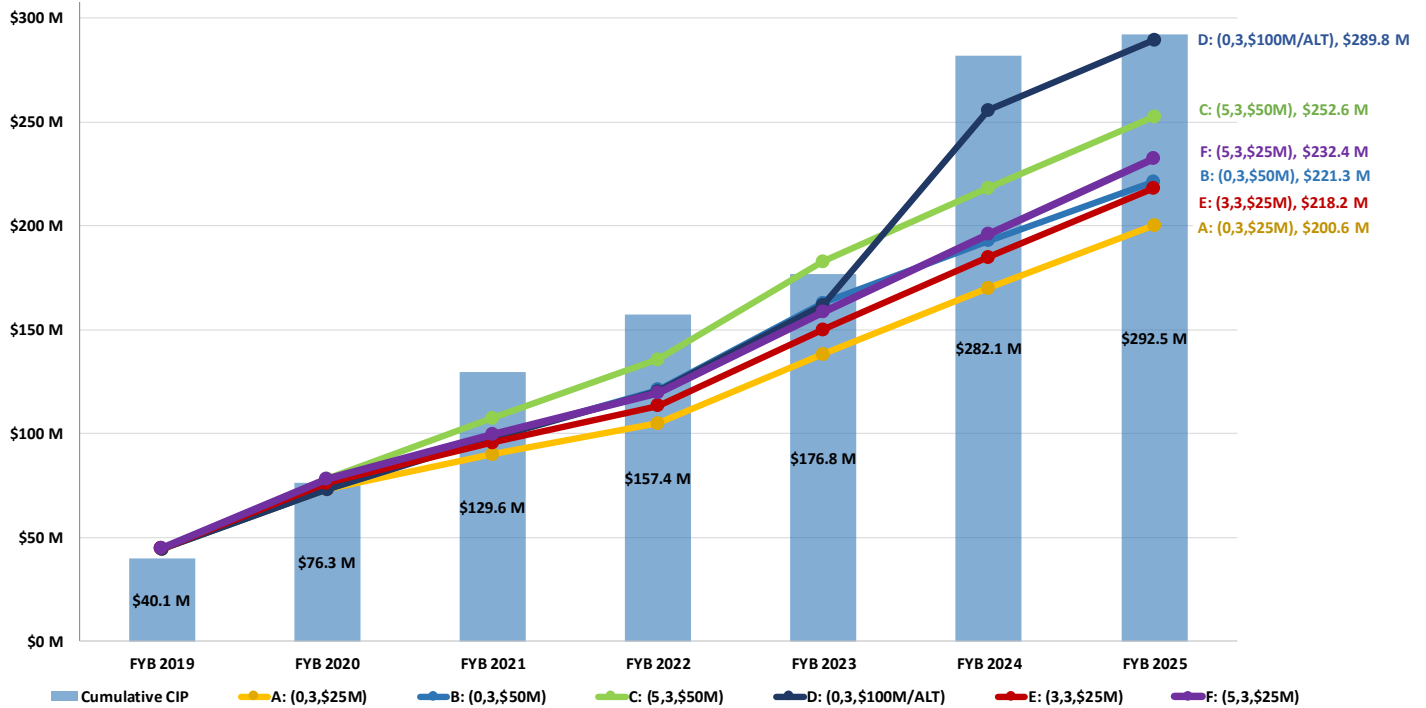
Scenario F (5%, 3%, \$25M):

Fiscal Year Ended April 30,	Projected - FYE					
	2020	2021	2022	2023	2024	2025
Cash Flows from Current Operations						
a) Operating Revenues	\$ 98,889,885	\$98,889,885	\$ 98,889,885	\$98,889,885	\$98,889,885	\$98,889,885
b) Less: Operating Expenses (net Depr)	54,900,741	56,547,763	58,244,196	59,991,522	61,791,268	63,645,006
Cash Flows from Operations	\$ 43,989,144	\$ 42,342,122	\$ 40,645,689	\$ 38,898,363	\$ 37,098,617	\$ 35,244,879
Cash Flows from Projected Changes						
c) Rev: Increased rates - consumption- Water	\$ 394,642	\$ 400,561	\$ 406,570	\$ 412,668	\$ 418,858	\$ 425,141
d) Rev: Increased rates - consumption - Sewer	337,325	342,384	347,520	352,733	358,024	363,394
e) Rev: Increased rates - base - Water	107,010	108,615	110,244	111,898	113,576	115,280
f) Rev: Increased rates - base - Sewer	96,777	98,229	99,702	101,197	102,715	104,256
g) Rev: Increased customer base	-	-	-	-	-	-
h) Rev: Tap Fees	8,760	8,891	9,025	9,160	9,298	9,437
i) Rev: Rate Increase - Water	-	2,508,258	2,633,671	2,765,355	2,903,622	3,048,804
Rev: Rate Increase - Sewer	-	2,170,508	2,279,033	2,392,985	2,512,634	2,638,265
j) Exp: Decreased / (Increased) Operating Expenses	-	-	-	-	-	-
Proposed Project-Related Cash Flows	\$ 944,513	\$ 5,637,447	\$ 5,885,765	\$ 6,145,996	\$ 6,418,728	\$ 6,704,578
k) Impact Fees-Water/Sewer	\$ 1,539,088	\$ 1,692,997	\$ 1,718,392	\$ 1,744,168	\$ 1,770,330	\$ 1,796,885
l) Operating Transfers in -from Stormwater	1,271,151	1,309,286	1,348,564	1,389,021	1,430,692	1,473,612
Available Cash Flows	\$ 47,743,896	\$ 50,981,851	\$ 49,598,410	\$ 48,177,548	\$ 46,718,367	\$ 45,219,955
Current Long-Term Obligations						
m) Existing Bond Debt Service	\$ 19,279,700	\$ 20,544,450	\$ 20,545,500	\$ 20,543,250	\$ -	\$ -
n) Existing GEFA Debt Service	797,647	797,647	797,647	797,647	797,647	797,647
Existing Long-term Debt Service	\$ 20,077,347	\$ 21,342,097	\$ 21,343,147	\$ 21,340,897	\$ 797,647	\$ 797,647
Proposed Debt Service						
o) Proposed New Debt: P&I Payments - GEFA 1 (\$25M, 15 yrs, 0.65%)	\$ -	\$ -	\$ 1,749,688	\$ 1,749,688	\$ 1,749,688	\$ 1,749,688
p) Interest Only Payment	104,000	162,500	-	-	-	-
Proposed Additional Obligations	\$ 104,000	\$ 162,500	\$ 1,749,688	\$ 1,749,688	\$ 1,749,688	\$ 1,749,688
Total Proposed Obligations	\$ 20,181,347	\$ 21,504,597	\$ 23,092,834	\$ 23,090,584	\$ 2,547,334	\$ 2,547,334
Debt Service Coverage - Bonds	2.46	2.46	2.22	2.16	26.70	25.84
Debt Service Coverage - Including GEFA Loans	2.37	2.37	2.15	2.09	18.34	17.75
Available Cash for Projects/Cap Expenditures	\$ 27,562,550	\$ 29,477,254	\$ 26,505,575	\$ 25,086,963	\$ 44,171,033	\$ 42,672,620
q) Capital Expenditures	3,509,843	3,000,000	3,090,000	3,090,000	3,090,000	3,090,000
Available Cash for Projects	\$ 24,052,707	\$ 26,477,254	\$ 23,415,575	\$ 21,996,963	\$ 41,081,033	\$ 39,582,620
r) Cash Reserve for Contingency	10,500,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
Available Cash to Disburse	\$ 13,552,707	\$ 24,477,254	\$ 21,415,575	\$ 19,996,963	\$ 39,081,033	\$ 37,582,620
s) Loan Proceeds	10,000,000	9,000,000	-	-	-	-
Net Cash	\$ 23,552,707	\$ 33,477,254	\$ 21,415,575	\$ 19,996,963	\$ 39,081,033	\$ 37,582,620

The graph on [page 74](#) illustrates the cumulative capital improvement funding need (blue vertical bar) in relationship to the cumulative cash flow available (horizontal line; per scenario) after operating expenses and debt service payments are made for each fiscal year. **Scenario F** illustrates that a 5 percent rate increase cannot supply the funding provided by additional debt. This scenario produced a shortfall of \$60M over the forecasted period. Between FY 2023 and FY 2024, the last bond series is retired adding \$20M to cash flow.



Scenario Graph



The surplus or deficiency in cash flow based on the five sample scenarios are found in the table below. It should be noted that these scenarios are created for general analysis and discussion purposes only. Depending on board approval, project timing or scope can be altered, or the project can be eliminated from the plan to accommodate funding preferences. Scenarios using debt as a financing option can vary significantly based on amount borrowed, interest rate fluctuations, term of repayment and structure of repayment. Between FY 2023 and FY 2024, the last bond series is retired adding \$20M to cash flow.

Fiscal Year	Cumulative CIP	Funding Gap (millions)					
		A: (0,3,\$25M)	B: (0,3,\$50M)	C: (5,3,\$50M)	D: (0,3,\$100M/ALT)	E: (3,3,\$25M)	F: (5,3,\$25M)
FYB 2019	\$40.1 M	\$4.5	\$4.5	\$4.5	\$4.5	\$4.5	\$4.5
FYB 2020	\$76.3 M	-\$2.9	-\$2.9	\$1.8	-\$3.1	-\$0.1	\$1.8
FYB 2021	\$129.6 M	-\$39.6	-\$31.4	-\$21.8	-\$31.7	-\$33.9	-\$30.0
FYB 2022	\$157.4 M	-\$52.7	-\$36.3	-\$21.7	-\$36.8	-\$44.1	-\$37.9
FYB 2023	\$176.8 M	-\$38.4	-\$14.0	\$6.0	-\$14.6	-\$26.8	-\$18.2
FYB 2024	\$282.1 M	-\$111.8	-\$89.2	-\$63.8	-\$26.2	-\$97.2	-\$85.9
FYB 2025	\$292.5 M	-\$91.9	-\$71.2	-\$39.9	-\$2.7	-\$74.3	-\$60.1
		-\$91.9	-\$71.2	-\$39.9	-\$2.7	-\$74.3 M	-\$60.1 M

(R=Rate Increase, E=Expense Growth, D=Debt Proceeds)



Cash Flow Projection – Water and Sewer Fund

Scenario C (light green line): Rate increase – 5% in FY 2020 – 2021; Operating Expense Growth - 3%; Debt Proceeds - \$50M to finance a major phase of an interceptor project estimated at \$69M to complete. Scenario C was selected because it was the scenario that best met the funding requirements of the suggested capital project plan and the second \$25M loan was approved by the Board of Directors in March. This six-year projection includes debt proceeds of two GEFA Loans totaling each for \$25M All assumptions are listed below.

Cash Flow and Debt Service Coverage Projection – Water and Sewer Fund

Fiscal Year Ended April 30,	Projected - FYE						
	2019	2020	2021	2022	2023	2024	2025
Cash Flows from Current Operations							
a) Operating Revenues	\$ 101,129,041	\$ 98,889,885	\$ 98,889,885	\$ 98,889,885	\$ 98,889,885	\$ 98,889,885	\$ 98,889,885
b) Less: Operating Expenses (net Depr)	57,814,006	54,900,741	56,547,763	58,244,196	59,991,522	61,791,268	63,645,006
Cash Flows from Operations	\$ 43,315,035	\$ 43,989,144	\$ 42,342,122	\$ 40,645,689	\$ 38,898,363	\$ 37,098,617	\$ 35,244,879
Cash Flows from Projected Changes							
c) Rev: Increased rates - consumption- Water		\$ 394,642	\$ 400,561	\$ 406,570	\$ 412,668	\$ 418,858	\$ 425,141
d) Rev: Increased rates - consumption - Sewer		337,325	342,384	347,520	352,733	358,024	363,394
e) Rev: Increased rates - base - Water		107,010	108,615	110,244	111,898	113,576	115,280
f) Rev: Increased rates - base - Sewer		96,777	98,229	99,702	101,197	102,715	104,256
g) Rev: Increase Customer Base		-	-	-	-	-	-
h) Rev: Tap Fees		8,760	8,891	9,025	9,160	9,298	9,437
i) Rev: Rate Increase - Water			2,508,258	2,633,671	2,765,355	2,903,622	3,048,804
Rev: Rate Increase - Sewer			2,170,508	2,279,033	2,392,985	2,512,634	2,638,265
j) Exp: Decr / (Incr) Operating Expenses		-	-	-	-	-	-
Exp: Other		-	-	-	-	-	-
Proposed Project-Related Cash Flows	\$ -	\$ 944,513	\$ 5,637,447	\$ 5,885,765	\$ 6,145,996	\$ 6,418,728	\$ 6,704,578
k) Impact Fees-Water/Sewer	\$ 1,539,088	\$ 1,539,088	\$ 1,692,997	\$ 1,718,392	\$ 1,744,168	\$ 1,770,330	\$ 1,796,885
l) Operating Transfers in -from Stormwater	1,413,558	1,271,151	1,309,286	1,348,564	1,389,021	1,430,692	1,473,612
Available Cash Flows	\$ 46,299,916	\$ 47,743,896	\$ 50,981,851	\$ 49,598,410	\$ 48,177,548	\$ 46,718,367	\$ 45,219,955
Current Long-Term Obligations							
m) Existing Bond Debt Service	\$ 21,070,230	\$ 19,279,700	\$ 20,544,450	\$ 20,545,500	\$ 20,543,250	\$ -	\$ -
n) Existing GEFA Debt Service	843,147	797,647	797,647	797,647	797,647	797,647	797,647
Existing Long-term Debt Service	\$ 21,913,377	\$ 20,077,347	\$ 21,342,097	\$ 21,343,147	\$ 21,340,897	\$ 797,647	\$ 797,647
Proposed Debt Service							
o) Proposed New Debt: P&I Payments - GEFA 1 (\$25M, 15 yrs, 0.65%)	\$ -	\$ -	\$ -	\$ 1,749,688	\$ 1,749,688	\$ 1,749,688	\$ 1,749,688
Proposed New Debt: P&I Payments - GEFA 2 (\$25M, 15 yrs, 2.65%)							1,828,662
p) Interest Only Payment		104,000	162,500	104,167	208,333	312,500	-
Proposed Additional Obligations	\$ -	\$ 104,000	\$ 162,500	\$ 1,853,854	\$ 1,958,021	\$ 2,062,188	\$ 3,578,350
Total Proposed Obligations	\$ 21,913,377	\$ 20,181,347	\$ 21,504,597	\$ 23,197,001	\$ 23,298,918	\$ 2,859,834	\$ 4,375,996
Debt Service Coverage - Bonds	2.20	2.46	2.46	2.21	2.14	22.65	12.64
Debt Service Coverage - Including GEFA Loans	2.11	2.37	2.37	2.14	2.07	16.34	10.33
s) Loan Proceeds	6,000,000	10,000,000	9,000,000	8,333,333	8,333,333	8,333,333	-

a) Operating Revenues are estimated actual for FY 2018-2019. The operating revenue forecasted in FY 2018-2019 budget is held

constant throughout the years of the projection. Changes in operating revenues are shown in the section with the heading, *Cash Flow from Projected Changes*, to highlight incremental impact to cash flow of assumption.

b) Operating Expenses exclude depreciation expense because it has no impact to cash flow. A compounded annual growth rate (CAGR) of 3 percent was applied to all other operating expenses.

c) thru i) Cash Flows from Projected Changes in operating revenues assumes an annual rate increase of 5% for both base and consumption tiers for all water and sewer customers in FY 2020 – 2021 and then the historical annual customer growth of 1.5% is applied to all revenue types.



j) Operating Transfers in are from the Stormwater Fund to cover its share of administrative expenses incurred by the Water and Sewer Fund that budgets all administrative costs. Portions of those costs are allocated to the Stormwater Fund through an overhead calculation performed annually. A 3% annual growth rate is applied to this line item, consistent with the operating expense growth rate used.

k) For the cash flow analysis, all bond debt service principal and interest payments are projected as payments made to the debt service accounts (sinking fund) which occur one fiscal year ahead of scheduled payments required to be made to bondholders. The 2012 Bonds have the latest maturity of existing bond debt with the final payment to bond holders made on May 1, 2023 from accumulated payments made to the Debt Service Account through FY 2022-2023.

l) GEFA Loan CW02008 (Wetlands) matures 11/1/2025 and Loan DW00002P (Backflows) matures 4/1/2026. The loan agreements require Debt Service Coverage of 1.05x. GEFA loans are subordinate debt and bond covenants exclude their annual debt service payments from the 1.20x covenant calculation.

m), n) Proposed Debt Service shows loan proceeds of two \$25M GEFA loans; disbursed over 5 years with interest only during construction. With proceeds disbursed to fund project costs. The first GEFA loan, **highlighted in blue**, has an interest rate is 0.65% with interest only paid monthly on the amount outstanding. Level principal and interest payments will be paid monthly for 15 years beginning when construction is completed (\$1.7M/yr.). The proposed second GEFA loan, **highlighted in green**, has an interest rate of 1.25% with interest only paid monthly on the outstanding balance. Level principal and interest payments will be monthly for 15 years when construction is completed (\$1.8M/yr.).

Projected Net Position – Water and Sewer Fund

Fiscal Year Ended April 30,	Actual		2019	Projected - FYE				
	2017	2018		2020	2021	2022	2023	
Cash Flows from Current Operations								
a) Operating Revenues	\$ 103,046,221	\$ 103,444,329	\$ 101,129,041	\$ 98,889,885	\$ 98,889,885	\$ 98,889,885	\$ 98,889,885	
b) Less: Operating Expenses (net Depr)	54,481,903	54,900,741	57,814,006	54,900,741	56,547,763	58,244,196	59,991,522	
Cash Flows from Operations	\$ 48,564,318	\$ 48,543,588	\$ 43,315,035	\$ 43,989,144	\$ 42,342,122	\$ 40,645,689	\$ 38,898,363	
Proposed Project-Related Cash Flows	\$ -	\$ -	\$ -	\$ 944,513	\$ 5,637,447	\$ 5,885,765	\$ 6,145,996	
k) Impact Fees-Water/Sewer	1,334,529	2,580,852	\$ 1,539,088	\$ 1,539,088	\$ 1,692,997	\$ 1,718,392	\$ 1,744,168	
l) Operating Transfers in -from Stormwater	1,864,370	1,162,140	1,413,558	1,271,151	1,309,286	1,348,564	1,389,021	
Available Cash Flows	\$ 52,260,364	\$ 53,335,869	\$ 46,299,916	\$ 47,743,896	\$ 50,981,851	\$ 49,598,410	\$ 48,177,548	
Total Proposed Obligations	\$ 20,766,150	\$ 20,837,995	\$ 21,913,377	\$ 20,181,347	\$ 21,504,597	\$ 23,197,001	\$ 23,298,918	
Beginning Net Position	\$ 440,373,283	\$ 468,100,602	\$ 500,066,217	\$ 524,452,757	\$ 552,015,306	\$ 581,492,560	\$ 607,893,969	
Net Revenues/Increase (Decrease) in Net Position	27,727,319	32,497,874	24,386,540	27,562,550	29,477,254	26,401,409	24,878,630	
Ending Net Position	\$ 468,100,602	\$ 500,598,476	\$ 524,452,757	\$ 552,015,306	\$ 581,492,560	\$ 607,893,969	\$ 632,772,599	

[**Scenario C** (light green line): Rate increase – 5% in FY 2020 – 2021; Operating Expense Growth - 3%; Debt Proceeds - \$50M to finance a major phase of an interceptor project estimated at \$69M to complete.]

Using information from the cash flow projection on the previous page, the estimated net position was calculated for the forecasted period through FYE 2023. Net Position at FYE 2018 was **\$500,598,476** and projected to increase by \$24,386,540 to **\$500,000,000** at FYE 2019. This is presented as **Beginning Net Position** in the table above for FYE 2020.

Fund Balance is a term used for the net position of a governmental fund that is equal to the difference between assets and deferred outflows of resources and liabilities and deferred inflows of resources. Net position is the residual of all other financial statement elements presented in a statement of net position. Both Authority's primary funds are proprietary or enterprise funds and use the term Net Position in place of Fund Balance.



Net excess cash produced would add to Net Position whether these funds are invested in capital assets, restricted or unrestricted. Unrestricted Net Position reflects resources accessible for use by the fund.

The Clayton County Water Authority's financial statements are being presented in conformance with provisions of the Governmental Accounting Standards Board (GASB) Statement No. 63 *"Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources and Net Position"* (GASB 63). As required by GASB 63, the Authority has classified net position into three components; net investment in capital assets, restricted and unrestricted. These classifications of Net Position are defined below.

- **Net investment in capital assets:** This component of net position consists of capital assets, including restricted capital assets, net of accumulated depreciation and reduced by the outstanding balances of any bonds, mortgages, notes or other borrowings that are attributable to the acquisition, construction or improvement of those assets. If there are significant unspent proceeds at year-end, the portion of the debt attributable to the unspent proceeds is not included in the calculation of net investment in capital assets. Instead, that portion of the debt is included in the same net position component as the unspent proceeds.
- **Restricted:** This component of net position consists of constraints placed on net position through external restrictions imposed by creditors (e.g., debt covenants), grantors, contributors, laws or regulations of other governments. This component would also include constraints imposed by law through constitutional provisions or enabling legislation. For the Authority, this component consists of a debt service reserve amount, the accrued amounts of debt service principal and interest for the next required payments, working capital and a reserve amount for the Renewal and Extension Fund required by bond covenants.
- **Unrestricted:** This component of net position consists of net position that does not meet the definition of "restricted" or "net investment in capital assets". Generally, this represents those financial resources that are available to the Authority to meet any future obligations that might arise.

The Authority applies restricted resources first, when an expense is incurred, for which both restricted and unrestricted net position is available.

Assessing economic condition of a governmental entity involves consideration of factors that could have an impact on a government's net position. This assessment includes trends in revenues and expenses and how net position has changed over time.

Debt

As needed to fund large construction projects, the Authority issues water and sewer revenue bonds in accordance with the Constitution and laws of the State of Georgia, including the Revenue Bond Law (O.C.G.A. Section 36-82-60 et seq., as amended). With the adoption of each bond resolution, the Authority creates a first lien on the "net revenues" of the System as security for the debt. Currently, the Stormwater Fund has no debt.

Unlike general obligation bonds that pledge the full faith and credit of the government, there are no statutory limitations on the amount of revenue bonds that can be issued by the Authority. Since a portion of the revenues being received must be designated for repaying the existing debt, the ability to issue additional debt is really a function of the rates that the customers are willing to pay for the services being offered.



Debt Service

As part of its bond issuance process, CCWA has promised the bondholders that the money that was borrowed from them will be paid back through a pledge of a portion of its revenue stream each year. To facilitate compliance with that revenue pledge, the bond agreements call for the Water and Sewer Fund to transfer annual debt service each month into a separate bank account. This ensures that funds will be available in our trust accounts to pay the principal and interest when it becomes due.

The entire amount noted as Bond Debt Service, \$19.1M, represents the transfers from the Water and Sewer Fund into these individual bank accounts. Presently, the Authority has four different series of revenue bonds outstanding. The series denotes the calendar year in which those bonds were issued. In adhering to the repayment schedule, the monies that have been deposited into these separate accounts will be disbursed on November 1 and May 1 to cover any bond related expenditures. Each of the Authority's outstanding revenue bonds have an annual principal payment date of May 1 with interest paid semi-annually to the bondholders on May 1 and November 1. The payment that occurs on May 1, which includes the principal payment, is generally much larger and is considered to have transpired at the conclusion of the fiscal year for budgeting and cash flow purposes.

Debt Service Reserve

As an additional safeguard to protect the bondholders, the Authority is required to deposit into a separate debt service reserve account an amount equal to the highest annual debt service payable in any future year. As prescribed in the bond covenants, the current reserve requirement is \$19.1M, which is the debt service payment for May 1, 2020. These "reserve" monies are held in an account by the trustee while the bonds are outstanding and would be available to make the debt service payment if for some unforeseen reason the Authority had to default on a payment. This reserve requirement had to be met by February 1, 2015 and the Authority has currently met this reserve obligation.





Outstanding Bonds

Clayton County Water Authority has a bond rating of AA+ from Standard and Poor's Ratings Services.

Revenue Bond	Interest Rate	Issue Date	Maturity Date	Amount of Bonds		
				Issued	Retired	Outstanding
2009 Series	3.00 - 4.00%	2009	2018	\$ 17,785,000	\$ 17,785,000	\$ -
2011 Series	2.00 - 5.00%	2011	2020	13,190,000	8,625,000	4,565,000
2012 Series	3.00 - 5.00%	2012	2023	56,235,000	-	56,235,000
2013a Series	4.00 - 5.00%	2013	2020	17,015,000	-	17,015,000
2013b Series	0.40 - 1.80%	2013	2019	47,895,000	36,310,000	11,585,000
Total				\$ 486,470,000	\$ 397,070,000	\$ 89,400,000

SERIES 2011 WATER AND SEWERAGE REFUNDING REVENUE BONDS

On October 11, 2011, the Authority issued \$13.2 million in Series 2011 Water and Sewerage Revenue Refunding Bonds to refund outstanding Series 2003 bonds and pay the issuance costs of the Series 2011 bonds. After redeeming the \$1.6 million in bonds that mature on May 1, 2019, there will be an outstanding balance of \$2.3 million on this series. The last principal payment on this series will be made to bondholders on May 1, 2020.

SERIES 2012 WATER AND SEWERAGE REFUNDING REVENUE BONDS

On March 1, 2012, the Authority issued \$56.2 million in Series 2012 Water and Sewerage Revenue Refunding Bonds to refund the outstanding Series 2005 bonds. The first maturity is not due until May 1, 2021 and will have the final principal payment to bondholders on May 1, 2023.

SERIES 2013 WATER AND SEWERAGE REFUNDING REVENUE BONDS

On June 4, 2013, the Authority issued \$64.9 million in Series 2013A and 2013B Water and Sewerage Revenue Refunding Bonds to refund outstanding 2003 and 2004 bond issues. After redeeming the \$15.0 million in bonds that mature on May 1, 2019, there will remain a balance of \$13.6 million outstanding on this series. The final principal payment for these bonds will be on May 1, 2020.





As of April 30, 2018, the Authority was obligated to make payments of principal, due on May 1, and interest due on May 1 and November 1, for various revenue bond issues as follows:

<i>For Fiscal Years Ending April 30,</i>	Principal	Interest	Total Payments
2019	15,995,000	4,004,092	19,999,092
2020	17,260,000	3,592,465	20,852,465
2021	15,905,000	4,266,800	20,171,800
2022	17,965,000	2,209,975	20,174,975
2023	18,705,000	1,409,375	20,114,375
2024	19,565,000	489,125	20,054,125
Totals	\$ 19,565,000	\$ 14,682,107	\$ 120,077,107

State Revolving Fund Loans

In addition to issuing revenue bonds in the long-term capital market, the Authority has two loans with Georgia Environmental Finance Authority (GEFA) in repayment and a recently approved \$25M loan to assist in funding a portion of the \$60M large sewer interceptor rehabilitation. In October 2002, the Authority entered into a loan agreement with GEFA for \$4.2M to provide funding for the installation of backflow prevention devices on approximately 45,000 water meters. Backflow prevention devices are valves that block the reflux of water from a residence, commercial or industrial site from flowing back into the main water line, which could contaminate the water supply. The outstanding principal balance at April 30, 2018 is \$2.0M with the final monthly payment on April 1, 2026. In May 2003, the Authority entered into a second loan agreement with GEFA for \$7.7M to provide funding for the construction of one phase of wetlands at the Huie land application site. This constructed wetland project includes a flow distribution structure, approximately 13,500 feet of pipeline and the construction of a 55-acre wetlands wastewater treatment system with inlet and outlet structures. The outstanding principal balance at April 30, 2018 is \$3.5M with the final monthly payment due on November 1, 2025. The Authority's bond covenants allow for the exclusion of the debt service for these loans from Debt Service Coverage calculation because Georgia statute allows this debt to be subordinate.





Projected Debt Service Coverage - Water and Sewer Fund

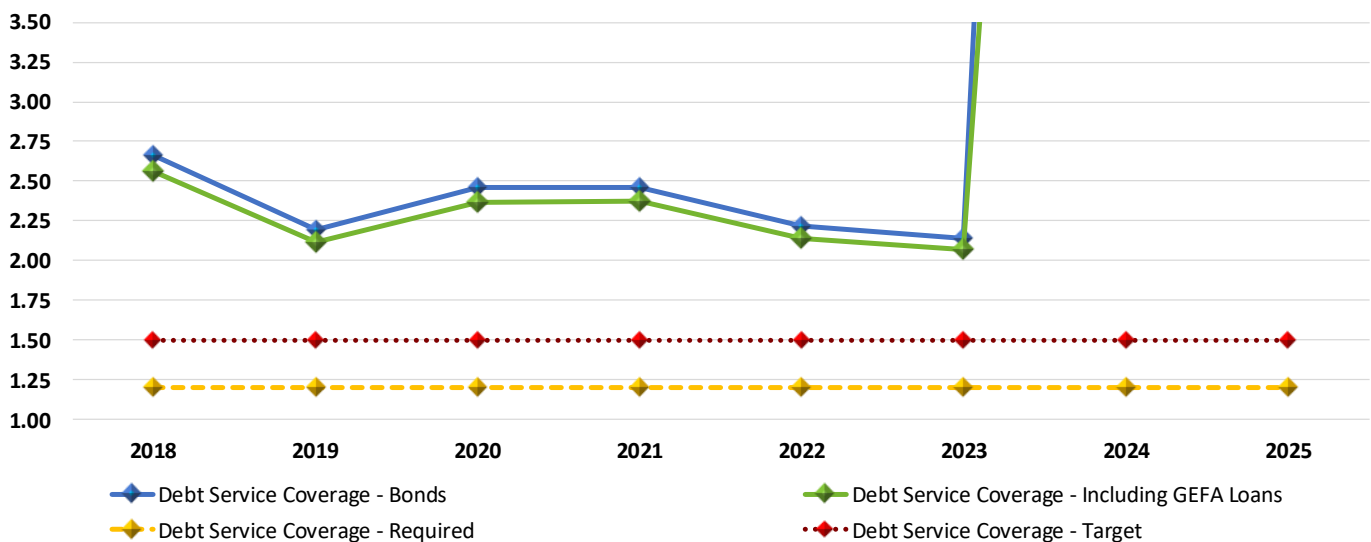
The projected debt service and *Debt Service Coverage Ratio* is shown for the forecasted period through FYE 2025 using the cash flow generated by **Scenario C** using an annual rate increase of 3 percent for water and sewer, annual operating expense growth of 3 percent and Loan Proceeds of \$25M. Between FY 2023 and FY 2024, the last bond series is retired adding \$20M to cash flow.

Debt Payments - Debt Service Schedule

The table and graph below show the required debt service payments and the projected Debt Service Coverage Ratio.

Fiscal Year Ended April 30,	2019	2020	2021	2022	2023	2024	2025
Current Long-Term Obligations							
Existing Bond Debt Service	\$ 21,070,230	\$ 19,279,700	\$ 20,544,450	\$ 20,545,500	\$ 20,543,250	\$ -	\$ -
2013-A Series - Principal	3,435,000	13,580,000					
2013-A Series - Interest	816,400	679,000					
2013-B Series - Principal	11,585,000						
2013-B Series - Interest	208,530						
2012 Series - Principal	-	-	17,965,000	18,705,000	19,565,000		
2012 Series - Interest	2,579,450	2,579,450	2,579,450	1,840,500	978,250		
2011 Series - Principal	2,240,000	2,325,000					
2011 Series - Interest	205,850	116,250					
Existing GEFA Debt Service	797,647	797,647	797,647	797,647	797,647	797,647	797,647
CW02008; matures 11/1/2025	514,317	514,317	514,317	514,317	514,317	514,317	514,317
DW00002P; matures 4/1/2026	283,329	283,329	283,329	283,329	283,329	283,329	283,329
Existing Long-Term Debt Service	\$ 21,867,877	\$ 20,077,347	\$ 21,342,097	\$ 21,343,147	\$ 21,340,897	\$ 797,647	\$ 797,647
Proposed Debt Service							
Proposed New Debt		\$ -	\$ -	\$ 1,749,688	\$ 1,749,688	\$ 1,749,688	\$ 1,749,688
Interest Only Annual Payment		81,250	162,500				
Proposed Additional Obligations	\$ -	81,250	162,500	1,749,688	1,749,688	1,749,688	1,749,688
Debt Service Coverage - Bonds	2.20	2.46	2.46	2.21	2.14	22.65	12.64
Debt Service Coverage - Including GEFA Loans	2.11	2.37	2.37	2.14	2.07	16.34	10.33

Debt Service Coverage - Graph



Note: Bond covenants require 1.20x debt service coverage, excluding GEFA loan payments.



Projected Net Position – Stormwater Fund

Fiscal Year Ended April 30,	Historical		2019	FYE - Projected					
	2017	2018		2020	2021	2022	2023	2024	2025
Cash Flows from Current Operations									
Operating Revenues	\$ 9,929,702	\$ 10,040,481	\$ 10,092,064	\$ 10,092,064	\$ 10,092,064	\$ 10,092,064	\$ 10,092,064	\$ 10,092,064	\$ 10,092,064
Less: Operating Expenses (net Depr)	4,343,090	3,773,861	4,108,780	4,232,044	4,295,524	4,359,957	4,425,356	4,491,737	4,559,113
Cash Flows from Operations	\$ 5,586,612	\$ 6,266,620	\$ 5,983,283	\$ 5,860,020	\$ 5,796,539	\$ 5,732,106	\$ 5,666,707	\$ 5,600,327	\$ 5,532,951
Proposed Project-Related Cash Flows	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Non-Operating Revenues (Expenses)									
Intergovernmental Revenues	\$ 125,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interest Income	9,216	9,008	7,610	-	-	-	-	-	-
Interest Expense	-	-	-	-	-	-	-	-	-
Operating Transfers Out -to Water and Sewer	(1,676,527)	(1,158,251)	(1,413,558)	(1,271,151)	(1,309,286)	(1,348,564)	(1,389,021)	(1,430,692)	(1,473,612)
Available Cash Flows	\$ 4,044,301	\$ 5,117,377	\$ 4,577,335	\$ 4,588,869	\$ 4,487,254	\$ 4,383,542	\$ 4,277,686	\$ 4,169,635	\$ 4,059,338
Total Proposed Obligations	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Beginning Net Position	\$ 50,583,156	\$ 51,354,452	\$ 53,763,795	\$ 57,431,130	\$ 61,219,999	\$ 64,707,253	\$ 68,590,795	\$ 72,318,481	\$ 75,828,116
Net Revenues	771,296	2,409,343	4,577,335	4,588,869	4,487,254	4,383,542	4,277,686	4,169,635	4,059,338
Planned use of Unrestricted Net Position			(910,000)	(800,000)	(1,000,000)	(500,000)	(550,000)	(660,000)	(900,000)
Ending Net Position	\$ 51,354,452	\$ 53,763,795	\$ 57,431,130	\$ 61,219,999	\$ 64,707,253	\$ 68,590,795	\$ 72,318,481	\$ 75,828,116	\$ 78,987,455

The projected net position above assumes that operating expenses will grow 3 percent annually. The Stormwater Fund has no debt obligations. The Stormwater Fund transfers money to the Water and Sewer Fund to cover its share of administrative charges. The transfer in prior years had been based on budgeted expenses of the Water and Sewer Fund. Beginning in this budget year, the Stormwater Fund transfer will be allocated based on the actual expenses incurred by the Water and Sewer Fund in the prior fiscal year. The projected growth of the transfer is 3 percent.

Net Position at FYE 2018 was **\$53,763,795** and projected to increase by \$3,667,355 to **\$57,431,130** at FYE 2019. This is presented as **Beginning Net Position** in the table above.

Fund Balance is a term used for the net position of a governmental fund that is equal to the difference between assets and deferred outflows of resources and liabilities and deferred inflows of resources. Net position is the residual of all other financial statement elements presented in a statement of net position. Both Authority's primary funds are enterprise funds and use the term Net Position in place of Fund Balance.

Net excess cash produced would add to Net Position whether these funds are invested in capital assets, restricted or unrestricted. Unrestricted Net Position reflects resources accessible for use by the fund.

The Clayton County Water Authority's financial statements are being presented in conformance with provisions of the Governmental Accounting Standards Board (GASB) Statement No. 63 *"Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources and Net Position"* (GASB 63). As required by GASB 63, the Authority has classified net position into three components; net investment in capital assets, restricted and unrestricted. These classifications of Net Position are defined below.

- **Net investment in capital assets:** This component of net position consists of capital assets, including restricted capital assets, net of accumulated depreciation and reduced by the outstanding balances of any bonds, mortgages, notes or other borrowings that are attributable to the acquisition, construction or improvement of those assets. If there are significant unspent proceeds at year-end, the portion of the debt attributable to the unspent proceeds is not included in the calculation of net investment in capital assets. Instead, that portion of the debt is included in the same net position component as the unspent proceeds.



- **Restricted:** This component of net position consists of constraints placed on net position through external restrictions imposed by creditors (e.g., debt covenants), grantors, contributors, laws or regulations of other governments. This component would also include constraints imposed by law through constitutional provisions or enabling legislation. For the Authority, this component consists of a debt service reserve amount, the accrued amounts of debt service principal and interest for the next required payments, working capital and a reserve amount for the Renewal and Extension Fund required by bond covenants. The Stormwater Fund has no debt. The restricted amount is in an Escrow Account held until FYE 2019 for a watershed project.
- **Unrestricted:** This component of net position consists of net position that does not meet the definition of “restricted” or “net investment in capital assets”. Generally, this represents those financial resources that are available to the Authority to meet any future obligations that might arise.

The Authority applies restricted resources first, when an expense is incurred, for which both restricted and unrestricted net position is available.

Assessing economic condition of a governmental entity involves consideration of factors that could have an impact on a government’s net position. This assessment includes trends in revenues and expenses and how net position has changed over time.





Levels of Service and Key Performance Indicators

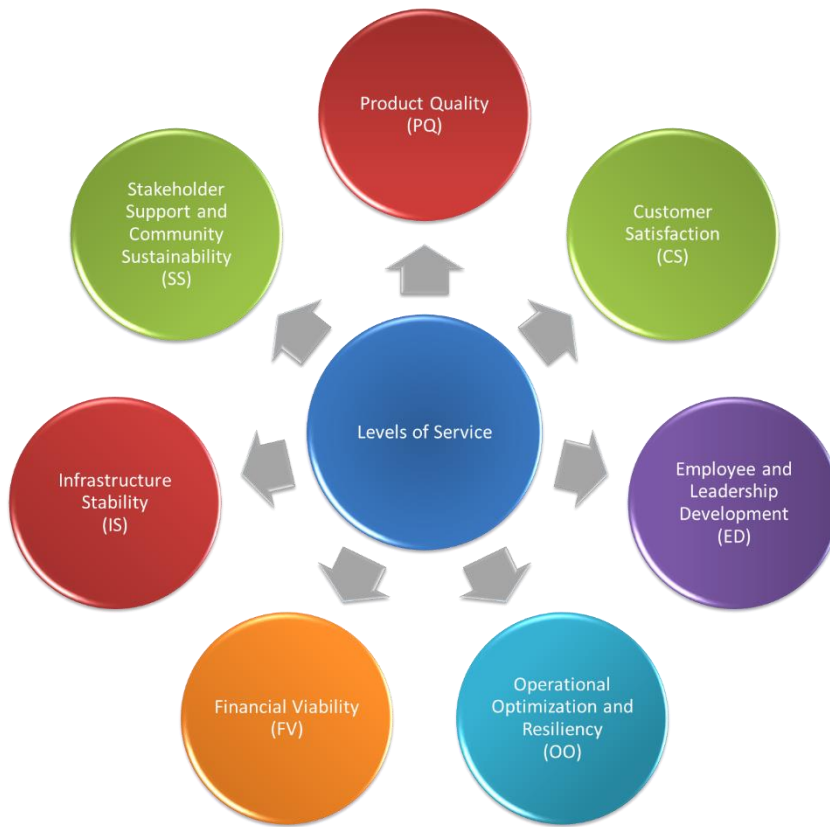
The Authority has implemented Levels of Service (LOS) performance measures, or key performance indicators (KPIs). These KPIs guide operational and capital activities and provide metrics that hold us accountable and responsive to the

Authority's mission and goals. Although the SMP focuses on a 12- to 18-month timeframe, the development and monitoring of these measures, indicators and metrics will have a direct correlation to successfully achieving our strategic goals and prioritizing budget allocations. The General Manager regularly reports to the CCWA Board of Directors the activities, actions and results of our performance.

To promote and encourage success, CCWA has developed a company-wide performance measurement-reporting tool. This online tool is accessible via the company intranet and each manager timely self-reports information for the applicable indicator, measure or metric. Each manager also has developed a set of internal or non-reporting measures that provide for managing operations and external regulatory reporting. Whether reported via the reporting tool or maintained internally,

CCWA plans to update regularly its performance indicators, standards and guidelines.

The Key Performance Indicators (KPIs) and reporting metrics are organized according to one of **7 major goals** supported by **26 primary strategies** that are measured with **78 individual KPI metrics** used to gauge performance against the benchmark.



Abbreviation	Responsible Division or Department
WR	Water Reclamation
WP	Water Production
PME	Program Management and Engineering
DC	Distribution and Conveyance
SW	Stormwater
CS	Customer Service
HR	Human Resources
RM	Risk Management
PIO	Public Information
IT	Information Technology
FIN	Finance
GS	General Services



Levels of Service – Goals and Strategies Detail

Strategies: 1 through 7

Service Level Goal		Key Performance Indicator (KPI)	Division	Target	Actual 2017 - 2018	Actual 2016 - 2017	Actual 2015 - 2016
SUPERIOR PRODUCT QUALITY							
1	Meet all applicable regulatory requirements	% compliance with NPDES permits	WR	100%	100%	100%	98%
		% compliance with Water Production permits	WP	100%		100%	100%
		% compliance with regulatory annual reporting (July)	WP	100%		100%	100%
		% compliance with MNGWPD Plan (Jan)	PME	100%		100%	100%
2	Potable water quality that meets customer expectations	# discoloration complaint calls (CCWA issue)	DC	< 200/Yr. - Reduce 10%/Yr.	236	272	1,034 / 95%
		# water Taste and Odor complaint calls (CCWA issue)	DC	< 25/Yr. - Reduce 10%/Yr.	301	41	105 / 8%
3	Improve the quality of Clayton Co. water resources	% compliance with MS4 Permit (Sep.)	SW	100%	100%	100%	100%
		Miles of water quality non-attainment streams (Sep.)	SW	< 65	65	65	65
EXCEED CUSTOMER EXPECTATIONS							
4	Improve customer experience	% customers calls that are abandoned	CS	< 3% / Month	1%	5%	4%
		% days the call abandonment rate <3%	CS	> 80% / Month	90%	48%	65%
		% meters accurately read	CS	> 99.98% / Month	100%	100%	100%
		% site visits within 2 hours of customer call	DC	> 90% / Month	94%	93%	94%
		% site visits within 24 hours of customer call	SW	> 90% / Month	96%	98%	99%
		# callers using IVR	CS	> 4,000 /Month	8,561	8,880	4,992
		# customers using eCare	CS	> 8,000/Month	16,275	12,711	8,122
		% customer calls within 35 seconds	CS	> 60% / Month	83%	56%	65%
		% customers billed within 28-32 days of usage	CS	> 90% / Month	99%	95%	81%
5	Minimize potable water service disruptions	# low pressure complaints	DC	< 20 / Year	15	14	20
		% downtime for production plant and repump stations	WP	1% / Month	1.3%	0.5%	0.2%
		% maintenance related water service disruptions < 4 hours	DC	> 80% / Month	83%	84%	81%
6	Minimize customer sewer backups	Expense for sewer backup claims	DC	< \$200,000 / Year	\$95,023	\$354,457	\$108,588
		# sewer backup damage claims	DC	< 20 / Year	10	10	15
7	Complete all property restorations in 14 days	% property restorations completed < 14 days	DC	100% / Month	53%	55%	54%



Strategies: 8 through 16

Service Level Goal	Key Performance Indicator (KPI)	Division	Target	Actual 2017 - 2018	Actual 2016 - 2017	Actual 2015 - 2016
PROVIDE EMPLOYEE DEVELOPMENT						
8 Provide effective employee training and development	% DC employees with required certifications (Apr)	DC	100% / Year	100%	96%	96%
	% SW employees with required certification (Apr)	SW	100% / Year	100%	100%	90%
	% WP employees with required licenses (Apr)	WP	100% / Year	100%	100%	100%
	% WR employees with required licenses (Apr)	WR	100% / Year	100%	100%	100%
9 Provide CCWA employee opportunity for advancement	% key position non-entry level positions filled within (Apr)	HR	> 80% / Year	79%	86%	85%
	% Supervisors with completed competency assessment (Apr)	HR	100% / Year	90%	100%	100%
10 Satisfaction with working environment, challenge and opportunities	% non-retirement voluntary turnover (Apr)	HR	< 5% / Year	3%	1%	1%
11 Manage safety to minimize accidents	# of Employee non-lost time injuries	RM	< 23.4 / Year	12	15	18
	# Employee lost time injuries	RM	< 11.2 / Year	3	8	10
	# of CCWA at-fault veh/equip accidents	RM	< 12 / Year	14	20	21
12 Timely/targeted employee communications	% Newsletter distributed by the 5th of the month	PIO	100%	100%	67%	92%
OPTIMIZE OPERATIONS						
13 Reasonable Cost of Service	Water loss based on 12 mo. running avg. - prior month	WP	< 9% / Month	Min: 7.35% Max: 9.73%	8%	8%
	\$/mile of SW system pipe maintained (Apr)	SW	< \$3,000	\$2,464	\$2,710	\$2,781
	\$/acct. of wastewater collection system pipe maintained (Apr)	DC	< \$373	\$80	\$82	\$87
	\$/acct. of water distribution system pipe maintained (Apr)	DC	< \$408	\$82	\$91	\$95
	IT operating cost ratio per million dollars in revenue (Apr)	IT	< 3.82%	2.40%	2.29%	2.25%
	IT operational cost per user (Apr)	IT	< \$7,000	\$6,748	\$6,064	\$5,946
	% of budget (Apr)	WP	< 95%	92%	88%	80%
	% of budget (Apr)	WR	< 95%	87%	92%	82%
	% of budget (Apr)	SW	< 95%	83%	85%	79%
	% of budget (Apr)	DC	< 95%	89%	85%	NA
	\$/kGal produced (Apr)	WP	< \$1.00	\$0.98	\$0.81	\$0.82
	\$/kGal reclaimed (Apr)	WR	< \$2.00	\$1.57	\$1.64	\$1.17
	\$ of water/sewer service as % MHI (Jan)	FIN	< 2%	1.4%	1.4%	1.4%
14 Minimize Water System Losses	AWWA Infrastructure Leakage Index (Apr)	WP	< 1.35	1.03	0.69	1.20
15 Provide Minimum Down Time for CCWA's Fleet	Fleet work orders completed within 7 days	GS	> 80%	96%	97%	86%
	Fleet maintenance cost to fleet asset value	GS	< 25%	10%	7%	10%
16 Maximize computer system availability	% unplanned downtime during business hours	IT	< 1% of Business Hours	0.1%	0.2%	0.2%



Strategies: 17 through 22

Service Level Goal	Key Performance Indicator (KPI)	Division	Target	Actual 2017 - 2018	Actual 2016 - 2017	Actual 2015 - 2016
PROVIDE EMPLOYEE DEVELOPMENT						
8 Provide effective employee training and development	% DC employees with required certifications (Apr)	DC	100% / Year	100%	96%	96%
	% SW employees with required certification (Apr)	SW	100% / Year	100%	100%	90%
	% WP employees with required licenses (Apr)	WP	100% / Year	100%	100%	100%
	% WR employees with required licenses (Apr)	WR	100% / Year	100%	100%	100%
9 Provide CCWA employee opportunity for advancement	% key position non-entry level positions filled within (Apr)	HR	> 80% / Year	79%	86%	85%
	% Supervisors with completed competency assessment (Apr)	HR	100% / Year	90%	100%	100%
ENSURE FINANCIAL VIABILITY						
17 Develop a Sustainable Annual Budget	% of water/sewer budget (Apr)	FIN	< 95%	87%	84%	74%
	% SMP projects funded in next FY (Apr)	PME	< 80%	54%	49%	69%
18 Provide financing for the "Pay-As-You-Go" capital plan	Debt Service Coverage Ratio	FIN	> 1.5x	2.84	2.73	2.31
19 Maximize revenue collection vs. bad debt write-offs	Percentage of bad debt to sales	CS	< 1.5%	1.2%	1.0%	1.2%
INFRASTRUCTURE SUSTAINABILITY						
20 Implement asset management practices	Facilities work orders completed within 7 days	GS	> 80%	82%	80%	80%
	Facilities maintenance cost to asset value	GS	< 25%	7%	7%	6%
21 Provide a sustainable water supply	# water main breaks per 100 miles of pipe (Apr)	DC	< 11 / Year	5	7.5	0.1
	# water main leaks per 100 miles of pipe (Apr)	DC	< 25 / Year	12.6	11.4	0.4
	% reservoir storage capacity	WP	> 90%	95%	87%	99%
	Value of water services claims paid	DC	< \$50,000 / Year	\$1,157	\$9,407	\$55,374
22 Provide adequate treatment capacity	% utilized capacity at Casey WRRF	WR	< 80%	57%	55%	68%
	% utilized capacity at Northeast WRF	WR	< 80%	40%	36%	50%
	% utilized capacity at Shoal Creek	WR	< 80%	38%	34%	42%
	% sewer lines with adequate capacity (Apr)	PME	> 75%	62%	64%	64%

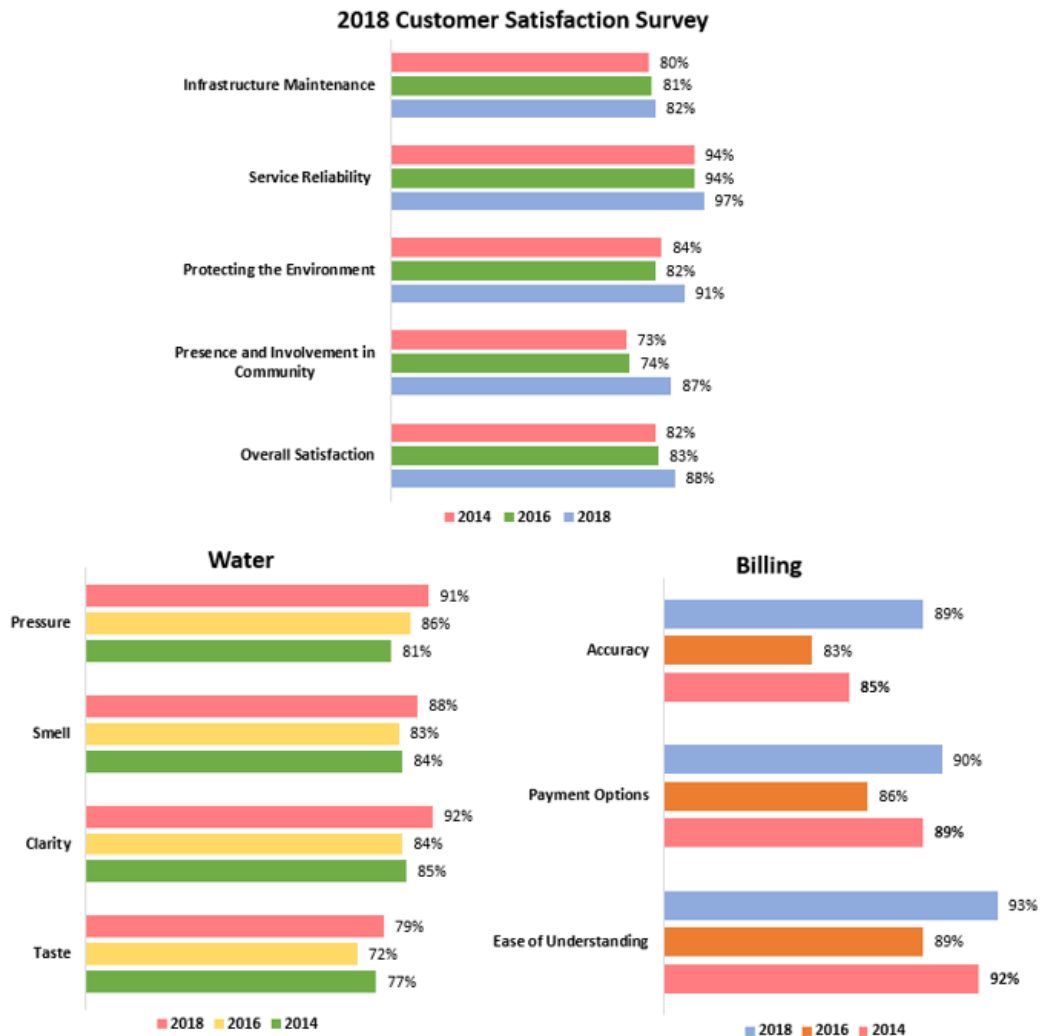


Strategies: 23 through 26

Service Level Goal		Key Performance Indicator (KPI)	Division	Target	Actual 2017 - 2018	Actual 2016 - 2017	Actual 2015 - 2016
PROVIDE EMPLOYEE DEVELOPMENT							
8	Provide effective employee training and development	% DC employees with required certifications (Apr)	DC	100% / Year	100%	96%	96%
		% SW employees with required certification (Apr)	SW	100% / Year	100%	100%	90%
		% WP employees with required licenses (Apr)	WP	100% / Year	100%	100%	100%
		% WR employees with required licenses (Apr)	WR	100% / Year	100%	100%	100%
9	Provide CCWA employee opportunity for advancement	% key position non-entry level positions filled within (Apr)	HR	> 80% / Year	79%	86%	85%
		% Supervisors with completed competency assessment (Apr)	HR	100% / Year	90%	100%	100%
STAKEHOLDER SUPPORT							
23	Environmental Stewardship and Sustainability	# low flow plumbing kits distributed	CS	> 1,000 / Year	827	1,056	1,022
		# SSOs to state waters	DC	< 40 / Year	44	30	40
		# toilet rebates	CS	> 400 / Year	240	284	352
		WR Carbon footprint status - Mton/yr. as CO2 (e) (Jan)	WR	Report	4.71	4.25	4.22
		Per capita water use in gpcd (Jan)	WP	< 90 gpcd	95	94	90
		% beneficial reuse of biosolids (Jan)	WR	100%	100%	100%	100%
24	Business opportunity development	# of CCWA Certified SLBE	PRO	> 56 (2014-15) > 100 (2015-16) > 115 (2017-18)	254	112	91
25	Timely/targeted customer communications	# new website visits	PIO	> 100,000 / Year	416,842	205,826	227,758
		# unique website hits	PIO	> 120,000 / Year	419,406	244,979	261,673
		# educational bill inserts issued (Apr)	PIO	> 7 / Year	10	11	12
		# positive media releases issued (Apr)	PIO	> 16 / Year	34	31	36
26	Promote Community Involvement & Pride	CCWA staff who have participated in community events (Apr)	PIO	> 75 / Year	102	128	223
		Community events CCWA staff have participated in (Apr)	PIO	> 25 / Year	44	41	54
		# residents reached through public education events (Apr)	PIO	> 8,000 / Year	11,796	10,572	13,868



Customer Service Survey



In 2014, partnered with Research America (formerly Metrix Matrix) to perform customer satisfaction survey. Our strategy is to perform a customer relationship survey every two years. Our recent survey was completed in September and October of 2018. From a random customer, Research America who surveyed 400 customers by phone. This number of customers should provide a statistically reliable result (+/-4.8% margin of error or 95% confidence level). The 2018 survey showed that 88 percent of our customers gave a satisfactory rating with regards to overall customer satisfaction. This is up from 83 percent in 2016 survey. The graphs above summarize the survey results.

Using the results from the survey we plan to:

- Review LOS and determine if we need to make any changes
- Continue participating in community events
- Continued exposure for Tap on the Go
- Continue with our overall strategy and projects that are focused on water quality
- With the Customer Information System project completion in the upcoming year, there will be some changes for customers which we hope will contribute to customer satisfaction



BUDGET DEVELOPMENT

The operating budget policy answers some basic questions that include how the budget is developed, who is involved in the budget process, what is included in the budget, if there is internal equity and if there is strategic direction.

The budget is developed in accordance with the priorities that are linked to the Authority's financial and strategic plans set forth by CCWA. These are found in the Authority's strategic master plans, the long-term financial plan, the needs of the community and federal and state laws. Current priorities developed in conjunction with service levels are established and included in each department's levels of service (LOS).

Board policy with respect to the Authority's budget are as follows:

- The budget should support the Authority's mission statement, strategic goals and critical priorities.
- The budget should be regarded as a business-operating plan.
- Balanced annual operating budgets are required for all funds. This means that total anticipated revenues and other financing sources must equal the total estimated expenditures and other financing uses.
- Rates and fees are evaluated and at the discretion of management and authorization by the Board, the authority establishes rate, fees and changes to make all payments required by the bond covenant, including the Authority's operating costs and to satisfy its debt service requirement (minimum 120% of debt service on its bond obligations).
- In the initial stages of the budget process, all departments are required to submit requests for new personnel or changes in the existing positions to Human Resources Department.
- Each Department manager attends the annual strategic planning retreat. As part of a group exercise, participants are charged with the responsibility of establishing goals and objectives, setting operating and capital priorities and determining the strategic direction of the Authority.
- All departments will share in the responsibility of meeting policy goals and ensuring long-term financial health.
- Departments must justify each of their budgetary requests for funding. This allows the budget process to weigh all competing requests for resources within expected financial restraints.
- Senior Management evaluates all of the information that has been provided by the various parties and prioritizes requests based on level of funding available.

Basis of Accounting

The accounting term "*measurement focus*" is used to denote what accountants attempt to **measure** and report in a particular statement. The term "*basis of accounting*" refers to that point in time when revenues and expenses are recognized in the accounts and reported in the financial statements and on budget reports. *Basis of accounting* relates to the **timing** of the measurements made, regardless of the particular measurement focus is being applied. Because of what is being measured and reported, the Authority uses one measurement focus and basis of accounting for its accounting records and a different one for its budget.

Accounting Records

The accounting policies utilized by the Authority in the preparation of its financial statements are in conformity with generally accepted accounting principles (GAAP) as applied to government units. The Governmental Accounting Standards Board (GASB) is the accepted standard-setting body for establishing governmental accounting and financial reporting principles.

With the Authority being operated as a business enterprise, the accounting records are maintained on the *accrual basis* of accounting. The measurement focus of the operating statement is on changes in economic resources (i.e.,



changes in total net assets). Such changes are recognized as soon as the underlying event or transaction has occurred, regardless of the timing of related cash flows (i.e., the accrual basis of accounting). For financial statement reporting purposes, all of the different segments of financial activities for the Authority's Water and Sewer Utility are aggregated together and reported as a single entity.

Budget

In preparing the budget and determining a suitable measurement focus, two major conceptual differences have to be taken into consideration. The first of those is the reporting requirements of the bond covenants or ordinances. Based on the purpose of the appropriation in the Water and Sewer Utility, the flow of funds from operations must be segregated into one of the three following funds or subsidiary budgets: Revenue Fund, Debt Service Funds or Renewal and Extension Funds.

As part of the budgetary structure, the basic unit of organization and operation within the Authority exists at the "fund" level. The Authority uses these funds to demonstrate legal compliance and to aid financial management by segregating transactions related to certain activities. In addition, since the user fees that we collect are associated with the provision of two different service classes, the Authority has to maintain *two separate enterprise funds*.

During the budget process, we are also concerned with balancing the amount of cash inflows and outflows. Accordingly, the Authority uses the *modified accrual basis* of accounting in preparing its budget. In this instance, the measurement focus is on changes in current financial, or expendable, resources to the extent that they normally are expected to impact near-term cash flows (i.e., the modified accrual basis of accounting). Under the modified accrual basis of accounting, revenues are recognized when susceptible to accrual (i.e., when they are "measurable and available"). "Measurable" means the amount of the transaction can be determined and "available" means collectible within the current period or soon enough thereafter to pay liabilities of the current period.

Budget Process

The budget process is yearlong with the planning for the next fiscal year beginning in September of the year before and ending with the adoption of the budget in April.

September through December: The *Budget Office* creates a calendar with deadlines for the budget in September, which is approved by the *General Manager*. Department managers determine need for new personnel and any changes required to existing positions. They also assess need for new or replacement of equipment, vehicles and capital projects that will begin in the next fiscal year.

In November, the Finance Department prepares a budget preparation package of material for every department. As all needed information is compiled, it is placed into each department's electronic folder. The *Budget Office* uses the current payroll information to calculate salary and benefits needed for the upcoming year. By the end of December, all necessary material and instructions needed by a department to complete its annual budget request is available for Managers to begin creating department budgets.

January: Managers begin building their budgets by reviewing historical spending patterns of operating budgets, fuel and utility rate changes and capital needs. Department Managers have approximately one month for the request preparation period and input into the financial software package. During this month, the *Finance Director* analyzes the historical and most recent revenue collection data. Based on the identified trends and certain economic assumptions, the revenue projections are prepared and sent to the *General Manager* for review. Once reviewed and any changes are made the *Budget Officer* then enters the proposed revenues into the financial software system.



February: All submittals are cataloged and balanced, and then these are given to *Executive Management, Finance Director and Budget Officer*. An administrative review is then conducted by the Financial Director and Budget Officer that includes; clarification of any items as needed, adjustments to submittals where historical spending warrants, incomplete or missing forms from Department Managers.

An onsite capital review is conducted for each department requesting the addition of new or replacement vehicles, capital equipment and projects. The *General Manager, Assistant General Managers, Finance Director and Budget Officer* meet with the respective *Department Managers*. Once *Executive Management* has reviewed all requests, a final budget meeting is scheduled with each department to discuss changes in requested funding. The Budget Office compiles changes and distributes information back to *Department Managers*.

March: All recommended budget information is compiled by the Finance Department and placed in a bound copy of the proposed budget document.

April: The *General Manager* presents a balanced budget to the *Board of Directors* for approval. During this presentation the Assistant General Managers, Department Managers, Finance Director and Budget Officer are all on hand to answer any questions the Board may have before adopting the proposed budget.



After the Board adopts the budget, the Finance Director completes the formal budget document. The final budget is submitted to the Government Finance Officers Association (GFOA) to determine if it meets the criteria for the Distinguished Budget Presentation award. The adopted budget is posted to the CCWA website.

August, November, February and June: After each quarter-end, the Budget Office prepares quarterly budget review workbooks for all departments and schedules budget reviews with each of the Department Managers, General Manager, Assistant General Managers and Finance Director to review budget to actual performance and distributes to Department Managers.

Monthly Board Meetings: The Finance Director prepares monthly budget to actual performance reports for the Water and Sewer Fund and the Stormwater Fund that is presented at each monthly board meeting.

Budget revisions can be made by department managers between object accounts within a budget unit. Revisions between business units, within a department, can be made with approval of the General Manager. All other changes are made with approval from the Board of Directors.

Budget Calendar

	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July
Strategic Planning:												
Department Managers Review Work Priorities	→											
Strategic Planning Retreat		→										
Work Priorities and Project Planning Workshops			→									
Work Priorities for Authority Scored and Ranked by All Department Managers				→								
Rate Analysis Performed based on Work Priorities for Next Year Budget					→							
Rate Increases Effective for current year budget						→						
Budget Development:												
Human Resources completes a Personnel and Compensation Review		→										
Capital Assessment for Equipment, Vehicle, and Technology Replacement					→							
Finance Director prepares revenue Forecast for upcoming year						→						
Department Managers prepare draft Operating and Capital Budgets based on Work Priorities						→						
Budget Office compiles draft Operating and Capital Budgets							→					
Department Managers present Operating and Capital Budget to General Manager's Office							→					
Finalize and Adopt:												
General Manager convenes budget review team and makes recommendations							→					
Budget Office compiles revisions and changes made								→				
Budget Office prepares Final Budget and Board of Director's Presentation								→				
Final Budget Presented to Board of Directors for Approval									→			
Budget Adoption										→		
Quarterly Budget Reviews with Department Managers			→			→			→			→



Rates and Charges

The Authority establishes a number of goals and objectives for the setting of retail water rates. A summary of the major goals and objectives include:

- Provide sufficient revenues for the operation, maintenance and repair of the systems consistent with good utility practice.
- Provide sufficient revenues to improve or maintain financial condition and bond ratings at or above levels equivalent to highly rated utilities.
- Meet requirements and covenants under all bond indentures.
- Set rates based on costs of service.
- Investigate and develop capacity fees for new development.
- Investigate and develop rate-based conservation incentives.
- Investigate and develop affordability programs for low-income customers.

Rate Objectives

A number of other rate objectives have been considered in developing rates. These objectives, together with other legal considerations, provide a basis for evaluating rate alternatives and selecting a preferred rate structure. The objectives include:

- **Conservation.** The rate structure should encourage customers to conserve water and to use water and sewer services in an environmentally sustainable manner.
- **Simplicity.** The rate structure should be easily communicated customers who should be able to use their knowledge of the rate structure to predict the amount of their water and sewer bill.
- **Stability.** The rate structure should provide a reliable revenue stream such that small changes in residential use patterns should not lead to large changes in revenues. Rate adjustments should be minimized year-to-year to avoid large changes.
- **Fairness.** The rate structure should ensure that all customer classes pay their fair share of costs. Cost of service is a basis for evaluating fairness.

Each April, CCWA undertakes an internal evaluation of its rates structure and customer metrics to ensure that each of these goals and objectives is achieved.

Monthly Service Charges

CCWA's rates include a base or monthly service charge applicable to all retail classes of service. The monthly service charge has two components, a fixed and a variable or volume-based charge. Certain costs such as meter reading and customer billing are equal for all customers and are included in the monthly service charge as fixed cost per account. Other costs such as meter maintenance and replacement are a function of meter size. While also fixed in type, these costs are included in the monthly service charge and are higher for larger metered accounts. Other costs are highly correlated to volume usage and are a part of the variable cost portion of the bill.

Stormwater Fees

Stormwater Fees for residential customers are a flat rate of \$3.75 per household. All non-residential customers are charged based on the square feet of impervious surface on the property. An impervious surface unit is calculated by total square feet of impervious surface divided by 2,950; that amount is then multiplied by \$3.75 to compute the fee assessed. Impervious surfaces are mainly artificial structures such as roads, sidewalks, driveways, parking lots and rooftops that are covered by impenetrable materials such as asphalt, concrete, brick or stone.



These materials, as well as highly compacted soil and gravel surfaces, prevent rainwater from soaking into the ground. This creates runoff that causes problems including flooding, water pollution and stream bank erosion.

Adopted Retail Water Rates

The summary of **Approved Retail Water Rates** reflects water rates per 1,000 gallons approved by the Board. The following rates are effective May 1, 2016 and have been taken into consideration for the current budget year, FY 2018 – 2019.

May 2016					
Description	Usage	Water		Sewer	
		Base Rate	Tier Rate	Base Rate	Tier Rate
Residential					
5/8" meter		\$10.05		\$10.73	
Tier 1	1k-3k		\$2.37		\$2.56
Tier 2	4k-7k		\$5.68		\$6.02
Tier 3	8k-20k		\$7.03		\$6.02
Tier 4	>20k		\$8.44		\$6.02
Commercial / Industrial					
5/8" meter		\$10.05		\$10.73	
3/4" meter		\$10.62		\$11.33	
1" meter		\$13.58		\$14.31	
1.5" meter		\$23.62		\$35.78	
2" meter		\$47.23		\$71.54	
3" meter		\$70.85		\$107.32	
4" meter		\$88.56		\$133.54	
6" meter		\$132.25		\$200.32	
8" meter		\$165.31		\$250.40	
10" meter		\$198.37		\$300.47	
Tiers for all commercial meter sizes					
Tier 1	1k-3k		\$3.25		\$3.58
Tier 2	>3k		\$5.68		\$6.02
Note: Tier 1 applies to 5/8", ¾", and 1" only					
Other					
Irrigation			\$8.44		
MFC/UFC			\$5.68		
2"		\$3.74			
4"		\$8.36			
6"		\$12.85			
8"		\$24.64			
10"		\$32.25			
12"		\$38.64			
16"		\$45.19			
Hydrant Meter		\$70.85	\$5.68		
Tier 1	0-30k		\$0.60		
Tier 2	31-60k		\$1.18		
Tier 3	> 60k		\$2.37		
Minimum			\$3.55		



OPERATING BUDGET



Operating Budget

The primary purpose of the **Operating Expenses** section is to provide the reader with detailed information about the expenses that are programmed for each department and budget unit. To provide the user with various levels of detail for their analysis, the information is first provided at the individual fund level. This aggregate expenditure data is then broken down and presented at the departmental level and then finally at the individual budget unit level. The data contained in this section identifies the amount of resources that are being allocated for specific purposes; gives a breakdown of expenses by object account; and provides some historical context for those amounts.

To help the reader place the appropriated amounts in the proper context, the major responsibilities and tasks being performed for each budget unit are described. For each budget unit, significant changes in appropriations and staffing levels are noted. Full-time equivalent information by personnel class is included to show staffing needs over time.

This section is organized by the Utility Fund. The Water and Sewer Fund has six primary divisions. Each division's section includes: (1) an Organizational Chart, (2) Summary of Staffing by business units within the division, (3) Major Objectives for each division and (4) Levels of Service (KPI's) for that division. A detailed staffing list by business unit follows each division's summary section. The Executive Division is presented with a separate summary for each of its individual business units.

Operating budgets are provided at the consolidated division level and then followed by individual business unit budgets.



Water and Sewer Fund



Clayton County Water Authority



**WATER & SEWER
FUND**



*"Providing **Quality**
Water and **Quality**
Services to Our
Community"*

**Department : All Departments - Consolidated****Business Unit : All Departments - Consolidated**

Budget Summary By Expenditure Class	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services	\$ 27,481,040	\$ 32,248,286	\$ 32,100,781
Operating Expenditures	28,167,398	36,701,102	40,620,012
Debt Service	-	641,478	660,723
Capital Outlay	1,224,984	2,892,335	3,509,843
Other Financing Uses	50,609,155	28,430,355	24,913,000
Total Appropriations	\$ 107,482,577	\$ 100,913,556	\$ 101,804,359

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 19,284,553	\$ 21,524,870	\$ 22,058,646
Overtime Pay	840,827	1,002,619	926,948
F.I.C.A.	1,482,555	1,700,335	1,682,526
Pension	2,731,470	3,060,182	3,144,938
Employee Benefits	3,141,635	4,960,280	4,287,723
Operating Expenditures:			
Operating Materials & Supplies	4,226,398	4,206,473	5,112,281
Vehicle Supplies	420,433	488,427	509,932
Administrative Supplies	231,272	310,284	344,846
Safety Supplies	74,344	90,687	104,430
Special Purchases	989,693	2,387,818	2,787,781
Utilities	7,436,882	7,774,532	7,999,530
Rentals	32,845	60,731	205,036
Maintenance and Repairs	1,052,120	1,354,350	1,560,243
Outside Services	7,561,038	12,160,580	14,374,500
Interest	173,932	936,171	299,426
Retiree Health Benefits	557,161	792,042	822,525
General Expenses	2,736,277	3,286,007	3,542,332
Accounting Charges	2,675,003	2,853,000	2,957,150
Debt Service:			
Capital Financing	-	641,478	660,723
Capital Outlay:			
Capital Expenditures	1,224,984	2,892,335	3,509,843
Other Financing Uses:			
Intrafund Transfers Out:	50,609,155	28,430,355	24,913,000
Total Appropriations	\$ 107,482,577	\$ 100,913,556	\$ 101,804,359



Department : All Departments - Consolidated

Business Unit : All Departments - Consolidated

Overview of Water and Sewer Utility Revenue Fund

The Clayton County Water Authority has developed and maintains a fund accounting system to ensure that the financial activities of the Water and Sewer Utility are properly recorded and reported.

The Revenue Fund serves as the principle operating fund of the Authority for the provision of water and sewer services to its customers.

The creation, maintenance and accounting methodologies of the Revenue Fund are required by the existing revenue bond ordinances.

The Authority is required to deposit all receipts from the operation of the water and sewer system, or from properties in connection therewith, into the Revenue Fund.

The Authority is permitted to use monies on deposit in the Revenue Fund to pay the reasonable and necessary costs of operating, maintaining and repairing the water and sewer system.

As a means of ensuring the availability of cash to meet immediate cash flow needs, the bond ordinances require that the Authority maintain a working capital reserve of \$500,000.

The new revenues remaining in the Revenue Fund after paying normal operating expenses and funding the working capital reserve are pledged under the bond resolutions to the payment of the debt service on the revenue bonds that have been issued.

The Authority has covenanted that it will establish, revise and maintain rates, fees and charges to the extent necessary that they generate funds sufficient at all times to (1) maintain and operate the system on a sound business like basis, (2) pay the required debt service amounts into the bond sinking fund, and (3) maintain a reserve for extensions and improvements to the system.

Functional Breakdown of Departments for Budgeting Purposes

Executive

Water Production

Program Management and Engineering

Distribution and Conveyance

Water Reclamation

General Services



Executive Division – Business Unit Group 100



Clayton County Water Authority



**EXECUTIVE
DIVISION**



*“Providing **Quality
Water and Quality
Services to Our
Community**”*



EXECUTIVE DIVISION BUDGET UNIT 100

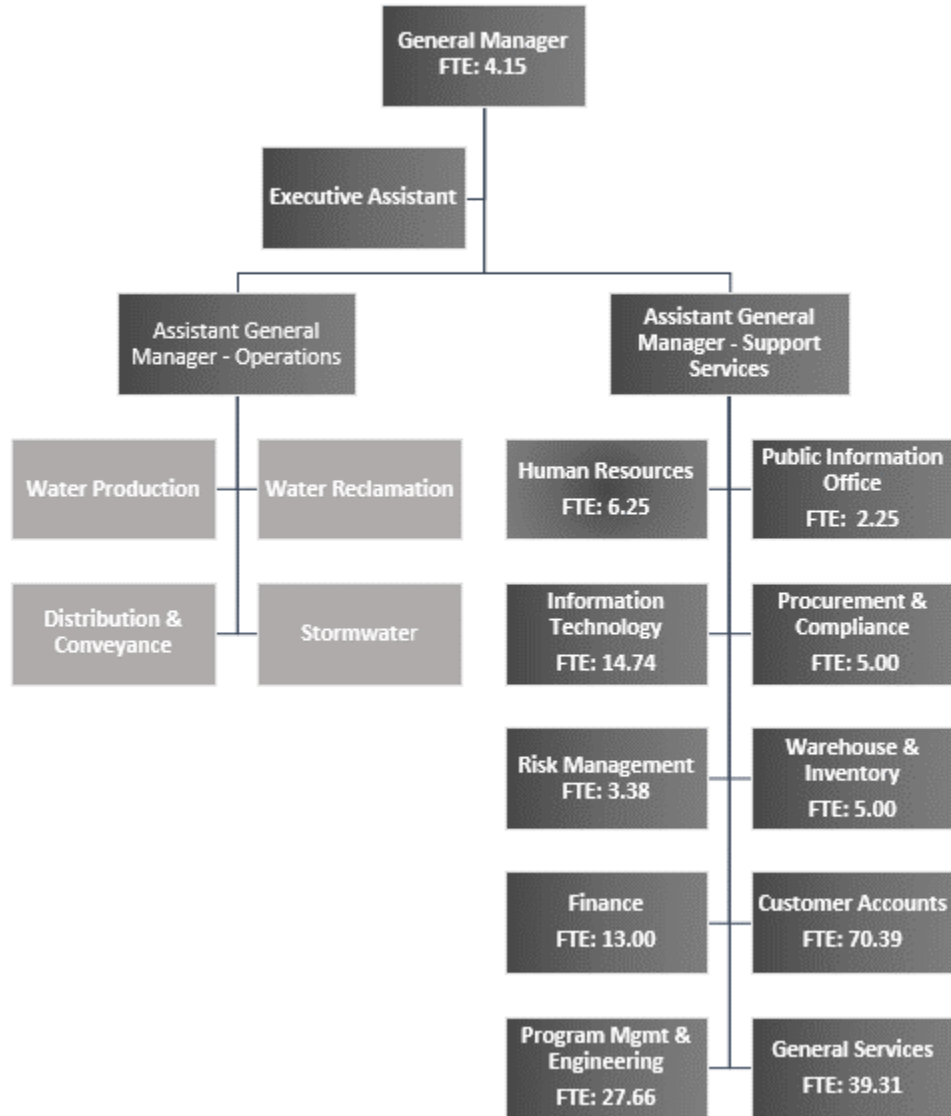
The Executive Department is composed of the typical oversight and administrative functions required in a service provider type of organization. The principal components include management, human resources, public relations, information technology, risk management, procurement, financial services and customer service.

The General Manager is responsible for the overall administration and direction of the Authority in keeping with the Board of Directors' policies and with federal and state laws, rules and regulations. The General Manager provides general direction to two Assistant General Managers (AGM). One Assistant General Manager is over support services and guides the Director of Human Resources, Finance, Information Technology, Risk Management, Procurement, Warehouse, Customer Accounts, Program Management and Engineering, the Public Information Office and General Services. A second Assistant General Manager is over Operations and guides the Managers of Water Production, Water Reclamation, Distribution and Conveyance and General Services. Directors and Managers are responsible for the day-to-day operations of their individual functions. To better manage operating expenses, the departments are broken down into specific programs, activities or functional areas of responsibility and are listed below.

101 – General Manager	130 – Customer Accounts Director
102 – Human Resources	131 – Meter Services
104 – Public Information Office	132 – Customer Accounting
105 – Board Members	135 – Customer Service
106 – Information Technology	136 – Community Use Room
109 – Procurement and Compliance	940 – Warehouse
110 – Finance	
115 – Risk Management	



Executive Division Organizational Chart





Executive Division Staffing

Authorized Personnel	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted	FY 2019-2020 Budgeted
Executive Division			
101 - General Manager	5.68	4.32	4.15
102 - Human Resources	6.23	6.23	6.25
104 - Public Relations	1.73	1.73	2.25
106 - Information Technology	14.74	14.74	14.74
109 - Procurement and Compliance	3.00	4.00	5.00
110 - Finance	13.00	13.34	13.00
115 - Risk Management	3.75	3.38	3.38
130 - Customer Accounts Director	3.00	3.00	3.00
131 - Meter Services	23.40	23.40	24.40
132 - Customer Accounting	7.60	7.60	7.00
135 - Customer Service	35.47	35.47	35.99
940 - Warehouse	6.00	5.00	5.00
Total Full-Time Employees (FTEs)	123.60	122.21	124.16



WE ♥ OUR
CUSTOMERS





Executive Division Consolidated Operating Budget

Department : Executive

Business Unit : Division 100 - Consolidated

Overview of Department Responsibilities

The primary responsibility of the Executive Division is to provide administrative and support services to the operating departments. Functional responsibilities include strategic management, human resources, customer service, information technology, fiscal and business services and public relations. This division helps assure that activities of the Authority are performed in accordance with federal and state laws which govern water distribution and wastewater collection systems and the various support responsibilities. This division also provide support services to the Stormwater Utility Fund. Tasks are generally undertaken based on the policies established by the Board of Directors and the priorities established by the General Manager.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 6,716,605	\$ 7,421,717	\$ 7,449,989
Overtime Pay	101,628	323,495	191,400
F.I.C.A.	499,226	569,946	560,964
Pension	1,009,529	1,109,804	1,142,533
Employee Benefits	1,142,598	1,708,216	1,481,002
Operating Expenditures:			
Operating Materials & Supplies	346,115	538,483	561,075
Vehicle Supplies	61,101	70,560	75,563
Administrative Supplies	171,655	230,697	255,310
Safety Supplies	14,738	28,085	40,385
Special Purchases	88,832	2,203,218	2,602,341
Utilities	399,909	443,893	514,905
Rentals	7,807	14,665	15,165
Maintenance and Repairs	32,097	59,882	67,132
Outside Services	1,857,117	3,386,612	5,622,865
Interest	173,932	936,171	299,426
Retiree Health Benefits	557,161	792,042	822,525
General Expenses	1,751,402	2,172,623	2,308,359
Accounting Charges	2,674,885	2,853,000	2,953,950
Debt Service:			
Capital Financing	-	641,478	660,723
Capital Outlay:			
Capital Expenditures	136,648	399,849	82,030
Other Financing Uses:			
Intrafund Transfers Out:	39,804,460	21,260,355	19,845,000
Total Appropriations	\$ 57,547,445	\$ 47,164,791	\$ 47,552,642

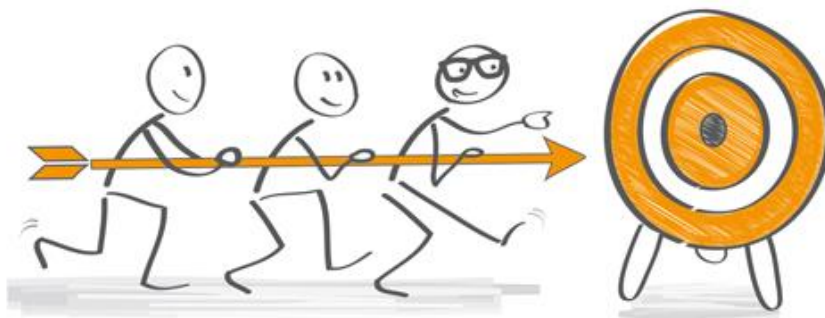


General Manager Staffing – Position Detail

Authorized Personnel	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted	FY 2019-2020 Budgeted
General Manager			
Assistant General Manager - Operations	1.00	1.00	1.00
Assistant General Manager - Support Svcs	1.00	1.00	1.00
Business Analyst	1.00	0.00	0.00
Executive Coordinator	1.00	1.00	1.00
General Manager	1.00	1.00	1.00
General Manager - Shadow	0.53	0.17	0.00
Plan/Policy Review Specialist	0.15	0.15	0.15
Total Number of Personnel (FTE's)	5.68	4.32	4.15

General Manager – Major Initiatives for FY 2019 – 2020

Business Unit	Budget Funding	Account Number	Amount Budgeted	Initiative
General Manager				
101	Operating	56110	\$ 275,000	Misc. Consulting For Executive Department
		56131	251,000	Misc. HQ Maintenance
		59104	150,000	Organizational National and Regional Water Memberships
Grand Total			\$ 676,000	





General Manager - Operating Budget

Department : ExecutiveBusiness Unit : (101) General ManagerMajor Business Unit Functions:

Serves in the Chief Executive Officer capacity for the Authority's operations. Implements policies established by the Board of Directors. Recommends improvements to management and control practices.

Significant Expenditure and Staffing Changes:

Other Materials & Supplies: increase due to supplies needed for 3 new executive team members.

Outside Services: increase due to maintenance and cleaning of the entire Headquarters building.

After meeting all budgetary needs, we are able to place \$2,599,216 into the **Special Purchases** category as a contingency fund to be used at the General Manager's discretion based upon Board approved policies.

Budget Detail By	FY 2017 - 18	FY 2018 - 19	FY 2019 - 20
<u>Individual Categories</u>	<u>Actual</u>	<u>Budgeted</u>	<u>Budgeted</u>
Personal Services:			
Salaries and Wages	\$ 549,156	\$ 717,956	\$ 550,766
Overtime Pay	-	400	400
F.I.C.A.	35,680	46,161	35,763
Pension	74,016	98,365	75,125
Employee Benefits	41,053	73,814	36,036
Operating Expenditures:			
Operating Materials & Supplies	3,712	4,220	15,800
Vehicle Supplies	848	2,600	2,750
Administrative Supplies	8,480	7,850	14,150
Safety Supplies	208	500	500
Special Purchases	671	2,080,418	2,599,316
Utilities	59,794	61,850	64,850
Rentals	-	1,515	1,515
Maintenance and Repairs	16,155	19,400	19,500
Outside Services	309,840	416,005	589,205
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	431,002	493,661	436,560
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	-	-	-
Other Financing Uses:			
Intrafund Transfers Out:	80,900	60,000	-
Total Appropriations	<u>\$ 1,611,515</u>	<u>\$ 4,084,715</u>	<u>\$ 4,442,236</u>



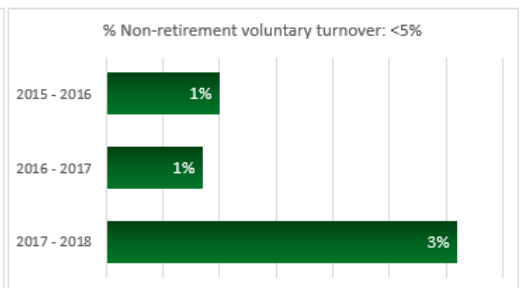
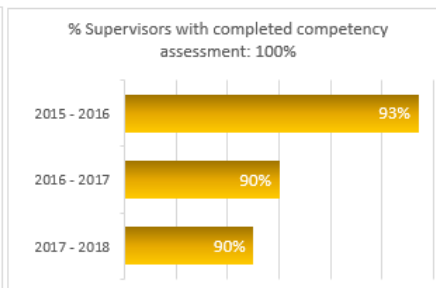
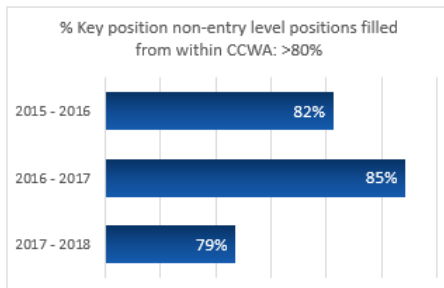
Human Resources Staffing – Position Detail

Authorized Personnel	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted	FY 2019-2020 Budgeted
Human Resources			
Compensation and Benefits Coordinator	1.00	1.00	1.00
Business Analyst: Human Resources	1.00	1.00	1.00
Human Resource Director	1.00	1.00	1.00
Human Resource Generalist	1.00	1.00	1.00
Human Resource High School Intern	0.23	0.23	0.25
Training and Development Coordinator	1.00	1.00	1.00
Training Specialist	1.00	1.00	1.00
Total Number of Personnel (FTE's)	6.23	6.23	6.25

Human Resources – Levels of Service

The Human Resources Department has three KPI metrics that are associated with the Authority's “**Provide Employee Development**” goal and strategies 9 and 10 to “*Provide CCWA employees the opportunity for advancement*” and “*Satisfaction with working environment, challenge and opportunities*”.

Service Level Goal	Key Performance Indicator (KPI)	n	Target	2017 - 2018	2016 - 2017	2015 - 2016
PROVIDE EMPLOYEE DEVELOPMENT						
9 Provide CCWA employee opportunity for advancement	% Key position non-entry level positions filled within	HR	> 80%	79%	85%	82%
	% Supervisors with completed competency assessment	HR	100%	90%	90%	93%
10 Satisfaction with working environment, challenge and opportunities	% Non-retirement voluntary turnover	HR	< 5% / Year	3%	1%	1%



Human Resources – Major Initiatives for FY 2019 – 2020

Human Resources					
102	Operating	50402	\$ 135,000	Pension Catchup	
		56101	30,000	Legal Fees	
		56110	50,000	Wellness Initiatives Monitoring and Coaching	
		59135	54,410	Internal Employee Training Programs	
Grand Total			\$ 269,410		



Human Resources - Operating Budget

Department : Executive**Business Unit : (102) Human Resources****Major Business Unit Functions:**

Provides administrative support to departments in the areas of recruitment, selection, development and retention of their employees. Administers a full range of employee benefits, life insurance, workers' compensation, deferred compensation, health insurance and disability plans. Oversees the in-house employee training programs. Maintains personnel files. Assists in policy development and compliance as it applies to providing a fair, equitable and productive work environment for CCWA employees.

Significant Expenditure and Staffing Changes:

Outside Services: increase represents funding for salary study along with wellness monitoring and coaching.

Retiree Health Benefits: represents funding for 10 additional retirees in the upcoming year.

General Expense: represents funding for in-house training and materials for leadership training .

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 523,361	\$ 532,769	\$ 568,934
Overtime Pay	2	3,000	-
F.I.C.A.	39,224	39,662	41,801
Pension	176,157	177,796	212,809
Employee Benefits	241,479	310,232	302,616
Operating Expenditures:			
Operating Materials & Supplies	8,084	32,223	5,000
Vehicle Supplies	-	-	-
Administrative Supplies	20,543	10,072	6,500
Safety Supplies	256	-	-
Special Purchases	(27)	120	120
Utilities	12,606	13,150	14,516
Rentals	450	3,650	3,650
Maintenance and Repairs	-	30	30
Outside Services	93,996	246,687	156,987
Interest	-	-	-
Retiree Health Benefits	557,161	792,042	822,525
General Expenses	109,577	116,388	135,610
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	-	-	-
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	\$ 1,782,869	\$ 2,277,821	\$ 2,271,098



Communications & Community Relations Staffing – Position Detail

Authorized Personnel	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted	FY 2019-2020 Budgeted
Communications and Community Relations			
Communications Intern	0.73	0.73	0.25
Communications Specialist	0.00	0.00	1.00
Public Information Officer	1.00	1.00	1.00
Total Number of Personnel (FTE's)	1.73	1.73	2.25

Communications & Community Relations – Major Initiatives for FY 2019 – 2020

Communications and Community Relations

104	Operating	56110	\$ 50,000	Website Functionality Enhancements
		56110	35,000	Communication Strategy Ph. 3 [SMP 108]
		56110	25,000	Organizational Change Management Training
		56199	9,100	Annual Community Report
		56199	2,500	Monthly hosting of website
		56199	5,000	Ad Design Work
		59110	27,200	Advertisements
Grand Total			\$ 153,800	

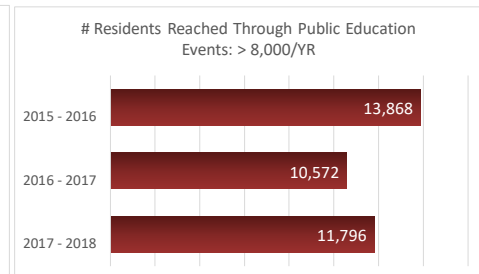
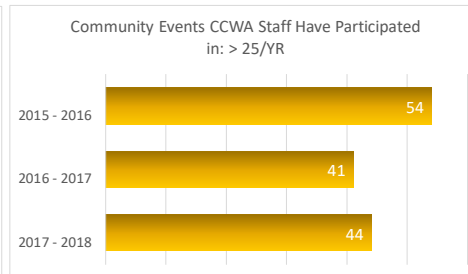
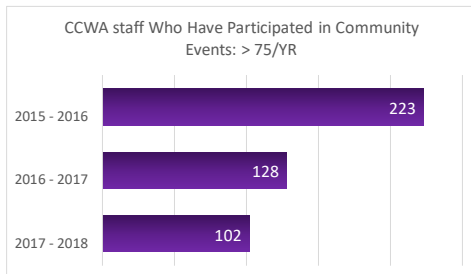
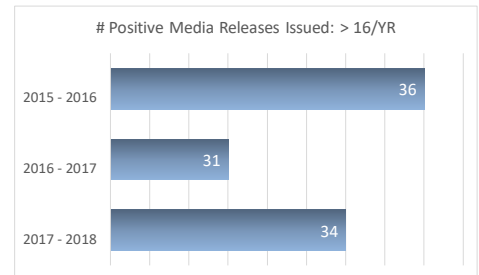
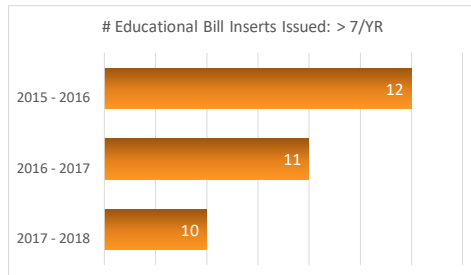
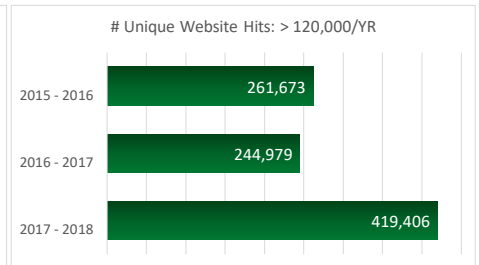
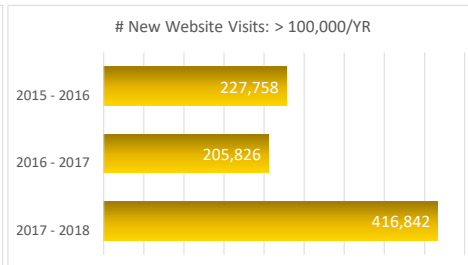
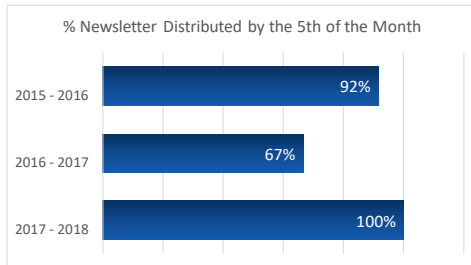




Communications & Community Relations – Levels of Service

The Communications & Community Relations has seven KPI metrics which are associated with the Authority's **"Provide Employee Development"** and **"Stakeholder Support"** goals and strategies 12, 25 and 26 to *"Distribute employee newsletter by the 3rd business day of the month," "Timely and targeted customer communications,"* and *"Promote community Involvement and Pride."* The department met all six of its KPI metrics for the previous two fiscal years

Service Level Goal	Key Performance Indicator (KPI)	Division	Target	2017 - 2018	2016 - 2017	2015 - 2016
PROVIDE EMPLOYEE DEVELOPMENT						
12 Timely/targeted employee communications	% Newsletter Distributed by the 5th of the Month	PIO	100%	100.0%	66.7%	91.7%
STAKEHOLDER SUPPORT						
25 Timely/targeted customer communications	# New Website Visits: > 100,000/YR	PIO	> 100,000 / Year	416,842	205,826	227,758
	# Unique Website Hits: > 120,000/YR	PIO	> 120,000 / Year	419,406	244,979	261,673
	# Educational Bill Inserts Issued: > 7/YR	PIO	> 7 / Year	10	11	12
	# Positive Media Releases Issued: > 16/YR	PIO	> 16 / Year	34	31	36
26 Promote Community Involvement & Pride	CCWA staff Who Have Participated in Community Events: > 75/YR	PIO	> 75 / Year	102	128	223
	Community Events CCWA Staff Have Participated in: > 25/YR	PIO	> 25 / Year	44	41	54
	# Residents Reached Through Public Education Events: > 8,000/YR	PIO	> 8,000 / Year	11,796	10,572	13,868





Communications & Community Relations - Operating Budget

Department : Executive**Business Unit : (104) Communications & Community Relations****Major Business Unit Functions:**

Coordinates internal and external communications. Prepares media releases and quarterly newsletters informing customers about significant activities. Responds to media inquiries and monitors coverage of Authority's activities in news media. Manages the CCWA website and coordinates community outreach/public education activities.

Significant Expenditure and Staffing Changes:

Personal Services: represents funding for a new Communications Specialist.

Operating Materials & Supplies: represents funding for public outreach supplies.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 101,713	\$ 110,854	\$ 143,082
Overtime Pay	-	-	1,000
F.I.C.A.	7,760	8,480	10,947
Pension	12,509	13,087	19,093
Employee Benefits	7,014	10,251	24,710
Operating Expenditures:			
Operating Materials & Supplies	22,133	30,000	36,205
Vehicle Supplies	-	-	-
Administrative Supplies	26,378	43,930	43,500
Safety Supplies	31	-	-
Special Purchases	-	-	105
Utilities	1,745	1,905	1,869
Rentals	1,010	-	-
Maintenance and Repairs	-	1,000	1,000
Outside Services	79,682	314,299	131,766
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	28,142	38,767	44,418
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	-	9,307	-
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	\$ 288,117	\$ 581,880	\$ 457,695



Board Members - Operating Budget

Department : Executive**Business Unit : (105) Board Members****Major Business Unit Functions:**

Develops policies that effectively provide and manage water, sewerage and stormwater services that protect the health, safety and welfare of CCWA's customers. Comply with the mandates of local, state and federal legislation or statutes which may require the Authority to provide certain services, or to provide enforcement or regulation of services provided for the benefit of the Authority's customers.

Significant Expenditure and Staffing Changes:

General Expenses: increase due to additional training with American Water Works Association and Water Environmental Federation.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 42,400	\$ 42,900	\$ 44,100
Overtime Pay	-	-	-
F.I.C.A.	3,244	3,282	3,374
Pension	-	-	-
Employee Benefits	2,534	106	105
Operating Expenditures:			
Operating Materials & Supplies	120	5,300	1,100
Vehicle Supplies	-	-	-
Administrative Supplies	21	300	400
Safety Supplies	-	-	-
Special Purchases	-	-	-
Utilities	3,472	3,650	3,950
Rentals	-	-	-
Maintenance and Repairs	-	-	-
Outside Services	18,743	14,100	24,100
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	26,286	38,296	61,605
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	-	-	-
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	\$ 96,820	\$ 107,934	\$ 138,734

*Note:

There are seven members of the Board of Directors who serve on a part-time basis.

The directors are appointed officials and thus not included as employed personnel.



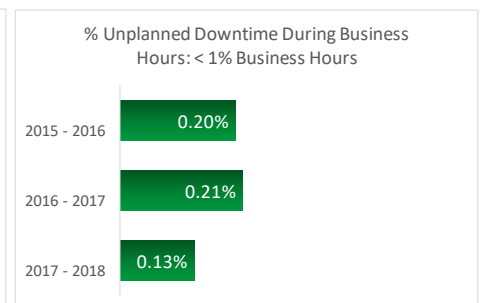
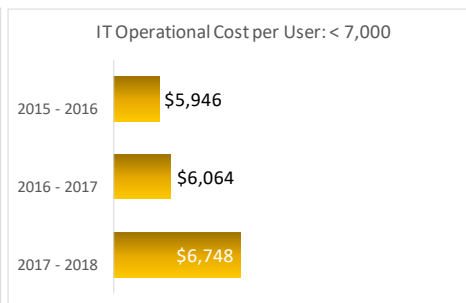
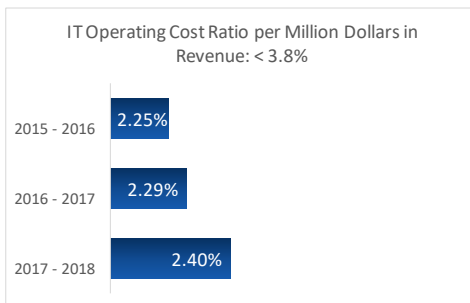
Information Technology Staffing – Position Detail

Authorized Personnel	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted	FY 2019-2020 Budgeted
Information Technology			
Communications Administrator	1.00	1.00	1.00
Desk Top Technician III	2.00	2.00	2.00
Director of IT	1.00	1.00	1.00
Document Mgt Administrator	1.00	1.00	1.00
Intern	0.74	0.74	0.50
Programmer Analyst	4.00	4.00	4.00
SCADA Systems Administrator	1.00	1.00	1.00
Systems Administrator	2.00	2.00	2.00
SQL Database Administrator	1.00	1.00	1.00
Technology & Operations Supervisor	1.00	1.00	1.00
Total Number of Personnel (FTE's)	14.74	14.74	14.50

Information Technology – Levels of Service

The Information Technology Department has three KPI metrics that are associated with the Authority's "**Optimize Operations**" goal and strategies 13 and 16 to "*IT operating cost ratio less than 3.8% per million dollars in revenue,*" "*Keep IT operational cost per user less than \$7,000,*" and "*To keep unplanned downtime during business hours under 1%.*"

Service Level Goal	Key Performance Indicator (KPI)	Division	Target	2017 - 2018	2016 - 2017	2015 - 2016
OPTIMIZE OPERATIONS						
13 Reasonable Cost of Service	IT Operating Cost Ratio per Million Dollars in Revenue: < 3.8%	IT	< 3.8%	2.4%	2.3%	2.2%
	IT Operational Cost per User: < 7,000	IT	< \$7,000	\$6,748	\$6,064	\$5,946
16 Maximize computer system availability	% Unplanned Downtime During Business Hours: < 1% Business Hours	IT	< 1% of Business Hours	0.1%	0.2%	0.2%





Information Technology – Major Initiatives for FY 2019 – 2020

Information Technology

106	Operating	51111	\$ 223,650	Annual Technology Replacement
		56110	125,000	JDE Related Consulting
		56110	200,000	Infrastructure Consulting
		56110	150,000	Other Apps. Consulting
		56130	264,000	Hardware Maintenance and Backup
		59122	1,090,440	Annual Software License
	Capital	59303	302,000	Software, System, Network and Infrastructure Improvements
		59983	30,000	Additional Windows and VMware Software
Grand Total		\$ 2,385,090		





Information Technology - Operating Budget

Department : Executive**Business Unit : (106) Information Technology****Major Business Unit Functions:**

Provides technology support and application support for the various functions and activities of the Authority. Evaluate existing and changing technologies to determine if and how they can be leveraged to support and enhance the business strategies of the Authority. Provides technical and operational support for the telephone system.

Significant Expenditure and Staffing Changes:

Outside Services: increase is Emerson/Liebert hardware Equipment Maintenance.

General Expenses: increase represents additional funding for new software that came onboard during the last fiscal year.

Intrafund Transfers Out: represents funds being transferred to the Renewal and Extension Fund for DR storage replacement, Blade Server, Network Equipment Upgrade, San Switch Consoles, SCADA Host Refresh, Automated Testing Software, and Hyperconverged Pilot.

Capital Expenditures: represents funding for additional Windows and Vmware Software.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 1,085,482	\$ 1,134,695	\$ 1,176,536
Overtime Pay	25,638	25,000	25,000
F.I.C.A.	82,430	87,510	88,272
Pension	146,007	156,135	160,994
Employee Benefits	125,497	175,451	151,149
Operating Expenditures:			
Operating Materials & Supplies	130,864	198,835	231,150
Vehicle Supplies	-	-	750
Administrative Supplies	9,559	11,500	10,500
Safety Supplies	3	100	100
Special Purchases	60	300	300
Utilities	213,604	214,800	259,800
Rentals	-	-	-
Maintenance and Repairs	-	3,000	3,150
Outside Services	522,197	764,700	775,300
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	799,652	952,932	1,174,979
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	42,058	318,000	30,000
Other Financing Uses:			
Intrafund Transfers Out:	702,900	96,000	302,000
Total Appropriations	\$ 3,885,951	\$ 4,138,958	\$ 4,389,980



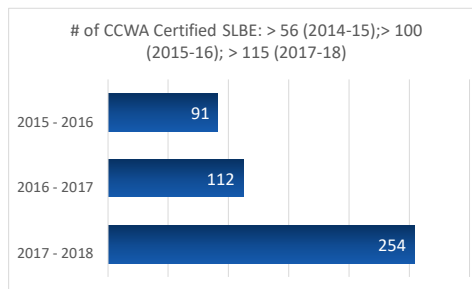
Procurement and Compliance Staffing – Position Detail

Authorized Personnel	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted	FY 2019-2020 Budgeted
Procurement and Compliance			
Procurement Compliance Coordinator	1.00	1.00	1.00
Procurement & Contract Specialist	2.00	2.00	2.00
Purchasing Coordinator	0.00	0.00	1.00
Business Analyst: Procurement	0.00	1.00	1.00
Total Number of Personnel (FTE's)	3.00	4.00	5.00

Procurement and Compliance – Levels of Service

The Procurement Department has one KPI metric that is associated with the Authority's "Stakeholder Support" goals. This metric includes strategy 24 to "Certify at least 115 small local businesses per year."

Service Level Goal	Key Performance Indicator (KPI)	Division	Target	2017 - 2018	2016 - 2017	2015 - 2016
STAKEHOLDER SUPPORT						
24 Business opportunity development	# of CCWA Certified SLBE: > 56 (2014-15); > 100 (2015-16); > 115 (2017-18)	PRO	> 56 (2014-15) > 100 (2015-16) > 115 (2017-18)	254	112	91



Procurement and Compliance – Major Initiatives for FY 2019 - 2020

Business Unit	Budget Funding	Account Number	Amount Budgeted	Initiative
Procurement and Compliance				
109	Operating	56101	\$ 25,000	Legal Fees: SLBE Program Assistance, Contract and Procurement
		56110	5,000	SLBE Workshops and Expo Presenter Fees
		56199	30,000	SLBE Marketing
Grand Total			\$ 60,000	



Procurement and Compliance – Operating Budget

Department : Executive**Business Unit : (109) Procurement and Compliance****Major Business Unit Functions:**

Monitor and coordinate the CCWA-wide bidding and contracting activities including Small Local Business Enterprise Program, contract administration and contract compliance.

Significant Expenditure and Staffing Changes:

Personal Services: decrease represents moving a Safety and Compliance Officer, Security Officer, Patrol Officer, and Risk Manager from business unit 109 to business unit 115.

Outside Services: decrease represents moving funds from business unit 109 to 115 legal fees and annual fees for security monitoring.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 378,878	\$ 545,443	\$ 309,917
Overtime Pay	555	7,000	1,000
F.I.C.A.	27,719	42,214	23,174
Pension	48,683	71,365	42,106
Employee Benefits	43,327	95,536	80,423
Operating Expenditures:			
Operating Materials & Supplies	489	12,260	4,700
Vehicle Supplies	-	3,250	-
Administrative Supplies	18,262	9,160	11,160
Safety Supplies	12,067	24,450	-
Special Purchases	73	140	100
Utilities	3,850	5,000	2,600
Rentals	250	3,500	4,000
Maintenance and Repairs	-	-	-
Outside Services	62,347	519,450	56,800
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	14,290	64,304	27,835
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	-	-	-
Other Financing Uses:			
Intrafund Transfers Out:	700,000	-	-
Total Appropriations	<u>\$ 1,310,790</u>	<u>\$ 1,403,072</u>	<u>\$ 563,815</u>



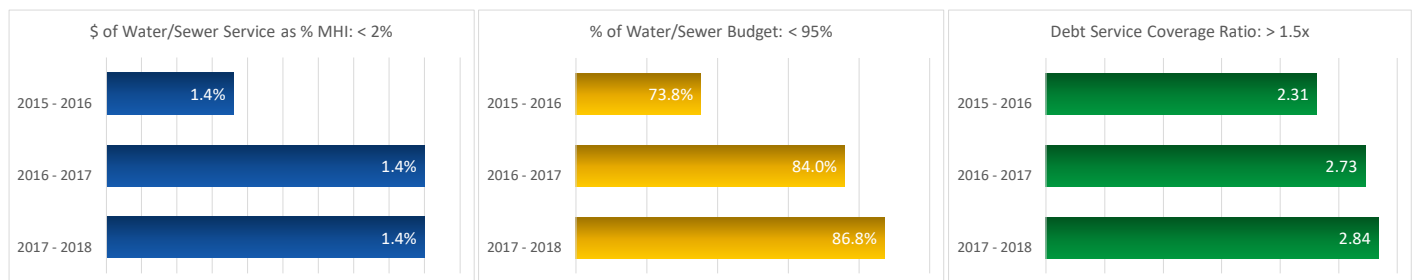
Finance Staffing – Position Detail

Authorized Personnel	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted	FY 2019-2020 Budgeted
Finance			
Accounting Supervisor	1.00	1.00	1.00
Accounts Payable Analyst	2.00	2.00	2.00
Budget Officer	1.00	1.00	1.00
Budget Officer - Shadow	0.00	0.34	0.00
Capital Asset Accountant	2.00	2.00	2.00
ERP Coordinator	1.00	1.00	1.00
Finance Assistant	1.00	1.00	1.00
Finance Director	1.00	1.00	1.00
Financial Analyst	1.00	1.00	1.00
Payroll Accountant	1.00	1.00	1.00
Revenue Fund Accountant	1.00	1.00	1.00
Special Funds Accountant	1.00	1.00	1.00
Total Number of Personnel (FTE's)	13.00	13.34	13.00

Finance – Levels of Service

The Finance Department has three KPI metrics which are associated with the Authority's "**Optimize Operations**" and "**Ensure Financial Viability**" goals and strategies 13, 17 and 18 to "Maintain a reasonable cost of service using the County's median household income (MHI)," "Develop an annual budget that can be sustained," and "Provide financing for the Authority's investment in its capital projects." The department met all three of its KPI metrics for the previous three fiscal years.

Service Level Goal	Key Performance Indicator (KPI)	Division	Target	2017 - 2018	2016 - 2017	2015 - 2016
OPTIMIZE OPERATIONS						
13 Reasonable Cost of Service	\$ of Water/Sewer Service as % MHI: < 2%	FIN	< 2%	1.4%	1.4%	1.4%
ENSURE FINANCIAL VIABILITY						
17 Develop a Sustainable Annual Budget	% of Water/Sewer Budget: < 95%	FIN	< 95%	87%	84%	74%
18 Provide financing for the "Pay-As-You-Go" capital plan	Debt Service Coverage Ratio: > 1.5x	FIN	> 1.5x	2.8	2.7	2.3





Finance – Major Initiatives for FY 2019 – 2020

Business Unit	Budget Funding	Account Number	Amount Budgeted	Initiative
Finance				
110	Operating	56102	\$ 55,256	Audit Fees: Annual and Single Audit
		56105	45,000	JDE Consulting Assistance for Process Changes
		56110	100,000	Fixed Asset Cleanup and Linear Asset Conversion
		56110	5,000	Arbitrage Compliance
	Financing	57106	299,426	Outfalls : Construction interest on \$25m for 12 months (GEFA)
	Capital	59991	25,000	New Desk (4)
Grand Total			\$ 529,682	





Finance – Operating Budget

Department : ExecutiveBusiness Unit : (110) FinanceMajor Business Unit Functions:

Oversees the finances of the Authority. Maintains the accounting records and prepares financial statements. Assists with the preparation and monitoring of the operating and capital budgets. Performs accounts payable function and prepares checks to satisfy outstanding obligations.

Significant Expenditure and Staffing Changes:

Outside Services: increase represents Resources for Fixed Asset Cleanup in JDE as part of SAMP and Linear Asset Conversion.

Capital Expenditures: represent the purchase of new desk for the General Accounting Department.

Intrafund Transfers Out: represents Debt Service payments.

<u>Budget Detail By Individual Categories</u>	<u>FY 2017 - 18 Actual</u>	<u>FY 2018 - 19 Budgeted</u>	<u>FY 2019 - 20 Budgeted</u>
Personal Services:			
Salaries and Wages	\$ 840,403	\$ 900,081	\$ 888,631
Overtime Pay	3,464	144,595	5,000
F.I.C.A.	62,626	69,047	68,363
Pension	116,786	125,114	123,519
Employee Benefits	114,892	172,622	125,074
Operating Expenditures:			
Operating Materials & Supplies	2,394	2,190	2,995
Vehicle Supplies	116	510	250
Administrative Supplies	13,272	20,100	15,100
Safety Supplies	-	35	35
Special Purchases	(266)	260	260
Utilities	16,091	17,015	19,369
Rentals	-	-	-
Maintenance and Repairs	98	175	175
Outside Services	68,348	189,650	273,766
Interest	173,932	936,171	299,426
Retiree Health Benefits	-	-	-
General Expenses	282,400	189,324	172,635
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	641,478	660,723
Capital Outlay:			
Capital Expenditures	10,890	-	25,000
Other Financing Uses:			
Intrafund Transfers Out:	38,244,216	21,074,355	19,282,400
Total Appropriations	<u>\$ 39,949,662</u>	<u>\$ 24,482,722</u>	<u>\$ 21,962,721</u>



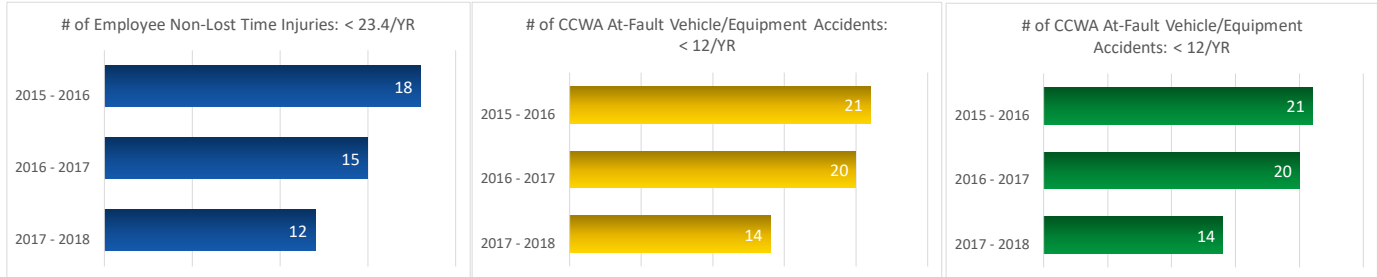
Risk Management Staffing – Position Detail

Authorized Personnel	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted	FY 2019-2020 Budgeted
Risk Management			
Patrol Officer	1.00	1.00	1.00
Risk Manager	1.00	1.00	1.00
Safety & Compliance Officer	1.00	1.00	1.00
Security Guards	0.75	0.38	0.50
Total Number of Personnel (FTE's)	3.75	3.38	3.50

Risk Management – Levels of Service

The Risk Management Office has three KPI metrics that are associated with the Authority's **"Provide Employee Development"** goals. These metrics are included in strategy 11 to **"Limit the number of employee *non-lost* time injuries to less than 23.4 per year," "Limit the number of employee *lost* time injuries to less than 11.2 per year," and "Limit the number of CCWA at-fault accidents under 12 per year."**

Service Level Goal	Key Performance Indicator (KPI)	Division	Target	2017 - 2018	2016 - 2017	2015 - 2016
PROVIDE EMPLOYEE DEVELOPMENT						
	# of Employee Non-Lost Time Injuries: < 23.4/YR	RM	< 23.4 / Year	12	15	18
11 Manage safety to minimize accidents	# Employee Lost Time Injuries: < 11.2/YR	RM	< 11.2 / Year	3	8	10
	# of CCWA At-Fault Vehicle/Equipment Accidents: < 12/YR	RM	< 12 / Year	14	20	21



Risk Management – Major Initiatives of FY 2019 - 2020

Business Unit	Budget Funding	Account Number	Amount Budgeted	Initiative
Risk Management				
115	Operating	56101	\$ 1,030,000	Legal Fees
		56110	10,000	Active Shooter Preparation
		56110	20,000	SMS P3 Consulting
		56110	50,000	Industrial Health & Hygiene Programs
		56110	5,000	Safety Presenter Fees
		56156	667,132	Security System Maintenance and Monitoring
		56199	50,000	Graphic Art for Safety Logo and Marketing Videos
	Capital	59303	200,000	Security Management System Phase 3
Grand Total			\$ 2,032,132	



Risk Management – Operating Budget

Department : Executive**Business Unit : (115) Risk Management****Major Business Unit Functions:**

Monitor and coordinate the Property and Insurance Program. Risk management assessment activities both internal and external. Lead the CCWA safety committee and all related safety and security activities for various departments and organization.

Significant Expenditure and Staffing Changes:

Personal Services: represent three full-time positions and one part-time position. Safety and Compliance Officer, Security Officer, Patrol Officer, and Risk Manager from business unit 109 to business unit 115.

Intrafund Transfers Out: represents Security Management System Phase 3.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ -	\$ -	\$ 299,834
Overtime Pay	-	-	-
F.I.C.A.	-	-	22,246
Pension	-	-	39,451
Employee Benefits	-	-	31,983
Operating Expenditures:			
Operating Materials & Supplies	-	-	7,785
Vehicle Supplies	-	-	3,250
Administrative Supplies	-	-	4,000
Safety Supplies	-	-	36,000
Special Purchases	-	-	60
Utilities	-	-	2,900
Rentals	-	-	-
Maintenance and Repairs	-	-	-
Outside Services	-	-	1,867,427
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	-	-	119,344
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	-	-	-
Other Financing Uses:			
Intrafund Transfers Out:	-	-	200,000
Total Appropriations	\$ -	\$ -	\$ 2,634,280



Customer Account Services Staffing – Position Detail

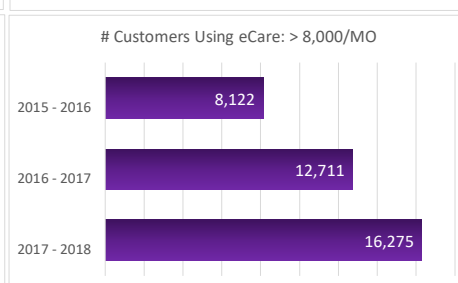
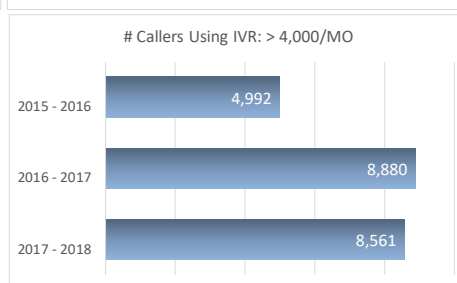
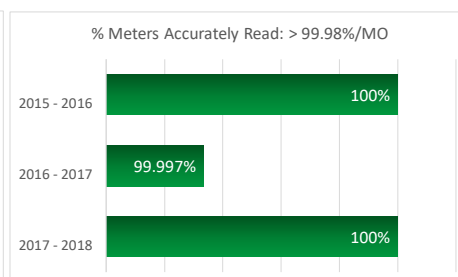
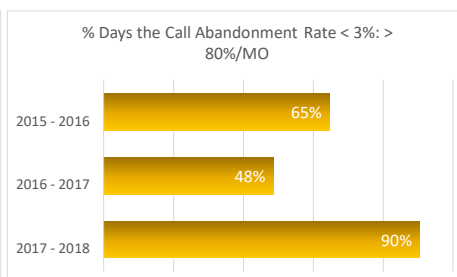
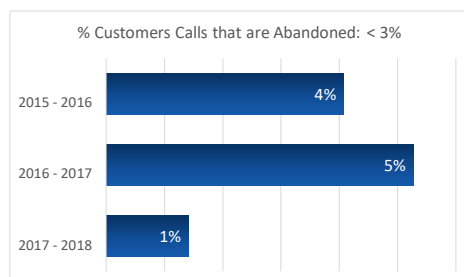
Authorized Personnel	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted	FY 2019-2020 Budgeted
Customer Accounts Director			
Business Applications Administrator	1.00	0.00	0.00
Business Analyst: Customer Accounts	0.00	1.00	1.00
Customer Accounts Director	1.00	1.00	1.00
Office Assistant	1.00	1.00	1.00
Total Number of Personnel (FTE's)	3.00	3.00	3.00
Meter Services			
Account Service Representative	10.00	10.00	10.00
Account Service Representative Lead	1.00	1.00	1.00
Account Services Supervisor	1.00	1.00	1.00
Account Specialist	1.00	1.00	1.00
AMR Install Tech	0.40	0.40	0.40
Data Entry Clerk	1.00	0.00	0.00
Meter Services General Foreman	1.00	1.00	1.00
Meter Services Supervisor	1.00	1.00	1.00
Meter Services Installation Tech	0.00	0.00	1.00
Meter Services Tech	7.00	7.00	7.00
Office Assistant	0.00	1.00	1.00
Total Number of Personnel (FTE's)	23.40	23.40	24.40
Customer Accounting			
Accounts Receivable Analyst	2.00	2.00	2.00
Accounts Receivable Supervisor	1.00	1.00	1.00
Cash Application Specialist I	3.00	3.00	3.00
Cash Application Specialist II	0.60	0.60	0.00
Sr. Accounts Receivable Analyst	1.00	1.00	1.00
Total Number of Personnel (FTE's)	7.60	7.60	7.00
Customer Service			
Account Analyst	1.00	1.00	1.00
Call Center Supervisor	1.00	1.00	1.00
Collections Specialist	2.00	2.00	2.00
CSR - Call Center	8.00	8.00	6.50
Customer Account Specialist	2.00	2.00	2.00
Customer Service Coordinator	1.00	1.00	1.00
Customer Service Representative	2.00	2.00	2.00
Customer Service Specialist	7.00	7.00	7.00
Customer Service Supervisor	1.00	1.00	1.00
Customer Service Support Operator	1.00	1.00	1.00
Customer Service Support Specialist	1.00	1.00	1.00
Customer Service Training Specialist	1.00	1.00	1.00
HS Intern - Temp	0.23	0.23	0.25
Lead Customer Service Representative	1.00	1.00	1.00
Shadow - Customer Service	0.24	0.24	0.24
Sr. CSR - Call Center	4.00	4.00	6.00
Sr. Customer Service Specialist	1.00	1.00	1.00
Team Lead - Call Center	1.00	1.00	1.00
Total Number of Personnel (FTE's)	35.47	35.47	35.99
Total Customer Accounts Personnel (FTE's)	69.47	69.47	70.39

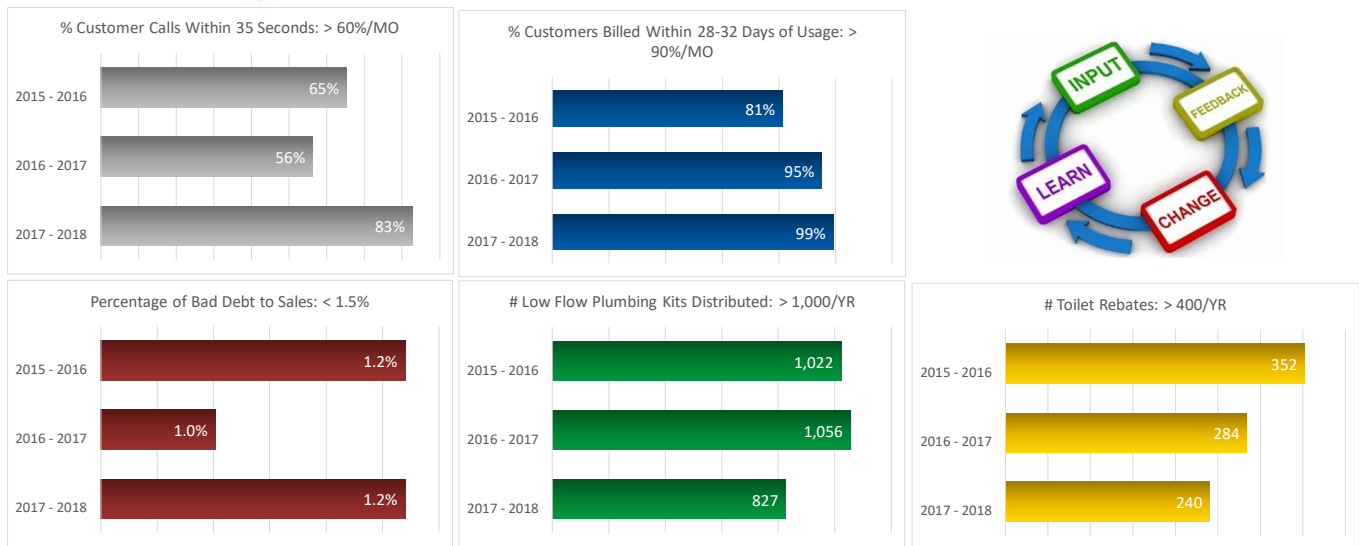


Customer Accounts Services – Levels of Service

The Customer Accounts Department has ten KPI metrics which are associated with the Authority's **"Exceed Customer Expectations," "Ensure Financial Viability"** and **"Stakeholder Support"** goals and strategies 4, 19 and 23 to *"Improve CCWA customer experience," "Maximize revenue collection vs. bad debt write-offs"* and *"Environmental Stewardship and Sustainability"*. The department's performance on these metrics is captured in the table that follows.

Service Level Goal	Key Performance Indicator (KPI)	Division	Target	2017 - 2018	2016 - 2017	2015 - 2016
EXCEED CUSTOMER EXPECTATIONS						
4 Improve customer experience	% Customers Calls that are Abandoned: < 3%	CS	< 3% / Month	1%	5%	4%
	% Days the Call Abandonment Rate < 3%: > 80%/MO	CS	> 80% / Month	90%	48%	65%
	% Meters Accurately Read: > 99.98%/MO	CS	> 99.98% / Month	100.00%	99.997%	100.00%
	# Callers Using IVR: > 4,000/MO	CS	> 4,000 /Month	8,561	8,880	4,992
	# Customers Using eCare: > 8,000/MO	CS	> 8,000/Month	16,275	12,711	8,122
	% Customer Calls Within 35 Seconds: > 60%/MO	CS	> 60% / Month	83%	56%	65%
	% Customers Billed Within 28-32 Days of Usage: > 90%/MO	CS	> 90% / Month	99%	95%	81%
ENSURE FINANCIAL VIABILITY						
19 Maximize revenue collection vs. bad debt write-offs	Percentage of Bad Debt to Sales: < 1.5%	CS	< 1.5%	1.2%	1.0%	1.2%
STAKEHOLDER SUPPORT						
23 Environmental Stewardship and Sustainability	# Low Flow Plumbing Kits Distributed: > 1,000/YR	CS	> 1,000 / Year	827	1,056	1,022
	# Toilet Rebates: > 400/YR	CS	> 400 / Year	240	284	352





Customer Accounts Services – Major Initiatives for FY 2019 - 2010

Business Unit	Budget Funding	Account Number	Amount Budgeted	Initiative
Customer Accounts Director				
130	Operating	56105	\$ 10,000	Cash Cycle (CIS Implementation Enhancements)
		56105	20,000	Cisco Enhancement Reports
		56110	70,000	Valor Analytics
		56110	30,000	Customer Survey Process
		56110	100,000	Post Go Live Consulting for CIS
Grand Total		\$ 230,000		
Meter Services				
131	Operating	51104	\$ 154,710	Backflow Cartridges Change Out
		55106	20,000	Private Property Damage
	Capital	59303	21,800	Outdoor Break Area
		59953	27,030	F-150 Pickup
Grand Total		\$ 223,540		
Customer Accounting				
132	Operating	56110	\$ 20,000	Module or Process Changes for Northstar, CCS, or Profit Stars Inc.
Grand Total		\$ 20,000		
Customer Service				
135	Operating	56101	\$ 7,000	CCCS Hardship Assistance
		56101	10,000	Legal Fees
		56199	33,000	Process changes
	Capital	59303	20,000	Forest Park Breakroom Remodel
			12,000	Forest Park Drive-Thru Renovations
			6,800	Call Center Furniture
Grand Total		\$ 88,800		



Customer Accounts Services – Operating Budgets
BUSINESS UNIT 130: CUSTOMER ACCOUNTS DIRECTOR

Department : Executive

Business Unit : (130) Customer Accounts Director

Major Business Unit Functions:

Directs, manages and controls the operations of the Customer Service, Customer Accounting and Meter Services functions.

Significant Expenditure and Staffing Changes:

Outside Services: increase represents funding for miscellaneous consulting associated with post go live needs for CIS.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 262,058	\$ 270,991	\$ 229,348
Overtime Pay	163	3,000	3,000
F.I.C.A.	19,178	20,354	17,774
Pension	35,717	37,667	31,879
Employee Benefits	28,241	36,584	36,049
Operating Expenditures:			
Operating Materials & Supplies	3,131	1,000	1,000
Vehicle Supplies	-	-	-
Administrative Supplies	1,730	13,000	10,500
Safety Supplies	-	250	250
Special Purchases	500	500	500
Utilities	12,769	15,000	8,750
Rentals	-	-	-
Maintenance and Repairs	740	1,000	1,000
Outside Services	42,532	139,000	237,000
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	5,855	182,470	29,177
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	-	-	-
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	\$ 412,614	\$ 720,816	\$ 606,227



BUSINESS UNIT 131: METER SERVICES

Department : ExecutiveBusiness Unit : (131) Meter ServicesMajor Business Unit Functions:

This business unit is responsible for reading all the Authority's 85,423 meters each month. Currently these meters are being read electronically using a drive-by radio reading system. Meter Services responsibilities include disconnecting services for accounts in a past due status, reconnecting services after payments are collected, investigating high bill customer concerns and meeting with the customer when necessary. Other responsibilities include updating and maintaining the electronic register on each meter. Meter Services coordinates heavily with the Customer Accounting and Customer Service Sections.

Significant Expenditure and Staffing Changes:

Operating Materials and Supplies: represents funding for backflow cartridge replacements.

Capital Expenditures: represents the scheduled replacement of one pick up truck.

Intrafund Transfers Out: represents funds being transferred to the Renewal and Extension Fund for an outdoor break area.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 990,467	\$ 1,062,689	\$ 1,134,430
Overtime Pay	25,538	40,000	50,000
F.I.C.A.	74,362	84,351	86,784
Pension	135,768	145,537	153,843
Employee Benefits	193,316	291,203	240,944
Operating Expenditures:			
Operating Materials & Supplies	168,335	228,880	242,455
Vehicle Supplies	59,357	62,950	66,110
Administrative Supplies	8,654	10,450	6,165
Safety Supplies	2,070	2,000	2,000
Special Purchases	480	480	480
Utilities	22,940	30,200	37,500
Rentals	-	-	-
Maintenance and Repairs	11,491	27,500	29,500
Outside Services	7,968	31,400	44,300
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	12,226	57,599	59,702
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	77,015	57,542	27,030
Other Financing Uses:			
Intrafund Transfers Out:	-	30,000	21,800
Total Appropriations	\$ 1,789,987	\$ 2,162,781	\$ 2,203,043



BUSINESS UNIT 132: CUSTOMER ACCOUNTING

Department : Executive**Business Unit : (132) Customer Accounting****Major Business Unit Functions:**

Customer Accounting is responsible for preparation and delivery of all water, sewer and stormwater bills each month. Other responsibilities include preparing and posting adjustments to accounts, processing and posting electronic payments, monitoring of controls for the transfer of balances to the general ledger and maintenance of the customer deposit file.

Significant Expenditure and Staffing Changes:

Administrative Supplies: increase represents a 5% increase on postage along with an increase for Cayenta collection letter process.

Accounting Charges: represents and increase for Credit Card Convenience Fees.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 319,788	\$ 364,801	\$ 351,602
Overtime Pay	2,592	10,000	15,500
F.I.C.A.	23,545	28,672	27,815
Pension	44,251	50,708	48,872
Employee Benefits	54,552	98,337	68,378
Operating Expenditures:			
Operating Materials & Supplies	916	-	-
Vehicle Supplies	-	-	-
Administrative Supplies	29,702	36,435	50,435
Safety Supplies	-	-	-
Special Purchases	-	200	200
Utilities	4,195	3,945	3,945
Rentals	6,097	6,000	5,000
Maintenance and Repairs	3	580	580
Outside Services	514,698	522,550	566,550
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	6,817	10,053	14,142
Accounting Charges	2,674,885	2,853,000	2,953,000
Debt Service:	-	-	-
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	-	15,000	-
Other Financing Uses:			
Intrafund Transfers Out:	30,000	-	-
Total Appropriations	\$ 3,712,041	\$ 4,000,281	\$ 4,106,019



BUSINESS UNIT 135: CUSTOMER SERVICE

Department : ExecutiveBusiness Unit : (135) Customer ServiceMajor Business Unit Functions:

This business unit is responsible for creating a positive customer experience for CCWA customers. Sections in this business unit include payment locations such as Headquarters and Forest Park, Call Center and Collections. Services include receipt of payments, applications for new meters, setting up new service or ending service, addressing customer questions and concerns and collection of past due balances.

Significant Expenditure and Staffing Changes:

Administrative Supplies: increase represents funding for ergonomic chairs for Customer Service Representatives.

Interfund Transfers: represents funds being transferred to the Renewal and Extension Fund for new cubicles for CSR's, Forest Park breakroom remodel, and Forest Park drive-thru renovations.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 1,357,564	\$ 1,515,328	\$ 1,516,920
Overtime Pay	43,647	90,000	90,000
F.I.C.A.	103,646	123,099	116,338
Pension	183,234	203,003	202,054
Employee Benefits	256,202	403,762	341,608
Operating Expenditures:			
Operating Materials & Supplies	3,490	17,100	8,400
Vehicle Supplies	-	150	-
Administrative Supplies	33,386	64,150	75,500
Safety Supplies	(7)	250	1,000
Special Purchases	87,341	120,800	800
Utilities	23,765	48,153	48,165
Rentals	-	-	-
Maintenance and Repairs	1,270	1,297	1,297
Outside Services	122,644	202,400	133,900
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	28,050	15,497	18,143
Accounting Charges	-	-	-
Debt Service:			-
Capital Financing	-	-	-
Capital Outlay:			-
Capital Expenditures	6,685	-	-
Other Financing Uses:			-
Intrafund Transfers Out:	7,800	-	38,800
Total Appropriations	\$ 2,258,717	\$ 2,804,989	\$ 2,592,925



BUSINESS UNIT 136: COMMUNITY USE ROOM

Department : Executive**Business Unit : (136) Community Use Room****Major Business Unit Functions:**

Operates Head Quarters Community Use Room

Significant Expenditure and Staffing Changes:**Administrative Supplies:** represents janitorial supplies for CUR.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ -	\$ -	\$ -
Overtime Pay	-	-	-
F.I.C.A.	-	-	268
Pension	-	-	-
Employee Benefits	-	-	-
Operating Expenditures:			
Operating Materials & Supplies	-	-	-
Vehicle Supplies	-	-	-
Administrative Supplies	-	-	3,150
Safety Supplies	-	-	250
Special Purchases	-	-	-
Utilities	-	-	15,000
Rentals	-	-	1,000
Maintenance and Repairs	-	-	2,000
Outside Services	-	-	21,000
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	-	-	480
Accounting Charges	-	-	950
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	-	-	-
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	\$ -	\$ -	\$ 44,098



Warehouse Staffing – Position Detail

Authorized Personnel	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted	FY 2019-2020 Budgeted
Warehouse			
Garage Inventory Warehouse Worker	1.00	0.00	0.00
Inventory - Procurement Specialist	0.00	1.00	1.00
Inventory - Warehouse Supervisor	1.00	1.00	1.00
Inventory Warehouse Worker	2.00	2.00	0.00
Warehouse/Inventory Technician	0.00	0.00	2.00
Lead Warehouse Inventory Worker	1.00	1.00	0.00
Lead Warehouse/Inventory Technician	0.00	0.00	1.00
Warehouse Assistant	1.00	0.00	0.00
Total Number of Personnel (FTE's)	6.00	5.00	5.00

Warehouse – Major Initiatives for FY 2019 – 2020

Business Unit	Budget Funding	Account Number	Amount Budgeted	Initiative
Warehouse				
940	Operating	56110	\$ 500,000	Warehouse and Inventory Improvements
		56110	150,000	Spare Parts Review and Disposal Strategy
		56131	60,000	Pressure Wash & Seal Building B
Grand Total			\$ 710,000	





Warehouse – Operating Budget

Department : General Services**Business Unit : (940) Warehouse****Major Business Unit Functions:**

Facilitates the purchasing and warehousing of supplies and materials for other departments.
Maintains an inventory of items needed on a regular basis.

Significant Expenditure and Staffing Changes:

Outside Services: increase represents pressure washing and sealing of Building B, Warehouse and Inventory Improvements and Spare Parts Review and Disposal Strategy.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 265,335	\$ 223,210	\$ 235,889
Overtime Pay	29	500	500
F.I.C.A.	19,812	17,114	18,045
Pension	36,401	31,027	32,788
Employee Benefits	34,491	40,318	41,927
Operating Expenditures:			
Operating Materials & Supplies	2,447	6,475	4,485
Vehicle Supplies	780	1,100	2,453
Administrative Supplies	1,668	3,750	4,250
Safety Supplies	110	500	250
Special Purchases	-	-	100
Utilities	25,078	29,225	31,691
Rentals	-	-	-
Maintenance and Repairs	2,340	5,900	8,900
Outside Services	14,122	26,371	744,764
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	7,105	13,332	13,729
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	-	-	-
Other Financing Uses:			
Intrafund Transfers Out:	38,644	-	-
Total Appropriations	\$ 448,362	\$ 398,822	\$ 1,139,771



Water Production Division – Business Unit Group 300



Clayton County Water Authority



WATER
PRODUCTION
DIVISION



*“Providing **Quality**
Water and **Quality**
Services to Our
Community”*



WATER PRODUCTION DIVISION BUDGET UNIT 300

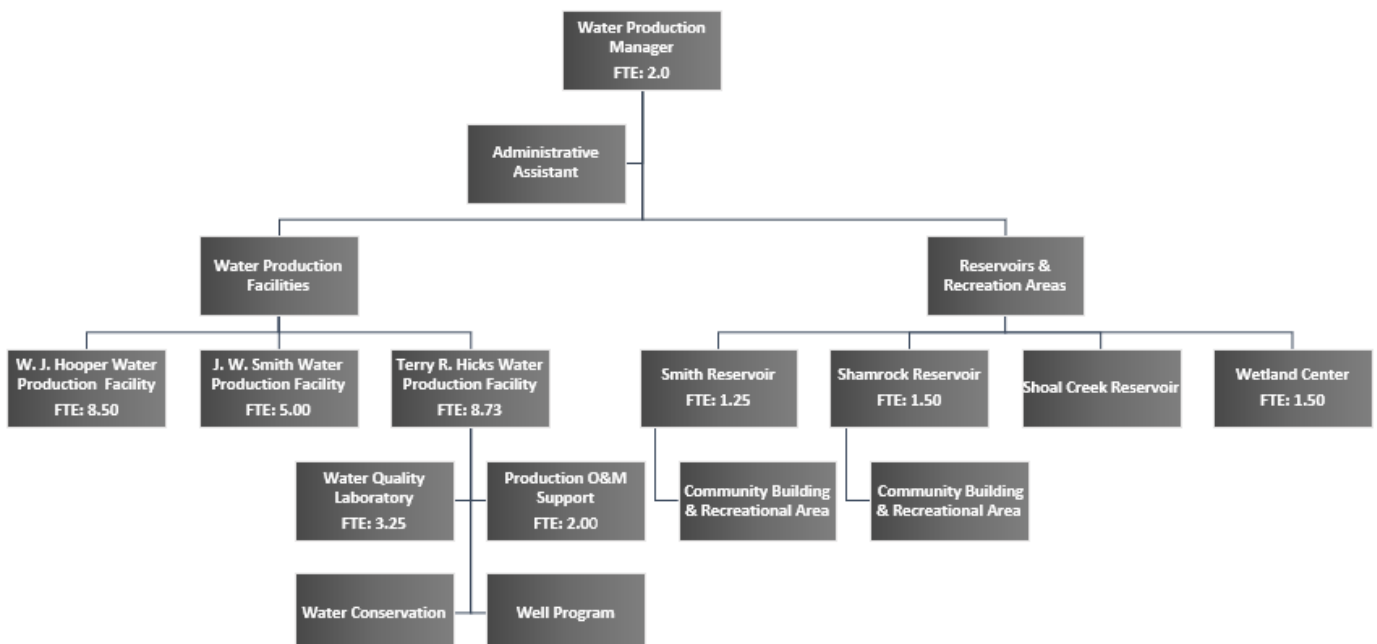
The function of the Water Production Division is to produce potable water, which is then directed into the distribution system and sold to the Authority's customers. The activity of producing drinking water is highly regulated and specific operating standards are promulgated by federal and state regulatory agencies that have oversight of the production of safe drinking water. The Water Production Division is also responsible for operating and maintaining the various recreation facilities.

Responsibilities are accomplished per the general direction of the General Manager and the Assistant General Managers over operations. The Water Production Manager is responsible for the day-to-day operations of the department.

To better manage operating expenses, the department is broken down into specific programs, production facilities or areas of responsibility. The budget units that have been identified for this department are listed in a tabular format below.

301 – Water Production Manager
 305 – Production O&M Support
 310 – W. J. Hooper Water Production Facility
 311 – Morrow Pumping Station
 312 – Noah's Ark Pumping Station
 314 – Elevated Tanks
 315 – J. W. Smith Water Production Facility
 316 – Blalock Jr. Reservoir and Dam
 317 – Jonesboro Pumping Station
 318 – Forest Park & Cajun Queen Pumping Stations

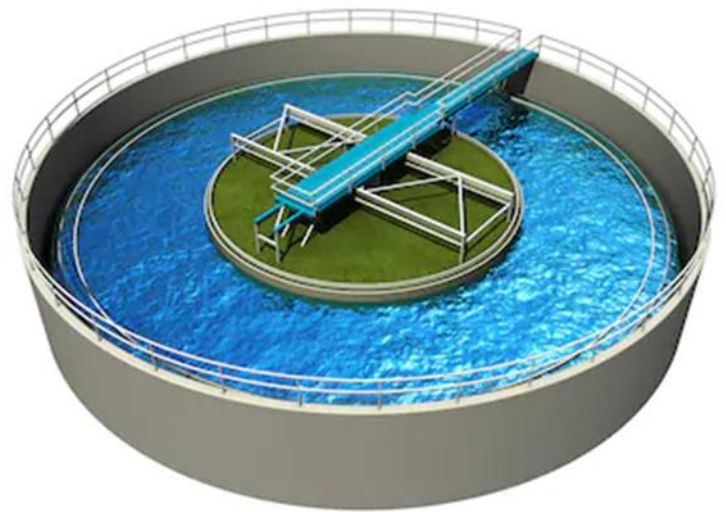
319 – Shoal Creek Reservoir
 320 – Terry R. Hicks Water Production Facility
 325 – Well Program
 330 – Water Quality Laboratory
 340 – Smith CUB & Recreation Park
 350 – Shamrock Recreation
 351 – Shamrock Community Use Building
 352 – Wetland Center
 399 – Water Conservation





Water Production Division – Staffing Summary

Authorized Personnel	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted	FY 2019-2020 Budgeted
Water Production Division			
301 - Water Production Manager	2.00	2.00	2.00
305 - Production Operations & Maintenance Support	2.00	2.00	2.00
310 - W. J. Hooper Water Production Facility	8.50	8.50	8.50
315 - J. W. Smith Water Production Facility	5.00	5.00	5.00
320 - Terry R. Hicks Water Production Facility	8.00	8.66	8.73
330 - Water Quality Laboratory	3.50	3.50	3.25
340 - Smith Community Use Building & Recreation Park	1.40	1.40	1.25
350 - Shamrock Recreation	1.80	1.80	1.50
352 - Wetland Center	1.50	1.50	1.50
Total Full-Time Employees (FTEs)	33.70	34.36	33.73





Water Production Division – Major Initiatives for FY 2019 - 2020

Business Unit	Budget Funding	Account Number	Amount Budgeted	Initiative
Water Production Operations and Maintenance Support				
301	Capital	59951	\$ 27,601	Ford Explorer
Grand Total			\$ 27,601	
W J Hooper Water Plant				
310	Operating	51102	\$ 3,542	Jar Testing Machine
	Capital	59303	10,000	Breakroom Renovations
		59922	58,000	HVAC
		59933	35,505	Turbidimeters (8)
		59933	17,295	Particle Counters (3)
Grand Total			\$ 124,342	
Morrow Pumping Station				
311	Operating	56199	\$ 6,500	Paint Logo on Tank
Grand Total			\$ 6,500	
Noah's Ark Pumping Station				
312	Operating	56123	\$ 28,722	Solar Bee Beekeeper Services
Grand Total			\$ 28,722	
Elevated Tanks				
314	Capital	59927	\$ 375,000	Grant Road Tank Repainting, Washout and Assessment
Grand Total			\$ 375,000	
J W Smith Water Plant				
315	Operating	56110	\$ 20,000	JW Smith North Dam Permitting
	Capital	59303	1,000,000	High Service Replacement Implementation
		59932	150,000	Sludge Removal Basin
		59933	40,875	Turbidimeters (9)
		59933	46,800	Particle Counters (9)
Grand Total			\$ 1,257,675	
Blalock Jr Reservoir and Dam				
316	Operating	54202	\$ 135,000	LOX System Rental
Grand Total			\$ 135,000	
Terry R. Hicks Water Production Complex				
320	Operating	56116	\$ 14,000	Blalock Raw Water 24" Valve and Actuator Repair
	Capital	59922	16,000	HVAC
		59931	80,000	VFD's (3) for Blalock Reservoir
		59933	200,000	Programming to SCADA
		59933	14,000	Actuator/Valve
Grand Total			\$ 324,000	



Business Unit	Budget Funding	Account Number	Amount Budgeted	Initiative
Shamrock Recreation Center				
350	Operating	56125	\$ 16,000	Dredge Pates Creek, Treatment and Maintenance of Eel Grass
	Capital	59951	28,557	Truck: F-150 4x4
Grand Total			\$ 44,557	
Shamrock Community Use Building				
351	Operating	51104	\$ 29,000	General Maintenance and Repair
		59984	7,000	PA System
Grand Total			\$ 36,000	
Wetland Center				
352	Operating	56110	\$ 30,000	MP for Internal Building Improvements
		56131	30,000	Change Out Composite Boards for Boardwalk
	Capital	59951	28,557	Truck: F-150 4x4
Grand Total			\$ 88,557	
Water Conservation				
399	Operating	51104	\$ 15,000	Low Flow Kits
		53104	80,000	Toilet Rebate
Grand Total			\$ 95,000	

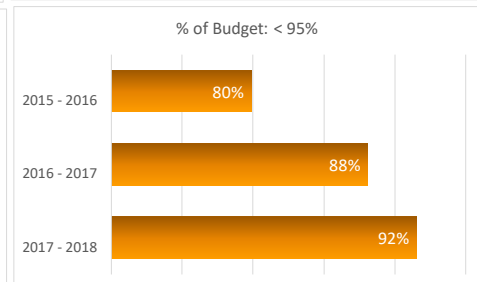
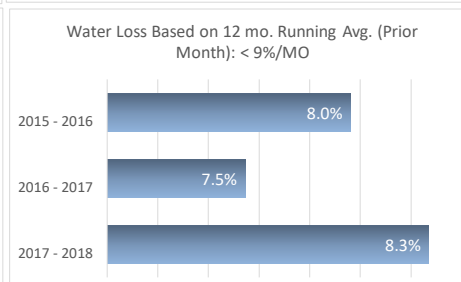
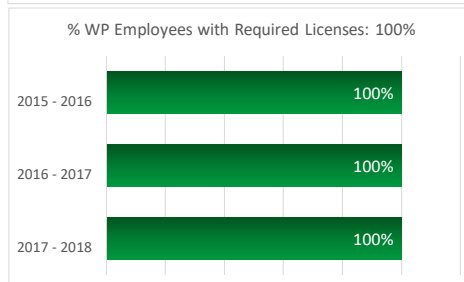
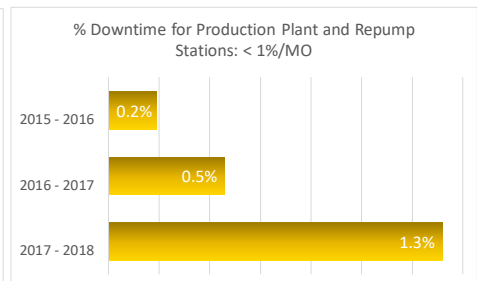
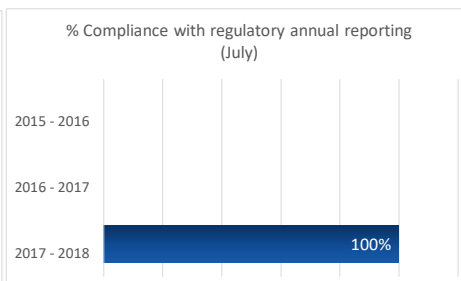
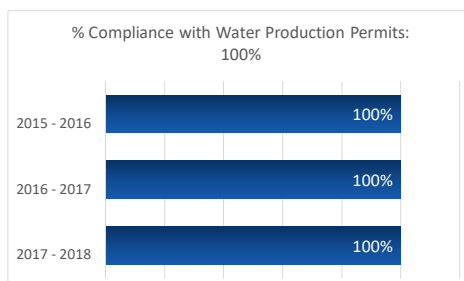


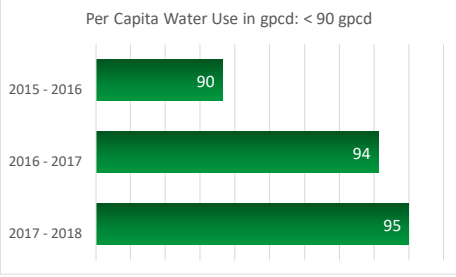
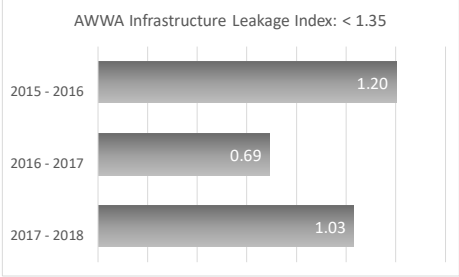
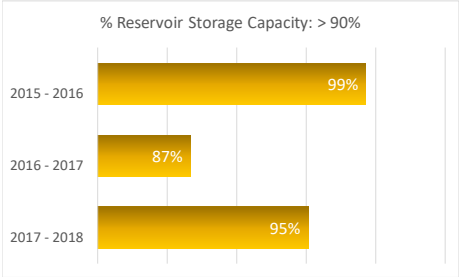
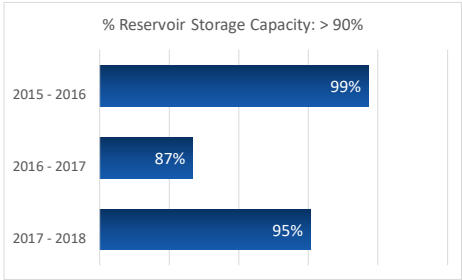
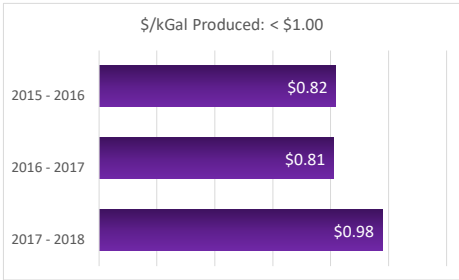


Water Production Division – Levels of Service

The Water Production Division has nine KPI metrics that are associated with the Authority's “**Superior Product Quality**,” “**Exceed Customer Expectations**,” “**Provide Employee Development**,” “**Optimize Operations**,” “**Infrastructure Sustainability**,” and “**Stakeholder Support**” goals and strategies 1, 5, 8, 13, 14, 21 and 23. The department's performance on these metrics is captured in the table that follows.

Service Level Goal	Key Performance Indicator (KPI)	Division	Target	2017 - 2018	2016 - 2017	2015 - 2016
SUPERIOR PRODUCT QUALITY						
1 Meet all applicable regulatory requirements	% Compliance with Water Production Permits: 100%	WP	100%	100%	100%	100%
	% Compliance with regulatory annual reporting (July)	WP	100%	100%	N/A	N/A
EXCEED CUSTOMER EXPECTATIONS						
5 Minimize potable water service disruptions	% Downtime for Production Plant and Repump Stations: < 1%/MO	WP	< 1% / Month	1.32%	0.5%	0.19%
PROVIDE EMPLOYEE DEVELOPMENT						
8 Provide effective employee training and development	% WP Employees with Required Licenses: 100%	WP	100%	100%	100%	100%
OPTIMIZE OPERATIONS						
13 Reasonable Cost of Service	Water Loss Based on 12 mo. Running Avg. (Prior Month): < 9%/MO	WP	< 9% / Month	8.3%	7.5%	8.0%
	% of Budget: < 95%	WP	< 95%	92%	88%	80%
	\$/kGal Produced: < \$1.00	WP	< \$1.00	\$0.98	\$0.81	\$0.82
14 Minimize Water System Losses	AWWA Infrastructure Leakage Index: < 1.35	WP	< 1.35	1.03	0.69	1.20
INFRASTRUCTURE SUSTAINABILITY						
21 Provide a sustainable water supply	% Reservoir Storage Capacity: > 90%	WP	> 90%	95%	87%	99%







Water Production Division Staffing – Position Detail

Authorized Personnel	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted	FY 2019-2020 Budgeted
<i>Water Production Manager</i>			
Office Assistant	1.00	1.00	1.00
Water Production Manager	1.00	1.00	1.00
Total Number of Personnel (FTE's)	2.00	2.00	2.00
<i>Production O&M Support</i>			
Distribution and Resource Coordinator	1.00	1.00	1.00
Distribution and Resource Technician	1.00	1.00	1.00
Total Number of Personnel (FTE's)	2.00	2.00	2.00
<i>W.J. Hooper Water Production Facility</i>			
Custodian	0.50	0.50	0.50
Plant Operator I	3.00	3.00	4.00
Plant Operator II	2.00	2.00	3.00
Plant Operator III	2.00	2.00	0.00
Plant Supervisor	1.00	1.00	1.00
Total Number of Personnel (FTE's)	8.50	8.50	8.50
<i>J.W. Smith Water Production Facility</i>			
Plant Operator I	3.00	2.00	1.00
Plant Operator II	0.00	0.00	0.00
Plant Operator III	1.00	2.00	3.00
Plant Supervisor	1.00	1.00	1.00
Total Number of Personnel (FTE's)	5.00	5.00	5.00
<i>Terry R Hicks Water Production Facility</i>			
Plant Operator I	4.00	4.00	4.00
Plant Operator II	0.00	0.00	0.00
Plant Operator III	2.00	2.00	2.00
Plant Supervisor	1.00	1.00	1.00
Plant Worker	1.00	1.00	1.00
PT Plant Operator Trainee	0.00	0.66	0.73
Total Number of Personnel (FTE's)	8.00	8.66	8.73
<i>Water Quality Lab</i>			
Lab Analyst	1.00	1.00	1.00
Lab Technician PT	0.50	0.50	0.25
Microbiologist	1.00	1.00	1.00
Water Lab and Regulatory Compliance Coordinator	1.00	1.00	1.00
Total Number of Personnel (FTE's)	3.50	3.50	3.25
<i>Smith Community Use Building & Recreation Park</i>			
Recreation Area Assistant	1.00	1.00	1.00
Recreation Area Caretaker	0.40	0.40	0.25
Total Number of Personnel (FTE's)	1.40	1.40	1.25
<i>Shamrock Recreation</i>			
Recreation Area Caretaker	0.80	0.80	0.50
Recreation Area Coordinator	1.00	1.00	1.00
Total Number of Personnel (FTE's)	1.80	1.80	1.50
<i>Wetland Center</i>			
Conservation Assistant	0.25	0.25	0.25
Recreation Area Caretaker	0.25	0.25	0.25
Sr. Conservation Specialist	1.00	1.00	1.00
Total Number of Personnel (FTE's)	1.50	1.50	1.50
<i>Water Production Department Total</i>	33.70	34.36	33.73



Water Production Division – Consolidated Operating Budget

Department : Water Production

Business Unit : Department 300 - Consolidated

Overview of Department Responsibilities

The primary responsibility of the Water Production Division is the production of potable water. This is accomplished primarily through the collection of raw surface water in reservoirs and then treating the stored water with chemicals and ultraviolet lights to ensure that it is fit for human consumption. The Division's responsibilities also include facilitating the passive recreation activities (e.g., fishing, community use buildings) that are permitted on the property adjacent to the reservoirs. The activities are performed in accordance with the rules and regulations which govern the production of safe drinking water. Tasks are generally undertaken based on the priorities established by the General Manager.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 1,837,759	\$ 2,066,870	\$ 2,065,483
Overtime Pay	195,203	152,500	180,340
F.I.C.A.	152,385	169,784	164,613
Pension	243,804	270,067	278,852
Employee Benefits	259,298	415,597	358,992
Operating Expenditures:	-	-	-
Operating Materials & Supplies	1,279,855	1,323,160	1,758,420
Vehicle Supplies	18,663	23,640	24,240
Administrative Supplies	15,060	26,625	27,850
Safety Supplies	4,253	9,650	7,800
Special Purchases	896,915	180,720	181,120
Utilities	3,605,336	3,745,185	3,764,383
Rentals	5,160	27,875	166,450
Maintenance and Repairs	235,981	281,400	297,400
Outside Services	717,190	2,508,109	1,167,367
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	201,810	197,258	212,297
Accounting Charges	118	-	3,200
Debt Service:	-	-	-
Capital Financing	-	-	-
Capital Outlay:	-	-	-
Capital Expenditures	128,488	810,279	1,125,190
Other Financing Uses:	-	-	-
Intrafund Transfers Out:	5,000,000	150,000	10,000
Total Appropriations	\$ 14,797,278	\$ 12,358,719	\$ 11,793,997



BUSINESS UNIT 301: WATER PRODUCTION DEPARTMENT MANAGER

Department : Water Production**Business Unit : (301) Water Production Manager****Major Business Unit Functions:**

Directs, manages and controls the operations of the Water Production Division.

Significant Expenditure and Staffing Changes:**Capital Expenditures:** represents the scheduled replacement of one Explorer.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 159,326	\$ 166,556	\$ 168,467
Overtime Pay	-	-	-
F.I.C.A.	12,046	12,742	12,887
Pension	21,740	23,151	23,417
Employee Benefits	13,778	20,236	19,120
Operating Expenditures:			
Operating Materials & Supplies	137	6,130	1,200
Vehicle Supplies	520	910	1,000
Administrative Supplies	395	1,000	1,000
Safety Supplies	-	-	-
Special Purchases	868,915	100,720	101,120
Utilities	778	720	1,200
Rentals	-	10,000	12,000
Maintenance and Repairs	117	500	500
Outside Services	1,844	1,920	1,920
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	101,378	72,408	81,735
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	-	-	27,601
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	\$ 1,180,974	\$ 416,993	\$ 453,167



BUSINESS UNIT 305: PRODUCTION OPERATIONS AND MAINTENANCE SUPPORT

Department : Water Production**Business Unit : (305) Production O&M Support****Major Business Unit Functions:**

Coordinates and performs operation and maintenance of distribution tanks, distribution pumping facilities, reservoirs and dams.

Significant Expenditure and Staffing Changes:

No significant changes from previous fiscal year.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 99,248	\$ 107,326	\$ 111,687
Overtime Pay	1,343	1,500	1,000
F.I.C.A.	7,805	8,324	8,543
Pension	14,045	14,919	15,524
Employee Benefits	13,512	19,982	16,072
Operating Expenditures:			
Operating Materials & Supplies	2,624	2,990	2,880
Vehicle Supplies	2,011	4,500	3,600
Administrative Supplies	144	450	400
Safety Supplies	178	1,400	500
Special Purchases	-	-	-
Utilities	1,440	1,560	2,200
Rentals	-	-	-
Maintenance and Repairs	306	4,300	2,800
Outside Services	130	900	900
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	3,780	4,128	4,799
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	-	30,000	-
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	<u>\$ 146,566</u>	<u>\$ 202,279</u>	<u>\$ 170,905</u>



BUSINESS UNIT 310: W.J. HOOPER WATER PRODUCTION FACILITY

Department : Water Production**Business Unit : (310) W.J. Hooper Water
Production Facility****Major Business Unit Functions:**

Produces potable water at the W.J. Hooper Water Production Facility.

Significant Expenditure and Staffing Changes:**Operating Materials & Supplies:** increase in funding for treatment chemicals and a new jar testing machine.**Capital Expenditures:** represents funds for HVAC Unit, Online Turarticle Counters (3).**Intrafund Transfers Out:** represents funds being transferred to the Renewal and Extension Fund for Breakroom Renovations.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 485,659	\$ 514,642	\$ 537,310
Overtime Pay	74,170	65,000	65,000
F.I.C.A.	41,370	44,343	46,079
Pension	64,712	68,758	71,809
Employee Benefits	85,364	120,571	104,413
Operating Expenditures:			
Operating Materials & Supplies	666,197	688,110	1,045,650
Vehicle Supplies	706	1,100	1,250
Administrative Supplies	1,941	3,875	3,700
Safety Supplies	990	1,250	1,250
Special Purchases	-	-	-
Utilities	1,166,631	1,354,090	1,266,572
Rentals	1,352	1,175	2,750
Maintenance and Repairs	69,268	98,200	90,200
Outside Services	305,591	298,885	270,550
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	25,983	31,761	28,644
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	81,503	109,075	110,800
Other Financing Uses:			
Intrafund Transfers Out:	2,500,000	-	10,000
Total Appropriations	\$ 5,571,437	\$ 3,400,835	\$ 3,655,977



BUSINESS UNIT 311: MORROW PUMPING STATION

Department : Water Production**Business Unit : (311) Morrow Pumping Station****Major Business Unit Functions:**

Pumps potable water to maintain adequate pressure and supply in water distribution system.

Significant Expenditure and Staffing Changes:**Outside Services:** represents funds for maintenance to (2) VFD's along with LOGO's for this tank.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ -	\$ -	\$ -
Overtime Pay	-	-	-
F.I.C.A.	-	-	-
Pension	-	-	-
Employee Benefits	-	-	-
Operating Expenditures:			
Operating Materials & Supplies	18,467	3,300	2,300
Vehicle Supplies	577	750	1,000
Administrative Supplies	37	100	100
Safety Supplies	-	100	100
Special Purchases	-	-	-
Utilities	230,134	277,500	280,300
Rentals	-	-	-
Maintenance and Repairs	4,516	5,000	5,000
Outside Services	6,118	36,500	47,750
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	1,035	1,246	1,880
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	-	-	-
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	\$ 260,884	\$ 324,496	\$ 338,430



BUSINESS UNIT 312: NOAH'S ARK PUMPING STATION

Department : Water Production**Business Unit : (312) Noah's Ark Pumping Station****Major Business Unit Functions:**

Pumps potable water to maintain adequate pressure and supply in water distribution system.

Significant Expenditure and Staffing Changes:

No significant changes from previous fiscal year.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ -	\$ -	\$ -
Overtime Pay	-	-	-
F.I.C.A.	-	-	-
Pension	-	-	-
Employee Benefits	-	-	-
Operating Expenditures:			
Operating Materials & Supplies	623	1,000	1,300
Vehicle Supplies	2,375	4,300	1,000
Administrative Supplies	37	100	100
Safety Supplies	-	100	100
Special Purchases	-	-	-
Utilities	506,165	461,350	461,375
Rentals	-	-	-
Maintenance and Repairs	6,367	4,000	4,000
Outside Services	2,950	68,000	79,472
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	2,826	3,095	3,885
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	-	-	-
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	\$ 521,343	\$ 541,945	\$ 551,232



BUSINESS UNIT 314: ELEVATED TANKS

Department : Water Production**Business Unit : (314) Elevated Tanks****Major Business Unit Functions:**

Provides additional storage of potable water for distribution system.

Significant Expenditure and Staffing Changes:**Outside Services:** increase represents funding for clean out and inspection of four elevated tanks.**Capital Expenditures:** represents funding for Grant Road Tank repainting.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ -	\$ -	\$ -
Overtime Pay	-	-	-
F.I.C.A.	-	-	-
Pension	-	-	-
Employee Benefits	-	-	-
Operating Expenditures:			
Operating Materials & Supplies	196	800	500
Vehicle Supplies	-	-	-
Administrative Supplies	-	-	-
Safety Supplies	-	100	100
Special Purchases	-	-	-
Utilities	12,809	15,130	12,230
Rentals	-	-	-
Maintenance and Repairs	94	5,000	5,000
Outside Services	13,444	12,200	26,200
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	3,299	3,617	3,850
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	-	387,000	375,000
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	\$ 29,842	\$ 423,847	\$ 422,880



BUSINESS UNIT 315: J.W. SMITH WATER PRODUCTION FACILITY

Department : Water Production**Business Unit : (315) J.W. Smith Water
Production Facility****Major Business Unit Functions:**

Produces potable water at the J.W. Smith Water Production Facility.

Significant Expenditure and Staffing Changes:**Operating Materials and Supplies:** increase represents a cost increase for carbon feed.**Capital Expenditures:** represents funding for a Sludge Removal Basin, Filter & Combined Turbidimeters (9) & Particle Counters (9).

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 337,744	\$ 349,387	\$ 321,153
Overtime Pay	31,395	35,000	35,000
F.I.C.A.	28,147	29,407	27,245
Pension	47,424	48,566	44,641
Employee Benefits	44,972	63,328	57,925
Operating Expenditures:			
Operating Materials & Supplies	300,601	285,125	293,475
Vehicle Supplies	267	580	890
Administrative Supplies	1,406	1,850	2,350
Safety Supplies	529	2,900	750
Special Purchases	-	-	-
Utilities	958,445	889,280	966,346
Rentals	-	-	-
Maintenance and Repairs	52,573	65,200	65,200
Outside Services	64,841	218,659	152,670
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	14,858	18,460	19,538
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	-	170,000	237,675
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	<u>\$ 1,883,202</u>	<u>\$ 2,177,742</u>	<u>\$ 2,224,858</u>



BUSINESS UNIT 316: BLALOCK JR. RESERVOIR AND DAM

Department : Water Production**Business Unit : (316) Blalock Jr. Reservoir and Dam****Major Business Unit Functions:**

Facilitates storage of raw water prior to treatment.

Significant Expenditure and Staffing Changes:**Other Materials and Supplies:** increases represents funding for Bulk Ferric Chloride Tank for Water Quality improvements for Blalock and Shamrock Reservoirs.**Rentals:** represents funding for a LOX System rental.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ -	\$ -	\$ -
Overtime Pay	-	-	-
F.I.C.A.	-	-	-
Pension	-	-	-
Employee Benefits	-	-	-
Operating Expenditures:			
Operating Materials & Supplies	-	2,500	51,500
Vehicle Supplies	-	-	-
Administrative Supplies	-	50	50
Safety Supplies	-	-	-
Special Purchases	-	-	-
Utilities	-	-	-
Rentals	-	-	135,000
Maintenance and Repairs	169	10,000	10,000
Outside Services	7,950	1,319,000	41,000
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	32	66	67
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	-	35,000	-
Other Financing Uses:			
Intrafund Transfers Out:	2,500,000	-	-
Total Appropriations	\$ 2,508,151	\$ 1,366,616	\$ 237,617



BUSINESS UNIT 317: JONESBORO PUMPING STATION

Department : Water Production**Business Unit : (317) Jonesboro Pumping Station****Major Business Unit Functions:**

Pumps potable water to maintain adequate pressure and supply in water distribution system.

Significant Expenditure and Staffing Changes:**Outside Services:** increase represents funds for Beekeeper service for Solar Bee units and repairs on level gauges for both tanks.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 -20 Budgeted
Personal Services:			
Salaries and Wages	\$ -	\$ -	\$ -
Overtime Pay	-	-	-
F.I.C.A.	-	-	-
Pension	-	-	-
Employee Benefits	-	-	-
Operating Expenditures:			
Operating Materials & Supplies	1,307	2,100	2,300
Vehicle Supplies	-	-	-
Administrative Supplies	9	100	100
Safety Supplies	101	100	100
Special Purchases	-	-	-
Utilities	217,009	232,250	232,250
Rentals	-	-	-
Maintenance and Repairs	5,175	3,500	3,000
Outside Services	25,120	19,500	70,460
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	1,375	1,552	2,195
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	-	-	-
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	<u>\$ 250,096</u>	<u>\$ 259,102</u>	<u>\$ 310,405</u>



BUSINESS UNIT 318: FOREST PARK AND CAJUN QUEEN PUMPING STATIONS

Department : Water Production**Business Unit : (318) FP/Cajun Queen Pumping Stations
Station****Major Business Unit Functions:**

Pumps potable water to maintain adequate pressure and supply in water distribution system.

Significant Expenditure and Staffing Changes:

No significant changes from the previous fiscal year.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 -20 Budgeted
Personal Services:			
Salaries and Wages	\$ -	\$ -	\$ -
Overtime Pay	-	-	-
F.I.C.A.	-	-	-
Pension	-	-	-
Employee Benefits	-	-	-
Operating Expenditures:			
Operating Materials & Supplies	-	500	500
Vehicle Supplies	-	-	-
Administrative Supplies	-	-	-
Safety Supplies	-	100	100
Special Purchases	-	-	-
Utilities	11,525	27,410	12,010
Rentals	-	-	-
Maintenance and Repairs	355	3,300	3,300
Outside Services	1,126	14,250	14,200
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	440	521	1,134
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	5,159	-	-
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	<u>\$ 18,605</u>	<u>\$ 46,081</u>	<u>\$ 31,244</u>



BUSINESS UNIT 319: SHOAL CREEK RESERVOIR

Department : Water Production**Business Unit : (319) Shoal Creek Reservoir****Major Business Unit Functions:**

Facilitates storage of raw water prior to treatment.

Significant Expenditure and Staffing Changes:

No significant changes from the previous fiscal year.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ -	\$ -	\$ -
Overtime Pay	-	-	-
F.I.C.A.	-	-	-
Pension	-	-	-
Employee Benefits	-	-	-
Operating Expenditures:			
Operating Materials & Supplies	43	2,300	2,300
Vehicle Supplies	-	-	-
Administrative Supplies	-	-	-
Safety Supplies	-	-	100
Special Purchases	-	-	-
Utilities	-	-	-
Rentals	2	500	500
Maintenance and Repairs	771	6,000	6,000
Outside Services	7,916	8,000	5,000
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	1,796	1,986	2,043
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	-	-	-
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	<u>\$ 10,528</u>	<u>\$ 18,786</u>	<u>\$ 15,943</u>



BUSINESS UNIT 320: TERRY R. HICKS WATER PRODUCTION FACILITY

Department : Water Production**Business Unit : (320) Terry R. Hicks Water Production Facility****Major Business Unit Functions:**

Produces potable water at the Terry R. Hicks Water Production Facility.

Significant Expenditure and Staffing Changes:**Personal Services:** increase represents funding to move a part-time Plant Operator Trainee to full-time.**Other Materials and Supplies:** increase represents a treatment cost increase along with four Sludge Blanket indicators.**Capital Expenditures:** represents funding for HVAC, three VFD's, SCADA Programming and an Actuator/Valve.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 404,130	\$ 504,555	\$ 520,847
Overtime Pay	73,267	50,000	61,840
F.I.C.A.	35,485	42,425	38,721
Pension	56,047	65,906	72,869
Employee Benefits	60,898	114,198	102,371
Operating Expenditures:			
Operating Materials & Supplies	209,613	200,060	244,145
Vehicle Supplies	2,385	4,100	3,050
Administrative Supplies	7,014	6,000	6,000
Safety Supplies	1,661	2,500	3,000
Special Purchases	-	-	-
Utilities	452,852	443,000	478,400
Rentals	-	-	2,500
Maintenance and Repairs	78,174	35,000	38,250
Outside Services	189,472	319,350	163,000
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	23,700	30,297	32,753
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	-	-	310,000
Other Financing Uses:			
Intrafund Transfers Out:	-	150,000	-
Total Appropriations	\$ 1,594,698	\$ 1,967,391	\$ 2,077,746



BUSINESS UNIT 325: WELL PROGRAM

Department : Water Production**Business Unit : (325) Well Program****Major Business Unit Functions:**

Utilization of underground sources of raw water.

Significant Expenditure and Staffing Changes:

No significant changes from previous fiscal year.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ -	\$ -	\$ -
Overtime Pay	-	-	-
F.I.C.A.	-	-	-
Pension	-	-	-
Employee Benefits	-	-	-
Operating Expenditures:			
Operating Materials & Supplies	89	2,200	2,150
Vehicle Supplies	-	-	-
Administrative Supplies	-	-	-
Safety Supplies	-	150	150
Special Purchases	-	-	-
Utilities	3,940	6,600	4,000
Rentals	-	-	-
Maintenance and Repairs	198	1,000	1,000
Outside Services	50	100	100
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	297	419	430
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	-	-	-
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	\$ 4,574	\$ 10,469	\$ 7,830



BUSINESS UNIT 330: WATER QUALITY LABORATORY

Department : Water Production**Business Unit : (330) Water Quality Laboratory****Major Business Unit Functions:**

Testing of quality of produced water to ensure product is in compliance with regulatory standards.

Significant Expenditure and Staffing Changes:

Outside Services: increase represents renewal of a contract for laboratory services and drinking water program along with a contract for UCRM4 water testing.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 135,479	\$ 199,010	\$ 191,055
Overtime Pay	194	1,000	1,000
F.I.C.A.	9,705	15,301	14,693
Pension	17,725	25,130	24,950
Employee Benefits	14,258	40,495	27,576
Operating Expenditures:			
Operating Materials & Supplies	54,857	72,200	63,970
Vehicle Supplies	1,936	3,700	3,700
Administrative Supplies	607	3,000	2,800
Safety Supplies	292	250	250
Special Purchases	-	-	-
Utilities	977	-	2,500
Rentals	2,727	11,000	10,000
Maintenance and Repairs	543	500	1,000
Outside Services	46,614	73,800	151,450
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	13,284	15,596	17,607
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	13,130	43,204	-
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	\$ 312,328	\$ 504,186	\$ 512,551



BUSINESS UNIT 340: SMITH COMMUNITY USE BUILDING AND RECREATION PARK

Department : Water Production**Business Unit : (340) Smith CUB & Recreation Park****Major Business Unit Functions:**

Operates the J.W. Smith Recreation Park facilities.

Significant Expenditure and Staffing Changes:

No significant changes from the previous fiscal year.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 55,893	\$ 58,715	\$ 55,655
Overtime Pay	4,969	-	6,500
F.I.C.A.	4,638	4,491	4,257
Pension	5,854	6,337	8,158
Employee Benefits	6,627	9,845	7,873
Operating Expenditures:			
Operating Materials & Supplies	2,169	2,145	2,350
Vehicle Supplies	4,386	-	5,500
Administrative Supplies	328	850	1,000
Safety Supplies	-	100	100
Special Purchases	-	-	-
Utilities	7,099	1,400	7,100
Rentals	-	800	800
Maintenance and Repairs	2,816	10,000	11,400
Outside Services	6,617	21,075	20,675
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	1,080	1,421	1,314
Accounting Charges	12	-	800
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	28,696	-	-
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	<u>\$ 131,184</u>	<u>\$ 117,179</u>	<u>\$ 133,482</u>



BUSINESS UNIT 350: SHAMROCK RECREATION

Department : Water ProductionBusiness Unit : (350) Shamrock RecreationMajor Business Unit Functions:

Operates Lake Shamrock Recreation facilities.

Significant Expenditure and Staffing Changes:

Maintenance and Repairs: increase represents installation of septic tank lid along with a cleanout.

Capital Expenditures: represent funding for a replacement truck.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 93,378	\$ 102,952	\$ 93,201
Overtime Pay	9,865	-	10,000
F.I.C.A.	8,142	7,875	7,130
Pension	10,072	10,661	10,582
Employee Benefits	13,223	17,068	15,724
Operating Expenditures:			
Operating Materials & Supplies	3,951	8,950	6,650
Vehicle Supplies	3,206	3,700	2,750
Administrative Supplies	1,796	4,900	7,250
Safety Supplies	401	300	300
Special Purchases	-	-	-
Utilities	10,318	9,000	8,950
Rentals	535	1,500	700
Maintenance and Repairs	4,958	8,700	26,000
Outside Services	7,298	32,450	25,900
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	1,498	1,698	1,369
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	-	11,000	28,557
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	<u>\$ 168,641</u>	<u>\$ 220,754</u>	<u>\$ 245,063</u>



BUSINESS UNIT 351: SHAMROCK COMMUNITY USE BUILDING

Department : Water Production**Business Unit : (351) Shamrock Community Use Building****Major Business Unit Functions:**

Operates Shamrock Community Use Building.

Significant Expenditure and Staffing Changes:**Capital Expenditures:** represent funding for a replacement PA System.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ -	\$ -	\$ -
Overtime Pay	-	-	-
F.I.C.A.	-	-	-
Pension	-	-	-
Employee Benefits	-	-	-
Operating Expenditures:			
Operating Materials & Supplies	6,583	15,050	18,150
Vehicle Supplies	-	-	-
Administrative Supplies	544	750	650
Safety Supplies	14	100	100
Special Purchases	-	-	-
Utilities	14,197	16,800	19,000
Rentals	154	1,200	500
Maintenance and Repairs	5,027	10,000	14,500
Outside Services	12,541	43,000	31,000
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	777	990	1,107
Accounting Charges	106	-	2,400
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	-	-	7,000
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	\$ 39,943	\$ 87,890	\$ 94,407



BUSINESS UNIT 352: WETLAND CENTER

Department : Water Production**Business Unit : (352) Wetland Center****Major Business Unit Functions:**

Operates Wetland Center.

Significant Expenditure and Staffing Changes:**Outside Services:** increase represents consulting for master Plan for internal building improvements.**Capital Expenditures:** represents funds for a replacement truck.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 66,902	\$ 63,727	\$ 66,108
Overtime Pay	-	-	-
F.I.C.A.	5,047	4,876	5,058
Pension	6,185	6,639	6,902
Employee Benefits	6,666	9,874	7,918
Operating Expenditures:			
Operating Materials & Supplies	4,828	12,700	15,600
Vehicle Supplies	294	-	500
Administrative Supplies	802	600	1,350
Safety Supplies	87	200	800
Special Purchases	-	-	-
Utilities	11,017	9,095	9,950
Rentals	390	1,700	1,700
Maintenance and Repairs	4,554	11,200	10,250
Outside Services	17,568	20,520	65,120
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	1,397	2,797	2,747
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	-	25,000	28,557
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	<u>\$ 125,737</u>	<u>\$ 168,928</u>	<u>\$ 222,560</u>



BUSINESS UNIT 399: WATER CONSERVATION

Department : Water ProductionBusiness Unit : (399) Water ConservationMajor Business Unit Functions:

Promote programs that encourage water conservation by our customers.

Significant Expenditure and Staffing Changes:

No significant changes from the previous fiscal year.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ -	\$ -	\$ -
Overtime Pay	-	-	-
F.I.C.A.	-	-	-
Pension	-	-	-
Employee Benefits	-	-	-
Operating Expenditures:			
Operating Materials & Supplies	7,570	15,000	1,500
Vehicle Supplies	-	-	-
Administrative Supplies	-	3,000	1,000
Safety Supplies	-	-	-
Special Purchases	28,000	80,000	80,000
Utilities	-	-	-
Rentals	-	-	-
Maintenance and Repairs	-	-	-
Outside Services	-	-	-
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	2,975	5,200	5,200
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	-	-	-
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	<u>\$ 38,545</u>	<u>\$ 103,200</u>	<u>\$ 87,700</u>



Program Management and Engineering Division – Business Unit Group 500



Clayton County Water Authority



**PROGRAM
MANAGEMENT &
ENGINEERING
DIVISION**



*“Providing **Quality**
Water and **Quality**
Services to Our
Community”*



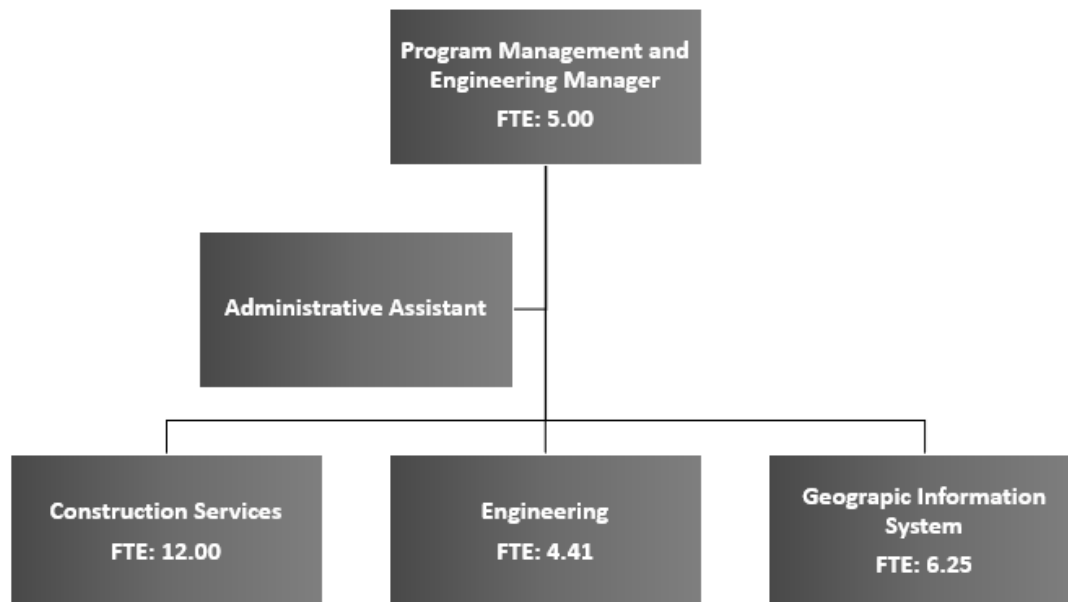
PROGRAM MANAGEMENT AND ENGINEERING DIVISION BUDGET UNIT 500

The Program Management and Engineering Division serves as the Authority's planning, programming, monitoring and review function for its facilities and distribution and collection systems. It is responsible for the implementation of the strategic master plan, engineering, surveying, GIS and inspection of additions to the water and sewer systems. Tasks are performed in conformity with federal, state and local laws and authority laws, regulations and policies.

Responsibilities are accomplished per the general direction of the General Manager and the Assistant General Managers over support services. The Program Management and Engineering Manager is responsible for the day-to-day operations of the department.

To better manage operating expenses, the division is broken down into specific programs, project funding sources or functional areas of responsibility. The budget units that have been identified for this area are listed in a tabular format below.

- 501 – Program Management and Engineering Department Manager
- 507 – Construction Services
- 530 – Engineering
- 535 – Geographic Information Systems





Program Management and Engineering Division – Staffing Summary

Authorized Personnel	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted	FY 2019-2020 Budgeted
Program Management and Engineering			
501 - Program and Engineering Manager	4.00	4.00	5.00
507 - Construction Services	12.00	12.00	12.00
530 - Engineering	4.00	4.38	4.41
535 - Geographic Information System	7.43	6.38	6.25
Total Full-Time Employees (FTEs)	27.43	26.76	27.66

Program Management and Engineering Division – Major Initiatives for FY 2019 - 2020

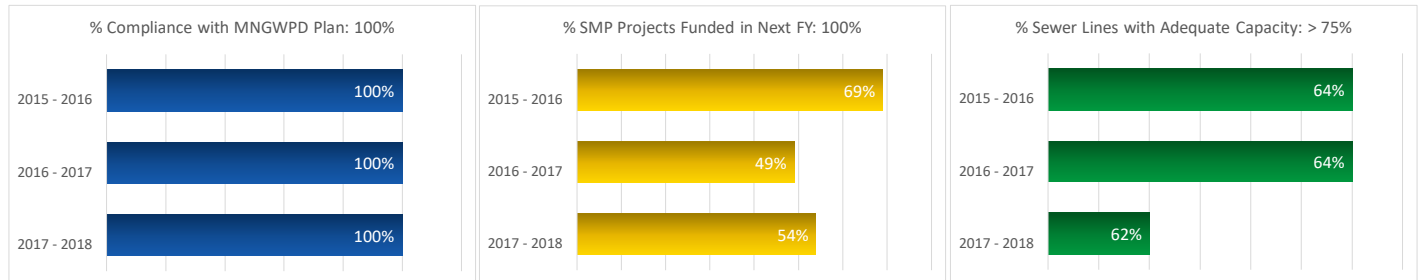
Business Unit	Budget Funding	Account Number	Amount Budgeted	Initiative
Program Management and Engineering Department Manager				
501	Operating	56110	\$ 210,000	Unidirectional Flushing Program [WP 2018-07]
		56110	150,000	On-Call Engineering Services
		56110	75,000	Collection System Assessment and Program Management [WP 2017-05]
		56110	150,000	Knowledge Retention Study [WP 2019-09] [SAMP OS-06]
		56110	75,000	Organizational Assessment [WP 2019-07][SAMP OS-7]
		56110	80,000	Metrics Improvement Study [WP 2019-10][SAMP OS-10]
		56110	250,000	Facility Asset Improvement Strategy [WP 2019-11] [SAMP F-01]
	Capital	59303	500,000	Walnut Creek Lift Station Evaluation and Detailed Design [WP 2017-03][SMP 903]
		59303	1,500,000	Casey WRRF Solids Handling Detailed Design [WP 2019-03][SMP 708]
Grand Total			\$ 2,990,000	
Construction Services				
507	Capital	59303	\$ 40,000	Water Line Inspections
		59303	40,000	Sewer Line Inspections
		59303	40,000	Water Meter Inspections
		59303	1,500,000	Galvanized Main Replacements [SMP 601]
		59303	2,500,000	Basin Level Sewer Rehabilitation [SMP 614]
		59953	30,200	Truck: F-150
		59953	25,446	Ford Escape
Grand Total			\$ 4,175,646	
Engineering				
530	Operating	56124	\$ 1,000,000	SSes Discovery Work [SMP 613]
	Capital	59902	100	Easements
Grand Total			\$ 1,000,100	
Geographic Information Systems				
535	Operating	56110	\$ 30,000	Cityworks Support: XML and Template Configuration, BP Streamlining, Code Development
		56110	30,000	SAP Business Objects BI and Reporting Support: Data Mart Design and Construction, Report Development
Grand Total			\$ 60,000	



Program Management and Engineering Division – Levels of Service

The Program Management and Engineering Division has three KPI metrics that are associated with the Authority's **"Superior Product Quality," "Ensure Financial Viability,"** and **"Infrastructure Sustainability"** goals and strategies 1, 17 and 22 to *"To meet all applicable regulatory requirements," "Have 100% of the Strategic Master Plan projects funded for the appropriate fiscal year according to plan,"* and *"Provide adequate treatment capacity."* The department's performance on these metrics is captured in the table that follows.

Service Level Goal	Key Performance Indicator (KPI)	Division	Target	2017 - 2018	2016 - 2017	2015 - 2016
SUPERIOR PRODUCT QUALITY						
1 Meet all applicable regulatory requirements	% Compliance with MNGWPD Plan: 100%	PME	100%	100%	100%	100%
ENSURE FINANCIAL VIABILITY						
17 Develop a Sustainable Annual Budget	% SMP Projects Funded in Next FY: 100%	PME	80%	54%	49%	69%
INFRASTRUCTURE SUSTAINABILITY						
22 Provide adequate treatment capacity	% Sewer Lines with Adequate Capacity: > 75%	PME	> 75%	62%	64%	64%





Program Management and Engineering Division Staffing – Position Detail

Authorized Personnel	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted	FY 2019-2020 Budgeted
<i>Program Management and Engineering Manager</i>			
Office Assistant	1.00	1.00	1.00
PME Project Engineer	1.00	1.00	1.00
Program Management Engineer	1.00	1.00	1.00
Junior Engineer	0.00	0.00	1.00
Program Management and Engineering Manager	1.00	1.00	1.00
Total Number of Personnel (FTE's)	4.00	4.00	5.00
<i>Construction Services</i>			
Civil Engineer	1.00	1.00	1.00
Construction Inspector I	8.00	8.00	7.00
Construction Inspector II	1.00	1.00	2.00
Construction Services Supervisor	2.00	2.00	2.00
Total Number of Personnel (FTE's)	12.00	12.00	12.00
<i>Engineering</i>			
Engineering Coordinator	1.00	1.00	1.00
Intern - College	0.00	0.38	0.41
Plan Review Technician	1.00	1.00	1.00
Senior Engineering Technician	2.00	2.00	2.00
Total Number of Personnel (FTE's)	4.00	4.38	4.41
<i>Geographic Information System</i>			
GIS Field Coordinator	1.00	1.00	1.00
GIS Field Technician I	1.00	2.00	2.00
GIS Field Technician II	1.00	0.00	0.00
GIS Supervisor	1.00	1.00	1.00
GIS Technician II	2.00	2.00	0.00
GSI Technician III	0.00	0.00	2.00
GSI Technician I	1.00	0.00	0.00
Intern - College	0.18	0.38	0.25
Intern - High School	0.25	0.00	0.00
Total Number of Personnel (FTE's)	7.43	6.38	6.25
<i>Program Management and Engineering Department Total</i>	27.43	26.76	27.66



Program Management and Engineering Division – Consolidated Operating Budget

Department : Program Management and Engineering **Business Unit** : Department 500 - Consolidated

Overview of Department Responsibilities

The primary responsibilities of the Program Management and Engineering Division include implementation of the Master Plan, engineering design & construction support and surveying, mapping of the water and sewer system, oversight of the Geographic Information System (GIS) and inspection of additions to the water distribution, sewer and stormwater infrastructure systems. The activities are performed in accordance with federal and state laws, and with rules and regulations promulgated to cover water production and wastewater treatment. Tasks are generally undertaken based on the priorities established by the General Manager.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 1,407,559	\$ 1,836,358	\$ 2,006,358
Overtime Pay	1,170	9,000	5,000
F.I.C.A.	101,671	140,714	152,301
Pension	188,979	251,585	275,536
Employee Benefits	184,402	359,288	336,552
Operating Expenditures:			
Operating Materials & Supplies	7,192	13,845	16,455
Vehicle Supplies	13,632	18,213	19,213
Administrative Supplies	7,999	10,411	20,221
Safety Supplies	1,134	1,450	1,450
Special Purchases	500	-	540
Utilities	28,935	41,014	47,832
Rentals	-	-	-
Maintenance and Repairs	2,104	6,100	11,100
Outside Services	891,088	1,538,065	2,118,340
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	216,033	265,475	328,175
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	122,683	100	55,746
Other Financing Uses:			
Intrafund Transfers Out:	2,996,000	5,480,000	4,620,000
Total Appropriations	<u>\$ 6,171,081</u>	<u>\$ 9,971,618</u>	<u>\$ 10,014,819</u>



BUSINESS UNIT 501: PROGRAM MANAGEMENT AND ENGINEERING DEPARTMENT MANAGER

Department : Program Management and Engineering **Business Unit :** (501) Program Management and Engineering Manager

Major Business Unit Functions:

Directs, manages and controls the efforts of the Program Management and Engineering Division. Manages the Authority's Master Planning process including forecasting future capacity needs, accommodating regulatory changes and improving operational efficiency. Manages engineering consulting services and new major construction projects.

Significant Expenditure and Staffing Changes:

Maintenance and Repairs: increase represents removal of wallpaper and painting of 11 offices.

Outside Services: reflects funding for On-Call Engineering Services, Unidirectional Flushing Program, Collection System Advisement, Knowledge Retention Strategy, Organizational Assessment, Metrics Improvement Strategy, along with Facility Asset Improvement Strategy.

Interfund Transfers: represents funds being transferred to the Renewal and Extension Fund for Walnut Creek Lift Station Evaluation

Budget Detail By	FY 2017 - 18	FY 2018 - 19	FY 2019 - 20
Individual Categories	Actual	Budgeted	Budgeted
Personal Services:			
Salaries and Wages	\$ 311,385	\$ 374,134	\$ 463,592
Overtime Pay	-	-	-
F.I.C.A.	23,155	28,166	34,279
Pension	43,628	52,005	64,438
Employee Benefits	31,600	52,717	65,422
Operating Expenditures:			
Operating Materials & Supplies	27	1,060	1,930
Vehicle Supplies	241	700	700
Administrative Supplies	732	2,535	12,535
Safety Supplies	-	50	50
Special Purchases	500	-	540
Utilities	5,294	6,819	8,129
Rentals	-	-	-
Maintenance and Repairs	118	2,000	7,000
Outside Services	267,332	456,090	996,090
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	68,479	86,565	94,472
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	-	-	-
Other Financing Uses:			
Intrafund Transfers Out:	866,000	1,250,000	500,000
Total Appropriations	<u>\$ 1,618,491</u>	<u>\$ 2,312,841</u>	<u>\$ 2,249,177</u>



BUSINESS UNIT 507: CONSTRUCTION SERVICES

Department : Program Management and Engineering**Business Unit** : (507) Construction Services**Major Business Unit Functions:**

Manages construction projects and provides construction support services. Inspects water and sewer line construction to ensure compliance with standards.

Significant Expenditure and Staffing Changes:

Capital Expenditures: represent funding for a replacement Escape and Truck.

Interfund Transfers: represents funds being transferred to the Renewal and Extension Fund for Waterline Inspections, Sewerline Inspections, Meter Inspections, Galvanized Water Main Replacements, Basin Level Sewer Rehab.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 517,788	\$ 774,017	\$ 805,769
Overtime Pay	1,170	9,000	5,000
F.I.C.A.	37,071	59,902	61,639
Pension	69,292	107,588	112,001
Employee Benefits	75,314	164,216	152,124
Operating Expenditures:			
Operating Materials & Supplies	4,724	8,685	9,730
Vehicle Supplies	9,898	13,800	13,800
Administrative Supplies	6,050	4,060	3,840
Safety Supplies	719	1,000	1,000
Special Purchases	-	-	-
Utilities	15,175	18,971	22,751
Rentals	-	-	-
Maintenance and Repairs	1,677	3,600	3,600
Outside Services	2,143	12,180	10,520
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	14,852	24,079	33,338
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	55,508	-	55,646
Other Financing Uses:			
Intrafund Transfers Out:	2,130,000	4,080,000	4,120,000
Total Appropriations	<u>\$ 2,941,381</u>	<u>\$ 5,281,098</u>	<u>\$ 5,410,758</u>



BUSINESS UNIT 530: ENGINEERING

Department : Program Management and Engineering**Business Unit : (530) Engineering****Major Business Unit Functions:**

Provides engineering services for construction of water and sewer lines. Reviews and approves proposed additions to the Authority's water and sewer system. Assists customers with sewer and water service locations, tap-on fees and meter quotes.

Significant Expenditure and Staffing Changes:

Capital Expenditures: represents funding for recording of Easements.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 179,959	\$ 275,361	\$ 300,327
Overtime Pay	-	-	-
F.I.C.A.	13,321	21,064	22,976
Pension	23,362	37,066	39,673
Employee Benefits	20,517	66,809	44,042
Operating Expenditures:			
Operating Materials & Supplies	130	620	760
Vehicle Supplies	-	-	-
Administrative Supplies	1,109	3,070	3,100
Safety Supplies	-	100	100
Special Purchases	-	-	-
Utilities	3,534	6,763	7,195
Rentals	-	-	-
Maintenance and Repairs	-	-	-
Outside Services	610,748	1,035,215	1,005,015
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	7,079	15,756	16,799
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	-	100	100
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	<u>\$ 859,759</u>	<u>\$ 1,461,924</u>	<u>\$ 1,440,087</u>



BUSINESS UNIT 535: GEOGRAPHIC INFORMATION SYSTEM (GIS)

Department : Program Management and Engineering**Business Unit : (535) Geographic Information System****Major Business Unit Functions:**

Maintains geodatabase for water, sewer and storm piping systems. Manages the development and implementation of work order and inspection tools to support field and management operations. Provides survey information for engineering design projects. Provides data and mapping for asset management and planning purposes. Responsible for acquisition of easements for water and sewer construction projects.

Significant Expenditure and Staffing Changes:

Outside Services: increase represents funding for support for Cityworks, Business Objects BI and reporting along with temporary GIS Field personnel for 1 year.

General Expenses: increase represents twenty various ESRI licenses.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 398,427	\$ 412,846	\$ 436,670
Overtime Pay	-	-	-
F.I.C.A.	28,124	31,582	33,407
Pension	52,697	54,926	59,424
Employee Benefits	56,971	75,546	74,964
Operating Expenditures:			
Operating Materials & Supplies	2,311	3,480	4,035
Vehicle Supplies	3,493	3,713	4,713
Administrative Supplies	108	746	746
Safety Supplies	415	300	300
Special Purchases	-	-	-
Utilities	4,932	8,461	9,757
Rentals	-	-	-
Maintenance and Repairs	309	500	500
Outside Services	10,865	34,580	106,715
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	125,623	139,075	183,566
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	67,175	-	-
Other Financing Uses:			
Intrafund Transfers Out:	-	150,000	-
Total Appropriations	<u>\$ 751,450</u>	<u>\$ 915,755</u>	<u>\$ 914,797</u>



Distribution and Conveyance Division – Business Unit Group 600



Clayton County Water Authority



**DISTRIBUTION
AND
CONVEYANCE
DIVISION**



*“Providing **Quality**
Water and **Quality**
Services to Our
Community”*



DISTRIBUTION AND CONVEYANCE DIVISION BUDGET UNIT 600

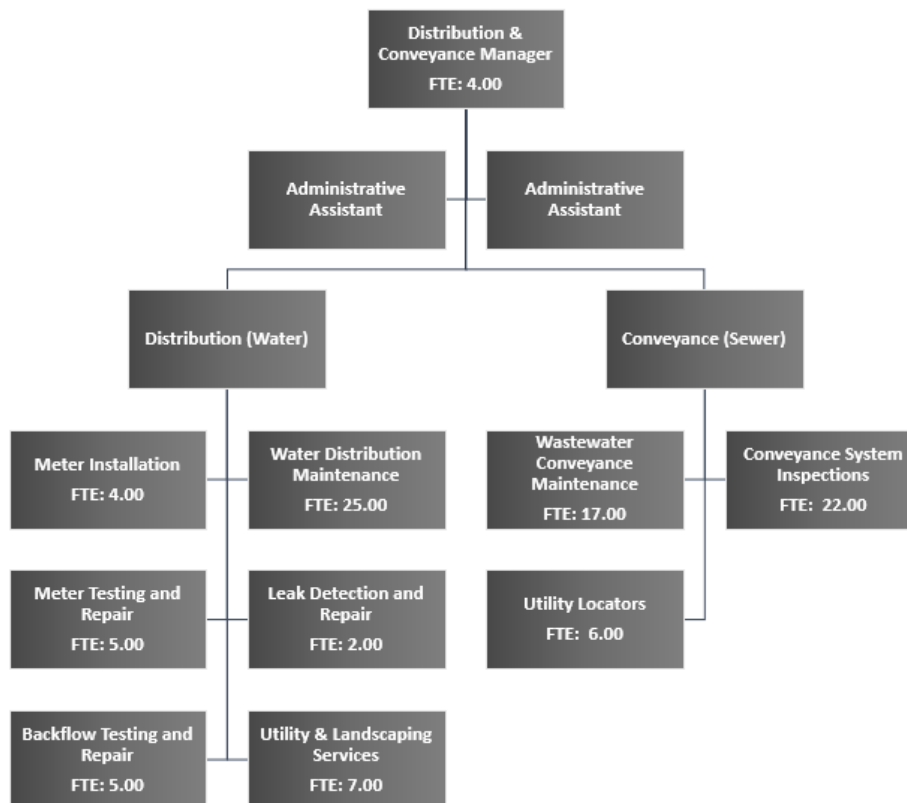
The Distribution and Conveyance Division is charged with the critical task of ensuring the efficiency of the individual distribution and collection systems. It has the responsibilities of installing the Authority's water lines, water meters and maintaining both water and sewer lines. Work must be performed in compliance with standards established by the federal and state regulatory agencies as they pertain to water distribution and sewer collection.

Responsibilities are accomplished per the general direction of the General Manager and the Assistant General Managers over operations. The Distribution and Conveyance Manager is responsible for the day-to-day operations of the department.

To better manage operating expenses, the division is broken down into specific programs, types of services or functional areas of responsibility. The budget units that have been identified for this department are listed below.

601 – Distribution and Conveyance Manager
610 – Meter Installation
612 – Water Distribution Maintenance
616 – Meter Testing and Repair
617 – Leak Detection and Repair

618 – Backflow Testing and Repair
619 – Utility and Landscaping Services
621 – Wastewater Conveyance Maintenance
627 – Conveyance System Inspections
630 – Utility Locators

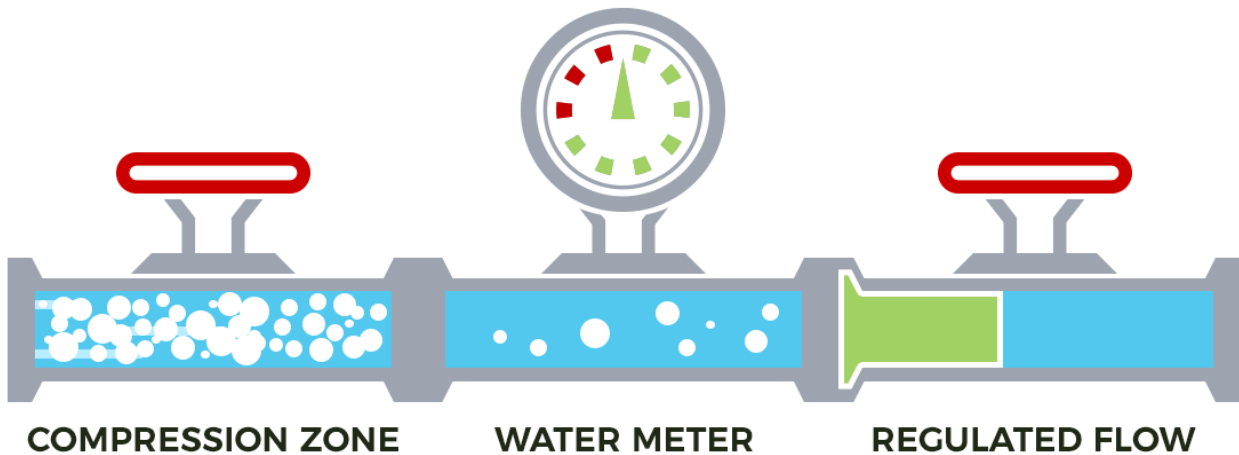




Distribution and Conveyance Division – Staffing Summary

Authorized Personnel	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted	FY 2019-2020 Budgeted
Distribution and Conveyance Division			
601 - Distribution & Conveyance Manager	4.00	4.00	4.00
610 - Meter Installation	4.00	4.00	4.00
612 - Water Distribution Maintenance	27.00	26.00	25.00
616 - Meter Testing and Repair	6.00	5.00	5.00
617 - Leak Detection and Repair	2.00	2.00	2.00
618 - Backflow Testing and Repair	5.00	5.00	5.00
619 - Utility & Landscaping Services	9.00	7.00	7.00
621 - Wastewater Conveyance Maintenance	15.00	16.00	17.00
627 - Conveyance System Inspections	20.00	22.00	22.00
630 - Utility Locators	6.00	6.00	6.00
Total Full-Time Employees (FTEs)	98.00	97.00	97.00

The [Distribution and Conveyance Division](#) decreased by one full-time employee (FTE) in its Water Distribution Maintenance business unit when a supervisory level position was consolidated with another.





Distribution and Conveyance Division – Major Initiatives for FY 2019 - 2020

Business Unit	Budget Funding	Account Number	Amount Budgeted	Initiative
Distribution and Conveyance Manager				
601	Operating	56131	\$ 60,000	Pressure Wash and Paint Building
	Capital	59921	115,000	Roof
		59953	29,807	Truck: F-150 4x4
Grand Total			\$ 204,807	
Meter Installation				
610	Operating	51104	\$ 400,000	Meter Setting Materials-From Warehouse
		56124	250,000	Meter and Backflow Setting Outside Services
	Capital	59941	119,000	Excavator
Grand Total			\$ 769,000	
Water Distribution Maintenance				
612	Operating	51104	\$ 350,000	Materials for Water Distribution Maintenance
		56118	300,000	Patching and Paving
		56128	250,000	Maintenance: Supply Mains <i>(Concrete, Vault repairs, Dump fees, Plumbing Repairs)</i>
	Capital	59303	318,000	DOT - Valley Hill Road Connector and Bridge
		59303	120,000	DOT - Tara Blvd
		59951	41,394	Truck: F-350
		59951	41,394	Truck: F-351
		59951	95,076	Flat Dump Truck
		59951	95,076	Flat Dump Truck
Grand Total			\$ 1,610,940	
Meter Testing and Repair				
616	Capital	59946	\$ 10,000	Meter Tester
Grand Total			\$ 10,000	
Backflow Testing and Repair				
618	Operating	56199	\$ 40,000	Backflow Testing Contractor
Grand Total			\$ 40,000	
Utility and Landscaping Services				
619	Operating	51104	\$ 70,000	Materials for Utility & Landscaping Services
Grand Total			\$ 70,000	



Business Unit	Budget Funding	Account Number	Amount Budgeted	Initiative
Wastewater Conveyance Maintenance				
621	Operating	51104	\$ 210,000	Materials for Conveyance Maintenance
		55106	200,000	Private Property Damage
		56118	150,000	Patching & Paving
		56124	500,000	Maintenance: Collections & Outfalls (Concrete, Dump Fees, Plumbing Repairs)
	Capital	59988	16,000	Ridged Camera Reel & Transmitter
Grand Total			\$ 1,076,000	
Conveyance System Inspections				
627	Operating	56104	\$ 50,000	Flow Monitoring
		56124	300,000	Maintenance: Collections & Outfalls (Concrete, Dump Fees, Plumbing Repairs)
	Capital	59933	25,000	SLRAT
		59946	30,000	Smart Loggers (5)
		59953	29,807	Truck: F-150 4x4
		59988	35,000	Pole Camera (2)
		59988	37,000	Transporter for Large Pipes
		59988	24,000	Spare Camera
		Grand Total		
Utility Locators				
630	Operating	56104	\$ 26,000	IRTH Solutions Locating Software
		56199	32,000	UPC Annual Membership
	Capital	59953	29,807	Truck: F-150 4x4
		59953	29,807	Truck: F-150 4x4
		59953	29,807	Truck: F-150 4x4
		Grand Total		

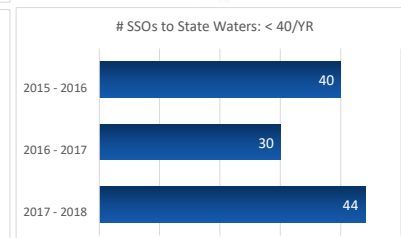
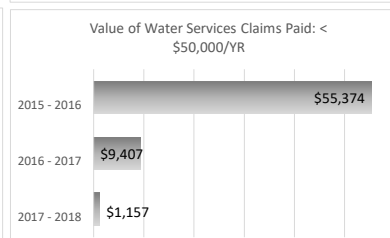
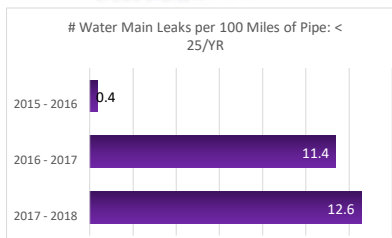
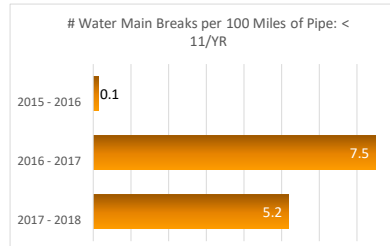
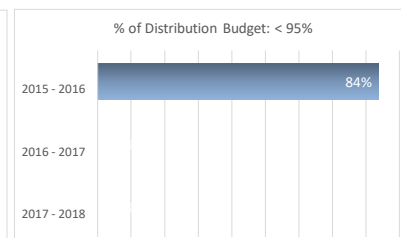
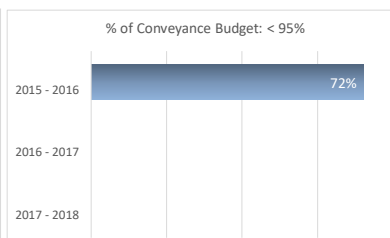
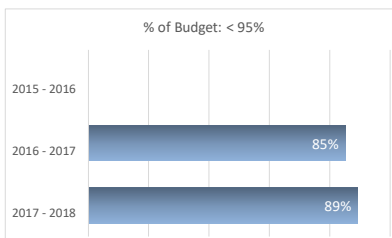
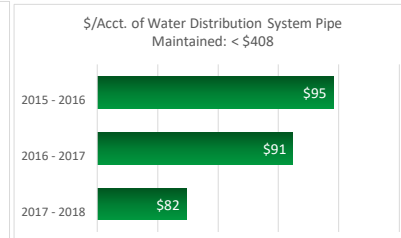
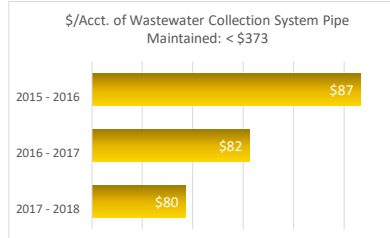
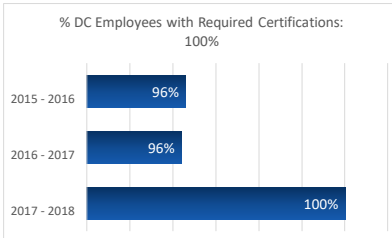
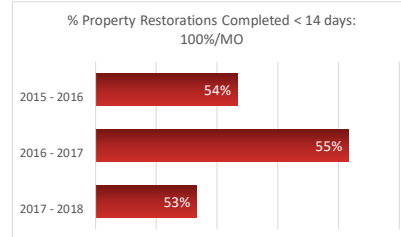
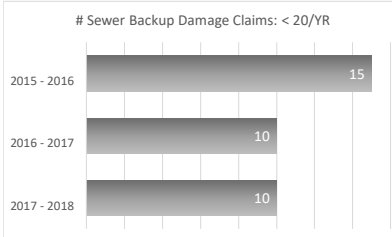
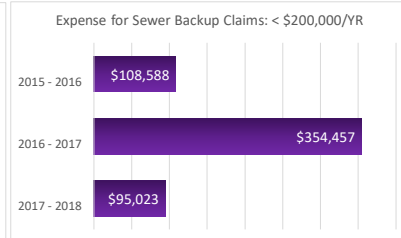
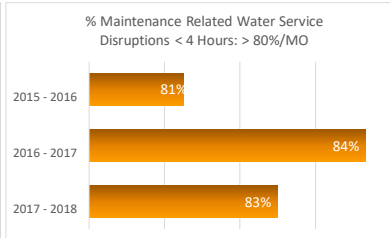
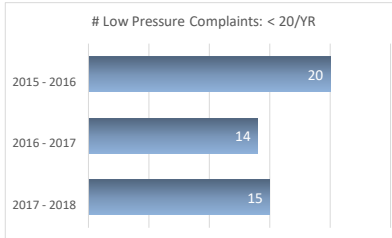
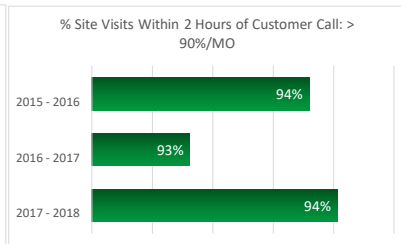
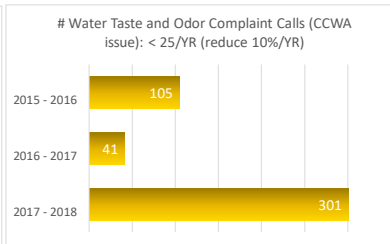
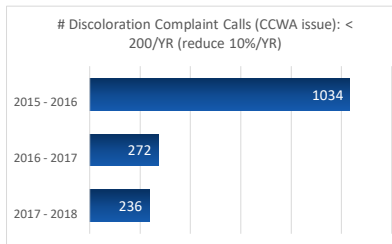


Distribution and Conveyance Division – Levels of Service

The Distribution and Conveyance Division is the Authority's largest division. This group has 16 KPI metrics that are associated with six of the seven goals of the Authority which include "Superior Product Quality," "Exceed Customer Expectations," "Provide Employee Development," "Optimize Operations," "Infrastructure Sustainability," and "Stakeholder Support" goals and strategies 2, 4, 5, 6, 7, 8, 13, 21 and 23. The department's performance on these metrics is captured in the table that follows.

Service Level Goal	Key Performance Indicator (KPI)	Division	Target	2017 - 2018	2016 - 2017	2015 - 2016
SUPERIOR PRODUCT QUALITY						
2 Potable water quality that meets customer expectations	# Discoloration Complaint Calls (CCWA issue): < 200/YR (reduce 10%/YR)	DC	< 200/Yr. - Reduce 10%/Yr.	236	272	1,034
	# Water Taste and Odor Complaint Calls (CCWA issue): < 25/YR (reduce 10%/YR)	DC	< 25/Yr. - Reduce 10%/Yr.	301	41	105
EXCEED CUSTOMER EXPECTATIONS						
4 Improve customer experience	% Site Visits Within 2 Hours of Customer Call: > 90%/MO	DC	> 90% / Month	94%	93%	94%
5 Minimize potable water service disruptions	# Low Pressure Complaints: < 20/YR	DC	< 20 / Year	15	14	20
	% Maintenance Related Water Service Disruptions < 4 Hours: > 80%/MO	DC	> 80% / Month	83%	84%	81%
6 Minimize customer sewer backups	Expense for Sewer Backup Claims: < \$200,000/YR	DC	< \$200,000 / Year	\$95,023	\$354,457	\$108,588
	# Sewer Backup Damage Claims: < 20/YR	DC	< 20 / Year	10	10	15
7 Complete all property restorations in 14 days	% Property Restorations Completed < 14 days: 100%/MO	DC	100% / Month	53%	55%	54%
PROVIDE EMPLOYEE DEVELOPMENT						
8 Provide effective employee training and development	% DC Employees with Required Certifications: 100%	DC	100% / Year	100%	96%	96%
OPTIMIZE OPERATIONS						
13 Reasonable Cost of Service	\$/Acct. of Wastewater Collection System Pipe Maintained: < \$373	DC	< \$373	\$80	\$82	\$87
	\$/Acct. of Water Distribution System Pipe Maintained: < \$408	DC	< \$408	\$82	\$91	\$95
	% of Budget: < 95%	DC	< 95%	89%	85%	NA
INFRASTRUCTURE SUSTAINABILITY						
21 Provide a sustainable water supply	# Water Main Breaks per 100 Miles of Pipe: < 11/YR	DC	< 11 / Year	5.2	7.5	0.13
	# Water Main Leaks per 100 Miles of Pipe: < 25/YR	DC	< 25 / Year	12.6	11.4	0.36
	Value of Water Services Claims Paid: < \$50,000/YR	DC	< \$50,000 / Year	\$1,157	\$9,407	\$55,374
STAKEHOLDER SUPPORT						
23 Environmental Stewardship and Sustainability	# SSOs to State Waters: < 40/YR	DC	< 40 / Year	44	30	40







Distribution and Conveyance Division Staffing – Position Detail

Authorized Personnel	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted	FY 2019-2020 Budgeted
<i>Distribution and Conveyance Dept. Manager</i>			
Distribution and Conveyance Manager	1.00	1.00	1.00
Compliance Specialist	1.00	1.00	1.00
Lead Office Assistant	1.00	1.00	1.00
Property Restoration Tech	1.00	1.00	1.00
Total Number of Personnel (FTE's)	4.00	4.00	4.00
<i>Meter Installation</i>			
Equipment Operator	1.00	1.00	1.00
Utility Service Mechanic I	1.00	2.00	2.00
Utility Service Mechanic II	1.00	0.00	0.00
Utility Service Mechanic Crew Leader	1.00	1.00	1.00
Total Number of Personnel (FTE's)	4.00	4.00	4.00
<i>Water Distribution Maintenance</i>			
Distribution Maintenance Supervisor	1.00	1.00	1.00
Equipment Operator	4.00	4.00	4.00
Equipment Operator Pipeline	2.00	2.00	2.00
Installation/Repair Foreman	1.00	2.00	2.00
Installation/Repair Specialist	1.00	0.00	0.00
Office Assistant	1.00	1.00	1.00
Pipeline Install Crew Leader	2.00	2.00	2.00
Senior Equipment Operator	2.00	2.00	1.00
Trouble Shooter	4.00	3.00	3.00
Utility Service Mechanic Crew Leader	3.00	3.00	3.00
Utility Service Mechanic I	4.00	5.00	4.00
Utility Service Mechanic II	2.00	1.00	2.00
Total Number of Personnel (FTE's)	27.00	26.00	25.00
<i>Meter Testing and Repair</i>			
Equipment Operator	2.00	1.00	1.00
Meter Repair Technician	2.00	2.00	2.00
Utility Services Mechanic Crew Leader	1.00	1.00	1.00
Meter/Backflow Testing and Repair Forer	1.00	1.00	1.00
Total Number of Personnel (FTE's)	6.00	5.00	5.00
<i>Leak Detection and Repair</i>			
Leak Detection Crew Leader	1.00	1.00	1.00
Leak Detection Technician	1.00	1.00	1.00
Total Number of Personnel (FTE's)	2.00	2.00	2.00
<i>Backflow Testing and Repair</i>			
Backflow Technician	4.00	4.00	4.00
Backflow Prevention Crew Leader	1.00	1.00	1.00
Total Number of Personnel (FTE's)	5.00	5.00	5.00



Authorized Personnel	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted	FY 2019-2020 Budgeted
<i>Utility & Landscaping Services</i>			
Equipment Operator	2.00	1.00	1.00
Utility Service Mechanic I	3.00	1.00	3.00
Utility Service Mechanic II	1.00	2.00	0.00
Utility Service Mechanic Crew Leader	1.00	1.00	1.00
Utility Services Foreman	1.00	1.00	1.00
Valve Maintenance Coordinator	1.00	1.00	1.00
Total Number of Personnel (FTE's)	9.00	7.00	7.00
<i>Wastewater Conveyance Maintenance</i>			
Conveyance Maintenance Supervisor	1.00	1.00	1.00
Conveyance System Repair Foreman	1.00	1.00	1.00
Equipment Operator	3.00	3.00	3.00
Office Assistant	1.00	1.00	1.00
Troubleshooter	0.00	1.00	1.00
Utility Service Mechanic I	4.00	4.00	3.00
Utility Service Mechanic II	2.00	2.00	3.00
Utility Service Mechanic Crew Leader	3.00	3.00	3.00
Conveyance Planner/Scheduler	0.00	0.00	1.00
Total Number of Personnel (FTE's)	15.00	16.00	17.00
<i>Conveyance System Inspections</i>			
Conveyance Preventative Maint Foreman	1.00	1.00	1.00
CCTV Crew Leader	2.00	2.00	2.00
CCTV Technician	2.00	2.00	2.00
Damage Control Foreman	0.00	1.00	0.00
Conveyance Cleaning Foreman	0.00	0.00	1.00
Damage Control Specialist	1.00	0.00	0.00
Equipment Operator	5.00	5.00	5.00
Lead Utility Service Mechanic	2.00	3.00	3.00
Utility Service Mechanic I	1.00	2.00	3.00
Utility Service Mechanic II	1.00	1.00	0.00
Utility Services Mechanic Crew Leader	5.00	5.00	5.00
Total Number of Personnel (FTE's)	20.00	22.00	22.00
<i>Utility Locators</i>			
Trouble Shooter/Utility Locator	5.00	5.00	5.00
Utility Service Mechanic Crew Leader	1.00	1.00	1.00
Total Number of Personnel (FTE's)	6.00	6.00	6.00
<i>Distribution & Conveyance Department Total</i>	98.00	97.00	97.00



Distribution and Conveyance Division – Consolidated Operating Budget

Department : Distribution and Conveyance

Business Unit : Department 600 - Consolidated

Overview of Department Responsibilities

The primary responsibility of the Distribution and Conveyance (D&C) Division is ensuring the overall integrity of the water distribution and wastewater collection systems. The Division installs and maintains water lines and water meters. It also maintains the wastewater collection system. The activities are performed in accordance with federal and state laws which govern water distribution and wastewater collection systems. Tasks are generally undertaken based on the priorities established by the General Manager.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 4,432,646	4,864,867	\$ 4,958,964
Overtime Pay	241,123	234,500	239,000
F.I.C.A.	345,495	390,099	377,364
Pension	613,238	688,279	689,294
Employee Benefits	777,038	1,258,207	1,084,864
Operating Expenditures:			-
Operating Materials & Supplies	1,516,122	1,121,095	1,400,010
Vehicle Supplies	201,568	211,400	217,100
Administrative Supplies	11,640	15,525	15,275
Safety Supplies	34,897	33,400	32,200
Special Purchases	1,972	1,960	1,960
Utilities	111,690	101,979	101,514
Rentals	3,921	6,950	7,350
Maintenance and Repairs	258,756	302,349	352,849
Outside Services	1,975,063	2,178,150	2,265,796
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	185,678	220,094	232,410
Accounting Charges	-	-	-
Debt Service:			-
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	314,599	859,962	892,975
Other Financing Uses:			-
Intrafund Transfers Out:	2,068,000	1,269,000	438,000
Total Appropriations	\$ 13,093,446	\$ 13,757,816	\$ 13,306,925



BUSINESS UNIT 601: DISTRIBUTION AND CONVEYANCE DEPARTMENT MANAGER

Department : Distribution and Conveyance**Business Unit : (601) Distribution and Conveyance Manager****Major Business Unit Functions:**

Directs, manages and controls the maintenance and construction of water and sewer lines.

Significant Expenditure and Staffing Changes:

Capital Expenditures: represents funding for a new roof, pressure wash and seal building, and a replacement truck.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 319,263	\$ 324,504	\$ 332,592
Overtime Pay	5,241	5,500	8,500
F.I.C.A.	23,610	25,247	25,443
Pension	43,480	45,106	46,231
Employee Benefits	43,823	58,362	52,151
Operating Expenditures:			
Operating Materials & Supplies	11,870	9,820	16,995
Vehicle Supplies	4,440	5,400	5,400
Administrative Supplies	1,071	2,600	2,600
Safety Supplies	175	500	500
Special Purchases	1,972	1,960	1,960
Utilities	23,701	21,560	20,995
Rentals	-	350	350
Maintenance and Repairs	3,648	11,400	11,400
Outside Services	41,498	46,480	49,980
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	74,605	87,132	94,491
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	-	-	204,807
Other Financing Uses:			
Intrafund Transfers Out:	200,000	500,000	-
Total Appropriations	\$ 798,397	\$ 1,145,921	\$ 874,395



BUSINESS UNIT 610: METER INSTALLATION

Department : Distribution and ConveyanceBusiness Unit : (610) Meter InstallationMajor Business Unit Functions:

Oversees the installation of meters.

Significant Expenditure and Staffing Changes:**Operating Materials and Supplies:** increase is due to more of the small meters being installed.

Capital Expenditures: represents funding for a new excavator.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 123,331	\$ 170,974	\$ 178,649
Overtime Pay	12,683	10,000	10,000
F.I.C.A.	10,002	13,845	13,667
Pension	16,581	23,765	24,831
Employee Benefits	21,138	45,882	38,664
Operating Expenditures:			
Operating Materials & Supplies	557,310	211,380	411,660
Vehicle Supplies	5,644	6,300	6,300
Administrative Supplies	139	300	300
Safety Supplies	2,161	2,500	2,500
Special Purchases	-	-	-
Utilities	1,508	1,200	1,500
Rentals	707	-	400
Maintenance and Repairs	2,720	4,200	4,200
Outside Services	155,466	284,085	292,105
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	1,858	4,902	4,961
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	13,150	-	119,000
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	\$ 924,398	\$ 779,333	\$ 1,108,737



BUSINESS UNIT 612: WATER DISTRIBUTION MAINTENANCE

Department : Distribution and Conveyance**Business Unit : (612) Water Distribution
Maintenance****Major Business Unit Functions:**

Maintains water lines.

Significant Expenditure and Staffing Changes:**Outside Services:** represents funding for patching and paving of roads, concrete work and dumping fees after waterline repairs are completed.**Capital Expenditures:** represents funding for two replacement trucks, one replacement and one new Flat Dump Truck**Interfund Transfers:** represents funds being transferred to the Renewal and Extension Fund for DOT Valley Hill Rd Connector & Bridge and DOT Tara Blvd.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 1,226,481	\$ 1,361,511	\$ 1,344,161
Overtime Pay	119,168	110,000	110,000
F.I.C.A.	100,289	112,567	100,829
Pension	170,858	189,251	186,838
Employee Benefits	206,948	333,331	266,853
Operating Expenditures:			
Operating Materials & Supplies	431,480	389,915	389,960
Vehicle Supplies	72,541	72,500	72,500
Administrative Supplies	3,059	3,300	3,300
Safety Supplies	12,969	12,000	12,000
Special Purchases	-	-	-
Utilities	27,634	25,500	25,500
Rentals	-	2,500	2,500
Maintenance and Repairs	39,892	43,000	43,500
Outside Services	515,798	590,285	615,285
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	27,611	33,212	33,310
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	-	173,382	272,940
Other Financing Uses:			
Intrafund Transfers Out:	1,750,000	769,000	438,000
Total Appropriations	<u>\$ 4,704,728</u>	<u>\$ 4,221,254</u>	<u>\$ 3,917,476</u>



BUSINESS UNIT 616: METER TESTING AND REPAIR

Department : Distribution and Conveyance**Business Unit : (616) Meter Testing and Repair****Major Business Unit Functions:**

Test, install and repair meters & backflows.

Significant Expenditure and Staffing Changes:**Capital Expenditures:** represent funding for a replacement Meter Tester.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 288,764	\$ 267,430	\$ 276,932
Overtime Pay	3,381	5,000	5,000
F.I.C.A.	22,009	20,842	21,187
Pension	41,323	49,232	38,493
Employee Benefits	53,096	68,285	55,008
Operating Expenditures:			
Operating Materials & Supplies	50,068	50,570	51,050
Vehicle Supplies	5,776	8,500	8,500
Administrative Supplies	446	850	850
Safety Supplies	1,150	1,000	1,000
Special Purchases	-	-	-
Utilities	5,039	4,600	4,600
Rentals	1,162	1,000	1,000
Maintenance and Repairs	443	1,214	1,214
Outside Services	1,062	28,368	28,768
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	6,046	5,522	5,561
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	-	-	10,000
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	<u>\$ 479,765</u>	<u>\$ 512,413</u>	<u>\$ 509,163</u>



BUSINESS UNIT 617: LEAK DETECTION AND REPAIR

Department : Distribution and Conveyance**Business Unit : (617) Leak Detection and Repair****Major Business Unit Functions:**

Detect and locate leaks in water and sewer lines. Monitor the M-Log System.

Significant Expenditure and Staffing Changes:

No significant changes from previous fiscal year.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 88,869	\$ 93,357	\$ 99,568
Overtime Pay	-	1,000	500
F.I.C.A.	6,710	7,219	7,617
Pension	12,122	12,977	13,840
Employee Benefits	12,938	19,370	19,105
Operating Expenditures:			
Operating Materials & Supplies	1,412	4,290	4,830
Vehicle Supplies	158	4,400	2,400
Administrative Supplies	80	200	200
Safety Supplies	46	300	100
Special Purchases	-	-	-
Utilities	2,806	2,200	2,200
Rentals	-	-	-
Maintenance and Repairs	121	435	435
Outside Services	25,122	1,652	1,652
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	606	2,224	2,247
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	-	-	-
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	\$ 150,990	\$ 149,624	\$ 154,694



BUSINESS UNIT 618: BACKFLOW TESTING AND REPAIR

Department : Distribution and Conveyance**Business Unit : (618) Backflow Testing and Repair****Major Business Unit Functions:**

Testing and repair of backflows.

Significant Expenditure and Staffing Changes:**Outside Services:** increase represents funding for Backflow Testing.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 177,166	\$ 220,093	\$ 227,129
Overtime Pay	12,962	10,000	12,000
F.I.C.A.	14,334	17,601	17,376
Pension	24,634	30,593	31,571
Employee Benefits	33,554	63,574	43,151
Operating Expenditures:			
Operating Materials & Supplies	25,365	46,725	47,075
Vehicle Supplies	8,638	11,000	11,000
Administrative Supplies	775	950	1,150
Safety Supplies	1,705	1,200	1,200
Special Purchases	-	-	-
Utilities	4,857	4,419	4,419
Rentals	-	-	-
Maintenance and Repairs	5,175	4,000	4,000
Outside Services	2,739	29,112	109,612
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	10,501	10,625	11,354
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	-	35,358	-
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	\$ 322,405	\$ 485,250	\$ 521,037



BUSINESS UNIT 619: UTILITY AND LANDSCAPING SERVICES

Department : Distribution and Conveyance**Business Unit : (619) Utility & Landscaping Services****Major Business Unit Functions:**

Maintain valves and hydrants. Performs property restoration.

Significant Expenditure and Staffing Changes:

No significant changes from previous fiscal year.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 336,655	\$ 344,492	\$ 322,330
Overtime Pay	17,874	18,000	18,000
F.I.C.A.	26,731	27,730	24,658
Pension	47,287	47,885	44,804
Employee Benefits	60,422	96,830	75,820
Operating Expenditures:			
Operating Materials & Supplies	91,483	76,715	77,965
Vehicle Supplies	16,604	18,300	21,500
Administrative Supplies	476	625	1,375
Safety Supplies	1,372	1,400	1,400
Special Purchases	-	-	-
Utilities	3,710	3,600	3,600
Rentals	-	500	500
Maintenance and Repairs	9,100	9,600	9,600
Outside Services	2,380	10,335	6,935
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	7,386	9,179	9,673
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	127,540	28,382	-
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	\$ 749,020	\$ 693,573	\$ 618,160



BUSINESS UNIT 621: WASTEWATER CONVEYANCE MAINTENANCE

Department : Distribution and Conveyance**Business Unit : (621) Wastewater****Major Business Unit Functions:****Conveyance Maintenance**

Repair and maintenance of sewer lines.

Significant Expenditure and Staffing Changes:**Maintenance and Repairs:** increase represents funding for building renovations along with increase in private property.**Capital Expenditures:** represents funding for a new Ridged Camera Reel and Transmitter.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 668,033	\$ 771,688	\$ 818,925
Overtime Pay	26,095	30,000	30,000
F.I.C.A.	50,495	61,330	62,647
Pension	91,642	107,264	113,831
Employee Benefits	119,064	229,621	216,936
Operating Expenditures:			
Operating Materials & Supplies	267,145	238,520	270,175
Vehicle Supplies	32,903	34,000	32,000
Administrative Supplies	2,245	3,100	2,400
Safety Supplies	9,067	9,000	8,000
Special Purchases	-	-	-
Utilities	14,788	13,550	13,350
Rentals	1,189	2,000	2,000
Maintenance and Repairs	146,784	179,000	237,500
Outside Services	792,411	656,621	697,885
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	21,922	26,496	25,763
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	142,555	272,000	16,000
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	<u>\$ 2,386,338</u>	<u>\$ 2,634,190</u>	<u>\$ 2,547,412</u>



BUSINESS UNIT 627: CONVEYANCE SYSTEM INSPECTION

Department : Distribution and Conveyance**Business Unit : (627) Conveyance System
Inspection****Major Business Unit Functions:**

Clean and inspect sewer lines to improve flow efficiencies, preventing sewer backups.

Significant Expenditure and Staffing Changes:**Other Materials & Supplies:** increase represents funding for replacement smoke blowers, 2" pumps, and specialized nozzles.**Capital Expenditures:** represents funding for a SLRAT, Smart Loggers, two Pole Cameras, Transporter for large pipes, Spare Camera, and a replacement Truck, .

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 977,191	\$ 1,061,167	\$ 1,085,652
Overtime Pay	39,498	35,000	35,000
F.I.C.A.	74,400	83,854	83,052
Pension	134,021	147,504	150,905
Employee Benefits	179,241	271,320	249,445
Operating Expenditures:			
Operating Materials & Supplies	57,374	58,590	95,250
Vehicle Supplies	37,847	36,500	43,000
Administrative Supplies	2,512	2,700	2,200
Safety Supplies	5,772	5,000	5,000
Special Purchases	-	-	-
Utilities	19,299	17,750	17,750
Rentals	863	600	600
Maintenance and Repairs	48,642	47,500	40,000
Outside Services	379,749	470,182	402,544
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	29,449	34,415	37,583
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	31,354	322,458	180,807
Other Financing Uses:			
Intrafund Transfers Out:	118,000	-	-
Total Appropriations	<u>\$ 2,135,212</u>	<u>\$ 2,594,540</u>	<u>\$ 2,428,788</u>



BUSINESS UNIT 630: UTILITY LOCATORS

Department : Distribution and ConveyanceBusiness Unit : (630) Utility LocatorsMajor Business Unit Functions:

Locate water and sewer lines.

Significant Expenditure and Staffing Changes:**Capital Expenditures:** represents funding for three replacement trucks.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 226,893	\$ 249,651	\$ 273,026
Overtime Pay	4,221	10,000	10,000
F.I.C.A.	16,915	19,864	20,888
Pension	31,290	34,702	37,950
Employee Benefits	46,814	71,632	67,731
Operating Expenditures:			
Operating Materials & Supplies	22,615	34,570	35,050
Vehicle Supplies	17,017	14,500	14,500
Administrative Supplies	837	900	900
Safety Supplies	480	500	500
Special Purchases	-	-	-
Utilities	8,348	7,600	7,600
Rentals	-	-	-
Maintenance and Repairs	2,231	2,000	1,000
Outside Services	58,838	61,030	61,030
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	5,694	6,387	7,467
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	-	28,382	89,421
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	<u>\$ 442,193</u>	<u>\$ 541,718</u>	<u>\$ 627,063</u>



Water Reclamation Division – Business Unit Group 700



Clayton County Water Authority



**WATER
RECLAMATION
DIVISION**



*“Providing **Quality**
Water and **Quality**
Services to Our
Community”*



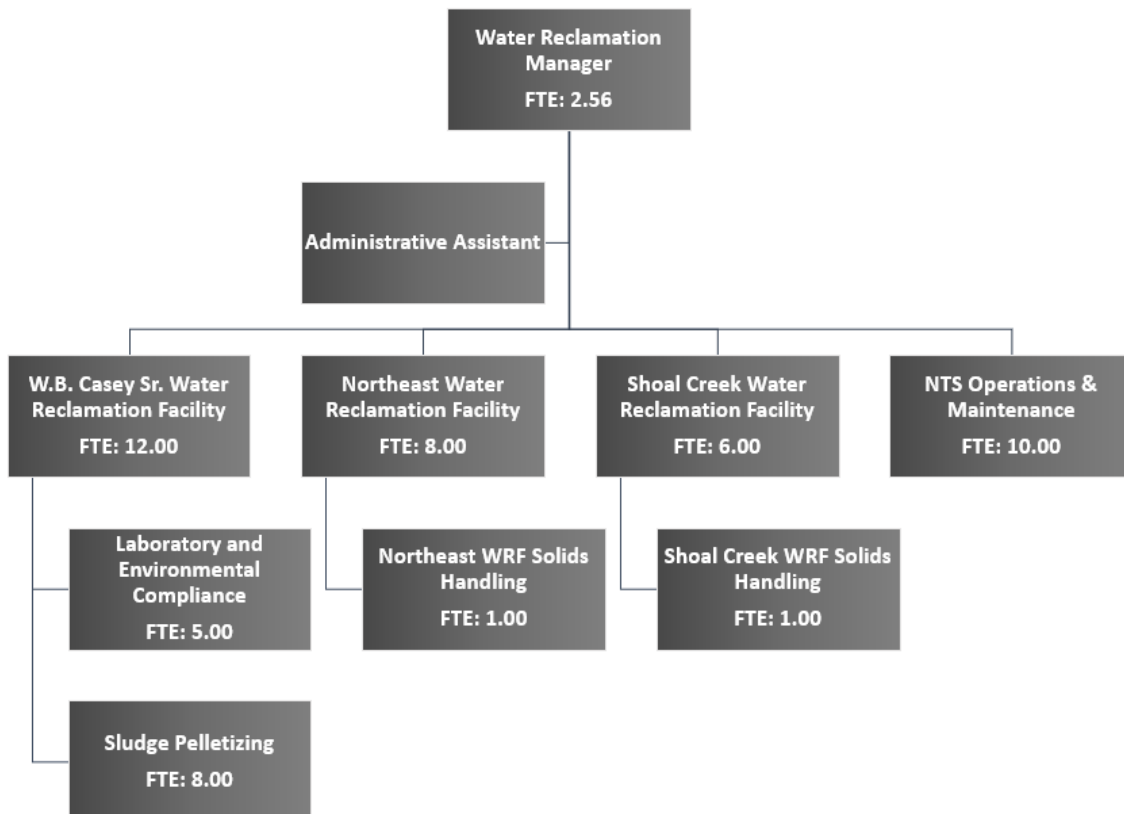
WATER RECLAMATION DIVISION BUDGET UNIT 700

The Water Reclamation Division is responsible for treating the wastewater generated by the Authority's customers. To achieve its task of reclaiming water so that it is environmentally safe, it operates three wastewater facilities, one bio-solid facility and a central laboratory. The activity of treating wastewater is highly regulated and specific operating standards are promulgated by federal and state regulatory agencies that have oversight of wastewater treatment.

Responsibilities are accomplished per the general direction of the General Manager and the Assistant General Managers over operations. The Water Reclamation Manager is responsible for the day-to-day operations of the department.

To better manage operating expenses, the division is broken down into specific programs, reclamation facilities, activities or areas of responsibility. The budget units that have been identified for this area are listed below.

- | | |
|---|--|
| <ul style="list-style-type: none"> 701 – Water Reclamation Manager 720 – W.B. Casey Sr. Water Reclamation Facility 721 – Northeast Water Reclamation Facility 722 – Northeast WRF Solids Handling 724 – Shoal Creek Water Reclamation Facility 727 – Shoal Creek WRF Solids Handling 729 – R. L. Jackson Transfer Pump Station | <ul style="list-style-type: none"> 730 – Laboratory and Environmental Compliance 731 – Sludge Pelletizing 732 – Influent Pump Station 740 – Natural Treatment Operations and Maintenance 741 – Panhandle Road Wetlands 742 – Huie Wetlands |
|---|--|





Water Reclamation Division – Staffing Summary

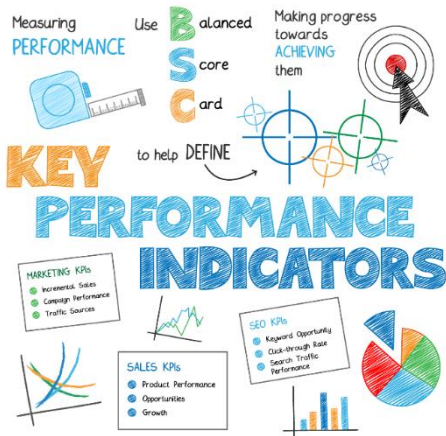
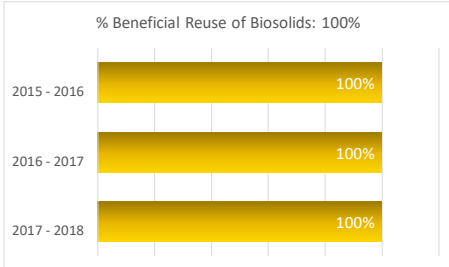
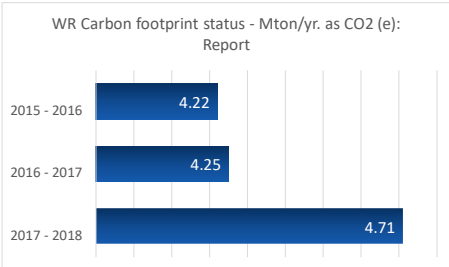
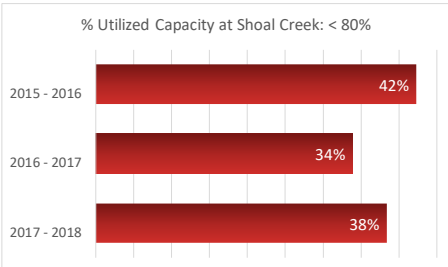
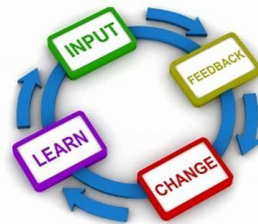
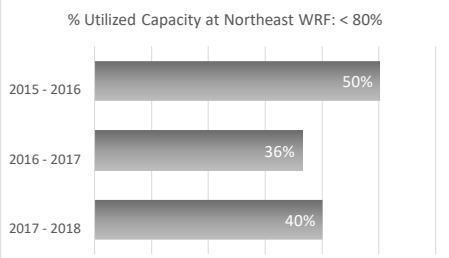
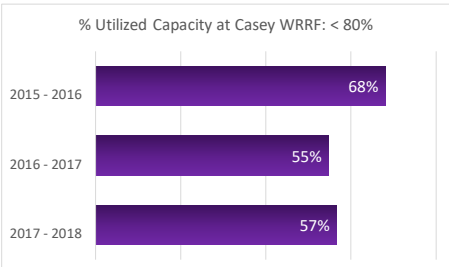
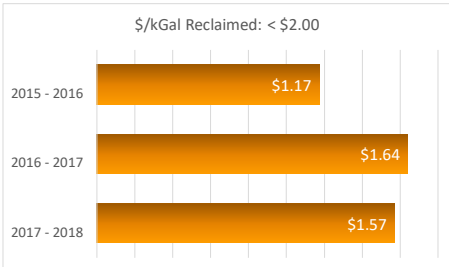
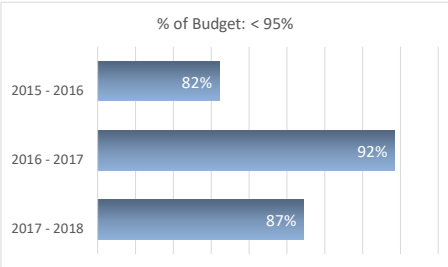
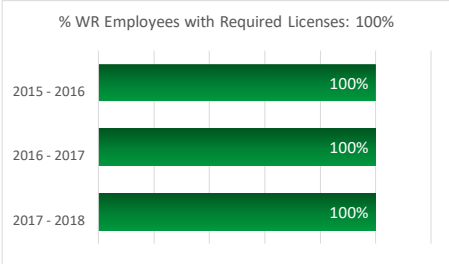
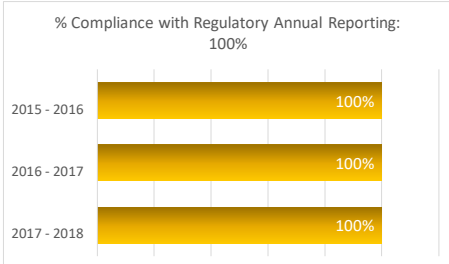
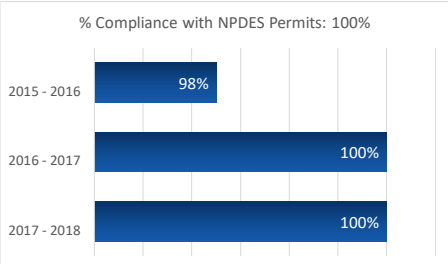
Authorized Personnel	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted	FY 2019-2020 Budgeted
Water Reclamation Division			
701 - Water Reclamation Manager	2.23	2.23	2.56
720 - W.B Casey SR Water Resource Recovery Facility	10.00	11.00	12.00
721 - Northeast Water Reclamation Facility	9.00	9.00	8.00
722 - Northeast WRF Solids Handling	1.00	1.00	1.00
724 - Shoal Creek Water Reclamation Facility	7.00	6.00	6.00
727 - Shoal Creek WRF Solids Handling	1.00	1.00	1.00
730 - Laboratory and Environmental Compliance	5.00	5.00	5.00
731 - Sludge Pelletizing	8.00	8.00	8.00
740 - NTS Operations & Maintenance	10.00	10.00	10.00
Total Full-Time Employees (FTEs)	53.23	53.23	53.56

Water Reclamation Division – Levels of Service

The Water Reclamation Division has 10 KPI metrics that are associated with five of the seven goals of the Authority which include “**Superior Product Quality**,” “**Provide Employee Development**,” “**Optimize Operations**,” “**Infrastructure Sustainability**” and “**Stakeholder Support**” goals and strategies 1, 8, 13, 22 and 23. The department’s performance on these metrics is captured in the table that follows.

Service Level Goal	Key Performance Indicator (KPI)	Division	Target	2017 - 2018	2016 - 2017	2015 - 2016
SUPERIOR PRODUCT QUALITY						
1 Meet all applicable regulatory requirements	% Compliance with NPDES Permits: 100%	WR	100%	100%	100%	98%
PROVIDE EMPLOYEE DEVELOPMENT						
8 Provide effective employee training and development	% WR Employees with Required Licenses: 100%	WR	100%	100%	100%	100%
OPTIMIZE OPERATIONS						
13 Reasonable Cost of Service	% of Budget: < 95%	WR	< 95%	87%	92%	82%
	\$/kGal Reclaimed: < \$2.00	WR	< \$2.00	\$1.57	\$1.64	\$1.17
INFRASTRUCTURE SUSTAINABILITY						
22 Provide adequate treatment capacity	% Utilized Capacity at Casey WRRF: < 80%	WR	< 80%	57%	55%	68%
	% Utilized Capacity at Northeast WRF: < 80%	WR	< 80%	40%	36%	50%
	% Utilized Capacity at Shoal Creek: < 80%	WR	< 80%	38%	34%	42%
STAKEHOLDER SUPPORT						
23 Environmental Stewardship and Sustainability	WR Carbon footprint status - Mton/yr. as CO2 (e): Report	WR	Report	4.71	4.25	4.22
	% Beneficial Reuse of Biosolids: 100%	WR	100%	100%	100%	100%







Water Reclamation Division – Major Initiatives for FY 2019 - 2020

Business Unit	Budget Funding	Account Number	Amount Budgeted	Initiative
Water Reclamation Manager				
701	Operating	56110	\$ 30,000	Unforeseen Consulting
		56134	650,000	DeKalb Co Sewer
Grand Total			\$ 680,000	
W. B. Casey Sr. Water Reclamation Facility				
720	Operating	55103	\$ 30,000	Diffuser Membrane Replacement
		56116	356,808	Maintenance: Plant Equipment (<i>As needed basis</i>)
		56199	39,192	Scum Concentrator and Wetwell Pump Outs
	Capital	59931	154,000	Raw Pump
		59932	37,000	Scum Trough Assembly
		59953	150,000	Tublex Blower
		59953	17,000	HVAC Controller
Grand Total			\$ 784,000	
Northeast Water Reclamation Facility				
721	Operating	56116	\$ 224,623	Maintenance: Non-Construction Equip (<i>As needed basis</i>)
	Capital	59947	166,000	PLC & Controls Upgrade
		59953	9,000	Utility Cart
Grand Total			\$ 399,623	
Northeast WRF Solids Handling				
722	Operating	55103	\$ 60,000	Conveyer System Belt
		56199	380,468	Solids Disposal
Grand Total			\$ 440,468	
Shoal Creek Water Reclamation Facility				
724	Operating	55103	\$ 126,095	Maintenance: Plant Equipment (<i>As needed basis</i>)
		55103	129,563	Maintenance: Non-Construction Equip (<i>As needed basis</i>)
Grand Total			\$ 255,658	
Shoal Creek WRF Solids Handling				
727	Operating	56199	\$ 224,617	Solids Disposal
Grand Total			\$ 224,617	
R. L. Jackson Transfer Pump Station				
729	Operating	56116	\$ 87,654	Maintenance: Non-Construction Equip (<i>As needed basis</i>)
		56116	80,000	Jackson Vertical Transfer Pump Rebuild
		56151	21,000	Ga Power Repair and Maintenance Contract
Grand Total			\$ 188,654	
Sludge Pelletizing				
731	Operating	55103	\$ 99,100	Maintenance: Non-Construction Equip (<i>As needed basis</i>)
		56116	30,000	Dust Hazard Evaluation
		56199	92,470	Solids Disposal
	Capital	59932	196,512	Dryer Drum
		59934	29,992	Forklift
Grand Total			\$ 448,074	
Natural Treatment Operations and Maintenance				
740	Operating	56110	\$ 60,000	Reclassification of Huie Pond Complex

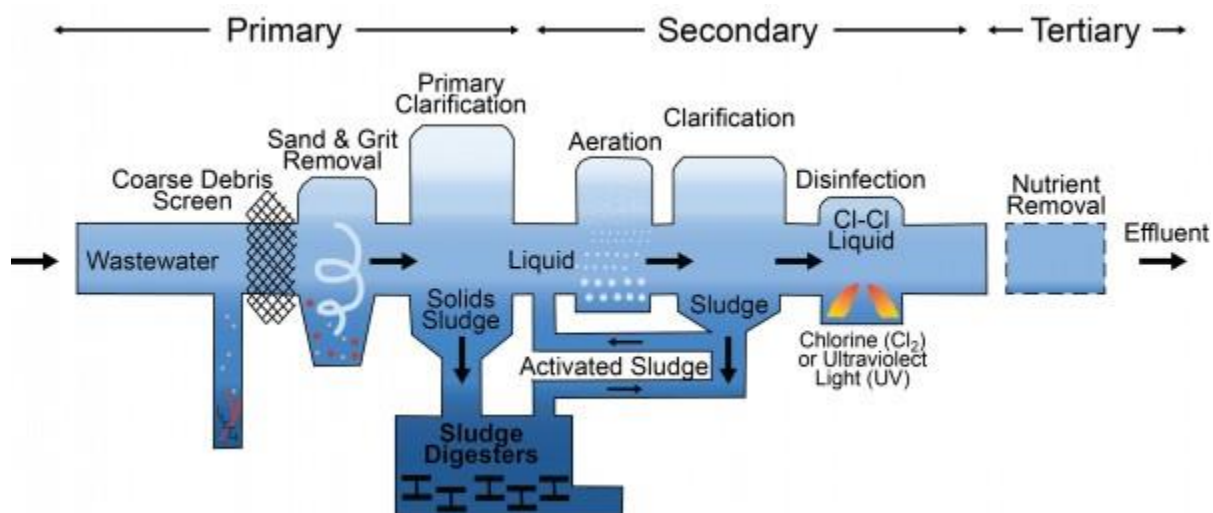


Water Reclamation Division Staffing – Position Detail

Authorized Personnel	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted	FY 2019-2020 Budgeted
<i>Water Reclamation Department Manager</i>			
Intern	0.23	0.23	0.25
Office Assistant	1.00	1.00	1.00
Shadow - Department Manager - Water R	0.00	0.00	0.31
Water Reclamation Manager	1.00	1.00	1.00
Total Number of Personnel (FTE's)	2.23	2.23	2.56
<i>W.B. Casey Sr. Water Rclamation Facility</i>			
Buildings & Grounds Custodian	1.00	1.00	1.00
Chief Operator	1.00	1.00	1.00
Plant Operator I	0.00	1.00	1.00
Plant Operator II	3.00	2.00	1.00
Plant Operator III	4.00	5.00	7.00
Plant Supervisor	1.00	1.00	1.00
Total Number of Personnel (FTE's)	10.00	11.00	12.00
<i>Northeast Water Reclamation Facility</i>			
Chief Operator	1.00	1.00	1.00
Building and Grounds Maintenance	1.00	1.00	1.00
Plant Operator I	6.00	6.00	4.00
Plant Operator II	0.00	0.00	0.00
Plant Operator III	0.00	0.00	1.00
Plant Supervisor	1.00	1.00	1.00
Total Number of Personnel (FTE's)	9.00	9.00	8.00
<i>Northeast WRF Solids Handling</i>			
Plant Operator III	1.00	1.00	1.00
Total Number of Personnel (FTE's)	1.00	1.00	1.00
<i>Shoal Creek Water Reclamation Facility</i>			
Chief Operator	1.00	1.00	1.00
Plant Operator I	4.00	3.00	3.00
Plant Operator II	0.00	0.00	0.00
Plant Operator III	1.00	1.00	1.00
Plant Supervisor	1.00	1.00	1.00
Total Number of Personnel (FTE's)	7.00	6.00	6.00
<i>Shoal Creek WRF Solids Handling</i>			
Plant Operator I	1.00	1.00	1.00
Plant Operator II	0.00	0.00	0.00
Plant Operator III	0.00	0.00	0.00
Total Number of Personnel (FTE's)	1.00	1.00	1.00



Authorized Personnel	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted	FY 2019-2020 Budgeted
Laboratory and Environmental Compliance			
Environmental Compliance & Lab Coordir	1.00	1.00	1.00
Environmental Compliance Inspector	1.00	1.00	1.00
Industrial Compliance Specialist	1.00	1.00	1.00
Lab Analyst	2.00	2.00	2.00
Total Number of Personnel (FTE's)	5.00	5.00	5.00
Sludge Pelletizing			
Buildings & Grounds Custodian	1.00	1.00	1.00
Chief Operator	1.00	1.00	1.00
Plant Operator I	2.00	1.00	1.00
Plant Operator II	1.00	2.00	2.00
Plant Operator III	2.00	2.00	2.00
Plant Supervisor	1.00	1.00	1.00
Total Number of Personnel (FTE's)	8.00	8.00	8.00
Natural Treatment Operations & Maintenance			
NTS Maintenance Operator	5.00	5.00	5.00
NTS Operator I	3.00	3.00	2.00
NTS Operator III	0.00	0.00	0.00
NTS Operator II	0.00	0.00	1.00
NTS Operations & Maintenance Coordina	1.00	1.00	1.00
NTS Supervisor	1.00	1.00	1.00
Total Number of Personnel (FTE's)	10.00	10.00	10.00
Water Reclamation Department Total	53.23	53.23	53.56





Water Reclamation Division – Consolidated Operating Budget

Department : Water Reclamation

Business Unit : Department 700 - Consolidated

Overview of Department Responsibilities

Responsible for the wastewater treatment systems which includes three water reclamation facilities, a natural treatment systems consisting of over 500 acres of constructed wetlands, three bio-solids processing facilities, an industrial pretreatment program, FOG program and the central water reclamation laboratory. Responsible for compliance with all state and federal regulations pertaining to water quality standards. Ensures that CCWA standards and policies are implemented and followed.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 3,107,421	\$ 3,279,474	\$ 3,377,777
Overtime Pay	219,883	200,424	214,408
F.I.C.A.	245,368	266,210	258,975
Pension	429,067	454,721	463,122
Employee Benefits	490,274	722,861	580,571
Operating Expenditures:			
Operating Materials & Supplies	836,667	997,951	1,068,322
Vehicle Supplies	64,360	94,193	96,881
Administrative Supplies	16,836	20,556	19,620
Safety Supplies	12,897	12,052	12,095
Special Purchases	707	1,040	1,040
Utilities	3,007,662	3,175,868	3,288,993
Rentals	11,692	7,841	12,471
Maintenance and Repairs	449,073	623,499	666,192
Outside Services	1,928,376	2,339,514	2,903,240
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	246,046	265,219	266,236
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	339,607	651,888	759,504
Other Financing Uses:			
Intrafund Transfers Out:	-	271,000	-
Total Appropriations	\$ 11,405,936	\$ 13,384,311	\$ 13,989,447



BUSINESS UNIT 701: WATER RECLAMATION DEPARTMENT MANAGER

Department : Water Reclamation**Business Unit : (701) Water Reclamation Manager****Major Business Unit Functions:**

Directs, manages and controls the efforts of the Water Reclamation Division.

Significant Expenditure and Staffing Changes:

No significant changes from previous fiscal year.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 150,788	\$ 165,569	\$ 212,115
Overtime Pay	-	-	-
F.I.C.A.	11,216	12,665	16,228
Pension	20,558	21,889	23,094
Employee Benefits	17,210	24,038	20,240
Operating Expenditures:			
Operating Materials & Supplies	182	630	665
Vehicle Supplies	266	500	500
Administrative Supplies	270	600	600
Safety Supplies	-	125	100
Special Purchases	707	1,040	1,040
Utilities	1,142	1,000	2,000
Rentals	-	-	-
Maintenance and Repairs	117	500	500
Outside Services	560,176	704,530	685,500
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	82,489	73,329	80,993
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	-	-	-
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	<u>\$ 845,121</u>	<u>\$ 1,006,415</u>	<u>\$ 1,043,575</u>



BUSINESS UNIT 720: W.B. CASEY SR. WATER RECLAMATION FACILITY

Department : Water Reclamation**Business Unit : (720) W.B. Casey Sr. Water
Water Reclamation Facility****Major Business Unit Functions:**

Operates the W.B. Casey Sr. Water Reclamation Facility. Operates Septic Tank Waste Receiving Station. Operates Influent Pump Station and R.L. Jackson Transfer Pump Station.

Significant Expenditure and Staffing Changes:

Utilities: increase represents funding for the new Phosphorus Polishing Building.

Maintenance and Repairs: increase represents funding for membrane replacements.

Outside Services: increases represents funding for installation of BRB diffuser membranes and repairs to Hydroxide tank.

Capital Expenditures: represents funding for Raw Pump, Scum Trough Assembly, Turblex Blower and HVAC Controller and Software.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 538,676	\$ 616,632	\$ 651,675
Overtime Pay	41,184	38,755	39,028
F.I.C.A.	42,799	50,137	49,852
Pension	73,945	85,712	90,582
Employee Benefits	85,682	146,505	88,323
Operating Expenditures:			
Operating Materials & Supplies	281,255	303,003	273,559
Vehicle Supplies	7,491	10,429	6,534
Administrative Supplies	4,272	5,300	5,383
Safety Supplies	3,178	2,889	2,792
Special Purchases	-	-	-
Utilities	942,403	972,343	1,105,690
Rentals	6,021	3,011	3,011
Maintenance and Repairs	78,014	93,169	132,759
Outside Services	339,778	367,038	472,903
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	41,935	50,303	50,071
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	126,824	236,882	358,000
Other Financing Uses:			
Intrafund Transfers Out:	-	221,000	-
Total Appropriations	<u>\$ 2,613,457</u>	<u>\$ 3,203,108</u>	<u>\$ 3,330,162</u>



BUSINESS UNIT 721: NORTHEAST WATER RECLAMATION FACILITY

Department : Water Reclamation**Business Unit : (721) Northeast Water
Reclamation Facility****Major Business Unit Functions:**

Operates the Northeast Water Reclamation Facility.

Significant Expenditure and Staffing Changes:**Capital Expenditures:** represents funding for a replacement Utility Cart and upgrade to PLC and Controls.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 521,224	\$ 557,109	\$ 489,217
Overtime Pay	49,154	41,461	46,483
F.I.C.A.	41,640	45,791	37,425
Pension	72,022	77,439	68,001
Employee Benefits	94,843	130,781	101,643
Operating Expenditures:			
Operating Materials & Supplies	161,754	187,897	184,718
Vehicle Supplies	7,679	5,653	7,442
Administrative Supplies	2,501	2,797	2,453
Safety Supplies	4,179	2,712	2,754
Special Purchases	-	-	-
Utilities	466,594	510,570	509,345
Rentals	1,100	725	980
Maintenance and Repairs	127,510	158,817	161,040
Outside Services	138,788	298,910	265,941
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	34,437	41,744	41,261
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	-	28,382	175,000
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	<u>\$ 1,723,425</u>	<u>\$ 2,090,788</u>	<u>\$ 2,093,703</u>



BUSINESS UNIT 722: NORTHEAST WRF SOLIDS HANDLING

Department : Water Reclamation**Business Unit : (722) Northeast Solids WRF
Handling****Major Business Unit Functions:**

Operation of solids handling at the Northeast Water Reclamation Facility.

Significant Expenditure and Staffing Changes:**Maintenance and Repairs:** increase represents funding for a conveyor system belt replacement.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 42,163	\$ 52,250	\$ 48,007
Overtime Pay	2,738	3,757	3,757
F.I.C.A.	3,386	4,284	3,672
Pension	5,863	7,263	6,673
Employee Benefits	7,271	10,174	15,436
Operating Expenditures:			
Operating Materials & Supplies	94,000	104,666	107,392
Vehicle Supplies	-	-	-
Administrative Supplies	227	353	353
Safety Supplies	-	563	563
Special Purchases	-	-	-
Utilities	33,016	36,742	36,742
Rentals	-	-	-
Maintenance and Repairs	3,386	6,976	68,264
Outside Services	237,430	214,659	393,135
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	4,949	5,744	5,759
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	-	-	-
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	\$ 434,429	\$ 447,431	\$ 689,753



BUSINESS UNIT 724: SHOAL CREEK WATER RECLAMATION FACILITY

Department : Water Reclamation**Business Unit : (724) Shoal Creek Water
Reclamation Facility****Major Business Unit Functions:**

Operation of the Shoal Creek Water Reclamation Facility.

Significant Expenditure and Staffing Changes:

No significant changes from previous fiscal year.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 436,361	\$ 426,405	\$ 464,941
Overtime Pay	28,267	33,161	29,101
F.I.C.A.	34,839	35,156	35,567
Pension	60,318	59,268	64,627
Employee Benefits	59,795	78,141	60,116
Operating Expenditures:			
Operating Materials & Supplies	31,979	42,581	43,928
Vehicle Supplies	2,812	7,358	7,244
Administrative Supplies	2,670	3,768	3,160
Safety Supplies	1,538	1,855	1,888
Special Purchases	-	-	-
Utilities	277,870	298,261	281,196
Rentals	-	-	-
Maintenance and Repairs	94,353	179,571	132,589
Outside Services	106,855	168,013	165,477
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	26,380	29,180	28,360
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	7,546	77,030	-
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	\$ 1,171,583	\$ 1,439,748	\$ 1,318,194



BUSINESS UNIT 727: SHOAL CREEK WRF SOLIDS HANDLING

Department : Water Reclamation**Business Unit : (727) Shoal Creek WRF Solids Handling****Major Business Unit Functions:**

Removal of solids generated from the operation of the Shoal Creek Water Reclamation Facility.

Significant Expenditure and Staffing Changes:**Outside Services:** increase due to an increase in solids disposal and transportation.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 74,290	\$ 78,175	\$ 79,266
Overtime Pay	1,423	1,940	1,239
F.I.C.A.	5,778	6,129	6,063
Pension	10,213	10,866	11,018
Employee Benefits	6,867	9,431	8,106
Operating Expenditures:			
Operating Materials & Supplies	42,880	36,325	36,743
Vehicle Supplies	-	-	-
Administrative Supplies	-	411	-
Safety Supplies	-	100	-
Special Purchases	-	-	-
Utilities	23,983	22,053	22,053
Rentals	-	-	-
Maintenance and Repairs	5,584	12,819	8,561
Outside Services	148,289	148,998	233,981
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	4,836	5,996	5,688
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	-	-	-
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	<u>\$ 324,143</u>	<u>\$ 333,243</u>	<u>\$ 412,718</u>



BUSINESS UNIT 729: R. L. JACKSON TRANSFER PUMP STATION

Department : Water Reclamation**Business Unit : (729) R.L. Jackson Transfer Pump Station****Major Business Unit Functions:**

Operates the R.L. Jackson Transfer Pump Station that pumps the W.B. Sr. Casey Water Reclamation Facility effluent to Huie site for further treatment.

Significant Expenditure and Staffing Changes:

Outside Services: increase due to repairs needed on two vertical transfer pumps.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ -	\$ -	\$ -
Overtime Pay	-	-	-
F.I.C.A.	-	-	-
Pension	-	-	-
Employee Benefits	-	-	-
Operating Expenditures:			
Operating Materials & Supplies	82	200	200
Vehicle Supplies	-	4,878	4,878
Administrative Supplies	-	-	-
Safety Supplies	-	200	200
Special Purchases	-	-	-
Utilities	585,780	614,105	614,120
Rentals	475	605	605
Maintenance and Repairs	8,697	5,754	8,201
Outside Services	95,896	175,766	191,841
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	4,549	5,616	5,362
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	-	-	-
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	\$ 695,479	\$ 807,124	\$ 825,407



BUSINESS UNIT 730: LABORATORY AND ENVIRONMENTAL COMPLIANCE

Department : Water Reclamation**Business Unit : (730) Laboratory and Environmental Compliance****Major Business Unit Functions:**

Operates Water Reclamation laboratory. Administers Grease Management Program. Administers Industrial Pretreatment Program. Coordinates sewer use ordinance issue.

Significant Expenditure and Staffing Changes:

Outside Services: increase due to testing cost for ACH study at the Huie Wetlands.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 299,071	\$ 310,524	\$ 327,429
Overtime Pay	5,147	6,200	7,500
F.I.C.A.	22,188	24,228	25,624
Pension	40,807	43,162	45,513
Employee Benefits	45,864	63,958	51,317
Operating Expenditures:			
Operating Materials & Supplies	27,585	46,625	31,725
Vehicle Supplies	2,878	3,100	3,921
Administrative Supplies	2,182	2,900	2,900
Safety Supplies	169	150	150
Special Purchases	-	-	-
Utilities	2,649	2,500	3,850
Rentals	-	-	3,000
Maintenance and Repairs	1,239	1,600	1,750
Outside Services	34,481	46,100	57,112
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	9,435	11,681	10,095
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	-	-	-
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	\$ 493,695	\$ 562,728	\$ 571,886



BUSINESS UNIT 731: SLUDGE PELLETIZING

Department : Water Reclamation**Business Unit : (731) Sludge Pelletizing****Major Business Unit Functions:**

Operation of the solids handling at the W.B. Casey Sr. Water Reclamation Facility which includes the pelletizing process.

Significant Expenditure and Staffing Changes:

Capital Expenditures: represents funding for a Dryer Drum and Forklift.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 455,092	\$ 459,573	\$ 474,600
Overtime Pay	80,344	62,000	76,300
F.I.C.A.	40,222	39,900	36,308
Pension	64,443	63,882	65,969
Employee Benefits	73,267	124,243	112,591
Operating Expenditures:			
Operating Materials & Supplies	180,645	256,595	261,567
Vehicle Supplies	23,018	38,963	40,404
Administrative Supplies	2,697	2,187	2,831
Safety Supplies	2,626	1,443	2,248
Special Purchases	-	-	-
Utilities	457,943	505,153	489,828
Rentals	4,096	2,500	3,875
Maintenance and Repairs	103,860	116,282	106,868
Outside Services	233,733	129,848	250,157
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	17,285	18,989	17,522
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	56,358	-	226,504
Other Financing Uses:			
Intrafund Transfers Out:	-	50,000	-
Total Appropriations	\$ 1,795,629	\$ 1,871,558	\$ 2,167,572



BUSINESS UNIT 732: R.L. JACKSON PUMP STATION

Department : Water Reclamation**Business Unit : (732) R.L. Jackson Pump Station****Major Business Unit Functions:**

Operates the Jackson Influent Pump Station which pumps wastewater to the W.B. Casey Sr. Water Reclamation Facility for treatment.

Significant Expenditure and Staffing Changes:

No significant changes from the previous fiscal year.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 -20 Budgeted
Personal Services:			
Salaries and Wages	\$ -	\$ -	\$ -
Overtime Pay	-	-	-
F.I.C.A.	-	-	-
Pension	-	-	-
Employee Benefits	-	-	-
Operating Expenditures:			
Operating Materials & Supplies	-	-	-
Vehicle Supplies	-	658	658
Administrative Supplies	-	-	-
Safety Supplies	-	200	200
Special Purchases	-	-	-
Utilities	106,801	104,603	112,243
Rentals	-	-	-
Maintenance and Repairs	115	1,046	380
Outside Services	7,573	57,408	38,109
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	1,653	2,064	1,724
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	5,327	-	-
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	<u>\$ 121,469</u>	<u>\$ 165,979</u>	<u>\$ 153,314</u>



BUSINESS UNIT 740: NTS OPERATIONS AND MAINTENANCE

Department : Water Reclamation**Business Unit : (740) NTS Operations & Maintenance****Major Business Unit Functions:**

Operation and maintenance of Natural Treatment Systems which include spray irrigation facilities, storage ponds, pump stations and constructed wetlands.

Significant Expenditure and Staffing Changes:

Operating Materials and Supplies: increase represents ACH for Wetland influent chemical augmentation.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 589,756	\$ 613,237	\$ 630,527
Overtime Pay	11,626	13,150	11,000
F.I.C.A.	43,300	47,920	48,236
Pension	80,898	85,240	87,645
Employee Benefits	99,475	135,590	122,799
Operating Expenditures:			
Operating Materials & Supplies	16,305	19,429	127,825
Vehicle Supplies	20,216	22,654	25,300
Administrative Supplies	2,017	2,240	1,940
Safety Supplies	1,207	1,815	1,200
Special Purchases	-	-	-
Utilities	109,481	108,538	111,926
Rentals	-	1,000	1,000
Maintenance and Repairs	26,198	46,965	45,280
Outside Services	25,377	28,244	149,084
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	18,098	20,573	19,401
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	143,552	309,594	-
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	\$ 1,187,506	\$ 1,456,189	\$ 1,383,163



General Services Division – Business Unit Group 900



Clayton County Water Authority



**GENERAL
SERVICES
DIVISION**



*“Providing **Quality**
Water and **Quality**
Services to Our
Community”*



**GENERAL SERVICES DIVISION
BUDGET UNIT 900**

The General Services Division serves in the capacity of an internal services provider for other departments. It has the responsibility of repairing and maintaining the Authority’s fleet, mechanical, electrical and structural equipment throughout the Authority. It is responsible for maintaining the following buildings: the headquarters complex, the plant facilities, grounds of the plant facility, recreation sites and sewer lift and metering stations. The General Services Division also performs small renovation and construction projects. Tasks are performed in conformity with federal, state and local laws and authority laws, regulations and policies.

Responsibilities are accomplished per the general direction of the General Manager and the Assistant General Managers over support services. The General Service Manager is responsible for directing the day-to-day operations of the department.

To better manage operating expenses, the division is broken down into specific programs, types of service being provided or areas of responsibility. The budget units that have been identified for this department are listed below.

- 901 – General Services Manager

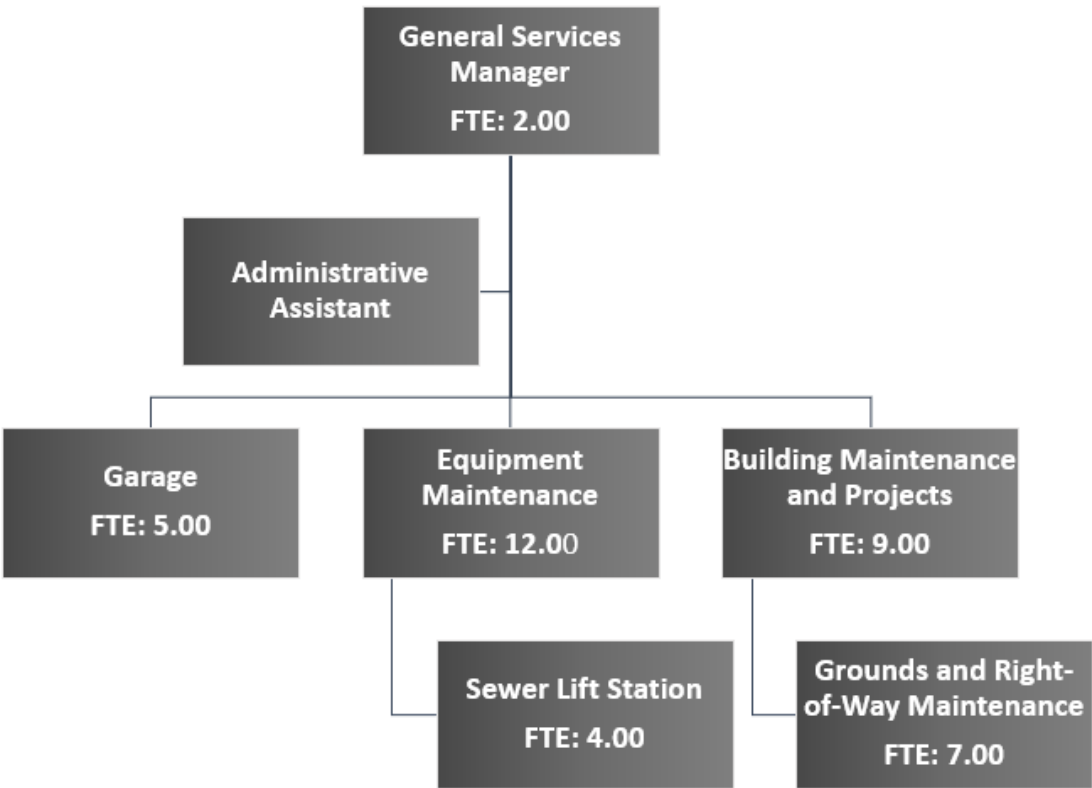
925 – Sewer Lift Stations

930 – Garage

940 – Warehouse
- 950 – Equipment Maintenance

960 – Grounds/Right-of-Way Maintenance

970 – Building Maintenance and Projects





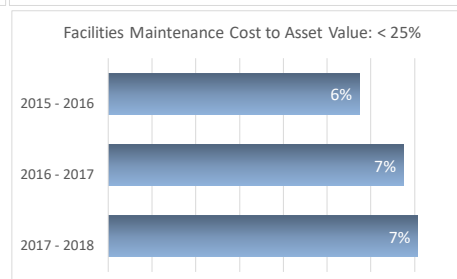
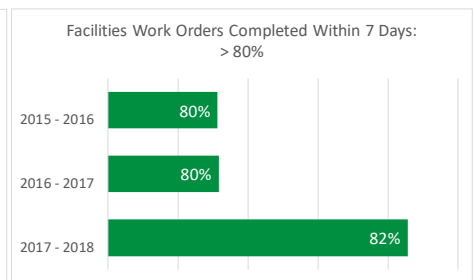
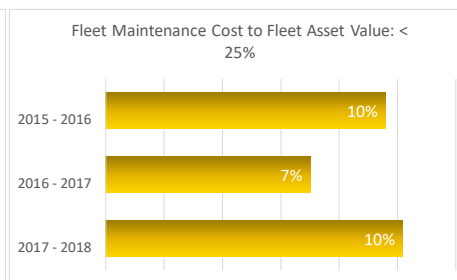
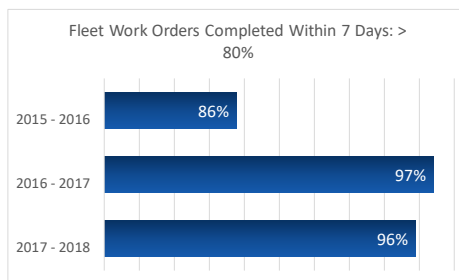
General Services Division – Staffing Summary

Authorized Personnel	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted	FY 2019-2020 Budgeted
General Services Division			
901 - General Services Manager	2.00	2.00	2.31
925 - Sewer Lift Station	4.00	4.00	4.00
930 - Garage	4.00	5.00	5.00
950 - Equipment Maintenance	9.00	12.00	12.00
960 - Grounds and Right-of-Way Maintenance	7.00	7.00	7.00
970 - Building Maintenance and Projects	12.00	9.00	9.00
Total Full-Time Employees (FTEs)	38.00	39.00	39.31

General Services Division – Levels of Service

The General Services Division has a new director that changed the Levels of Service metrics for his group last year. These four KPI metrics are better aligned with the desired performance for the division. These four indicators are associated with the Authority's **"Optimize Operations"** and **"Infrastructure Sustainability"** goals and strategies 15 and 20 to *"Minimize fleet downtime"* and *"Implement sound asset management practices"*. The department's performance on these metrics is captured in the table that follows.

Service Level Goal	Key Performance Indicator (KPI)	Division	Target	2017 - 2018	2016 - 2017	2015 - 2016
OPTIMIZE OPERATIONS						
15 Provide Minimum Down Time for CCWA's Fleet	Fleet Work Orders Completed Within 7 Days: > 80%	GS	> 80%	96%	97%	86%
	Fleet Maintenance Cost to Fleet Asset Value: < 25%	GS	< 25%	10%	7%	10%
INFRASTRUCTURE SUSTAINABILITY						
20 Implement asset management practices	Facilities Work Orders Completed Within 7 Days: > 80%	GS	> 80%	82%	80%	80%
	Facilities Maintenance Cost to Asset Value: < 25%	GS	< 25%	7%	7%	6%





General Services Division – Major Initiatives for FY 2019 - 2020

Business Unit	Budget Funding	Account Number	Amount Budgeted	Initiative
General Services Manager				
901	Operating	56152	\$ 31,365	AVL Tracking
Grand Total			\$ 31,365	
Sewer Lift Stations				
925	Operating	55103	\$ 86,400	Sierra Wireless Units (18 @ \$4,800 each)
	Capital	59932	35,358	Truck: F-250
Grand Total			\$ 121,758	
Garage				
930	Capital	59934	\$ 36,840	Tire Storage
Grand Total			\$ 36,840	
Equipment Maintenance				
950	Capital	59951	\$ 295,300	Terex Crane Truck
Grand Total			\$ 295,300	
Grounds and Right-of-Way Maintenance				
960	Capital	59915	\$ 17,500	Fence GSMB
		59951	34,750	Truck: F-350
		59963	12,650	Grass Hopper Mower
Grand Total			\$ 64,900	
Building Maintenance and Projects				
970	Capital	59921	\$ 162,000	Storage Building
Grand Total			\$ 162,000	





General Services Division Staffing – Position Detail

Authorized Personnel	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted	FY 2019-2020 Budgeted
General Services Department Manager			
General Services Manager	1.00	1.00	1.00
Shadow - Dept Mgr - General Services	0.00	0.00	0.31
Office Assistant	1.00	1.00	1.00
Total Number of Personnel (FTE's)	2.00	2.00	2.31
Sewage Lift Stations			
Lift Station / PM Specialist	1.00	1.00	1.00
Lift Station Technician	3.00	3.00	3.00
Total Number of Personnel (FTE's)	4.00	4.00	4.00
Garage			
Fleet Maintenance Foreman	1.00	1.00	1.00
Fleet Technician	0.00	3.00	3.00
Garage Inv./Warehouse Technician	0.00	1.00	1.00
Garage Worker	1.00	0.00	0.00
Sr. Fleet Mechanic	2.00	0.00	0.00
Total Number of Personnel (FTE's)	4.00	5.00	5.00
Equipment Maintenance			
Electrician	0.00	1.00	1.00
Electrician Technician	0.00	1.00	1.00
Instrumentation & Controls Technician	1.00	1.00	1.00
Maintenance Technician I	4.00	5.00	4.00
Maintenance Technician II	2.00	1.00	1.00
Maintenance Technician III	0.00	0.00	1.00
Plant Services Chief Maint Technician	1.00	1.00	1.00
Plant Services Supervisor	0.00	1.00	1.00
PLC Specialist	1.00	1.00	1.00
Total Number of Personnel (FTE's)	9.00	12.00	12.00
Grounds/Right-of-Way Maintenance			
Grounds Maintenance Crew Leader	1.00	1.00	1.00
Grounds Technician I	0.00	0.00	3.00
Grounds Technician II	0.00	0.00	3.00
Grounds Maintenance Worker I	3.00	3.00	0.00
Grounds Maintenance Worker II	3.00	3.00	0.00
Total Number of Personnel (FTE's)	7.00	7.00	7.00
Building Maintenance/Projects			
Building Maintenance Worker	3.00	3.00	0.00
Building Maintenance Technician	0.00	0.00	3.00
Electrician	1.00	0.00	0.00
Facilities Maintenance Crew Leader	1.00	1.00	1.00
Facilities Maintenance Worker	3.00	4.00	0.00
Facilities Technician	0.00	0.00	4.00
General Foreman-Facilities Maintenance	1.00	1.00	1.00
Plant Services Supervisor	1.00	0.00	0.00
Sr. Maintenance Worker	1.00	0.00	0.00
Electrician Technician	1.00	0.00	0.00
Total Number of Personnel (FTE's)	12.00	9.00	9.00
General Services Department Total	38.00	39.00	39.31



General Services Division – Consolidated Operating Budget

Department : General Services

Business Unit : Department 900 - Consolidated

Overview of Department Responsibilities

The General Services Division represents the internal service functions for the Authority. Its responsibilities include purchasing and warehousing inventory items needed by the operating departments; repairing and maintaining vehicles and heavy-duty equipment; maintaining grounds and clearing right-of-ways; performing small building and construction projects; repairing and maintaining plants, pumping stations and lift stations operating equipment and electrical and communication systems. General Services is also responsible for bidding and contracting for all products and services for CCWA. Tasks are generally undertaken based on priorities established by the General Manager.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 1,782,563	\$ 2,055,584	\$ 2,200,075
Overtime Pay	81,820	82,700	96,800
F.I.C.A.	138,410	163,582	168,309
Pension	246,853	285,726	295,601
Employee Benefits	288,025	496,111	445,742
Operating Expenditures:			
Operating Materials & Supplies	240,447	211,939	307,999
Vehicle Supplies	61,109	70,421	76,935
Administrative Supplies	8,082	6,470	6,570
Safety Supplies	6,425	6,050	10,500
Special Purchases	767	880	780
Utilities	283,350	266,593	281,903
Rentals	4,265	3,400	3,600
Maintenance and Repairs	74,109	81,120	165,570
Outside Services	192,204	210,130	296,892
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	135,308	165,338	194,855
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	182,959	170,257	594,398
Other Financing Uses:			
Intrafund Transfers Out:	740,695	-	-
Total Appropriations	<u>\$ 4,467,391</u>	<u>\$ 4,276,301</u>	<u>\$ 5,146,529</u>



BUSINESS UNIT 901: GENERAL SERVICES DEPARTMENT MANAGER

Department : General ServicesBusiness Unit : (901) General Services ManagerMajor Business Unit Functions:

Directs, manages and controls the efforts of the General Services Division.

Significant Expenditure and Staffing Changes:

Outside Services: increase represents SCADA and instrumentation repair services.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 162,323	\$ 170,576	\$ 212,706
Overtime Pay	29	100	100
F.I.C.A.	11,604	13,058	16,273
Pension	21,972	23,710	24,449
Employee Benefits	22,282	29,598	26,707
Operating Expenditures:			
Operating Materials & Supplies	79	500	100
Vehicle Supplies	428	1,145	612
Administrative Supplies	1,123	350	250
Safety Supplies	-	50	50
Special Purchases	767	880	780
Utilities	2,740	2,567	1,524
Rentals	-	-	-
Maintenance and Repairs	1,526	3,250	250
Outside Services	4,083	72,990	129,030
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	65,416	70,858	83,462
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	-	-	-
Other Financing Uses:			
Intrafund Transfers Out:	578,295	-	-
Total Appropriations	<u>\$ 872,667</u>	<u>\$ 389,632</u>	<u>\$ 496,293</u>



BUSINESS UNIT 925: SEWAGE LIFT STATIONS

Department : General ServicesBusiness Unit : (925) Sewage Lift StationsMajor Business Unit Functions:

Maintains and repairs 41 sewage lift stations. Covers utilities and insurance expenses on lift

Significant Expenditure and Staffing Changes:

Other Materials and Supplies: increase represents 4.98% increase in Odor Control Premier Magnesia chemicals along with use/demand of this product.

Maintenance and Repairs: increase represents funding for new wireless units at 18 lift stations.

Outside Services: increases due to repairs on aging PLC and Soft Start equipment.

Capital Expenditures: represents funding for a replacement Truck.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 175,854	\$ 184,688	\$ 196,369
Overtime Pay	32,964	20,000	30,000
F.I.C.A.	15,303	15,658	15,022
Pension	24,423	25,672	27,295
Employee Benefits	38,174	52,221	45,673
Operating Expenditures:			
Operating Materials & Supplies	168,007	147,355	226,585
Vehicle Supplies	15,315	13,308	13,558
Administrative Supplies	604	650	400
Safety Supplies	798	1,000	1,800
Special Purchases	-	-	-
Utilities	246,684	224,094	227,675
Rentals	-	-	-
Maintenance and Repairs	54,529	62,500	149,000
Outside Services	106,773	70,818	99,787
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	40,460	50,746	61,242
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	39,698	-	35,358
Other Financing Uses:			
Intrafund Transfers Out:	162,400	-	-
Total Appropriations	\$ 1,121,986	\$ 868,710	\$ 1,129,764



BUSINESS UNIT 930: GARAGE

Department : General ServicesBusiness Unit : (930) GarageMajor Business Unit Functions:

Maintains and repairs the Authority's vehicles and heavy-duty equipment.

Significant Expenditure and Staffing Changes:

Capital Expenditures: represents funding for a new Tire Storage.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 183,194	\$ 244,061	\$ 254,710
Overtime Pay	200	600	1,500
F.I.C.A.	13,673	18,717	19,486
Pension	25,790	33,925	35,404
Employee Benefits	35,045	60,910	50,924
Operating Expenditures:			
Operating Materials & Supplies	15,518	12,224	14,875
Vehicle Supplies	5,304	7,033	7,139
Administrative Supplies	1,213	850	850
Safety Supplies	1,245	1,000	1,000
Special Purchases	-	-	-
Utilities	9,719	9,863	10,366
Rentals	1,148	1,000	1,000
Maintenance and Repairs	9,259	4,700	4,500
Outside Services	23,113	6,455	8,875
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	3,300	7,543	7,133
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	26,603	13,500	36,840
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	<u>\$ 354,324</u>	<u>\$ 422,381</u>	<u>\$ 454,602</u>



BUSINESS UNIT 950: EQUIPMENT MAINTENANCE

Department : General Services**Business Unit : (950) Equipment Maintenance****Major Business Unit Functions:**

Maintains and repairs plant equipment and pumping stations.

Significant Expenditure and Staffing Changes:**Personal Services:** increase represents a new Specialist Support Technician.**Capital Expenditures:** represents funds for the replacement of a Crane Truck.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 517,582	\$ 761,123	\$ 835,616
Overtime Pay	31,253	30,000	32,000
F.I.C.A.	40,724	60,521	63,925
Pension	71,452	105,795	116,151
Employee Benefits	79,618	146,768	166,683
Operating Expenditures:			
Operating Materials & Supplies	15,172	17,140	18,032
Vehicle Supplies	13,196	14,600	21,700
Administrative Supplies	2,373	1,900	2,350
Safety Supplies	1,430	1,500	4,100
Special Purchases	-	-	-
Utilities	11,702	17,201	29,400
Rentals	816	1,000	1,100
Maintenance and Repairs	1,234	1,600	2,750
Outside Services	26,777	38,200	40,235
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	14,971	23,779	30,873
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	89,906	45,000	295,300
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	<u>\$ 918,206</u>	<u>\$ 1,266,127</u>	<u>\$ 1,660,215</u>



BUSINESS UNIT 960: GROUNDS AND RIGHT-OF-WAY MAINTENANCE

Department : General Services**Business Unit : (960) Grounds/Right-of-Way
Maintenance****Major Business Unit Functions:**

Maintains the Authority's grounds and right-of-ways.

Significant Expenditure and Staffing Changes:**Capital Expenditures:** represents funding to replace a Truck, Grasshopper Mover, and a new Fence.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 208,423	\$ 247,117	\$ 259,054
Overtime Pay	4,147	12,000	13,200
F.I.C.A.	15,849	19,821	19,818
Pension	29,147	34,350	30,918
Employee Benefits	41,560	88,917	69,337
Operating Expenditures:			
Operating Materials & Supplies	16,713	11,615	13,485
Vehicle Supplies	11,490	16,620	16,391
Administrative Supplies	963	1,120	1,120
Safety Supplies	696	1,000	1,000
Special Purchases	-	-	-
Utilities	4,752	4,877	5,147
Rentals	2,301	1,400	1,500
Maintenance and Repairs	5,487	6,420	6,420
Outside Services	14,112	14,675	11,653
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	3,261	3,540	3,640
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	12,502	106,757	64,900
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	<u>\$ 371,403</u>	<u>\$ 570,229</u>	<u>\$ 517,583</u>



BUSINESS UNIT 970: BUILDING MAINTENANCE PROJECTS

Department : General ServicesBusiness Unit : (970) Building Maintenance ProjectsMajor Business Unit Functions:

Repairs and maintains the Authority's buildings and structures. Repairs and maintains the Authority's electrical and communications systems.

Significant Expenditure and Staffing Changes:

Other Materials and Supplies: increase represents the purchase of and installation of new blinds.

Capital Expenditures: category represents funds for a new Storage Building.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 535,187	\$ 448,019	\$ 441,620
Overtime Pay	13,227	20,000	20,000
F.I.C.A.	41,257	35,807	33,785
Pension	74,069	62,274	61,384
Employee Benefits	71,346	117,697	86,418
Operating Expenditures:			
Operating Materials & Supplies	24,958	23,105	34,922
Vehicle Supplies	15,376	17,715	17,535
Administrative Supplies	1,806	1,600	1,600
Safety Supplies	2,256	1,500	2,550
Special Purchases	-	-	-
Utilities	7,753	7,991	7,791
Rentals	-	-	-
Maintenance and Repairs	2,074	2,650	2,650
Outside Services	17,346	6,992	7,312
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	7,900	8,872	8,505
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	14,250	5,000	162,000
Other Financing Uses:			
Intrafund Transfers Out:	-	-	-
Total Appropriations	<u>\$ 828,805</u>	<u>\$ 759,222</u>	<u>\$ 888,072</u>



Stormwater Fund – Business Unit Group 200



Clayton County Water Authority



**STORMWATER
FUND**



*"Providing **Quality
Water** and **Quality
Services** to Our
Community"*



STORMWATER FUND

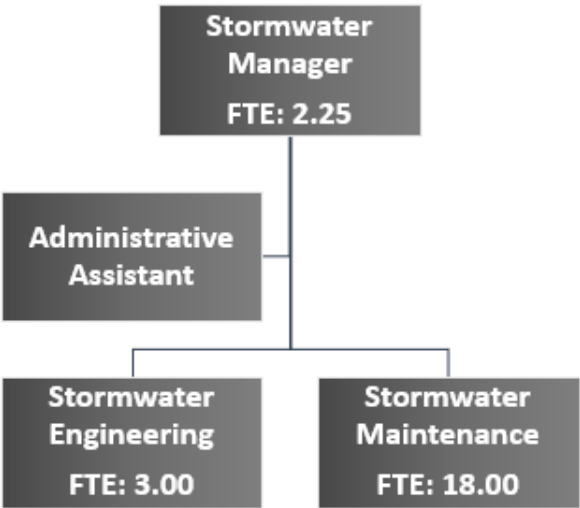
BUDGET UNIT 200

The primary responsibility of the Stormwater Utility Fund is the management of Stormwater related activities throughout Clayton County as regulated through the Clean Water Act set in place in 1977. This act includes, but is not limited to, requirements to set water quality standards for all contaminants in surface water. The Stormwater Fund works closely with County government and local municipalities to protect local streams, rivers and lakes along with the maintenance of and planning for local infrastructure needs.

Responsibilities are accomplished per the general direction of the General Manager and the Assistant General Managers over operations. The Stormwater Manager is responsible for directing the day-to-day operations of the department.

To better manage operating expenses, the department is broken down into specific programs from management to inspection. The budget units that have been identified for this department are listed below.

- 201 – Stormwater Management
- 205 – Stormwater Engineering
- 210 – Stormwater Maintenance





Stormwater Fund – Staffing Summary

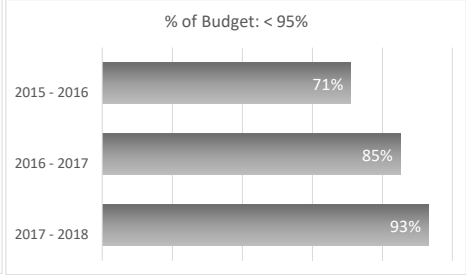
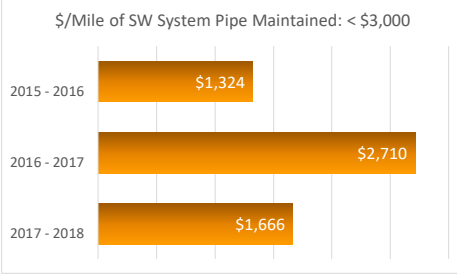
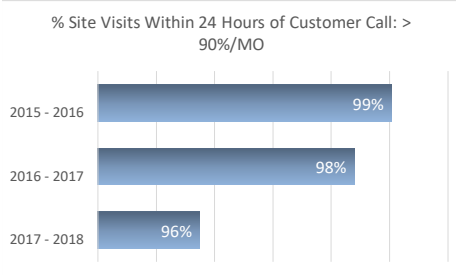
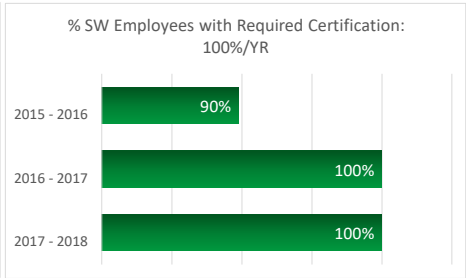
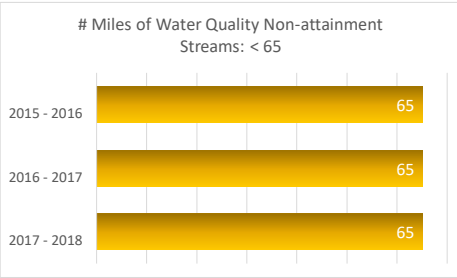
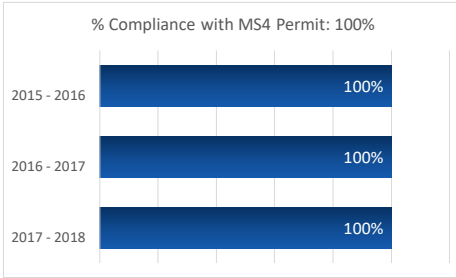
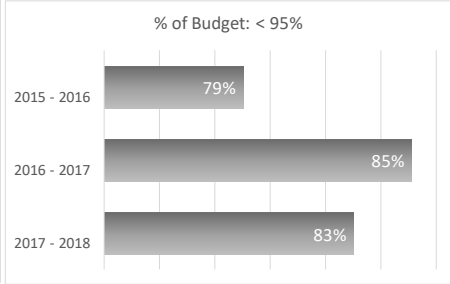
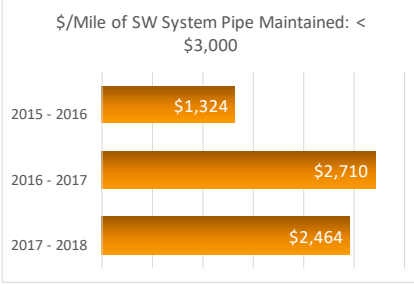
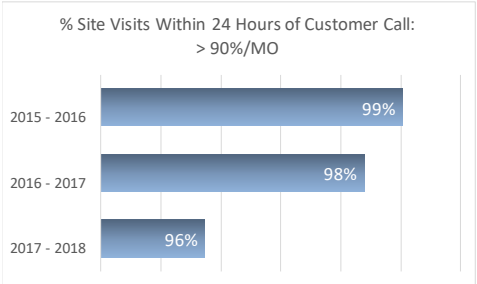
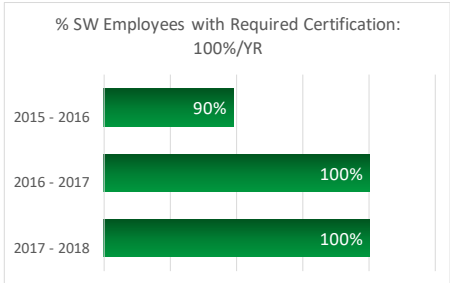
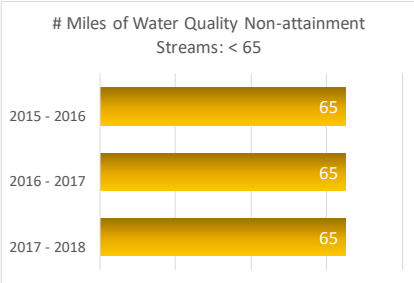
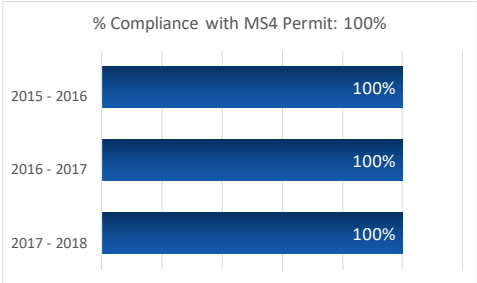
Authorized Personnel	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted	FY 2019-2020 Budgeted
Stormwater Fund			
201 - Stormwater Manager	2.50	2.50	2.25
205 - Stormwater Engineering	3.00	3.00	3.00
210 - Stormwater Maintenance	17.00	18.00	18.00
Total Full-Time Employees (FTEs)	22.50	23.50	23.25

Stormwater Fund – Levels of Service

The Stormwater Fund has six KPI metrics that are associated with the Authority's "Superior Product Quality," "Exceed Customer Expectations," "Provide Employee Development," and "Optimize Operations" goals and strategies 3, 4, 8 and 13. The department's performance on these metrics is captured in the table that follows.

Service Level Goal	Key Performance Indicator (KPI)	Division	Target	2017 - 2018	2016 - 2017	2015 - 2016
SUPERIOR PRODUCT QUALITY						
3 Improve the quality of Clayton Co. water resources	% Compliance with MS4 Permit: 100%	SW	100%	100%	100%	100%
	# Miles of Water Quality Non-attainment Streams: < 65	SW	< 65	65	65	65
EXCEED CUSTOMER EXPECTATIONS						
4 Improve customer experience	% Site Visits Within 24 Hours of Customer Call: > 90%/MO	SW	> 90% / Month	96%	98%	99%
PROVIDE EMPLOYEE DEVELOPMENT						
8 Provide effective employee training and development	% SW Employees with Required Certification: 100%/YR	SW	100% / Year	100%	100%	90%
OPTIMIZE OPERATIONS						
13 Reasonable Cost of Service	\$/Mile of SW System Pipe Maintained: < \$3,000	SW	< \$3,000	\$2,464	\$2,710	\$1,324
	% of Budget: < 95%	SW	< 95%	83%	85%	79%







Stormwater Fund – Major Initiatives for FY 2019 - 2020

Business Unit	Budget Funding	Account Number	Amount Budgeted	Initiative		
Stormwater Manager						
201	Operating	56110	\$ 300,000	Engineering On Call Services		
		56110	10,000	Spivey Station Dam		
		59302	1,271,151	Administrative expense allocation transfers to W&S Fund		
Grand Total			\$ 1,581,151			
Stormwater Engineering						
205	Operating	56110	\$ 15,000	Annual Biological Monitoring		
		56110	10,000	Yr. 7 of Mitigation Bank Monitoring		
		56110	180,000	Watershed plan for West Jesters Creek Basin		
		56110	60,000	2019-2024 MS4 Permit		
		56125	29,200	USGS Gauge Installation on Flint at SR 85		
		56199	75,000	Amnesty Day Contractor Costs		
Capital	59988	20,000	Pole Inspection Camera			
Grand Total			\$ 389,200			
Stormwater Maintenance						
210	Operating	56110	\$ 20,000	Geotechnical Services Support		
		56124	1,250,000	Outside Support for Pipe Repairs		
		56125	220,000	Outside Support for Lakes, Rivers and Other		
	Capital	59370	1,500,000	Cured In Place Pipe (CIPP) [SMP 214]		
		59370	1,813,121	Removal and Replacement (R/R) [SMP 214]		
		59902	10,000	Easements		
		59941	120,000	Backhoe Loader		
		59941	115,000	Excavator		
		59943	12,000	Hydraulic Hammer		
		59951	120,000	Tandem Dump Truck		
		59951	95,076	Flatbed Dump Truck		
		59988	40,000	Portable CCTV		
		Grand Total			\$ 5,180,121	



Stormwater Fund Staffing – Position Detail

Authorized Personnel	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted	FY 2019-2020 Budgeted
<i>Stormwater Management</i>			
High School Intern	0.50	0.50	0.25
Office Assistant	1.00	1.00	1.00
Program Manager	1.00	1.00	1.00
Total Number of Personnel (FTE's)	2.50	2.50	2.25
<i>Stormwater Engineering</i>			
Stormwater Inspection Technician	1.00	1.00	1.00
Stormwater MGT Technician	1.00	1.00	1.00
Water Resources Engineer	1.00	1.00	0.00
Stormwater Compliance Specialist	0.00	0.00	1.00
Total Number of Personnel (FTE's)	3.00	3.00	3.00
<i>Stormwater Maintenance</i>			
Equipment Operator	2.00	2.00	2.00
Senior Equipment Operator	2.00	2.00	2.00
Lead Maintenance Mechanic	2.00	2.00	2.00
Maintenance Crew Leader	1.00	1.00	1.00
Maintenance and Install Crew Leader	2.00	2.00	2.00
SW Maintenance Supervisor	1.00	1.00	1.00
Stormwater Investigative Technician	1.00	1.00	1.00
Maintenance Mechanic I	3.00	3.00	2.00
Maintenance Mechanic II	2.00	2.00	3.00
Property & Restoration Technician	1.00	1.00	1.00
SW Maintenance & Install Foreman	0.00	1.00	1.00
Total Number of Personnel (FTE's)	17.00	18.00	18.00
<u>Stormwater Utility Grand Total</u>	22.50	23.50	23.25





Stormwater Fund – Consolidated Operating Budget

Department : Stormwater Fund - Consolidated

Business Unit : Stormwater Fund - Consolidated

Budget Summary By	FY 2017 - 18	FY 2018 - 19	FY 2019 - 20
<u>Expenditure Class</u>	<u>Actual</u>	<u>Budgeted</u>	<u>Budgeted</u>
Personal Services	\$ 1,504,237	\$ 1,779,875	\$ 1,809,428
Operating Expenditures	2,302,768	2,784,796	3,084,005
Debt Service	-	-	-
Capital Outlay	484,324	537,030	532,076
Other Financing Uses	6,283,091	4,706,559	4,464,272
	<u>\$ 10,574,420</u>	<u>\$ 9,808,260</u>	<u>\$ 9,889,781</u>

Budget Detail By	FY 2017 - 18	FY 2018 - 19	FY 2019 - 20
<u>Individual Categories</u>	<u>Actual</u>	<u>Budgeted</u>	<u>Budgeted</u>
Personal Services:			
Salaries and Wages	\$ 1,040,174	\$ 1,194,565	\$ 1,250,367
Overtime Pay	72,539	31,000	52,500
F.I.C.A.	83,084	93,754	95,657
Pension	143,766	164,787	172,526
Employee Benefits	164,674	295,769	238,378
Operating Expenditures:			
Operating Materials & Supplies	117,464	140,120	140,940
Vehicle Supplies	46,471	52,240	53,540
Administrative Supplies	12,197	17,200	14,600
Safety Supplies	5,306	4,750	5,550
Special Purchases	441	460	460
Utilities	25,268	27,372	28,372
Rentals	4,494	4,300	8,500
Maintenance and Repairs	14,704	30,700	28,250
Outside Services	1,595,292	2,052,510	2,295,310
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	128,285	135,144	156,483
Accounting Charges	352,846	320,000	352,000
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	484,324	537,030	532,076
Other Financing Uses:			
Interfund Transfers Out	1,217,907	1,413,558	1,271,151
Intrafund Transfers Out	5,065,184	3,293,001	3,193,121
Total Appropriations	<u>\$ 10,574,420</u>	<u>\$ 9,808,260</u>	<u>\$ 9,889,781</u>



Stormwater Responsibilities

Department : Stormwater Fund - Consolidated

Business Unit : Stormwater Fund - Consolidated

Overview of Stormwater Utility Responsibilities

The primary responsibility of the Stormwater Utility Section is the management of Stormwater related activities throughout Clayton County. These activities include: 1) helping Clayton County government, local municipalities and the Authority comply with the regulations in the Clean Water Act and Safe Drinking Water Act; 2) helping to maintain and improve stormwater infrastructure in Clayton County, protect property values, minimize flooding and maintain facilities; 3) safeguarding water quality; 4) protecting local streams, rivers and lakes; 5) supporting sound, long-term planning of local infrastructure needs and capital improvement activities; and 6) providing a fair and equitable means for distributing the financial responsibility of proper stormwater management in the County.

Functional Breakdown of Business Units for Budgeting Purposes

Stormwater Management
Stormwater Engineering
Stormwater Maintenance



BUSINESS UNIT 201: STORMWATER MANAGEMENT

Department : Stormwater Fund**Business Unit : (201) Stormwater Manager****Major Business Unit Functions:**

Directs, manages and controls the efforts of the Stormwater Utility Section. Manages efforts with consultants and contractors for outside service projects.

Significant Expenditure and Staffing Changes:

Outside Services: increase represents the need for On-Demand Engineering Services.

Interfund Transfers Out: represents a monthly payment to the Water and Sewer Utility Revenue Fund for the Stormwater Utility's pro rata portion of certain administrative expenses.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 161,607	\$ 181,055	\$ 187,802
Overtime Pay	86	-	-
F.I.C.A.	12,034	13,850	14,368
Pension	22,238	23,908	24,832
Employee Benefits	19,865	26,862	19,459
Operating Expenditures:			
Operating Materials & Supplies	709	960	865
Vehicle Supplies	246	240	240
Administrative Supplies	9,681	9,200	9,200
Safety Supplies	-	150	150
Special Purchases	441	460	460
Utilities	7,340	8,332	8,332
Rentals	-	-	-
Maintenance and Repairs	372	650	700
Outside Services	69,615	174,220	324,220
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	96,315	89,849	99,890
Accounting Charges	352,846	320,000	352,000
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	-	-	-
Other Financing Uses:			
Interfund Transfers Out	1,158,251	1,413,558	1,271,151
Intrafund Transfers Out	70,000	20,000	-
Total Appropriations	\$ 1,981,646	\$ 2,283,294	\$ 2,313,669



BUSINESS UNIT 205: STORMWATER ENGINEERING

Department : Stormwater Utility**Business Unit : (205) Stormwater Engineering****Major Business Unit Functions:**

Manages construction plan review to ensure compliance with Georgia Stormwater Management Manual. Ensures compliance with the various Regulatory Agencies. Serves as floodplain administrator for the County. Responds to flooding and drainage complaints within the County.

Significant Expenditure and Staffing Changes:

Outside Services: increase represents West Jesters Creek Basin, Assistance in updating Stormwater based on the requirements of MS4 permit for the county and six cities.

Capital Expenditures: represent the funding for a replacement Pole Inspection Camera.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 179,119	\$ 186,726	\$ 189,071
Overtime Pay	2,074	1,000	2,500
F.I.C.A.	13,660	14,362	14,464
Pension	24,801	25,955	26,280
Employee Benefits	23,556	33,466	36,688
Operating Expenditures:			
Operating Materials & Supplies	3,014	3,920	9,365
Vehicle Supplies	2,148	4,300	3,300
Administrative Supplies	1,280	2,650	2,650
Safety Supplies	468	400	400
Special Purchases	-	-	-
Utilities	4,883	5,200	6,200
Rentals	350	1,300	2,500
Maintenance and Repairs	279	5,050	1,050
Outside Services	155,011	286,300	379,100
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	7,482	10,657	14,776
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	(20)	-	20,000
Other Financing Uses:			
Interfund Transfers Out	59,656	-	-
Intrafund Transfers Out	-	-	-
Total Appropriations	\$ 477,761	\$ 581,286	\$ 708,344



BUSINESS UNIT 210: STORMWATER MAINTENANCE

Department : Stormwater Fund**Business Unit : (210) Stormwater Maintenance****Major Business Unit Functions:**

Maintenance and repair of stormwater infrastructure throughout the County. Works on smaller scale Capital Improvement Projects (CIP's).

Significant Expenditure and Staffing Changes:

Personal Services: increase represents funding for the reclass of Gradall Maintenance Crew Leader from an 8 to a 9.

Intrafund Transfers Out: represents funding for CIPP (Cured in Place Pipe) and R/R (Removal and Replacement of Pipe).

Capital Expenditures: represents funding for the replacement of a Backhoe, Portable Hydraulic Hammer, Tandem Dump Truck, Flatbed Dump Truck, a new portable CCTV and Easements.

Budget Detail By Individual Categories	FY 2017 - 18 Actual	FY 2018 - 19 Budgeted	FY 2019 - 20 Budgeted
Personal Services:			
Salaries and Wages	\$ 699,448	\$ 826,784	\$ 873,494
Overtime Pay	70,379	30,000	50,000
F.I.C.A.	57,390	65,542	66,825
Pension	96,727	114,924	121,414
Employee Benefits	121,253	235,441	182,231
Operating Expenditures:			
Operating Materials & Supplies	113,741	135,240	130,710
Vehicle Supplies	44,077	47,700	50,000
Administrative Supplies	1,236	5,350	2,750
Safety Supplies	4,838	4,200	5,000
Special Purchases	-	-	-
Utilities	13,045	13,840	13,840
Rentals	4,144	3,000	6,000
Maintenance and Repairs	14,053	25,000	26,500
Outside Services	1,370,666	1,591,990	1,591,990
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	24,488	34,638	41,817
Accounting Charges	-	-	-
Debt Service:			
Capital Financing	-	-	-
Capital Outlay:			
Capital Expenditures	484,344	537,030	512,076
Other Financing Uses:			
Interfund Transfers Out	-	-	-
Intrafund Transfers Out	4,995,184	3,273,001	3,193,121
Total Appropriations	\$ 8,115,013	\$ 6,943,680	\$ 6,867,768



CAPITAL BUDGET



Capital Budget

The primary purpose of the Capital Budget section is to provide the reader with additional information about the Authority's plan for acquiring or constructing the capital assets that are required to provide water, sewer and storm-water services to our customers. The terms "capital assets" or "capital outlay" refer to the plant facility, piping, property, equipment and infrastructure that are used by CCWA in its day-to-day operations. As far as the specific information provided in this section, the discussion of capital outlay is presented in three segments: 1) Work Priorities, 2) Capital Expenditures and 3) Capital Projects.

In this section, the reader will find an explanation of how the Authority goes about programming or planning for the acquisition of its capital assets. Additional narrative is included to explain the rationale behind the various funding methods that are used. Cost information is also provided as to the anticipated impact of these capital outlay disbursements on future operating expenses.

CCWA uses two primary categories for its **Capital Budget**; *Capital Expenditures* for equipment and vehicles purchases and *Capital Projects*. CCWA differentiates *Capital Projects* from *Capital Expenditures* by defining a *Capital Project* as one that requires multiple resources to complete. These resources could include any combination of inside labor, outside labor and various materials or products that require assembly or construction to become a long-term asset. The equipment and rolling stock being purchased in FY 2018 – 2019 for both the Water and Sewer and Stormwater Funds are detailed first. Next, the Authority's Capital Improvement Plan (CIP) and Projects are presented by historical, current and anticipated future spending requirements.

Within the Water and Sewer Fund, there is a Renewal and Extension Fund (RE) that acts as a capital projects fund. After approval from the Board of Directors, the Capital Budget funding is moved from the operating fund into the Renewal and Extension Fund until the projects are completed. The completed assets are then transferred back into the responsible business unit of the Water and Sewer Fund to be maintained.



Capital Budget Overview

Long-term Capital Planning is a dynamic process and is part of CCWA's overall strategic plan. Because strategic planning is a process and its activities are continually changing, long-term capital planning is reviewed annually during the budgeting process.

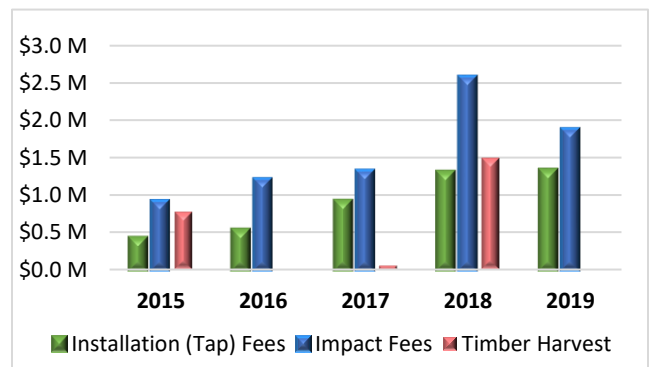
The capital planning process involves identifying current and future needs and prioritizing these needs based on certain operating assumptions. The primary objective of planning efforts for CCWA is to create a stable, long-range financial plan and support an orderly, efficient program of improvement, expansion and replacement. It is the goal of the capital plan to develop an independent, self-sustaining capital improvement program using a mixture of financial resources and timing the project and its cash flow to meet those available resources.

CCWA follows its Strategic Master Plan (SMP) that outlines future water, wastewater, stormwater and administrative improvement projects for the next ten years based on projected future demands. This SMP is used by CCWA staff as a guide to develop the long-range financial plan of the Authority and serves as a living document that can be updated as the Authority grows and as the character of future development becomes more certain.

CCWA conducted its original SMP study in 2010. The study combined various planning efforts into one document that addresses the needs within the vast Authority's operations, water, wastewater and stormwater. An update to the SMP was published during 2015. The Authority prepared a separate Information Technology Master Plan (ITMP) in 2012 and then combined it with the SMP as part of the 2015 update. The 2020 Strategic Master Plan will be completed Spring 2020. Additional information about planning can be found in the section titled [PLANNING AND DIRECTION](#).

To meet pay-as-you-go objectives, all funding required by a project must be available before it is taken to the Board of Directors for approval. Along with financial resources, staff resources are also considered as part of the project planning process. To meet funding requirements, money is accumulated in the Renewal and Extension Fund where it is earmarked for a particular job. Large projects are planned in phases allowing the required funding to be accumulated and work accomplished in stages. Each phase has a distinct, operational benefit when completed and doesn't rely on later phases to perform.

The housing crisis in 2008 prompted a more conservative budgeting approach. To assure basic operations could be maintained, projected revenues are based on reliable, predictable operating revenues. Economic development and the timing of revenue based on that development cannot be easily predicted. Revenues generated from economic development include installation (tapping) fees and impact fees. Revenue generated from the harvesting of timber from properties around CCWA reservoirs is also more difficult to predict as harvesting varies due to market conditions and tree maturity. There will be no timber harvest during the FY 2019 – 2020 fiscal year.



Due to the conservative budgeting approach and the need to accumulate all funds required for a project prior to the beginning of a project, there has been a cash surplus at the end of the previous four years. At the time the budget is approved for the new fiscal year, the amount of that surplus is forecasted and allocated by the Board of Directors to meet future capital project needs and is transferred to one of the Renewal and Extension Fund construction lines. Cash on Hand is maintained at 4.5 months. Budget surplus for the fiscal years ended 2018 and 2019 were \$17.8M and \$14.2M, respectively.



Capital Improvement Program – Long-Term Goals and Objectives

The following are CCWA's Capital Improvement Program Goals and Objectives for the fiscal year 2019 - 2020:

- Within the resources available each fiscal year, to provide safe and reliable services to all customers, maintain and safeguard the Authority's capital assets and infrastructure through implementation of various replacement and betterment programs based on the Strategic Master Plan [SMP].
- Maintain a consistent allocation of resources for programs to carry out the Authority's mission to its customers.
- Complete expansion projects to meet current and future water demands.
- Continue efforts to develop alternative water supplies, including recycled water, through cooperative agreements with various agencies to provide safe and reliable water to each customer in a cost-effective manner.
- Continue to operate the water and wastewater facilities in a cost-effective manner through implementation of various innovative and operational enhancements to the system when needed.
- Continue improving services to all customers using advanced technology in a cost-effective manner.

Summary of Capital Improvement Program Expenditures

Capital Purchases and Projects

The Authority's capital spending includes capital equipment purchases and capital projects. The total capital expenditures for Fiscal Year 2019 - 2020 are budgeted at \$12.8 million, consisting of \$4.0 million in capital equipment purchases and \$8.8 million in capital projects.

Items in the capital budget are those that are non-recurring, cost \$5,000 or more and have a useful life of greater than one year or extend the productive life of an existing asset. These are assets that are used in the operations of a business over a multiple year period and are sometimes referred to as capital outlay.

CCWA uses the term *capital expenditure* as the purchase of equipment and vehicles. The current year budgeted request is \$4.0 million, \$600 thousand higher than the previous year. Summaries of capital item purchases for Fiscal Year 2019 – 2020 are listed on the following pages.

CCWA differentiates *Capital Projects* from *Capital Expenditures and Equipment* by defining a *Capital Project* as one that requires multiple resources to complete. These resources could include any combination of inside labor, outside labor and various materials or products that require assembly or construction to become a long-term asset. Capital Projects are budgeted at \$8.8 million compared to the previous budget year amount of \$10.6 million. Amounts *budgeted* in this category exclude inside labor costs, which are included in the operating budget in the Personal Services.

In addition to other Authority initiatives which are funded from the operating budget, capital projects that are identified in CCWA's Capital Improvement Program are listed as [Work Priorities](#) on the following page and are prioritized based on the criteria in the adjoining table.

Strategy	Weighting	Description
Product Quality (PQ)	10	Consistently provide superior product quality and necessary quantity
Customer Satisfaction (CS)	18	Exceed customer expectations
Employee and Leadership Development (ED)	20	Hire and develop professional, highly motivated employees who will lead CCWA in the future
Operational Optimization/Resiliency (OO)	20	Optimize operations to control costs and to ensure effective response to changing regulatory, environmental and economic conditions
Financial Viability (FV)	5	Promote sound business practices and long-term planning
Infrastructure Stability (IS)	22	Develop and follow sound asset management practices
Stakeholder Understanding, Support and Community Sustainability (SS)	5	Develop strong stakeholder understanding, support and community sustainability



Work Priorities – 2019 – 2020

Work Priority [WP] #	Strategic Master Plan [SMP] #	Strategic Asset Management Plan [SMAP] #	Project Name	Estimated Cost	FY 19-20 Budget	Prior Budget Funding	Funding Source/ Construction Line	OP or CAP	Functional Area/Lead	Project Size	Benefit Score
2015-08	150		Business Intelligence Strategy and Application	\$ 250,000	\$ -	\$ 250,000	RE230	CAP	IT	S	100.00
2015-09	157		Northstar Replacement/Cayenta CIS Implementation	4,441,575	-	4,441,575	RE220	CAP	CS	M	100.00
2015-10	154		Office 365/SharePoint/Collaboration Strategy and Application	150,000	-	150,000	RE230	CAP	IT	S	100.00
2015-11	713		Flint River Discharge Pipeline & Polishing Facility (C, SDC)	17,415,414	-	17,415,414	RE199	CAP	WR/PME	L	100.00
2015-15	612		Develop Sewer Model - Shoal Creek and Dekalb Basins	350,000	-	350,000	RE166	CAP	PME	S	100.00
2015-16	316		Smith High Service Pumps Evaluation (D, C)	3,000,000	-	2,000,000	RE2291	CAP	WP/PME	M	100.00
2016-01A	617		Large Interceptor Rehab. - Jesters Creek Phase 1	9,710,800	-	300,000	GEFA/OP001	CAP	DC/PME	L	100.00
2016-01B	617		Large Interceptor Rehab. - Flint River Phase 3	10,205,000	-	300,000	GEFA/OP001	CAP	DC/PME	L	100.00
2016-01C	617		Large Interceptor Rehab. - Flint River East Phase 1	4,900,000	-	300,000	GEFA/OP001	CAP	DC/PME	M	100.00
2016-08	110		Asset Management Program Assessment	250,000	250,000	-	BU 501	OP	UW/PME	S	100.00
2016-09	302		Implement Water Quality Monitoring/Control in Reservoirs (D, B, C, SDC)	6,007,924	-	6,007,924	RE229	CAP	WP/PME	L	100.00
2016-18	161		Additional Cyber Security	250,000	-	250,000	RE230	CAP	IT	S	100.00
2016-27	212		Lake Mirror Phase 2 Project (C, SDC)	2,000,000	500,000	1,500,000	SW006	CAP	SW	M	100.00
2017-04			Hooper Solids Handling Improvements (D, B, C)	6,275,565	-	6,275,565	RE229	CAP	WP/PME	L	100.00
2018-01	303		Drinking Water Quality Treatment Technology Evaluation	299,636	-	299,636	RE230	CAP	WP/PME	S	100.00
2018-02	718		LIMS - Hach WIMS Implementation Project	432,548	-	432,548	RE146	CAP	WR/WP	S	100.00
2018-03			IT Master Plan Update	50,000	-	50,000	RE184	CAP	IT	S	100.00
2018-05			2020 Strategic Master Plan	750,000	-	750,000	RE184	CAP	PME	M	100.00
2018-08			Shoal Creek Pump Station and Conveyance to Casey WRRF Evaluation	174,346	174,346	-	RE233	CAP	WR/PME	S	100.00
2018-09	708/710		Casey WRRF Capacity Projects 4th BRB/Solids Evaluation	554,081	-	554,081	RE199	CAP	WR/PME	M	100.00
2018-12	617		Large Interceptor Rehab. - Jesters Creek Phase 4	4,800,000	-	300,000	GEFA/OP001	CAP	DC/PME	M	100.00
2018-13			Grant Road Sewer Upgrade Phase 2	600,000	-	600,000	RE226	CAP	DC/PME	M	100.00
2019-02			Shoal Creek Pump Station and Conveyance to Casey WRRF (D, B)	2,000,000	-	2,000,000	RE233	CAP	WR/PME	M	100.00
2019-03	708/710		Casey WRRF Capacity Projects 4th BRB/Solids (D, B)	2,500,000	1,500,000	-	RE199	CAP	WR/PME	M	100.00
2019-04			Geochemical (ACH) Augmentation in Constructed Wetlands	150,000	-	150,000	RE229	CAP	WR/PME	S	100.00
2019-06			Water Production and Storage Analysis	154,940	-	154,940	RE184	CAP	WP/PME	S	100.00
2016-30	902		Lift Station Assessment	250,000	-	250,000	RE219	OP	GS/PME	S	77.60
2018-07			Implement a Unidirectional Flushing (UDF) Program	500,000	210,000	250,000	BU 501	OP	DC/PME	M	77.40
2019-09		OS-06	Knowledge Retention Strategy	150,000	150,000	-	BU 501	OP	UW/PME	S	77.00
2017-03	903		"Walnut Creek" Lift Station Rehabilitation/Construction (D, B, C)	2,000,000	500,000	1,500,000	RE219	CAP	GS/PME	M	73.00
2019-07		OS-7	Organizational Assessment	50,000	50,000	-	BU 501	OP	UW/PME	S	73.00
2016-10	307		Emergency Power Generator for W.J. Hooper (D, C)	2,000,000	-	2,000,000	RE229	CAP	WP/PME	M	71.00
2019-10		OS-10	Metrics Identification and Usage Improvement Strategy	80,000	80,000	-	BU 501	OP	UW/PME	S	66.00
2019-11		F-01	Facility Asset Improvement Strategy	250,000	250,000	-	BU 501	OP	UW/PME	S	64.00
2018-11	705		Northeast WRF Phosphorus Polishing (D, B)	1,500,000	-	1,500,000	RE224	CAP	WR/PME	M	60.40
2016-05	638		Pressure Sewer Condition Assessment	250,000	-	250,000	RE228	CAP	DC/PME	S	59.40
2019-01	306		UV Disinfection Assessment	500,000	500,000	-	RE229	CAP	WP/PME	M	55.00
2019-05			Predictive Modeling and Training for WQ Data Interpretation	150,000	150,000	-	BU 501	OP	WP/PME	S	55.00
2019-08		W-01/W-02	Warehouse and Inventory Management Improvement Initiative; Spare Parts Obsolescence Review and Disposal Strategy	650,000	650,000	-	BU 940	OP	PRO/PME	M	55.00
Total				\$86,001,829	\$4,964,346	\$50,581,683					

Legend

S: Small projects with costs less than \$500,000

M: Medium projects with costs greater than \$500,000 but less than \$5,000,000

L: Large projects with costs over \$5,000,000

SMP: Project in the Strategic Master Plan

D: Design

B: Bid

C: Construction

SDC: Services During Construction (Project Mgmt.)

OP: Operating Budget

CAP: Capital Budget

RE: Main Construction Line

BU: Business Unit Operating Budget

GEFA: Georgia Environmental Finance Authority Loan



Capital Equipment – Summary

FY 2019 – 2020 Budget

Description	Replacement	New	Total
Vehicles			
Trucks - Fleet	\$ 433,964	\$ 35,358	\$ 469,322
Trucks - Dump, Heavy	390,376	95,076	485,452
Trailers	-	-	-
Buildings and Structures			
Building, Roof, Paving	256,000	179,500	435,500
Tanks and Containers	375,000	-	375,000
Equipment			
Field Equipment - Construction Equipment	21,650	148,992	170,642
Data Processing/IT System Equipment	211,000	362,000	573,000
Plant Equipment	938,987	36,840	975,827
Other	25,000	100	25,100
Total Capital Equipment	\$ 2,651,977	\$ 857,866	\$ 3,509,843





Fleet Assessment Guidelines

Prior to Budget Capital Review each year, using Fleet Maintenance Reports each vehicle is assessed using the criteria below:

Cars & Trucks under 26,000 GVW					
Age (yrs)	Points	Mileage	Points	Maintenance Cost	Points
0 – 2	0	0 - 25,000	0	0 – 10% of replacement costs	0
3 – 4	1	25,000 – 50,000	1	10 - 20% of replacement costs	1
5 – 6	2	50,000 – 75,000	2	20 - 30% of replacement costs	2
7 – 8	3	75,000 – 100,000	3	30 - 40% of replacement costs	3
9	4	100,000 – 125,000	4	40 - 50% of replacement costs	4
> 9	5	> 125,000	5	Over 50% of replacement costs	5

Trucks over 26,000 GVW					
Age (yrs)	Points	Mileage	Points	Maintenance Cost	Points
< 5	0	0 – 100,000	0	0 – 10% of replacement costs	0
6	1	100,000 – 150,000	1	10 - 20% of replacement costs	1
7	2	150,000 – 175,000	2	20 - 30% of replacement costs	2
8	3	175,000 – 200,000	3	30 - 40% of replacement costs	3
9	4	200,000 – 250,000	4	40 - 50% of replacement costs	4
> 9	5	> 250,000	5	Over 50% of replacement costs	5

Replacement recommendations are based on age, mileage, and maintenance as a percent of purchased price, input from Fleet Maintenance Supervisor. When a combination of two or three categories are high, justification to replace is based on cost avoidance of major repairs and loss of usage to end users. Additional factors such as condition of the vehicle and future required usage are also considered.

Once justification to replace is determined, the recommended replacement is made, and estimated replacement cost is based on the **Georgia State Contract** amount. After final Board of Director approval to replace these vehicles, the General Service Fleet Maintenance Supervisor and Fleet Administrator check availability from the Georgia State Contract. Specifications for vehicles that are not available on through the State Contract are advertised through CCWA's bidding process.

CCWA is currently developing a Strategic Asset Management Plan (SAMP) that will develop criteria for all its capital assets.





Capital Equipment: Water and Sewer Fund – Detail by Business Unit

Budget Unit - Department	Description	Replacement	New	Total
EXECUTIVE DIVISION				
106 Information Technology	Data Processing Equipment: Additional Software - Windows, Vmware		\$ 30,000	
110 Finance	Desks, Tables & Racks: Desks (4)	25,000		
131 Meter Services	Automobile/Pickups: Truck: F-150	27,030		
Total Executive		\$ 52,030	\$ 30,000	\$ 82,030
WATER PRODUCTION DIVISION				
301 Water Production Manager	Trucks: Ford Explorer	\$ 27,601		
310 WJ Hooper Water Plant	Building Services: HVAC Unit	58,000		
	Monitoring/Control Equipment: Turbidimeters (8)	35,505		
	Particle Counters (3)	17,295		
314 Elevated Tanks	Laboratory Equipment: Water Tanks: Tank Painting - Grant Road	375,000		
315 J.W. Smith Water Plant	Treatment Equipment: Sludge Removal Basin	150,000		
	Monitoring/Control Equipment: Turbidimeters (9)	40,875		
	Particle Counters (9)	46,800		
320 Terry R Hicks Wtr Production Plant	Building Services: HVAC Unit	16,000		
	Pumping Equipment: VFD's (3) for Blalock Reservoir	80,000		
	Monitoring/Control Equipment: Programming for SCADA		200,000	
	Actuator/Valve	14,000		
350 Lake Shamrock Recreation	Trucks: Truck: F-150 4x4	28,557		
351 Shamrock Community Use Building	Audio-Visual Equipment: PA System	7,000		
352 Wetland Center	Trucks: Truck: F-150 4x4	28,557		
Total Water Production		\$ 925,190	\$ 200,000	\$ 1,125,190
PROGRAM MGMT AND ENGINEERING DIVISION				
507 Construction Services	Automobile/Pickups: Truck: F-150 4x4	\$ 30,200		
	Ford Escape	25,446		
530 Engineering	Easements: Easements		100	
Total Program Mgmt. and Engineering		\$ 55,646	\$ 100	\$ 55,746



Budget Unit - Department	Description	Replacement	New	Total
DISTRIBUTION AND CONVEYANCE DIVISION				
601 D&C Department Manager	Building and Structures:			
	Pressure Wash & Paint Seal Building	\$ 60,000		
	Roof	\$ 115,000		
	Automobile/Pickups:			
	Truck: F-150 4x4	29,807		
610 Meter Installation	Construction Equipment:			
	Excavator		119,000	
612 Water Distribution Maintenance	Trucks:			
	Truck: F-350	41,394		
	Truck: F-350	41,394		
	Flat Bed Dump Truck	95,076		
	Flat Bed Dump Truck		95,076	
616 Meter Testing & Repair	Measuring/Drafting Equipment:			
	Meter Tester	10,000		
621 Water Conveyance Maintenance	Video Equipment:			
	Ridged Camera Reel & Transmitter		16,000	
627 Conveyance System Inspections	Monitoring/Control Equipment:			
	SLRAT		25,000	
	Measuring/Drafting Equipment:			
	Smart Loggers (5)		30,000	
	Automobile/Pickups:			
	Truck: F-150 4x4	29,807		
	Video Equipment:			
	Pole Camera (2)	35,000		
	Transporter for Large Pipes		37,000	
	Camera (Spare)		24,000	
630 Utility Locators	Automobile/Pickups:			
	Truck: F-150 4x4	29,807		
	Truck: F-150 4x4	29,807		
	Truck: F-150 4x4	29,807		
Total Distribution and Conveyance		\$ 546,899	\$ 346,076	\$ 892,975
WATER RECLAMATION DIVISION				
720 W.B. Casey Sr. WRRF	Pumping Equipment:			
	Raw Pump	\$ 154,000		
	Treatment Equipment:			
	Scum Trough Assembly in Primary Clarifier	37,000		
	Monitoring/Control Equipment:			
	Turblex Blower Communications/Control Upgrade	150,000		
	HVAC Controller and Software	17,000		
721 NE Clayton Water Reclamation Plant	Energy Utility Sources:			
	PLC and Controls Upgrade	166,000		
	Automobile/Pickups:			
	Utility Cart	9,000		
731 Sludge Pelletizing	Treatment Equipment:			
	Dryer Drum	196,512		
	Lifting/Handling Equipment:			
	Forklift		29,992	
Total Water Reclamation		\$ 729,512	\$ 29,992	\$ 759,504



Budget Unit - Department	Description	Replacement	New	Total
GENERAL SERVICES DIVISION				
925 Sewage Lift Station	Automobile/Pickups: Truck: F-250		\$ 35,358	
930 Garage	Lifting/Handling Equipment: Tire Storage		36,840	
950 Equipment Maintenance	Trucks: Terex Crane Truck	295,300		
960 Grounds/Right-of-Way Maintenance	Fencing: Fence for General Services Maintenance Building		17,500	
	Trucks: Truck: F-350	34,750		
	Landscaping Equipment: Grass Hopper Mower	12,650		
970 Building Maintenance Projects	Building and Structures: Storage Building		162,000	
Total General Services		\$ 342,700	\$ 251,698	\$ 594,398
Total Capital Equipment		\$ 2,651,977	\$ 857,866	\$ 3,509,843

Capital Equipment: Stormwater Fund – Detail by Business Unit

FY 2019 – 2020 Budget

Budget Unit - Department	Description	Replacement	New	Total
STORMWATER FUND				
205 Stormwater Engineering	Video Equipment: Pole Inspection Camera	\$ 20,000		
210 Stormwater Maintenance	Easements: Easements		\$ 10,000	
	Construction Equipment: Backhoe Loader	120,000		
	Excavator	115,000		
	Drilling/Cutting Equipment: Hydraulic Hammer for CAT Track Loader	12,000		
	Trucks: Tandem Dump Truck	120,000	-	
	Flatbed Dump Truck	95,076		
	Video Equipment: Portable CCTV		40,000	
Total Capital Equipment		\$ 482,076	\$ 50,000	\$ 532,076



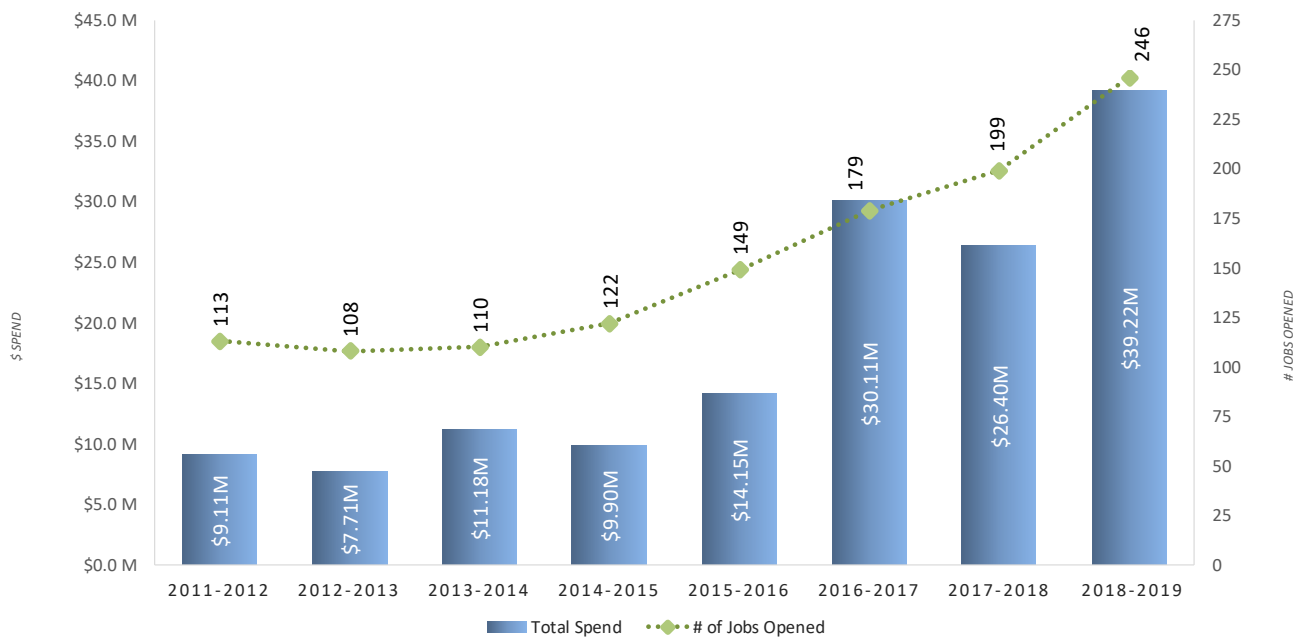


Capital Improvement Program (CIP) – Capital Projects

Projects listed in the CIP budget are reviewed annually by management and staff to allow the program to be more responsive to changing priorities, particularly with respect to changes in demand projections and operational enhancements. The changes sometimes result in the addition of projects and the acceleration or delay of project schedules. Additionally, quarterly review of all active projects will provide on-going updates on project cost estimates as detailed design information becomes available. Construction project status is monitored and reviewed monthly with a construction report.

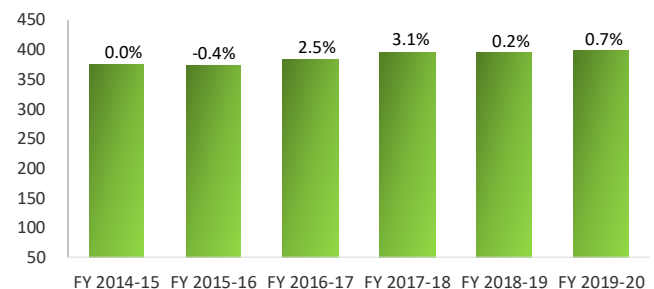
Historical Capital Project Spending

Changes in Capital Project Activity



While the number of capital projects opened has more than doubled and spending has more than quadrupled, staffing has increased by 23 employees or 6 percent. The number of full-time employees (FTEs) in FY 2014-2015 was 376 compared with 399 in FY 2019-2020.

Between fiscal years ended 2013 and 2014, procurement became a focus along with a Small Local Business Enterprise initiative. Since that time, five positions have been added to this department to assist staff with purchasing. CCWA is considering eventually moving toward centralized procurement.

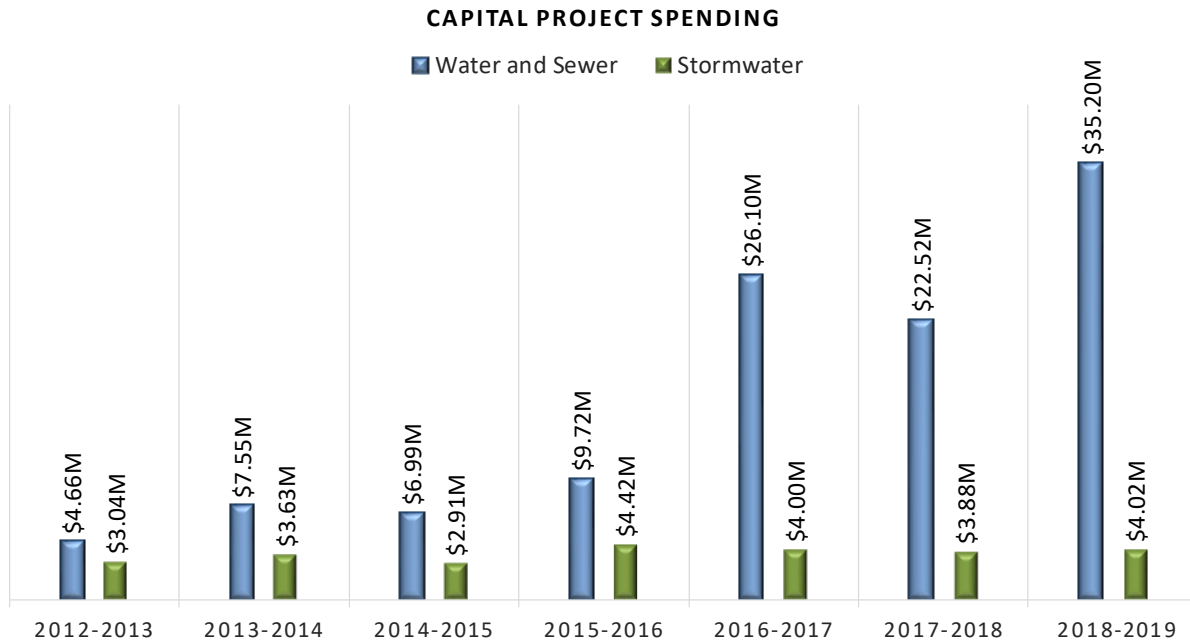


Due to maintenance and repair needs for our Water, Sewer and Stormwater facilities and pipe infrastructure, additional construction and engineering staff were added beginning in FY 2014-2015 budget. Since that time, ten additional positions have been added to the Program Management and Engineering area.

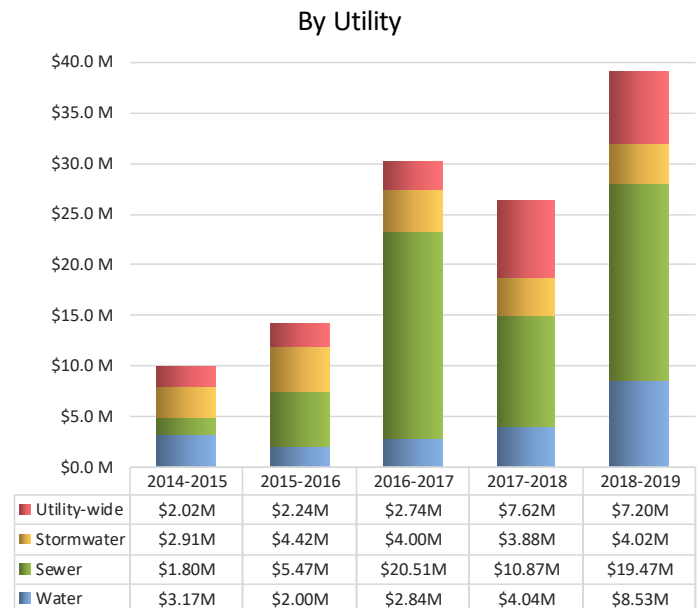
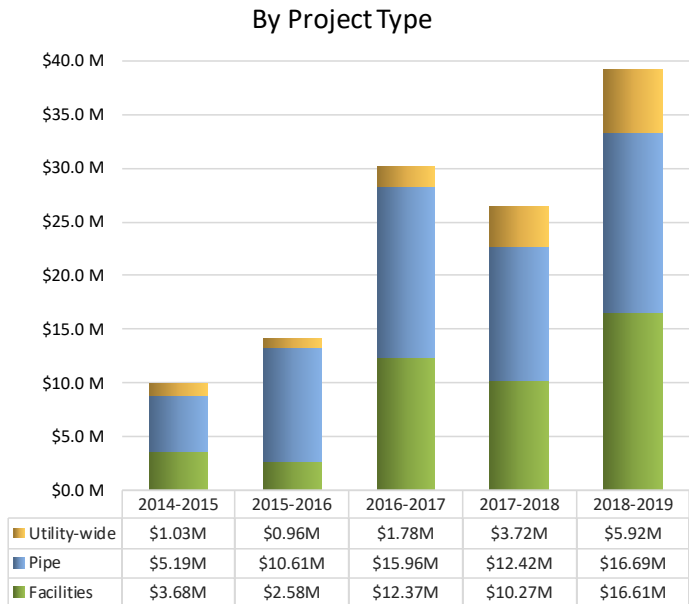
In FY 2017 – 2018, a shift from using prison inmate labor to internal staff for building and grounds maintenance. This decision increased headcount by six FTEs.



Changes in Capital Project Spending - By Fund

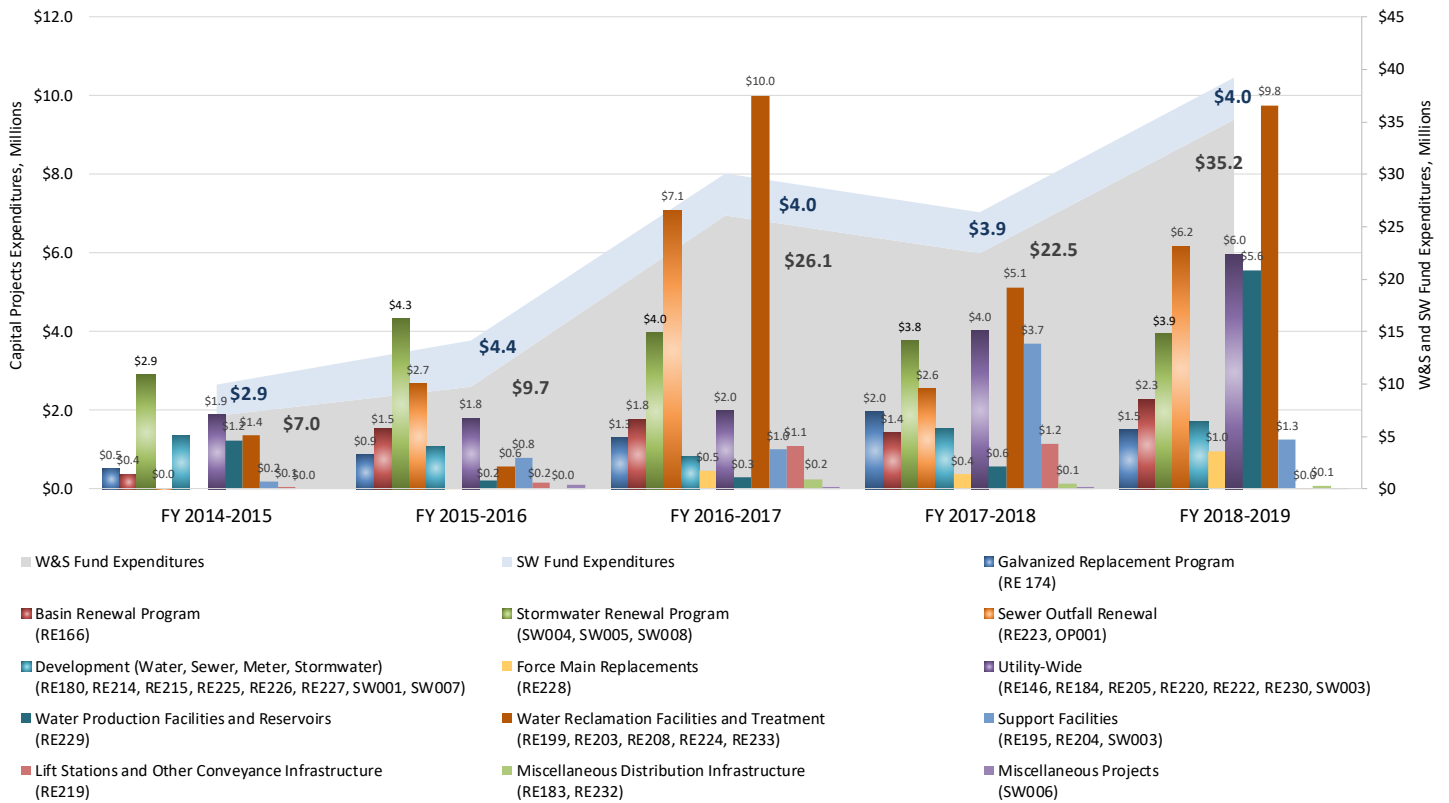


Changes in Capital Project Spending – By Project Type and Utility



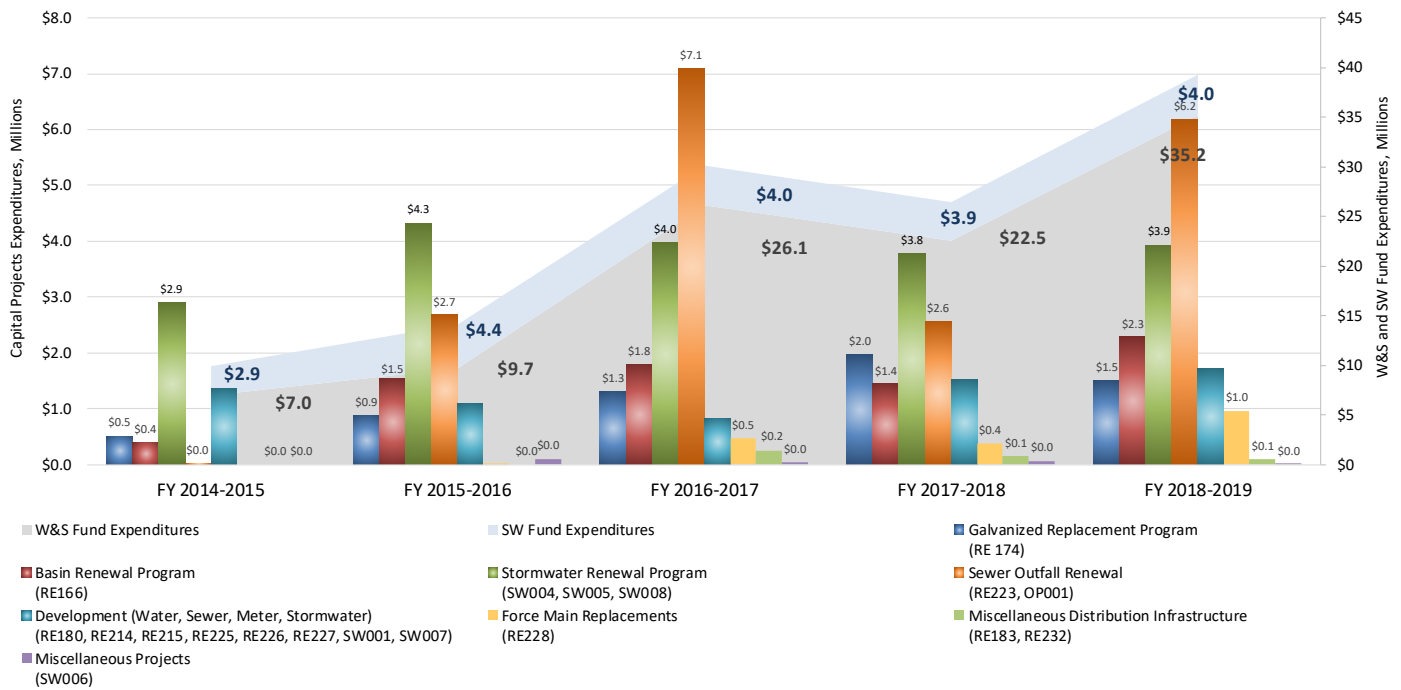


Changes in Capital Project Spending – By Main Renewal and Extension Line





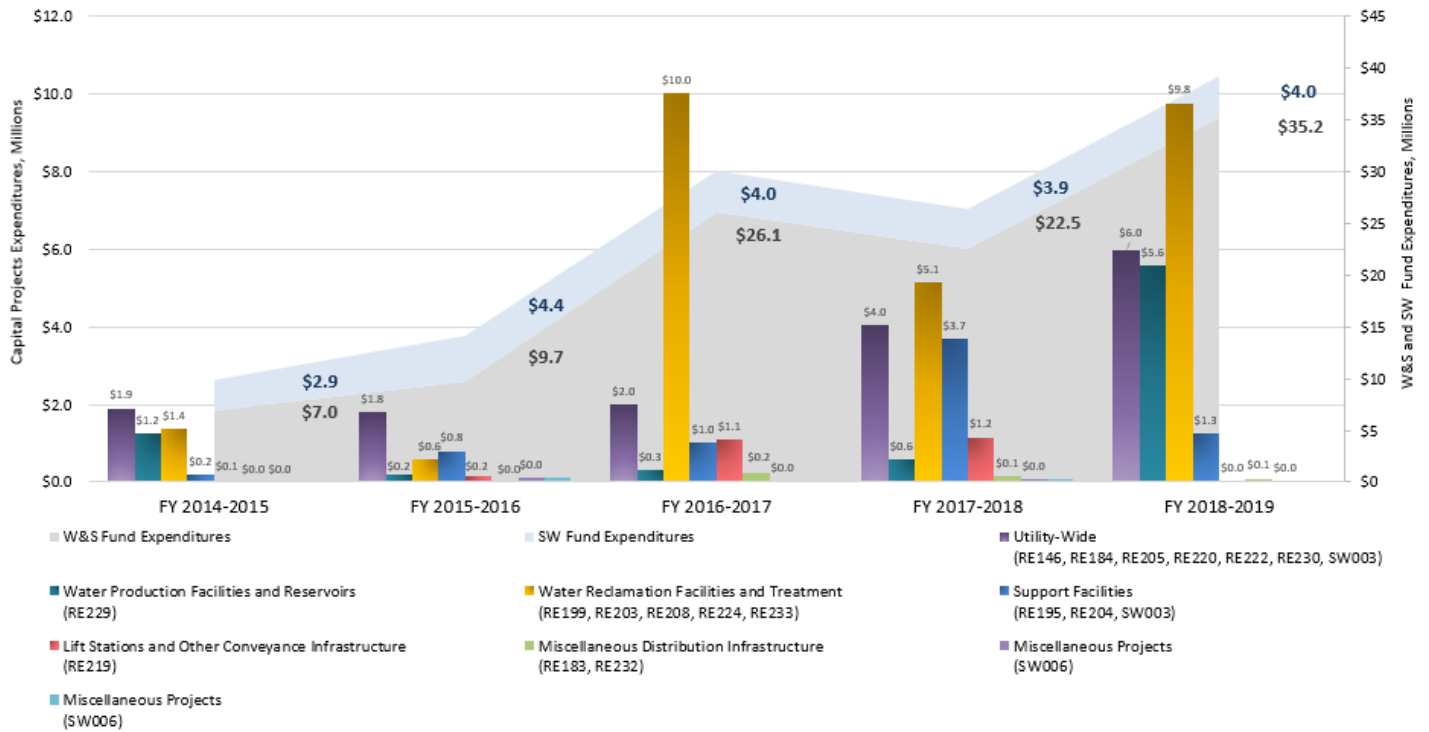
Changes in Capital Spending – Pipeline Infrastructure Programs



ANNUAL CAPITAL SPENDING	FY 2014-2015	FY 2015-2016	FY 2016-2017	FY 2017-2018	FY 2018-2019
Total	\$9,902,727	\$14,145,927	\$30,106,478	\$26,400,653	\$39,219,101
W&S Fund Expenditures	\$6,988,246	\$9,723,383	\$26,102,263	\$22,521,830	\$35,202,878
SW Fund Expenditures	\$2,914,480	\$4,422,544	\$4,004,216	\$3,878,823	\$4,016,223
Galvanized Replacement Program (RE 174)	\$510,140	\$876,219	\$1,301,274	\$1,964,307	\$1,500,791
Basin Renewal Program (RE166)	\$389,393	\$1,533,862	\$1,788,554	\$1,434,946	\$2,280,780
Stormwater Renewal Program (SW004, SW005, SW008)	\$2,897,494	\$4,323,362	\$3,966,480	\$3,773,716	\$3,929,828
Sewer Outfall Renewal (RE223, OP001)	\$19,606	\$2,674,397	\$7,090,180	\$2,557,102	\$6,169,261
Development (Water, Sewer, Meter, Stormwater) (RE180, RE214, RE215, RE225, RE226, RE227, SW001, SW007)	\$1,368,951	\$1,079,292	\$821,790	\$1,525,288	\$1,730,986
Force Main Replacements (RE228)	\$0	\$19,379	\$458,837	\$372,366	\$961,214
Miscellaneous Distribution Infrastructure (RE183, RE232)	\$0	\$0	\$242,776	\$143,396	\$91,416
Miscellaneous Projects (SW006)	\$0	\$99,059	\$37,572	\$62,250	\$5,355
All Pipeline Related Projects⁽¹⁾	\$5,185,584	\$10,506,512	\$15,669,891	\$11,771,120	\$16,664,277



Changes in Capital Spending – Facility Improvement and Utility wide Projects



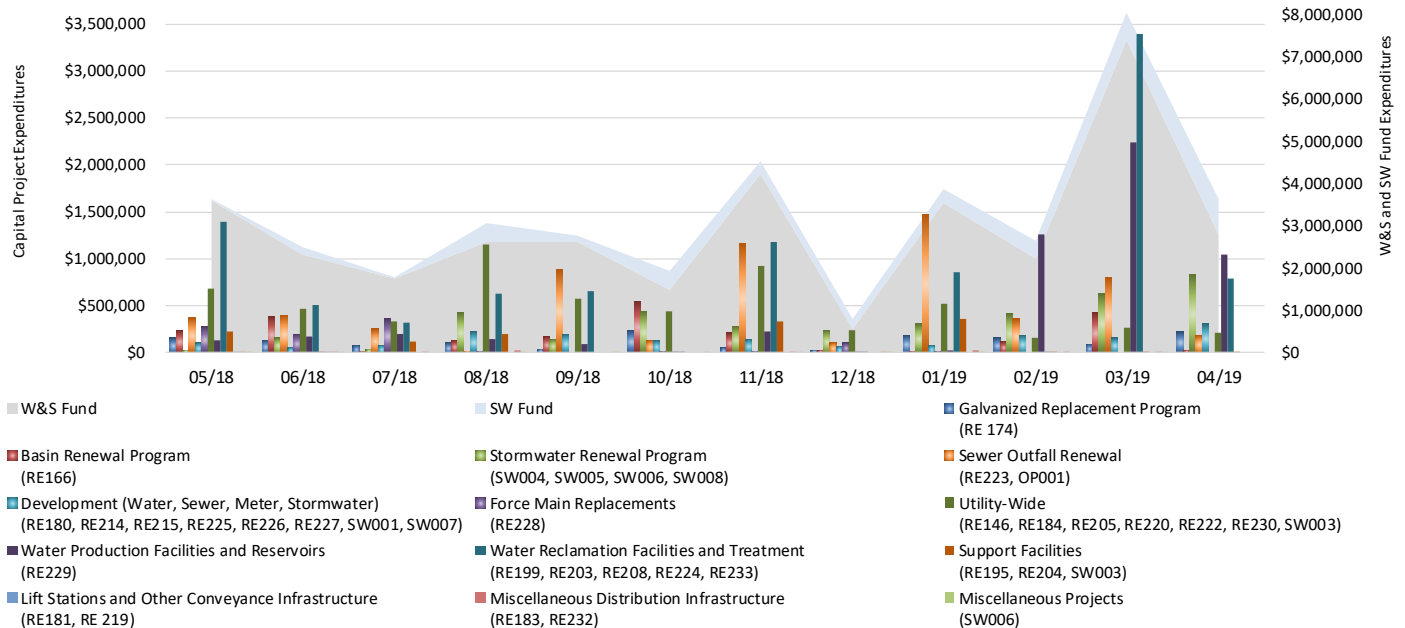
ANNUAL CAPITAL SPENDING	FY 2014-2015	FY 2015-2016	FY 2016-2017	FY 2017-2018	FY 2018-2019
Total	\$9,902,727	\$14,145,927	\$30,106,478	\$26,400,653	\$39,219,101
W&S Fund Expenditures	\$6,988,246	\$9,723,383	\$26,102,263	\$22,521,830	\$35,202,878
SW Fund Expenditures	\$2,914,480	\$4,422,544	\$4,004,216	\$3,878,823	\$4,016,223
Utility-Wide (RE146, RE184, RE205, RE220, RE222, RE230, SW003)	\$1,893,126	\$1,800,552	\$1,992,911	\$4,028,479	\$5,976,620
Water Production Facilities and Reservoirs (RE229)	\$1,240,741	\$209,382	\$293,844	\$572,886	\$5,560,992
Water Reclamation Facilities and Treatment (RE199, RE203, RE208, RE224, RE233)	\$1,353,726	\$575,757	\$10,009,355	\$5,129,804	\$9,754,203
Support Facilities (RE195, RE204, SW003)	\$177,263	\$795,315	\$1,008,445	\$3,682,842	\$1,254,471
Lift Stations and Other Conveyance Infrastructure (RE219)	\$52,288	\$159,350	\$1,094,461	\$1,153,273	\$3,183
Miscellaneous Projects (SW006)	\$0	\$99,059	\$37,572	\$62,250	\$5,355
All Facility Improvement and Utility-wide Projects	\$2,824,017	\$1,739,804	\$12,406,104	\$10,538,804	\$22,554,824

The description and purpose of the primary Renewal and Extension construction lines follow under the heading [Capital Project Funding FY 2019 – 2020 – By Main Construction Line](#) and [Capital Project Funding FY 2019 – 2020 – By Storm-water Construction Lines](#). Renewal and Extension construction lines specific to Pipeline Programs is located under the heading [Distribution and Conveyance Programs](#).



Construction in Progress – FY 2018 – 2019 Monthly Capital Project Spending

During construction, all capital projects are reported in the Renewal and Extension Fund (RE Fund) and Stormwater Construction under main lines of construction. A monthly construction report shows the detailed spending and status of each project during construction. A graph showing the monthly capital spending for FY 2018 – 2019 is shown below.



FY 2018-2019 MONTHLY CAPITAL SPENDING SUMMARY

	05/18	06/18	07/18	08/18	09/18	10/18	11/18	12/18	01/19	02/19	03/19	04/19
W&S Fund	\$3,594,348	\$2,326,897	\$1,743,877	\$2,631,683	\$2,618,216	\$1,489,034	\$4,236,099	\$569,071	\$3,552,707	\$2,247,537	\$7,404,659	\$2,788,751
SW Fund	\$39,149	\$175,669	\$50,329	\$430,497	\$151,823	\$435,755	\$287,710	\$237,646	\$313,818	\$418,349	\$636,910	\$838,568
Galvanized Replacement Program (RE 174)	\$161,673	\$133,932	\$84,345	\$107,781	\$41,660	\$238,265	\$58,485	\$18,365	\$185,510	\$152,703	\$92,940	\$225,133
Basin Renewal Program (RE166)	\$239,644	\$391,665	\$6,826	\$131,452	\$171,838	\$544,393	\$207,820	\$23,091	\$619	\$116,721	\$426,918	\$19,793
Stormwater Renewal Program (SW004, SW005, SW006, SW008)	\$27,305	\$161,233	\$42,053	\$428,688	\$140,327	\$435,597	\$274,653	\$236,938	\$308,932	\$414,072	\$626,831	\$833,200
Sewer Outfall Renewal (RE223, OP001)	\$378,705	\$406,649	\$253,832	\$17,533	\$887,266	\$128,628	\$1,161,752	\$103,782	\$1,469,293	\$363,325	\$808,263	\$190,234
Development (Water, Sewer, Meter, Stormwater)	\$101,351	\$50,773	\$75,290	\$230,063	\$206,068	\$135,445	\$151,332	\$61,377	\$75,576	\$180,800	\$162,044	\$300,867
Force Main Replacements (RE228)	\$279,707	\$194,697	\$354,387	\$295	\$0	\$268	\$13,297	\$109,472	\$9,090	\$0	\$0	\$0
Utility-Wide (RE146, RE184, RE205, RE220, RE222, RE230, Water Production Facilities and Reservoirs (RE229)	\$677,832	\$470,117	\$334,520	\$1,156,202	\$570,958	\$438,484	\$927,105	\$243,039	\$525,314	\$157,722	\$266,815	\$208,512
Water Reclamation Facilities and Treatment (RE199, RE203, RE208, RE224, RE233)	\$137,259	\$172,111	\$199,365	\$143,778	\$97,385	\$3,500	\$222,574	\$3,523	\$30,856	\$1,263,600	\$2,236,518	\$1,050,523
Support Facilities (RE195, RE204, SW003)	\$1,393,480	\$502,934	\$324,531	\$630,294	\$653,248	\$51	\$1,173,972	\$566	\$863,939	\$16,785	\$3,398,103	\$796,300
Lift Stations and Other Conveyance Infrastructure (RE181, RE 219)	\$226,527	\$9,331	\$118,666	\$194,912	\$0	\$0	\$329,981	\$0	\$364,406	\$2,160	\$5,729	\$2,758
Miscellaneous Distribution Infrastructure (RE183, RE232)	\$1,595	\$1,588	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Miscellaneous Projects (SW006)	\$8,191	\$6,895	\$389	\$19,372	\$0	\$0	\$2,500	\$6,091	\$30,828	\$26	\$17,123	\$0
Total Monthly Capital Project Expenditures	\$3,633,497	\$2,502,566	\$1,794,205	\$3,062,180	\$2,770,040	\$1,924,788	\$4,523,809	\$806,716	\$3,864,497	\$2,667,914	\$8,041,569	\$3,627,319

The description and purpose of the primary Renewal and Extension construction lines follow under the heading [Capital Project Funding FY 2019 – 2020 – By Main Construction Line](#).



Projected Capital Project Spending

Capital Project Listing with Annual Cash Flow Requirements: FY 2019 – 2020 through FY 2024 - 2025

The tables on the following pages list, by department, the capital projects that comprise the next 5 years of eight remaining years of CCWA's 10-Year Master Plan and the corresponding cash flows required to fund those projects. A total of roughly \$367 million will be required over the life of the Master Plan to complete all planned projects. Of that total, Water and Sewer Fund projects total \$326 million and Stormwater Fund projects total \$41 million. A portion of these projects is included in the current adopted budget for FY 2019 – 2020 and the impact of each of those projects on the operating budget is detailed, by individual project, in the sections **RENEWAL AND EXTENSION FUNDED PROJECTS** and **STORMWATER FUNDED PROJECTS**. Summaries for the operational impact of these projects are under the headings [Impact Summary of Capital Projects on Operating Budget - Renewal and Extension Fund](#) and [Impact Summary of Capital Projects on Operating Budget - Stormwater Fund](#) in the upcoming pages of this document. Capital projects funded by the FY 2019 – 2020 budget total \$8.8 million with an additional \$14.2 million funded from the FY 2018 – 2019 budget surplus approved by the Board of Directors when the FY 2019 – 2019 budget was approved. Pre-funded amounts

Summary of Capital Project Cash Flow Requirements by Area or Division

	2019 - 2020	2020 - 2021	2021 - 2022	2022 - 2023	2023 - 2024	2024 - 2025
Dist & Conveyance	\$19,760,500	\$21,027,500	\$22,569,167	\$22,494,167	\$14,219,167	\$ 24,552,500
General Services	\$ 1,571,429	\$ 1,571,429	\$ 1,571,429	\$ -	\$ -	\$ -
IT	\$ 1,005,000	\$ 790,000	\$ 695,000	\$ 215,000	\$ 900,000	\$ 1,650,000
SW & Watersheds	\$ 3,500,000	\$ 4,600,000	\$ 4,750,000	\$ 4,675,000	\$ 4,500,000	\$ 3,500,000
Utility-wide	\$ 360,600	\$ 590,000	\$ 6,325,000	\$ 6,600,000	\$ 6,500,000	\$ 6,250,000
Water Production	\$ 9,801,855	\$ 6,291,855	\$24,450,000	\$ 900,000	\$ 400,000	\$ -
Water Reclamation	\$ 4,500,000	\$ 9,000,000	\$ -	\$ -	\$ -	\$ 76,000,000
Grand Total	\$40,499,384	\$43,870,784	\$60,360,595	\$34,884,167	\$26,519,167	\$ 111,952,500

- Dist & Conveyance: Distribution and Conveyance
- IT: Information Technology
- SW & Watersheds: Stormwater Fund
- Utility-wide: Clayton County Water Authority
- Water Production, Water Reclamation and General Services



CASH FLOW REQUIREMENTS OF CAPITAL PROJECTS – DISTRIBUTION AND CONVEYANCE

	2019 - 2020	2020 - 2021	2021 - 2022	2022 - 2023	2023 - 2024	2024 - 2025
Dist & Conveyance	\$ 7,260,500	\$15,027,500	\$16,569,167	\$16,494,167	\$8,219,167	\$18,552,500
601 / Galvanized Water Main Replacement Program	2,250,000	2,250,000	2,250,000	2,250,000	2,250,000	2,250,000
607 / Develop and Implement Large Valve Replacement Program	152,500	152,500	152,500	152,500	152,500	152,500
608 / Backflow Preventer and Commercial Meter Replacement Program	500,000	500,000	500,000	500,000	-	-
610 / Distribution System Linear Infrastructure Risk Assessment & Prioritization Strategy	-	-	125,000	125,000	-	-
613 / Infiltration/Inflow Program, SSES Studies (for all three basins)	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000
614 / Basin Level Sanitary Sewer Rehabilitation (for all three basins)	2,500,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
616 / Large Interceptor Condition Assessment	-	200,000	200,000	150,000	50,000	50,000
617 / Large Interceptor Rehabilitation (Flint River Phases 1B, 2, 3, R.L. Jackson, Jesters Creek)	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000
618 / Post Infiltration/Inflow Rehabilitation Flow Monitoring, Analysis, and System Capacity	50,000	50,000	50,000	50,000	50,000	50,000
619 / Identification, Evaluation and Selection of Recommended Odor and Corrosion Control	-	250,000	-	-	-	-
620 / Design & Implement Selected Odor and Corrosion Control Technologies	-	-	1,666,667	1,666,667	1,666,667	-
630 / Conveyance Modifications to take DeKalb County Flows	-	5,000,000	5,000,000	5,000,000	-	-
636 / College Park Contract WW Flows	-	-	-	-	450,000	7,450,000
638 / Pressure Sewer Condition Assessment	250,000	125,000	125,000	100,000	100,000	100,000
639 / Pressure Sewer Rehabilitation	3,000,000	3,000,000	3,000,000	3,000,000	-	-
Pre-Funded Dist & Conveyance	(12,500,000)	(6,000,000)	(6,000,000)	(6,000,000)	(6,000,000)	(6,000,000)
Sewer Line Inspection	40,000	-	-	-	-	-
DOT - Tara Blvd	120,000	-	-	-	-	-
Sewer Outfall - Emergency	2,000,000	-	-	-	-	-
Water Line Inspection	40,000	-	-	-	-	-
Water Meter Inspection	40,000	-	-	-	-	-
DOT - Valley Hill Rd Connector & Bridge	318,000	-	-	-	-	-
DOT - Battle Creek	1,000,000	-	-	-	-	-

CASH FLOW REQUIREMENTS OF CAPITAL PROJECTS – WATER PRODUCTION

	2019 - 2020	2020 - 2021	2021 - 2022	2022 - 2023	2023 - 2024	2024 - 2025
Water Production	\$4,401,855	\$6,291,855	\$24,450,000	\$ 900,000	\$ 400,000	\$ -
304 / CCWA WPP Treatment Technology Implementation	2,500,000	-	22,500,000	-	-	-
306 / UV Disinfection System Technology Evaluation, Condition Assessment	400,000	-	-	-	-	-
307 / Emergency Power Generators (W.J. Hooper WPP)	1,800,000	-	-	-	-	-
310 / Liquid Lime Feed System (Terry R. Hicks WPP)	-	450,000	450,000	-	-	-
311 / Replace Dry Chemical Feed Equipment (J.W. Smith WPP)	-	250,000	-	-	-	-
312 / Evaluate Flood Proofing (J.W. Smith WPP)	-	-	-	150,000	-	-
313 / Flood Proofing (J.W. Smith WPP)	-	-	-	-	400,000	-
314 / Bar Screen Replacement (Flint River Pump Station)	-	-	-	750,000	-	-
315 / Plant Improvements Phase 2 (J.W. Smith WPP)	-	1,500,000	1,500,000	-	-	-
316 / Replace High Service Pumps (J.W. Smith WPP)	3,000,000	-	-	-	-	-
317 / Forest Ave Demolition and Booster Pump Design and Construction	-	2,000,000	-	-	-	-
Pre-Funded Water Production	(5,400,000)	-	-	-	-	-
Hooper Residual Solids Construction & SDC's	2,091,855	2,091,855	-	-	-	-
Breakroom Renovations	10,000	-	-	-	-	-

CASH FLOW REQUIREMENTS OF CAPITAL PROJECTS – WATER RECLAMATION

	2019 - 2020	2020 - 2021	2021 - 2022	2022 - 2023	2023 - 2024	2024 - 2025
Water Reclamation	\$1,000,000	\$9,000,000	\$ -	\$ -	\$ -	\$76,000,000
705 / Phosphorus Removal System Modifications (Northeast WRF)	1,000,000	9,000,000	-	-	-	-
708 / Design & Construct Dewatering Facility, Primary Solids (W.B. Casey WRF)	1,500,000	-	-	-	-	-
Pre-Funded Water Reclamation	(3,500,000)	-	-	-	-	-
Shoal Creek Pump Station & Conveyance	2,000,000	-	-	-	-	-
Casey WRRF (24 mgd to 32 mgd)	-	-	-	-	-	65,000,000
Convey Shoal Creek Flows to Casey WRRF	-	-	-	-	-	11,000,000



CASH FLOW REQUIREMENTS OF CAPITAL PROJECTS – UTILITY-WIDE

	2019 - 2020	2020 - 2021	2021 - 2022	2022 - 2023	2023 - 2024	2024 - 2025
Utility-wide	\$ 360,600	\$ 590,000	\$6,325,000	\$6,600,000	\$6,500,000	\$6,250,000
101 / Re-Assess and Implement Learning and Leadership Development Program	-	150,000	-	-	-	-
104 / Develop and Implement Vulnerability Assessment/Security Master Plan	200,000	-	-	-	-	-
105 / Develop and Implement Emergency Operations and Disaster Recovery	-	75,000	75,000	-	-	-
106 / Business Continuity	100,000	-	-	-	-	-
107 / Comprehensive Safety Program	-	100,000	-	-	-	-
111 / Implement Meter Service Routing	-	115,000	-	-	-	-
113 / Define Project Management Resources	-	-	-	200,000	-	-
114 / CCWA Energy Optimization Study	-	-	-	150,000	-	-
115 / Evaluate Next Generation of Meter Technologies	-	150,000	-	-	-	-
116 / Customer Meter Replacement Program (includes moving from AMR to AMI)	-	-	6,250,000	6,250,000	6,250,000	6,250,000
121 / Enhance Compliance Reporting	-	-	-	-	250,000	-
Pre-Funded Utility-wide	(250,000)	-	-	-	-	-
Risk and Resiliency Study	250,000	-	-	-	-	-
Outdoor Break Area	21,800	-	-	-	-	-
Forest Park Breakroom Remodel	20,000	-	-	-	-	-
Forest Park Drive-Thru Renovations	12,000	-	-	-	-	-
Call Center Furniture (Ext of 3-135-3)	6,800	-	-	-	-	-

CASH FLOW REQUIREMENTS OF CAPITAL PROJECTS – IT

	2019 - 2020	2020 - 2021	2021 - 2022	2022 - 2023	2023 - 2024	2024 - 2025
IT	\$1,005,000	\$ 790,000	\$ 695,000	\$ 215,000	\$ 900,000	\$1,650,000
155 / Software Application Upgrade & Technology Refresh	530,000	790,000	695,000	215,000	600,000	1,050,000
158 / Review/Develop Architecture Standards	50,000	-	-	-	-	-
160 / Evaluate and Implement System Integration Strategy	-	-	-	-	300,000	600,000
161 / Refresh Disaster Recovery - Data Center & Cyber Security Strategy	48,000	-	-	-	-	-
164 / Sourcing Strategy-Cloud	75,000	-	-	-	-	-
Pre-Funded IT	-	-	-	-	-	-
Blade Server	45,000	-	-	-	-	-
Disaster Recovery Storage Replacement	48,000	-	-	-	-	-
San Switch Console	48,000	-	-	-	-	-
Network Equipment	35,000	-	-	-	-	-
SCADA Host Refresh	46,000	-	-	-	-	-
Hyperconverged Pilot	40,000	-	-	-	-	-
IT Parts Room Equipment	10,000	-	-	-	-	-
Automated Testing Software	30,000	-	-	-	-	-

CASH FLOW REQUIREMENTS OF CAPITAL PROJECTS – GENERAL SERVICES

	2019 - 2020	2020 - 2021	2021 - 2022	2022 - 2023	2023 - 2024	2024 - 2025
General Services	\$1,571,429	\$1,571,429	\$1,571,429	\$ -	\$ -	\$ -
903 / Lift Station Rehabilitation	1,571,429	1,571,429	1,571,429	-	-	-

CASH FLOW REQUIREMENTS OF CAPITAL PROJECTS – STORMWATER AND WATERSHEDS

	2019 - 2020	2020 - 2021	2021 - 2022	2022 - 2023	2023 - 2024	2024 - 2025
SW & Watersheds	\$3,500,000	\$4,600,000	\$4,750,000	\$4,675,000	\$4,500,000	\$3,500,000
206 / Update Stormwater Development Guidelines, Plan Review, Inspection Procedures	-	-	100,000	-	-	-
207 / Stormwater Public Education Program Implementation	-	50,000	-	-	-	-
208 / Ongoing Coordination Program with Cities and County	-	50,000	-	-	-	-
211 / Develop Watershed Master Plan	-	-	-	175,000	-	-
212 / Implement Watershed Improvement Projects	-	1,000,000	1,000,000	1,000,000	1,000,000	-
213 / Develop New Prioritization and Asset Management Process	-	-	150,000	-	-	-
214 / Implement Stormwater Capital Improvement Projects	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000
Pre-Funded SW & Watersheds	-	-	-	-	-	-



Current Capital Project Spending

Capital Project Funding FY 2019 - 2020 - By Main Construction Line; Renewal and Extension Fund DISTRIBUTION AND CONVEYANCE PROGRAMS

RE166- COLLECTION SYSTEM– INFILTRATION AND INFLOW (I/I) [SMP 613, 614, 618]

This construction line contains projects related to major sewer line replacements, repairs or lining (Cured-in-place pipe -CIPP). This construction line focuses on sewer pipe with a diameter of 15" or smaller. Many of these projects are the result of evaluations for Inflow and Infiltration performed on the wastewater collection system. Outside contractors perform CIPP lining work and open cut work to replace damaged pipe and reduce infiltration. CCWA crews perform sewer line point repairs in these basins to address sewer pipe components that are in danger of collapse or significant infiltration. Projects under this construction line are driven by the SSES program which utilizes infiltration and inflow (I/I) studies, age of pipe and staff knowledge. Since FY 2015-2016, the first year of the 2015 Strategic Master Plan, the **Small Gravity Sewer Renewal and Replacement Program** has spent \$6.7M completing 45 projects which replaced 11 miles of pipe infrastructure under this construction line.



Basin Level Sewer Rehabilitation projects [SMP 614] are under this construction line with \$2M budgeted annually for this program. At that funding level, approximately 2.5 miles of pipeline can be renewed each year. The FY 2019 – 2020 capital budget will fund \$2.5M or approximately 3.1 miles of this pipeline. The Sewer System Evaluation Surveys (SSES) condition assessments [SMP 613] that are performed on our system prioritize the projects that are worked on. SSES assessment work has an annual operating budget of \$1.5M.



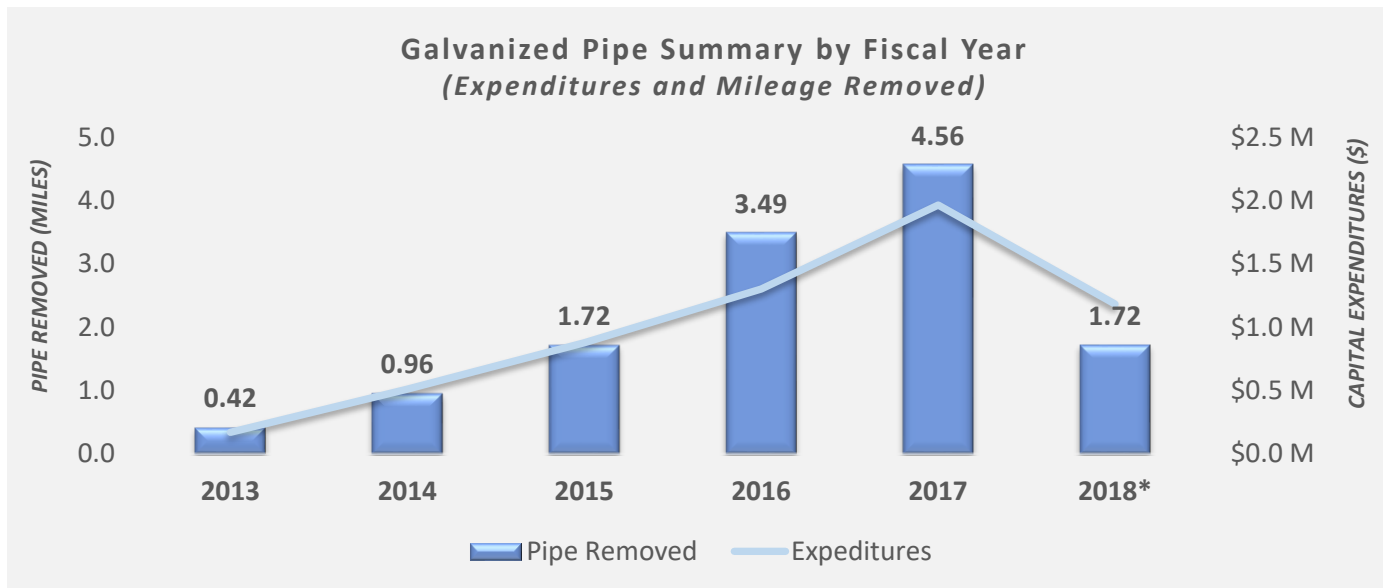
RE174 - GALVANIZED WATERMAIN REPLACEMENTS [SMP 601]

In 2003, the County had an estimated 62 miles of galvanized watermain. This program focuses on the systematic replacement these pipes to improve water quality and fire protection. The affected areas of water distribution system targeted for water main replacements are the areas with most of water leakage and water quality complaints as well as fire hydrant spacing.





The planning level estimated cost of this program is \$35M with an estimated duration of 28 years. The annual budget goal for [Galvanized Watermain Replacement](#) is \$1.25M, which will keep one crew busy 52 weeks a year and replaces about 2.4 miles of pipe. A typical replacement job takes about one week to complete. These projects are small and replace small sections of pipe throughout the County, taking longer to complete than our other pipe programs that replace long stretches of pipe at a time. The FY 2019-2020 capital budget allocates \$1.5M. Since FY 2015 – 2016, \$5.3M has been spent and 11.5 miles of pipeline has been replaced with approximately 43 miles remaining.



RE180 – WATERMAIN RELOCATIONS

This construction line funds the relocation of water lines due to the widening of roads by the both state and federal departments of transportation (DOT). Funding varies from year to year based on state and federal need. The FY 2019 – 2020 budget has \$438K for expected DOT projects within the fiscal year for two projects, [Department of Transportation \(DOT\) – Valley Hill and Battle Creek Roads](#) and [Department of Transportation \(DOT\) – Tara Boulevard](#).

RE225 – WATER LINE EXTENSIONS

This construction line is used for to capture inspections and other Authority related costs from the expansion of water lines created by new residential and commercial developments. Real Estate Developers donate the water lines, sewer pipe and water meters to the Authority to maintain once their developments are completed. There are no annual targets and budgeting in this line follows County permits and development needs. Plans submitted for new development estimate that 48,386 feet of new water lines, 80,099 feet of new sewer pipe and 14,420 feet of new force main connecting to four associated sewer lift stations will be added when these residential and commercial developments are completed. Assuming a third of this pipe is donated over each of the following three years, an additional 16,129 ft of water pipe will be added to water infrastructure each of those years. The FY 2019 – 2020 Capital Budget includes \$40K for CCWA labor affiliated with these [Water Line Extensions](#).

RE226 – SEWER LINE EXTENSIONS AND STUB-OUTS

Projects to capture inspections and other Authority related costs for the expansion of sewer lines required by new residential and commercial development are placed under this construction line. There are no annual targets and budgeting in this line follows County permits and development needs. Plans submitted for new development estimate that 48,386 feet of new water lines, 80,099 feet of new sewer pipe and 14,420 feet of new force main connecting to



four associated sewer lift stations will be added when these residential and commercial developments are completed. Assuming a third of this pipe is donated over each of the following three years, an additional 31,506 ft of sewer pipe will be added to sewer infrastructure each of those years. The current budget includes funding of \$40K for this [sewer initiative](#).

RE227 – METER SETTINGS

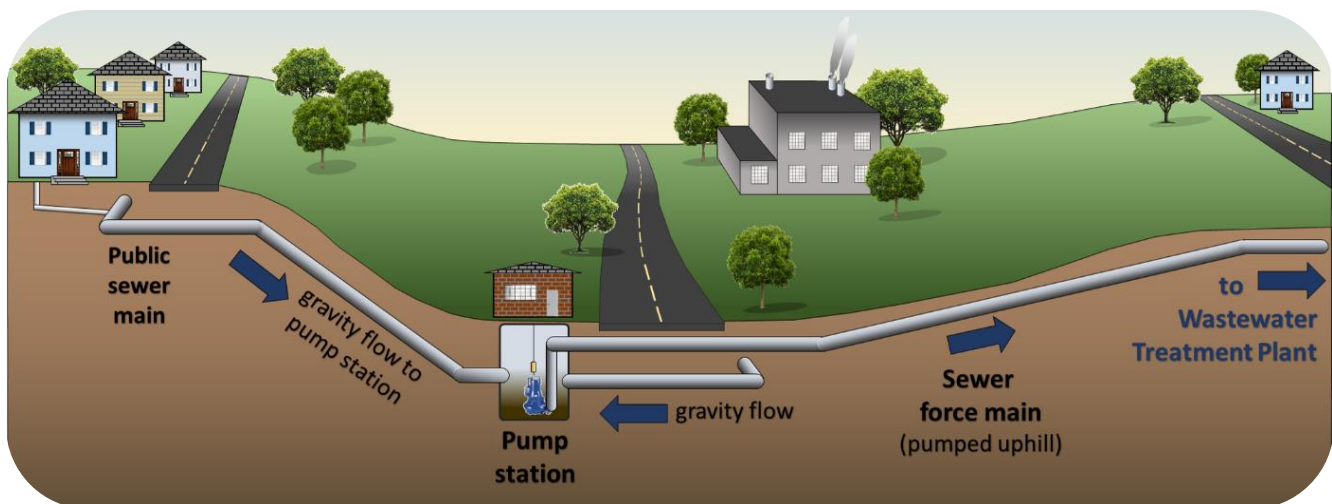
This construction line contains projects to capture inspections other Authority related costs for to new meters associated with new development throughout the County. There are no annual targets and budgeting in this line follows County permits and development needs. The FY 2019 – 2020 budget includes \$40K for [Meter Settings](#).

RE228 – SEWER FORCE MAIN REPLACEMENTS [SMP 639]

The annual funding target for the **Sewer Force Main Program** is \$1.2M beginning in the next budget year. The FY 2017 - 2018 budget contained \$250K to develop a formal Pressure Sewer Condition Assessment program for the 51 miles of sewer force mains throughout the conveyance system in Clayton County. The resulting projects from this assessment program are funded under this construction line. Of the 51 miles of sewer force main in Clayton County, \$1.8M has been spent and four projects replacing 2 miles of this pipe have been completed since the implementation of the 2015 Strategic Master Plan. Additional funding of \$3M from FY 2018-2019 budget surplus was approved by the Board of Directors for **Force Main Replacement at Walnut Creek**.

RE232 – LARGE METER REPLACEMENTS [SMP 608]

This construction line contains projects for the replacement of large meters for commercial and industrial customers. There are no annual targets and budgeting in this line follows need. This construction line has unassigned funds of \$500K that will fund work done during the FY 2019 – 2020 fiscal year.



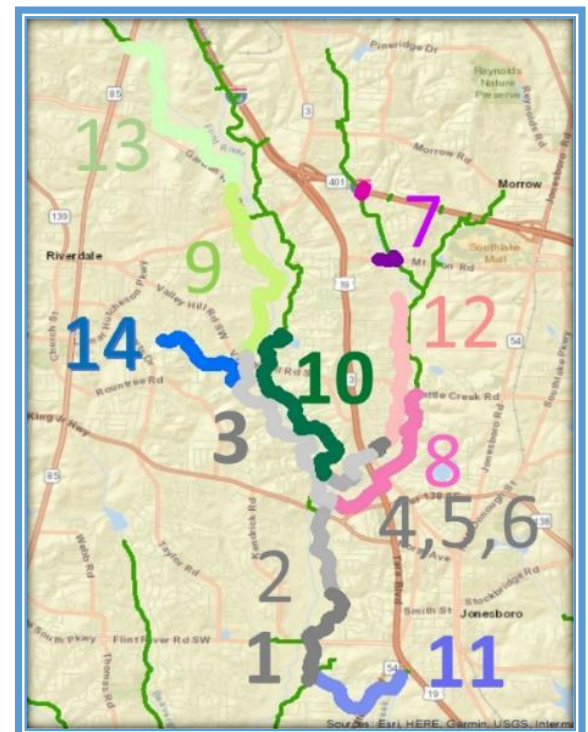
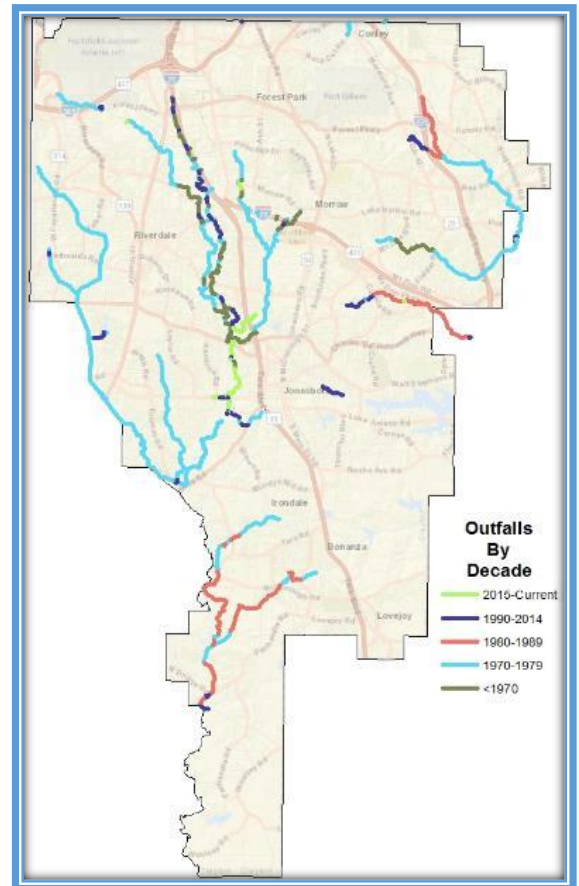


RE223 – LARGE SEWER INTERCEPTOR / OUTFALL REHABILITATION [SMP 617]

A primary focus for the Authority over the next several years will be on its conveyance system and its Large Outfall Rehabilitation program. CCWA defines sewer pipe with a diameter greater than 15 inches as Sewer Interceptors or Outfalls. The map below shows the County's 76 miles of this large sewer pipe by its estimated age. The cost of the projects affiliated with this outfall replacement initiative is currently estimated at \$69M. Started in FY 2015 -2016, replacement will occur over several years. The table with the current status of multiple forecasted projects is below. In January 2017, Georgia Environmental Finance Authority (GEFA) approved a \$25M Clean Water SRF loan to assist with the funding of projects three of the projects in this rehabilitation program. Internal labor is used for the design of these projects and estimated at \$300K per project. This year three phases are expected to be designed and the Board of Directors approved a request for the pursuit of a second GEFA loan for up to \$25M for the construction of these three outfall project phases.

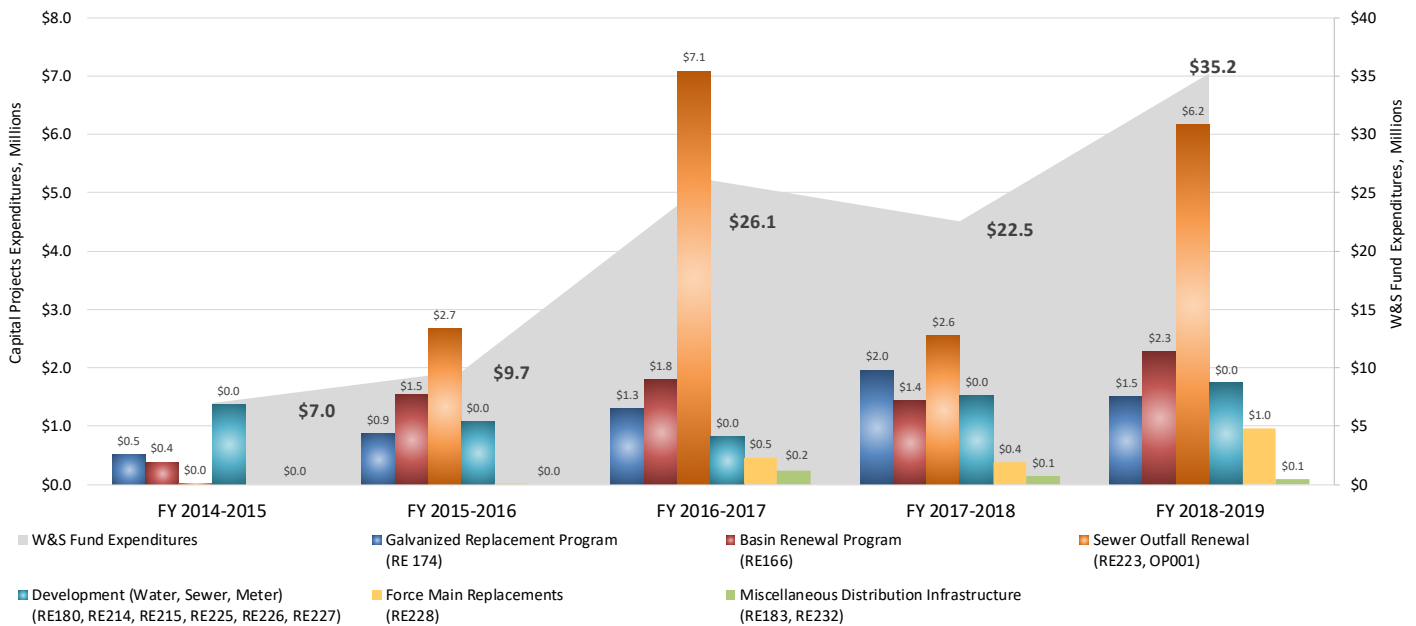
Status of Major Outfall Projects

Project	Funding / Status	Length (miles)	Cost
MAJOR REPLACEMENT PROJECTS (2015 - Current)			
1) Flint River Outfall Ph 1a	Complete	0.8	\$4.7 M
2) Flint River Outfall Ph 1b	Complete	1.1	\$5.7 M
3) Flint River Outfall Ph 2	Complete (GEFA 1-1)	2.3	\$7.5 M
4) Jesters Creek Outfall Ph 1	Complete	0.3	\$0.6 M
5) Jesters Creek Outfall Ph 2	Complete	0.2	\$0.5 M
6) Jesters Creek Outfall Ph 3	Complete	0.5	\$1.2 M
Subtotal		5.2	\$20.2 M
PROJECTS UNDERWAY / PLANNED FOR FY 2019-2020			
7) Jesters Creek Outfall East Misc.	Construction	0.5	\$1.7 M
8) Jesters East Ph 1	Design (GEFA 1-2)	1.3	\$8.5 M
9) Flint River Outfall Ph 3	Design (GEFA 1-3)	2.3	\$10.3 M
10) Flint River Outfall East Ph 1	Design (Proposed GEFA 2-1)	2.1	\$4.9 M
11) Rum Creek Outfall	Design	1.2	\$3.1 M
12) Jesters Creek Outfall Ph 4	Design	1.7	\$4.8 M
13) Flint River Outfall Ph 4	Proposed GEFA 2-2	2.2	\$11.2 M
14) Riverdale Outfall Ph1	Proposed GEFA 2-3	1.1	\$2.3 M
15) Emergency Outfall Work	RE223	---	\$2.0 M
Subtotal		12.4	\$48.8 M
Total		17.6	\$69.0 M





SUMMARY OF DISTRIBUTION AND CONVEYANCE ANNUAL CAPITAL SPENDING



ANNUAL CAPITAL SPENDING

	FY 2014-2015	FY 2015-2016	FY 2016-2017	FY 2017-2018	FY 2018-2019
W&S Fund Expenditures	\$6,988,246	\$9,723,383	\$26,102,263	\$22,521,830	\$35,202,878
Galvanized Replacement Program (RE 174)	\$510,140	\$876,219	\$1,301,274	\$1,964,307	\$1,500,791
Basin Renewal Program (RE166)	\$389,393	\$1,533,862	\$1,788,554	\$1,434,946	\$2,280,780
Sewer Outfall Renewal (RE223, OP001)	\$19,606	\$2,674,397	\$7,090,180	\$2,557,102	\$6,169,261
Development (Water, Sewer, Meter) (RE180, RE214, RE215, RE225, RE226, RE227)	\$1,368,951	\$1,079,292	\$821,790	\$1,525,288	\$1,730,986
Force Main Replacements (RE228)	\$0	\$19,379	\$458,837	\$372,366	\$961,214
Miscellaneous Distribution Infrastructure (RE183, RE232)	\$0	\$0	\$242,776	\$143,396	\$91,416
All Pipeline Related Projects	\$5,185,584	\$10,506,512	\$15,669,891	\$11,771,120	\$16,664,277

FACILITY IMPROVEMENT PROJECTS

RE199 – CASEY WRF IMPROVEMENTS



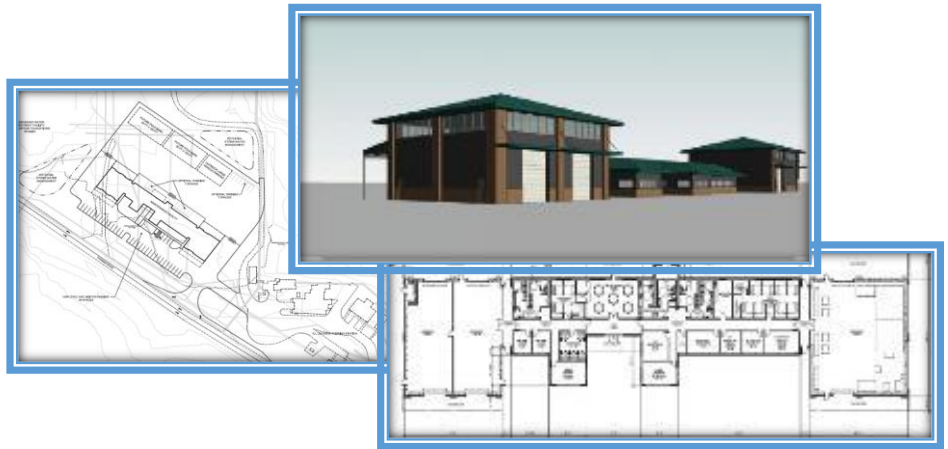
This Renewal and Extension Fund construction line focuses on improvements at CCWA's largest and newest water reclamation facility, W.B. Casey. Large projects underway are the preliminary treatment unit (PTU) improvements, the addition of a fourth-secondary clarifier, rehabilitation of the three existing clarifiers and a new polishing facility. Enhancements to the PTU with a new screen structure and rotary drum screen will reduce maintenance costs by protecting downstream treatment equipment, help mitigate peak flow situations, provide better odor control and improve the byproduct pellets sold to a fertilizer company. The additional clarifier and the rehabilitation of the existing clarifiers will provide additional needed treatment capacity and meet increasingly stringent effluent regulatory requirements. The Board of



Directors approved \$1.5M of surplus funds from the FY 2018 – 2019 Budget for the Casey WRRF Solids Handling Detailed Design project [SMP 708].

RE204 – GENERAL SERVICES MAINTENANCE BUILDING [SMP 901]

The General Services Maintenance Building will co-locate and improve working conditions for 30 staff members currently located in three separate facilities spread throughout the county. Each of the separate facilities have significant issues related to its structural condition, functionality and environmental conditions and lack of adequate work and storage space for needed parts and flammable items. Co-locating these facilities in an energy efficient, secure location will improve operational efficiencies, reduce utility costs and increase productivity of personnel.



Construction has been completed and this construction line will be closed in FY 2019 – 2020.

RE219 – LIFT STATION REHABILITATION [SMP 902, SMP 903]

This construction line is used to fund capital improvements to the 44 lift stations that are part of the sewer conveyance infrastructure throughout the County. A comprehensive Lift Station Assessment [SMP 902] was funded in the FY 2017 – 2018 budget. The first phases of this project will be the development of a master list of stations and any known operational or capital issues. Based on this initial list, follow-up condition assessment activities will be conducted in future years and the resulting construction activities will be performed under [SMP 903] - Lift Station Rehabilitation. The Rum Creek Lift Station upgrade with a cost of \$2.1M was recently completed under this construction line. The FY 2019 – 2020 budget will fund \$500K for the evaluation and detailed design for the [Walnut Creek Lift Station](#) rehabilitation.

RE229 – WATER PRODUCTION FACILITIES IMPROVEMENTS

This main construction line contains capital projects for the work done at one of three water production facilities or for improving water quality in the reservoirs that supply these water facilities. The FY 2019 – 2020 budget will fund a \$10K [breakroom renovation](#) at the Hooper Water Production Facility. In addition to this project, surplus approved by the Board of Directors from the FY 2018 – 2019 budget will add funding to several additional projects under this construction line.

The [Hooper Solids Reservoir Improvements](#) initiative, which will replace the current sludge removal system at the Hooper Water Production Facility, received an additional \$1M. This \$6.3M project will provide a more robust technology that is able to remove consistently the sludge that accumulates in the holding pond. This chain and flight system will alleviate the need for an outside contractor to remove the sludge. This has become a quarterly expense of approximately \$20,000 and will save the Authority almost \$80,000 annually. Effectively removing sludge helps the Authority comply with the requirements of our National Pollutant Discharge Elimination System (NPDES) permit by discharging "cleaner water" back into the Hooper Reservoir. The NPDES permit program, created in 1972 by the Clean Water Act, addresses water pollution by regulating point sources that discharge pollutants to waters in the US. The second project funded by budgetary surplus added \$500K for the [Hooper Emergency Generator](#) [SMP 307] to provide back-up power in the event of an electrical outage. The [Ultraviolet Disinfection System Technology Evaluation](#) [SMP

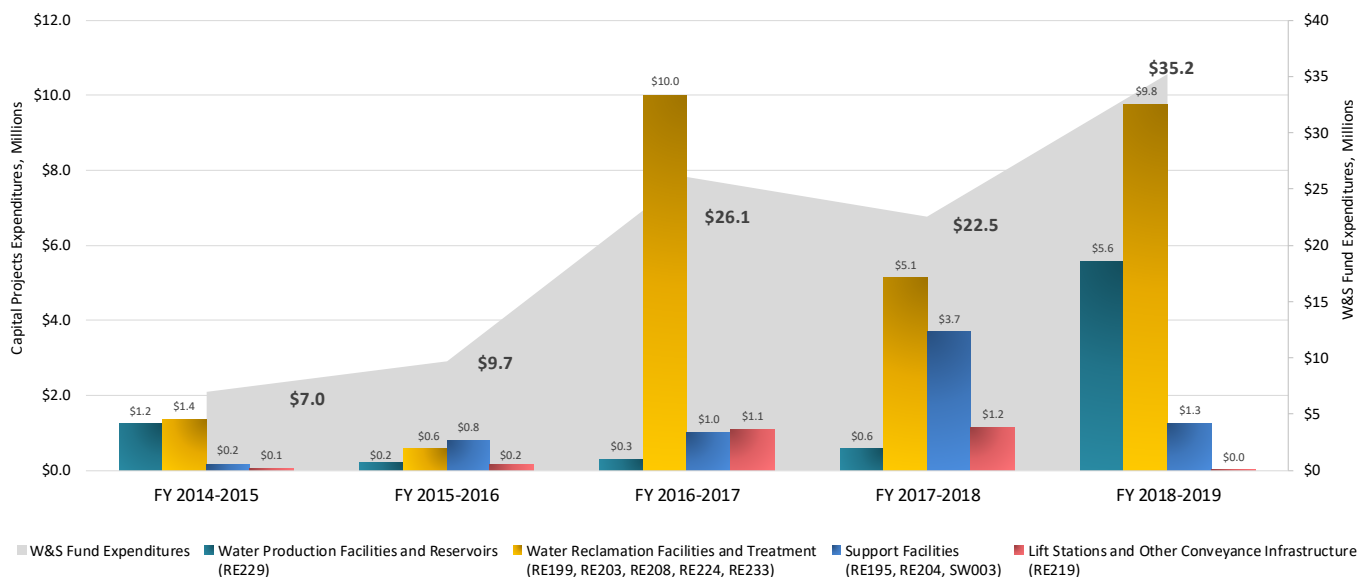


306] received \$400K from last year's budget surplus. This project will assess the existing system to identify and implement more advanced technologies for water treatment. The **Treatment Technology Implementation Design** [SMP 304] project received \$2.5M in surplus funding to implement the recommended treatment technology at both the Hooper and Hicks Water Production Facilities. The **High Service Pump Replacement** project at the J.W. Smith Water Production Facility [SMP 316] received an additional \$1M from last year's surplus bringing the amount reserved for this initiative up to \$2M of its estimated cost of \$3M.

RE233 – SHOAL CREEK WATER RECLAMATION FACILITY MODIFICATIONS

This construction line will contain projects related to the modification of the Shoal Creek Water Reclamation Plant from a separate treatment facility into a pump and conveyance station. This conversion follows the recommendation of a large facilities evaluation the Authority completed in FY 2015 – 2016. The Board of Directors approved \$2M from the FY 2018 – 2019 budget surplus to fund the Shoal Creek Pump Station and Conveyance project under this construction line.

SUMMARY OF FACILITY IMPROVEMENTS ANNUAL CAPITAL SPENDING



ANNUAL CAPITAL SPENDING	FY 2014-2015	FY 2015-2016	FY 2016-2017	FY 2017-2018	FY 2018-2019
W&S Fund Expenditures	\$6,988,246	\$9,723,383	\$26,102,263	\$22,521,830	\$35,202,878
Water Production Facilities and Reservoirs (RE229)	\$1,240,741	\$209,382	\$293,844	\$572,886	\$5,560,992
Water Reclamation Facilities and Treatment (RE199, RE203, RE208, RE224, RE233)	\$1,353,726	\$575,757	\$10,009,355	\$5,129,804	\$9,754,203
Support Facilities (RE195, RE204, SW003)	\$177,263	\$795,315	\$1,008,445	\$3,682,842	\$1,254,471
Lift Stations and Other Conveyance Infrastructure (RE219)	\$52,288	\$159,350	\$1,094,461	\$1,153,273	\$3,183
All Facility Improvement Projects	\$2,824,017	\$1,739,804	\$12,406,104	\$10,538,804	\$22,554,824



UTILITY-WIDE PROJECTS

RE146 – MISCELLANEOUS INHOUSE PROJECTS



This Renewal and Extension line contains smaller capital projects that will be performed by CCWA staff that do not fit into other primary Renewal and Extension Fund construction lines. The FY 2019 – 2020 Budget has funding for \$22K for the [Outdoor Break Area](#) for Meter Services at the Headquarters building, an additional \$7K for the [Call Center Upgrades](#), the \$12K [Drive-thru Renovation](#) for the customer service center at the Forest Park location, and \$20K for [Breakroom Remodel](#) at the Forest Park location.

RE184 – STRATEGIC MASTER PLAN

This Renewal and Extension line holds funding for consulting services for evaluations, assessments and studies that support the five-year updates to the Strategic Master Plan [SMP]. The last update to the SMP was 2015. The FY 2018 – 2019 Budget funded the [2020 Strategic Master Plan](#), with multiple workshops taking place at all the facilities this year.

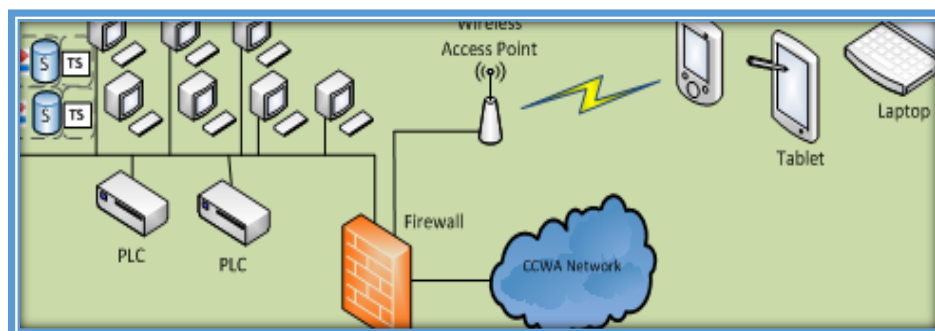
RE205 – SCADA UPGRADES [SMP 906]

This Renewal and Extension main line holds major SCADA (supervisory control and data acquisition) projects. SCADA is a software application program for used for process control and for gathering of data in real time from remote locations in order to control equipment and conditions. SCADA Systems consist of both hardware and software components. The hardware collects and feeds data into a computer with SCADA software installed. The data is then processed by the computer before presenting it. The function of SCADA is to record and log all events in a file that is stored in a hard disk or that is sent to a printer. If conditions become hazardous, SCADA can sound warning alarms.

SCADA systems are used in our water and wastewater treatment facilities to track performance of treatment equipment and processes. The system directly interacts with devices such as sensors, valves, pump, motors while it monitors, gathers and processes data in real-time and is vital to our production and treatment of water and wastewater.

SCADA Upgrades planned under this construction line consists of six projects with the final two funded in the prior year budget:

1. SCADA Servers (*Completed April 2016*)
2. Bristol RTU Upgrades (*Completed March 2017*)
3. Mission Communication Upgrades (*Completed March 2017*)
4. Facility Ethernet Upgrades (*Estimated Completion September 2018*)
5. Facility Firewall and Wireless Access Points (*Estimated Completion December 2019*)
6. GE Mobile Products (*Estimated to start FY 2019-2020*)





RE220 – CUSTOMER INFORMATION SYSTEM DEVELOPMENT [SMP 157]

This main construction line contains all projects and task orders relevant to the replacement and implementation of the Authority's Customer Information System. The budget for this project is \$4.5M. This major initiative is expected to be completed during FY 2019 – 2020.

RE222 – COMPANYWIDE SECURITY – [SMP 104]



This construction line of the Renewal and Extension Fund holds projects undertaken as part of the *Security Management System* to provide physical security of the Authority's properties. The objective of projects under this line is to improve organization security by integrating access controls and video (CCTV) management on one unified security platform. The projects include hardware and software installation, access control, visitor management system and formalized security processes and procedures for the operation and maintenance of this new system.

The two primary phases of this initiative had a total cost of \$2.5M and was funded through previous years' budgets. The first phase of the project was completed in March 2017 and the second phase in FY 2018 - 2019. The FY 2019 – 2020 budget allocated \$200K for the [Security Management System - Phase 3](#). This phase includes additional security features that were postponed until the completion of the primary projects or the need was discovered during the installation of the systems.

RE230 – INFORMATION TECHNOLOGY PROJECTS

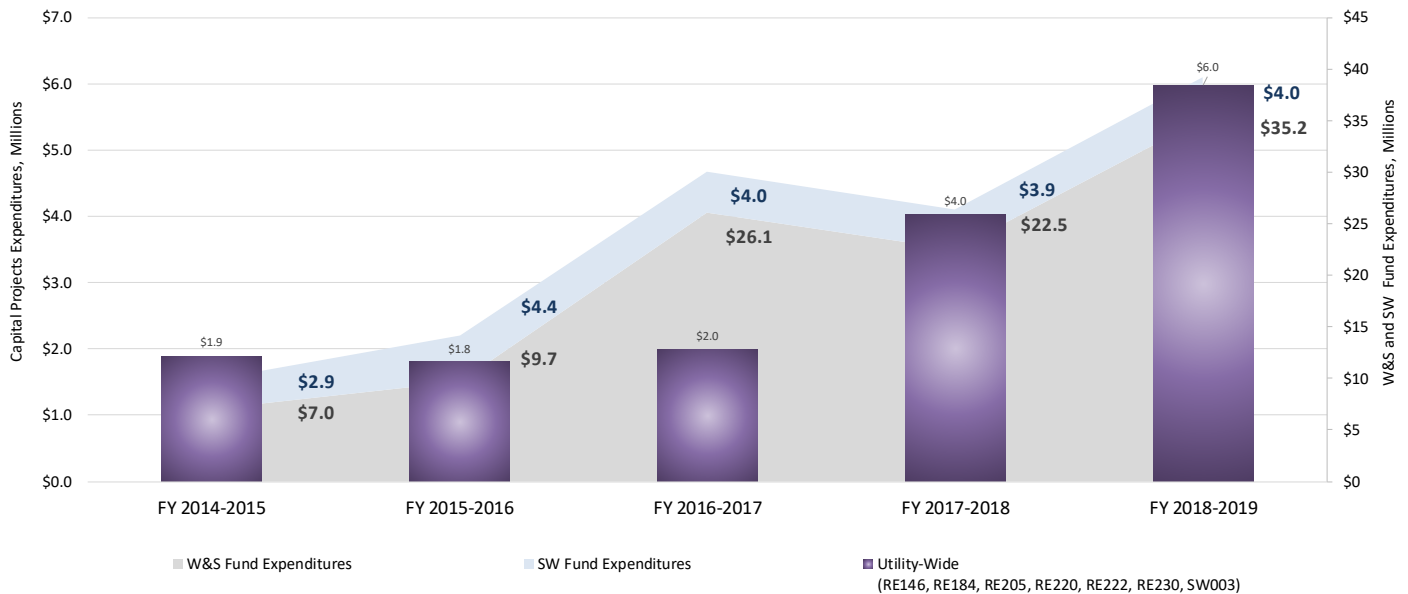
This construction line contains capital projects that improve the technology infrastructure of the Authority. Projects under this Renewal and Extension line include network upgrades and improvements and consist of both hardware and software enhancements.

The 2019 – 2020 capital budget funds a total of \$302K for the following projects: [Blade Server Replacement](#), [Disaster Recovery Storage Replacement](#), [San Switch Console](#), [Network Equipment](#), [SCADA Host Refresh](#), [Hyperconverged Pilot](#), [IT Parts Room Storage Equipment](#), and [Automated Testing Software](#).





SUMMARY OF UTILITY-WIDE IMPROVEMENTS ANNUAL CAPITAL SPENDING



ANNUAL CAPITAL SPENDING	FY 2014-2015	FY 2015-2016	FY 2016-2017	FY 2017-2018	FY 2018-2019
W&S Fund Expenditures	\$6,988,246	\$9,723,383	\$26,102,263	\$22,521,830	\$35,202,878
SW Fund Expenditures	\$2,914,480	\$4,422,544	\$4,004,216	\$3,878,823	\$4,016,223
Utility-Wide (RE146, RE184, RE205, RE220, RE222, RE230, SW003)	\$1,893,126	\$1,800,552	\$1,992,911	\$4,028,479	\$5,976,620

Capital Project Funding FY 2019 – 2020 – By Stormwater Construction Lines

The Stormwater Fund has two primary types of projects, Watershed Improvements and Capital infrastructure Improvements. The capital infrastructure projects are classified as either *Open-Cut* (Removal and Replacement – R/R) or *Cured-In-Place-Pipe* (CIPP). These projects are similar to gravity sewer programs (RE 166) with open cut and cured-in-place methods. Projects are driven by complaints and permit required inspections. Since FY 2015-2016, \$14.2M has been spent and 8.5 miles of Stormwater Infrastructure renewed.

The 10-year strategic master plan estimated the cost of capital infrastructure rehabilitation would be \$35M. The annual budget target for stormwater pipe renewal is \$3.5M, which would rehabilitate approximately two miles of stormwater pipe. The table shows a summary of stormwater infrastructure projects by fiscal year.

	SW-004			SW-005			Sum of All Years			
	LF	Total \$	\$/LF	LF	Total \$	\$/LF	LF	Total \$	\$/LF	Miles
FY 2018	3,809	\$ 1,517,148	\$398.31	9,228	\$ 3,062,484	\$331.87	13,037	\$ 4,579,632	\$ 365.09	2.5
FY 2017	3,169	897,645	283.26	7,064	2,276,456	322.26	10,233	3,174,101	302.76	1.9
FY 2016	2,946	925,993	314.32	8,184	2,413,203	294.87	11,130	3,339,196	304.60	2.1
FY 2015	5,850	1,582,819	270.57	4,480	1,517,832	338.80	10,330	3,100,650	304.68	2.0
FY 2014	8,362	2,213,246	264.68	5,680	1,449,543	358.40	14,042	3,662,789	311.54	2.7
FY 2013	6,400	1,515,190	236.75	3,854	979,168	360.81	10,254	2,494,357	298.78	1.9
FY 2012	11,574	2,598,507	230.51	7,318	1,239,107	230.59	18,892	3,837,614	230.55	3.6
FY 2011	9,775	1,508,688	154.34	6,742	1,203,471	178.50	16,517	2,712,159	166.42	3.1
FY 2010	2,280	793,421	347.99	8,758	1,908,816	217.95	11,038	2,702,237	282.97	2.1
FY 2009	1,745	807,771	462.91	2,912	962,319	330.47	4,657	1,770,090	396.69	0.9
Total	48,932	\$11,945,635	\$296.36	47,928	\$11,673,458	\$296.45	96,860	\$23,619,093	\$296.41	18.3



SW004 – STORMWATER CURED-IN-PLACE PIPE (CIPP) – [SMP 214]

This construction line funds the Cured-In-Place-Pipe (CIPP) Stormwater program. CIPP is the most common trenchless technology used by CCWA for pipeline rehabilitation. A large liner is inserted inside a pipe and then applied to coat the inside of an existing stormwater pipe. The standard design provides a standalone, structurally complete replacement. The FY 2019 – 2020 budget will fund \$1.5M of Stormwater Cured-In-Place Pipe improvements.





SW005 – STORMWATER REMOVAL AND REPLACEMENT PIPE (R/R) – [SMP 214]

This construction line funds the Stormwater Removal and Replacement (R/R) projects in the capital infrastructure improvement program. The FY 2019 – 2020 budget will fund \$1.7M of [Remove and Replace](#) projects.



Photographs below show the “before and after” of a culvert renewal.





SW006 – UPPER FLINT-LAKE MIRROR STORMWATER IMPROVEMENTS

This construction line was set-up for the repair that will resolve flooding on Lake Mirror Place (at Cajun Queen Ground Storage Tank). This is the second phase of the Upper Flint River – Lake Mirror Stormwater Improvement project that was identified in the Upper Flint Watershed Management Plan in 2010. Phase 2 of this project consists of installing 1,300 feet of 60-inch reinforced concrete pipe and other drainage intake structures to capture and improve existing stormwater drainage. The first phase of this watershed project installed 700 feet of 60-inch reinforced concrete pipe and other intake structures to capture stormwater flow.

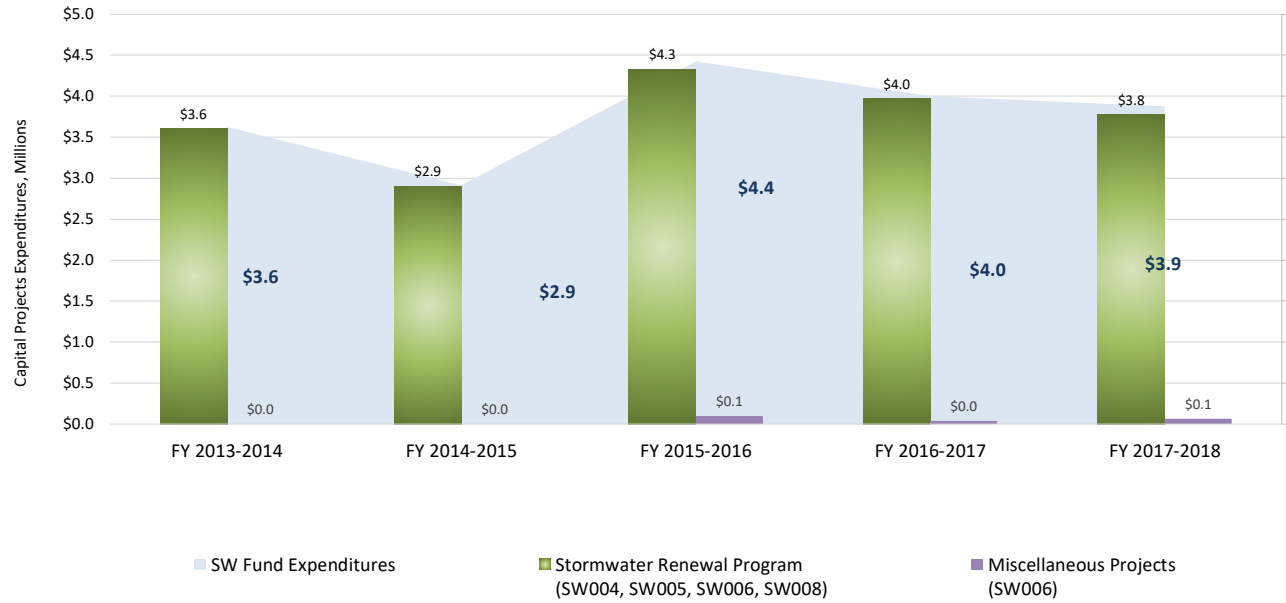


SW008 – VETERAN'S PARKWAY PHASE 2

This construction line holds the Veterans Parkway Stormwater Rehabilitation project that will replace and reroute dual runs of 48" Corrugated Metal Pipe, roughly 790' each. The existing pipe route is not entirely within road right-of-way (ROW), therefore the lines will be combined and replaced with a single 72" Reinforced Concrete Pipe and rerouted to be within the ROW.



SUMMARY OF STORMWATER ANNUAL CAPITAL SPENDING



ANNUAL CAPITAL SPENDING	FY 2013-2014	FY 2014-2015	FY 2015-2016	FY 2016-2017	FY 2017-2018
SW Fund Expenditures	\$3,626,423	\$2,914,480	\$4,422,544	\$4,004,216	\$3,878,823
Stormwater Renewal Program (SW004, SW005, SW006, SW008)	\$3,602,702	\$2,897,494	\$4,323,362	\$3,966,480	\$3,773,716
Miscellaneous Projects (SW006)	\$0	\$0	\$99,059	\$37,572	\$62,250

The photograph shows the challenge utility lines present when replacing pipe infrastructure.





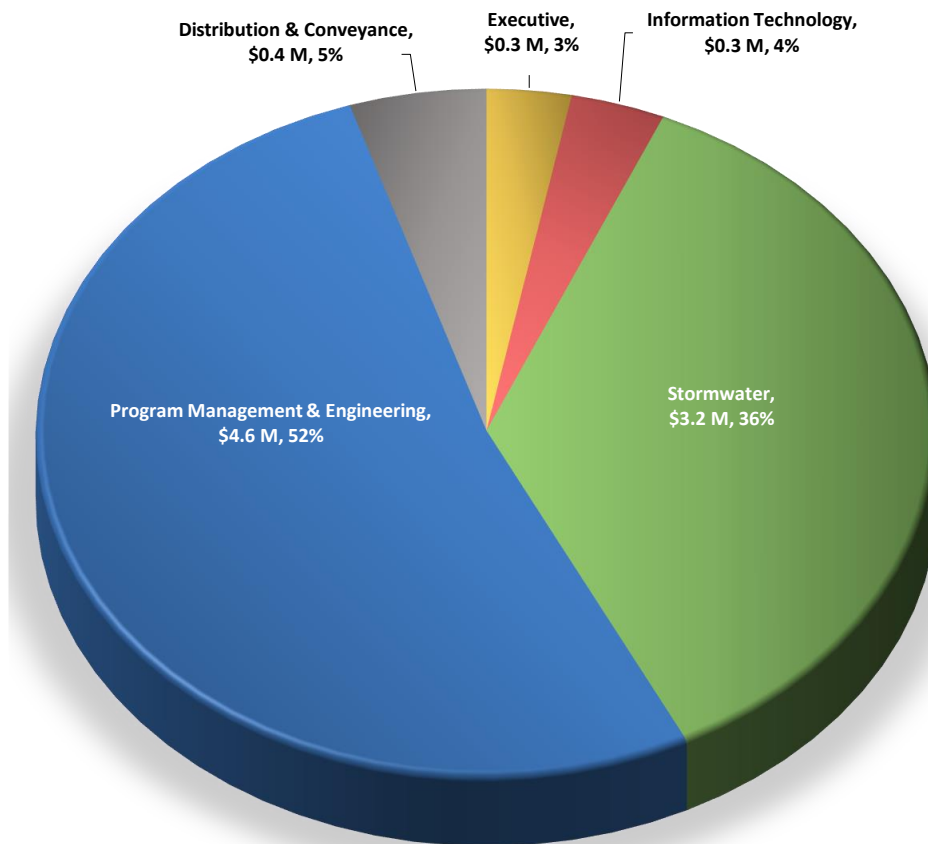
Capital Project FY 2019 – 2020 Budget Funding Summary

Water and Sewer Fund - Renewal and Extension Fund

Construction Line	Project Description	Amount Budgeted	Construction Line	Project Description	Amount Budgeted
[RE146]	Outdoor Break Area - <i>Meter Services</i>	\$ 21,800	[RE225]	Water Line Inspection	\$ 40,000
[RE146]	Breakroom Remodel - <i>Forest Park</i>	20,000	[RE226]	Sewer Line Inspection	40,000
[RE146]	Drive-Thru Renovations - <i>Forest Park</i>	12,000	[RE227]	Water Meter Inspection	40,000
[RE146]	Call Center Furniture (<i>Additional funds: 3-135-3</i>)	6,800	[RE230]	Blade Server	45,000
[RE146]	Breakroom Renovations - <i>Hooper Plant</i>	10,000	[RE230]	DR Storage Replacement	48,000
[RE166]	Basin Level Sewer Rehab	2,500,000	[RE230]	San Switch Console	48,000
[RE174]	Galvanized Water Main Replacement	1,500,000	[RE230]	Network Equipment	35,000
[RE180]	DOT - Valley Hill Rd Connector and Bridge	318,000	[RE230]	SCADA Host Refresh	46,000
[RE180]	DOT - Tara Blvd	120,000	[RE230]	Hyperconverged Pilot	40,000
[RE219]	Walnut Creek Lift Station Evaluation and Design	500,000	[RE230]	IT Parts Room Equipment	10,000
[RE222]	Security Mgt System Phase 3	200,000	[RE230]	Automated Testing Software	30,000
			Total Capital Projects		\$ 5,630,600

Stormwater Fund - Construction Fund

Construction Line	Project Description	Amount Budgeted
[SW004]	Cured In Place Pipe	1,500,000
[SW005]	Removal and Replacement	1,693,121
Total Capital Projects		\$ 3,193,121





Renewal and Extension Funded Projects

FUNDING SOURCES

DESCRIPTION OF REVENUE SOURCES	AMOUNT
Other Financing Sources:	
Capital Budget Transfers FY 2019-2020	\$ 5,630,600
from Water and Sewer Operating Fund	
Total Funding Sources	\$ 5,630,600

PROJECTS

BUDGET UNIT - PROJECT SPONSOR	GENERAL PROJECT DESCRIPTION	AMOUNT
Information Technology	Blade Server	\$ 45,000
Information Technology	Disaster Recovery Storage Replacement	48,000
Information Technology	San Switch Console	48,000
Information Technology	Network Equipment	35,000
Information Technology	SCADA Host Refresh	46,000
Information Technology	Hyperconverged Pilot	40,000
Information Technology	IT Parts Room Equipment	10,000
Information Technology	Automated Testing Software	30,000
Risk Management	Security Management System Phase Three	200,000
Meter Services	Outdoor Break Area	21,800
Customer Service	Forest Park Breakroom Remodel	20,000
Customer Service	Forest Park Drive-Thru Renovations	12,000
Customer Service	Call Center Furniture (Ext of 3-135-3)	6,800
W.J. Hooper Water Production Facility	Breakroom Renovations	10,000
	Walnut Creek Lift Station Evaluation & Detailed Design	500,000
PM & E Department Manager	Water Line Inspection	40,000
Construction Services	Sewer Line Inspection	40,000
Construction Services	Water Meter Inspection	40,000
Construction Services	Galvanized Water Main Replacement	1,500,000
Construction Services	Basin Level Sewer Rehab	2,500,000
Water Distribution Maintenance	Department of Transportation - Valley Hill Connector and Battle Creek Roads	318,000
Water Distribution Maintenance	Department of Transportation - Tara Boulevard	120,000
Total Projects		\$ 5,630,600



Renewal and Extension Funded Projects – Detail by Project

Blade Server Replacement

Department: Executive

Fund: R & E

Budget Unit: Information Technology

Utility: Water / Sewer

Blade Server Replacement- \$45,000

DESCRIPTION OF PROJECT

This project will add standalone servers to our environment to migrate the workload off of the Cisco Blade Chassis. This will allow for maximum redundancy.

Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1

	<u>Available</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
Project Funding	\$ -	\$ 45,000	\$ -	\$ -	\$ -	\$ -
Impact to Operating Budget	-	-	4,500	4,500	4,500	4,500
Total Financial Impact	\$ -	\$ 45,000	\$ 4,500	\$ 4,500	\$ 4,500	\$ 4,500

IMPACT ON OPERATING BUDGET

This project is replacement of existing infrastructure and will have \$4,500 impact on the operating budget consisting of annual maintenance fees which are estimated at 10 percent of the project cost.





Disaster Recovery Storage Replacement

Department: Executive

Fund: R & E

Budget Unit: Information Technology

Utility: Water / Sewer

Disaster Recovery Storage Replacement - \$48,000

DESCRIPTION OF PROJECT

The IBM V7000 has reached its end of life. We will need to replace the storage at our disaster recovery site.

Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1

	<u>Available</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
Project Funding	\$ -	\$ 48,000	\$ -	\$ -	\$ -	\$ -
Impact to Operating Budget	-	-	4,800	4,800	4,800	4,800
Total Financial Impact	\$ -	\$ 48,000	\$ 4,800	\$ 4,800	\$ 4,800	\$ 4,800

IMPACT ON OPERATING BUDGET

This project is replacement of existing infrastructure and will have \$4,800 impact on the operating budget consisting of annual maintenance fees which are estimated at 10 percent of the project cost.





San Switch Console

Department: Executive

Fund: R & E

Budget Unit: Information Technology

Utility: Water / Sewer

San Switch Console - \$48,000
DESCRIPTION OF PROJECT

Consolidate 3 smaller switch stacks into 1 switch stack which will provide greater flexibility and redundancy.

Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1

	<u>Available</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
Project Funding	\$ -	\$ 48,000	\$ -	\$ -	\$ -	\$ -
Impact to Operating Budget	-	-	4,800	4,800	4,800	4,800
Total Financial Impact	\$ -	\$ 48,000	\$ 4,800	\$ 4,800	\$ 4,800	\$ 4,800

IMPACT ON OPERATING BUDGET

This project is replacement of existing infrastructure and will have \$4,800 impact on the operating budget consisting of annual maintenance fees which are estimated at 10 percent of the project cost.





Network Equipment

Department:	Executive	Fund:	R & E
Budget Unit:	Information Technology	Utility:	Water / Sewer

Network Equipment - \$35,000

DESCRIPTION OF PROJECT

This project will add networking capacity throughout the organization.

Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1						
	Available	2019	2020	2021	2022	2023
Project Funding	\$ -	\$ 35,000	\$ -	\$ -	\$ -	\$ -
Impact to Operating Budget	-	-	3,500	3,500	3,500	3,500
Total Financial Impact	\$ -	\$ 35,000	\$ 3,500	\$ 3,500	\$ 3,500	\$ 3,500

IMPACT ON OPERATING BUDGET

The impact of this project on the annual operating budget will be \$3,500 in annual maintenance cost estimated at 10 percent of the project cost.





SCADA Host Refresh

Department: Executive

Fund: R & E

Budget Unit: Information Technology

Utility: Water / Sewer

SCADA Host Refresh - \$46,000

DESCRIPTION OF PROJECT

The Cisco servers currently hosting the SCADA environment are nearing end of life. This project will replace these servers.

Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1

	<u>Available</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
Project Funding	\$ -	\$ 46,000	\$ -	\$ -	\$ -	\$ -
Impact to Operating Budget	-	-	4,600	4,600	4,600	4,600
Total Financial Impact	\$ -	\$ 46,000	\$ 4,600	\$ 4,600	\$ 4,600	\$ 4,600

IMPACT ON OPERATING BUDGET

This project is replacement of existing infrastructure and will have \$4,600 impact on the operating budget consisting of annual maintenance fees which are estimated at 10 percent of the project cost.





Hyperconverged Pilot

Department: Executive

Fund: R & E

Budget Unit: Information Technology

Utility: Water / Sewer

Hyperconverged Pilot - \$40,000

DESCRIPTION OF PROJECT

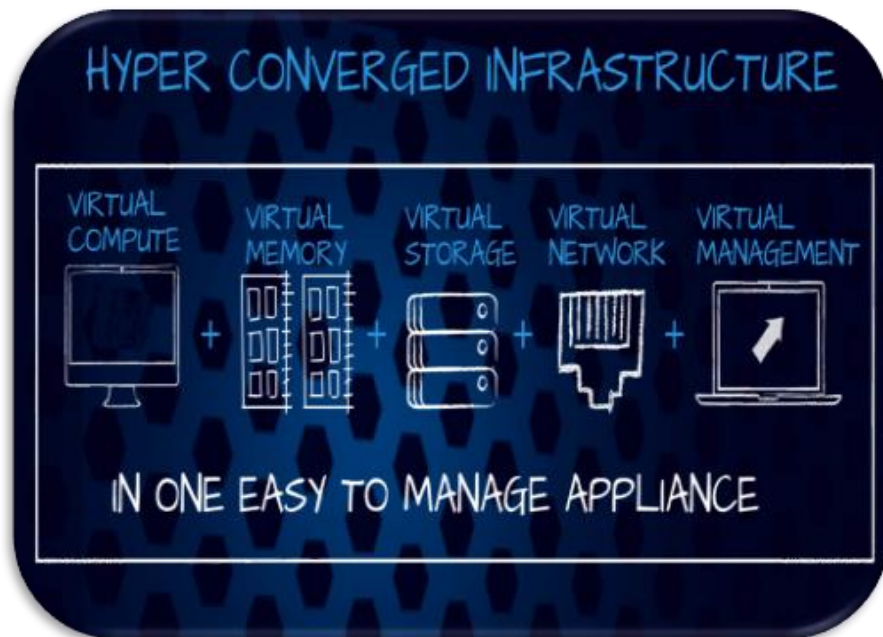
This pilot project will test the validity of using hyperconverged equipment for remote site data centers.

Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1

	<u>Available</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
Project Funding	\$ -	\$ 40,000	\$ -	\$ -	\$ -	\$ -
Impact to Operating Budget	-	-	6,000	6,000	6,000	6,000
Total Financial Impact	\$ -	\$ 40,000	\$ 6,000	\$ 6,000	\$ 6,000	\$ 6,000

IMPACT ON OPERATING BUDGET

The impact of this project on the annual operating budget will be \$6,000 in annual maintenance cost of both hardware and software and is estimated at 15 percent of the project cost.





IT Parts Room Equipment

Department: Executive

Fund: R & E

Budget Unit: Information Technology

Utility: Water / Sewer

IT Parts Room Equipment - \$10,000

DESCRIPTION OF PROJECT

The IT Parts Room needs to be re-organized with cabinets and work benches. Cable Management needs will also be considered.

Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1

	<u>Available</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
Project Funding	\$ -	\$ 10,000	\$ -	\$ -	\$ -	\$ -
Impact to Operating Budget	-	-	-	-	-	-
Total Financial Impact	\$ -	\$ 10,000	\$ -	\$ -	\$ -	\$ -

IMPACT ON OPERATING BUDGET

The impact on the operating budget for this project is neutral and will be a reorganization of the existing room with new storage equipment.





Automated Testing Software

Department: Executive

Fund: R & E

Budget Unit: Information Technology

Utility: Water / Sewer

Automated Testing Software - \$30,000

DESCRIPTION OF PROJECT

This is for the acquisition and implementation of automated testing software for our JD Edwards ERP application; highlighted the areas of changes between versions. This will allow us to more easily upgrade to newer versions by reducing the time CCWA employees are required to test JD Edwards applications. Scripts will be utilized to simulate processes being performed.

Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1

	<u>Available</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
Project Funding	\$ -	\$ 30,000	\$ -	\$ -	\$ -	\$ -
Impact to Operating Budget	-	-	3,100	3,100	3,100	3,100
Total Financial Impact	\$ -	\$ 30,000	\$ 3,100	\$ 3,100	\$ 3,100	\$ 3,100

IMPACT ON OPERATING BUDGET

The impact to the operating budget will be for the additional annual maintenance of the software, estimated at 20 percent of the software cost, or approximately \$4,000. There would be a reduction of 30 hours of testing for annual updates producing an annual savings of \$900 in labor costs at an estimated hourly rate of \$30.





Security Management System Phase 3

Department: Executive

Fund: R & E

Budget Unit: Risk Management

Utility: Water / Sewer

Security Management System Phase 3 - \$200,000

DESCRIPTION OF PROJECT

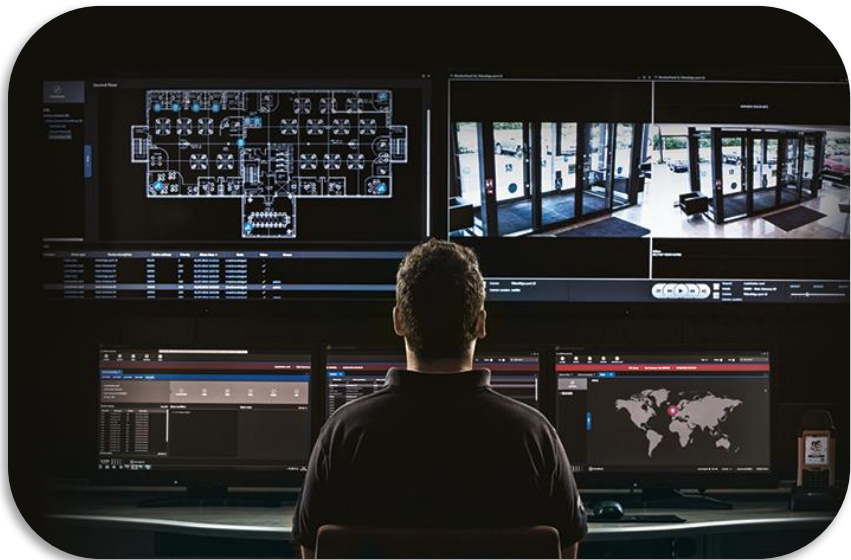
Phase 3 will integrate CCWA's security and fire alarms, mass notification system, and the Genetec Security Center to provide more efficient monitoring and response. Additionally, Phase 3 will remedy operational needs that were identified either during installation or after implementation of SMS Phases 1 and 2.
[SMP 104]

Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1

	<u>Available</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
Project Funding	\$ -	\$ 200,000	\$ -	\$ -	\$ -	\$ -
Impact to Operating Budget	-	-	30,000	30,000	30,000	30,000
Total Financial Impact	\$ -	\$ 200,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000

IMPACT ON OPERATING BUDGET

The impact on the operating budget for this project will be the annual maintenance of the software and equipment installed and is estimated at 15 percent of the project cost.





Outdoor Break Area

Department: Customer Account

Fund: R & E

Budget Unit: Meter Services

Utility: Water / Sewer

Outdoor Break Area - \$21,800

DESCRIPTION OF PROJECT

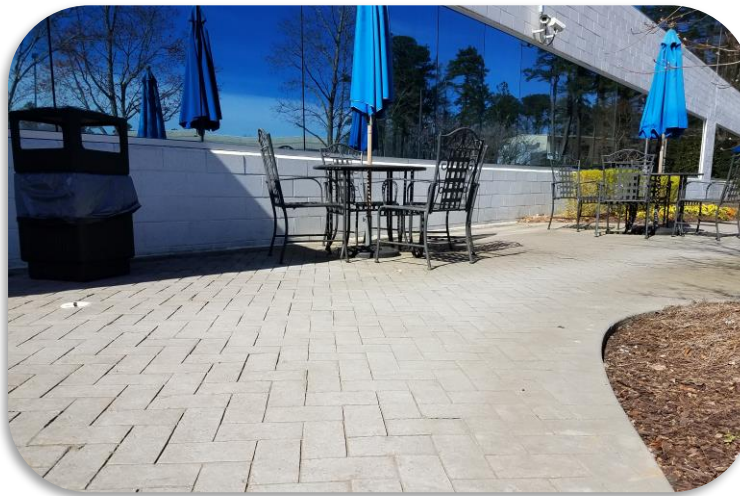
In an effort to continue to strengthen employee morale and create a more positive work atmosphere, the Meter Services group would like to have an outside patio area for employees. The Meter Services team also assists the entire Customer Service staff with cook-outs for employee appreciations lunches and customer service weeks during the seasonal periods. This area would be a benefit for CCWA for these activities and would also benefit others located at the HQ campus.

Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1

	<u>Available</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
Project Funding	\$ -	\$ 21,800	\$ -	\$ -	\$ -	\$ -
Impact to Operating Budget	-	-	-	-	-	-
Total Financial Impact	\$ -	\$ 21,800	\$ -	\$ -	\$ -	\$ -

IMPACT ON OPERATING BUDGET

There would be a negligible impact on the operating budget for this project as the concrete patio would require little to no maintenance for the first 10 years.





Forest Park Breakroom Remodel

Department: Customer Accounts

Fund: R & E

Budget Unit: Customer Service

Utility: Water / Sewer

Forest Park Breakroom Remodel - \$20,000

DESCRIPTION OF PROJECT

This project will update the employee breakroom at the Forest Park Business office enhancing employee moral. This update was originally scheduled to be included in the 2018-2019 budget but was postponed due to roof repairs that were needed at the same location.

Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1

	<u>Available</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
Project Funding	\$ -	\$ 20,000	\$ -	\$ -	\$ -	\$ -
Impact to Operating Budget	-	-	-	-	-	-
Total Financial Impact	\$ -	\$ 20,000	\$ -	\$ -	\$ -	\$ -

IMPACT ON OPERATING BUDGET

This project is to update the existing area and will have a neutral impact to the operating budget after the initial project outlay.





Forest Park Drive-Thru Renovations

Department: Customer Accounts

Fund: R & E

Budget Unit: Customer Service

Utility: Water / Sewer

Forest Park Drive-Thru Renovations - \$12,000

DESCRIPTION OF PROJECT

This project will update the drive-thru area at the Forest Park Business office. This project was scheduled to be included in the 2018-2019 budget but was postponed due to roof repairs that were needed at the same location.

Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1

	<u>Available</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
Project Funding	\$ -	\$ 12,000	\$ -	\$ -	\$ -	\$ -
Impact to Operating Budget	-	-	-	-	-	-
Total Financial Impact	\$ -	\$ 12,000	\$ -	\$ -	\$ -	\$ -

IMPACT ON OPERATING BUDGET

This project is to update the existing area and will have a neutral impact to the operating budget after the initial project outlay.





Call Center Furniture

Department: Customer Accounts

Fund: R & E

Budget Unit: Customer Service

Utility: Water / Sewer

Call Center Furniture (Ext. of 3-135-3) - \$6,800

DESCRIPTION OF PROJECT

This project will complete the Call Center renovation undertaken in the prior fiscal year to improve workstation ergonomics. This funding will outfit the final 4 workstations in the center with adjustable desks, as well as, monitor holders for all 16 workstations in the Call Center.

Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1

	<u>Available</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
Project Funding	\$ -	\$ 6,800	\$ -	\$ -	\$ -	\$ -
Impact to Operating Budget	-	-	-	-	-	-
Total Financial Impact	\$ -	\$ 6,800	\$ -	\$ -	\$ -	\$ -

IMPACT ON OPERATING BUDGET

This project is to update the existing area and will have a neutral impact to the operating budget after the initial project outlay.





Breakroom Renovations

Department: Water Production

Fund: R & E

Budget Unit: W.J. Hooper Water Production Facility

Utility: Water / Sewer

Breakroom Renovations - \$10,000

DESCRIPTION OF PROJECT

This project will upgrade the breakroom facility at our W.J. Hooper Water Production Facility and includes the replacement of the refrigerator, range, microwave, cabinet and countertops.

Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1

	<u>Available</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
Project Funding	\$ -	\$ 10,000	\$ -	\$ -	\$ -	\$ -
Impact to Operating Budget	-	-	-	-	-	-
Total Financial Impact	\$ -	\$ 10,000	\$ -	\$ -	\$ -	\$ -

IMPACT ON OPERATING BUDGET

This project is to update the existing area and will have a neutral impact to the operating budget after the initial project outlay.





Walnut Creek Lift Station Evaluation and Detailed Design

Department:	Program Management & Engineering	Fund:	R & E
Budget Unit:	PM&E Department Manager	Utility:	Water / Sewer

Walnut Creek Lift Station Evaluation & Detailed Design - \$500,000

DESCRIPTION OF PROJECT

This project will consist of an evaluation, design, and replacement of the Walnut Creek Lift Station, located in Lovejoy, Georgia. The station needs to be upgraded to accommodate development that has occurred in this area of the county. [SMP 903][WP 2017-03]

Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1

	<u>Available</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
Project Funding	\$ 1,500,000	\$ 500,000	\$ -	\$ -	\$ -	\$ -
Impact to Operating Budget	-	-	-	-	23,000	23,000
Total Financial Impact	\$ 1,500,000	\$ 500,000	\$ -	\$ -	\$ 23,000	\$ 23,000

IMPACT ON OPERATING BUDGET

The operating budget will not be impacted for the portion of the project that includes the evaluation and design of this lift station. However, when the lift station is constructed and replaces the existing station the ongoing maintenance of the lift station is approximately \$23,000 annually.





Water Line Inspection

Department: Program Management & Engineering

Fund: R & E

Budget Unit: Construction Services

Utility: Water / Sewer

Water Line Inspection - \$40,000

DESCRIPTION OF PROJECT

This set of water line jobs will include the inspection of water line installations donated as part of new developments, along with inspection of service line connections.

Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1

	<u>Available</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
Project Funding	\$ -	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000
Impact to Operating Budget	-	-	8,709	17,419	26,128	26,128
Total Financial Impact	\$ -	\$ 40,000	\$ 48,709	\$ 57,419	\$ 66,128	\$ 66,128

IMPACT ON OPERATING BUDGET

There is no impact on the operating budget of the inspection part of the capitalized infrastructure. However, the inspections done are for new water infrastructure and that will impact the operating budget at a rate of \$0.54 per foot. The plans for new development estimate 48,386 feet of water lines, 80,099 feet of sewer pipe and 14,420 feet of force main connecting to 4 associated sewer lift stations. Assuming a third of this pipe is donated over each of the following three years, an additional 16,129 ft of water pipe will be added to water infrastructure each of those years. At \$0.54 per foot, the maintenance expense would increase the operating budget an additional \$8,709 over each of the next three years.





Sewer Line Inspection

Department:	Program Management & Engineering
-------------	----------------------------------

Fund:	R & E
-------	-------

Budget Unit:	Construction Services
--------------	-----------------------

Utility:	Water / Sewer
----------	---------------

Sewer Line Inspection - \$40,000

DESCRIPTION OF PROJECT

This set of sewer line jobs will include the inspection of sewer line installations donated as part of new developments, along with inspection of sewer line stub outs. These stub outs will serve adjacent, unsewered property.

Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1

	<u>Available</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
Project Funding	\$ -	\$ 40,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000
Impact to Operating Budget	-	-	19,219	38,438	57,657	57,657
Total Financial Impact	\$ -	\$ 40,000	\$ 29,219	\$ 48,438	\$ 67,657	\$ 67,657

IMPACT ON OPERATING BUDGET

There is no impact on the operating budget of the inspection part of the capitalized infrastructure. However, the inspections done are for new sewer infrastructure and that will impact the operating budget at a rate of \$0.61 per foot. The plans for new development estimate 48,386 feet of water lines, 80,099 feet of sewer pipe and 14,420 feet of force main connecting to 4 associated sewer lift stations. Assuming a third of this pipe is donated over each of the following three years, an additional 31,506 ft of sewer pipe will be added to sewer infrastructure each of those years. At \$0.61 per foot, the maintenance expense would increase the operating budget an additional \$19,219 over each of the next three years.





Water Meter Inspection

Department:	Program Management & Engineering
--------------------	---

Fund:	R & E
--------------	------------------

Budget Unit:	Construction Services
---------------------	------------------------------

Utility:	Water / Sewer
-----------------	----------------------

Water Meter Inspection - \$40,000

DESCRIPTION OF PROJECT

This set of meter jobs will include the inspection of larger meter installations donated as part of new developments.

Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1

	<u>Available</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
Project Funding	\$ -	\$ 40,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000
Impact to Operating Budget	-	466	699	932	1,165	1,398
Total Financial Impact	\$ -	\$ 40,466	\$ 20,699	\$ 20,932	\$ 21,165	\$ 21,398

IMPACT ON OPERATING BUDGET

There is no impact on the operating budget of the inspection part of the capitalized infrastructure. However, the inspections done are for new meters and that will impact the operating budget through annual maintenance of the meter. The meter inspections are budgeted at \$1,000 per meter. The 2019-2020 funding this in this project will inspect 40 meters. With an average annual maintenance cost per meter is \$11.65, the total estimated maintenance cost of 40 meters that this inspection budget covers would total \$466 annually. Funding projected for this project is \$20,000 annually which will add \$233 in maintenance cost per year.





Galvanized Water Main Replacement

Department:	Program Management & Engineering
--------------------	---

Fund:	R & E
--------------	------------------

Budget Unit:	Construction Services
---------------------	------------------------------

Utility:	Water / Sewer
-----------------	----------------------

Galvanized Water Main Replacement - \$1,500,000

DESCRIPTION OF PROJECT

This project is a continuation of a long-term annual program that replaces galvanized steel water mains throughout the County. When these pipes age, they cause a number of problems within our Distribution System. We replace the galvanized lines with ductile iron pipe or 2" copper, based on customer service needs and fire protection. The cost to replace this pipe is approximately \$100 per ft. This amount budgeted will replace approximately 2.84 miles of galvanized pipe.

[SMP 601]

Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1

	<u>Available</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
Project Funding	\$ -	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000
Impact to Operating Budget	-	8,100	16,200	24,300	32,400	40,500
Total Financial Impact	\$ -	\$ 1,508,100	\$ 1,516,200	\$ 1,524,300	\$ 1,532,400	\$ 1,540,500

IMPACT ON OPERATING BUDGET

The impact on the operating budget for this year's investment of \$1,500,000 will consist of general maintenance of the replaced existing infrastructure of 2.84 miles of pipe (~15,000 ft.) is \$8,100 (\$0.54/ft.).





Basin Level Sewer Rehabilitation

Department:	Program Management & Engineering	Fund:	R & E
Budget Unit:	Construction Services	Utility:	Water / Sewer

Basin Level Sewer Rehab - \$2,500,000

DESCRIPTION OF PROJECT

This project will implement repairs, rehabilitations, or replacements of the wastewater collection system based on the findings of the Sanitary Sewer Evaluation Survey (SSES) program. The solutions implemented will be the most cost effective for reduction of Inflow and Infiltration (I/I) in the system at the W.B. Casey, Northeast, and Shoal Creek Basins. Cost to replace is approximately \$800,000 per mile or about \$152/ft. The amount budgeted of \$2,500,000 will replace about 3.1 miles (~16,500 ft.)

[SMP 614]

Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1

	Available	2019	2020	2021	2022	2023
Project Funding	\$ -	\$ 2,500,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000
Impact to Operating Budget		7,754	13,977	20,201	26,424	32,647
Total Financial Impact	\$ -	\$ 2,507,754	\$ 2,013,977	\$ 2,020,201	\$ 2,026,424	\$ 2,032,647

IMPACT ON OPERATING BUDGET

The net impact on the operating budget for this year's project investment of \$2,500,000 is \$7,754. At \$0.61/ft, it will cost approximately \$10,033 annually for the general maintenance of the 3.1 miles (16,500 ft.) of sewer pipe infrastructure the project will replace.

Cost savings in energy and chemicals would reduce that impact by \$2,279. This is due to a reduction in Inflow and Infiltration (I/I) which is estimated to be responsible for \$1 million of water reclamation expenses. (3.1 miles is .23% of 1,367 miles of sewer pipeline).

Future project investments estimated at \$2,000,000 annually will replace 2.5 miles (13,200 ft.) of existing sewer pipe infrastructure which will have general maintenance costs of \$8,052 annually at \$0.61/ft. Cost savings in energy and chemicals would reduce that impact by \$1,829 by the reduction in I/I (2.5 miles is .18% of 1,367 miles of sewer pipeline).





DOT – Valley Hill Road Connector & Bridge

Department: Distribution & Conveyance

Fund: R & E

Budget Unit: Water Distribution
Maintenance

Utility: Water / Sewer

Department of Transportation (DOT) - Valley Hill Road Connector & Bridge - \$318,000

DESCRIPTION OF PROJECT

This project is part of a Department of Transportation project that will widen the section of Valley Hill Road between the Bridge and Battle Creek Road. This project requires the relocation of 2,400 feet of 12-inch water main and 600 feet of 8-inch sewer main that runs along this section of the road. ☐

Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1

	<u>Available</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
Project Funding	\$ -	\$ 318,000	\$ -	\$ -	\$ -	\$ -
Impact to Operating Budget		-	1,662	1,662	1,662	1,662
Total Financial Impact	\$ -	\$ 318,000	\$ 1,662	\$ 1,662	\$ 1,662	\$ 1,662

IMPACT ON OPERATING BUDGET

The impact to the operating budget is neutral. The general maintenance of water main is \$0.54 per foot and ongoing maintenance of this existing infrastructure is \$1,296 for 2,400 feet of distribution (water) pipe. The general maintenance of sewer pipe is \$0.61 per foot and ongoing maintenance of this existing infrastructure is \$366 for 600 feet of conveyance (sewer) pipe.





Department of Transportation – Tara Blvd

Department: Distribution & Conveyance

Fund: R & E

Budget Unit: Water Distribution
Maintenance

Utility: Water / Sewer

Department of Transportation (DOT) - Tara Blvd - \$120,000

DESCRIPTION OF PROJECT

This project is part of a Department of Transportation project that is widening Tara Boulevard between Tara Road and Highway 54. This project requires the relocation of 3,700 feet of 24-inch water main and 200 feet of 8-inch water main along this section of the road.

Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1

	<u>Available</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
Project Funding	\$ -	\$ 120,000	\$ -	\$ -	\$ -	\$ -
Impact to Operating Budget	-	-	2,106	2,106	2,106	2,106
Total Financial Impact	\$ -	\$ 120,000	\$ 2,106	\$ 2,106	\$ 2,106	\$ 2,106

IMPACT ON OPERATING BUDGET

The impact to the operating budget is neutral. The general maintenance of water main is \$0.54 per foot and ongoing maintenance of this existing infrastructure is \$2,106 for 3,900 feet of distribution (water) pipe.





Impact Summary of Capital Projects on Operating Budget – Renewal and Extension Fund

The detailed annual financial impact of each project is explained on each of the previous project pages.

Fiscal Year Ended April 30,	Initial Funding	Impact on Operating Budget					
	2020	Type of Cost	2021	2022	2023	2024	2025
Blade Server	\$ 45,000	M	\$ 4,500	\$ 4,500	\$ 4,500	\$ 4,500	\$ 4,500
Disaster Recovery Storage Replacement	48,000	M	4,800	4,800	4,800	4,800	4,800
San Switch Console	48,000	M	4,800	4,800	4,800	4,800	4,800
Network Equipment	35,000	M	3,500	3,500	3,500	3,500	3,500
SCADA Host Refresh	46,000	M	4,600	4,600	4,600	4,600	4,600
Hyperconverged Pilot	40,000	M	6,000	6,000	6,000	6,000	6,000
IT Parts Room Equipment	10,000	M	-	-	-	-	-
Automated Testing Software	30,000	M,L	3,100	3,100	3,100	3,100	3,100
Security Management System Phase Three	200,000	M	30,000	30,000	30,000	30,000	30,000
Outdoor Break Area	21,800	M	-	-	-	-	-
Forest Park Breakroom Remodel	20,000	M	-	-	-	-	-
Forest Park Drive-Thru Renovations	12,000	M	-	-	-	-	-
Call Center Furniture (Ext of 3-135-3)	6,800	M	-	-	-	-	-
Breakroom Renovations	10,000	M	-	-	-	-	-
Walnut Creek Lift Station Evaluation and Detailed Design	500,000	A, M				23,000	23,000
Water Line Inspection	40,000	M	8,709	17,419	26,128	26,128	26,128
Sewer Line Inspection	40,000	M	19,219	38,438	57,657	57,657	57,657
Water Meter Inspection	40,000	M	466	699	932	1,165	1,398
Galvanized Water Main Replacement	1,500,000	M	8,100	16,200	24,300	32,400	40,500
Basin Level Sewer Rehab	2,500,000	M, E	7,754	13,977	20,201	26,424	32,647
DOT - Valley Hill and Battle Creek Roads	318,000	M	1,662	1,662	1,662	1,662	1,662
DOT - Tara Boulevard	120,000	M	2,106	2,106	2,106	2,106	2,106
Total FY 2019-2020 Capital Project Funding	\$ 5,630,600						
Net Increase/(Decrease) to Operating Budget			\$ 109,317	\$ 151,801	\$ 194,286	\$ 231,842	\$ 246,398

Type of Cost:

FTE = New Employee

L = Labor Hour Impact

M = Annual Maintenance or Licensing Fees

E = Energy or Utility Charges

A = Construction design or Assessment that prioritizes pipeline projects that will be capitalized and then require maintenance depending on results



Stormwater Funded Projects

FUNDING SOURCES

<u>DESCRIPTION OF REVENUE SOURCES</u>	<u>AMOUNT</u>
Other Financing Sources:	
Interfund Transfers from Stormwater Fund	\$ 3,395,185
Total Funding Sources	\$ 3,395,185

PROJECTS

<u>BUDGET UNIT - PROJECT SPONSOR</u>	<u>GENERAL PROJECT DESCRIPTION</u>	<u>AMOUNT</u>
Stormwater Maintenance	Cured In Place Pipe	\$ 1,500,000
Stormwater Maintenance	Removal and Replacement	1,693,121
Total Projects		\$ 3,193,121



Cured In Place Pipe (CIPP)

Department: Stormwater

Fund: Construction

Budget Unit: Stormwater Maintenance

Utility: Stormwater

Cured In Place Pipe (CIPP) - \$1,500,000

DESCRIPTION OF PROJECT

Cured in Place is a means of rehabilitating and restoring existing pipe by using a felt tube saturated with resin and coated with a waterproof layer. This tube is inserted into the existing pipe system and allowed to harden, essentially creating a new pipe. This work is performed by an outside annual services contractor and is part of a 10-year strategic master plan program. Estimated annual funding for CIPP is \$1,500,000. At a cost of \$330 per linear foot, approximately 4,500 feet, or 3/4 of a mile, of stormwater pipe can be relined per year.

[SMP 214]

Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1

	<u>Available</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
Project Funding	\$ -	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000
Impact to Operating Budget		3,645	7,290	10,935	14,580	18,225
Total Financial Impact	\$ -	\$ 1,503,645	\$ 1,507,290	\$ 1,510,935	\$ 1,514,580	\$ 1,518,225

IMPACT ON OPERATING BUDGET

The impact on the operating budget for this project will be neutral as it restores existing infrastructure. The cost to continue to maintain 4,500 feet of existing infrastructure is \$3,645. (\$0.81/ft.)





Removal and Replacement (R/R)

Department: Stormwater

Fund: Construction

Budget Unit: Stormwater Maintenance

Utility: Stormwater

Removal and Replacement (R/R) - \$1,693,121

DESCRIPTION OF PROJECT

Removal and Replacement involves the actual excavation, repair, and/or replacement of Stormwater Infrastructure. These projects usually involve an effort where larger diameter infrastructure is being replaced or a longer term effort is required to replace existing infrastructure. This year, an emphasis is being made to include more linear assets regardless of pipe diameter. These jobs are usually performed by an annual outside services contractor but more jobs performed by internal staff will be captured. This work is part of a 10-year strategic master plan program. Estimated annual funding for R/R is \$1,500,000. At a cost of \$300 per linear foot, approximately 5,000 feet, or almost one mile, of stormwater pipe can be replaced per year. This budgeted amount will replace 5,644 feet of pipe.

[SMP 214]

Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1

	<u>Available</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
Project Funding	\$ -	\$ 1,693,121	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000
Impact to Operating Budget		4,571	8,621	12,671	16,721	20,771
Total Financial Impact	\$ -	\$ 1,697,692	\$ 1,508,621	\$ 1,512,671	\$ 1,516,721	\$ 1,520,771

IMPACT ON OPERATING BUDGET

This project will have a neutral impact to the operating budget as it replaces existing stormwater infrastructure currently maintained. The annual maintenance cost on 5,644 linear feet at \$0.81/LF of stormwater pipe is \$4,571.





Impact Summary of Capital Projects on Operating Budget – Stormwater Fund

The detailed annual financial impact of each project is explained on each of the previous project pages.

Fiscal Year Ended April 30,	Initial Funding	Impact on Operating Budget					
	2020	Type of Cost	2021	2022	2023	2024	2025
Cured In Place Pipe (CIPP)	\$ 1,500,000	M	\$ 3,645	\$ 7,290	\$ 10,935	\$ 14,580	\$ 18,225
Removal and Replacement (R/R)	1,693,121	M	4,571	8,621	12,671	16,721	20,771
	<u>\$ 3,193,121</u>		<u>\$ 8,216</u>	<u>\$ 15,911</u>	<u>\$ 23,606</u>	<u>\$ 31,301</u>	<u>\$ 38,996</u>

Type of Cost:

FTE = New Employee

L = Labor Hour Impact

M = Annual Maintenance or Licensing Fees

E = Energy or Utility Charges

A = Construction design or Assessment that prioritizes pipeline projects that will be capitalized and then require maintenance depending on results



FISCAL POLICIES

Fiscal Policies

The financial policy document, comprised of individual yet cohesive policies, incorporates many of the Authority's financial management practices that are used by CCWA staff as guidelines for operational and strategic decision making related to current and future financial matters.

The purpose of establishing these policies is to identify acceptable and unacceptable courses of action, thus establishing parameters in which the Authority can operate as well as providing a standard against which the Authority's fiscal performance can be reviewed. In all the Authority's policies, the overriding consideration is to assure that its services are provided to its customers into perpetuity. Some policies are flexible when they are utilized by CCWA staff as performance measurement tools to monitor the Authority's finances; others are restrictive to emphasize accountability.

Due to the above reasons, these policies are drafted as a living document to maintain their effectiveness in order to accommodate changes. CCWA staff and Board members review these policies on a recurring basis to accommodate minor changes to the existing financial policy or major shifts in financial priorities, as approved by the CCWA Board of Directors at its sole discretion.

The Authority's financial policies encompass the following functional areas:

- Operating Budget Policy
- Capital Budget Policies
- Accounting, Auditing and Financial Reporting Policies
- Revenue Administration Policy
- Expenditure Administration Policy
- Debt Management Policy
- Investment Policy
- Reserve Policy
- Risk Management Policy
- Purchasing Policy

Operating Budget Policy

Operating Budget policies are adopted to ensure that a sound business approach is taken in the course of preparing the annual expenditure plan. The guiding principle of the Authority's budgetary policies is to achieve structural balance between revenues and expenditures to endure that desired service levels are provided on a sustained basis. To remain a viable, ongoing enterprise the Authority's annual operating expenditures must be based on a stable stream of revenues. These principles are designed to encourage consideration of long-term objectives rather than short-term benefits. Adherence to these policies will enable the Authority to maintain a stable level of services, expenditures and user rates in future periods.

Board guidelines with respect to the Authority's operating budget are as follows:

- Provide a mechanism for exercising managerial control over cash flows. The Authority shall *annually adopt a balanced budget* where operating revenues are equal to, or exceed, operating expenditures for each twelve-month cycle.
- The operating budget will be prepared utilizing the modified accrual basis of accounting as a means of estimating the flow of financial resources on an annual basis.
- The Authority will annually submit its budget document to the Government Finance Officers Association (GFOA) for consideration of its adherence to the criteria established for receiving the "Distinguished Budget Presentation Award".



- The Authority will finance all current expenditures with current revenues. The Authority will avoid budgetary procedures that balance current expenditures through the obligation of future resources. The Authority will not use short-term borrowing to meet operating budget requirements.
- The Authority will utilize performance measures and workload indicators to provide qualitative and quantitative information about operations.
- Departments must justify each of their budgetary requests for funding. The budget process is intended to weigh all competing requests for resources, within expected fiscal constraints.
- All unencumbered operating budget appropriations will lapse at the year-end unless their carry-over is specifically approved by the General Manager. Encumbered balances will be re-appropriated in the following fiscal period.
- The Authority will maintain a budgetary control system to ensure adherence to the budget and will prepare timely financial reports comparing actual revenues, expenditures and encumbrances with budgeted amounts.
- Budgeting procedures will be used to identify distinct functions and activities and to allocate resources to perform these functions and activities as required. The operating budget shall be developed to control both direct and indirect costs of programs and services wherever practical.
- The Authority will estimate its annual revenues by an objective analytical process in a prudent manner.
- All departments will share in the responsibility of meeting policy goals and ensuring long-term financial health. Future service plans and program initiatives will be developed to reflect current policy directives, projected resources and future service requirements.
- The appropriations portion of the operating budget will contain a sufficient level of contingency funds that are unplanned and available to meet unanticipated expenditures that might arise.
- The operating budget will provide for adequate maintenance of capital equipment and facilities, as well as for their orderly replacement.
- The Board of Directors will adopt the annual operating budget for the Authority no later than April 20th.
- Funding priorities in the Operating Budget will be aligned with the Strategic Master Plan that has been prepared by the management team.
- Information from the annual operating budget will be made available to the customers and other interested parties via the Authority's website.
- During the year, the Finance Department shall prepare and disseminate quarterly budget-to-actual reports for all operating funds to members of the management team. The report shall include an analysis of the revenue and expenditure activity year-to-date. The document will also discuss any significant deviations from the original budget operating plan.

Capital Budget Policy

Capital budget policies are needed to ensure that capital expenditures are well planned and enable the Authority to replace its plant facility, piping, equipment and other capital assets when needed, without requiring significant fluctuations in the user service charges.

- Based on a review of existing capital assets and a comprehensive assessment of future needs, the Authority shall prepare a ten-year capital plan to define the major projects that will need to be addressed during that decade. The plan shall be reviewed periodically and updated as needed.



- Using the ten-year plan as a guiding document, the Authority will develop a five-year plan for capital improvements and update it annually.
- The Authority will coordinate development of the capital improvement budget with development of the operating budget. Future operational costs associated with new capital improvements will be projected and included in operating budget forecasts.
- The Authority will provide ongoing preventative maintenance and upkeep on all its assets at a level adequate to protect the Authority's investment and to minimize future maintenance and replacement costs.
- The Authority will determine the least costly financing method for all new projects.
- The Authority will establish specific replacement criteria (e.g., mileage, hours, age) for rolling stock and heavy equipment based on financial and operational considerations.
- The Authority will develop an annual capital budget schedule for replacement of equipment generally having a replacement cost of more than \$5,000. The replacement schedule should cover the succeeding five fiscal years and identify the specific unit and its estimate cost.
- Whenever financially feasible, the Authority will fund its capital budget needs on a pay-as-you-go basis.
- Federal, State, other intergovernmental and private funding sources are sought and used as available to provide supplemental funding for capital improvements.
- Upon completion of any capital project, any remaining appropriated funds for that project will be returned to the undesignated capital project fund balance.
- Capital project proposals should include complete, reliable and attainable cost estimates. At the time of award of the construction contract, each project should include a reasonable provision for contingencies.
- The Authority will utilize innovative and cost-effective methods for the disposal of unserviceable capital assets.

Accounting, Auditing and Financial Reporting Policies

The purpose of accounting, auditing and financial reporting policies are to ensure accurate and consistent accounting practices that conform to generally accepted accounting principles. These policies promote public confidence in and ensure the integrity of the Authority's financial system and processes.

Board guidelines with respect to the Authority's fiscal policies are as follows:

- The Authority will develop an ongoing system of financial reporting to meet the needs of the Board of Directors, the General Manager, department heads and the general public. Reporting systems will monitor the costs of providing services wherever possible. The reporting systems will also promote budgetary control and comparative analysis.
- An independent audit in compliance with Generally Accepted Audit Standards (GAAS) will be performed annually by a qualified, independent auditor in accordance with HB 535.
- The Authority will establish and maintain a high standard of accounting practices. Accounting records and systems will conform to Generally Accepted Accounting Principles (GAAP). These principles will be updated as mandated by the Governmental Accounting Standards Board (GASB), which is the legal authority charged with defining GAAP.
- The Authority will prepare a Comprehensive Annual Financial Report (CAFR) in accordance with Generally Accepted Accounting Principles (GAAP) for governmental entities. The Authority will strive to prepare the Comprehensive Annual Financial Report to meet the standards of the GFOA Certificate of Achievement for Excellence in Financial Reporting Program.



- The Authority will follow a policy of full disclosure on every financial report.
- The Authority will maintain accurate records of all assets to ensure a high degree of stewardship for property under its control.
- Regular monthly and annual financial reports will present a summary of financial activity for the various individual accounts of the Authority.
- Information from the Comprehensive Annual Financial Report will be made available to the customers and other interested parties via the Authority's website.

Revenue Administration Policy

Revenue administration policies are needed to ensure that the Authority has a stable revenue based on which to fund its operations over the long-term. The primary objective of these policies is to ensure that sufficient revenues are generated so that the Authority remains an ongoing concern.

Board guidelines with respect to the Authority's revenue administration policy are as follows:

- The user charges being assessed customers should represent the full cost of providing service.
- Annually, a five-year forward operating forecast will be prepared. Based on those estimates, planned rate adjustments on a consistent basis will be programmed as part of the financial plan.
- User fees will be adjusted periodically to ensure that estimated net revenues (i.e., revenues after paying operating expenses) will remain at a minimum of 1.5 times the annual debt service amount.
- Revenues generated from impact fees will be designated for capital expenditures.
- The Authority shall establish and annually re-evaluate, all user charges and fees to ensure that they remain at a rate that directly correlates to the cost of providing the associated service.
- Revenues of a limited or indefinite term should be used for capital projects or one-time operating expenditures to ensure that no ongoing service program is lost when such revenues are reduced or discontinued.
- Grant applications to fund new service programs with State or Federal funds will be reviewed by the Authority, as they become available, with due consideration being given to whether user fee revenues will be required to support these programs when external funding is no longer available.
- The Authority will follow a vigorous policy of collecting all revenues that are due to the Authority.

Expenditure Administration Policy

Expenditure administration policies are needed to ensure that the authority exercises adequate control over its expenditures and analyzes them in terms of their long-term financial impact. The overriding objective of these policies is to help ensure that the Authority is able to maintain its user rates at the lowest possible level.

Board guidelines with respect to the Authority's debt policy are as follows:

- Expenditures should be controlled by management and should stay within the amount of appropriated funds.
- High priority will be given to expenditures that will reduce future operating costs, such as increased utilization of technology and equipment and prudent business methods.
- Should the revenue projections fall short of the projected expenditures, the Finance Director shall convey service alternatives to the General Manager to match the projected revenues.
- A continuing effort shall be made to reduce duplicative and inefficient functions within the Authority. To that end, business process redesign and reorganization will be encouraged whenever increased efficiency and effectiveness can be demonstrated.



Debt Policy

Debt policies are adopted to define the role of debt in the Authority's total fiscal strategy. The principle goal of these policies is to avoid using debt in a way that weakens other segments of the financial structure of the Authority. The Authority's primary objective is to minimize debt service and issuance costs; maintain access to cost-effective borrowing; achieve the highest practical credit rating; ensure full and timely repayment of debt; maintain full and complete financial disclosure and reporting; and ensure compliance with applicable state and federal laws.

Board guidelines with respect to the Authority's debt policy are as follows:

- The Authority will confine long-term borrowing to capital improvements or projects that cannot be financed from current revenues. The Authority will not use debt for the purchase of vehicles and heavy equipment.
- When the Authority finances capital projects by issuing bonds, it will pay back the bonds within a period not to exceed the expected useful life of the project.
- The Authority will not use long-term debt for current operations.
- Bond issues shall be planned to mitigate substantial year-to-year shifts in future debt service requirements.
- The Authority will follow a policy of full disclosure on every bond prospectus.
- Refinancing or bond refunding will only be undertaken when there is significant economic advantage to the Authority, and when it does not conflict with other fiscal or credit policies. As a savings target, the Authority looks to project a net present value savings, after bond issuance costs, of at least 3 percent of refunded principle.
- The Authority shall comply with all Internal Revenue Service arbitrage rebate requirements for bond indebtedness. As a rule, calculations as to the liability amount for each series should be prepared annually.
- For all competitive and negotiated sales, underwriters will be required to demonstrate sufficient capitalization and experience related to the debt issuance.
- The maintenance of the best possible credit rating shall be a major factor in all financial decisions.

Investment Policy

Investment policies are needed to ensure the most efficient use of the Authority's idle funds and to identify the preferred investment strategy. The primary objective of these policies is to provide a reasonable rate of return on idle funds while limiting the amount of risk involved.

Board guidelines with respect to the Authority's investment policy are as follows:

- The Authority will make arrangements for banking services on a contractual basis for a period not to exceed five one-year terms. The contract will contain a fee schedule for each service rendered.
- The investment program shall comply with all Authority related legislation and Federal/State regulations for investing public funds and safekeeping/security requirements.
- The investment program shall be operated based on the following principles, with priorities placed on the order as listed below:
 - **Legality:** All investments will comply with State laws and local ordinances. Specific requirements, such as those set forth in bond ordinances, will take precedence and could further restrict investment options;
 - **Safety of Principal:** Principal is protected from loss with secure investment practices and collateralization;



- **Maintenance of Adequate Liquidity:** A sufficient quantity of investments is readily convertible to cash when needed to meet current obligations without incurring losses; and
- **Yield or Return on Investment:** The earnings rate on investments is maximized without diminishing the other principles.
- The investment program should use a competitive selection process for investments with maturity dates greater than 90 days. Investments should be placed with only qualified financial institutions.
- The investment program should provide for a system of internal control over investments and timely financial reporting of investing activities.
- The accounting system will provide regular information concerning cash position and investment performance.
- Where permitted, the Authority will pool its cash resources from various accounts for investment purposes.
- All Authority bank accounts shall be reconciled on a timely basis.

Reserve Policy

Reserve policies are needed to provide the working capital that is needed to address significant fluctuations in cash flows that may occur during the fiscal year. These principles also provide a cushion against unexpected revenue and income interruptions.

Board guidelines with respect to the Authority's reserve policy are as follows:

- The Authority shall maintain a minimum of \$1,500,000 in the Renewal and Extension Fund. Monies held in this reserve fund may only be expended upon authorization of the Board of Directors for unanticipated operating and maintenance activities.
- The Authority will maintain reserves in compliance with all debt service requirements to maintain bond ratings and the marketability of bonds. As a rule, cash balances will be maintained at such a level, as determined by Senior Management, necessary to provide the Authority with sufficient working capital and a comfortable margin of safety to address emergencies and unexpected declines in revenue without borrowing.
- The Authority shall set aside sufficient funds to cover future postemployment benefits as employees earn them.

Risk Management Policy

Risk management policies are needed to ensure that the Authority undertakes a diligent effort to prevent loss or degradation of its assets and to reduce its exposure to liability.

Board guidelines with respect to the Authority's risk management policy are as follows:

- The Authority shall transfer risk to other parties, where cost effective, by purchasing insurance.
- Insurance policies will be analyzed regularly to assure proper coverage and deductibles.
- The Authority shall shift the legal and financial responsibility to third parties who perform work or provide services to the Authority for losses or potential losses caused by the actions of those third parties. This transfer of risk may occur through a variety of means in leases, purchase and service agreements and other contracts. The transfer of risk shall be made formally and in writing and may include bid bonds, payment bonds, performance bonds, fidelity bonds indemnification agreements, insurance requirements and the required provision of certificates of insurance.



Purchasing Policies

It is essential that uniform purchasing policies be followed and observed when purchases are made on the behalf of Clayton County Water Authority (“Authority”) to ensure the best product and services are obtained. The primary purpose of these policies is to provide an equitable and fair methodology for acquiring the goods and services needed for the Authority’s operations at the lowest total cost. Purchasing policies are needed to ensure that the Authority obtains the best product for money that is expended.

Board guidelines with the respect to the Authority’s purchasing policy are as follows:

- The Authority will strive to obtain the highest quality of goods and services for the most economical costs. Bulk purchases, quantity discounts, standardization of common items and other approaches will be used to acquire goods and services economically.
- It is the intent of the Authority to establish uniform regulations and procedures to provide for an efficient and fiscally responsible system for the purchase of materials and services necessary for the effective operations of the Company.
- All departments of the Authority must utilize competitive bidding procedures as outlined in the purchasing policies. Bids will be awarded on a nondiscriminatory basis with appropriate efforts to include local and disadvantaged businesses.
- The Authority will maintain a purchasing system that provides needed materials and services in a timely manner to avoid interruptions in the delivery of services.
- The Authority will strive to take advantage of attractive payment terms by seeking the necessary approvals and processing checks in a timely fashion.
- Purchases in excess of a unit price of one hundred dollars (\$100) or an aggregate value of one hundred dollars (\$100), except as supported by an executed contract or under the Purchasing Card or Credit Card program shall be by purchase order. These goods or services should not be included in a price agreement or available in inventory, when possible.
- Purchases of any item, group of items or service, whether by purchase order or contract, with a total cost of fifty thousand dollars (\$50,000) or more shall be competitively priced utilizing sealed bids or sealed request for proposals with the exception of purchases made through the State of Georgia pursuant to Title 50, Chapter 5, Section 100 of the Official Code of Georgia Annotated or goods and services that are of an expected and continuing nature, including but not limited to replenishment of inventory goods, utility bills, travel, seminar fees, conference and registration fees, membership dues, subscription costs and maintenance agreements. Notification of sealed bids or request for proposals will be advertised in the County’s Legal Organ or on the CCWA website a minimum of twice in a four-week period prior to the bid or proposal opening. The first advertisement must occur at least four weeks prior to the opening of the sealed bids or proposals with the second advertisement following no earlier than two weeks from the first advertisement. The Board of Directors shall make awards to vendors. Contracts may not be divided for purposes of avoiding the limitations of this section.
- Purchases of any item, group of items or service whose total cost is less than fifty thousand dollars (\$50,000) may be competitively priced if it is determined to be in the best interest of the Authority. Any of the competitive pricing methods, i.e., sealed bids, Request for Proposal or quotes may be used. The General Manager or designee shall make awards to vendors.
- Management may elect to contract on an annual basis for supplies and/or services under a Master Contract and make specific purchases or assignments by issuing Purchase Orders; such annual contracts must be no more than fifty (\$50,000) without the prior approval of the Board. Such situations will require annual certificates of insurance and contractual provisions as required.



- Sole Source Purchases would only occur when there is only one available supplier of a good or service that meets the needs of the Authority and meets one or more of sixteen qualifying criteria. Negotiation should be used to complete the terms and conditions for this purchase. Sole source approval shall be effective for a period of three (3) years after which time a search of the market for adequate competition must be performed to justify continued sole source contract.
- The provisions of the Purchasing Policy shall not apply to the payment of recurring bills including, but not limited to, utility payments. Said payments may be made when due to avoid the accrual of interest or the imposition of late payment fees and/or penalties.
- In the event of an emergency condition, which threatens the water, sewer or storm water system's ability to operate, the General Manager is to contact the Chairman of the Board as soon as practically possible and proceed without competitive pricing, if necessary. If the Chairman is not available, then the remaining officers in the order of Vice Chairman, then Secretary/Treasurer will be notified. The scope shall be limited only to the emergency procurement of goods and services exceeding \$50,000 and necessary to meet the emergency. All emergency contracts for public works or improvements in excess of \$50,000 shall apply.
- Purchases shall be in compliance with the approved budget a single budget revision of less than fifty thousand dollars (\$50,000) shall be approved by the General Manager whether for an individual item or in aggregate.
- Upon the recommendation of the General Manager, purchases may be made through the State of Georgia pursuant to Title 50, Chapter 5, Section 100 of the Official Code of Georgia Annotated, without the necessity of further competitive pricing. For any such purchase of less than fifty thousand dollars (\$50,000), the General Manager or his/her designee may make awards to vendors for items approved in the budget without further action of the Board. For all other contracts, Board approval shall be required.
- Competitive bidding will not be required for repair, maintenance or reconditioning of equipment and/or devices by the manufacturer or if there is only one manufacturer-authorized firm for purchases up to one hundred thousand dollars (\$100,000) with Board approval.
 - This provision will be utilized when it is advisable to take advantage of certain expertise or equipment not available from other or to comply with or protect warranties. For non-warranty repair work, the requesting Department should consult with Contracts and Procurement for advice on how to proceed. In some cases, competitive bids may not be in the best interest of the Authority, if they require the disassembly, reassembly and transport of the equipment to obtain repair estimates. In such cases, the Department and Contracts and Procurement will attempt to achieve competition by utilizing various vendors over a period of time. In the procurement of automotive repair parts, the competition among vendors may be limited in certain instances due to the stringent delivery time requirements for parts.
- Consistent with Official Code of Georgia Annotated, Title 14, Chapter 7, Section 2, the purchase of Professional Services shall not be subject to competitive pricing:
 - 'Profession' means of profession of certified public accountancy, architecture, chiropractic, dentistry, professional engineering, land surveying, law, pharmacy, psychology, medicine and surgery, optometry, osteopathy, podiatry, veterinary medicine, registered professional nursing or harbor piloting.



- In any situation where the Authority has requested bids, proposals or any other competitive offers for a contract for the provision of goods and/or services, the Board may, except in the case of contracts for “Public Works,” award the contract to a proposer other than the proposed offering the lowest price where:
 - The difference in price between the low proposal and the preferred proposal is nominal.
 - The Board determines that the preferred proposal provides the most cost-effective option due to the closer proximity of the preferred proposer’s place of business to the affected Authority facility or facilities; and
 - The instructions to bidders, request for proposals or other documents produced by the Authority and pursuant to which proposals are received provides express notice that the Authority will consider proximity in its decision-making process.
 - Other evaluation factors may weigh the decision to award to a bidder without regard to price such as a qualifications-based procurement where price is not the only evaluation criteria.
- As a part of these purchasing policies, the Clayton County Water Authority will adhere to the following regarding contracting with Minority-owned, Women-owned and Small Local Business Enterprises:
 - As used in this section, the terms used have the following definitions:
 - “Minority Business Enterprise or **MBE**” means a business entity which is at least fifty-one percent (51%) owned and controlled by one or more African American, Hispanic, Asian American, Native American, Pacific Islander or disabled citizens of the United States and such person or persons operate the business; and
 - “Women Business Enterprise or **WBE**” means a business entity which is at least fifty-one percent (51%) owned by women who are United States citizens and who also control and operate the business.
 - “Small Local Business Enterprise or **SLBE**” means a small locally based business concern whose average annual gross receipts for the previous three years must not exceed (1) Construction Firms- \$5,000,000 (2) Professional Services Firms, except architectural and engineering firms - \$1,000,000, Architectural & Engineering - \$2,000,000 and Goods & Services – less than 100 employees.
 - The Clayton County Water Authority (the “Authority”) will provide equal opportunities for all and to not discriminate against anyone, regardless of race, color, religion, national origin, age, gender, sexual orientation or disability. It is also the policy of the Authority to award contracts for the sale or purchase of goods or services to the responsible and responsive bidder whose proposal is determined, in writing, to be the most advantageous to the Authority. It is further declared that the policy of the Authority is to take steps to provide economic opportunity, ensure non-discriminatory results and practices while involving minority business enterprises, women business enterprises and small local business enterprises completely in the process by the Authority of awarding contracts for the sale or purchase of goods or services. These policies, together with the general principles of sound procurement, are intended to achieve the maximum practical opportunities for minority-owned,



- women-owned and small local business enterprises by the Authority, consistent with Constitutional principles of equal protection and to protect the assets of the Authority;
- The provisions contained in this Policy are intended for all departments of the Authority to consider when the Authority awards contracts for the sale or purchase of goods or services. However, it is the responsibility of the Contracts, Compliance and Risk Management Section of the Authority to ensure compliance with the provisions of this policy by all CCWA departments of the Authority. It is the written policy of the Authority to make affirmative and deliberate efforts to assure that minority-owned, women-owned and small local business enterprises are involved with the Authority as sources of supplies, services and construction items; and
 - Affirmative efforts to be made may include but may not be limited to:
 - Including qualified minority-owned, women-owned and small local business enterprises on solicitation lists;
 - Assuring that minority-owned, women-owned and small local business enterprises are solicited whenever they are potential sources; and
 - Where the requirement permits, establishing delivery schedules which will encourage participation from minority-owned, women-owned and small local business enterprises.
 - This policy is provided as an internal guideline for outreach and non-discriminatory practices in contract and procurement procedures in the award of contracts for the sale or purchase of goods or services by the Authority. This policy does not provide or create any obligation on behalf of the Authority to any third parties. The Authority has discretion to award contracts for the sale and purchase of goods or services to the most responsible and responsive bidder.
 - The Authority staff shall provide to the Board with a monthly report detailing the corresponding calendar month's non-recurring expenditures that are in excess of \$20,000 and that did not require Board award under approved purchasing policies.



STATISCAL INFORMATION



Statistical Information

The primary purpose of the Statistical Information section is to provide the reader with additional background about the operations of the Authority and the demographics of the customers that we serve.

The data contained in this section includes a tabular and graphical presentation of the results of operations for the most recently completed ten-year period. From this information, the user of this document can identify any significant trends in the revenues and operating expenses for the Company over the last decade.

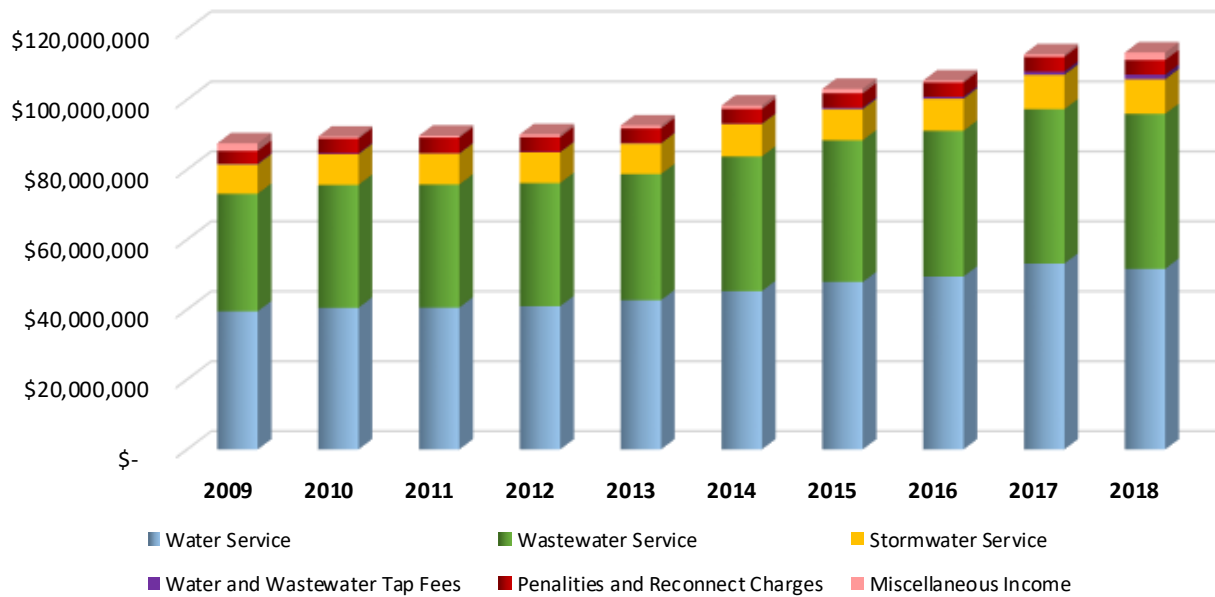
To assist in the understanding of revenues, schedules showing water and sewer rates and number of customers are provided. To lend additional perspective on expenses, tables showing the number of gallons of raw water treated and wastewater flows reclaimed are included. As a general rule, much of this information is taken from the Authority's Comprehensive Annual Financial Report. Thus, the user should be aware that the fiscal year information being reported is as of April 30th of the year designated in the table. In addition, economic information about the Authority's business environment is provided to help the reader place the budgetary data in the proper perspective. Finally, a number of demographic statistics for the County's population are included.



Operating Revenues by Source

WATER AND SEWER FUND STORMWATER FUND OPERATING REVENUES BY SOURCE Last Ten Fiscal Years

Fiscal Year	Water Service	Wastewater Service	Stormwater Service	Water and Wastewater Tap Fees	Penalties and Reconnect Charges	Miscellaneous Income	Total
2009	\$ 39,491,798	\$ 33,589,398	\$ 8,420,466	\$ 226,792	\$ 3,645,236	\$ 2,129,920	\$ 87,503,610
2010	40,483,822	35,147,385	8,795,285	243,803	4,190,306	612,656	89,473,257
2011	40,582,754	35,148,237	8,859,096	134,353	4,428,917	533,099	89,686,456
2012	40,921,924	35,238,977	8,817,272	120,080	4,176,454	822,984	90,097,691
2013	42,668,980	36,021,876	8,806,125	141,110	4,140,089	834,388	92,612,568
2014	45,257,155	38,518,066	9,256,014	147,245	4,151,497	1,017,065	98,347,042
2015	47,878,265	40,511,433	8,904,863	434,708	4,083,185	1,276,393	103,088,847
2016	49,402,423	41,702,605	9,153,440	543,879	4,084,382	579,386	105,466,115
2017	53,110,970	44,182,570	9,758,230	927,741	4,230,691	765,721	112,975,923
2018	51,638,780	44,316,956	9,869,285	1,308,596	4,168,748	2,182,445	113,484,810

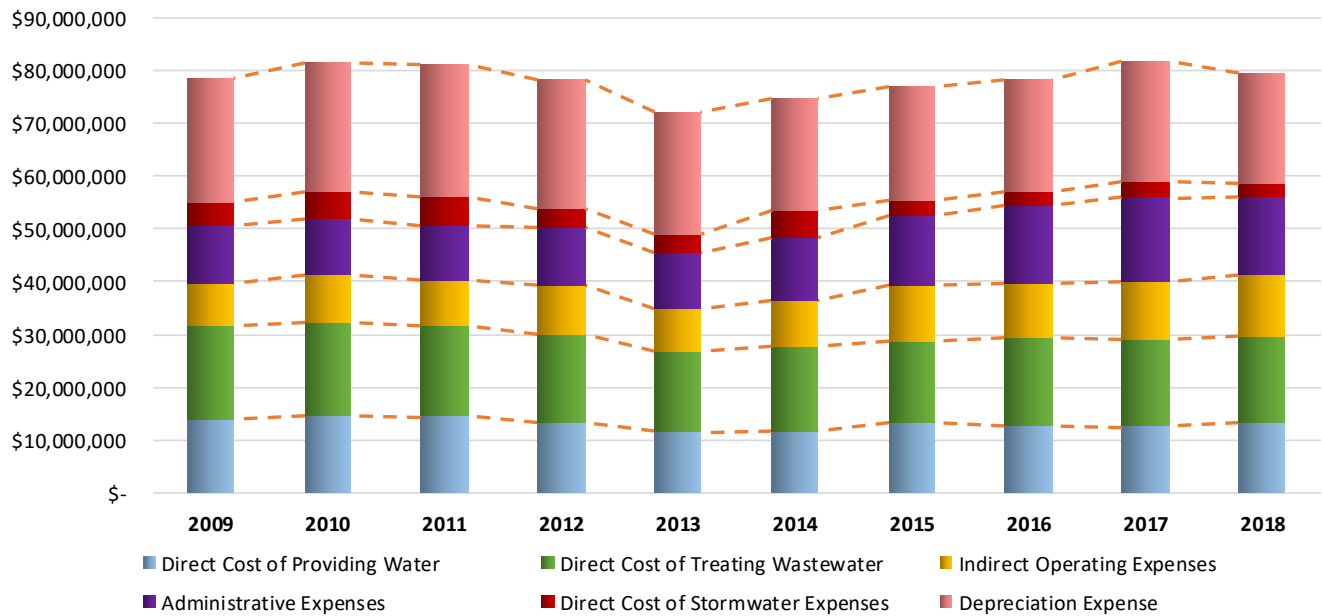




Operating Expenses by Function

WATER AND SEWER FUND STORMWATER FUND OPERATING EXPENSES BY FUNCTION Last Ten Fiscal Years

Fiscal Year	Direct Cost of Providing Water	Direct Cost of Treating Wastewater	Indirect Operating Expenses	Administrative Expenses	Direct Cost of Stormwater Expenses	Total Expenses before Depreciation	Depreciation Expense	Total Operating Expenses
2009	\$ 14,041,212	\$ 17,657,662	\$ 7,904,903	\$ 10,911,205	\$ 4,573,188	\$ 55,088,170	\$ 23,384,670	\$ 78,472,840
2010	14,472,265	17,700,390	8,997,632	10,808,461	4,962,752	56,941,500	24,337,439	81,278,939
2011	14,445,285	17,245,305	8,473,871	10,501,177	5,333,818	55,999,456	25,169,019	81,168,475
2012	13,402,560	16,515,463	9,255,517	10,928,317	3,812,880	53,914,737	24,279,130	78,193,867
2013	11,540,882	15,248,122	8,195,943	10,448,241	3,635,044	49,068,232	22,902,469	71,970,701
2014	11,786,815	16,068,233	8,705,040	11,642,974	5,393,363	53,596,425	21,025,400	74,621,825
2015	13,172,973	15,478,178	10,645,097	13,129,577	2,877,188	55,303,013	21,591,768	76,894,781
2016	12,754,527	16,469,567	10,511,474	14,831,159	2,520,871	57,087,598	21,178,153	78,265,751
2017	12,656,515	16,246,840	11,196,737	15,870,455	2,854,446	58,824,993	22,774,299	81,599,292
2018	13,206,938	16,450,059	11,528,995	14,833,778	2,654,832	58,674,602	20,967,132	79,641,734





General Demographic Statistics

GENERAL DEMOGRAPHIC STATISTICS U.S. BUREAU OF CENSUS INFORMATION For Clayton County, Georgia

Population	Amount
1930 Census	10,260
1950 Census	22,872
1970 Census	98,126
1980 Census	150,357
1990 Census	182,052
2000 Census	236,517
2010 Census	259,424

Median Age of Population	Years
2010 Census	30.1

Age Distribution - 2010 Census	Percent
0 - 4 Years of Age	8.5%
5 - 14 Years of Age	15.7%
15 - 19 Years of Age	7.8%
20 - 34 Years of Age	23.0%
35 - 59 Years of Age	34.4%
60 and Over Years of Age	10.6%

Education Level for Residents 25 Years of Age and Older - 2010		
Census	Amount	Percent
Less Than 9th Grade	12,841	8.20%
Some High School, No Diploma	17,539	11.20%
High School or G.E.D.	49,798	31.80%
Some College, No Degree	37,740	24.10%
Associate Degree	12,528	8.00%
Bachelor Degree	18,792	12.00%
Graduate or Professional Degree	7,360	4.70%
Total	156,597	100.0%



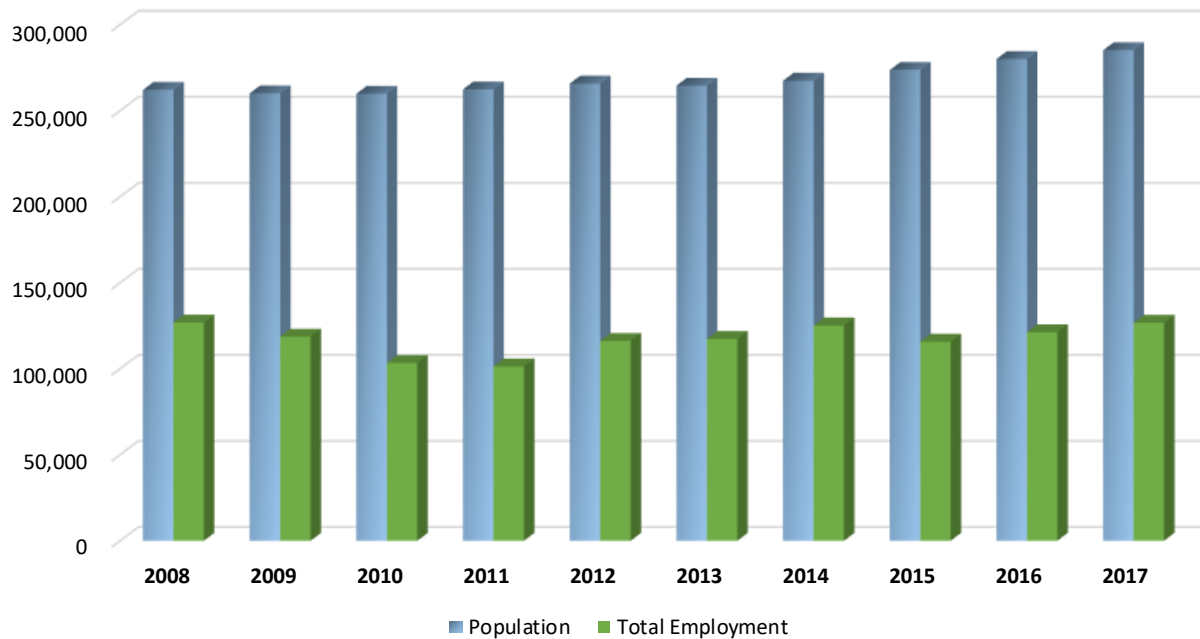
Selected Demographic and Economic Statistics

SELECTED DEMOGRAPHIC AND ECONOMIC STATISTICS

Last Ten Calendar Years

Average Unemployment Rate

Calendar Year	Population	Personal Income (Thousands of Dollars)	Per Capita Personal Income	Total Full-Time and Part-Time Employment	Average Annual Pay	Clayton County	State of Georgia	United States	Labor Force	Total Housing Units
2008	262,099	6,322,652	24,123	126,855	41,805	7.60%	7.50%	7.20%	137,223	107,167
2009	260,067	6,285,498	24,169	118,660	40,652	11.30%	9.60%	10.00%	133,824	107,245
2010	259,857	6,441,380	24,788	103,353	40,922	12.30%	10.20%	9.40%	131,098	104,705
2011	262,360	6,824,142	26,011	101,357	42,674	11.50%	9.40%	8.50%	129,784	104,463
2012	265,777	6,521,165	24,536	116,109	47,552	10.30%	9.00%	8.10%	130,580	103,913
2013	264,511	6,530,963	24,691	117,301	46,620	9.70%	8.40%	7.50%	129,950	104,343
2014	267,405	6,810,947	25,471	125,119	48,430	9.30%	7.20%	6.20%	125,119	104,535
2015	273,675	7,186,778	26,260	115,708	48,990	7.50%	5.90%	5.30%	125,051	104,719
2016	280,006	7,461,902	26,649	121,278	53,637	6.60%	5.40%	4.90%	129,852	104,996
2017	285,153	7,781,551	27,289	126,727	53,956	5.80%	4.70%	4.40%	134,595	105,606

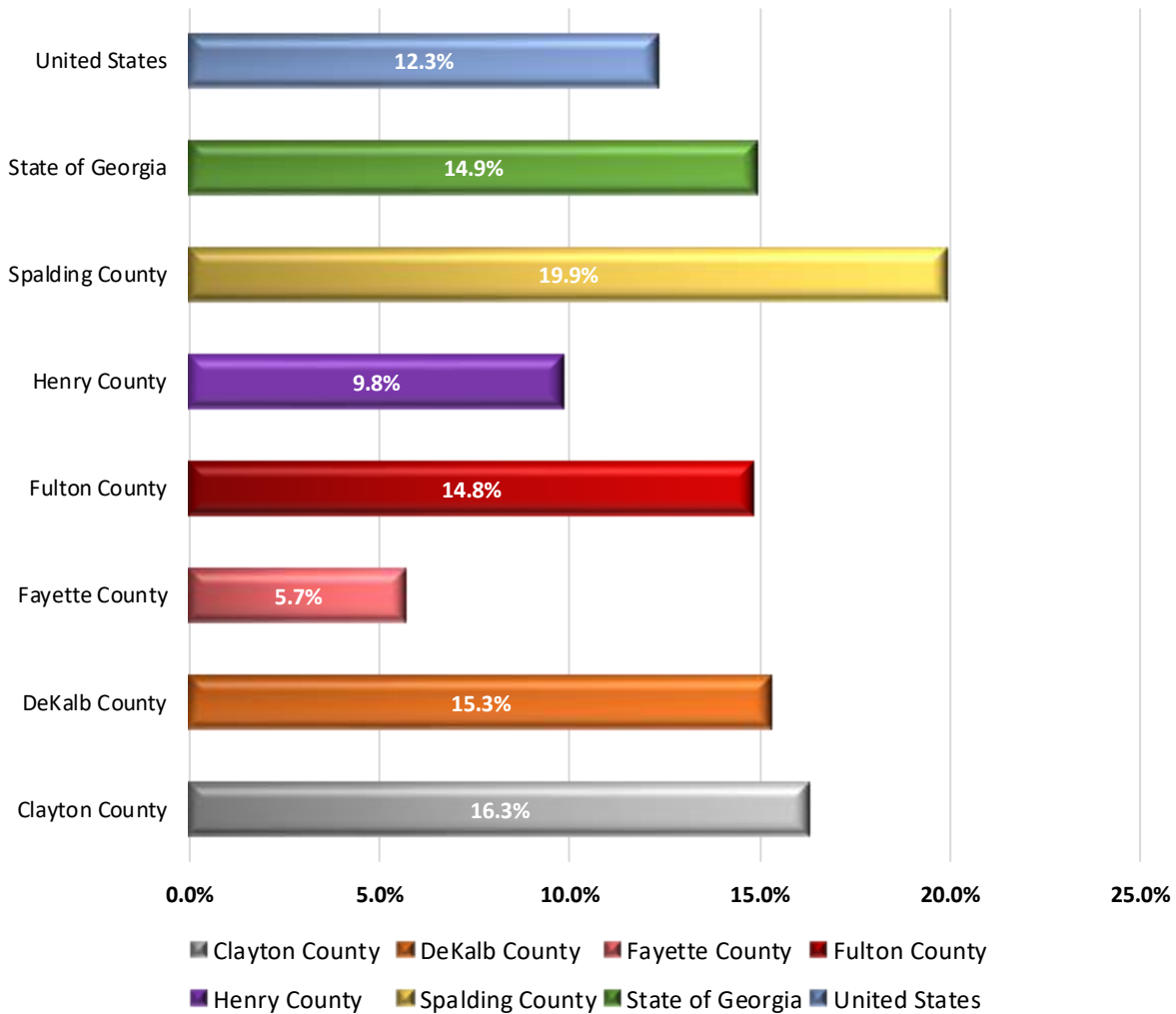




Percentage of Individuals below Poverty Line

**PERCENTAGE OF INDIVIDUALS BELOW THE POVERTY LINE
COMPARISON OF CONTIGUOUS COUNTIES AND STATE AVERAGE**
Calendar Year 2017

Clayton County	DeKalb County	Fayette County	Fulton County	Henry County	Spalding County	State of Georgia	United States
16.3%	15.3%	5.7%	14.8%	9.8%	19.9%	14.9%	12.3%

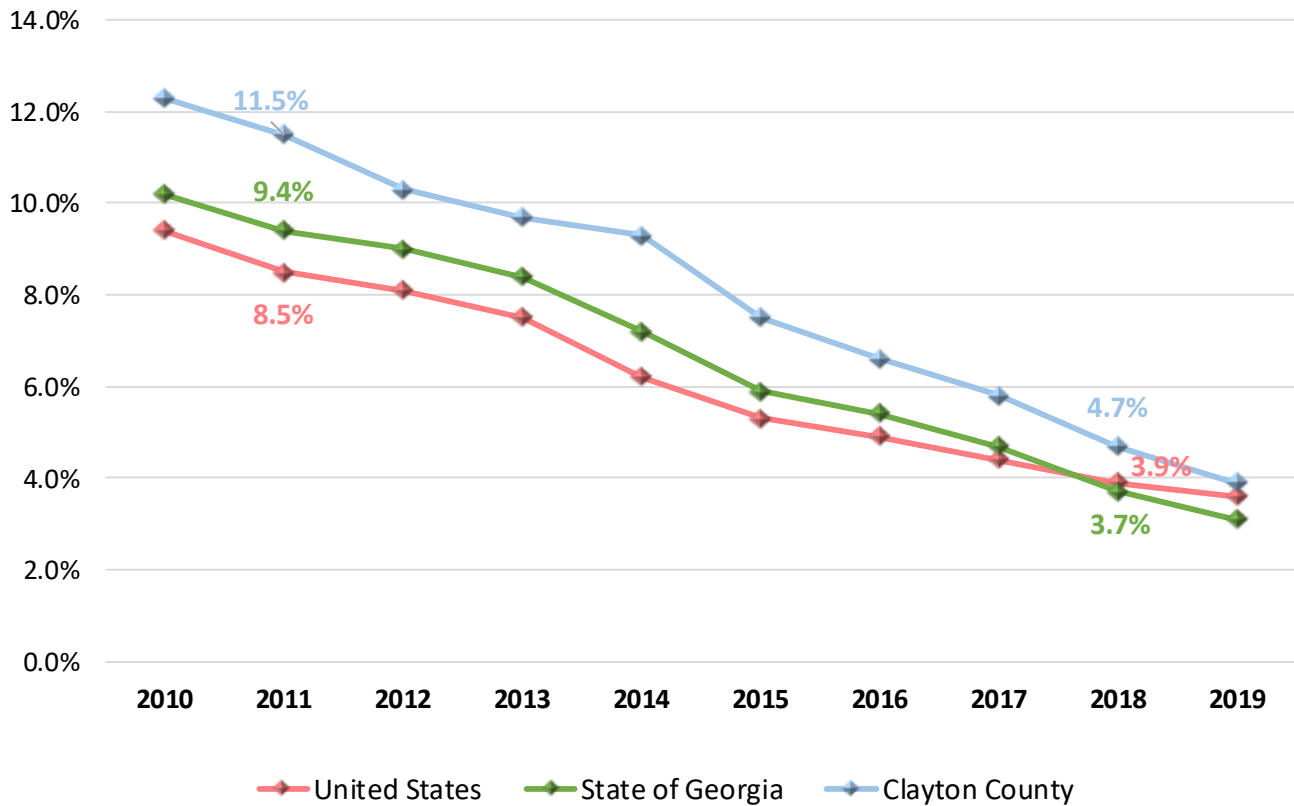




Unemployment Rates

UNEMPLOYMENT RATES
COMPARISON OF NATIONAL, STATE AND COUNTY
 Last Ten Calendar Years

Unemployment Rate	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
United States	9.4%	8.5%	8.1%	7.5%	6.2%	5.3%	4.9%	4.4%	3.9%	3.6%
State of Georgia	10.2%	9.4%	9.0%	8.4%	7.2%	5.9%	5.4%	4.7%	3.7%	3.1%
Clayton County	12.3%	11.5%	10.3%	9.7%	9.3%	7.5%	6.6%	5.8%	4.7%	3.9%



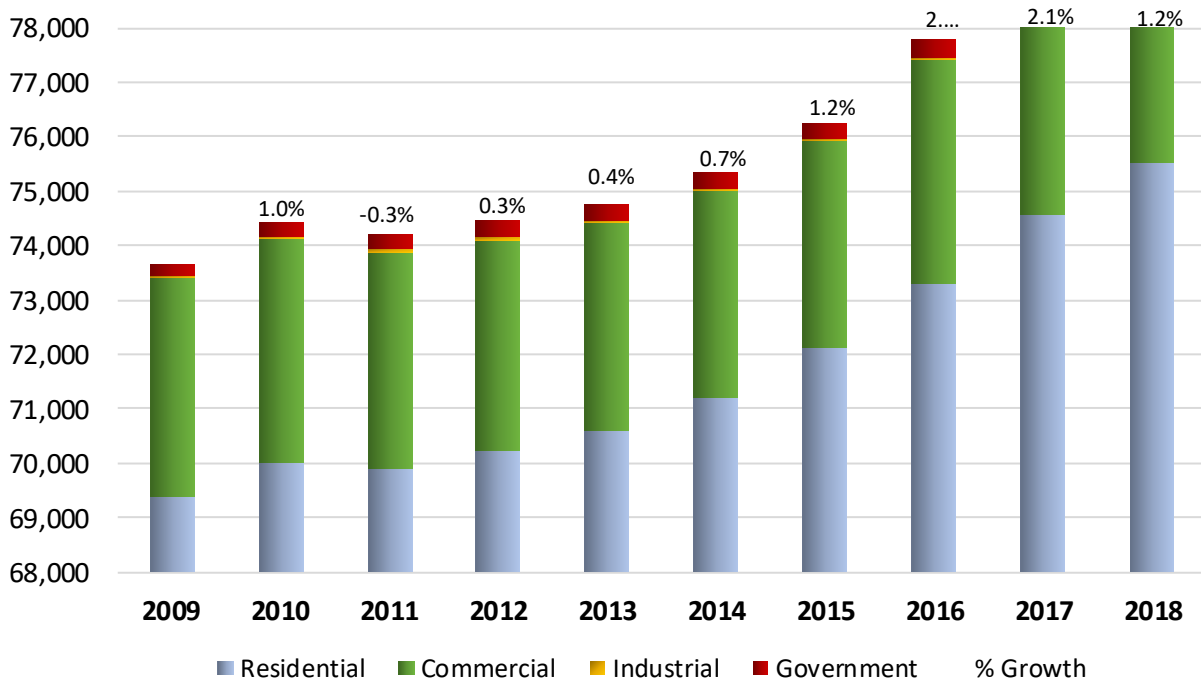


Number of Stormwater Customers by Type

NUMBER OF STORMWATER CUSTOMERS BY TYPE

Last Five Fiscal Years

Fiscal Year	Residential	Commercial	Industrial	Government	Total Stormwater Customers	% Growth
2009	69,407	3,987	46	240	73,680	
2010	70,022	4,112	46	237	74,417	1.0%
2011	69,909	3,990	43	284	74,226	-0.3%
2012	70,228	3,885	47	288	74,448	0.3%
2013	70,603	3,831	46	291	74,771	0.4%
2014	71,232	3,765	46	288	75,331	0.7%
2015	72,113	3,806	47	286	76,252	1.2%
2016	73,293	4,135	47	299	77,774	2.0%
2017	74,572	4,445	48	308	79,373	2.1%
2018	75,521	4,527	48	228	80,324	1.2%





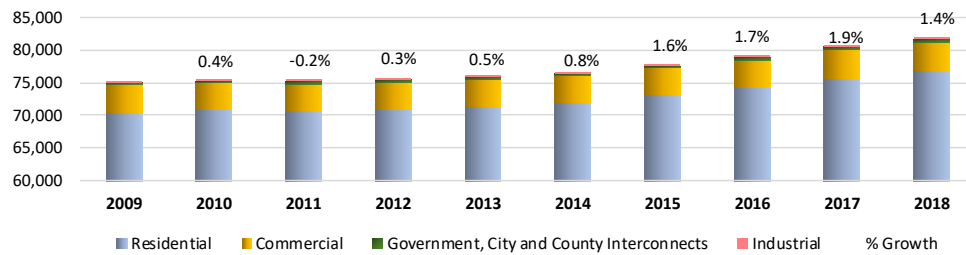
Number of Water and Wastewater Customers by Type

NUMBER OF WATER AND WASTEWATER CUSTOMERS BY TYPE

Last Ten Fiscal Years

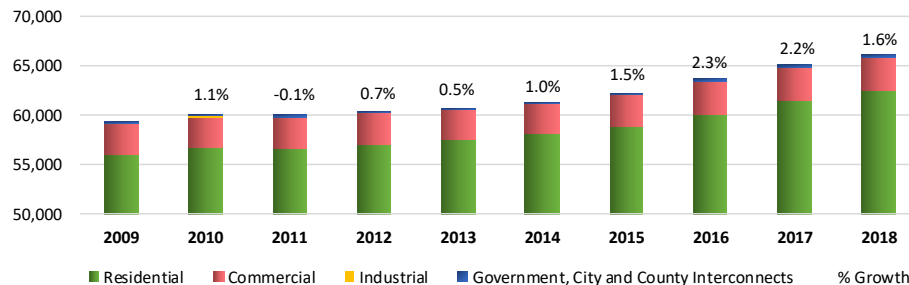
Fiscal Year	Residential	Commercial	Industrial	Government, City and County Interconnects	Total Water Customers	% Growth
2009	70,476	4,209	49	318	75,052	
2010	70,856	4,159	51	317	75,383	0.4%
2011	70,656	4,124	50	426	75,256	-0.2%
2012	70,930	4,086	54	434	75,504	0.3%
2013	71,335	4,057	50	440	75,882	0.5%
2014	72,054	4,069	50	315	76,488	0.8%
2015	73,107	4,104	54	425	77,690	1.6%
2016	74,224	4,294	52	433	79,003	1.7%
2017	75,658	4,329	53	457	80,497	1.9%
2018	76,747	4,493	53	354	81,647	1.4%

Total Water Customers



Fiscal Year	Residential	Commercial	Industrial	Government, City and County Interconnects	Total Wastewater Customers	% Growth
2009	55,996	3,165	37	195	59,393	
2010	56,679	3,140	38	193	60,050	1.1%
2011	56,669	3,114	38	197	60,018	-0.1%
2012	57,096	3,085	43	196	60,420	0.7%
2013	57,454	3,046	38	202	60,740	0.5%
2014	58,097	3,007	38	197	61,339	1.0%
2015	58,913	3,093	39	195	62,240	1.5%
2016	60,123	3,240	37	243	63,643	2.3%
2017	61,467	3,279	37	245	65,028	2.2%
2018	62,425	3,408	37	187	66,057	1.6%

Total Wastewater Customers





Water and Wastewater Rates Per Thousand Gallons of Usage

WATER AND SEWER FUND

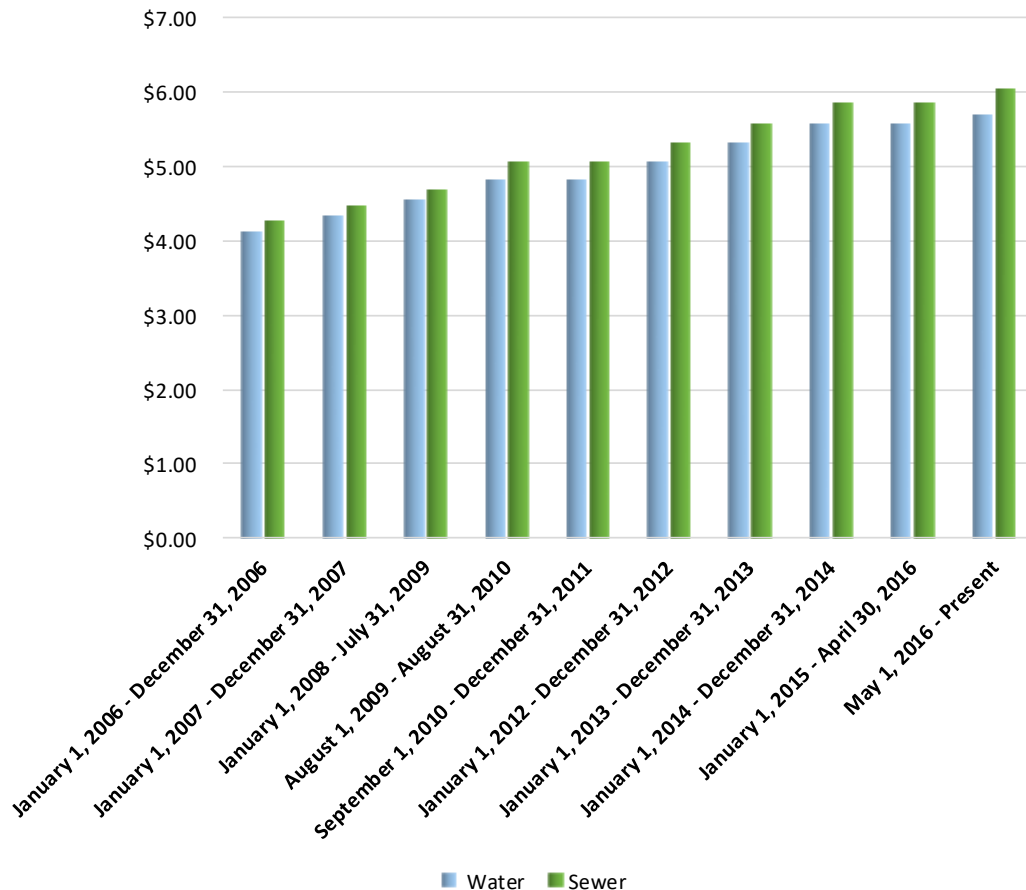
WATER AND SEWER RATES

Last Ten Fiscal Years

Period	<i>Per Thousand Gallons</i>	
	Water	Sewer
January 1, 2006 - December 31, 2006	\$4.11	\$4.25
January 1, 2007 - December 31, 2007	\$4.32	\$4.46
January 1, 2008 - July 31, 2009	\$4.54	\$4.68
August 1, 2009 - August 31, 2010	\$4.81	\$5.05
September 1, 2010 - December 31, 2011	\$4.81	\$5.05
January 1, 2012 - December 31, 2012	\$5.05	\$5.30
January 1, 2013 - December 31, 2013	\$5.30	\$5.57
January 1, 2014 - December 31, 2014	\$5.57	\$5.85
January 1, 2015 - April 30, 2016	\$5.57	\$5.85
May 1, 2016 - Present	\$5.68	\$6.02

Note: The amounts shown above do not reflect conservation rate surcharges, minimums or base rates

Note: Effective September 1, 2010 a base rate was implemented and the minimum use tier charges were reduced





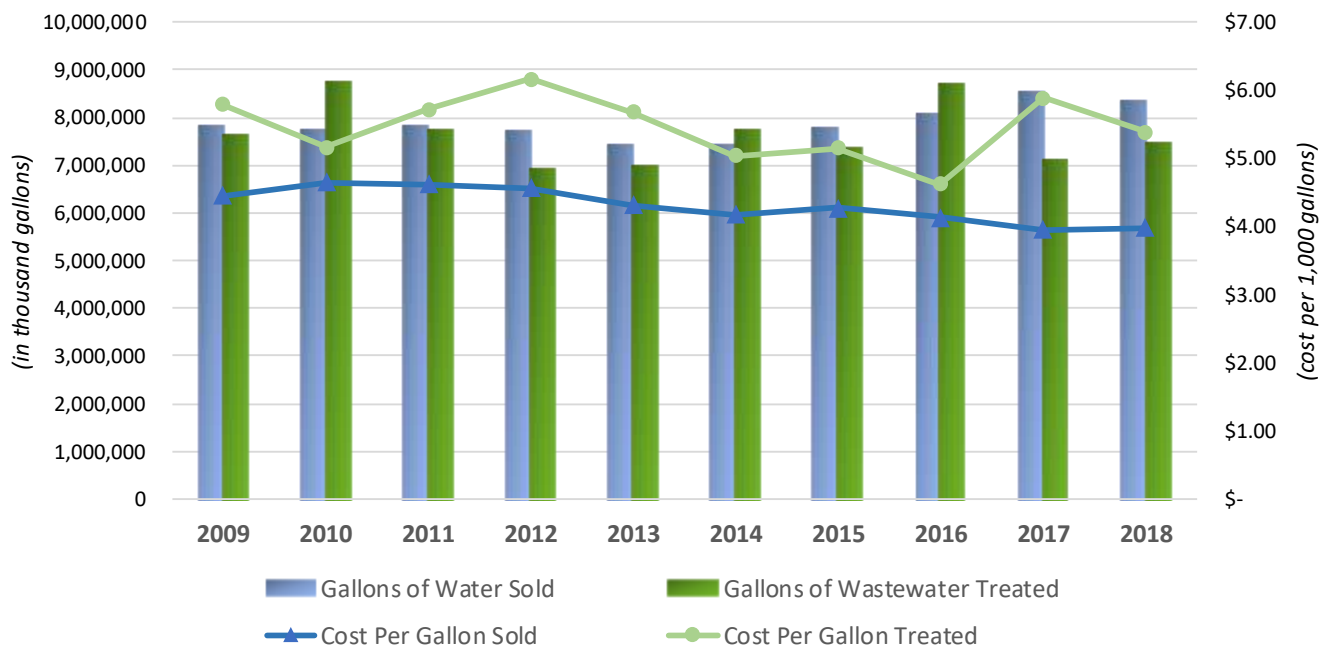
Gallons of Water Sold and Wastewater Treated

GALLONS OF WATER SOLD AND WASTEWATER TREATED

Last Ten Fiscal Years

(in thousand gallons)

Fiscal Year	Gallons of Water Sold	Cost Per Gallon Sold	Gallons of Wastewater Treated	Cost Per Gallon Treated
2009	7,817,860	\$ 4.45	7,637,213	\$ 5.79
2010	7,759,403	4.65	8,745,866	5.17
2011	7,823,417	4.62	7,736,072	5.72
2012	7,700,805	4.57	6,890,218	6.17
2013	7,442,676	4.32	6,970,915	5.68
2014	7,444,278	4.17	7,727,264	5.04
2015	7,767,732	4.28	7,329,418	5.15
2016	8,051,729	4.14	8,703,540	4.61
2017	8,539,097	3.96	7,100,709	5.88
2018	8,358,331	3.99	7,451,024	5.39





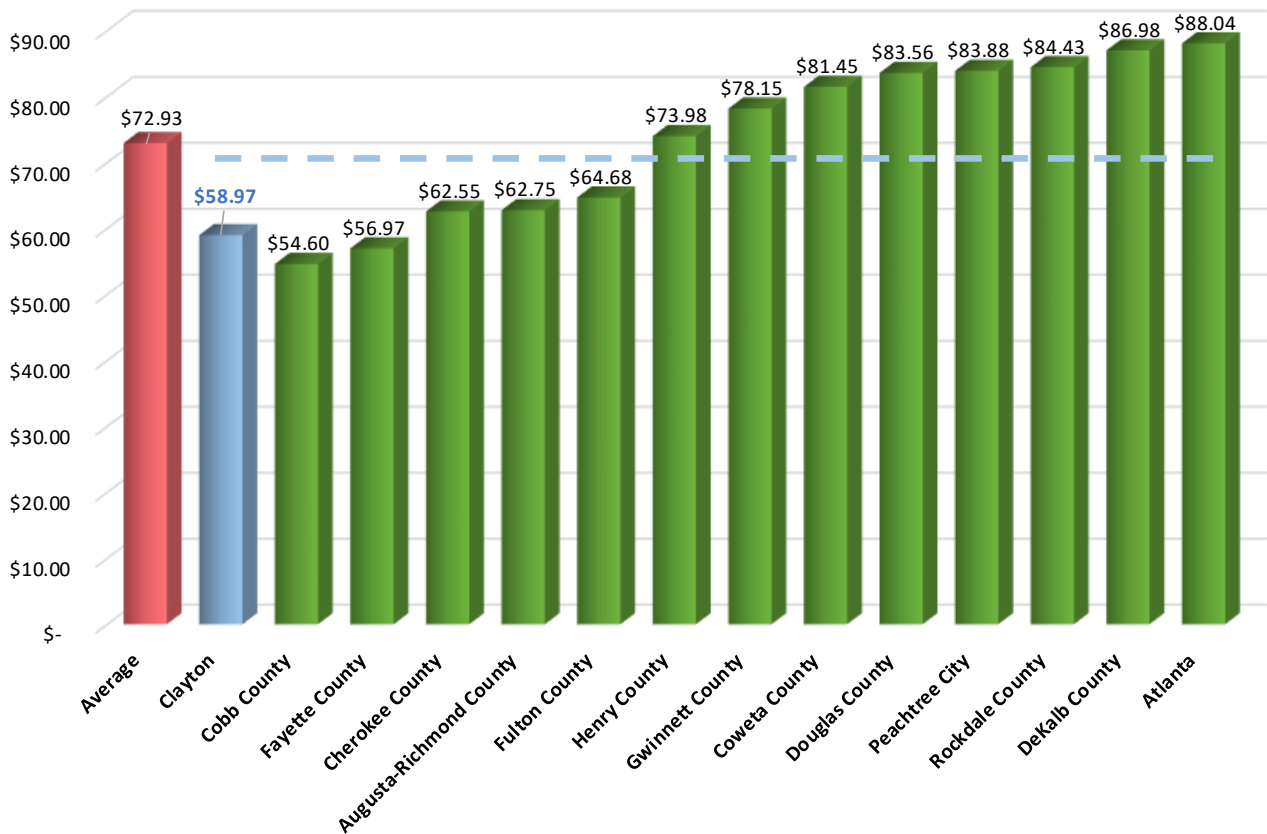
Water and Sewer Rates – Survey of Metro Atlanta Counties

COMPARISON OF WATER AND SEWER RATES SURVEY OF METRO ATLANTA COUNTIES

User Fee Information as of February 2019

Bill Based on Monthly Usage of 4,000 Gallons

Metro Atlanta Jurisdiction	Total Charges
Atlanta	88.04
Augusta-Richmond County	62.75
Cherokee County	62.55
Clayton County	58.97
Cobb County	54.60
Coweta County	81.45
DeKalb County	86.98
Douglas County	83.56
Fayette County	56.97
Fulton County	64.68
Gwinnett County	78.15
Henry County	73.98
Peachtree City	83.88
Rockdale County	84.43



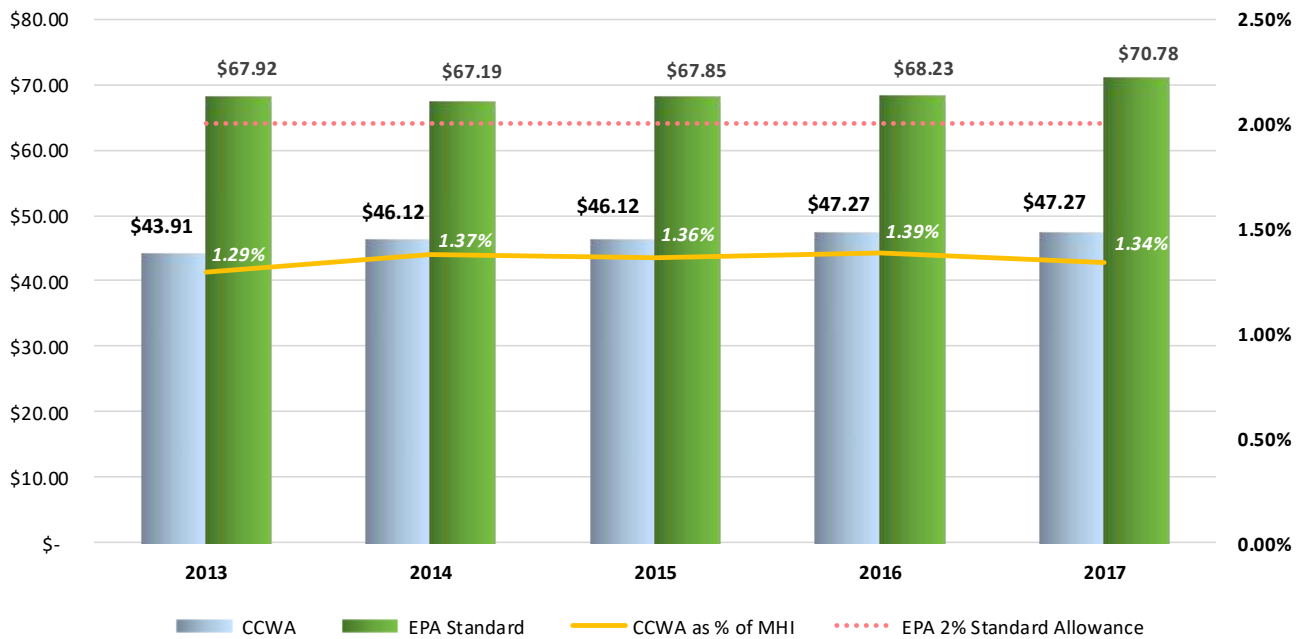


Bill Comparison with EPA Standard

WATER AND SEWER FUND CCWA AVERAGE BILL COMARISON WITH EPA STANDARD

Last Five Calendar Years

Calendar Year	Average Monthly Usage	Median Household Income (MHI)	CCWA Average Monthly Bill	CCWA Annual Water Bill	CCWA as % of MHI	EPA 2% Standard Allowance	Difference Actual Bill & Standard	CCWA as Percent of Standard
2013	4,000	\$ 40,754	\$ 43.91	\$ 526.92	1.29%	\$ 67.92	\$ 24.01	64.65%
2014	4,000	40,314	46.12	553.44	1.37%	67.19	21.07	68.64%
2015	4,000	40,712	46.12	553.44	1.36%	67.85	21.73	67.97%
2016	4,000	40,938	47.27	567.24	1.39%	68.23	20.96	69.28%
2017	4,000	42,470	47.27	567.24	1.34%	70.78	23.51	66.78%



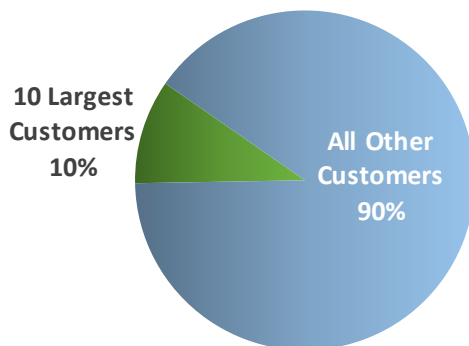


Ten Largest Customers Measured by Water and Wastewater Revenues

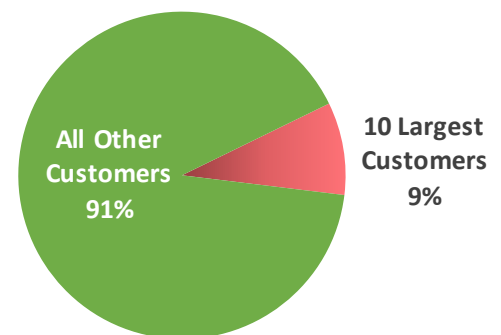
TEN LARGEST WATER AND WASTEWATER CUSTOMERS MEASURED BY CONSUMPTION IN GALLONS AND WATER AND WASTEWATER REVENUES For the Fiscal Year Ended April 30, 2018

Customer	Water Revenue	Percent	Wastewater Revenue	Percent
Fresh Express	1,429,372	2.77%	\$ 1,787,308	4.03%
City of College Park	\$ 1,317,647	2.55%	359,894	0.81%
Clorox Company	736,166	1.43%	335,834	0.76%
Clayton County Board of Commissioners	316,812	0.61%	303,548	0.68%
Club Chef Southeast LLC	313,571	0.61%	296,750	0.67%
Atlanta South Properties LLC	222,501	0.43%	226,981	0.51%
Deer Creek Mobile Home Park LLC	214,044	0.41%	212,526	0.48%
Marcre Sales Inc	210,290	0.41%	202,882	0.46%
Toto USA Inc	191,369	0.37%	180,517	0.41%
Gateway At Hartsfield LLC	176,260	0.34%	149,459	0.34%
10 Largest Customers	\$ 5,128,033	9.93%	\$ 4,055,698	9.15%
All Other Customers	46,510,747	90.07%	40,261,258	90.85%
Total	\$51,638,780	100.00%	\$44,316,956	100.00%

Water Revenue



Wastewater Revenue





Ten Largest Customers Measured by Stormwater User Fees

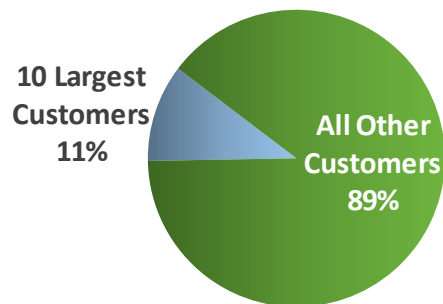
STORMWATER UTILITY

TEN LARGEST CUSTOMERS MEASURED BY STORMWATER USER FEES

For the Fiscal Year Ended April 30, 2018

Customer	Stormwater Fees	Percent
Department of Aviation (<i>Hartsfield-Jackson Airport</i>)	\$ 613,976	6.22%
Georgia Department of Agriculture	84,551	0.86%
Urban Redevelopment Agency	76,461	0.77%
J C Penney Catalog Division	62,823	0.64%
Kroger	52,843	0.54%
Fort Gillem - Site Manager	46,839	0.47%
Georgia Power	31,016	0.31%
Tindall Corporation GA Division	26,490	0.27%
Federal Express	25,672	0.26%
Gillem Logistics Center Building 200 LLC	25,400	0.26%
10 Largest Customers	\$ 1,046,072	10.60%
All Other Customers	8,823,213	89.40%
Total	\$ 9,869,285	100.00%

Stormwater Fees

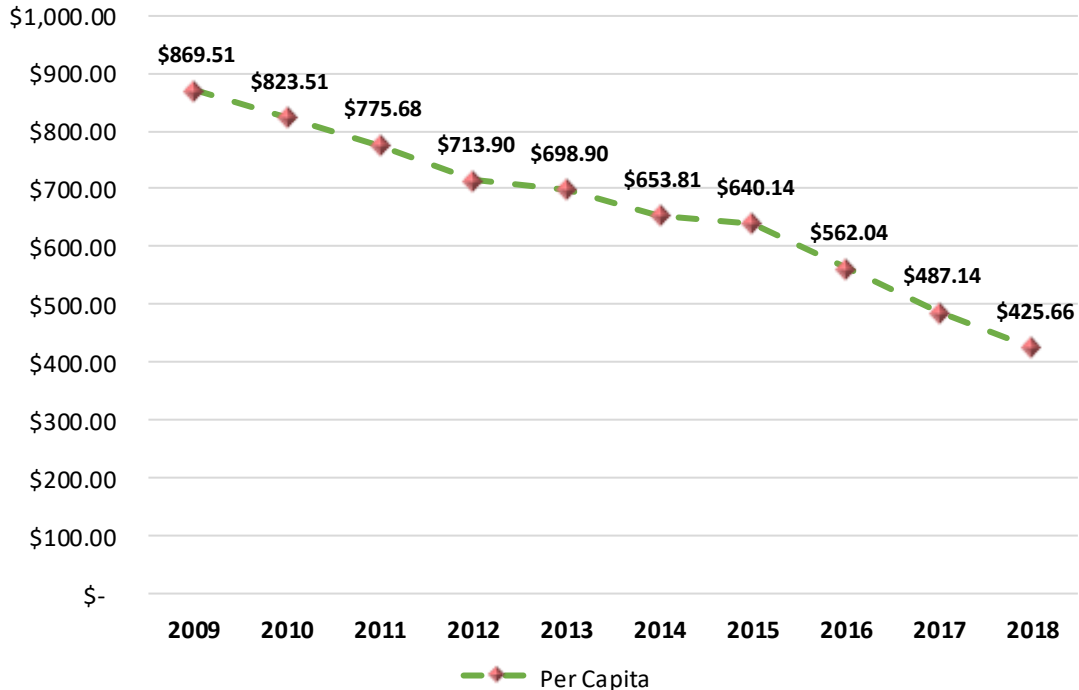




Ratio of Outstanding Debt by Type

WATER AND SEWER FUND RATIOS OF OUTSTANDING DEBT BY TYPE Last Ten Fiscal Years Ended April 30

Fiscal Year	Revenue Bonds	GEFA Loans	Total Amount	Per Capita	As a Share of Personal Income
2009	\$ 227,495,000	\$ 10,481,980	\$ 237,976,980	\$ 869.51	3.98%
2010	216,950,000	9,992,123	226,942,123	823.51	3.81%
2011	205,735,000	9,487,366	215,222,366	775.68	3.51%
2012	190,625,000	8,967,819	199,592,819	713.90	3.18%
2013	178,300,000	8,431,354	186,731,354	698.90	2.85%
2014	180,116,610	7,879,126	187,995,736	653.81	2.66%
2015	163,953,530	7,310,101	171,263,631	640.14	3.47%
2016	147,250,664	6,724,191	153,974,855	562.04	2.19%
2017	130,017,798	6,119,630	136,137,428	487.14	1.98%
2018	112,349,932	6,604,761	118,954,693	425.66	1.73%



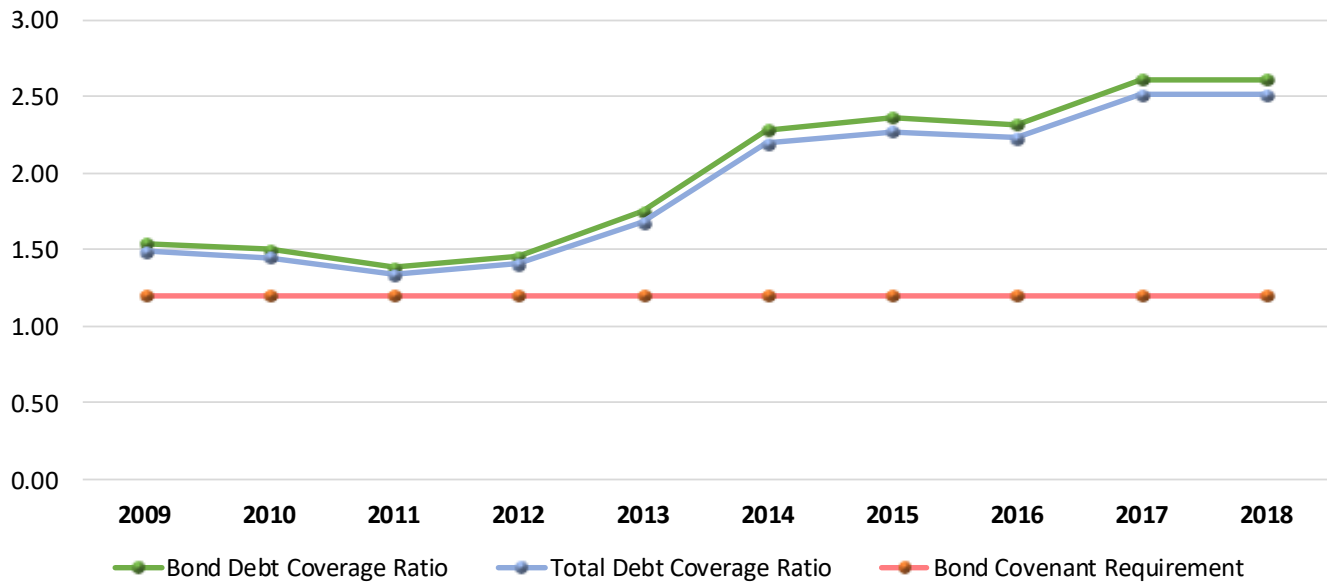


Debt Service Coverage

DEBT SERVICE COVERAGE

Last Ten Fiscal Years

Fiscal Year	Gross Revenues	Operating Expenses (excludes Deprec)	Net Cash Flow Available for Debt Service	Bond Annual Debt Service	Bond Debt Coverage Ratio	GEFA Loan Debt Service	Total Debt Coverage Ratio	Bond Covenant Requirement
2009	\$ 81,330,240	\$ 47,728,607	\$33,601,633	\$ 21,797,732	1.54	\$ 797,647	1.49	1.20
2010	81,850,879	49,546,582	32,304,297	21,565,183	1.50	797,647	1.44	1.20
2011	80,835,611	51,006,748	29,828,863	21,557,268	1.38	797,647	1.33	1.20
2012	81,265,317	49,669,638	31,595,679	21,705,160	1.46	797,647	1.40	1.20
2013	83,882,779	48,955,857	34,926,922	20,017,027	1.74	797,647	1.68	1.20
2014	89,383,063	44,287,188	45,095,875	19,783,983	2.28	797,647	2.19	1.20
2015	95,320,360	48,612,496	46,707,864	19,780,828	2.36	797,647	2.27	1.20
2016	97,429,249	51,317,854	46,111,395	19,879,133	2.32	797,647	2.23	1.20
2017	104,702,175	52,617,533	52,084,642	19,968,503	2.61	797,647	2.51	1.20
2018	106,898,748	54,900,741	51,998,007	19,903,233	2.61	797,647	2.51	1.20





BUDGET TERMINOLOGY

Budget Terminology

The primary purpose of the Budget Terminology section is to function as the user's dictionary. The terms, definitions and explanatory information that follow are provided to help ensure that the reader understands what is being presented in the budget document and to place the narrative information in the proper context. As with any other discipline, numerous terms, acronyms and abbreviations are generic to the accounting, budgeting, stormwater, water production and wastewater reclamation fields. In the following pages, we have attempted to identify those items and have provided additional explanation for each of them.



Glossary

A **Accounting System:** The total set of records and procedures which are used to record, classify and report information on the financial statements and operations of an entity.

Accrual Basis of Accounting: The method of accounting under which revenues are recorded when they are earned (whether or not cash is received at that time) and expenditures are recorded when goods and services are received (whether or not cash disbursements are made at that time).

Aeration: The process that forces compressed air into wastewater. The oxygen keeps the microorganisms alive and sets off a chain reaction; live, eat and work. Oxygen is an essential ingredient in “activating” sludge.

Appropriation: An authorization made by the Board of Directors that permits officials to incur obligations against and to make expenditures of Authority resources. Appropriations are usually made for fixed amounts and are typically granted for a one-year period.

Asset: All property such as cash, inventory and receivables that is owned by a business or government and may be applied to cover liabilities.

Audit: An independent systematic examination of resource utilization concluding in a written report. It is a test of management’s internal accounting records. It also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statements.

Automated Meter Reading (AMR): System that automatically reads customers’ meters using radio frequencies, allowing for more accurate and frequent meter readings.

B **Balanced Budget:** A budget in which estimated revenues and other financing sources equal estimated expenditures and other financing uses.

Basin: The drainage area to a particular point

Biochemical Oxygen Demand (BOD): An indicator of the amount of biodegradable contaminants in wastewater.

Biosolids: Sludge that has been treated to reduce pathogens, organics and odors, forming a reusable agricultural product.

Bond: An obligation issued by CCWA promising to pay a specified sum of money (called principal or face value) at a specified future date (called the maturity date) along with periodic interest paid at a specified percentage of the principal (interest rate). Bonds are typically issued to fund specific capital improvement expenditures.

Bond Refinancing: The payoff and re-issuance of bonds, to obtain better interest rates and/or bond conditions.

Budget: Proposed plan of revenue and expenditures over a given time period, usually one year.



Budget Adjustment: A procedure utilized by the Water Authority staff to revise a budget appropriation.

Budget Calendar: The schedule of key dates or milestones that the Water Authority follows in the preparation and adoption of the budget.

Budget Document: The instrument or publication used by the Budget Officer to present a comprehensive financial plan to the Board of Directors.

Budget Message: A general discussion of the proposed budget presented in writing as part of or supplement to the budget document. The transmittal letter explains the principal budget issues against the background of financial experience in recent years and presents recommendations made by the General Manager.

Budget Unit: A unique organizational structure used in the accounting system to identify transactions related to that specific segment of operations.

Budgetary Control: The control or management of a budget unit or enterprise in accordance with an approved budget for the purpose of keeping expenditures within limitations of available appropriations and available revenues.

C

Capital Asset: These are assets such as plant facility, property and equipment of significant value and having a useful life of more than one year. Capital assets are also called fixed assets.

Capital Budget: A plan of proposed capital expenditures and the means of financing them. The capital budget is usually enacted as part of a complete annual budget, which includes both operating and capital outlays. The capital budget is based on the Authority's ten-year master plan or capital improvement program (CIP).

Capital Expenditure/Outlay: The purchase or improvement of a tangible fixed asset; e.g., land, buildings and furniture/equipment; with the cost of \$5,000 or more and a useful life of at least three years.

Capital Improvement Program (CIP): A plan that identifies the nature, schedule and cost of long-term improvements to CCWA's infrastructure.

Clean Water Act (CWA): Act passed by the U.S. Congress to control water pollution.

Comprehensive Annual Financial Report (CAFR): This report is prepared by the Finance Department and is usually referred to by its abbreviation. It is a government's audit report and summarizes financial data for the previous fiscal year in a standardized format that includes three basic sections: introductory section, financial section and statistical section. The CAFR contains three types of financial statements: a statement of net assets, a statement of revenues, expenses and changes in net assets and a statement of cash flows.

Contingency: A budgetary reserve set aside for emergencies or unforeseen expenditures not otherwise budgeted.

Customer Information System (CIS): System that CCWA utilizes for customer billing information and other related services.



D **Debt:** An obligation resulting from the borrowing of money or from the purchase of goods or services over a period of time. Legal definitions of debt vary from state to state and are determined by constitutional provisions, statutes and court decisions.

Debt Rating: An independent opinion, based on a comprehensive quantitative and qualitative evaluation, of a company's financial position, operating performance, business profile and management. Specifically, the debt rating reflects a company's ability to meet its obligations to repay interest and principal on outstanding obligations to investors.

Debt Service: The amount of money required to pay maturities of principal on bonds plus the interest due on the outstanding debt, usually reported on an annual basis.

Debt Service Coverage: Requirement of CCWA's bond indenture and Board policy that provides that annual revenue available to pay debt service must exceed annual debt service by a certain percentage. CCWA's bond indenture for rates requires 120 percent debt service coverage; CCWA Board's target and the parity bond test is 150 percent debt service coverage.

Debt Service Funds: Funds used to account for the accumulation of resources for and the payment of general long-term debt principal, interest and related costs.

Debt Service Requirements: The amount of money necessary for scheduled payment of outstanding debt, both principal and interest becoming due during the fiscal period and contributions which may be required to accumulate monies for the future retirement of bonds.

Department: A basic organizational unit of the Water Authority that is functionally unique in its delivery of services.

Depreciation Expense: Depreciation or amortization of the cost of capital assets over their useful lives.

Distinguished Budget Presentation Awards Program: A voluntary awards program administered by the Government Finance Officers Association to encourage governments to prepare effective budget documents.

E **Enabling Act:** Legislation which established CCWA and defined its purpose and authority. CCWA's enabling legislation was initially enacted in 1955.

Encumbrance: Obligations in the form of purchase orders, contracts or salary commitments which are chargeable to an appropriation and for which part of the appropriation is reserved. They cease to be encumbrances when paid or when an actual liability is set up.

Enterprise Fund: A governmental accounting fund in which the services provided are financed and operated similarly to those of a private business. The rate schedules for these services are established to ensure that revenues are adequate to meet all necessary expenditures.

Environmental Protection Agency (EPA): Federal level agency responsible for all environmental issues and policies.

Expenditure: Decrease in net financial resources. Expenditures include current operating expenses requiring the present and future use of net current assets, debt service, capital outlays and intergovernmental grants, entitlements and shared revenues.



Expenses: Outflows or increases of liabilities from delivering or producing goods, rendering services or carrying out other activities that constitute the entity's ongoing major or general operations.

F **Fiscal Year:** For the Clayton County Water Authority, the 12 month accounting period that begins with May 1 and ends April 30 of the designated fiscal year ;(e.g. FY 2011 ends April 30, 2012).

Fixed Asset: Assets of long-term character which are intended to continue to be held or used in carrying out the operations of the Authority, such as land, buildings, machinery and furniture. These items are also referred to as capital assets.

Flow Monitoring: Metering of sanitary sewer flows in a basin.

Force Main Pressure Sewer: Sanitary sewer pipes that convey sewer by pump stations.

Full Time Equivalent (FTE): The relative value of a position in terms of a 40-hour workweek for 52 weeks, or one full year. For example, a part-time position in which the incumbent works 20 hours would equal one-half or .50 of an FTE.

Fund: A fiscal and accounting entity which is comprised of a self-balancing set of accounts which reflect all assets, liabilities, equity, revenue and expenditures (or expenses) necessary to disclose financial position and the results of operations. Funds are established as individual entities in order to segregate financial records for the purpose of legal compliance, different natures of activities performed, measurement of different objectives and to facilitate management control.

Fund Balance: Net position of a governmental fund that is equal to the difference between assets and deferred outflows of resources and liabilities and deferred inflows of resources.

Generally Accepted Accounting Principles (GAAP): A body of accounting and financial reporting standards set by the Governmental Accounting Standards Board (GASB) for state and local governments and by the Financial Accounting Standards Board (FASB) for private sector organizations.

Geographic Information Systems (GIS): A computerized mapping system that captures, stores, analyzes, manages and presents data that is linked to a location.

Grant: A contribution by a government or other organization to support a particular function or program.

Impact Fees: A payment of money imposed upon development as a condition of development approval, to pay for a proportionate share of the cost of system improvements needed to serve new growth and development.

Infrastructure: Physical assets of a government, upon which the continuance and growth of a community depends.

Interest Income: Revenue earned for the use of idle monies.

Interfund Transfer: Contributions and operating transfers of cash made between the various funds of the Water Authority.



Investment: Securities purchased and held for the production of income in the form of interest, dividends or base payments.

L

Lease Purchase: A method of acquiring high cost equipment or property and spreading the payments over a specified period of time.

Level of Service Standards: A measure of the amount (and/or quality) of the public facility which must be provided to meet the community's basic needs and expectations.

Liability: Debt or other legal obligation arising out of transactions in the past that must be liquidated renewed or refunded at some future date. This term does not include encumbrances.

Lift Station: A pumping facility generally for a sewer line, which is usually used to lift the raw wastewater to a higher elevation so that gravity can take it further down the line.

Line Item Budget: A budget that lists each expenditure category separately along with the dollar amount budgeted for each specific category.

M

Metropolitan North Georgia Water Planning District (MNGWPD): Signed into law on April 5, 2001 (2001 S.B. 130). This planning entity is dedicated to developing comprehensive regional and watershed-specific plans to be implemented by local governments in the District. These plans will protect water supplies downstream of the region and minimize potential adverse impacts of development on water in and downstream of the region. The area includes the following 16 counties: Bartow, Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Fulton, Forsyth, Gwinnett, Hall, Henry, Paulding, Rockdale and Walton Counties.

Million Gallons a Day (MGD): A measure of the amount of water processed through a water reclamation or a water production facility in a day.

Modified Accrual Basis of Accounting: The method of accounting in which revenue is recognized in the accounting period in which it becomes available and measurable and expenditures are recognized in the accounting period in which the liability (a claim against an asset) is incurred.

O

Open Cut: Trench excavation for pipe installation.

Operating Budget: Authorized expenditures for on-going day-to-day services ;(e.g., maintenance, materials, supplies, etc.).

Outfall: An 18-inch or larger pipe that is a trunk-line sanitary sewer. These large sewer pipelines connect to smaller sewer lines that navigate waste from various areas of the system up to treatment facilities.

P

PACP Codes: Pipeline Assessment Certification Program, standard codes for pipe condition.

Pay-As-You-Go Financing: A term used to describe a financial policy by which the capital program is financed from current revenue rather than through borrowing.



Performance Measures: Specific quantitative and qualitative measures of work performed as an objective of a department or business unit.

Personal Services: Expenditures for salaries, wages and fringe benefits of a government's employees.

Pipe Types:

- Cast Iron (used in water systems)
- CIPP - Cured in Place Pipe (used in sewer and stormwater systems)
- CMP - Corrugated Metal Pipe (used in sewer and stormwater systems)
 - Aluminized CMP
 - Bituminous CMP
- Concrete (used in sewer systems)
- Copper (used in water systems)
- DIP - Ductile Iron Pipe (used in sewer and water systems)
- Galvanized (used in water systems)
- HDPE - High Density Polyethylene Pipe (used in stormwater systems and recently in sewer systems)
- PVC - Polyvinyl Chloride Pipe (used in sewer systems)
- RCP - Reinforced Concrete Pipe (used in sewer and stormwater systems)
- Steel (used in sewer systems)
- VCP - Vitrified Clay Pipe (used in sewer systems)

Policy: A plan, course of action or a guiding principle designed to set parameters for decisions and actions.

Potable Water: Drinking water.

Primary Treatment: A wastewater treatment process that takes place in a tank and allows those substances in wastewater that readily settle or float to be separated from the water being treated.

Purchase Order: A document issued to authorize a vendor or vendors to deliver specified merchandise or render a specified service for stated estimated price. Outstanding purchase orders are called encumbrances.

R

Raw Water: Untreated water.

Reserve: An account used to indicate that a portion of a fund's fund balance is legally restricted for a specific purpose or commitment and is, therefore, not available for general appropriation.

Reservoir: A structure or impoundment for physically storing raw water.



Revenue: The term designates an increase to a fund's asset that does not increase a liability, represent a repayment of an expenditure already made, represent a cancellation of certain liabilities or represent an increase in contributed capital.

Revenue Bonds: Bonds where pledges are made to dedicate specific revenue sources to repay the bonds.

Risk Management: An organization goal to protect a government's assets against accidental loss in the most economical method.

S

Safe Drinking Water Act (SDWA): Act passed by the U.S. Congress (most recently amended in 1996) to control drinking water quality.

Secondary Treatment: Usually following primary treatment, secondary treatment employs microorganisms to reduce the level of biochemical oxygen demand (BOD) in wastewater.

Sludge: Solid residue from wastewater treatment.

Stormwater Utility: A stormwater utility is essentially a special assessment district set up to generate funding specifically for stormwater management. Users within the district pay a stormwater fee and the revenue thus generated directly supports maintenance and upgrade of existing storm drain systems; development of drainage plans, flood control measures and water-quality programs; administrative costs; and sometimes construction of major capital improvements.

Supervisory Control and Data Acquisition (SCADA): Equipment and computer technology used to monitor and control the water distribution and wastewater conveyance systems.

T

Tap Fees: Fees charged to join or to extend an existing utility system. Also referred to as system development fees or connection fees.

W

Work Load Indicators: Units of work produced by a department or budget unit which indicates the output.



Acronyms and Abbreviations

ACECGA	American Council of Engineering Companies of Georgia
ARC	Atlanta Regional Commission
AMR	Automated Meter Reading
AWWA	American Water Works Association
BOD	Biochemical Oxygen Demand
BU	Budget Unit
CAFR	Comprehensive Annual Financial Report
CCR	Consumer Confidence Report
CCWA	Clayton County Water Authority
CFR	Code of Federal Regulations
CIP	Capital Improvement Plan
CIPP	Cured in Place Pipe
CIS	Customer Information System
COLA	Cost of Living Adjustment
DBPs	Disinfection By-Products
DNR	Department of Natural Resources
D & C	Distribution and Conveyance
EEO	Equal Employment Opportunity
EPA	Environmental Protection Agency
EPD	Environmental Protection Division
FTE	Full Time Equivalent
FY	Fiscal Year
GAAP	Generally Accepted Accounting Principles
GASB	Governmental Accounting Standards Board
GAWP	Georgia Association of Water Professionals
GEFA	Georgia Environmental Finance Authority
GFOA	Government Finance Officers Association
GGFOA	Georgia Government Finance Officers Association
GIS	Geographic Information System
GM	General Manager



GPCD	Gallons Per Capita per Day
GPS	Global Positioning System
HAAs	Haloacetic Acids
HVAC	Heating, Ventilation and Air-Conditioning
I/I	Infiltration/Inflow
IT	Information Technology
JDE	JD Edwards EnterpriseOne: Accounting Software
LF	Linear Feet
LOSS	Level of Service Standards
LTO	Linear Tape Open
MG/L	Milligrams per Liter
MGD	Million Gallons per Day
N/A	Not Applicable or Not Available
OPEB	Other Post-Employment Benefits
ORP	Oxidation Reduction Potential
pH	Potential of Hydrogen
PSI	Pounds per Square Inch
R & E	Renewal and Extension
R & R	Removal and Replacement
ROW	Right of Way
SCADA	Supervisory Control and Data Acquisition
SDWA	Safe Drinking Water Act
SEACAP	System Evaluation and Capacity Assurance Plan
SLBE	Small Local Business
SND	Standard Non-Compliance Day
SSes	Sewer System Evaluation Study
SSOs	Sanitary Sewer Overflows
TARP	Troubled Asset Relief Program
TBD	To Be Determined
TMDL	Total Maximum Daily Load
TOC	Total Organic Carbon



TOD Total Oxygen Demand
TTHMs.....Total Trihalomethanes
UV Ultraviolet
WEF Water Environment Federation
WPF.....Water Production Facility
WRF.....Water Reclamation Facility