



# ADOPTED BUDGET 2018-2019

*Clayton County Water Authority*



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

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## INTRODUCTION

### Transmittal Letter



"Providing Quality Water and Quality Services to Our Community"

[www.ccwa.us](http://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 2018 - 2019. 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 2018-2019 budget assumes our revenues will only increase 0.7% 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 a potential drought that could lead to water use restrictions or a contraction in the economy.

The consolidated budget request (water, sewer and stormwater services) is only slightly higher than last year based on the revenue estimate mentioned above. While personnel costs are increasing by over 7%, capital project funding



is decreasing by 34%. A significant part of the personnel increase is due to rising health care costs and our Board of Directors desire to absorb most of this increased cost rather than passing it on to employees. The 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. A continued investment in personnel is necessary to be able to accelerate these capital projects.

The capital projects budget continues to focus on pipeline replacement projects and improvements to our 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 \$21 million annual bond debt set to be retired in 2023. 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,

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### Acknowledgement

A special thank you is extended to Danielle Bunch, Senior Conservation Specialist, for the cover photos and section introductory pages

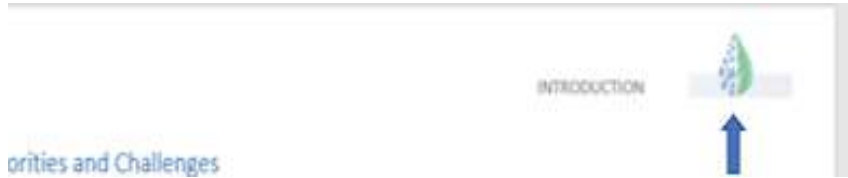
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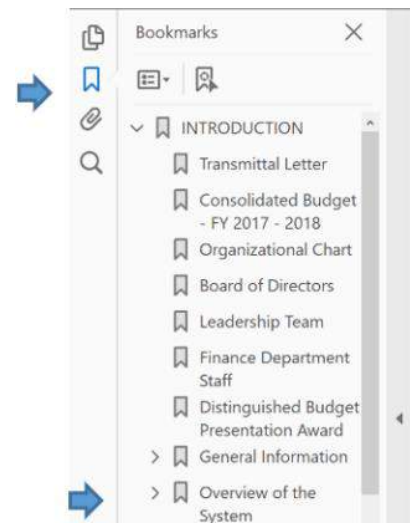
## How to Navigate this Document

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.



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.

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.

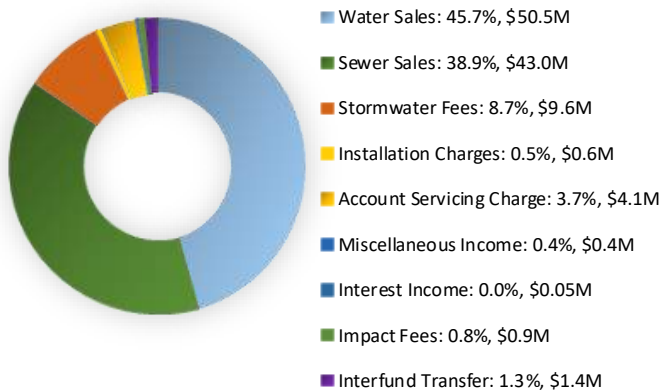




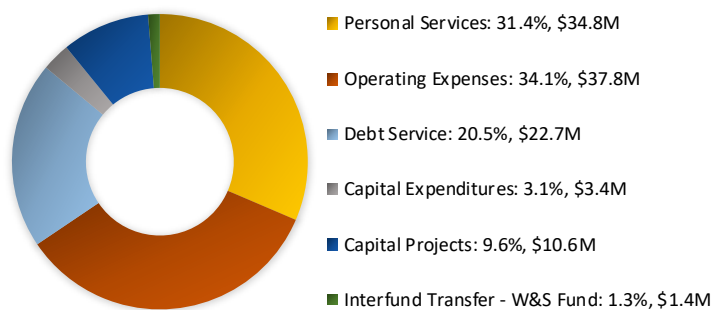
## Consolidated Budget - FY 2018 - 2019

	Water and Sewer Fund	Stormwater Fund	Total
<b>Revenues</b>			
Water Sales	\$ 50,548,433	\$ -	\$ 50,548,433
Sewer Sales	43,040,471	-	43,040,471
Stormwater Fees	-	9,641,417	9,641,417
Installation Charges	604,436	-	604,436
Account Servicing Charge	3,963,678	157,205	4,120,883
Miscellaneous Income	426,118	4,445	430,563
Interest Income	39,332	5,193	44,525
Impact Fees	877,530	-	877,530
Interfund Transfer	1,413,558	-	1,413,558
<b>Total Revenues</b>	<b>\$ 100,913,556</b>	<b>\$ 9,808,260</b>	<b>\$ 110,721,816</b>
<b>Expenses</b>			
Personal Services	\$ 33,040,328	\$ 1,779,875	\$ 34,820,203
Operating Expenses	34,972,889	2,784,796	37,757,685
Debt Service	22,652,004	-	22,652,004
Interfund Transfer - Revenue Fund	-	1,413,558	1,413,558
Capital Expenditures	2,892,335	537,030	3,429,365
Capital Projects	7,356,000	3,293,001	10,649,001
<b>Total Expenses and Appropriations</b>	<b>\$ 100,913,556</b>	<b>\$ 9,808,260</b>	<b>\$ 110,721,816</b>

**Revenues -  
Funds Combined**

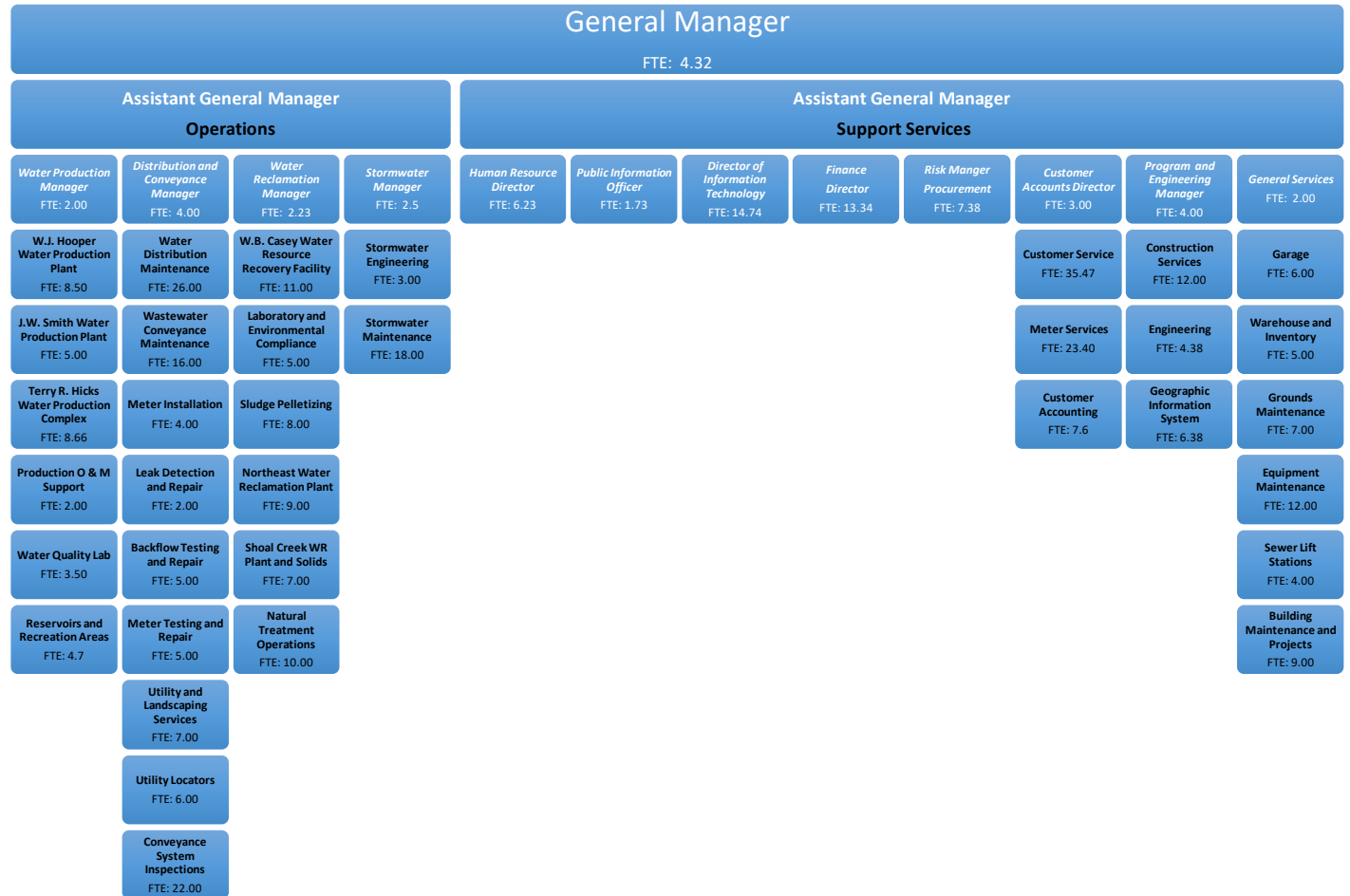


**Expenses -  
Funds Combined**





## Organizational Chart





## Board of Directors



John M. Chafin  
***Chairman***



Rodney Givens  
***Vice Chairman***



John L. Westervelt  
***Secretary – Treasurer***



Marie Barber  
***Member***



Dr. Cephus Jackson  
***Member***



Robin Malone  
***Member***



Vivian Baldwin  
***Member***





## Leadership Team



P. Michael Thomas  
*General Manager*



Bernard Franks  
*Assistant General Manager  
Support Services*



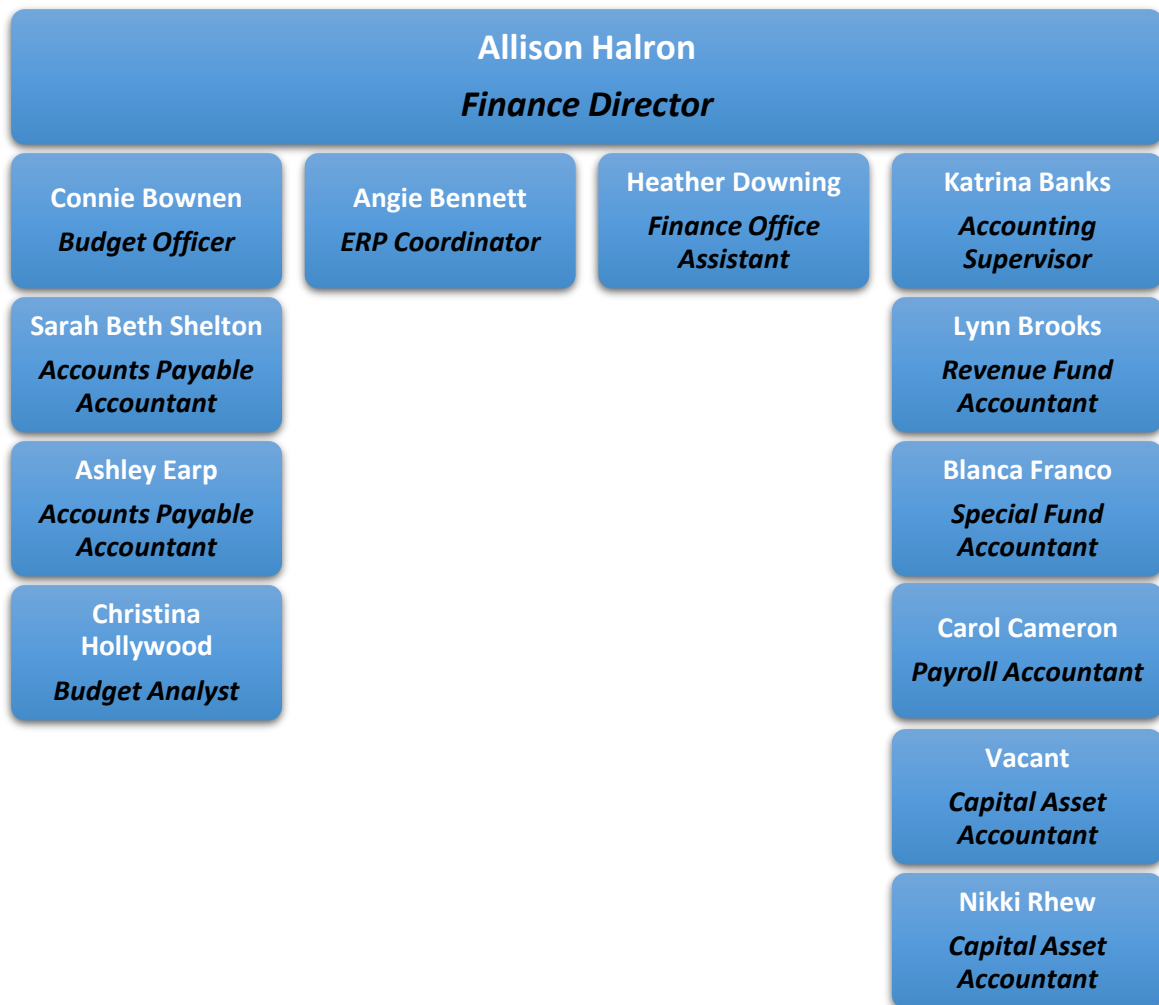
James G. Poff  
*Assistant General Manager  
Operations*

Suzanne Brown  
Ed Durham  
Allison G. Halron  
Chris Hamilton  
Dan Holverson  
Jeff Jones  
Marshall Maddox  
Kevin Osbey  
Karen Riser  
Kendra Staniel  
Kelly Taylor  
Teresa Worley

*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, 2017. 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 12th 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 280 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.





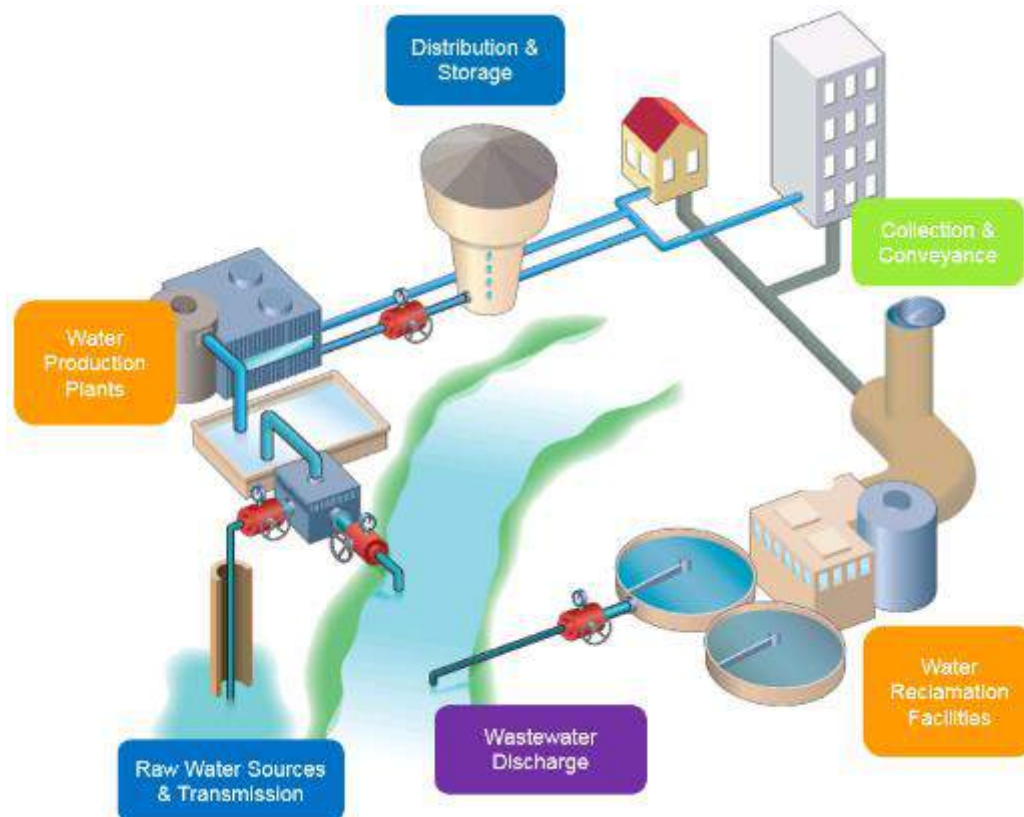
## Structure

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. **Business Units 100's includes 130's - Customer Service, Meter Services and Customer Accounts (A/R)**
- **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 plants, 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 inventory warehousing, 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 amount of impervious surfaces located on a customer's property.

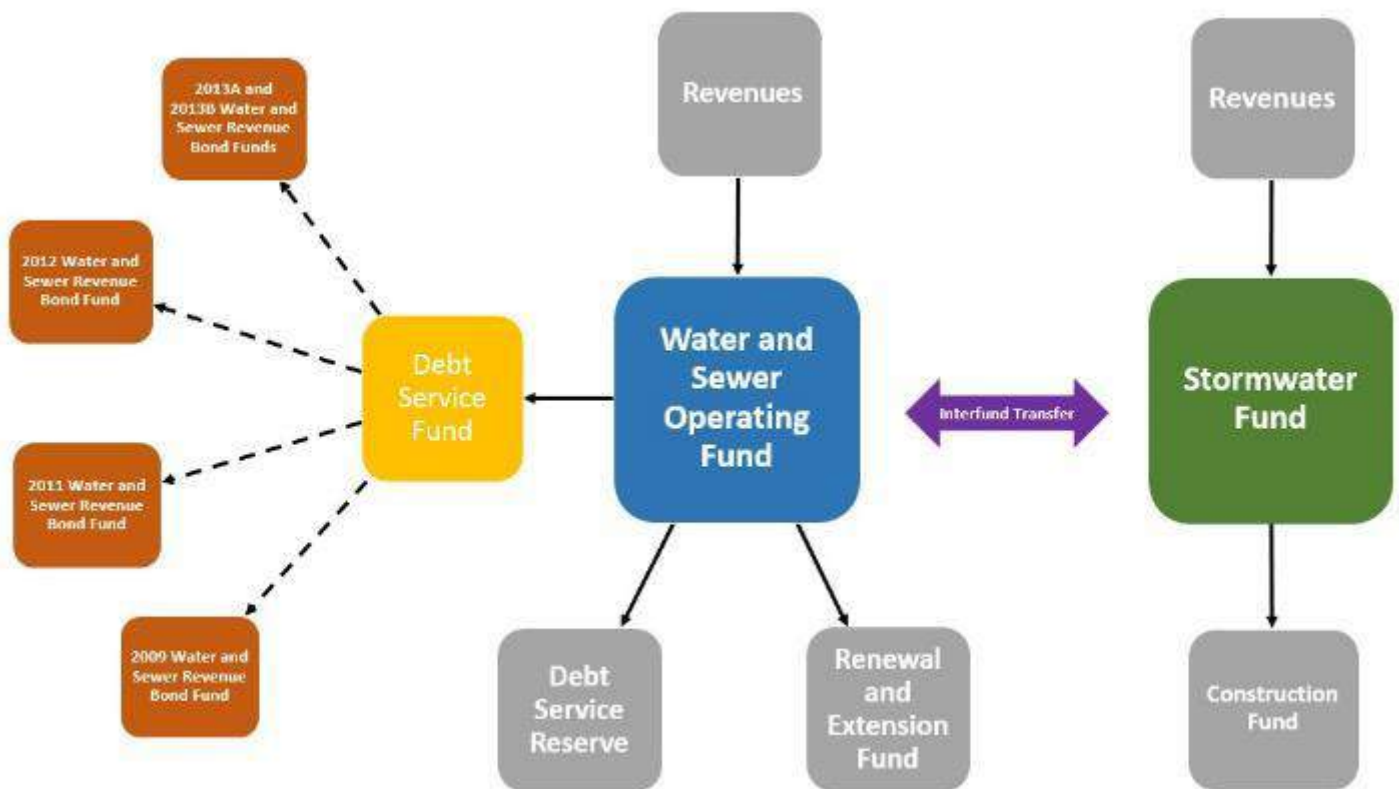
- **Stormwater Management:** Directs, manages and controls the efforts of the Stormwater Utility section.
- **Stormwater Engineering:** Manages construction plan to ensure compliance with State and Federal regulations and mandates.
- **Stormwater Maintenance:** Maintains and repairs stormwater infrastructure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



### Stormwater

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

The Authority owns and operates five raw water reservoirs:

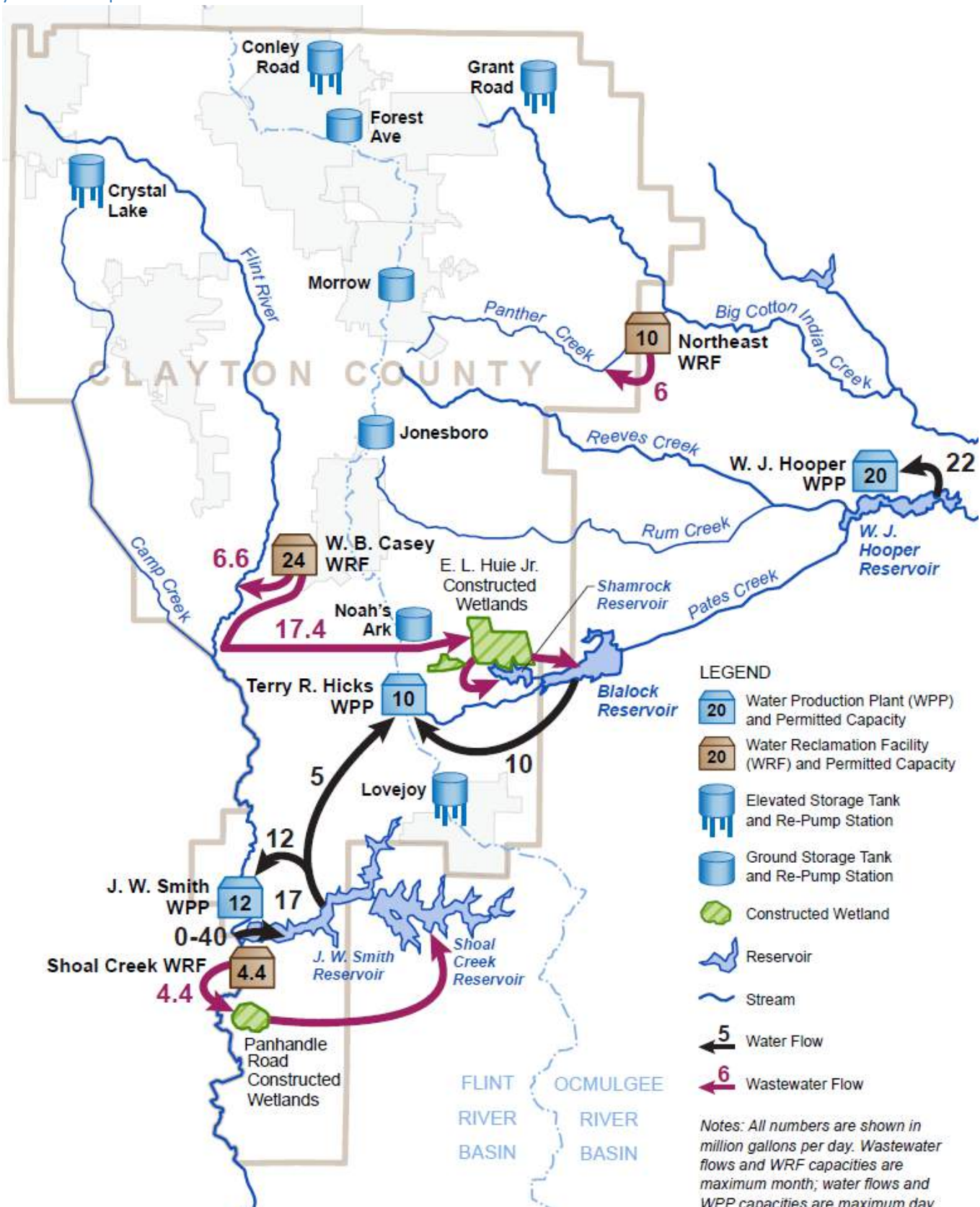
- **J.W. Smith** - 240 acres in size, holding approximately 844 million gallons of water at capacity
- **Shamrock** - 78 acres in size, holding approximately 260 million gallons of water at capacity
- **Edgar Blalock, Jr.** - 263 acres in size, holding approximately 889 million gallons of water at capacity
- **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 more than 80,634 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 65,593 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 plant 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 80,166 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.









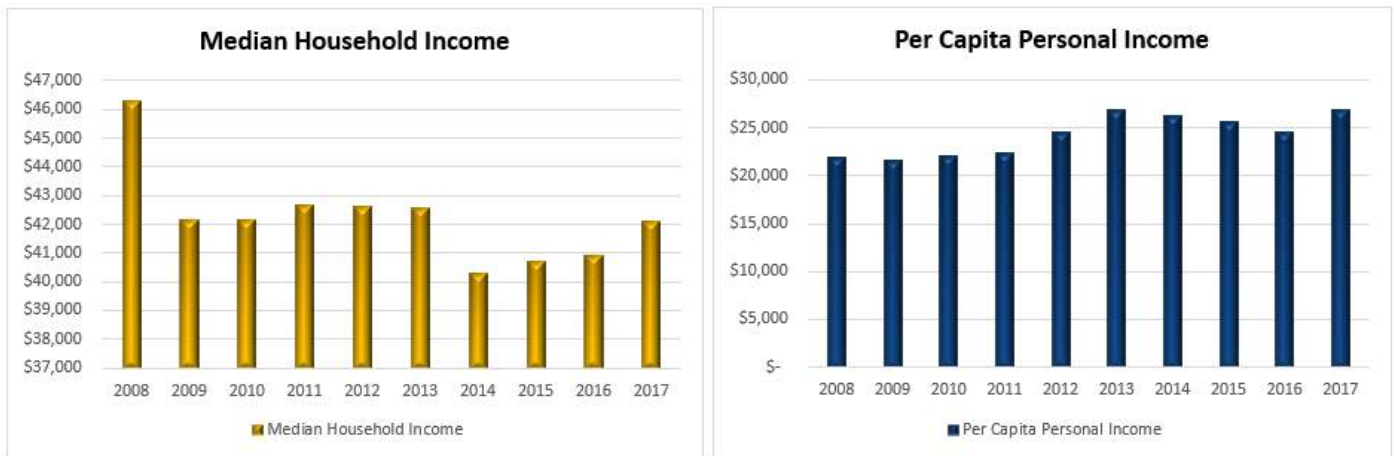
## Education

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.

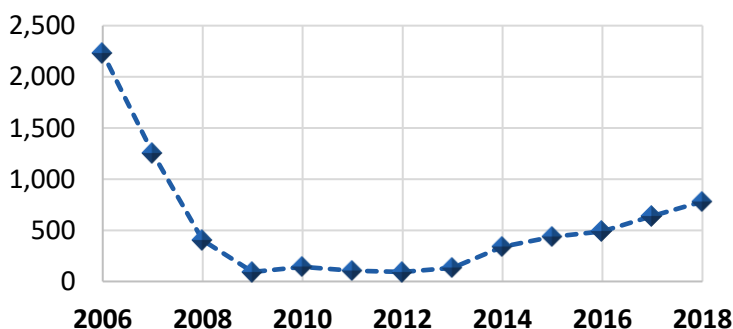
## Demographics and Economic Outlook

### 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 money people have to spend. The higher the MHI and PCI, the more money people have to spend on discretionary items. Economists estimate that for every penny drop in in gas price, the economy experiences an extra billion dollars in spending. With the drop in gas prices, more income will be used for discretionary spending like dining out, shopping, or home improvements.

### Clayton County Building Permits





## 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%
<b>Subtotal (10 Largest Employers)</b>		<b>21,817</b>	<b>13.98%</b>
Total Employment in Clayton County		121,278	100.00%

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 on the cusp of this type of expansion due to the growth in the **film industry** and the development surrounding **Hartsfield-Jackson Atlanta International Airport**.

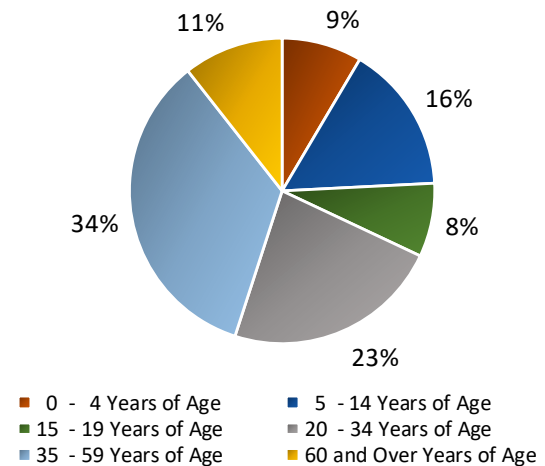
A modern, extensive transportation and logistical infrastructure allows Georgia to compete effectively in a global marketplace. Hartsfield-Jackson International Airport is the world's busiest passenger airport and 10th-largest in the nation for cargo. Georgia's deep-water ports and inland barge terminals 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.

Several transportation projects, in various stages of development, in Clayton and Henry counties promise to open up previously closed transportation channels and ease congestion on busy Interstate 75. Clayton County voters approved a 1 percent sales tax last November to fund Metropolitan Atlanta Rapid Transit Authority bus service (MARTA), which should have more than 160 stops by July 2016. MARTA links the County's workforce to major employers and activity centers throughout the Metro-Atlanta area.

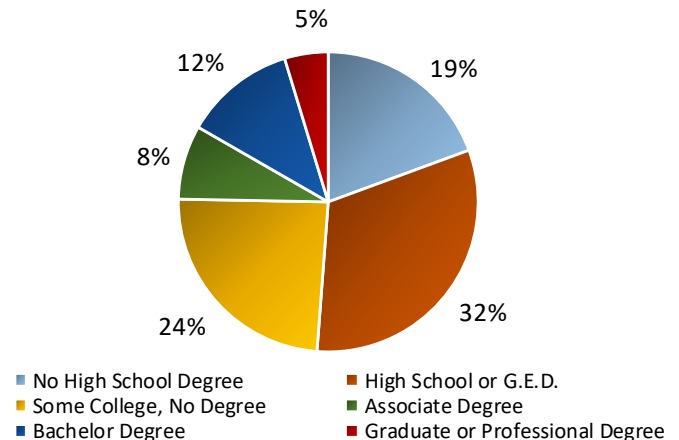
**Hartsfield-Jackson Atlanta International Airport** is a powerful economic driver and two community improvement districts (CIDs), Airport West and Airport South (North Clayton County), have joined forces as the *Atlanta Aerotropolis Alliance* to assist the airport into becoming a major economic hub. 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 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

Age of County Residents



Education Level







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. Hartsfield-Jackson recently unveiled its 20-year master plan that included \$6 billion in projects. Approximately \$1 billion will be spent in 2017. A list of some of the major projects and funding is outlined below.

The Authority's service area will see economic gains from the development surrounding Hartsfield-Jackson Atlanta International Airport.

### Airport terminal

- Terminal modernization, 2016-2018, \$393 million
- Concourse T extension, 2016-2021, \$200 million
- Plane Train people-mover turnback relocation, 2016-2027, \$307 million
- Concourse G, 2016-2023, \$983 million
- Concourse D gate area expansion, 2019-2025, \$50 million

### Parking

- ATL West parking deck next to Georgia International Convention Center, 2016-2017, \$150 million
- Sullivan Road Park-Ride Lot, 2016-2018, \$7.6 million
- Domestic garage enabling work, 2016-2021, \$100 million
- South garage teardown and replacement, 2021-2024, \$420 million
- North garage teardown and replacement, 2024-2027, \$245 million

### Hotel

- Hotel, travel plaza, mixed-use commercial complex, 2016-2018, \$500 million

### Airfield

- Taxiway/runway pavement replacement, 2016-2017, \$24 million
- End-around taxiway, 2017-2021, \$58 million
- Runway pavement replacement, 2021-2023, \$35 million
- Other airfield renewal/replacement, 2016-2035, \$310 million
- Sixth runway, 2023-2034, \$943 million

### Cargo

- Cargo building C, 2012-2017, \$26 million
- Cargo buildings 2A/2B, 2015-2018, \$157 million
- Cargo building 1, 2017-2021, \$22 million

### Support facilities

- Fire station, 2016-2017, \$16.4 million
- Building renewal/replacement, 2016-2035, \$91 million
- Airport maintenance complex consolidation, 2022-2027, \$37 million

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, has signed an agreement to build 16 soundstages on 330 acres of the 488-acre site at the closed Fort McPherson army base in East Point.

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.

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](http://TourGeorgiaFilm.com), to cater specifically to film tourism.

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 has recently completed its \$108M new fulfillment center to process online orders. This location will employ 400 people over the next three years. The 1.2 million square foot facility is located at the Majestic Airport Center IV Industrial Park in Union City and opened late 2015.

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 is investing about \$175M over a five period at the location. Castellini Group, a large distributor of fresh produce, has completed a \$52M distribution facility that is creating 300

## 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*



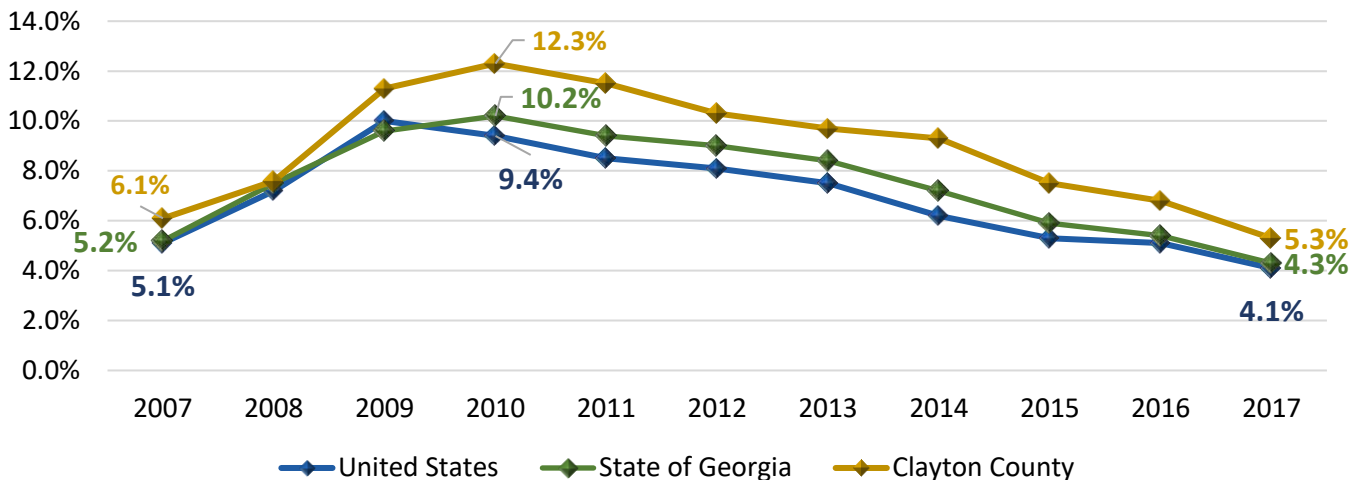


new jobs. Castellini is a complete vertical supply chain company that provides services from tomato ripening and repacking, to processing and transportation.

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

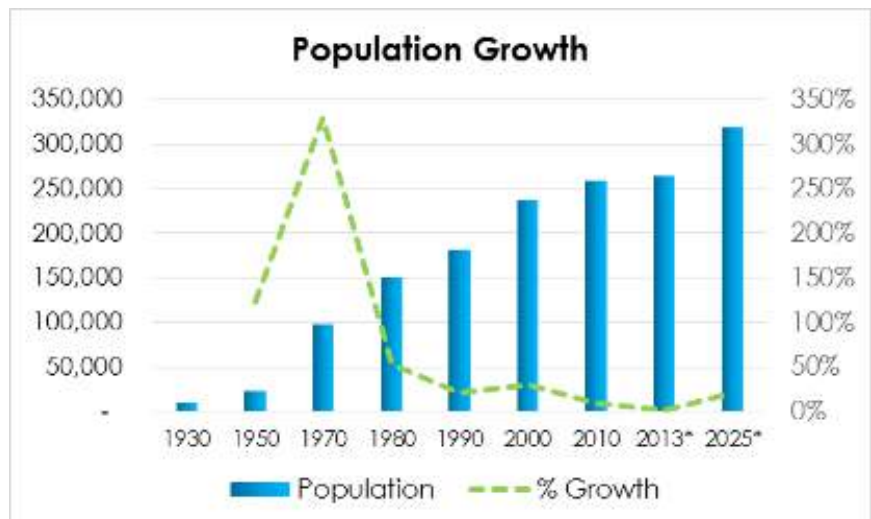
Unemployment Rates



### 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.



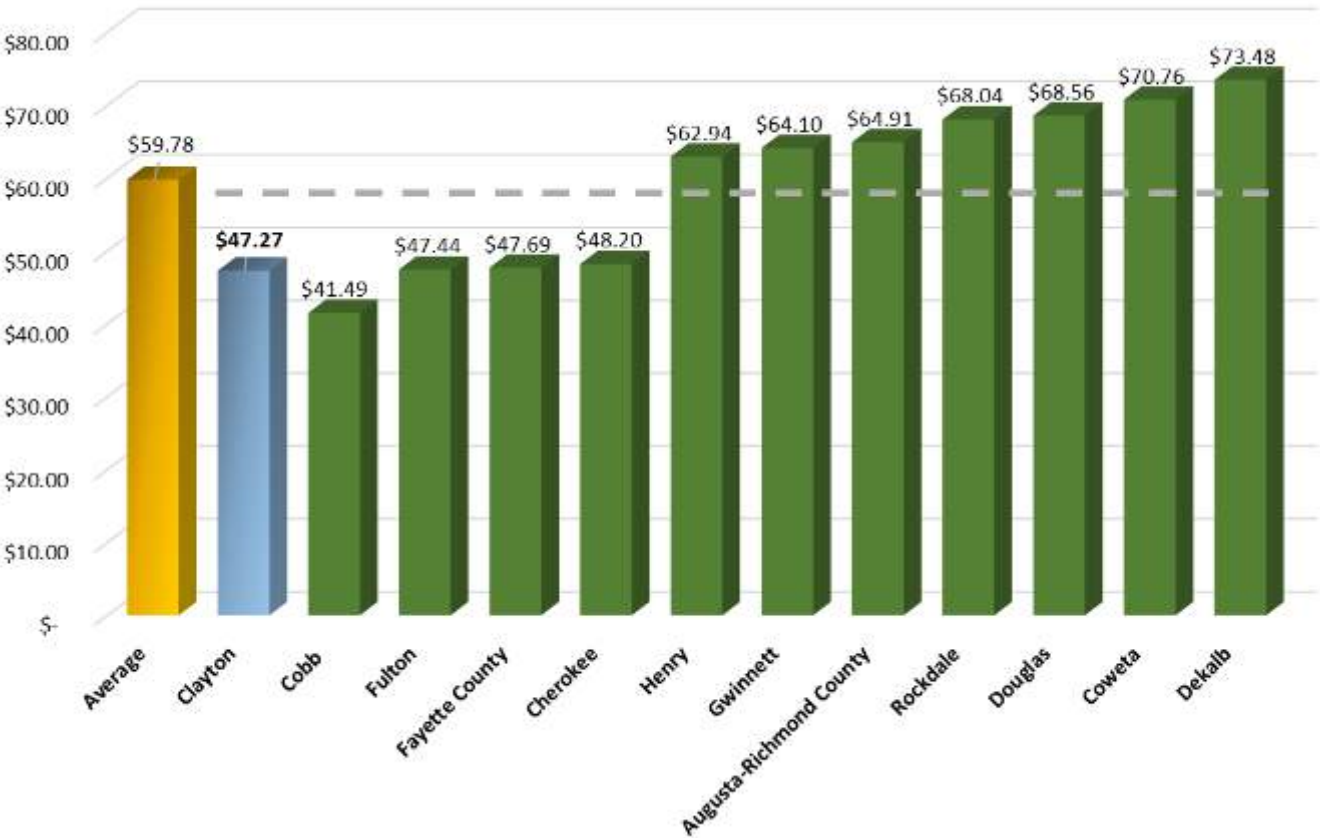


Quality and cost of labor are key drivers in every location decision. Georgia’s Quick Start work force development program is one of the best in the nation and provides customized training at no cost to qualified companies in an array of industries. Nearly one million workers at 6,200 companies of all sizes have benefited from Quick Start.

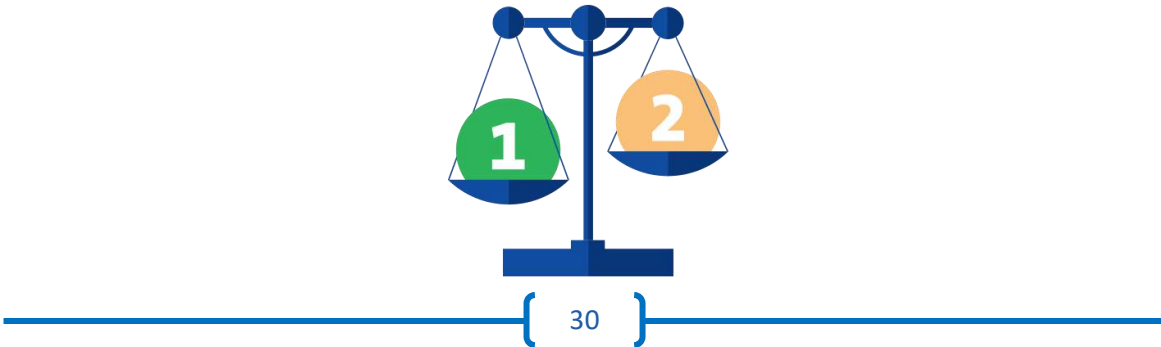
Thirty Fortune 1000 companies have headquarters in Georgia including General Motors, Hitachi, and Greenway Medical Technologies who are continuing to invest and expand in Georgia. Additionally, AT&T recently announced plans to build a research center in Atlanta to develop the company’s latest technologies 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 \$47.27, CCWA customers have an average combined water and sewer bill that is \$12.51, or 21 percent, lower than our benchmark utilities charge their customers. The Authority is able to provide water to its customers at a reasonable cost by controlling its own costs.

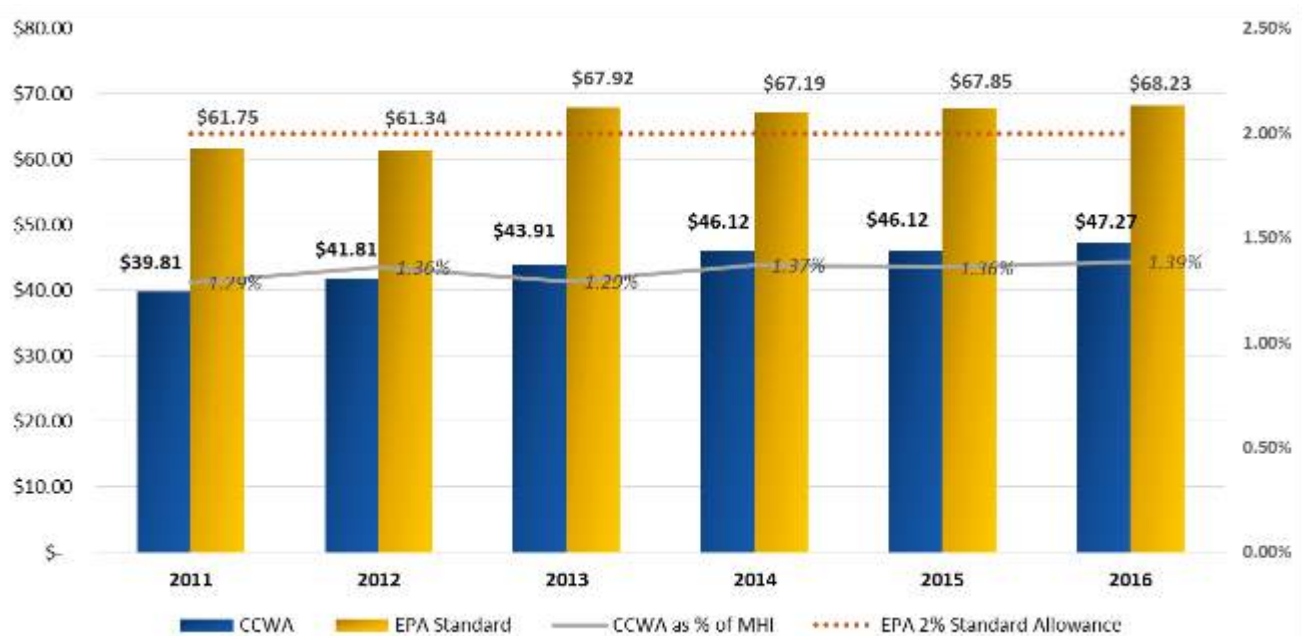




CCWA Average Bill Comparison with EPA Standard

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
2011	4,000	\$ 37,050	\$ 39.81	\$ 477.72	1.29%	\$ 61.75	\$ 21.94	64.47%
2012	4,000	36,804	41.81	501.72	1.36%	61.34	19.53	68.16%
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%

The EPA sets a standard of affordability for average monthly bills. This standard is 2 percent of median household income standard or \$68.23 for CCWA customers. Our customers pay \$20.96 less than what the EPA deems affordable.



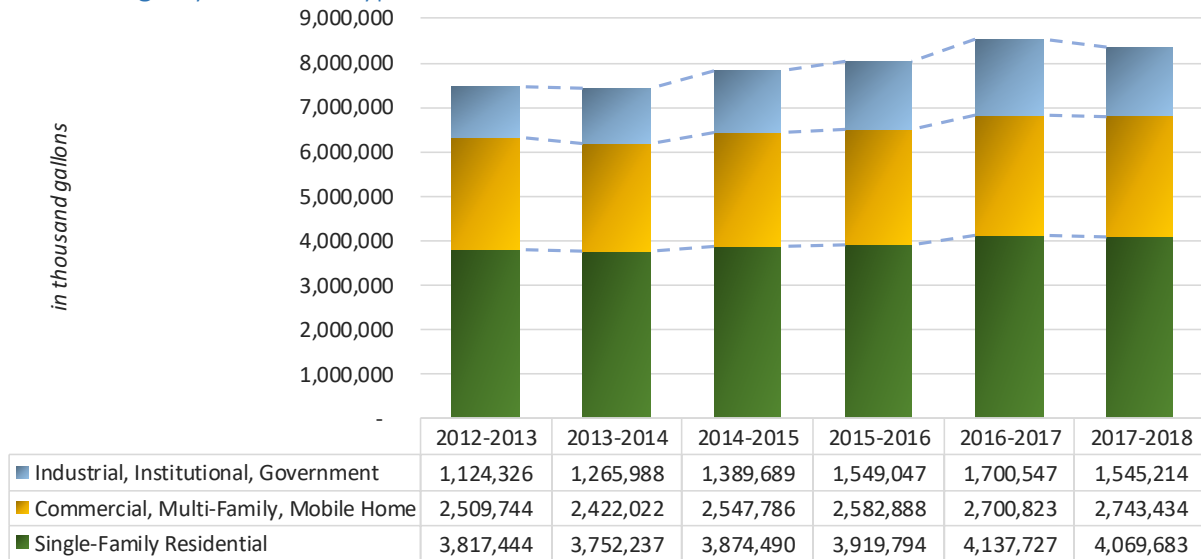


## Financial Highlights and Trends

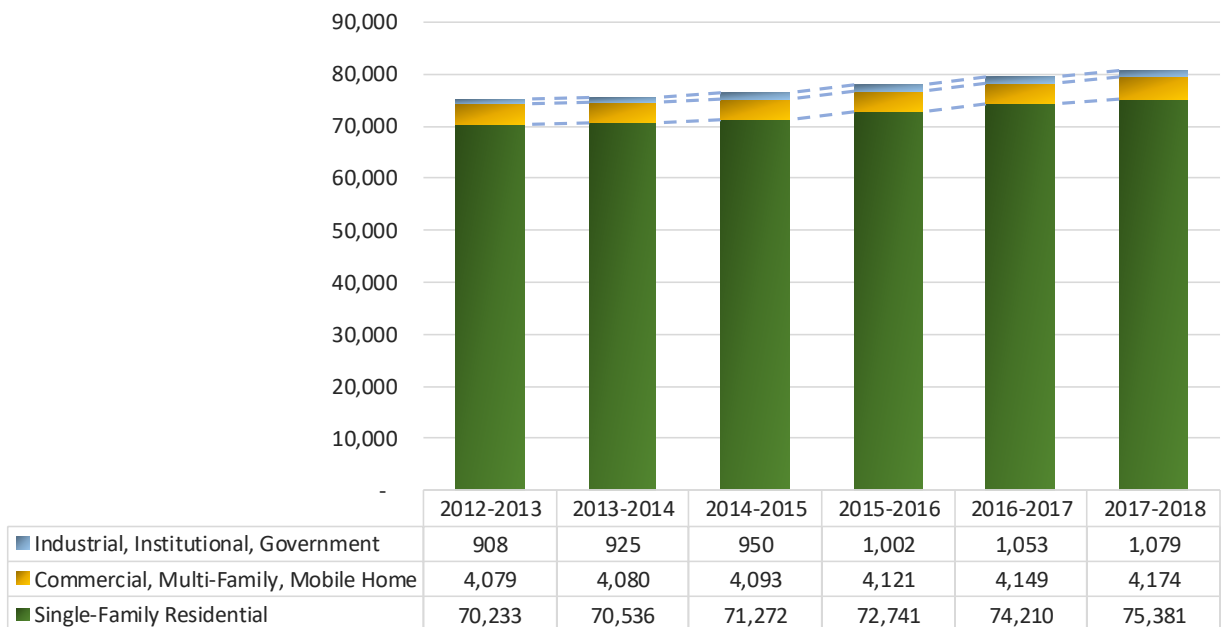
Water usage has steadily increased in all CCWA customer categories since FY 2014-2015. Although water usage was down slightly from the previous year due to the drought conditions experienced in FY 2016 – 2017, it continues to trend upward over the previous four years. Sewer usage, measured against water 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 2 percent annual growth over the last three fiscal years.

The number of stormwater customers in all CCWA customer categories increased an average of 1.5 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

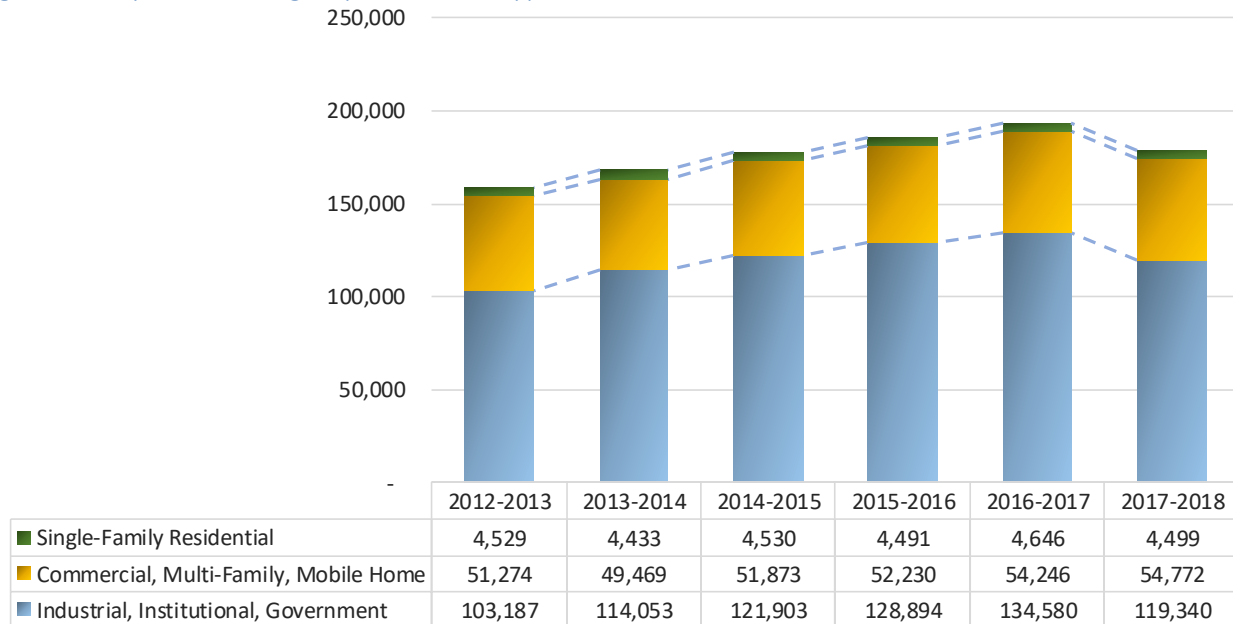


### Water Customers by Type

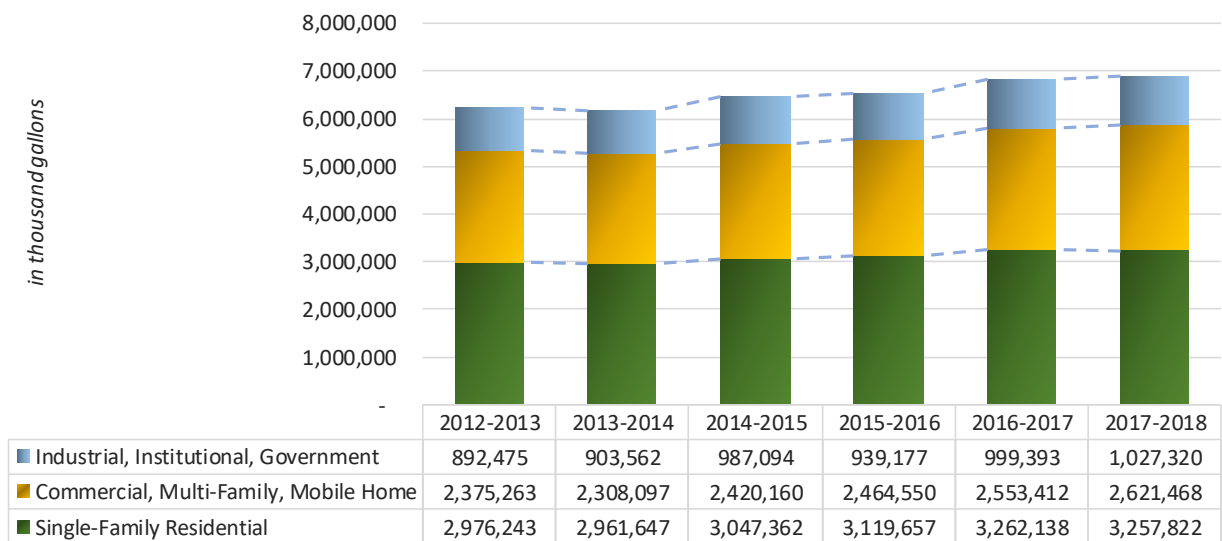




### Average Monthly Water Usage by Customer Type

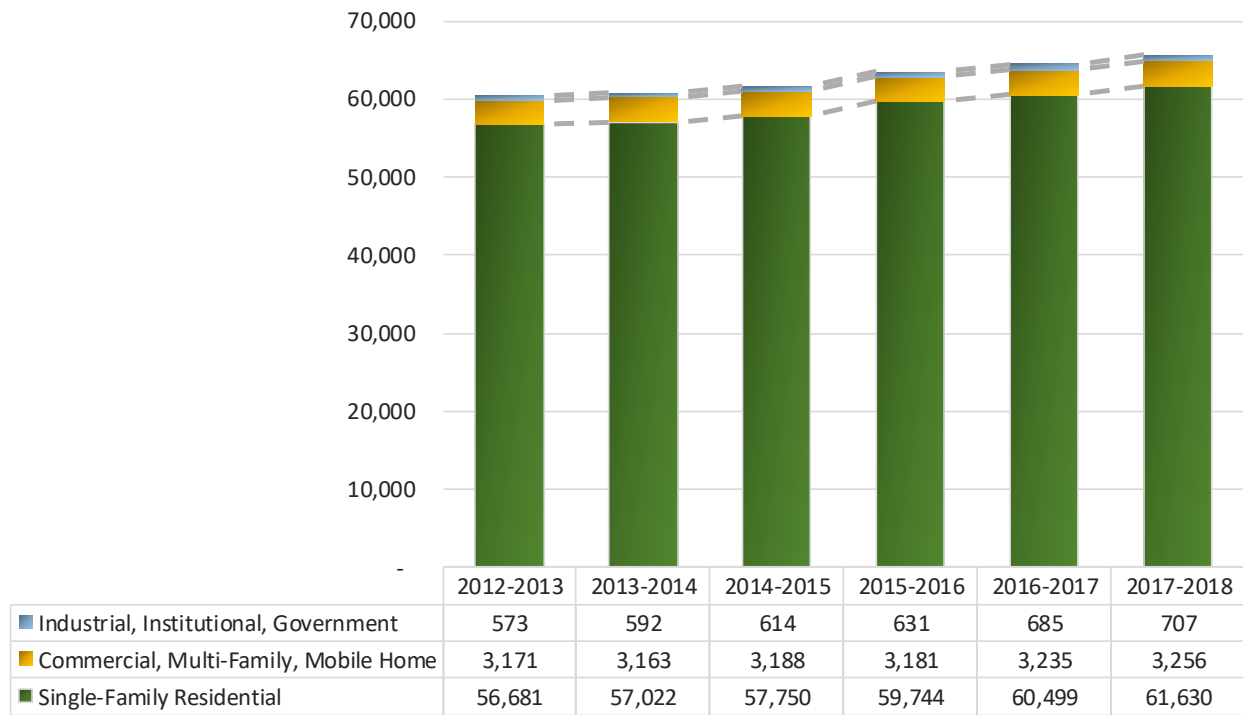


### Annual Sewer Usage by Customer Type

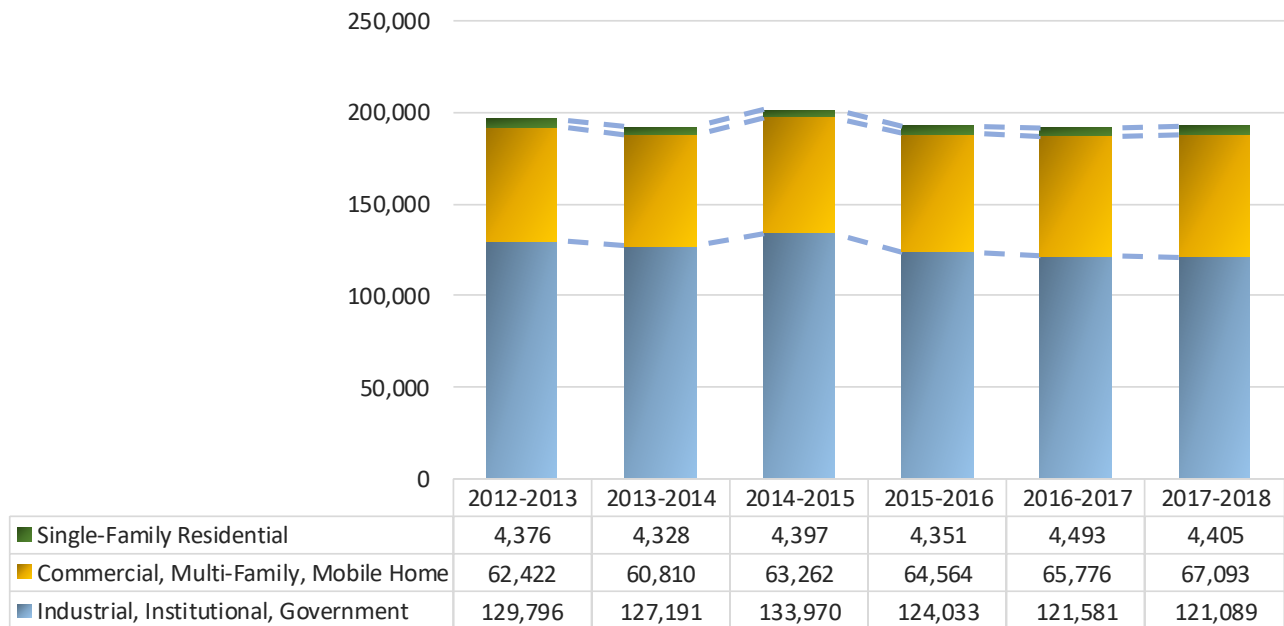




## Sewer Customers by Type

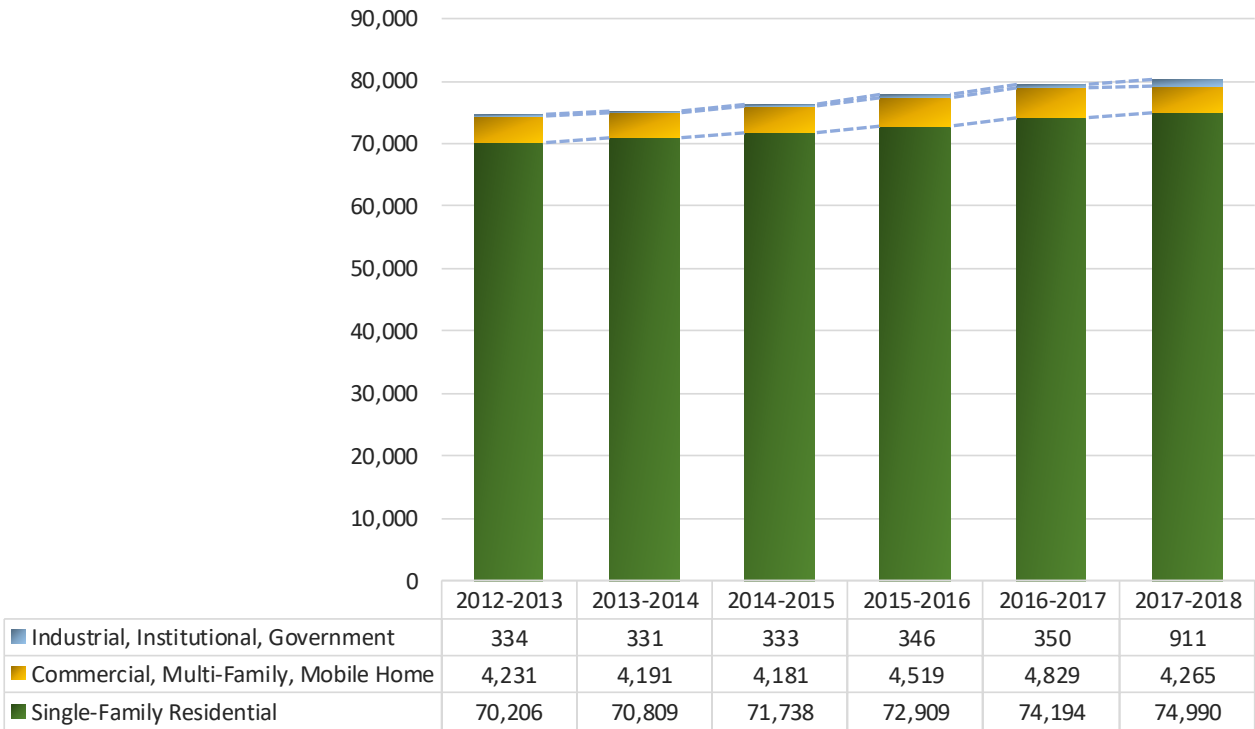


## Average Monthly Sewer Usage by Customer Type





Stormwater Customers by Type



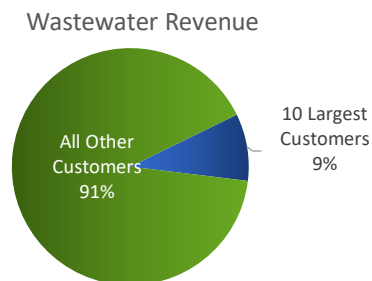
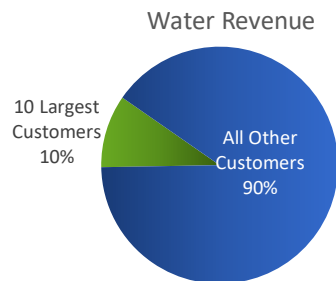




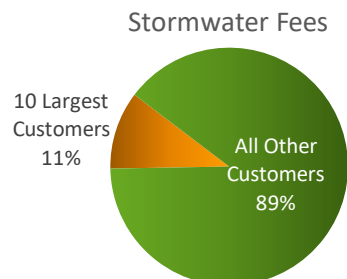
## Top 10 Customers

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%
Marcree 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%
<b>10 Largest Customers</b>	<b>\$ 5,128,033</b>	<b>9.93%</b>	<b>\$ 4,055,698</b>	<b>9.15%</b>
All Other Customers	46,510,747	90.07%	40,261,258	90.85%
<b>Total</b>	<b>\$ 51,638,780</b>	<b>100.00%</b>	<b>\$ 44,316,956</b>	<b>100.00%</b>



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%
<b>10 Largest Customers</b>	<b>\$ 1,046,072</b>	<b>10.60%</b>
All Other Customers	8,823,213	89.40%
<b>Total</b>	<b>\$ 9,869,285</b>	<b>100.00%</b>



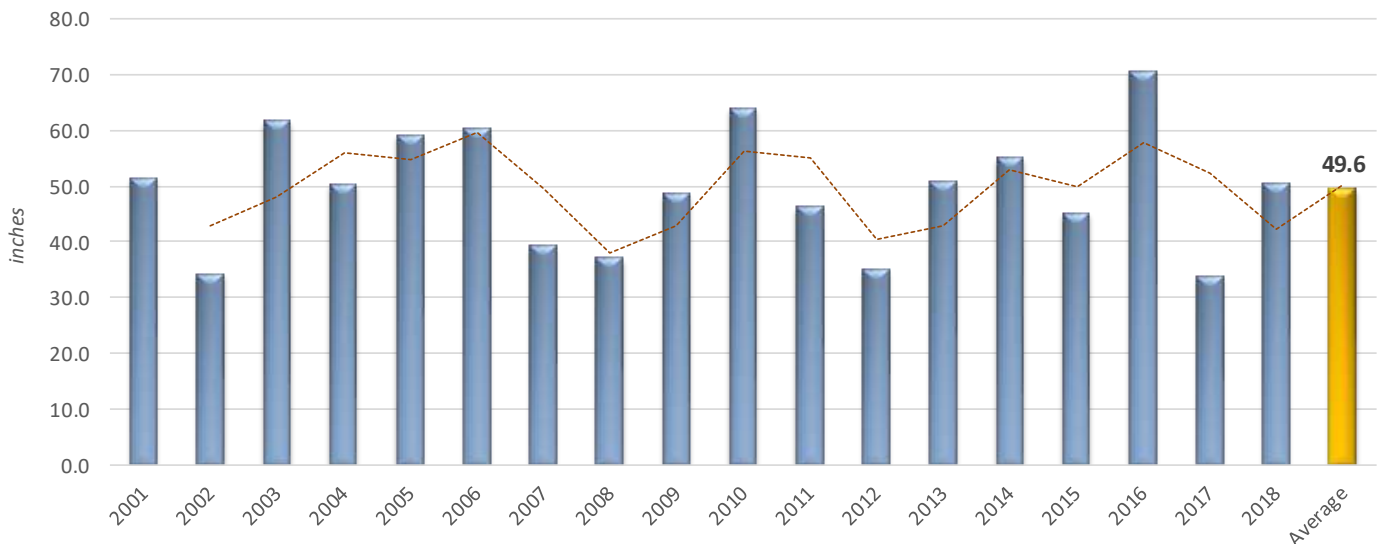


## Weather Conditions

Weather influences both the supply and demand of water. Higher rainfall levels increase operating costs of a water utility. When surface water is the source of drinking water, more chemicals may be needed to treat drinking water. 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 the amount of time sewer pumps must run to manage the additional flow, increasing utility costs. 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.

While operating costs increase, 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 and less drinking water is consumed because less work is done outdoors, and average temperatures are lower on rainy days.

The metro-Atlanta area received record-breaking rainfall during 2016 but water usage for the Authority remained relatively consistent with the previous year.



The amount of rainfall also affects the operating cost of Water Production. 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.



## Priorities and Challenges

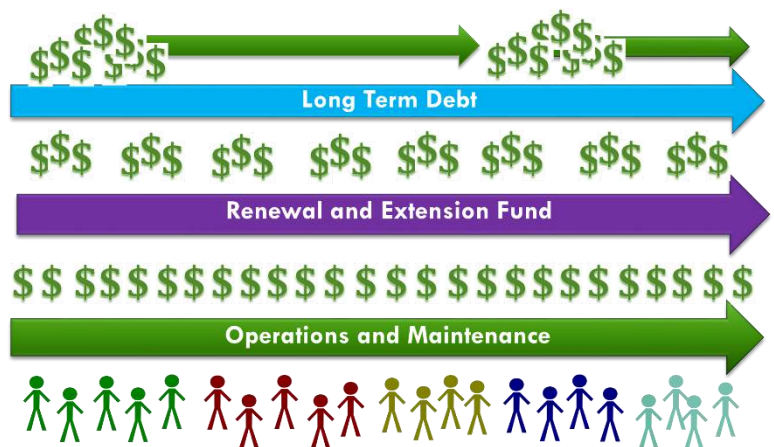
The table below lists the challenges that the Authority faces and managements approach to addressing these issues.

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.
Aging, deteriorating underground infrastructure	Utilize risk-based approaches to maintain, upgrade, and operate existing physical assets cost effectively.

## 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 \$60M 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. It has a current outstanding principal balance of \$3.9M, and its final payment will be November 1, 2025. The second loan funded the addition of backflow devices within our distribution system. It has a current outstanding principal balance of \$2.2M and matures on April 1, 2026.

CCWA has five bond issues with a combined outstanding debt of \$121.1M. 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.

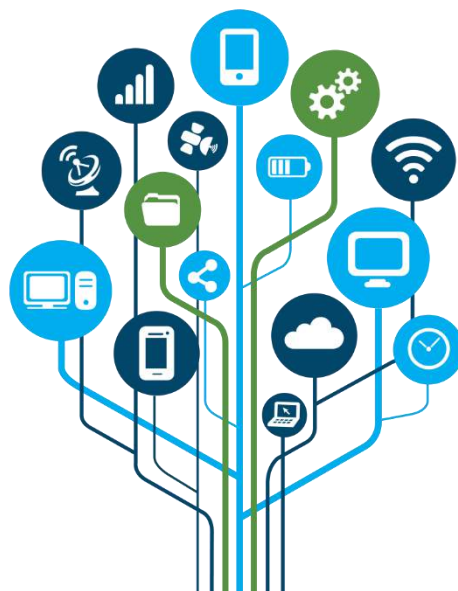
Additional detail about the Authority's debt can be found in the [PLANNING AND DIRECTION](#) section under [Debt](#).

### 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.

### 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, two of the largest are currently underway, the implementation of the new Customer Information System (estimated completion July 2019) and the JD Edwards Enterprise Resource Program (ERP) upgrade (estimated completion of phase 1 October 1, 2018). These projects are funded from the Renewal and Extension Fund, which accumulated funds from previous budget years. Both systems require the development of interfaces 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 2018-2019 capital budget includes \$250K for this development along with 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, four projects are receiving \$1.3M from the FY 2018-2019 budget. Two additional projects totaling \$6.6M will be funded with part of the surplus from FY 2017-2018 budget, as directed by the Board of Directors at FYE 2018. 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
<b>1. Nutrient Criteria</b>	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
<b>2. Capacity, Management, Operations, and Maintenance (CMOM)</b>	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	
<b>3. Biosolids</b>	CCWA must comply with 40 Code of Federal Regulations (CFR) Part 503 for biosolids management.		X		X		
<b>4. Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR)</b>	This EPA rule provides additional public health protection against microbial pathogens in public water systems with potential water treatment and monitoring.	X			X		
<b>5. Disinfection By-Product (DBP) Control (Stage 2D/DBPR)</b>	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		
<b>6. Perchlorate</b>	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
<b>7. Fluoride</b>	Health and Human Services (HHS) and EPA have proposed lowering the current allowable concentration of fluoride in potable water.	X				X	X
<b>8. Lead and Copper</b>	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	
<b>9. National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4)</b>	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	
<b>10. Total Maximum Daily Loads (TMDLs) Program</b>	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	
<b>11. Emerging Contaminants</b>	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
<b>12. Drought Management Rule</b>	GAEPD has issued a draft drought management rule to clarify requirements for utilities during periods of drought.	X					X
<b>13. Rules for Public Water Systems to Improve Water Supply Efficiency</b>	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
<b>14. 2010 Georgia Water Stewardship Act</b>	CCWA must comply with the Stewardship Act, including water loss audits and enforcement of water restrictions.	X			X		
<b>15. Georgia State Regional Water Plans</b>	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	
<b>16. Metropolitan North Georgia Water Planning District Requirements</b>	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	



## Aging Infrastructure

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 EPA estimates that over the next 20 years the price to repair the aging water infrastructure throughout the US will reach \$335B. 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, \$18.5M in funding will be needed in the upcoming year with \$4.1M of that amount included in the 2018 – 2019 budget. Loan disbursements will cover \$6M of the Large Interceptor Rehabilitation funding need and the remaining \$8.4M 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
<b>Lifespan (50 yrs.)</b>	60 miles year	\$50-\$100/foot		<b>\$16-\$31M</b>
<b>90/10 Rule</b>	Inspect 3000 miles	\$5/foot	\$160M	<b>\$16-\$23M</b>
	Replace 300 miles	\$50-\$100/foot		
<b>Strategic Master Plan</b>	--	--	\$162M	<b>\$16M</b>

Several factors contribute to the lifespan of pipeline assets.

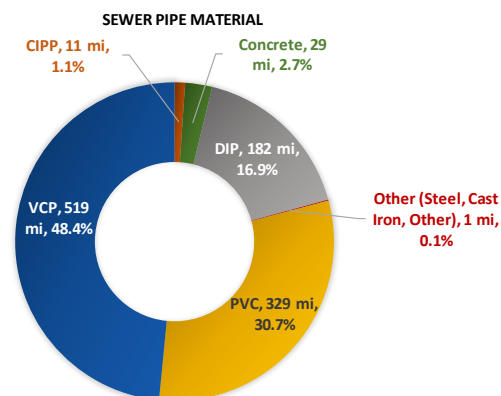
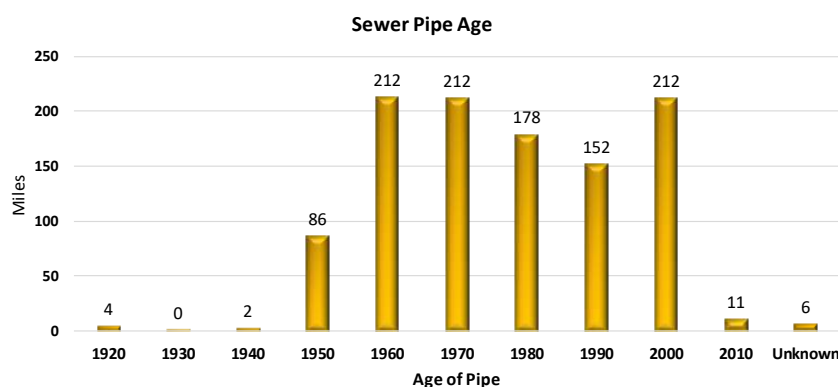
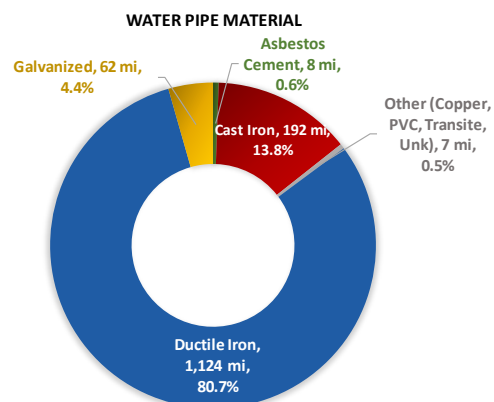
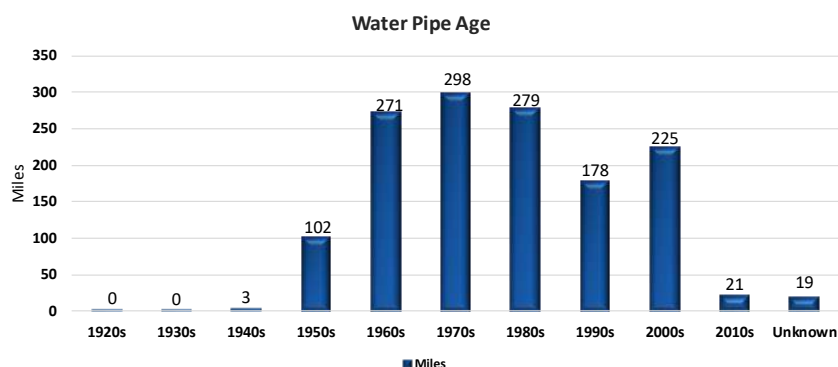
- **Age:** Over 300 miles of sewer pipe is older than an average 50-year lifespan
- **Material:** An important indicator of condition and lifespan
- **Corrosion:** Significant issue that affects lifespan particularly in concrete and ductile iron sewer pipe.
- **Construction Quality:** Quality of construction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







## Pipe Material and Age



### PIPE TYPES:

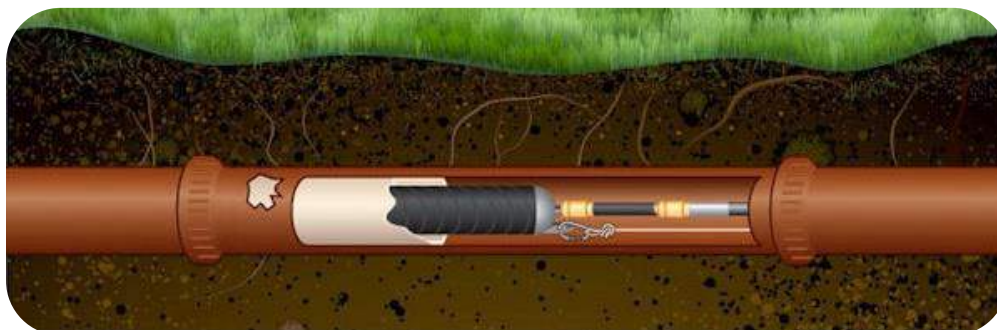
#### Used in sewer systems:

- 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

- Concrete

#### Used in water systems:

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







## Summary of Factors Influencing the 2018 - 2019 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 Georgia Environmental Finance Authority (Clean Water State Revolving Fund program) for [Large Sewer Interceptor Rehabilitation](#). Principal of \$25M, interest rate of 0.65%, repayment term of 15 years.
- A shift in project priorities due to a water taste and odor issue in Fall 2017 that affected customers in the northern part of the County
- Water consumption consistent with previous two fiscal years
- Possible drought restrictions imposed by the Georgia Environmental Protection Division
- No new rate or fee adjustments



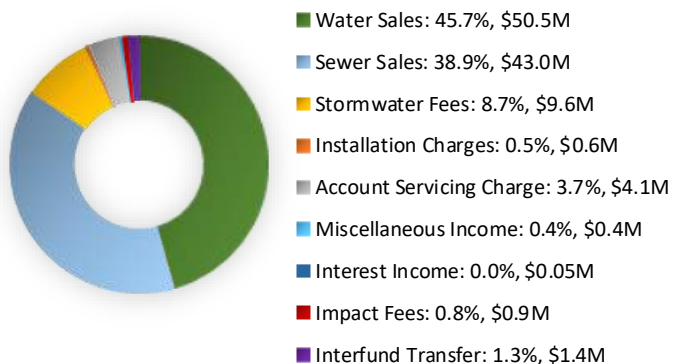


## EXECUTIVE SUMMARY

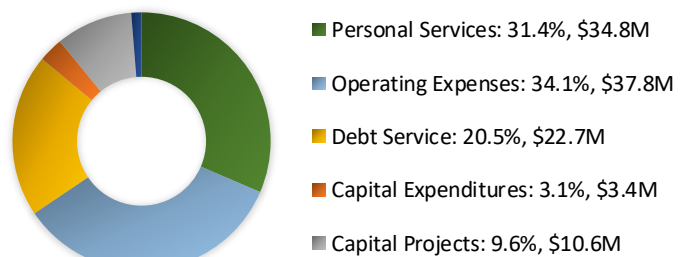
## Consolidated Budget - FY 2018 - 2019

	Water and Sewer Fund	Stormwater Fund	Total
<b>Revenues</b>			
Water Sales	\$ 50,548,433	\$ -	\$ 50,548,433
Sewer Sales	43,040,471	-	43,040,471
Stormwater Fees	-	9,641,417	9,641,417
Installation Charges	604,436	-	604,436
Account Servicing Charge	3,963,678	157,205	4,120,883
Miscellaneous Income	426,118	4,445	430,563
Interest Income	39,332	5,193	44,525
Impact Fees	877,530	-	877,530
Interfund Transfer	1,413,558	-	1,413,558
<b>Total Revenues</b>	<b>\$ 100,913,556</b>	<b>\$ 9,808,260</b>	<b>\$ 110,721,816</b>
<b>Expenses</b>			
Personal Services	\$ 33,040,328	\$ 1,779,875	\$ 34,820,203
Operating Expenses	34,972,889	2,784,796	37,757,685
Debt Service	22,652,004	-	22,652,004
Interfund Transfer - Revenue Fund	-	1,413,558	1,413,558
Capital Expenditures	2,892,335	537,030	3,429,365
Capital Projects	7,356,000	3,293,001	10,649,001
<b>Total Expenses and Appropriations</b>	<b>\$ 100,913,556</b>	<b>\$ 9,808,260</b>	<b>\$ 110,721,816</b>

**Revenues -  
Funds Combined**



**Expenses -  
Funds Combined**





## Budget Summary: Water and Sewer Fund

(in millions)

	Budget FY 2017 - 2018	Est Actual FY 2017 - 2018	Budget FY 2018 - 2019	% Chg Budget FYE 18 -FYE 19	% Chg Act FYE 2018 with Budget FY 2017-2018	% Chg Est Act FYE 18 to Budget FYE 19
<b>REVENUES</b>						
Water Sales	\$51.21 M	\$51.55 M	\$50.55 M	-1.3%	0.7%	-1.9%
Sewer Sales	42.54 M	43.76 M	43.04 M	1.2%	2.9%	-1.6%
Installation Charges	0.12 M	0.97 M	0.60 M	420.8%	734.6%	-39.3%
Account Service Charges	3.79 M	3.89 M	3.96 M	4.6%	2.6%	1.8%
Miscellaneous Income	0.50 M	2.31 M	0.43 M	-14.5%	363.5%	-214.0%
Interest Income	0.04 M	0.04 M	0.04 M	11.3%	11.3%	0.0%
Impact Fees	0.86 M	1.94 M	0.88 M	1.7%	124.5%	-79.4%
Interfund Transfer	1.15 M	1.16 M	1.41 M	23.3%	1.4%	13.5%
<b>TOTAL REVENUES</b>	<b>\$100.20 M</b>	<b>\$105.62 M</b>	<b>\$100.91 M</b>	<b>0.7%</b>	<b>5.4%</b>	<b>-4.4%</b>
<b>EXPENSES</b>						
Personal Services	\$30.86 M	\$27.33 M	\$33.04 M	7.0%	-11.5%	20.3%
Operating Expenses	33.94 M	31.66 M	34.97 M	3.0%	-6.7%	12.8%
Debt Service	21.05 M	21.05 M	22.65 M	7.6%	0.0%	7.6%
Capital Expenditures	1.71 M	2.07 M	2.89 M	69.0%	20.8%	52.5%
Capital Projects	12.64 M	12.97 M	7.36 M	-41.8%	2.6%	-20.9%
<b>TOTAL EXPENSES</b>	<b>\$100.20 M</b>	<b>\$95.07 M</b>	<b>\$100.91 M</b>	<b>0.7%</b>	<b>-5.1%</b>	<b>5.6%</b>

The 2018 – 2019 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, 2018 are estimated at \$105.6M or 5.4 percent higher than budgeted.

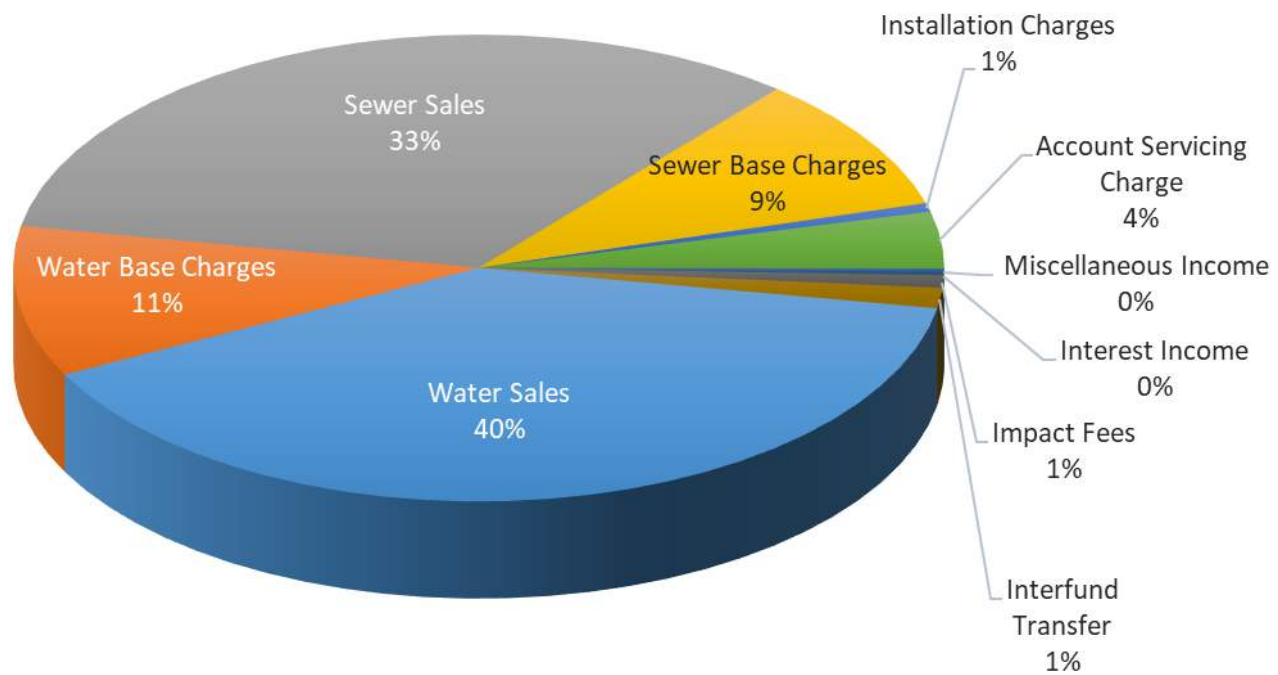
Forecasted revenues for FY 2018 – 2019 are expected to remain flat with this year's actual performance. Budgeted revenues for water and sewer sales were discounted by 2 percent to anticipate declines in usage due to water restrictions imposed by a drought response, changes in weather conditions, or rainfall. Estimated actual revenue in the current fiscal year from Installation Charges (Tap Fees) and Impact Fees were \$853K and \$1.1M, 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.

Additional favorable revenue variances to budget were due to the sale of timber, which accounted for \$1.4M of the difference, and from a payment of \$400K from the Forest Park Urban Redevelopment Agency for the partial cost reimbursement for pipe infrastructure. Revenue from timber harvests are not budgeted because a timber management consultant bases the timing of the harvest on weather and timber prices that can fluctuate significantly. The Authority entered into an Intergovernmental Agreement with the Forest Park Redevelopment Agency to assist in the County's economic development efforts to convert the Fort Gillem military base into a large industrial and commercial center. The reimbursement from the redevelopment agency to the Authority occurs as companies locate within the new center. Because the timing of occupancy is unpredictable, revenues from the Intergovernmental Agreement are not budgeted.



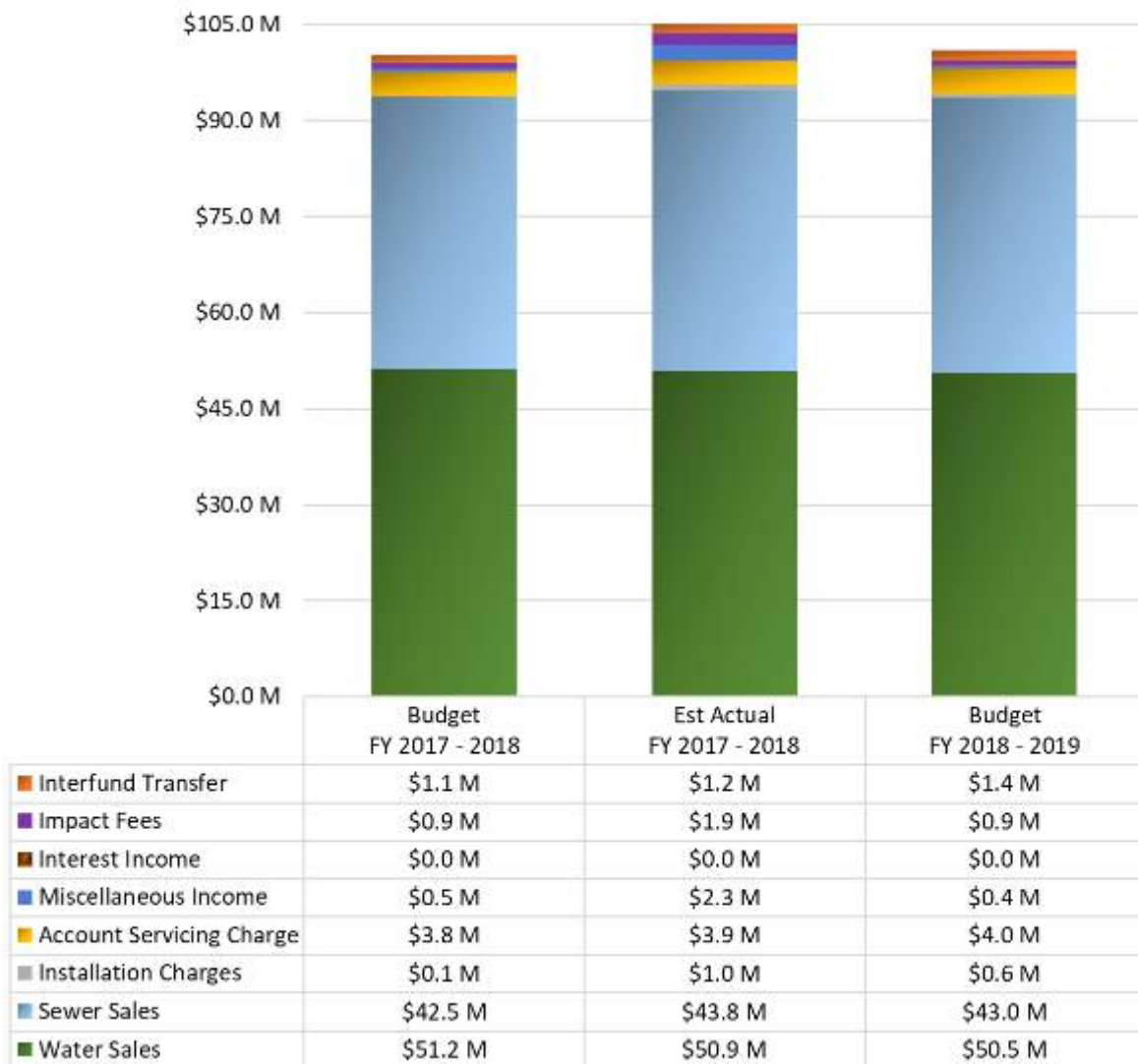
Of the \$100.9M in revenue generated in this budget year, \$10.2M or 10 percent, will be reinvested in the utility system via capital equipment and projects. Another \$22.7M or 22 percent will be used to repay debt utilized for previous capital projects and construction interest on the Authority's recent loan for a portion of its sewer outfall rehabilitation project. The remaining \$68.0M will cover operating expenses of the Water and Sewer Fund including salaries and benefits of employees. The *Contingency Fund*, an account within *Operating Expenses*, will hold \$2.1M. This account is used to fund emergency projects if the need arises during the year.

### Water and Sewer Fund Revenues as Percent of FY 2018-2019 Budget





## Analysis of Revenues - Water and Sewer Fund



### Revenue Budget Assumptions FY 2018 - 2019

*Water Sales* are forecasted at \$50.5M in the upcoming budget year with \$10.5M of that amount coming from base charges. This is \$661K less than the previous budget year and \$1.0M or 2 percent less than estimated actual performance of the year ending April 30, 2018. *Sewer sales* are projected to be \$43.0M in the current budget. This is 1.6 percent lower than estimated actual performance. Base sewer charges comprise \$9.5M 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. Revenues in this category were discounted due to potential drought restrictions that could restrict water usage and are in line with the average of the previous three years.

Estimated actual water sales to cities (College Park) will end \$387K less than budgeted. 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.



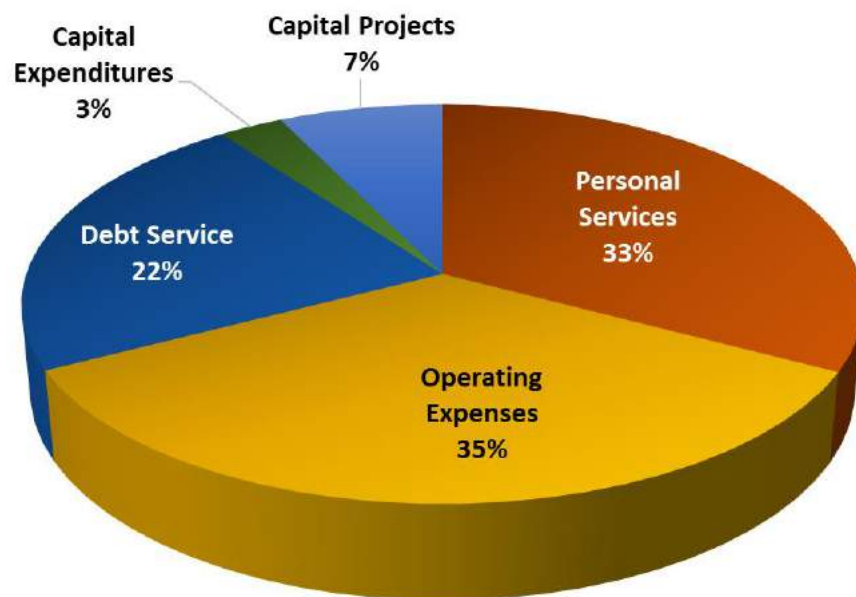
*Installation Charges* are revenues received from the installation of meters or other related infrastructure to provide water and sewer services. This revenue category was budgeted at \$604K, the average actual revenue received in the previous five fiscal years.

*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 \$3.9M, 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, timber harvests, sale of fertilizer pellets, intergovernmental transactions, and property and cell tower rental fees. This revenue was budgeted at \$426K, approximately the same as 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 \$1.4M. This is a monthly charge of \$118K versus the \$96K per month charged in the previous year. This fee is calculated using the prior fiscal year's actual expenses for certain administrative departments.

### Water and Sewer Fund Expenses as Percent of Budget







## Analysis of Expenses - Water and Sewer Fund



## Operating and Capital Expense Budget Assumptions FY 2018 - 2019

### 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, whether given or not. *Salaries* and *Payroll Taxes* of \$22.5M and \$1.7M combined for an overall budget increase of \$751K or 3.2 percent over the previous year budget. For the last five fiscal years, the budgeted amount for *Salaries* had an average annual increase of 4.0 percent budget year to budget year. The \$708K increase is due to net changes in new and eliminated positions and upgrades and downgrades of current positions. Actual salary expenses have been 6 percent lower than budgeted over the most recent five fiscal years.

Medical and related *Benefits* of \$4.9M are \$1.1M or 28 percent higher than the previous year budget due to recent increases in insurance costs. In fiscal year 2015 - 2016, the Authority adopted a self-funded insurance program for its medical, life, and disability insurances, which has provided more control over the cost of these benefits but still cannot completely curb the general escalation of cost for these benefits.

*Pension* expense of \$3.1M is \$175K higher than the previous budget year. Of the increase, \$105K is the additional contribution necessary to maintain the set allocation between Clayton County employees and Authority employees of 85 percent and 15 percent, respectively. Because this line item is budgeted as a percentage of salaries, actual expenses for this line item average 6 percent less than the budgeted amount over the previous five years.



## Operating Expenses

**Operating Expenses** are \$35.0M for the new budget year and up 3.0 percent or \$1.0M from the previous budget. This increase is primarily due to the increase of the amount budgeted for *Outside Services*, which is \$1.5M higher in the current budget year. This increase is due to the implementation of recently completed projects and initiatives such as the monitoring and maintenance of the water quality projects completed at the reservoirs; services to connect additional plant equipment to the SCADA system; and annual security monitoring for the newly implemented security systems at plants and facilities throughout the Authority.

The *Operating Materials and Supplies* category of \$4.2M is down \$196K or 5 percent from the previous year budget. *Chemical* expenses make up about \$2.0M of this category and remain flat with the previous year budget. Another large account in this category, is *Other Materials* budgeted at \$1.5M. This account is budgeted at \$314K lower than the previous year because large meter projects are now being funded and installed within the Renewal and Extension Fund. This line item includes various supply needs, not large enough to merit a separate expense account, and includes items from the warehouse such as washers, pipefittings, 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 remained flat with 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 \$488K in the current fiscal year, which is down \$26K from last year's budget. Actual expenses in this category have averaged \$492K over the previous five years and \$415K over the previous three years due to dropping 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 at \$310K and is down \$18K or 5.4 percent from the FY 2017 – 2018 budget.

The *Special Purchases* expense category contains the line items *Water Purchases*, *Employee Recognition*, *Toilet Rebate*, and the *Hardship Assistance Program*. 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 \$2.1M, which is \$730K lower than the previous year budget.

*Utility* expense is budgeted at \$7.8M, which is \$19K or 0.2 percent higher than the previous budget year.

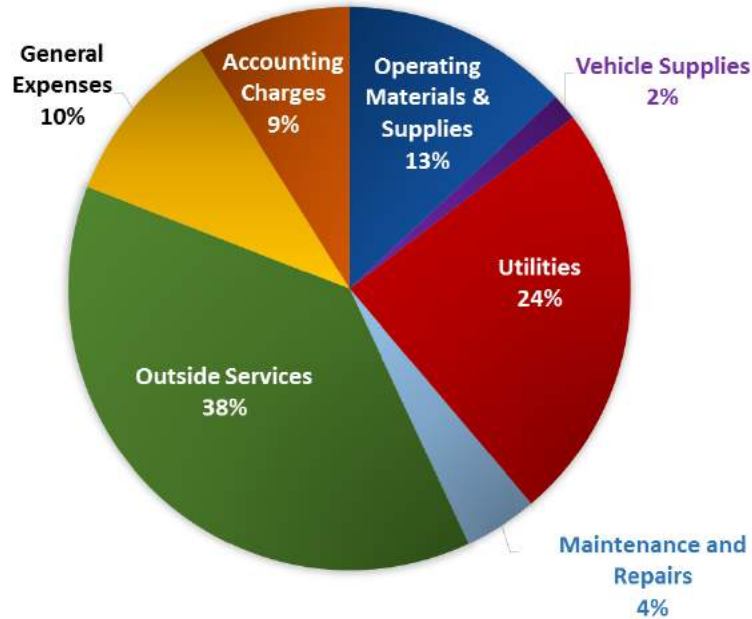
*Maintenance and Repair* expenses have been budgeted at \$1.4M, which is \$113K higher than the prior year budget. Actual expenses over the prior five fiscal years have averaged \$1.0M. The higher budgeted amount provides a safeguard against an unplanned repair caused by weather or emergency event.

*Outside Services* expense category of \$12.2M is up \$1.9M or 18 percent from the previous year budget. The increase in this category is due to annual services related to the completion of recently completed projects and initiatives. The implementation of the water quality Improvement projects account for \$1.4M of the increase. These additional funds are budgeted for the leased oxygen tank and monthly oxygen deliveries at the Blalock reservoir and the equipment integration and monitoring of water quality at Hooper, Blalock, and Shamrock reservoirs. Security monitoring and maintenance increased this expense category by \$200K due to the implementation of the organization's security project.



The *General Expenses* category contains the expense line items of *Employee Bonding*, *Property Insurance*, *Training*, and *Annual Software License Fees*. At \$3.3M, the *General Expenses* category has increased \$379K or 13 percent from the previous year budget. The purchase of new *Annual Software Licenses* for security and Microsoft, as well as, increases from our major enterprise software vendors for our Customer Information System and Enterprise Resource Program accounted for \$257K of the increase. *Property Insurance* and *Employee Bonding and Liability Insurance* accounted for \$57K of the increase.

#### Operating Expenses - Percentage by Category Type



#### Debt Service

*Debt Service* includes the required bond debt service for the upcoming year of \$21.1M; the principal and interest payments for two GEFA loans totaling \$798K; and estimated interest-only payments 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. The current year budgeted request is \$2.9M which is \$1.2M higher than the previous year budget. The actual performance, over the previous five fiscal years, has averaged \$1.6M. The increase in this budget year is due to the atypical replacements of larger equipment that includes a dump truck (\$90K), a large box truck (\$94K), a mid-size excavator (\$89K), a skid-steer loader (\$89K), and an aquatic vegetation excavator for the constructed wetlands (\$78M). 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	\$ 801,640	\$ 35,358	\$ 836,998
Trailers	15,000	-	15,000
Buildings and Structures			
Building, Roof, Paving	-	195,000	195,000
Tanks and Containers	387,000	-	387,000
Equipment			
Field Equipment	319,766	107,490	427,256
Data Processing/IT System Equipment	95,000	223,000	318,000
Plant Equipment	350,999	166,575	517,574
Desk, Tables, & Racks	54,307	-	54,307
Other	22,600	118,600	141,200
<b>Total Capital Equipment</b>	<b>\$ 2,046,312</b>	<b>\$ 846,023</b>	<b>\$ 2,892,335</b>





### 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 \$7.4M is \$5.1M lower than the previous budget year, based on project need. The average budgeted amount in this category, over the previous five years, is \$9.4M. 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 2018 – 2019 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

Project Description	Amount Budgeted	Project Description	Amount Budgeted
HQ Restroom Renovations	\$ 60,000	Galvanized Main Replacements	\$ 1,750,000
Infrastructure Improvements	25,000	Basin Level Sewer Rehabilitation	2,000,000
Auto Attendant Upgrade	23,000	Jesters Creek Outfall East Replacement- Design	300,000
Voice Environment Upgrade	38,000	CIS Integration Support	75,000
Help Desk Renovations	10,000	JDE Integration Support	75,000
Fire Hydrant Meters (15)	30,000	Large Meter Replacements	500,000
Upgrade Breakroom - Hicks Plant	10,000	DOT - Stagecoach & Steel Rd	389,000
Pump Repairs (2)	60,000	DOT - Tara Blvd	380,000
Flow Meters/Controllers/ Software	80,000	Casey Capacity Evaluation	100,000
2020 Strategic Master Plan	750,000	Baffles for three Secondary Clarifiers	60,000
Distribution System Model Follow-up Projects	500,000	Scum Trough Assembly	37,000
Sewer Line Inspection	10,000	Primary Clarifier Solids Meter	24,000
Meter Inspections	20,000	Polymer Tank	50,000
		<b>Total Capital Projects</b>	<b>\$ 7,356,000</b>







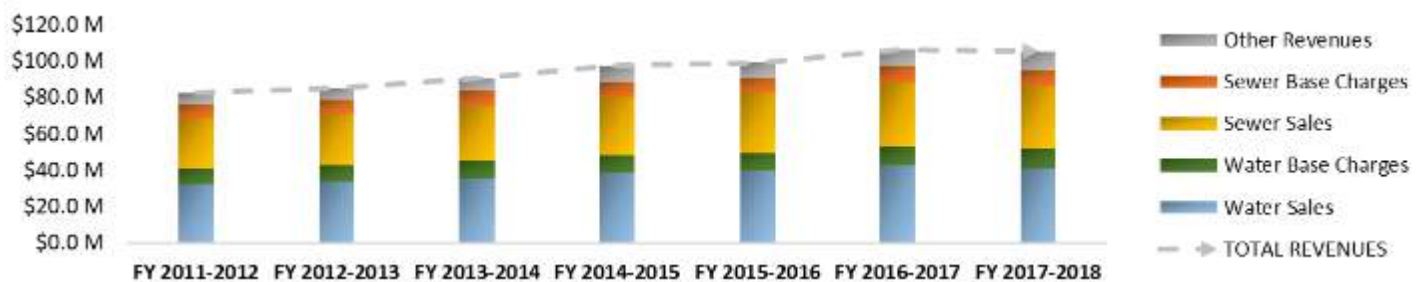
## Budgetary Analysis - Revenues and Expenses: Actual Performance to Budget Comparison

(in millions)

	Actual FY 2015 - 2016	Actual FY 2016 - 2017	Est Actual FY 2017 - 2018	Budget FY 2018 - 2019	% Chg Budget FYE 18 -FYE 19	% Chg Est Act FYE 18 to Budget FYE 19
<b>REVENUES</b>						
Water Sales	\$49.40 M	\$53.11 M	\$51.55 M	\$50.55 M	-1.3%	-1.9%
Sewer Sales	41.71 M	44.19 M	43.76 M	43.04 M	1.2%	-1.6%
Installation Charges	0.54 M	0.93 M	0.97 M	0.60 M	420.8%	-39.3%
Account Service Charges	3.91 M	4.07 M	3.89 M	3.96 M	4.6%	1.8%
Miscellaneous Income	0.64 M	0.88 M	2.31 M	0.43 M	-14.5%	-214.0%
Interest Income	0.04 M	0.04 M	0.04 M	0.04 M	11.3%	0.0%
Impact Fees	1.22 M	1.33 M	1.94 M	0.88 M	1.7%	-79.4%
Interfund Transfer	1.68 M	1.86 M	1.16 M	1.41 M	23.3%	13.5%
<b>TOTAL REVENUES</b>	<b>\$99.14 M</b>	<b>\$106.41 M</b>	<b>\$105.62 M</b>	<b>\$100.91 M</b>	<b>0.7%</b>	<b>-4.4%</b>
<b>EXPENSES</b>						
Personal Services	\$28.15 M	\$28.19 M	\$27.33 M	\$33.04 M	7.0%	20.3%
Operating Expenses	25.20 M	25.87 M	31.66 M	34.97 M	3.0%	12.8%
Debt Service	20.98 M	20.99 M	21.05 M	22.65 M	7.6%	7.6%
Capital Expenditures	1.80 M	1.57 M	2.07 M	2.89 M	69.0%	52.5%
Capital Projects	23.39 M	26.87 M	12.97 M	7.36 M	-41.8%	-20.9%
<b>TOTAL EXPENSES</b>	<b>\$99.52 M</b>	<b>\$103.48 M</b>	<b>\$95.07 M</b>	<b>\$100.91 M</b>	<b>0.7%</b>	<b>5.6%</b>

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, 2018. Projected revenue from these sources were discounted 2 percent to anticipate a decrease in usage that might occur if water restrictions are imposed by Georgia's Environmental Protection Division as a response to a drought condition.

### Actual Revenues - FY 2012 to FY 2018







## Budgetary Analysis - Revenues: Budget to Budget Comparison

(in millions)

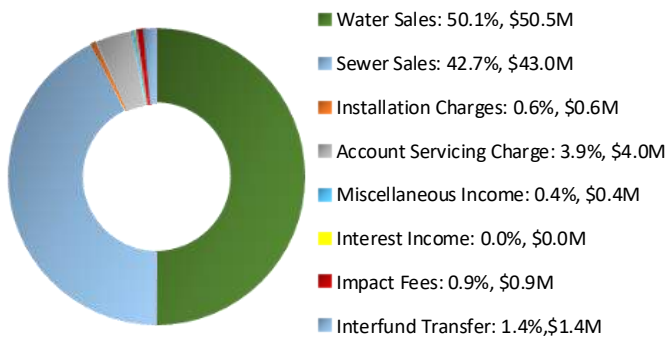
	Budget FY 2014-2015	Budget FY 2015 - 2016	% Chg Budget FYE 15 -FYE 16	Budget FY 2016 - 2017	% Chg Budget FYE 16 -FYE 17	Budget FY 2017 - 2018	% Chg Budget FYE 17 -FYE 18	Budget FY 2018 - 2019	% Chg Budget FYE 18 -FYE 19
<b>REVENUES</b>									
Water Sales	\$43.85 M	\$48.69 M	11.0%	\$47.91 M	-1.6%	\$51.21 M	6.9%	\$50.55 M	-1.3%
Sewer Sales	37.45 M	41.06 M	9.6%	41.70 M	1.6%	42.54 M	2.0%	43.04 M	1.2%
Installation Charges	0.12 M	0.21 M	67.7%	0.25 M	18.2%	0.12 M	-53.1%	0.60 M	420.8%
Account Service Charges	3.98 M	3.99 M	0.0%	3.94 M	-1.1%	3.79 M	-3.8%	3.96 M	4.6%
Miscellaneous Income	0.34 M	0.87 M	152.7%	0.68 M	-21.5%	0.50 M	-27.1%	0.43 M	-14.5%
Interest Income	0.01 M	0.01 M	25.3%	0.03 M	113.7%	0.04 M	22.9%	0.04 M	11.3%
Impact Fees	0.28 M	0.40 M	41.7%	0.52 M	29.7%	0.86 M	65.1%	0.88 M	1.7%
Interfund Transfer	1.58 M	1.68 M	6.2%	1.86 M	11.2%	1.15 M	-38.5%	1.41 M	23.3%
<b>TOTAL REVENUES</b>	<b>\$87.64 M</b>	<b>\$96.90 M</b>	<b>10.6%</b>	<b>\$96.90 M</b>	<b>0.0%</b>	<b>\$100.20 M</b>	<b>3.4%</b>	<b>\$100.91 M</b>	<b>0.7%</b>

## Budgetary Analysis - Expenses: Budget to Budget Comparison

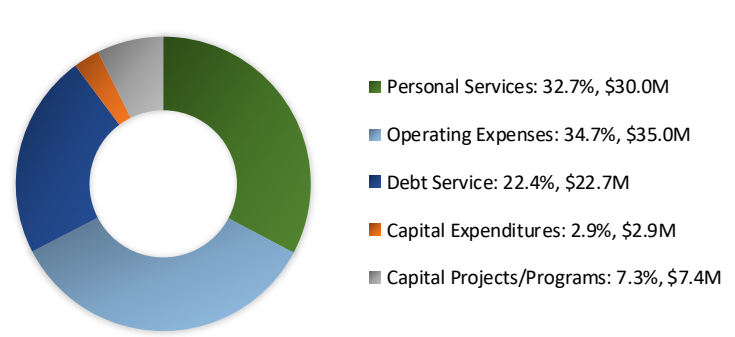
(in millions)

	Budget FY 2014-2015	Budget FY 2015 - 2016	% Chg Budget FYE 15 -FYE 16	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
<b>EXPENSES</b>									
Personal Services	\$26.64 M	\$28.12 M	5.6%	\$29.81 M	6.0%	\$30.86 M	3.6%	\$33.04 M	7.0%
Operating Expenses	29.29 M	35.08 M	19.8%	33.13 M	-5.5%	33.94 M	2.4%	34.97 M	3.0%
Debt Service	21.25 M	20.99 M	-1.2%	20.99 M	0.0%	21.05 M	0.3%	22.65 M	7.6%
Capital Expenditures	2.93 M	2.19 M	-25.4%	1.79 M	-18.4%	1.71 M	-4.2%	2.89 M	69.0%
Capital Projects	7.52 M	10.52 M	39.9%	11.18 M	6.3%	12.64 M	13.0%	7.36 M	-41.8%
<b>TOTAL EXPENSES</b>	<b>\$87.64 M</b>	<b>\$96.89 M</b>	<b>10.6%</b>	<b>\$96.90 M</b>	<b>0.0%</b>	<b>\$100.20 M</b>	<b>3.4%</b>	<b>\$100.91 M</b>	<b>0.7%</b>

### REVENUES - WATER AND SEWER FUND



### EXPENSES - WATER AND SEWER FUND



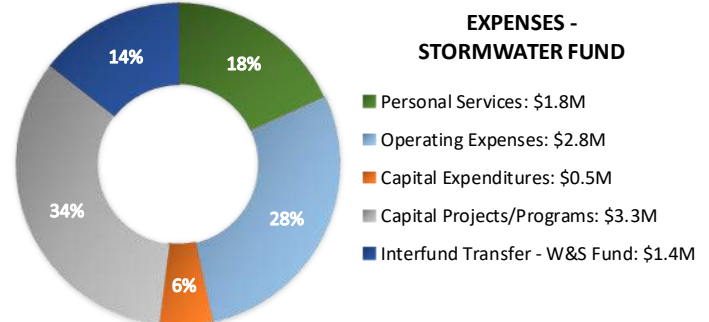
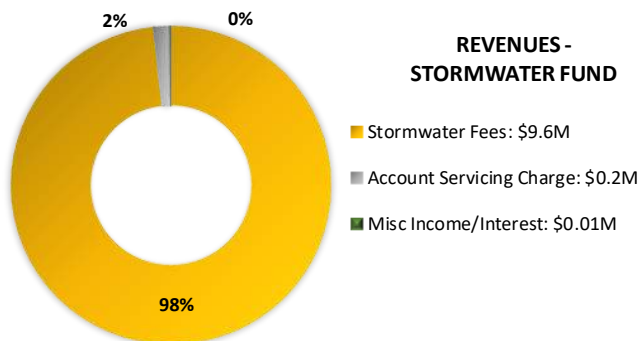


## Budget Summary: Stormwater Fund

(in millions)

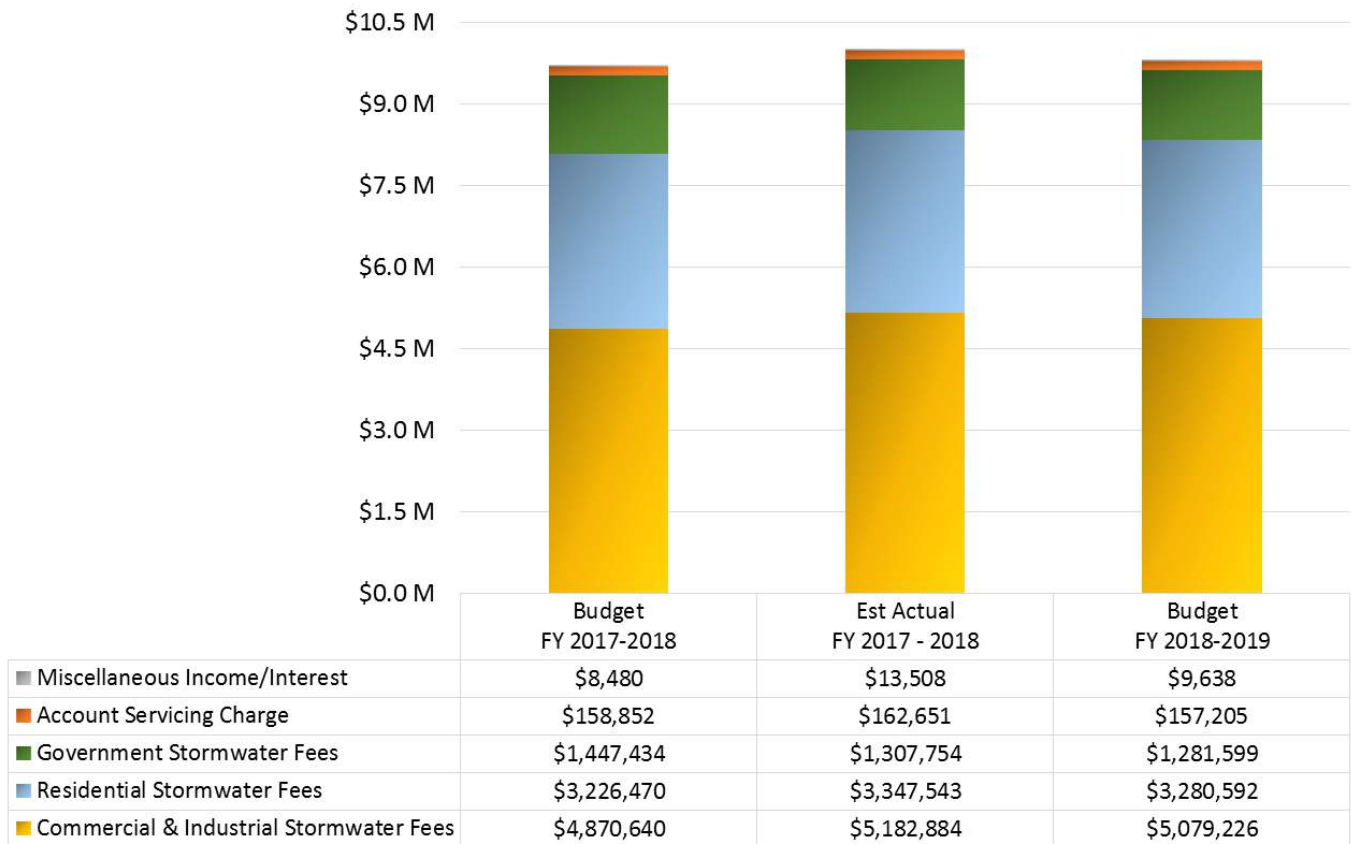
	Budget FY 2017-2018	Est Actual FY 2017 - 2018	Budget FY 2018-2019	% Chg Budget FYE 18 -FYE 19	% Chg Act FYE 2018 with Budget FY 2017-2018	% Chg Est Act FYE 18 to Budget FYE 19
<b>REVENUES</b>						
Stormwater Fees	\$9.54 M	\$9.84 M	\$9.64 M	1.0%	3.1%	-2.0%
Account Service Charges	0.16 M	0.16 M	0.16 M	-1.0%	2.4%	-3.3%
Miscellaneous Income	0.01 M	0.01 M	0.01 M	13.7%	59.3%	-28.6%
Grants	0.00 M	0.00 M	0.00 M	-	-	-
<b>TOTAL REVENUES</b>	<b>\$9.71 M</b>	<b>\$10.01 M</b>	<b>\$9.81 M</b>	<b>1.0%</b>	<b>3.1%</b>	<b>-2.1%</b>
<b>EXPENSES</b>						
Personal Services	\$1.57 M	\$1.46 M	\$1.78 M	13.3%	-6.9%	21.6%
Operating Expenses	2.98 M	2.42 M	2.78 M	-6.6%	-18.7%	14.9%
Debt Service	0.00 M	0.00 M	0.00 M	-	-	-
Interfund Transfer -W&S	1.15 M	1.15 M	1.41 M	23.3%	0.0%	23.3%
Capital Expenditures	0.45 M	0.46 M	0.54 M	20.0%	2.6%	17.0%
Capital Projects	3.57 M	5.07 M	3.29 M	-7.6%	42.1%	-35.0%
<b>TOTAL EXPENSES</b>	<b>\$9.71 M</b>	<b>\$10.56 M</b>	<b>\$9.81 M</b>	<b>1.0%</b>	<b>8.7%</b>	<b>-7.1%</b>

The 2018 - 2019 Operating and Capital Budget of \$9.8M is up \$96K or 1 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 capital projects.





## Analysis of Revenues - Stormwater Fund



### Revenue Budget Assumptions FY 2018 - 2019

**Stormwater Fees:** Fees are budgeted at \$9.6M for the upcoming fiscal year. This is \$97K or 1 percent higher than the prior year budget and \$197K less than the actual revenue estimated for April 30, 2018. The FY 2018-2019 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.

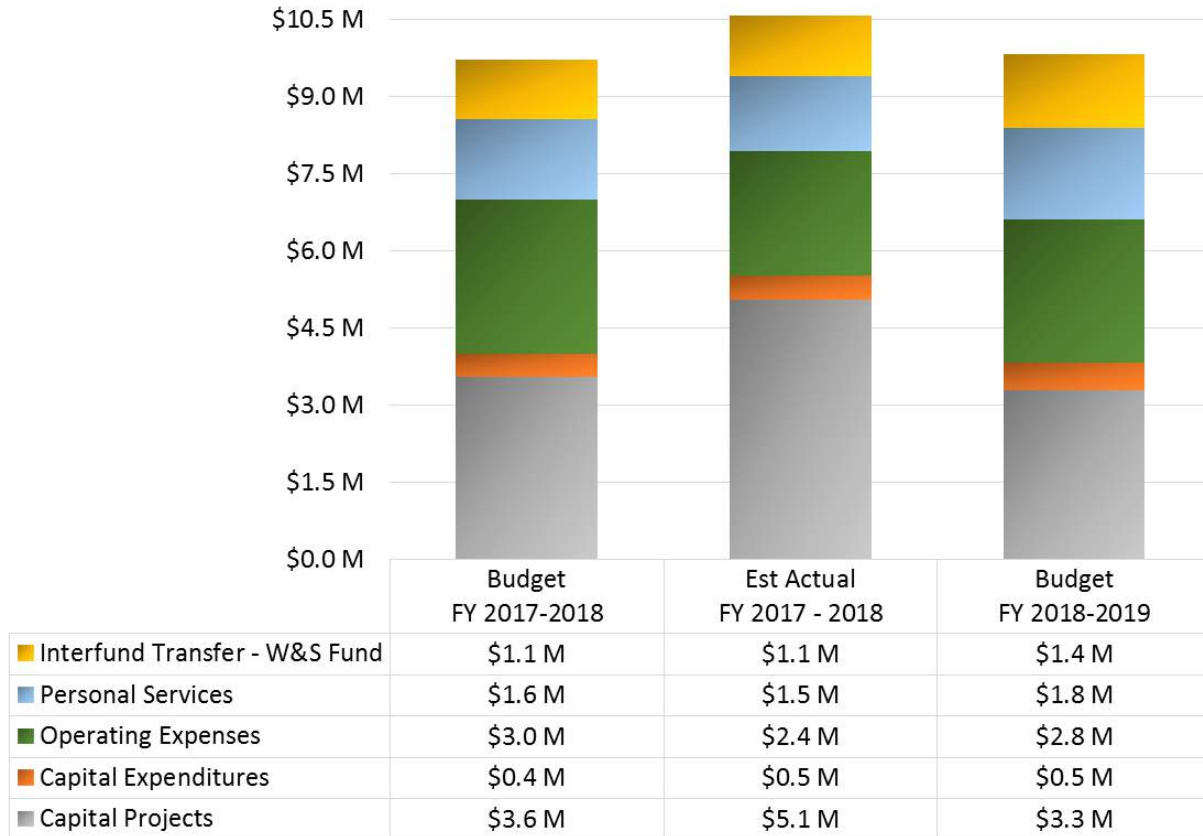
**Account Service Charges** are revenues associated with the fees and charges for late and delinquent payment of fees. This revenue was budgeted at \$157K for the year, which is the historical average of actual performance over the last five fiscal years.

**Miscellaneous Income** is revenue received from the sale of scrap materials and other minor revenues and was budgeted at \$4K, 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 2018 - 2019

#### 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 \$1.2M and \$94K increased \$98K or 8 percent from the previous year budget. Stormwater Maintenance added a foreman position to assist with the backlog of service requests.

Medical and related *Benefits* of \$296K are \$97K or 49 percent higher than the previous year budget due to recent increases in insurance costs. In fiscal year 2015 - 2016, the Authority adopted a self-funded insurance program for its medical, life, and disability insurances, which has provided more control over the cost of these benefits but still cannot completely curb the general escalation of cost for these benefits.

*Pension* expense, a percentage of *Salaries*, also increased 8 percent from the previous budget year.

#### Operating Expenses:

Overall operating expenses, excluding *Personal Services*, of \$2.8M were \$196K or 6.6 percent lower than the previous budget year.



The *Operating Materials and Supplies* category is budgeted at \$140K, which is down \$30K from the previous year budget. Responsible for the decrease, is the reduction in *Other Materials and Supplies*.

*Administrative Supplies* expense category includes office and janitorial supplies, printing, and postage. This category was budgeted at \$17K, which is up \$3K from the previous year due to the 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 \$52K 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 \$27K is up slightly from the previous year budget of \$26K.

*Maintenance and Repair* expenses have been budgeted at \$31K, which is \$4K higher than the previous year. This category of expenses included 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 of \$2.1M is down \$210K or 7 percent from the previous year budget. The primary expense line item in this category is responsible for the decrease is *Consulting Fees*. This account decreased due to changes in initiatives under taken 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 \$135K is \$10K lower than the previous year budget.

*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 \$1.4M. This is a monthly charge of \$118K versus the \$96K 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 equipment 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 \$537K, *Capital Equipment* is budgeted at \$89K higher 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
<b>STORMWATER FUND</b>				
<b>210 Stormwater Maintenance</b>	<b>Easements:</b>			
	Easements	\$ -	\$ 10,000	
	<b>Construction Equipment:</b>			
	Gradall	370,000		
	<b>Trucks:</b>			
	Flatbed Dump	100,000		
	<b>Trailers (Non-Forestry)</b>			
	20-Ton Trailer (2) @ \$15,000 each	30,000	-	
	<b>Automobile/Pickups:</b>			
	Truck: F-150		27,030	
<b>Total Capital Equipment</b>		<b>\$ 500,000</b>	<b>\$ 37,030</b>	<b>\$ 537,030</b>





### 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 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 \$3.3M compared to the previous budget year amount of \$3.6M. The amount budgeted in this category over the previous five fiscal years has averaged \$3.1M. 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 2018 – 2019 budget is in the [Capital Budget](#) section of this document under the heading [Stormwater Funded Projects - Summary](#).

### Capital Projects Summary - Stormwater Fund

Project Description	Amount Budgeted
Building A Septic to Sanitary Sewer	\$ 20,000
Cured In Place Pipe	1,500,000
Removal and Replacement	1,773,001
<b>Total Capital Projects</b>	<b>\$ 3,293,001</b>







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

	Actual FY 2015-2016	Actual FY 2016 - 2017	Est Actual FY 2017 - 2018	Budget FY 2018-2019	% Chg Budget FYE 18 -FYE 19	% Chg Est Act FYE 18 to Budget FYE 19
<b>REVENUES</b>						
Stormwater Fees	\$9.15 M	\$9.76 M	\$9.84 M	\$9.64 M	1.0%	-2.0%
Account Service Charges	0.17 M	0.17 M	0.16 M	0.16 M	-1.0%	-3.3%
Miscellaneous Income	0.02 M	0.02 M	0.01 M	0.01 M	13.7%	-28.6%
Grants	0.00 M	0.13 M	0.00 M	0.00 M	-	0.0%
<b>TOTAL REVENUES</b>	<b>\$9.34 M</b>	<b>\$10.06 M</b>	<b>\$10.01 M</b>	<b>\$9.81 M</b>	<b>1.0%</b>	<b>-2.1%</b>
<b>EXPENSES</b>						
Personal Services	\$1.58 M	\$1.50 M	\$1.46 M	\$1.78 M	13.3%	21.6%
Operating Expenses	2.44 M	2.78 M	2.42 M	2.78 M	-6.6%	14.9%
Debt Service	0.00 M	0.00 M	0.00 M	0.00 M	-	0.0%
Interfund Transfer -W&S	1.68 M	1.86 M	1.15 M	1.41 M	23.3%	23.3%
Capital Expenditures	0.04 M	0.15 M	0.46 M	0.54 M	20.0%	17.0%
Capital Projects	2.98 M	4.45 M	5.07 M	3.29 M	-7.6%	-35.0%
<b>TOTAL EXPENSES</b>	<b>\$8.72 M</b>	<b>\$10.75 M</b>	<b>\$10.56 M</b>	<b>\$9.81 M</b>	<b>1.0%</b>	<b>-7.1%</b>

The 2018 - 2019 Operating and Capital Budget of \$9.8M is up \$96K from the previous budget year. These additional funds were used to increase the budget for *Capital Equipment* purchases.

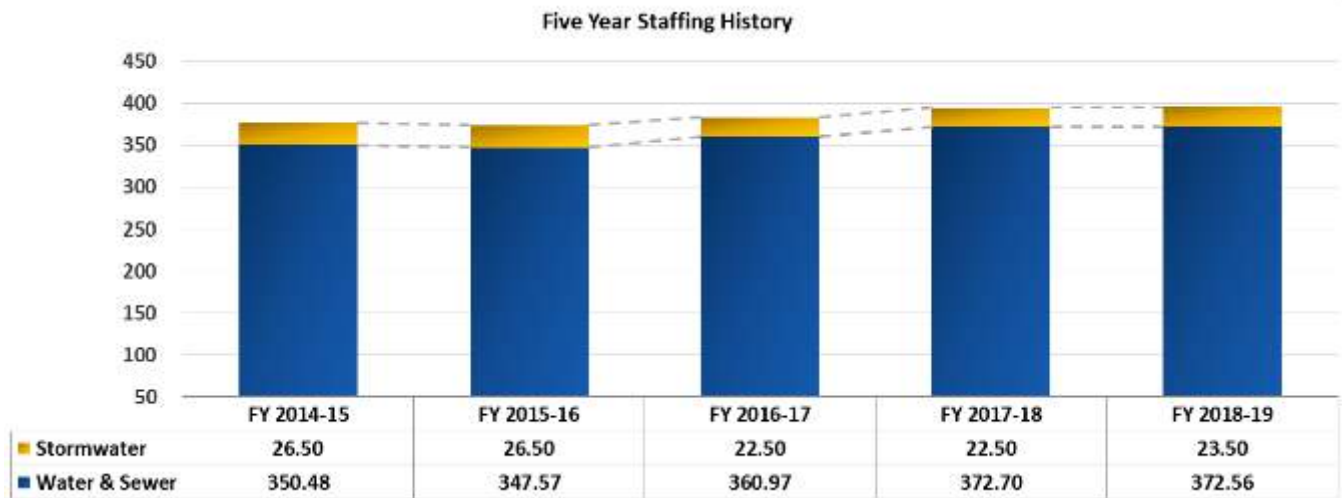
## Budgetary Analysis - Revenues and Expenses: Budget to Budget Comparison (in millions)

	Budget FY 2014 - 2015	Budget FY 2015 - 2016	% Chg Budget FYE 15 -FYE 16	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
<b>REVENUES</b>									
Stormwater Fees	\$9.53 M	\$8.84 M	-7.2%	\$9.34 M	5.7%	\$9.54 M	2.2%	\$9.64 M	1.0%
Account Service Charges	0.16 M	0.16 M	-0.3%	0.17 M	6.3%	0.16 M	-6.4%	0.16 M	-1.0%
Miscellaneous Income	0.02 M	0.01 M	-30.1%	0.01 M	-0.3%	0.01 M	-37.6%	0.01 M	13.7%
Grants	0.15 M	0.00 M	-100.0%	0.00 M	-	0.00 M	-	0.00 M	-
<b>TOTAL REVENUES</b>	<b>\$9.85 M</b>	<b>\$9.01 M</b>	<b>-8.5%</b>	<b>\$9.53 M</b>	<b>5.7%</b>	<b>\$9.71 M</b>	<b>1.9%</b>	<b>\$9.81 M</b>	<b>1.0%</b>
<b>EXPENSES</b>									
Personal Services	\$1.70 M	\$1.78 M	5.2%	\$1.58 M	-11.7%	\$1.57 M	-0.2%	\$1.78 M	13.3%
Operating Expenses	3.06 M	3.15 M	3.2%	2.59 M	-18.0%	2.98 M	15.3%	2.78 M	-6.6%
Debt Service	0.00 M	0.00 M	-	0.00 M	-	0.00 M	-	0.00 M	-
Interfund Transfer -W&S	1.58 M	1.68 M	6.2%	1.86 M	11.2%	1.15 M	-38.5%	1.41 M	23.3%
Capital Expenditures	0.03 M	0.14 M	395.3%	0.17 M	22.0%	0.45 M	156.5%	0.54 M	20.0%
Capital Projects	3.49 M	2.26 M	-35.4%	3.33 M	47.5%	3.57 M	7.2%	3.29 M	-7.6%
<b>TOTAL EXPENSES</b>	<b>\$9.85 M</b>	<b>\$9.01 M</b>	<b>-8.5%</b>	<b>\$9.53 M</b>	<b>5.7%</b>	<b>\$9.71 M</b>	<b>1.9%</b>	<b>\$9.81 M</b>	<b>1.0%</b>



## 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 2016-2017 Budgeted	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted
<b>Executive Department</b>	113.11	117.60	117.21
<b>Water Production</b>	33.20	33.70	34.36
<b>Program Management and Engineering</b>	24.43	26.43	26.76
<b>Distribution and Conveyance</b>	99.00	98.00	97.00
<b>Water Reclamation</b>	51.23	53.23	53.23
<b>General Services</b>	40.00	44.00	44.00
<b>Water and Sewer Fund</b>	<b>360.97</b>	<b>372.96</b>	<b>372.56</b>
<b>Stormwater Fund</b>	<b>22.50</b>	<b>22.50</b>	<b>23.50</b>
<b>Grand Total Full-Time Employees (FTEs)</b>	<b>383.47</b>	<b>395.46</b>	<b>396.06</b>

The Water and Sewer Fund overall staff was reduced by 0.4 FTEs. The Stormwater Fund increased by 1.0 FTE for an overall increase in staffing at the Authority by 0.2 percent.



## 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%
<b>Total Projects</b>	<b>95</b>	<b>100%</b>	<b>\$367,090,000</b>	<b>100%</b>

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, and 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.

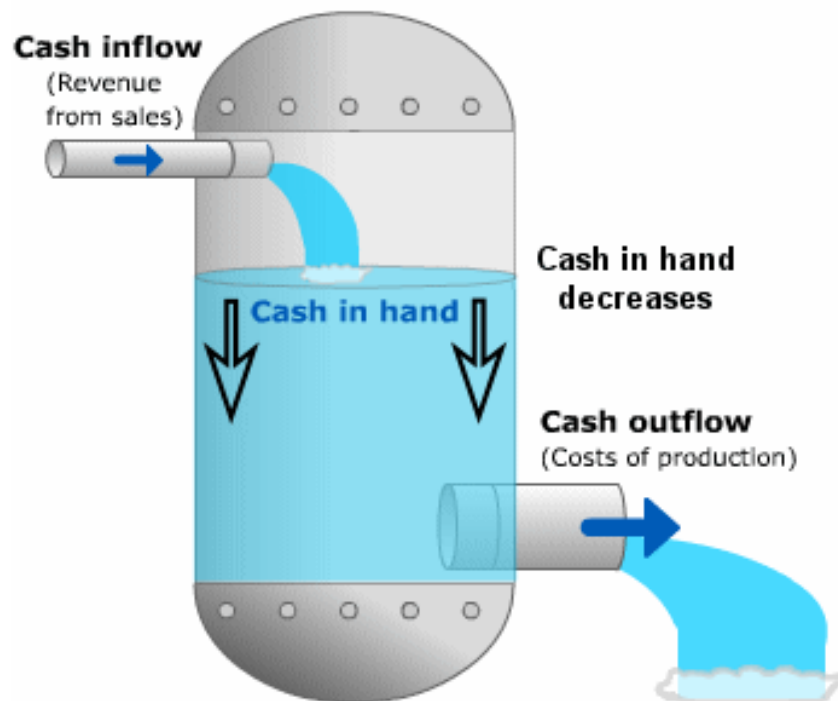
Project Name							
Project Category							
Total Benefit = 0		Project Rating (0 = lowest, 10 = highest)					
Performance Measure		0	Votes	1	Votes	3	Votes
Rating Objectives	PQ: PRODUCT QUALITY/QUANTITY 1. Impact on drinking water quality, effluent/reclaimed water quality, or stormwater quality 2. Regulatory 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.

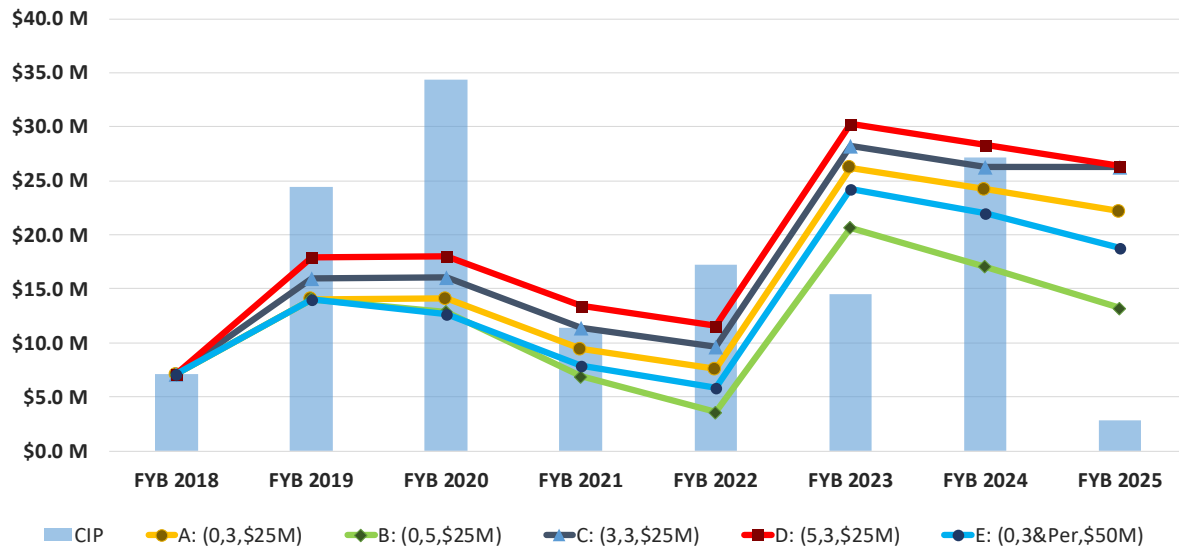






## Capital Improvement Need and Cash Flow Generated from Operations

CIP Need vs. Available Cash to Disperse



*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 CIP projects are represented in the projected operating expenses and cash available to disburse.

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 \$60M 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 five different sample scenarios using combinations of three primary variables holding everything else constant. The scenarios are listed from the most conservative variables, **Scenario A**, to the least conservative, **Scenario E**. The three variables modeled include the impact on available cash from rate increases, operating expense growth, and proceeds from debt. The latest rate adjustment was adopted for the 2016 – 2017 budget and became effective May 1, 2017. Rate increases for **Scenario C** and **Scenario D** have not been adopted are used in the tables and graphs below to demonstrate the impact to cash flow of these adjustments.

All five 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. **Scenario E** assumes an additional loan of \$25M, an interest rate of 2.0 percent, an interest only period of 3 years, and a repayment term of 15 years with level monthly principal and interest payments. Disbursements from this second loan would begin in FY 2020 – 2021.



### 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** (light green line): Rate Increase-0%; Operating Expense Growth-5%; Debt Proceeds-\$25M; Customer Growth-1.5%.

**Scenario C** (dark blue line): Rate Increase-3% FY2020-21; Operating Expense Growth-3%; Debt Proceeds-\$25M; Customer Growth-1.5%.

**Scenario D** (red line): Rate increase-5% FY2020-21; Operating Expense Growth-3%; Debt Proceeds-\$25M; Customer Growth-1.5%.

**Scenario E** (light blue line): Rate increase-0%; Operating Expense Growth-3%; Additional Staff; Debt Proceeds-\$50M; 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 h)

**b) Operating Expenses:** 3% annual operating expense growth in all Scenarios except Scenario B with 5% growth.

**c) Rev: Increased rates - consumption- Water (each 1%=\$412K):** Additional revenue generated from water rate increases on consumption tiers. For every 1% increase in rates, approximately \$412K in additional revenue is generated.

**d) Rev: Increased rates - consumption - Sewer (each 1%=\$348K):** Additional revenue generated from sewer rate increases on consumption tiers. For every 1% increase in rates, approximately \$348K in additional revenue is generated.

**e) Rev: Increased rates - base - Water (each 1%=\$105K):** Additional revenue generated from water rate increases on base charges. For every 1% increase in rates, approximately \$105K in additional revenue is generated.

**f) Rev: Increased rates - base - Sewer (each 1%=\$95K):** Additional revenue generated from sewer rate increases on base charges. For every 1% increase in rates, approximately \$95K in additional revenue is generated.

**g) Rev: Increased customer base:** Additional revenue generated from water and sewer usage from new customers; new development. Historical 1.5% growth in customer accounts was used to project this revenue stream.

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

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

**j) 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.

**k) 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.

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

**m) Proposed New Debt P&I Payments:** Principal and Interest payments on new debt – .65% interest rate, 15-year term, \$25M in principal, level monthly payments. Scenario E adds an additional loan of \$25M – 2% interest rate, 15-year term.

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

**o) Capital Expenditures:** Expense for equipment and assets not included in a Capital Projects. Annual growth rate of 2 percent.

**p) Cash Reserve for Contingency:** Funding reserved for emergency projects.

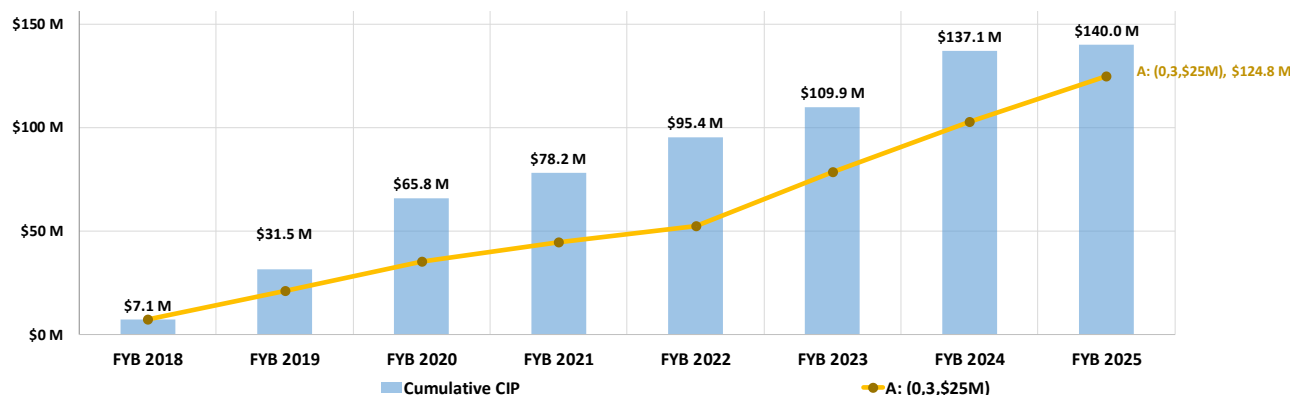
**q) Loan Proceeds:** Loan disbursements for construction of the large interceptor project.



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

	Projected - FYE					
Fiscal Year Ended April 30,	2019	2020	2021	2022	2023	2024
<b>Cash Flows from Current Operations</b>						
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
<b>Cash Flows from Operations</b>	<b>\$29,922,455</b>	<b>\$36,723,777</b>	<b>\$34,887,420</b>	<b>\$32,995,972</b>	<b>\$31,047,781</b>	<b>\$29,041,144</b>
<b>Cash Flows from Projected Changes</b>						
c) Rev: Increased Growth - consumption- Water	\$ 410,181	\$ 418,384	\$ 424,660	\$ 431,030	\$ 437,496	\$ 444,058
d) Rev: Increased Growth - consumption - Sewer	342,433	349,281	354,520	359,838	365,236	370,714
e) Rev: Increased Growth - base - Water	105,364	107,471	109,083	110,720	112,381	114,066
f) Rev: Increased Growth - base - Sewer	95,133	97,035	98,491	99,968	101,468	102,990
g) Rev: Increased Customer Base	-	-	-	-	-	-
h) Rev: Tap Fees	9,686	9,880	10,028	10,178	10,331	10,486
i) Exp: Decreased / (Increased) Operating Expenses	-	-	-	-	-	-
<b>Proposed Project-Related Cash Flows</b>	<b>\$ 962,796</b>	<b>\$ 982,052</b>	<b>\$ 996,783</b>	<b>\$ 1,011,735</b>	<b>\$ 1,026,911</b>	<b>\$ 1,042,314</b>
<b>Non-Operating Revenues (Expenses)</b>						
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 -from Stormwater	1,413,558	1,455,965	1,499,644	1,544,633	1,590,972	1,638,701
<b>Available Cash Flows</b>	<b>\$ 33,176,339</b>	<b>\$ 40,170,953</b>	<b>\$ 38,493,922</b>	<b>\$ 36,679,066</b>	<b>\$ 34,809,291</b>	<b>\$ 32,882,942</b>
<b>Current Long-Term Obligations</b>						
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
<b>Existing Long-term Debt Service</b>	<b>\$ 20,990,602</b>	<b>\$ 21,867,877</b>	<b>\$ 20,077,347</b>	<b>\$ 21,342,097</b>	<b>\$ 21,343,147</b>	<b>\$ 797,647</b>
<b>Proposed Debt Service</b>						
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	-	-	-
<b>Proposed Additional Obligations</b>	<b>\$ 104,000</b>	<b>\$ 133,250</b>	<b>\$ 162,500</b>	<b>\$ 1,749,688</b>	<b>\$ 1,749,688</b>	<b>\$ 1,749,688</b>
<b>Total Proposed Obligations</b>	<b>\$ 21,094,602</b>	<b>\$ 22,001,127</b>	<b>\$ 20,239,847</b>	<b>\$ 23,091,784</b>	<b>\$ 23,092,834</b>	<b>\$ 2,547,334</b>
<b>Debt Service Coverage - Bonds</b>	<b>1.63</b>	<b>1.89</b>	<b>1.98</b>	<b>1.65</b>	<b>1.56</b>	<b>18.79</b>
<b>Debt Service Coverage - Including GEFA Loans</b>	<b>1.57</b>	<b>1.83</b>	<b>1.90</b>	<b>1.59</b>	<b>1.51</b>	<b>12.91</b>
<b>Available Cash for Projects/Cap Expenditures</b>	<b>\$ 12,081,737</b>	<b>\$ 18,169,826</b>	<b>\$ 18,254,075</b>	<b>\$ 13,587,282</b>	<b>\$ 11,716,457</b>	<b>\$ 30,335,607</b>
a) Capital Expenditures	2,892,335	2,040,000	2,040,000	2,040,000	2,040,000	2,040,000
<b>Available Cash for Projects</b>	<b>\$ 9,189,402</b>	<b>\$ 16,129,826</b>	<b>\$ 16,214,075</b>	<b>\$ 11,547,282</b>	<b>\$ 9,676,457</b>	<b>\$ 28,295,607</b>
p) Cash Reserve for Contingency	2,100,000	2,100,000	2,100,000	2,100,000	2,100,000	2,100,000
<b>Available Cash to Disburse</b>	<b>\$ 7,089,402</b>	<b>\$ 14,029,826</b>	<b>\$ 14,114,075</b>	<b>\$ 9,447,282</b>	<b>\$ 7,576,457</b>	<b>\$ 26,195,607</b>
q) Loan Proceeds	6,000,000	6,000,000	6,000,000	6,000,000	-	-
<b>Net Cash</b>	<b>\$ 13,089,402</b>	<b>\$ 20,029,826</b>	<b>\$ 20,114,075</b>	<b>\$ 15,447,282</b>	<b>\$ 7,576,457</b>	<b>\$ 26,195,607</b>

The graph below 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 a deficit of \$15.2M through FY 2025-2026 between proposed capital projects planned and the cash flow available to cover the estimated costs and timing of those projects.

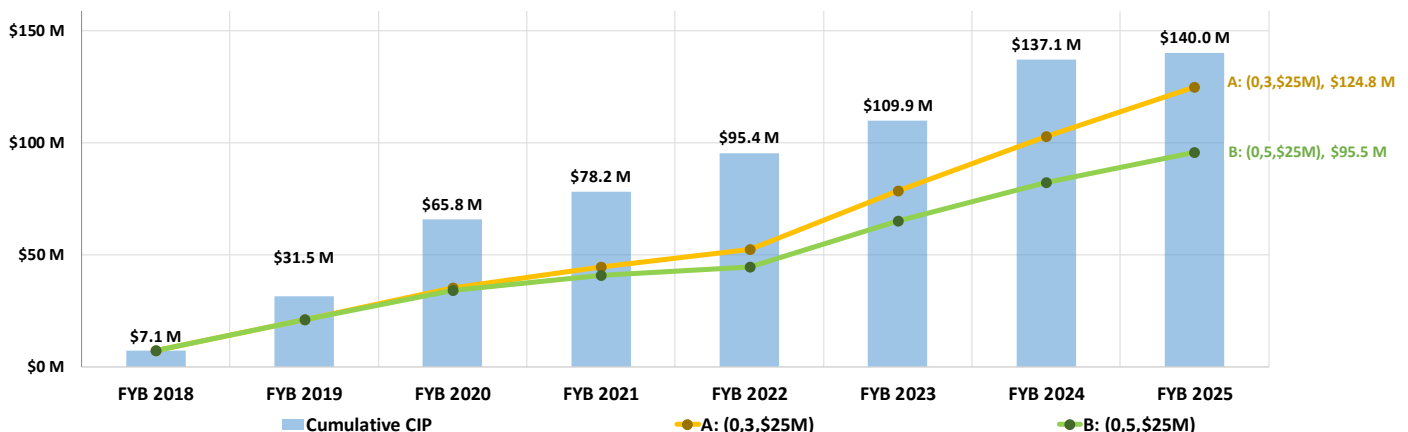




## Scenario B (0%, 5%, \$25M):

	Projected - FYE					
Fiscal Year Ended April 30,	2019	2020	2021	2022	2023	2024
<b>Cash Flows from Current Operations</b>						
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	64,272,490	67,486,115	70,860,420	74,403,441
<b>Cash Flows from Operations</b>	<b>\$29,922,455</b>	<b>\$36,723,777</b>	<b>\$33,663,182</b>	<b>\$30,449,557</b>	<b>\$27,075,252</b>	<b>\$23,532,231</b>
<b>Cash Flows from Projected Changes</b>						
c) Rev: Increased rates - consumption- Water	410,181	418,384	424,660	431,030	437,496	444,058
d) Rev: Increased rates - consumption - Sewer	342,433	349,281	354,520	359,838	365,236	370,714
e) Rev: Increased rates - base - Water	105,364	107,471	109,083	110,720	112,381	114,066
f) Rev: Increased rates - base - Sewer	95,133	97,035	98,491	99,968	101,468	102,990
g) Rev: Increased customer base	-	-	-	-	-	-
h) Rev: Tap Fees	9,686	9,880	10,028	10,178	10,331	10,486
i) Exp: Decreased / (Increased) Operating Expenses	-	-	-	-	-	-
<b>Proposed Project-Related Cash Flows</b>	<b>\$ 962,796</b>	<b>\$ 982,052</b>	<b>\$ 996,783</b>	<b>\$ 1,011,735</b>	<b>\$ 1,026,911</b>	<b>\$ 1,042,314</b>
<b>Non-Operating Revenues (Expenses)</b>						
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 -from Stormwater	1,413,558	1,455,965	1,499,644	1,544,633	1,590,972	1,638,701
<b>Available Cash Flows</b>	<b>\$ 33,176,339</b>	<b>\$ 40,170,953</b>	<b>\$ 37,269,684</b>	<b>\$ 34,132,651</b>	<b>\$ 30,836,762</b>	<b>\$ 27,374,028</b>
<b>Current Long-Term Obligations</b>						
j) Existing Bond Debt Service	\$ 20,192,955	\$ 21,070,230	\$ 19,279,700	\$ 20,544,450	\$ 20,545,500	\$ -
k) Existing GEFA Debt Service	797,647	797,647	797,647	797,647	797,647	797,647
<b>Current Bond Debt Service</b>	<b>\$ 20,990,602</b>	<b>\$ 21,867,877</b>	<b>\$ 20,077,347</b>	<b>\$ 21,342,097</b>	<b>\$ 21,343,147</b>	<b>\$ 797,647</b>
<b>Proposed Debt Service</b>						
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	-	-	-
<b>Proposed Additional Obligations</b>	<b>\$ 104,000</b>	<b>\$ 133,250</b>	<b>\$ 162,500</b>	<b>\$ 1,749,688</b>	<b>\$ 1,749,688</b>	<b>\$ 1,749,688</b>
<b>Total Proposed Obligations</b>	<b>\$ 21,094,602</b>	<b>\$ 22,001,127</b>	<b>\$ 20,239,847</b>	<b>\$ 23,091,784</b>	<b>\$ 23,092,834</b>	<b>\$ 2,547,334</b>
<b>Debt Service Coverage - Bonds</b>	<b>1.63</b>	<b>1.89</b>	<b>1.92</b>	<b>1.53</b>	<b>1.38</b>	<b>15.65</b>
<b>Debt Service Coverage - Including GEFA Loans</b>	<b>1.57</b>	<b>1.83</b>	<b>1.84</b>	<b>1.48</b>	<b>1.34</b>	<b>10.75</b>
<b>Available Cash for Projects/Cap Expenditures</b>	<b>\$ 12,081,737</b>	<b>\$ 18,169,826</b>	<b>\$ 17,029,837</b>	<b>\$ 11,040,867</b>	<b>\$ 7,743,927</b>	<b>\$ 24,826,693</b>
a) Capital Expenditures	2,892,335	2,040,000	2,040,000	2,040,000	2,040,000	2,040,000
<b>Available Cash for Projects</b>	<b>\$ 9,189,402</b>	<b>\$ 16,129,826</b>	<b>\$ 14,989,837</b>	<b>\$ 9,000,867</b>	<b>\$ 5,703,927</b>	<b>\$ 22,786,693</b>
p) Cash Reserve for Contingency	2,100,000	2,100,000	2,100,000	2,100,000	2,100,000	2,100,000
<b>Available Cash to Disburse</b>	<b>\$ 7,089,402</b>	<b>\$ 14,029,826</b>	<b>\$ 12,889,837</b>	<b>\$ 6,900,867</b>	<b>\$ 3,603,927</b>	<b>\$ 20,686,693</b>
q) Loan Proceeds	6,000,000	6,000,000	6,000,000	6,000,000	-	-
<b>Net Cash</b>	<b>\$ 13,089,402</b>	<b>\$ 20,029,826</b>	<b>\$ 18,889,837</b>	<b>\$ 12,900,867</b>	<b>\$ 3,603,927</b>	<b>\$ 20,686,693</b>

The graph below 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**, with no rate increase in addition to expense growth of 5 percent, produced the largest cumulative funding shortfall of \$44.5M over the remaining eight years of the ten-year forecasted period.

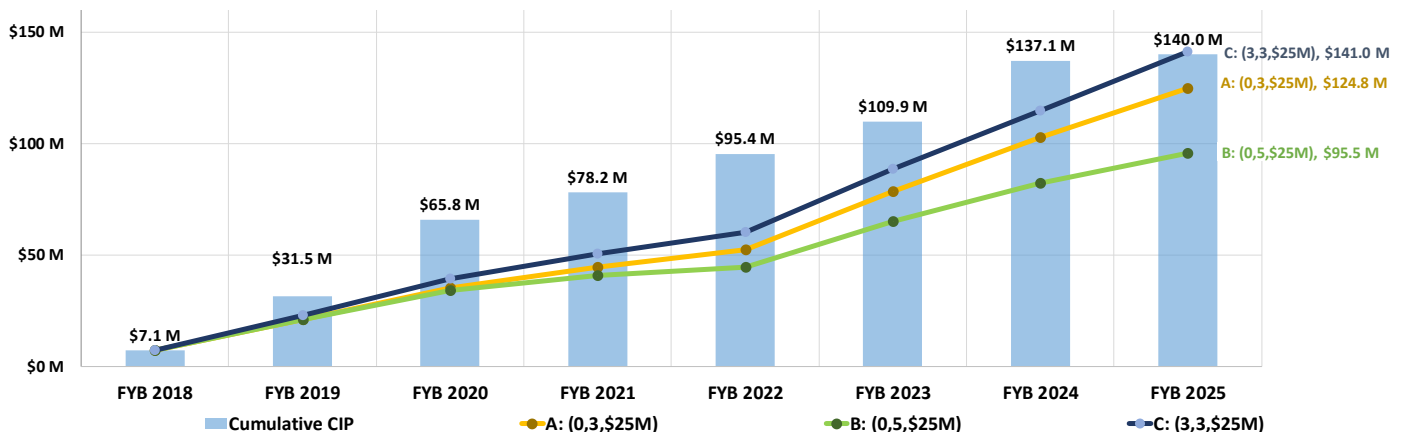




## Scenario C (3%, 3%, \$25M):

Fiscal Year Ended April 30,	Projected - FYE					
	2019	2020	2021	2022	2023	2024
<b>Cash Flows from Current Operations</b>						
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
<b>Cash Flows from Operations</b>	<b>\$29,922,455</b>	<b>\$36,723,777</b>	<b>\$34,887,420</b>	<b>\$32,995,972</b>	<b>\$31,047,781</b>	<b>\$29,041,144</b>
<b>Cash Flows from Projected Changes</b>						
c) Rev: Increased rates - consumption- Water	410,181	1,245,114	1,263,790	1,282,747	1,301,988	1,321,518
d) Rev: Increased rates - consumption- Sewer	342,433	1,055,779	1,071,616	1,087,690	1,104,005	1,120,565
e) Rev: Increased rates - base - Water	105,364	319,316	324,105	328,967	333,901	338,910
f) Rev: Increased rates - base - Sewer	95,133	288,307	292,632	297,021	301,476	305,999
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	-	-	-	-	-	-
<b>Proposed Project-Related Cash Flows</b>	<b>\$ 962,796</b>	<b>\$ 2,918,347</b>	<b>\$ 2,962,122</b>	<b>\$ 3,006,554</b>	<b>\$ 3,051,652</b>	<b>\$ 3,097,427</b>
<b>Non-Operating Revenues (Expenses)</b>						
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 -from Stormwater	1,413,558	1,455,965	1,499,644	1,544,633	1,590,972	1,638,701
<b>Available Cash Flows</b>	<b>\$ 33,176,339</b>	<b>\$ 42,107,247</b>	<b>\$ 40,459,261</b>	<b>\$ 38,673,885</b>	<b>\$ 36,834,033</b>	<b>\$ 34,938,054</b>
<b>Current Long-Term Obligations</b>						
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
<b>Existing Long-term Debt Service</b>	<b>\$ 20,990,602</b>	<b>\$ 21,867,877</b>	<b>\$ 20,077,347</b>	<b>\$ 21,342,097</b>	<b>\$ 21,343,147</b>	<b>\$ 797,647</b>
<b>Proposed Debt Service</b>						
m) Proposed New Debt: P&I Payments	\$ -	\$ -	\$ -	\$ 1,749,688	\$ 1,749,688	\$ 1,749,688
n) Interest Only Payment/Second Issue P&I	104,000	133,250	162,500			
<b>Proposed Additional Obligations</b>	<b>\$ 104,000</b>	<b>\$ 133,250</b>	<b>\$ 162,500</b>	<b>\$ 1,749,688</b>	<b>\$ 1,749,688</b>	<b>\$ 1,749,688</b>
<b>Total Proposed Obligations</b>	<b>\$ 21,094,602</b>	<b>\$ 22,001,127</b>	<b>\$ 20,239,847</b>	<b>\$ 23,091,784</b>	<b>\$ 23,092,834</b>	<b>\$ 2,547,334</b>
<b>Debt Service Coverage - Bonds</b>	<b>1.63</b>	<b>1.99</b>	<b>2.08</b>	<b>1.73</b>	<b>1.65</b>	<b>19.97</b>
<b>Debt Service Coverage - Including GEFA Loans</b>	<b>1.57</b>	<b>1.91</b>	<b>2.00</b>	<b>1.67</b>	<b>1.60</b>	<b>13.72</b>
<b>Available Cash for Projects/Cap Expenditures</b>	<b>\$ 12,081,737</b>	<b>\$ 20,106,121</b>	<b>\$ 20,219,414</b>	<b>\$ 15,582,101</b>	<b>\$ 13,741,198</b>	<b>\$ 32,390,720</b>
a) Capital Expenditures	2,892,335	2,040,000	2,040,000	2,040,000	2,040,000	2,040,000
<b>Available Cash for Projects</b>	<b>\$ 9,189,402</b>	<b>\$ 18,066,121</b>	<b>\$ 18,179,414</b>	<b>\$ 13,542,101</b>	<b>\$ 11,701,198</b>	<b>\$ 30,350,720</b>
p) Cash Reserve for Contingency	2,100,000	2,100,000	2,100,000	2,100,000	2,100,000	2,100,000
<b>Available Cash to Disburse</b>	<b>\$ 7,089,402</b>	<b>\$ 15,966,121</b>	<b>\$ 16,079,414</b>	<b>\$ 11,442,101</b>	<b>\$ 9,601,198</b>	<b>\$ 28,250,720</b>
q) Loan Proceeds	6,000,000	6,000,000	6,000,000	6,000,000		
<b>Net Cash</b>	<b>\$ 13,089,402</b>	<b>\$ 21,966,121</b>	<b>\$ 22,079,414</b>	<b>\$ 17,442,101</b>	<b>\$ 9,601,198</b>	<b>\$ 28,250,720</b>

The graph below 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 3 percent in FY 2019-2020 produced a cumulative funding surplus over the forecasted period of \$1.0M over the remaining 8 years of the forecasted period.

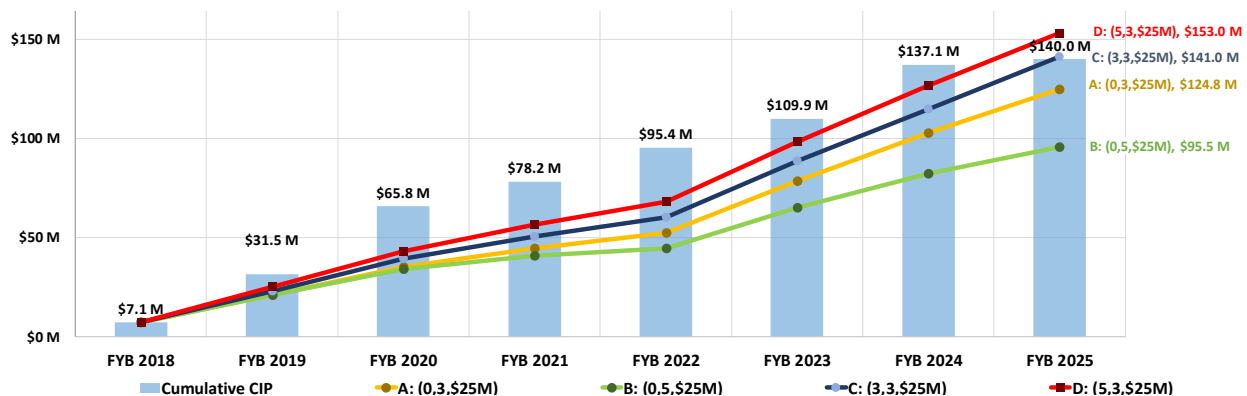




## Scenario D (5%, 3%, \$25M):

Fiscal Year Ended April 30,	Projected - FYE					
	2019	2020	2021	2022	2023	2024
<b>Cash Flows from Current Operations</b>						
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
<b>Cash Flows from Operations</b>	<b>\$29,922,455</b>	<b>\$36,723,777</b>	<b>\$34,887,420</b>	<b>\$32,995,972</b>	<b>\$31,047,781</b>	<b>\$29,041,144</b>
<b>Cash Flows from Projected Changes</b>						
c) Rev: Increased rates - consumption- Water	410,181	2,075,189	2,106,317	2,137,912	2,169,981	2,202,530
d) Rev: Increased rates - consumption - Sewer	342,433	1,742,210	1,768,343	1,794,868	1,821,791	1,849,118
e) Rev: Increased rates - base - Water	105,364	532,193	540,176	548,278	556,502	564,850
f) Rev: Increased rates - base - Sewer	95,133	475,754	482,890	490,134	497,486	504,948
g) Rev: Increase Customer Base	-	-	-	-	-	-
h) Rev: Tap Fees	9,686	9,783	9,930	10,079	10,230	10,383
i) Exp: Decr / (Incr) Operating Expenses	-	-	-	-	-	-
<b>Proposed Project-Related Cash Flows</b>	<b>\$ 962,796</b>	<b>\$ 4,835,129</b>	<b>\$ 4,907,656</b>	<b>\$ 4,981,271</b>	<b>\$ 5,055,990</b>	<b>\$ 5,131,829</b>
<b>Non-Operating Revenues (Expenses)</b>						
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 -from Stormwater	1,413,558	1,455,965	1,499,644	1,544,633	1,590,972	1,638,701
<b>Available Cash Flows</b>	<b>\$ 33,176,339</b>	<b>\$ 44,024,030</b>	<b>\$ 42,404,795</b>	<b>\$ 40,648,602</b>	<b>\$ 38,838,370</b>	<b>\$ 36,972,457</b>
<b>Current Long-Term Obligations</b>						
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
<b>Existing Long-term Debt Service</b>	<b>\$ 20,990,602</b>	<b>\$ 21,867,877</b>	<b>\$ 20,077,347</b>	<b>\$ 21,342,097</b>	<b>\$ 21,343,147</b>	<b>\$ 797,647</b>
<b>Proposed Debt Service</b>						
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	-	-	-
<b>Proposed Additional Obligations</b>	<b>\$ 104,000</b>	<b>\$ 133,250</b>	<b>\$ 162,500</b>	<b>\$ 1,749,688</b>	<b>\$ 1,749,688</b>	<b>\$ 1,749,688</b>
<b>Total Proposed Obligations</b>	<b>\$ 21,094,602</b>	<b>\$ 22,001,127</b>	<b>\$ 20,239,847</b>	<b>\$ 23,091,784</b>	<b>\$ 23,092,834</b>	<b>\$ 2,547,334</b>
<b>Debt Service Coverage - Bonds</b>	<b>1.63</b>	<b>2.08</b>	<b>2.18</b>	<b>1.82</b>	<b>1.74</b>	<b>21.13</b>
<b>Debt Service Coverage - Include GEFA Loans</b>	<b>1.57</b>	<b>2.00</b>	<b>2.10</b>	<b>1.76</b>	<b>1.68</b>	<b>14.51</b>
<b>Available Cash Produced</b>	<b>\$ 12,081,737</b>	<b>\$ 22,022,903</b>	<b>\$ 22,164,948</b>	<b>\$ 17,556,818</b>	<b>\$ 15,745,536</b>	<b>\$ 34,425,123</b>
a) Capital Expenditures	2,892,335	2,040,000	2,040,000	2,040,000	2,040,000	2,040,000
<b>Available Cash for Projects</b>	<b>\$ 9,189,402</b>	<b>\$ 19,982,903</b>	<b>\$ 20,124,948</b>	<b>\$ 15,516,818</b>	<b>\$ 13,705,536</b>	<b>\$ 32,385,123</b>
p) Cash Reserve for Contingency	2,100,000	2,100,000	2,100,000	2,100,000	2,100,000	2,100,000
<b>Available Cash to Disburse</b>	<b>\$ 7,089,402</b>	<b>\$ 17,882,903</b>	<b>\$ 18,024,948</b>	<b>\$ 13,416,818</b>	<b>\$ 11,605,536</b>	<b>\$ 30,285,123</b>
q) Loan Proceeds	6,000,000	6,000,000	6,000,000	6,000,000	-	-
<b>Net Cash</b>	<b>\$ 13,089,402</b>	<b>\$ 23,882,903</b>	<b>\$ 24,024,948</b>	<b>\$ 19,416,818</b>	<b>\$ 11,605,536</b>	<b>\$ 30,285,123</b>

The graph below 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 a rate increase of 5 percent in FY 2019-2020 and funding of \$25M for the large interceptor project. This scenario had a surplus of \$13.1M. Operating revenues increased \$3.9M offsetting the average annual expense growth of \$1.8M over the remaining 8 years of the forecasted period.



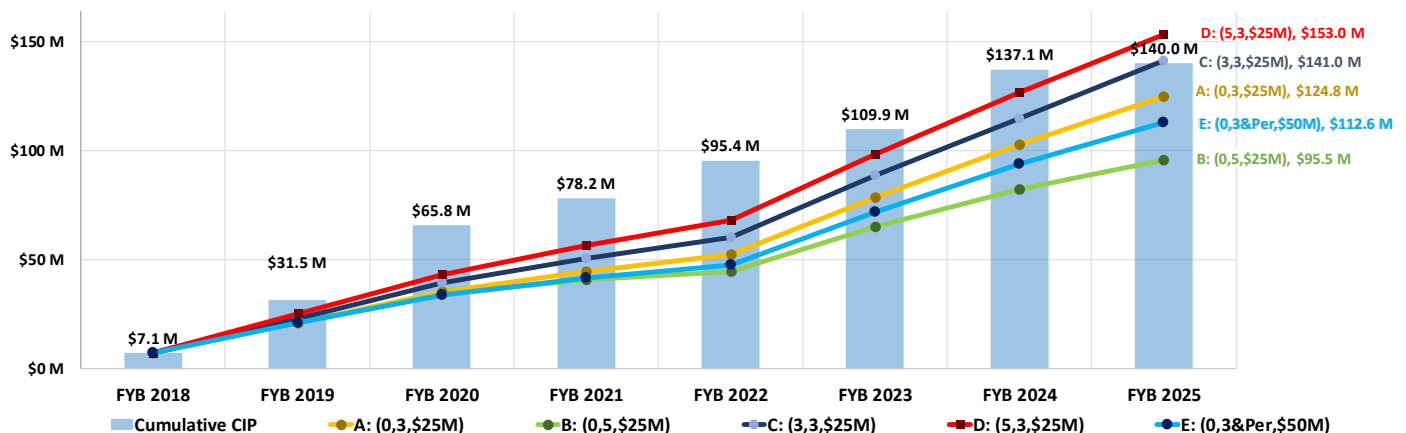




## Scenario E (0%, 3%, Staff Inc, \$50M):

Fiscal Year Ended April 30,	Projected - FYE					
	2019	2020	2021	2022	2023	2024
<b>Cash Flows from Current Operations</b>						
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
<b>Cash Flows from Operations</b>	<b>\$29,922,455</b>	<b>\$36,723,777</b>	<b>\$34,887,420</b>	<b>\$32,995,972</b>	<b>\$31,047,781</b>	<b>\$29,041,144</b>
<b>Cash Flows from Projected Changes</b>						
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)
<b>Proposed Project-Related Cash Flows</b>	<b>\$ 962,796</b>	<b>\$ 977,238</b>	<b>\$ (478,103)</b>	<b>\$ (507,325)</b>	<b>\$ (537,646)</b>	<b>\$ (569,104)</b>
<b>Non-Operating Revenues (Expenses)</b>						
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
<b>Available Cash Flows</b>	<b>\$ 33,176,339</b>	<b>\$ 40,166,139</b>	<b>\$ 37,019,035</b>	<b>\$ 35,160,007</b>	<b>\$ 33,244,734</b>	<b>\$ 31,271,524</b>
<b>Current Long-Term Obligations</b>						
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
<b>Existing Long-term Debt Service</b>	<b>\$ 20,990,602</b>	<b>\$ 21,867,877</b>	<b>\$ 20,077,347</b>	<b>\$ 21,342,097</b>	<b>\$ 21,343,147</b>	<b>\$ 797,647</b>
<b>Proposed Debt Service</b>						
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
<b>Proposed Additional Obligations</b>	<b>\$ 104,000</b>	<b>\$ 133,250</b>	<b>\$ 162,500</b>	<b>\$ 1,749,688</b>	<b>\$ 1,916,354</b>	<b>\$ 2,083,021</b>
<b>Total Proposed Obligations</b>	<b>\$ 21,094,602</b>	<b>\$ 22,001,127</b>	<b>\$ 20,239,847</b>	<b>\$ 23,091,784</b>	<b>\$ 23,259,501</b>	<b>\$ 2,880,668</b>
<b>Debt Service Coverage - Bonds</b>	<b>1.63</b>	<b>1.89</b>	<b>1.90</b>	<b>1.58</b>	<b>1.48</b>	<b>15.01</b>
<b>Debt Service Coverage - Including GEFA Loans</b>	<b>1.57</b>	<b>1.83</b>	<b>1.83</b>	<b>1.52</b>	<b>1.43</b>	<b>10.86</b>
<b>Available Cash Produced</b>	<b>\$ 12,081,737</b>	<b>\$ 18,165,012</b>	<b>\$ 16,779,189</b>	<b>\$ 12,068,222</b>	<b>\$ 9,985,233</b>	<b>\$ 28,390,856</b>
a) Capital Expenditures	2,892,335	2,040,000	2,040,000	2,040,000	2,040,000	2,040,000
<b>Available Cash for Projects</b>	<b>\$ 9,189,402</b>	<b>\$ 16,125,012</b>	<b>\$ 14,739,189</b>	<b>\$ 10,028,222</b>	<b>\$ 7,945,233</b>	<b>\$ 26,350,856</b>
p) Cash Reserve for Contingency	2,100,000	2,100,000	2,100,000	2,100,000	2,100,000	2,100,000
<b>Available Cash to Disburse</b>	<b>\$ 7,089,402</b>	<b>\$ 14,025,012</b>	<b>\$ 12,639,189</b>	<b>\$ 7,928,222</b>	<b>\$ 5,845,233</b>	<b>\$ 24,250,856</b>
q) Loan Proceeds	6,000,000	6,000,000	6,000,000	6,000,000	7,000,000	6,000,000
<b>Net Cash</b>	<b>\$ 13,089,402</b>	<b>\$ 20,025,012</b>	<b>\$ 18,639,189</b>	<b>\$ 13,928,222</b>	<b>\$ 12,845,233</b>	<b>\$ 30,250,856</b>

The graph below 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**, with no rate increase and \$50M in long-term debt, produced the second highest funding shortfall of \$27.4M over the remaining 8 years of the forecasted period.

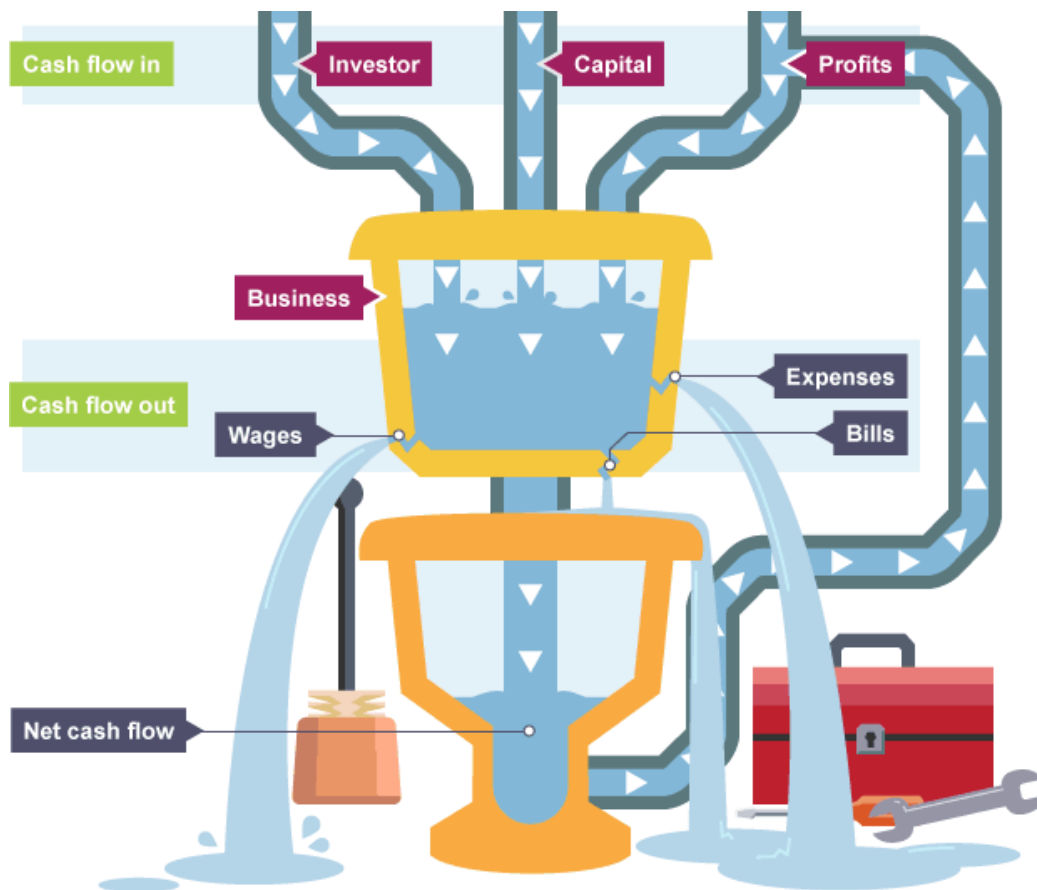




The surplus or deficiency in cash flow based on the five sample scenarios are found in the table below. It should be noted that these scenarios are created for general analysis and discussion purposes only. Depending on board approval, project timing or scope can be altered, or the project can be eliminated 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.

Fiscal Year	Cumulative CIP	Funding Gap (millions)				
		A: (0,3,\$25M)	B: (0,5,\$25M)	C: (3,3,\$25M)	D: (5,3,\$25M)	E: (0,3&Per,\$50M)
FYB 2018	\$7.1 M	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
FYB 2019	\$31.5 M	-\$10.4	-\$10.4	-\$8.5	-\$6.5	-\$10.4
FYB 2020	\$65.8 M	-\$30.6	-\$31.8	-\$26.7	-\$22.8	-\$32.1
FYB 2021	\$78.2 M	-\$33.5	-\$37.3	-\$27.7	-\$21.8	-\$36.5
FYB 2022	\$95.4 M	-\$43.2	-\$50.9	-\$35.3	-\$27.4	-\$47.9
FYB 2023	\$109.9 M	-\$31.5	-\$44.7	-\$21.5	-\$11.6	-\$38.1
FYB 2024	\$137.1 M	-\$34.5	-\$54.9	-\$22.4	-\$10.5	-\$43.3
FYB 2025	\$140.0 M	-\$15.2	-\$44.5	\$1.0	\$13.1	-\$27.4
		-\$15.2	-\$44.5	\$1.0	\$13.1 M	-\$27.4 M

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





## Cash Flow Projection - Water and Sewer Fund

**Scenario C** (dark blue line): Rate increase – 3% in FY 2019 – 2020; Operating Expense Growth - 3%; Debt Proceeds - \$25M to finance a major phase of an interceptor project estimated at \$60M to complete. Scenario C was selected because it was the scenario that best met the funding requirements of the suggested capital project plan.

This six-year projection includes debt proceeds of \$25M, an interest rate of 0.65 percent, an interest only period of 4 years –during construction, and level principal and interest payments amortized over 15 years. All assumptions are listed below.

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

Fiscal Year Ended April 30,	Projected - FYE						
	2018	2019	2020	2021	2022	2023	2024
<i>Cash Flows from Current Operations</i>							
a) Operating Revenues	\$ 100,531,584	\$ 97,935,672	\$ 97,935,672	\$ 97,935,672	\$ 97,935,672	\$ 97,935,672	\$ 97,935,672
b) Less: Operating Expenses (net Depr)	58,989,284	68,013,217	61,211,895	63,048,252	64,939,700	66,887,891	68,894,527
<b>Cash Flows from Operations</b>	<b>\$41,542,300</b>	<b>\$29,922,455</b>	<b>\$36,723,777</b>	<b>\$34,887,420</b>	<b>\$32,995,972</b>	<b>\$31,047,781</b>	<b>\$29,041,144</b>
<i>Cash Flows from Projected Changes</i>							
c) Rev: Increased rates - consumption- Water	\$ -	410,181	1,245,114	1,263,790	1,282,747	1,301,988	1,321,518
d) Rev: Increased rates - consumption - Sewer	-	342,433	1,055,779	1,071,616	1,087,690	1,104,005	1,120,565
e) Rev: Increased rates - base - Water	-	105,364	319,316	324,105	328,967	333,901	338,910
f) Rev: Increased rates - base - Sewer	-	95,133	288,307	292,632	297,021	301,476	305,999
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	-	-	-	-	-	-	-
<b>Proposed Project-Related Cash Flows</b>	<b>\$ -</b>	<b>\$ 962,796</b>	<b>\$ 2,918,347</b>	<b>\$ 2,962,122</b>	<b>\$ 3,006,554</b>	<b>\$ 3,051,652</b>	<b>\$ 3,097,427</b>
<b>Non-Operating Revenues (Expenses)</b>							
r) Impact Fees-Water/Sewer	1,936,683	877,530	1,009,160	1,110,075	1,126,727	1,143,627	1,160,782
j) Operating Transfers in -from Stormwater	1,162,140	1,413,558	1,455,965	1,499,644	1,544,633	1,590,972	1,638,701
<b>Available Cash Flows</b>	<b>\$ 46,627,484</b>	<b>\$ 33,176,339</b>	<b>\$ 42,107,247</b>	<b>\$ 40,459,261</b>	<b>\$ 38,673,885</b>	<b>\$ 36,834,033</b>	<b>\$ 34,938,054</b>
<i>Current Long-Term Obligations</i>							
k) Existing Bond Debt Service	\$ 20,187,740	\$ 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	797,647
<b>Existing Long-term Debt Service</b>	<b>\$ 20,985,387</b>	<b>\$ 20,990,602</b>	<b>\$ 21,867,877</b>	<b>\$ 20,077,347</b>	<b>\$ 21,342,097</b>	<b>\$ 21,343,147</b>	<b>\$ 797,647</b>
<i>Proposed Debt Service</i>							
m) Proposed New Debt: P&I Payments	\$ -	\$ -	\$ -	\$ -	\$ 1,749,688	\$ 1,749,688	\$ 1,749,688
n) Interest Only Payment/Second Issue P&I	-	104,000	133,250	162,500	-	-	-
<b>Proposed Additional Obligations</b>	<b>\$ -</b>	<b>\$ 104,000</b>	<b>\$ 133,250</b>	<b>\$ 162,500</b>	<b>\$ 1,749,688</b>	<b>\$ 1,749,688</b>	<b>\$ 1,749,688</b>
<b>Total Proposed Obligations</b>	<b>\$ 20,985,387</b>	<b>\$ 21,094,602</b>	<b>\$ 22,001,127</b>	<b>\$ 20,239,847</b>	<b>\$ 23,091,784</b>	<b>\$ 23,092,834</b>	<b>\$ 2,547,334</b>
<b>Debt Service Coverage - Bonds</b>	<b>2.31</b>	<b>1.63</b>	<b>1.99</b>	<b>2.08</b>	<b>1.73</b>	<b>1.65</b>	<b>19.97</b>
<b>Debt Service Coverage - Including GEFA Loans</b>	<b>2.22</b>	<b>1.57</b>	<b>1.91</b>	<b>2.00</b>	<b>1.67</b>	<b>1.60</b>	<b>13.72</b>

a) Operating Revenues are estimated actual for FY 201-2018. 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 h) 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 2019 – 2020 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 \$25M; disbursed over 4 years with interest only during construction. With proceeds of \$6M per year used to fund project costs. The interest rate is 0.65% with interest only paid monthly on the amount outstanding. Level principal and interest payments made monthly for 15 years beginning when construction is completed (\$1.7M/yr.).

## Projected Net Position - Water and Sewer Fund

Fiscal Year Ended April 30,	Projected - FYE						
	2018	2019	2020	2021	2022	2023	2024
<b>Cash Flows from Current Operations</b>							
a) Operating Revenues	\$ 100,531,584	\$ 97,935,672	\$ 97,935,672	\$ 97,935,672	\$ 97,935,672	\$ 97,935,672	\$ 97,935,672
b) Less: Operating Expenses (net Depr)	58,989,284	68,013,217	61,211,895	63,048,252	64,939,700	66,887,891	68,894,527
<b>Cash Flows from Operations</b>	<b>\$41,542,300</b>	<b>\$29,922,455</b>	<b>\$36,723,777</b>	<b>\$34,887,420</b>	<b>\$32,995,972</b>	<b>\$31,047,781</b>	<b>\$29,041,144</b>
<b>Cash Flows from Projected Changes</b>							
c) Rev: Increased rates - consumption- Water	\$ -	410,181	1,245,114	1,263,790	1,282,747	1,301,988	1,321,518
d) Rev: Increased rates - consumption - Sewer	-	342,433	1,055,779	1,071,616	1,087,690	1,104,005	1,120,565
e) Rev: Increased rates - base - Water	-	105,364	319,316	324,105	328,967	333,901	338,910
f) Rev: Increased rates - base - Sewer	-	95,133	288,307	292,632	297,021	301,476	305,999
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	-	-	-	-	-	-	-
<b>Proposed Project-Related Cash Flows</b>	<b>\$ -</b>	<b>\$ 962,796</b>	<b>\$ 2,918,347</b>	<b>\$ 2,962,122</b>	<b>\$ 3,006,554</b>	<b>\$ 3,051,652</b>	<b>\$ 3,097,427</b>
<b>Non-Operating Revenues (Expenses)</b>							
r) Impact Fees-Water/Sewer	1,936,683	877,530	1,009,160	1,110,075	1,126,727	1,143,627	1,160,782
j) Operating Transfers in -from Stormwater	1,162,140	1,413,558	1,455,965	1,499,644	1,544,633	1,590,972	1,638,701
<b>Available Cash Flows</b>	<b>\$ 46,627,484</b>	<b>\$ 33,176,339</b>	<b>\$ 42,107,247</b>	<b>\$ 40,459,261</b>	<b>\$ 38,673,885</b>	<b>\$ 36,834,033</b>	<b>\$ 34,938,054</b>
<b>Current Long-Term Obligations</b>							
k) Existing Bond Debt Service	\$ 20,187,740	\$ 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	797,647
<b>Existing Long-term Debt Service</b>	<b>\$ 20,985,387</b>	<b>\$ 20,990,602</b>	<b>\$ 21,867,877</b>	<b>\$ 20,077,347</b>	<b>\$ 21,342,097</b>	<b>\$ 21,343,147</b>	<b>\$ 797,647</b>
<b>Proposed Debt Service</b>							
m) Proposed New Debt: P&I Payments	\$ -	\$ -	\$ -	\$ -	\$ 1,749,688	\$ 1,749,688	\$ 1,749,688
n) Interest Only Payment/Second Issue P&I	-	104,000	133,250	162,500	-	-	-
<b>Proposed Additional Obligations</b>	<b>\$ -</b>	<b>\$ 104,000</b>	<b>\$ 133,250</b>	<b>\$ 162,500</b>	<b>\$ 1,749,688</b>	<b>\$ 1,749,688</b>	<b>\$ 1,749,688</b>
<b>Total Proposed Obligations</b>	<b>\$ 20,985,387</b>	<b>\$ 21,094,602</b>	<b>\$ 22,001,127</b>	<b>\$ 20,239,847</b>	<b>\$ 23,091,784</b>	<b>\$ 23,092,834</b>	<b>\$ 2,547,334</b>
<b>Debt Service Coverage - Bonds</b>	<b>2.31</b>	<b>1.63</b>	<b>1.99</b>	<b>2.08</b>	<b>1.73</b>	<b>1.65</b>	<b>19.97</b>
<b>Debt Service Coverage - Including GEFA Loans</b>	<b>2.22</b>	<b>1.57</b>	<b>1.91</b>	<b>2.00</b>	<b>1.67</b>	<b>1.60</b>	<b>13.72</b>
<b>Available Cash Produced</b>	<b>\$ 25,642,097</b>	<b>\$ 12,081,737</b>	<b>\$ 20,106,121</b>	<b>\$ 20,219,414</b>	<b>\$ 15,582,101</b>	<b>\$ 13,741,198</b>	<b>\$ 32,390,720</b>
<b>Beginning Net Position</b>							
Net Investment in Capital Assets	\$ 359,385,331	\$ 383,197,988	\$ 407,357,664	\$ 425,759,591	\$ 443,730,273	\$ 464,397,082	\$ 511,390,235
Restricted Net Position	40,617,015	41,435,098	41,165,115	40,032,350	42,143,525	42,971,826	24,302,633
Unrestricted Net Position	67,598,756	75,366,914	63,625,176	66,462,134	66,599,691	60,686,682	46,103,921
<b>Beginning Net Position</b>	<b>\$ 468,100,602</b>	<b>\$ 500,000,000</b>	<b>\$ 512,147,954</b>	<b>\$ 532,254,075</b>	<b>\$ 552,473,489</b>	<b>\$ 568,055,590</b>	<b>\$ 581,796,789</b>
<b>Ending Net Position</b>							
Net Investment in Capital Assets	\$ 383,197,988	\$ 407,357,664	\$ 425,759,591	\$ 443,730,273	\$ 464,397,082	\$ 511,390,235	\$ 520,135,294
Restricted Net Position	41,435,098	41,165,115	40,032,350	42,143,525	42,971,826	24,302,633	489,125
Unrestricted Net Position	75,366,914	63,625,176	66,462,134	66,599,691	60,686,682	46,103,921	93,563,089
<b>Ending Net Position</b>	<b>\$ 500,000,000</b>	<b>\$ 512,147,954</b>	<b>\$ 532,254,075</b>	<b>\$ 552,473,489</b>	<b>\$ 568,055,590</b>	<b>\$ 581,796,789</b>	<b>\$ 614,187,508</b>

**Scenario C** (dark blue line): Rate increase – 3% in FY 2019 – 2020; Operating Expense Growth - 3%; Debt Proceeds - \$25M.



Using information from the cash flow projection on the previous page, the estimated net position was calculated for the forecasted period through FYE 2024. Net Position at FYE 2016 was **\$468,100,602** and projected to increase by \$31,899,398 to **\$500,000,000** at FYE 2018. This is presented as ***Beginning Net Position*** in the table above for FYE 2019.

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 sufficient funds will be available in our trust accounts to pay the principal and interest when it becomes due every six months.

The entire amount noted as Debt Service, \$21.1M, represents the transfers from the Water and Sewer Fund into these individual bank accounts. Presently, the Authority has five different series of revenue bonds outstanding. The particular 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. All 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 \$21.1M, which is the debt service payment for May 1, 2019. 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	\$ 14,890,000	\$ 2,895,000
2011 Series	2.00 - 5.00%	2011	2020	13,190,000	6,470,000	6,720,000
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	25,365,000	22,530,000
<b>Total</b>				<b>\$ 486,470,000</b>	<b>\$ 381,075,000</b>	<b>\$ 105,395,000</b>

### SERIES 2009 WATER AND SEWERAGE REFUNDING REVENUE BONDS

On December 30, 2009, the Authority issued \$17.8 million in Series 2009 Water and Sewerage Revenue Refunding Bonds. After redeeming the \$2.8 million in bonds that mature on May 1, 2017, there will be an outstanding principal balance of \$2.9 million on this series. The last principal payment made on this bond will occur on May 1, 2018.

### 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, 2017, there will be an outstanding balance of \$6.7 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 \$11.3 million in bonds that mature on May 1, 2017, there will remain a balance of \$39.5 million outstanding on this series. The final principal payment for these bonds will be on May 1, 2020.



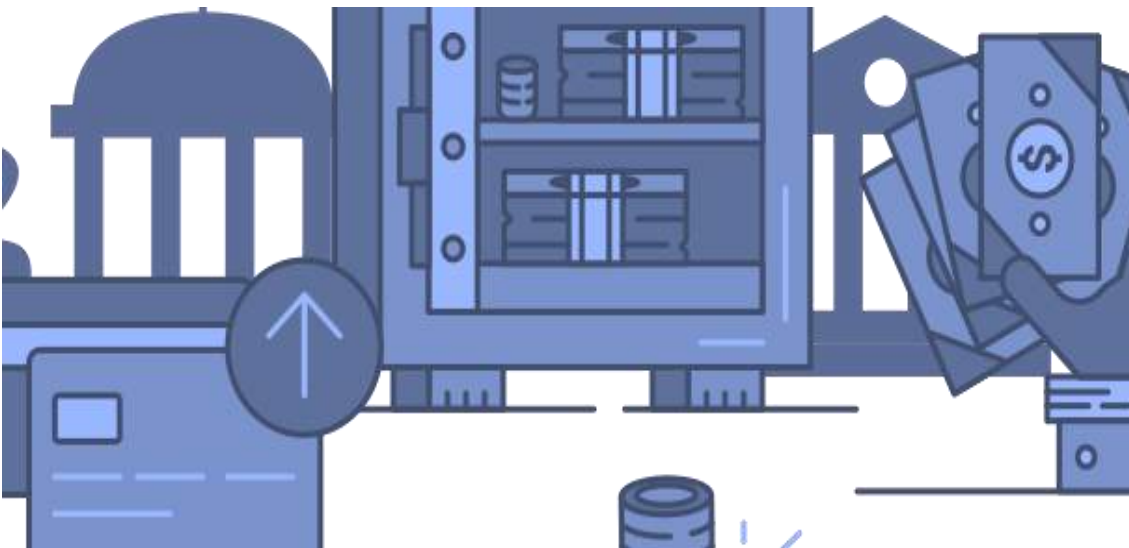


As of April 30, 2017, the Authority was obligated to make payments of principal, due on May 1, and interest due on May 1 and November 1, for various revenue bond issues as follows:

<i>For Fiscal Years Ending April 30,</i>	<b>Principal</b>	<b>Interest</b>	<b>Total Payments</b>
2018	15,695,000	4,345,347	20,040,347
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 - 2024	38,270,000	1,898,500	40,168,500
<b>Totals</b>	<b>\$ 121,090,000</b>	<b>\$ 19,027,455</b>	<b>\$ 140,117,455</b>

### 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

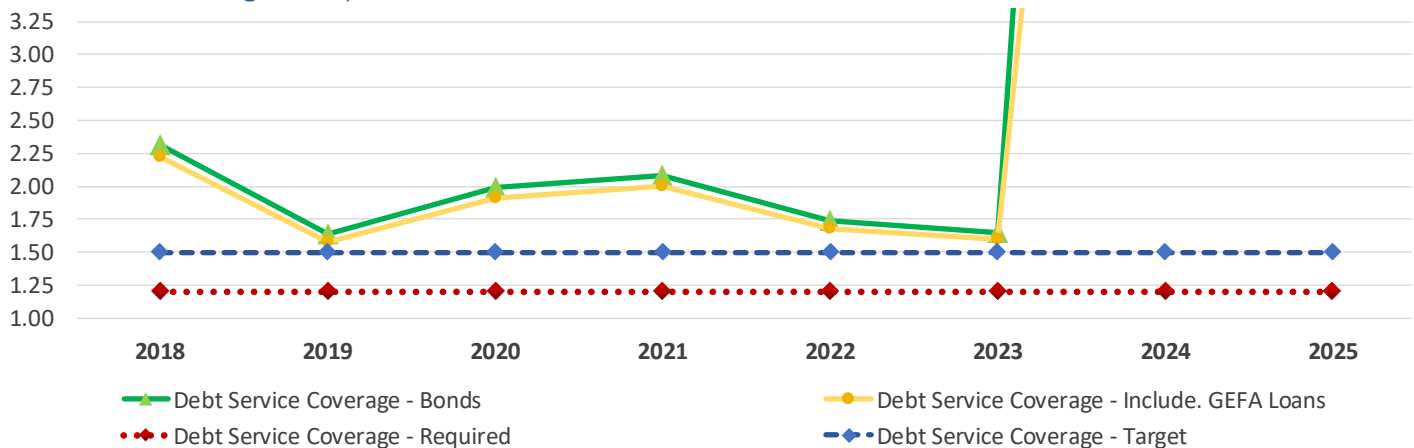
The projected debt service and *Debt Service Coverage Ratio* is shown for the forecasted period through FYE 2024 using the cash flow generated by **Scenario C** using an annual rate increase of 3 percent for water and sewer, annual operating expense growth of 3 percent and Loan Proceeds of \$25M.

### 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,	2018	2019	2020	2021	2022	2023	2024
<b>Current Long-Term Obligations</b>							
<b>Existing Bond Debt Service</b>	\$ 20,187,740	\$ 20,192,955	\$ 21,070,230	\$ 19,279,700	\$ 20,544,450	\$ 20,545,500	\$ -
2013-A Series - Principal	-	3,435,000	13,580,000	-	-	-	-
2013-A Series - Interest	816,400	816,400	679,000	-	-	-	-
2013-B Series - Principal	10,945,000	11,585,000	-	-	-	-	-
2013-B Series - Interest	372,705	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	2,579,450	1,840,500	978,250	-
2011 Series - Principal	2,155,000	2,240,000	2,325,000	-	-	-	-
2011 Series - Interest	313,600	205,850	116,250	-	-	-	-
2009 Series - Principal	2,895,000	-	-	-	-	-	-
2009 Series - Interest	115,800	-	-	-	-	-	-
<b>Existing GEFA Debt Service</b>	<b>797,647</b>	<b>797,647</b>	<b>797,647</b>	<b>797,647</b>	<b>797,647</b>	<b>797,647</b>	<b>797,647</b>
<b>Existing Long-term Debt Service</b>	<b>\$ 20,985,387</b>	<b>\$ 20,990,602</b>	<b>\$ 21,867,877</b>	<b>\$ 20,077,347</b>	<b>\$ 21,342,097</b>	<b>\$ 21,343,147</b>	<b>\$ 797,647</b>
<i>Proposed Debt Service</i>							
Proposed New Debt: P&I Payments	\$ -	\$ -	\$ -	\$ -	\$ 1,749,688	\$ 1,749,688	\$ 1,749,688
Interest Only Payment	-	104,000	133,250	162,500	-	-	-
<b>Proposed Additional Obligations</b>	<b>\$ -</b>	<b>\$ 104,000</b>	<b>\$ 133,250</b>	<b>\$ 162,500</b>	<b>\$ 1,749,688</b>	<b>\$ 1,749,688</b>	<b>\$ 1,749,688</b>
<b>Total Proposed Obligations</b>	<b>\$ 20,985,387</b>	<b>\$ 21,094,602</b>	<b>\$ 22,001,127</b>	<b>\$ 20,239,847</b>	<b>\$ 23,091,784</b>	<b>\$ 23,092,834</b>	<b>\$ 2,547,334</b>
<b>Debt Service Coverage - Bonds</b>	<b>2.31</b>	<b>1.63</b>	<b>2.08</b>	<b>2.18</b>	<b>1.82</b>	<b>1.74</b>	<b>21.13</b>
<b>Debt Service Coverage - Include. GEFA Loans</b>	<b>2.22</b>	<b>1.57</b>	<b>2.00</b>	<b>2.10</b>	<b>1.76</b>	<b>1.68</b>	<b>14.51</b>

### Debt Service Coverage - Graph



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



## Projected Net Position - Stormwater Fund

Fiscal Year Ended April 30,	FYE - Projected						
	2018	2019	2020	2021	2022	2023	2024
<b>Cash Flows from Current Operations</b>							
Operating Revenues	\$ 10,006,730	\$ 10,006,730	\$ 10,006,730	\$ 10,006,730	\$ 10,006,730	\$ 10,006,730	\$ 10,006,730
Less: Operating Expenses (net Depr)	4,473,383	4,607,584	4,676,698	4,746,848	4,818,051	4,890,322	4,963,677
<b>Cash Flows from Operations</b>	<b>\$ 5,533,347</b>	<b>\$ 5,399,145</b>	<b>\$ 5,330,032</b>	<b>\$ 5,259,881</b>	<b>\$ 5,188,678</b>	<b>\$ 5,116,408</b>	<b>\$ 5,043,053</b>
<b>Cash Flows from Projected Changes</b>							
Rev: Increased rates - Residential (each 10% = \$335K/yr)		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Rev: Increased rates - Government (each 10% = \$130K/yr)		-	-	-	-	-	-
Rev: Increased rates - Other (each 10% = \$520K/yr)		-	-	-	-	-	-
Rev: Increased Customer Base							
Exp: Decrease / (Increase) Oper Exp		-	-	-	-	-	-
<b>Proposed Project-Related Cash Flows</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Non-Operating Revenues (Expenses)</b>							
Interest Income-Stormwater	7,610						
Operating Transfers in -Water/Sewer	(1,146,586)	(1,413,558)	(1,455,965)	(1,499,644)	(1,544,633)	(1,590,972)	(1,638,701)
<b>Available Cash Flows</b>	<b>\$ 4,394,371</b>	<b>\$ 3,985,587</b>	<b>\$ 3,874,067</b>	<b>\$ 3,760,237</b>	<b>\$ 3,644,045</b>	<b>\$ 3,525,436</b>	<b>\$ 3,404,352</b>
<b>Current Long-Term Debt Service</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Proposed Debt Service</b>							
Proposed New Debt		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interest Only Annual Payment							
<b>Proposed Additional Obligations</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Proposed Obligations</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Available Cash Produced</b>	<b>\$ 4,394,371</b>	<b>\$ 3,985,587</b>	<b>\$ 3,874,067</b>	<b>\$ 3,760,237</b>	<b>\$ 3,644,045</b>	<b>\$ 3,525,436</b>	<b>\$ 3,404,352</b>
<b>Beginning Net Position</b>							
Net Investment in Capital Assets	45,213,150	46,939,665	48,939,665	50,439,665	52,139,665	54,639,665	57,139,665
Restricted	120,714	121,886	123,714	-	-	-	-
Unrestricted	6,020,588	6,702,244	6,700,416	7,324,130	7,624,130	7,124,130	6,624,130
<b>Beginning Net Position</b>	<b>\$ 51,354,452</b>	<b>\$ 53,763,795</b>	<b>\$ 55,763,795</b>	<b>\$ 57,763,795</b>	<b>\$ 59,763,795</b>	<b>\$ 61,763,795</b>	<b>\$ 63,763,795</b>
<b>Ending Net Position</b>							
Net Investment in Capital Assets	46,939,665	48,939,665	50,439,665	52,139,665	54,639,665	57,139,665	59,639,665
Restricted	121,886	123,714	-	-	-	-	-
Unrestricted	6,702,244	6,700,416	7,324,130	7,624,130	7,124,130	6,624,130	6,124,130
<b>Ending Net Position</b>	<b>\$ 53,763,795</b>	<b>\$ 55,763,795</b>	<b>\$ 57,763,795</b>	<b>\$ 59,763,795</b>	<b>\$ 61,763,795</b>	<b>\$ 63,763,795</b>	<b>\$ 65,763,795</b>

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 2017 was **\$51,354,452** and projected to increase by \$2,409,343 to **\$53,763,795** at FYE 2018. 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.

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- **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

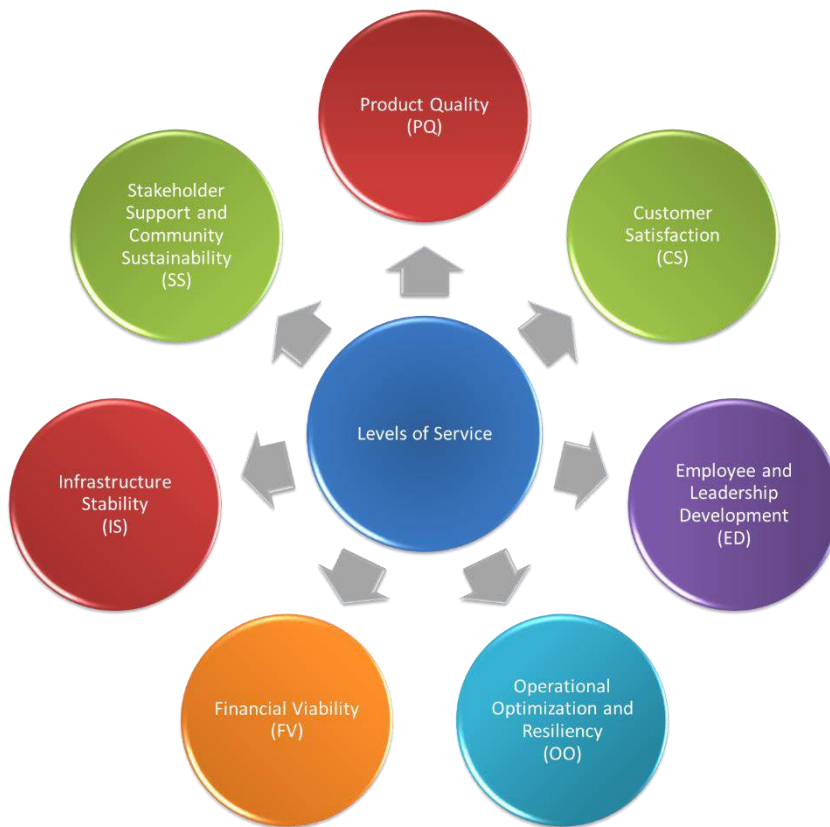
The Authority has implemented Levels of Service (LOS) performance measures, or key performance indicators (KPIs). These KPIs guide operational and capital activities and provide metrics that hold us accountable and responsive to the

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 2016 - 2017	Actual 2015 - 2016	Actual 2014 - 2015
<b>SUPERIOR PRODUCT QUALITY</b>						
1 Meet all applicable regulatory requirements	% compliance with NPDES permits	WR	100%	100.0%	98.3%	100.0%
	% compliance with Water Production permits	WP	100%	100.0%	100.0%	100.0%
	% compliance with regulatory annual reporting (July)	WR	100%	100.0%	100.0%	100.0%
	% compliance with MNGWPD Plan (Jan)	PME	100%	100.0%	100.0%	99.4%
2 Potable water quality that meets customer expectations	# discoloration complaint calls (CCWA issue)	DC	< 200/Yr. - Reduce 10%/Yr.	272	1,034 / 95%	529
	# water Taste and Odor complaint calls (CCWA issue)	DC	< 25/Yr. - Reduce 10%/Yr.	41	105 / 8%	97
3 Improve the quality of Clayton Co. water resources	% compliance with MS4 Permit (Sep.)	SW	100%	100.0%	100.0%	100.0%
	Miles of water quality non-attainment streams (Sep.)	SW	< 65	65	65	65
<b>EXCEED CUSTOMER EXPECTATIONS</b>						
4 Improve customer experience	% customers calls that are abandoned	CS	< 3% / Month	5.3%	4.1%	7.1%
	% days the call abandonment rate <3%	CS	> 80% / Month	48.4%	64.6%	46.82%
	% meters accurately read	CS	> 99.98% / Month	100.0%	100.0%	100.0%
	% site visits within 2 hours of customer call	DC	> 90% / Month	92.8%	93.8%	91.7%
	% site visits within 24 hours of customer call	SW	> 90% / Month	98.4%	99.0%	100.0%
	# callers using IVR	CS	> 4,000 /Month	8,880	4,992	4,797
	# customers using eCare	CS	> 8,000/Month	12,711	8,122	9,218
	% customer calls within 35 seconds	CS	> 60% / Month	56.24%	65.2%	57.2%
	% customers billed within 28-32 days of usage	CS	> 90% / Month	95.08%	81.3%	73.9%
5 Minimize potable water service disruptions	# low pressure complaints	DC	< 20 / Year	14	20	25
	% downtime for production plant and repump stations	WP	1% / Month	0.5%	0.19%	0.03%
	% maintenance related water service disruptions < 4 hours	DC	> 80% / Month	83.7%	81.3%	91.2%
6 Minimize customer sewer backups	Expense for sewer backup claims	DC	< \$200,000 / Year	\$354,457	\$108,588	\$127,395
	# sewer backup damage claims	DC	< 20 / Year	10	15	14
7 Complete all property restorations in 14 days	% property restorations completed < 14 days	DC	100% / Month	54.6%	53.7%	63.2%



## Strategies: 8 through 16

Service Level Goal		Key Performance Indicator (KPI)	Division	Target	Actual 2016 - 2017	Actual 2015 - 2016	Actual 2014 - 2015
PROVIDE EMPLOYEE DEVELOPMENT							
8	Provide effective employee training and development	% DC employees with required certifications (Apr)	DC	100%	96.2%	96.3%	83.5%
		% SW employees with required certification (Apr)	SW	100%	100.0%	89.8%	87.8%
		% WP employees with required licenses (Apr)	WP	100%	100.0%	100%	100.0%
		% WR employees with required licenses (Apr)	WR	100%	100.0%	100%	100.0%
9	Provide CCWA employee opportunity for advancement	% key position non-entry level positions filled within (Apr)	HR	> 80%	85.7%	84.9%	82.2%
		% Supervisors with completed competency assessment (Apr)	HR	100%	100.0%	100.0%	92.7%
10	Satisfaction with working environment, challenge and opportunities	% non-retirement voluntary turnover (Apr)	HR	< 5% / Year	1.4%	0.85%	2.8%
11	Manage safety to minimize accidents	# of Employee non-lost time injuries	RM	< 23.4 / Year	15	18	12
		# Employee lost time injuries	RM	< 11.2 / Year	8	10	5
		# of CCWA at-fault veh/equip accidents	RM	< 12 / Year	20	21	13
12	Timely/targeted employee communications	% distributed by the 3rd of the month (Apr)	PIO	100%	66.7%	91.7%	91.7%
OPTIMIZE OPERATIONS							
13	Reasonable Cost of Service	Water loss based on 12 mo. running avg. - prior month	WP	< 9% / Month	7.5%	8.0%	8.8%
		\$/mile of SW system pipe maintained (Apr)	SW	< \$3,000	\$2,710	\$1,324	\$2,064
		\$/acct. of wastewater collection system pipe maintained (Apr)	DC	< \$373	\$82	\$87	\$79
		\$/acct. of water distribution system pipe maintained (Apr)	DC	< \$408	\$91	\$95	\$98
		IT operating cost ratio per million dollars in revenue (Apr)	IT	< 3.82%	2.3%	2.2%	2.2%
		IT operational cost per user (Apr)	IT	< \$7,000	\$6,064	\$5,946	\$5,907
		% of budget (Apr)	WP	< 95%	88.1%	79.9%	80.3%
		% of budget (Apr)	WR	< 95%	91.7%	82.4%	80.1%
		% of budget (Apr)	SW	< 95%	85.1%	70.9%	86.7%
		% of budget (Apr)	DC	< 95%	85.1%	NA	NA
		% of Conveyance budget (Apr)	DC	< 95%	NA	72.1%	68.2%
		% of Distribution budget (Apr)	DC	< 95%	NA	83.7%	96.8%
		\$/kGal produced (Apr)	WP	<\$1.00	\$0.81	\$0.82	\$0.92
		\$/kGal reclaimed (Apr)	WR	<\$2.00	\$1.64	\$1.17	\$1.49
		\$ 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	0.69	1.20	1.33
15	Provide Minimum Down Time for CCWA's Fleet	Fleet work orders completed within 7 days	GS	> 80%	96.8%	85.6%	N/A
		Fleet maintenance cost to fleet asset value	GS	< 25%	7.0%	9.6%	N/A
16	Maximize computer system availability	% unplanned downtime during business hours	IT	< 1% of Business Hours	0.2%	0.2%	2.4%



## Strategies: 17 through 22

Service Level Goal	Key Performance Indicator (KPI)	Division	Target	Actual 2016 - 2017	Actual 2015 - 2016	Actual 2014 - 2015
<b>ENSURE FINANCIAL VIABILITY</b>						
17 Develop a Sustainable Annual Budget	% of water/sewer budget (Apr)	FIN	<95%	84.0%	73.8%	21.8%
	% SMP projects funded in next FY (Apr)	PME	100%	49.0%	69.0%	93.7%
18 Provide financing for the "Pay-As-You-Go" capital plan	Debt Service Coverage Ratio	FIN	>1.5x	2.73	2.31	2.72
19 Maximize revenue collection vs. bad debt write-offs	Percentage of bad debt to sales	CS	< 1.5%	1.0%	1.2%	1.3%
<b>INFRASTRUCTURE SUSTAINABILITY</b>						
20 Implement asset management practices	Facilities work orders completed within 7 days	GS	>80%	80.3%	80.3%	N/A
	Facilities maintenance cost to asset value	GS	< 25%	6.8%	5.8%	N/A
21 Provide a sustainable water supply	# water main breaks per 100 miles of pipe (Apr)	DC	11	7.5	0.13	6.00
	# water main leaks per 100 miles of pipe (Apr)	DC	25	11.4	0.36	16.30
	% reservoir storage capacity	WP	> 90%	86.7%	99.3%	98.2%
	Value of water services claims paid	DC	< \$50,000 / Year	\$9,407	\$55,374	\$2,131
22 Provide adequate treatment capacity	% utilized capacity at Casey WRRF	WR	< 80%	54.8%	68.1%	57.5%
	% utilized capacity at Northeast WRF	WR	< 80%	36.5%	50.2%	38.3%
	% utilized capacity at Shoal Creek	WR	< 80%	33.9%	42.3%	33.3%
	% sewer lines with adequate capacity (Apr)	PME	> 75%	64.0%	64.0%	64.0%

## Strategies: 23 through 26

Service Level Goal	Key Performance Indicator (KPI)	Division	Target	Actual 2016 - 2017	Actual 2015 - 2016	Actual 2014 - 2015
<b>STAKEHOLDER SUPPORT</b>						
23 Environmental Stewardship and Sustainability	# low flow plumbing kits distributed	CS	> 1,000 / Year	1,056	1,022	667
	# SSOs to state waters	DC	< 40 / Year	30	40	21
	# toilet rebates	CS	> 400 / Year	284	352	405
	WR Carbon footprint status - Mton/yr. as CO2 (e) (Jan)	WR	Report	4.25	4.22	4
	Per capita water use in gpcd (Jan)	WP	< 90gpcd	94.1	89.6	89.4
	% beneficial reuse of biosolids (Jan)	WR	100%	100.0%	100.0%	93.5%
24 Business opportunity development	# of CCWA Certified SLBE	RM	>56 (2014-15) >100 (2015-16) >115 (2017-18)	112	91	0
25 Timely/targeted customer communications	# new website visits	PIO	> 100,000 / Year	205,826	227,758	177,950
	# unique website hits	PIO	> 120,000 / Year	244,979	261,673	200,215
	# educational bill inserts issued (Apr)	PIO	> 7 / Year	11	12	12
	# positive media releases issued (Apr)	PIO	> 16 / Year	31	36	27
26 Promote Community Involvement & Pride	CCWA staff who have participated in community events (Apr)	PIO	> 75 / Year	128	223	111
	Community events CCWA staff have participated in (Apr)	PIO	> 25 / Year	41	54	36
	# residents reached through public education events (Apr)	PIO	> 8000 / Year	10,572	13,868	7,597



## 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
<b>Strategic Planning:</b>												
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						→						
<b>Budget Development:</b>												
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							→					
<b>Finalize and Adopt:</b>												
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**

<b>Budget Summary By</b>	<b>FY 2016 - 17</b>	<b>FY 2017 - 18</b>	<b>FY 2018 - 19</b>
<b><u>Expenditure Class</u></b>	<b><u>Actual</u></b>	<b><u>Budgeted</u></b>	<b><u>Budgeted</u></b>
Personal Services	\$ 26,697,650	\$ 30,244,464	\$ 32,248,286
Operating Expenditures	26,533,858	34,803,956	36,701,102
Debt Service	-	622,543	641,478
Capital Outlay	1,571,447	1,711,592	2,892,335
Other Financing Uses	47,058,338	32,832,475	28,430,355
Total Appropriations	<u>\$ 101,861,293</u>	<u>\$ 100,215,030</u>	<u>\$ 100,913,556</u>

<b>Budget Detail By</b>	<b>FY 2016 - 17</b>	<b>FY 2017 - 18</b>	<b>FY 2018 - 19</b>
<b><u>Individual Categories</u></b>	<b><u>Actual</u></b>	<b><u>Budgeted</u></b>	<b><u>Budgeted</u></b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 18,667,786	\$ 21,062,917	\$ 21,524,870
Overtime Pay	780,495	772,392	1,002,619
F.I.C.A.	1,421,958	1,657,477	1,700,335
Pension	2,799,965	2,884,778	3,060,182
Employee Benefits	3,027,446	3,866,900	4,960,280
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	4,424,442	4,402,615	4,206,473
Vehicle Supplies	408,141	514,184	488,427
Administrative Supplies	183,176	327,944	310,284
Safety Supplies	59,848	89,822	90,687
Special Purchases	105,976	3,168,959	2,387,818
Utilities	7,266,044	7,755,828	7,774,532
Rentals	35,845	46,849	60,731
Maintenance and Repairs	1,134,408	1,240,891	1,354,350
Outside Services	7,352,461	10,681,384	12,160,580
Interest	191,639	229,273	936,171
Retiree Health Benefits	555,586	636,000	792,042
General Expenses	2,114,417	2,907,207	3,286,007
Accounting Charges	2,701,875	2,803,000	2,853,000
<b>Debt Service:</b>			
Capital Financing	-	622,543	641,478
<b>Capital Outlay:</b>			
Capital Expenditures	1,571,447	1,711,592	2,892,335
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	47,058,338	32,832,475	28,430,355
Total Appropriations	<u>\$ 101,861,293</u>	<u>\$ 100,215,030</u>	<u>\$ 100,913,556</u>





**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 Department - Business Unit Group 100



***Clayton County Water Authority***



**EXECUTIVE  
DEPARTMENT**



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



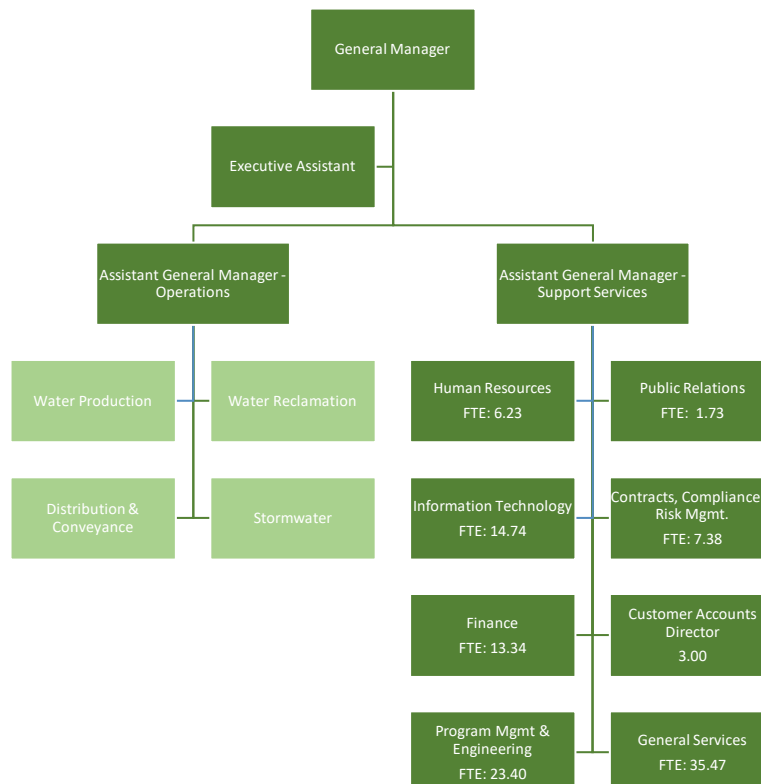
## EXECUTIVE DEPARTMENT BUDGET UNIT 100

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, information technology, 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 Directors of Human Resources, Finance, Information Technology, Risk Management, 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. Those Directors and Managers are then responsible for the day-to-day operations of their individual functions. To better manage operating expenses, the department is broken down into specific programs, activities, or functional areas of responsibility and are listed below.

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>101 - General Manager</li> <li>102 - Human Resources</li> <li>104 - Public Relations</li> <li>105 - Board Members</li> <li>106 - Information Technology</li> <li>109 - Contracts, Compliance and Risk Management</li> </ul> | <ul style="list-style-type: none"> <li>110 - Finance</li> <li>130 - Customer Accounts Director</li> <li>131 - Meter Services</li> <li>132 - Customer Accounting</li> <li>135 - Customer Service</li> </ul> |
|--|--|

### Executive Division Organizational Chart





## Executive Division Staffing

Authorized Personnel	FY 2016-2017 Budgeted	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted
<b>Executive Division</b>			
101 - General Manager	4.15	5.68	4.32
102 - Human Resources	6.00	6.23	6.23
104 - Public Relations	1.00	1.73	1.73
106 - Information Technology	14.74	14.74	14.74
109 - Contracts, Compliance & Risk Mgmt.	4.75	6.75	7.38
110 - Finance	13.00	13.00	13.34
130 - Customer Accounts Director	3.00	3.00	3.00
131 - Meter Services	23.40	23.40	23.40
132 - Customer Accounting	7.60	7.60	7.60
135 - Customer Service	35.47	35.47	35.47
<b>Total Full-Time Employees (FTEs)</b>	<b>113.11</b>	<b>117.60</b>	<b>117.21</b>





## Executive Division Consolidated Operating Budget

**Department : Executive****Business Unit : Department 100 - Consolidated****Overview of Department Responsibilities**

The primary responsibility of the Executive Department is to provide administrative and support services to the operating departments. Functional responsibilities include strategic management, human resources, customer service, information technology, business services and public relations. The activities are performed in accordance with federal and state laws which govern water distribution and wastewater collection systems and the various support responsibilities. The activities in this department 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.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 6,062,034	\$ 6,826,827	\$ 7,198,507
Overtime Pay	97,545	93,960	322,995
F.I.C.A.	444,326	518,047	552,832
Pension	1,076,833	920,735	1,078,777
Employee Benefits	1,025,064	1,307,013	1,667,898
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	397,410	396,400	532,008
Vehicle Supplies	62,363	70,350	69,460
Administrative Supplies	122,609	231,239	226,947
Safety Supplies	13,104	25,305	27,585
Special Purchases	61,277	3,013,979	2,203,218
Utilities	331,576	395,380	414,668
Rentals	7,022	12,665	14,665
Maintenance and Repairs	29,339	52,585	53,982
Outside Services	1,558,027	2,786,636	3,360,241
Interest	191,639	229,273	936,171
Retiree Health Benefits	555,586	636,000	792,042
General Expenses	1,216,962	1,747,939	2,159,291
Accounting Charges	2,701,875	2,803,000	2,853,000
<b>Debt Service:</b>			
Capital Financing	-	622,543	641,478
<b>Capital Outlay:</b>			
Capital Expenditures	209,453	422,136	399,849
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	40,920,412	21,514,180	21,260,355
Total Appropriations	<u>\$ 57,084,456</u>	<u>\$ 44,626,192</u>	<u>\$ 46,765,969</u>





## General Manager Staffing – Position Detail

Authorized Personnel	FY 2016-2017 Budgeted	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted
<b>General Manager</b>			
Assistant General Manager - Operations	1.00	1.00	1.00
Assistant General Manager - Support Svcs	1.00	1.00	1.00
Business Analyst	0.00	1.00	0.00
Executive Coordinator	1.00	1.00	1.00
General Manager	1.00	1.00	1.00
General Manager - Shadow	0.00	0.53	0.17
Plan/Policy Review Specialist	0.15	0.15	0.15
<b>Total Number of Personnel (FTE's)</b>	<b>4.15</b>	<b>5.68</b>	<b>4.32</b>

## General Manager– Major Initiatives for FY 2018 - 2019

Business Unit	Budget Funding	Account Number	Amount Budgeted	Initiative
<b>General Manager</b>				
<b>101</b>	<b>Operating</b>	56110	\$ 250,000	Misc. Consulting For Executive Department
		56131	130,000	Misc. HQ Maintenance
		59104	150,000	Organizational National and Regional Water Memberships
		59124	131,000	Timber Harvesting
	<b>Capital</b>	59303	60,000	Restroom Renovations at HQ
<b>Grand Total</b>			<b>\$ 721,000</b>	







## General Manager - Operating Budget

**Department : Executive****Business Unit : (101) General Manager****Major 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:**

**General Expenses:** represents funding for WEF and MNGWPD funding that was divided between Water Production, Water Reclamation and Stormwater.

**Intrafund Transfers Out:** represents funds being transferred to the Renewal and Extension Fund for HQ restroom renovations.

After meeting all budgetary needs, we are able to place \$2,080,318 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 Individual Categories	FY 2016 - 17 Actual	FY 2017 - 18 Budgeted	FY 2018 - 19 Budgeted
<b>Personal Services:</b>			
Salaries and Wages	\$ 515,667	\$ 626,419	\$ 717,956
Overtime Pay	344	460	400
F.I.C.A.	32,442	40,209	46,161
Pension	76,729	85,642	98,365
Employee Benefits	40,832	60,641	73,814
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	6,472	13,780	4,220
Vehicle Supplies	1,130	2,550	2,600
Administrative Supplies	7,238	7,140	7,850
Safety Supplies	26	100	500
Special Purchases	281	2,810,199	2,080,418
Utilities	55,388	60,450	61,850
Rentals	1,010	1,515	1,515
Maintenance and Repairs	6,746	10,300	19,400
Outside Services	166,387	437,875	416,005
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	305,025	336,424	493,661
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	8,500	-	-
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	58,747	30,000	60,000
Total Appropriations	\$ 1,282,964	\$ 4,523,704	\$ 4,084,715



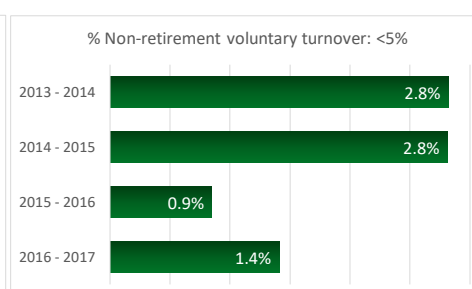
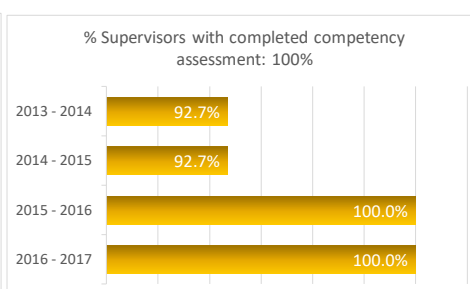
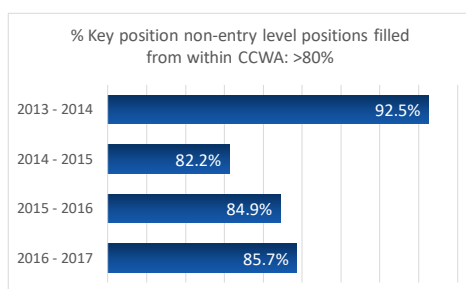
## Human Resources Staffing – Position Detail

Authorized Personnel	FY 2016-2017 Budgeted	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted
<b>Human Resources</b>			
Compensation and Benefits Coordinator	1.00	1.00	1.00
Human Resource Business Analyst	0.00	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	0.00	0.23	0.23
Human Resource Systems Analyst	1.00	0.00	0.00
Training and Development Coordinator	1.00	1.00	1.00
Training Specialist	1.00	1.00	1.00
<b>Total Number of Personnel (FTE's)</b>	<b>6.00</b>	<b>6.23</b>	<b>6.23</b>

## 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"*. The department met all three of its KPI metrics for the previous three fiscal years.

Service Level Goal		Key Performance Indicator (KPI)	Division	Target	Actual 2016 - 2017	Actual 2015 - 2016	Actual 2014 - 2015
PROVIDE EMPLOYEE DEVELOPMENT							
9	Provide CCWA employee opportunity for advancement	% key position non-entry level positions filled within (Apr)	HR	> 80%	85.7%	84.9%	82.2%
		% Supervisors with completed competency assessment (Apr)	HR	100%	100.0%	100.0%	92.7%
10	Satisfaction with working environment, challenge and opportunities	% non-retirement voluntary turnover (Apr)	HR	< 5% / Year	1.4%	0.85%	2.8%



## Human Resources – Major Initiatives for FY 2018 – 2019

Business Unit	Budget Funding	Account Number	Amount Budgeted	Initiative
<b>Human Resources</b>				
102	Operating	50402	\$ 105,000	Pension Catchup
		56101	30,000	Legal Fees
		56110	100,000	Compensation Study
		56110	50,000	Wellness Initiatives Monitoring and Coaching
		59135	54,080	Internal Employee Training Programs
<b>Grand Total</b>			<b>\$ 339,080</b>	



## 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:**

**Operating Materials and Supplies:** increase represents funding for Situational Leadership training. Supervisor Training materials and employee training materials.

**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 .

<b>Budget Detail By</b>	<b>FY 2016 - 17</b>	<b>FY 2017 - 18</b>	<b>FY 2018 - 19</b>
<b>Individual Categories</b>	<b>Actual</b>	<b>Budgeted</b>	<b>Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 498,847	\$ 536,657	\$ 532,769
Overtime Pay	492	-	3,000
F.I.C.A.	36,153	40,031	39,662
Pension	323,389	74,195	177,796
Employee Benefits	196,232	282,179	310,232
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	36,818	11,265	32,223
Vehicle Supplies	-	-	-
Administrative Supplies	2,722	33,640	10,072
Safety Supplies	344	-	-
Special Purchases	184	120	120
Utilities	12,152	5,705	13,150
Rentals	-	2,450	3,650
Maintenance and Repairs	382	30	30
Outside Services	57,014	135,487	246,687
Interest	-	-	-
Retiree Health Benefits	555,586	636,000	792,042
General Expenses	30,676	140,127	116,388
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	-	-	-
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	-
<b>Total Appropriations</b>	<b>\$ 1,750,991</b>	<b>\$ 1,897,886</b>	<b>\$ 2,277,821</b>



## Public Information Office Staffing – Position Detail

Authorized Personnel	FY 2016-2017 Budgeted	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted
<b>Public Relations</b>			
Communications Intern	0.00	0.73	0.73
Public Information Officer	1.00	1.00	1.00
<b>Total Number of Personnel (FTE's)</b>	<b>1.00</b>	<b>1.73</b>	<b>1.73</b>

## Public Information Office – Major Initiatives for FY 2018 – 2019

Business Unit	Budget Funding	Account Number	Amount Budgeted	Initiative
<b>Public Relations</b>				
<b>104</b>	<b>Operating</b>	56110	\$ 250,000	Web Strategy [SMP 112] [WP 2016-28]
		56110	3,500	Communication Strategy Ph. 3 [SMP 108]
		56199	15,000	Videos -Cycle of Water, Behind the Tap
		56199	9,000	Monthly hosting of website
		59110	26,795	Advertisements
	<b>Capital</b>	59991	9,307	Cubicles
<b>Grand Total</b>			<b>\$ 313,602</b>	

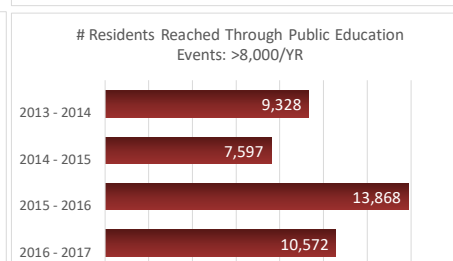
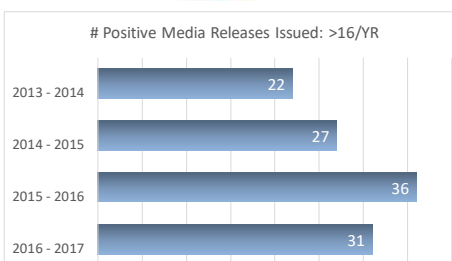
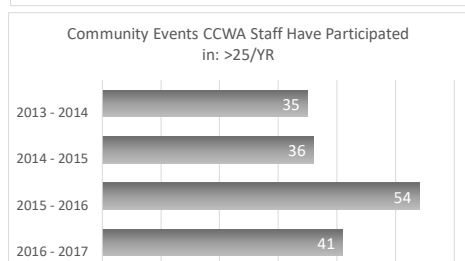
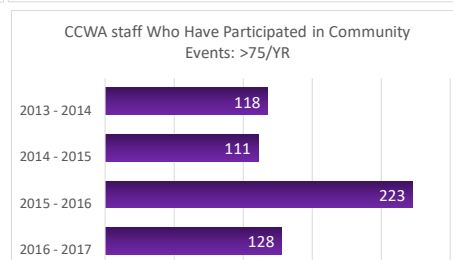
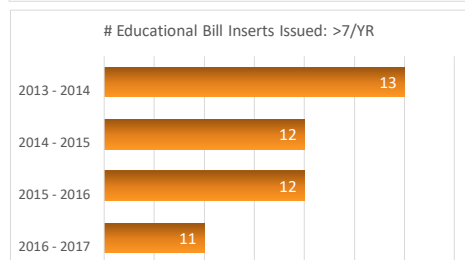
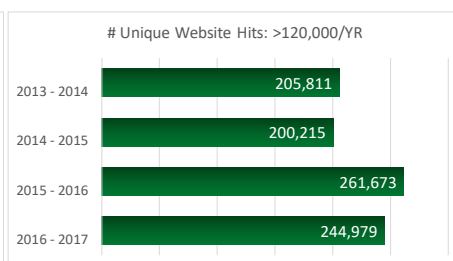
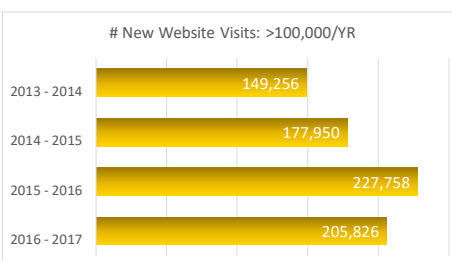
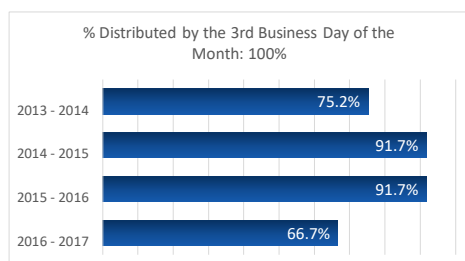




## Public Information Office – Levels of Service

The Public Information Office 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 3<sup>rd</sup> 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	Actual 2016 - 2017	Actual 2015 - 2016	Actual 2014 - 2015
<b>PROVIDE EMPLOYEE DEVELOPMENT</b>						
12 Timely/targeted employee communications	% distributed by the 3rd of the month (Apr)	PIO	100%	66.7%	91.7%	91.7%
<b>STAKEHOLDER SUPPORT</b>						
25 Timely/targeted customer communications	# new website visits	PIO	> 100,000 / Year	205,826	227,758	177,950
	# unique website hits	PIO	> 120,000 / Year	244,979	261,673	200,215
	# educational bill inserts issued (Apr)	PIO	> 7 / Year	11	12	12
	# positive media releases issued (Apr)	PIO	> 16 / Year	31	36	27
26 Promote Community Involvement & Pride	CCWA staff who have participated in community events (Apr)	PIO	> 75 / Year	128	223	111
	Community events CCWA staff have participated in (Apr)	PIO	> 25 / Year	41	54	36
	# residents reached through public education events (Apr)	PIO	> 8000 / Year	10,572	13,868	7,597





## Public Information Office - Operating Budget

**Department : Executive****Business Unit : (104) Public Relations****Major Business Unit Functions:**

Promotes good public relations in the community. 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:**

**Outside Services:** represents funding for Web Strategy, Communication Strategy consultants along with Behind the Tap video series.

**Capital Expenditures:** represents funding for office furniture.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 89,505	\$ 114,312	\$ 110,854
Overtime Pay	-	-	-
F.I.C.A.	6,765	8,746	8,480
Pension	12,218	12,709	13,087
Employee Benefits	6,933	7,435	10,251
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	24,579	30,000	30,000
Vehicle Supplies	-	-	-
Administrative Supplies	23,082	43,000	43,930
Safety Supplies	6	-	-
Special Purchases	-	-	-
Utilities	1,916	1,919	1,905
Rentals	-	1,000	-
Maintenance and Repairs	-	1,000	1,000
Outside Services	101,891	278,847	314,299
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	18,384	36,198	38,767
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	-	-	9,307
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	-
<b>Total Appropriations</b>	<b>\$ 285,279</b>	<b>\$ 535,166</b>	<b>\$ 581,880</b>





## 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:**

No significant changes from previous fiscal year.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 42,900	\$ 42,900	\$ 42,900
Overtime Pay	-	-	-
F.I.C.A.	3,282	3,282	3,282
Pension	-	-	-
Employee Benefits	113	106	106
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	8,768	200	5,300
Vehicle Supplies	-	-	-
Administrative Supplies	170	300	300
Safety Supplies	-	-	-
Special Purchases	-	-	-
Utilities	3,417	3,450	3,650
Rentals	-	-	-
Maintenance and Repairs	-	-	-
Outside Services	15,279	13,900	14,100
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	35,934	35,851	38,296
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	-	8,500	-
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	-
<b>Total Appropriations</b>	<b>\$ 109,863</b>	<b>\$ 108,489</b>	<b>\$ 107,934</b>

**\*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.



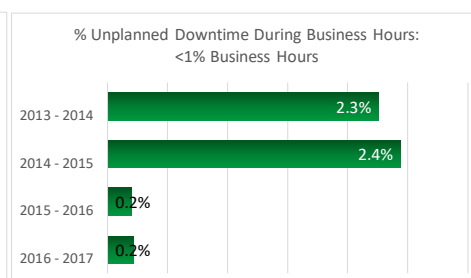
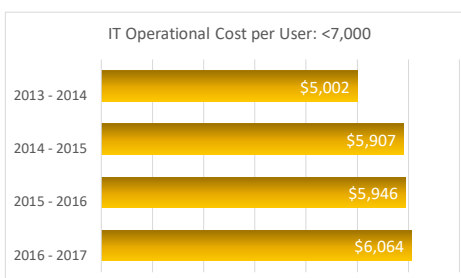
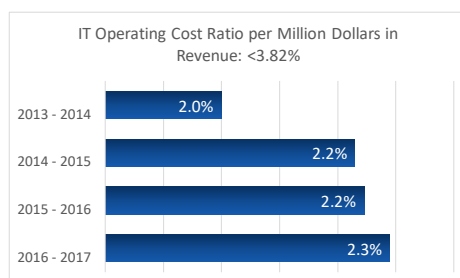
## Information Technology Staffing – Position Detail

Authorized Personnel	FY 2016-2017 Budgeted	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted
<b>Information Technology</b>			
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	0.00	1.00	1.00
Intern	0.74	0.74	0.74
Programmer Analyst	4.00	4.00	4.00
Records & Info Coordinator	1.00	0.00	0.00
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 & Op's Supervisor	1.00	1.00	1.00
<b>Total Number of Personnel (FTE's)</b>	<b>14.74</b>	<b>14.74</b>	<b>14.74</b>

## 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 3.82% 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%."* The department met its KPI metrics for the previous two fiscal years.

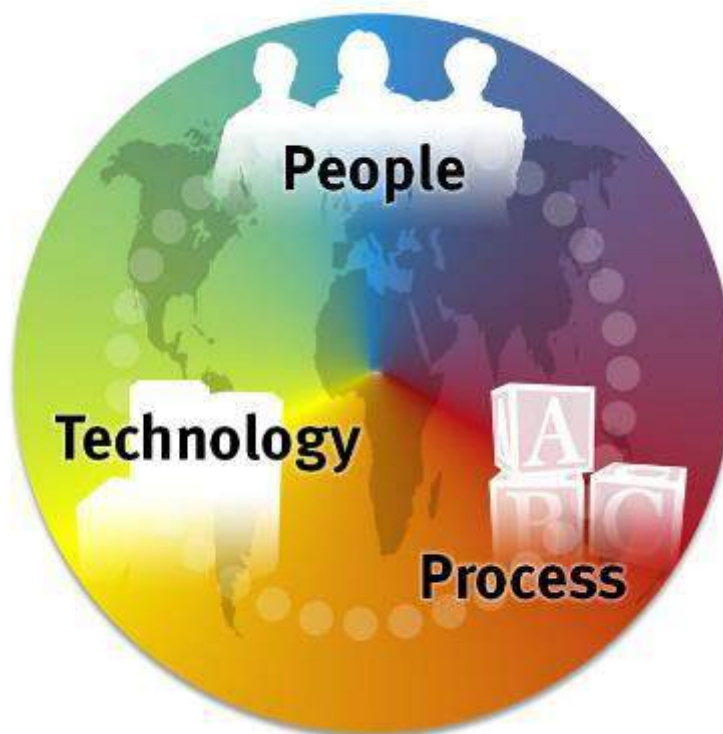
Service Level Goal	Key Performance Indicator (KPI)	Division	Target	Actual 2016 - 2017	Actual 2015 - 2016	Actual 2014 - 2015
<b>OPTIMIZE OPERATIONS</b>						
<b>13</b> Reasonable Cost of Service	IT operating cost ratio per million dollars in revenue (Apr)	IT	< 3.82%	<b>2.3%</b>	<b>2.2%</b>	<b>2.2%</b>
	IT operational cost per user (Apr)	IT	< \$7,000	<b>\$6,064</b>	<b>\$5,946</b>	<b>\$5,907</b>
<b>16</b> Maximize computer system availability	% unplanned downtime during business hours	IT	< 1% of Business Hours	<b>0.2%</b>	<b>0.2%</b>	<b>2.4%</b>





## Information Technology – Major Initiatives for FY 2018 – 2019

Business Unit	Budget Funding	Account Number	Amount Budgeted	Initiative
<b>Information Technology</b>				
<b>106</b>	<b>Operating</b>	51111	\$ 191,335	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
		56199	13,200	Proofpoint Security
		59122	873,000	Annual Software License
	<b>Capital</b>	59303	96,000	Software and Infrastructure Improvements
		59983	308,000	System and Network Upgrades
<b>Grand Total</b>			<b>\$2,220,535</b>	





## 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:**

**Personal Services:** increase represents funding for the reclass of the Communications Administrator from a paygrade 11 to paygrade 12.

**Outside Services:** represents funding for infrastructure monitoring, JDE monitoring and support of additional applications.

**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 infrastructure improvements, audio attendant gateway, help desk renovations, and voice environment upgrades.

**Capital Expenditures:** represents funding for server improvements, additional production and backup storage, network equipment refresh, Windows and VMware, additional Business Object license, Cloud Computing, Voice Equipment upgrades (phones) and Application Xtender upgrade.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 1,011,595	\$ 1,089,778	\$ 1,134,695
Overtime Pay	13,478	12,000	25,000
F.I.C.A.	74,920	82,691	87,510
Pension	136,543	149,450	156,135
Employee Benefits	117,296	143,894	175,451
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	35,607	16,580	198,835
Vehicle Supplies	-	-	-
Administrative Supplies	9,116	11,500	11,500
Safety Supplies	45	100	100
Special Purchases	220	300	300
Utilities	179,728	213,800	214,800
Rentals	-	-	-
Maintenance and Repairs	137	3,000	3,000
Outside Services	481,573	746,335	764,700
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	740,396	854,979	952,932
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	84,809	193,000	318,000
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	958,420	587,100	96,000
<b>Total Appropriations</b>	<b>\$ 3,843,883</b>	<b>\$ 4,104,507</b>	<b>\$ 4,138,958</b>



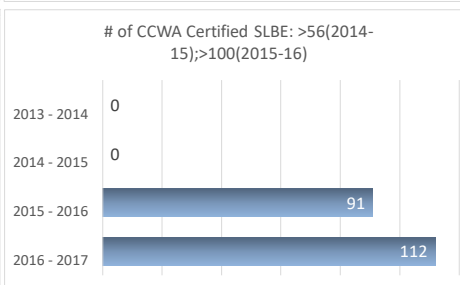
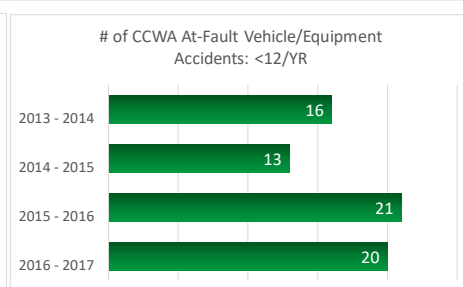
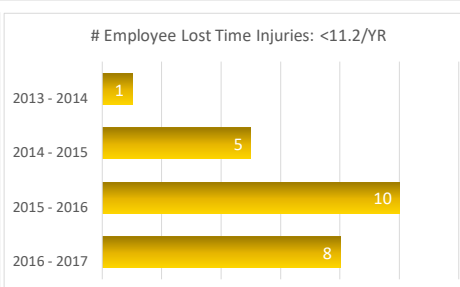
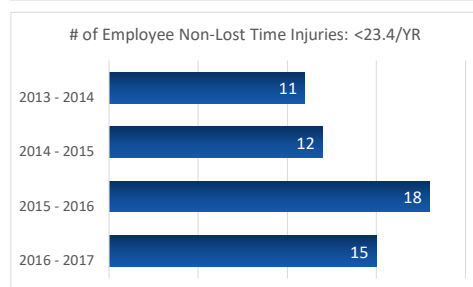
## Contracts, Compliance and Risk Management Staffing – Position Detail

Authorized Personnel	FY 2016-2017 Budgeted	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted
<b>Risk Management</b>			
Patrol Officer	0.00	1.00	1.00
Procurement Compliance Coordinator	1.00	1.00	1.00
Procurement & Contract Specialist	1.00	2.00	2.00
Risk Manager	1.00	1.00	1.00
Safety & Compliance Officer	1.00	1.00	1.00
Security Guards	0.75	0.75	0.38
Business Analyst: Procurement	0.00	0.00	1.00
<b>Total Number of Personnel (FTE's)</b>	<b>4.75</b>	<b>6.75</b>	<b>7.38</b>

## Contracts, Compliance and Risk Management Staffing – Levels of Service

The Risk Management Department has four KPI metrics that are associated with the Authority's “**Provide Employee Development**” and “**Stakeholder Support**” goals. These metrics include strategies 11 and 24 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,*” “*Limit the number of CCWA at-fault accidents under 12 per year,*” and “*Certify at least 56 new small local businesses per year.*”

Service Level Goal	Key Performance Indicator (KPI)	Division	Target	Actual 2016 - 2017	Actual 2015 - 2016	Actual 2014 - 2015
<b>PROVIDE EMPLOYEE DEVELOPMENT</b>						
11 Manage safety to minimize accidents	# of Employee non-lost time injuries	RM	< 23.4 / Year	15	18	12
	# Employee lost time injuries	RM	< 11.2 / Year	8	10	5
	# of CCWA at-fault veh/equip accidents	RM	< 12 / Year	20	21	13
<b>STAKEHOLDER SUPPORT</b>						
24 Business opportunity development	# of CCWA Certified SLBE	RM	>56 (2014-15) >100 (2015-16) >115 (2017-18)	112	91	0









## Contracts, Compliance and Risk Management - Operating Budget

**Department : Executive****Business Unit : (109) Contracts, Compliance & 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. CCWA-wide bidding and contracting activities including Small Local Business Enterprise Program, contract administration and contract compliance.

**Significant Expenditure and Staffing Changes:**

**Personal Services:** represents funding for the reclass of the Risk Manager from a paygrade 15 to a paygrade 16 along with the deletion of one part time security officer.

**Outside Services:** increase represents additional funding for legal fees, JDE enhancements, web site enhancements for SLBE procurement along with annual security monitoring and customer support.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 331,950	\$ 459,730	\$ 545,443
Overtime Pay	508	1,000	7,000
F.I.C.A.	23,826	34,846	42,214
Pension	42,562	59,626	71,365
Employee Benefits	41,888	78,757	95,536
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	4,339	22,550	12,260
Vehicle Supplies	-	3,250	3,250
Administrative Supplies	2,231	9,060	9,160
Safety Supplies	10,485	22,650	24,450
Special Purchases	59	120	140
Utilities	3,515	4,225	5,000
Rentals	1,600	2,000	3,500
Maintenance and Repairs	-	-	-
Outside Services	18,247	250,650	519,450
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	28,307	62,502	64,304
Accounting Charges	258	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	-	-	-
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	1,300,000	700,000	-
<b>Total Appropriations</b>	<b>\$ 1,809,775</b>	<b>\$ 1,710,966</b>	<b>\$ 1,403,072</b>



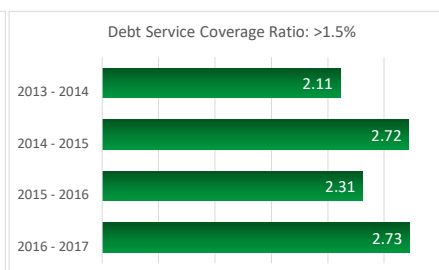
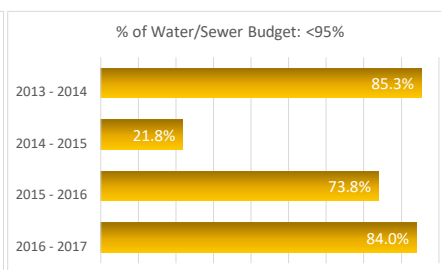
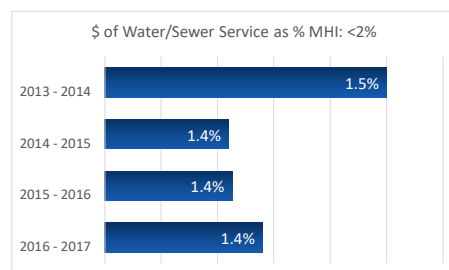
## Finance Staffing – Position Detail

	FY 2016-2017 Budgeted	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted
Authorized Personnel			
<b>Finance</b>			
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	0.00	0.34
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
<b>Total Number of Personnel (FTE's)</b>	<b>13.00</b>	<b>13.00</b>	<b>13.34</b>

## 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	Actual 2016 - 2017	Actual 2015 - 2016	Actual 2014 - 2015
<b>OPTIMIZE OPERATIONS</b>						
<b>13</b> Reasonable Cost of Service	\$ of water/sewer service as % MHI (Jan)	FIN	< 2%	<b>1.4%</b>	<b>1.4%</b>	<b>1.4%</b>
<b>ENSURE FINANCIAL VIABILITY</b>						
<b>17</b> Develop a Sustainable Annual Budget	% of water/sewer budget (Apr)	FIN	<95%	<b>84.0%</b>	<b>73.8%</b>	<b>21.8%</b>
<b>18</b> Provide financing for the “Pay-As-You-Go” capital plan	Debt Service Coverage Ratio	FIN	>1.5x	<b>2.73</b>	<b>2.31</b>	<b>2.72</b>





## Finance – Major Initiatives for FY 2018 – 2019

Business Unit	Budget Funding	Account Number	Amount Budgeted	Initiative
<b>Finance</b>				
<b>110</b>	<b>Operating</b>	56102	\$ 71,000	Audit Fees: Annual and Single Audit
		56105	45,000	JDE: Pre-Upgrade Gap Analysis Recommendations
		56110	50,000	Fixed Asset process and policy, other finance dept. processes
		56110	5,000	Arbitrage Compliance
	<b>Financing</b>	57106	780,000	Outfalls : Construction interest (GEFA)
<b>Grand Total</b>			<b>\$ 951,000</b>	





## Finance – Operating Budget

**Department : Executive****Business Unit : (110) Finance****Major 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:**

**Personal Services:** increase represents a shadow position for the Budget Officer.

**Interest:** increase is due to new GEFA loan for Outfall Construction.

**Capital Financing:** increase is due to the amortization schedule of GEFA loans which results in a higher principal payment.

**Intrafund Transfers Out:** represents Debt Service payments.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 774,500	\$ 865,864	\$ 900,081
Overtime Pay	6,477	3,000	144,595
F.I.C.A.	56,983	66,468	69,047
Pension	106,226	120,356	125,114
Employee Benefits	106,543	128,079	172,622
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	10,813	8,575	2,190
Vehicle Supplies	193	500	510
Administrative Supplies	8,356	20,100	20,100
Safety Supplies	17	35	35
Special Purchases	313	260	260
Utilities	15,235	17,093	17,015
Rentals	-	-	-
Maintenance and Repairs	753	175	175
Outside Services	84,930	174,242	189,650
Interest	191,639	229,273	936,171
Retiree Health Benefits	-	-	-
General Expenses	15,260	172,405	189,324
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	622,543	641,478
<b>Capital Outlay:</b>			
Capital Expenditures	20,000	40,000	-
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	38,489,745	20,197,080	21,074,355
<b>Total Appropriations</b>	<b>\$ 39,887,983</b>	<b>\$ 22,666,048</b>	<b>\$ 24,482,722</b>



## Customer Account Services Staffing – Position Detail

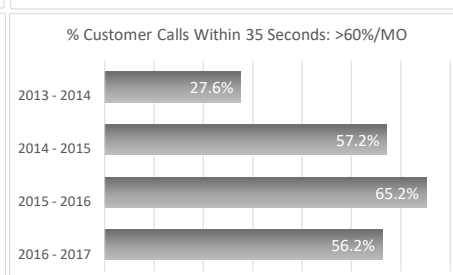
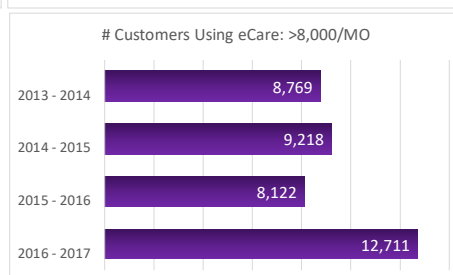
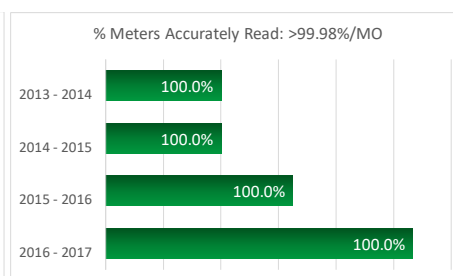
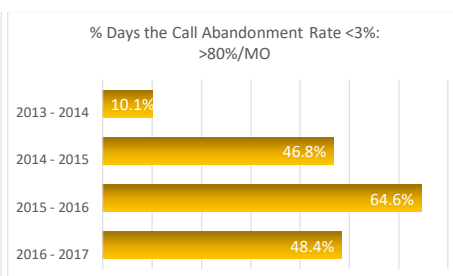
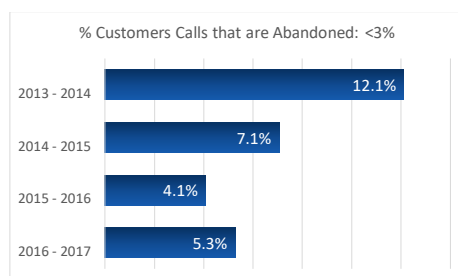
Authorized Personnel	FY 2016-2017 Budgeted	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted
<b>Customer Accounts Director</b>			
Business Applications Administrator	1.00	1.00	0.00
Business Analyst: Customer Accounts	0.00	0.00	1.00
Customer Accounts Director	1.00	1.00	1.00
Office Assistant	1.00	1.00	1.00
<b>Total Number of Personnel (FTE's)</b>	<b>3.00</b>	<b>3.00</b>	<b>3.00</b>
<b>Meter Services</b>			
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	1.00	0.00
Meter Services General Foreman	1.00	1.00	1.00
Meter Services Supervisor	1.00	1.00	1.00
Meter Services Tech	7.00	7.00	7.00
Office Assistant	0.00	0.00	1.00
<b>Total Number of Personnel (FTE's)</b>	<b>23.40</b>	<b>23.40</b>	<b>23.40</b>
<b>Customer Accounting</b>			
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	0.60
Sr. Accounts Receivable Analyst	1.00	1.00	1.00
<b>Total Number of Personnel (FTE's)</b>	<b>7.60</b>	<b>7.60</b>	<b>7.60</b>
<b>Customer Service</b>			
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	12.00	8.00	8.00
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	0.23
Lead Customer Service Representative	1.00	1.00	1.00
Shadow - Customer Service	0.24	0.24	0.24
Sr. CSR - Call Center	0.00	4.00	4.00
Sr. Customer Service Specialist	1.00	1.00	1.00
Team Lead - Call Center	1.00	1.00	1.00
<b>Total Number of Personnel (FTE's)</b>	<b>35.47</b>	<b>35.47</b>	<b>35.47</b>



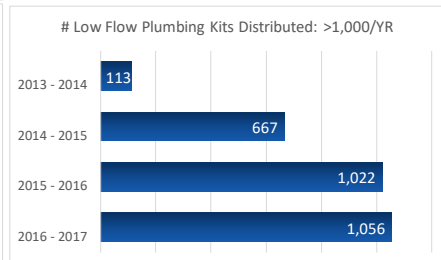
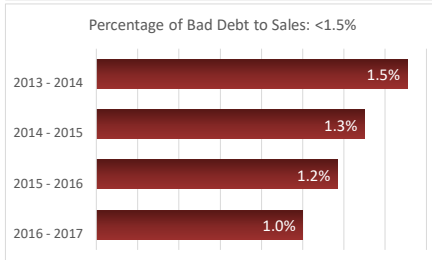
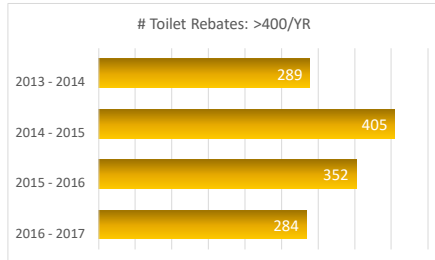
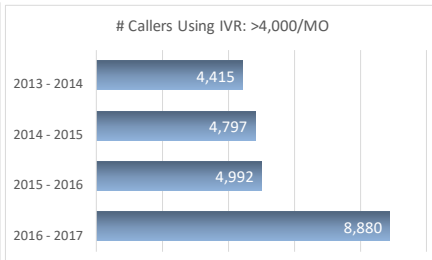
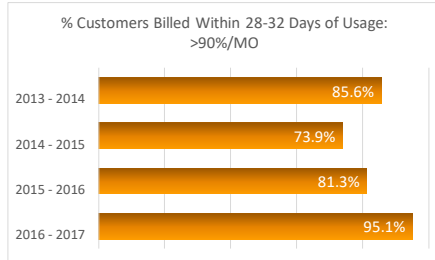
## Customer Accounts Services – Levels of Service

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	Actual 2016 - 2017	Actual 2015 - 2016	Actual 2014 - 2015
<b>EXCEED CUSTOMER EXPECTATIONS</b>						
4 Improve customer experience	% customers calls that are abandoned	CS	< 3% / Month	5.3%	4.1%	7.1%
	% days the call abandonment rate <3%	CS	> 80% / Month	48.4%	64.6%	46.82%
	% meters accurately read	CS	> 99.98% / Month	100.0%	100.0%	100.0%
	# callers using IVR	CS	> 4,000 /Month	8,880	4,992	4,797
	# customers using eCare	CS	> 8,000/Month	12,711	8,122	9,218
	% customer calls within 35 seconds	CS	> 60% / Month	56.24%	65.2%	57.2%
	% customers billed within 28-32 days of usage	CS	> 90% / Month	95.08%	81.3%	73.9%
<b>ENSURE FINANCIAL VIABILITY</b>						
19 Maximize revenue collection vs. bad debt write-offs	Percentage of bad debt to sales	CS	< 1.5%	1.0%	1.2%	1.3%
<b>STAKEHOLDER SUPPORT</b>						
23 Environmental Stewardship and Sustainability	# low flow plumbing kits distributed	CS	> 1,000 / Year	1,056	1,022	667
	# toilet rebates	CS	> 400 / Year	284	352	405







### Customer Accounts Services – Major Initiatives for FY 2018 - 2019

Business Unit	Budget Funding	Account Number	Amount Budgeted	Initiative
Customer Accounts Director				
130	Operating	56110	\$ 70,000	Valor Analytics data cleanup
		56110	28,000	Transactional Customer Survey
Grand Total			\$ 98,000	
Meter Services				
131	Operating	51104	\$ 144,000	Backflow Cartridges Change Out
		55106	20,000	Private Property Damage
	Capital	59303	30,000	Fire Hydrant Meters (15)
		59953	27,030	Truck: F-150
		59953	30,512	Truck: F-250
Grand Total			\$ 251,542	
Customer Accounting				
132	Capital	59991	\$ 15,000	Wall
Grand Total			\$ 15,000	
Customer Service				
135	Operating	53105	\$ 120,000	CCCS Hardship Assistance
		56101	7,000	Legal Fees
		56110	10,000	Process changes
		56153	75,000	Temp Service
Grand Total			\$ 212,000	



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

**Department : Executive**

**Business Unit : (130) Customer Accounts Direct**

**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:**

**General Expenses:** increase represents funding for the first year of annual maintenance of Cayenta/Mobile Workforce Management/Customer Self Service.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 250,484	\$ 261,768	\$ 270,991
Overtime Pay	347	1,000	3,000
F.I.C.A.	17,678	19,470	20,354
Pension	34,164	36,386	37,667
Employee Benefits	29,176	31,681	36,584
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	6,959	5,700	1,000
Vehicle Supplies	-	-	-
Administrative Supplies	8,784	13,000	13,000
Safety Supplies	-	250	250
Special Purchases	-	500	500
Utilities	12,256	11,900	15,000
Rentals	-	-	-
Maintenance and Repairs	199	1,000	1,000
Outside Services	61,144	103,000	139,000
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	10,446	29,004	182,470
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	-	10,000	-
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	81,000	-	-
<b>Total Appropriations</b>	<b>\$ 512,637</b>	<b>\$ 524,659</b>	<b>\$ 720,816</b>



## BUSINESS UNIT 131: METER SERVICES

**Department : Executive****Business Unit : (131) Meter Services****Major 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 two pick up trucks.

**Intrafund Transfers Out:** represents funds being transferred to the Renewal and Extension Fund for 15 Fire Hydrant meters.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 976,449	\$ 1,036,422	\$ 1,062,689
Overtime Pay	16,969	23,000	40,000
F.I.C.A.	72,368	81,047	84,351
Pension	133,127	141,906	145,537
Employee Benefits	192,657	211,696	291,203
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	236,980	243,140	228,880
Vehicle Supplies	61,040	63,900	62,950
Administrative Supplies	12,417	14,999	10,450
Safety Supplies	1,986	1,920	2,000
Special Purchases	308	480	480
Utilities	22,222	25,024	30,200
Rentals	-	-	-
Maintenance and Repairs	19,825	30,000	27,500
Outside Services	18,987	43,631	31,400
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	11,657	53,505	57,599
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	82,227	89,036	57,542
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	30,000
<b>Total Appropriations</b>	<b>\$ 1,859,219</b>	<b>\$ 2,059,706</b>	<b>\$ 2,162,781</b>



## 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:**

**Outside Services:** increase represents a 5% increase on postage along with an increase for NCOA.

**Capital Expenditures:** represents funding for the addition of a wall in the mail equipment room and cash counting area.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 309,695	\$ 348,990	\$ 364,801
Overtime Pay	3,256	3,500	10,000
F.I.C.A.	22,980	26,966	28,672
Pension	42,534	48,509	50,708
Employee Benefits	47,433	68,992	98,337
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	4,721	6,810	-
Vehicle Supplies	-	-	-
Administrative Supplies	26,459	36,350	36,435
Safety Supplies	-	-	-
Special Purchases	-	200	200
Utilities	3,918	3,661	3,945
Rentals	4,412	5,700	6,000
Maintenance and Repairs	-	580	580
Outside Services	430,569	455,569	522,550
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	6,552	7,171	10,053
Accounting Charges	2,701,617	2,803,000	2,853,000
<b>Debt Service:</b>	-	-	-
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	13,917	15,000	15,000
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	-
<b>Total Appropriations</b>	<b>\$ 3,618,063</b>	<b>\$ 3,830,998</b>	<b>\$ 4,000,281</b>



## BUSINESS UNIT 135: CUSTOMER SERVICE

**Department : Executive****Business Unit : (135) Customer Service****Major 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 call center cubical rework and stand up desks for CSR's.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 1,260,442	\$ 1,443,987	\$ 1,515,328
Overtime Pay	55,674	50,000	90,000
F.I.C.A.	96,929	114,291	123,099
Pension	169,341	191,956	203,003
Employee Benefits	245,961	293,553	403,762
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	21,354	37,800	17,100
Vehicle Supplies	-	150	150
Administrative Supplies	22,034	42,150	64,150
Safety Supplies	195	250	250
Special Purchases	59,912	201,800	120,800
Utilities	21,829	48,153	48,153
Rentals	-	-	-
Maintenance and Repairs	1,297	6,500	1,297
Outside Services	122,006	147,100	202,400
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	14,325	19,773	15,497
Accounting Charges	-	-	-
<b>Debt Service:</b>			-
Capital Financing	-	-	-
<b>Capital Outlay:</b>			-
Capital Expenditures	-	66,600	-
<b>Other Financing Uses:</b>			-
Intrafund Transfers Out:	32,500	-	-
<b>Total Appropriations</b>	<b>\$ 2,123,799</b>	<b>\$ 2,664,063</b>	<b>\$ 2,804,989</b>





Water Production Division - Business Unit Group 300



***Clayton County Water Authority***



**WATER  
PRODUCTION  
DEPARTMENTS**



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





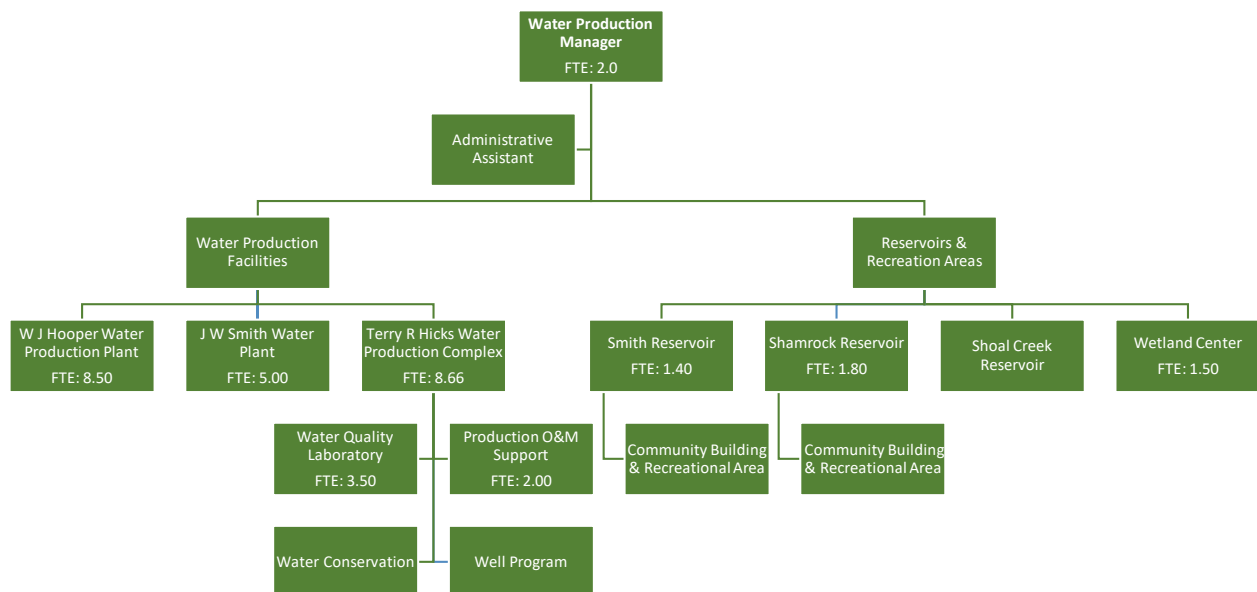
## WATER PRODUCTION DIVISION BUDGET UNIT 300

The function of the Water Production Department 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 Department 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 Manager 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 plants, facilities, or areas of responsibility. The budget units that have been identified for this department are listed in a tabular format below.

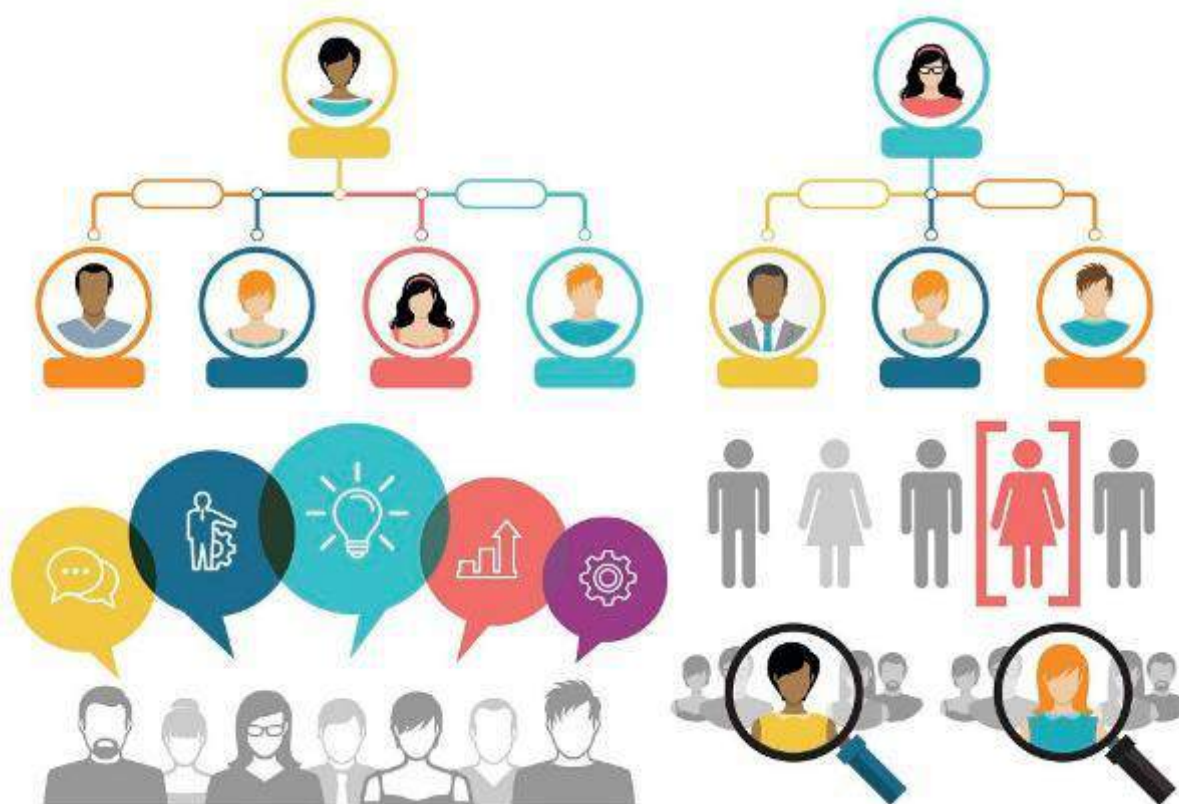
301 - Water Production Manager	319 - Shoal Creek Reservoir
305 - Production O&M Support	320 - Terry R. Hicks Water Production Complex
310 - W. J. Hooper Water Plant	325 - Well Program
311 - Morrow Pumping Station	330 - Water Quality Laboratory
312 - Noah's Ark Pumping Station	340 - Smith CUB & Recreation Park
314 - Elevated Tanks	350 - Shamrock Recreation
315 - J. W. Smith Water Plant	351 - Shamrock Community Use Building
316 - Blalock Jr. Reservoir and Dam	352 - Wetland Center
317 - Jonesboro Pumping Station	399 - Water Conservation
318 - Forest Park & Cajun Queen Pumping Stations	





## Water Production Division – Staffing Summary

Authorized Personnel	FY 2016-2017 Budgeted	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted
<b>Water Production Division</b>			
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 Plant	8.50	8.50	8.50
315 - J W Smith Water Plant	5.00	5.00	5.00
320 - Terry R Hicks Water Production Complex	8.00	8.00	8.66
330 - Water Quality Laboratory	3.00	3.50	3.50
340 - Smith Community Use Building & Recreation Park	1.40	1.40	1.40
350 - Shamrock Recreation	1.80	1.80	1.80
352 - Wetland Center	1.50	1.50	1.50
<b>Total Full-Time Employees (FTEs)</b>	<b>33.20</b>	<b>33.70</b>	<b>34.36</b>





## Water Production Division – Major Initiatives for FY 2018 - 2019

Business Unit	Budget Funding	Account Number	Amount Budgeted	Initiative
<b>Water Production Operations and Maintenance Support</b>				
305	Capital	59933	\$ 30,000	Auto-Flusher
<b>Grand Total</b>			<b>\$ 30,000</b>	
<b>W J Hooper Water Plant</b>				
310	Operating	51101	\$ 625,000	Treatment Chemicals
	Capital	59915	80,000	Fencing
		59932	15,000	Floride Feeder Dust Control System
		59962	14,075	Chemtrac Lab Charge Analyzer w/Auto-titration & Microsyringe
<b>Grand Total</b>			<b>\$ 734,075</b>	
<b>Morrow Pumping Station</b>				
311	Operating	56199	\$ 6,500	Paint Logo on Tank
<b>Grand Total</b>			<b>\$ 6,500</b>	
<b>Noah's Ark Pumping Station</b>				
312	Operating	56123	\$ 30,000	Tank Inspection, Maintenance and Washout
<b>Grand Total</b>			<b>\$ 30,000</b>	
<b>Elevated Tanks</b>				
314	Capital	59924	\$ 375,000	Grant Road Tank Repainting, Washout and Assessment
		59974	12,000	Lovejoy ET Altitude Valve and Actuator
<b>Grand Total</b>			<b>\$ 387,000</b>	
<b>J W Smith Water Plant</b>				
315	Operating	51101	\$ 253,000	Treatment Chemicals
		56110	110,000	Evaluation/Assessment of High Service Pumps MCC's
	Capital	59932	150,000	Basin Sludge Removal Equipment / Painting 4@ \$37,500
		59933	20,000	Convert Particle Counters to SCADA
<b>Grand Total</b>			<b>\$ 533,000</b>	
<b>Blalock Jr Reservoir and Dam</b>				
316	Operating	56110	\$1,305,000	Blalock Vertical Profiler, Shamrock Monitoring Equipment, LOX Annual Contract
	Capital	59934	35,000	Forklift
<b>Grand Total</b>			<b>\$1,340,000</b>	
<b>Terry R. Hicks Water Production Complex</b>				
320	Operating	56110	\$ 100,000	Filter Study on High Rating Filters
		56116	120,000	Alum, Bleach and Chlorine Dioxide Feed System talk to SCADA
	Capital	59303	10,000	Upgrade Breakroom
		59303	60,000	Pump Repairs (2)
		59303	80,000	Flow Meters, Controllers, and Software
<b>Grand Total</b>			<b>\$ 370,000</b>	



Business Unit	Budget Funding	Account Number	Amount Budgeted	Initiative
Water Quality Laboratory				
330	Operating	59953	\$ 21,204	Cargo Van
	Capital	59962	\$ 10,000	Spectrophotometer
		59962	12,000	Field Probe
Grand Total			\$ 43,204	
Shamrock Recreation Center				
350	Operating	56125	\$ 9,000	Dredge Pates Creek
		56125	3,000	Electroshock Reservoir to determine fish population
	Capital	59963	11,000	Mower
Grand Total			\$ 23,000	
Shamrock Community Use Building				
351	Operating	51104	\$ 4,000	Replace Worn Tables
		51104	8,000	Replace Stacking Chairs
		55104	2,500	Landscaping Improvements
		55104	2,000	Interior Painting
		55104	3,000	Tread Covers for Steps
Grand Total			\$ 19,500	
Wetland Center				
352	Operating	55104	\$ 11,000	New/Replacement Signage
	Capital	59984	25,000	Interpretive Exhibit
Grand Total			\$ 36,000	
Water Conservation				
399	Operating	51104	\$ 15,000	Low Flow Kits
		53104	80,000	Toilet Rebate
Grand Total			\$ 95,000	

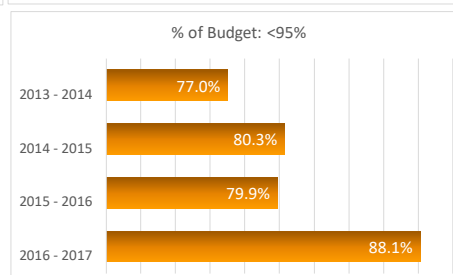
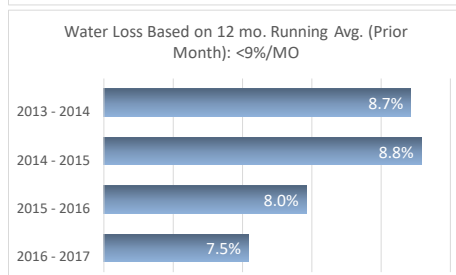
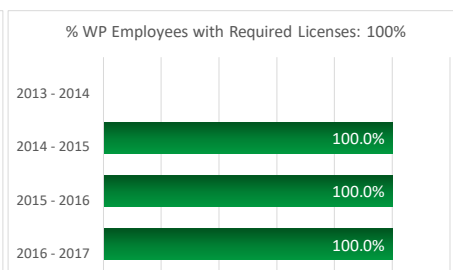
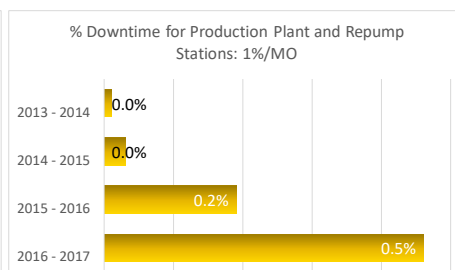
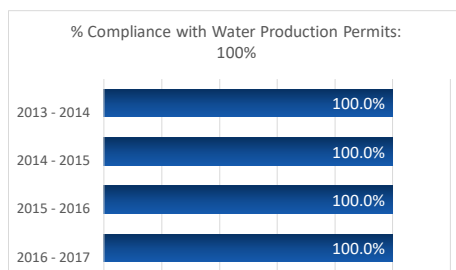


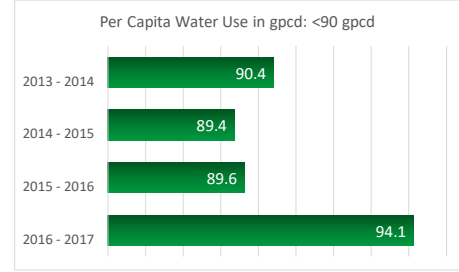
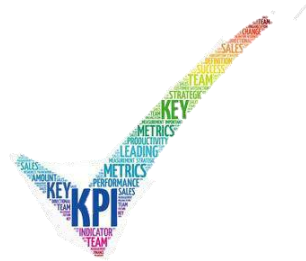
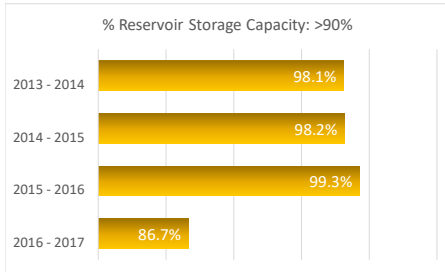
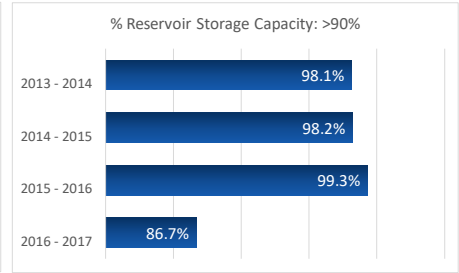
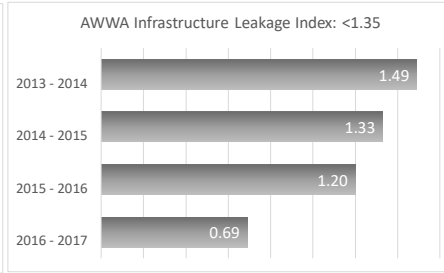
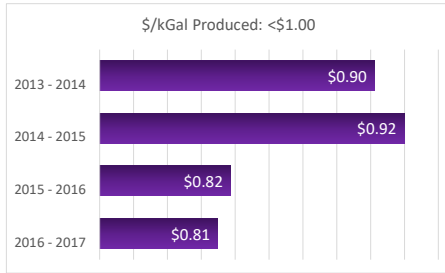


## Water Production Division – Levels of Service

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	Actual 2016 - 2017	Actual 2015 - 2016	Actual 2014 - 2015
<b>SUPERIOR PRODUCT QUALITY</b>						
1 Meet all applicable regulatory requirements	% compliance with Water Production permits	WP	100%	100.0%	100.0%	100.0%
<b>EXCEED CUSTOMER EXPECTATIONS</b>						
5 Minimize potable water service disruptions	% downtime for production plant and repump stations	WP	1% / Month	0.5%	0.19%	0.03%
<b>PROVIDE EMPLOYEE DEVELOPMENT</b>						
8 Provide effective employee training and development	% WP employees with required licenses (Apr)	WP	100%	100.0%	100%	100.0%
<b>OPTIMIZE OPERATIONS</b>						
13 Reasonable Cost of Service	Water loss based on 12 mo. running avg. - prior month	WP	< 9% / Month	7.5%	8.0%	8.8%
	% of budget (Apr)	WP	< 95%	88.1%	79.9%	80.3%
	\$/kGal produced (Apr)	WP	<\$1.00	\$0.81	\$0.82	\$0.92
14 Minimize Water System Losses	AWWA Infrastructure Leakage Index (Apr)	WP	< 1.35	0.69	1.20	1.33
<b>INFRASTRUCTURE SUSTAINABILITY</b>						
21 Provide a sustainable water supply	% reservoir storage capacity	WP	> 90%	86.7%	99.3%	98.2%
<b>STAKEHOLDER SUPPORT</b>						
23 Environmental Stewardship and Sustainability	Per capita water use in gpcd (Jan)	WP	< 90gpcd	94.1	89.6	89.4









## Water Production Division Staffing – Position Detail

Authorized Personnel	FY 2016-2017 Budgeted	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted
<b>Water Production Manager</b>			
Office Assistant	1.00	1.00	1.00
Water Production Manager	1.00	1.00	1.00
<b>Total Number of Personnel (FTE's)</b>	<b>2.00</b>	<b>2.00</b>	<b>2.00</b>
<b>Production O&amp;M Support</b>			
Distribution and Resource Coordinator	1.00	1.00	1.00
Distribution and Resource Technician	1.00	1.00	1.00
<b>Total Number of Personnel (FTE's)</b>	<b>2.00</b>	<b>2.00</b>	<b>2.00</b>
<b>W.J. Hooper Water Plant</b>			
Custodian	0.50	0.50	0.50
Plant Operator I	4.00	3.00	3.00
Plant Operator II	2.00	2.00	2.00
Plant Operator III	1.00	2.00	2.00
Plant Supervisor	1.00	1.00	1.00
<b>Total Number of Personnel (FTE's)</b>	<b>8.50</b>	<b>8.50</b>	<b>8.50</b>
<b>J.W. Smith Water Production Plant</b>			
Plant Operator I	3.00	3.00	2.00
Plant Operator II	0.00	0.00	0.00
Plant Operator III	1.00	1.00	2.00
Plant Supervisor	1.00	1.00	1.00
<b>Total Number of Personnel (FTE's)</b>	<b>5.00</b>	<b>5.00</b>	<b>5.00</b>
<b>Terry R Hicks Water Production Complex</b>			
Plant Operator I	5.00	4.00	4.00
Plant Operator II	0.00	0.00	0.00
Plant Operator III	1.00	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	0.00	0.66
<b>Total Number of Personnel (FTE's)</b>	<b>8.00</b>	<b>8.00</b>	<b>8.66</b>
<b>Water Quality Lab</b>			
Lab Analyst	1.00	1.00	1.00
Lab Technician PT	0.00	0.50	0.50
Microbiologist	1.00	1.00	1.00
Water Lab & Regulatory Compliance	1.00	1.00	1.00
<b>Total Number of Personnel (FTE's)</b>	<b>3.00</b>	<b>3.50</b>	<b>3.50</b>
<b>Smith Community Use Building &amp; Recreation Park</b>			
Recreation Area Assistant	1.00	1.00	1.00
Recreation Area Caretaker	0.40	0.40	0.40
<b>Total Number of Personnel (FTE's)</b>	<b>1.40</b>	<b>1.40</b>	<b>1.40</b>
<b>Shamrock Recreation</b>			
Recreation Area Caretaker	0.80	0.80	0.80
Recreation Area Coordinator	1.00	1.00	1.00
<b>Total Number of Personnel (FTE's)</b>	<b>1.80</b>	<b>1.80</b>	<b>1.80</b>
<b>Wetland Center</b>			
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
<b>Total Number of Personnel (FTE's)</b>	<b>1.50</b>	<b>1.50</b>	<b>1.50</b>
<b>Water Production Department Total</b>	<b>33.20</b>	<b>33.70</b>	<b>34.36</b>



## 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 Department 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 Department'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.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 -19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 1,805,006	\$ 1,963,373	\$ 2,066,870
Overtime Pay	155,055	146,800	152,500
F.I.C.A.	145,479	160,233	169,784
Pension	239,607	261,480	270,067
Employee Benefits	262,294	296,732	415,597
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	1,217,799	1,289,600	1,323,160
Vehicle Supplies	20,362	27,715	23,640
Administrative Supplies	16,740	25,314	26,625
Safety Supplies	3,420	5,125	9,650
Special Purchases	41,062	150,720	180,720
Utilities	3,688,712	3,747,804	3,745,185
Rentals	21,173	17,500	27,875
Maintenance and Repairs	116,605	239,900	281,400
Outside Services	786,788	1,160,995	2,508,109
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	189,116	233,171	197,258
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	62,153	187,814	810,279
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	412,474	5,000,000	150,000
<b>Total Appropriations</b>	<b>\$ 9,183,845</b>	<b>\$ 14,914,276</b>	<b>\$ 12,358,719</b>



## BUSINESS UNIT 301: WATER PRODUCTION MANAGER

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

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

**Significant Expenditure and Staffing Changes:**

No significant changes from the previous fiscal year.

<b>Budget Detail By Individual Categories</b>	<b>FY 2015 - 16 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 153,642	\$ 161,940	\$ 166,556
Overtime Pay	-	-	-
F.I.C.A.	11,581	12,389	12,742
Pension	20,896	22,510	23,151
Employee Benefits	13,679	14,702	20,236
<b>Operating Expenditures:</b>			-
Operating Materials & Supplies	3,944	3,200	6,130
Vehicle Supplies	504	900	910
Administrative Supplies	321	2,500	1,000
Safety Supplies	75	-	-
Special Purchases	7,162	100,720	100,720
Utilities	720	720	720
Rentals	12,950	-	10,000
Maintenance and Repairs	436	500	500
Outside Services	1,850	1,660	1,920
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	95,435	122,192	72,408
Accounting Charges	-	-	-
<b>Debt Service:</b>			-
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	-	40,000	-
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	-
<b>Total Appropriations</b>	<b>\$ 323,195</b>	<b>\$ 483,933</b>	<b>\$ 416,993</b>



## 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:**

**Capital Expenditures:** represents funds for an Auto Flusher.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 93,973	\$ 102,910	\$ 107,326
Overtime Pay	558	1,000	1,500
F.I.C.A.	7,063	7,949	8,324
Pension	12,998	14,305	14,919
Employee Benefits	15,683	14,424	19,982
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	1,814	4,870	2,990
Vehicle Supplies	3,147	5,550	4,500
Administrative Supplies	76	250	450
Safety Supplies	187	400	1,400
Special Purchases	-	-	-
Utilities	1,290	1,560	1,560
Rentals	-	-	-
Maintenance and Repairs	532	4,300	4,300
Outside Services	5	900	900
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	3,312	4,603	4,128
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	-	-	30,000
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	-
<b>Total Appropriations</b>	<b>\$ 140,638</b>	<b>\$ 163,021</b>	<b>\$ 202,279</b>



## BUSINESS UNIT 310: W.J. HOOPER WATER PLANT

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

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

**Significant Expenditure and Staffing Changes:**

**Operating Materials & Supplies:** increase in funding for treatment chemicals.

**Capital Expenditures:** represents funds for fencing the property, Fluoride Feeder Dust Control System and Chemtrac Lab Charge Analyzer with Auto-tilation & Microsyringe.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 489,910	\$ 505,485	\$ 514,642
Overtime Pay	56,151	60,000	65,000
F.I.C.A.	39,400	43,259	44,343
Pension	63,232	67,496	68,758
Employee Benefits	79,957	91,021	120,571
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	658,607	644,005	688,110
Vehicle Supplies	1,246	1,900	1,100
Administrative Supplies	1,820	2,564	3,875
Safety Supplies	818	650	1,250
Special Purchases	-	-	-
Utilities	1,182,219	1,299,304	1,354,090
Rentals	147	1,000	1,175
Maintenance and Repairs	46,072	74,200	98,200
Outside Services	133,371	232,736	298,885
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	25,000	29,476	31,761
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	40,392	111,718	109,075
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	33,018	2,500,000	-
<b>Total Appropriations</b>	<b>\$ 2,851,360</b>	<b>\$ 5,664,814</b>	<b>\$ 3,400,835</b>



## 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.

<b>Budget Detail By</b>	<b>FY 2016 - 17</b>	<b>FY 2017 - 18</b>	<b>FY 2018 - 19</b>
<b>Individual Categories</b>	<b>Actual</b>	<b>Budgeted</b>	<b>Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ -	\$ -	\$ -
Overtime Pay	-	-	-
F.I.C.A.	-	-	-
Pension	-	-	-
Employee Benefits	-	-	-
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	812	6,300	3,300
Vehicle Supplies	289	1,500	750
Administrative Supplies	53	150	100
Safety Supplies	-	200	100
Special Purchases	-	-	-
Utilities	287,067	260,500	277,500
Rentals	-	-	-
Maintenance and Repairs	1,705	6,000	5,000
Outside Services	101,964	4,700	36,500
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	1,764	1,171	1,246
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	-	-	-
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	-
<b>Total Appropriations</b>	<b>\$ 393,654</b>	<b>\$ 280,521</b>	<b>\$ 324,496</b>





## 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.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ -	\$ -	\$ -
Overtime Pay	-	-	-
F.I.C.A.	-	-	-
Pension	-	-	-
Employee Benefits	-	-	-
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	1,006	6,300	1,000
Vehicle Supplies	727	850	4,300
Administrative Supplies	62	150	100
Safety Supplies	-	100	100
Special Purchases	-	-	-
Utilities	479,172	444,050	461,350
Rentals	-	-	-
Maintenance and Repairs	3,329	6,000	4,000
Outside Services	3,845	24,000	68,000
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	2,712	2,937	3,095
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	-	-	-
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	-
Total Appropriations	<u>\$ 490,853</u>	<u>\$ 484,387</u>	<u>\$ 541,945</u>



## 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:****Capital Expenditures:** represents funding for Grant Road Tank repainting.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ -	\$ -	\$ -
Overtime Pay	-	-	-
F.I.C.A.	-	-	-
Pension	-	-	-
Employee Benefits	-	-	-
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	58	1,000	800
Vehicle Supplies	-	-	-
Administrative Supplies	-	-	-
Safety Supplies	-	100	100
Special Purchases	-	-	-
Utilities	12,206	13,630	15,130
Rentals	-	-	-
Maintenance and Repairs	449	5,000	5,000
Outside Services	259,435	378,000	12,200
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	3,154	3,265	3,617
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	-	-	387,000
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	-
Total Appropriations	<u>\$ 275,302</u>	<u>\$ 400,995</u>	<u>\$ 423,847</u>



## BUSINESS UNIT 315: J.W. SMITH WATER PLANT

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

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

**Significant Expenditure and Staffing Changes:**

**Outside Services:** represents funding for the evaluation and assessment of High Service Pumps MCC's

**Capital Expenditures:** represents funding for the removal of basin sludge and painting of 4 sites along with converting Particle Counts over to SCADA.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 329,414	\$ 346,821	\$ 349,387
Overtime Pay	24,882	25,000	35,000
F.I.C.A.	26,637	28,445	29,407
Pension	45,214	48,207	48,566
Employee Benefits	39,578	41,914	63,328
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	253,376	263,125	285,125
Vehicle Supplies	310	525	580
Administrative Supplies	1,339	1,850	1,850
Safety Supplies	438	500	2,900
Special Purchases	-	-	-
Utilities	964,458	863,405	889,280
Rentals	-	-	-
Maintenance and Repairs	21,658	39,100	65,200
Outside Services	69,023	82,659	218,659
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	18,024	16,617	18,460
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	-	7,400	170,000
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	40,000	-	-
Total Appropriations	<u>\$ 1,834,351</u>	<u>\$ 1,765,568</u>	<u>\$ 2,177,742</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:****Outside Services:** represents funds for Blalock Vertical Profiler, Shamrock monitoring equipment and LOX annual contract.**Capital Expenditures:** represents funds for a forklift.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ -	\$ -	\$ -
Overtime Pay	-	-	-
F.I.C.A.	-	-	-
Pension	-	-	-
Employee Benefits	-	-	-
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	295	2,500	2,500
Vehicle Supplies	-	-	-
Administrative Supplies	-	50	50
Safety Supplies	-	-	-
Special Purchases	-	-	-
Utilities	-	-	-
Rentals	-	-	-
Maintenance and Repairs	2,108	10,000	10,000
Outside Services	4,685	19,000	1,319,000
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	39	15	66
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	-	-	35,000
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	324,456	2,500,000	-
Total Appropriations	<u>\$ 331,583</u>	<u>\$ 2,531,565</u>	<u>\$ 1,366,616</u>



## 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:**

No significant changes from previous fiscal year.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 -19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ -	\$ -	\$ -
Overtime Pay	-	-	-
F.I.C.A.	-	-	-
Pension	-	-	-
Employee Benefits	-	-	-
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	1,302	6,300	2,100
Vehicle Supplies	-	-	-
Administrative Supplies	-	100	100
Safety Supplies	-	100	100
Special Purchases	-	-	-
Utilities	210,621	241,250	232,250
Rentals	-	-	-
Maintenance and Repairs	512	6,000	3,500
Outside Services	10,214	33,900	19,500
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	1,287	1,504	1,552
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	-	-	-
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	-
<b>Total Appropriations</b>	<b>\$ 223,936</b>	<b>\$ 289,154</b>	<b>\$ 259,102</b>



## BUSINESS UNIT 318: FOREST PARK AND CAJUN QUEEN PUMPING STATIONS

**Department : Water Production****Business Unit : (318) Forest Park/Cajun Queen  
Pumping Stations****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 the clean out and disinfection of the 2 Forest Ave. tanks.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ -	\$ -	\$ -
Overtime Pay	-	-	-
F.I.C.A.	-	-	-
Pension	-	-	-
Employee Benefits	-	-	-
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	40	700	500
Vehicle Supplies	-	-	-
Administrative Supplies	-	-	-
Safety Supplies	-	100	100
Special Purchases	-	-	-
Utilities	14,775	26,010	27,410
Rentals	-	-	-
Maintenance and Repairs	312	3,300	3,300
Outside Services	1,288	4,000	14,250
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	427	481	521
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	-	-	-
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	-
Total Appropriations	<u>\$ 16,842</u>	<u>\$ 34,591</u>	<u>\$ 46,081</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.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ -	\$ -	\$ -
Overtime Pay	-	-	-
F.I.C.A.	-	-	-
Pension	-	-	-
Employee Benefits	-	-	-
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	125	2,300	2,300
Vehicle Supplies	-	-	-
Administrative Supplies	-	-	-
Safety Supplies	-	-	-
Special Purchases	-	-	-
Utilities	-	-	-
Rentals	360	500	500
Maintenance and Repairs	1,177	6,000	6,000
Outside Services	2,443	12,000	8,000
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	451	1,796	1,986
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	-	-	-
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	-
Total Appropriations	<u>\$ 4,556</u>	<u>\$ 22,596</u>	<u>\$ 18,786</u>



## BUSINESS UNIT 320: TERRY R HICKS WATER PRODUCTION COMPLEX

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

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

**Significant Expenditure and Staffing Changes:****Personal Services:** increase represents funding a new Part Time Plant Operator Trainee.**Intrafund Transfers Out:** represents funds being transferred to the Renewal and Extension Fund for breakroom upgrade, pump repairs and clamp on flow meters with controllers and software.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 404,707	\$ 452,514	\$ 504,555
Overtime Pay	59,753	50,000	50,000
F.I.C.A.	34,521	38,443	42,425
Pension	56,336	62,898	65,906
Employee Benefits	69,050	84,778	114,198
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	216,318	247,970	200,060
Vehicle Supplies	3,801	3,940	4,100
Administrative Supplies	4,891	5,500	6,000
Safety Supplies	1,499	2,000	2,500
Special Purchases	-	-	-
Utilities	486,786	549,700	443,000
Rentals	83	-	-
Maintenance and Repairs	21,084	44,500	35,000
Outside Services	110,917	217,800	319,350
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	21,104	26,497	30,297
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	2,150	-	-
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	15,000	-	150,000
<b>Total Appropriations</b>	<b>\$ 1,508,000</b>	<b>\$ 1,786,540</b>	<b>\$ 1,967,391</b>



## 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.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ -	\$ -	\$ -
Overtime Pay	-	-	-
F.I.C.A.	-	-	-
Pension	-	-	-
Employee Benefits	-	-	-
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	679	3,000	2,200
Vehicle Supplies	-	-	-
Administrative Supplies	-	-	-
Safety Supplies	28	150	150
Special Purchases	-	-	-
Utilities	8,246	6,200	6,600
Rentals	-	-	-
Maintenance and Repairs	738	1,000	1,000
Outside Services	25	100	100
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	314	397	419
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	-	-	-
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	-
<b>Total Appropriations</b>	<b>\$ 10,030</b>	<b>\$ 10,847</b>	<b>\$ 10,469</b>



## 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:**

**Operating Materials & Supplies:** increase represents increase in lab supply costs and the replacement of a bright field microscope.

**Capital Expenditures:** represents funds for a Cargo Van, Spectrophotometer and a Field Probe.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 141,109	\$ 192,635	\$ 199,010
Overtime Pay	-	500	1,000
F.I.C.A.	10,387	14,776	15,301
Pension	19,479	23,748	25,130
Employee Benefits	18,010	21,568	40,495
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	52,470	54,990	72,200
Vehicle Supplies	2,504	3,500	3,700
Administrative Supplies	1,098	1,400	3,000
Safety Supplies	-	200	250
Special Purchases	-	-	-
Utilities	113	-	-
Rentals	4,741	11,000	11,000
Maintenance and Repairs	476	500	500
Outside Services	34,568	66,250	73,800
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	7,096	11,754	15,596
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	19,612	-	43,204
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	-
<b>Total Appropriations</b>	<b>\$ 311,663</b>	<b>\$ 402,821</b>	<b>\$ 504,186</b>



## 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.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 51,706	\$ 50,982	\$ 58,715
Overtime Pay	3,482	-	-
F.I.C.A.	4,234	3,900	4,491
Pension	5,591	5,935	6,337
Employee Benefits	6,584	7,078	9,845
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	1,140	2,590	2,145
Vehicle Supplies	4,551	4,300	-
Administrative Supplies	950	1,150	850
Safety Supplies	21	75	100
Special Purchases	-	-	-
Utilities	6,443	6,300	1,400
Rentals	-	600	800
Maintenance and Repairs	3,699	8,600	10,000
Outside Services	8,203	14,075	21,075
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	937	917	1,421
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	-	28,696	-
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	-
Total Appropriations	<u>\$ 97,541</u>	<u>\$ 135,198</u>	<u>\$ 117,179</u>



## BUSINESS UNIT 350: SHAMROCK RECREATION

**Department : Water Production****Business Unit : (350) Shamrock Recreation****Major Business Unit Functions:**

Operates Lake Shamrock Recreation facilities.

**Significant Expenditure and Staffing Changes:****Capital Expenditures:** represents funds for a replacement mower.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 93,689	\$ 89,760	\$ 102,952
Overtime Pay	10,229	10,000	-
F.I.C.A.	8,137	7,632	7,875
Pension	9,846	10,173	10,661
Employee Benefits	13,176	14,169	17,068
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	3,142	3,585	8,950
Vehicle Supplies	2,928	4,400	3,700
Administrative Supplies	4,820	4,700	4,900
Safety Supplies	186	200	300
Special Purchases	-	-	-
Utilities	8,982	8,200	9,000
Rentals	2,152	2,000	1,500
Maintenance and Repairs	5,303	12,200	8,700
Outside Services	13,070	25,495	32,450
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	1,419	1,588	1,698
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	-	-	11,000
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	-
Total Appropriations	<u>\$ 177,079</u>	<u>\$ 194,102</u>	<u>\$ 220,754</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:**

No significant changes from the previous fiscal year.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ -	\$ -	\$ -
Overtime Pay	-	-	-
F.I.C.A.	-	-	-
Pension	-	-	-
Employee Benefits	-	-	-
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	4,939	8,350	15,050
Vehicle Supplies	-	-	-
Administrative Supplies	478	750	750
Safety Supplies	-	150	100
Special Purchases	-	-	-
Utilities	14,070	16,800	16,800
Rentals	130	1,200	1,200
Maintenance and Repairs	3,812	10,000	10,000
Outside Services	17,482	32,000	43,000
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	953	948	990
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	-	-	-
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	-
<b>Total Appropriations</b>	<b>\$ 41,864</b>	<b>\$ 70,198</b>	<b>\$ 87,890</b>



## 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 new signage .**Capital Expenditures:** represents funds for a new Interpretive Exhibit.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 46,856	\$ 60,326	\$ 63,727
Overtime Pay	-	300	-
F.I.C.A.	3,520	3,440	4,876
Pension	6,015	6,208	6,639
Employee Benefits	6,577	7,078	9,874
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	6,377	13,515	12,700
Vehicle Supplies	356	350	-
Administrative Supplies	832	1,200	600
Safety Supplies	168	200	200
Special Purchases	-	-	-
Utilities	11,544	10,175	9,095
Rentals	610	1,200	1,700
Maintenance and Repairs	3,203	2,700	11,200
Outside Services	14,400	11,720	20,520
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	2,023	1,813	2,797
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	-	-	25,000
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	-
Total Appropriations	<u>\$ 102,481</u>	<u>\$ 120,225</u>	<u>\$ 168,928</u>



## BUSINESS UNIT 399: WATER CONSERVATION

**Department : Water Production****Business Unit : (399) Water Conservation****Major Business Unit Functions:**

Promote programs that encourage water conservation by our customers.

**Significant Expenditure and Staffing Changes:****Special Purchases:** represents funding for the Toilet Rebate Program.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ -	\$ -	\$ -
Overtime Pay	-	-	-
F.I.C.A.	-	-	-
Pension	-	-	-
Employee Benefits	-	-	-
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	11,355	15,000	15,000
Vehicle Supplies	-	-	-
Administrative Supplies	-	3,000	3,000
Safety Supplies	-	-	-
Special Purchases	33,900	50,000	80,000
Utilities	-	-	-
Rentals	-	-	-
Maintenance and Repairs	-	-	-
Outside Services	-	-	-
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	3,665	5,200	5,200
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	-	-	-
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	-
Total Appropriations	\$ 48,920	\$ 73,200	\$ 103,200



Program Management and Engineering Division - Business Unit Group 500



**PROGRAM  
MANAGEMENT &  
ENGINEERING  
DEPARTMENTS**

***Clayton County Water Authority***



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



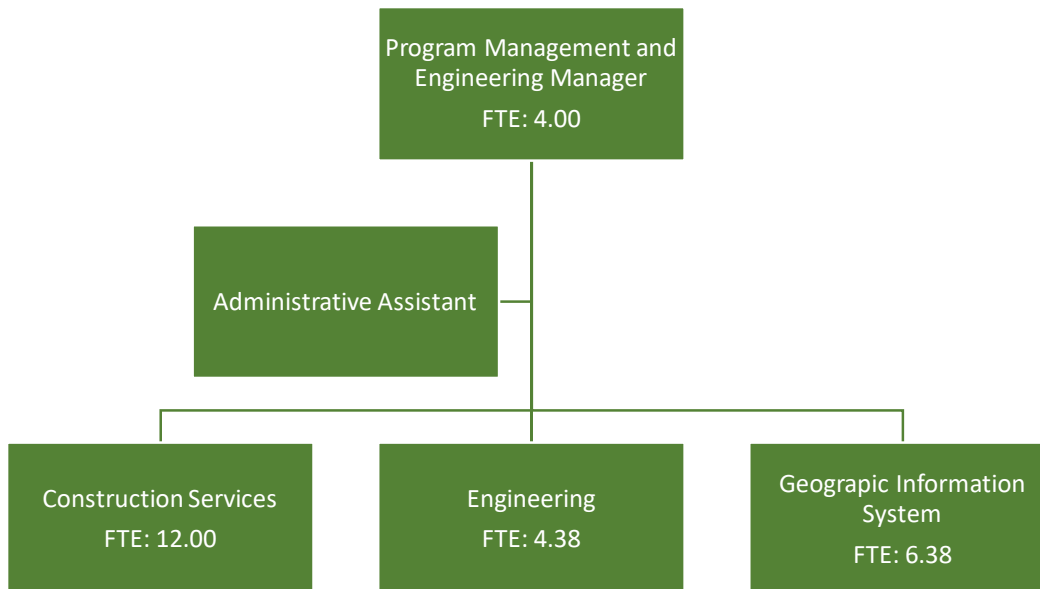
## PROGRAM MANAGEMENT AND ENGINEERING DIVISION BUDGET UNIT 500

The Program Management and Engineering Department serves as the Authority's planning, programming, monitoring, and review function for its plants, facilities, and distribution and collection systems. It is responsible for implementation of the Capital Improvement Master Plan, engineering and surveying, mapping the water and sewer system, 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 Manager 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 department is broken down into specific programs, project funding sources, or functional areas of responsibility. The budget units that have been identified for this department are listed in a tabular format below.

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





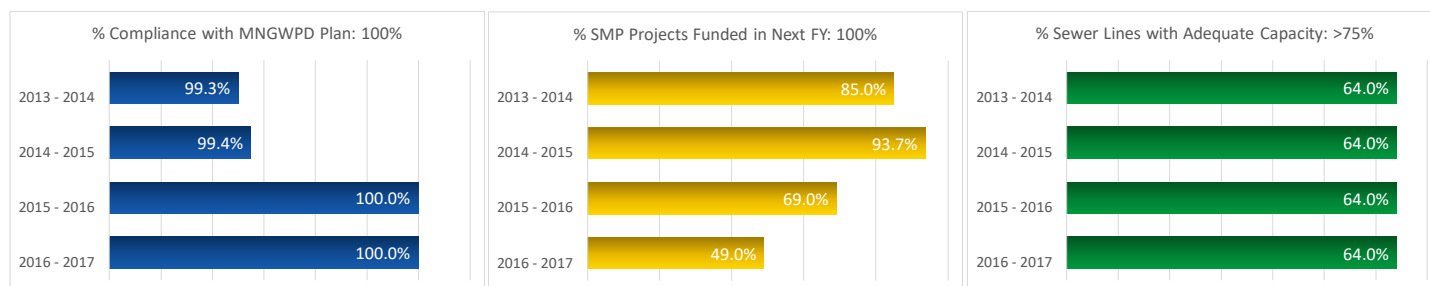
## Program Management and Engineering Division Staffing – Position Detail

Authorized Personnel	FY 2016-2017 Budgeted	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted
<b><i>Program Management and Engineering Manager</i></b>			
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
Program Management and Engineering Manager	1.00	1.00	1.00
<b>Total Number of Personnel (FTE's)</b>	<b>4.00</b>	<b>4.00</b>	<b>4.00</b>
<b><i>Construction Services</i></b>			
Civil Engineer	1.00	1.00	1.00
Construction Inspector I	5.00	8.00	8.00
Construction Inspector II	2.00	1.00	1.00
Construction Services Supervisor	2.00	2.00	2.00
<b>Total Number of Personnel (FTE's)</b>	<b>10.00</b>	<b>12.00</b>	<b>12.00</b>
<b><i>Engineering</i></b>			
Engineering Coordinator	1.00	1.00	1.00
Intern - College	0.00	0.00	0.38
Plan Review Technician	1.00	1.00	1.00
Senior Engineering Technician	2.00	2.00	2.00
<b>Total Number of Personnel (FTE's)</b>	<b>4.00</b>	<b>4.00</b>	<b>4.38</b>
<b><i>Geographic Information System</i></b>			
GIS Field Coordinator	1.00	1.00	1.00
GIS Field Technician I	1.00	1.00	2.00
GIS Field Technician II	1.00	1.00	0.00
GIS Supervisor	1.00	1.00	1.00
GIS Technician II	1.00	2.00	2.00
GSI Technician I	1.00	0.00	0.00
Intern - College	0.18	0.18	0.38
Intern - High School	0.25	0.25	0.00
<b>Total Number of Personnel (FTE's)</b>	<b>6.43</b>	<b>6.43</b>	<b>6.38</b>
<b><i>Program Management and Engineering Department Total</i></b>	<b>24.43</b>	<b>26.43</b>	<b>26.76</b>



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	Actual 2016 - 2017	Actual 2015 - 2016	Actual 2014 - 2015
SUPERIOR PRODUCT QUALITY							
1	Meet all applicable regulatory requirements	% compliance with MNGWPD Plan (Jan)	PME	100%	100.0%	100.0%	99.4%
ENSURE FINANCIAL VIABILITY							
17	Develop a Sustainable Annual Budget	% SMP projects funded in next FY (Apr)	PME	100%	49.0%	69.0%	93.7%
INFRASTRUCTURE SUSTAINABILITY							
22	Provide adequate treatment capacity	% sewer lines with adequate capacity (Apr)	PME	> 75%	64.0%	64.0%	64.0%







### Program Management and Engineering Division – Major Initiatives for FY 2018 - 2019

Business Unit	Budget Funding	Account Number	Amount Budgeted	Initiative
Program Management and Engineering Department Manager				
501	Operating	56110	\$ 250,000	Unidirectional Flushing Program [WP 2018-07]
			150,000	On-Call Engineering Services
			50,000	Collection System Assessment and Program Management [WP 2017-05]
	Capital	59303	750,000	2020 Strategic Master Plan [WP 2018-05]
			500,000	Distribution System Model Follow-up Projects [WP 2018-10]
Grand Total			\$1,700,000	
Construction Services				
507	Capital	59303	\$ 10,000	Sewerline Inspection
			20,000	Meter Inspections
			1,750,000	Galvanized Main Replacements [SMP 601]
			2,000,000	Basin Level Sewer Rehabilitation [SMP 614]
			300,000	Jesters Creek Outfall East Replacement Design [SMP 617][WP 2016-01]
Grand Total			\$4,080,000	
Engineering				
530	Operating	56110	\$ 30,000	Consulting Services for Plan Review Tech Training
		56124	1,000,000	SSES Discovery Work [SMP 613]
Grand Total			\$1,030,000	
Geographic Information Systems				
535	Capital	59303	\$ 75,000	GIS/Cityworks and CIS Integration Support [SMP 157][WP2015-09]
		59303	75,000	GIS/Cityworks and JDE Integration Support [SMP 156][WP 2015-06]
Grand Total			\$ 150,000	





## 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 Department 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.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 1,401,277	\$ 1,824,465	\$ 1,836,358
Overtime Pay	5,431	11,000	9,000
F.I.C.A.	103,796	139,815	140,714
Pension	192,724	251,494	251,585
Employee Benefits	165,680	275,476	359,288
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	26,397	37,480	13,845
Vehicle Supplies	10,548	19,085	18,213
Administrative Supplies	4,919	17,461	10,411
Safety Supplies	748	1,350	1,450
Special Purchases	298	520	-
Utilities	26,485	40,611	41,014
Rentals	-	-	-
Maintenance and Repairs	3,598	7,220	6,100
Outside Services	659,854	1,629,615	1,538,065
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	189,581	257,047	265,475
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	49,501	174,938	100
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	4,943,807	3,830,000	5,480,000
Total Appropriations	\$ 7,784,644	\$ 8,517,577	\$ 9,971,618



## BUSINESS UNIT 501: PROGRAM MANAGEMENT AND ENGINEERING MANAGER

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

Directs, manages and controls the efforts of the Program Management and Engineering Department. 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:**

**Outside Services:** reflects funding for On-Call Engineering Services, Unidirectional Flushing Program along with Collection System Program Advisement.

**Intrafund Transfers Out:** represents funds being transferred to the Renewal and Extension Fund for Distribution System Modeling follow up along with the 2020 Strategic Master Plan.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 362,836	\$ 385,096	\$ 374,134
Overtime Pay	-	-	-
F.I.C.A.	26,686	29,092	28,166
Pension	50,027	53,528	52,005
Employee Benefits	28,844	33,737	52,717
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	5,924	3,140	1,060
Vehicle Supplies	353	735	700
Administrative Supplies	626	3,085	2,535
Safety Supplies	-	50	50
Special Purchases	298	520	-
Utilities	5,361	6,704	6,819
Rentals	-	-	-
Maintenance and Repairs	143	2,000	2,000
Outside Services	35,984	576,590	456,090
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	64,733	77,727	86,565
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	-	-	-
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	636,807	850,000	1,250,000
<b>Total Appropriations</b>	<b>\$ 1,218,622</b>	<b>\$ 2,022,004</b>	<b>\$ 2,312,841</b>



## 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:**

**Intrafund Transfers Out:** represents funds being transferred to the Renewal and Extension Fund for Sewerline Inspections, Meter Inspections, Galvanized Water Main Replacements, Basin Level Sewer Rehab and Jesters Creek Outfall East Replacement Design.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 432,474	\$ 757,652	\$ 774,017
Overtime Pay	5,431	11,000	9,000
F.I.C.A.	32,423	58,572	59,902
Pension	58,959	105,313	107,588
Employee Benefits	59,667	134,999	164,216
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	17,248	20,015	8,685
Vehicle Supplies	8,127	14,700	13,800
Administrative Supplies	1,932	10,060	4,060
Safety Supplies	414	900	1,000
Special Purchases	-	-	-
Utilities	12,661	19,071	18,971
Rentals	-	-	-
Maintenance and Repairs	3,250	4,720	3,600
Outside Services	5,813	13,400	12,180
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	14,336	27,031	24,079
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	-	57,392	-
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	4,307,000	2,980,000	4,080,000
Total Appropriations	<u>\$ 4,959,735</u>	<u>\$ 4,214,825</u>	<u>\$ 5,281,098</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:**

**Personal Services:** represents funding for a new College Intern.

**Outside Services:** represents funding for the annual SSES (Sewer System Evaluation Survey) Program along with consulting services for Plan Review Tech training.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 234,877	\$ 272,260	\$ 275,361
Overtime Pay	-	-	-
F.I.C.A.	17,929	20,828	21,064
Pension	33,124	37,843	37,066
Employee Benefits	25,388	43,700	66,809
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	(92)	3,730	620
Vehicle Supplies	-	-	-
Administrative Supplies	1,822	3,570	3,070
Safety Supplies	-	100	100
Special Purchases	-	-	-
Utilities	3,388	6,537	6,763
Rentals	-	-	-
Maintenance and Repairs	-	-	-
Outside Services	609,670	1,035,045	1,035,215
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	7,188	14,633	15,756
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	7,296	100	100
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	-
Total Appropriations	<u>\$ 940,590</u>	<u>\$ 1,438,346</u>	<u>\$ 1,461,924</u>



## BUSINESS UNIT 535: GEOGRAPHIC INFORMATION SERVICES (GIS)

**Department :** Program Management and Engineering      **Business Unit :** (535) Geographic Information Systems

**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:**

**Intrafund Transfers Out:** represents funds being transferred to the Renewal and Extension Fund for CIS and JDE integration support.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 371,090	\$ 409,457	\$ 412,846
Overtime Pay	-	-	-
F.I.C.A.	26,758	31,323	31,582
Pension	50,614	54,810	54,926
Employee Benefits	51,781	63,040	75,546
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	3,317	10,595	3,480
Vehicle Supplies	2,068	3,650	3,713
Administrative Supplies	539	746	746
Safety Supplies	334	300	300
Special Purchases	-	-	-
Utilities	5,075	8,299	8,461
Rentals	-	-	-
Maintenance and Repairs	205	500	500
Outside Services	8,387	4,580	34,580
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	103,324	137,656	139,075
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	42,205	117,446	-
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	150,000
<b>Total Appropriations</b>	<b>\$ 665,697</b>	<b>\$ 842,402</b>	<b>\$ 915,755</b>





Distribution and Conveyance Division – Business Unit Group 600



*Clayton County Water Authority*



**DISTRIBUTION &  
CONVEYANCE  
DEPARTMENTS**



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





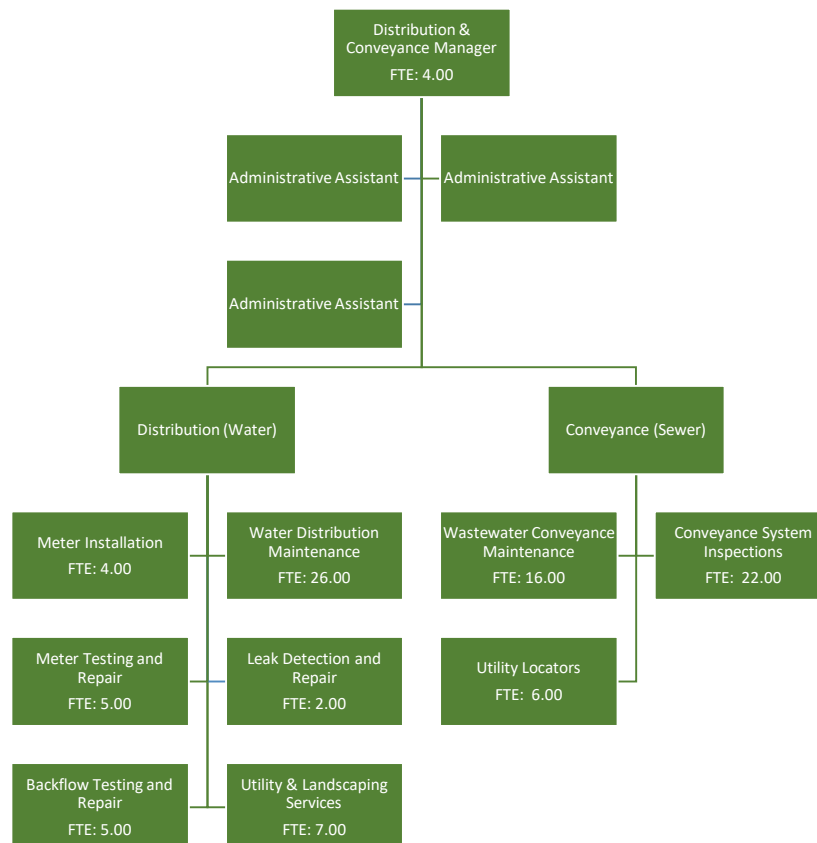
## DISTRIBUTION AND CONVEYANCE DIVISION BUDGET UNIT 600

The Distribution and Conveyance Department 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 sewerage collection.

Responsibilities are accomplished per the general direction of the General Manager and the Assistant General Manager over operations. The Distribution and Conveyance 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, types of services, or functional areas of responsibility. The budget units that have been identified for this department are listed in a tabular format below.

601- Distribution and Conveyance Manager	618 - Backflow Testing and Repair
610 Meter Installation	619 Utility and Landscaping Services
612 - Water Distribution Maintenance	621 - Wastewater Conveyance Maintenance
616 - Meter Testing and Repair	627 - Conveyance System Inspections
617 - Leak Detection and Repair	630 - Utility Locators

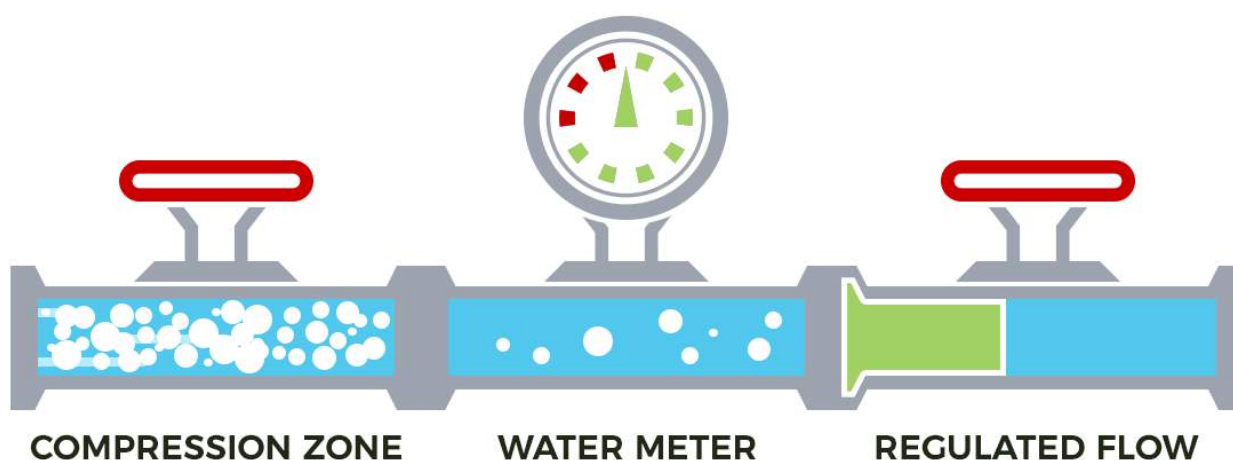




### Distribution and Conveyance Division – Staffing Summary

Authorized Personnel	FY 2016-2017 Budgeted	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted
<b>Distribution and Conveyance Division</b>			
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	27.00	26.00
616 - Meter Testing and Repair	7.00	6.00	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	9.00	7.00
621 - Wastewater Conveyance Maintenance	15.00	15.00	16.00
627 - Conveyance System Inspections	20.00	20.00	22.00
630 - Utility Locators	6.00	6.00	6.00
<b>Total Full-Time Employees (FTEs)</b>	<b>99.00</b>	<b>98.00</b>	<b>97.00</b>

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 2018 - 2019

Business Unit	Budget Funding	Account Number	Amount Budgeted	Initiative
<b>Distribution and Conveyance Manager</b>				
601	Capital	59303	\$ 500,000	Large Meter Replacements
<b>Grand Total</b>			<b>\$ 500,000</b>	
<b>Meter Installation</b>				
610	Operating	51104	\$ 200,000	Meter Setting Materials-From Warehouse
		56124	250,000	Meter and Backflow Setting Outside Services
<b>Grand Total</b>			<b>\$ 450,000</b>	
<b>Water Distribution Maintenance</b>				
612	Operating	51104	\$ 350,000	Materials for Water Distribution Maintenance
		56118	300,000	Patching and Paving
		56128	225,000	Maintenance: Supply Mains <i>(Concrete, Vault repairs, Dump fees, Plumbing Repairs)</i>
	Capital	59303	389,000	DOT - Stagecoach & Steele Rd
		59303	380,000	DOT - Tara Blvd
		59941	20,000	Pull Behind Air Compressor
		59941	90,000	Dump Truck
		59941	15,000	20-ton Trailer
		59941	28,382	Truck: F-150 4x4
		59941	20,000	Trench Boxes (2) @ \$10,000 each
<b>Grand Total</b>			<b>\$1,817,382</b>	
<b>Backflow Testing and Repair</b>				
618	Capital	59953	\$ 35,358	Truck: F-250
<b>Grand Total</b>			<b>\$ 35,358</b>	
<b>Utility and Landscaping Services</b>				
619	Capital	59953	\$ 28,382	Truck: F-150 4x4
<b>Grand Total</b>			<b>\$ 28,382</b>	
<b>Wastewater Conveyance Maintenance</b>				
621	Operating	51104	\$ 200,000	Materials for Conveyance Maintenance
		55106	160,000	Private Property Damage
		56118	200,000	Patching & Paving
		56124	400,000	Maintenance: Collections & Outfalls <i>(Concrete, Dump Fees, Plumbing Repairs)</i>
	Capital	59913	180,000	Paving around "Building C"-Dust Control
		59951	55,000	Truck: F-550 4X4
		59964	22,000	8" Smartshore Portable & Inflatable Trench Box Systems (2) @ \$11,000 each
		59988	15,000	SeaSnake Camera, Monitor & Locator
<b>Grand Total</b>			<b>\$1,232,000</b>	
<b>Conveyance System Inspections</b>				
627	Operating	56104	\$ 166,638	Flow Monitoring
		56124	250,000	Maintenance: Collections & Outfalls <i>(Concrete, Dump Fees, Plumbing Repairs)</i>
	Capital	59951	269,500	Jet Truck
		59953	35,358	Truck: F-150 4x4
		59988	17,600	Pole Camera
<b>Grand Total</b>			<b>\$ 739,096</b>	
<b>Utility Locators</b>				
630	Operating	56104	\$ 25,000	IRTH Solutions Locating Software
	Capital	59953	28,382	Truck: F-150 4x4
<b>Grand Total</b>			<b>\$ 53,382</b>	

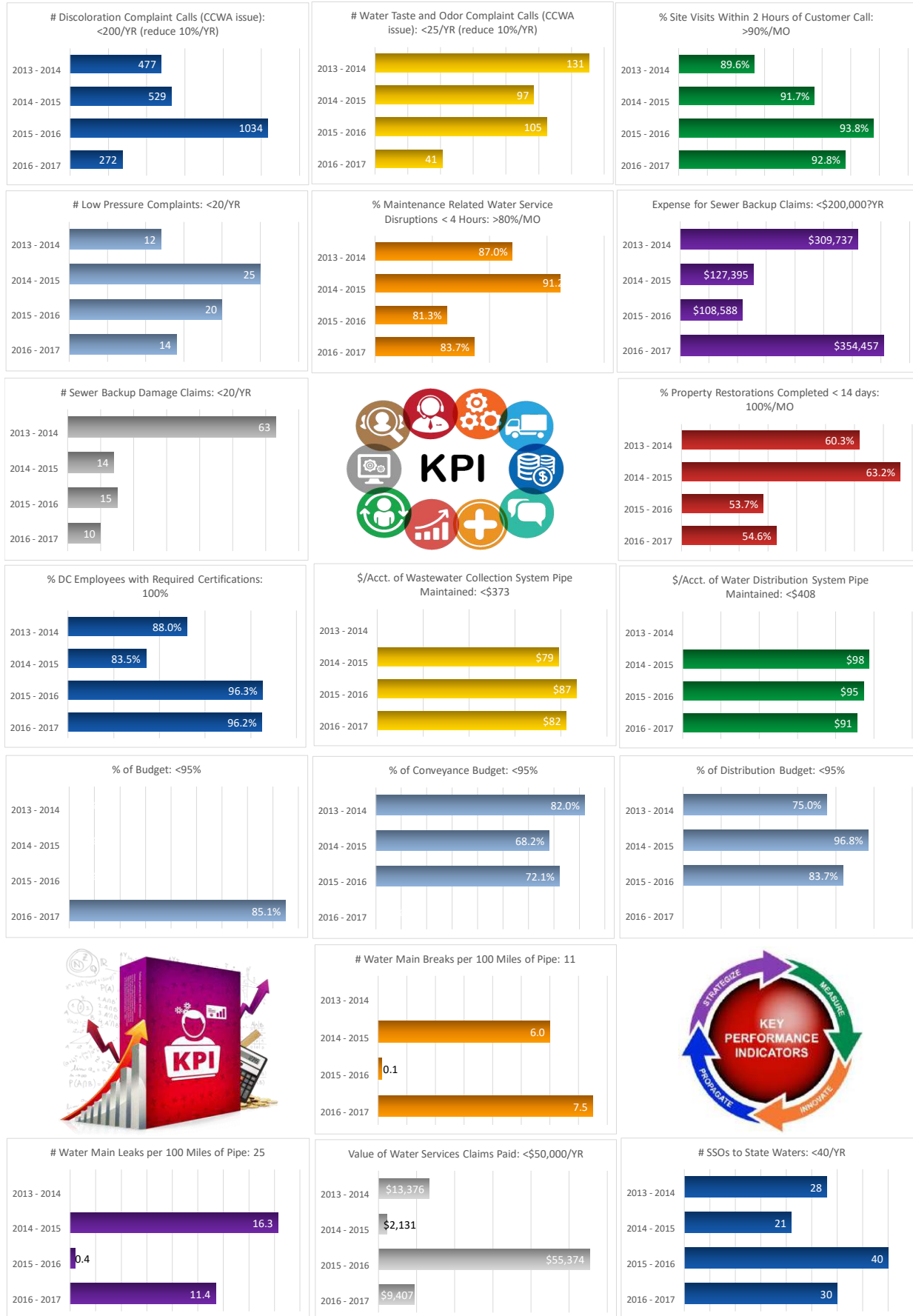


## Distribution and Conveyance Division – Levels of Service

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	Actual 2016 - 2017	Actual 2015 - 2016	Actual 2014 - 2015
<b>SUPERIOR PRODUCT QUALITY</b>						
2 Potable water quality that meets customer expectations	# discoloration complaint calls (CCWA issue)	DC	< 200/Yr. - Reduce 10%/Yr.	272	1,034 / 95%	529
	# water Taste and Odor complaint calls (CCWA issue)	DC	< 25/Yr. - Reduce 10%/Yr.	41	105 / 8%	97
<b>EXCEED CUSTOMER EXPECTATIONS</b>						
4 Improve customer experience	% site visits within 2 hours of customer call	DC	> 90% / Month	92.8%	93.8%	91.7%
5 Minimize potable water service disruptions	# low pressure complaints	DC	< 20 / Year	14	20	25
	% maintenance related water service disruptions < 4 hours	DC	> 80% / Month	83.7%	81.3%	91.2%
6 Minimize customer sewer backups	Expense for sewer backup claims	DC	< \$200,000 / Year	\$354,457	\$108,588	\$127,395
	# sewer backup damage claims	DC	< 20 / Year	10	15	14
7 Complete all property restorations in 14 days	% property restorations completed < 14 days	DC	100% / Month	54.6%	53.7%	63.2%
<b>PROVIDE EMPLOYEE DEVELOPMENT</b>						
8 Provide effective employee training and development	% DC employees with required certifications (Apr)	DC	100%	96.2%	96.3%	83.5%
<b>OPTIMIZE OPERATIONS</b>						
13 Reasonable Cost of Service	\$/acct. of wastewater collection system pipe maintained (Apr)	DC	< \$373	\$82	\$87	\$79
	\$/acct. of water distribution system pipe maintained (Apr)	DC	< \$408	\$91	\$95	\$98
	% of budget (Apr)	DC	< 95%	85.1%	NA	NA
	% of Conveyance budget (Apr)	DC	< 95%	NA	72.1%	68.2%
	% of Distribution budget (Apr)	DC	< 95%	NA	83.7%	96.8%
<b>INFRASTRUCTURE SUSTAINABILITY</b>						
21 Provide a sustainable water supply	# water main breaks per 100 miles of pipe (Apr)	DC	11	7.5	0.13	6.00
	# water main leaks per 100 miles of pipe (Apr)	DC	25	11.4	0.36	16.30
	Value of water services claims paid	DC	< \$50,000 / Year	\$9,407	\$55,374	\$2,131
<b>STAKEHOLDER SUPPORT</b>						
23 Environmental Stewardship and Sustainability	# SSOs to state waters	DC	< 40 / Year	30	40	21







## Distribution and Conveyance Division Staffing – Position Detail

Authorized Personnel	FY 2016-2017 Budgeted	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted
<b><i>Distribution and Conveyance Dept. Manager</i></b>			
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
<b>Total Number of Personnel (FTE's)</b>	<b>4.00</b>	<b>4.00</b>	<b>4.00</b>
<b><i>Meter Installation</i></b>			
Equipment Operator	1.00	1.00	1.00
Utility Service Mechanic I	2.00	1.00	2.00
Utility Service Mechanic II	0.00	1.00	0.00
Utility Service Mechanic Crew Leader	1.00	1.00	1.00
<b>Total Number of Personnel (FTE's)</b>	<b>4.00</b>	<b>4.00</b>	<b>4.00</b>
<b><i>Water Distribution Maintenance</i></b>			
Distribution Maintenance Supervisor	1.00	1.00	1.00
Equipment Operator	4.00	4.00	4.00
Equipment Operator Pipeline	3.00	2.00	2.00
Installation/Repair Foreman	1.00	1.00	2.00
Installation/Repair Specialist	1.00	1.00	0.00
Office Assistant	1.00	1.00	1.00
Pipeline Install Crew Leader	2.00	2.00	2.00
Senior Equipment Operator	1.00	2.00	2.00
Trouble Shooter	4.00	4.00	3.00
Utility Service Mechanic Crew Leader	3.00	3.00	3.00
Utility Service Mechanic I	3.00	4.00	5.00
Utility Service Mechanic II	3.00	2.00	1.00
<b>Total Number of Personnel (FTE's)</b>	<b>27.00</b>	<b>27.00</b>	<b>26.00</b>
<b><i>Meter Testing and Repair</i></b>			
Equipment Operator	2.00	2.00	1.00
Meter Repair Technician	2.00	2.00	2.00
Meter Testing/Repair Coordinator	1.00	0.00	0.00
Utility Services Mechanic Crew Leader	1.00	1.00	1.00
Meter/Backflow Testing and Repair Foreman	1.00	1.00	1.00
<b>Total Number of Personnel (FTE's)</b>	<b>7.00</b>	<b>6.00</b>	<b>5.00</b>
<b><i>Leak Detection and Repair</i></b>			
Leak Detection Crew Leader	1.00	1.00	1.00
Leak Detection Technician	1.00	1.00	1.00
<b>Total Number of Personnel (FTE's)</b>	<b>2.00</b>	<b>2.00</b>	<b>2.00</b>
<b><i>Backflow Testing and Repair</i></b>			
Backflow Technician	4.00	4.00	4.00
Backflow Prevention Crew Leader	1.00	1.00	1.00
<b>Total Number of Personnel (FTE's)</b>	<b>5.00</b>	<b>5.00</b>	<b>5.00</b>



Authorized Personnel	FY 2016-2017 Budgeted	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted
<b><i>Utility &amp; Landscaping Services</i></b>			
Equipment Operator	2.00	2.00	1.00
Utility Service Mechanic I	4.00	3.00	1.00
Utility Service Mechanic II	0.00	1.00	2.00
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
<b>Total Number of Personnel (FTE's)</b>	<b>9.00</b>	<b>9.00</b>	<b>7.00</b>
<b><i>Wastewater Conveyance Maintenance</i></b>			
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	0.00	1.00
Utility Service Mechanic I	4.00	4.00	4.00
Utility Service Mechanic II	2.00	2.00	2.00
Utility Service Mechanic Crew Leader	3.00	3.00	3.00
<b>Total Number of Personnel (FTE's)</b>	<b>15.00</b>	<b>15.00</b>	<b>16.00</b>
<b><i>Conveyance System Inspections</i></b>			
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	0.00	1.00
Damage Control Specialist	1.00	1.00	0.00
Equipment Operator	5.00	5.00	5.00
Lead Utility Service Mechanic	2.00	2.00	3.00
Utility Service Mechanic I	1.00	1.00	2.00
Utility Service Mechanic II	1.00	1.00	1.00
Utility Services Mechanic Crew Leader	5.00	5.00	5.00
<b>Total Number of Personnel (FTE's)</b>	<b>20.00</b>	<b>20.00</b>	<b>22.00</b>
<b><i>Utility Locators</i></b>			
Trouble Shooter/Utility Locator	5.00	5.00	5.00
Utility Service Mechanic Crew Leader	1.00	1.00	1.00
<b>Total Number of Personnel (FTE's)</b>	<b>6.00</b>	<b>6.00</b>	<b>6.00</b>
<b><i>Distribution &amp; Conveyance Department Total</i></b>	<b>99.00</b>	<b>98.00</b>	<b>97.00</b>





## 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) Department is ensuring the overall integrity of the water distribution and wastewater collection systems. The Department 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.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 4,518,601	4,905,760	\$ 4,864,867
Overtime Pay	236,882	240,500	234,500
F.I.C.A.	350,989	393,683	390,099
Pension	623,942	681,901	688,279
Employee Benefits	771,793	950,599	1,258,207
<b>Operating Expenditures:</b>			-
Operating Materials & Supplies	1,530,698	1,425,030	1,121,095
Vehicle Supplies	214,019	220,400	211,400
Administrative Supplies	12,614	16,658	15,525
Safety Supplies	26,767	33,900	33,400
Special Purchases	1,944	1,960	1,960
Utilities	108,137	101,621	101,979
Rentals	3,010	6,600	6,950
Maintenance and Repairs	258,611	277,649	302,349
Outside Services	2,065,631	2,770,783	2,178,150
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	160,126	221,645	220,094
Accounting Charges	-	-	-
<b>Debt Service:</b>			-
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	757,646	316,649	859,962
<b>Other Financing Uses:</b>			-
Intrafund Transfers Out:	400,000	1,750,000	1,269,000
<b>Total Appropriations</b>	<b>\$ 12,041,410</b>	<b>\$ 14,315,338</b>	<b>\$ 13,757,816</b>



## BUSINESS UNIT 601: DISTRIBUTION AND CONVEYANCE MANAGER

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

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

**Significant Expenditure and Staffing Changes:**

**Intrafund Transfers Out:** represents funds being transferred to the Renewal and Extension Fund for Large Meter Replacements.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 304,921	\$ 311,269	\$ 324,504
Overtime Pay	5,434	6,500	5,500
F.I.C.A.	22,726	24,309	25,247
Pension	41,797	43,266	45,106
Employee Benefits	43,628	47,002	58,362
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	16,443	12,850	9,820
Vehicle Supplies	4,674	5,300	5,400
Administrative Supplies	2,373	3,100	2,600
Safety Supplies	143	500	500
Special Purchases	1,944	1,960	1,960
Utilities	23,055	21,900	21,560
Rentals	83	350	350
Maintenance and Repairs	8,426	10,750	11,400
Outside Services	31,154	47,245	46,480
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	68,982	81,348	87,132
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	-	51,315	-
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	300,000	-	500,000
<b>Total Appropriations</b>	<b>\$ 875,783</b>	<b>\$ 668,964</b>	<b>\$ 1,145,921</b>



## BUSINESS UNIT 610: METER INSTALLATION

**Department :** Distribution and Conveyance**Business Unit :** (610) Meter Installation**Major Business Unit Functions:**

Oversees the installation of meters.

**Significant Expenditure and Staffing Changes:**

**Operating Materials and Supplies:** decrease is due to more of the larger meters being set this upcoming years. These activities will take place in the R&E fund.

**Outside Services:** decrease represents funding for meter and backflow settings along with building and repairing meter vaults, the larger meter setting are now being done in-house rather than by outside contractors.

Budget Detail By Individual Categories	FY 2016 - 17 Actual	FY 2017 - 18 Budgeted	FY 2018 - 19 Budgeted
<b>Personal Services:</b>			
Salaries and Wages	\$ 128,421	\$ 161,658	\$ 170,974
Overtime Pay	8,505	10,000	10,000
F.I.C.A.	10,358	13,132	13,845
Pension	17,930	22,470	23,765
Employee Benefits	12,666	35,890	45,882
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	407,943	455,880	211,380
Vehicle Supplies	5,646	6,100	6,300
Administrative Supplies	258	300	300
Safety Supplies	1,831	2,500	2,500
Special Purchases	-	-	-
Utilities	1,201	1,200	1,200
Rentals	-	-	-
Maintenance and Repairs	2,365	2,000	4,200
Outside Services	211,587	371,645	284,085
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	2,146	4,078	4,902
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	-	14,000	-
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	-
Total Appropriations	\$ 810,857	\$ 1,100,853	\$ 779,333



## 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:**

**Personal Services:** the decrease represents moving a Utility Service Mechanic position from business Unit 612 to business unit 621 and moving a Trouble Shooter position from business unit 612 to business unit 627.

**Outside Services:** represents funding for patching and paving of roads, concrete work and dumping fees after waterline repairs are completed.

**Intrafund Transfers Out:** represents funds being transferred to the Renewal & Extension Fund for two DOT Projects; Stagecoach road @ Steele Rd and Tara Blvd.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 1,281,530	\$ 1,422,114	\$ 1,361,511
Overtime Pay	108,759	110,000	110,000
F.I.C.A.	103,501	117,205	112,567
Pension	177,406	197,672	189,251
Employee Benefits	205,438	276,334	333,331
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	486,335	419,315	389,915
Vehicle Supplies	73,013	75,000	72,500
Administrative Supplies	2,198	3,300	3,300
Safety Supplies	9,336	12,000	12,000
Special Purchases	-	-	-
Utilities	26,959	25,600	25,500
Rentals	68	2,500	2,500
Maintenance and Repairs	41,256	32,600	43,000
Outside Services	629,977	594,410	590,285
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	28,225	30,759	33,212
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	160,604	-	173,382
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	100,000	1,750,000	769,000
<b>Total Appropriations</b>	<b>\$ 3,434,605</b>	<b>\$ 5,068,809</b>	<b>\$ 4,221,254</b>



## BUSINESS UNIT 616: DISTRIBUTION AND CONVEYANCE MANAGER

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

Test, install and repair meters &amp; backflows.

**Significant Expenditure and Staffing Changes:****Personal Services:** reduction in funding due to the elimination of one Equipment Operator's position.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 366,422	\$ 339,802	\$ 267,430
Overtime Pay	4,735	5,000	5,000
F.I.C.A.	26,712	26,379	20,842
Pension	49,449	47,233	49,232
Employee Benefits	61,565	57,926	68,285
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	57,060	60,915	50,570
Vehicle Supplies	10,506	12,000	8,500
Administrative Supplies	1,881	1,750	850
Safety Supplies	579	1,250	1,000
Special Purchases	-	-	-
Utilities	4,843	4,600	4,600
Rentals	1,043	850	1,000
Maintenance and Repairs	1,507	2,714	1,214
Outside Services	7,465	8,143	28,368
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	3,887	9,487	5,522
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	72,994	-	-
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	-
Total Appropriations	<u>\$ 670,648</u>	<u>\$ 578,049</u>	<u>\$ 512,413</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.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 78,526	\$ 92,256	\$ 93,357
Overtime Pay	33	1,000	1,000
F.I.C.A.	6,146	7,134	7,219
Pension	11,016	12,824	12,977
Employee Benefits	12,065	14,196	19,370
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	1,868	4,290	4,290
Vehicle Supplies	2,239	3,900	4,400
Administrative Supplies	65	200	200
Safety Supplies	83	300	300
Special Purchases	-	-	-
Utilities	2,523	1,800	2,200
Rentals	-	-	-
Maintenance and Repairs	13	485	435
Outside Services	182	1,827	1,652
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	2,398	2,016	2,224
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	46,363	12,000	-
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	-
Total Appropriations	\$ 163,520	\$ 154,228	\$ 149,624



## 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:****Capital Expenditure:** represents funding for the scheduled replacement of a pickup truck.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 195,861	\$ 221,925	\$ 220,093
Overtime Pay	9,969	10,000	10,000
F.I.C.A.	15,082	17,743	17,601
Pension	27,198	30,847	30,593
Employee Benefits	37,804	46,012	63,574
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	52,115	61,975	46,725
Vehicle Supplies	9,446	11,000	11,000
Administrative Supplies	703	1,600	950
Safety Supplies	855	1,000	1,200
Special Purchases	-	-	-
Utilities	5,130	4,419	4,419
Rentals	-	-	-
Maintenance and Repairs	1,419	1,700	4,000
Outside Services	2,767	4,312	29,112
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	9,783	16,060	10,625
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	60,291	-	35,358
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	-
<b>Total Appropriations</b>	<b>\$ 428,423</b>	<b>\$ 428,593</b>	<b>\$ 485,250</b>





## 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:****Personal Services:** decrease represents the elimination of a Utility Service Mechanics position.**Capital Expenditure:** represents funding for the scheduled replacement of a pickup truck.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 364,059	\$ 404,680	\$ 344,492
Overtime Pay	23,194	18,000	18,000
F.I.C.A.	28,679	32,333	27,730
Pension	50,156	56,252	47,885
Employee Benefits	61,346	84,369	96,830
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	117,615	76,105	76,715
Vehicle Supplies	17,813	19,500	18,300
Administrative Supplies	783	658	625
Safety Supplies	2,431	1,500	1,400
Special Purchases	-	-	-
Utilities	3,530	3,602	3,600
Rentals	-	500	500
Maintenance and Repairs	4,711	5,900	9,600
Outside Services	11,961	11,935	10,335
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	9,601	9,232	9,179
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	74,964	108,696	28,382
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	-
Total Appropriations	<u>\$ 770,843</u>	<u>\$ 833,262</u>	<u>\$ 693,573</u>



## 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:**

**Capital Expenditures:** represents funding for paving around Building C, scheduled replacement of a pickup truck, two portable/inflatable Trench Boxes and a Seasnake Camera, Monitor and Locator.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 640,537	\$ 719,784	\$ 771,688
Overtime Pay	22,907	30,000	30,000
F.I.C.A.	48,647	57,356	61,330
Pension	88,402	100,050	107,264
Employee Benefits	116,003	150,807	229,621
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	275,697	251,730	238,520
Vehicle Supplies	31,965	32,200	34,000
Administrative Supplies	2,170	2,500	3,100
Safety Supplies	6,360	9,000	9,000
Special Purchases	-	-	-
Utilities	14,216	12,950	13,550
Rentals	1,296	2,000	2,000
Maintenance and Repairs	164,542	178,000	179,000
Outside Services	803,937	963,616	656,621
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	16,234	26,784	26,496
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	99,733	99,138	272,000
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	-
Total Appropriations	<u>\$ 2,332,646</u>	<u>\$ 2,635,915</u>	<u>\$ 2,634,190</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:****Outside Services:** decrease represents funding for root control no longer being done by outside contractors.**Capital Expenditures:** represents funding for the scheduled replacement of a Jet Truck, a new 4x4 Pickup Truck and a Pole Camera.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 915,296	\$ 977,153	\$ 1,061,167
Overtime Pay	45,786	40,000	35,000
F.I.C.A.	70,944	77,809	83,854
Pension	127,208	135,825	147,504
Employee Benefits	172,271	182,307	271,320
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	79,243	59,400	58,590
Vehicle Supplies	43,321	40,500	36,500
Administrative Supplies	1,722	2,800	2,700
Safety Supplies	4,780	5,500	5,000
Special Purchases	-	-	-
Utilities	18,088	17,950	17,750
Rentals	520	400	600
Maintenance and Repairs	32,384	41,500	47,500
Outside Services	307,991	704,700	470,182
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	15,920	34,833	34,415
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	184,357	31,500	322,458
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	-
<b>Total Appropriations</b>	<b>\$ 2,019,831</b>	<b>\$ 2,352,177</b>	<b>\$ 2,594,540</b>



## BUSINESS UNIT 630: UTILITY LOCATORS

**Department :** Distribution and Conveyance**Business Unit :** (630) Utility Locators**Major Business Unit Functions:**

Locate water and sewer lines.

**Significant Expenditure and Staffing Changes:****Capital Expenditures:** represents funding for the scheduled replacement of a Pickup Truck.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 243,028	\$ 255,119	\$ 249,651
Overtime Pay	7,560	10,000	10,000
F.I.C.A.	18,194	20,283	19,864
Pension	33,380	35,462	34,702
Employee Benefits	49,007	55,756	71,632
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	36,379	22,570	34,570
Vehicle Supplies	15,396	14,900	14,500
Administrative Supplies	461	450	900
Safety Supplies	369	350	500
Special Purchases	-	-	-
Utilities	8,592	7,600	7,600
Rentals	-	-	-
Maintenance and Repairs	1,988	2,000	2,000
Outside Services	58,610	62,950	61,030
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	2,950	7,048	6,387
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	58,340	-	28,382
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	-
Total Appropriations	\$ 534,254	\$ 494,488	\$ 541,718



Water Reclamation Division – Business Unit Group 700



**WATER  
RECLAMATION  
DEPARTMENTS**

*Clayton County Water Authority*



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



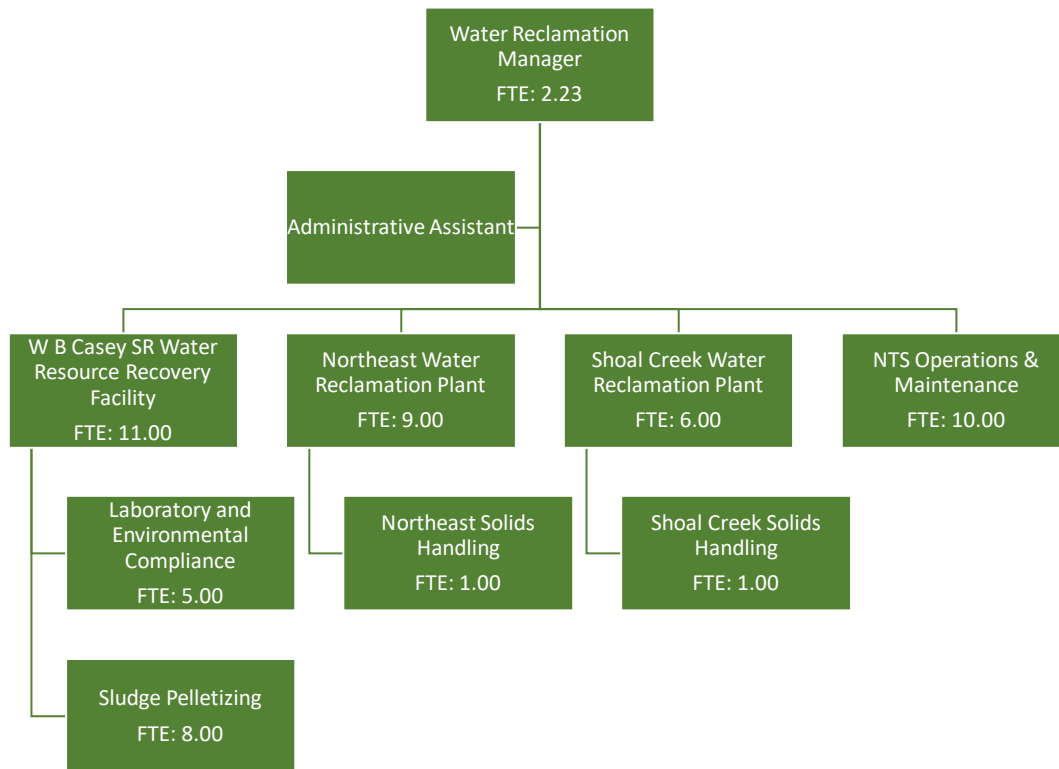
## WATER RECLAMATION DEPARTMENT BUDGET UNIT 700

The Water Reclamation Department 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 plants, one bio-solid plant, 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 Manager over operations. The Water Reclamation 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, reclamation facilities, activities, or areas of responsibility. The budget units that have been identified for this department are listed below.

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





## Water Reclamation Division – Staffing Summary

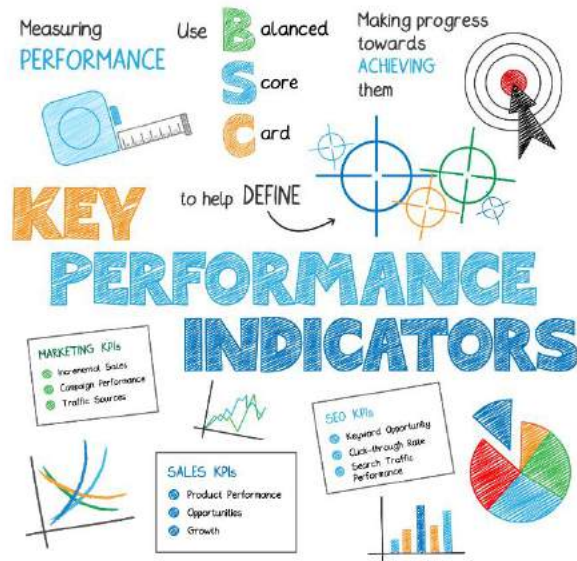
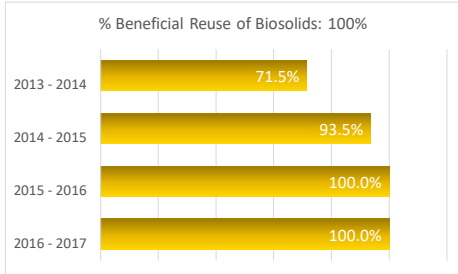
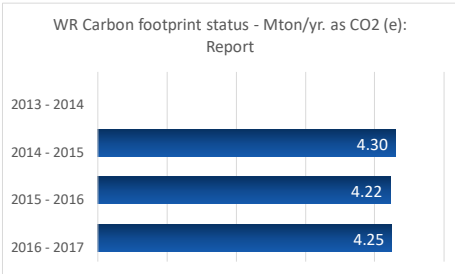
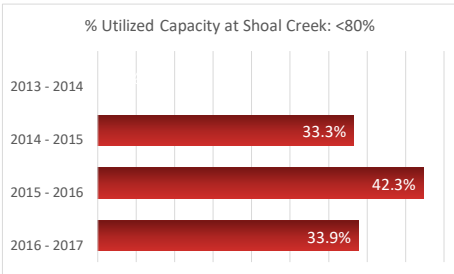
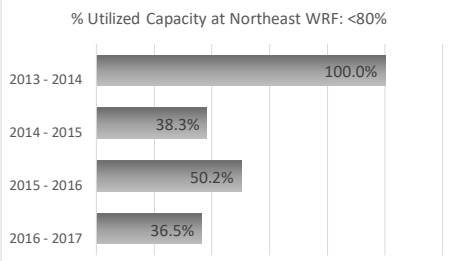
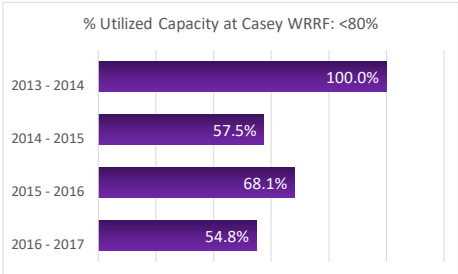
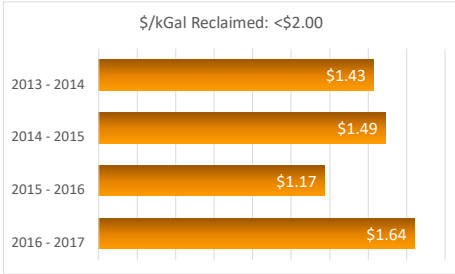
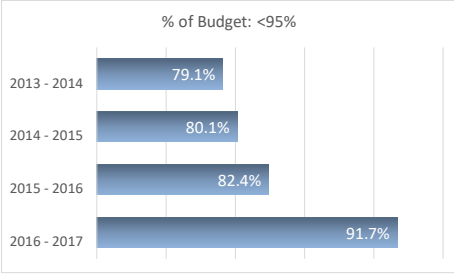
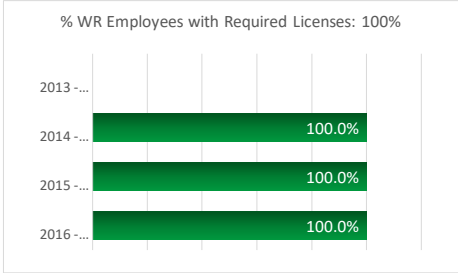
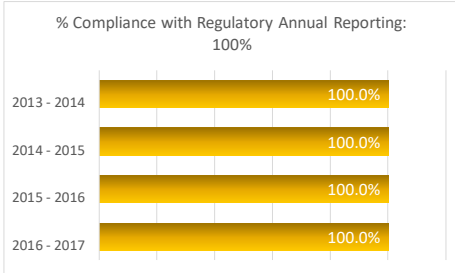
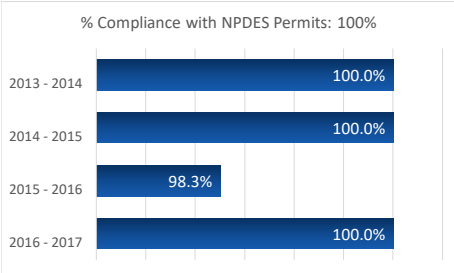
Authorized Personnel	FY 2016-2017 Budgeted	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted
<b>Water Reclamation Division</b>			
701 - Water Reclamation Manager	2.23	2.23	2.23
720 - W B Casey SR Water Resource Recovery Facility	9.00	10.00	11.00
721 - Northeast Water Reclamation Plant	9.00	9.00	9.00
722 - Northeast Solids Handling	1.00	1.00	1.00
724 - Shoal Creek Water Reclamation Plant	7.00	7.00	6.00
727 - Shoal Creek Solids Handling	1.00	1.00	1.00
730 - Laboratory and Environmental Compliance	5.00	5.00	5.00
731 - Sludge Pelletizing	7.00	8.00	8.00
740 - NTS Operations & Maintenance	10.00	10.00	10.00
<b>Total Full-Time Employees (FTEs)</b>	<b>51.23</b>	<b>53.23</b>	<b>53.23</b>

## 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	Actual 2016 - 2017	Actual 2015 - 2016	Actual 2014 - 2015
<b>SUPERIOR PRODUCT QUALITY</b>						
1 Meet all applicable regulatory requirements	% compliance with NPDES permits	WR	100%	100.0%	98.3%	100.0%
	% compliance with regulatory annual reporting (July)	WR	100%	100.0%	100.0%	100.0%
<b>PROVIDE EMPLOYEE DEVELOPMENT</b>						
8 Provide effective employee training and development	% WR employees with required licenses (Apr)	WR	100%	100.0%	100%	100.0%
<b>OPTIMIZE OPERATIONS</b>						
13 Reasonable Cost of Service	% of budget (Apr)	WR	< 95%	91.7%	82.4%	80.1%
	\$/kGal reclaimed (Apr)	WR	<\$2.00	\$1.64	\$1.17	\$1.49
<b>INFRASTRUCTURE SUSTAINABILITY</b>						
22 Provide adequate treatment capacity	% utilized capacity at Casey WRRF	WR	< 80%	54.8%	68.1%	57.5%
	% utilized capacity at Northeast WRF	WR	< 80%	36.5%	50.2%	38.3%
	% utilized capacity at Shoal Creek	WR	< 80%	33.9%	42.3%	33.3%
<b>STAKEHOLDER SUPPORT</b>						
23 Environmental Stewardship and Sustainability	WR Carbon footprint status - Mton/yr. as CO2 (e) (Jan)	WR	Report	4.25	4.22	4
	% beneficial reuse of biosolids (Jan)	WR	100%	100.0%	100.0%	93.5%





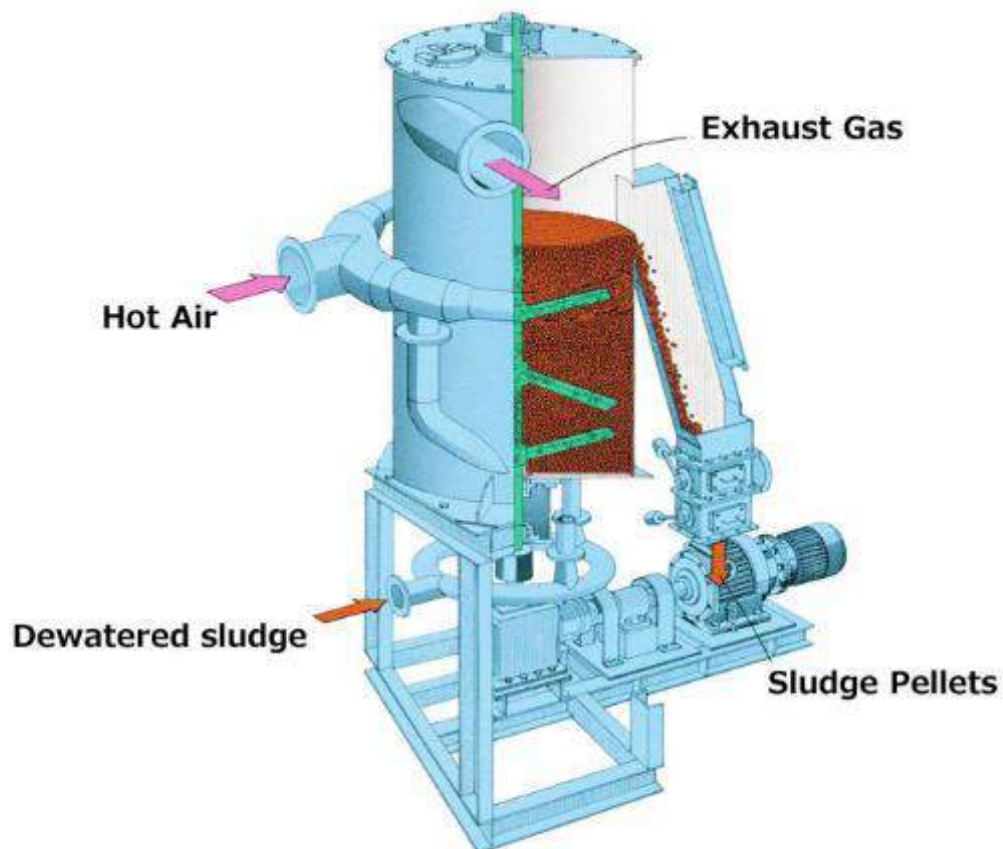


## Water Reclamation Division – Major Initiatives for FY 2018 - 2019

Business Unit	Budget Funding	Account Number	Amount Budgeted	Initiative
Water Reclamation Manager				
701	Operating	56110	\$ 50,000	Unforeseen Consulting
		56134	650,000	DeKalb Co Sewer
Grand Total			\$ 700,000	
W. B. Casey Sr. Water Reclamation Plant				
720	Operating	51101	\$ 279,200	Chemicals
		56116	255,992	Maintenance: Plant Equipment ( <i>As needed basis</i> )
	Capital	59303	100,000	Casey Capacity Evaluation
		59303	60,000	Baffles for 1,2,3 Secondary Clarifiers
		59303	37,000	Scum Trough Assembly
		59303	24,000	Primary Clarifier Solids Meter
		59932	87,500	24" Valve & Hot tap on RAS Return Line
		59947	121,000	Upgrade PLC & Controls for Emergency Generator
		59953	28,382	Truck: F-150 4x4
Grand Total			\$ 993,074	
Northeast Water Reclamation Plant				
721	Operating	56116	\$ 254,644	Maintenance: Non-Construction Equip ( <i>As needed basis</i> )
	Capital	59953	28,382	Truck: F-150 4x4
Grand Total			\$ 283,026	
Northeast Solids Handling				
722	Operating	56199	\$ 196,196	Solids Disposal
Grand Total			\$ 196,196	
Shoal Creek Water Reclamation Plant				
724	Operating	55103	\$ 170,159	Maintenance: Plant Equipment ( <i>As needed basis</i> )
			129,563	Maintenance: Non-Construction Equip ( <i>As needed basis</i> )
	Capital	59931	50,000	Raw Water Pump
		59953	27,030	Truck: F-150
Grand Total			\$ 376,752	
Shoal Creek Solids Handling				
727	Operating	56199	\$ 139,627	Solids Disposal
Grand Total			\$ 139,627	
R L Jackson Transfer Pump Station				
729	Operating	56116	\$ 169,066	Maintenance: Non-Construction Equip ( <i>As needed basis</i> )
Grand Total			\$ 169,066	



Business Unit	Budget Funding	Account Number	Amount Budgeted	Initiative
Sludge Pelletizing				
731	Operating	51101	\$ 239,000	Chemicals
		55103	111,111	Maintenance: Non-Construction Equip (As needed basis)
	Capital	59303	50,000	Polymer Tank
Grand Total			\$ 400,111	
Natural Treatment Operations and Maintenance				
740	Capital	59941	\$ 89,250	Mid-Size Excavator
		59941	89,181	Skid Steer Loader
		59945	35,490	Hydraulic Mulching Head
		59953	9,841	ATV
		59962	7,999	Refrigerated Auto Sampler
		59968	77,833	Aquatic Vegetation Excavator with Trailer
Grand Total			\$ 309,594	



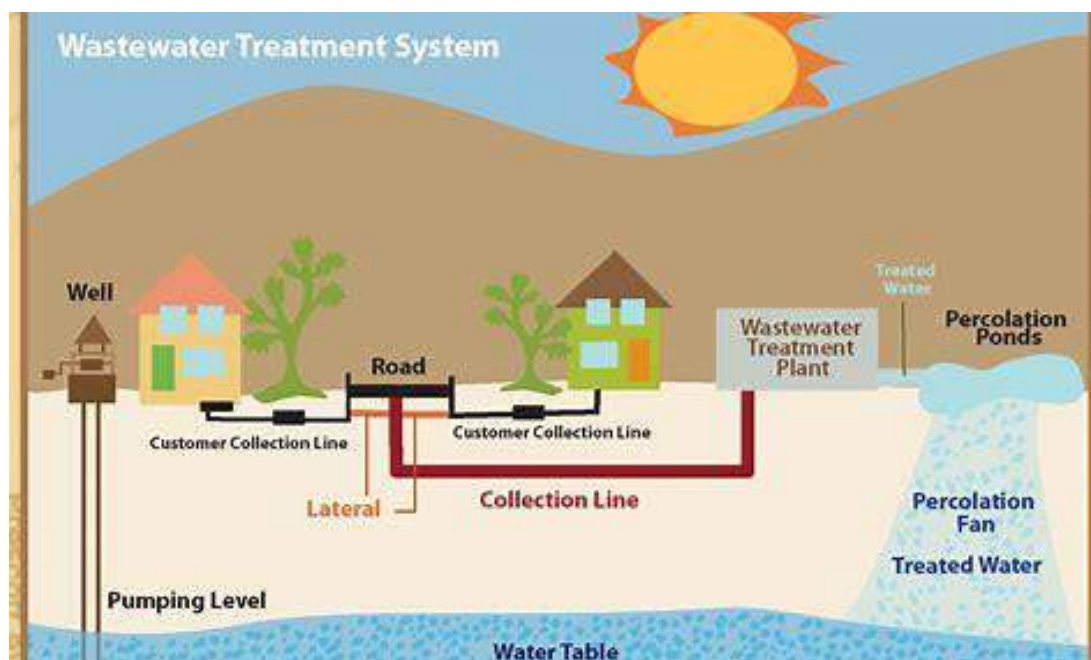


## Water Reclamation Division Staffing – Position Detail

Authorized Personnel	FY 2016-2017 Budgeted	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted
<b><i>Water Reclamation Department Manager</i></b>			
Intern	0.23	0.23	0.23
Office Assistant	1.00	1.00	1.00
Water Reclamation Manager	1.00	1.00	1.00
<b>Total Number of Personnel (FTE's)</b>	<b>2.23</b>	<b>2.23</b>	<b>2.23</b>
<b><i>W. B. Casey Sr. Water Resource Recovery Facility</i></b>			
Buildings & Grounds Custodian	0.00	1.00	1.00
Chief Operator	1.00	1.00	1.00
Plant Operator I	0.00	0.00	1.00
Plant Operator II	3.00	3.00	2.00
Plant Operator III	4.00	4.00	5.00
Plant Supervisor	1.00	1.00	1.00
<b>Total Number of Personnel (FTE's)</b>	<b>9.00</b>	<b>10.00</b>	<b>11.00</b>
<b><i>Northeast Water Reclamation Plant</i></b>			
Chief Operator	1.00	1.00	1.00
Building and Grounds Maintenance	1.00	1.00	1.00
Plant Operator I	5.00	6.00	6.00
Plant Operator II	1.00	0.00	0.00
Plant Operator III	0.00	0.00	0.00
Plant Supervisor	1.00	1.00	1.00
<b>Total Number of Personnel (FTE's)</b>	<b>9.00</b>	<b>9.00</b>	<b>9.00</b>
<b><i>Northeast Solids Handling</i></b>			
Plant Operator III	1.00	1.00	1.00
<b>Total Number of Personnel (FTE's)</b>	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>
<b><i>Shoal Creek Water Reclamation Plant</i></b>			
Chief Operator	1.00	1.00	1.00
Plant Operator I	4.00	4.00	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
<b>Total Number of Personnel (FTE's)</b>	<b>7.00</b>	<b>7.00</b>	<b>6.00</b>
<b><i>Shoal Creek Solids Handling</i></b>			
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
<b>Total Number of Personnel (FTE's)</b>	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>
<b><i>Laboratory and Environmental Compliance</i></b>			
Environmental Compliance & Lab Coordinator	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
<b>Total Number of Personnel (FTE's)</b>	<b>5.00</b>	<b>5.00</b>	<b>5.00</b>



Authorized Personnel	FY 2016-2017 Budgeted	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted
<b><i>Sludge Pelletizing</i></b>			
Buildings & Grounds Custodian	0.00	1.00	1.00
Chief Operator	1.00	1.00	1.00
Plant Operator I	2.00	2.00	1.00
Plant Operator II	0.00	1.00	2.00
Plant Operator III	3.00	2.00	2.00
Plant Supervisor	1.00	1.00	1.00
<b>Total Number of Personnel (FTE's)</b>	<b>7.00</b>	<b>8.00</b>	<b>8.00</b>
<b><i>Natural Treatment Operations &amp; Maintenance</i></b>			
NTS Maintenance Operator	5.00	5.00	5.00
NTS Operator I	2.00	3.00	3.00
NTS Operator III	1.00	0.00	0.00
NTS Operations & Maintenance Coordinator	1.00	1.00	1.00
NTS Supervisor	1.00	1.00	1.00
<b>Total Number of Personnel (FTE's)</b>	<b>10.00</b>	<b>10.00</b>	<b>10.00</b>
<b><u>Water Reclamation Department Total</u></b>	<b>51.23</b>	<b>53.23</b>	<b>53.23</b>





## Water Reclamation Division - Consolidated Operating Budget

**Department : Water Reclamation**

**Business Unit : Department 700 - Consolidated**

### **Overview of Department Responsibilities**

The primary responsibility of the Water Reclamation Department is the operation of three water reclamation facilities. These operations include treating the wastewater, educating the public about sanitary sewers, monitoring the treatment results and effecting the environmentally safe disposition of the residuals produced by the process. The activities are performed in accordance with federal and state laws, and with rules and regulations promulgated to cover wastewater treatment. Tasks are generally undertaken based on the priorities established by the General

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 2,962,807	\$ 3,330,439	\$ 3,279,474
Overtime Pay	200,736	196,932	200,424
F.I.C.A.	231,089	270,112	266,210
Pension	405,076	461,691	454,721
Employee Benefits	480,075	603,867	722,861
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	981,320	1,018,540	997,951
Vehicle Supplies	39,427	107,534	94,193
Administrative Supplies	18,653	27,392	20,556
Safety Supplies	10,007	17,192	12,052
Special Purchases	636	1,000	1,040
Utilities	2,818,607	3,194,601	3,175,868
Rentals	1,471	7,084	7,841
Maintenance and Repairs	636,769	564,687	623,499
Outside Services	2,084,939	2,086,427	2,339,514
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	238,051	282,634	265,219
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	354,773	384,574	651,888
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	258,300	-	271,000
<b>Total Appropriations</b>	<b>\$ 11,722,736</b>	<b>\$ 12,554,706</b>	<b>\$ 13,384,311</b>



## BUSINESS UNIT 701: WATER RECLAMATION DEPARTMENT MANAGER

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

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

**Significant Expenditure and Staffing Changes:****Outside Services:** represents funding for DeKalb County Sewer charges.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 149,270	\$ 159,157	\$ 165,569
Overtime Pay	-	-	-
F.I.C.A.	10,933	12,176	12,665
Pension	19,517	20,888	21,889
Employee Benefits	17,132	18,396	24,038
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	2,154	4,860	630
Vehicle Supplies	269	500	500
Administrative Supplies	696	700	600
Safety Supplies	-	125	125
Special Purchases	636	1,000	1,040
Utilities	720	1,000	1,000
Rentals	-	-	-
Maintenance and Repairs	-	500	500
Outside Services	707,789	704,370	704,530
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	77,886	97,596	73,329
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	-	7,500	-
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	-
Total Appropriations	<u>\$ 987,002</u>	<u>\$ 1,028,768</u>	<u>\$ 1,006,415</u>





## BUSINESS UNIT 720: W.B. CASEY SR. WATER RESOURCE RECOVERY FACILITY

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

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

**Significant Expenditure and Staffing Changes:**

**Outside Services:** increase represents the rebuilding of two RAS pumps, a BRB Diffuser replacement along with Scum Concentrator pump outs.

**Intrafund Transfers Out:** represents funds being transferred to the Renewal and Extension Fund for Capacity Evaluation, Baffles for Secondary Clarifiers, Scum Trough Assembly, and Primary Clarifier Solids Meter.

**Capital Expenditures:** represents funding for valve and hot tap, upgrade PLC and controls, and the

Budget Detail By Individual Categories	FY 2016 - 17 Actual	FY 2017 - 18 Budgeted	FY 2018 - 19 Budgeted
<b>Personal Services:</b>			
Salaries and Wages	\$ 470,847	\$ 529,043	\$ 616,632
Overtime Pay	34,055	38,755	38,755
F.I.C.A.	37,038	43,436	50,137
Pension	64,592	73,535	85,712
Employee Benefits	81,474	103,784	146,505
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	314,523	311,726	303,003
Vehicle Supplies	7,005	16,044	10,429
Administrative Supplies	4,894	10,818	5,300
Safety Supplies	2,865	3,264	2,889
Special Purchases	-	-	-
Utilities	875,640	987,109	972,343
Rentals	48	2,049	3,011
Maintenance and Repairs	98,380	110,263	93,169
Outside Services	248,118	309,157	367,038
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	43,689	55,654	50,303
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	182,560	91,014	236,882
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	258,300	-	221,000
Total Appropriations	\$ 2,724,028	\$ 2,685,651	\$ 3,203,108



## BUSINESS UNIT 721: NORTHEAST WATER RECLAMATION PLANT

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

Operates the Northeast Water Reclamation Plant.

**Significant Expenditure and Staffing Changes:****Operating Materials and Supplies:** decrease represents the optimization of chemical usage.**Outside Services:** increase represents maintenance on the Turblex Blowers.**Capital Expenditures:** represents funding for the scheduled replacement of a Pickup Truck.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 485,046	\$ 539,872	\$ 557,109
Overtime Pay	38,581	44,964	41,461
F.I.C.A.	37,546	44,741	45,791
Pension	66,008	75,043	77,439
Employee Benefits	90,910	112,277	130,781
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	163,203	225,336	187,897
Vehicle Supplies	5,026	10,666	5,653
Administrative Supplies	2,206	2,627	2,797
Safety Supplies	1,735	6,922	2,712
Special Purchases	-	-	-
Utilities	456,042	505,045	510,570
Rentals	760	730	725
Maintenance and Repairs	200,675	148,669	158,817
Outside Services	337,915	173,736	298,910
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	34,979	39,102	41,744
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	31,796	-	28,382
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	-
Total Appropriations	<u>\$ 1,952,428</u>	<u>\$ 1,929,730</u>	<u>\$ 2,090,788</u>



## BUSINESS UNIT 627: CONVEYANCE SYSTEM INSPECTION

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

Operation of solids handling at the Northeast Plant.

**Significant Expenditure and Staffing Changes:****Outside Services:** increase represents PM maintenance of Centrifuges.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 46,138	\$ 49,716	\$ 52,250
Overtime Pay	4,331	3,451	3,757
F.I.C.A.	3,823	4,067	4,284
Pension	6,699	6,911	7,263
Employee Benefits	8,292	10,213	10,174
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	102,669	94,027	104,666
Vehicle Supplies	-	-	-
Administrative Supplies	43	353	353
Safety Supplies	-	563	563
Special Purchases	-	-	-
Utilities	34,853	37,351	36,742
Rentals	-	-	-
Maintenance and Repairs	12,958	10,352	6,976
Outside Services	192,923	198,109	214,659
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	3,652	5,020	5,744
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	-	-	-
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	-
Total Appropriations	<u>\$ 416,381</u>	<u>\$ 420,133</u>	<u>\$ 447,431</u>



## BUSINESS UNIT 724: SHOAL CREEK WATER RECLAMATION PLANT

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

Operation of the Shoal Creek Water Reclamation Plant.

**Significant Expenditure and Staffing Changes:****Capital Expenditures:** category represents funds for a Raw Water Pump and the scheduled replacement of a Pickup Truck.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 464,961	\$ 488,879	\$ 426,405
Overtime Pay	37,936	27,595	33,161
F.I.C.A.	37,209	39,512	35,156
Pension	63,293	67,954	59,268
Employee Benefits	67,182	72,320	78,141
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	59,878	40,467	42,581
Vehicle Supplies	2,968	8,182	7,358
Administrative Supplies	4,211	3,150	3,768
Safety Supplies	2,709	2,243	1,855
Special Purchases	-	-	-
Utilities	262,985	275,208	298,261
Rentals	-	100	-
Maintenance and Repairs	168,353	102,785	179,571
Outside Services	192,699	125,679	168,013
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	27,175	26,994	29,180
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	97,375	63,000	77,030
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	-
Total Appropriations	<u>\$ 1,488,934</u>	<u>\$ 1,344,068</u>	<u>\$ 1,439,748</u>



## BUSINESS UNIT 727: SHOAL CREEK SOLIDS HANDLING

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

Removal of solids generated from operation of the Shoal Creek Plant.

**Significant Expenditure and Staffing Changes:**

No significant changes from previous fiscal year.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 70,805	\$ 75,898	\$ 78,175
Overtime Pay	1,055	2,167	1,940
F.I.C.A.	5,482	5,973	6,129
Pension	9,704	10,550	10,866
Employee Benefits	6,820	7,329	9,431
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	35,282	36,644	36,325
Vehicle Supplies	-	-	-
Administrative Supplies	-	411	411
Safety Supplies	-	100	100
Special Purchases	-	-	-
Utilities	21,864	24,122	22,053
Rentals	-	-	-
Maintenance and Repairs	11,146	12,819	12,819
Outside Services	133,390	138,203	148,998
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	4,997	5,769	5,996
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	-	-	-
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	-
Total Appropriations	<u>\$ 300,545</u>	<u>\$ 319,985</u>	<u>\$ 333,243</u>



## BUSINESS UNIT 727: SHOAL CREEK SOLIDS HANDLING

**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 Casey Plant effluent to Huie site for further treatment.

**Significant Expenditure and Staffing Changes:**

**Outside Services:** increase due to repairs needed on three transfer pumps.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ -	\$ -	\$ -
Overtime Pay	-	-	-
F.I.C.A.	-	-	-
Pension	-	-	-
Employee Benefits	-	-	-
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	-	200	200
Vehicle Supplies	572	4,878	4,878
Administrative Supplies	-	-	-
Safety Supplies	-	200	200
Special Purchases	-	-	-
Utilities	516,621	610,649	614,105
Rentals	-	605	605
Maintenance and Repairs	3,058	7,940	5,754
Outside Services	24,640	110,694	175,766
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	4,759	5,007	5,616
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	-	-	-
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	-
<b>Total Appropriations</b>	<b>\$ 549,650</b>	<b>\$ 740,173</b>	<b>\$ 807,124</b>



## 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:**

No significant changes from previous fiscal year.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 270,482	\$ 298,797	\$ 310,524
Overtime Pay	10,782	6,000	6,200
F.I.C.A.	20,808	23,583	24,228
Pension	37,419	41,531	43,162
Employee Benefits	40,131	46,199	63,958
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	24,177	30,855	46,625
Vehicle Supplies	2,647	3,250	3,100
Administrative Supplies	1,856	3,800	2,900
Safety Supplies	40	200	150
Special Purchases	-	-	-
Utilities	2,924	2,500	2,500
Rentals	-	100	-
Maintenance and Repairs	378	1,250	1,600
Outside Services	36,668	47,050	46,100
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	6,598	9,560	11,681
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	-	15,585	-
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	-
Total Appropriations	<u>\$ 454,910</u>	<u>\$ 530,260</u>	<u>\$ 562,728</u>





## BUSINESS UNIT 731: SLUDGE PELLETIZING

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

Operation of solids handling at the Casey Plant which includes the pelletizing process.

**Significant Expenditure and Staffing Changes:**

**Outside Services:** increase represents roof repairs.

**Intrafund Transfers Out:** represents funds being transferred to the Renewal and Extension Fund for a Polymer Tank.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 438,128	\$ 490,458	\$ 459,573
Overtime Pay	62,416	62,000	62,000
F.I.C.A.	36,354	42,263	39,900
Pension	59,789	68,173	63,882
Employee Benefits	71,128	93,345	124,243
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	256,502	259,715	256,595
Vehicle Supplies	1,616	37,230	38,963
Administrative Supplies	2,855	2,877	2,187
Safety Supplies	1,374	1,895	1,443
Special Purchases	-	-	-
Utilities	451,891	541,425	505,153
Rentals	663	2,500	2,500
Maintenance and Repairs	112,826	139,275	116,282
Outside Services	88,076	193,212	129,848
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	13,693	17,571	18,989
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	-	60,000	-
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	50,000
<b>Total Appropriations</b>	<b>\$ 1,597,311</b>	<b>\$ 2,011,939</b>	<b>\$ 1,871,558</b>



## 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 Casey Plant for treatment.

**Significant Expenditure and Staffing Changes:**

No significant changes from the previous fiscal year.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 -19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ -	\$ -	\$ -
Overtime Pay	-	-	-
F.I.C.A.	-	-	-
Pension	-	-	-
Employee Benefits	-	-	-
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	-	-	-
Vehicle Supplies	659	1,000	658
Administrative Supplies	-	-	-
Safety Supplies	-	200	200
Special Purchases	-	-	-
Utilities	89,090	103,572	104,603
Rentals	-	-	-
Maintenance and Repairs	995	1,420	1,046
Outside Services	93,235	53,000	57,408
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	1,525	1,953	2,064
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	-	-	-
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	-
<b>Total Appropriations</b>	<b>\$ 185,504</b>	<b>\$ 161,145</b>	<b>\$ 165,979</b>



## 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:**

**Capital Expenditures:** represents funds for the replacement of a Mid Size Excavator, Skid Steer Loader, ATV, Aquatic Vegetation Excavator with Trailer, Refrigerated Auto Sampler, and a new Hydraulic Mulching Head.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 567,130	\$ 698,619	\$ 613,237
Overtime Pay	11,580	12,000	13,150
F.I.C.A.	41,896	54,361	47,920
Pension	78,055	97,106	85,240
Employee Benefits	97,006	140,004	135,590
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	22,932	14,710	19,429
Vehicle Supplies	18,665	25,784	22,654
Administrative Supplies	1,892	2,656	2,240
Safety Supplies	1,284	1,480	1,815
Special Purchases	-	-	-
Utilities	105,977	106,620	108,538
Rentals	-	1,000	1,000
Maintenance and Repairs	28,000	29,414	46,965
Outside Services	29,486	33,217	28,244
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	19,098	18,408	20,573
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	43,042	147,475	309,594
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	-
Total Appropriations	<u>\$ 1,066,043</u>	<u>\$ 1,382,854</u>	<u>\$ 1,456,189</u>



General Services Division – Business Unit Group 900



**GENERAL  
SERVICES  
DEPARTMENTS**

***Clayton County Water Authority***



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



**GENERAL SERVICES DEPARTMENT**  
**BUDGET UNIT 900**

The General Services Department 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. It is responsible for maintaining the following buildings: the headquarters complex, the plants, grounds of the plants, recreation sites, and sewer lift and metering stations. The General Services Department 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 Manager 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 department 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

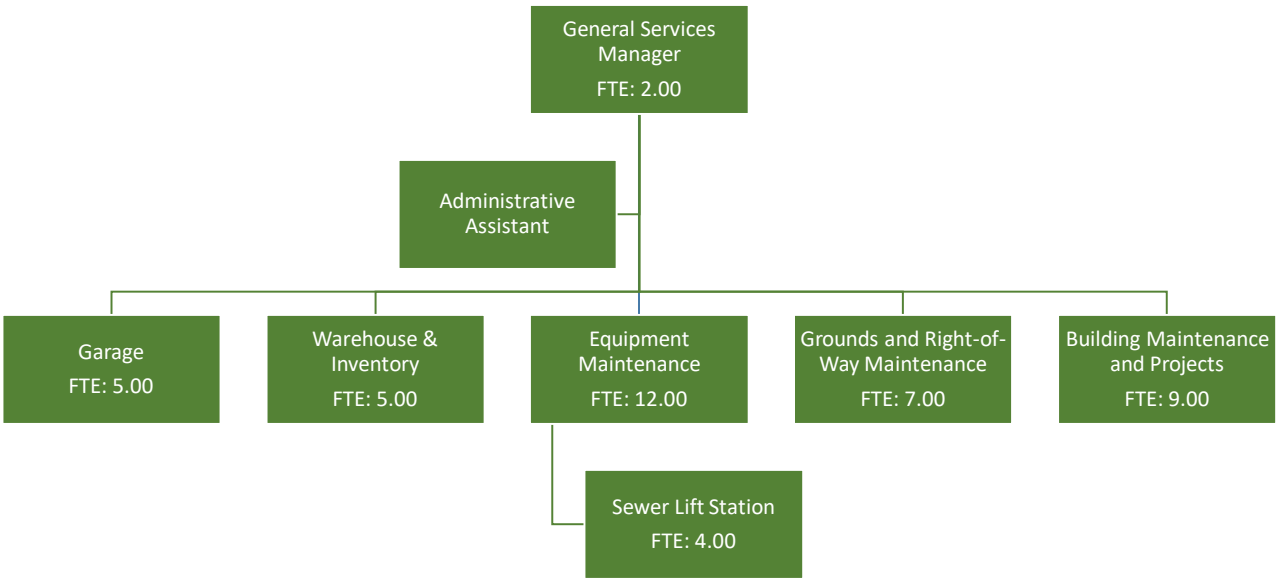
925-Sewer Lift Stations

930-Garage

940-Warehouse
- 950-Equipment Maintenance

960-Grounds/Right-of-Way Maintenance

970-Building Maintenance and Projects





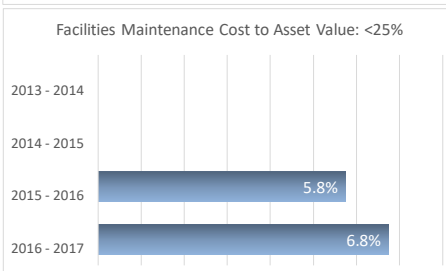
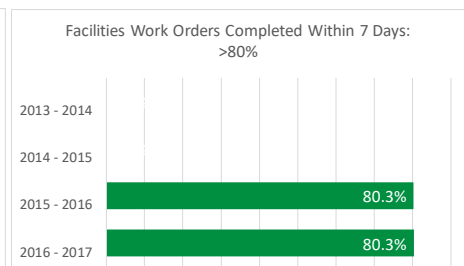
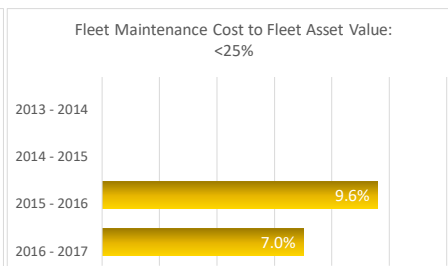
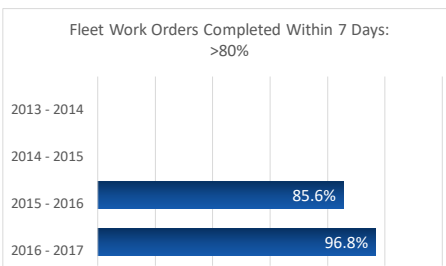
## General Services Division – Staffing Summary

Authorized Personnel	FY 2016-2017 Budgeted	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted
<b>General Services Division</b>			
901 - General Services Manager	2.00	2.00	2.00
925 - Sewage Lift Station	4.00	4.00	4.00
930 - Garage	4.00	4.00	5.00
940 - Warehouse	6.00	6.00	5.00
950 - Equipment Maintenance	9.00	9.00	12.00
960 - Grounds and Right-of-Way Maintenance	6.00	7.00	7.00
970 - Building Maintenance and Projects	9.00	12.00	9.00
<b>Total Full-Time Employees (FTEs)</b>	<b>40.00</b>	<b>44.00</b>	<b>44.00</b>

## 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	Actual 2016 - 2017	Actual 2015 - 2016	Actual 2014 - 2015
<b>OPTIMIZE OPERATIONS</b>						
15 Provide Minimum Down Time for CCWA's Fleet	Fleet work orders completed within 7 days	GS	> 80%	96.8%	85.6%	N/A
	Fleet maintenance cost to fleet asset value	GS	< 25%	7.0%	9.6%	N/A
<b>INFRASTRUCTURE SUSTAINABILITY</b>						
20 Implement asset management practices	Facilities work orders completed within 7 days	GS	>80%	80.3%	80.3%	N/A
	Facilities maintenance cost to asset value	GS	< 25%	6.8%	5.8%	N/A







## General Services Division – Major Initiatives for FY 2018 - 2019

Business Unit	Budget Funding	Account Number	Amount Budgeted	Initiative
General Services Manager				
901	Operating	56152	\$ 63,000	AVL Tracking
Grand Total			\$ 63,000	
Sewer Lift Stations				
925	Operating	51101	\$ 120,000	Chemicals
Grand Total			\$ 120,000	
Garage				
930	Capital	59961	\$ 13,500	Key Management Security System
Grand Total			\$ 13,500	
Equipment Maintenance				
950	Capital	59991	\$ 45,000	Workstations and Office Furniture
Grand Total			\$ 45,000	
Grounds and Right-of-Way Maintenance				
960	Capital	59951	\$ 94,255	Box Dump
		59963	12,502	Mower 61" Deck
Grand Total			\$ 106,757	
Building Maintenance and Projects				
970	Capital	59965	\$ 5,000	Sandblaster
Grand Total			\$ 5,000	







## General Services Division Staffing – Position Detail

Authorized Personnel	FY 2016-2017 Budgeted	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted
<b>General Services Department Manager</b>			
General Services Manager	1.00	1.00	1.00
Office Assistant	1.00	1.00	1.00
<b>Total Number of Personnel (FTE's)</b>	<b>2.00</b>	<b>2.00</b>	<b>2.00</b>
<b>Sewage Lift Stations</b>			
Lift Station / PM Specialist	1.00	1.00	1.00
Lift Station Technician	3.00	3.00	3.00
<b>Total Number of Personnel (FTE's)</b>	<b>4.00</b>	<b>4.00</b>	<b>4.00</b>
<b>Garage</b>			
Fleet Maintenance Foreman	1.00	1.00	1.00
Fleet Technician	0.00	0.00	3.00
Garage Inv./Warehouse Technician	0.00	0.00	1.00
Garage Worker	1.00	1.00	0.00
Sr. Fleet Mechanic	2.00	2.00	0.00
<b>Total Number of Personnel (FTE's)</b>	<b>4.00</b>	<b>4.00</b>	<b>5.00</b>
<b>Warehouse</b>			
Garage Inventory Warehouse Worker	1.00	1.00	0.00
Inventory - Procurement Specialist	0.00	0.00	1.00
Inventory - Warehouse Supervisor	1.00	1.00	1.00
Inventory Warehouse Worker	2.00	2.00	2.00
Lead Warehouse Inventory Worker	1.00	1.00	1.00
Warehouse Assistant	1.00	1.00	0.00
<b>Total Number of Personnel (FTE's)</b>	<b>6.00</b>	<b>6.00</b>	<b>5.00</b>
<b>Equipment Maintenance</b>			
Electrician	0.00	0.00	1.00
Electrician Technician	0.00	0.00	1.00
Instrumentation & Controls Technician	1.00	1.00	1.00
Maintenance Technician I	4.00	4.00	5.00
Maintenance Technician II	2.00	2.00	1.00
Plant Services Chief Maint Technician	1.00	1.00	1.00
Plant Services Supervisor	0.00	0.00	1.00
PLC Specialist	1.00	1.00	1.00
<b>Total Number of Personnel (FTE's)</b>	<b>9.00</b>	<b>9.00</b>	<b>12.00</b>
<b>Grounds/Right-of-Way Maintenance</b>			
Grounds Maintenance Crew Leader	1.00	1.00	1.00
Grounds Maintenance Worker I	3.00	3.00	3.00
Grounds Maintenance Worker II	2.00	3.00	3.00
<b>Total Number of Personnel (FTE's)</b>	<b>6.00</b>	<b>7.00</b>	<b>7.00</b>
<b>Building Maintenance/Projects</b>			
Building Maintenance Worker	0.00	3.00	3.00
Electrician	1.00	1.00	0.00
Facilities Maintenance Crew Leader	1.00	1.00	1.00
Facilities Maintenance Worker	3.00	3.00	4.00
General Foreman-Facilities Maintenance	1.00	1.00	1.00
Plant Services Supervisor	1.00	1.00	0.00
Sr. Maintenance Worker	1.00	1.00	0.00
Electrician Technician	1.00	1.00	0.00
<b>Total Number of Personnel (FTE's)</b>	<b>9.00</b>	<b>12.00</b>	<b>9.00</b>
<b>General Services Department Total</b>	<b>40.00</b>	<b>44.00</b>	<b>44.00</b>



## General Services Division - Consolidated Operating Budget

**Department : General Services**

**Business Unit : Department 900 - Consolidated**

### Overview of Department Responsibilities

The General Services Department 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.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 1,918,061	\$ 2,212,053	\$ 2,278,794
Overtime Pay	84,846	83,200	83,200
F.I.C.A.	146,279	175,587	180,696
Pension	261,783	307,477	316,753
Employee Benefits	322,540	433,213	536,429
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	270,818	235,565	218,414
Vehicle Supplies	61,422	69,100	71,521
Administrative Supplies	7,641	9,880	10,220
Safety Supplies	5,802	6,950	6,550
Special Purchases	759	780	880
Utilities	292,527	275,811	295,818
Rentals	3,169	3,000	3,400
Maintenance and Repairs	89,486	98,850	87,020
Outside Services	197,222	246,928	236,501
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	120,581	164,771	178,670
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	137,921	225,481	170,257
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	123,345	738,295	-
Total Appropriations	<u>\$ 4,044,202</u>	<u>\$ 5,286,941</u>	<u>\$ 4,675,123</u>



## BUSINESS UNIT 901: GENERAL SERVICES DEPARTMENT MANAGER

**Department : General Services****Business Unit : (901) General Services  
Department Manager****Major Business Unit Functions:**

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

**Significant Expenditure and Staffing Changes:**

No significant changes from the previous fiscal year.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 152,086	\$ 160,245	\$ 170,576
Overtime Pay	41	100	100
F.I.C.A.	11,018	12,268	13,058
Pension	20,923	22,274	23,710
Employee Benefits	22,190	23,912	29,598
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	907	5,885	500
Vehicle Supplies	288	1,100	1,145
Administrative Supplies	50	500	350
Safety Supplies	-	50	50
Special Purchases	759	780	880
Utilities	2,558	2,500	2,567
Rentals	-	-	-
Maintenance and Repairs	2,030	3,500	3,250
Outside Services	7,185	73,290	72,990
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	60,502	66,757	70,858
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	-	-	-
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	13,345	578,295	-
Total Appropriations	<u>\$ 293,882</u>	<u>\$ 951,456</u>	<u>\$ 389,632</u>



## BUSINESS UNIT 925: SEWAGE LIFT STATIONS

**Department : General Services****Business Unit : (925) Sewage Lift Stations****Major Business Unit Functions:**

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

**Significant Expenditure and Staffing Changes:**

No significant changes from the previous fiscal year.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 162,877	\$ 173,078	\$ 184,688
Overtime Pay	23,363	20,000	20,000
F.I.C.A.	13,247	14,769	15,658
Pension	21,957	24,058	25,672
Employee Benefits	34,839	40,989	52,221
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	159,485	150,873	147,355
Vehicle Supplies	13,753	12,200	13,308
Administrative Supplies	859	650	650
Safety Supplies	790	1,100	1,000
Special Purchases	-	-	-
Utilities	233,507	213,339	224,094
Rentals	-	-	-
Maintenance and Repairs	68,024	63,500	62,500
Outside Services	70,687	77,552	70,818
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	12,323	39,492	50,746
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	5,533	39,698	-
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	160,000	-
<b>Total Appropriations</b>	<b>\$ 821,244</b>	<b>\$ 1,031,298</b>	<b>\$ 868,710</b>



## BUSINESS UNIT 930: GARAGE

**Department : General Services****Business Unit : (930) Garage****Major Business Unit Functions:**

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

**Significant Expenditure and Staffing Changes:**

**Personal Services:** increase represents moving a Garage Inventory Technician position from business Unit 940 to business unit 930.

**Capital Expenditures:** category represents funding for a new Key Management Security System.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 164,909	\$ 193,386	\$ 244,061
Overtime Pay	412	600	600
F.I.C.A.	11,524	14,840	18,717
Pension	21,778	26,881	33,925
Employee Benefits	35,272	43,437	60,910
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	34,302	14,605	12,224
Vehicle Supplies	4,671	6,800	7,033
Administrative Supplies	881	650	850
Safety Supplies	1,182	800	1,000
Special Purchases	-	-	-
Utilities	10,106	9,743	9,863
Rentals	991	1,000	1,000
Maintenance and Repairs	4,557	7,000	4,700
Outside Services	16,919	14,292	6,455
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	13,850	7,159	7,543
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	-	79,886	13,500
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	-
Total Appropriations	\$ 321,354	\$ 421,079	\$ 422,381



## BUSINESS UNIT 940: WAREHOUSE

**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:**

**Personal Services:** decrease represents moving a Garage Inventory Technician position from business Unit 940 to business unit 930.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 252,529	\$ 264,737	\$ 223,210
Overtime Pay	119	500	500
F.I.C.A.	19,002	20,290	17,114
Pension	35,052	36,799	31,027
Employee Benefits	33,786	36,333	40,318
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	10,291	12,610	6,475
Vehicle Supplies	728	1,400	1,100
Administrative Supplies	1,466	3,500	3,750
Safety Supplies	128	500	500
Special Purchases	-	-	-
Utilities	24,620	27,824	29,225
Rentals	-	-	-
Maintenance and Repairs	2,621	12,400	5,900
Outside Services	18,353	29,193	26,371
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	7,713	13,775	13,332
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	-	-	-
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	110,000	-	-
<b>Total Appropriations</b>	<b>\$ 516,408</b>	<b>\$ 459,861</b>	<b>\$ 398,822</b>



## 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 moving a Plant Services Supervisor, Electrician, and Electrician Technician position from business Unit 970 to business unit 950.**Capital Expenditures:** represents funds for the replacement of Workstations, Desk, and Chairs.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 495,627	\$ 533,723	\$ 761,123
Overtime Pay	22,029	30,000	30,000
F.I.C.A.	37,944	43,125	60,521
Pension	67,921	74,188	105,795
Employee Benefits	82,657	98,863	146,768
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	29,610	18,459	17,140
Vehicle Supplies	13,454	16,200	14,600
Administrative Supplies	1,707	1,880	1,900
Safety Supplies	559	2,000	1,500
Special Purchases	-	-	-
Utilities	9,177	9,993	17,201
Rentals	792	1,000	1,000
Maintenance and Repairs	1,481	3,800	1,600
Outside Services	25,438	34,896	38,200
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	16,899	25,745	23,779
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	14,958	79,396	45,000
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	-
<b>Total Appropriations</b>	<b>\$ 820,253</b>	<b>\$ 973,268</b>	<b>\$ 1,266,127</b>





## 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 Dump Box and Mower Deck.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 201,629	\$ 253,455	\$ 247,117
Overtime Pay	9,930	12,000	12,000
F.I.C.A.	15,292	20,306	19,821
Pension	27,804	35,230	34,350
Employee Benefits	48,073	69,954	88,917
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	16,524	7,430	11,615
Vehicle Supplies	12,660	15,200	16,620
Administrative Supplies	1,178	1,100	1,120
Safety Supplies	1,009	1,000	1,000
Special Purchases	-	-	-
Utilities	4,603	4,686	4,877
Rentals	1,386	1,000	1,400
Maintenance and Repairs	7,604	6,000	6,420
Outside Services	21,998	11,163	14,675
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	3,321	3,261	3,540
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	34,671	12,251	106,757
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	-
<b>Total Appropriations</b>	<b>\$ 407,682</b>	<b>\$ 454,036</b>	<b>\$ 570,229</b>



## BUSINESS UNIT 970: BUILDING MAINTENANCE AND PROJECTS

**Department : General Services****Business Unit : (970) Building Maintenance  
Projects****Major 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:**

**Personal Services:** decrease represents moving a Plant Services Supervisor, Electrician, and Electrician Technician position from business Unit 970 to business unit 950.

**Capital Expenditures:** category represents funds for the replacement of a Sandblaster.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 488,404	\$ 633,429	\$ 448,019
Overtime Pay	28,952	20,000	20,000
F.I.C.A.	38,252	49,989	35,807
Pension	66,348	88,047	62,274
Employee Benefits	65,723	119,725	117,697
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	19,699	25,703	23,105
Vehicle Supplies	15,868	16,200	17,715
Administrative Supplies	1,500	1,600	1,600
Safety Supplies	2,134	1,500	1,500
Special Purchases	-	-	-
Utilities	7,956	7,726	7,991
Rentals	-	-	-
Maintenance and Repairs	3,169	2,650	2,650
Outside Services	36,642	6,542	6,992
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	5,973	8,582	8,872
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	82,759	14,250	5,000
<b>Other Financing Uses:</b>			
Intrafund Transfers Out:	-	-	-
Total Appropriations	<u>\$ 863,379</u>	<u>\$ 995,943</u>	<u>\$ 759,222</u>



Stormwater Fund - Business Unit Group 200



**STORMWATER  
FUND**

***Clayton County Water Authority***



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



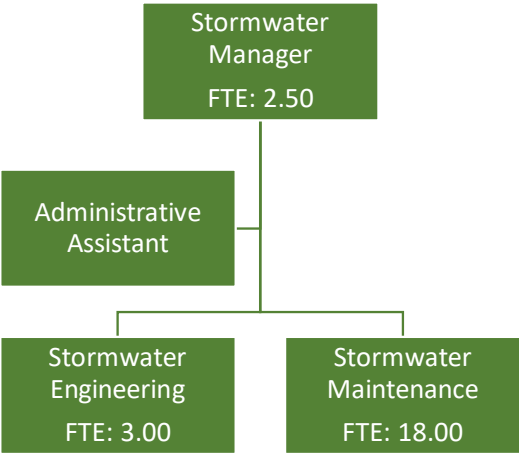
**STORMWATER FUND**  
**BUDGET UNIT 200**

The primary responsibility of the Stormwater Utility Department 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 Utility will be working 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 Manager 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





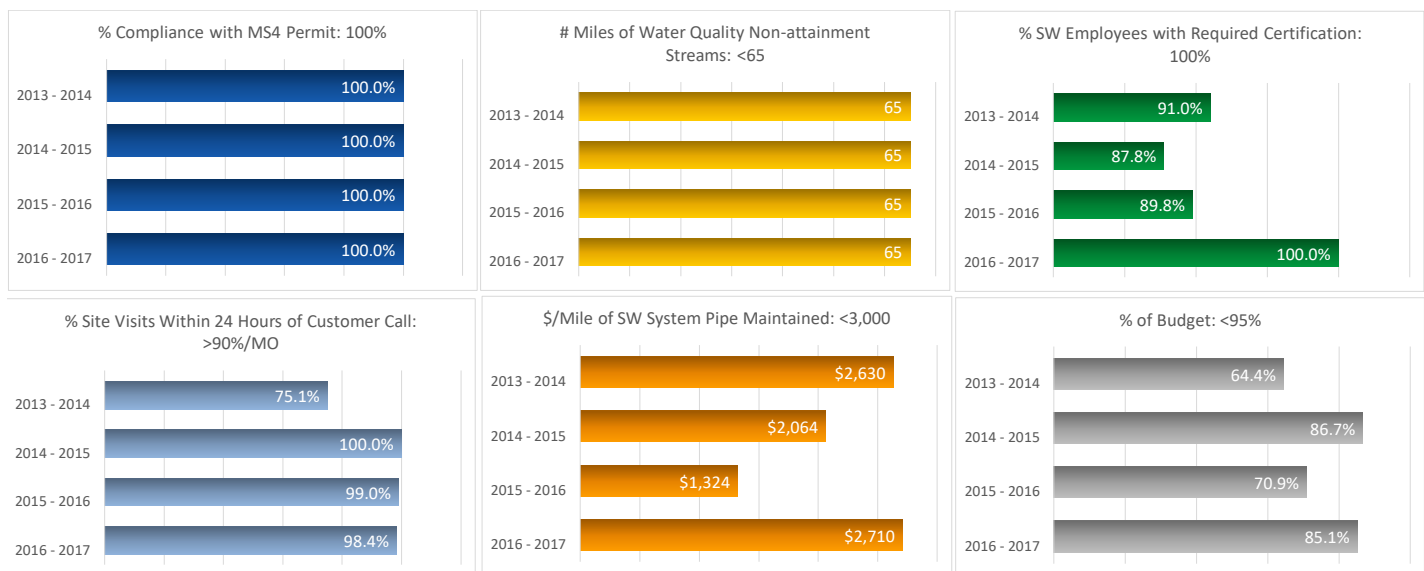
## Stormwater Fund– Staffing Summary

Authorized Personnel	FY 2016-2017 Budgeted	FY 2017-2018 Budgeted	FY 2018-2019 Budgeted
<b>Stormwater Fund</b>			
201 - Stormwater Manager	2.50	2.50	2.50
205 - Stormwater Engineering	3.00	3.00	3.00
210 - Stormwater Maintenance	17.00	17.00	18.00
<b>Total Full-Time Employees (FTEs)</b>	<b>22.50</b>	<b>22.50</b>	<b>23.50</b>

## 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	Actual 2016 - 2017	Actual 2015 - 2016	Actual 2014 - 2015
<b>SUPERIOR PRODUCT QUALITY</b>						
<b>3</b> Improve the quality of Clayton Co. water resources	% compliance with MS4 Permit (Sep.)	SW	100%	100.0%	100.0%	100.0%
	Miles of water quality non-attainment streams (Sep.)	SW	< 65	65	65	65
<b>EXCEED CUSTOMER EXPECTATIONS</b>						
<b>4</b> Improve customer experience	% site visits within 24 hours of customer call	SW	> 90% / Month	98.4%	99.0%	100.0%
<b>PROVIDE EMPLOYEE DEVELOPMENT</b>						
<b>8</b> Provide effective employee training and development	% SW employees with required certification (Apr)	SW	100%	100.0%	89.8%	87.8%
<b>OPTIMIZE OPERATIONS</b>						
<b>13</b> Reasonable Cost of Service	\$/mile of SW system pipe maintained (Apr)	SW	< \$3,000	\$2,710	\$1,324	\$2,064
	% of budget (Apr)	SW	< 95%	85.1%	70.9%	86.7%







## Stormwater Fund – Major Initiatives for FY 2018 - 2019

Business Unit	Budget Funding	Account Number	Amount Budgeted	Initiative
Stormwater Manager				
201	Operating	56110	\$ 150,000	Engineering On Call Services
		56110	10,000	Spivey Station Dam
		59370	1,413,558	Administrative expense allocation transfers to W&S Fund
	Capital	59370	20,000	Change Building A from Septic to Sewer
Grand Total			\$1,593,558	
Stormwater Engineering				
205	Operating	56110	\$ 15,000	Annual Biological Monitoring
		56110	10,000	Year 7 of Mitigation Bank Monitoring
		56110	175,000	Develop Watershed Plan Master Plan [SMP 211][WP2016-26]
		56125	14,600	USGS Gauge Maintenance Fee
		56125	14,600	USGS Gauge Installation on Flint at SR 85
		56125	45,000	Amnesty Day Contractor Costs
Grand Total			\$ 274,200	
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		1,773,001	Removal and Replacement (R/R) [SMP 214]	
59902		10,000	Easements	
59941		370,000	Gradall	
59951		100,000	Flatbed Dump Truck	
59952		30,000	20-ton Trailer (2) @ \$15,000 each	
59953		27,030	Truck: F-150	
Grand Total			\$5,300,031	





## Stormwater Fund Staffing – Position Detail

Authorized Personnel	FY	FY	FY
	2016-2017	2017-2018	2018-2019
	Budgeted	Budgeted	Budgeted
<b>Stormwater Management</b>			
High School Intern	0.50	0.50	0.50
Office Assistant	1.00	1.00	1.00
Program Manager	1.00	1.00	1.00
<b>Total Number of Personnel (FTE's)</b>	<b>2.50</b>	<b>2.50</b>	<b>2.50</b>
<b>Stormwater Engineering</b>			
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	1.00
<b>Total Number of Personnel (FTE's)</b>	<b>3.00</b>	<b>3.00</b>	<b>3.00</b>
<b>Stormwater Maintenance</b>			
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 & 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	3.00
Maintenance Mechanic II	2.00	2.00	2.00
Property & Restoration Technician	1.00	1.00	1.00
SW Maintenance & Install Foreman	0.00	0.00	1.00
<b>Total Number of Personnel (FTE's)</b>	<b>17.00</b>	<b>17.00</b>	<b>18.00</b>
<b>Stormwater Utility Grand Total</b>	<b>22.50</b>	<b>22.50</b>	<b>23.50</b>







## Stormwater Fund - Consolidated Operating Budget

**Department : Stormwater Utility - Consolidated**

**Business Unit : Stormwater Fund - Consolidated**

<b>Budget Summary By Expenditure Class</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
Personal Services	\$ 1,425,870	\$ 1,571,473	\$ 1,779,875
Operating Expenditures	2,782,261	2,981,133	2,784,796
Debt Service	-	-	-
Capital Outlay	154,882	447,500	537,030
Other Financing Uses	6,315,332	4,711,770	4,706,559
	<u>\$ 10,678,345</u>	<u>\$ 9,711,876</u>	<u>\$ 9,808,260</u>

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 996,055	\$ 1,103,653	\$ 1,194,565
Overtime Pay	49,852	30,500	31,000
F.I.C.A.	77,531	86,763	93,754
Pension	136,543	152,174	164,787
Employee Benefits	165,889	198,383	295,769
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	145,023	169,865	140,120
Vehicle Supplies	48,047	50,820	52,240
Administrative Supplies	9,643	14,500	17,200
Safety Supplies	5,206	4,750	4,750
Special Purchases	449	440	460
Utilities	24,726	25,742	27,372
Rentals	520	2,510	4,300
Maintenance and Repairs	24,288	26,200	30,700
Outside Services	2,108,426	2,221,450	2,052,510
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	116,494	144,856	135,144
Accounting Charges	299,439	320,000	320,000
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	154,882	447,500	537,030
<b>Other Financing Uses:</b>			
Interfund Transfers Out	1,864,370	1,146,586	1,413,558
Intrafund Transfers Out	4,450,962	3,565,184	3,293,001
Total Appropriations	<u>\$ 10,678,345</u>	<u>\$ 9,711,876</u>	<u>\$ 9,808,260</u>



**Department : Stormwater Utility - 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, but are not limited to: 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 Utility****Business Unit : (201) Stormwater Management****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:**

**Personal Services:** increase represents the reclass of the Stormwater Program Manager from a paygrade 15 to a paygrade 16.

**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.

**Intrafund Transfers Out:** represents funds being transferred to Stormwater Construction to change Building A from septic to sanitary sewer.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 156,434	\$ 169,737	\$ 181,055
Overtime Pay	-	-	-
F.I.C.A.	11,368	12,985	13,850
Pension	20,929	22,359	23,908
Employee Benefits	19,995	21,550	26,862
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	7,864	4,830	960
Vehicle Supplies	185	220	240
Administrative Supplies	7,006	9,100	9,200
Safety Supplies	2	150	150
Special Purchases	449	440	460
Utilities	7,630	8,342	8,332
Rentals	-	-	-
Maintenance and Repairs	3,309	650	650
Outside Services	108,280	174,370	174,220
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	88,218	103,799	89,849
Accounting Charges	299,439	320,000	320,000
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	-	37,500	-
<b>Other Financing Uses:</b>			
Interfund Transfers Out	1,864,370	1,146,586	1,413,558
Intrafund Transfers Out	191,856	70,000	20,000
Total Appropriations	<u>\$ 2,787,334</u>	<u>\$ 2,102,618</u>	<u>\$ 2,283,294</u>



## 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:**

No significant changes from the previous fiscal year

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 153,822	\$ 178,916	\$ 186,726
Overtime Pay	51	500	1,000
F.I.C.A.	12,586	13,725	14,362
Pension	23,123	24,869	25,955
Employee Benefits	24,368	25,101	33,466
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	6,225	3,790	3,920
Vehicle Supplies	2,550	4,600	4,300
Administrative Supplies	903	2,650	2,650
Safety Supplies	307	600	400
Special Purchases	-	-	-
Utilities	4,484	5,000	5,200
Rentals	520	510	1,300
Maintenance and Repairs	396	550	5,050
Outside Services	422,658	407,310	286,300
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	7,618	9,045	10,657
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	24,659	-	-
<b>Other Financing Uses:</b>			
Interfund Transfers Out	-	-	-
Intrafund Transfers Out	-	-	-
<b>Total Appropriations</b>	<b>\$ 684,270</b>	<b>\$ 677,166</b>	<b>\$ 581,286</b>



## BUSINESS UNIT 210: STORMWATER MAINTENANCE

**Department : Stormwater Utility****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 a new SW Maintenance & Installation Foreman.

**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 Gradall, Flat Bed Dump, (2) 20 ton Trailers, Easements and a new Pickup Truck for the new employee added.

<b>Budget Detail By Individual Categories</b>	<b>FY 2016 - 17 Actual</b>	<b>FY 2017 - 18 Budgeted</b>	<b>FY 2018 - 19 Budgeted</b>
<b>Personal Services:</b>			
Salaries and Wages	\$ 685,799	\$ 755,000	\$ 826,784
Overtime Pay	49,801	30,000	30,000
F.I.C.A.	53,577	60,053	65,542
Pension	92,491	104,946	114,924
Employee Benefits	121,526	151,732	235,441
<b>Operating Expenditures:</b>			
Operating Materials & Supplies	130,934	161,245	135,240
Vehicle Supplies	45,312	46,000	47,700
Administrative Supplies	1,734	2,750	5,350
Safety Supplies	4,897	4,000	4,200
Special Purchases	-	-	-
Utilities	12,612	12,400	13,840
Rentals	-	2,000	3,000
Maintenance and Repairs	20,583	25,000	25,000
Outside Services	1,577,488	1,639,770	1,591,990
Interest	-	-	-
Retiree Health Benefits	-	-	-
General Expenses	20,658	32,012	34,638
Accounting Charges	-	-	-
<b>Debt Service:</b>			
Capital Financing	-	-	-
<b>Capital Outlay:</b>			
Capital Expenditures	130,223	410,000	537,030
<b>Other Financing Uses:</b>			
Interfund Transfers Out	-	-	-
Intrafund Transfers Out	4,259,106	3,495,184	3,273,001
<b>Total Appropriations</b>	<b>\$ 7,206,741</b>	<b>\$ 6,932,092</b>	<b>\$ 6,943,680</b>



## 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 stormwater services to our customers. The terms "capital assets" or "capital outlay" refer to the plant, 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 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. 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 must be subject to periodic review and periodic revisions.

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 FY 2018 – 2019 budget allocates \$750K for the 2020 Strategic Master Plan. 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 which totaled \$\$2.3M for fiscal year ended 2017 and are estimated to be about \$3M for fiscal year ended 2018. The timber from properties around CCWA reservoirs is harvested and sold every few years when market conditions and tree maturity is right. Revenue generated from this activity can range from \$1M to \$2M but is unpredictable. For the fiscal year ended 2018, the sale of timber is estimated at \$1.5M while no revenue was generated from this activity in 2017.

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 2017 and 2018 were \$19.3M and \$17.8M, respectively.





## Capital Improvement Program - Long-Term Goals and Objectives

The following are CCWA's Capital Improvement Program Goals and Objectives for the fiscal year 2018 - 2019:

- 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 and recycled customer 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 2018-2019 are budgeted at \$14.0 million, consisting of \$3.4 million in capital equipment purchases and \$10.6 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 \$3.4M, \$1.2M higher than the previous year. Summaries of capital item purchases for Fiscal Year 2018-2019 are listed on the following pages.

CCWA differentiates *Capital Projects* from *Capital 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 \$10.6M compared to the previous budget year amount of \$16.2M. 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 - 2018 - 2019

Project Number	Project Name	Functional Area Lead	Project Size	Estimated Cost	Prior Year Funded Amount	FY 2018-2019 Budget	OP or CAP Budget	Lead	Benefit Score
2015-15	Develop Sewer Model - Shoal Creek and Dekalb Basins [SMP 612]	PME	S	\$ 350,000	\$ 350,000			PME	100.00
2014-37	Southern Road Sewer Improvements Phase 2 (Design, Bid, and Construction)	PME	M	500,000	473,795			PME	100.00
2015-06	JDE Upgrade including Cityworks Integration [SMP 156]	IT	M	2,394,190	2,394,190			IT	100.00
2015-08	Business Intelligence Strategy [SMP 150]	IT	S	250,000	250,000			AGM-O	100.00
2015-09	Northstar Replacement/Cayenta CIS Implementation [SMP 157]	CS	M	4,441,575	4,441,575			CS	100.00
2015-11	Flint River Discharge Pipeline & Polishing Facility Construction & SDCs [SMP 713]	WR	L	17,415,414	17,415,514			WR	100.00
2016-01	Large Interceptor Rehab. - Flint River Phase 3 and Jesters Creek (Design, Bid, Construction) [SMP 617]	DC	L	14,000,000	14,000,000			PME	100.00
2016-09	Implement Water Quality Monitoring/Control Approaches in Reservoirs (Design, Bid, Construction, SDCs) [SMP 302]	WP	M	2,500,000	2,500,000			WP	100.00
2016-18	Additional Cyber Security [SMP 161]	IT	S	250,000	250,000			IT	100.00
2016-27	Lake Mirror Phase 2 (Construction and SDCs)	SW	M	2,000,000	1,500,000			SW	100.00
2015-10	Office 365/SharePoint/Collaboration Strategy [SMP 154]	IT	S	150,000	150,000			IT	100.00
2016-06	Large Interceptor Condition Assessment - Casey basin [SMP 616]	DC	S	205,820	205,820			PME	100.00
2015-40B	SCADA Implementation Project 4 [SMP 906]	GS	S	950,000	805,968			GS	100.00
2016-22	Northeast WRF Phosphorus Treatment Options Evaluation [SMP 704]	WR	S	300,000	249,657			WR	100.00
2016-28	Web Analytics & Strategy	PIO	S	200,000	250,000	X	OP	PIO	100.00
2015-16	Smith High Service Pumps Evaluation, Modeling, & Design	WP	S	160,000	1,000,000			WP	100.00
2016-29	Distribution Storage & System Modeling [Includes UDF Pilot]	WP	S	406,991	406,991			PME/WP	100.00
2017-04	Hooper Solids Handling Improvements (Design, Bid, Construction)	WP	L	6,275,565	3,423,047			WP	100.00
2017-05	Collection System Assessment/Program Management	PME	S	170,000	120,000	X	OP	PME	100.00
2018-01	Drinking Water Quality Treatment Technology Evaluation [SMP 303]	WP	S	299,636	299,636			WP	100.00
2018-02	LIMS - Hach WIMS Implementation project	WR/WP	M	640,000	600,000			WR/WP	100.00
2018-03	IT Master Plan Update	IT	S	50,000	-	X	CAP	IT	100.00
2018-05	2020 Strategic Master Plan	PME	M	750,000	-	X	CAP	PME	100.00
2016-30	Lift Station Assessment	GS	S	250,000	250,000			GS	77.60
2018-07	Implement a Unidirectional Flushing (UDF) Program	DC/PME	M	500,000	-	X	OP	DC	77.40
2018-10	Distribution System Model Follow Up Project(s)	PME	M	500,000	-	X	CAP	PME	77.40
2018-06	Hicks WPP High Rate Study/EPD Approval	WP	S	100,000	-	X	OP	WP	75.60
2017-03	"Walnut Creek" Lift Station Rehabilitation/Construction (Design, Bid, Construction)	GS	L	2,000,000	1,500,000			GS	73.00
2016-10	Emergency Power Generator for W.J. Hooper (Design/Build) [SMP 307]	WP	M	2,000,000	250,000	X	CAP	WP	71.00
2016-08	Asset Management Program Assessment [SMP 110]	ALL	S	250,000	250,000			PME	69.40
2018-08	Shoal Creek Pump Station and Conveyance to Casey WRRF Evaluation	PME	S	100,000	-	X	CAP	PME	60.40
2018-09	Casey WRRF Capacity Projects 4th BRB/Solids Evaluation [SMP 708/710]	WR	S	100,000	-	X	CAP	WR	60.40
2018-11	Northeast WRF Phosphorus Polishing (Design & Bid Services) [SMP 705]	WR/PME	M	650,000	-	X	CAP	WR	60.40
2016-05	Pressure Sewer Condition Assessment [SMP 638]	DC	S	250,000	250,000			PME	59.40
2016-26	Develop a Watershed Master Plan [SMP 211]	SW	S	175,000	175,000	X	OP	SW	44.80

## 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

OP: Operating Budget

CAP: Capital Budget

FY 17-18 Budget: X means all or a portion of funding is in FY 2017 – 2018 Budget



## Capital Equipment – Summary

FY 2018 – 2019 Budget

Description	Replacement	New	Total
Vehicles			
Trucks	\$ 801,640	\$ 35,358	\$ 836,998
Trailers	15,000	-	15,000
Buildings and Structures			
Building, Roof, Paving	-	195,000	195,000
Tanks and Containers	387,000	-	387,000
Equipment			
Field Equipment	319,766	107,490	427,256
Data Processing/IT System Equipment	95,000	223,000	318,000
Plant Equipment	350,999	166,575	517,574
Desk, Tables, & Racks	54,307	-	54,307
Other	22,600	118,600	141,200
<b>Total Capital Equipment</b>	<b>\$ 2,046,312</b>	<b>\$ 846,023</b>	<b>\$ 2,892,335</b>

### FLEET ASSESSMENT GUIDELINES

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

#### Cars & Trucks under 26,000 GVW

**Table 1**

(1) Age	(2) Mileage	(3) Maintenance Cost
0 – 2 years = 0 Points	0 - 25,000 miles = 0 Points	0 – 10% of replacement costs = 0 Points
3 – 4 years = 1 Point	25,000 – 50,000 miles = 1	10 - 20% of replacement costs = 1 Point
5 – 6 years = 2 Points	50,000 – 75,000 miles = 2	20 - 30% of replacement costs = 2 Points
7 – 8 years = 3 Points	75,000 – 100,000 miles = 3	30 - 40% of replacement costs = 3 Points
9 years = 4 Points	100,000 – 125,000 miles = 4	40 - 50% of replacement costs = 4 Points
Over 9 years = 5 Points	Over 125,000 miles = 5 Points	Over 50% of replacement costs = 5 Points

#### Trucks over 26,000 GVW

**Table 2**

(1) Age	(2) Mileage	(3) Maintenance Cost
0 – 5 years = 0 Points	0 – 100,000 miles = 0 Points	0 – 10% of replacement costs = 0 Points
6 years = 1 Point	100,000 – 150,000 miles = 1	10 - 20% of replacement costs = 1 Point
7 years = 2 Points	150,000 – 175,000 miles = 2	20 - 30% of replacement costs = 2 Points
8 years = 3 Points	175,000 – 200,000 miles = 3	30 - 40% of replacement costs = 3 Points
9 years = 4 Points	200,000 – 250,000 miles = 4	40 - 50% of replacement costs = 4 Points
Over 10 yrs = 5 Points	Over 250,000 miles = 5 Points	Over 50% of replacement costs = 5 Points

Replacement recommendations are based on (1) model year, (2) mileage, (3) maintenance as a % of purchased price, input from Fleet Maintenance Supervisor. The following point system has been devised to determine factors in the three categories: After completing the inventory assessment, each vehicle's category is reviewed (model year, mileage, maintenance percentage to purchased price), and assigned the associated rating. When a combination of two or three categories are on the high end of the rating point system, justification to replace is based on cost



avoidance of major repairs and loss of usage to end users. In addition, additional information such as condition of the vehicle and future required usage is considered.

Once justification to replace is determined, the recommended replacement is made, and estimated replacement cost is determined using Georgia State Wide Contract. Upon board approval, the Approved Fiscal Year Budget books are produced with the approved purchases. Approved vehicles are captured from the budget book and compiled. The General Service Fleet Maintenance Supervisor and Fleet Administrator compiles a listing of availability from the Georgia State Wide Contract. Specifications for vehicles that are not available on the Georgia State Wide 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
<b>EXECUTIVE DIVISION</b>				
104 Public Information Office	<b>Desks, Tables &amp; Racks:</b>			
	Cubicles	\$ 9,307	\$ -	
106 Information Technology	<b>Data Processing Equipment:</b>			
	Server Improvements	35,000		
	Additional Production Storage		45,000	
	Network Equipment Refresh	35,000		
	Additional System Backup Storage		48,000	
	Software - Windows, Vmware		40,000	
	Additional Business Object License		15,000	
	Cloud Computing		20,000	
	App Performance Software		15,000	
	Cisco Mobile Licensing		10,000	
	Voice Equipment Upgrade-Phones		30,000	
	Application Xtender Upgrade	25,000		
131 Meter Services	<b>Automobile/Pickups:</b>			
	Truck: F-150	27,030		
	Truck: F-250	30,512		
132 Customer Accounting	<b>Building and Structures:</b>			
	Wall - Cash Security		15,000	
<b>Total Executive Division</b>		<b>\$ 161,849</b>	<b>\$ 238,000</b>	<b>\$ 399,849</b>
<b>WATER PRODUCTION DIVISION</b>				
305 Water Production O & M Support	<b>Monitoring/Control Equipment:</b>			
	Auto Flusher	\$ -	\$ 30,000	
310 WJ Hooper Water Plant	<b>Fencing:</b>			
	Property Fencing		80,000	
	<b>Treatment Equipment:</b>			
	Fluoride Feeder Dust Control System		15,000	
	<b>Laboratory Equipment:</b>			
	Lab Charge Analyzer/ Auto-titration & Micro syringe		14,075	
314 Elevated Tanks	<b>Water Tanks:</b>			
	Tank Painting - Grant Road	375,000		
	Altitude Valve/Actuator - Lovejoy Elevated Tank	12,000		
315 J.W. Smith Water Plant	<b>Treatment Equipment:</b>			
	Basin Sludge Removal Equipment	150,000		
	<b>Monitoring/Control Equipment:</b>			
	Convert Particle Counters to SCADA		20,000	
316 Blalock Jr Reservoir and Dam	<b>Lifting/Handling Equipment:</b>			
	Forklift		35,000	
330 Water Quality Laboratory	<b>Automobile/Pickups:</b>			
	Cargo Van	21,204		
	<b>Laboratory Equipment:</b>			
	Spectrophotometer	10,000		
	Field Probe	12,000		
350 Lake Shamrock Recreation	<b>Landscaping Equipment:</b>			
	Mower	11,000		
352 Wetland Center	<b>Audio-Visual Equipment</b>			
	Interpretive Exhibit	-	25,000	
<b>Total Water Production Division</b>		<b>\$ 591,204</b>	<b>\$ 219,075</b>	<b>\$ 810,279</b>
<b>PROGRAM MANAGEMENT AND ENGINEERING DIVISION</b>				
530 Engineering	<b>Easements:</b>			
	Easements	\$ -	\$ 100	
<b>Total Program Management and Engineering Division</b>		<b>\$ -</b>	<b>\$ 100</b>	<b>\$ 100</b>



Budget Unit - Department	Description	Replacement	New	Total
<b>DISTRIBUTION AND CONVEYANCE DIVISION</b>				
612 Water Distribution Maintenance	<b>Construction Equipment:</b> Air Compressor - Pull Behind	\$ 20,000	\$ -	
	<b>Trucks:</b> Dump Truck	90,000		
	<b>Trailers (Non-Forestry):</b> Trailer: 20-ton	15,000		
612 Meter Installation	<b>Automobile/Pickups:</b> Truck: F-150 4x4	28,382		
	<b>Safety Equipment:</b> Trench Boxes (2) @ \$10,000 each	20,000		
618 Backflow Testing and Repair	<b>Automobile/Pickups:</b> Truck: F-250	35,358		
619 Utility & Landscaping Services:	<b>Automobile/Pickups:</b> Truck: F-150 4x4	28,382		
621 Wastewater Conveyance Maintenance	<b>Paving and Surfacing:</b> Paving around Building C		180,000	
	<b>Trucks:</b> Truck: F-550	55,000		
	<b>Safety Equipment:</b> Portable/Inflatable Trench Boxes (2) @ \$11,000 each		22,000	
	<b>Video Equipment:</b> Seasnake Camera, Monitor and Locator		15,000	
627 Conveyance System Inspections	<b>Trucks:</b> Jet Truck	269,500		
	<b>Automobile/Pickups:</b> Truck: F-250 4x4		35,358	
	<b>Video Equipment:</b> Pole Camera	17,600		
630 Utility Locators	<b>Automobile/Pickups:</b> Truck: F-150 4x4	28,382		
<b>Total Distribution and Conveyance Division</b>		<b>\$ 607,604</b>	<b>\$ 252,358</b>	<b>\$ 859,962</b>
<b>WATER RECLAMATION DIVISION</b>				
720 W.B. Casey Sr. Water Reclamation Plant	<b>Treatment Equipment:</b> 24" Valve & Hot Tap on RAS Return Line	\$ -	\$ 87,500	
	<b>Energy Utility Sources</b> PLC & Controls Upgrade for Emergency Generator	121,000		
	<b>Automobile/Pickups:</b> Truck: F-150 4x4	28,382		
721 NE Clayton Water Reclamation Plant	<b>Automobile/Pickups:</b> Truck: F-150 4x4	28,382		
724 Shoal Creek Water Reclamation Plant	<b>Pumping Equipment:</b> Raw Water Pump	50,000		
	<b>Automobile/Pickups:</b> Truck: F-150	27,030		
740 NTS Operations and Maintenance	<b>Construction Equipment:</b> Mid-Size Excavator	89,250		
	Skid Steer Loader	89,181		
	<b>Forestry Equipment</b> Hydraulic Mulching Head Attachment		35,490	
	<b>Automobile/Pickups:</b> ATV	9,841		
	<b>Laboratory Equipment:</b> Refrigerated Auto Sampler	7,999		
	<b>Marine Equipment:</b> Aquatic Vegetation Excavator with Trailer	77,833		
<b>Total Water Reclamation Division</b>		<b>\$ 528,898</b>	<b>\$ 122,990</b>	<b>\$ 651,888</b>





Budget Unit - Department	Description	Replacement	New	Total
<b>GENERAL SERVICES DIVISION</b>				
930 Garage	<b>Garage Equipment:</b> Key Management Security System	\$ -	\$ 13,500	
950 Equipment Maintenance	<b>Desks, Tables &amp; Racks:</b> Workstations, Chairs and Desks	45,000		
960 Grounds/Right-of-Way Maintenance	<b>Trucks:</b> Box Dump	94,255		
	<b>Landscaping Equipment:</b> Mower with 61" Deck	12,502		
970 Building Maintenance Projects	<b>Shop/Cleaning Equipment and Tools</b> Sandblaster	5,000		
<b>Total General Services Division</b>		<b>\$ 156,757</b>	<b>\$ 13,500</b>	<b>\$ 170,257</b>
<b>Total Capital Equipment</b>		<b>\$ 2,046,312</b>	<b>\$ 846,023</b>	<b>\$ 2,892,335</b>

### Capital Equipment: Stormwater Fund – Detail by Business Unit

FY 2018 – 2019 Budget

Budget Unit - Department	Description	Replacement	New	Total
<b>STORMWATER FUND</b>				
210 Stormwater Maintenance	<b>Easements:</b> Easements	\$ -	\$ 10,000	
	<b>Construction Equipment:</b> Gradall	370,000		
	<b>Trucks:</b> Flatbed Dump	100,000		
	<b>Trailers (Non-Forestry)</b> 20-Ton Trailer (2) @ \$15,000 each	30,000	-	
	<b>Automobile/Pickups:</b> Truck: F-150		27,030	
<b>Total Capital Equipment</b>		<b>\$ 500,000</b>	<b>\$ 37,030</b>	<b>\$ 537,030</b>





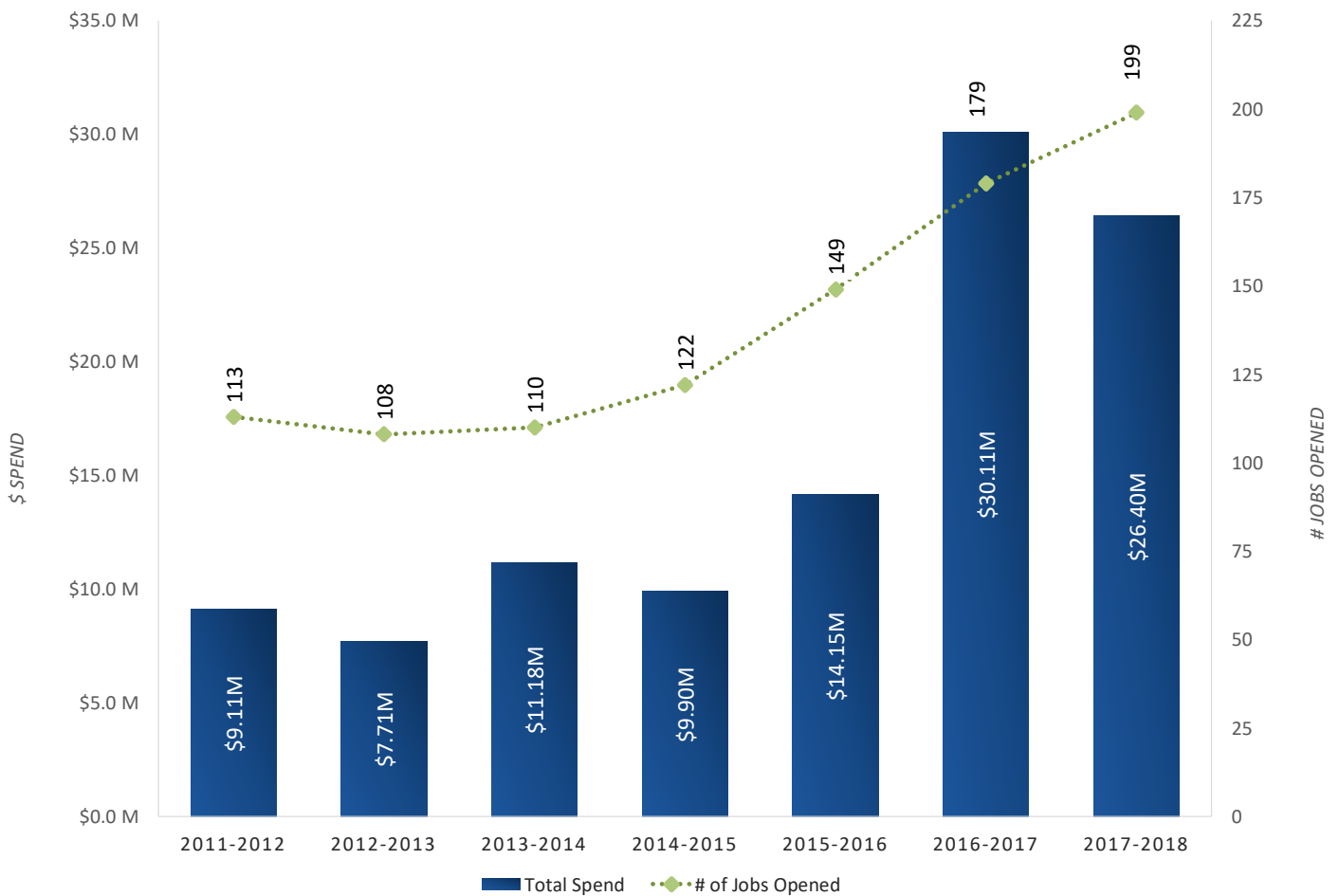


## Capital Improvement Program (CIP) – Capital Projects

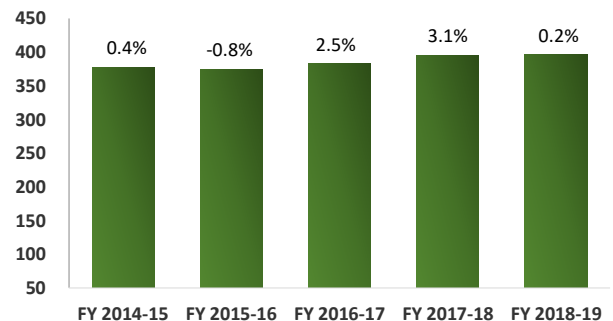
Projects listed in the CIP budget are reviewed annually by management and staff to allow the program to be more responsive to changing priorities, particularly with respect to changes in demand projections and operational enhancements. The changes sometimes result in the addition of projects and the 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 have doubled and average spending has tripled, staffing has increased by 19 employees or 5 percent. The number of full-time employees (FTEs) in FY 2014-2015 was 377 compared with 396 in FY 2018-2019.

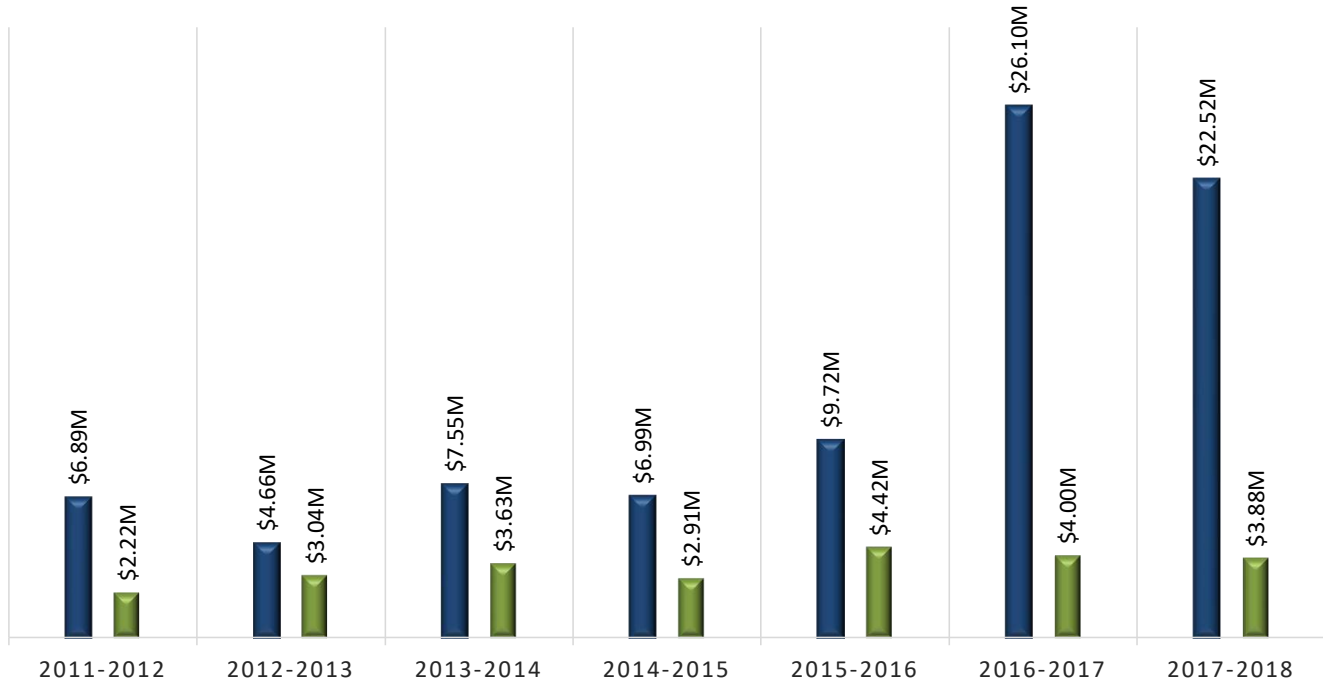




## Changes in Capital Project Spending - By Fund

## CAPITAL PROJECT SPENDING

■ Water and Sewer ■ Stormwater

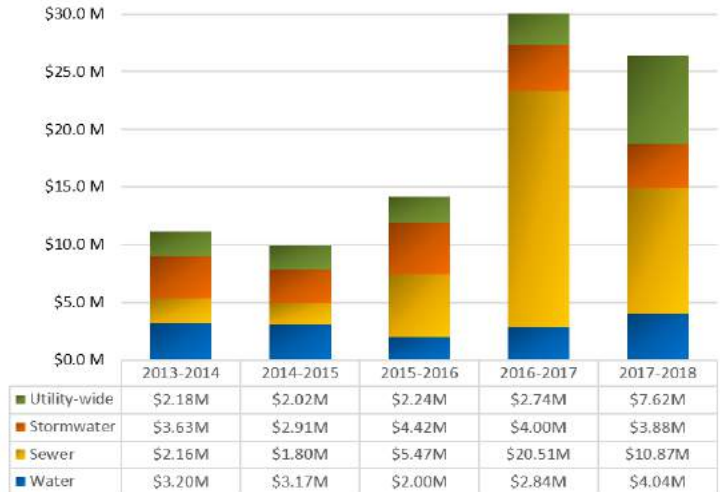


## Changes in Capital Project Spending – By Project Type and Utility

By Project Type

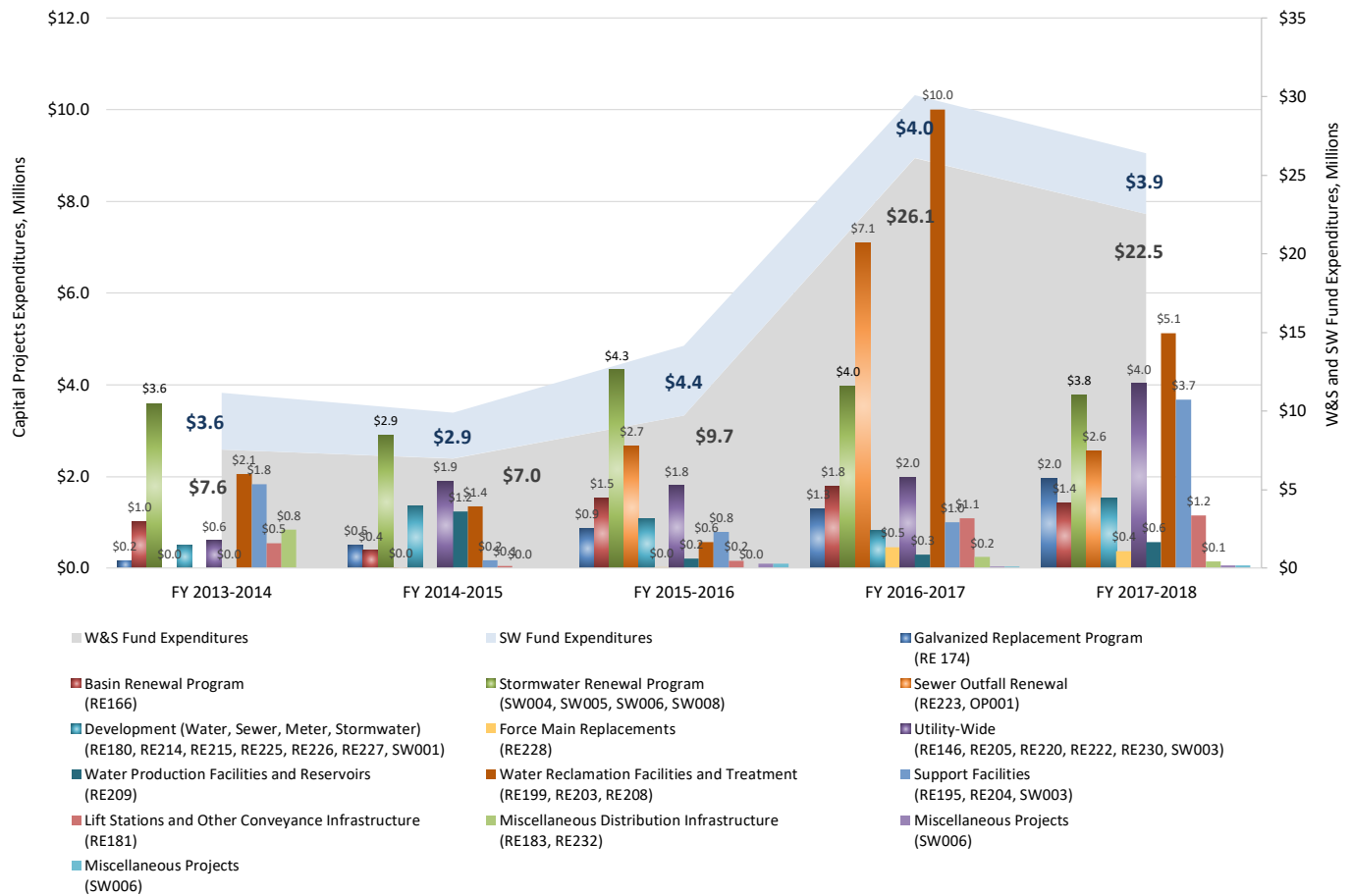


By Utility





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

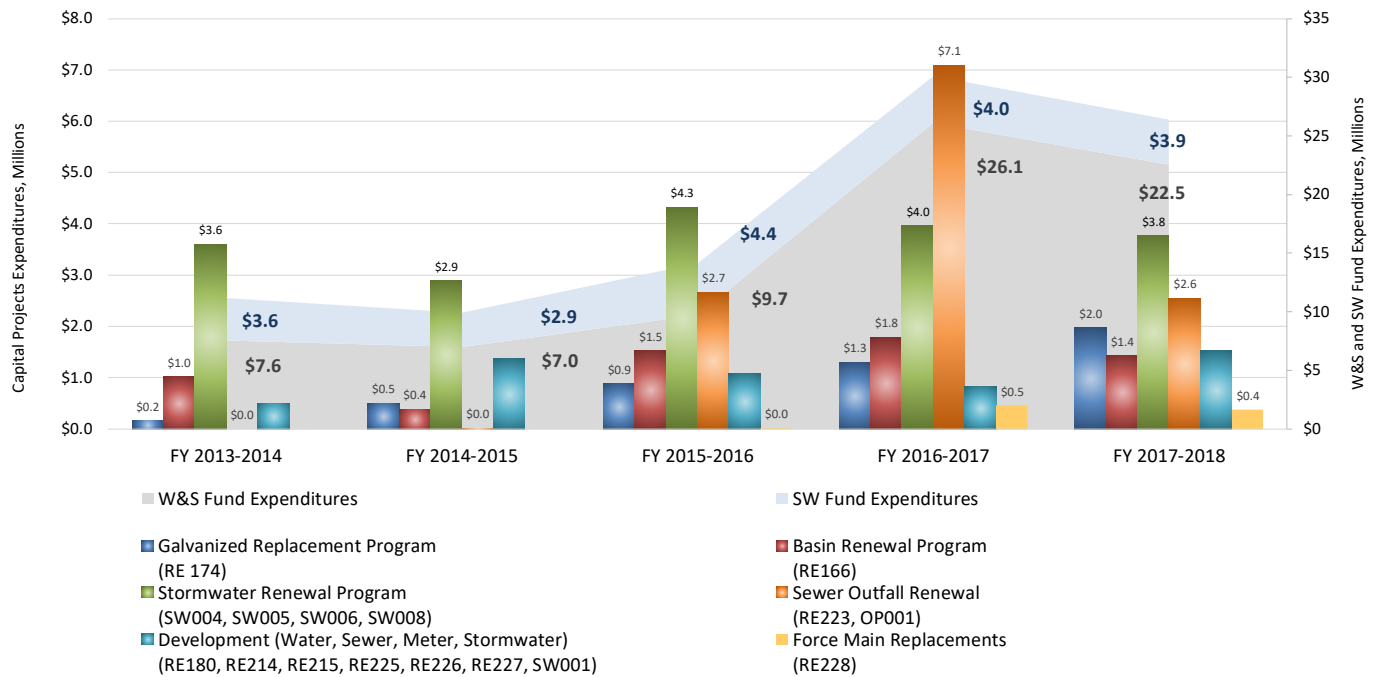


### ANNUAL CAPITAL SPENDING

	FY 2013-2014	FY 2014-2015	FY 2015-2016	FY 2016-2017	FY 2017-2018
Total	\$11,178,062	\$9,902,727	\$14,145,927	\$30,106,478	\$26,400,653
W&S Fund Expenditures	\$7,551,639	\$6,988,246	\$9,723,383	\$26,102,263	\$22,521,830
SW Fund Expenditures	\$3,626,423	\$2,914,480	\$4,422,544	\$4,004,216	\$3,878,823
Galvanized Replacement Program (RE 174)	\$170,029	\$510,140	\$876,219	\$1,301,274	\$1,964,307
Basin Renewal Program (RE166)	\$1,017,095	\$389,393	\$1,533,862	\$1,788,554	\$1,434,946
Stormwater Renewal Program (SW004, SW005, SW006, SW008)	\$3,602,702	\$2,897,494	\$4,323,362	\$3,966,480	\$3,773,716
Sewer Outfall Renewal (RE223, OP001)	\$0	\$19,606	\$2,674,397	\$7,090,180	\$2,557,102
Development (Water, Sewer, Meter, Stormwater) (RE180, RE214, RE215, RE225, RE226, RE227, SW001)	\$510,079	\$1,368,951	\$1,079,292	\$821,790	\$1,525,288
Force Main Replacements (RE228)	\$0	\$0	\$19,379	\$458,837	\$372,366
Utility-Wide (RE146, RE205, RE220, RE222, RE230, SW003)	\$598,541	\$1,893,126	\$1,800,552	\$1,992,911	\$4,028,479
Water Production Facilities and Reservoirs (RE209)	\$4,125	\$1,240,741	\$209,382	\$293,844	\$572,886
Water Reclamation Facilities and Treatment (RE199, RE203, RE208)	\$2,056,531	\$1,353,726	\$575,757	\$10,009,355	\$5,129,804
Support Facilities (RE195, RE204, SW003)	\$1,833,017	\$177,263	\$795,315	\$1,008,445	\$3,682,842
Lift Stations and Other Conveyance Infrastructure (RE181)	\$545,839	\$52,288	\$159,350	\$1,094,461	\$1,153,273
Miscellaneous Distribution Infrastructure (RE183, RE232)	\$840,104	\$0	\$0	\$242,776	\$143,396
Miscellaneous Projects (SW006)	\$0	\$0	\$99,059	\$37,572	\$62,250



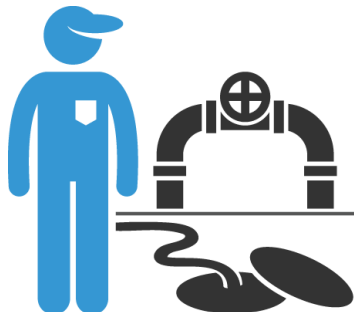
## Changes in Capital Spending – Pipeline Infrastructure Programs



### ANNUAL CAPITAL SPENDING

	FY 2013-2014	FY 2014-2015	FY 2015-2016	FY 2016-2017	FY 2017-2018
<b>Total</b>	<b>\$11,178,062</b>	<b>\$9,902,727</b>	<b>\$14,145,927</b>	<b>\$30,106,478</b>	<b>\$26,400,653</b>
W&S Fund Expenditures	\$7,551,639	\$6,988,246	\$9,723,383	\$26,102,263	\$22,521,830
SW Fund Expenditures	\$3,626,423	\$2,914,480	\$4,422,544	\$4,004,216	\$3,878,823
Galvanized Replacement Program (RE 174)	\$170,029	\$510,140	\$876,219	\$1,301,274	\$1,964,307
Basin Renewal Program (RE166)	\$1,017,095	\$389,393	\$1,533,862	\$1,788,554	\$1,434,946
Stormwater Renewal Program (SW004, SW005, SW006, SW008)	\$3,602,702	\$2,897,494	\$4,323,362	\$3,966,480	\$3,773,716
Sewer Outfall Renewal (RE223, OP001)	\$0	\$19,606	\$2,674,397	\$7,090,180	\$2,557,102
Development (Water, Sewer, Meter, Stormwater) (RE180, RE214, RE215, RE225, RE226, RE227, SW001)	\$510,079	\$1,368,951	\$1,079,292	\$821,790	\$1,525,288
Force Main Replacements (RE228)	\$0	\$0	\$19,379	\$458,837	\$372,366
All Pipeline Related Projects <sup>(1)</sup>	\$5,299,905	\$5,185,584	\$10,506,512	\$15,427,115	\$11,627,724

The description and purpose of the primary Renewal and Extension construction lines follow under the heading [Capital Project Funding FY 2018 – 2019 – By Main Construction Line](#). Renewal and Extension construction lines specific to Pipeline Programs is located under the heading [Summary of Distribution and Conveyance Annual Capital Spending](#).

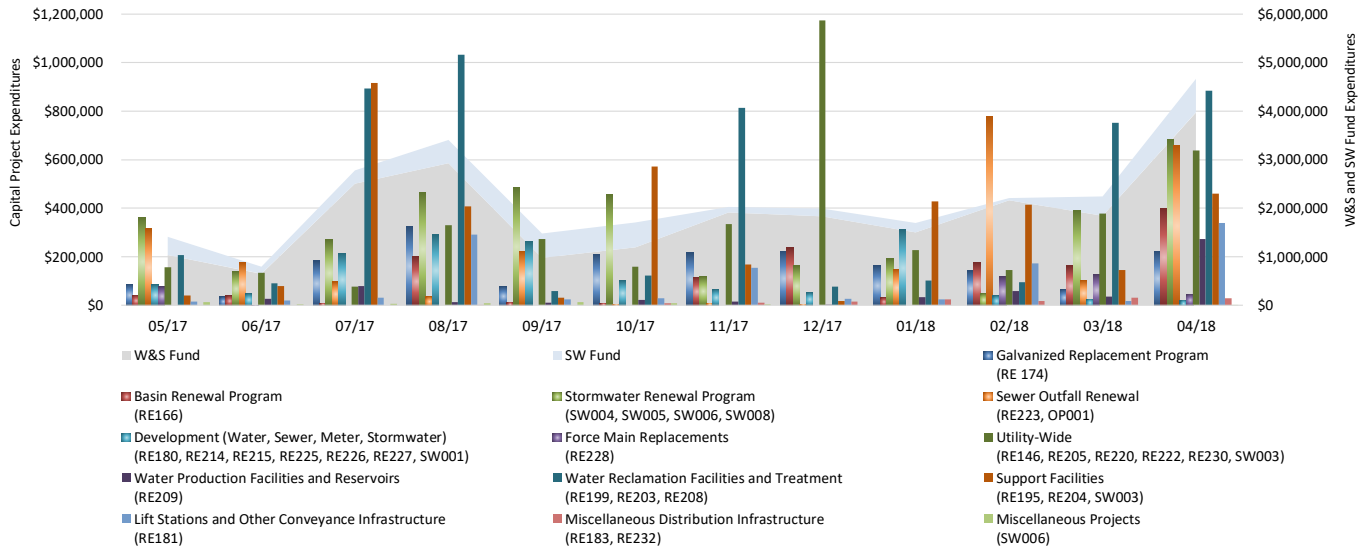




## Construction in Progress – FY 2017 – 2018 Monthly Capital Project Spending

During construction, all capital projects are reported in the Renewal and Extension Fund (RE Fund) 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 2017 – 2018 is shown below.

Monthly Capital Spending Summary - FY 2017-2018



FY 2017-2018 MONTHLY CAPITAL SPENDING SUMMARY

FYB 17	05/17	06/17	07/17	08/17	09/17	10/17	11/17	12/17	01/18	02/18	03/18	04/18
W&S Fund	\$1,033,485	\$654,045	\$2,501,699	\$2,931,767	\$979,710	\$1,200,357	\$1,910,691	\$1,829,363	\$1,502,623	\$2,159,099	\$1,847,689	\$3,971,302
SW Fund	\$375,789	\$144,431	\$276,255	\$473,028	\$498,520	\$507,394	\$122,446	\$161,626	\$192,351	\$48,891	\$390,738	\$687,354
Galvanized Replacement Program (RE 174)	\$88,526	\$35,037	\$183,677	\$326,909	\$77,729	\$211,157	\$218,105	\$223,335	\$165,393	\$141,778	\$67,501	\$225,158
Basin Renewal Program (RE166)	\$42,191	\$40,591	\$6,675	\$200,756	\$12,413	\$6,546	\$116,911	\$237,030	\$33,430	\$176,545	\$162,669	\$399,190
Stormwater Renewal Program (SW004, SW005, SW006, SW008)	\$362,411	\$140,933	\$268,732	\$464,589	\$485,937	\$455,720	\$118,473	\$161,480	\$192,147	\$48,286	\$390,738	\$684,269
Sewer Outfall Renewal (RE223, OP001)	\$314,988	\$177,257	\$97,076	\$35,854	\$225,157	\$6,031	\$9,510	\$4,883	\$150,042	\$776,754	\$102,478	\$657,072
Development (Water, Sewer, Meter, Stormwater) (RE180, RE214, RE215, RE225, RE226, RE227, SW001)	\$88,168	\$48,385	\$214,740	\$290,144	\$264,233	\$103,436	\$67,692	\$53,671	\$309,898	\$39,288	\$25,606	\$20,028
Force Main Replacements (RE228)	\$78,531	(\$1,008)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$119,905	\$127,803	\$47,134
Utility-Wide (RE146, RE205, RE220, RE222, RE230, SW003)	\$157,249	\$135,380	\$77,263	\$329,628	\$272,282	\$158,964	\$333,937	\$1,172,919	\$227,907	\$146,685	\$377,579	\$638,686
Water Production Facilities and Reservoirs (RE209)	\$0	\$26,884	\$78,757	\$14,219	\$11,233	\$22,167	\$16,172	\$900	\$34,763	\$59,736	\$35,429	\$272,627
Water Reclamation Facilities and Treatment (RE199, RE203, RE208)	\$208,007	\$91,713	\$893,693	\$1,031,810	\$58,699	\$122,014	\$813,970	\$76,707	\$103,473	\$94,455	\$751,957	\$883,305
Support Facilities (RE195, RE204, SW003)	\$40,903	\$79,048	\$917,060	\$407,854	\$31,961	\$571,595	\$167,509	\$17,597	\$428,870	\$414,343	\$145,663	\$460,439
Lift Stations and Other Conveyance Infrastructure (RE181)	\$14,923	\$20,759	\$32,758	\$292,210	\$25,277	\$29,113	\$154,792	\$27,180	\$24,611	\$172,611	\$18,736	\$340,304
Miscellaneous Distribution Infrastructure (RE183, RE232)	\$0	\$0	\$0	\$2,305	\$0	\$8,821	\$12,095	\$15,288	\$24,439	\$17,603	\$32,268	\$30,577
Miscellaneous Projects (SW006)	\$13,377	\$3,498	\$7,523	\$8,208	\$12,584	\$10,003	\$3,973	\$0	\$0	\$0	\$0	\$3,085
<b>Total Monthly Capital Project Expenditures</b>	<b>\$1,409,274</b>	<b>\$798,477</b>	<b>\$2,777,953</b>	<b>\$3,404,487</b>	<b>\$1,477,504</b>	<b>\$1,705,566</b>	<b>\$2,033,137</b>	<b>\$1,990,990</b>	<b>\$1,694,974</b>	<b>\$2,207,990</b>	<b>\$2,238,427</b>	<b>\$4,661,875</b>

The description and purpose of the primary Renewal and Extension construction lines follow under the heading [Capital Project Funding FY 2018 – 2019 – By Main Construction Line](#).



## Projected Capital Project Spending

### Capital Project Listing with Annual Cash Flow Requirements - FY 2018 - 2019 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 2018 – 2019 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 2018 – 2019 budget total \$10.4 million with an additional \$17.8 million funded from the FY 2017 – 2018 budget surplus approved by the Board of Directors along with the FY 2018 – 2019 budget.

### Summary of Cash Flow Requirements of Capital Projects by Area or Division

	2018 - 2019	2019 - 2020	2020 - 2021	2021 - 2022	2022 - 2023	2023 - 2024	2024 - 2025
Dist & Conveyance	5,751,500	\$ 11,127,500	\$ 11,252,500	\$ 11,494,167	\$ 6,969,167	\$ 8,419,167	\$ 18,752,500
General Services	\$ 600,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	1,000,000	1,000,000	1,000,000
IT	\$ 1,066,000	\$ 955,000	\$ 1,390,000	\$ 795,000	\$ 215,000	\$ 600,000	\$ 1,050,000
SW & Watersheds	\$ 3,675,000	\$ 4,850,000	\$ 4,500,000	\$ 4,500,000	\$ 3,675,000	\$ 4,500,000	\$ 3,500,000
Utility-wide	\$ 1,970,000	\$ 1,290,000	\$ 75,000	\$ -	\$ 6,250,000	6,250,000	6,250,000
Water Production	\$ 350,000	\$ 6,550,000	\$ 11,400,000	\$ 400,000	\$ 4,500,000	\$ -	\$ -
Water Reclamation	\$ 271,000	\$ 7,260,000	\$ 12,690,000	\$ -	\$ -	300,000	\$ 2,700,000
<b>Grand Total</b>	<b>\$ 13,683,500</b>	<b>\$ 33,032,500</b>	<b>\$ 42,307,500</b>	<b>\$ 18,189,167</b>	<b>\$ 22,609,167</b>	<b>\$ 21,069,167</b>	<b>\$ 33,252,500</b>

- 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

	2018 - 2019	2019 - 2020	2020 - 2021	2021 - 2022	2022 - 2023
<b>Dist &amp; Conveyance</b>	<b>\$5,751,500</b>	<b>11,127,500</b>	<b>11,252,500</b>	<b>11,494,167</b>	<b>\$ 6,969,167</b>
601 / Galvanized Water Main Replacement Program	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000
604 / Expand Sewer Service to Key Unsewered (Septic Tank) Areas	-	-	-	-	-
607 / Develop and Implement Large Valve Replacement Program	152,500	152,500	152,500	152,500	152,500
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
614 / Basin Level Sanitary Sewer Rehabilitation (for all three basins)	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
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
618 / Post Infiltration/Inflow Rehabilitation Flow Monitoring, Analysis, and System Capacity	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
630 / Conveyance Modifications to take DeKalb County Flows	-	4,400,000	4,400,000	4,400,000	-
638 / Pressure Sewer Condition Assessment	-	250,000	125,000	125,000	100,000
639 / Pressure Sewer Rehabilitation	-	1,200,000	1,200,000	1,200,000	1,200,000
Pre-Funded Dist & Conveyance	(14,400,000)	(6,000,000)	(6,000,000)	(7,000,000)	(7,000,000)
Sewer Line Inspection	10,000	-	-	-	-
Meter Inspections	20,000	-	-	-	-
Large Meter Replacements	500,000	-	-	-	-
DOT - Stagecoach & Steel Rd	389,000	-	-	-	-
DOT - Tara Blvd	380,000	-	-	-	-
Jesters Creek Ph 4	4,800,000	-	-	-	-
Rum Creek Outfall Replacement	3,100,000	-	-	-	-

## CASH FLOW REQUIREMENTS OF CAPITAL PROJECTS – GENERAL SERVICES

	2018 - 2019	2019 - 2020	2020 - 2021	2021 - 2022	2022 - 2023
<b>General Services</b>	<b>\$600,000</b>	<b>\$1,000,000</b>	<b>\$ 1,000,000</b>	<b>\$ 1,000,000</b>	<b>1,000,000</b>
903 / Lift Station Rehabilitation	1,600,000	1,000,000	1,000,000	1,000,000	1,000,000
Pre-Funded General Services	(1,000,000)	-	-	-	-

## CASH FLOW REQUIREMENTS OF CAPITAL PROJECTS – WATER PRODUCTION

	2018 - 2019	2019 - 2020	2020 - 2021	2021 - 2022	2022 - 2023
<b>Water Production</b>	<b>\$350,000</b>	<b>6,550,000</b>	<b>11,400,000</b>	<b>400,000</b>	<b>\$ 4,500,000</b>
303 / CCWA WPP Treatment Technology Evaluation	150,000	-	-	-	-
304 / CCWA WPP Treatment Technology Implementation	-	-	9,000,000	-	4,500,000
306 / UV Disinfection System Technology Evaluation, Condition Assessment	-	100,000	300,000	-	-
307 / Emergency Power Generators (W.J. Hooper WPP)	1,800,000	-	-	-	-
308 / Reservoir Dredging (W.J. Hooper WPP)	-	-	-	-	-
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)	-	1,500,000	-	-	-
317 / Forest Ave Demolition and Booster Pump Design and Construction	-	2,000,000	-	-	-
Pre-Funded Water Production	(6,750,000)	-	-	-	-
Upgrade Breakroom	10,000	-	-	-	-
Pump Repairs (2)	60,000	-	-	-	-
Flow Meters/Controllers/ Software	80,000	-	-	-	-
Hooper Residual Solids Construction & SDC's	5,000,000	-	-	-	-





## CASH FLOW REQUIREMENTS OF CAPITAL PROJECTS – UTILITY-WIDE

	2018 - 2019	2019 - 2020	2020 - 2021	2021 - 2022	2022 - 2023
<b>Utility-wide</b>	<b>\$1,970,000</b>	<b>1,290,000</b>	<b>75,000</b>	<b>-</b>	<b>\$ 6,250,000</b>
101 / Re-Assess and Implement Learning and Leadership Development Program	-	150,000	-	-	-
105 / Develop and Implement Emergency Operations and Disaster Recovery	-	75,000	75,000	-	-
106 / Business Continuity	100,000	100,000	-	-	-
107 / Comprehensive Safety Program	-	100,000	-	-	-
108 / Enterprise-wide Communications Strategy	100,000	-	-	-	-
111 / Implement Meter Service Routing	-	115,000	-	-	-
112 / Web Strategy & Enhancements	250,000	-	-	-	-
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
121 / Enhance Compliance Reporting	-	250,000	-	-	-
Pre-Funded Utility-wide	-	-	-	-	-
HQ Restroom Renovations	90,000	-	-	-	-
Fire Hydrant Meters - 15	30,000	-	-	-	-
2020 Strategic Master Plan	750,000	-	-	-	-
Dist Sys Model Follow Up Projects	500,000	-	-	-	-
CIS Integration Support	75,000	-	-	-	-
JDE Integration Support	75,000	-	-	-	-

## CASH FLOW REQUIREMENTS OF CAPITAL PROJECTS – WATER RECLAMATION

	2018 - 2019	2019 - 2020	2020 - 2021	2021 - 2022	2022 - 2023
<b>Water Reclamation</b>	<b>\$ 271,000</b>	<b>\$ 7,260,000</b>	<b>\$ 12,690,000</b>	<b>\$ -</b>	<b>\$ -</b>
705 / Phosphorus Removal System Modifications (Northeast WRF)	650,000	5,850,000	-	-	-
708 / Design & Construct Dewatering Facility, Primary Solids (W.B. Casey WRF)	-	600,000	5,400,000	-	-
710 / Conceptual Design and Construction of Fourth BRB (W.B. Casey WRF)	-	810,000	7,290,000	-	-
716 / Implement Disinfection Treatment System (Shoal Creek WRF)	-	-	-	-	-
718 / Laboratory Information Management System (LIMS)	250,000	-	-	-	-
Pre-Funded Water Reclamation	(3,500,000)	-	-	-	-
Casey Capacity Evaluation	100,000	-	-	-	-
Baffles for 1,2,3 Secondary Clarifiers	60,000	-	-	-	-
Scum Trough Assembly	37,000	-	-	-	-
Primary Clarifier Solids Meter	24,000	-	-	-	-
Polymer Tank	50,000	-	-	-	-
Influent Pump Station Conversion-Design	1,000,000	-	-	-	-
ACH Application-Design & Construction	1,600,000	-	-	-	-

## CASH FLOW REQUIREMENTS OF CAPITAL PROJECTS – STORMWATER AND WATERSHEDS

	2018 - 2019	2019 - 2020	2020 - 2021	2021 - 2022	2022 - 2023
<b>SW &amp; Watersheds</b>	<b>\$3,675,000</b>	<b>\$4,850,000</b>	<b>\$ 4,500,000</b>	<b>\$ 4,500,000</b>	<b>\$ 3,675,000</b>
206 / Update Stormwater Development Guidelines, Plan Review, Inspectic	-	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	-	-	-	175,000
212 / Implement Watershed Improvement Projects	-	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
Pre-Funded SW & Watersheds	-	-	-	-	-



## CASH FLOW REQUIREMENTS OF CAPITAL PROJECTS – IT

	2018 - 2019	2019 - 2020	2020 - 2021	2021 - 2022	2022 - 2023
<b>IT</b>	<b>\$1,066,000</b>	<b>955,000</b>	<b>1,390,000</b>	<b>795,000</b>	<b>\$ 215,000</b>
150 / Business Intelligence (BI) Strategy	-	-	-	-	-
151 / IT Services Catalog	-	-	-	-	-
152 / Mobility Strategy	-	-	-	-	-
153 / RACI Development	50,000	-	-	-	-
154 / Develop and Implement a Collaboration Strategy	-	-	-	-	-
155 / Software Application Upgrade & Technology Refresh	795,000	530,000	790,000	695,000	215,000
156 / JDE Upgrade	-	-	-	-	-
158 / Review/Develop Architecture Standards	50,000	50,000	-	-	-
159 / Application Portfolio Rationalization	50,000	-	-	-	-
160 / Evaluate and Implement System Integration Strategy	-	300,000	600,000	100,000	-
161 / Refresh Disaster Recovery - Data Center & Cyber Security Strategy	-	-	-	-	-
162 / Establish Data Governance & Stewardship Program	-	-	-	-	-
164 / Sourcing Strategy-Cloud	25,000	75,000	-	-	-
Pre-Funded IT	-	-	-	-	-
Infrastructure Improvements	25,000	-	-	-	-
Auto Attendant Upgrade	23,000	-	-	-	-
Voice Environment Upgrade	38,000	-	-	-	-
Help Desk Renovations	10,000	-	-	-	-





## Current Capital Project Spending

### Capital Project Funding FY 2018 - 2019 - 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, \$4.3M has been spent and 34 projects have been completed replacing 8 miles of pipe infrastructure.



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 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. Additional funding of \$4.8M from FY 2017-2018 budget surplus was approved by the Board of Directors for Jesters Creek Phase 4. This project will be a continuation of Jesters Creek Phases 1, 2, and 3 and replace 7,700 feet of sewer line. The FY 2017-2018 budget surplus will also fund \$3.8M the Rum Creek Outfall project. The is replace 6,100 feet of gravity sewer from the Rum Creek Lift Station and connect to the Flint River Outfall Phase 1A. The condition of this pipe may allow for CIPP instead of complete replacement.  
8 miles replaced



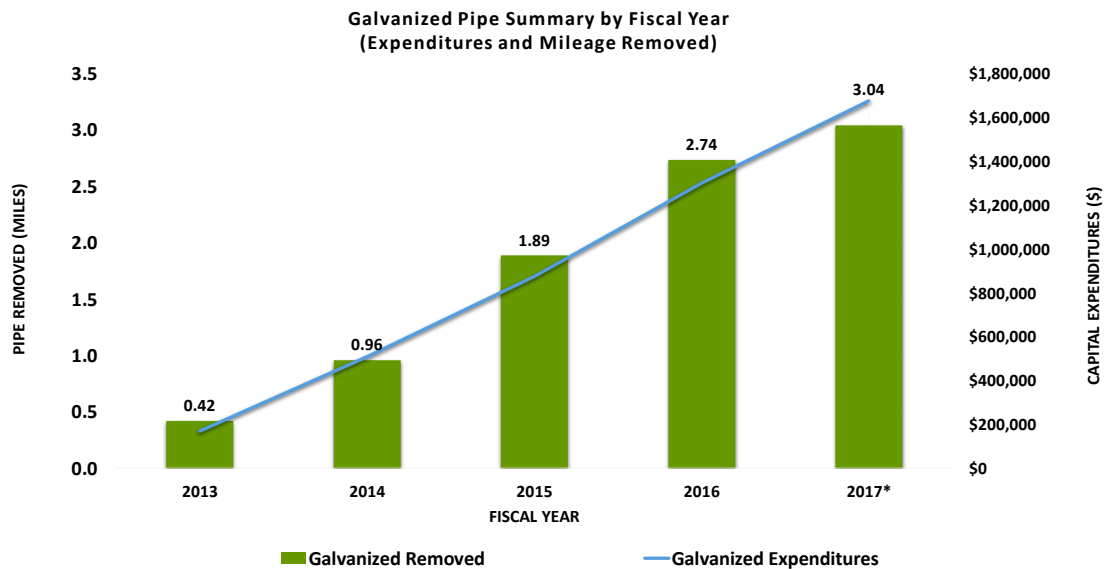
##### *RE174 - GALVANIZED WATERMAIN REPLACEMENTS [SMP 601]*

This program focuses on the systematic replacement of 2-inch galvanized water mains with 8-inch water lines 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 Water Main 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. The FY 2018-2019 capital budget allocates \$1.75M with another \$500K approved by the Board of Directors from FY 2017-2018 surplus. If the budget for this program were increased to \$2.25M, all the galvanized water main could be replaced in 11 years.



#### [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 2018 – 2019 budget has \$769K for expected DOT projects within the fiscal year for two projects, [Department of Transportation \(DOT\) – Stagecoach and Steel Roads](#) and [Department of Transportation \(DOT\) – Tara Boulevard](#).

#### [RE225 – WATER LINE EXTENSIONS](#)

This construction line is used for expansion of water lines required by new residential and commercial developments. There are no annual targets and budgeting in this line follows County permits and development needs.

#### [RE226 – SEWER LINE EXTENSIONS AND STUB-OUTS](#)

Projects 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. The current budget includes funding of \$10K for this [sewer initiative](#)

#### [RE227 – METER SETTINGS](#)

This construction line contains projects for the placement of large meters and fire meters required by new commercial and institutional development. There are no annual targets and budgeting in this line follows County permits and development needs. The FY 2018 – 2019 budget includes \$20K for [Meter Settings](#).

#### [RE228 – SEWER FORCE MAIN REPLACEMENTS \[SMP 639\]](#)

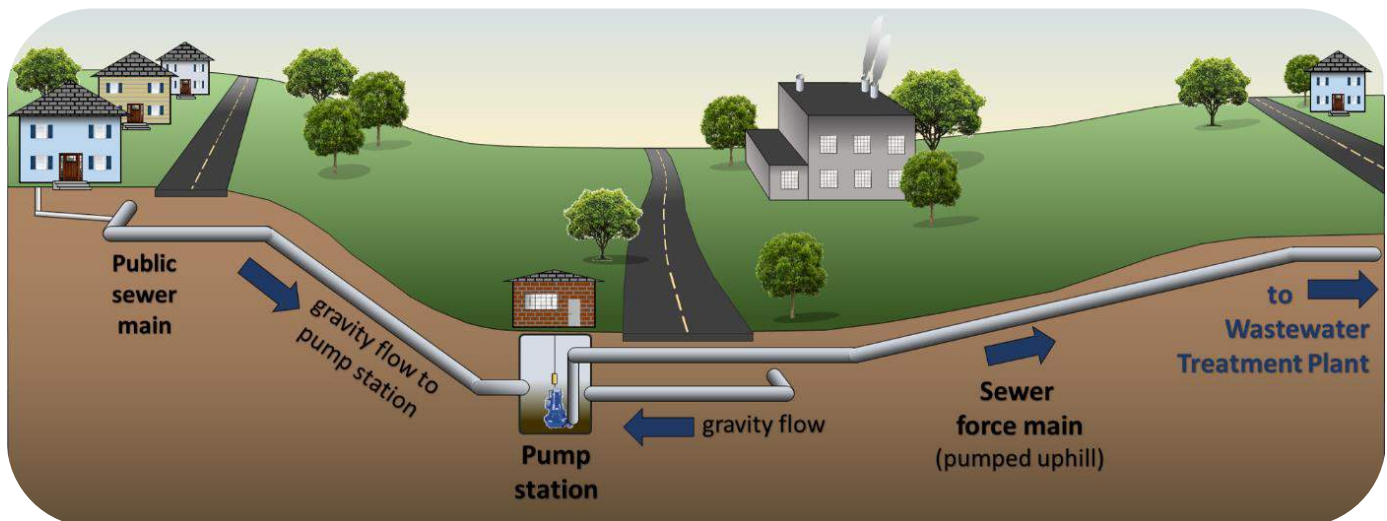
The annual funding target for this program is \$1.2M beginning in the next budget year. The FY 2017 - 2018 budget contained \$250K to develop a formal Pressure Sewer Condition Assessment program for our 48 miles of sewer force



mains throughout the conveyance system. The resulting projects from this assessment program will be funded under this construction line.

#### *RE232 – LARGE METER REPLACEMENTS*

This construction line contains projects for the replacement of large meters for commercial and industrial. There are no annual targets and budgeting in this line follows need. The FY 2018 – 2019 Capital Budget includes funding of \$500K for [Large Meter Replacements](#) and an additional \$30K for [Fire Hydrant Meters](#).

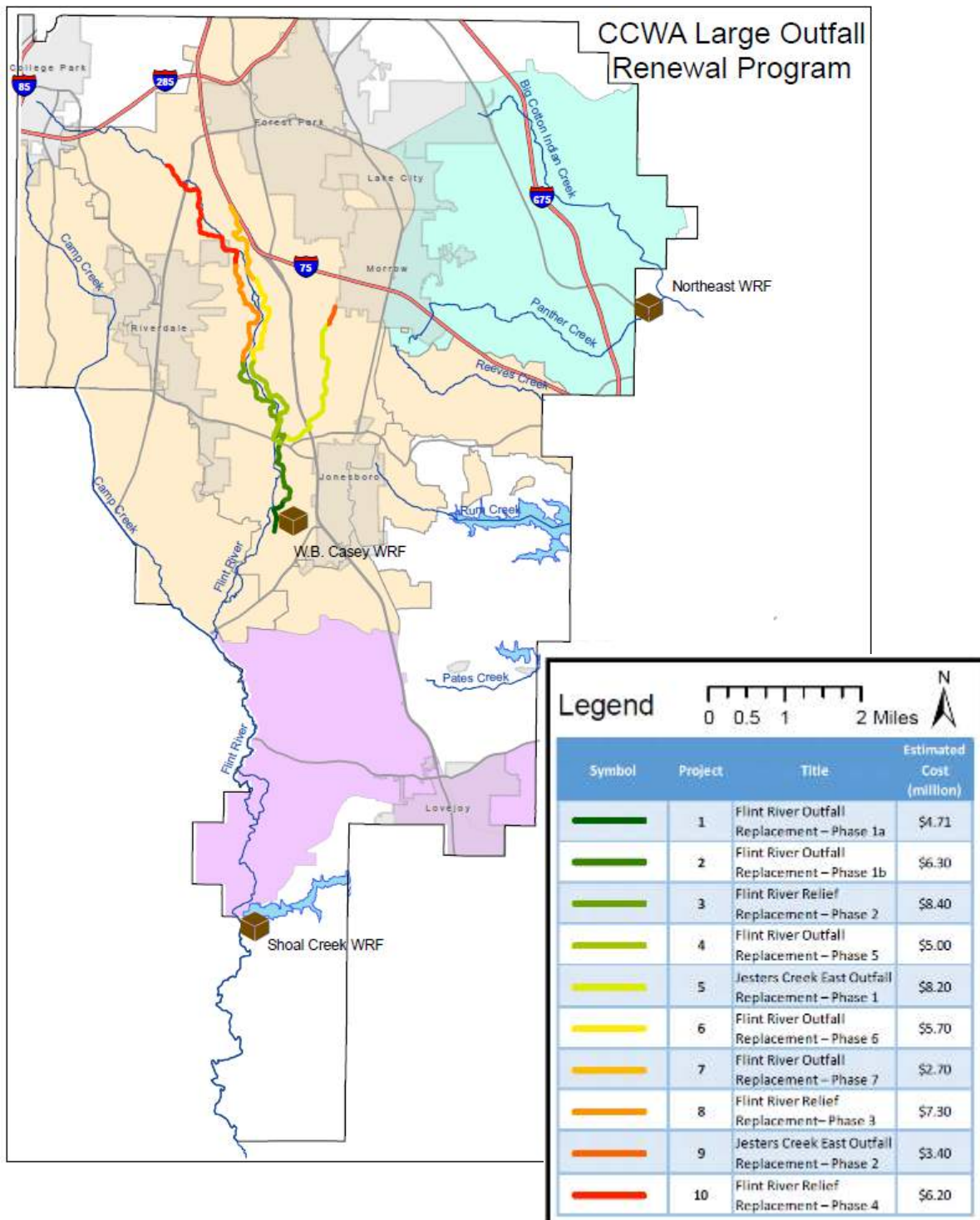






### RE223 – LARGE SEWER INTERCEPTOR REHABILITATION [SMP 617]

A primary focus for the Authority over the next several years will be on its conveyance system. The map below shows the area of sewer pipe that will be replaced as part of the large Interceptor renewal initiative. The estimated cost of all 10 projects affiliated with this outfall replacement is \$57.9 million. Started in FY 2015 -2016, construction will span several years. Phases 1a and 1b are completed and a \$25 million Clean Water SRF loan approved by the Georgia Environmental Finance Authority in January 2017 will be used to assist with the funding of projects 3 through 6 of the 10-project rehabilitation program. This year's budget includes \$300K for the design of Project 9: [Jesters Creek Outfall East Replacement](#).

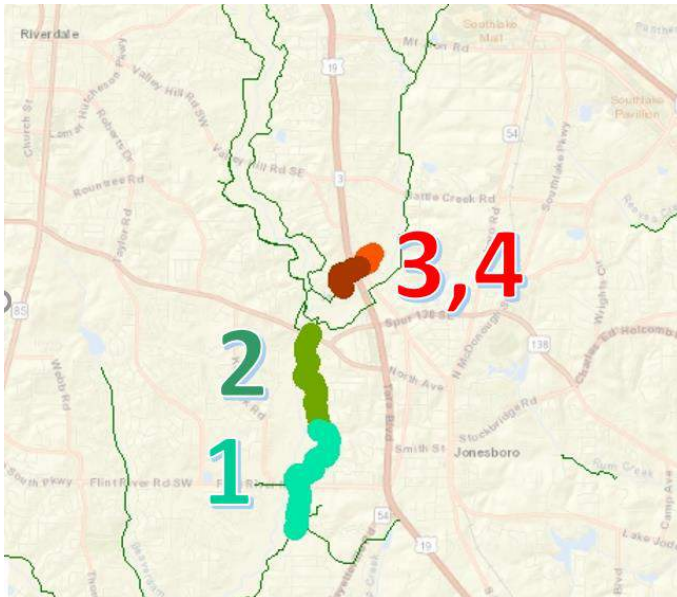




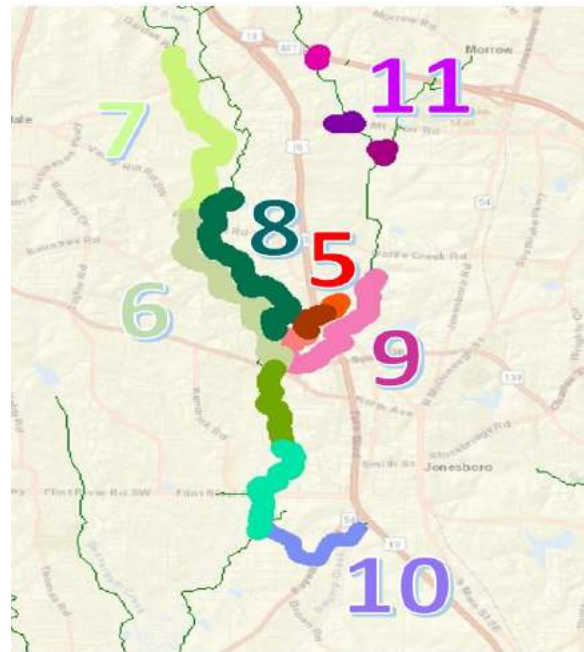
## Status of Major Outfall Projects

Project	Funding / Status	Length (miles)	Cost (\$)
MAJOR REPLACEMENT PROJECTS (FYE 2016-Current)			
1) Flint River Outfall Ph 1A	Complete	0.8	\$4,733,000
2) Flint River Outfall Ph 1B	Complete	1.1	\$6,300,000
3) Jesters Creek Outfall Ph 1	Complete	0.3	\$560,200
4) Jesters Creek Outfall Ph 2	Complete	0.2	\$472,000
<b>Subtotal:</b>		<b>2.5</b>	<b>\$12,065,200</b>
PROJECTS UNDERWAY / PLANNED FOR FYB18			
5) Jesters Creek Outfall Ph 3	FY 2017-2018 Budget	0.5	\$1,277,000
6) FRO Phase 2 (Construction)	GEFA	2.3	\$8,450,000
7) FRO Phase 3 (Design)	GEFA	2.8	\$10,000,000
8) FRO East Phase 1	GEFA	2.1	\$4,000,000
9) Jesters East Phase 1	GEFA	1.3	\$4,000,000
10) Rum Creek Outfall	FY 2017-2018 Surplus	1.2	\$3,100,000
11) Jesters Creek Outfall East Replacements	FY 2018-2019 Budget	0.5	\$1,711,000
<b>Subtotal:</b>		<b>10.2</b>	<b>\$32,538,000</b>
<b>Total:</b>		<b>12.71</b>	<b>\$44,603,200</b>

## Completed:



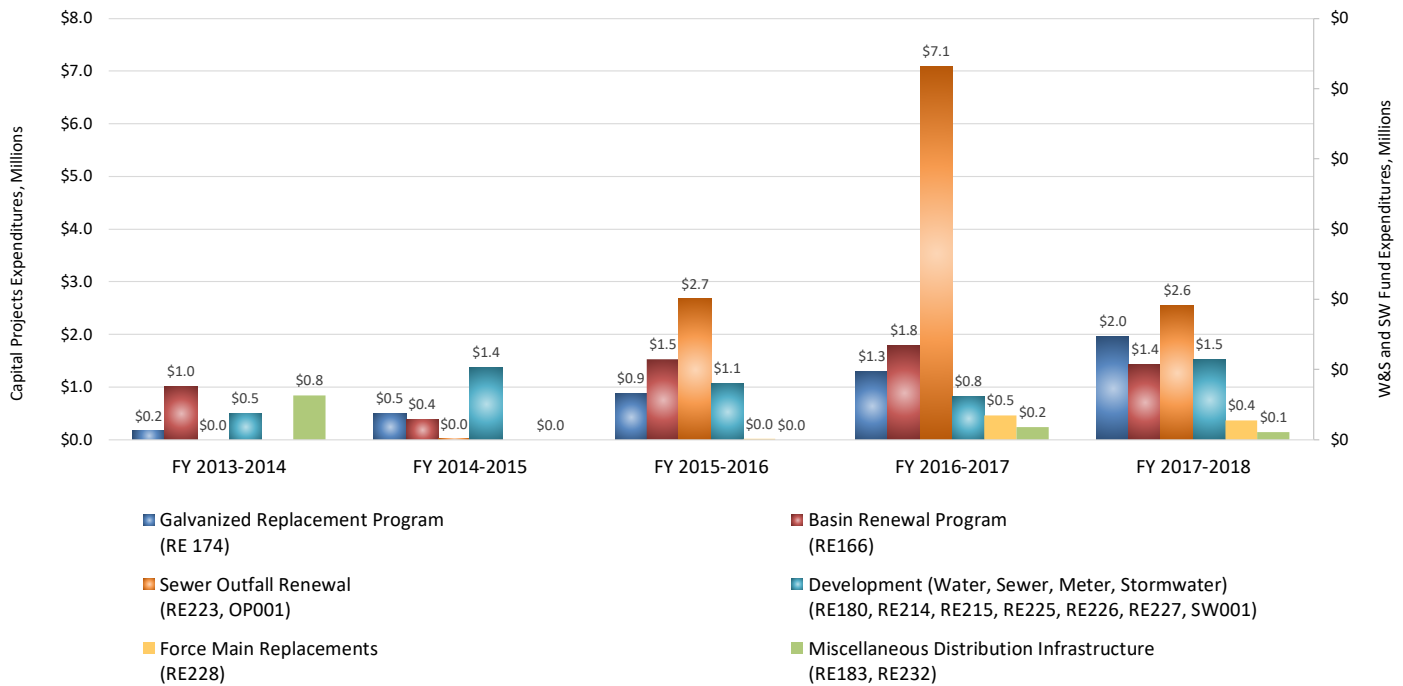
## Underway or Planned:







## SUMMARY OF DISTRIBUTION AND CONVEYANCE ANNUAL CAPITAL SPENDING



## ANNUAL CAPITAL SPENDING

	FY 2013-2014	FY 2014-2015	FY 2015-2016	FY 2016-2017	FY 2017-2018
Galvanized Replacement Program (RE 174)	\$170,029	\$510,140	\$876,219	\$1,301,274	\$1,964,307
Basin Renewal Program (RE166)	\$1,017,095	\$389,393	\$1,533,862	\$1,788,554	\$1,434,946
Sewer Outfall Renewal (RE223, OP001)	\$0	\$19,606	\$2,674,397	\$7,090,180	\$2,557,102
Development (Water, Sewer, Meter, Stormwater) (RE180, RE214, RE215, RE225, RE226, RE227, SW001)	\$510,079	\$1,368,951	\$1,079,292	\$821,790	\$1,525,288
Force Main Replacements (RE228)	\$0	\$0	\$19,379	\$458,837	\$372,366
Miscellaneous Distribution Infrastructure (RE183, RE232)	\$840,104	\$0	\$0	\$242,776	\$143,396
All Pipeline Related Projects	\$5,299,905	\$5,185,584	\$10,506,512	\$15,427,115	\$7,997,404

## 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

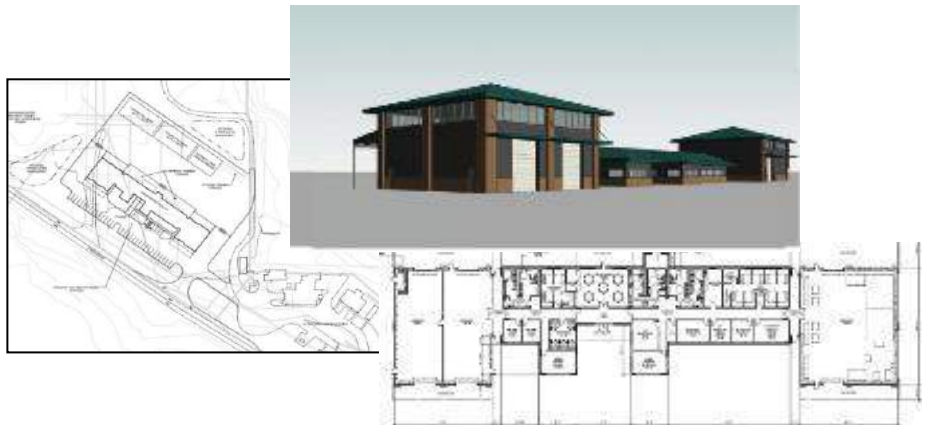


requirements. The FY 2018 – 2019 Capital Budget includes four smaller projects totaling \$271K that will be started under this line; [Casey Capacity Evaluation](#), [Three Secondary Clarifier Baffles](#), [Scum Trough Assembly](#), [Primary Clarifier Solids Meter](#), and a [Polymer Tank](#) for Pelletizing Operations.



#### [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 should be completed early fall of 2018.



#### [RE219 – LIFT STATION REHABILITATION](#)

This construction line is used to fund capital improvements to the 41 lift stations that are part of the sewer conveyance infrastructure throughout the County. A comprehensive Lift Station Assessment 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. A current project under construction in this line is the Rum Creek Lift Station upgrade with a cost of \$2.1M.

#### [RE229 – WATER PRODUCTION FACILITIES IMPROVEMENTS](#)

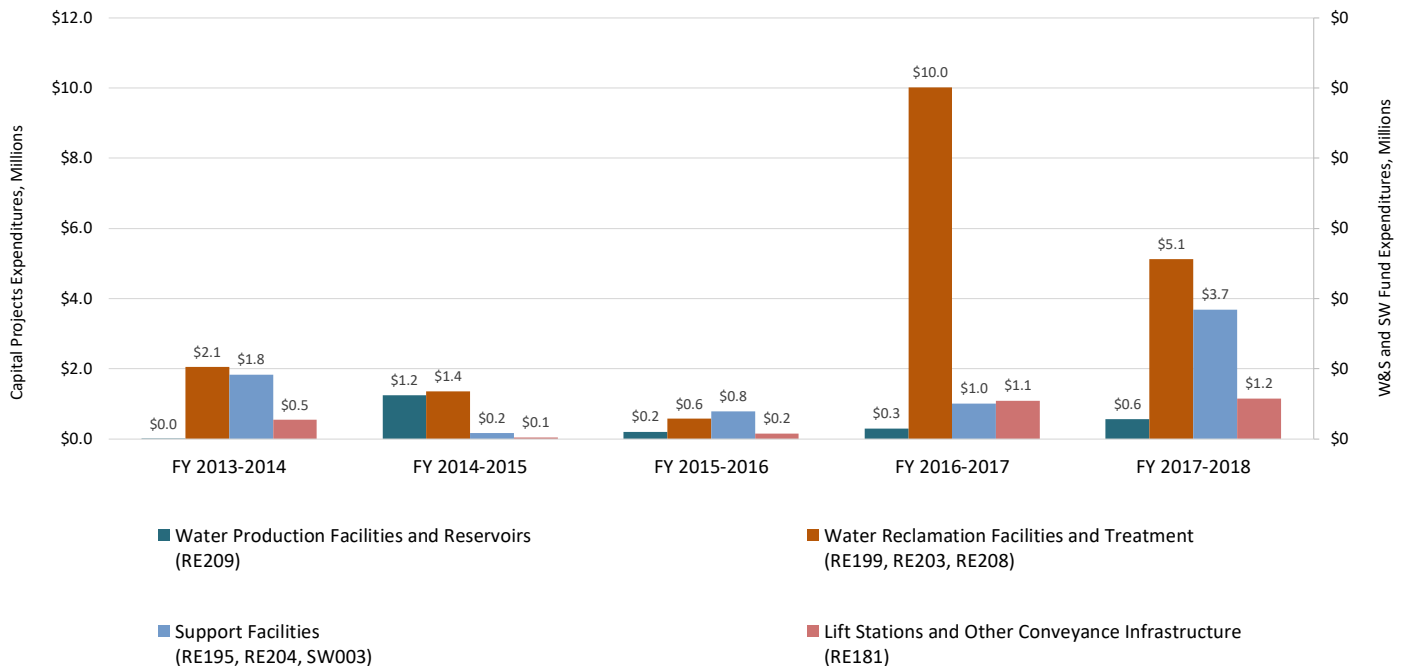
This main construction line contains capital projects for the work done at one of three water production facilities or for improving water quality in the reservoirs that supply these water plants. The FY 2018 – 2019 Capital Budget will



fund two smaller projects totaling \$140K: [rebuilding two pumps](#) and [flow meters, controllers and software](#) at the Hicks Water Production Plant.

Other major projects that were funded by FY 2017-2018 budget surplus funds approved by the Board of Directors under this construction line was the *Hooper Lower Pond Solids Handling* initiative that will replace the current sludge removal system at the Hooper Plant. This \$5.0M 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. This project was delayed from the FY 2017-2018 budget due to 'Taste and Odor' Issues experienced in the fall due to algae bloom. The second project funded by budgetary surplus of \$1.75M is a generator [SMP 307] [WP 2016-10] to provide emergency back-up power in the event of an electrical outage.

#### SUMMARY OF FACILITY IMPROVEMENTS ANNUAL CAPITAL SPENDING



#### ANNUAL CAPITAL SPENDING

	FY 2013-2014	FY 2014-2015	FY 2015-2016	FY 2016-2017	FY 2017-2018
Water Production Facilities and Reservoirs (RE209)	\$4,125	\$1,240,741	\$209,382	\$293,844	\$572,886
Water Reclamation Facilities and Treatment (RE199, RE203, RE208)	\$2,056,531	\$1,353,726	\$575,757	\$10,009,355	\$5,129,804
Support Facilities (RE195, RE204, SW003)	\$1,833,017	\$177,263	\$795,315	\$1,008,445	\$3,682,842
Lift Stations and Other Conveyance Infrastructure (RE181)	\$545,839	\$52,288	\$159,350	\$1,094,461	\$1,153,273
All Facility Improvement Projects	\$4,439,511	\$2,824,017	\$1,739,804	\$12,406,104	\$10,538,804



## 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 2018 – 2019 Budget has funding for \$60K for the [Renovation of Restrooms](#) at the Headquarters building and \$10K to [Update the Break Room](#) at the Hicks Water Treatment Plant.

### 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 includes funding of \$750K for the [2020 Strategic Master Plan Update](#).

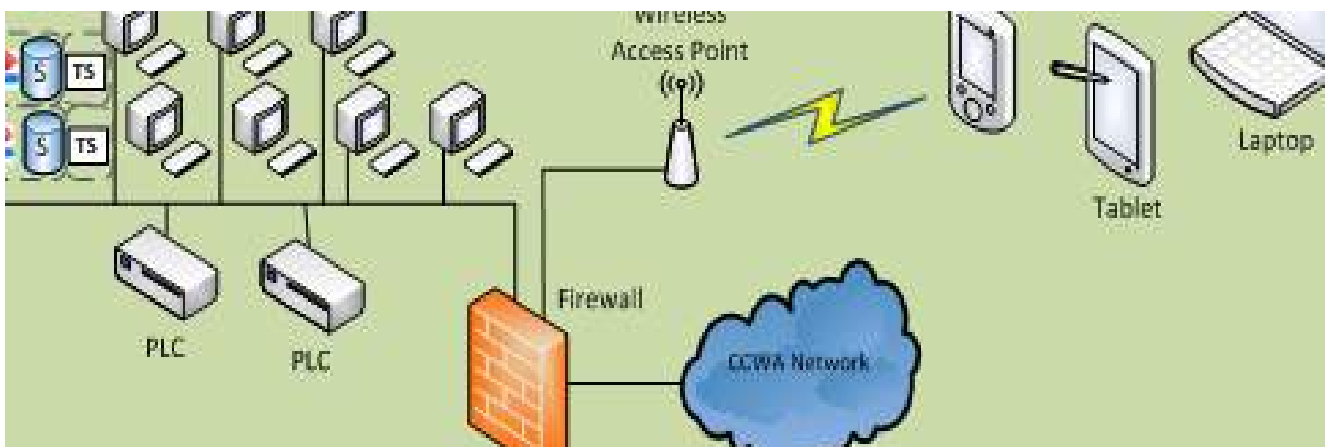
### RE205 – SCADA UPGRADES [SMP 906]

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 plants 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. Plant 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 2018-2019)







### RE220 – CUSTOMER INFORMATION SYSTEM DEVELOPMENT

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 in the summer of 2019.

### 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.

This two-phase initiative has a total cost of \$2.5M and was funded the previous two budgets. The first phase of the project was completed in March 2017 and the second phase of the project will be completed by December 2018.

### RE230 – INFORMATION TECHNOLOGY PROJECTS

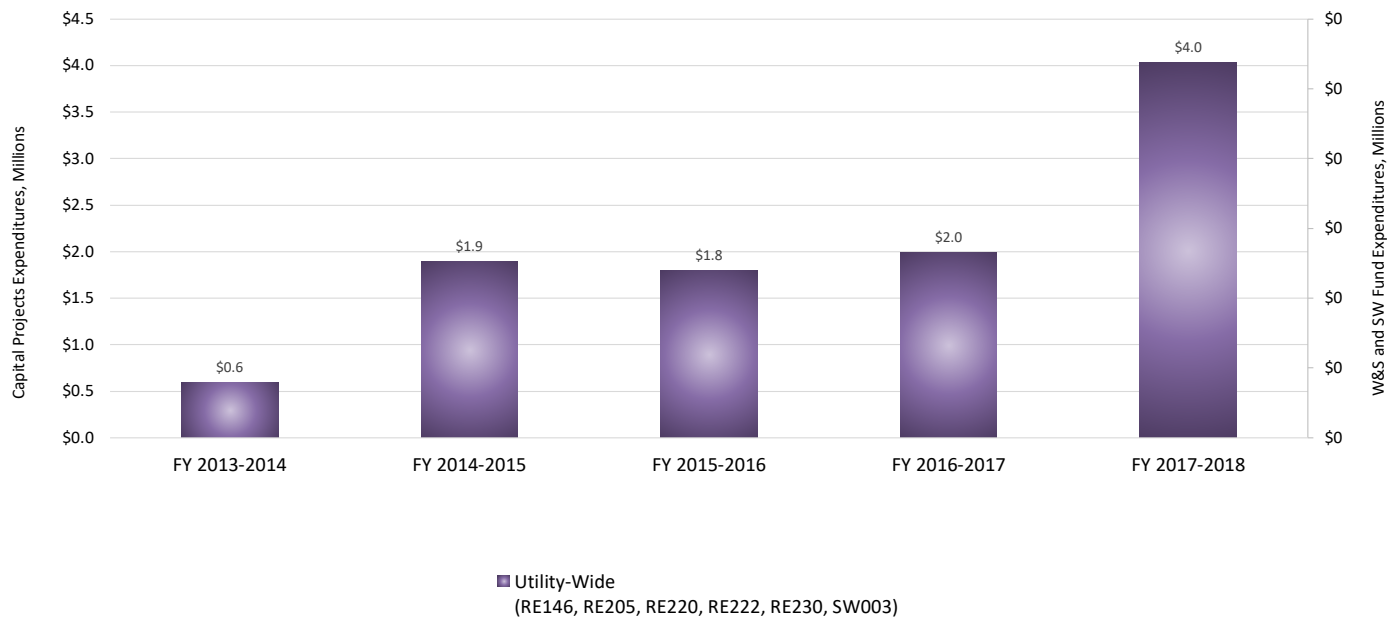
This construction line contains capital projects that improve the technology infrastructure of the Authority. Projects under this Renewal and Extension line include network upgrades and improvements and consist of both hardware and software enhancements. The largest initiative under this line is the JD Edwards ERP System upgrade with a cost of \$2.5M. This project will occur during FY 2018 -2019 and was funded in prior year budgets.

The 2018 – 2019 capital budget funds a total of \$96K for the following projects: [Infrastructure Improvements](#), [Auto Attendant Upgrade](#), [Voice Environment Upgrade](#), and [Help Desk Renovations](#).





## SUMMARY OF FACILITY IMPROVEMENTS ANNUAL CAPITAL SPENDING



## ANNUAL CAPITAL SPENDING

	FY 2013-2014	FY 2014-2015	FY 2015-2016	FY 2016-2017	FY 2017-2018
Utility-Wide (RE146, RE205, RE220, RE222, RE230, SW003)	\$598,541	\$1,893,126	\$1,800,552	\$1,992,911	\$4,028,479

## Capital Project Funding FY 2018 – 2019 – 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* (Renewal and Replacement) 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, \$11.1 M has been spent and 109 projects completed.

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 that follows shows a summary of stormwater infrastructure projects by fiscal year.

	SW-004 (CIPP)			SW-005 (Open Cut)			Sum of All Years		
	LF	Total \$	\$/LF	LF	Total \$	\$/LF	LF	Total \$	\$/LF
FY 2016	2,972	\$ 1,001,108	\$336.85	7,353	\$ 2,230,165	\$303.30	10,325	\$ 3,231,273	\$320.07
FY 2015	5,850	\$ 1,582,819	\$270.57	4,480	\$ 1,517,832	\$338.80	10,330	\$ 3,100,650	\$304.68
FY 2014	8,362	\$ 2,213,246	\$264.68	5,680	\$ 1,449,543	\$358.40	14,042	\$ 3,662,789	\$311.54
FY 2013	6,400	\$ 1,515,190	\$236.75	3,854	\$ 979,168	\$360.81	10,254	\$ 2,494,357	\$298.78
FY 2012	11,574	\$ 2,598,507	\$230.51	7,318	\$ 1,239,107	\$230.59	18,892	\$ 3,837,614	\$230.55
FY 2011	9,775	\$ 1,508,688	\$154.34	6,742	\$ 1,203,471	\$178.50	16,517	\$ 2,712,159	\$166.42
FY 2010	2,280	\$ 793,421	\$347.99	8,758	\$ 1,908,816	\$217.95	11,038	\$ 2,702,237	\$282.97
FY 2009	1,745	\$ 807,771	\$462.91	2,912	\$ 962,319	\$330.47	4,657	\$ 1,770,090	\$396.69
Total	48,958	\$ 12,020,749	\$288.07	47,097	\$ 11,490,420	\$289.85	96,055	\$ 23,511,169	\$288.96
	9 Miles			9 Miles			18 Miles		





*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 2018 – 2019 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 2018 – 2019 budget will fund \$1,773,001 of [R/R pipe replacement](#).







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.

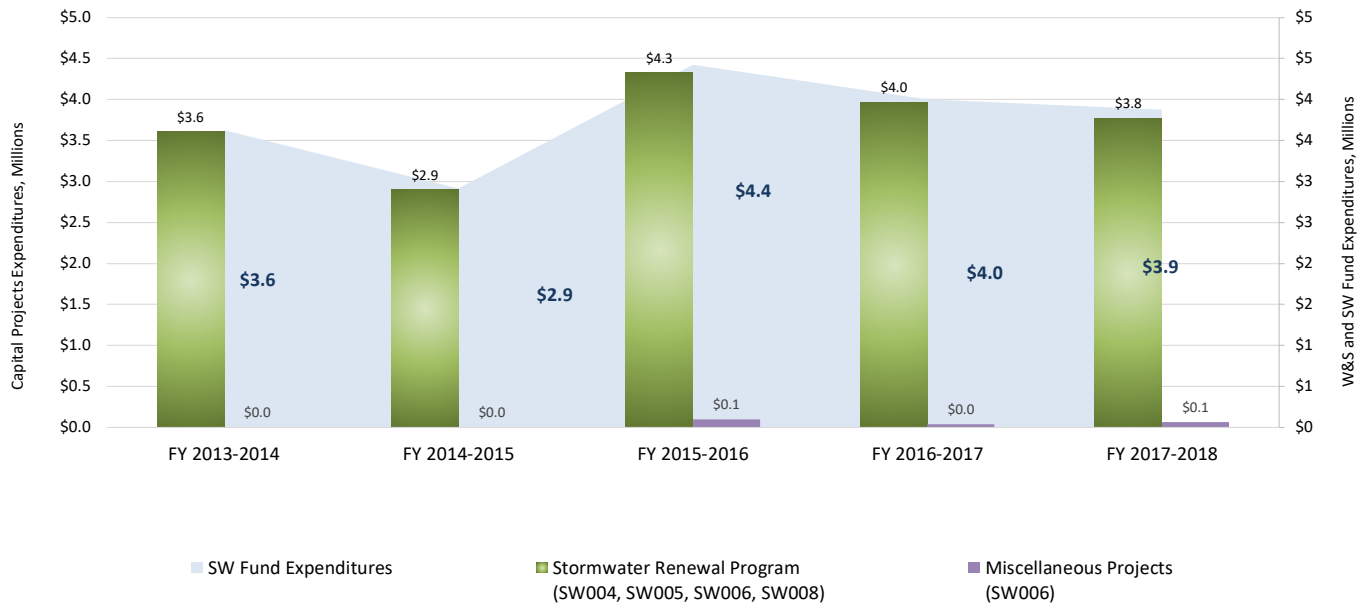


#### *SW008 – VETERAN’S PARKWAY PHASE 2*

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 2018 - 2019 Budget Funding Summary

### WATER AND SEWER UTILITY - RENEWAL AND EXTENSION FUND

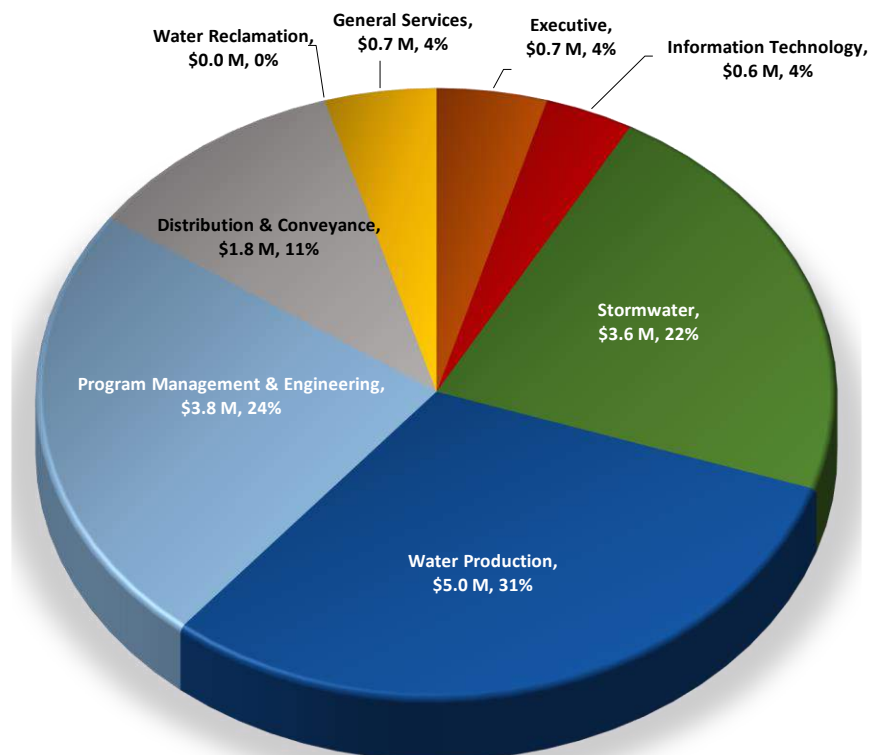
For the Fiscal Year Beginning May 1, 2018

Construction			Construction		
Line	Project Description	Amount Budgeted	Line	Project Description	Amount Budgeted
[RE146]	HQ Restroom Renovations	\$ 60,000	[RE174]	Galvanized Main Replacements	\$ 1,750,000
[RE230]	Infrastructure Improvements	25,000	[RE166]	Basin Level Sewer Rehabilitation	2,000,000
[RE230]	Auto Attendant Upgrade	23,000	[RE223]	Jesters Creek Outfall East Replacement- Design	300,000
[RE230]	Voice Environment Upgrade	38,000	[RE220]	CIS Integration Support	75,000
[RE230]	Help Desk Renovations	10,000	[RE230]	JDE Integration Support	75,000
[RE146]	Fire Hydrant Meters (15)	30,000	[RE232]	Large Meter Replacements	500,000
[RE146]	Upgrade Breakroom - Hicks Plant	10,000	[RE180]	DOT - Stagecoach & Steel Rd	389,000
[RE229]	High Service Pump Rebuilds (2)	60,000	[RE180]	DOT - Tara Blvd	380,000
[RE229]	Flow Meters/Controllers/ Software	80,000	[RE199]	Casey Capacity Evaluation	100,000
[RE184]	2020 Strategic Master Plan	750,000	[RE199]	Baffles for three Secondary Clarifiers	60,000
[RE226]	Sewer Line Inspection	10,000	[RE199]	Scum Trough Assembly	37,000
[RE227]	Meter Inspections	20,000	[RE199]	Primary Clarifier Solids Meter	24,000
	Distribution System Model Follow-up Projects	500,000	[RE199]	Polymer Tank	50,000
			<b>Total Capital Projects</b>		<b>\$ 7,356,000</b>

### STORMWATER UTILITY - CONSTRUCTION FUND

For the Fiscal Year Beginning May 1, 2018

Construction		
Line	Project Description	Amount Budgeted
[SW003]	Building A Septic to Sanitary Sewer	\$ 20,000
[SW004]	Cured In Place Pipe	1,500,000
[SW005]	Removal and Replacement	1,773,001
<b>Total Capital Projects</b>		<b>\$ 3,293,001</b>





## Renewal and Extension Funded Projects

### FUNDING SOURCES

DESCRIPTION OF REVENUE SOURCES	AMOUNT
Other Financing Sources:	
Capital Budget Transfers FY 2018-2019	\$ 7,356,000
from Water and Sewer Operating Fund	
<b>Total Funding Sources</b>	<b>\$ 7,356,000</b>

### PROJECTS

BUDGET UNIT - PROJECT SPONSOR	GENERAL PROJECT DESCRIPTION	AMOUNT
General Manager	<a href="#">HQ Restroom Renovations</a>	\$ 60,000
Information Technology	<a href="#">Infrastructure Improvements</a>	25,000
Information Technology	<a href="#">Auto Attendant Upgrade</a>	23,000
Information Technology	<a href="#">Voice Environment Upgrade</a>	38,000
Information Technology	<a href="#">Help Desk Renovations</a>	10,000
Meter Services	<a href="#">Fire Hydrant Meters (15)</a>	30,000
Terry R Hicks Water Production Complex	<a href="#">Update Break Room</a>	10,000
Terry R Hicks Water Production Complex	<a href="#">High Service Pump Rebuild (2)</a>	60,000
Terry R Hicks Water Production Complex	<a href="#">Flow Meters/Controllers/Software</a>	80,000
PM&E Department Manager	<a href="#">2020 Strategic Master Plan</a>	750,000
PM&E Department Manager	<a href="#">Distribution System Model Follow-Up Projects</a>	500,000
Construction Services	<a href="#">Sewer Line Inspection</a>	10,000
Construction Services	<a href="#">Meter Inspections</a>	20,000
Construction Services	<a href="#">Galvanized Water Main Replacements</a>	1,750,000
Construction Services	<a href="#">Basin Level Sewer Rehabilitation</a>	2,000,000
Construction Services	<a href="#">Jesters Creek Outfall East Replacement Design</a>	300,000
Geographic Information System	<a href="#">Customer Information System (CIS) Integration Support</a>	75,000
Geographic Information System	<a href="#">JDE Integration Support</a>	75,000
D&C Department Manager	<a href="#">Large Meter Replacements</a>	500,000
Water Distribution Maintenance	<a href="#">Department of Transportation (DOT) – Pipe Extension and Relocation at Stagecoach and Steel Roads</a>	389,000
Water Distribution Maintenance	<a href="#">Department of Transportation (DOT) – Pipe Relocation at Tara Boulevard</a>	380,000
WB Casey WRP	<a href="#">Casey Capacity Evaluation</a>	100,000
WB Casey WRP	<a href="#">Secondary Clarifier Baffles</a>	60,000
WB Casey WRP	<a href="#">Scum Trough Assembly</a>	37,000
WB Casey WRP	<a href="#">Primary Clarifier Solids Meter</a>	24,000
Sludge Pelletizing	<a href="#">Polymer Tank</a>	50,000
<b>Total Projects</b>		<b>\$ 7,356,000</b>





## Renewal and Extension Funded Projects – Detail by Project

### HQ Restroom Renovations

**Department:** Executive

**Fund:** R & E

**Budget Unit:** General Manager

**Utility:** Water / Sewer

### HQ Restroom Renovations - \$60,000

#### DESCRIPTION OF PROJECT

This project is to redesign and upgrade approximately four restrooms in the HQ Building. The restrooms selected are both the men and women's on the 2nd and 3rd floors. Our goal is to improve the function and appearance of the restrooms including handicap accessibility and water and energy use efficiencies.

#### Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1

<u>Available</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
\$0	\$60,000	\$0	\$0	\$0	\$0

#### IMPACT ON OPERATING BUDGET

This project is replacement of existing infrastructure and will have a negligible impact to the operating budget primarily due to slight decreases in utility bills.





## Infrastructure Improvements

**Department:** Executive

**Fund:** R & E

**Budget Unit:** Information Technology

**Utility:** Water / Sewer

**Infrastructure Improvements - \$25,000**
**DESCRIPTION OF PROJECT**

This project is for fiber infrastructure improvements or replacements at CCWA sites.

**Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1**

<u>Available</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
\$0	\$25,000	\$2,500	\$2,500	\$2,500	\$2,500

**IMPACT ON OPERATING BUDGET**

The change to the annual operating budget for this project will be an increase of approximately \$2,500 and are related to changes in utility charges and standard IT maintenance costs.





## Auto Attendant Upgrade

**Department:** Executive

**Fund:** R & E

**Budget Unit:** Information Technology

**Utility:** Water / Sewer

**Auto Attendant Upgrade - \$23,000**
**DESCRIPTION OF PROJECT**

Cisco Auto Attendant Upgrade software for the operator to be able to manage call flow, we are upgrading to the latest version, our current version is over three years old.

**Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1**

<u>Available</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
\$0	\$23,000	\$1,150	\$1,150	\$1,150	\$1,150

**IMPACT ON OPERATING BUDGET**

This project is a software upgrade to existing IT infrastructure. The impact on the operating budget for this project will be \$1,150 and consists of annual maintenance and utility charges.







Voice Environment Upgrade

Department:	Executive	Fund:	R & E
Budget Unit:	Information Technology	Utility:	Water / Sewer

Voice Environment Upgrade - \$38,000

DESCRIPTION OF PROJECT

All application servers that use Cisco Voice over IP need to be upgraded to latest version. This is for hardware, software and outside services to assist with set-up.

Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1

<u>Available</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
\$0	\$38,000	\$7,600	\$7,600	\$7,600	\$7,600

IMPACT ON OPERATING BUDGET

The impact on the operating budget for this project is \$7,600 and will consist of changes in annual maintenance fees which are estimated at 20 percent of the project cost.





## Help Desk Renovations

**Department:** Executive

**Fund:** R & E

**Budget Unit:** Information Technology

**Utility:** Water / Sewer

**Help Desk Renovations - \$10,000**
**DESCRIPTION OF PROJECT**

This is a small renovation project to create additional workspace in the Help Desk. This will allow the space to have additional room to configure computers and troubleshoot as needed.

**Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1**

<u>Available</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
\$0	\$10,000	\$0	\$0	\$0	\$0

**IMPACT ON OPERATING BUDGET**

This project is the reconfiguration of the current workspace and will have a neutral impact to the operating budget.





## Fire Hydrant Meters (15)

Department: Executive

Fund: R &amp; E

Budget Unit: Meter Services

Utility: Water / Sewer

## Fire Hydrant Meters (15) - \$30,000

## DESCRIPTION OF PROJECT

Hydrant meters are leased by customers to allow access to water through a fire hydrant. The hydrant meter measures the usage for billing purposes. The use of hydrant meters has increased requiring 15 hydrant meters to be added to the CCWA current inventory of 88. If hydrant meters are not available, people will be tempted to use water from the hydrant without the usage being measured and revenue will be lost.

## Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1

<u>Available</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
\$0	\$30,000	(\$22,875)	(\$22,875)	(\$22,875)	(\$22,875)

## IMPACT ON OPERATING BUDGET

The average annual revenue per fire hydrant is \$1,600. Hydrant meters are serviced each time they are returned and average annual maintenance per meter is \$75.

Applying that amount to the additional 15 meters would result in an annual increase in revenue of \$24,000 and an annual increase in expense of \$1,125 for a net impact to the operating budget of \$22,875.





## Update Break Room

**Department:** Water Production

**Fund:** R & E

**Budget Unit:** Terry R Hicks Water  
Production Complex

**Utility:** Water / Sewer

**Update Breakroom - \$10,000**
**DESCRIPTION OF PROJECT**

The breakroom at the Hicks Plant has had no improvements since the building was constructed in 1999; all appliances and cabinets are 19 years old. Because plants have to be manned at all times, the operators have their meals in the breakroom during their shifts and need to have working appliances and cabinets.

**Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1**

<u>Available</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
\$0	\$10,000	\$0	\$0	\$0	\$0

**IMPACT ON OPERATING BUDGET**

This project is to update the existing area and will have a neutral impact to the operating budget.





## High Service Pump Rebuild (2)

**Department:** Water Production

**Fund:** R & E

**Budget Unit:** Terry R Hicks Water  
Production Complex

**Utility:** Water / Sewer

**High Service Pump Rebuild (2) - \$60,000**
**DESCRIPTION OF PROJECT**

This project is to rebuild two High Service Pumps that pump treated water from the water production plant to repump stations that distribute water throughout the County. The maintenance that will be performed will include the replacement of motors and will extend the life of these pumps and maintain their output.

**Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1**

<u>Available</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
\$0	\$60,000	\$0	\$0	\$0	\$0

**IMPACT ON OPERATING BUDGET**

There will be a neutral impact on the operating budget for this project as it will assist in maintaining current service levels of existing pumps.





## Flow Meters/Controllers/Software

<b>Department:</b>	<b>Water Production</b>	<b>Fund:</b>	<b>R &amp; E</b>
<b>Budget Unit:</b>	<b>Terry R Hicks Water Production Complex</b>	<b>Utility:</b>	<b>Water / Sewer</b>

## Flow Meters/Controllers/Software - \$80,000

## DESCRIPTION OF PROJECT

This project includes *Flow Meters* that attach to system filters and *Flow-paced dosing controllers* and connects them to the plant SCADA system. The flow meters will accurately measure the rate water travels through the system filters at all times; one of the requirements for our permit. Currently flows are not metered and are estimated based on gpm/ft<sup>2</sup> of each filter. These flow meters will also help with a *High Rate Filter Study* planned this year which requires the measurement of flow through our filters. Another component of this project is *Flow-paced Chemical Dosing*. Chemicals, including Alum, bleach and chlorine dioxide chemicals, are now being dosed using gravity or volume feed rates that are manually set. Flow-paced dosing adjusts the chemicals released into the water automatically based on the amount of water brought into the plant so no manual adjustments would be needed. This control will provide the maximum amount of treatment with a minimal amount of chemical. It will also lessen the risk of operator error. These components will be linked to the SCADA system which will alert water operators through alarms when water flow increases or decreases.

## Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1

<u>Available</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
\$0	\$80,000	\$4,000	\$4,000	\$4,000	\$4,000

## IMPACT ON OPERATING BUDGET

The primary purpose of this project is to met Georgia's Environmental Protection Division (EPD) permit requirements. Improving the accuracy of chemical dosing with this system may affect chemical costs. The impact to chemical expenses will not be known until chemical trends are measured after implementation but an increase of \$4,000 in annual maintenance of equipment and software is estimated.







## 2020 Strategic Master Plan

**Department:** Program Management and Engineering

**Fund:** R & E

**Budget Unit:** PM&E Department Manager

**Utility:** Water / Sewer

## 2020 Strategic Master Plan - \$750,000

## DESCRIPTION OF PROJECT

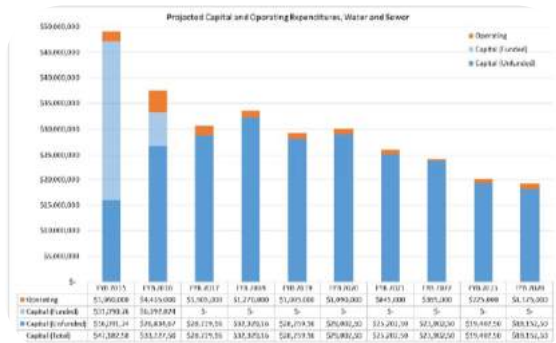
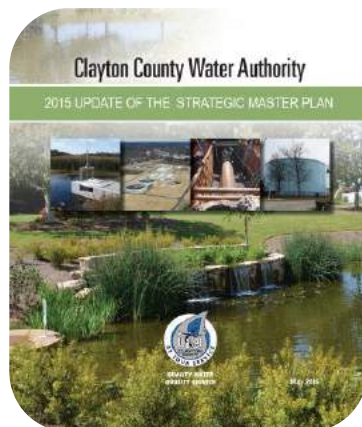
CCWA updates its Master Plan every ten years, with five year updates. The 2020 Strategic Master Plan will need to be initiated in FY 2018-2019 and will include a comprehensive look of project needs across CCWA. The first phase of the project will include an update of the Water Production and Water Reclamation Facility Evaluation study that was completed in 2016. This phase establishes and confirms the direction of CCWA as it relates to the number of plants in operation. Once that is complete, identification of the individual projects needed at the facilities can be identified, as well as other project needs required to support CCWA's overall strategic direction. A ten-year plan including cost and schedule estimates will be included.

## Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1

<u>Available</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
\$0	\$750,000	\$0	\$0	\$0	\$0

## IMPACT ON OPERATING BUDGET

The Strategic Master Plan will identify the capital improvements needed throughout the Authority over the next ten years. The 2015 Update assessed over \$350 million in capital projects. The impact to the FY 2018-2019 operating budget will be the labor hours of CCWA staff to assist in workshops during the development of the Plan and is difficult to estimate due to the number of staff, their positions, and the time of involvement as meetings have not been scheduled. Additionally, the ongoing impact to the operating budget will be specific to the completed capital projects constructed under this plan.





## Distribution System Model Follow-Up Projects

**Department:** Program Management and Engineering

**Fund:** R & E

**Budget Unit:** PM&E Department Manager

**Utility:** Water / Sewer

## Distribution System Model Follow-Up Projects - \$500,000

## DESCRIPTION OF PROJECT

One project that is currently underway is an update of CCWA's Distribution System Model. As part of the scope of that project, once the model is developed and calibrated, several operational analyses will be conducted. The specific scenarios to be modeled are in the process of being defined, however CCWA anticipates that several capital project needs will be identified once the model provides answers and solutions to various scenarios. For example, the model may be used to identify water age issues in certain areas of the county. Several potential solutions are likely to be recommended and will require funding to implement. This allocated budget amount is being reserved in Renewal and Extension to begin saving for the recommended project.

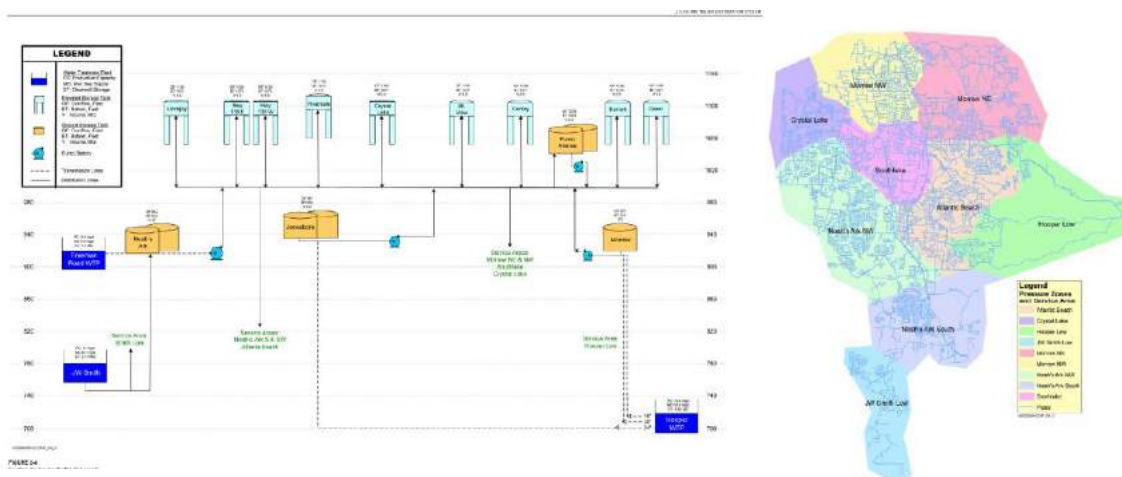
[WP 2018-10]

## Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1

<u>Available</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
\$0	\$500,000	\$0	\$0	\$0	\$0

## IMPACT ON OPERATING BUDGET

This funding is being reserved for the recommended project from the Distribution System Model. Because it is undefined at this time, the impact to the operating budget cannot be estimated.





## Sewer Line Inspection

**Department:** Program Management and Engineering

**Fund:** R & E

**Budget Unit:** Construction Services

**Utility:** Water / Sewer

### Sewer Line Inspection - \$10,000

#### 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>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
\$0	\$10,000	\$15,000	\$15,000	\$15,000	\$15,000
		\$3,388	\$6,861	\$10,334	\$13,807
	\$10,000	\$18,388	\$21,861	\$25,334	\$28,807

#### 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/ft. The 3-year average donated pipe infrastructure is \$611,000. Maintenance costs are based on the feet of pipe infrastructure. At an estimated \$108/ft., that is an additional 5,555 feet to maintain and would have an impact to the annual operating budget of \$3,388.





## Meter Inspections

**Department:** Program Management and Engineering

**Fund:** R & E

**Budget Unit:** Construction Services

**Utility:** Water / Sewer

### Meter Inspections - \$20,000

#### DESCRIPTION OF PROJECT

This set of meter jobs will include the inspection of larger meter installations donated as part of new commercial development.

#### Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1

<u>Available</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
\$0	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
		\$163	\$326	\$489	\$652
	\$20,000	\$20,163	\$20,326	\$20,489	\$20,652

#### 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 at a rate of \$11.65/meter. The average number of meters donated annually over the previous 3 years is 14. The additional annual cost of maintenance for the estimated 14 meters that this inspection budget would be \$163.





## Galvanized Water Main Replacements

**Department:** Program Management and Engineering

**Fund:** R & E

**Budget Unit:** Construction Services

**Utility:** Water / Sewer

## Galvanized Water Main Replacements - \$1,750,000

## DESCRIPTION OF PROJECT

This project is a continuation of a 20 to 30 year program of replacing galvanized steel water mains. 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/ft. This amount budgeted will replace approximately 3.3 miles of galvanized pipe. The Board of Directors allocated an additional \$500,000 from FY 2017-2018 surplus for this program which will add another mile of pipe replacement planned for this budget year. [SMP 601]

## Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1

<u>Available</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
\$0	\$2,250,000	\$2,250,000	\$2,250,000	\$2,250,000	\$2,250,000
		\$21,710	\$25,160	\$28,610	\$32,060
	\$2,250,000	\$2,271,710	\$2,275,160	\$2,278,610	\$2,282,060

## IMPACT ON OPERATING BUDGET

The impact on the operating budget for \$1,750,000 will consist of general maintenance of the replaced existing infrastructure of 3.3 miles of pipe (~17,500 ft.) is \$9,450 (\$0.54/ft.). The annual general maintenance expense for the total project spend of \$2,250,000 in FY 2018-2019 to replace 4.3 miles of pipe (~22,704 ft) is \$12,260 (\$0.54/ft.).







## Basin Level Sewer Rehabilitation

**Department:** Program Management and Engineering

**Fund:** R & E

**Budget Unit:** Construction Services

**Utility:** Water / Sewer

### Basin Level Sewer Rehabilitation - \$2,000,000

#### 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 million will replace about 2.5 miles (~13,200 ft.)

[SMP 614]

#### Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1

<u>Available</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
\$0	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000
		\$6,223	\$12,446	\$18,669	\$24,892
	\$2,000,000	\$2,006,223	\$2,012,446	\$2,018,669	\$2,024,892

#### IMPACT ON OPERATING BUDGET

The net impact on the operating budget for this project is \$6,223. It costs approximately \$8,052 annually for the general maintenance of 2.5 miles (13,200 ft.) of existing sewer pipe infrastructure at \$0.61/ft.

Cost savings in energy and chemicals would reduce that impact by \$1,829. This is due to a reduction in I/I which is estimated to be responsible for \$1 million of water reclamation expenses. (2.5 miles is .18% of 1,367 miles of sewer pipeline)







## Jesters Creek Outfall East Replacement Design

**Department:** Program Management and Engineering

**Fund:** R & E

**Budget Unit:** Construction Services

**Utility:** Water / Sewer

## Jesters Creek Outfall East Replacement Design - \$300,000

## DESCRIPTION OF PROJECT

Several replacement projects are required along the Jesters Creek Outfall East line. The projects were found upon review of inspection data and through visual inspections along the line. Design services are required to develop plans and specifications to complete the pipe replacements.

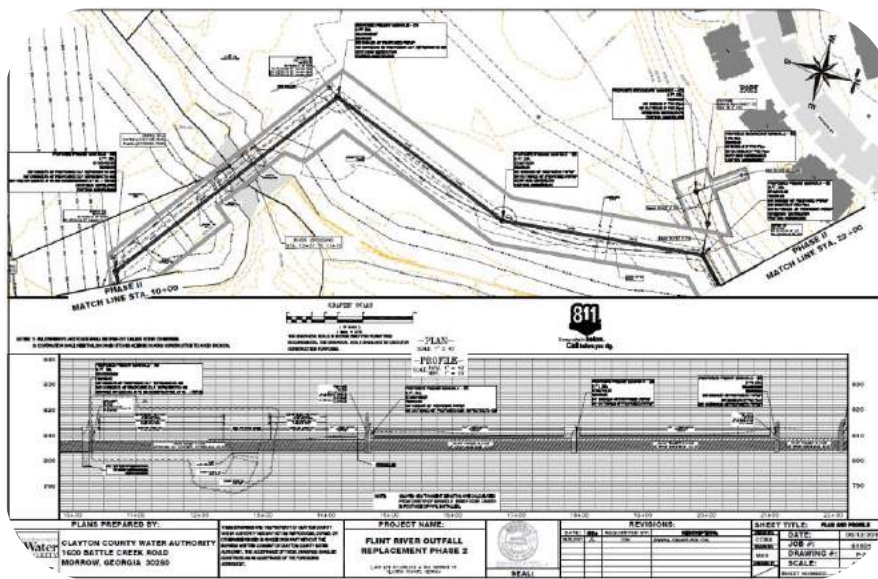
[SMP 617][WP 2016-01]

## Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1

<u>Available</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
\$0	\$300,000	\$0	\$0	\$0	\$0

## IMPACT ON OPERATING BUDGET

There is no impact on the operating budget this design work. It will provide detailed specifications and cost estimates for the pipe replacements that will done.





## Customer Information System (CIS) Integration Support

<b>Department:</b>	<b>Program Management and Engineering</b>	<b>Fund:</b>	<b>R &amp; E</b>
<b>Budget Unit:</b>	<b>Geographic Information System</b>	<b>Utility:</b>	<b>Water / Sewer</b>

## Customer Information System (CIS) Integration Support - \$75,000

## DESCRIPTION OF PROJECT

The existing Customer Information System (CIS) is being replaced with Cayenta and is currently underway. One primary goal of the CIS project is to allow customer service representatives the ability to use a single software (Cayenta). This requires Cayenta and Cityworks (the linear asset computerized maintenance management system) to be integrated at some level. Currently, that level of integration has not yet been defined. It is very likely programming changes to Cityworks will be required to allow the software systems to communicate and send information from Cayenta to Cityworks, and from Cityworks to Cayenta. This project will be used to acquire outside services to assist with the integration, if needed, and once the project is defined.

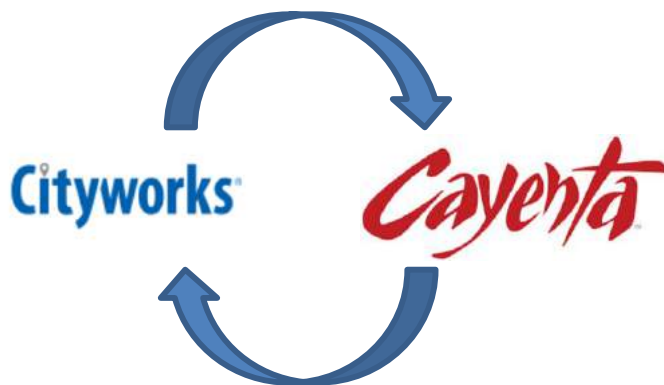
[SMP 157][WP 2015-09]

## Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1

<u>Available</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
\$0	\$75,000	(\$1,560)	(\$1,560)	(\$1,560)	(\$1,560)

## IMPACT ON OPERATING BUDGET

The impact on the operating budget for this project will be a savings in labor hours due to automating the flow of information between the software system field crews use and the system that customer support staff use. The current process requires logging into different systems, emails and phone calls. It is estimated that it could save about 2 hours of labor a





## JDE Integration Support

**Department:** Program Management and Engineering

**Fund:** R & E

**Budget Unit:** Geographic Information System

**Utility:** Water / Sewer

## JDE Integration Support - \$75,000

## DESCRIPTION OF PROJECT

JD Edwards is being upgraded and one of the goals of the project is to have JD Edwards and Cityworks (the linear asset computerized maintenance management system) be integrated at some level in terms of assets and costs. Currently, that level of integration has not yet been defined. It is very likely programming changes to Cityworks will be required to allow the software systems to communicate data to and from JD Edwards. This project will be used to acquire outside services to assist with the integration, if needed, and once the project is defined.

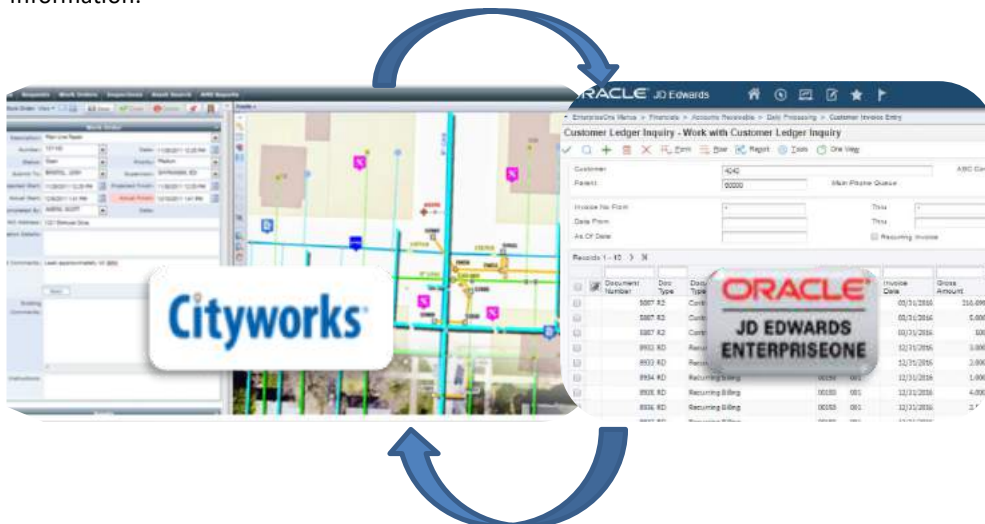
[SMP 156][WP 2015-06]

## Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1

<u>Available</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
\$0	\$75,000	(\$6,500)	(\$6,500)	(\$6,500)	(\$6,500)

## IMPACT ON OPERATING BUDGET

The impact on the operating budget for this integration is a savings of \$6,500 in labor. This savings would result from automating the flow of information between the software system pipe field crews use and the ERP used for work orders, time entry and warehouse issues. The current process requires double-entry into both Cityworks and JDE systems which does not always happen when crews are busy. This integration will provide better job costing, save multiple different staff duplicating transactions, and save warehouse staff time in locating the appropriate place to assign inventory issue costs. This double-entry and other inefficiencies is estimated to cost over 5 labor hours a week plus leads to incomplete information.





## Large Meter Replacements

**Department:** Distribution & Conveyance

**Fund:** R & E

**Budget Unit:** D&C Department Manager

**Utility:** Water / Sewer

**Large Meter Replacements - \$500,000**

**DESCRIPTION OF PROJECT**

This project will consist of the replacement of large meters that are not repairable or in need of full retros with backflows. With an average cost of \$25,000 per large meter, the budgeted amount of \$500,000 should replace about 20 meters.

**Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1**

<u>Available</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
\$0	\$500,000	\$233	\$233	\$233	\$233

**IMPACT ON OPERATING BUDGET**

This project replaces existing meters so it should have no additional impact to the operating budget. Ongoing maintenance of 20 existing meters (with backflows) at \$11.65 per meter is \$233 per year.





## Department of Transportation (DOT) – Pipe Extension and Relocation at Stagecoach and Steel Roads

**Department:** Distribution & Conveyance

**Fund:** R & E

**Budget Unit:** Water Distribution  
Maintenance

**Utility:** Water / Sewer

### Department of Transportation (DOT) - Pipe Extension and Relocation at Stagecoach and Steel Roads - \$389,000

#### DESCRIPTION OF PROJECT

This is part of a Department of Transportation (DOT) project for road reconstruction and a line extension for a new school under construction. It will replace 3,700 feet of existing 6-inch water main with a larger 12-inch water main and connect the water mains on Steele Road from Stagecoach to Anvil Block Road; a line extension of 3,000 feet of 8-inch pipe.

#### Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1

<u>Available</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
\$0	\$389,000	\$3,618	\$3,618	\$3,618	\$3,618

#### IMPACT ON OPERATING BUDGET

The impact on the annual operating budget is the cost of general maintenance of distribution pipe at \$0.54 per foot. The maintenance of 3,000 feet of new infrastructure increases annual expenses by \$1,620 and the ongoing maintenance of the 3,700 feet of existing infrastructure of \$1,998 has a neutral impact.







### Department of Transportation (DOT) – Pipe Relocation at Tara Boulevard

<b>Department:</b>	<b>Distribution &amp; Conveyance</b>	<b>Fund:</b>	<b>R &amp; E</b>
<b>Budget Unit:</b>	<b>Water Distribution Maintenance</b>	<b>Utility:</b>	<b>Water / Sewer</b>

### Department of Transportation (DOT) - Pipe Relocation at Tara Boulevard - \$380,000

#### DESCRIPTION OF PROJECT

This is part of a Department of Transportation (DOT) project to widen Tara Boulevard from Tara Road to Highway 54. This project requires the relocation of 3,700 feet of 24-inch water main and 100 feet of 8-inch water main along Tara Boulevard.

#### Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1

<u>Available</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
\$0	\$380,000	\$1,620	\$1,620	\$1,620	\$1,620

#### 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 \$2,052 for 3,800 feet of distribution (water) pipe.







## Casey Capacity Evaluation

**Department:** Water Reclamation

**Fund:** R & E

**Budget Unit:** WB Casey WRRF

**Utility:** Water / Sewer

**Casey Capacity Evaluation - \$100,000**
**DESCRIPTION OF PROJECT**

CCWA partnered with CH2M to perform a facility evaluation of water and water reclamation facilities to determine the optimal number of facilities to operate and maintain moving into the future. The evaluation project determined that it would be feasible to decommission our Shoal Creek WRF and pump the flow to the W.B. Casey WRRF for treatment. As part of the CCWA strategic master plan a capacity evaluation needs to be conducted at the W.B. Casey WRRF to determine what upgrades are needed to handle the additional loading at the plant. This is needed before moving into the design phase of upgrading Casey. This project is also needed to achieve the Water Reclamation Level of Service #2: Provide adequate treatment at WRF's for new and existing customers. Casey WRRF Capacity Projects /Solids Evaluation

[SMP 708 - Dewatering Facility][SMP 710- Casey WRRF Capacity Projects - 4th Bioreactor Basin (BRB)][WP 2018-09]

**Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1**

<u>Available</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
\$0	\$100,000	\$0	\$0	\$0	\$0

**IMPACT ON OPERATING BUDGET**

The impact of this evaluation will have a neutral impact on the operating budget but will determine capacity needs that will become capital improvement projects at the W.B. Casey WRRF.





## Secondary Clarifier Baffles

**Department:** Water Reclamation

**Fund:** R & E

**Budget Unit:** WB Casey WRRF

**Utility:** Water / Sewer

**Secondary Clarifier Baffles - \$60,000**
**DESCRIPTION OF PROJECT**

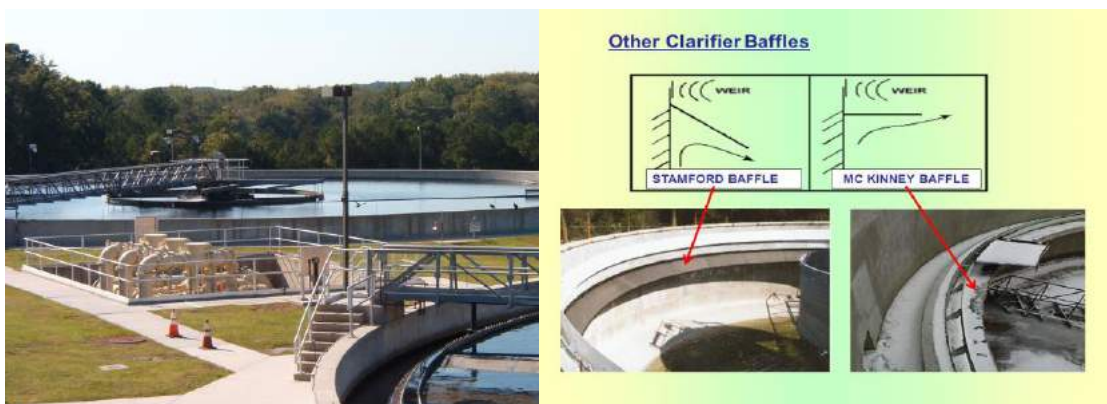
This project is for the custom build and installation of McKinney baffles in the 1, 2 and 3 secondary clarifiers at the W.B. Casey WRRF. This is needed to prevent solids carry over at the scum beach and during high flows. These baffles will enhance the water quality and efficiency of the clarification process as it will decrease the density of the currents in the clarifier which allow the solids to remain separated at the bottom of the clarifier. This project will also help the Water Reclamation Staff achieve one of our most important levels of service. Water Reclamation Level of Service #1: Discharge High Effluent Quality at all WRFs.

**Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1**

<u>Available</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
\$0	\$60,000	\$0	\$0	\$0	\$0

**IMPACT ON OPERATING BUDGET**

There is no impact to the operating budget. This is a change in type of baffle used; required for treatment. The primary purpose of this project is to enhance the clarification process by reducing the amount of particulates carried over the weir into the effluent. The baffles are designed to improve the clarifier and overall water quality.





## Scum Trough Assembly

**Department:** Water Reclamation

**Fund:** R & E

**Budget Unit:** WB Casey WRRF

**Utility:** Water / Sewer

**Scum Trough Assembly - \$37,000**
**DESCRIPTION OF PROJECT**

This request is to replace the current scum trough assembly in one of the three primary clarifiers at the W.B. Casey WRRF. The tipping troughs have extensive corrosion due to high levels of hydrogen sulfide in the process and will require replacement. The new unit will be made of stainless steel and should have a longer service life. The plan will be to have them all replaced over the next couple of years. This project will help the Water Reclamation staff meet our Water Reclamation Level of Service # 9: Eliminate quantity of grease present in CCWA conveyance system and WRF's.

**Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1**

<u>Available</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
\$0	\$37,000	\$0	\$0	\$0	\$0

**IMPACT ON OPERATING BUDGET**

This project will have a neutral impact on the operating budget. This is a replacement of an existing trough and will maintain current operational service levels.





## Primary Clarifier Solids Meter

**Department:** Water Reclamation

**Fund:** R & E

**Budget Unit:** WB Casey WRRF

**Utility:** Water / Sewer

**Primary Clarifier Solids Meter - \$24,000**
**DESCRIPTION OF PROJECT**

As part of CCWA's efficiency and innovation initiatives, the W.B. Casey WRRF Staff is requesting to purchase a primary clarifier solids meter for real time monitoring of the primary clarifier solids concentration. This particular solids meter uses microwave technology for reliable and accurate measurement of wastewater sludge treatment applications (0 – 40% total solids). This meter will automate the solids concentration being discharged from the primary clarifiers and outputs from the meter will be tied into the plant's SCADA system for monitoring and control. This meter should increase efficiency of the operation of the primary clarifiers by minimizing the amount of water being pumped to the sludge blending tank and reducing the amount of time operational staff have to manually sample the primary sludge concentration. This project will also help the Water Reclamation Staff achieve our Water Reclamation Level of Service #5: Achieve at most efficient cost of service to our customers.

**Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1**

<u>Available</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
\$0	\$24,000	(\$10,950)	(\$10,950)	(\$10,950)	(\$10,950)

**IMPACT ON OPERATING BUDGET**

The annual impact to the operating budget will be a savings of approximately \$10,950 in wages by eliminating 550 labor hours that it takes to manually sample sludge.





## Polymer Tank

**Department:** Water Reclamation

**Fund:** R & E

**Budget Unit:** Sludge Pelletizing

**Utility:** Water / Sewer

**Polymer Tank - \$50,000**
**DESCRIPTION OF PROJECT**

This project is needed to procure a new polymer tank, pump, piping and other essential materials for relocating the tank to new location in the Pelletizing Facility. The existing polymer tank is old and needs to be replaced and relocated to a more suitable location. This project will make the polymer mixing procedure for the Operators more efficient and will save time. Polymer is used in the pelletizing process to convert solids from sewer waste into fertilizer pellets that are then sold.

**Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1**

<u>Available</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
\$0	\$50,000	(\$3,650)	(\$3,650)	(\$3,650)	(\$3,650)

**IMPACT ON OPERATING BUDGET**

The impact on the operating budget for this project will be an annual savings of approximately \$3,650 in wages. A rough estimate of 180 labor hours are used annually to manually move polymer with a forklift and tote from an external tank into the pelletizing building and mixing tank.





## 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					
	2019	Type of Cost	2020	2021	2022	2023	2024
HQ Restroom Renovations	\$ 60,000	M,E	\$ -	\$ -	\$ -	\$ -	\$ -
Infrastructure Improvements	25,000	M,E	2,500	2,500	2,500	2,500	2,500
Auto Attendant Upgrade	23,000	M,E	1,150	1,150	1,150	1,150	1,150
Voice Environment Upgrade	38,000	M	7,600	7,600	7,600	7,600	7,600
Help Desk Renovations	10,000	M	-	-	-	-	-
Fire Hydrant Meters (15 new)	30,000	M	(22,875)	(22,875)	(22,875)	(22,875)	(22,875)
High Service Distribution Pump Rebuilds (2)	60,000	M,E	-	-	-	-	-
Update Breakroom at Hick's Water Production Plant	10,000	M	-	-	-	-	-
Flow meters, Chemical Dosing Controllers and Software	80,000	M,E	4,000	4,000	4,000	4,000	4,000
2020 Strategic Master Plan	750,000	A	-	-	-	-	-
Distribution System Model Follow-up Project	500,000	M	-	-	-	-	-
Sewer Line Inspection of Donated Infrastructure	10,000	M	3,388	3,388	3,388	3,388	3,388
Meter Inspections of Donated Infrastructure	20,000	M	163	163	163	163	163
Galvanized Main Replacements	1,750,000	M	9,450	9,450	9,450	9,450	9,450
Basin Level Sewer Rehabilitation	2,000,000	M,E	6,223	6,223	6,223	6,223	6,223
Jesters Creek Outfall East Replacement Design	300,000	A	-	-	-	-	-
CIS Integration Support	75,000	M,L	(1,560)	(1,560)	(1,560)	(1,560)	(1,560)
JDE Integration Support	75,000	M,L	(6,500)	(6,500)	(6,500)	(6,500)	(6,500)
Large Meter Replacements	500,000	M	233	233	233	233	233
Department of Transportation - Stagecoach and Steel Roads	389,000	M	3,618	3,618	3,618	3,618	3,618
Department of Transportation - Tara Boulevard	380,000	M	1,620	1,620	1,620	1,620	1,620
Casey Capacity Evaluation	100,000	A	-	-	-	-	-
Baffles for 3 Secondary Clarifiers	60,000	M	-	-	-	-	-
Scum Trough Assembly	37,000	M	-	-	-	-	-
Primary Clarifier Solids Meter	24,000	M,E	(10,950)	(10,950)	(10,950)	(10,950)	(10,950)
Polymer Tank	50,000	M,L	(3,650)	(3,650)	(3,650)	(3,650)	(3,650)
<b>Total FY 2018-2019 Capital Project Funding</b>	<b>\$7,356,000</b>						
<b>Net Increase/(Decrease) to Operating Budget</b>			<b>\$ (5,590)</b>	<b>\$ (5,590)</b>	<b>\$ (5,590)</b>	<b>\$ (5,590)</b>	<b>\$ (5,590)</b>

### 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

DESCRIPTION OF REVENUE SOURCES	AMOUNT
Other Financing Sources:	
Interfund Transfers from Stormwater Utility	\$ 3,293,001
<b>Total Funding Sources</b>	<b>\$ 3,293,001</b>

### PROJECTS

BUDGET UNIT - PROJECT SPONSOR	GENERAL PROJECT DESCRIPTION	AMOUNT
Stormwater Management	<a href="#">Building A Septic to Sanitary Sewer</a>	\$ 20,000
Stormwater Maintenance	<a href="#">Cured in Place Pipe (CIPP)</a>	1,500,000
Stormwater Maintenance	<a href="#">Removal and Replacement (R/R)</a>	1,773,001
<b>Total Projects</b>		<b>\$3,293,001</b>



## Building 'A' Septic to Sanitary Sewer

**Department:** Stormwater**Fund:** Construction**Budget Unit:** Stormwater Management**Utility:** Stormwater**Building A Septic to Sanitary Sewer - \$20,000****DESCRIPTION OF PROJECT**

Stormwater Building A is currently on septic tank and has had several issues with it. This project will connect this building to the sanitary sewer system.

**Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1**

<u>Available</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
\$0	\$20,000	\$500	\$500	\$500	\$500

**IMPACT ON OPERATING BUDGET**

The impact on the operating budget for this project will be an annual sewer charge of \$500.





## Cured in Place Pipe

**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>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
\$0	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000
		\$3,645	\$7,290	\$10,935	\$14,580
	\$1,500,000	\$1,503,645	\$1,507,290	\$1,510,935	\$1,514,580

**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

**Department:** Stormwater

**Fund:** Construction

**Budget Unit:** Stormwater Maintenance

**Utility:** Stormwater

**Removal and Replacement (R/R) - \$1,773,001**
**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 5,910 feet of pipe.

[SMP 214]

**Projected Expenditures - Next Five Consecutive Fiscal Years Beginning May 1**

<u>Available</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
\$0	\$1,773,001	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000
		\$4,787	\$8,837	\$12,887	\$16,937
	\$1,773,001	\$1,504,787	\$1,508,837	\$1,512,887	\$1,516,937

**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 5,910 linear feet at \$0.81/LF of stormwater pipe is \$4,787.







## 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					
		Type of Cost	2019	2020	2021	2022	2023
Stormwater Bldg. A - Septic Tank to Sewer	\$ 20,000	E	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500
Cured In Place Pipe (CIPP)	1,500,000	M	3,645	3,645	3,645	3,645	3,645
Removal and Replacement (R/R)	1,773,001	M	4,787	4,787	4,787	4,787	4,787
	<u>\$3,293,001</u>		<u>\$ 8,932</u>	<u>\$ 8,932</u>	<u>\$ 8,932</u>	<u>\$ 8,932</u>	<u>\$ 8,932</u>

### Type of Cost:

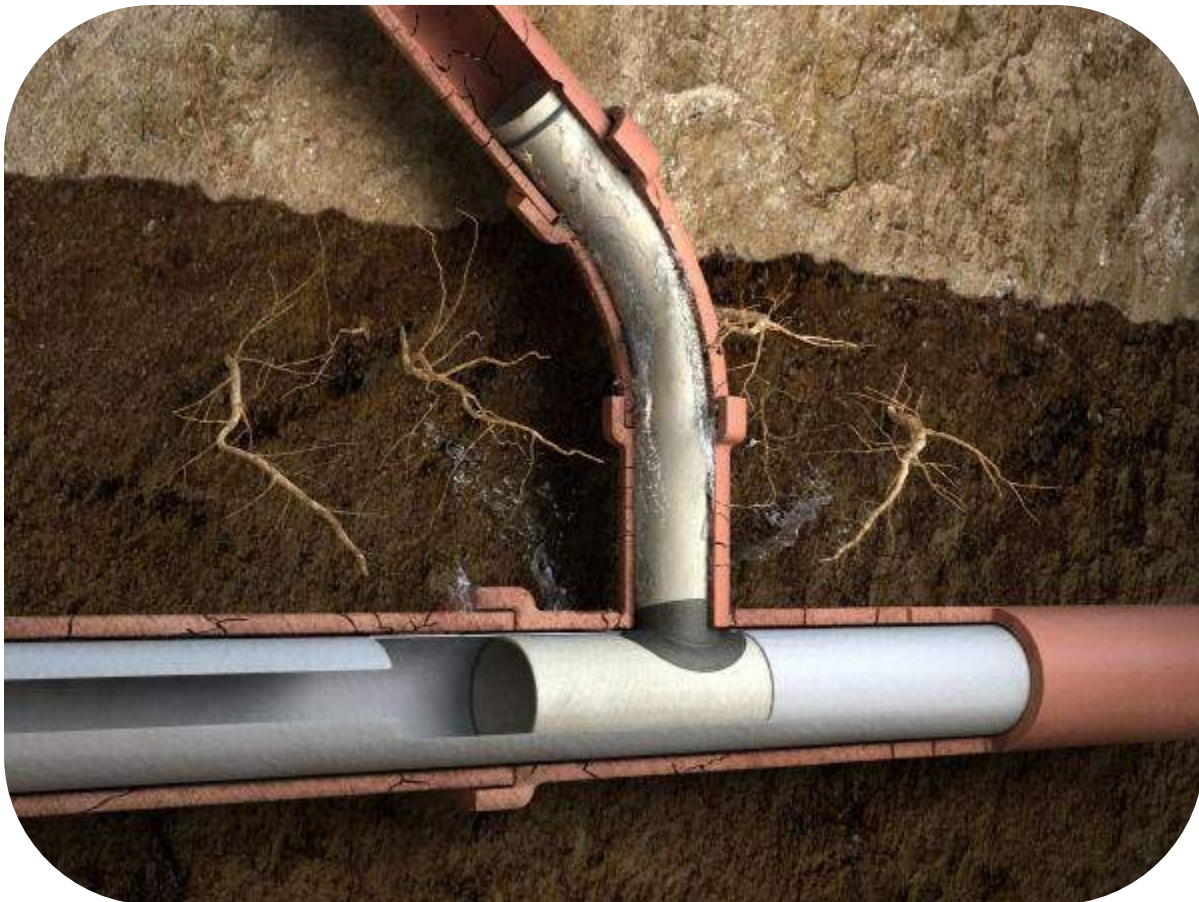
FTE = New Employee

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 work load 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 20<sup>th</sup>.
- 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, 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 web-site.

### 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 principal.
- 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 document 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- and Women-owned Enterprises and Small Local Business Enterprises:
  - As used in this section, the terms used have the following definitions:
    - “Minority Business Enterprise” 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
    - “Female Business Enterprise” 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” 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 opportunity for all and 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 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 the policy of the Authority to take steps to provide economic opportunity, ensure nondiscriminatory results and practices, and involve minority business enterprises and female business enterprises fully in the process by the Authority of the awarding of contracts for 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 business and female 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 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 small, minority- and women owned business enterprises are involved with the Authority as sources of supplies, services and construction items;
  - Affirmative efforts to be made may include but may not be limited to:
    - Including qualified small, minority- and women-owned business enterprises on solicitation lists;
    - Assuring that small, minority- and women-owned business enterprises are solicited whenever they are potential sources; and
    - Where the requirement permits, establishing delivery schedules which will encourage participation small, minority- and women-owned business enterprise.
  - This policy is provided as an internal guideline for outreach and nondiscriminatory practices in contract and procurement procedures in the award of contracts for sale or purchase of goods or services by the Authority. This policy does not provide or create any cause or right of action to nor any rights in any third parties against 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 sale and purchase of goods or services to the most responsible and responsive bidder.
  - The Authority staff shall provide to the Board each month a 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.

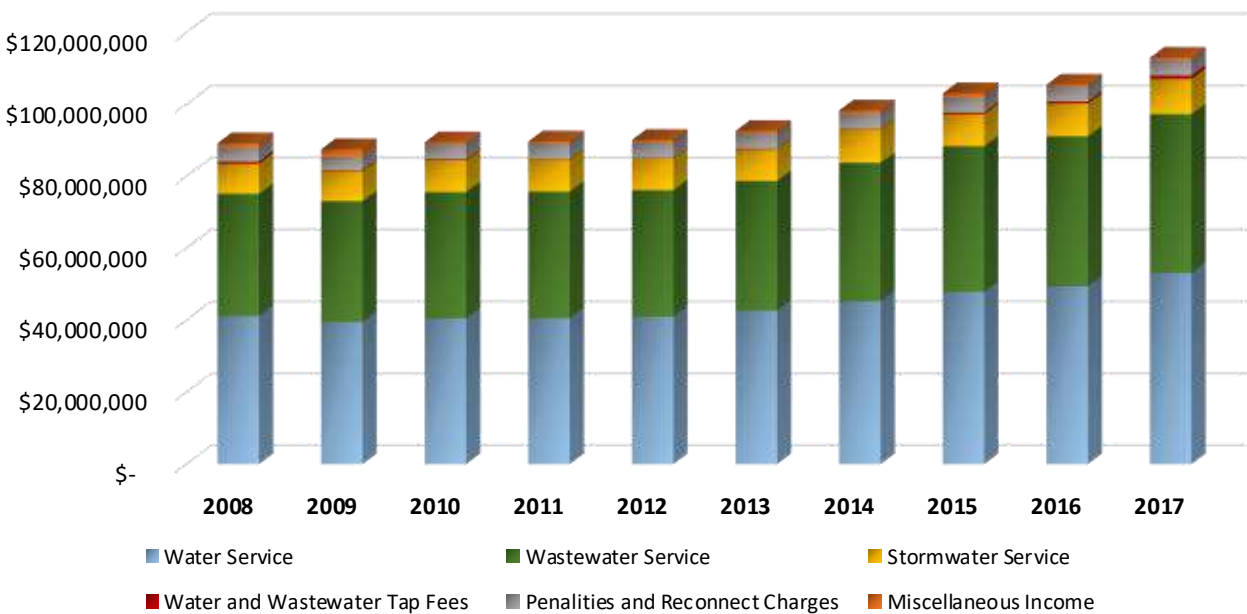
To assist in the understanding of revenues, schedules showing water and sewer rates, and number of customers are provided. To lend additional perspective on expenses, tables showing the number of gallons of raw water treated and wastewater flows reclaimed are included. As a general rule, much of this 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 30<sup>th</sup> 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
2008	\$ 41,165,916	\$ 33,985,577	\$ 8,353,594	\$ 587,279	\$ 3,783,581	\$ 1,324,361	\$ 89,200,308
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

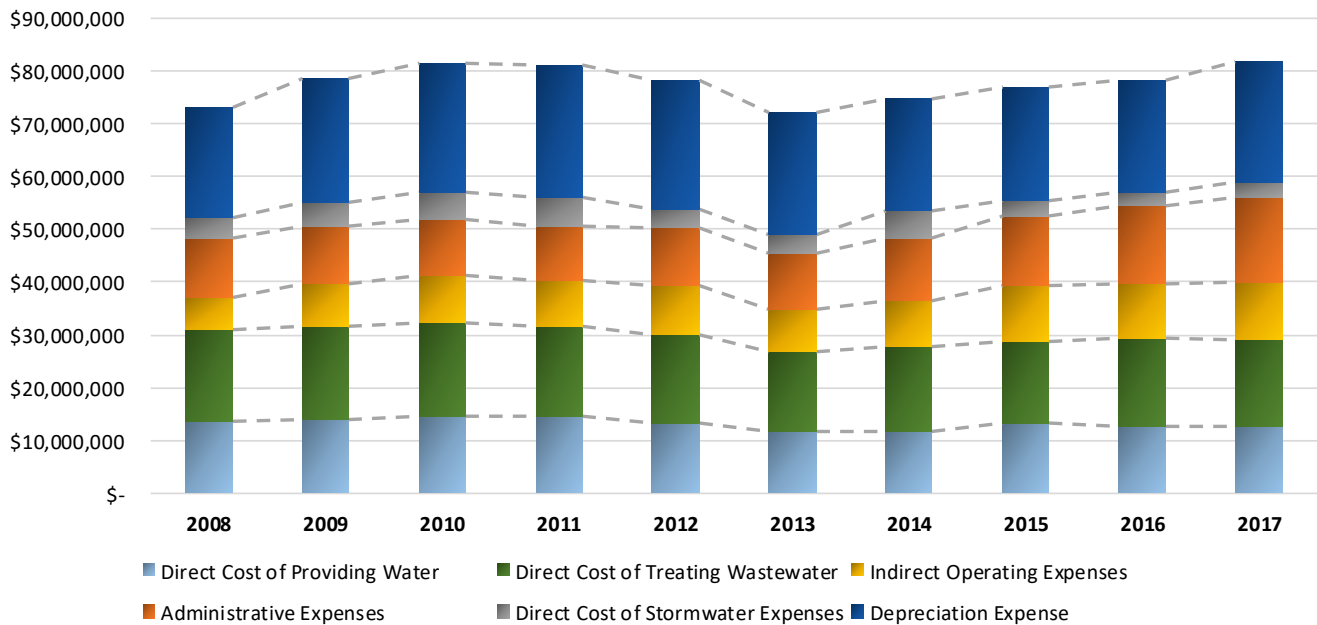




## Operating Expenses by Function

### 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
2008	\$ 13,540,691	\$ 17,561,613	\$ 5,948,899	\$ 11,361,404	\$ 3,905,380	\$ 52,317,987	\$ 20,816,423	\$ 73,134,410
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







## 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%
<b>Total</b>	<b>156,597</b>	<b>100.0%</b>



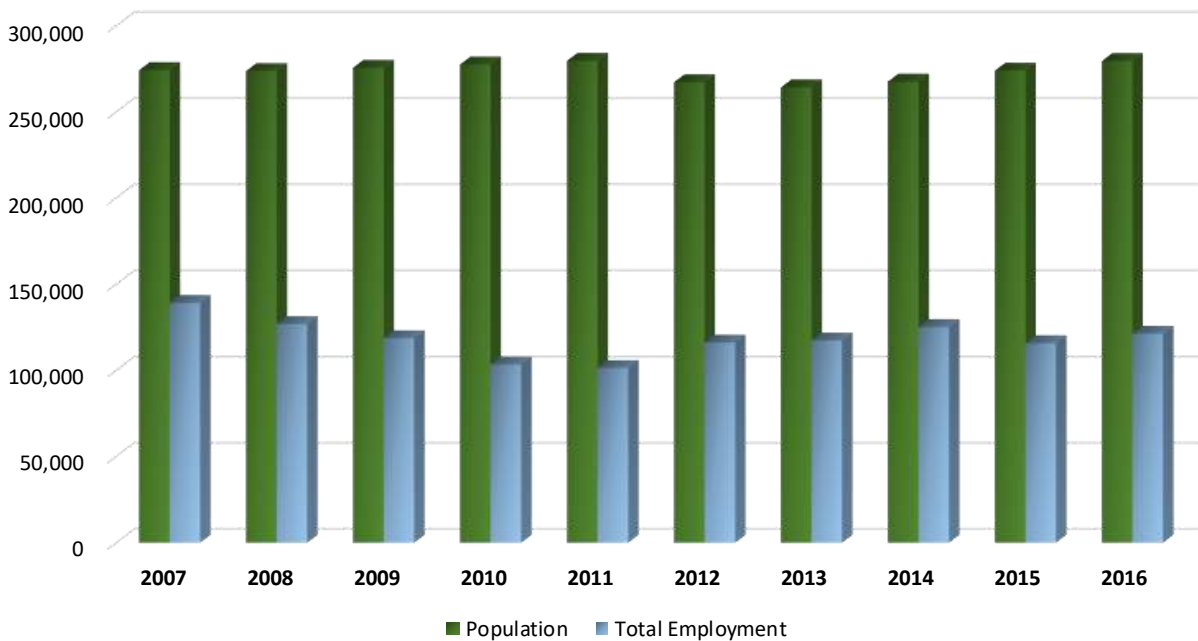
## Selected Demographic and Economic Statistics

### 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
2007	274,220	6,635,480	24,198	139,117	49,667	6.10%	5.20%	5.10%	139,147	105,002
2008	273,690	5,979,930	21,849	126,855	41,805	7.60%	7.50%	7.20%	137,223	107,167
2009	275,580	5,960,557	21,629	118,660	40,652	11.30%	9.60%	10.00%	133,824	107,245
2010	277,463	6,140,280	22,130	103,353	40,922	12.30%	10.20%	9.40%	131,098	104,705
2011	279,580	6,274,560	22,443	101,357	42,674	11.50%	9.40%	8.50%	129,784	104,463
2012	267,180	6,551,330	24,520	116,109	47,552	10.30%	9.00%	8.10%	130,580	103,913
2013	264,220	7,093,164	26,846	117,301	46,620	9.70%	8.40%	7.50%	129,950	104,343
2014	267,542	7,018,256	26,232	125,119	48,430	9.30%	7.20%	6.20%	125,119	104,535
2015	273,955	7,129,808	26,025	115,708	48,990	7.50%	5.90%	5.30%	125,051	104,719
2016	279,462	7,506,876	26,862	121,278	53,637	6.60%	5.40%	4.90%	129,852	104,996





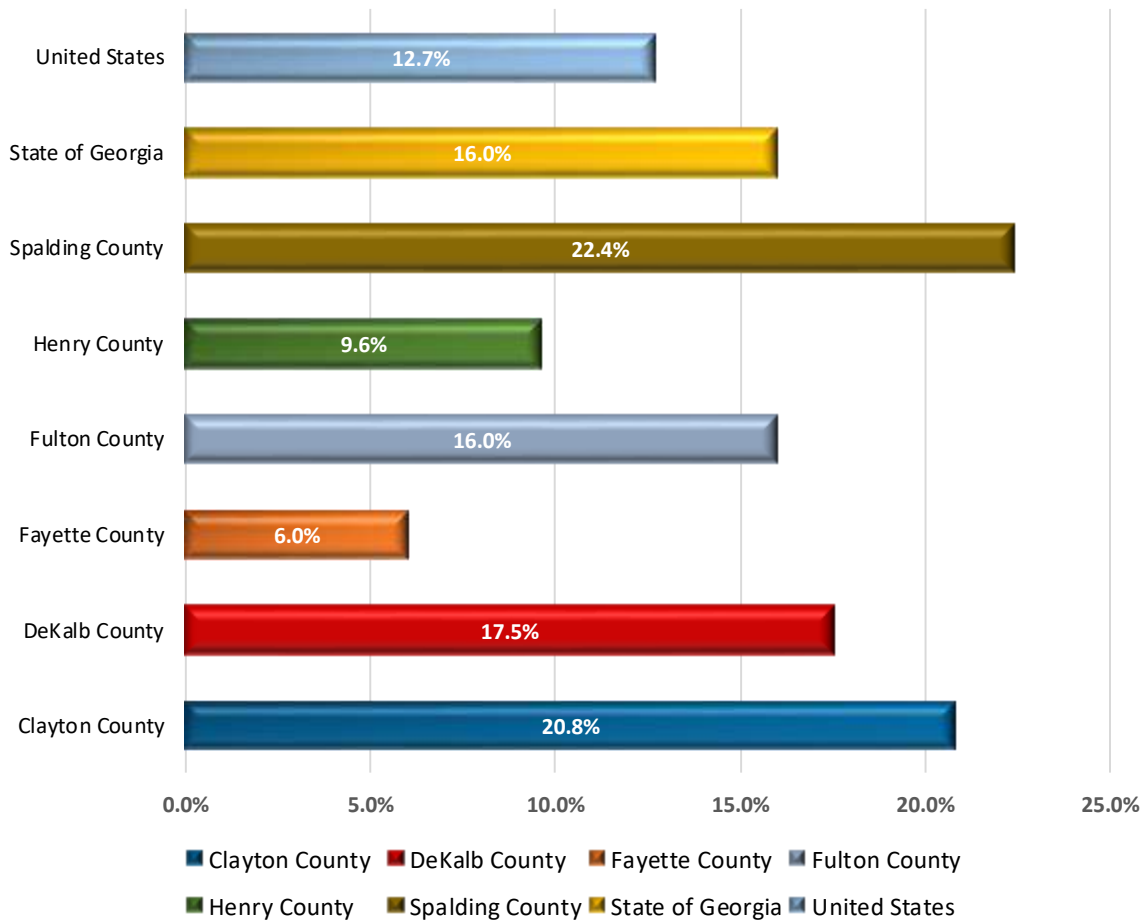
## Percentage of Individuals below Poverty Line

### PERCENTAGE OF INDIVIDUALS BELOW THE POVERTY LINE COMPARISON OF CONTIGUOUS COUNTIES AND STATE AVERAGE

Calendar Year 2016

Clayton County	DeKalb County	Fayette County	Fulton County	Henry County	Spalding County	State of Georgia	United States
20.8%	17.5%	6.0%	16.0%	9.6%	22.4%	16.0%	12.7%

### Percentage of Individuals Below The Poverty Line

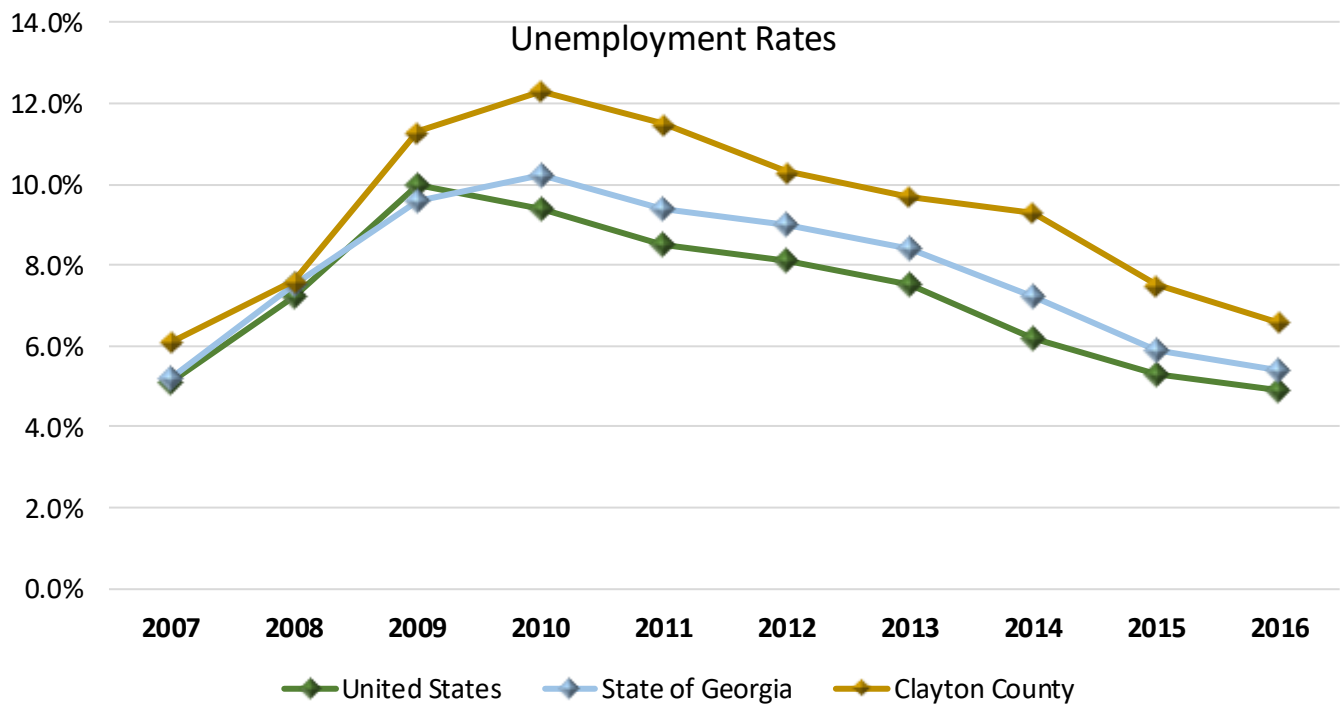




## Unemployment Rates

**UNEMPLOYMENT RATES**  
**COMPARISON OF NATIONAL, STATE AND COUNTY**  
 Last Ten Calendar Years

Unemployment Rate	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
United States	5.1%	7.2%	10.0%	9.4%	8.5%	8.1%	7.5%	6.2%	5.3%	4.9%
State of Georgia	5.2%	7.5%	9.6%	10.2%	9.4%	9.0%	8.4%	7.2%	5.9%	5.4%
Clayton County	6.1%	7.6%	11.3%	12.3%	11.5%	10.3%	9.7%	9.3%	7.5%	6.6%

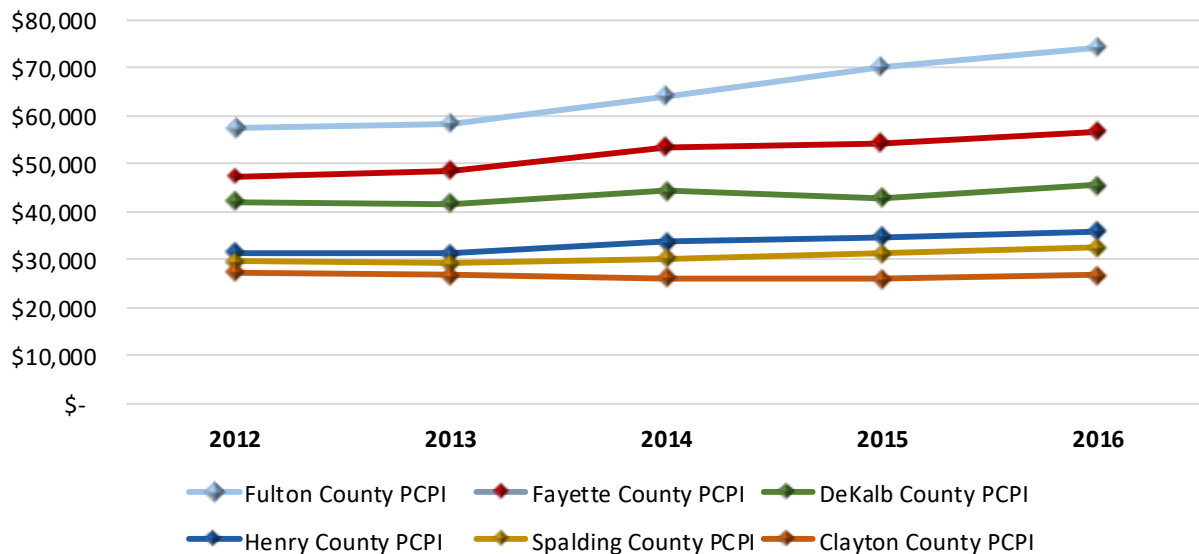




## Per Capital Personal Income

### PER CAPITA PERSONAL INCOME (PCPI) COMPARISON OF CONTIGUOUS COUNTIES Calendar Years 2012 Through 2016

Counties	2012	2013	2014	2015	2016	Period Change
Clayton County PCPI	\$ 27,417	\$ 26,846	\$ 26,232	\$ 26,025	\$ 26,862	\$ (555)
<b>Annual Change</b>	<b>N/A</b>	<b>-2.08%</b>	<b>-2.29%</b>	<b>-0.79%</b>	<b>3.22%</b>	<b>-2.02%</b>
DeKalb County PCPI	\$ 42,154	\$ 41,568	\$ 44,261	\$ 42,819	\$ 45,445	\$ 3,291
<b>Annual Change</b>	<b>N/A</b>	<b>-1.39%</b>	<b>6.48%</b>	<b>-3.26%</b>	<b>6.13%</b>	<b>7.81%</b>
Fayette County PCPI	\$ 47,406	\$ 48,413	\$ 53,548	\$ 54,361	\$ 56,759	\$ 9,353
<b>Annual Change</b>	<b>N/A</b>	<b>2.12%</b>	<b>10.61%</b>	<b>1.52%</b>	<b>4.41%</b>	<b>19.73%</b>
Fulton County PCPI	\$ 57,537	\$ 58,123	\$ 64,174	\$ 69,977	\$ 74,095	\$ 16,558
<b>Annual Change</b>	<b>N/A</b>	<b>1.02%</b>	<b>10.41%</b>	<b>9.04%</b>	<b>5.88%</b>	<b>28.78%</b>
Henry County PCPI	\$ 31,509	\$ 31,242	\$ 33,779	\$ 34,671	\$ 35,985	\$ 4,476
<b>Annual Change</b>	<b>N/A</b>	<b>-0.85%</b>	<b>8.12%</b>	<b>2.64%</b>	<b>3.79%</b>	<b>14.21%</b>
Spalding County PCPI	\$ 29,712	\$ 29,308	\$ 30,264	\$ 31,305	\$ 32,512	\$ 2,800
<b>Annual Change</b>	<b>N/A</b>	<b>-1.36%</b>	<b>3.26%</b>	<b>3.44%</b>	<b>3.86%</b>	<b>9.42%</b>





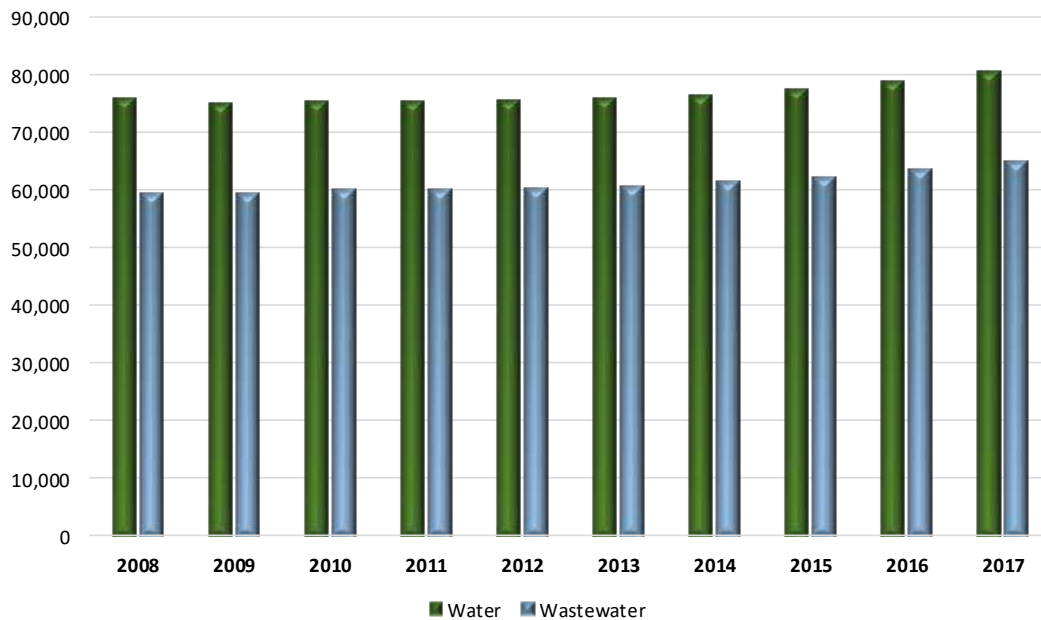
## Number of Water and Wastewater Customers by Type

### NUMBER OF WATER AND WASTEWATER CUSTOMERS BY TYPE

Last Ten Fiscal Years

Fiscal Year	Residential	Commercial	Industrial	City and County	Total Water Customers
2008	71,285	4,292	52	312	75,941
2009	70,476	4,209	49	318	75,052
2010	70,856	4,159	51	317	75,383
2011	70,656	4,124	50	426	75,256
2012	70,930	4,086	54	434	75,504
2013	71,335	4,057	50	440	75,882
2014	72,054	4,069	50	315	76,488
2015	73,107	4,104	54	425	77,690
2016	74,224	4,294	52	433	79,003
2017	75,658	4,329	53	457	80,497

Fiscal Year	Residential	Commercial	Industrial	City and County	Total Wastewater Customers
2008	56,106	3,217	38	195	59,556
2009	55,996	3,165	37	195	59,393
2010	56,679	3,140	38	193	60,050
2011	56,669	3,114	38	197	60,018
2012	57,096	3,085	43	196	60,420
2013	57,454	3,046	38	202	60,740
2014	58,097	3,007	38	197	61,339
2015	58,913	3,093	39	195	62,240
2016	60,123	3,240	37	243	63,643
2017	61,467	3,279	37	245	65,028







## Water and Wastewater Rates Per Thousand Gallons of Usage

### WATER AND SEWER FUND

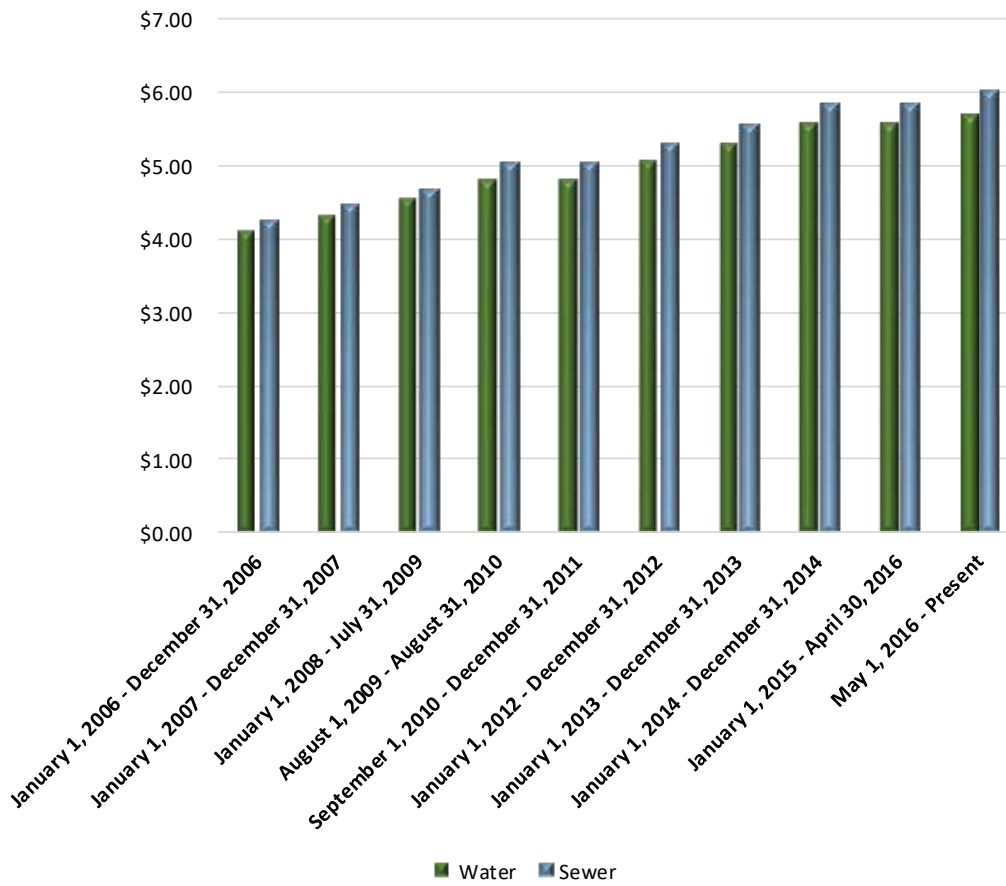
### WATER AND SEWER RATES

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



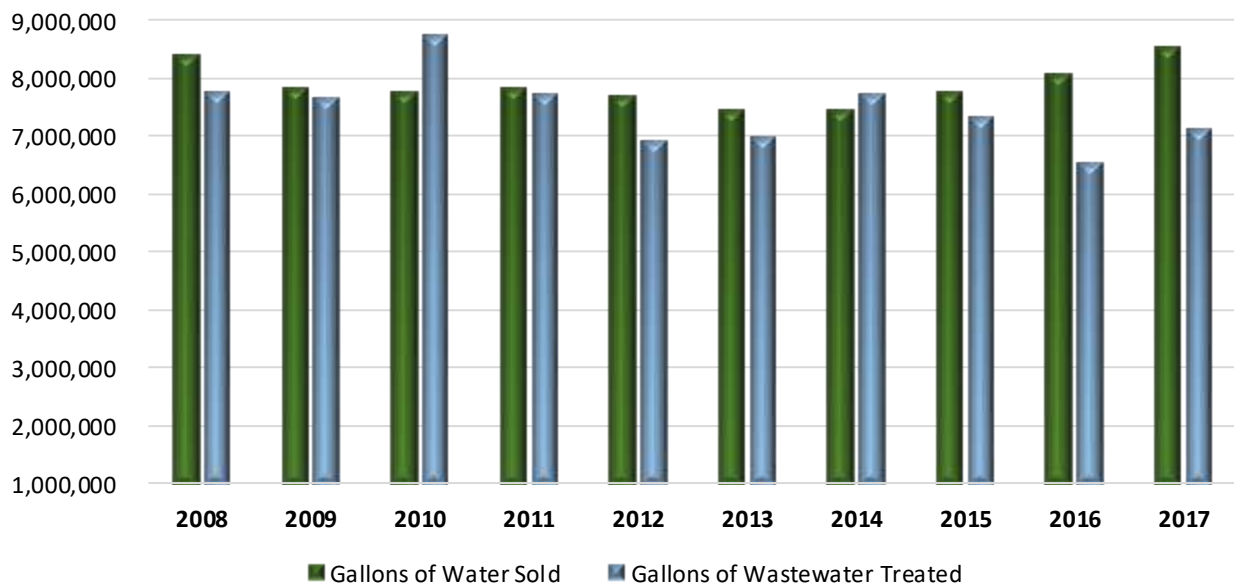


## Gallons of Water Sold and Wastewater Treated

Last Ten Fiscal Years Ended April 30

(in thousand gallons)

Fiscal Year	Gallons of Water Sold	Cost per Gallon Sold	Gallons of Wastewater Treated	Cost per Gallon Treated
2008	8,389,066	\$ 3.88	7,755,162	\$ 4.87
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	7,328,281	5.15
2016	8,051,729	4.14	6,521,898	6.16
2017	8,539,097	3.96	7,100,709	5.88





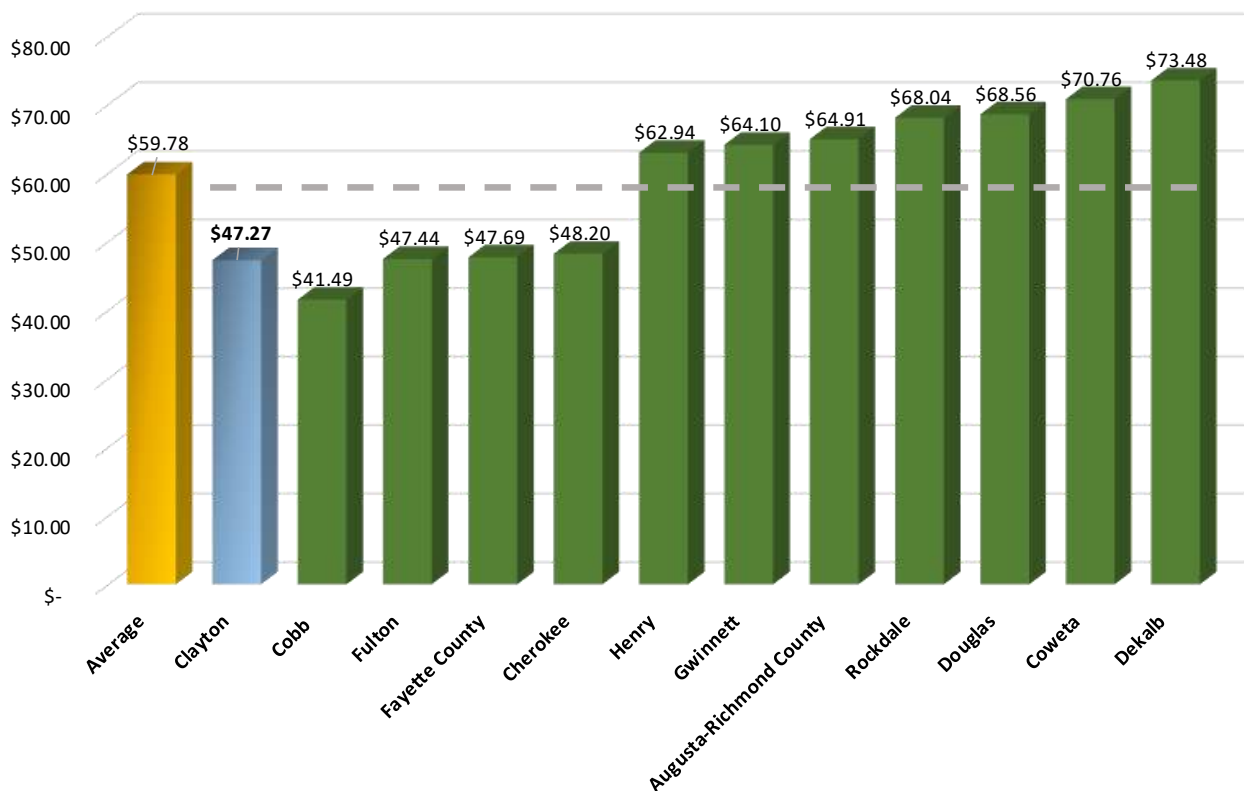
## Water and Sewer Rates - Survey of Metro Atlanta Counties

### COMPARISON OF WATER AND SEWER RATES

#### SURVEY OF METRO ATLANTA COUNTIES

User Fee Information as of February 2017

<i>Bill Based on Monthly Usage of 4,000 Gallons</i>	
Metro Atlanta Jurisdiction	Total Charges
Cobb County	\$41.49
<b>Clayton County</b>	<b>47.27</b>
Fulton County	47.44
Fayette County	47.69
Cherokee County	48.20
Henry County	62.94
Gwinnett County	64.10
Augusta-Richmond County	64.91
Rockdale County	68.04
Douglas County	68.56
Coweta County	70.76
DeKalb County	73.48

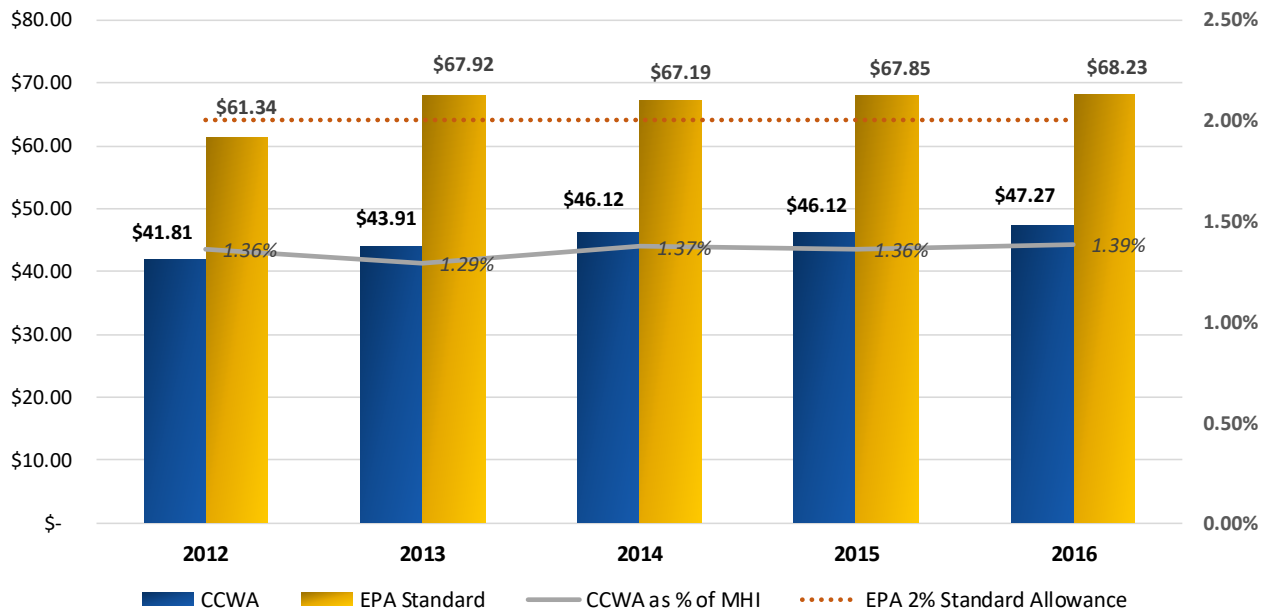




## Bill Comparison with EPA Standard

### 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
2012	4,000	\$ 36,804	\$ 41.81	\$ 501.72	1.36%	\$ 61.34	\$ 19.53	68.16%
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%





## Ten Largest Customers Measured by Water and Wastewater Revenue

Clayton County Water Authority

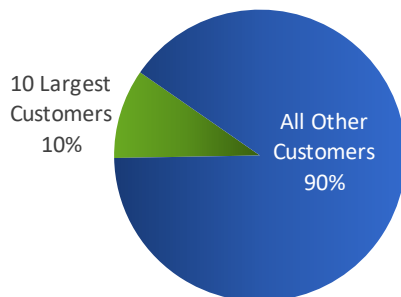
### TEN LARGEST WATER AND SEWER CUSTOMERS

#### MEASURED BY CONSUMPTION IN GALLONS AND WATER AND SEWER REVENUES

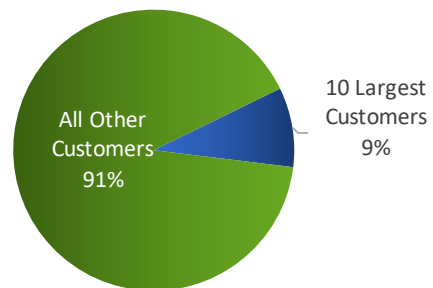
For the Fiscal Year Ended April 30, 2018

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%
Marcres 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%
<b>10 Largest Customers</b>	<b>\$ 5,128,033</b>	<b>9.93%</b>	<b>\$ 4,055,698</b>	<b>9.15%</b>
All Other Customers	46,510,747	90.07%	40,261,258	90.85%
<b>Total</b>	<b>\$51,638,780</b>	<b>100.00%</b>	<b>\$44,316,956</b>	<b>100.00%</b>

Water Revenue



Wastewater Revenue





## Ten Largest Customers - Stormwater

Clayton County Water Authority

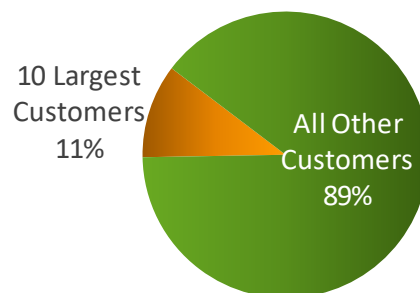
### STORMWATER UTILITY

#### 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%
<b>10 Largest Customers</b>	<b>\$ 1,046,072</b>	<b>10.60%</b>
All Other Customers	8,823,213	89.40%
<b>Total</b>	<b>\$ 9,869,285</b>	<b>100.00%</b>

Stormwater Fees





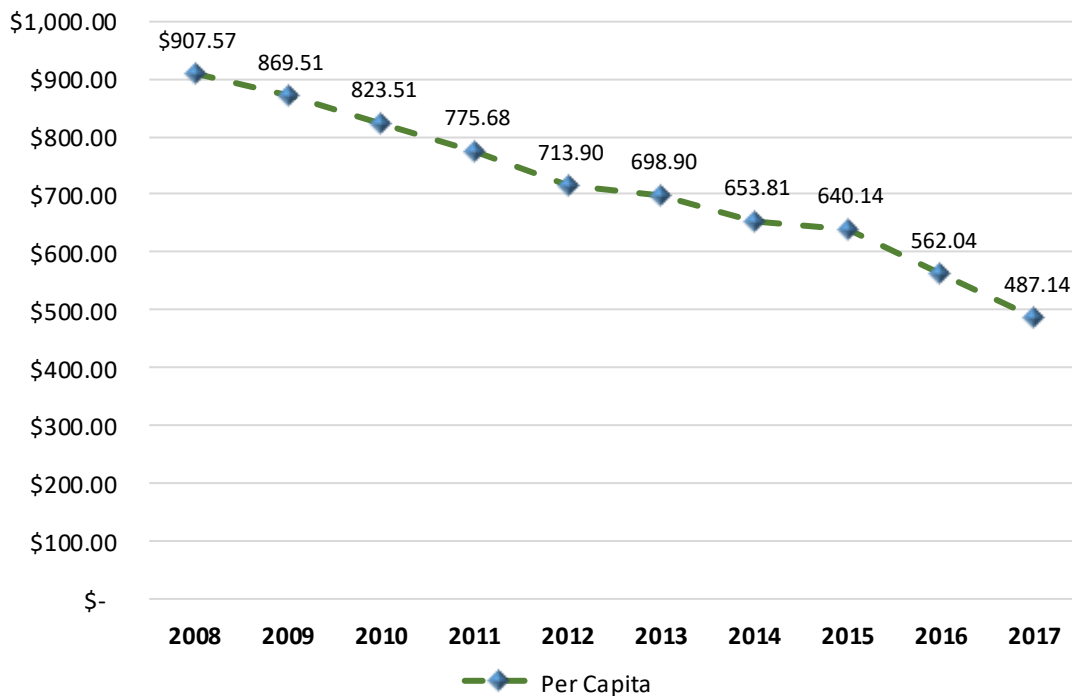


## Ratio of Outstanding Debt by Type

### 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
2008	\$ 237,915,000	\$ 10,958,035	248,873,035	\$ 907.57	3.75%
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%



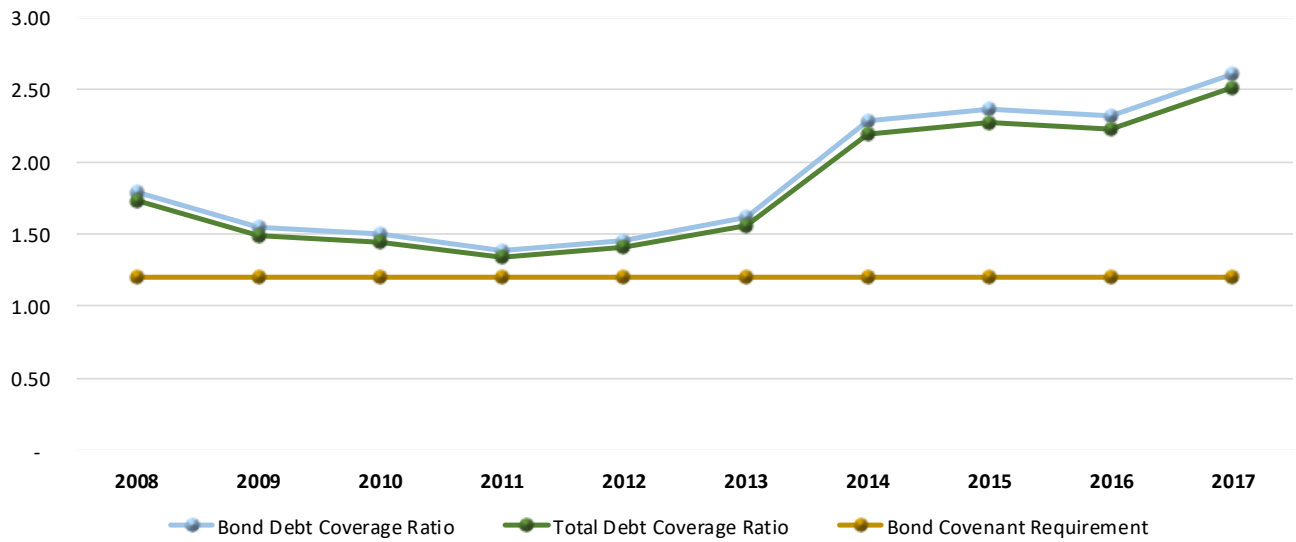


## Debt Service Coverage

### 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
2008	\$ 82,735,269	\$ 43,662,780	\$ 39,072,489	\$ 21,803,779	1.79	\$ 797,647	1.73	1.20
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	21,705,160	1.61	797,647	1.55	1.20
2014	89,383,063	44,287,188	45,095,875	19,803,994	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	19,876,133	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





## 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, 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.

**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 plant 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

<b>ACECGA</b>	..... American Council of Engineering Companies of Georgia
<b>ARC</b>	..... Atlanta Regional Commission
<b>AMR</b>	..... Automated Meter Reading
<b>AWWA</b>	..... American Water Works Association
<b>BOD</b>	..... Biochemical Oxygen Demand
<b>BU</b>	..... Budget Unit
<b>CAFR</b>	..... Comprehensive Annual Financial Report
<b>CCR</b>	..... Consumer Confidence Report
<b>CCWA</b>	..... Clayton County Water Authority
<b>CFR</b>	..... Code of Federal Regulations
<b>CIP</b>	..... Capital Improvement Plan
<b>CIPP</b>	..... Cured in Place Pipe
<b>CIS</b>	..... Customer Information System
<b>COLA</b>	..... Cost of Living Adjustment
<b>DNR</b>	..... Department of Natural Resources
<b>D &amp; C</b>	..... Distribution and Conveyance
<b>EEO</b>	..... Equal Employment Opportunity
<b>EPA</b>	..... Environmental Protection Agency
<b>EPD</b>	..... Environmental Protection Division
<b>FTE</b>	..... Full Time Equivalent
<b>FY</b>	..... Fiscal Year
<b>GAAP</b>	..... Generally Accepted Accounting Principles
<b>GASB</b>	..... Governmental Accounting Standards Board
<b>GAWP</b>	..... Georgia Association of Water Professionals
<b>GEFA</b>	..... Georgia Environmental Finance Authority
<b>GFOA</b>	..... Government Finance Officers Association
<b>GGFOA</b>	..... Georgia Government Finance Officers Association
<b>GIS</b>	..... Geographic Information System
<b>GM</b>	..... General Manager
<b>GPCD</b>	..... Gallons Per Capita per Day



<b>GPS</b> .....	Global Positioning System
<b>HVAC</b> .....	Heating, Ventilation and Air-Conditioning
<b>I/I</b> .....	Infiltration/Inflow
<b>IT</b> .....	Information Technology
<b>JDE</b> .....	JD Edwards EnterpriseOne: Accounting Software
<b>LF</b> .....	Linear Feet
<b>LOSS</b> .....	Level of Service Standards
<b>LTO</b> .....	Linear Tape Open
<b>MG/L</b> .....	Milligrams per Liter
<b>MGD</b> .....	Million Gallons per Day
<b>N/A</b> .....	Not Applicable or Not Available
<b>OPEB</b> .....	Other Post-Employment Benefits
<b>ORP</b> .....	Oxidation Reduction Potential
<b>pH</b> .....	Potential of Hydrogen
<b>PSI</b> .....	Pounds per Square Inch
<b>R &amp; E</b> .....	Renewal and Extension
<b>R &amp; R</b> .....	Removal and Replacement
<b>ROW</b> .....	Right of Way
<b>SCADA</b> .....	Supervisory Control and Data Acquisition
<b>SDWA</b> .....	Safe Drinking Water Act
<b>SEACAP</b> .....	System Evaluation and Capacity Assurance Plan
<b>SLBE</b> .....	Small Local Business
<b>SND</b> .....	Standard Non-Compliance Day
<b>SSES</b> .....	Sewer System Evaluation Study
<b>SSOs</b> .....	Sanitary Sewer Overflows
<b>TARP</b> .....	Troubled Asset Relief Program
<b>TBD</b> .....	To Be Determined
<b>TMDL</b> .....	Total Maximum Daily Load
<b>TOC</b> .....	Total Organic Carbon
<b>TOD</b> .....	Total Oxygen Demand
<b>UV</b> .....	Ultra Violet



- WEF** ..... Water Environment Federation
- WPP** ..... Water Production Plant
- WRF** ..... Water Reclamation Facility