

Table of Contents

INTRODUCTION	1
Consolidated Budget – Fiscal Year 2018	2
Distinguished Budget Presentation Award	3
General Information	4
Mission & Values	5
Governance	6
Board Members	6
Executive Team	7
Organizational Chart	8
System Overview	9
Structure	10
Priorities and Issues	11
Per Capita Demand	11
Customer Changes	13
Weather Conditions	14
Workforce Development	15
Aging Infrastructure	16
BUDGET DEVELOPMENT	17
Planning Process	17
Budget Process	18
Strategic Plan Implementation	20
EXECUTIVE SUMMARY	21
Summary of Factors Influencing the 2018 Budget	22
Operating Revenue Assumptions	23
Operating Expense Assumptions	24
Other Income and Expense Assumptions	27
Capital Improvement Plan Assumptions	27
Fund Equity	29
Entity-Wide Financial and Non-Financial Goals	31
Staffing Changes	35
OPERATING BUDGET	37
Statement of Operations	37

	General Operations Budget	38
	Administration Division	39
	Administration and Rental Buildings	41
	Finance Division	42
	Engineering Division	44
	Information Technology Division	46
	Safety and Security Division	48
	Research and Development	50
	Hickory Log Creek Reservoir Division	51
	Wyckoff Division	54
	Quarles Division	56
	Maintenance Division	59
	Laboratory Division	61
	Transmission Division	63
С	APITAL BUDGET	65
	5-Year Capital Improvement Plan	66
	Capital Project Descriptions	67
	Wyckoff 42" Finished Water Main Replacement	67
	Mableton Parkway 36" Water Main Replacement	68
	US 41 20" Parallel 20" Water Main	69
	West Side Loop Section #2 - 36" Water Main	70
	Quarles Plant 1 Replacement	71
	Quarles Plant 2 SCADA Replacement	72
	Pete Shaw Tank No. 2	73
	Asset Renewal & Replacement Projects	74
D	EBT OBLIGATIONS	76
	Legal Debt Limit	76
	Principal and Interest Payments – 2016 through 2018	77
2	017 DEFINED BUDGET GOALS	78
	Administration Division	78
	Finance Division	78
	Engineering Division	79
	Information Technology Division	79

Hickory Log Creek Reservoir Division	80
Wyckoff Treatment Plant Division	80
Quarles Treatment Plant Division	81
Laboratory Division	81
Transmission Division	82
FINANCIAL POLICIES	83
Financial Management Policy	83
Debt Issuance	83
Accounting	84
Internal Controls	84
Budgeting	84
Financial Reporting	85
Investment Policy	86
Capitalization Policy	87
Procurement Policy	88
STATISICAL SECTION	90
Cobb County-Marietta Water Authority's Customers	91
Rate Comparison Information	92
Permitted Production Capacity Comparison Information	93
Costs per Million Gallons of Water Produced	94
Demographic Information	95
Employer Demographics in the Cobb County Area	96
Water Quality Information	97
Performance Indicators	100
BUDGET TERMINOLOGY	101
Glossary	101
Acronyms	103

INTRODUCTION



"Providing sustainable and reliable drinking water that supports public health, public safety, and the economic vitality of the region."

1170 Atlanta Industrial Drive, Marietta, GA 30066 | 770-514-5300 | www.ccmwa.org

The following budget is the outcome of a full year of tracking, analysis, planning and prioritizing by Cobb County-Marietta Water Authority's Finance Division and staff at all levels. But it's more than that. It's also a reflection of years of consistent and vigilant adherence to a strategy to achieve system reliability and organizational sustainability.

Cobb County-Marietta Water Authority's Finance Division was created in 2013, with Cole Blackwell as the first Director of Finance. Cole's leadership in starting the division provided a firm foundation for Allison Clements to build upon, as she replaced Cole in April 2017 when Cole was appointed Director of Operations for the Authority. Each year since its creation, the Finance Division has received the Government Finance Officers Association's Distinguished Budget Presentation Award. This year's budget continues to demonstrate the Authority's commitment to stewardship in meeting its objectives.

The Authority's core purpose is "to provide sustainable and reliable drinking water that supports public health, public safety and the economic vitality of the region." Through scenario planning with our comprehensive cash-flow model, we are confident that we can continue to reliably deliver high-quality drinking water to our customers through this budget, which includes a reduction in annual rate increases from the current program of 3% annual rate increases to 2% annually for the next three years.

Respectfully,

Glenn M. Page

Glenn M. Page, P.E.

General Manager

\$ (10,814,626)

-18.01%

Consolidated Budget – Fiscal Year 2018

	2017 Budget	20	17 Projected Actual	Fa	riance - avorable avorable)	2018 Budge		Increase (Decrease) over 2017 Budget	Increase (Decrease) over 2017 Budget
Operating Revenues	\$ 86,229,000	\$	85,545,066	\$	(683,934)	\$89,207,400	\$	2,978,400	3.45%
Operating Expenses	\$ 51,202,520	\$	47,128,621	\$ 4	,073,899	\$54,227,250	\$	3,024,730	5.91%
Operating Income	\$ 35,026,480	\$	38,416,445	\$ 3	3,389,965	\$34,980,150	\$	(46,330)	-0.13%
Other Income	\$ 1,489,560	\$	1,533,886	\$	44,326	\$ 1,456,512	\$	(33,048)	-2.22%
Other Expenses	\$ 2,614,030	\$	2,610,307	\$	3,723	\$ 2,417,507	\$	(196,523)	-7.52%
Extraordinary Items	\$ 150,000	\$	-	\$	150,000	\$ 150,000	\$	-	0.00%
Net Income	\$ 33,752,010	\$	37,340,023	\$ 3	3,588,013	\$33,869,155	\$	117,145	0.35%,
		2017 Projected Actual							
	2017 Budget	20	,	Fa	iriance - ivorable avorable)	2018 Budge		Increase (Decrease) over 2017 Budget	Increase (Decrease) over 2017 Budget
Pipelines	2017 Budget \$ 27,170,629	20	,	Fa (Unf	vorable	2018 Budge \$ 9,075,400	<u>t</u>	(Decrease) over 2017	(Decrease) over 2017
Pipelines Water Treatment Plants			Actual	Fa (Unf \$ 1	avorable avorable)		<u> </u>	(Decrease) over 2017 Budget	(Decrease) over 2017 Budget
•	\$ 27,170,629	\$	Actual 25,677,663	Fa (Unf \$ 1	vorable avorable) ,492,966	\$ 9,075,400	<u>*</u> \$	(Decrease) over 2017 Budget (18,095,229)	(Decrease) over 2017 Budget -66.60%
Water Treatment Plants	\$ 27,170,629 \$ 18,589,372	\$ \$	Actual 25,677,663	Fa (Unf \$ 1 \$ 3	vorable avorable) ,492,966	\$ 9,075,400 \$25,400,000	\$ \$ \$	(Decrease) over 2017 Budget (18,095,229) 6,810,628	(Decrease) over 2017 Budget -66.60% 36.64%
Water Treatment Plants Water Storage Tanks	\$ 27,170,629 \$ 18,589,372 \$ -	\$ \$ \$	Actual 25,677,663 15,265,323	Fa (Unf \$ 1 \$ 3 \$ 3	,492,966 3,324,049	\$ 9,075,400 \$25,400,000 \$ 300,000	\$ \$ \$ \$ \$	(Decrease) over 2017 Budget (18,095,229) 6,810,628 300,000	(Decrease) over 2017 Budget -66.60% 36.64% 100.00%
Water Treatment Plants Water Storage Tanks Asset Renewal & Replacement	\$ 27,170,629 \$ 18,589,372 \$ - \$ 8,980,827	\$ \$ \$	Actual 25,677,663 15,265,323 - 5,388,496	\$ 1 \$ 3 \$ 3 \$ 8	,492,966 3,324,049 - 5,592,331	\$ 9,075,400 \$25,400,000 \$ 300,000 \$ 8,992,384	\$ \$ \$ \$	(Decrease) over 2017 Budget (18,095,229) 6,810,628 300,000 11,554	(Decrease) over 2017 Budget -66.60% 36.64% 100.00% 0.13%

 Total Capital Expenditures
 \$ 60,059,185
 \$ 48,047,348
 \$12,011,837
 \$49,244,559

Distinguished Budget Presentation Award

Cobb County-Marietta Water Authority was presented the Distinguished Budget Presentation Award by the Government Finance Officers Association (GFOA) for the Fiscal Year 2017 budget document. This award reflects the commitment of the Authority to meeting the highest principles of governmental budgeting. To receive this award, the Authority's budget must meet nationally recognized guidelines designed to assess how well the budget serves as a policy document, a financial plan, an operations guide, and a communications device. This marks the Authority's 5th year of submitting a budget document to GFOA for consideration and receiving the Distinguished Budget Presentation Award.



GOVERNMENT FINANCE OFFICERS ASSOCIATION

Distinguished Budget Presentation Award

PRESENTED TO

Cobb County- Marietta Water Authority Georgia

For the Fiscal Year Beginning

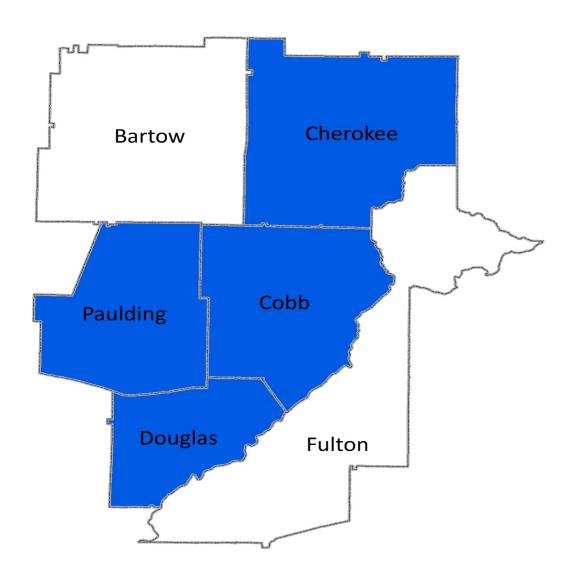
January 1, 2017

Christopher P. Morrill

Executive Director

General Information

Cobb County-Marietta Water Authority (CCMWA) was created in 1951 by an act of the General Assembly of the State of Georgia and is a political subdivision of the state. CCMWA is unique because its single primary function is to supply drinking water to its wholesale customers. CCMWA's service area (shown in the graphic below) includes customers in Cobb County, Cherokee County, Douglas County, Fulton County and Paulding County. All of CCMWA's customers are governmental water purveyors with the exception of Lockheed Martin Corporation, which shares its location with the Dobbins Air Force Base complex in Marietta, GA. CCMWA also has an active contract with Fulton County, but does not currently have active connections to Fulton County's water system.



Mission & Values

The mission of Cobb County-Marietta Water Authority is "to provide sustainable and reliable drinking water that supports public health, public safety, and the economic vitality of the region". Although CCMWA does not have residential customers, it values the importance of keeping water consumers satisfied and well-informed. CCMWA has built a strong reputation of success by investing in the protection of our precious water resources through conservation programs, while maintaining dependable customer service and consistent product quality.

CCMWA's current Strategic Plan, which encompasses 2016 through 2020, outlines the three categories of values that are inherent across the Authority:

Core Values

- Service: Preserving the trust of customers and stakeholders by exceeding their expectations
- Stewardship: Responsible and sustainable management of resources and assets
- Professionalism: Exhibiting high standards in personal conduct with a commitment to quality

Permission-to-Play Values

- Integrity: Acting honestly and consistently
- Trust: Confidence that employees will do the right thing, while safeguarding the confidence that others have in us
- Technical Excellence: Acquiring, developing, and maintaining expertise needed to support our purpose

Aspirational Values

- Safety Culture: Protecting our employees and the public through an ingrained mindset of safety
- Transparency: Open and clear decision-making process; information is easily available and readily shared
- Innovation: Translating new technology, ideas, business processes, and systems to improve our services and work environment

Governance

Cobb County-Marietta Water Authority is governed by a seven-member board, with members selected by virtue of office or by appointment. The current CCMWA board is constructed of members from the following positions:

By Virtue of Elected Office:

Chairman of the Cobb County Board of Commissioners

Appointed by the Governing Authority of the:

- City of Marietta
- City of Smyrna

Appointed by the Cobb County Delegation to the Georgia General Assembly:

- One member from Cobb Commission District 1 or 4, excluding residents of Marietta and Smyrna
- One member from Cobb Commission District 2 or 3, excluding residents of Marietta and Smyrna
- Two members from unincorporated Cobb County

Term limits for the seven board members are staggered in two-year increments to ensure consistency and stability of the overall board. Board Officers are elected on an annual basis to one-year terms to preserve the board's impartiality.

Board Members



James C. Scott, Jr., Chairman



T. Daniel Buyers, Vice Chair



Charlie N. Crowder, Member



Griffin L. Chalfant, Member



A. Max Bacon. Member



James A. Balli. Member



Mike H. Boyce, Member

Executive Team



Glenn Page General Manager



Cole Blackwell Director of Operations & Assistant General Manager

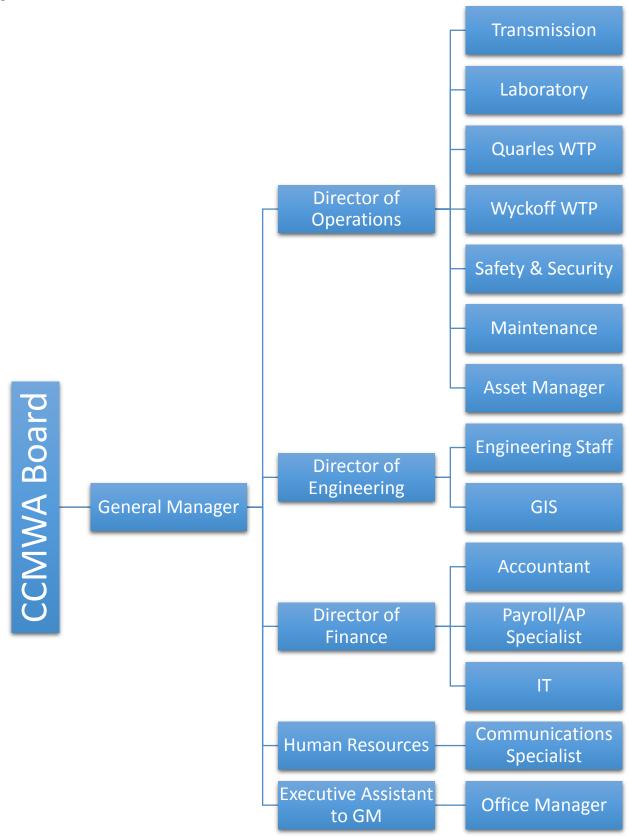


George Kaffezakis Director of Engineering



Allison Clements Director of Finance

Organizational Chart



System Overview

CCMWA has award-winning water treatment and testing facilities, which include the James E. Quarles Water Treatment Plant, the Hugh A. Wyckoff Water Treatment Plant, and the Calvin F. Simmons Microbiological Laboratory. Each facility is staffed with certified professionals who manage the operations 24 hours a day, seven days a week. The dual water treatment plants (WTPs) which are supplied water by two separate river basins, provide production flexibility and reliability for the CCMWA service area. The laboratory, which is certified by the State of Georgia, ensures drinking water safety and regulatory compliance.

The Quarles WTP is currently permitted to produce 86 million gallons of water per day and is supplied by the Chattahoochee River, part of the Apalachicola-Chattahoochee-Flint (ACF) River Basin. The Wyckoff WTP is currently permitted to produce 72 million gallons of water per day and is supplied by Allatoona Lake, a U.S. Army Corps of Engineers impoundment on the Etowah River, which is part of the Alabama-Coosa-Tallapoosa (ACT) River Basin.





Quarles WTP Wyckoff WTP

CCMWA's laboratory is responsible for testing the water that CCMWA provides to its wholesale customers to ensure that it meets state and federal drinking water standards. The laboratory tests approximately 500 regulatory water samples each month from raw water sources, both WTPs, CCMWA's water transmission pipeline system, and wholesale customers' distribution systems. The laboratory also provides microbiological water testing services to residents who have wells and for various other purposes for a set fee. The laboratory facilities include a research lab, chemistry lab, Level I and II microbiology labs, media prep lab, and an incubator lab.

In addition to water treatment and testing facilities, a transmission pipeline network including over 200 miles of pipe conveys drinking water to CCMWA's wholesale customers. The system includes pipe ranging in diameter from 16 to 64 inches, with most pipe at least 36 inches in diameter.

To provide additional water supply, CCMWA operates the Hickory Log Creek Reservoir, a pumped storage project located upstream of Allatoona Lake in the Etowah River Basin. Hickory Log Creek Reservoir covers approximately 441 acres and impounds 5.7 billion gallons of water. The reservoir is jointly owned and operated by CCMWA and the City of Canton, with CCMWA owning 75% of the project. The reservoir was constructed with a designed yield of 44 million gallons per day (MGD), with 33 MGD allocated to CCMWA.

Structure

CCMWA is considered a government entity due to its creation as a political subdivision of the State of Georgia. This government designation allows CCMWA to operate as a proprietary fund, which is used to account for government activities that are similar to businesses found in the private sector. In accounting for proprietary operations, CCMWA utilizes the full accrual basis of accounting as prescribed by the Governmental Accounting Standards Board (GASB). CCMWA applies all GASB pronouncements and all Financial Accounting Standards Board (FASB) pronouncements and interpretations issued on or before November 30, 1989, unless they conflict with or contradict GASB pronouncements.

CCMWA's sole purpose of providing wholesale potable water qualifies as a single enterprise fund for financial reporting purposes. This single enterprise fund is used to account for all activities using the flow of economic resources measurement focus. CCMWA's single enterprise fund is referred to as the "Water Fund" and has four primary functions. The duties within each function are divided into budgetary operating divisions, with a total of twelve divisions across the Authority. The four primary functions and their respective budgetary divisions are:

- Administration & Engineering Oversees planning and coordination for the entire organization in the areas of General Administration, Engineering, Finance, Information Technology, Safety & Security, and Research & Development.
- Water Treatment Responsible for water production, water testing, and routine maintenance of treatment plant infrastructure with responsibilities divided among the Quarles Water Treatment Plant, Wyckoff Water Treatment Plant, Laboratory, and Maintenance Division.
- Water Resources Responsible for the operation and maintenance of Hickory Log Creek Reservoir and represented by the Hickory Log Creek Division.
- Transmission System Responsible for maintenance of the Authority's transmission pipeline system and represented by the Transmission Division.

The annual operating budget is prepared under the same reporting standards as CCMWA's audited financial statements, which report CCMWA's financial position and operating results as a single fund.

Priorities and Issues

Cobb County-Marietta Water Authority's operational decisions are impacted by a number of external and internal factors. These factors drive not only operational decisions, but also guide budget development and strategic planning. The priorities and challenges facing CCMWA for the 2018 budget year and beyond are:

- Per capita demand changes
- Customer-driven changes
- Weather conditions
- Workforce continuity and development
- Aging infrastructure

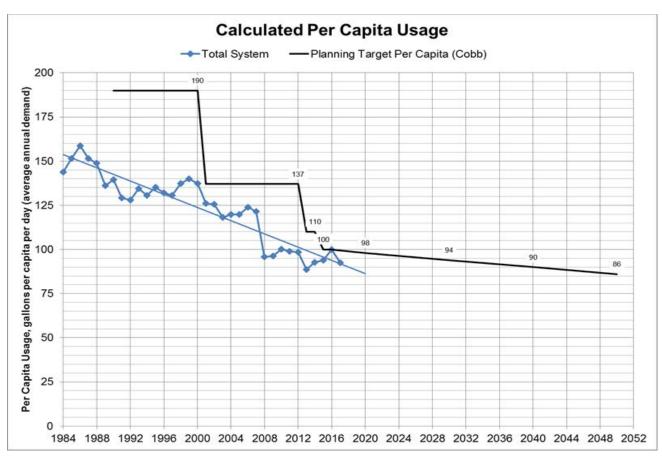
Each of these priorities and issues are discussed below with details regarding how CCMWA plans to address each of these items in the coming years.

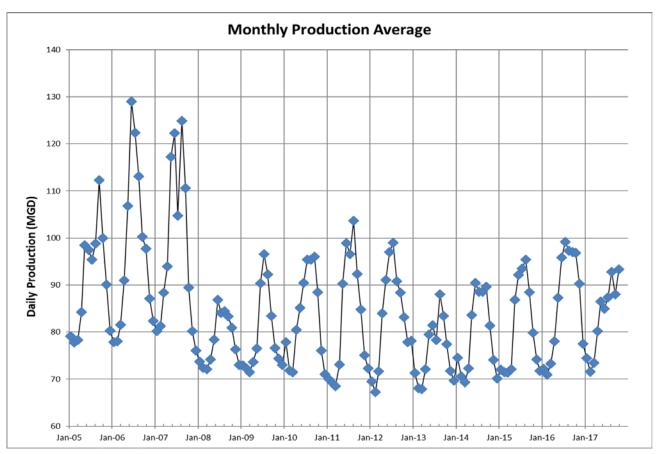
Per Capita Demand

The population of Cobb County, the largest area served by CCMWA, has grown 22% since 2000 when approximately 607,751 people resided in the county. Cobb County's population in 2016 is estimated to be 741,334 and the county is ranked third in the Atlanta region for population growth. Despite the rapid population growth in our service area, CCMWA has experienced a downward trend in per capita demand for water over the last decade.

Between 2006 and 2008, per capita demand decreased from an annual average of 125 gallons per capita per day to 95 gallons per capita per day as shown in the Calculated Per Capita Usage graph below. This trend has continued since 2006 and is expected to continue into the future as end users of water become more conscious about water usage and more water efficient products are developed.

The downward trend of per capita water demand can also be seen in CCMWA's monthly production averages, shown in the Monthly Production Average graph below. Since 2006, monthly production has decreased to a level that reflects a "new normal" for water usage in CCMWA's service area. As a result, there are no capital improvements in the current 5-year Capital Improvement Plan (CIP) that would result in an increase to overall water production capacity. The 5-year CIP was reviewed during 2016 and 2017 to prioritize projects related to reliability and rehabilitation of infrastructure instead of projects related to system expansion.





Customer Changes

Within the next two years, CCMWA anticipates a reduction in water demands due to infrastructure development in progress by our second largest customer, Paulding County. In October 2015, Paulding County received a permit from the United States Army Corps of Engineers to build the Richland Creek Reservoir, which is now under construction, along with a related water treatment facility, transmission pipelines, and pump stations. Paulding County currently plans to begin producing potable water and significantly reduce the amount of water purchased from CCMWA during the 2019 fiscal year. CCMWA has examined the financial and infrastructure impacts of Paulding County's planned reduction in water purchases and has determined the overall cash flow impact to be neutral due to a reduced need for future capital projects related to delivering water to Paulding County.

During 2017, the 50-year contract between CCMWA and the Douglasville-Douglas County Water and Sewer Authority (DDCWSA) expired and became eligible for renewal. DDCWSA operates its own water treatment and transmission system and has purchased water from CCMWA on an as-needed, secondary basis. The new contract terms include a base infrastructure charge and a variable delivery charge, designed to recognize and compensate CCMWA for investments in infrastructure to serve DDCWSA as a non-sole-source customer. The base infrastructure charge will be a uniform monthly charge based on the reserved daily allocation (RDA) requested by DDCWSA. When water is purchased from CCMWA, DDCWSA will also be subject to a variable delivery charge. The effective total rate for DDCWSA, between the base infrastructure charge and the variable delivery charge, will be equal to CCMWA's current incounty sole-source rate.

CCMWA will use this type of contract structure for future contract negotiations, as customer contracts expire or become eligible for renegotiation, including Paulding County's. By recognizing infrastructure investments within the terms of each contract, CCMWA can more equitably allocate capital infrastructure costs between all CCMWA customers.

Through careful planning and review of future infrastructure needs, CCMWA has worked to enact a rate program that reflects the true value of water to each customer. The reduction in water purchases from Paulding County and the planned changes to contracts for non-sole source customers have allowed CCMWA to once again reduce the planned rate increase. CCMWA began a 5-year rate program of 4% annual increases in January 2014 and reduced the planned annual rate increase to 3% in January 2017. In January 2018, CCMWA will enact another reduction in the rate program with 2% annual rate increases for the 3-year period beginning in January 2018.

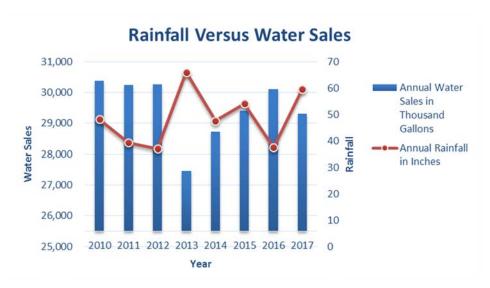
Weather Conditions

Weather conditions influence both water demand and water supply. Cobb County-Marietta Water Authority's service area was under a Level 2 drought response for the first eight months of 2017. Georgia's Environmental Protection District (EPD) issued the Level 2 drought response on November 17, 2016 due to an extended period of little or no rainfall and the failure of winter rainfall to refill Lake Lanier, the primary water source for nine metro Atlanta counties. A Level 2 drought response restricts outdoor landscape watering to two days a week and prohibits the use of water for washing exterior surfaces, ornamental purposes, non-commercial washing of vehicles, non-commercial pressure washing, and fundraising car washes. These water use restrictions are intended to reduce customer demand and manage water supply levels to preserve the area's water supply.

CCMWA's service area experienced regular rainfall throughout the summer of 2017, which, in addition to the water use restrictions, resulted in lower demands. However, the geographic area of Lake Lanier did not receive adequate rainfall to refill the water source to normal levels, and the Level 2 response remained in effect until September 7, 2017, when the drought response level for CCMWA's service area was reduced to a Level 1 response. A Level 1 drought response requires permitted public water systems to conduct a public information campaign to explain drought conditions and the need to conserve water, but does not include any restrictions to use.

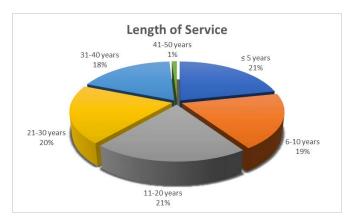
Regular rainfall, combined with eight months of Level 2 drought restrictions, resulted in a lower demand for water than CCMWA anticipated in the 2017 budget. These factors were considered, along with past demand and rainfall experience, when developing the forecast for 2018 water sales.

The graph below shows the inverse relationship between rainfall and water sales. CCMWA's service area receives 50 inches of rainfall per year on average; therefore, higher demand for water occurs when annual rainfall is below the yearly average.



Workforce Development

Cobb County-Marietta Water Authority has a strong history of retaining employees and, as a result, has experienced lower than average turnover for many years. However, as CCMWA approaches its 67th year of operations, organizational changes are expected through the next decade as a number of long-tenured employees become eligible for retirement. The average age of an employee at CCMWA is 48, with 53% of the current workforce over the age of 50. Further, 20% of the current workforce is eligible for a normal retirement benefit in the next 5 years. These statistics highlight the need for employee development and succession planning to ensure that key positions are filled when long-tenured employees retire.





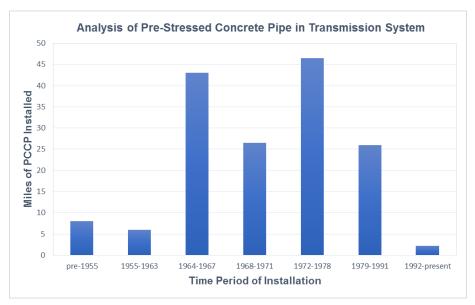
CCMWA plans to address the need for employee development and succession planning during 2018 in the following ways:

- Increased training and educational opportunities for employees
- Creation of a competency-based development program for key positions
- Transition of standard operating procedures to a uniform template in all divisions
- Introduction of 360° reviews and development courses for supervisory staff
- Partnership with local high schools to provide educational internships for students interested in careers in the water industry

Aging Infrastructure

Cobb County-Marietta Water Authority's current Strategic Plan identifies infrastructure sustainability as a key area of focus through 2020. The goal of the infrastructure sustainability initiative is to maintain CCMWA's infrastructure to minimize life cycle costs and maximize system reliability. In 2016, the CCMWA Board approved funds to develop a multi-year program to proactively replace water mains as they near the end of their useful life. This program, referred to as the Aged Pipe Replacement Program, was incorporated into the capital improvement program with the passage of the 2017 budget. By proactively replacing aged pipe, CCMWA can mitigate the risk of catastrophic failure and costly repairs.

The Aged Pipe Replacement Program was developed through a joint effort of CCMWA Engineering staff and an external engineering firm. The goal of the program was to evaluate all of CCMWA's pipelines, including ductile iron and pre-stressed concrete cylinder pipe (PCCP). Through the use of an analysis tool, over 2,200 pipe sections were assessed based on age, internal pipe pressures, soil conditions, traffic impacts, potential collateral damage to properties, ease of repairs, and criticality to the transmission system. An emphasis was placed on PCCP, due to its estimated life being less than the estimated life of ductile iron pipe. The initial evaluation of CCMWA's transmission pipelines identified 12 pipe sections with the potential for failure, leaks, or significant impact to the system and 5 pipe sections in need of a condition assessment.



The graph above shows the original 160 miles of PCCP in the transmission system by year of installation, with the majority installed between the years of 1964-1978. At the beginning of the Aged Pipe Replacement Program, 87 miles of PCCP had already been replaced. The remaining 73 miles of PCCP have been prioritized for replacement based on their criticality and risk. The current 5-year Capital Improvement Plan for 2018-2022 includes nine projects that are part of the Aged Pipe Replacement Program.

BUDGET DEVELOPMENT

Planning Process

Cobb County-Marietta Water Authority conducts various planning processes each year. These planning processes include the following actions:

- Review, update, and determine progress towards goals and objectives in CCMWA's Strategic Plan.
- Review, update, and officially adopt a rolling 5-year Capital Improvement Plan.
- Maintain a forecast for capital improvements on a rolling 10-year and 20-year basis.
- Review, update, and ensure CCMWA's Master Cash Flow Model is consistent with operational costs, capital improvement funding needs, asset renewal and replacement funding needs, debt obligations, revenue requirements, water rates, bond rating matrixes, and reserve requirements.
- Review, analyze, develop, and adopt an annual balanced operating budget.

In order to facilitate the Capital Improvement Program (CIP), the CCMWA Board has implemented a plan for stabilized rate increases that span a set number of years instead of assessing rate increases based on the needs of a single year. The rate plan for 2017 set the annual increase at 3% per year for a 5-year period beginning in 2017. During the planning and development of the 2018-2022 CIP, the annual rate increase has been lowered to 2% per year beginning in 2018 for a 3-year period.

CCMWA has also implemented an Asset Management program to plan for and fund asset renewal and replacement projects (routine capital projects) each year through a "pay as you go" strategy. Current and planned capital projects (non-routine) are funded or are planned to be funded through the "pay as you go" strategy.

The information gathered by each planning process is evaluated through the Master Cash Flow Model. The purpose of this model is to provide the necessary guidelines to ensure that cash will be available to pay budgeted costs in a timely manner and forecast yearly cash flows for a term of at least 20 years. Budget allocations are utilized by the cash flow model to anticipate operational expenses and all other anticipated cash outflows including principle portions of debt payments, use of net income to fund capital projects, and extraordinary items. The cash flow model provides details as to the period in which revenues will be collected and will be available to pay obligations.

Through implementation of these planning processes, CCMWA ensures a reliable and sustainable water treatment and transmission system capable of providing high quality drinking water at competitive rates. CCMWA's bond rating was affirmed as AAA by the three primary rating agencies in 2002 due to both short term and long term financial and nonfinancial planning. CCMWA maintained this rating through the

recent recession, while many other utilities and governments experienced bond rating downgrades. CCMWA's bond rating was reaffirmed as AAA by the three primary rating agencies in 2015 during the refinancing of Georgia Environmental Finance Authority loans with senior lien revenue bonds. On May 11, 2017 Fitch Ratings reaffirmed its AAA rating on CCMWA's revenue bonds.

Budget Process

Cobb County-Marietta Water Authority is focused on providing high quality, affordable potable water to its customers at the quantity required to sustain their respective communities and economies. Planning, budgeting, operational efficiency, reliability, and quality are critical to the fulfillment of CCMWA's mission. The budget process for CCMWA is ongoing to ensure that each of these critical areas receive adequate attention, and the process is viewed as a continuous cycle that begins as soon as the next year's budget is adopted.

A budget kick-off meeting is held in July, which allows Division Managers and the Finance Division to discuss the previous year's budget process and due dates for the upcoming budget development process. The information gathered by Division Managers throughout the first half of the year is then entered into a budget template and discussed with the Director of Finance in August. During September, the draft capital budget is developed by operations staff and the Engineering Division. After the draft operating and capital budgets are prepared, the information is reviewed by the Directors and General Manager before it is presented to the board during committee meetings in October and November. The first reading of the draft budget occurs at the November board meeting and any board recommended changes are made before the final budget reading and adoption in December.

The due dates for development of the 2018 budget were:

July 10th – Finance Division budget process kick-off meeting

August 11th – Division budget requests due to Finance Division

August 14 - 25th – Individual division meetings to review operating and capital budget requests

September 1st – Engineering division complies draft capital budget, including CIP and AR&R requests

September 12th – Draft operating and capital budgets submitted to General Manager and Directors

October 2 - 13th – Master budget is finalized into a final draft by the Finance Division

October 25th – Planning Committee met to review CIP and AR&R Budgets

October 30th – Personnel Committee met to review Human Resources related budget items

November 3rd – Finance Committee met to review proposed operating and capital budgets

November 20th – First reading and consideration of adoption of the 2018 operating and capital budgets December 18th – Second reading and adoption of the 2018 operating and capital budgets

The budget calendar below highlights the focus during each month of the budget process.

Budget Calendar	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Division Managers review work priorities for upcoming year	•	•	•	•	•	•	•	•	•	•	•	•
Division Managers review, update, & determine goal progress	•	•	•	•	•	•	•	•	•	•	•	•
Budget status reviewed monthly by staff, management, & board members	•	•	•	•	•	•	•	•	•	•	•	•
Finance holds kick-off meeting with Divisions to review budget process and due dates							•					
Division Managers submit operational budget requests to Finance								•				
Director of Engineering submits rolling 5 year draft CIP plan to Finance									•			
Division Managers submit routine capital project (AR&R) requests to Finance									• ?]		
Finance submits draft Master Budget to General Manager and Directors									•			
Finance Division incorporates recommended changes into draft master budget									•	•		
Personnel Committee meeting scheduled for review of staffing needs and benefit offerings										•		
Master Budget is finalized and pro forma financial statements are developed										•		
Finalized Capital Budget is presented to CCMWA's Planning Committee										•		
Finalized Master Budget is presented to CCMWA's Finance Committee											•	
First Reading of the budget is presented to the CCMWA Board											•	
Second Reading of the budget is presented to the CCMWA Board and approval is requested												•

Strategic Plan Implementation

The initiatives highlighted in CCMWA's current Strategic Plan served as a guiding force during development of the 2018 budget. These initiatives are areas that CCMWA staff will devote time and energy to improve over the 5 years covered by the plan. The nine initiatives outlined in the 2016-2020 Strategic Plan include:

- Safety Culture elevate the Safety Program to create a safety culture to protect our employees and the public
- Water Quality consistently deliver high quality water to our customers
- Workforce Development attract, develop, and retain top talent
- Financial Strength preserve a strong financial profile
- Preparedness/Security improve the security of facilities and personnel, and increase resiliency
- Infrastructure Sustainability acquire and proactively maintain our infrastructure to minimize life cycle costs and maximize reliability
- Communication Enhancements promote clear, open communication within our organization and to external stakeholders
- Information Management collect and manage information to make sound, long-term decisions
- Water Resources secure and preserve water sources that will serve the region into the future

While developing annual goals during the budget process, each division looked to these Strategic Plan initiatives for guidance. By linking each divisional goal to a strategic initiative in 2018, CCMWA can ensure that progress is made towards our overall goals. The newly redesigned goals are intended to foster a culture where all employees across the Authority are working towards a single outcome; building a stronger organization for the future.

The goals and objectives set by each division for 2017 can be found in the 2017 Defined Budget Goals section. A measurement of each division's goal achievement over the last 5 years and their 2018 defined budget goals are presented at the divisional level with their operating budgets.



Increase

Increase

EXECUTIVE SUMMARY

The 2018 annual operating budget for Cobb County-Marietta Water Authority is a balanced budget with operating revenues exceeding operating expenses. Operating income is expected to decrease by \$46,330 in 2018 due to a 5.9% increase in operating expenses. Projected net income for 2018 is \$33.87 million, an \$117,145 increase over the 2017 budget. Actual net income for 2017 is expected to be \$37.34 million, 10.6% higher than expected.

The total 2018 capital budget is \$49.2 million, which includes \$34.8 million in capital improvements, \$9.0 million in asset renewal and replacement projects, a \$1.0 million reservation for Department of Transportation (DOT) required projects, and a \$4.5 million contingency. The overall capital budget for 2018 is 18.1% less than the 2017 capital budget. This reduction is due to the completion of several major pipeline projects during 2017 and a focus on replacement of aging infrastructure during the next 5 years.

	2017 Budget	2017 Projected Actual	Variance - Favorable (Unfavorable) 2018 Budget	(Decrease) over 2017 Budget	(Decrease) over 2017 Budget	
			<u> </u>			
Operating Revenues	\$ 86,229,000	\$ 85,545,066	\$ (683,934) \$89,207,400	\$ 2,978,400	3.45%	
Operating Expenses	\$ 51,202,520	\$ 47,128,621	\$ 4,073,899 \$54,227,250	\$ 3,024,730	5.91%	
Operating Income	\$ 35,026,480	\$ 38,416,445	\$ 3,389,965 \$34,980,150	\$ (46,330)	-0.13%	
Other Income	\$ 1,489,560	\$ 1,533,886	\$ 44,326 \$ 1,456,512	\$ (33,048)	-2.22%	
Other Expenses	\$ 2,614,030	\$ 2,610,307	\$ 3,723 \$ 2,417,507	\$ (196,523)	-7.52%	
Extraordinary Items	\$ 150,000	\$ -	\$ 150,000 \$ 150,000	\$ -	0.00%	
Net Income	\$ 33,752,010	\$ 37,340,023	\$ 3,588,013 \$33,869,155	\$ 117,145	0.35%	
	2017 Budget	2017 Projected Actual	Variance - Favorable (Unfavorable) 2018 Budget	Increase (Decrease) over 2017 Budget	Increase (Decrease) over 2017 Budget	
Pipelines	\$ 27,170,629	\$ 25,677,663	\$ 1,492,966 \$ 9,075,400	\$ (18,095,229)	-66.60%	
Water Treatment Plants	\$ 18,589,372	\$ 15,265,323	\$ 3,324,049 \$25,400,000	\$ 6,810,628	36.64%	
Water Storage Tanks	\$ -	\$ -	\$ - \$ 300,000	\$ 300,000	100.00%	
Asset Renewal & Replacement	\$ 8,980,827	\$ 5,388,496	\$ 3,592,331 \$ 8,992,381	\$ 11,554	0.13%	
Total Capital Improvements	\$ 54,740,828	\$ 46,331,482	\$ 8,409,346 \$43,767,781	\$ (10,973,047)	-20.05%	
Reservation for DOT Projects	\$ 1,500,000	\$ 18,902	\$ 1,481,098 \$ 1,000,000	\$ (500,000)	-33.33%	
Contingency	\$ 3,818,357	\$ 1,696,964	\$ 2,121,393 \$ 4,476,778	\$ 658,421	17.24%	
Total Capital Expenditures	\$ 60,059,185	\$ 48,047,348	\$12,011,837 \$49,244,559	\$ (10,814,626)	-18.01%	

Summary of Factors Influencing the 2018 Budget

- A balanced budget with net income supporting planned capital needs.
- Division goals and objectives directly related to Strategic Plan initiatives
- Rate program that represents the true value of water, with a reduction from a 3% planned rate increase to a 2% rate increase program through 2020.
- In-county customer rate: \$2.93; out-of-county customer rate: \$3.24
- Water sales estimated at 80.7 MGD
- Increased operating expenses related to water treatment chemicals and legal fees to support long term water supply.
- 3.5% of salary midpoints allocated for merit based raises
- Capital budget totaling \$49.2 million for 2018, with focus on Aged Pipe Replacement and system sustainability.

Operating Revenue Assumptions

Cobb County-Marietta Water Authority's operating revenue consists of water sales, summer surcharges, reserved daily allocation base charges, and water testing. CCMWA budgets for only three of these sources, because summer surcharges are realized only when summer water usage exceeds 130% of the previous winter's base demands. In 2017, only \$2,186 was collected in summer surcharges due to high winter water demand in late 2016 and lower summer water demand in 2017. Water sales revenue and reserved daily allocation base charges constitute more than 99% of all revenue for CCMWA.

	2	014 Audited	2015 Audited		2016 Audited		2017 Projected		2018 Budget	
Water Sales	\$	75,315,749	\$	79,971,182	\$8	39,354,831	\$85	5,504,630	\$	87,763,500
Base Charges	\$	-	\$	-	\$	-	\$	-	\$	1,412,400
Summer Surcharges	\$	315,870	\$	361,135	\$	261,333	\$	2,186	\$	-
Water Testing	\$	30,200	\$	24,050	\$	39,300	\$	38,250	\$	31,500
	\$	75,661,819	\$	80,356,367	\$8	9,655,464	\$85	5,545,066	\$	89,207,400
% of Total Revenue		100%		100%		100%		100%		100%

Water sales revenue for 2018 is forecasted at \$89,175,900, a 3.45% increase over the 2017 budget. This projection includes \$87.8 million from water sales and \$1.4 million from base charges related to reserved daily allocation contracts.

Water sales revenue for 2018 was forecasted with the following assumptions:

- Average daily water sales in 2018 will be 80.7 million gallons per day (MGD) based on forecasts of weather patterns and economic activity.
- In-county water sales will represent 86% of all water sales and out-of-county customers will represent 14%, based on historical billing and usage patterns.
- Revenue collection rate will be 100% based on prior year collection rates and the financial stability of all CCMWA customers.
- Rate increase for 2018 will follow board-approved rate program.

In 2017, CCMWA began a five year rate program of 3% annual rate increases; however, this rate program is evaluated on an annual basis along with the five-year capital budget. The CCMWA board approved a modification of the current program for the 2018 budget which reduced both the rate increase and the length of the program. The revised rate program includes a 2% annual rate increase for the three year period ending December 31, 2020. The rates for the 2018 budget are \$2.93 per thousand gallons for incounty customers and \$3.24 per thousand gallons for out of county customers.

Actual water sales revenue for 2017 is projected to be \$85.5 million compared to a budget expectation of \$86.2 million and actual water demand is projected to be 80.2 MGD compared to a budget of 81.0 MGD. Water demand for 2017 was based on the assumption that dry weather conditions would continue through much of 2017. However, CCMWA's service area received more rainfall than expected which, combined with drought restrictions, reduced overall demand for potable water.

Water testing revenue for 2018 is forecasted at \$31,500, an 8.62% increase over the 2017 budget. This revenue was forecasted using the assumption that 630 billable samples will be processed by the CCMWA Laboratory in 2018. Actual water testing revenue for 2017 is projected to be \$38,250 with 765 samples processed during the year, compared to the budget estimate of \$29,000 in water testing revenue from 580 processed samples.

Operating Expense Assumptions

The top five expense categories in CCMWA's operating budget are depreciation, salaries and benefits, electricity and natural gas, repairs and maintenance, and water treatment chemicals. In 2018, depreciation expense accounts for 40% of the operating budget, salaries and benefits accounts for 21%, electricity and natural gas accounts for 10%, and repairs and maintenance and water treatment chemicals each account for 5% of total operating expenses.

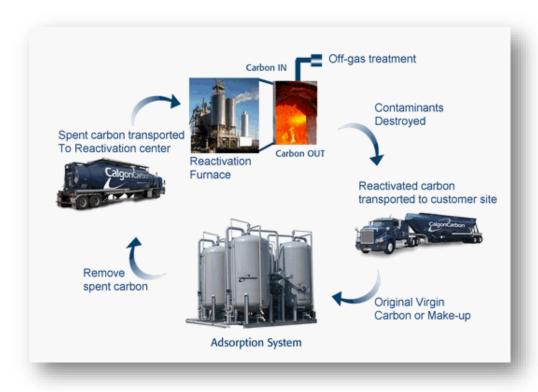
The 2018 budget anticipates depreciation expense of \$22.7 million, a 5.0% increase over the 2017 budget estimate of \$21.6 million. This increase is due to five capital improvement projects that were completed during 2017 and will have the first full year of depreciation in 2018.

Salaries and benefits, including pension expense, are estimated to increase by 4.6% in 2018. Each division's salaries, overtime, and payroll tax expenses were estimated based on the assumption that all full-time positions will be filled for the entire year. The budget for salaries, overtime, and payroll taxes also includes an allocation for merit increases of 3.5% of the midpoint of each position's salary grade. The overall budget for employee benefits has remained constant for 2018, despite a quoted increase of 12.5% for health insurance costs. The actual cost of employee benefits for 2017 is projected to be \$300,000 under budget; therefore, the anticipated increase in health insurance was applied to actual expenses when estimating the 2018 budget. Pension expense for 2018 has increased by 2.1% and is budgeted as a percentage of salaries expense.

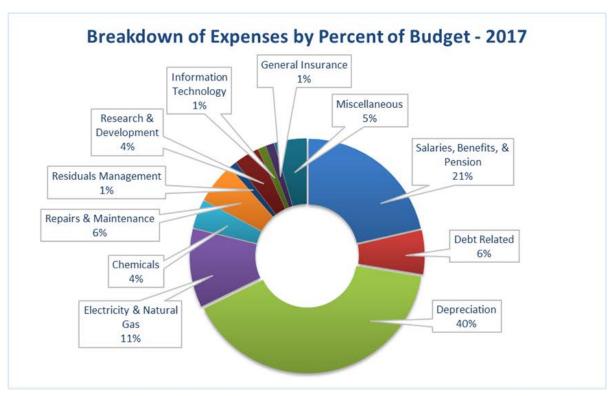
Electricity and natural gas expenses are expected by decrease by 1.9% in 2018 due to changes in water treatment plant operations that allow for increased efficiency. Actual electricity and natural gas expenses are projected to total \$5.6 million for 2017, compared to a budget of \$5.9 million, and are estimated to total \$5.8 million in 2018.

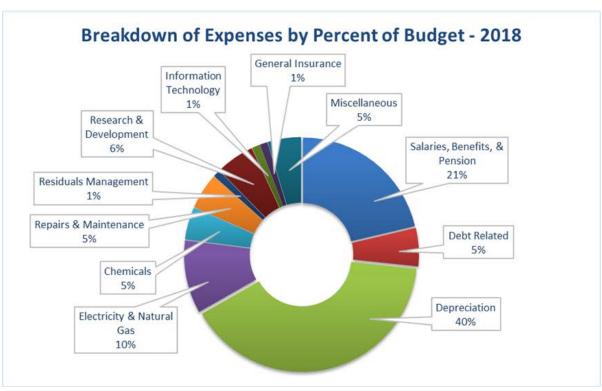
Repair and maintenance expenses include costs related to the maintenance of general equipment. electrical systems, SCADA system, security systems, vehicles, asset coating, pipelines, meters, water storage tanks, and easement clearing. Estimated repairs and maintenance expenses for 2017 are projected to total \$2.5 million compared to the budget of \$3.1 million. The total cost of these expenses is expected to decrease by 6.86% in 2018, for a total budget of \$2.8 million. This reduction is mainly due to a decreased need for asset coating during the year. The reservation for emergency pipeline repairs in the Transmission Division budget was also reduced in 2018 to reflect the historical use of this line item and the ability to capitalize larger pipeline repairs.

The total expense for water treatment chemicals for 2018 is expected to increase 18.0% due to the reactivation of the media in 14 granular activated carbon (GAC) vessels. GAC is used during the treatment process to remove dissolved organic compounds that can lead to water quality issues in finished water. During 2017, higher levels of dissolved organic compounds were present in raw water from Allatoona Lake, and the GAC system was used during the treatment process for a longer period of time than anticipated. Carbon from several GAC vessels was reactivated during 2017, which resulted in an estimated chemicals expense of \$2.3 million compared to a budget of \$2.2 million. The 2018 budget projects \$2.6 million in expenses related to water treatment chemicals to reactivate this filtration media.



Granular Activated Carbon reactivation process





Other Income and Expense Assumptions

Other income for 2017 is expected to meet the budget expectation \$1.5 million. However, other income is projected to decrease by 2.2% in 2018 due to a reduction in anticipated rental income. The "1190 Building", which that shares a campus with CCMWA's Administration and Engineering office, has been vacant for most of 2017, and a conservative estimate of 2018 rental income assume that the building will remain vacant.

Other expenses for 2017 are also expected to meet the budget expectation of \$2.6 million and 2018 other expenses are expected to decrease by 7.5%. This reduction in other expense is related to bond interest as CCMWA's revenue bonds move closer to maturity.

Capital Improvement Plan Assumptions

The 2018-2022 Capital Improvement Plan is focused on sustaining the ability to provide the expected level of service to our customers by maintaining and reinvesting in CCMWA's infrastructure. The projects outlined in the 5-year CIP are either aged pipe replacements or projects related to the replacement, rehabilitation, or reliability of plant assets and equipment. The total projected capital expenses for 2018 are \$49.2 million and the overall value of the 5-year CIP is projected to be \$258.2 million.

Actual capital expenses for 2017 are estimated to be \$48.0 million, with \$40.9 million from capital improvement projects, \$5.4 million from asset renewal & replacement projects, \$18,902 from DOT required projects, and \$1.7 million in contingency. The contingency expenses for 2017 include land purchases around the Wyckoff intake and the Wyckoff Treatment Plant, as well as a land settlement related to Hickory Log Creek Reservoir.

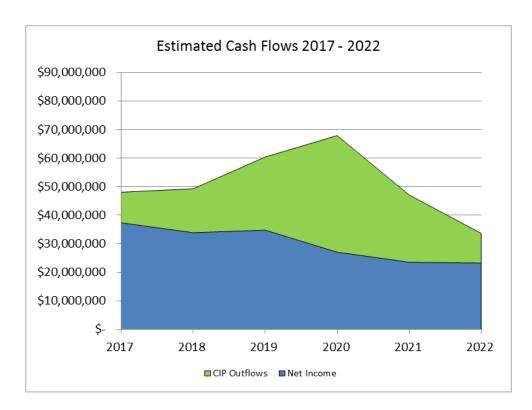
The Cash Flow Model is used to ensure that the operating budget and rate program can support the 20year CIP outlook. The results of the Cash Flow Model analysis are used to finalize the 5-year CIP projects and any adjustments to the rate program. The following assumptions were used for the Cash Flow Model analysis:

- 2018 proposed operating and capital budgets
- 4% inflation factor for expenses in future years
- Anticipated water demand of 80.7 MGD in 2018, an 8% reduction in water demand for 2019 and 2020 due to Paulding County's development of a water treatment reservoir and plant, and a 1% increase in water demand per year from 2021 to 2040.

The Cash Flow Model and 20-year CIP outlook do not take into account projects that are currently speculative and inestimable, and, if realized, would be funded through contingency or through the issuance of new debt. These projects include land purchases or settlements related to Hickory Log Creek Reservoir and major shifts in the 20-year CIP outlook due to regulatory changes or unfavorable decisions regarding future water availability through Allatoona Lake and Hickory Log Creek Reservoir.

Estimated Impacts of Capital Improvement Plan on Cash Flows

	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	2022 Projected
Projected Water Demand (MGD)	80.20	80.70	81.51	75.00	73.00	73.73
Anticipated Rate Increase	3.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Revenues	\$ 87,078,952	\$ 90,663,912	\$ 93,574,804	\$ 87,426,660	\$ 86,242,718	\$ 88,712,589
Expenses (excluding depreciation)	\$ 26,128,621	\$ 31,521,000	\$ 32,573,561	\$ 32,839,818	\$ 33,774,954	\$ 35,167,230
Net Income	\$ 37,340,023	\$ 33,869,155	\$ 34,756,716	\$ 27,047,686	\$ 23,514,107	\$ 23,212,931
Total CIP Spending Ending Cash Balance	\$ 48,047,348 \$183,326,035	\$ 49,244,559 \$183,973,388	\$ 60,382,147 \$175,513,342	\$ 67,887,822 \$152,992,976	\$ 47,066,164 \$149,611,823	\$ 33,646,892 \$166,064,579

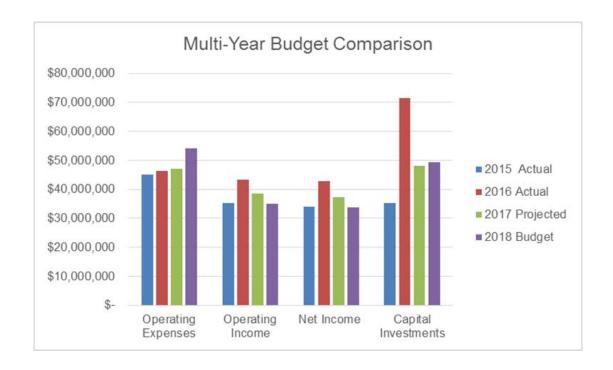


Fund Equity

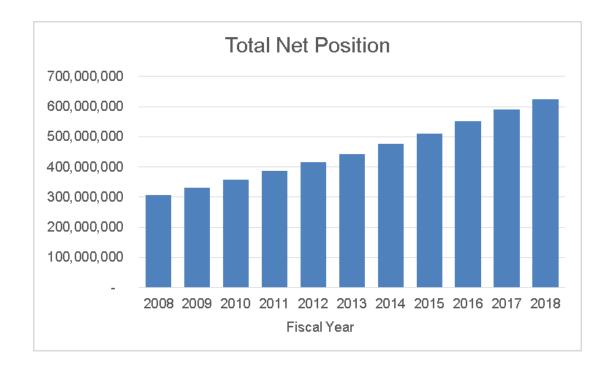
Cobb County-Marietta Water Authority operates as a proprietary fund and defines fund equity, also called net position, as total net assets. Net position is comprised of three components – net investment in capital assets, restricted, and unrestricted. Net income for each fiscal year increases CCMWA's total net position.

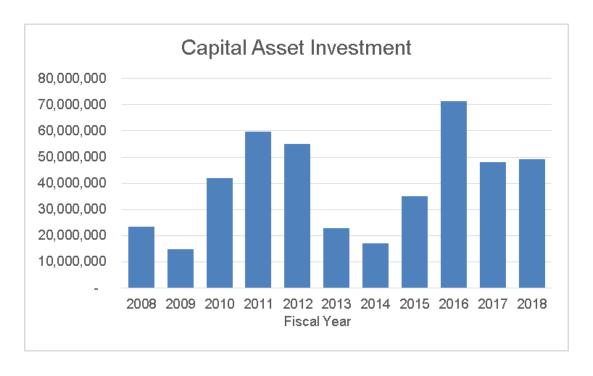
	_2	014 Audited	2	2015 Audited		2016 Audited		2017 Projected		018 Budget	
Operating Revenues	\$	75,661,819	\$	80,356,367	\$	89,655,464	\$	85,545,066	\$	89,207,400	
Operating Expenses	\$	44,474,605	\$	45,099,147	\$	46,224,169	\$	47,128,621	\$	54,227,250	
Operating Income	\$	31,187,214	\$	35,257,220	\$	43,431,295	\$	38,416,445	\$	34,980,150	
Other Income	\$	6,927,510	\$	2,355,904	\$	2,170,295	\$	1,533,886	\$	1,456,512	
Other Expenses	\$	3,593,125	\$	3,689,056	\$	2,832,098	\$	2,610,307	\$	2,267,507	
Extraordinary Items	\$		\$	74,684	\$		\$		\$	150,000	
Net Income	\$	34,521,599	\$	33,849,384	\$	42,769,492	\$	37,340,023	\$	34,019,155	

Over the last four budget years, operating expenses have gradually increased with a notable increase in 2018 due mainly to higher water treatment chemical expenses and legal costs related to long term water supply. Operating income and net income have gradually decreased over the last three budget years in conjunction with changes to CCMWA's 20-year Capital Improvement Plan. Planned net income is used to fund capital projects, but is estimated for future years at a level necessary to support future capital outlays.



Total net position as of December 31, 2016 was \$552,724,142. Total net position is estimated to be approximately \$590,064,165 by December 31, 2017 and \$624,083,320 by December 31, 2018. The increase in total net position is attributable to CCMWA's planned net income funding capital projects, which are capitalized and depreciated over the useful life of the given asset.





Entity-Wide Financial and Non-Financial Goals

The overarching financial goal of Cobb County-Marietta Water Authority is to fulfill its core mission while maintaining solvency to ensure long-term sustainability. To accomplish this goal, CCMWA designates entity-wide short-term and long-term financial goals. Below is a review of financial and non-financial goals set in 2017 and a list of goals for 2018:

Review of 2017 Short Term Financial Goals

- The Authority will plan for, develop, and adhere to a balanced budget for calendar year 2017. **Completed**
- The Authority will evaluate options to amend the Capital Improvement Plan in 2017 to avoid issuance of debt to fund capital improvements in future years. Completed
- The Authority will evaluate options to increase operational efficiency and reduce costs in support of its planned rate structure. Completed
- The Authority will maintain its planned rate increase of 3% while maintaining current levels of service and fiscal stability. Completed
- The Authority will maintain unrestricted cash reserves equivalent to two months of budgeted operating expenses throughout 2017. Completed

Review of 2017 Long-Term Financial Goals

- The Authority will strive to maintain its AAA bond rating from multiple bond rating agencies. Maintained
- When fiscally possible, the Authority will avoid issuance of "new debt" to fund renewal-type capital improvements. Maintained - no plans for debt issuance
- The Authority will fully fund a managed asset renewal and replacement program each year with net income. *Maintained – funded in 2017 by net income*
- The Authority will maintain a useful and effective cash flow model to predict cash flows for at least 20 years into the future in order to facilitate long-term financial planning and establish rate programs that avoid "rate shock" to customers. Maintained - cash flow model maintained and used to project through 2047
- The Authority will maintain a competitive rate structure to facilitate financial and overall economic sustainability of the Authority and its customers. Maintained - a 3% planned rate increase was implemented in January 2017 and a 2% rate increase is planned for 2018.

Review of 2017 Short-Term Non-Financial Goals

- The Authority will develop asset management plans for its primary equipment and infrastructure. **Completed**
- The Authority will complete an update to its Business Continuity Plan. Completed

- The Authority will continue to evaluate the structural integrity of aging large diameter pre-stressed concrete cylinder pipe. Completed
- The Authority will complete an update to its Drought Management Plan. Completed

Review of 2017 Long- Term Non-Financial Goals

- CCMWA will secure sufficient water resources for current and future customers of the Authority. Ongoing: currently active in six federal lawsuits to preserve and expand access to current water resources in the Chattahoochee River and Allatoona Lake.
- CCMWA will gain United States Army Corps of Engineers (USACE) approval for the accounting methodology proposed for the use of releases from Hickory Log Creek Reservoir and place the project into useful service. Ongoing: filed a federal lawsuit against USACE in February 2017 to challenge the accounting methodology for both made inflows from Hickory Log Creek Reservoir and wastewater return flows from Allatoona Lake; continuing active negotiation with USACE regarding the proposed Water Supply Rule, in conjunction with other states and water agencies across the nation, primarily through the 2017 formation of the National Water Supply Alliance (NWSA). CCMWA holds a seat on the NWSA Board of Directors.
- The Authority will gain consent of the USACE to credit wastewater inflows into Allatoona Lake as an offset to water withdrawals from the lake. Ongoing: same as above bullet.
- The Authority will gain additional allocation of water from Allatoona Lake sufficient to meet the needs of future Authority customers. Ongoing: in September 2017, CCMWA won a lawsuit against USACE in federal district court, from which a judge's order will require USACE to complete a reallocation study of Allatoona Lake by a date certain, currently being negotiated with the U.S. Department of Justice and USACE.
- The Authority will work with the Atlanta Regional Commission, Metropolitan North Georgia Water Planning District and the State of Georgia to acquire additional allocation of water from the Chattahoochee River sufficient to meet the future demands of Authority customers. Ongoing: CCMWA continues to team with other metropolitan water suppliers to support through staff involvement and funding the legal, strategic and technical work needed to maximize the availability of water required for current and future needs in the region.
- The Authority will maintain potable water quality and perform water quality monitoring in accordance with all regulatory rules. Ongoing: both the Quarles and Wyckoff Treatment Plants were recognized in 2017 for eight consecutive years of meeting all water quality, monitoring and reporting requirements through receiving the Platinum Award from the Georgia Association of Water Professionals

2018 Short Term Financial Goals

- The Authority will plan for, develop, and adhere to a balanced budget for calendar year 2018.
- The Authority will evaluate options to amend the Capital Improvement Plan in 2018 to avoid issuance of debt to fund capital improvements in future years.
- The Authority will evaluate options to increase operational efficiency and reduce costs in support of its planned rate structure.
- The Authority will maintain its planned rate increase of 2% while maintaining current levels of service and fiscal stability.
- The Authority will maintain unrestricted cash reserves equivalent to two months of budgeted operating expenses throughout 2018.

2018 Long-Term Financial Goals

- The Authority will strive to maintain its AAA bond rating from multiple bond rating agencies.
- When fiscally possible, the Authority will avoid issuance of "new debt" to fund renewal-type capital improvements.
- The Authority will fully fund a managed asset renewal and replacement program each year with net income.
- The Authority will maintain a useful and effective cash flow model to predict cash flows for at least 20 years into the future in order to facilitate long-term financial planning and establish rate programs that avoid "rate shock" to customers.
- The Authority will maintain a competitive rate structure to facilitate financial and overall economic sustainability of the Authority and its customers.

2018 Short-Term Non-Financial Goals

- The Authority will implement drone technology to enhance GIS records related to easements and buried assets.
- The Authority will perform a test of procedures in the Business Continuity Plan.
- The Authority will continue to evaluate the structural integrity of aging large diameter pre-stressed concrete cylinder pipe.
- The Authority will continue efforts related to workforce development through enhancements to the performance review program and leadership development program.

2018 Long- Term Non-Financial Goals

- CCMWA will secure sufficient water resources for current and future customers of the Authority.
- CCMWA will gain United States Army Corps of Engineers (USACE) approval for the accounting methodology proposed for the use of releases from Hickory Log Creek Reservoir and place the project into useful service.

- The Authority will gain consent of the United States Army Corps of Engineers to credit wastewater inflows into Allatoona Lake as an offset to water withdrawals from the lake.
- The Authority will gain additional allocation of water from Allatoona Lake sufficient to meet the needs of future Authority customers.
- The Authority will work with the Atlanta Regional Commission, Metropolitan North Georgia Water Planning District and the State of Georgia to acquire additional allocation of water from the Chattahoochee River sufficient to meet the future demands of Authority customers.
- The Authority will maintain potable water quality and perform water quality monitoring in accordance with all regulatory rules.
- The Authority will develop a sustainable workforce of qualified and capable operators, technicians, scientists, engineers, managers, and leaders.



U.S. Army Corp of Engineers' Allatoona Dam

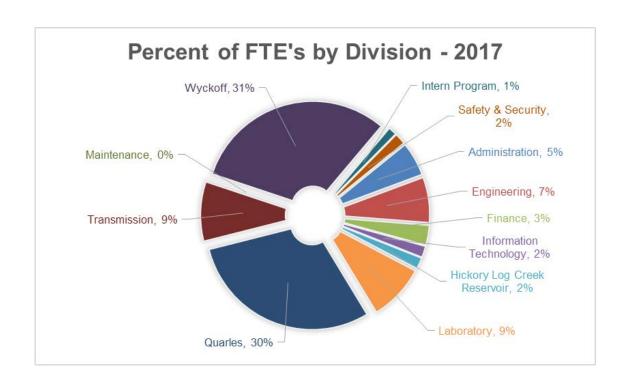
Staffing Changes

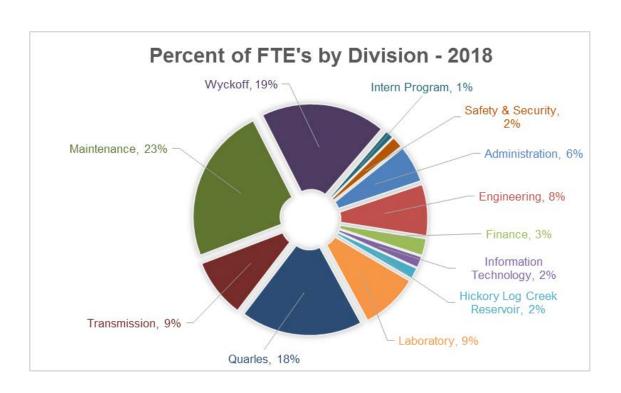
Cobb County-Marietta Water Authority used the increased number of retirements in 2017 as an opportunity to assess the needs of each division and reallocate positions throughout the organization to better address these needs. In some cases, the reallocations resulted in the creation of new position titles that will not increase the number of full-time equivalent (FTE) positions when filled.

Position reallocations for 2018

- The Asset Manager position has been moved from Finance to Administration to recognize this position as a function of the Director of Operations.
- The Office Administrator position that was previously allocated 50% to Transmission and 50% to Finance has been reallocated to recognize this position as a function of the Finance Division.
- Shift changes in the Wyckoff Division created a free position that has been reallocated to Engineering to increase GIS capabilities.
- The Office Administrator position that was previously allocated to Administration has been reallocated to recognize the administrative support duties this position will provide to the Transmission and Maintenance Divisions. The salary of this position will be allocated 50% to Administration, 25% to Transmission, and 25% to Maintenance.
- The Custodian position in the Quarles Division was vacated during 2017 and the position was reallocated to the Maintenance Division. The custodian services for the Quarles Water Treatment Plant will be outsourced for 2018.

Full Time Equivalent Pos	itions by D	ivision	
Division	2016	2017	2018
Administration	5.5	6	6.5
Finance	3.5	3.5	3
Engineering	8	8	9
Information Technology	2	2	2
Safety & Security	2	2	2
Hickory Log Creek Reservoir	2	2	2
Wyckoff	35.5	36	21.5
Quarles	34	34.5	21
Maintenance	0	0	27.25
Laboratory	10	10	10
Transmission	10.5	10.5	10.25
Intern Program	1.5	1.5	1.5
Total of Divisions	114.5	116	116





OPERATING BUDGET

Statement of Operations

Statement of Operations Revenue	2017 Budget	2017 Projected Actual	Variance Favorable (Unfavorable)	2018 Budget	Increase (Decrease) Over 2017 Budget	% Increase (Decrease) Over 2017 Budget
Water Sales	\$ 86,200,000	\$ 85,506,816	\$ (693,184)	\$ 89,175,900	\$ 2,975,900	3.45%
Water Testing	29,000	38,250	9,250	31,500	2,500	8.62%
Total Revenue	\$ 86,229,000	\$ 85,545,066	\$ (683,934)	\$ 89,207,400	\$ 2,978,400	3.45%
	- 	Ψ σσησ ισησσσ	- (000,001)	- + + + + + + + + + + + + + + + + + + +	Ψ =,σ: σ, :σσ	
Division Expense						
General Operations	\$ 1,962,800	\$ 1,793,929	\$ 168,871	\$ 3,083,500	\$ 1,120,700	57.10%
Depreciation Expense	21,625,000	21,000,000	625,000	22,706,250	1,081,250	5.00%
Administration Division	865,970	827,775	38,195	1,051,989	186,019	21.48%
Administration & Rental Buildings	121,600	125,595	(3,994.95)	137,700	16,100	13.24%
Finance Division	432,395	383,166	49,229.05	324,458	(107,937)	-24.96%
Engineering Division	1,178,660	1,127,408	51,252	1,303,234	124,574	10.57%
Information Technology Division	599,920	538,366	61,553.90	636,451	36,531	6.09%
Safety and Security Division	228,435	221,467	6,967.76	235,526	7,091	3.10%
Research & Development	1,889,000	1,003,052	885,947.78	2,127,000	238,000	12.60%
				, ,	,	
Hickory Log Creek Reservoir Division	482,985	477,341	5,643.96	474,192	(8,793)	-1.82%
Wyckoff Treatment Plant Division	8,048,355	7,653,960	394,395	8,194,228	145,873	1.81%
Quarles Treatment Plant Division	7,875,162	7,000,253	874,909	7,702,328	(172,834)	-2.19%
Maintenance Division	2,552,953	2,546,169	6,784	2,855,838	302,885	11.86%
Laboratory Division	1,114,120	1,083,937	30,183.14	1,115,143	1,023	0.09%
Transmission Division	2,225,165	1,346,202	878,962.64	2,279,412	54,247	2.44%
Total Division Expense	\$ 51,202,520	\$ 47,128,621	\$ 4,073,899	\$ 54,227,250	\$ 3,024,730	5.91%
Total Income from Operations	\$ 35,026,480	\$ 38,416,445	\$ 3,389,965	\$ 34,980,150	\$ (46,330)	-0.13%
Other Income						
Interest Income	\$ 1,347,000	\$ 1,523,238	\$ 176,238	\$ 1,380,000	\$ 33,000	2.45%
Rental Income	106,560	95,528	(11,032)	46,512	(60,048)	-56.35%
	100,300	•		40,312	(60,048)	
Gain (Loss) on Asset Disposal	-	8,200	8,200	-	=	0.00%
Gain (Loss) on Market Value of Investments	-	(133,026)	(133,026)	-	-	0.00%
Timber Sales	-	28,846	28,846	-	(0.000)	0.00%
Miscellaneous Income	36,000	11,100	(24,900)	30,000	(6,000)	-16.67%
Total Other Income	\$ 1,489,560	\$ 1,533,886	\$ 44,326	\$ 1,456,512	\$ (33,048)	-2.22%
Other Expense						
Bond Interest - 2009 Revenue Bonds	\$ 1,050,439	\$ 1,050,439	\$ -	\$ 870,089	\$ (180,350)	-17.17%
Bond Interest - 2009 Revenue Bonds	1,947,926	1,947,926	Ψ - -	1,908,300	(39,626)	-2.03%
Amortized Bond Premium	(715,740)	(715,740)	_		, ,	-11.35%
	\ , ,	, , ,	=	(634,516)	81,224	-17.17%
2009 Bond Deferred Charge Amortization	321,905	321,905	2.702	266,635	(55,270)	
Fiscal Agent Fees	9,500	5,777	3,723	7,000	(2,500)	-26.32%
Total Other Expense	\$ 2,614,030	\$ 2,610,307	\$ 3,723	\$ 2,417,507	\$ (196,523)	-7.52%
Net Income Before Extraordinary Items	\$ 33,902,010	\$ 37,340,023	\$ 3,438,013	\$ 34,019,155	\$ 117,145	0.35%
Extraordinary Items	150,000		150,000	150,000		0.00%
Net Income after Extraordinary Items	\$ 33,752,010	\$ 37,340,023	\$ 3,588,013	\$ 33,869,155	\$ 117,145	0.35%
Water Production Million Gallons Per Day Average	81.0	80.2	-0.8	80.7	-0.3	-0.37%

General Operations Budget

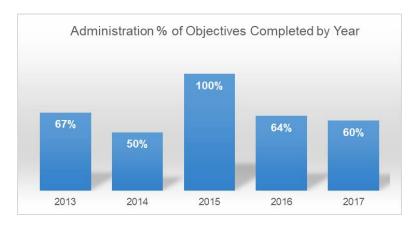
This operating segment is managed by the Administration Division and is used to track expenditures related to the operation of the entire organization, including board member fees and training. Legal fees related to long term water supply are recognized in the General Operations budget for 2018, instead of within the Research & Development budget. As CCMWA's court cases related to maintaining long term water supply advance, additional funds will be required for litigation and expert witnesses. Details regarding the status of these court cases can be found in the Entity-Wide Non-Financial Goals section of the Executive Summary.

General Operations		2017 Budget	F	2017 Projected Actual	F	/ariance avorable favorable)		2018 Budget	Increase (Decrease) Over 2017 Budget	% Increase (Decrease) Over 2017 Budget
Pension Plan Contributions & Fees	\$	935,100	\$	935,100	\$	_	\$	955,100	\$ 20.000	2.14%
Health Reimubursement Account	Ψ	-	Ψ	-	Ψ	_	Ψ	125,000	125,000	100.00%
Workers' Compensation Insurance		155,000		155,000		_		160,000	5,000	3.23%
Liability Insurance		375,000		302,992		72,008		360,000	(15,000)	-4.00%
Boiler/Machinery Insurance		31,600		31,600		-,		32,000	400	1.27%
Umbrella & Crime Insurance		61,500		64,504		(3,004)		65,000	3,500	5.69%
Risk Reduction / Safety Initiative		10,000		10,000		-		10,000	-	0.00%
Employee Incentive		17,000		17,000		_		17,000	-	0.00%
Fees - Board Members		34,800		34,800		-		34,800	-	0.00%
Fees - Accounting		300		300		-		2,000	1,700	566.67%
Fees - Audit		22,000		22,000		-		45,000	23,000	104.55%
Lees - Long Term Water Supply Litigation		-		-		-		950,000	950,000	100.00%
Fees - Legal		28,700		28,700		-		29,000	300	1.05%
Fees - Drug Testing & Background Checks	;	7,900		7,900		-		8,000	100	1.27%
Fees - Timber Tax		-		933		(933)		2,000	2,000	100.00%
Technical Services		9,000		18,000		(9,000)		9,000	-	0.00%
Travel Expenses		11,000		11,000		-		11,000	-	0.00%
Dues and Fees		48,800		48,800		-		50,000	1,200	2.46%
Education and Training		7,000		7,000		-		7,000	-	0.00%
Public Education & Outreach		130,000		20,000		110,000		130,000	-	0.00%
Bank Fees		3,200		3,500		(300)		6,700	3,500	109.38%
Office Supplies		4,500		4,500		-		4,500	-	0.00%
Investment Advisor		40,000		40,000		-		40,000	-	0.00%
Food		2,000		2,000		-		2,000	-	0.00%
Books and Periodicals		400		300		100		400	-	0.00%
Employee Wellness Program		28,000		28,000				28,000		0.00%
General Operating Expense:	_\$_	1,962,800	_\$_	1,793,929	\$	168,871	\$	3,083,500	\$1,120,700	57.10%
Depreciation Expense	2	1,625,000	2	1,085,583		539,417	2	22,706,250	1,081,250	5.00%
Total Operating Expense	\$2	3,587,800	\$2	2,879,512	\$	708,288	\$2	25,789,750	\$2,201,950	9.34%

Administration Division

The Administration Division is responsible for several functions that impact the entire organization. The roles of General Manager, Director of Operations, Human Resources, Communications, and Asset Manager are functions of this division.

Goals and Objectives



The 2018 Goals and Objectives of the Administration Division include:

Safety Culture

Make safety an integral part of all work activities (Goal)

Hold managers accountable for supporting and enforcing safety practices by mandating quarterly Safety Audits in 2018. (Objective)

Water Quality

Meet or exceed stakeholder expectations (Goal)

Establish written customer level of service expectations by December 1, 2018. (Objective)

Workforce Development

Attract, develop, and retain top talent (Goal)

- Fully integrate and utilize all aspects of the applicant tracking software. (Objective)
- Partner with professional societies, colleges, and trade schools to expand and diversify the talent pool. (Objective)

Improve employee management and morale (Goal)

Create and align career pathways and training programs to support organizational needs by designating written requirements for promotion and merit wage increases. This goal will be completed by October 1, 2018. (Objective)

- Provide monthly, on-site access to the Human Resources Manager at each main worksite. (Objective)
- Conduct trainings, listening sessions, and benefit awareness workshops to help employees better understand the opportunities that are available to them. (Objective)

Communication Enhancements

Improve the public's understanding of the value of water (Goal)

• Create and implement a presentation schedule for key organizations and groups to increase public outreach beginning July 1, 2018.

Enhance communication with employees (Goal)

 Create and provide an employee newsletter to improve communication between all Authority divisions. (Objective)

Administration Division Budget

								%
							Increase	Increase
		2017	V	ariance			(Decrease	(Decrease)
	2017	Projected	Fa	vorable		2018	Over 2017	Over 2017
Administration	Budget	Actual	(Unf	avorable)		Budget	Budget	Budget
Personnel Costs								
Salaries & Wages	\$651,960	\$651,960	\$	-	\$	820,577	\$ 168,617	25.86%
Overtime Wages	500	200		300		500	-	0.00%
Employee Benefits	117,875	81,000		36,875		125,000	7,125	6.04%
FICA - Employer Share	40,450	40,450		-		50,907	10,457	25.85%
Medicare - Employer Share	9,465	9,465		-		11,906	2,441	25.79%
Travel Expense	12,000	12,000		-		11,000	(1,000	-8.33%
Dues and Fees	2,000	2,000		-		2,000	-	0.00%
Education and Training	7,500	8,500		(1,000)		7,500	-	0.00%
Uniforms	2,520	1,000		1,520		1,200	(1,320	-52.38%
Total Personnel Costs	\$844,270	\$806,575	\$	37,695	\$ 1	,030,589	\$ 186,319	22.07%
Non-Personnel Costs								
Automotive Maintenance & Repairs	\$ 1,500	\$ 1,500	\$	-	\$	1,500	\$ -	0.00%
Communications	9,600	9,600		-		9,600	-	0.00%
Office Supplies	4,700	5,000		(300)		4,500	(200	-4.26%
Gasoline, Oil, & Diesel Fuel	1,000	500		500		800	(200	-20.00%
Food	1,900	2,100		(200)		2,000	100	5.26%
Small Equipment	1,500	1,500		-		1,500	-	0.00%
Safety Supplies & Equipment	1,500	1,000		500		1,500		0.00%
Total Non-Personnel Costs	\$ 21,700	\$ 21,200	\$	500	\$	21,400	\$ (300	-1.38%
Total Administration Expense	\$865,970	\$827,775	\$	38,195	\$ 1	,051,989	\$186,019	21.48%

Administration and Rental Buildings

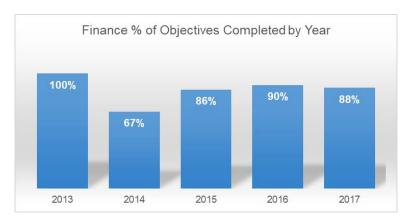
This operating segment is managed by the Administration Division and is used to track expenditures related to the Administration & Engineering building and CCMWA's rental properties. The rental properties owned by CCMWA include the organization's previous Administration & Engineering office building (1660 Barnes Mill Road) and the "1190 Building" located on the same campus as the current Administration & Engineering office.

						%
					Increase	Increase
		2017	Variance		(Decrease)	(Decrease)
	2017	Projected	Favorable	2018	Over 2017	Over 2017
Administration and Rental Buildings	Budget	Actual	(Unfavorable)	Budget	Budget	Budget
Cleaning Services	\$ 12,500	\$ 11,015	\$ 1,485	\$ 12,500	\$ -	0.00%
General Maint. & Repairs - Admin Building	21,000	18,000	3,000	20,000	(1,000)	-4.76%
General Maint. & Repairs - Rental Buildings	20,000	17,000	3,000	20,000	-	0.00%
Security Supplies & Maintenance	9,000	9,000	-	12,000	3,000	33.33%
Grounds Maintenance	17,500	15,600	1,900	22,000	4,500	25.71%
Communications	1,000	-	1,000	-	(1,000)	-100.00%
Natural Gas	3,100	2,400	700	3,000	(100)	-3.23%
Electricity	29,000	43,969	(14,969)	39,800	10,800	37.24%
Water Purchases	1,500	1,952	(452)	2,200	700	46.67%
Sewer / Wastewater Handling	1,500	1,459	41	1,700	200	13.33%
Janitorial Supplies	1,500	1,200	300	1,500	-	0.00%
Small Equipment	4,000	4,000		3,000	(1,000)	-25.00%
Total Admin. & Rental Buildings Expense	\$121,600	\$125,595	\$ (3,995)	\$ 137,700	\$ 16,100	13.24%

Finance Division

The Finance Division is responsible for coordination and administration of financial and accounting functions of CCMWA, including accounts payable and payroll. The division manages the development and implementation of the annual budget, maintains the chart of accounts and cash flow model, and ensures accounting compliance with GASB and FASB. The Division also coordinates with and oversees the work of CCMWA's investment advisor and CCMWA's annual external financial audit.

Goals and Objectives



The 2018 Goals and Objectives of the Finance Division include:

Financial Strength

Enhance financial capability within the Authority (Goal)

Enhance the cash flow model to be more user-friendly and train additional users outside the Finance Division. (Objective)

Workforce Development

Develop a highly competent, committed, and supported workforce (Goal)

- Review and refine Standard Operating Procedures (SOPs) for Accounts Payable/Payroll Coordinator position to ensure institutional and process knowledge is retained. (Objective)
- Provide training to CCMWA staff on applying financial policies for purchasing and travel. (Objective)

Safety

Develop a fully trained, educated, and safety aware workforce (Goal)

Ensure all Finance Division employee receive Defensive Driving training during 2018. (Objective)

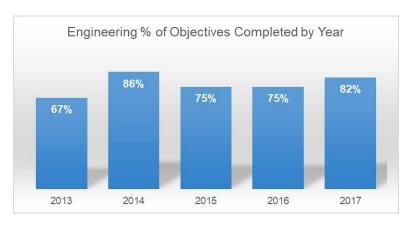
Finance Division Budget

•						%
					Increase	Increase
		2017	Variand	e	(Decrease)	(Decrease)
	2017	Projected	Favorab	le 2018	Over 2017	Over 2017
Finance Division	Budget	Actual	(Unfavora	ble) Budget	Budget	Budget
Personnel Costs						
Salaries & Wages	\$335,065	\$302,135	\$ 32,9	930 \$238,405	\$ (96,660)	-28.8%
Employee Benefits	45,950	33,000	12,9	40,000	(5,950)	-12.9%
FICA - Employer Share	19,500	16,185	3,3	315 14,781	(4,719)	-24.2%
Medicare - Employer Share	4,670	3,785	8	3, 457	(1,213)	-26.0%
Travel Expense	3,500	3,500		- 5,500	2,000	57.1%
Dues and Fees	730	730		- 1,165	435	59.6%
Education and Training	8,800	11,163	(2,3	7,000	(1,800)	-20.5%
Uniforms	930	750		600	(330)	-35.5%
Total Personnel Costs	\$419,145	\$371,247	\$ 47,8	\$310,908	\$(108,237)	-25.8%
Non-Personnel Costs						
Communications	\$ 6,500	\$ 4,918	\$ 1,5	582 \$ 6,500	\$ -	0.0%
Office Supplies	6,000	6,000		6,000	-	0.0%
Food	600	850	(2	900	300	50.0%
Safety Supplies & Equipment	150	150		- 150	-	0.0%
Total Non-Personnel Costs	\$ 13,250	\$ 11,918	\$ 1,3	\$ 13,550	\$ 300	2.3%
Total Finance Divison Expense	\$432,395	\$383,166	\$ 49,2	229 \$ 324,458	\$(107,937)	-25.0%

Engineering Division

The Engineering Division plans, coordinates, and implements capital projects for CCMWA. Recommendations from the Engineering Division drive the strategic decisions made by CCMWA in relation to capital improvement projects. When a capital project is planned, a member of the Engineering Division is assigned as project manager and is responsible for engineering and construction coordination, as well as overall project management. The Engineering Division provides strategic and regulatory guidance for operations and is also charged with development and maintenance of CCMWA's GIS platform.

Goals and Objectives



The 2018 Goals and Objectives of the Engineering Division include:

Water Quality

Meet or exceed stakeholder expectations (Goal)

Complete bench studies for taste and odor concerns, which will be used to develop a future CIP project for addressing taste and odor concerns in finished water at Quarles. (Objective)

Infrastructure Sustainability

Maintain a sustainable capital infrastructure program (Goal)

- Complete the design of four aged pipe replacement projects. (Objective)
- Complete initial site work and concrete pours for Quarles Plant #1 Replacement project. (Objective)
- Complete the design of Pete Shaw Tank No. 2. (Objective)

Information Management

Create consistent document and data management strategies (Goal)

- Develop a document management framework to transition from paper project files to digital, indexed files. (Objective)
- Increase Authority-wide access to Engineering division data through Share Point software and other tools. (Objective)

Engineering Division Budget

						%
					Increase	Increase
		2017	Variance		(Decrease)	(Decrease)
	2017	Projected	Favorable	2018	Over 2017	Over 2017
Engineering Division	Budget	Actual	(Unfavorable)	Budget	Budget	Budget
Personnel Costs						
Salaries & Wages	\$ 859,960	\$ 859,941	\$ 20	\$ 970,213	\$ 110,253	12.8%
Overtime Wages	-	19.50	(20)	-	-	0.0%
Employee Benefits	121,980	102,000	19,980	130,000	8,020	6.6%
FICA - Employer Share	53,320	53,320	-	60,153	6,833	12.8%
Medicare - Employer Share	12,470	12,470	-	14,068	1,598	12.8%
Travel Expense	27,000	15,000	12,000	31,000	4,000	14.8%
Dues and Fees	2,000	1,500	500	2,000	-	0.0%
Education and Training	18,000	18,000	-	21,000	3,000	16.7%
Uniforms	3,360	1,500	1,860	2,900	(460)	-13.7%
Total Personnel Costs	\$1,098,090	\$1,063,750	\$ 34,340	\$1,231,334	\$ 133,244	12.1%
Non-Personnel Costs						
Technical Services	\$ 10,000	\$ 10,000	\$ -	\$ 10,000	\$ -	0.0%
Automotive Maintenance & Repairs	11,500	9,000	2,500	10,000	(1,500)	-13.0%
Communications	28,800	25,000	3,800	28,000	(800)	-2.8%
Office Supplies	12,000	5,000	7,000	5,000	(7,000)	-58.3%
Gas, Oil & Diesel	8,500	8,000	500	8,000	(500)	-5.9%
Food	3,120	3,120	-	3,000	(120)	-3.8%
Small Equipment	1,420	1,538	(118)	5,000	3,580	252.1%
Safety Supplies & Equipment	5,230	2,000	3,230	2,900	(2,330)	-44.6%
Total Non-Personnel Costs	\$ 80,570	\$ 63,658	\$ 16,912	\$ 71,900	\$ (8,670)	-10.8%
Total Engineering Expense	\$1,178,660	\$1,127,408	\$ 51,252	\$1,303,234	\$ 124,574	10.6%

Information Technology Division

The Information Technology Division is responsible for installing, monitoring, and maintaining CCMWA's information technology equipment and infrastructure. The Division ensures the integrity and reliability of CCMWA's network by performing regular security monitoring and backup procedures. The Information Technology Division also operates the Help Desk for all CCMWA locations, manages the phone system and mobile communications contracts, and oversees all purchases of computer hardware and software.

Goals and Objectives

The Information Technology Division set budget goals and objectives for the first time in 2017. The division accomplished 80% of their objectives for the 2017 Budget Year.

The 2018 Goals and Objectives of the Information Technology Division include:

Preparedness/Security

Maintain continuity of service (Goal)

- Increase cybersecurity awareness among CCMWA staff by providing regular cybersecurity training. (Objective)
- Deploy Security Information and Event Management Software (SIEM) to monitor network security as recommended by the Dell Network Security Assessment. (Objective)

Communication Enhancements

Make information easily available and readily shared (Goal)

Use Information Management team to develop an intranet site or dashboard, utilizing current Microsoft SharePoint software, to improve the sharing of information across the Authority. (Objective)

Workforce Development

Develop a highly competent, committed and supported workforce (Goal)

Provide computer equipment for training classes related to basic computer skills and use of software to develop a more technologically skilled workforce. (Objective)



Information Technology Division Budget

							%
						Increase	Increase
		2017	Va	ariance		(Decrease)	(Decrease)
	2017	Projected	Fa	vorable	2018	Over 2017	Over 2017
Information Technology	Budget	Actual	(Unfa	avorable)	Budget	Budget	Budget
Personnel Costs							
Salaries & Wages	\$178,570	\$178,570	\$	-	\$189,433	\$ 10,863	6.1%
Overtime Wages	1,250	1,250		-	1,000	(250)	-20.0%
Employee Benefits	34,240	22,000		12,240	32,000	(2,240)	-6.5%
FICA - Employer Share	11,105	11,105		· -	11,807	702	6.3%
Medicare - Employer Share	2,600	2,600		_	2,761	161	6.2%
Travel Expense	4,000	, -		4,000	2,000	(2,000)	-50.0%
Dues and Fees	400	100		300	250	(150)	-37.5%
Education and Training	7,400	500		6,900	5,500	(1,900)	-25.7%
Uniforms	840	200		640	500	(340)	-40.5%
Total Personnel Costs	\$240,405	\$216,325	\$	24,080	\$ 245,251	\$ 4,846	2.0%
Total Forcomion Goods	Ψ2 10, 100	Ψ210,020	Ψ	21,000	Ψ Z ¬0,201	Ψ 1,010	2.070
Non-Personnel Costs							
Automotive Maintenance & Repairs	\$ 900	\$ 900	\$	_	\$ 900	\$ -	0.0%
Communications	5,400	5,000	Ψ	400	5,000	(400)	-7.4%
Office Supplies	2,000	2,000			2,000	(+00)	0.0%
Gas, Oil & Diesel	1,400	1,000		400	1,000	(400)	-28.6%
Food	300	300		400	300	(400)	0.0%
Safety Supplies & Equipment	200	200		_	500	300	150.0%
General - Software, Renewals and Support	3,000	3,000		-		-	0.0%
• •				-	3,000		
General - Technology, PCs & Peripherals	4,000	4,000		-	5,000	1,000	25.0%
Admin - Software, Renewals and Support	16,795	16,795		4 000	18,500	1,705	10.2%
Admin - Technology, PCs & Peripherals	2,000	1,000		1,000	2,000	(750)	0.0%
HLC - Software, Renewals and Support	11,250	10,000		1,250	10,500	(750)	-6.7%
HLC - Technology, PCs & Peripherals	1,125	-		1,125	6,000	4,875	433.3%
Finance - Software, Renewals and Support	12,345	12,345		-	14,000	1,655	13.4%
Finance - Technology, PCs & Peripherals	3,000	2,550		450	3,000	-	0.0%
Wyckoff - Software, Renewals & Support	34,195	34,108		87	10,000	(24,195)	-70.8%
Wyckoff - Technology, PCs & Peripherals	13,107	8,000		5,107	7,500	(5,607)	-42.8%
Quarles - Software, Renewals & Support	48,950	48,950		-	12,000	(36,950)	-75.5%
Quarles - Technology, PCs & Peripherals	1,693	1,656		37	14,000	12,307	726.9%
Trans - Software, Renewals & Support	11,935	11,935		-	10,000	(1,935)	-16.2%
Trans - Technology, PCs & Peripherals	9,800	9,800		-	5,000	(4,800)	-49.0%
Maint - Software, Renewals & Support	-	1,562		(1,562)	106,000	106,000	100.0%
Maint - Technology, PCs & Peripherals	13,800	13,785		15	21,000	7,200	52.2%
Engineer - Software, Renewals & Support	51,265	25,000		26,265	25,000	(26,265)	-51.2%
Engineer - Technology, PCs & Peripherals	11,890	11,890		-	9,000	(2,890)	-24.3%
Lab - Software, Renewals & Support	15,445	15,445		-	16,000	555	3.6%
Lab - Technology, PCs & Peripherals	10,500	10,500		-	11,500	1,000	9.5%
IT - Software, Renewals & Support	45,535	45,535		-	42,000	(3,535)	-7.8%
IT - Technology, PC's & Peripherals	11,050	11,050		-	12,500	1,450	13.1%
S&S - Software, Renewals & Support	7,335	7,335		-	16,000	8,665	118.1%
S&S - Technology, PC's & Peripherals	9,300	6,400		2,900	2,000	(7,300)	-78.5%
Total Non-Personnel Costs	\$359,515	\$322,041	\$	800	\$391,200	\$ 31,685	8.8%
Total Information Technology Expense	\$599,920	\$538,366	\$	24,880	\$ 636,451	\$ 36,531	6.1%

Safety and Security Division

The Safety and Security Division is responsible for promoting CCMWA's safety culture, training employees on safety practices, monitoring the security of all CCMWA facilities, and establishing security procedures. The Division regularly inspects all CCMWA buildings and grounds for security or safety threats, maintains all access control systems, and monitors security cameras and alarms.

Goals and Objectives

The Safety and Security Division's goals were included in the Administration Division's goals in prior years. Therefore, no history of goal achievement is available for this division.

The 2018 Goals and Objectives of the Safety and Security Division include:

Safety Culture

Ensure continuous improvement of the safety program (Goal)

- Review, update, and revise the Safety manual by December 1, 2018. (Objective)
- Create safety plans that clarify training, procedures, responsibilities, and PPE for every job classification by July 1, 2018. (Objective)

Make safety an integral part of all work activities (Goal)

- Work with Information Technology to select and install a driving app for cell phones by July 31, 2018. (Objective)
- Improve the incident review and reporting process by listing and reviewing all reported accidents and near misses in TASC meeting minutes. (Objectives)
- Create and maintain a Safety Training Matrix, beginning on January 1st, and facilitate all mandatory safety training. (Objective)

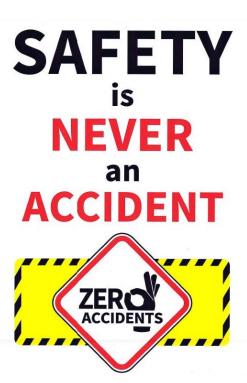
Preparedness/Security

Maintain continuity of service (Goal)

- Implement four tabletop and field exercises to respond to security threat scenarios. (Objective)
- Update the Emergency Response Plan by December 1, 2018. (Objective)
- Review CCMWA's vulnerability report and identify mitigation actions throughout the year. (Objective)

Safety & Security Division Budget

											%
									In	crease	Increase
			:	2017	Va	ariance			(De	ecrease)	(Decrease)
	:	2017	Pr	ojected	Fa	vorable		2018	Ov	er 2017	Over 2017
Safety & Security	Е	Budget	/	Actual	(Unf	avorable)	B	udget	E	Budget	Budget
Personnel Costs											
Salaries & Wages	\$1	47,125	\$1	47,125	\$	-	\$ 1	152,964	\$	5,839	4.0%
Overtime Wages		2,100		2,100		-		2,100		-	0.0%
Employee Benefits		45,300		41,340		3,960		46,000		700	1.5%
FICA - Employer Share		9,255		9,255		-		9,614		359	3.9%
Medicare - Employer Share		2,165		2,165		-		2,248		83	3.9%
Travel Expense		1,500		1,500		-		2,500		1,000	66.7%
Dues and Fees		2,500		2,000		500		2,000		(500)	-20.0%
Education and Training		5,000		4,000		1,000		5,000		-	0.0%
Uniforms		840		600		240		800		(40)	-4.8%
Total Personnel Costs	\$2	15,785	\$2	10,085	\$	5,700	\$2	223,226	\$	7,441	3.4%
Non-Personnel Costs											
Automotive Maintenance & Repairs	\$	2,000	\$	1,000	\$	1,000	\$	1,500	\$	(500)	-25.0%
Communications		3,500		3,300		200		3,300		(200)	-5.7%
Office Supplies		1,800		1,800		_		1,800		` _	0.0%
Gasoline, Oil, & Diesel Fuel		2,600		2,600		-		3,000		400	15.4%
Food		960		800		160		1,000		40	4.2%
Small Equipment		790		790		-		500		(290)	-36.7%
Safety Supplies & Equipment		1,000		1,092		(92)		1,200		200	20.0%
Total Non-Personnel Costs	\$	12,650	\$	11,382	\$	1,268	\$	12,300	\$	(350)	-2.8%
Total Safety & Security Expense	\$2	28,435	\$2	21,467	\$	6,968	\$2	235,526	\$	7,091	3.1%



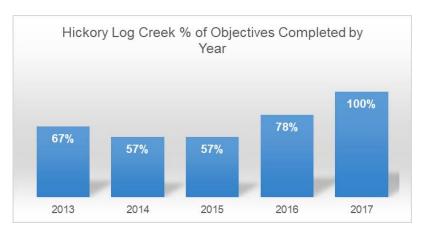
Research and Development

											%
									lr	ncrease	Increase
				2017	\	√ariance			(D	ecrease)	(Decrease)
		2017	Р	rojected	F	avorable		2018	Ò	ver 2017	Over 2017
Research and Development		Budget		Actual	(Ur	nfavorable)		Budget		Budget	Budget
•											
Other Professional Services	\$	100,000	\$	120,000		(20,000)	\$,	\$	-	0.00%
Hydraulic Model		75,000		25,000		50,000		67,000		(8,000)	-10.67%
Asset Management		50,000		50,000		-		50,000		-	0.00%
Miscellaneous Engineering		99,580		99,580		-		100,000		420	0.42%
Security, SCADA, & I.T. Evaluation		24,000		-		24,000		20,000		(4,000)	-16.67%
Effective Utility Management		40,000		586		39,414		27,000		(13,000)	-32.50%
Business Case Evaluation Program		-		-		-		134,000		134,000	100.00%
CIP Master Plan		-		-		-		34,000		34,000	100.00%
GIS Easement Project		150,000		-		150,000		34,000		(116,000)	-77.33%
Energy Optimization Program		60,000		10,000		50,000		34,000		(26,000)	-43.33%
GAC Study - Wyckoff Treatment Plant		15,000		15,000		, -		10,000		(5,000)	-33.33%
Surveying - Easements & Legal		25,000		25,000		_		25,000		-	0.00%
Pressure Transient Wave Classification						_		34,000		34,000	100.00%
Quarles Taste & Odor Control Study		_		_		_		100,000		100,000	100.00%
Corrosion Control Study		_		_		_		134,000		134,000	100.00%
Safety Audit		_		_		_		10,000		10,000	100.00%
Upper Etowah Watershed Studies		13,100		16,165		(3,065)		15,000		1,900	14.50%
Long Term Water Supply		151,000		151,000		(0,000)		500,000		349,000	231.13%
Allatoona Lake Clean-up / Monitoring		10,000		6,529		3,471		10,000		-	0.00%
Pipe Investigations / Monitoring		50,000		0,020		50,000		67,000		17,000	34.00%
Emergency Response Planning		25,000		_		25,000		-		(25,000)	-100.00%
Wyckoff Raw Water Line Replacement Study		120,000		_		120,000		34,000		(86,000)	-71.67%
Website & Communications Development		39,400		2,980		36.420		67,000		27,600	70.05%
Information System Management Study		100,000		20,000		80,000		67,000		(33,000)	-33.00%
Aged Pipe Program Support		50,000		50,000		-		14,000		(36,000)	-72.00%
Facilities Security Evaluation		50,000		48,293		1,707		14,000		(50,000)	-100.00%
Workforce Development Study		100,000		100,000		1,707		50,000		(50,000)	-50.00%
GIS Platform Services		116,420		116,420		_		119,000		2,580	2.22%
Wyckoff Intake Tower - Structural Testing		100,000		60,000		40,000		113,000		(100,000)	-100.00%
QTD Chemical Building - Structural Review		50,000		00,000		50,000		34,000		(16,000)	-32.00%
Surge Analysis		15,000		-		15,000		34,000		(15,000)	-32.00%
Production Meter Testing		100,000		-		100,000		67,000			-33.00%
				06 E00		100,000				(33,000)	
Payments to Other Agencies (WRF & ISAC)		86,500		86,500		74.000		100,000		13,500	15.61%
Contingency		74,000		-		74,000		70,000		(4,000)	-5.41%
Total Research & Development Expense	\$1	,889,000	\$1	,003,052	\$	885,948	\$2	2,127,000	\$	238,000	12.60%

Hickory Log Creek Reservoir Division

The Hickory Log Creek Reservoir Division consists of a 411-acre reservoir and a 44 million gallons per day intake/pumping system. The Division is located in central Cherokee County in the City of Canton. The project withdraws water from the Etowah River and impounds water from Hickory Log Creek to fill the 5.77 billion gallon reservoir. The project supplies water to the Wyckoff Water Treatment Plant by supplementing flow in the Etowah River through release of water from the reservoir. The project is jointly owned by CCMWA (75% ownership) and the City of Canton (25% ownership).

Goals and Objectives



The 2018 Goals and Objectives of the Hickory Log Creek Reservoir Division include:

Infrastructure Sustainability

Maintain a sustainable capital infrastructure program (Goal)

- By September 30, 2018, complete the planned replacement of two Ingersoll-Rand air compressors that control the dam's crest gate and are critical to the dam's operation. (Objective)
- By September 30, 2018, complete the planned replacement of fence line at the Turner mitigation site to keep cattle out of the Hickory Log Creek property and protect the site from damage. (Objective)
- By September 30, 2018, complete the planned installation of new SCADA servers at the pump station to maintain communication and monitoring capabilities with essential equipment. (Objective)

Preparedness/Security

Maintain continuity of service (Goal)

- Conduct a table top or field exercise of a security threat scenario at Hickory Log Creek Dam by October 31, 2018. (Objective)
- Review and update the Hickory Log Creek Emergency Action Plan, including an update of the contact list and condition flow charts by June 30, 2018. (Objective)

Safety Culture

Make safety an integral part of all work activities (Goal)

Conduct rope/tie-off safety training for scaling and inspecting Hickory Log Creek Dam in cooperation with the Cherokee County Fire Department. (Objective)



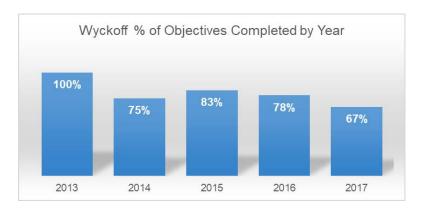
Hickory Log Creek Reservoir Division Budget

						%
					Increase	Increase
		2017	Variance		(Decrease)	(Decrease)
	2017	Projected	Favorable	2018	Over 2017	Over 2017
Hickory Log Creek Reservoir Division	Budget	Actual	(Unfavorable)	Budget	Budget	Budget
Personnel Costs						
Salaries & Wages	\$ 97,055	\$ 97,055	\$ -	\$ 103,398	\$ 6,343	6.5%
Overtime Wages	6,750	6,750	-	6,750	-	0.0%
Employee Benefits	36,750	36,750	-	31,005	(5,745)	-15.6%
FICA - Employer Share	6,475	6,475	-	6,978	503	7.8%
Medicare - Employer Share	1,515	1,515	-	1,632	117	7.7%
Travel Expense	1,500	500	1,000	1,500	-	0.0%
Dues and Fees	1,655	1,655	· -	1,650	(5)	-0.3%
Education and Training	3,000	3,000	_	3,000	-	0.0%
Uniforms	900	900	_	900	-	0.0%
Total Personnel Costs	\$155,600	\$154,600	\$ 1,000	\$ 156,813	\$ 1,213	0.8%
	+,	+ - ,	<u> </u>		+ / -	
Non-Personnel Costs						
Engineering Services - Dam	\$ 22,452	\$ 22,452	\$ -	\$ 29,850	\$ 7,398	33.0%
Technical Services	12,375	5,000	7,375	12,375	-	0.0%
Motor/Gear Inspections	1,125	1,125	-	1,125	-	0.0%
Biological Monitoring	8,600	8,600	-	22,875	14,275	166.0%
Mitigation Monitoring	3,335	3,335	-	-	(3,335)	-100.0%
USGS Monitoring	24,225	24,225	_	25,125	900	3.7%
General Maintenance & Repairs	30,370	30,370	-	28,568	(1,802)	-5.9%
Electrical Maintenance & Repairs	2,250	2,708	(458)	6,750	4,500	200.0%
Coatings Maintenance & Repairs	49,500	71,088	(21,588)	7,500	(42,000)	-84.8%
SCADA Maintenance & Repairs	9,025	9,025	-	9,023	(2)	0.0%
Security Maintenance & Repairs	8,250	7,000	1,250	8,250	-	0.0%
Automotive Maintenance & Repairs	1,725	1,725	· -	1,725	-	0.0%
Grounds Maintenance	15,825	15,825	-	17,775	1,950	12.3%
Rental of Equipment and Vehicles	375	-	375	375	-	0.0%
Liability Insurance	36,463	36,463	-	33,225	(3,238)	-8.9%
Communications	5,025	7,000	(1,975)	7,500	2,475	49.3%
Office Supplies	1,375	1,500	(125)	1,500	125	9.1%
Natural Gas	2,700	800	1,900	2,700	-	0.0%
Electricity	66,400	66,400	-	75,000	8,600	13.0%
Gas, Oil & Diesel	2,365	2,000	365	2,363	(2)	-0.1%
Laboratory Supplies and Chemicals	450	450	-	450	-	0.0%
Food	300	300	-	375	75	25.0%
Water Purchases	3,600	600	3,000	3,600	-	0.0%
Janitorial Supplies	450	300	150	525	75	16.7%
Small Equipment	1,950	1,950	-	1,950	-	0.0%
Safety Supplies & Equipment	7,500	2,500	5,000	7,500	-	0.0%
Contingency	9,375		9,375	9,375		0.0%
Total Non-Personnel Costs	\$327,385	\$322,741	\$ 4,644	\$ 317,379	\$ (10,006)	-3.1%
Total Hickory Log Crock Evenes	¢ 402 005	¢ 477 044	¢ = 644	¢ 474 400	¢ (0.700\	4 00/
Total Hickory Log Creek Expense	\$482,985	\$477,341	\$ 5,644	\$ 474,192	\$ (8,793)	-1.8%

Wyckoff Division

The Wyckoff Water Treatment Plant is located in the northwestern Cobb County near the City of Acworth. The treatment plant withdraws water from Allatoona Lake, treats the water to potable standards, and pumps the water into CCMWA's transmission system. Allatoona Lake is an impoundment of the Etowah River, operated by the U.S. Army Corps of Engineers. The Division consists of one water treatment facility and one intake/pumping station. The Division has a total permitted capacity of 72 million gallons per day.

Goals and Objectives



The 2018 Goals and Objectives of the Wyckoff Division include:

Workforce Development

Develop a highly competent, committed and supported workforce (Goal)

- Support the Workforce Development Team in the creation of a competency-based development program and succession planning model for the position of Water Treatment Plant Operator. (Objective)
- Transition all Standard Operating Procedures (SOPs) to a uniform template to create standardization of operations across the organization. (Objective)

Water Quality

Meet or exceed stakeholder expectations (Goal)

Oversee and ensure the completion of project to install plate settler covers in all sedimentation basins. The covers will block sunlight and reduce algae growth, which improves overall water quality by improving the efficiency of the plate settlers. (Objective)

Infrastructure Sustainability

Maintain a sustainable capital infrastructure program (Goal)

Develop and propose a long-term (10 year) Asset Renewal & Replacement plan for the Wyckoff Division along with supporting documentation. This will be completed in accordance with the budget planning process. (Objective)

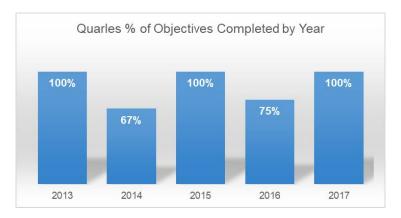
Wyckoff Division Budget

						%
					Increase	Increase
		2017	Variance		(Decrease)	(Decrease)
	2017	Projected	Favorable	2018	Over 2017	Over 2017
Wyckoff Division	Budget	Actual	(Unfavorable)	Budget	Budget	Budget
Personnel Costs						
Salaries & Wages	\$1,351,140	\$1,351,140	\$ -	\$1,372,808	\$ 21,668	1.60%
Overtime Wages	207,550	202,268	5,282	200,000	(7,550)	-3.64%
Employee Benefits	328,500	231,205	97,295	300,000	(28,500)	-8.68%
FICA - Employer Share	97,050	97,050	-	97,514	464	0.48%
Medicare - Employer Share	22,660	22,660	_	22,806	146	0.64%
Travel Expense	7,400	6,000	1,400	7,500	100	1.35%
Dues and Fees	2,755	2,000	755	2,800	45	1.63%
Education and Training	19,250	10,000	9,250	19,000	(250)	-1.30%
Uniforms	11,600	9,000	2,600	8,800	(2,800)	-24.14%
Total Personnel Costs	\$2,047,905	\$1,931,323	\$ 116,582	\$2,031,228	\$ (16,677)	-0.81%
10.01.10.00010.00.00	Ψ2,017,000	Ψ1,001,020	Ψ 110,002	<u> </u>	ψ (10,011)	0.0170
Non-Personnel Costs						
Motor / Gear Inspection	\$ 80,000	\$ 80,000	\$ -	\$ 80,000	\$ -	0.00%
Land Application Soil Scientist	50,000	34,000	16,000	50,000	· -	0.00%
General Maintenance & Repairs	385,000	300,000	85,000	300,000	(85,000)	-22.08%
Electrical Maintenance & Repairs	60,000	50,000	10,000	60,000	-	0.00%
Coatings Maintenance & Repairs	300,000	200,000	100,000	250,000	(50,000)	-16.67%
SCADA Maintenance & Repairs	92,000	120,000	(28,000)	125,000	33,000	35.87%
Security Maintenance & Repairs	16,000	16,000	-	16,000	-	0.00%
Residuals Management	279,000	270,000	9,000	275,000	(4,000)	-1.43%
Automotive Maintenance & Repairs	2,900	2,900	, -	4,000	1,100	37.93%
Grounds Maintenance	47,500	51,046	(3,546)	50,000	2,500	5.26%
Rental of Equipment & Vehicles	6,000	6,000	-	2,000	(4,000)	-66.67%
Communications	81,300	50,973	30,327	60,000	(21,300)	-26.20%
Office Supplies	9,800	9,800	, -	10,000	200	2.04%
Water Treatment Chemicals	1,324,650	1,524,650	(200,000)	1,720,000	395,350	29.85%
Natural Gas	15,000	10,000	5,000	10,000	(5,000)	-33.33%
Electricity	2,600,000	2,600,000	-	2,600,000	-	0.00%
Gasoline, Oil & Diesel Fuel	17,300	10,000	7,300	10,000	(7,300)	-42.20%
Laboratory Supplies & Chemicals	32,000	32,000	-	32,000	-	0.00%
Backup / Emergency Electric Power	30,000	30,000	-	75,000	45,000	150.00%
Food	2,800	2,800	_	3,000	200	7.14%
Water Purchases	430,000	215,600	214,400	250,000	(180,000)	-41.86%
Sewer / Wastewater Handling	39,000	31,168	7,832	80,000	41,000	105.13%
Janitorial Supplies	12,500	9,000	3,500	12,000	(500)	-4.00%
Small Equipment	71,000	50,000	21,000	70,000	(1,000)	-1.41%
Safety Supplies & Equipment	16,700	16,700	-	19,000	2,300	13.77%
Total Non-Personnel Costs	\$6,000,450	\$5,722,637	\$277,813	\$6,163,000	\$ 162,550	2.71%
			- 			
Total Wyckoff Division Expense	\$8,048,355	\$7,653,960	\$ 394,395	\$8,194,228	\$ 145,873	1.81%

Quarles Division

The Quarles Water Treatment Plant is located in the eastern Cobb County. The treatment plant withdraws water from the Chattahoochee River, treats the water to potable standards, and pumps the water into CCMWA's transmission system. The Division consists of two water treatment facilities and two intakes/pumping stations. The Division has a total permitted capacity of 86 million gallons per day.

Goals and Objectives



The 2018 Goals and Objectives of the Quarles Division include:

Workforce Development

Develop a highly competent, committed, and supported workforce (Goal)

- Align training to organizational needs by allowing the Assistant Division Manager to act as the Division Manager throughout 2018, while the Division Manager acts as construction liaison during the Quarles Plant 1 Replacement project. (Objective)
- Enhance career growth potential by providing cross-training to at least 50% of operations staff in all areas of plant operations, including those outside regular position roles. This will be completed by June 1, 2018 to pass on institutional knowledge, allow employees to fulfill all duties of their positions, and be prepared to take on greater responsibilities when shift leaders are unavailable. (Objective)

Water Quality

Meet or exceed stakeholder expectations (Goal)

Utilize data from water quality sonde installed at the raw water pump station to help operations staff become aware of changing raw water conditions. Incorporate data into SCADA for real time and historical information tracking and reporting by May 1, 2018. (Objective)

Work with Engineering Division staff to conduct research on available taste and odor control treatment technologies for the Quarles Plant and present results by October 1, 2018 to prepare for pilot testing. (Objective)

Infrastructure Sustainability

Maintain a sustainable capital infrastructure program (Goal)

- Engage Operations staff to facilitate construction in the replacement of Quarles Plant 1 by maintaining the plant's #17 - #19 treatment trains and #16 - #19 filters from May 1, 2018 through September 30, 2018. (Objective)
- Develop and propose a long-term (10 year) Asset Renewal & Replacement plan for the Quarles Division along with supporting documentation. This will be completed in accordance with the budget planning process. (Objective)



Quarles Division Budget

							%
						Increase	Increase
		2017		/ariance		(Decrease)	(Decrease)
	2017	Projected		avorable	2018	Over 2017	Over 2017
Quarles Division	Budget	Actual	(Ur	<u>nfavorable)</u>	Budget	Budget	Budget
Personnel Costs	¢1 442 620	¢1 442 620	Ф		¢1 476 022	¢ 22.202	2 210/
Salaries & Wages Overtime Wages	\$1,443,620 279,030	\$1,443,620 279,030	\$	-	\$1,476,923 270,000	\$ 33,303 (9,030)	2.31% -3.24%
Employee Benefits	401,270	362,000		39,270	392,000	(9,030)	-3.24 % -2.31%
FICA - Employer Share	108,106	108,106		33,270	108,309	203	0.19%
Medicare - Employer Share	25,271	25,271		_	25,330	59	0.13%
Travel Expense	6,550	5,000		1,550	6,550	-	0.00%
Dues and Fees	5,265	4,000		1,265	5,265	_	0.00%
Education and Training	17,350	12,000		5,350	17,350	_	0.00%
Uniforms	8,800	7,398		1,402	8,800	-	0.00%
Total Personnel Costs	\$2,295,262	\$2,246,425	\$	48,837	\$2,310,528	\$ 15,266	0.67%
				· · · · · · · · · · · · · · · · · · ·			
Non-Personnel Costs							
Motor / Gear Inspection	\$ 75,000	\$ 50,000	\$	25,000	\$ 75,000	\$ -	0.00%
Land Application Soil Scientist	55,000	34,000		21,000	55,000	-	0.00%
Cleaning Services	16,000	16,000		-	50,000	34,000	212.50%
General Maintenance & Repairs	375,000	275,000		100,000	350,000	(25,000)	-6.67%
Electrical Maintenance & Repairs	50,000	50,000		-	50,000	-	0.00%
Coatings Maintenance & Repairs	200,000	11,000		189,000	100,000	(100,000)	-50.00%
SCADA Maintenance & Repairs	105,000	125,000		(20,000)	125,000	20,000	19.05%
Security Maintenance & Repairs	16,000	16,000		-	16,000	-	0.00%
Residuals Management	295,000	200,000		95,000	300,000	5,000	1.69%
Automotive Maintenance & Repairs	2,700	3,500		(800)	3,000	300	11.11%
Grounds Maintenance	80,000	82,980		(2,980)	85,000	5,000	6.25%
Rental of Equipment & Vehicles	2,000	4,365		(2,365)	5,000	3,000	150.00%
Communications Office Supplies	67,800	59,760		8,040	70,000	2,200	3.24%
Office Supplies Water Treatment Chemicals	8,800	8,800		27 000	8,800	(7,000)	0.00%
Natural Gas	787,000 50,000	750,000 34,923		37,000 15,077	780,000 50,000	(7,000)	-0.89% 0.00%
Electricity	3,129,000	2,800,000		329,000	3,000,000	(129,000)	-4.12%
Gasoline, Oil & Diesel Fuel	18,000	13,000		5,000	15,000	(3,000)	-16.67%
Laboratory Supplies & Chemicals	36,000	36,000		- -	40,000	4,000	11.11%
Backup / Emergency Electric Power	25,000	25,000		_	25,000	-,000	0.00%
Food	2,600	4,500		(1,900)	3,000	400	15.38%
Water Purchases	11,000	-,		11,000	11,000	-	0.00%
Sewer / Wastewater Handling	80,000	80,000		-	80,000	-	0.00%
Janitorial Supplies	6,000	6,000		-	6,000	-	0.00%
Small Equipment	75,000	50,000		25,000	70,000	(5,000)	-6.67%
Safety Supplies & Equipment	12,000	18,000		(6,000)	19,000	7,000	58.33%
Total Non-Personnel Costs	\$5,579,900	\$4,753,828	\$	826,072	\$5,391,800	\$(188,100)	-3.37%
	_		_	_	_		_
Total Quarles Division Expense	\$7,875,162	\$7,000,253	<u>\$</u>	874,909	\$7,702,328	\$(172,834)	-2.19%

Maintenance Division

The Maintenance Division is responsible for maintaining the buildings and equipment at both of CCMWA's water treatment plants. The Division includes specialized maintenance technicians, industrial electricians, and instrumentation/controls technicians, analysts, and programmers. Maintenance staff work closely with plant operations staff, the Engineering Division, and the Asset Manager to schedule, perform, and track preventative maintenance and work order requests for equipment repairs. The Division also maintains information related to CCMWA's assets in a computerized asset management system that is used for analyzing future capital needs.

Goals and Objectives

The Maintenance Division was created during the 2017 fiscal year to consolidate each treatment plants' maintenance staff into a single operating division. Therefore, no history of goal achievement is available for this division.

The 2018 Goals and Objectives of the Maintenance Division include:

Workforce Development

Develop a highly competent, committed, and supported workforce (Goal)

- Create an environment of professional excellence through implementation of change-oriented performance management to be implemented January 1, 2018. (Objective)
- Create and implement a mentoring program to develop skills and positively affect succession planning to be implemented by July 1, 2018. (Objective)

Infrastructure Sustainability

Implement condition based Operations & Management Program (Goal)

- Expand use of condition assessment technologies to optimize maintenance of pumps and motors via implementation of routinely scheduled vibration analysis, infrared analysis, ultrasound, and associated analytics to be implemented January 1, 2018. (Objective)
- Optimize maintenance programs to increase reliability and reduce lifecycle costs through assignment of asset criticality ratings and expected service lives. Seventy percent of assets will have criticality and service lives assigned by October 1, 2018. (Objective)

Maintenance Division Budget

											%			
									I	ncrease	Increase			
				2017	V	ariance			(D	ecrease)	(Decrease)			
		2017	Pr	rojected	Fa	avorable		2018	0	ver 2017	Over 2017			
Maintenance Division		Budget		Actual	(Un	favorable)		Budget		Budget	Budget			
Personnel Costs														
Salaries & Wages	\$1	,813,000	\$1	,813,000	\$	-	\$1	,908,541	\$	95,541	5.27%			
Overtime Wages		29,200		40,250		(11,050)		36,000		6,800	23.29%			
Employee Benefits		426,500		404,565		21,935		450,000		23,500	5.51%			
FICA - Employer Share		110,484		110,484		-		120,562		10,078	9.12%			
Medicare - Employer Share		25,889		25,889		-		28,196		2,307	8.91%			
Travel Expense		11,600		11,600		-		12,300		700	6.03%			
Dues and Fees		3,980		3,980		-		5,500		1,520	38.19%			
Education and Training		30,300		25,200		5,100		31,000		700	2.31%			
Uniforms	15,600		13,000		2,600			16,900		1,300	8.33%			
Total Personnel Costs	\$2	,466,553	\$2,447,968		\$ 18,585		\$2,608,998		\$	142,445	5.78%			
Non-Personnel Costs														
Automotive Maintenance & Repairs	\$	20,400	\$	20,400	\$	-	\$	21,400	\$	1,000	4.90%			
Rental of Equipment and Vehicles		15,600		15,600		-		19,600		4,000	25.64%			
Communications		15,400		17,000		(1,600)		27,940		12,540	81.43%			
Office Supplies		2,400		4,000		(1,600)		4,000		1,600	66.67%			
Gas, Oil & Diesel		17,700		20,000		(2,300)		19,200		1,500	8.47%			
Food		4,600		4,600		-		5,200		600	13.04%			
Small Equipment		4,000		8,226		(4,226)		130,000		126,000	3150.00%			
Safety Supplies & Equipment		6,300		8,375		(2,075)		19,500		13,200	209.52%			
Total Non-Personnel Costs	\$	86,400	\$	98,201	\$	(11,801)	\$	246,840	\$	160,440	185.69%			
Total Maintenace Division Expense	\$2	,552,953	\$2	,546,169	\$	6,784	\$2	,855,838	\$	302,885	11.86%			

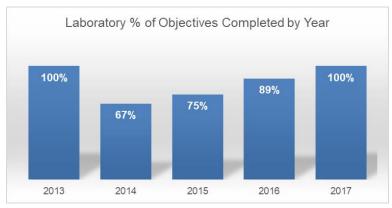


Equipment Maintenance

Laboratory Division

The Laboratory Division is responsible for water quality monitoring across CCMWA's transmission system. The Division is also accountable for bacteriological sampling and testing and water sampling and testing for CCMWA's sole-source customers. The Laboratory Division has historically operated out of two locations, the Calvin A. Simmons Microbiology Laboratory in Acworth, GA and the Chemical Laboratory located at the Quarles Water Treatment Plant. In order to streamline laboratory processes and facilitate cross training, the two locations will be consolidated into the Simmons Microbiology Laboratory through a building expansion project in 2018.

Goals and Objectives



The 2018 Goals and Objectives of the Laboratory Division include:

Workforce Development

Develop at highly competent, committed, and supported workforce (Goal)

Review and revise procedures at the Simmons Lab to include the Analytical Chemistry personnel to facilitate teamwork and cross training. (Objective)

Water Quality

Meet or exceed regulatory requirements (Goal)

- Provide TTHM data from a site(s) in each of our customers' systems before the 2nd, 3rd, and 4th Quarter DBP sampling. (Objective)
- Provide chlorate, chloride, and sulfate data from the plants and distribution systems to determine if chlorates remain below the expected level for possible regulation in the future, and provide chloride and sulfate data to help determine possible corrosiveness of CCMWA finished water. This will begin January 2018. (Objective)

Laboratory Division Budget

, and the grade of											%
									In	crease	Increase
				2017	V	ariance			(De	ecrease)	(Decrease)
		2017	P	rojected	Fa	avorable		2018	Ô۱	er 2017	Over 2017
Laboratory Division		Budget		Actual	(Un	favorable)		Budget	I	Budget	Budget
Personnel Costs									_		
Salaries & Wages	\$	583,540	\$	583,540	\$	-	\$	584,048	\$	508	0.09%
Overtime Wages		10,000		10,000		-		10,000		-	0.00%
Employee Benefits		129,470		108,935		20,535		125,000		(4,470)	-3.45%
FICA - Employer Share		36,800		36,800		-		36,831		31	0.08%
Medicare - Employer Share		8,610		8,610		-		8,614		4	0.04%
Travel Expense		5,700		3,000		2,700		7,300		1,600	28.07%
Dues and Fees		1,000		1,000		-		1,000		-	0.00%
Education and Training		6,500		6,500		-		6,200		(300)	-4.62%
Uniforms		3,000		3,000				3,000			0.00%
Total Personnel Costs	\$	784,620	\$	761,385	\$	23,235	\$	781,993	\$	(2,627)	-0.33%
Non-Personnel Costs											
EPD Compliance Sampling	\$	33,900	\$	33,900	\$	-	\$	34,000	\$	100	0.29%
Cleaning Services		9,000		9,000		-		9,000		-	0.00%
General Maintenance & Repairs		46,500		46,500		-		47,000		500	1.08%
SCADA Maintenance & Repairs		2,500		2,500		-		2,500		-	0.00%
Security Maintenance & Repairs		5,000		5,000		-		5,000		-	0.00%
Automotive Maintenance & Repairs		4,200		2,000		2,200		4,000		(200)	-4.76%
Grounds Maintenance		9,900		9,900		-		8,900		(1,000)	-10.10%
Rental Equipment and Vehicles		2,200		2,200		-		2,700		500	22.73%
Communications		21,000		18,952		2,048		21,000		-	0.00%
Office Supplies		5,500		5,500		-		5,500		-	0.00%
Natural Gas		900		900		-		1,150		250	27.78%
Electricity		32,000		30,000		2,000		30,000		(2,000)	-6.25%
Gas, Oil & Diesel		8,500		8,000		500		8,200		(300)	-3.53%
Laboratory Supplies		135,100		135,100		-		142,000		6,900	5.11%
Food		1,900		1,900		-		1,900		-	0.00%
Janitorial Supplies		1,400		1,200		200		1,300		(100)	-7.14%
Small Equipment		7,000		7,000		-		6,500		(500)	-7.14%
Safety Supplies & Equipment		3,000		3,000				2,500		(500)	-16.67%
Total Non-Personnel Costs	\$	329,500	\$	322,552	\$	6,948	\$	333,150	\$	3,650	1.11%
	•	444405	•		•	00.405			•	4 005	0.000
Total Laboratory Division Expense	<u>\$1</u>	,114,120	<u>\$1</u>	,083,937	\$	30,183	<u>\$1</u>	I,115,143	\$	1,023	0.09%

Transmission Division

The Transmission Division is responsible for maintaining CCMWA's transmission pipeline system and storage tanks. The Division's primary functions include: monthly meter reading, providing utility locates of CCMWA's water mains, overseeing the Valve Maintenance Program, and coordination of repair and maintenance of the transmission system. The Division also works closely with the Engineering Division to maintain the GIS database and with the Asset Manager to provide updates on buried infrastructure.

Goals and Objectives



The 2018 Goals and Objectives of the Transmission Division include:

Infrastructure Sustainability

Maintain a sustainable capital infrastructure program (Goal)

- Replace five meters (#430, #470, #190, #25, and #195) in the transmission system that have reached the end of their useful life by the end of 2018. (Objective)
- Replace three transmission system blow-off saddles that are at risk for critical failure in the Columns Drive/National Park Service area by the end of 2018. (Objective)
- Research advanced metering infrastructure (AMI) to determine if the technology can be effectively applied to CCMWA's transmission system meters. A report will be completed with a recommendation before December 2018. (Objective)

Safety Culture

Make safety an integral part of all work activities (Goal)

Ensure all Transmission Division employees receive Flagging & Traffic Control and Confined Space Entry training in 2018. (Objective)

Transmission Division Budget

3											%
									lı	ncrease	Increase
				2017	\	/ariance			(D	ecrease)	(Decrease)
		2017	Р	rojected	F	avorable		2018	0	ver 2017	Over 2017
Transmission Division		Budget		Actual	(Ur	favorable)		Budget		Budget	Budget
Personnel Costs											
Salaries & Wages	\$	652,775	\$	652,775	\$	-	\$	685,137	\$	32,362	4.96%
Overtime Wages		25,000		29,298		(4,298)		25,000		-	0.00%
Employee Benefits		155,150		110,000		45,150		150,000		(5,150)	-3.32%
FICA - Employer Share		41,900		41,900		-		44,028		2,128	5.08%
Medicare - Employer Share		9,830		9,830		-		10,297		467	4.75%
Travel Expense		7,700		7,700		-		8,000		300	3.90%
Dues and Fees		2,000		1,000		1,000		1,000		(1,000)	-50.00%
Education and Training		13,000		14,966		(1,966)		20,000		7,000	53.85%
Uniforms		6,360		4,500		1,860		6,000		(360)	-5.66%
Total Personnel Costs	\$	913,715	\$	871,968	\$	41,747	\$	949,462	\$	35,747	3.91%
Non-Personnel Costs											
Security Maintenance & Repairs	\$	4,000	\$	4,000	\$	-	\$	4,000	\$	-	0.00%
Pipeline Maintenance & Repairs		396,600		380,000		16,600		412,000		15,400	3.88%
Tanks Maintenance & Repairs		64,000		64,000		-		88,000		24,000	37.50%
Meters Maintenance & Repairs		47,450		47,450		-		47,450		-	0.00%
Emergency Pipeline Repairs		210,000		5,000		205,000		100,000		(110,000)	-52.38%
DOT Pipeline Modifications		150,000		-		150,000		150,000		-	0.00%
Automotive Maintenance & Repairs		20,000		15,000		5,000		20,000		-	0.00%
Right of Way & Tank Grounds Maintenance		320,350		370,534		(50,184)		410,000		89,650	27.99%
Rental Equipment and Vehicles		3,500		2,000		1,500		2,500		(1,000)	-28.57%
Communications		28,300		28,300		-		26,000		(2,300)	-8.13%
Office Supplies		2,000		2,000		-		2,000		-	0.00%
Gas, Oil & Diesel		30,000		20,000		10,000		30,000		-	0.00%
Food		2,250		2,500		(250)		3,000		750	33.33%
Small Equipment		20,900		20,900		-		20,000		(900)	-4.31%
Safety Supplies & Equipment		12,100		13,000		(900)		15,000		2,900	23.97%
Total Non-Personnel Costs	\$	1,311,450	\$	474,234	\$	336,766	\$	1,329,950	\$	18,500	1.41%
Total Transmission Division Expense	\$2	2,225,165	\$1	1,346,202	\$	378,513	\$ 2	2,279,412	\$	54,247	2.44%

CAPITAL BUDGET

Cobb County-Marietta Water Authority's capital budget is based on a 5-year Capital Improvement Plan, which includes projects planned to be started or completed between 2018 and 2022. This portion of the annual budget includes all capital expenditures planned during the year. A capital expenditure is the use of funds to acquire or maintain long-term assets that are used in the operation of the organization over a multi-year period. The presented 5-year plan does not include any capital expenditures after 2022, nor any costs incurred before 2018. All projects listed in CCMWA's capital budget will be financed with designated reserves and net income.

The projects defined in the 2018-2022 Capital Improvement Plan are classified into one of five categories:

- Aged Pipe Replacements Projects in this category were identified by the Aged Pipe Replacement study and represent a portion of the projects designated as Aged Pipe Replacement projects for future planning periods.
- CIP Projects Projects categorized as Construction in Progress (CIP) Projects are large, multiyear projects that are focused on addressing system performance and potential expansion.
- Plant Improvements Projects in this category are focused on the replacement, renovation, or addition of infrastructure within CCMWA' water treatment plants.
- Water Storage Tank Improvements Projects in this category are focused on the addition or replacement of water storage tanks within the transmission system.
- Other Capital Projects Projects in this category include routine capital projects, referred to as Asset Renewal & Replacement (AR&R) projects, which involve the rehabilitation or renovation of capital equipment and buildings. This category also includes capital expenditures outside of CCMWA's planning ability, including possible land purchases at reservoir sites and pipeline relocation projects requested by the Department of Transportation.

5-Year Capital Improvement Plan

Cobb County-Marietta Water Authority 5-Year Capital Improvement Plan

		2018		2019	2020 2021		2024	2022			Budgeted	
Project Proprietion	Budgeted Cost Budgeted Cost Budgete			р.,					Project Cost 2018-2022			
Project Description	Dи	ageted Cost	Dи	ageted Cost	Du	ugeteu Cost	Dи	ageted Cost	ьu	agetea Cost		2010-2022
Aged Pipe Replacements	\$	0.000.000	Φ.	0.000.000	Φ.		Φ		Φ.		Φ.	5 000 000
Wyckoff 42" Finished Water Main	Ъ	3,300,000	\$	2,392,000	\$	-	\$	-	\$	-	\$	5,692,000
Mableton Parkway 36" Water Main		2,561,900		520,000		-		-		-		3,081,900
U.S Highway 41 Parallel 20" Water Main		2,513,500		3,160,040		-		-		-		5,673,540
West Side Loop Section #2, 36" Water Main		700,000		5,911,490		6,147,950		2,024,755				14,784,195
Blackjack Tank Supply 36" Water Line		-		520,000		10,918,211		11,354,940		1,520,816		24,313,967
Factory Shoals 30" & Six Flags Drive 24" Water Mains		-		-		-		478,067		4,679,434		5,157,501
Trickum Road 20" Water Main		-		-		-		-		257,369		257,369
Wyckoff 36" Finished Water Main		-		-		-		-		549,834		549,834
CIP Projects												
Wyckoff 42" Raw Water Pipeline Improvements	\$	-	\$	-	\$	462,925	\$	7,568,085	\$	996,719	\$	9,027,729
Plant Improvements												
Quarles Water Treatment Plant 1 Replacement	\$	25,000,000	\$	28,000,000	\$	25,000,000	\$	-	\$	-	\$	78,000,000
Quarles Plant 2 SCADA Replacement		400,000		936,000		973,440		1,012,378		-		3,321,818
Quarles Power Voltage Regulation		-		104,000		939,910		-		-		1,043,910
Quarles Taste & Odor Toolbox		-		296,400		2,774,304		-		-		3,070,704
Quarles Main Switchgear Replacement		-		-		-		-		304,163		304,163
Quarles Reservoir Cleaning		-		-		-		-		2,573,689		2,573,689
Wyckoff Clearwell Replacement/Addition		-		208,000		1,622,400		8,605,210		8,949,418		19,385,028
Wyckoff Dewatering Building Renovation		-		468,000		2,190,240		2,277,850		-		4,936,090
Wyckoff Maintenance Building Renovation		-		107,120		1,002,643		-		-		1,109,763
Wyckoff Power Voltage Regulation		-		104,000		939,910		-		-		1,043,910
Wyckoff Thickener Refurbishment and Addition		-		-		-		326,211		1,526,665		1,852,876
Water Storage Tank Improvements												
Pete Shaw Tank No. 2 (5 MG)	\$	300,000	\$	3,328,000	\$	-	\$	-	\$	-	\$	3,628,000
Other Capital Projects												
Hickory Log Creek & Sharp Mtn. Creek Reserviors	С	ontingency	С	ontingency	C	ontingency	С	ontingency	С	ontingency	C	ontingency
Reservation for Department of Transportation Projects		1,000,000	\$	1,040,000	\$	1,081,600	\$	1,687,296	\$	1,754,788	\$	6,563,684
Asset Renewal & Replacement Projects (Routine)		8,992,381		7,797,811		6,560,593		5,951,318		5,893,046	·	35,195,148
General Contingency		4,476,778		5,489,286		7,273,695		5,780,055		4,640,951		27,660,765
Total Budgeted Cost:	\$	49,244,559	\$	60,382,147	\$	67,887,821	\$	47,066,165	\$	33,646,892	\$	258,227,583
Note:	_		_	• •			_	· '			_	

Projects in purple font were under construction as of December 31, 2017.

Projects in green font were under design as of December 31, 2017.

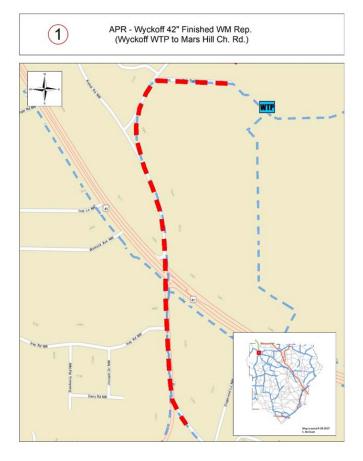
Projects in blue font are ongoing land purchases made when land is available or as condemnations are resolved.

All other projects had not started as of December 31, 2017.

Capital Project Descriptions

Wyckoff 42" Finished Water Main Replacement

The Wyckoff 42" Finished Water Main Replacement project will replace 5,200 feet of 53-year old 42-inch and 30-inch pre-stressed concrete water main with a new 42-inch ductile iron water main. This pipe was installed in 1964. This project will extend from the Wyckoff plant to Mars Hill Church Road. The project will improve reliability of the supply from the plant and will simplify the connections that have been made over the years near the intersection of Mars Hill Road and Highway 41. The intent is to eliminate critical vulnerable infrastructure that have been leak-prone in the main intersection.



The project was identified as one of the highest priority replacement water mains as a result of the Aged Pipe Replacement (APR) Program Study. The APR program is a multi-year program to proactively replace transmission mains as they near the end of their useful life. By proactively replacing aged pipe, the Authority mitigates the risk of catastrophic failure and costly repair. The pre-stressed concrete pipe has been prioritized for replacement based on criticality and risk, taking into account age of pipe, pipe material, consequence of failure and other factors.

This project is scheduled for the 2017-2019 timeframe. The total anticipated project spending includes funds spent in 2017 and funds allocated in the 2018 – 2022 CIP.

Scheduled Completion Date: Fiscal Year 2019

Contract Value: \$353,229

Contract Value: N/A

Engineer: Engineering Strategies, Inc.

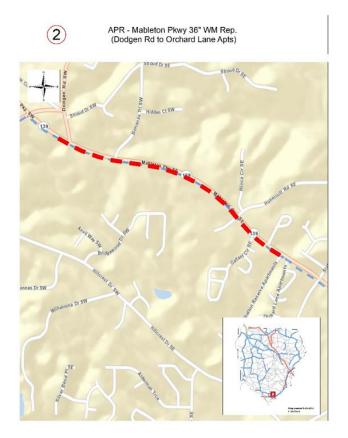
Contractor: TBD

CCMWA Project Engineer: Jacob Wilson

Mableton Parkway 36" Water Main Replacement

This project involves the replacement of 4,600 feet of 36-inch pre-stressed concrete cylinder pipe from Dodgen Road to Orchard Lane along Mableton Parkway with 36-inch Ductile Iron Pipe. This pipe was initially installed in 1969. The pipe is approximately 48 years old and failed in 2016. At the time of the failure, several segments were found to have deteriorated and had to be replaced under the Emergency and On-Call Construction contract. This is the only segment of pre-stressed concrete pipe that remains along Mableton Parkway. The project was identified as one of the highest priority replacement water mains as a result of the Aged Pipe Replacement (APR) Program Study and a water main break in this section in 2016.

This project is scheduled for the 2017-2019 timeframe. The total anticipated project spending includes funds spent in 2017 and funds allocated in the 2018 – 2022 CIP.



Scheduled Completion Date: Fiscal Year 2019

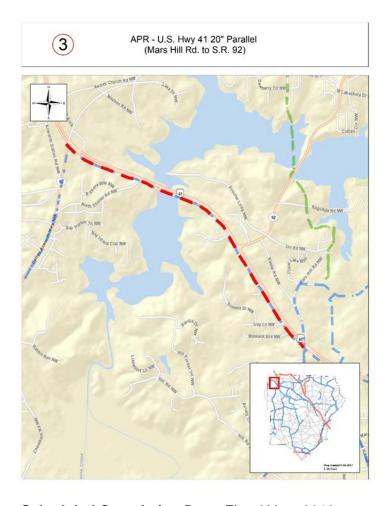
Engineer: Engineering Strategies, Inc. Contract Value: \$267,997

Contractor: To Be Determined Contract Value: N/A

CCMWA Project Engineer: Chris Dillard

US 41 20" Parallel 20" Water Main

The US 41 20" Parallel project involves the installation of 12,000 feet of 20-inch ductile iron pipe from Mars Hill Church Road to S.R.92 along Highway 41 to parallel the existing pre-stressed concrete cylinder pipe. This will allow for adequate redundancy in a critical area of the County. The existing pipe was initially installed in 1977 and crosses under Lake Allatoona. The project was identified as one of the highest priority replacement water mains as a result of the Aged Pipe Replacement (APR) Program Study due mainly to the criticality of the main and also to the pipe material being pre-stressed concrete.



This main provides the only feed to the area in Cobb County north of the lake and lacks redundancy. A failure, especially under Lake Allatoona, would result in customers being without water for several days. The North-West Land Vulnerability Study prepared by Cobb County in 2014 identified a need for additional redundancy to meet demand in this area in the event of a major water transmission main break. This project will serve to provide redundancy for this area that includes the new Wellstar Acworth Health Park, Allatoona High School and significant commercial and residential development.

This project is scheduled for the 2017 – 2019 timeframe. The total anticipated project spending includes funds spent in 2017 and funds allocated in the 2018 - 2022 CIP.

Scheduled Completion Date: Fiscal Year 2019

Contract Value: N/A Engineer(s): TBD

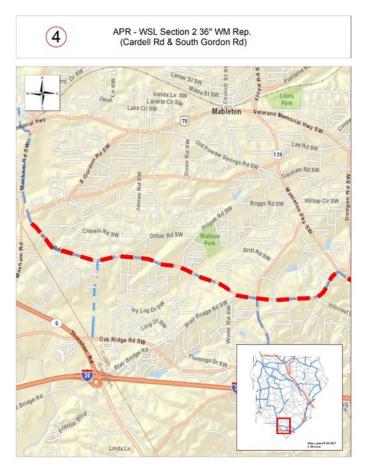
Contract Value: N/A Contractor(s): TBD

CCMWA Project Engineer: Jacob Wilson

West Side Loop Section #2 - 36" Water Main

The West Side Loop (WSL) Section #2 36" Water Main Replacement project involves the replacement of approximately 18,500 feet of 36-inch pre-stressed concrete cylinder pipe with 36-inch ductile iron pipe. The project extends from Old Alabama Road to Mableton Parkway along Cardell Road and South Gordon Road. The existing pipe was initially installed in 1967 and is approximately 50 years old. The project was identified as one of the highest priority replacement water mains as a result of the Aged Pipe Replacement (APR) Program Study and a water main break in this section in 2016.

This project is scheduled for the 2018 – 2020 timeframe.



Scheduled Completion Date: Fiscal Year 2020

Engineer(s): TBD Contract Value: N/A

Contractor(s): TBD Contract Value: N/A

CCMWA Project Engineer: Chris Dillard

Quarles Plant 1 Replacement

The Quarles Plant 1 Replacement Project will demolish all of the nearly 60-year-old structures associated with Quarles Plant 1 and rebuild a new water treatment facility in its place. The engineering on this project started in 2015 with a 3-year construction schedule beginning in 2017. The new plant will have a treatment capacity of 33 MGD, which is less than the current plant's rating of 42 MGD. The new plant will increase reliability of water production from the Quarles WTP.

This project is scheduled for the 2017-2020 timeframe. The total anticipated project spending includes funds spent in 2017 and funds allocated in the 2018 – 2022 CIP.

Contract Value: \$71,790,109.30

Original, Scheduled Completion Date: 2018 **Current, Scheduled Completion Date: 2020**

Engineer(s): Hazen and Sawyer, P.C. **Original Contract Value:** \$5,939,590

Current Contract Value: \$7,911,922

Project Engineer: Lance Buchanan

Contractor(s): Archer Western



Quarles Plant 1 Replacement - digital rendering

Quarles Plant 2 SCADA Replacement

The Quarles Plant 2 SCADA Replacement Project will be a multi-year program to overhaul and upgrade the Authority's Supervisory Control and Data Acquisition (SCADA) at Quarles Plant 2. The Authority is more dependent upon the SCADA technology to maintain operations than at any point in our history. The current system was installed in 2002 and has reached the end of its useful life (due to hardware and software obsolescence). Operations and Engineering staff plan to establish and maintain an appropriate schedule for coordinated updating of the SCADA systems (hardware and software, etc.). The first year of the project is to develop a work plan for the complete overhaul and redesign of the Authority's SCADA systems with a new architecture reflecting the interconnectedness of the Divisions (Wyckoff, Quarles, Hickory Log, Admin-Engineering, and Laboratory) and the interconnectedness of the Authority's various information systems (SCADA, GIS, CMMS, LIMS, Engineering Analysis Modeling software, etc.). The first year will also include some immediate hardware replacement needs.

Scheduled Completion Date: 2021

Engineer(s): TBD Contract Value: N/A

Contractor(s): TBD Contract Value: N/A

CCMWA Project Engineer: Lance Buchanan





Pete Shaw Tank No. 2

The Pete Shaw Tank No. 2 project will add a second 5 million gallon finished water storage tank to the Authority's transmission system. The addition of a second finished water storage tank will enhance the Authority's ability to adequately serve higher elevation areas of northeast Cobb County during periods of high demand for water. The second storage tank will also provide operational flexibility when one of the tanks must be taken out of service for maintenance. The addition of tanks in strategic locations throughout the County also helps mitigate transient pressures in the transmission system. The project is scheduled to begin in fiscal year 2018 and to be completed in fiscal year 2019. The project will add costs to operations upon completion. The largest costs will be maintenance, cleaning and inspections, which are estimated at around \$40,000 per year.

Scheduled Completion Date: Fiscal Year 2020

Engineer(s): TBD Contract Value: N/A

Contractor(s): TBD Contract Value: N/A

CCMWA Project Engineer: Ken Janney



Asset Renewal & Replacement Projects

	Prior Year Allocations Carried Over	2018 Allocation	2018 Total Allocation	Estimated Prior Year Investments	2018 Budgeted Project Spending
Quarles Treatment Division			•		
Replacement of Bulk Alum and Fluoride Tanks	-	240,000	240,000	-	240,000
Replacement of Fluoride Feed Pumps	-	26,500	26,500	-	26,500
Install Ladder and Platform for Salt Tank	-	10,000	10,000	-	10,000
Quarles RWPS #1 Beck Actuator Installation	-	78,000	78,000	-	78,000
Trim impellers on Q2 High Service Pumps	-	60,000	60,000	-	60,000
Q2 Roof Original Section Replacement	-	120,000	120,000	-	120,000
Quarles Filter Building Actuator Replacement	-	307,245	307,245	-	307,245
Raw Water Pump, Standby Motor Refurbishment	130,000	-	130,000	-	130,000
Second, Liquid Lime Tank & Feed System	300,000	225,000	525,000	25,000	500,000
Electrical Replacement & Ventilation Improvements @ RWPS #1	239,000	-	239,000	39,000	200,000
Quarles Dam Stabilization	895,000	-	895,000	90,000	805,000
	1,564,000	1,066,745	2,630,745	154,000	2,476,745
Wyckoff Treatment Division		_			
Wyckoff Clearwell Repairs		100,000	100,000	_	100,000
Plate Settler Covers for 6 Basins		99,000	99,000	_	99,000
Wyckoff Raw Water Intake Structural Repairs		150,000	150,000	_	150,000
Liquid Lime System for WTD Residuals		550,000	550,000	_	550,000
SSEQ Decant System		490,000	490,000	_	490,000
High Service Pump Motor #3 Rewind	100,000		100,000	_	100,000
Residuals Filter Press & Lime Silo PLC	40,000	_	40,000	27,797	12,203
Raw Water Pump Motor #4 Rewind	100,000	60,000	160,000	395	159,605
Thickener #3 Transfer Pump Controls Retrofit	55,000	00,000	55,000	-	55,000
Raw Water Pump and Motor #5 Replacement	558,625	_	558,625	58,625	500,000
Naw Water Fump and Woter #6 Replacement	853,625	1,449,000	2,302,625	86,817	2,215,808
Transmission				- 	
Transmission Reservation for Purchase of Pipe Yard Replacement Inventory	_	212,000	212,000	_	212,000
Reservation for Unplanned Pipe & Valve Replacements	_	515,000	515,000	_	515,000
Lost Mountain Tank #1 Painting	-	650,000	650,000	-	650,000
Planned Blow-Off Replacements	-	300,000	300,000	-	300,000
·	_	90,000	90,000	_	90,000
Replace 2 Meters in Vault at Sandtown/Booth Rd	-	70,000		-	70,000
Replace Meter #190 & Meter #195 in Smyrna	-		70,000	-	
Realtime Metering @ 5 locations Install 2 Manholes for Transient Detection System Relocations		50,000 75,000	50,000 75,000	_	50,000 75,000
install 2 Manifoles for Translent Detection System Relocations		1,962,000	1,962,000		1,962,000
		1,502,000	1,502,000	·	1,302,000
Maintenance		_			
VAC Breaker Puller - Wyckoff	-	55,000	55,000	-	55,000
VAC Breaker Puller - Quarles	-	55,000	55,000	-	55,000
Alternative Utility Vehicle #1 (to replace golf cart)	-	16,516	16,516	-	16,516
Alternative Utility Vehicle #2 (to replace golf cart)	-	16,516	16,516	-	16,516
Replacement of 2008 Ford E-350 Van	-	40,128	40,128	-	40,128
Replacement of 2007 Ford Explorer	-	44,000	44,000	-	44,000
Wyckoff Extended Boom 32' Forklift	-	85,500	85,500	-	85,500
Quarles Extended Boom 42' Forklift	-	96,000	96,000	-	96,000
Wireless Vibration/Thermal System for Wyckoff Raw Water Pumps	-	36,175	36,175		36,175
Wireless Vibration/Thermal System for Quarles Raw Water Pumps	-	34,175	34,175		34,175
Wyckoff High Service Air Compressor	-	26,500	26,500	-	26,500
Ultrasound Detection Device		17,600	17,600		17,600
	-	523,110	523,110	-	523,110

Asset Renewal & Replacement Projects

	Prior Year Allocations Carried Over	2018 Allocation	2018 Total	Estimated Prior Year Investments	2018 Budgeted Project Spending
Laboratory	-			-	<u> </u>
Copier/Printer Scanner	-	8,000	8,000	-	8,000
Vehicle Replacement	-	30,000	30,000	-	30,000
Purge & Trap/Gas Chromatograph Accessories	-	93,000	93,000	-	93,000
Simmons Lab Expansion	242,807	457,193	700,000	42,807	657,193
	242,807	588,193	831,000	42,807	788,193
Hickory Log Creek					
Replacement YSI Water Quality Sonde	-	12,000	12,000	-	12,000
Replace & Install 2 SCADA Servers at HLC	-	48,750	48,750	-	48,750
Install New Entrance Gate and Access Control at Office	-	11,250	11,250	-	11,250
Replace 2 Air Compressors at Dam Crest Gate	-	16,425	16,425	-	16,425
Install New Fencing at Mitigation Properties	-	75,000	75,000	-	75,000
HVAC replacement at Pump Station	43,000		43,000	33,000	10,000
	43,000	163,425	206,425	33,000	173,425
Information Systems / Technology					
Replace 2 Domain Controllers at Admin Building	-	12,000	12,000	-	12,000
CISCO Switch Upgrades	-	35,000	35,000	-	35,000
Storage Area Network (SAN) Upgrade	-	50,000	50,000	-	50,000
Security Information and Event Management Software (SIEM)	-	25,000	25,000	-	25,000
Upgrade XLIMS server		15,000	15,000	<u> </u>	15,000
	<u> </u>	137,000	137,000	-	137,000
Safety & Security					
Safety & Security Replacement Vehicle	-	44,000	44,000	-	44,000
Camera Upgrades for QTD Chemical Building	-	18,000	18,000	-	18,000
Camera Upgrades for WTD Intake	-	18,000	18,000	-	18,000
Camera Upgrades at Remote Sites at Remaining Locations	-	32,500	32,500	-	32,500
Gate Operators at Brush Mt. & Pete Shaw tank sites	-	88,000	88,000	-	88,000
Access Control Upgrade to RS2 System	-	82,000	82,000	-	82,000
Security System Install at 5 Remote Sites	-	37,500	37,500	-	37,500
HVAC system in QTD Chemical Building Electrical Room		10,000	10,000		10,000
	-	330,000	330,000	<u> </u>	330,000
Engineering					
Replacement Vehicle for 2008 Ford Explorer		45,000	45,000		45,000
		45,000	45,000	-	45,000
General and Administration					
Driveway and Parking Lot Sealing - Atlanta Ind. Drive	-	19,000	19,000	-	19,000
Solar Power Installation at 1170 Atlanta Ind. Drive	-	88,500	88,500	-	88,500
Remodeling of 1190 Atlanta Industrial Drive	108,000	142,000	250,000	16,400	233,600
	108,000	249,500	357,500	16,400	341,100
<u>Totals</u>	\$ 2,811,432	\$ 6,513,973	\$ 9,325,405	\$ 333,024	\$ 8,992,381

*Note: Red font indicates project carrying over from 2017

DEBT OBLIGATIONS

Cobb County-Marietta Water Authority utilizes the following standards when considering the use of debt as a funding source:

- Debt should be utilized only for construction of capital projects which are new additions to CCMWA's assets and which will provide benefit to future generations.
- CCMWA strives to maintain AAA bond ratings from the three bond rating agencies in order to obtain the lowest possible rates when financing projects through debt issuance.
- CCMWA will consider the expected useful life of any capital project financed through issuance of debt and will not secure debt with a term longer than the expected useful life of the capital project.
- In addition to issuance of revenue bonds, CCMWA considers the use of loans through the Georgia Environmental Finance Authority (GEFA) when considering sources for financing capital projects through debt issuance.
- When it is fiscally responsible, CCMWA will consider financing capital projects with cash to avoid the issuance of debt.
- Bond premiums, discounts, and issuance costs are deferred and amortized over the term of issued bonds using the effective interest method.
- Deferred charges on refunding are amortized over the shorter of the life of the original bond or the refunding bonds, using the effective interest method.
- Bond premiums, discounts, and deferred charges on refunding are presented as additions and reductions to the face amount of bonds payable, whereas issuance costs are recorded as deferred charges.

Legal Debt Limit

Cobb County-Marietta Water Authority has a legal debt limit of \$400 million as established by the Georgia General Assembly. CCMWA had total liabilities (debt) of \$92,953,692 as of January 1, 2017, with \$19,678,565 classified as current liabilities (due in less than one year) and \$73,275,127 classified as long-term liabilities. Compensated absences payable, both current and long-term, contributed to \$1,993,619 of total liabilities. As of January 1, 2018, CCMWA estimates a debt coverage ratio of 12.7%.

No additional debt was issued in 2017 to finance capital projects, general operations, or to refinance existing debt. CCMWA also does not intend to issue debt in the current 5-year plan; however, if interest rates become favorable, refinancing of existing debt could occur.

Principal and Interest Payments – 2016 through 2018

Series 2009 Revenue Bonds - Maturity 2021

Fiscal Year Ending December 31,	Principal	Interest	Total
2016	\$ 4,450,000	\$ 1,267,054	\$ 5,717,054
2017	\$ 4,680,000	\$ 1,081,638	\$ 5,761,638
2018	\$ 4,870,000	\$ 894,438	\$ 5,764,438

Series 2015 Revenue Bonds - Maturity 2042

Fiscal Year Ending December 31,	Principal	Interest	Total
2016	\$ 1,150,833	\$ 1,982,450	\$ 3,133,283
2017	\$ 1,185,833	\$ 1,947,925	\$ 3,133,758
2018	\$ 1,225,833	\$ 1,908,300	\$ 3,134,133

Total Long-Term Debts Payable

Fiscal Year Ending December 31,	Principal	Interest	Total
2016	\$ 5,600,833	\$ 3,249,504	\$ 8,850,337
2017	\$ 5,865,833	\$ 3,029,563	\$ 8,895,396
2018	\$ 6,095,833	\$ 2,802,738	\$ 8,898,571

2017 DEFINED BUDGET GOALS

The 2017 Budget Goals are outlined below and statistics related to each Division's goal achievement are presented with the 2018 Budget Goals as part of the Operating Budget. CCMWA approached the 2018 Budget Goals differently than in previous years. The goals presented for the 2018 fiscal year are initiatives outlined in the 2016-2020 Strategic Plan. The objectives presented for each division describe how that division will work towards the organization-wide goals in the Strategic Plan. The desired outcome of redesigning CCMWA's budget goals is to focus attention across the Authority to the areas defined as most important to CCMWA's continued success. The approach for setting 2017 goals did not focus on organization-wide goals; therefore, the 2017 goals are presented separately from the 2018 goals. In the future, division goals will be tied to the Strategic Plan and presented at the divisional level with a recap of the prior year's goal achievement. The goals set in the 2017 budget are outlined below, by division.

Administration Division

- Realign CCMWA's maintenance and instrumentation workforce to gain operational efficiency and increase effectiveness. (Goal)
 - Consolidate maintenance and instrumentation personnel into a separate operational division within CCMWA and hire a Maintenance Division Manger to lead the division. (Objective)
- Elevate CCMWA's safety program to create a safety culture to protect our employees and the public. (Goal)
 - Hold managers accountable for supporting and enforcing safety practices. (Objective)
- Attract, develop and retain top talent. (Goal)
 - Create and implement a change-oriented performance management system (Objective)
 - Create and align career pathways and training programs to organizational needs. (Objective)
 - Partner with professional societies, colleges, and trade schools to expand and diversify the talent pool. (Objective)

Finance Division

- Preserve a strong financial profile for CCMWA. (Goal)
 - Work with CCMWA's independent auditor through the calendar year 2016 audit and maintain an unqualified opinion of the CCMWA's finances. (Objective)
 - Review and recommend needed updates to all CCMWA Financial Policies. (Objective)
 - Work with to staff to develop, track and report on key performance indicators (KPIs) applicable to CCMWA's operations. (Objective)
- Support infrastructure sustainability through minimization of life cycle costs. (Goal)
 - Develop a process to track progression and planning of asset renewal and replacement projects to include appointment of project managers, milestone dates and monthly status reports. This will be implemented by April 1, 2017. (Objective)

- Implement an asset management steering committee composed of one member from each operating division. This committee will help implement and engrain asset management principals across CCMWA. (Objective)
- Implement an in-house training effort on CCMWA's computerized maintenance management system to further implementation across CCMWA. (Objective)
- Develop a trained, educated and safety aware workforce and strive toward continuous improvement. (Goal)
 - Establish and enforce safety training and tracking for all Finance Division staff. (Objective)
 - Ensure all Finance Division staff have applicable safety equipment and apparel through creation of a checklist and periodic inspection. (Objective)

Engineering Division

- Facilitate successful completion of current capital improvement projects. (Goal)
 - Complete construction of the Southwest Connector 54-inch Pipeline by December 2017. (Objective)
 - Completion of the West Side Loop Replacement 48-inch pipeline project by June 2017. [Pine Mountain to Dallas Highway phase] (Objective)
 - Completion of the Dallas Highway Parallel 36" by June 2017. (Objective)
 - Completion of the Wyckoff Filter Building Rehabilitation and Electrical Improvements project by December 2017. (Objective)
 - Award construction of Quarles Water Treatment Plant #1 by June 2017. (Objective)
- Facilitate design of approved capital improvement projects in accordance with timelines set forth in the board approved Capital Improvement Plan. (Goal)
 - Initiate design of three Aged Pipe Replacement Projects by December 2017. (Objective)
 - Vette and document facilities projects as to need, scope and priority (Objective)
- Realign Engineering into an asset management centric, sustainable and resilient group with greater opportunities for career development (Goal)
 - Create development ladders for advancement/specialization and revise job descriptions appropriately. (Objective)
 - Develop redundancy in the GIS area. (Objective)
 - Develop redundancy in hydraulic modeling of CCMWA's transmission system. (Objective)
 - Initiate reformation of CCMWA's information management systems. (Objective)

Information Technology Division

- Improve the security and reliability of CCMWA's business network. (Goal)
 - Implement security measures recommended in the 2016 Network Security Assessment. (Objective)
 - Install a smoke alarm and fire suppression system in the administration and engineering building server room. (Objective)

- Evaluate all CCMWA server rooms for security, safety, and reliability; then recommend actions in the 2018 budget to appropriately upgrade those server rooms. (Objective)
- Complete CCMWA's I.T. Master Plan to outline future technology-related projects that support the goals and actions of the CCMWA Strategic Plan. (Objective)

Provide useful training for employees on Authority software products (Goal)

To better inform and empower our employees, I.T. plans to provide more training on software used by CCMWA. In addition, IT wants to provide regular training on the use of Office 365 products, including Outlook, Excel, Word, etc. (Objective)

Hickory Log Creek Reservoir Division

- Demonstrate infrastructure sustainability through implementation of planned asset management strategies. (Goal)
 - Complete planned recoating of steel pedestrian bridge spanning the crest of Hickory Log Creek Dam. (Objective)
 - Utilizing CCMWA's computerized maintenance management system database, develop and document a ten-year capital asset renewal and replacement plan. (Objective)
- Demonstrate improvement of CCMWA's safety program by making safety an integral part of work activities. (Goal)
 - Conduct a table top exercise of the Hickory Log Creek Dam Emergency Action Plan (EAP) in cooperation with the City of Canton, Cherokee County, the United States Army Corps of Engineers, Georgia Safe Dams, and other germane agencies. (Objective)
 - Conduct rope / tie-off safety training for scaling and inspection of Hickory Log Creek Dam in cooperation with the Cherokee County Fire Department. (Objective)

Wyckoff Treatment Plant Division

- Infrastructure Sustainability Equipment repair/refurbishment by focusing on specific projects listed in our proposed 2017 AR&R. (Goal)
 - Rewind raw water #3 motor and high service #4 motor to increase reliability at our intake facility as well as our high service pump station. (Objective)
 - Upgrading Residuals filter press and lime silo PLC's that are being phased out and have reached their life expectancy. (Objective)
 - Replace the high service 42" isolation valve, manufactured in 1973. (Objective)
 - Replace the raw water pumps 1-4 valve actuators to eliminate the possibility of contaminating the source water at the intake structure. (Objective)
 - Replace raw water #5 pump and motor originally installed in 1986. (Objective)
- Increase SCADA security from cyberattacks (Goal)
 - Upgrade SCADA intrusion detection security software along with other upgrades in efforts to protect CCMWA and our customers. (Objective)
- Education Training and Development for Staff.
 - Advance implementation / utilization of CCMWA's computerized maintenance management system by keeping current with software upgrades continuing education, and training for staff. (Objective)

- Offer training to all staff members on topics related to water treatment operations and maintenance, including attendance at water industry conferences. (Objective)
- Work with human resources to offer supervisory / managerial training opportunities. (Objective)

Quarles Treatment Plant Division

- Bid the Quarles 1 replacement project and onboard a successful contractor for the replacement of Quarles #1 plant, including 33 MGD of capacity, 8 filters, and new high service pump station. (Goal)
 - Work in cooperation with Hazen & Sawyer project manager to bid the project and obtain a competent contractor to complete the construction. Have design ready to stay on schedule for construction to start in 2017. (Objective)
- Maintain functionality of the Quarles1 Filter Building during interim time before replacement construction is started on the facility in 2017. (Goal)
 - Operate the Quarles 1 Filter Building through 2016 in conformance with all applicable water quality standards. Work on plan to operate only 3 or 4 basins and filters during construction of the new WTP. Depending on schedule entire plant may be used for summer of 2017. (Objective)
- Continue integration of CCMWA's computerized maintenance management system into normal operations of the Quarles division. (Goal)
 - Build on additional functionality of CCMWA's computerized maintenance management system by using the program to develop facility assessments of all buildings at the Quarles Division and using the assessments to develop short term and long term asset renewal and replacement budget plans. (Objective)
- Establish and maintain a process whereby institutional knowledge is shared with junior staff members and managerial duties are delegated for personnel development. (Goal)
 - Share institutional knowledge at staff meetings and delegate managerial responsibilities where possible. (Objective)
 - Work with human resources to offer supervisory / managerial training opportunities. (Objective)

Laboratory Division

- Evaluate technologies for providing additional data to operations for enhancement of treatment processes. (Goal)
 - Investigate / document available technology to determine if it would provide value to CCMWA's water quality monitoring efforts. (Objective)
- Evaluate efficiency of having separate chemical and biological laboratory locations. (Goal)
 - Utilize a third-party assessment to determine if efficiencies could be gained by merging the chemical laboratory with the biological laboratory into a single location. (Objective)
- Train an additional scientist to operate an Ion Chromatography(IC) Instrument and relocate the instrument at the Quarles Analytical Lab. (Goal)
 - Provide data on the efficiency and performance of chlorine dioxide generators as related to chlorates to help meet future compliance regulations on chlorates. (Objective)

Transmission Division

- Offer educational / training opportunities for staff members to facilitate professional growth. (Goal)
 - Conduct advanced training of one staff member in the use and maintenance of GIS. (Objective)
 - Offer training to all staff members on topics related to water transmission system operations and maintenance, including attendance at water industry conferences. (Objective)
 - Share institutional knowledge at every opportunity and delegate managerial responsibilities when and where possible. (Objective)
 - Work with human resources to offer supervisory / managerial training opportunities. (Objective)
- Enhance system reliability and efficiency through utilization of CCMWA's computerized maintenance management system. (Goal)
 - Implement a second round of valve maintenance through the entire transmission system in 2017 and train a new employee on managing this program. (Objective)
 - Continue pipeline easement clearing project and concentrate on spraying and cutting of previously cleared easements. Also, utilize GIS to incorporate all cleared easements in our GIS map so cleared easement data is not lost. (Objective)
 - Clean and inspecting five transmission systems potable water storage tanks in order to maintain implementation of a 3-year cleaning schedule for all CCMWA potable water storage tanks. (Objective)
 - Replace at least five aged boundary meters in CCMWA's transmission system. (Objective)
 - Replace at least 4 transmission system blow-off saddles that may be likely to fail; drought and system demand pending (Objective)
 - Utilize CCMWA's computerized maintenance management system to develop systematic work order schedules for preventive maintenance of transmission system assets. (Objective)
 - Install monitoring equipment at three different locations on the 54-inch Quarles pipeline for leak detection purposes. (Objective)

FINANCIAL POLICIES

The financial management policies adopted by CCMWA are intended to provide guidelines for staff to use in making financial decisions related to daily operations and strategic long term planning. These policies were established to ensure a shared understanding of financial practices across the Authority and to promote stability and continuity in financial reporting. CCMWA's financial policies are considered a living document and are reviewed by staff and the Board on an annual basis to accommodate change in the Authority's needs and structure. The following financial policies have been adopted by the CCMWA Board:

- Financial Management Policy
- Investment Policy

- Capitalization Policy
- **Procurement Policy**

Financial Management Policy

CCMWA has adopted a Financial Management Policy to provide regulatory guidelines in all areas of the Authority's financial reporting. This policy also addresses internal controls and the proper application of State and Federal accounting standards. Board adopted guidelines regarding financial management include, but are not limited to, the following:

Debt Issuance

- Debt issuance for capital improvements and equipment shall be considered when at least one of the following conditions exist:
 - When one-time, non-continuous projects are required
 - o When CCMWA determines that future users will receive a benefit from the capital improvement financed by the debt
 - When the project is necessary to provide basic services to CCMWA rate payers
 - When total debt does not constitute an unreasonable burden to the rate payers
 - o When exhaustion of the use of all other possible revenue sources provides no alternative funding for capital projects
- When CCMWA utilizes debt financing, the following will occur to assure that the debt is soundly financed:
 - Analysis of the financial impact, both short-term and long-term, of issuing debt
 - Conservative projection of the revenue sources that CCMWA will use to repay the debt
 - Assurance that the term of any long-term debt CCMWA incurs shall not exceed the expected useful life of the asset the debt financed
 - Maintaining a debt service coverage ratio that assure that revenues pledged for repaying of outstanding debt will be adequate to make required debt service payments

Borrowings by CCMWA should be for a duration that does not exceed the economic life of the capital improvement that it financed and, when feasible, should be shorter than the projected economic life.

Accounting

- CCMWA shall maintain a system of financial monitoring, control, and reporting for all operations and funds to provide an effective means of assuring that financial integrity is not compromised.
- CCMWA shall establish and maintain a high standard of accounting practices that conform to Generally Accepted Accounting Principles (GAAP). These principles will be updated when required by the Governmental Accounting Standards Board (GASB), which is the authority charged with defining and developing GAAP.
- CCMWA shall maintain a minimum number of funds consistent with legal compliance and sound financial administration. The Authority shall adhere to the mandatory fund structure included in the Georgia Department of Community Affairs' (DCA) chart of accounts.
- An independent audit will be performed annually by a qualified, independent auditor, in compliance with Generally Accepted Audit Standards (GAAS).

Internal Controls

- CCMWA's internal control system is intended to:
 - o Promote orderly, economical, efficient, and effective operations
 - Safeguard resources against loss due to waste, abuse, mismanagement, errors, and fraud
 - o Promote adherence to statutes, regulations, bulletins, and procedures
 - Develop and maintain reliable financial data
 - Accurately report financial data in a timely manner

Budgeting

- CCMWA shall annually adopt a balanced budget where operating revenues are equal to or greater than operating expenditures.
- CCMWA shall prepare and publish an annual budget document in accordance with the budget policy and will strive to prepare the budget to meet the standards of the GFOA Distinguished Budget Award Program.
- 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.

- Expenditures shall be budgeted on a "line-item" basis. This type of budget focuses on categories of expenditures such as personnel services, contractual services, supplies, equipment, etc. within each Division.
- Revenue estimates made for the budget process shall be done through an analytical process to ensure that revenues are estimated conservatively, prudently, and realistically.
- CCMWA shall establish a cash reserve to cover the cost of expenditures caused by unforeseen emergencies, shortfalls caused by revenue declines, and eliminate the need for any short-term borrowing for cash flow purposes. This reserve shall accumulate and be maintained at an amount which represents no less than two months of operating and debt expenditures.
- The budget document shall include goals and objectives for each Division that measure Division effectiveness on a historical basis and for the upcoming year. Goals and objectives should be linked to the Authority wide goals outlined in the current Strategic Plan.
- The Finance Division shall prepare and distribute timely, monthly financial reports that compare actual revenues, outstanding encumbrances, and expenditures with budgeted amounts.
- Budget amendments that increase the operations budget and/or increase the number of authorized positions must be approved by the CCMWA Board. Budget reallocations, which do not increase the overall operations budget and/or do not increase the number of positions, must be approved by the General Manager.
- CCMWA's capital budget will consist of the following:
 - Asset Renewal and Replacement (AR&R) a capital budget for renewal or replacement of capital assets in which individual projects are valued at less than \$3,000,000
 - Capital Improvement Plan (CIP) a rolling five-year capital budget for construction projects valued at more than \$3,000,000. A project budget is adopted for each capital project and adopted allocations do not lapse at the end of the fiscal year, instead they remain in effect until the project is complete or a reallocation is made by the CCMWA Board.

Financial Reporting

In conjunction with the annual independent audit, the Authority shall prepare a Comprehensive Annual Financial Report (CAFR) in accordance with GAAP and will strive to prepare the CAFR to meet the standards of the GFOA Certificate of Achievement for Excellence in Financial Reporting Program.

- The Finance Division will prepare and present a summarized monthly and year to date unaudited, financial report to the Board. This financial report will include a Statement of Revenue and Expenditures, a comparative schedule of water sales in both dollars and gallons, and a capital improvement plan report.
- The Finance Division will prepare and distribute monthly reports to each division within the Authority to provide staff with adequate financial information to make sound business decisions. This financial report will include expenses, personnel costs, and recommended budget line-item reallocations for accounts in excess of budget.
- A copy of the Authority's annual independent audit will be submitted to the Georgia Division. of Audits and Accounts in accordance with OCGA 36-81-7.

Investment Policy

CCMWA has adopted an Investment Policy to guide financial decisions related to long term planning. This policy dictates how funds are to be invested by CCMWA in order to ensure adequate liquidity to fund current operations and planned capital projects. The investment strategy outlined in this policy focuses on maximizing return on investment and mitigating risk. Board adopted guidelines regarding investments include, but are not limited to, the following:

- CCMWA shall delegate authority to manage the investment portfolio to an external Investment Advisor, selected through a request for proposals (RFP) process and subject to Board review and evaluation.
- Only financial institutions, brokers, and dealers that have been pre-qualified and formally approved by the CCMWA Board are eligible to provide investment services as a designated qualified bidder.
- All financial institutions on the qualified bidder list shall be monitored on an ongoing basis to ensure compliance with applicable laws and CCMWA policies.
- Any financial institution that holds investment funds for CCMWA is required to abide by a "Suitability of Collateral" agreement which corresponds to the Georgia state statute regarding the collateralization of public funds.
- Maturity of investments shall be staggered to provide a stable income and should be structured to mature at specific times to meet expected cash requirements, limiting the need to sell securities prior to maturity.
- No more than 20% of the entire portfolio value may be deposited with a single bank or invested in securities of one issuer, excluding investments guaranteed by the U.S. Government and investment pools such as Georgia Fund 1.

- A minimum of 15% of the entire portfolio value shall be held in U.S. Treasury bills, overnight purchase agreements, the Local Government Investment Pool (LGIP), or money market accounts to ensure sufficient liquidity to meet current obligations.
- A third party shall be obtained for safekeeping of investment securities to protect CCMWA from potential fraud and embezzlement.
- Competitive bidding shall be the primary method of soliciting investment opportunities to ensure the best rate of return on investment.
- CCMWA's investment portfolio shall be updated monthly and included in the financial report to the Board at every monthly board meeting.
- CCMWA's investment advisor shall submit quarterly reports to the Board that summarize recent market conditions, economic developments, and anticipated investment conditions, as well as the investment strategies employed in the most recent quarter, the quarter's total investment return, and a summary of all purchase transactions made in the last quarter.

Capitalization Policy

CCMWA has adopted a Capitalization Policy to set dollar thresholds for capitalization of assets and define depreciation methodologies based on asset categories. Capital assets are financial resources that are tangible or intangible in nature, with a useful life expectancy greater than three years. These resources provide the Authority services in the normal course of operations and are not for resale. The capitalization policy outlines the following thresholds, which are used to determine if an asset qualifies for capitalization:

Capital Asset Class	Threshold	<u>Useful Life</u>
Construction in Progress	> \$1	Various
Land and Land Improvements	> \$1	Various
Computer Hardware and Software	> \$5,000	3 Years
Furniture, Fixtures and Other Equipment	> \$5,000	5-7 Years
Laboratory and Monitoring Equipment	> \$5,000	10 Years
Building and Building Improvements	> \$10,000	25-50 Years
Infrastructure	> \$10,000	10 50 Years
Machinery and Equipment	> \$10,000	5-25 Years
Vehicles	> \$10,000	5 Years
Intangible Assets	> \$25,000	3-50 Years

Board adopted guidelines regarding capitalization include, but are not limited to, the following:

- Useful life of a capital asset is determined based on the asset's present condition, past experience with similar assets, physical environment of the asset, maintenance requirements of the asset, and expected service levels.
- The Authority shall periodically evaluate actual experiences with capital assets to be included in future useful life determinations and to determine if adjustments are needed.

- Capital assets are included the annual budget process and categorized, budgeted, and reported by account code.
- Significant costs related to a capital asset that are incurred in periods after the original acquisition will be included in the assets value and capitalized over the remaining estimated useful life of the asset, if one of the following apply:
 - Improvements provide additional value to the asset by extending the asset's original estimated useful life by another three years.
 - Improvements provide additional value to the asset by increasing the asset's ability to provide a specific service level.
- Repair and maintenance costs incurred to maintain an asset's original level of service shall be treated as operating expenses and not capitalized.
- Land is considered to be non-expendable, real property with an indefinite useful life and is not depreciated. The cost of land includes the purchase price plus legal fees, appraisal fees, and site preparation fees incurred to put the land in condition for its intended use.
- Land Improvements are considered non-building assets that enhance the quality or facilities the use of land. Land Improvements with limited lives, such as driveways, walkways, fences, parking lots, and landscaping are recorded separately a depreciated over their estimated lives. Land improvements such as fill, grading, and excavation that provide permanent benefits and incur limited deterioration with use or the passage of time are considered Land and are nondepreciable.
- Easements are considered a right to use land owned by another entity for a specific purpose and may be granted on a permanent or temporary basis. Permanent easements are recorded as Land and are non-depreciable. Temporary easements granted during a construction project are included in the cost of the project.
- The CCMWA Board or General Manager must directly authorize the donation, disposal, or transfer of any capital assets.

Procurement Policy

CCMWA has adopted a Procurement Policy to guide staff when making purchasing decisions and ensure the best products and services are obtained at the lowest total cost. This policy also outlines methods for obtaining competitive pricing to provide an equitable and fair method for acquiring goods and services. Board adopted guidelines regarding procurement include, but are not limited to, the following:

 Purchase orders shall be issued for all purchases made by the Authority to ensure proper budget allocation and division level approval.

- A purchase requisition is required for the purchase of budgeted goods and services between \$2,000 and \$9,999. The requisition shall include three verbal or emailed quotes, excluding purchases of replacement parts/service required for repair and maintenance of existing equipment and infrastructure, and must be approved by the Division Manager or Assistant Division Manager before a purchase order will be issued.
- A purchase requisition is required for the purchase of budgeted goods and services between \$10,000 and \$49,999. The requisition shall include three written quotes and must be approved by the Division Manager or a Director before a purchase order will be issued.
- Non-budgeted purchases of goods and services under \$50,000 must be approved by both the Division Manager and the General Manager or in their absence, a Director before a purchase order will be issued.
- Competitive quotes are not required for purchases of goods and services over \$2,000 and for purchases of replacement parts/service required for repair and maintenance of existing equipment and infrastructure over \$10,000 when accompanied by a Sole Source request form that has been approved by the Director of Operations and the General Manager. Sole source procurement shall be used only when a situation warrants and must be supported by documentation that identifies why foregoing the competitive quote process is in the Authority's best interest.
- Purchases of goods and services over \$50,000 shall be made through a formal sealed bidding process. In compliance with the Official Code of Georgia Annotated (OCGA) 36-91-20, the sealed bidding process for purchases in this threshold shall be advertised two times with the first advertisement at least four weeks prior to the opening of the sealed bids or proposals. The second advertisement shall follow no earlier than two weeks after the publication date of the first advertisement.
- Sole source procurement of goods, services, and construction contracts over \$50,000 shall be presented to the Board for consideration and must include documentation to support the request.
- Construction contracts of \$100,000 or more shall be made through a formal sealed bidding process, in compliance with OCGA 36-91-20.
- Contracts and task authorizations adopted within a line item of the annual budget and under \$100,000 may be signed by the General Manager or a Director and do not require further action by the Board.
- Contracts and task authorizations in excess of \$100,000 must be presented to the Board for approval. The Board may authorize the Chairman, General Manager, or any other delegated authority to sign the contract.

STATISICAL SECTION

The primary purpose of the Statistical Section in this document is to provide detailed information in tabular and graphical form that gives the reader a context for understanding the budgetary decisions and operational background of Cobb County-Marietta Water Authority. The data contained in this section includes information related to both revenues and expenses, and when possible, presents results for the most recent 10-year period.

Information about CCMWA's customers, rates, and production capacity are intended to assist the reader in understanding significant revenue trends that impacted current budgetary decisions. Information about operating costs per million gallons produced and electricity used per million gallons produced are provided to assist the reader in understanding trends related to operating expenses.

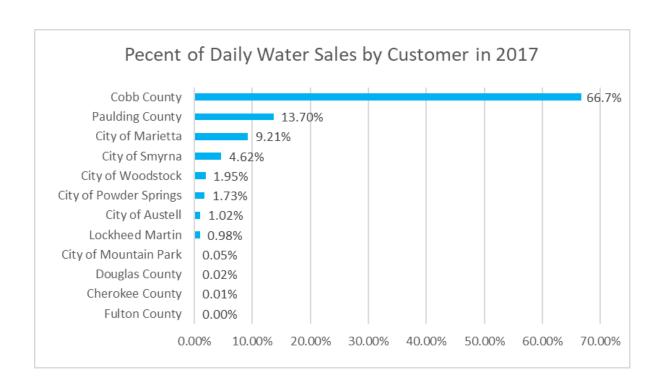
Demographic and economic measures of CCMWA's service area are presented to provide context for CCMWA's business environment. All demographic information is taken directly from the CCMWA's most recent Comprehensive Annual Financial Report and is reported on a fiscal year basis (as of December 31st). Information related to water quality is presented to represent CCMWA's commitment to providing safe, reliable drinking water to our customers. Finally, performance indicators of CCMWA are compared to the America Water Works Association's (AWWA) Industry Benchmark to highlight CCMWA's operational efficiency.

Cobb County-Marietta Water Authority's Customers

Cobb County-Marietta Water Authority currently has active contracts with the following customers:

- Cherokee County Water and Sewer Authority (CCWSA)
- City of Austell
- City of Mountain Park
- City of Powder Springs
- City of Smyrna
- City of Woodstock
- Cobb County Water System
- Douglasville/Douglas County Water and Sewer Authority (DDCWSA)
- Lockheed Martin Aerospace and Defense Company
- Marietta Board of Lights and Water
- Paulding County Water System

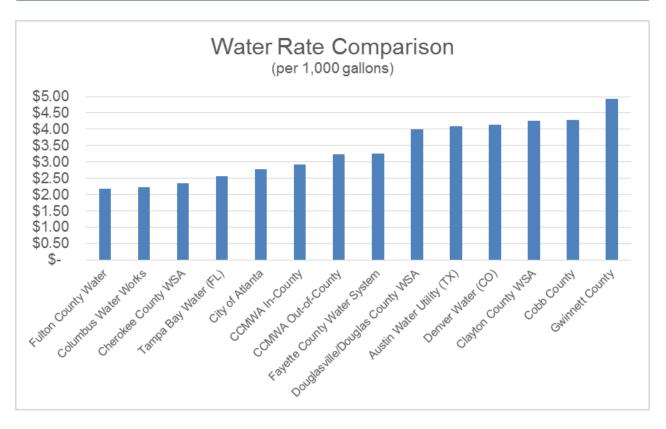
Cobb County-Marietta Water Authority also has an inactive contract with Fulton County Public Works. This contract terms are still in effect, but there are no active connections between Fulton County's system and CCMWA's system. All contracted customers of CCMWA are shown below, listed by percentage of water sales.



Rate Comparison Information

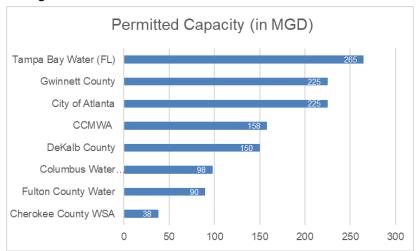
The following table represents select peer water purveyors of Cobb County-Marietta Water Authority in the Atlanta metropolitan area and similarly sized peer water purveyors outside of Georgia.

Utility	Charge	per 1,000 gal	Charge Appended by Retail Sales
Austin Water Utility (TX)	\$	4.10	yes
CCMWA In-County	\$	2.93	no
CCMWA Out-of-County	\$	3.24	no
Cherokee County WSA	\$	2.35	no
City of Atlanta	\$	2.77	yes
Clayton County WSA	\$	4.26	yes
Cobb County	\$	4.28	yes
Columbus Water Works	\$	2.23	yes
Douglasville/Douglas County WSA	\$	4.00	yes
Denver Water (CO)	\$	4.15	yes
Fayette County Water System	\$	3.25	yes
Fulton County Water	\$	2.17	yes
Gwinnett County	\$	4.92	yes
Tampa Bay Water (FL)	\$	2.56	no



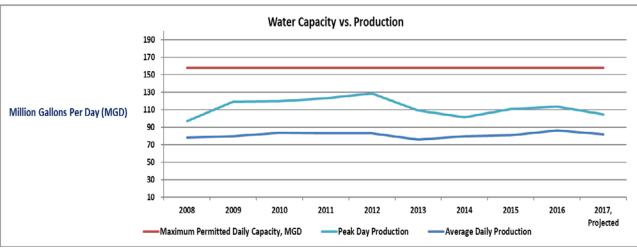
Permitted Production Capacity Comparison Information

The table below represents total daily potable water production capacity of major peer water purveyors of Cobb County-Marietta Water Authority in the Atlanta metropolitan area and similarly sized peer water purveyors outside of Georgia.



The table below compares CCMWA's permitted capacity to average daily production. During the last ten years, average daily production has not exceeded 54% of production capacity and peak day production has not exceeded 81% of production capacity.

Cobb County-Marietta Water Authority Water Capacity With Annual Average Daily Flow Last Ten Fiscal Years (All Numbers Expressed in Millions of Gallons) Unaudited										
Maximum Permitted Daily Capacity, MGD of Water Treatment Plants (WTPs) :	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017, Projected
Quarles WTP	86	86	86	86	86	86	86	86	86	86
Wyckoff WTP	72	72	72	72	72	72	72	72	72	72
	158	158	158	158	158	158	158	158	158	158
Average Daily Production	78	79	83	83	83	76	79	81	86	82
Percent of Capacity Used	49.51	50.27	52.72	52.46	52.60	47.94	50.25	51.15	54.65	51.82
Peak Day Production	97	119	120	123	128	109	102	111	113	104
Percent of Capacity Used	61.28	75.16	75.84	77.95	81.23	69.18	64.25	70.19	71.75	66.07



Costs per Million Gallons of Water Produced

Operational Cost per Million Gallons Produced & Thousand Gallons

(Operating Expense / Million Gallons Produced) **Includes Depreciation

Fiscal Year	MG Produced	Operating Expense	\$/MG	\$/K-Gal
2012	30,272	38,673,588	1,277.54	1.28
2013	27,451	40,152,408	1,462.69	1.46
2014	28,728	44,701,985	1,556.04	1.56
2015	29,445	45,099,147	1,531.64	1.53
2016	31,500	46,224,169	1,467.43	1.47
2017, Projected	29,208	47,128,621	1,613.55	1.61

Kilowatt Hours of Electricity Used per Million Gallons of Water

(KWH Used/ MG Produced)

Fiscal Year	MG Produced	Kilowatts Used	KW/MG
2012	30,272	74,616,139	2,465
2013	27,451	70,321,147	2,562
2014	28,728	71,318,540	2,483
2015	29,445	72,424,851	2,460
2016	31,500	76,901,520	2,441
2017, Projected	29,208	72,513,736	2,483

Demographic Information

Cobb County-Marietta Water Authority Cobb County, Georgia Demographic and Economic Statistics

Unaudited

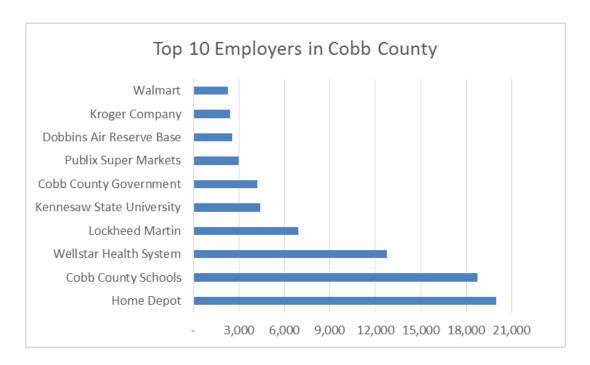
Fiscal Year	Population (1)	Personal Income (1)	Per Capita Personal Income (1)	County Unemployme nt Rate (2)
2007	670,440	32,249,690,000	48,102	3.50%
2007	670,440	32,249,090,000	40,102	3.30%
2008	679,820	31,744,830,000	46,696	6.20%
2009	684,780	29,643,900,000	43,290	9.60%
2010	689,750	30,144,950,000	43,704	9.50%
2011	697,550	30,776,120,000	44,120	8.40%
2012	707,170	31,338,650,000	44,316	7.30%
2013	716,950	32,029,550,000	44,675	7.10%
2014	726,850	32,765,870,000	45,079	6.00%
2015	733,860	33,827,430,000	46,095	4.90%
2016	741,334	35,410,880,000	47,766	4.50%

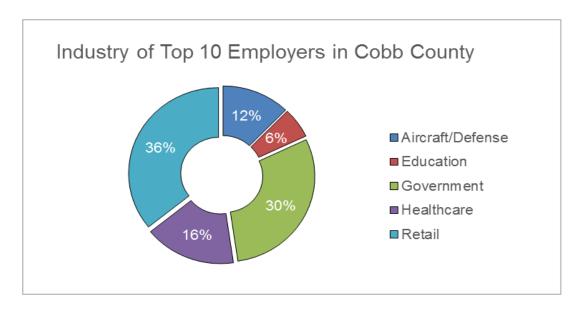
_City	_Population
Acworth	22,131
Marietta	59,067
Powder Springs	14,826
Smyrna	56,146_
	152,170

*Sources:

- (1) Woods and Poole Economics 2015 Data Pamphlet
- (2) Cobb County Office of Finance and Economic Development

Employer Demographics in the Cobb County Area





Water Quality Information

Water Treatment Process

The process begins by pumping untreated water from the Chattahoochee River or Lake Allatoona into sedimentation basins where large particles are removed and the water is disinfected. The water is then directed to a process called flocculation which is a gentle mixing of the water with a coagulant. This allows particles, called floc, to form and settle, clarifying the water. Next, the water is put through a filtration system where water flows through anthracite coal and sand filters, trapping even smaller particles. After filtration, chemicals are added for final disinfection. Except for chlorine and fluoride, chemicals used in the treatment process are removed before the finished water is distributed to the consumer. At the Wyckoff Plant, an additional step of adsorption using granular activated carbon is used during the warmer months to ensure compliance with the Disinfection By-Product Rule.

Why are there contaminants?

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of land or through the ground, it dissolves naturally-occurring minerals and radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- a) Microbial Contaminants such as viruses and bacteria which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- b) Inorganic Contaminants such as salts and metals which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- c) Pesticides and herbicides which may come from a variety of sources such as agriculture, storm water runoff, and residential uses.
- d) Organic chemical contaminants, including synthetic (man-made) and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gasoline stations, urban storm water runoff, and septic systems.
- e) Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

Water Testing and EPA Results

The U.S. Environmental Protection Agency (EPA) has established treatment methods to reduce contaminants to levels that protect human health. CCMWA's laboratory continuously monitors water quality to be sure it is properly treated to EPA standards. To ensure tap water is safe to drink, EPA prescribes limits on the number of certain contaminants in water provided by public water systems. The tables below show the results of our water quality analysis, as published in Cobb Count Water Systems Consumer Confidence Report. The information presented in this report is representative of 2/3 of our produced drinking water. Every contaminant regulated by the EPA that was detected in our water, even in the minutest traces, is listed here. The following definitions are important for understanding the information presented within the tables.

- Maximum Contaminant Level (MCL) is the highest level of a contaminant that is allowed in drinking water.
- Maximum Contaminant Level Goal (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- Action Level (AL) is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must implement.
- Treatment Technique (TT) is a required process intended to reduce the level of a contaminant in drinking water.

EPA Regulated Inorganic Substances or Contaminants							
Substance (Unit)	Date Tested	MCL	MCLG	Detected Level	Range	Major Sources	Violation
Fluoride ¹ (ppm)	2016	4	4	0.88	0.66 - 0.88	Erosion of natural deposits; water additive which promotes strong teeth	NO
Lead ² (ppb)	2014	AL =15	0	3.3	n/a	Corrosion of household plumbing systems	NO
Copper ³ (ppm)	2014	AL=1.3	0	0.046	n/a	Corrosion of household plumbing systems	NO
Nitrate/Nitrite ⁴ (ppm)	2016	10	10	0.54	0.28 - 0.54	Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits	NO

Notes: ¹Fluoride is added to water to help in the prevention of dental cavities in children.

²Of the 50 sites tested, 2 exceeded the action level. The next round of testing is due in 2017.

³Of the 50 sites tested none exceeded the action level. The next round of testing is due in 2017.

⁴ Nitrate and Nitrite are measured together.

Turbidity							
Substance	Date Tested	MCL	MCLG	Level Found	Range	Typical Source	Violation
		TT = 1 NTU		0.16	n/a		
Turbidity1	2016		0			Soil runoff	NO
Tarolany	2010	TT = percentage of samples <0.3 NTU	,	100%	n/a	Jon Julion	
Note: 'Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality. High							

turbidity can hinder the effectiveness of disinfectants.

Disinfection By-Products, By-Product Precursors and Disinfectant Residuals							
TTHMs (Total Trihalomethanes) (ppb)	2016	80	n/a	751	16 – 89	By-products of drinking water disinfection	NO
TTHMs (Total Trihalomethanes) (ppb) - Stage 2	2016	80	0	50.0¹	35.0 – 50.0	By-products of drinking water disinfection	NO
HAA5s (Haloacetic Acids) (ppb)	2016	60	n/a	351	9 – 57	By-products of drinking water disinfection	NO
HAA5s (Haloacetic Acids) (ppb) - Stage 2	2016	60	0	30.01	20.0 – 30.0	By-products of drinking water disinfection	NO
TOC (Total Organic Carbon) (ppm)	2016	TT	n/a	1.6	0.90 – 1.6	Decay of organic matter in the water withdrawn from sources such as lakes and streams	NO
Chlorite (ppm)	2016	1.0	0.8	0.45	0.09 – 0.45	By-product of drinking water disinfection	NO
Chlorine (ppm) ^{Free}	2016	MRDL=4	MRDLG= 4	1.96	0.00 – 1.96	Drinking water disinfectant	NO

Notes: ¹The highest detected LRAA (Locational Running Annual Average).

Microbiological Contaminants

(*The data presented in this table were from samples tested during 01/01/2016 - 03/31/2016)

Substance	Date Tested Positive	MCL	MCLG	Highest Level Detected (%)	Major Sources	Violation
Total coliform bacteria	None	<5% positive samples during a monthly	0	0	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially - harmful, bacteria may be present.	NO
Escherichia coli (E. coli) bacteria	None	sampling period	0	0	E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes	NO

Microbiological Contaminants

(*The data presented in this table were from samples tested during 04/01/2016 - 12/31/2016)

Substance	Date Tested Positive	MCL	MCLG	Level 1 Assessment Trigger ²	Level Detected	Highest Level Detected	Likely Source	Violation
Total coliform bacteria	07/2016 10/2016 11/2016	TT	TT	Exceeds 5.0% TC+ samples in a month	0.88% ³ 0.45% ⁴ 0.45% ⁴	0.88%	Naturally present in the environment	NO
E. coli	None	One Positive Sample ¹	0	n/a	0.00%	0.00%	Human or animal fecal waste	NO

A PWS will receive an E. coli MCL violation when there is any combination of an EC+ sample result with a routine/repeat TC+ or EC+ sample result.

*This Consumer Confidence Report (CCR) reflects changes in drinking water regulatory requirements during 2016. All water systems were required to comply with the Total Coliform Rule from 1989 to March 31, 2016, and begin compliance with a new rule, the Revised Total Coliform Rule, April 1, 2016. The new rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of total coliform bacteria, which includes E. coli bacteria. The U.S. EPA anticipates greater public health protection under the new rule, as it requires water systems that are vulnerable to microbial contamination to identify and fix problems. As a result, under the new rule there is no longer a maximum contaminant level (MCL) violation for multiple total coliform detections. Instead, the new rule requires water systems that exceed a specified frequency of total coliform occurrences to conduct an assessment to determine if any significant deficiencies exist. If found, these must be corrected by the Public Water System (PWS). The regulated status of E. coli did not change under the RTCR, and the MCL for E coli remains the same, but requires a Level 2 assessment to provide a more thorough investigation of the cause.

A level 1 assessment is not a violation unless it is not completed. ³Two positive samples out of 226 samples tested during the month. ⁴One positive sample out of 223 samples tested during the month.

Performance Indicators

Return on Assets

(Net Income/Total Assets)

	`	,			
Fiscal Year	Net Income	Total Assets	Return on Assets		
2012	31,785,122	529,716,913	6.00%		
2013	22,153,944	544,443,645	4.07%		
2014	34,521,599	567,377,950	6.08%		
2015	33,921,068	603,441,449	5.62%		
2016	42,769,492	642,946,957	6.65%		
2017, Projected	37,340,023	669,091,355	5.58%		
AWWA Benchmark (Median Quartile, 2012) 2.2					

Million Gallons per Day of Water Delivered per Full Time Equivalent

(Average MGD Delivered/Number of FTEs)

Fiscal Year	MGD	FTEs	MGD per FTE
2012	83.02	113	0.73
2013	75.2	114.5	0.66
2014	78.71	114.5	0.69
2015	80.8	114.5	0.71
2016	86.3	116	0.74
2017, Projected	80.2	116	0.69

Debt Ratio

(Total Liabilities/Total Assets)

(Total Liabilities/Total /183013)	
2012, Audited	21.6%
2013, Audited	19.3%
2014, Audited	16.3%
2015, Audited	16.0%
2016, Audited	14.0%
2017, Projected	12.7%

34.0%

AWWA Industry Benchmark (Median Quartile, 2012)

BUDGET TERMINOLOGY

Glossary

AL-Action Level: the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must implement.

Asset Management: a management paradigm and a body of management practices that is applied to the entire portfolio of assets at all levels of the organization, seeking to minimize the total cost of acquiring, operating, maintaining and renewing the assets within an environment of limited resources; while continuously delivering the service level customers desire and regulators require, at an acceptable level of business risk to the organization.

Balanced Budget: a budget in which estimated revenues and other financing sources equal estimated expenditures.

Budget Message: a general discussion of the proposed budget in writing often referred to as the transmittal letter explaining any known forthcoming budgetary issues of the future and recommendations of how the Authority will handle those issues.

Capital Asset: assets with a useful life of more than a year and is not intended for resale in the regular course of operations, also known as fixed assets. Examples include: land and improvements, Computers, Equipment, Furniture and Fixtures, Machinery, Buildings, Infrastructure, vehicles, and intangibles.

Capital Expenditure: the use of funds to acquire or maintain long-term assets that are used in the operation of the organization over a multi-year period.

Comprehensive Annual Financial Report (CAFR): set of U.S. government financial statements comprising the financial report of the state, municipal or other governmental entity that complies with the accounting requirements promulgated by the GASB.

Contingency: money set aside to cover unexpected costs during the fiscal year.

Contract: an agreement entered into only by the CCMWA Board (Board) (or General Manager, Director of Operations, Director of Engineering or other authorized agent) on behalf of CCMWA with one or more parties for the doing of some specified act. The term "Contract" shall be synonymous with "Agreement."

Depreciation: a reduction in the value of an asset over its useful life.

Enterprise Fund: government owned fund that sells goods and services. They must abide by GAAP just like private companies.

Flow of Economic Resources Measurement Focus: measures all assets that are available to the entity, not only cash or soon to be cash assets. Both long-term assets and long-term liabilities are measured

Full Accrual Basis of Accounting: recognizes financial transactions based upon when the event will impact the entity regardless of whether cash was received or spent.

Geographic Information System (GIS): a computerized mapping system that captures, stores, analyzes, manages, and presents data that is linked to location.

MCL- Maximum Contaminant Level: the highest level of contaminant in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG- Maximum Contaminant Level Goal: the level of contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Modified Accrual Basis of Accounting: the method of accounting in which revenue is recognized when it becomes available and expenditures are recognized when the liability is incurred.

Operating Budget: authorized expenditures for on-going day-to-day services including, but not limited to, maintenance, supplies, materials and personnel.

PPB - parts per billion: or micrograms per liter (i.e. penny per \$10,000,000.00)

PPM - parts per million: or milligrams per liter (i.e. penny per \$10,000.00)

Proprietary Fund: in government, a business-like fund of a state or local government. An enterprise fund is a type of proprietary fund.

Purchase Order: an official document with a unique reference number issued by the CCMWA to a seller stipulating types, quantities, and agreed upon prices for products or services the seller will provide to the CCMWA.

Request for Proposal: a document that solicits proposal through the bidding process of goods or services to potential suppliers/contractors.

Single Enterprise Fund: a government owned fund that sells goods and services. They must abide by the same generally accepted accounting principles that private companies do.

Sole Source Request: a contract made after determination by the Board, or by the General Manager, if authorized, by this policy, that there is only one viable source for the required supply, service, or construction item.

Supervisory Control and Data Acquisition (SCADA): equipment and computer technology used to monitor and control water distribution.

Total Net Assets: total assets minus total liabilities.

Transmission System: network of pipelines and water tanks whereby potable water is distributed to CCMWA customers.

Treatment Plant: plant where raw water / source water is treated through various processes to potable water quality standards and pumped into CCMWA's transmission system.

TC+: Total Coliform Positive

TT-Treatment Technique: a required process intended to reduce the level of a contaminant in drinking water.

Acronyms

Α

ACF Apalac	chicola-Chattahoochee-Flint River Basin
ACH	Automated Clearing House
ACT	Alabama-Coosa-Tallapoosa River Basin
AR&R	Asset Renewal and Replacement
AWWA	American Water Works Association
В	
BCP	Business Continuity Plan
C	
CAFR	Comprehensive Annual Financial Report
CIP	Capital Improvement Plan
CMP	Communication Management Plan
D	
DCAGeo	orgia's Department of Community Affairs
E	
EPAUnited S	States Environmental Protection Agency
EPDGeo	rgia's Environmental Protection Division
F	
FASB	Financial Accounting Standards Board
FINRA	Financial Industry Regulatory Authority
FTE	Full Time Equivalent
G	
GAC	Granular Activated Carbon
GAAPG	enerally Accepted Accounting Principles

GAAS	Generally Accepted Auditing Standards
GASB	Governmental Accounting Standards Board
GEFA	Georgia Environmental Finance Authority
GFOA	Governmental Finance Officers Association
GIS	Geographic Information System
L	
LGIP	Local Government Investment Pool
M	
MGD	Million Gallons per Day
MSL	Mean Sea Level
0	
OCGA	Official Code of Georgia Annotated
P	
PCCP	Pre-Stressed Concrete Cylinder Pipe
R	
RFP	Request for Proposal
S	
SCADA	Supervisory Control and Data Acquisition
SEC	Security and Exchange Commission
W	
WA	Water Authority
WSA	Water and Sewer Authority
WTP	Water Treatment Plant