

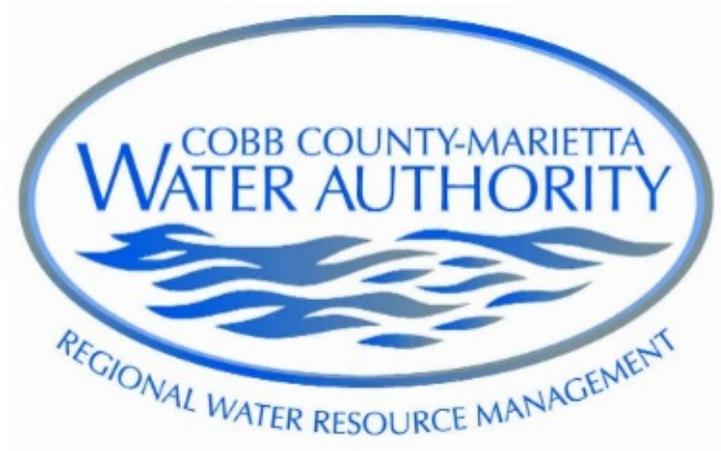
2022

Adopted Budget

Cobb County-Marietta Water Authority

Marietta, GA

Adopted December 20, 2021



COBB COUNTY-MARIETTA WATER AUTHORITY
BUDGET
FISCAL YEAR 2022

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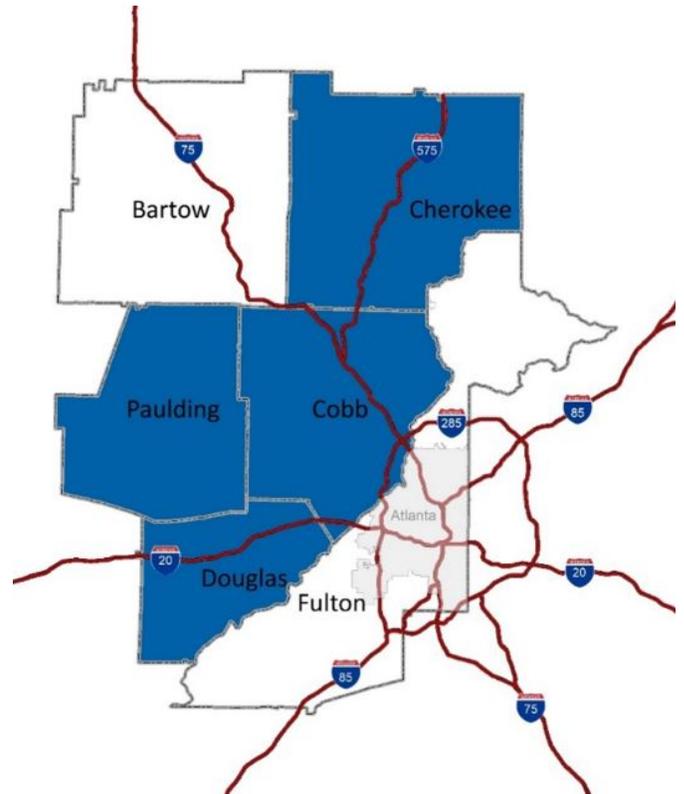
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General Information

History and Service Area

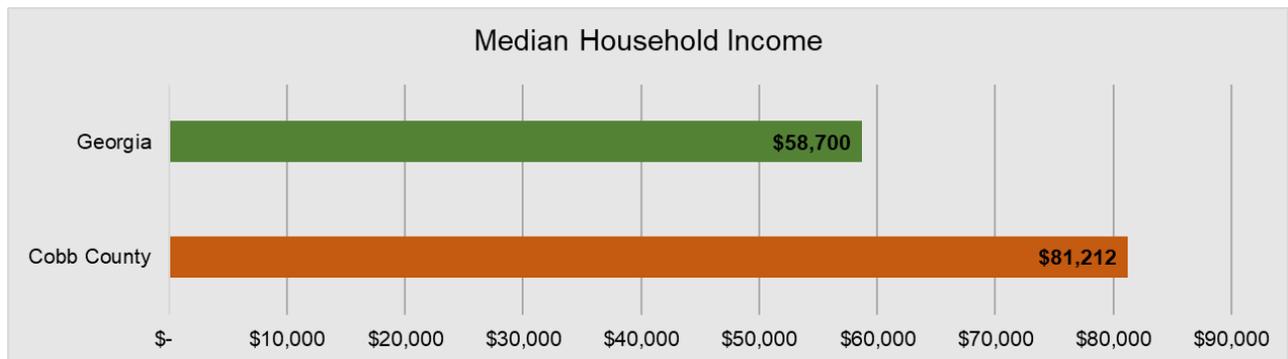
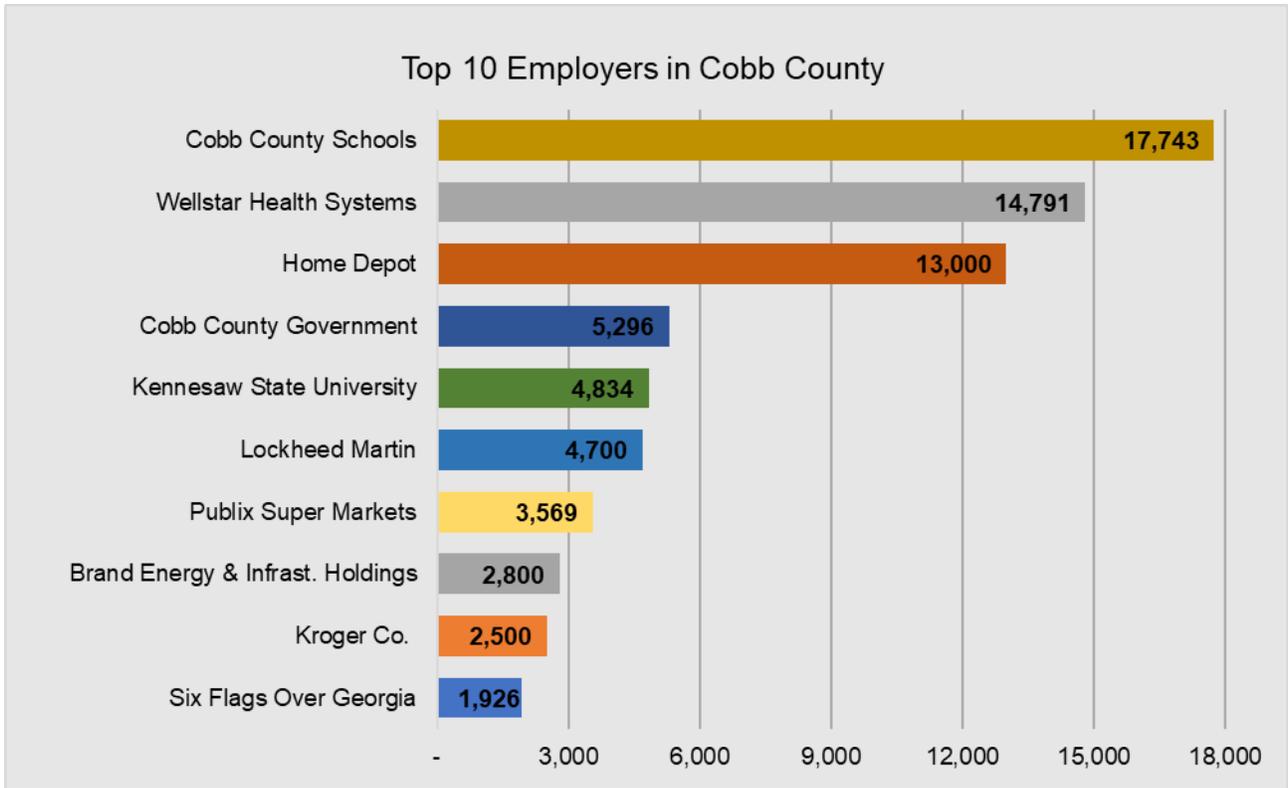
Cobb County-Marietta Water Authority (CCMWA) was created in 1951 by an act of the General Assembly of the State of Georgia as a political subdivision with the sole function of supplying drinking water to wholesale customers. CCMWA serves wholesale customers north of Metro Atlanta, Georgia with water service reaching four counties (shown in blue in the map below) and one city, Mountain Park, located in Fulton County. Our wholesale customers are all governmental water purveyors except for Lockheed Martin Corporation, which shares its location with the Dobbins Air Force Base complex in Marietta. CCMWA also has a contract with Fulton County, but there are currently no active connections to Fulton County's water system.

The largest population served by CCMWA is through sales to Cobb County Water System, the retail water provider for Cobb County, which has an estimated population of 773,290 according to Woods & Poole Economics 2020 Data Pamphlet and is the third most-populous county in Georgia.



2021 Water Sales

Customer	% of Sales	Location
Cobb County Water System	68.84%	Cobb County, GA
Paulding County	13.17%	Paulding County, GA
City of Marietta	9.12%	Cobb County, GA
City of Smyrna	4.80%	Cobb County, GA
City of Woodstock	1.70%	Cherokee County, GA
City of Austell	1.29%	Cobb County, GA
Lockheed Martin	1.00%	Cobb County, GA
City of Mountain Park	0.05%	Fulton County, GA
Cherokee County Water & Sewer Authority	0.01%	Cherokee County, GA
Douglasville Douglas County Water & Sewer Authority	0.00%	Douglas County, GA
Fulton County	0.00%	Fulton County, GA



Mission and 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 Strategic Plan outlines the three categories of values that are integral to our operations:

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



SERVICE



STEWARDSHIP



PROFESSIONALISM



INTEGRITY



TRUST



EXCELLENCE



SAFETY



TRANSPARENCY



INNOVATION

Governance and Board Members

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.



James C. Scott, Jr.
Chairman



T. Daniel Buyers
Vice Chair



Charlie N. Crowder
Secretary



Lisa N. Cupid
Member



Griffin L. Chalfant
Member



James A. Balli
Member



Charles A. Welch
Member

Executive Team



Cole Blackwell
General Manager



George Kaffezakis
Director of Engineering



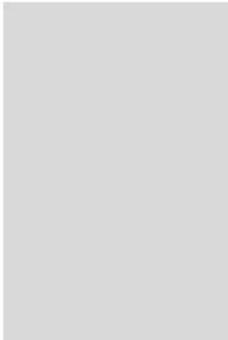
Allison Clements
Director of Finance



Patrick Henley
Director of Human
Resources

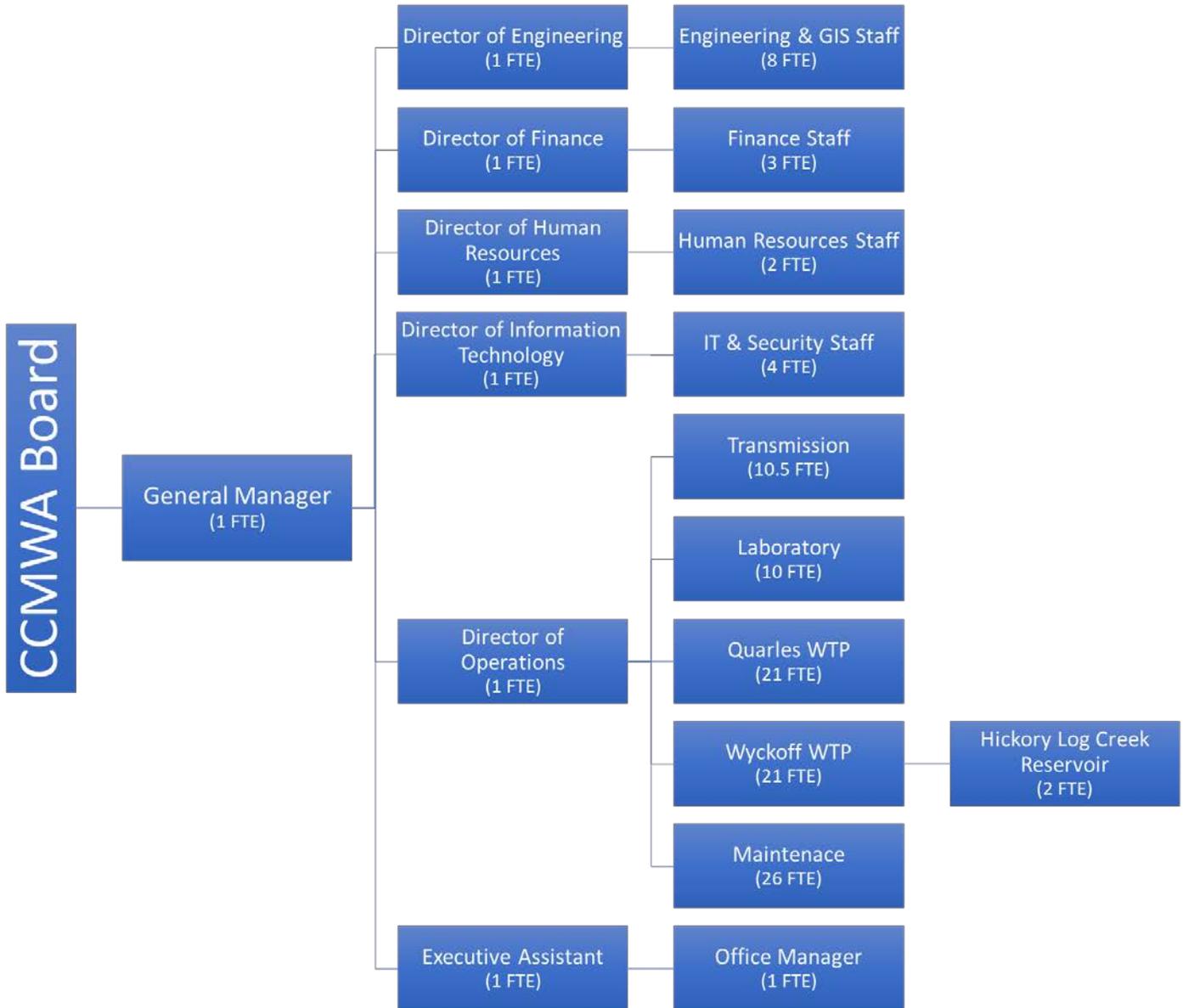


Lonnie Gilmore
Director of Information
Technology



Vacant
Director of Operations

Organizational Chart



FTE – Full Time Equivalent

117 Full Time Equivalent positions for Fiscal Year 2022

Intern program is allocated 1.5 FTE's that are not assigned to a specific division

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 treatment facility is staffed with certified professionals who manage the operations 24 hours a day, seven days a week. The dual water treatment plants, which are supplied water by two separate river basins, provide production flexibility and reliability for CCMWA's service area. The laboratory, which is certified by the State of Georgia, ensures drinking water safety and regulatory compliance.

The Quarles Water Treatment Plant is currently permitted to produce 87 million gallons of water per day and is supplied by the Chattahoochee River, part of the Apalachicola-Chattahoochee-Flint (ACF) River Basin. The Quarles Water Treatment Plant is comprised of two individual treatment plants with different capacities that are permitted as a single treatment plant. The Quarles campus also features a raw water storage reservoir.



The Wyckoff Water Treatment Plant is currently permitted to produce 86 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.

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 water treatment plants, 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 on a fee basis.

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.

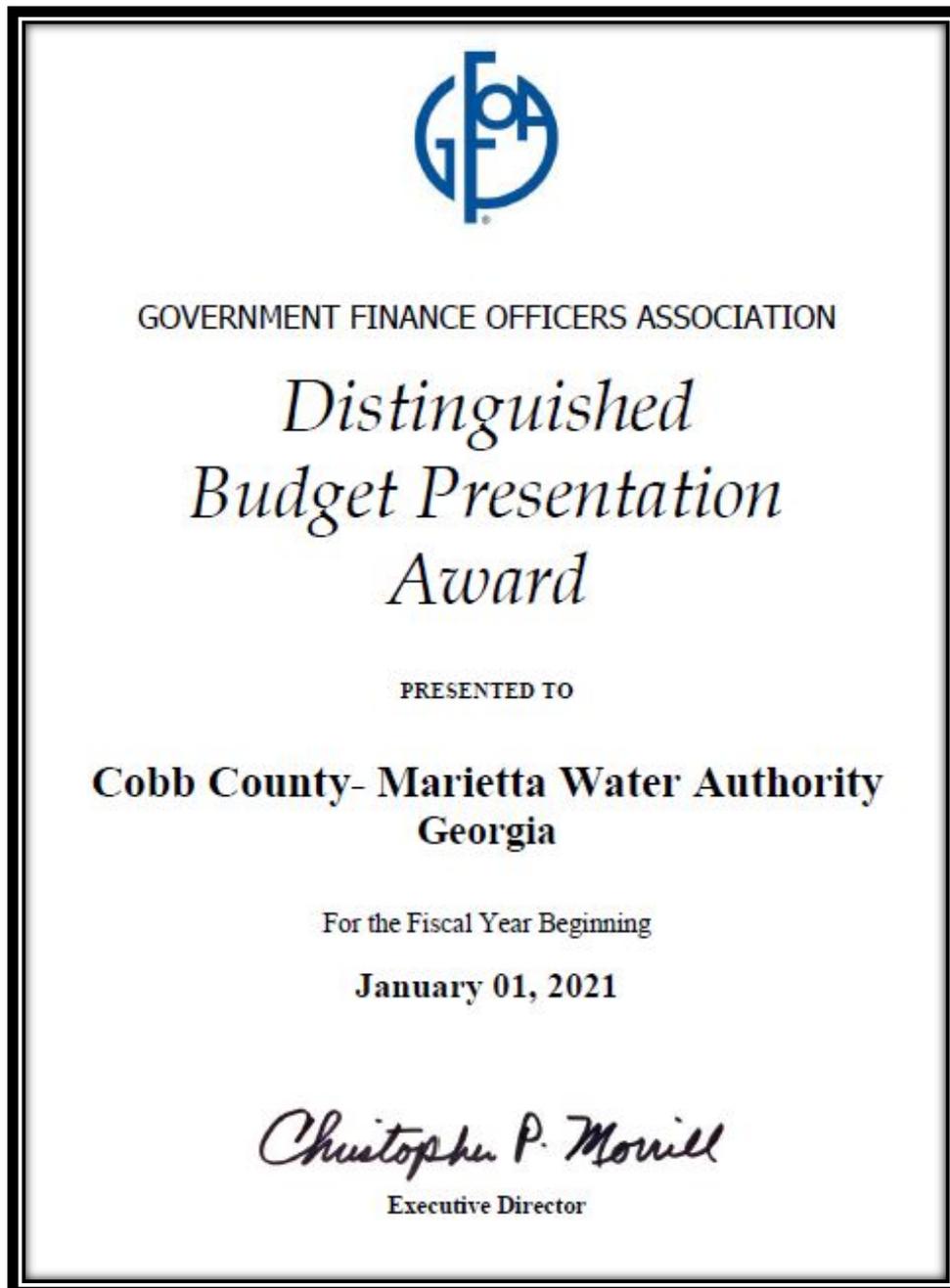
To provide additional water supply, CCMWA operates the Hickory Log Creek Reservoir, a pumped storage project located upstream of Allatoona Lake in the Etowah River Basin. Hickory Log Creek Reservoir covers

approximately 411 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.



Distinguished Budget Presentation Award

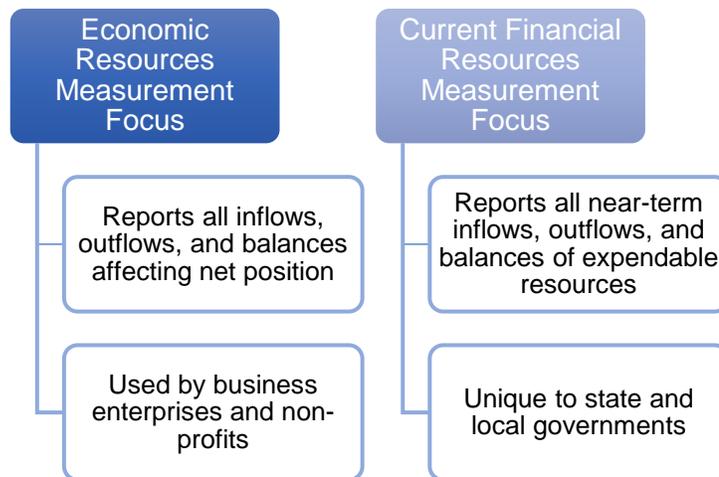
Cobb County-Marietta Water Authority was presented the Distinguished Budget Presentation Award by the Government Finance Officers Association (GFOA) for the Fiscal Year 2021 budget document. This award reflects our commitment to meeting the highest principles of governmental budgeting. To receive this award, the 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 9th year of submitting a budget document to GFOA for consideration and receiving the Distinguished Budget Presentation Award.



Basis of Budgeting and Fund Structure

Fund Type

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 account for its activities using an **enterprise fund**, which is required for business-like activities under the Generally Accepted Accounting Principles (**GAAP**). The enterprise fund type uses a measurement focus known as the **flow of economic resources**. This measurement focus is most like that used by commercial entities, with both long-term assets and liabilities reported on the balance sheet.



CCMWA operates as an independent entity and is not considered a component unit of any other government. The financial statements and annual budget account for all CCMWA operations, including its single revenue source - volumetric water sales to public entities on a wholesale basis. CCMWA does not have taxing authority, nor does it have access to tax revenue through a city or county government.

Basis of Budgeting

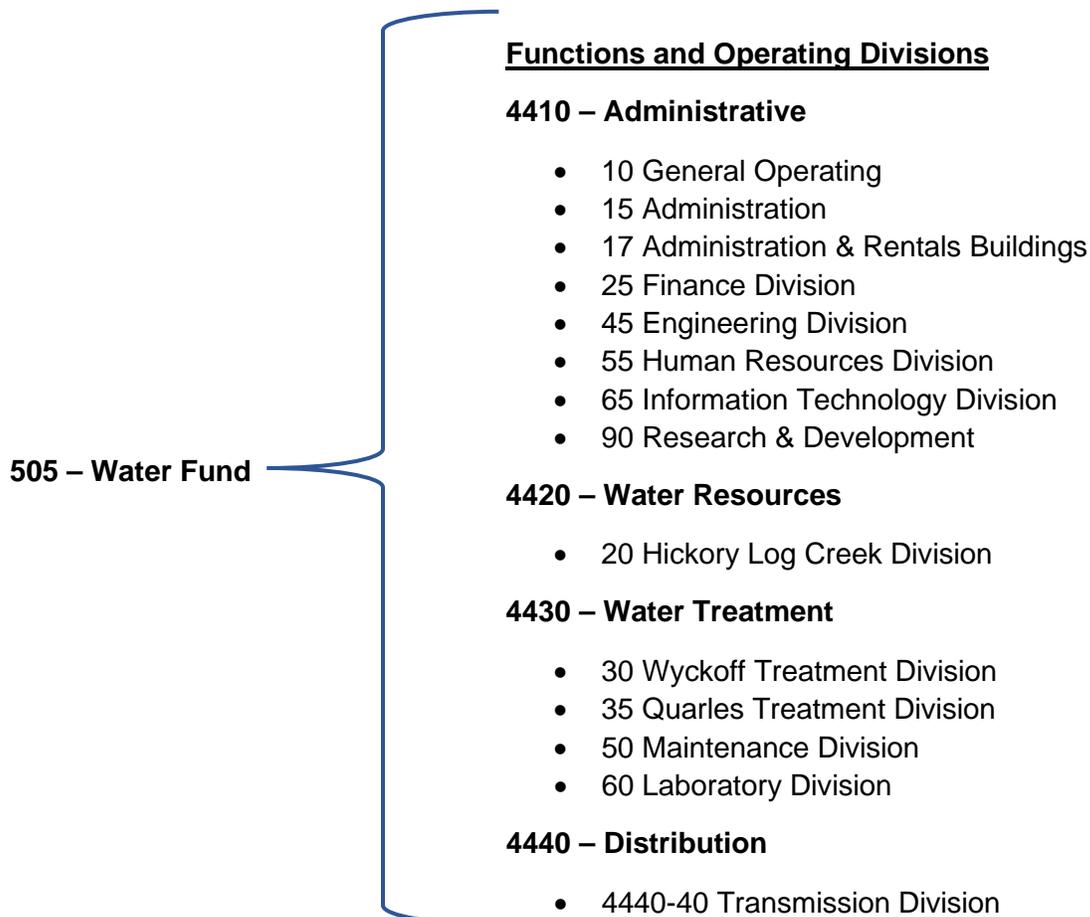
CCMWA operates and reports as an enterprise fund utilizing the **accrual basis of accounting**. Revenues are recognized when they are earned, and expenses are recognized when they are incurred. The annual budget and five-year Capital Improvement Program are also based on the accrual method and are structured to reflect the same format as the audited financial statements.



Fund and Division Relationship

The single enterprise fund utilized by CCMWA is referred to as the Water Fund and has four primary functions. The duties within each function are divided into operating divisions, with a total of fourteen divisional budgets across the organization. The four primary functions and their respective budgetary divisions are:

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



Budget Introduction

Budget Message/Transmittal Letter

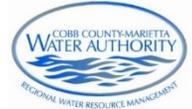
The 2022 budget book is a comprehensive document that addresses anticipated revenues, operating expenses, and capital expenses. For accounting purposes, all operations are managed within a single fund, but details of each division's expenses are presented separately in the budget document.

The annual budget document is the most important policy document adopted by the Cobb County-Marietta Water Authority Board each year. The budget guides management throughout the year by providing guidelines for spending, authorizing the Capital Improvement Program, and clearly setting goals and objectives for the coming year. The Board-approved budget sets the annual operating and capital budgets and outlines future capital projects in the five-year plan. The 2022 operating budget and Capital Improvement Plan recognize the importance of well-planned improvements and replacements that are necessary to protect Cobb County-Marietta Water Authority's assets and facilities. The budget document not only serves as a policy guide for the coming year, but it also establishes a long-range planning document that provides the framework for sound financial decision-making and establishes the foundation for a strong future for CCMWA.

Cobb County-Marietta Water Authority's main revenue source is the sale of wholesale water and the ability to sustain a pay-as-you-go financing structure for capital improvements is dependent upon annual rate increases. Since most of our customers are government entities that provide water to citizens, it is important that water rates represent the true value of water without placing an unnecessary burden on customers and their citizens. By using a long-term planning model and multi-year rate programs, Cobb County-Marietta Water Authority has been able to gradually reduce the annual rate increase required to support the Capital Improvement Plan. A program of annual rate increases, instead of intermittent rate increases of unplanned value, helps prevent customers from experiencing "rate shock" when additional funds are needed to finance large capital projects. Cobb County-Marietta Water Authority plans to review its needs annually and adjust the rate program to best allow for the continuation of "pay-as-you-go" financing. By avoiding debt issuance until necessary to fund a project that truly provides a benefit to future generations, Cobb County-Marietta Water Authority can continue to provide safe, reliable, and affordable drinking water.

Message from the General Manager

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



The coronavirus pandemic that began in early 2020 continued through 2021 with effects on staffing levels, workplace practices, supply chains, and inflation. CCMWA has been very fortunate to have experienced minimal coronavirus infections among staff members and has not faced a decrease in water demand due to the ongoing pandemic. However, in 2021, inflation, shortages, and various delivery delays became prevalent. In the 2022 operational budget, CCMWA is anticipating an increase in operational expenses of nearly 5.1%.

In 2021, CCMWA planned for its second largest customer, Paulding County to significantly reduce water purchases during the first quarter when it was to begin producing drinking water from its new water treatment plant. Paulding County did not begin producing drinking water until August 2021, resulting in net income being significantly higher than budget. Paulding County is now producing drinking water from their water treatment plant and as a result CCMWA anticipates a 7.6% reduction in water sales revenue as compared to 2021 sales. Reduced water sales combined with a 5.1% increase in budgeted operating expenses is resulting in budgeted net income being reduced by 15.0% as compared to 2021.

The 2022 Budget includes a 2.5% increase in each of our rate structures. This increase is both lower than the Atlanta Consumer Price Index (CPI) of 7.9% and less than the sector-specific CPI for Water and Sewer and Trash Collection Services of 3.7% (October 2020 – October 2021). This modest price increase will allow us to continue funding ongoing infrastructure renewal efforts and sustainably maintain and operate our facilities.

During 2021, CCMWA worked to produce a new 5-year Strategic Plan. The 2022 – 2026 Strategic Plan concentrates on four strategic initiatives: Safety & Emergency Preparedness, Workforce Development, Water Quality, and Stakeholder Engagement. Fiscal resources and staff efforts will be directed towards completion of areas of focus and corresponding strategic initiatives.

Since 2013, the Cobb County-Marietta Water Authority has developed a comprehensive budget book each fiscal year to not only serve as a financial plan, but as a policy document, operations guide, and communications tool. This budget book is a culmination of many months of planning and hundreds of hours of work by the Finance Division in cooperation with all other Divisions at CCMWA. Without CCMWA's dedicated and knowledgeable staff members this document and the level of excellence in budgeting it represents would not be possible.

Respectfully,

Cole E. Blackwell, CPA

General Manager

Consolidated Budget – Fiscal Year 2022

	2021 Budget	2021 Projected Actual	Variance - Favorable (Unfavorable)	2022 Budget	Increase (Decrease) over 2021 Budget (\$)	Increase (Decrease) over 2021 Budget (%)
Operating Revenues	\$ 89,664,617	\$ 94,060,944	\$ 4,396,327	\$ 86,883,393	\$ (2,781,224)	-3.10%
Operating Expenses	51,559,378	49,400,193	2,159,185	54,181,690	2,622,311	5.09%
Operating Income	38,105,239	44,660,751	6,555,512	32,701,703	(5,403,536)	-14.18%
Other Income	3,345,952	1,434,470	(1,911,482)	2,755,693	(590,259)	-17.64%
Other Expenses	1,740,000	1,739,102	898	1,692,167	(47,833)	-2.75%
Extraordinary Items	100,000	-	100,000	100,000	-	0.00%
Net Income	\$ 39,611,191	\$ 44,356,119	\$ 4,744,928	\$ 33,665,230	\$ (5,945,961)	-15.01%

	2021 Budget	2021 Projected Actual	Variance - Favorable (Unfavorable)	2022 Budget	Increase (Decrease) over 2021 Budget (\$)	Increase (Decrease) over 2021 Budget (%)
Aged Pipe Replacements	\$ 24,981,677	\$ 17,007,044	\$ 7,974,633	\$ 9,723,592	\$ (15,258,085)	-61.08%
Blow-Off & Valve Replacements	1,100,000	1,215,000	(115,000)	2,515,000	1,415,000	100.00%
Pipeline Improvements	5,769,000	1,036,873	4,732,127	10,194,452	4,425,452	76.71%
Water Treatment Plants	25,999,014	18,909,459	7,089,555	17,829,942	(8,169,072)	-31.42%
Water Storage Tanks	250,000	273,556	(23,556)	700,000	450,000	180.00%
Asset Renewal & Replacement	7,352,502	5,023,607	2,328,895	5,758,537	(1,593,965)	-21.68%
Total Capital Improvements	65,452,193	43,465,539	21,986,654	46,721,523	(18,730,670)	-28.62%
Reservation for DOT Projects	1,361,480	1,354,557	6,923	2,200,000	838,520	61.59%
Contingency	2,000,000	132,136	1,867,864	2,500,000	500,000	25.00%
Total Capital Expenditures	\$ 68,813,673	\$ 44,952,232	\$ 23,861,441	\$ 51,421,523	\$ (17,392,150)	-25.27%

Priorities and Issues

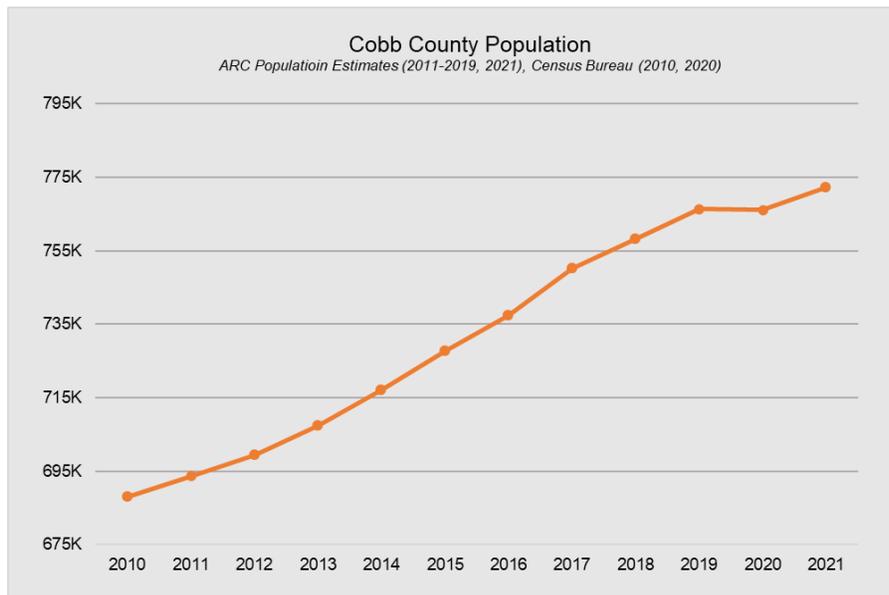
Cobb County-Marietta Water Authority’s annual budget is impacted by a variety of external and internal factors. These factors drive not only guide budget development and strategic planning, but also drive operational decisions. The following priorities and issues had the largest impact on the 2022 budget:

- Per capita demand changes
- Production cost increases
- Aging infrastructure

These influencing factors are discussed in detail in the following section, including how we plan to address each of these items in the coming years.

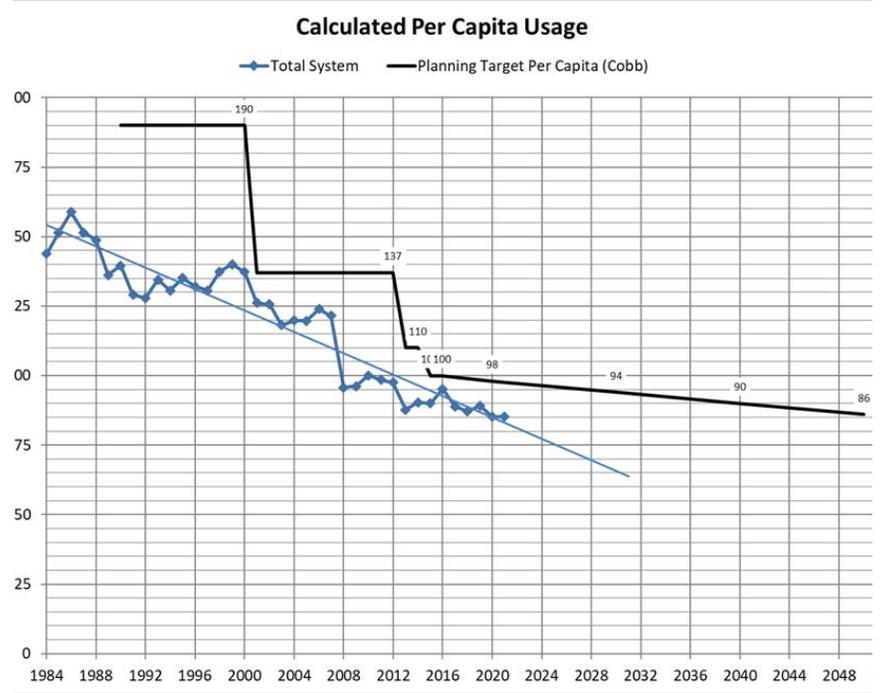
Per Capita Demand

The population of Cobb County, the largest area served by CCMWA, has grown by more than 84,000 residents since 2010. The Atlanta Regional Commission estimates Cobb County’s population grew by 6,200 people in the last year and the county is ranked third in the 10-county Atlanta region for population growth between 2010 and 2021.



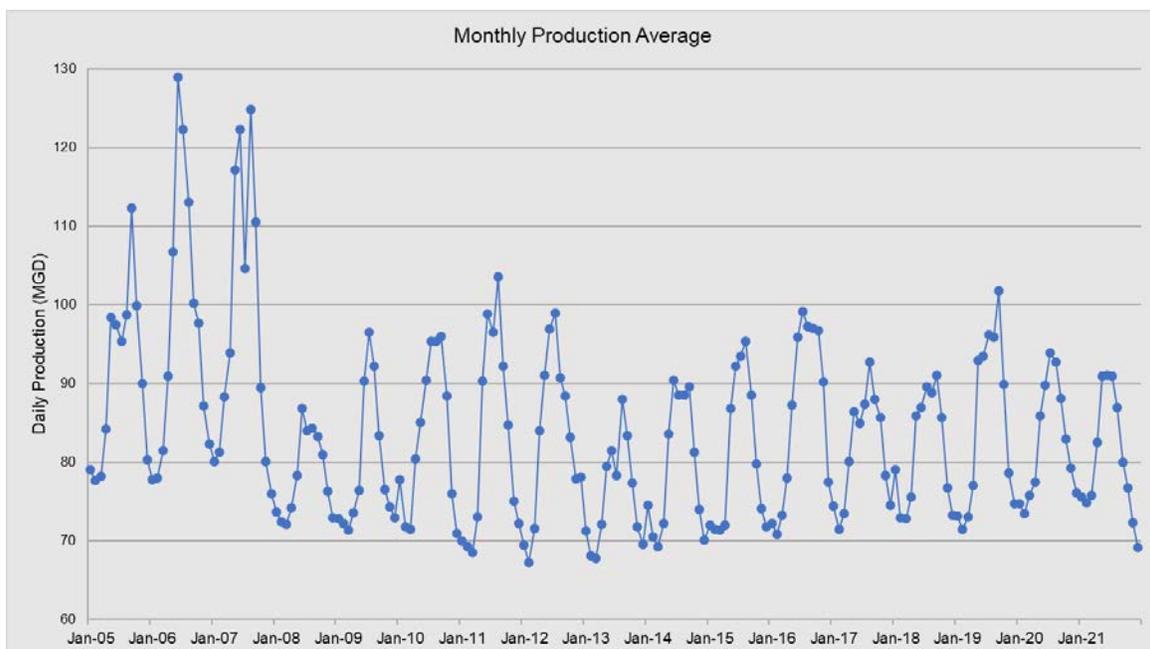
However, despite the rapid population growth in our service area, CCMWA has experienced a downward trend in per capita demand for water over the last decade. This trend began in 2008 when per capita demand decreased from an annual average of nearly 125 gallons per capita per day to approximately 95 gallons per capita per day as depicted in the graph below. The years since have shown a continuation of this downward trend in per capita demand and has become the “new normal” as end users of water become more conscious about water usage, manufacturers develop more water efficient products and processes, and plumbing codes and water pricing structures promote less water use.

The Calculated Per Capita Usage graph shows total system demand from 1984 to 2021, as well as the target per capita demand used for planning by CCMWA. The planning target of 190 gallons per capita per day used in 2000 has been decreased over time to 97 gallons per capita per day for the 2022 fiscal year. Future planning targets to the year 2052 have been adjusted to match the trend line of actual total system demand.



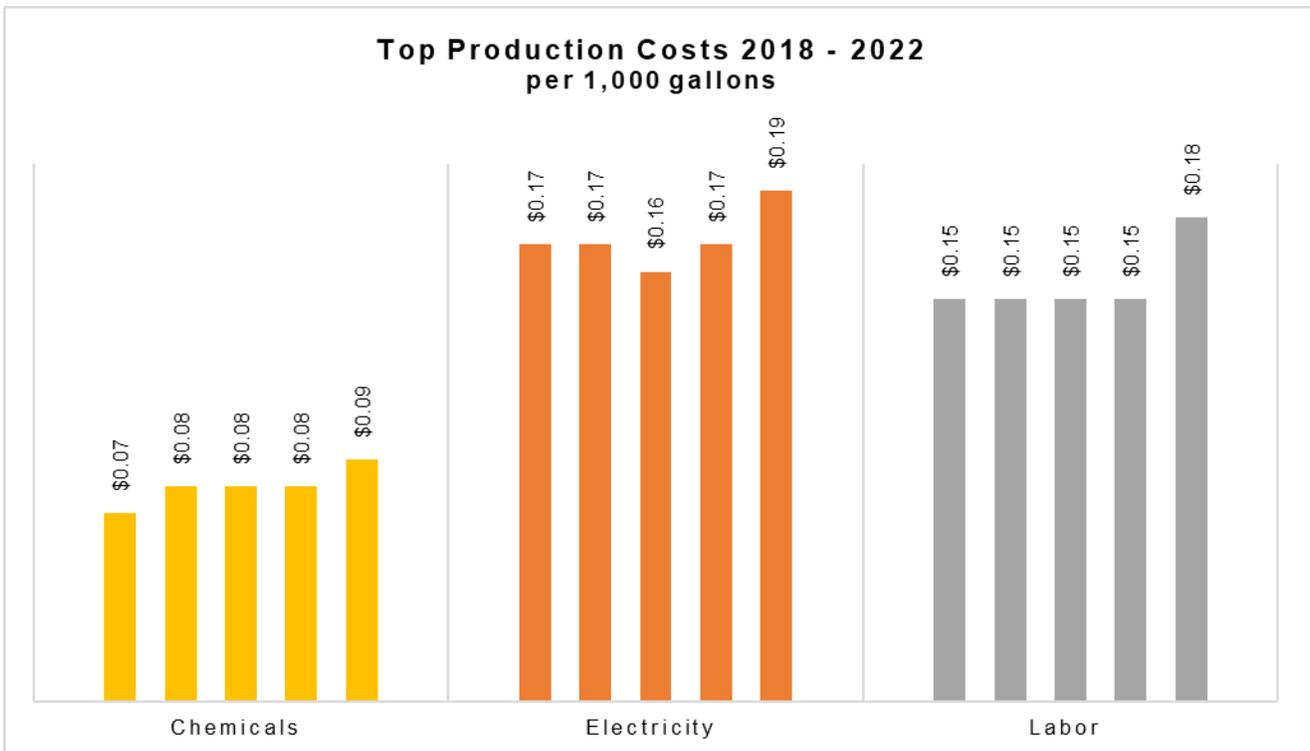
The downward trend of per capita water demand can also be seen in our monthly production averages, shown in the Monthly Production Average graph below.

CCMWA has experienced only two months in the last fourteen years (July 2011 & September 2019) with average production over 100 million gallons per day, both due to hot, dry weather conditions. Water efficiency and conservation efforts made since 2008 are now ingrained in the water use habits of consumers and are expected to continue into future years. As a result, there are no capital improvements included in the current 5-year Capital Improvement Plan (CIP) that would result in an increase to overall water production capacity. The 5-year CIP now focuses on projects addressing reliability and rehabilitation of infrastructure instead of projects related to system expansion.



Production Cost Increases

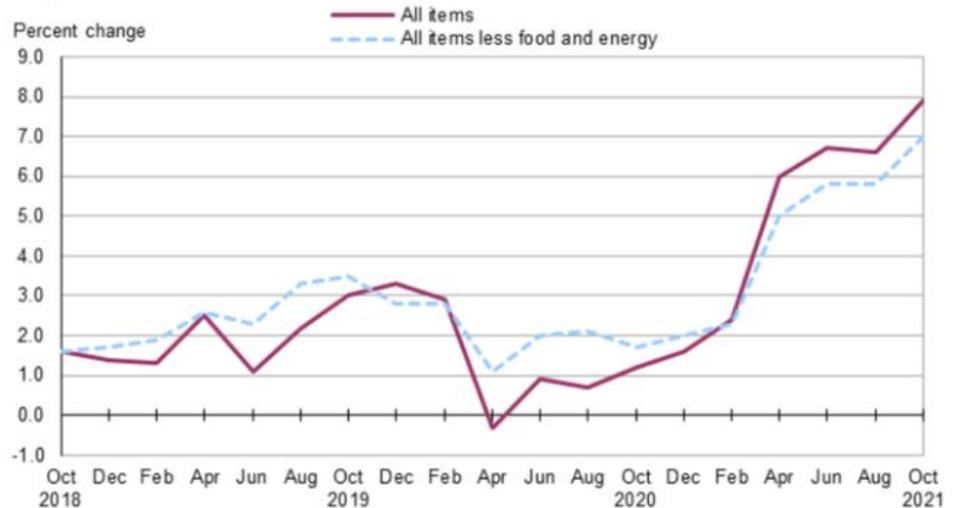
Three of CCMWA’s five largest operating costs are directly associated with the production of drinking water – chemicals, electricity, and labor. Specifically, the cost of water treatment chemicals, electricity used by the water treatment plants, and personnel costs of the Wyckoff and Quarles divisions. Personnel costs are fixed costs, with a certain number of staff required to operate a water treatment plant regardless of the amount of water produced. Water treatment chemicals and electricity usage vary based on water production and are subject to [economies of scale](#). In 2022, water production is anticipated to decrease to its lowest point in five years due to Paulding County Water System, our second largest customer, reducing water purchases. Decreased water production combined with increasing costs due to inflation has impacted the projected net income for 2022. The impact of these changes can be seen by calculating each category’s cost on a per unit basis (1,000 gallons).



Water treatment chemicals are competitively bid each year and in past years decreases in the per ton cost of individual chemicals have offset increases in the cost of others. Water treatment chemical costs increased by an average of 7.5% per ton when bid in late 2021 and several suppliers indicated they would be unable to guarantee a price due to rising costs. Electricity usage by kilowatt hour is expected to decrease in 2022 due to lower water production; however, the cost per kilowatt hour is expected to increase by up to 8.5%, an increase of \$0.02 per thousand gallons. The biggest increase is expected in the cost of labor to operate the water treatment plants due to cost of living increases required to stay competitive in the market, higher insurance premiums, and a record number of water treatment plant operators obtaining Class 1 licenses.

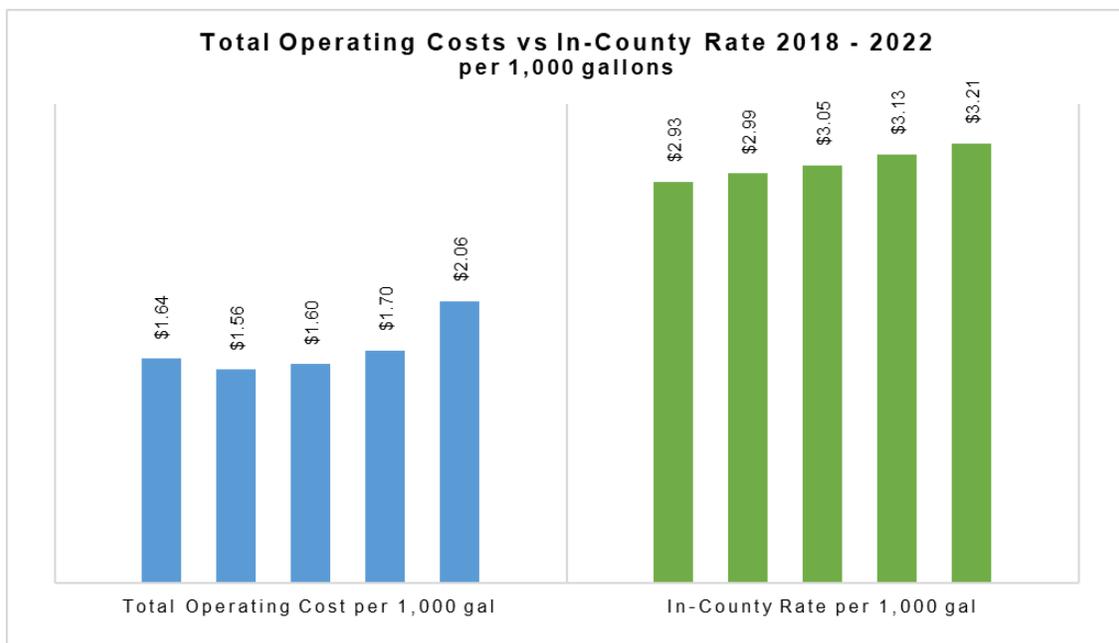
Inflation is projected to impact all operating costs, not just those directly associated with water production. The CPI-U (Consumer Price Index for All Urban Consumers) for the metro-region that includes CCMWA’s service area increased 7.9% from the prior year as of October and has impacted operating costs in several areas. This trend is expected to continue into 2022, with total operating expenses projected to increase to \$2.06 per thousand

Chart 1. Over-the-year percent change in CPI-U, Atlanta-Sandy Springs-Roswell, GA, October 2018–October 2021



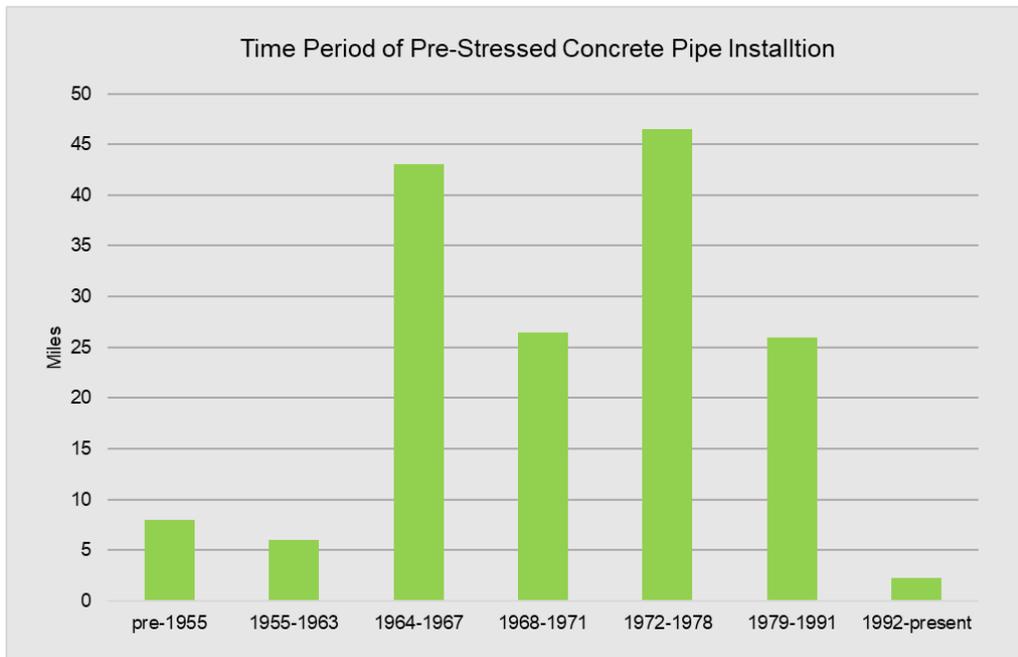
Source: U.S. Bureau of Labor Statistics.

gallons sold. When compared to CCMWA’s in-county water rate, the total cost of producing 1,000 gallons of water is still below the rate charged for those 1,000 gallons. The difference between these two figures contributes to CCMWA’s planned net income which is used to fund capital projects. By ensuring that water rates are adequate to cover operating costs, CCMWA has been able to establish a long-term plan for funding capital projects. The per unit cost of operating expenses will continue to be monitored and the impact of any anticipated increases on our long-term financial plan will be evaluated each year. If inflation continues to rise, actual operating expenses for 2022 may exceed projections and further analysis will be needed to determine the impact of increasing operating costs on future water rates.



Aging Infrastructure

CCMWA’s underground pipeline infrastructure includes pipelines ranging from 16 to 64 inches in diameter. These pipelines run under major highways, through neighborhoods, and near other critical infrastructure. Most of CCMWA’s pipelines were installed before the area was densely populated and before above ground infrastructure was built, resulting in a greater risk of damage to surrounding structures and people in the event of a pipeline failure. In 2016, the CCMWA Board approved funds to develop a multi-year program to proactively replace pipelines as they near the end of their useful life. The Aged Pipe Replacement Program’s goal was to evaluate all pipelines in the system, including pre-stressed concrete cylinder pipe (PCCP) and ductile iron pipe. An analysis tool was used to assess over 2,200 pipe sections 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 shorter 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.

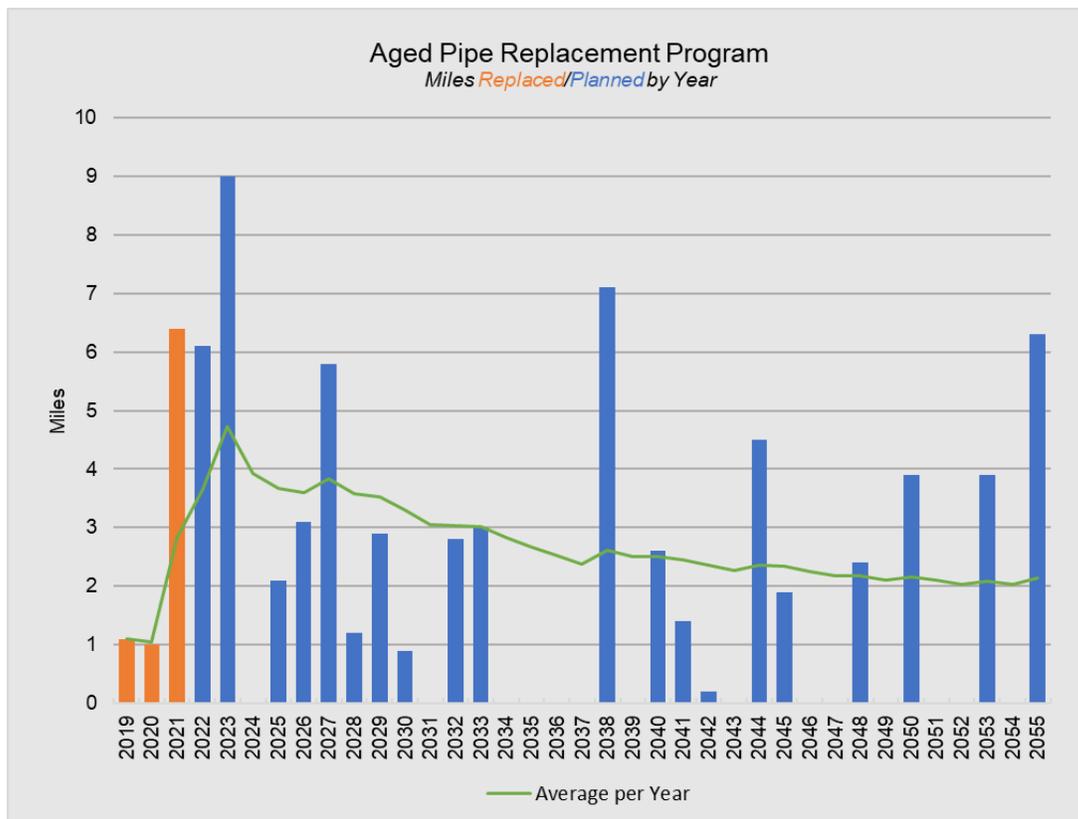
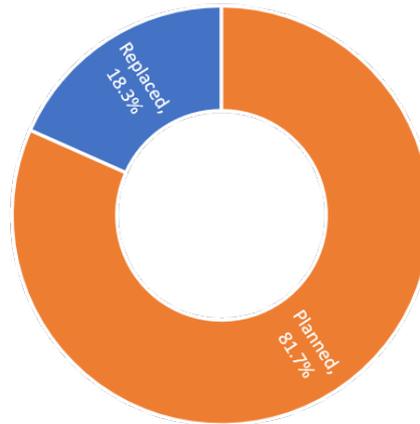


This graph shows the original 160 miles of PCCP in the transmission system by year of installation, with the majority installed between the years of 1964-1978. When the Aged Pipe Replacement (APR) Program began 87 miles of those 160 miles had already been replaced as part of other projects. The remaining 73 miles of PCCP were prioritized for replacement based on their criticality and risk. The highest priority items from assessment were added to the Capital Improvement Plan in 2017 with a total of 29 projects identified through 2055. The Aged Pipe Replacement projects planned for the next five years account for 27% of the \$318 million Capital Improvement Plan and are a critical part of CCMWA’s plan to address aging infrastructure.

The following Aged Pipe Replacement projects have been completed or will be completed in the upcoming year:

Project Name	Year Installed	Year Replaced	Feet Replaced	Miles Replaced
Mableton Parkway 36" Water Main Replacement	1969	2019	5,600	1.1
Wyckoff 42" Finished Water Main Replacement	1964	2020	5,200	1.0
U.S. Highway 41 Parallel 20" Water Main Replacement	1977	2021	12,000	2.3
West Side Loop Section #2 36" Water Main Replacement	1967	2021	21,500	4.1
Blackjack Tank Supply 36" Water Main Replacement	~1952	2022	32,000	6.1
Total			76,300	14.5

Aged Pipe Replacement Program Progress



Budget Development

Planning Process

CCMWA conducts various planning processes throughout the year to facilitate the development of the operating budget and the Capital Improvement Plan (CIP). The planning process begins with a review of the current Strategic Plan to determine if the action items to be addressed during the upcoming year require budgetary support. Staff incorporates these needs into their budget plan, along with any identified staffing, operational, or organization wide issues.



To facilitate delivery of 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. Each year the Board reviews the 5-year CIP and recommends a rate increase for the next budget year, along with a planning estimate to be used for the remaining four years covered by the 5-year CIP. The establishment of a planning estimate aids CCMWA and its customers in forecasting and budgeting. The current rate plan includes a 2.5% increase for 2022, with a planning estimate of annual 2.5% increases for 2023-2026. Each year's adopted increase will be reviewed during the planning and development of the 5-year CIP to ensure that it supports our future capital plans and will be adjusted based on changes to the capital plan and each year's financial outcome.

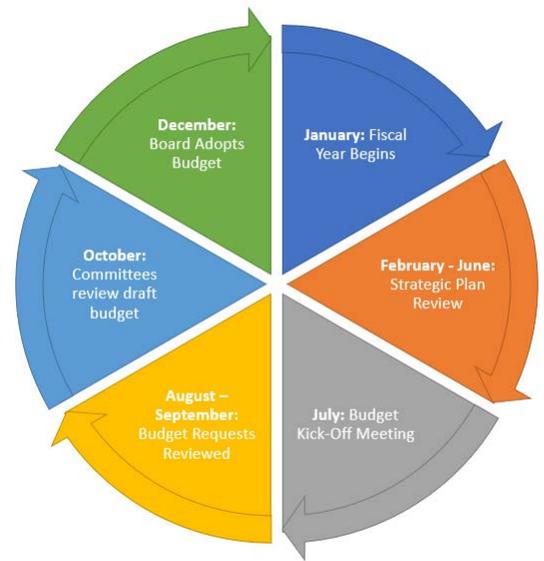
The information gathered by each planning process is evaluated through a cash flow model. The purpose of this model is to provide the necessary guidelines to ensure that the operating budget and rate program can support the 20-year CIP outlook with cash available to pay budgeted costs in a timely manner. The results of the cash flow model analysis are used to finalize the 5-year CIP and support any adjustments to the rate program. The following assumptions are used for the cash flow model analysis:

- Current year projected and future year proposed operating and capital budgets
- 3.5% inflation factor for operating expenses and 4.0% inflation factor for capital expenses in future years
- Average annual water demand of 76.5 MGD from 2022 through 2032 and average annual water demand of 80.6 MGD from 2033 to 2042

The cash flow model and 20-year CIP outlook do not include projects that are currently speculative and inestimable, and, if realized, would be funded through contingency or through the issuance of new debt. These possible, but unplanned, projects could include land purchases or settlements related to future reservoir sites, 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.

Budget Process

CCMWA recognizes that planning and budgeting are crucial to our ability to achieve our mission. The budget process is ongoing to ensure that 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. CCMWA strives for a collaborative budget process, with each division actively involved in the development process. Due to CCMWA's use of a proprietary fund, budget amendments are not performed to match revenues to expenditures as is done in governmental funds. Throughout the year, budget reallocations may be made between individual line items, but the budget total is not changed.



Budget Calendar

At the beginning of a new fiscal year, staff reviews the priorities for the upcoming year and begin to plan work. Strategic Plan goals are also reviewed at this time and progress measurements are recorded. A budget development kick-off meeting is held in July, which allows Division Managers and the Finance Division to discuss frequently asked budget questions and due dates for the upcoming budget development process. The information gathered by the Divisions throughout the first half of the year is then used to develop budget requests. Division Managers meet with the Finance Division in August to discuss their operational and capital budget needs. During September, the draft 5-year Capital Improvement Plan is developed by operations staff and the Engineering Division. After a draft master budget is compiled by Finance, 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 second budget reading and adoption in December.



Strategic Plan

CCMWA's last strategic plan ended in 2020 and development of a new plan was put on hold due to the pandemic. During 2021, staff began developing a new strategic plan for fiscal years 2022 – 2026 which will be implemented in January 2022. The planning process began with the Executive Team reviewing the previous strategic plan and the progress made towards those initiatives. The Executive Team determined that CCMWA still had progress to make in four areas of focus. Each area of focus was assigned a new list of initiatives through staff led workshops with employees throughout the organization. Additional workshops were held to develop action items for each initiative that are intended to move CCMWA closer to realizing each initiative. Progress towards the action items will be measured by key performance indicators (KPI's) which will be regularly reviewed and recorded on a central dashboard.

The areas of focus and strategic initiatives highlighted in CCMWA's 2022 - 2026 Strategic Plan are:



Safety and Emergency Preparedness

- Improve Safety Culture
- Increase awareness of safety compliance to better detect risk and potential threats to employees
- Develop a staff that is prepared, organized, and consistent in their response to emergency situations
- Develop and expand company-wide cyber security policies to address specific risks



Workforce Development

- Refine leadership skill development opportunities for non-supervisory staff and current leaders
- Enhance workforce diversity
- Formalize succession planning program to fill key roles
- Enhance internal communication at all levels by developing and implementing regular, scheduled communication



Water Quality

- Address declining source water quality and prepare for anticipated future regulations



Stakeholder Engagement

- Create and implement processes to communicate financial, strategic, and capital project related information to all stakeholders

Safety and Emergency Preparedness	
<i>Improve safety culture</i>	
Authority-Wide Action Items: <ul style="list-style-type: none"> • Scheduled safety training for all staff to improve knowledge of safety practices & procedures • Implement incentive & recognition program for safety suggestions and solutions made by employees • Assign a safety officer to each division to serve on the safety committee 	Key Performance Indicators: <ul style="list-style-type: none"> # of safety training hours per year % of employees passing safety quizzes # of updates to safety training matrix
<i>Increase awareness of safety compliance</i>	
Authority-Wide Action Items: <ul style="list-style-type: none"> • Maintain a regular training schedule for risk & threat detection • Enhance position-based training for site-specific hazards, & evacuation plans • Include safety assessments in weekly/monthly meetings 	Key Performance Indicators: <ul style="list-style-type: none"> # of emergency response training hours % of after-action reports generated % of safety assessment issues resolved
<i>Be prepared, organized, & consistent in response to emergency situations</i>	
Authority-Wide Action Items: <ul style="list-style-type: none"> Regular drills & tabletop exercises for emergency scenarios with debriefing sessions • Emergency communication system training & testing • Formalize Incident Command System (ICS) structure • Review Crisis Communication Strategy 	Key Performance Indicators: <ul style="list-style-type: none"> # of tabletop exercises per year % of staff attending tabletop exercises % of ISC roles assigned % of NIMS training completed # of crisis communication tabletops
<i>Develop and expand cybersecurity policies</i>	
Authority-Wide Action Items: <ul style="list-style-type: none"> • Reach AWWA J100 compliance • Create cybersecurity focused tabletop exercises • Enhance cybersecurity training 	Key Performance Indicators: <ul style="list-style-type: none"> % progress towards J100 compliance # of critical items after assessment % of employees passing training
Workforce Development	
<i>Refine leadership skill development opportunities</i>	
Authority-Wide Action Items: <ul style="list-style-type: none"> • Implement Leadership Competency Model • Create job shadowing program • Create formal onboarding process for new leaders • Encourage volunteering & community service • Foster interagency connections 	Key Performance Indicators: <ul style="list-style-type: none"> % of roles using model # of positions being shadowed # of volunteer hours % of employees attending volunteering events
<i>Enhance workforce diversity</i>	
Authority-Wide Action Items: <ul style="list-style-type: none"> • Expand recruiting efforts to include diverse applicant pools • Diversify interview panels • Expand diversity & inclusion training • Review job descriptions to attract a larger applicant pool 	Key Performance Indicators: <ul style="list-style-type: none"> % of interview panels meeting criteria # of diversity training hours per year # of job descriptions reviewed annually

<i>Formalize succession planning program</i>	
Authority-Wide Action Items: <ul style="list-style-type: none"> Formalized cross training program Capture critical institutional knowledge from retirees Include future desired role/position on annual review forms Create trainee positions Utilize competency model for all positions 	Key Performance Indicators: <ul style="list-style-type: none"> # of positions identified to cross train % of retirees given exit interviews # of trainee positions created # of positions using competency model
<i>Enhance internal communication at all levels</i>	
Authority-Wide Action Items: <ul style="list-style-type: none"> Publish divisional KPI's Direct communication of Authority-wide initiatives Annual State of the Authority meeting for employees 	Key Performance Indicators: <ul style="list-style-type: none"> % of divisions tracking KPI's % of KPI's posted to intranet site % of employees attending meeting
Water Quality	
<i>Address declining source water quality & prepare for anticipated future regulations</i>	
Authority-Wide Action Items: <ul style="list-style-type: none"> River corridor monitoring plan for Chattahoochee River Lake monitoring plan for Allatoona Lake Residuals Management Treatment Process review Model directional flow of Allatoona Lake Refine Harmful Algae Bloom (HAB) monitoring plan Establish a regulatory committee 	Key Performance Indicators: <ul style="list-style-type: none"> # of Chattahoochee water quality parameters set # of Allatoona water quality parameters set % of directional flow model complete # of regulatory committee meetings
Stakeholder Engagement	
<i>Communicate financial, strategic, & CIP related information to all stakeholders</i>	
Authority-Wide Action Items: <ul style="list-style-type: none"> Snapshot report of Authority information Annual State of Authority meeting for customers & stakeholders Stand-alone CIP document to address project details & public impact Update Level of Service goals with customer input 	Key Performance Indicators: <ul style="list-style-type: none"> # of reports distributed % of customers attending presentation % of stakeholders attending presentation # of LOS goals defined

Performance towards the Authority-Wide action items will be measured each quarter through the defined KPI's and will be published on the employee portal and presented to the CCMWA Board. Throughout the year, KPI's may be revised as work begins on specific action items and new KPI's may be developed as needed. More information about each strategic initiative, including a detailed description of why each category was included in the plan, can be found in the 2022-2026 Strategic Plan document. The 2022 Authority-Wide performance measures will be included in the 2023 budget document, as well as within the Strategic Plan document on the [CCMWA website](#).

Goals and Objectives

CCMWA uses the Strategic Plan initiatives for guidance when developing annual goals and objectives. The goals set by each division are intended to foster a culture where all employees across the Authority are working towards a single outcome: a stronger organization for the future. The goals set by each division are presented with their individual [operating budgets](#) and include stated objectives and KPI's needed to meet each goal. Historical KPI performance is also included when available.

CCMWA also sets Authority-wide financial and non-financial goals that require continued focus and attention from the organization. Some of these goals were achieved through prior Strategic Plans and require continued efforts to maintain a desired standard, while others are directly related to current Strategic Plan initiatives. Financial goals ensure CCMWA maintains a strong financial position, while non-financial goals focus on areas that impact the overall operation of the Authority, allow CCMWA to fulfill its core mission, and prepare the organization for future changes.

Authority-Wide Financial Goals		
Short-Term	<i>Prior Year Achieved</i>	<i>Current Year Planned</i>
Plan for, develop, and adhere to a balanced budget for the current fiscal year	✓	•
Maintain pay-as-you-go financing method for renewal-type capital improvements	✓	•
Maintain planned rate structure with annual increases adequate to support current levels of service	✓	•
Maintain unrestricted cash reserves equal to six months of budgeted operating expenses	✓	•
Align investment strategy for capital reserves with long-term capital improvement plan	✓	•
Monitor impact of inflation on operating and capital expenses and adjust cash flow model accordingly		•
Negotiate and finalize contract renewal with Lockheed Martin and update the Paulding County contract to include a defined Reserve Daily Allocation		•
Long-Term	<i>Prior Year Achieved</i>	<i>Current Year Planned</i>
Maintain AAA bond rating from multiple rating agencies	✓	•
Avoid issuance of new debt for renewal-type capital improvements	✓	•
Ensure that five-year capital improvement plan is fully funded through annual net income and capital reserves	✓	•
Use cash flow model to estimate cash flows and capital outlays for at least 20 years into the future	✓	•
Maintain a competitive rate structure to facilitate financial and overall economic sustainability	✓	•
Explore opportunities to increase our service area through new customers		•

Authority-Wide Non-Financial Goals		
Short-Term (* - Strategic Plan action item)	<i>Prior Year Achieved</i>	<i>Current Year Planned</i>
Evaluate water treatment strategy to optimize lead & copper corrosion control	✓	
Monitor the structural integrity of aging pre-stressed concrete cylinder pipe	✓	•
Update performance review process to include mid-year and annual reviews, aligned with each position's responsibilities and our long-term goals	✓	
Develop and issue an updated Strategic Plan for 2022-2026	✓	
Roll-out 2022-2026 Strategic Plan through ongoing communication with staff		•
Investigate options for the replacement of our Computerized Maintenance Management System (CMMS) through a needs assessment		•
Adopt and implement a formalized Safety Incentive Program *		•
Assign a Safety Officer from each Division to serve on the Safety Committee *		•
Formalize Incident Command System (ICS) structure *		•
Conduct one cybersecurity focused tabletop exercise and debrief *		•
Create and implement a formal (written) onboarding process for new leaders *		•
Create and implement a Leadership Competency model *		•
Expand and encourage opportunities for water supply/drinking water related community service *		•
Expand recruiting efforts beyond industry specific job boards to include minority organizations and diverse applicant pools *		•
Using historical data, establish "normal ranges" for specific water quality parameters over the last 5 years in raw, source water *		•
Develop draft Harmful Algae Bloom monitoring Plans for all water sources *		•
Create and distribute a 1-page report showing pertinent organizational info *		•
Develop and conduct a "State of the Authority" presentation for stakeholders *		•
Long-Term	<i>Prior Year Achieved</i>	<i>Current Year Planned</i>
Meet or exceed all drinking water quality regulations, including monitoring and reporting requirements	✓	•
Utilize US EPA anticipated water quality regulatory changes in long-term capital improvement planning	✓	•
Coordinate with the Metropolitan North Georgia Water Planning District to ensure alignment of planned water resources & water treatment infrastructure	✓	•
Maintain a competitive total compensation program to attract and retain highly competent staff and remain an employer of choice in the industry	✓	•
Gain US Army Corp of Engineers approval of the proposed accounting methodology for the use of releases from Hickory Log Creek Reservoir	✓	
Gain consent from the US Army Corp of Engineers to credit wastewater inflows into Allatoona Lake as an offset to water withdrawals from the lake	✓	
Create a long-term plan for construction of Sharp Mountain Creek Reservoir or acquisition of alternative made in-flows to Allatoona Lake		•

Executive Summary

Budget Overview

The 2022 annual operating budget for Cobb County-Marietta Water Authority is a balanced budget with operating revenues exceeding operating expenses and was developed in accordance with all financial policies. Planned net income for 2022 will support a multi-year capital program that includes \$318 million in capital investment over the next five years.

Operating income is expected to decrease by \$5.4 million in 2022 due to a 3% decrease in operating revenues and a 5% increase in operating expenses. Net income for 2022 is projected to total \$33.7 million, a 15% decrease over the 2021 budget. Actual net income for 2021 is expected to be \$44.3 million, \$4.7 million higher than expected, due to higher than anticipated water sales revenue.

	2021 Budget	2021 Projected Actual	Variance - Favorable (Unfavorable)	2022 Budget	Increase (Decrease) over 2021 Budget (\$)	Increase (Decrease) over 2021 Budget (%)
Operating Revenues	\$ 89,664,617	\$ 94,060,944	\$ 4,396,327	\$ 86,883,393	\$ (2,781,224)	-3.10%
Operating Expenses	51,559,378	49,400,193	2,159,185	54,181,690	2,622,311	5.09%
Operating Income	38,105,239	44,660,751	6,555,512	32,701,703	(5,403,536)	-14.18%
Other Income	3,345,952	1,434,470	(1,911,482)	2,755,693	(590,259)	-17.64%
Other Expenses	1,740,000	1,739,102	898	1,692,167	(47,833)	-2.75%
Extraordinary Items	100,000	-	100,000	100,000	-	0.00%
Net Income	\$ 39,611,191	\$ 44,356,119	\$ 4,744,928	\$ 33,665,230	\$ (5,945,961)	-15.01%

The 2022 capital budget totals \$51.4 million, which includes \$46.7 million in capital improvements, a \$2.2 million reservation for Department of Transportation (DOT) required projects, and a \$2.5 million contingency. The overall capital budget for 2022 is \$17.4 million less than the 2021 capital budget due to several large projects reaching final completion during the year.

	2021 Budget	2021 Projected Actual	Variance - Favorable (Unfavorable)	2022 Budget	Increase (Decrease) over 2021 Budget (\$)	Increase (Decrease) over 2021 Budget (%)
Aged Pipe Replacements	\$ 24,981,677	\$ 17,007,044	\$ 7,974,633	\$ 9,723,592	\$ (15,258,085)	-61.08%
Blow-Off & Valve Replacements	1,100,000	1,215,000	(115,000)	2,515,000	1,415,000	100.00%
Pipeline Improvements	5,769,000	1,036,873	4,732,127	10,194,452	4,425,452	76.71%
Water Treatment Plants	25,999,014	18,909,459	7,089,555	17,829,942	(8,169,072)	-31.42%
Water Storage Tanks	250,000	273,556	(23,556)	700,000	450,000	180.00%
Asset Renewal & Replacement	7,352,502	5,023,607	2,328,895	5,758,537	(1,593,965)	-21.68%
Total Capital Improvements	65,452,193	43,465,539	21,986,654	46,721,523	(18,730,670)	-28.62%
Reservation for DOT Projects	1,361,480	1,354,557	6,923	2,200,000	838,520	61.59%
Contingency	2,000,000	132,136	1,867,864	2,500,000	500,000	25.00%
Total Capital Expenditures	\$ 68,813,673	\$ 44,952,232	\$ 23,861,441	\$ 51,421,523	\$ (17,392,150)	-25.27%

Revenue Analysis and Assumptions

Revenue Sources

Operating revenue for CCMWA consists of water sales, base charges, summer surcharges, and water testing fees. Water sales revenue and base charges constitute more than 99% of revenue. Water sales revenue is based on volumetric charges for monthly water demand at a rate set by the customer's status as an in-county (sole-source) or out-of-county (non-sole-source) customer. Monthly water demand is projected for the upcoming year using historical demand, weather trends, and known customer changes. This data is compared to historical information and used to develop monthly demand projections, which are then used to develop the water sales revenue budget. Yearly demand is presented in million gallons per day (MGD) which is calculated as the total of each month's estimated demand in million gallons divided by the number of days in the calendar year.

Base charge revenue is received from customers with reserved daily allocation contracts and is realized in equal monthly installments. Customers on this type of contract pay a base charge equal to 45% of the in-county rate for a set amount of water (referred to as a reserved daily allocation) regardless of the volume of water used. When water is used, volumetric charges are added at 55% of the in-county rate.

Water testing fees are collected by the CCMWA laboratory at a rate of \$65 per sample. Testing fees apply only to special samples requested by our customers or private citizens. Regulatory samples are collected and analyzed by the laboratory for sole-source customers at no charge and make up the largest category of samples collected and tested each month. All sources of revenue are budgeted except for potential revenue from summer surcharges. These surcharges take effect when summer water usage exceeds 130% of the previous winter's base demands. Summer water usage is heavily dependent on rainfall and temperature; therefore, it is not possible to project potential revenue from summer surcharges.

	2018 Audited	2019 Audited	2020 Audited	2021 Budget	2021 Projected	2022 Budget
Water Sales	\$88,956,343	\$93,980,958	\$93,862,547	\$87,995,453	\$92,432,786	\$85,173,825
Base Charges	1,445,400	1,472,628	1,504,009	1,540,464	1,540,464	1,580,868
Summer Surcharges	32,359	551,289	49,845	-	14,479	-
Water Testing	44,150	46,200	38,750	128,700	73,215	128,700
Total Operating Revenue	\$90,478,252	\$96,051,075	\$95,455,151	\$89,664,617	\$94,060,944	\$86,883,393
% of Total Operating Revenue	100%	100%	100%	100%	100%	100%
Gallons Sold (in millions)	29,842	30,950	30,222	27,913	29,092	26,333
MGD (average)	81.3	84.8	82.6	76.5	79.7	72.1

2021 Revenue Analysis

Water sales revenue for 2021 is projected at \$92.4 million with demand of 79.7 MGD, compared to a budget of \$88 million with water demand of 76.5 MGD. The water demand projection for 2021 assumed that Paulding County, CCMWA's second largest customer, would begin operating its own water treatment plant in January and

reduce monthly water purchases by up to 9 MGD. However, Paulding County experienced delays and did not reduce purchases until August, resulting in water sales revenue exceeding the budget expectation.

Base charge revenue is projected to be \$1.5 million in 2021 and meet the budget expectation. Summer surcharges in the months of May through September provided \$14,479 in unbudgeted revenue for 2021, a decrease from the prior year due to increased rainfall driving down summer demand. Water testing revenue for 2021 is projected to be \$73,215 compared to a budget of \$128,700. The 2021 budget assumed that 1,980 billable samples would be processed by the CCMWA laboratory; however, the laboratory is projected to process only 1,220 samples. The laboratory did not begin charging Paulding County for regulatory samples until their status changed in August to a non-sole-source customer.

2022 Revenue Assumptions

Operating revenue for 2022 is forecasted at \$86.9 million, a 14% decrease over the 2021 budget and a 27% decrease over the 2021 projected actual. This forecast assumes \$85.2 million in revenue from water sales, \$1.6 million from base charges, and \$128,700 from water testing. The revenue collection rate for 2021 is assumed to be 100% based on prior year collection rates and the financial stability of our customers.

The forecast for water sales revenue assumes 72.1 MGD in water sales, with 92% of water sales to in-county customers at \$3.21 per thousand gallons and 8% of sales to out-of-county customers at \$3.54 per thousand gallons. Paulding County is projected to further reduce water purchases as their water treatment plant reaches full production capacity and these reductions are included in the projection of 2022 demand.

Base charges for 2022 will increase by 2.5% per contract terms, which matches the rate increase for volumetric sales. The forecast for 2022 water testing revenue is based on 1,200 billable samples for Paulding County and 780 billable samples for other customers, with no change in assumptions from the prior year.

Expense Analysis and Assumptions

The top five expense categories in the operating budget are depreciation, salaries and benefits, electricity and natural gas, repairs and maintenance, and water treatment chemicals. In 2021, depreciation expense is expected to account for 40.3% of the operating expense budget, salaries and benefits for 27%, electricity and natural gas for 10.4%, repairs and maintenance for 7%, and water treatment chemicals for 4.9% of operating expenses. These proportions are in line with historical trends, with slight changes from year to year driven by water production.

Operating Expenses by Type

	2018 Audited	2019 Audited	2020 Audited	2021 Budget	2021 Projected	2022 Budget
Depreciation	\$ 20,820,906	\$ 19,423,834	\$ 19,474,859	\$ 19,942,000	\$ 19,921,919	\$ 21,713,000
Salaries, Benefits, & Pension	12,500,348	12,582,132	11,531,754	13,424,443	13,319,320	14,220,257
Electricity & Natural Gas	5,272,921	5,391,984	5,248,136	5,381,076	5,271,215	5,266,875
Repairs & Maintenance	2,766,505	3,224,153	4,010,954	3,614,760	3,354,022	3,968,744
Chemicals	2,437,846	2,746,135	2,645,337	2,531,775	2,532,050	2,684,245
Research & Development	939,966	1,164,539	1,365,021	1,525,800	740,369	1,195,150
Residuals Management	664,929	818,749	748,218	856,384	712,609	877,360
Information Technology	542,456	465,027	543,189	1,026,131	960,779	876,872
General Insurance	513,738	539,273	548,276	570,700	552,206	581,680
Miscellaneous	2,504,458	1,953,909	2,382,647	2,686,309	2,035,704	2,797,507
	<u>\$ 48,964,073</u>	<u>\$ 48,309,734</u>	<u>\$ 48,498,392</u>	<u>\$ 51,559,378</u>	<u>\$ 49,400,193</u>	<u>\$ 54,181,690</u>

Operating Expenses by Percent of Total

	2018 Audited	2019 Audited	2020 Audited	2021 Budget	2021 Projected	2022 Budget
Depreciation	42.5%	40.2%	40.2%	38.7%	40.3%	40.1%
Salaries, Benefits, & Pension	25.5%	26.0%	23.8%	26.0%	27.0%	26.2%
Electricity & Natural Gas	10.8%	11.2%	10.8%	10.4%	10.7%	9.7%
Repairs & Maintenance	5.7%	6.7%	8.3%	7.0%	6.8%	7.3%
Chemicals	5.0%	5.7%	5.5%	4.9%	5.1%	5.0%
Research & Development	1.9%	2.4%	2.8%	3.0%	1.5%	2.2%
Residuals Management	1.4%	1.7%	1.5%	1.7%	1.4%	1.6%
Information Technology	1.1%	1.0%	1.1%	2.0%	1.9%	1.6%
General Insurance	1.0%	1.1%	1.1%	1.1%	1.1%	1.1%
Miscellaneous	5.1%	4.0%	4.9%	5.2%	4.1%	5.2%
	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>

The 2022 budget anticipates depreciation expense of \$21.7 million, a \$1.7 million increase over the 2021 budget of \$19.9 million. CCMWA's assets are depreciated on a straight-line basis over their determined useful lives. Many of CCMWA's assets are near or beyond the end of their useful lives and scheduled for replacement. As major construction projects are completed and added to the depreciation schedule, depreciation expense will continue to increase.

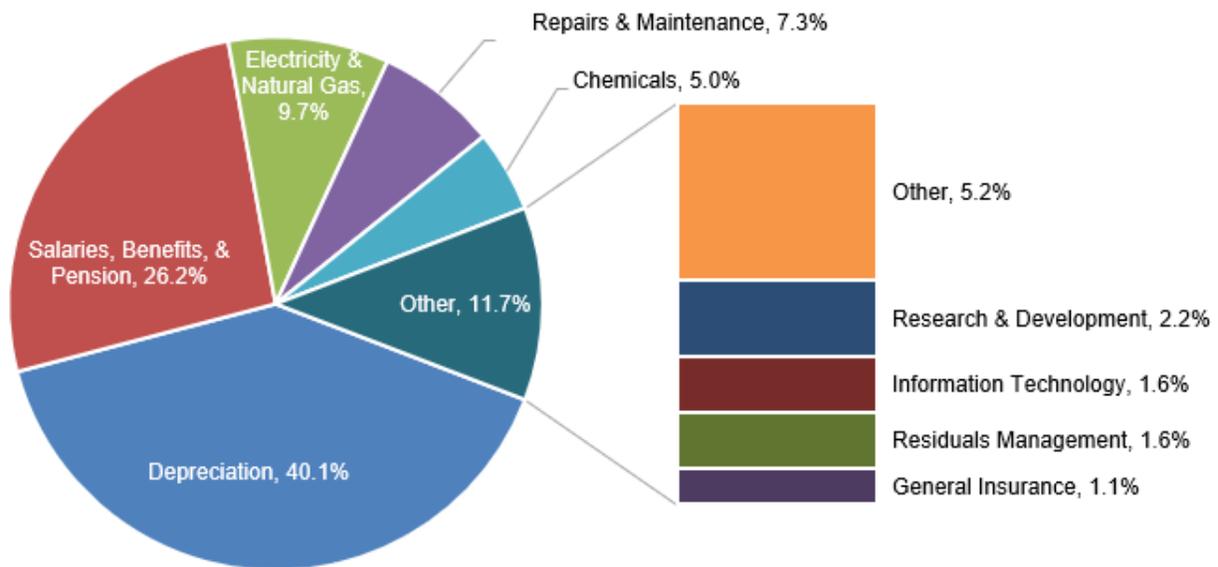
Personnel costs (salaries, employee benefits, payroll taxes, and pension expenses) are estimated to increase by 5.9% in 2022 to \$14.2 million. Personnel costs were estimated based on the assumption that all full-time positions will be funded. The salaries budget also includes an allocation for a 5% cost-of-living adjustment for all

positions and merit increases, which together totaled \$399,846. Employee benefits expense, which is the employer paid portion of insurance premiums, is expected to increase by 16.4% in 2022 based on past plan experience. Pension expense, which includes quarterly pension contributions and plan administration costs, is not expected to change for 2022.

CCMWA’s main supplier of electricity is expected to implement a rate increase up to 8% in January, which was used to develop the budget estimate for 2022. Despite this increase, electricity and natural gas expenses are expected to decrease by 2.1% in 2022 due to lower projected water demand which will decrease the use of electricity. Actual electricity and natural gas expenses for 2021 are projected to total \$5.3 million, compared to a budget of \$5.4 million.

Repair and maintenance expenses include costs related to the maintenance of buildings, property, equipment, electrical systems, SCADA system, security systems, vehicles, pipelines, meters, and water storage tanks. Repair and maintenance expenses for 2021 are projected to total \$3.4 million compared to a budget of \$3.6 million. The total budget for these expenses is expected to increase by 9.8% in 2022 to \$4 million due to increasing costs of repair parts and from contractors performing work in these areas.

The budget for water treatment chemicals in 2022 is expected to increase by 6% to \$2.7 million based on price increases from supplying vendors. CCMWA utilizes seven different chemicals in the water treatment process and prices for water treatment chemicals are obtained each September through a competitive bidding process. The lowest cost provider in each category is awarded a contract to supply chemicals in the upcoming year. The most recent chemical bid resulted in an average increase per ton of 7.5%. This increase was offset by lower projected water demand for 2022, resulting in a smaller increase compared to the prior year’s budget. Actual chemicals expense in 2021 is projected to total \$2.5 million, meeting the budget expectation.



2022 Budgeted Operating Expenses by Type

Other Income and Expense Assumptions

Budgeted other income consists of interest income, rental income, and miscellaneous income. Non-budgeted sources of other income include gain/loss on disposal of assets, gain/loss on market value of investments, timber sales, reimbursements, settlements, and sales tax refunds. These non-budgeted items represent income that is difficult to estimate due to changes in market conditions or to being out of CCMWA's control.

Other income for 2021 is projected to be \$1.4 million, which will fall short of the \$3.1 million budget expectation by \$1.9 million due primarily to lower than anticipated interest income and an unrealized loss on the fair market value of investments. Interest income is projected to fall short of the budget expectations by \$268,000 due to interest rates falling near zero. An unrealized loss on the fair market value of investments, which was not budgeted, is estimated to total \$2.4 million in 2021. All investments are held to maturity, so this loss will never be realized but it is required to be included in the calculation of net income. In 2022, other income is forecasted to total \$2.5 million, a 17% decrease over the prior year to align the expectation for interest income with the current market.

Budgeted other expenses include debt related items such as the interest portion of revenue bond payments and fiscal agent fees, which are offset by the amortization of bond premium which is classified as other income. CCMWA currently has one outstanding debt issuance that contributes to expenses in this category with associated expenses of \$1.5 million in 2022.

Capital Improvement Plan Assumptions

The 2022-2026 Capital Improvement Plan is focused on maintaining and reinvesting in infrastructure. The projects outlined in the 5-year CIP include aged pipe replacements, blow-off and valve replacements, pipeline improvements, water treatment plant improvements, a water storage tank replacement, and small capital purchases referred to as renewal and replacement projects (AR&R). In 2022, capital spending is budgeted at \$51.4 million and capital spending over the 5-year plan is estimated to be \$318 million.

Actual capital spending for 2021 is estimated to be \$44.9 million, with \$38.4 million from capital improvement projects, \$5 million from asset renewal and replacement projects, and \$1.4 million from DOT projects, and \$132,136 in land purchases. CCMWA's planning target is to spend at least 70% of the annual CIP budget and capital spending in 2021 is estimated to be 65.3% of the annual CIP budget. Two aged pipe replacement projects were completed earlier than anticipated, resulting in a savings of \$5 million in construction costs and reducing the percentage of CIP spending. Several other projects did not progress as quickly as expected in 2021, but as these projects move further into the construction phase during 2022, spending should progress at a faster pace. The 2021 portion of these projects' budgets that was unspent will be spent in future years and did not impact the total estimated cost of the projects.

Impact of Capital Improvement Plan on Operating Budget

When prioritizing and scheduling capital projects, CCMWA considers the impact each project will have on the operating budget. While the actual impact will not be known until a project is completed, the table below shows the estimated impact of each project that will be completed in the next five budget years. Depreciation expense has the greatest impact on the operating budget, as it is CCMWA's largest expense category. Many of the capital projects planned for the next five years will result in lower maintenance costs as they are replacing pipelines or equipment that are currently prone to failure and in need of frequent maintenance.

Estimated Impact of 5-Year Capital Improvement Plan on Operating Budget

CIP Project Description	Cost Category	Cost				
		2022	2023	2024	2025	2026
Blackjack Tank Supply 36" Water Line	D	-	262,948	525,895	525,895	525,895
Factory Shoals 30" & Six Flags 24" Water Mains	D	-	-	-	96,908	193,816
Mars Hill Church Rd to Pine Mountain 36" Water Main	D	-	-	-	-	289,539
Trickum Road 20" Water Main	D	-	-	-	-	46,474
BOR 2022 - Acworth Due West Rd to McEver Park Dr (7)	D	49,625	99,250	99,250	99,250	99,250
BOR 2023 - Beech Haven Trail to Maner Rd (6)	D	-	33,785	67,570	67,570	67,570
BOR 2024 - Mableton Pkwy/Discovery Blvd/Riverview Rd (8)	D	-	-	45,952	91,905	91,905
BOR 2025 - Six Flags Way/Lee Ind./Mableton Pkwy (6)	D	-	-	-	36,542	73,084
BOR 2026 - Legacy Park to Jiles Rd (8)	D	-	-	-	-	49,702
Critical Valve Replacement Program	D	-	25,750	78,530	160,461	217,548
Wyckoff 42" Raw Water Pipeline Improvements	D	-	122,188	244,377	244,377	244,377
Maner Road 36" Water Main Replacement	D	-	85,416	170,831	170,831	170,831
Cedarcrest New 16" Water Main	D	-	20,720	41,440	41,440	41,440
Corrosion Control Feed System (Both Plants)	C/D	-	-	642,024	684,048	684,048
Quarles - Plant 2 SCADA Replacement	D	-	-	-	696,122	1,392,245
Quarles - Taste & Odor Process Improvements	C/D	88,141	247,135	247,135	227,135	227,135
Quarles - Reservoir Cleaning	D	-	114,000	380,000	380,000	380,000
Quarles - Plant 2 Filter Valve & Actuator Replacements	D	-	-	263,680	527,360	527,360
Quarles - Main Switchgear Replacement	D	-	-	-	274,227	548,454
Quarles - Plant 2 Pump Station Valve & Actuator Replacements	D	-	-	-	-	285,196
Quarles - Plant 2 Sludge Removal Improvements	D	-	-	-	113,637	227,274
Quarles - Thickener Addition	D	-	-	-	89,643	179,286
Quarles - High Service & Transfer Pump Stations Exhaust Fans	D	-	-	-	84,040	168,081
Wyckoff - 6MG Clearwell Addition	D	237,271	474,543	474,543	474,543	474,543
Wyckoff - Maintenance Facility Improvements	D	33,979	135,915	135,915	135,915	135,915
Wyckoff - Press Filtrate Discharge Pre-Treatment	C/D	-	-	332,289	464,579	464,579
Wyckoff - Filter Underdrain Replacements (Filters 1-8)	D	-	-	141,035	282,069	282,069
Wyckoff - Electrical Switchgear 2 Replacement	D	-	-	-	75,604	151,208
Blackjack Mountain Tank Replacement (5MG)	D/M	-	45,100	110,200	90,200	110,200
Pine Mountain Tank No. 1 Replacement (5 MG)	D/M	-	-	-	48,079	116,158
2022 AR&R Projects *	D	822,648	822,648	822,648	822,648	822,648
Total Operating Impact from CIP and AR&R Projects		1,231,664	2,489,398	4,823,315	7,005,029	9,287,830
Cost Category		2022	2023	2024	2024	2024
Chemicals (C)		120,000	120,000	720,000	720,000	720,000
Maintenance (M)		-	-	20,000	-	40,000
Depreciation (D)		1,111,664	2,369,398	4,083,315	6,285,029	8,527,830
		1,231,664	2,489,398	4,823,315	7,005,029	9,287,830

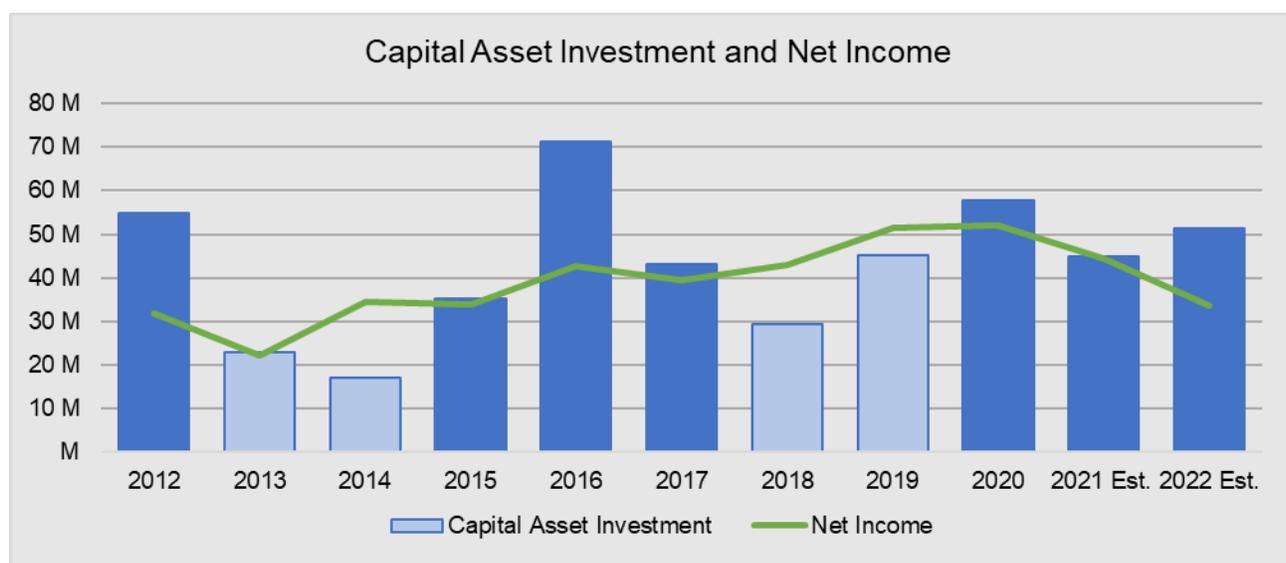
Fund Equity

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.

	<u>2018 Audited</u>	<u>2019 Audited</u>	<u>2020 Audited</u>	<u>2021 Estimated</u>	<u>2022 Budget</u>
Operating Revenues	\$ 90,478,252	\$ 96,051,075	\$ 95,455,151	\$ 94,060,944	\$ 86,883,393
Operating Expenses	48,964,073	48,309,734	48,490,645	49,400,193	54,181,690
Operating Income	<u>41,514,179</u>	<u>47,741,341</u>	<u>46,964,506</u>	<u>44,660,751</u>	<u>32,701,703</u>
Non-Operating Revenue (Expense)	1,367,539	3,885,586	5,081,291	(304,632)	963,527
Change in Net Position	42,881,718	51,626,927	52,045,797	44,356,119	33,665,230
Net Position - Beginning	<u>592,114,361</u>	<u>634,996,079</u>	<u>686,623,006</u>	<u>738,668,803</u>	<u>783,024,922</u>
Net Position - Ending	<u>\$ 634,996,079</u>	<u>\$ 686,623,006</u>	<u>\$ 738,668,803</u>	<u>\$ 783,024,922</u>	<u>\$ 816,690,152</u>

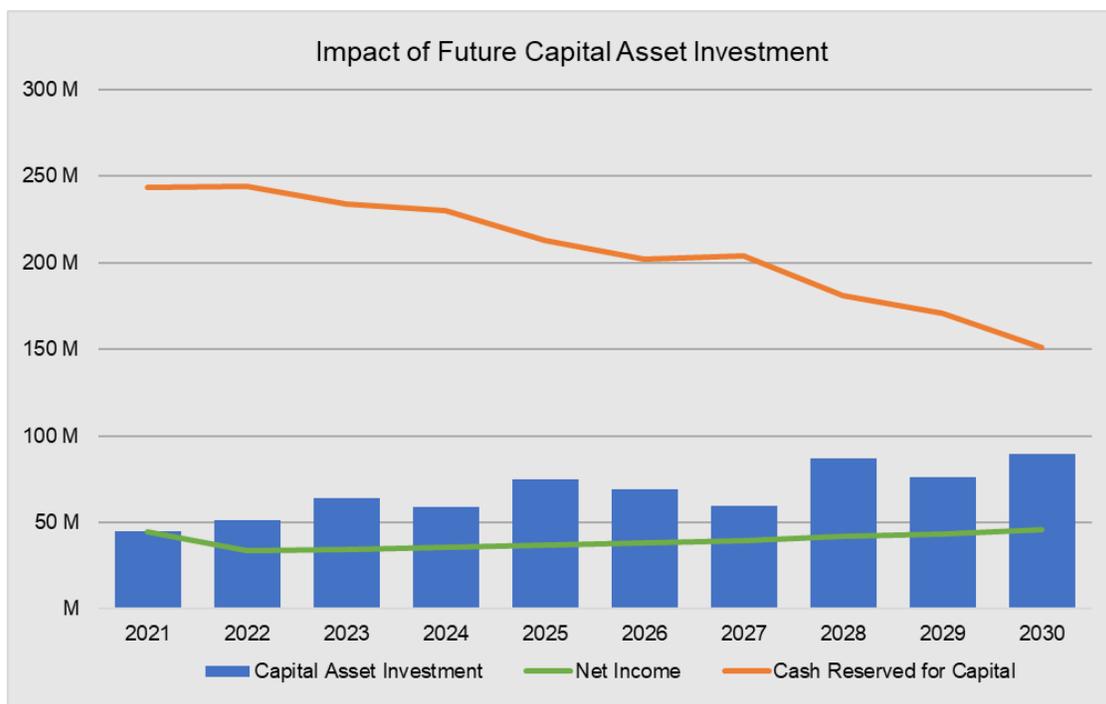
Total net position as of December 31, 2020 was \$738,668,803. Total net position is projected to be \$783,024,922 by December 31, 2021 and \$816,690,152 by December 31, 2022. The annual increases in total net position are attributable to CCMWA's using net income to fund capital projects, which are capitalized and depreciated over the assets' useful lives with the value of those long-term assets listed on the balance sheet.

Capital asset investment has exceeded annual net income in six of the last ten years. In these years, net income was supplemented by funds reserved for capital projects through a pay-as-you-go plan for financing capital projects. Budgeted capital spending for 2022 is also expected to exceed net income and we plan to continue using reserved funds to support the pay-as-you-go plan.



Financial Plan

Cobb County-Marietta Water Authority's current financial plan is to use the pay-as-you go method for financing capital projects and to avoid issuing debt except under specific conditions. Under this method, annual net income and cash reserved for capital spending are used to fund each year's capital spending. Capital reserves are held in interest-bearing investments, including money market accounts, certificates of deposit, treasury bonds, and federal agency bonds. Maturities of these investments are timed to match the monthly capital outlays projected for the five-year capital improvement plan. Capital outlays beyond five-years are estimated with maturities set to fall in each quarter instead of specific months. If annual capital asset investment is less than planned net income, residual net income is invested under the same guidelines and reserved for future capital spending.



Future cash flow projections are developed each year using a cash flow model. The upcoming budget year serves as a base, with operating revenues escalated by 3% each year and operating income adjusted for potential customer changes and planned rate increases. Future capital spending estimates are escalated for assumed annual inflation of 4%. As shown in the graph above, annual net income through 2030 is estimated to be between \$33 million and \$46 million with capital asset investment increasing in later years up to \$89 million. The current model shows estimated capital asset investment exceeding estimated net income every year.

The impact of this can be seen in the cash reserved for capital, which is projected to decrease from just under \$250 million in 2021 to \$150 million by 2030. The current capital reserve balance has been built over time through fully funding depreciation expense. Many of CCMWA's original assets, placed in service in the 1960's and 1970's,

have reached the end of their useful lives and the cash to fund their replacement has been gradually saved through depreciation expense. This cycle is the cause of the cash reserve balance reduction expected to occur between 2021 and 2030, as most of the original assets are replaced with new infrastructure.

As changes are made to the Capital Improvement Plan and actual budget results are added to the model, the outlook changes; however, the sustainability of the pay-as-you-go plan depends on maintaining a capital reserve that exceeds the next two to three years of planned capital investments. The current financial plan indicates that CCMWA has adequate cash reserved to continue the pay-as-you-go plan into the future without the need for debt issuance.

CCMWA's [Financial Management Policy](#) outlines the criteria to be considered when planning debt issuance to fund capital improvements. The most heavily weighted criterion is the benefit future users will receive from the capital improvement financed by debt. Future benefit is based on the expected life of the capital improvement, which should extend beyond the life of the debt. Additional consideration is placed on the justification for a capital improvement and if the project that will expand our service area.

The overall goal of our financial plan is to ensure that financial resources are managed in a way that allows our rate structure to reflect the true value of water. By using the pay-as-you-go method, we have been able to adequately plan for future capital needs and maintain a schedule of proactively replacing and rehabilitating capital infrastructure. This schedule also helps to reduce unexpected rate increases due to unplanned capital improvements or unexpected revenue changes. Operating expenses are also more stable due to the planned replacement of assets because the likelihood of unexpected equipment and infrastructure failures is reduced, which can have a major impact on operating expenses if an emergency repair is needed before a full replacement can be planned and funded.

Debt Obligations

CCMWA has a legal debt limit of \$400 million as established by the Georgia General Assembly. Total liabilities were \$60,935,318 as of January 1, 2021, with \$15,453,377 classified as current liabilities (due in less than one year) and \$43,796,945 classified as long-term liabilities. Compensated absences payable contributed to \$2,496,000 of total liabilities. CCMWA estimates a debt ratio, calculated as total liabilities divided by total assets, of 6.2% as of January 1, 2022.

CCMWA has one outstanding debt issuance with a principal balance of \$37,945,000 as of December 31, 2021. These Revenue Bonds, Series 2015 were issued on June 15, 2015, for the purpose of refunding the aggregate principal of two loans made by the Georgia Environmental Finance Authority (GEFA). The Series 2015 bonds were issued in the amount of \$47,315,000 and will mature on November 1, 2042. The original GEFA loans were issued in 2006 and 2008 to fund the construction of the Hickory Log Creek Reservoir.

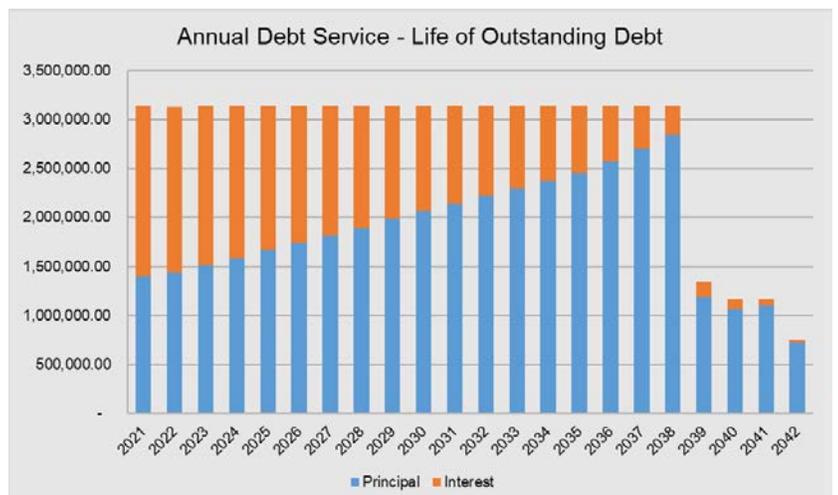
CCMWA's bond rating was first affirmed as AAA by the three primary rating agencies in 2002 due to both short-term and long-term financial and nonfinancial planning. CCMWA maintained this rating through the Great Recession of 2007-2009, while many other utilities and governments experienced bond rating downgrades. CCMWA's bond rating was reaffirmed as AAA by the three primary rating agencies during issuance of the 2015

revenue bonds. CCMWA's bond rating was last reviewed on June 29, 2021 by Fitch Ratings, which concluded that there should be no change to the existing AAA rating or outlook.

No additional debt was issued in 2021 and CCMWA does not intend to issue debt in the current 5-year plan; however, if interest rates become favorable, refinancing of existing debt could occur. Only the interest payments on outstanding debt are included in the calculation of net income; however, principal payments are considered when planning annual net income and capital spending.

Series 2015 Revenue Bonds - Maturity 2042

Fiscal Year	Principal	Interest	Total
2021	1,395,000	1,739,975	3,134,975
2022	1,435,000	1,698,125	3,133,125
2023	1,510,000	1,626,375	3,136,375
2024	1,585,000	1,550,875	3,135,875
2025	1,665,000	1,471,625	3,136,625
2026	1,745,000	1,388,375	3,133,375
2027	1,815,000	1,318,575	3,133,575
2028	1,890,000	1,245,975	3,135,975
2029	1,985,000	1,151,475	3,136,475
2030	2,065,000	1,072,075	3,137,075
2031	2,145,000	989,475	3,134,475
2032	2,220,000	917,081	3,137,081
2033	2,295,000	842,156	3,137,156
2034	2,370,000	764,700	3,134,700
2035	2,455,000	681,750	3,136,750
2036	2,575,000	559,000	3,134,000
2037	2,705,000	430,250	3,135,250
2038	2,840,000	295,000	3,135,000
2039	1,185,000	153,000	1,338,000
2040	1,065,000	108,563	1,173,563
2041	1,105,000	68,625	1,173,625
2042	725,000	27,188	752,188



Staffing Changes

CCMWA has a total of 117 full-time equivalent (FTE) positions with all positions budgeted for 2022. Each year position needs are reviewed by the Executive Team and requests for additional positions are presented to the CCMWA Board's Personnel Committee for consideration. Vacant positions, due to promotions, resignations, or retirements, are used as an opportunity to assess the needs of the impacted division and, if needed, reallocate positions throughout the organization to better address identified needs.

Positions Created

- Procurement Coordinator position added to the Finance Division
- Cybersecurity Analyst position added to the Information Technology Division

Positions Removed

- Business Systems Analyst position removed from the Information Technology Division after it was vacated by an internal promotion to another division and duties were reallocated to other positions

Classification Changes

- Information Systems Manager position promoted to Director of Information Technology (no impact to number of FTE's)

Position Control

Full Time Equivalent Positions by Division

Division	FY 2019	FY 2020	FY 2021	FY 2022
Administration	5.50	5.50	4.00	4.00
Finance	3.00	3.00	3.00	4.00
Engineering	9.00	9.00	9.00	9.00
Human Resources	-	-	3.00	3.00
Information Technology	4.00	5.00	5.00	5.00
Safety & Security	2.00	1.00	-	-
Hickory Log Creek Reservoir	2.00	2.00	2.00	2.00
Wyckoff	21.00	21.00	20.00	20.00
Quarles	21.00	21.00	21.00	21.00
Maintenance	26.25	26.25	27.00	27.00
Laboratory	10.00	10.00	10.00	10.00
Transmission	10.75	10.75	10.50	10.50
Intern Program	1.50	1.50	1.50	1.50
Total	116.00	116.00	116.00	117.00

Operating Budget



Statement of Operations

Statement of Operations	2021 Budget	2021 Projected Actual	Variance Favorable (Unfavorable)	2022 Budget	Increase (Decrease) Over 2021 Budget (\$)	Increase (Decrease) Over 2021 Budget (%)
Revenue						
Water Sales & Base Charges	\$ 89,535,917	\$ 93,987,729	\$ 4,451,812	\$ 86,754,693	\$ (2,781,224)	-3.11%
Water Testing	128,700	73,215	(55,485)	128,700	-	0.00%
Total Revenue	\$ 89,664,617	\$ 94,060,944	\$ 4,396,327	\$ 86,883,393	\$ (2,781,224)	-3.10%
Division Expense						
General Operations	\$ 2,270,940	\$ 1,898,654	\$ 372,286	\$ 2,161,012	\$ (109,928)	-4.84%
Depreciation Expense	19,942,000	19,921,919	20,081	21,713,000	1,771,000	8.88%
Administration Division	789,946	802,435	(12,489)	702,972	(86,974)	-11.01%
Administration & Rental Buildings	187,800	181,340	6,460	148,644	(39,156)	-20.85%
Finance Division	368,852	363,629	5,223	477,760	108,908	29.53%
Engineering Division	1,460,503	1,398,816	61,687	1,527,118	66,615	4.56%
Human Resources Division	370,212	332,076	38,136	415,962	45,750	12.36%
Information Technology Division	1,332,436	1,225,569	106,867	1,210,404	(122,032)	-9.16%
Research & Development	1,525,800	740,369	785,431	1,195,150	(330,650)	-21.67%
Hickory Log Creek Reservoir Division	460,123	442,357	17,766	564,158	104,035	22.61%
Wyckoff Treatment Plant Division	8,163,304	7,838,390	324,914	8,261,977	98,673	1.21%
Quarles Treatment Plant Division	7,602,780	7,417,195	185,585	8,410,035	807,255	10.62%
Maintenance Division	3,058,826	2,967,867	90,959	3,042,037	(16,789)	-0.55%
Laboratory Division	1,208,520	1,168,839	39,681	1,338,123	129,603	10.72%
Transmission Division	2,817,336	2,700,739	116,597	3,013,338	196,002	6.96%
Total Division Expense	\$ 51,559,378	\$ 49,400,193	\$ 2,159,185	\$ 54,181,690	\$ 2,622,311	5.09%
Total Income from Operations	\$ 38,105,239	\$ 44,660,751	\$ 6,555,512	\$ 32,701,703	\$ (5,403,536)	-14.18%
Other Income						
Interest Income	\$ 3,000,000	\$ 2,731,365	\$ (268,635)	\$ 2,400,000	\$ (600,000)	-20.00%
Rental Income	99,847	114,257	14,409	116,207	16,360	16.38%
Gain (Loss) on Asset Disposal	-	158,442	158,442	-	-	0.00%
Gain (Loss) on Market Value of Investments	-	(2,356,916)	(2,356,916)	-	-	0.00%
Reimbursements & Settlements	-	-	-	-	-	0.00%
Sales Tax Refund	-	491,387	491,387	-	-	0.00%
Timber Sales	-	38,904	38,904	-	-	0.00%
Amortized Bond Premium	244,905	244,905	-	238,286	(6,618)	-2.70%
Miscellaneous Income	1,200	12,127	10,927	1,200	-	0.00%
Total Other Income	\$ 3,345,952	\$ 1,434,470	\$ (1,911,482)	\$ 2,755,693	\$ (590,259)	-17.64%
Other Expense						
Bond Interest - 2015 Revenue Bonds	1,733,000	1,733,000	-	1,686,167	(46,833)	-2.70%
Fiscal Agent Fees	7,000	6,102	898	6,000	(1,000)	-14.29%
Total Other Expense	\$ 1,740,000	\$ 1,739,102	\$ 898	\$ 1,692,167	\$ (47,833)	-2.75%
Net Income Before Extraordinary Items	\$ 39,711,191	\$ 44,356,119	\$ 4,644,928	\$ 33,765,230	\$ (5,945,961)	-14.97%
Extraordinary Items	100,000	-	100,000	100,000	-	0.00%
Net Income after Extraordinary Items	\$ 39,611,191	\$ 44,356,119	\$ 4,744,928	\$ 33,665,230	\$ (5,945,961)	-15.01%
Water Production						
Million Gallons Per Day Average	76.5	79.7	3.2	72.1	-4.3	-5.66%

General Operations Budget

This operating segment is used to track expenditures related to the operation of the entire organization and includes pension contributions, liability insurance, legal fees, investment advisory fees, board member fees, safety initiatives, and the employee wellness program.

Major Changes

- Increase to Health Reimbursement Account to allow for higher reimbursement limits for employees selecting a High Deductible Health Plan
- Increase to Other Post Retirement Benefits for insurance benefits provided to a retiree
- Decrease to Long Term Water Supply Litigation fees due to a lower contribution to the Atlanta Regional Commission legal funds, which addresses regional water issues

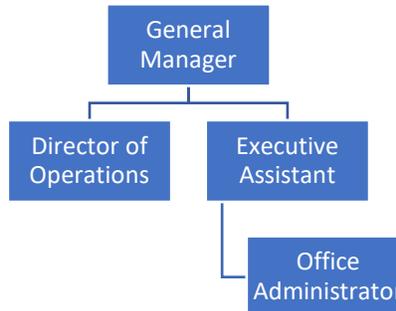
General Operations	2021 Budget	2021 Projected Actual	Variance Favorable (Unfavorable)	2022 Budget	Increase (Decrease) Over 2021 Budget (\$)	Increase (Decrease) Over 2021 Budget (%)
Pension Plan Contributions & Fees	\$ 985,000	\$ 985,000	\$ -	\$ 984,500	\$ (500)	-0.05%
Health Reimbursement Account	80,000	60,000	20,000	100,000	20,000	25.00%
Workers' Compensation Insurance	110,000	99,265	10,735	105,000	(5,000)	-4.55%
Other Post Retirement Benefits	-	-	-	38,587	38,587	100.00%
Liability Insurance	318,202	283,419	34,783	300,000	(18,202)	-5.72%
Boiler/Machinery Insurance	29,798	29,798	-	30,000	202	0.68%
Umbrella & Crime Insurance	65,000	55,744	9,256	60,000	(5,000)	-7.69%
Risk Reduction / Safety Initiative	10,000	1,000	9,000	10,000	-	0.00%
Employee Incentive	20,500	16,109	4,391	19,500	(1,000)	-4.88%
Fees - Board Members	34,800	34,800	-	34,800	-	0.00%
Fees - Accounting	660	-	660	-	(660)	-100.00%
Fees - Audit	29,500	29,500	-	30,000	500	1.69%
Fees - Long Term Water Supply Litigation	350,000	126,419	223,581	240,000	(110,000)	-31.43%
Fees - Legal	40,000	23,920	16,081	35,000	(5,000)	-12.50%
Fees - Drug Testing & Background Checks	8,000	7,489	511	8,500	500	6.25%
Fees - Timber Tax	5,000	-	5,000	2,850	(2,150)	-43.00%
Technical Services	18,540	14,581	3,959	16,700	(1,840)	-9.92%
Travel Expenses	4,400	1,286	3,114	11,000	6,600	150.00%
Dues and Fees	57,940	57,294	646	57,575	(365)	-0.63%
Education and Training	6,800	-	6,800	6,800	-	0.00%
Public Education & Outreach	17,100	18,056	(956)	5,000	(12,100)	-70.76%
Bank Fees	17,000	1,298	15,702	2,500	(14,500)	-85.29%
Office Supplies	5,000	5,000	-	5,000	-	0.00%
Investment Advisor	32,000	31,234	766	32,000	-	0.00%
Food	5,000	2,000	3,000	5,000	-	0.00%
Books and Periodicals	700	443	257	700	-	0.00%
Employee Wellness Program	20,000	15,000	5,000	20,000	-	0.00%
General Operating Expense	\$ 2,270,940	\$ 1,898,654	\$ 372,286	\$ 2,161,012	\$ (109,928)	-4.84%
Depreciation Expense	19,942,000	19,921,919	20,081	21,713,000	1,771,000	8.88%
Total General Operating Expense	\$ 22,212,940	\$ 21,820,573	\$ 392,367	\$ 23,874,012	\$ 1,661,072	7.48%

Administration Division

The Administration Division is responsible for overseeing the entire organization and includes the roles of General Manager, Director of Operations, and their support staff.

Full Time Equivalent Positions

Division	FY 2019	FY 2020	FY 2021	FY 2022
Administration	5.50	5.50	4.00	4.00



Goal	Objective	Performance Measure
Communication Enhancements	Maintain regular communications with our customers	# of customer outreach meetings
	Maintain positive communications with employees	# of virtual lunch meetings with employees
	Improve the public's understanding of the value of water	# of months since last update to the CCMWA website
		# of public outreach speaking engagements

Performance Measures (* projected)	2019	2020	2021	2022*
# of customer outreach meetings	1	3	1	2
# of virtual lunch meetings with employees	N/A	1	4	4
# of months since last update to the CCMWA website	< 12	0	0	0
# of public outreach speaking engagements	7	0	0	4

Administration Division

Major Budget Changes

- Decrease to all Personnel Costs based on the new General Manager's contract terms after retirement of the previous General Manager

Administration Division	2021 Budget	2021 Projected Actual	Variance Favorable (Unfavorable)	2022 Budget	Increase (Decrease) Over 2021 Budget (\$)	Increase (Decrease) Over 2021 Budget (%)
Personnel Costs						
Salaries & Wages	\$ 633,801	\$ 668,684	\$ (34,883)	\$ 517,535	\$ (116,266)	-18.34%
Employee Benefits	67,760	76,979	(9,219)	111,085	43,325	63.94%
FICA - Employer Share	39,296	27,267	12,029	32,088	(7,208)	-18.34%
Medicare - Employer Share	9,191	8,561	630	7,505	(1,686)	-18.34%
Travel Expense	13,150	2,007	11,143	9,570	(3,580)	-27.22%
Dues and Fees	1,000	500	500	1,000	-	0.00%
Education and Training	9,100	5,311	3,789	7,795	(1,305)	-14.34%
Uniforms	600	400	200	600	-	0.00%
Total Personnel Costs	\$ 773,898	\$ 789,710	\$ (15,812)	\$ 687,178	\$ (86,720)	-11.21%
Non-Personnel Costs						
Automotive Maintenance & Repairs	\$ 1,500	\$ 1,500	\$ -	\$ 750	\$ (750)	-50.00%
Communications	7,448	7,448	-	8,044	596	8.00%
Office Supplies	3,500	2,103	1,397	3,500	-	0.00%
Gasoline, Oil, & Diesel Fuel	400	150	250	500	100	25.00%
Food	2,000	1,165	835	2,000	-	0.00%
Small Equipment	500	40	460	500	-	0.00%
Safety Supplies & Equipment	700	320	380	500	(200)	-28.57%
Total Non-Personnel Costs	\$ 16,048	\$ 12,726	\$ 3,322	\$ 15,794	\$ (254)	-1.58%
Total Administration Expense	\$ 789,946	\$ 802,435	\$ (12,489)	\$ 702,972	\$ (86,974)	-11.01%

Administration and Rental Buildings

This operating segment is managed by the Administration Division and is used to track expenditures related to the Administration & Engineering buildings and CCMWA's rental properties. The rental properties owned by CCMWA include the organization's previous office building and warehouse space located on the same property as the current Administration & Engineering buildings.

Major Budget Changes

- Overall budget decreased based on needs of rental property tenants

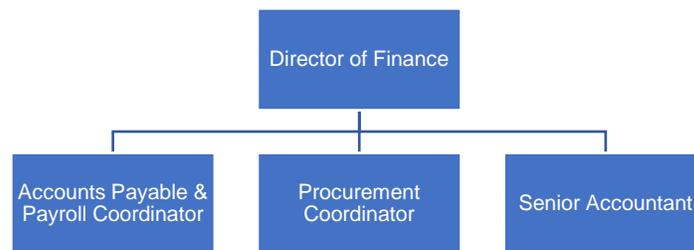
	2021 Budget	2021 Projected Actual	Variance Favorable (Unfavorable)	2022 Budget	Increase (Decrease) Over 2021 Budget (\$)	Increase (Decrease) Over 2021 Budget (%)
Administration and Rental Buildings						
Cleaning Services	\$ 18,800	\$ 14,100	\$ 4,700	\$ 15,000	\$ (3,800)	-20.21%
General Maint. & Repairs - Admin Building	60,100	23,281	36,820	52,500	(7,600)	-12.65%
General Maint. & Repairs - Rental Buildings	8,000	57,000	(49,000)	5,000	(3,000)	-37.50%
Security Maintenance & Repairs	11,500	5,047	6,453	10,000	(1,500)	-13.04%
Grounds Maintenance	20,500	20,056	444	11,644	(8,856)	-43.20%
Natural Gas	4,500	4,317	183	5,000	500	11.11%
Electricity	45,000	38,303	6,697	38,000	(7,000)	-15.56%
Water Purchases	2,000	1,990	10	2,000	-	0.00%
Sewer / Wastewater Handling	1,000	872	128	1,000	-	0.00%
Janitorial Supplies	2,000	2,000	-	2,000	-	0.00%
Small Equipment	14,400	14,375	25	6,500	(7,900)	-54.86%
Total Admin& Rental Buildings Expense	\$ 187,800	\$ 181,340	\$ 6,460	\$ 148,644	\$ (39,156)	-20.85%

Finance Division

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

Full Time Equivalent Positions

Division	FY 2019	FY 2020	FY 2021	FY 2022
Finance	3.00	3.00	3.00	4.00



Goal	Objective	Performance Measure
Effectively communicate CCMWA’s financial condition through an Annual Comprehensive Financial Report (ACFR)	Produce an ACFR that meets the highest GFOA criteria	# of years GFOA certificate has been received
Published a balanced annual budget that highlights CCMWA’s commitment to financial responsibility and transparency	Produce an adopted annual budget that meets the highest GFOA criteria	# of years GFOA award has been received
Meet all financial reporting requirements and principals of the Governmental Accounting Standards Board (GASB)	Minimize audit findings by accurately applying all accounting standards	# of audit findings per year
Provide efficient and cost-effective processing of accounts payable	Issue electronic payments for all routine purchases	% of vendors receiving electronic payments
Preserve high bond rating	Maintain cash flow model in line with financial policies regarding debt	# of years AAA rating has been maintained

Performance Measures (* projected)	2019	2020	2021	2022*
# of years GFOA Certificate of Achievement for Excellence in Financial Reporting has been received	6	7	8	9
# of years GFOA Distinguished Budget Award has been received	7	8	9	10
# of audit findings per year	0	0	0	0
% of vendors receiving electronic payments	19%	36%	34%	40%
# of years AAA rating has been maintained	18	19	20	21

Finance Division

Major Budget Changes

- Increase to all Personnel Costs for new Procurement Coordinator position and due to a cost-of-living adjustment and merit increases

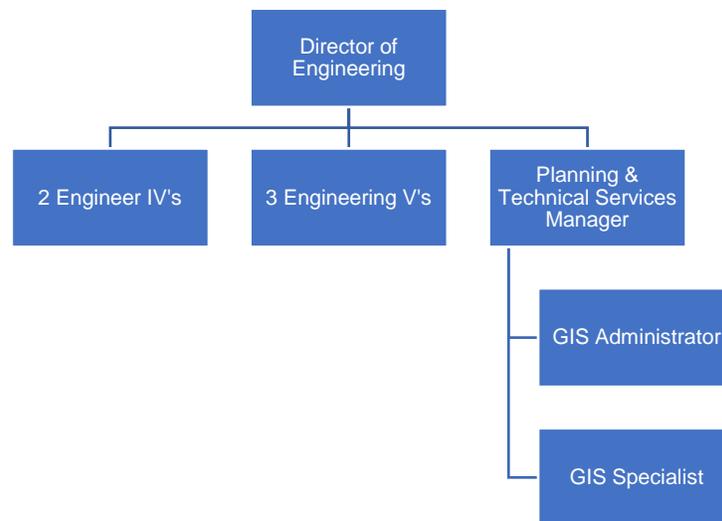
Finance Division	2021 Budget	2021 Projected Actual	Variance Favorable (Unfavorable)	2022 Budget	Increase (Decrease) Over 2021 Budget (\$)	Increase (Decrease) Over 2021 Budget (%)
Personnel Costs						
Salaries & Wages	\$ 289,321	\$ 289,321	\$ -	\$ 363,683	\$ 74,362	25.70%
Employee Benefits	42,737	42,376	361	73,261	30,524	71.42%
FICA - Employer Share	17,938	17,099	839	22,549	4,611	25.71%
Medicare - Employer Share	4,196	3,996	200	5,274	1,078	25.69%
Travel Expense	500	-	500	500	-	0.00%
Dues and Fees	480	430	50	480	-	0.00%
Education and Training	2,950	1,800	1,150	2,150	(800)	-27.12%
Uniforms	150	150	-	150	-	0.00%
Total Personnel Costs	\$ 358,272	\$ 355,172	\$ 3,100	\$ 468,047	\$ 109,775	30.64%
Non-Personnel Costs						
Communications	\$ 5,880	\$ 5,880	\$ -	\$ 6,113	\$ 233	3.96%
Office Supplies	4,000	2,556	1,444	3,000	(1,000)	-25.00%
Food	400	7	393	300	(100)	-25.00%
Safety Supplies & Equipment	300	14	286	300	-	0.00%
Total Non-Personnel Costs	\$ 10,580	\$ 8,457	\$ 2,123	\$ 9,713	\$ (867)	-8.19%
Total Finance Expense	\$ 368,852	\$ 363,629	\$ 5,223	\$ 477,760	\$ 108,908	29.53%

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.

Full Time Equivalent Positions

Division	FY 2019	FY 2020	FY 2021	FY 2022
Engineering	9.00	9.00	9.00	9.00



Goal	Objective	Performance Measure
Maintain a sustainable capital infrastructure program	Develop and deliver the annual Capital Improvement Plan	% of CIP projects in progress by year end
Make data-driven decisions regarding future CCMWA technical initiatives	Perform business case evaluations, studies, and master plans	% of Research & Development projects with >75% budget expended by year end

Performance Measures (* projected)	2019	2020	2021	2022*
% of CIP projects in progress by year end	100%	100%	90%	100%
% of Engineering Research & Development projects with >75% budget expended by year end	47%	100%	7%	80%

Engineering Division

Major Budget Changes

- Increase to Salaries & Wages, FICA, and Medicare due to a cost-of-living adjustment and merit increases
- Decrease to Non-Personnel Costs based on historical spending

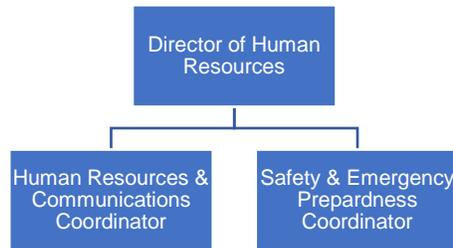
Engineering Division	2021 Budget	2021 Projected Actual	Variance Favorable (Unfavorable)	2022 Budget	Increase (Decrease) Over 2021 Budget (\$)	Increase (Decrease) Over 2021 Budget (%)
Personnel Costs						
Salaries & Wages	\$ 1,081,492	\$ 1,108,500	\$ (27,008)	\$ 1,170,445	\$ 88,953	8.23%
Employee Benefits	172,654	148,640	24,014	169,541	(3,113)	-1.80%
FICA - Employer Share	67,053	66,106	947	72,568	5,515	8.22%
Medicare - Employer Share	15,682	15,592	90	16,972	1,290	8.23%
Travel Expense	28,000	2,553	25,447	20,000	(8,000)	-28.57%
Dues and Fees	2,100	1,575	525	2,100	-	0.00%
Education and Training	20,000	5,721	14,279	17,000	(3,000)	-15.00%
Uniforms	1,500	176	1,324	1,000	(500)	-33.33%
Total Personnel Costs	\$ 1,388,481	\$ 1,348,864	\$ 39,617	\$ 1,469,626	\$ 81,145	5.84%
Non-Personnel Costs						
Automotive Maintenance & Repairs	\$ 4,000	\$ 1,778	\$ 2,222	\$ 3,000	\$ (1,000)	-25.00%
Communications	30,022	27,984	2,038	27,992	(2,030)	-6.76%
Office Supplies	7,500	2,858	4,642	5,000	(2,500)	-33.33%
Gas, Oil & Diesel	6,500	5,294	1,206	7,000	500	7.69%
Food	5,000	992	4,008	4,000	(1,000)	-20.00%
Small Equipment	15,400	10,489	4,911	7,500	(7,900)	-51.30%
Safety Supplies & Equipment	3,600	557	3,043	3,000	(600)	-16.67%
Total Non-Personnel Costs	\$ 72,022	\$ 49,952	\$ 22,070	\$ 57,492	\$ (14,530)	-20.17%
Total Engineering Expense	\$ 1,460,503	\$ 1,398,816	\$ 61,687	\$ 1,527,118	\$ 66,615	4.56%

Human Resources Division

The Human Resources Division is responsible for all major aspects of human capital management. These functions include attracting and retaining a skilled workforce, training and developing CCMWA staff, compensation and benefits administration, risk management, and employee relations. The division is also responsible for internal and external communications, promoting CCMWA's safety culture, ensuring a diverse and inclusive workplace, developing workplace policies, and ensuring organizational compliance with federal, state, and local employment laws.

Full Time Equivalent Positions

Division	FY 2019	FY 2020	FY 2021	FY 2022
Human Resources	-	-	3.00	3.00



Goal	Objective	Performance Measure
Maintain a fully staffed workforce	Fill open positions within 55 days	# of days to fill open positions
Develop a highly competent, committed, & supported workforce	Provide position related training	# of training hours per employee
Ensure continuous improvement of the Safety Program	Perform annual safety audits	# of safety audits performed each year
Develop a fully trained, educated, & safety-aware workforce	Provide mandatory safety training to all employees (First Aid/CPR/AED & Defensive Driving)	% of employees fully trained

Performance Measures (* projected)	2019	2020	2021	2022*
# of days to fill open positions	79	65	75	55
# of training hours per employee	21	20	10	20
# of safety audits performed each year	0	0	1	2
% of employees fully trained	73%	73%	70%	80%

Human Resources Division

Major Budget Changes

- Increase to Salaries & Wages, FICA, and Medicare due to a cost-of-living adjustment and merit increases
- Increase to Education & Training for safety instructor certification

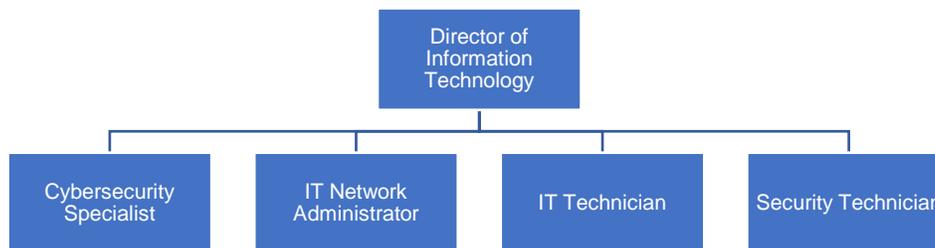
Human Resources Division	2021 Budget	2021 Projected Actual	Variance Favorable (Unfavorable)	2022 Budget	Increase (Decrease) Over 2021 Budget (\$)	Increase (Decrease) Over 2021 Budget (%)
Personnel Costs						
Salaries & Wages	\$ 261,623	\$ 257,671	\$ 3,952	\$ 299,925	\$ 38,302	14.64%
Employee Benefits	38,119	26,817	11,302	31,918	(6,201)	-16.27%
FICA - Employer Share	16,221	15,764	457	18,596	2,375	14.64%
Medicare - Employer Share	3,794	3,687	107	4,349	555	14.63%
Travel Expense	7,000	501	6,499	7,400	400	5.71%
Dues and Fees	2,000	877	1,123	3,804	1,804	90.20%
Education and Training	10,050	6,208	3,842	18,129	8,079	80.39%
Education and Training - Safety	15,500	9,681	5,819	16,500	1,000	6.45%
Uniforms	450	450	-	600	150	33.33%
Total Personnel Costs	\$ 354,757	\$ 321,656	\$ 33,101	\$ 401,221	\$ 46,464	13.10%
Non-Personnel Costs						
Communications	\$ 7,320	\$ 6,767	\$ 553	\$ 6,516	\$ (804)	-10.98%
Office Supplies	3,350	1,914	1,436	3,350	-	0.00%
Food	1,785	1,500	285	1,875	90	5.04%
Safety Supplies & Equipment	3,000	240	2,760	3,000	-	0.00%
Total Non-Personnel Costs	\$ 15,455	\$ 10,421	\$ 5,034	\$ 14,741	\$ (714)	-4.62%
Total Human Resources Expense	\$ 370,212	\$ 332,076	\$ 38,136	\$ 415,962	\$ 45,750	12.36%

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, 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. Positions that specialize in networking, security systems, and cyber security are part of the Information Technology Division.

Full Time Equivalent Positions

Division	FY 2019	FY 2020	FY 2021	FY 2022
Information Technology	4.00	5.00	5.00	5.00



Goal	Objective	Performance Measure
Improve security against cyber-attacks and external threats	Educate employees about phishing attacks through training	% of employees that fail surprise phishing email test
Ensure business viability by efficiently responding to IT issues	Resolve all support requests in a timely manner	# of days to resolve and close a help desk ticket
Ensure security, operability, and protection of end-use devices	Perform regularly scheduled updates	>90% of hardware with latest updates installed

Performance Measures (* projected)	2019	2020	2021	2022*
% of employees that fail surprise phishing email test	0%	6.9%	12.9%	0%
# of days to resolve and close a help desk ticket	2.4	1	3.8	< 3
>90% of hardware with latest updates installed	N/A	N/A	85%	90%

Information Technology Division

Major Budget Changes

- Increase to Salaries & Wages, FICA, and Medicare due to a cost-of-living adjustment and merit increases
- Cybersecurity Analyst position added, and Business Systems Analyst position moved to Finance Division
- Decrease to most division's software accounts based on renewals

Information Technology Division	2021 Budget	2021 Projected Actual	Variance Favorable (Unfavorable)	2022 Budget	Increase (Decrease) Over 2021 Budget (\$)	Increase (Decrease) Over 2021 Budget (%)
Personnel Costs						
Salaries & Wages	\$ 423,297	\$ 389,890	\$ 33,407	\$ 450,025	\$ 26,728	6.31%
Overtime Wages	4,000	2,524	1,476	3,000	(1,000)	-25.00%
Employee Benefits	83,748	75,966	7,782	92,056	8,308	9.92%
FICA - Employer Share	24,745	23,260	1,485	28,088	3,343	13.51%
Medicare - Employer Share	5,638	5,440	198	6,569	931	16.51%
Travel Expense	4,000	-	4,000	3,000	(1,000)	-25.00%
Dues and Fees	250	189	61	250	-	0.00%
Education and Training	9,000	1,025	7,975	9,000	-	0.00%
Uniforms	750	108	642	600	(150)	-20.00%
Total Personnel Costs	\$ 555,428	\$ 498,402	\$ 57,026	\$ 592,588	\$ 37,160	6.69%
Non-Personnel Costs						
Automotive Maintenance & Repairs	\$ 1,000	\$ 314	\$ 686	\$ 1,000	\$ -	0.00%
Communications	12,689	12,689	-	18,989	6,300	49.65%
Office Supplies	2,000	2,000	-	2,000	-	0.00%
Gas, Oil & Diesel	2,000	1,259	741	2,000	-	0.00%
Food	500	11	489	500	-	0.00%
Safety Supplies & Equipment	500	97	403	500	-	0.00%
General - Software, Renewals and Support	2,000	1,223	777	2,000	-	0.00%
General - Technology, PCs & Peripherals	700	564	136	5,000	4,300	614.29%
Admin - Software, Renewals and Support	12,483	12,451	32	6,218	(6,265)	-50.19%
Admin - Technology, PCs & Peripherals	3,000	2,583	417	5,000	2,000	66.67%
HLC - Software, Renewals and Support	10,250	7,929	2,321	11,250	1,000	9.76%
HLC - Technology, PCs & Peripherals	6,025	5,492	533	2,250	(3,775)	-62.66%
Finance - Software, Renewals and Support	12,113	12,097	16	10,039	(2,074)	-17.12%
Finance - Technology, PCs & Peripherals	500	493	7	5,000	4,500	900.00%
Wyckoff - Software, Renewals & Support	15,395	15,387	8	14,244	(1,151)	-7.48%
Wyckoff - Technology, PCs & Peripherals	11,000	10,890	110	14,500	3,500	31.82%
Quarles - Software, Renewals & Support	14,530	14,481	49	12,608	(1,922)	-13.23%
Quarles - Technology, PCs & Peripherals	14,000	12,240	1,760	10,000	(4,000)	-28.57%
Trans - Software, Renewals & Support	8,290	8,246	44	6,071	(2,219)	-26.77%
Trans - Technology, PCs & Peripherals	14,700	14,416	284	8,000	(6,700)	-45.58%
Maint - Software, Renewals & Support	204,045	202,501	1,544	229,695	25,650	12.57%
Maint - Technology, PCs & Peripherals	46,900	45,747	1,153	39,000	(7,900)	-16.84%
Engineer - Software, Renewals & Support	140,172	129,915	10,257	126,739	(13,433)	-9.58%
Engineer - Technology, PCs & Peripherals	14,000	6,741	7,259	10,915	(3,085)	-22.04%
HR - Software, Renewals & Support	37,905	18,796	19,109	23,501	(14,404)	100.00%
HR - Technology, PCs & Peripherals	5,500	4,786	714	3,000	(2,500)	100.00%
Lab - Software, Renewals & Support	17,208	17,176	32	15,495	(1,713)	-9.95%
Lab - Technology, PCs & Peripherals	14,600	13,689	911	6,500	(8,100)	-55.48%
IT - Software, Renewals & Support	129,003	128,953	50	19,302	(109,701)	-85.04%
IT - Technology, PC's & Peripherals	24,000	24,000	-	6,500	(17,500)	-72.92%
Total Non-Personnel Costs	\$ 777,008	\$ 727,167	\$ 49,841	\$ 617,816	\$ (159,192)	-20.49%
Total Information Technology Expense	\$ 1,332,436	\$ 1,225,569	\$ 106,867	\$ 1,210,404	\$ (122,032)	-9.16%

Research and Development

The Research and Development segment is used to track costs associated with resource management efforts, program development, and the evaluation of potential future capital projects. Most projects within this budget are a joint effort between Operations and Engineering staff.

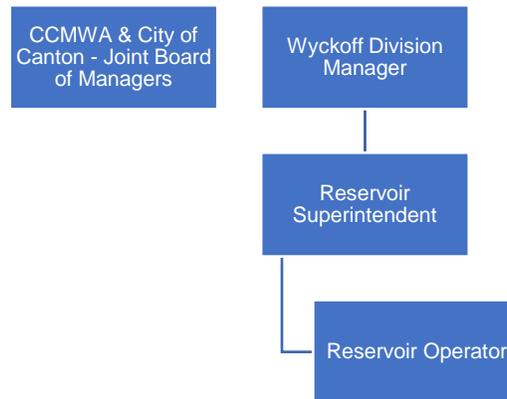
Research and Development	2021 Budget	2021 Projected Actual	Variance Favorable (Unfavorable)	2022 Budget	Increase (Decrease) Over 2021 Budget (\$)	Increase (Decrease) Over 2021 Budget (%)
Other Professional Services	\$ 65,000	\$ 28,206	36,794	\$ 138,000	\$ 73,000	112.31%
Hydraulic Model	50,000	5,775	44,225	10,000	(40,000)	-80.00%
Miscellaneous Engineering	50,000	43,221	6,779	25,000	(25,000)	-50.00%
Security, SCADA, & I.T. Evaluation	50,000	21,700	28,300	65,000	15,000	30.00%
Business Case Evaluation Program	150,000	90,899	59,101	75,000	(75,000)	-50.00%
CIP Master Plan	10,000	-	10,000	-	(10,000)	-100.00%
GIS Initiatives	75,000	-	75,000	25,000	(50,000)	-66.67%
Energy Optimization Program	15,000	-	15,000	-	(15,000)	-100.00%
Surveying & Easements	15,000	6,568	8,432	10,000	(5,000)	-33.33%
Internal Corrosion Control Study	160,000	92,774	67,226	30,000	(130,000)	-81.25%
Safety Audits & Investigations	10,000	9,970	30	10,000	-	0.00%
Upper Etowah Resource Management	18,000	17,208	792	20,000	2,000	11.11%
Long Term Water Supply	42,800	38,873	3,927	35,000	(7,800)	-18.22%
Allatoona Lake Clean-up / Monitoring	6,000	6,060	(60)	6,000	-	0.00%
Pipeline Investigations / Monitoring	135,000	75,000	60,000	100,000	(35,000)	-25.93%
Chattahoochee River Monitoring	-	-	-	50,000	50,000	n/a
Website & Communications Development	2,500	2,800	(300)	4,600	2,100	84.00%
Information System Management	10,000	-	10,000	110,000	100,000	1000.00%
Aged Pipe & Critical Valve Replacement Program	40,000	-	40,000	50,000	10,000	100.00%
Workforce Development	47,000	46,700	300	22,500	(24,500)	-52.13%
Structural Analysis Program	75,000	37,548	37,452	25,000	(50,000)	100.00%
Production Meter Testing	100,000	-	100,000	100,000	-	100.00%
Water Research Initiatives	176,600	57,350	119,250	100,000	(76,600)	-43.37%
Residuals Management Study	5,000	-	5,000	-	(5,000)	-100.00%
External Pipeline Corrosion Control Program	50,000	-	50,000	50,000	-	0.00%
Education Assistance Program	75,600	68,104	7,496	40,000	(35,600)	100.00%
Payments to Other Agencies (Research)	92,300	91,612	688	94,050	1,750	1.90%
Total Research & Development Expense	\$ 1,525,800	\$ 740,369	\$ 785,431	\$ 1,195,150	\$ (330,650)	-21.67%

Hickory Log Creek Reservoir Division

The Hickory Log Creek Reservoir Division consists of a 411-acre reservoir and a 44 MGD intake/pumping system located in the City of Canton, in Cherokee County. The Hickory Log Creek management office is located adjacent to the reservoir. 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 into Allatoona Lake through releases of water from the reservoir into the Etowah River. The project is jointly owned by CCMWA (75% ownership) and the City of Canton (25% ownership). In 2019, a new Joint Project Agreement was negotiated between CCMWA and the City of Canton to ensure more effective operation of the project with better defined parameters for sharing the resource.

Full Time Equivalent Positions

Division	FY 2019	FY 2020	FY 2021	FY 2022
Hickory Log Creek Reservoir	2.00	2.00	2.00	2.00



Goal	Objective	Performance Measure
Ensure staff, local authorities, and emergency responders are prepared in the event of a failure	Maintain an Emergency Action Plan document that is tested annually	# of updates to the Emergency Action Plan # of years since last plan exercise
Ensure on-call support can be provided	Cross-train at least 3 CCMWA employees in operating procedures	# of employees cross trained

Performance Measures (* projected)	2019	2020	2021	2022*
# of updates to the Emergency Action Plan	1	1	1	1
# of years since last plan exercise (performed every 4 years)	3	0	2	2
# of employees cross trained	5	4	5	4

Hickory Log Creek Division

Major Budget Changes

- Increase to Engineering Services for a feasibility study on the replacement of the dam's crest gate air bladder system
- Increase to Liability Insurance due to past provider no longer offering this type of insurance and new provider quoting a higher renewal premium

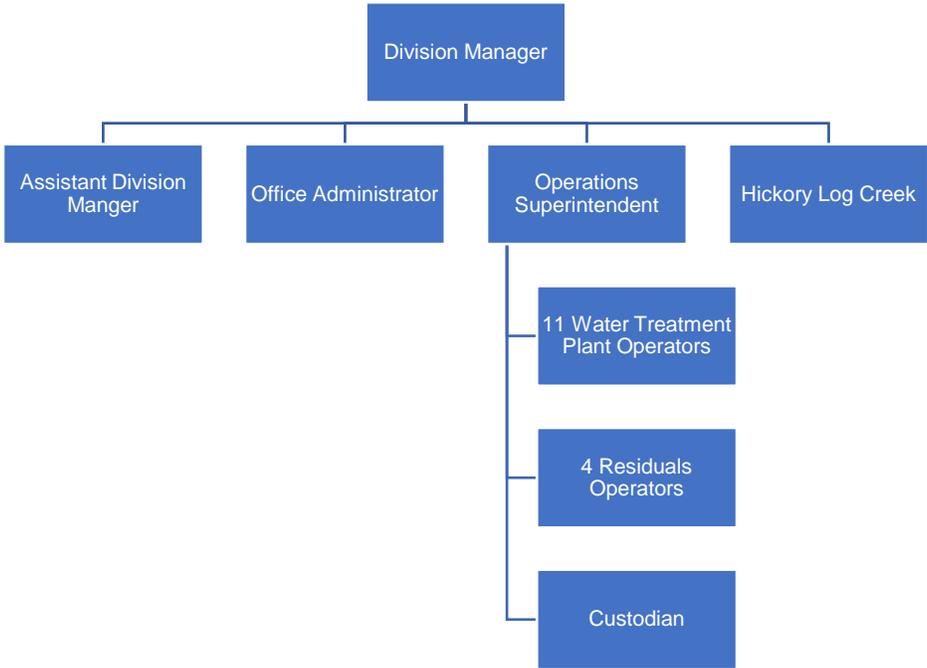
Hickory Log Creek Reservoir Division	2021 Budget	2021 Projected Actual	Variance Favorable (Unfavorable)	2022 Budget	Increase (Decrease) Over 2021 Budget (\$)	Increase (Decrease) Over 2021 Budget (%)
Personnel Costs						
Salaries & Wages	\$ 106,318	\$ 112,903	\$ (6,585)	\$ 120,420	\$ 14,102	13.26%
Overtime Wages	2,625	307	2,318	1,500	(1,125)	-42.86%
Employee Benefits	22,424	22,580	(156)	24,869	2,445	10.90%
FICA - Employer Share	6,755	6,872	(117)	7,758	1,003	14.85%
Medicare - Employer Share	1,634	1,481	153	1,814	180	10.99%
Travel Expense	1,500	-	1,500	1,500	-	0.00%
Dues and Fees	1,838	1,398	441	1,838	-	0.00%
Education and Training	1,875	480	1,395	1,875	-	0.00%
Uniforms	900	806	94	900	-	0.00%
Total Personnel Costs	\$ 145,869	\$ 146,826	\$ (1,051)	\$ 162,474	\$ 16,605	11.38%
Non-Personnel Costs						
Engineering Services - Dam	\$ 52,125	\$ 22,958	\$ 29,167	\$ 83,025	\$ 30,900	59.28%
Technical Services	10,500	3,654	6,846	10,500	-	0.00%
Motor/Gear Inspections	-	-	-	-	-	n/a
Biological Monitoring	-	-	-	-	-	n/a
USGS Monitoring	24,975	24,200	775	24,975	-	0.00%
General Maintenance & Repairs	5,250	44,250	(39,000)	17,250	12,000	228.57%
Electrical Maintenance & Repairs	1,875	152	1,723	3,000	1,125	60.00%
Coatings Maintenance & Repairs	-	-	-	-	-	n/a
SCADA Maintenance & Repairs	7,500	13,387	(5,887)	9,750	2,250	30.00%
Security Maintenance & Repairs	10,500	10,761	(261)	12,000	1,500	14.29%
Automotive Maintenance & Repairs	1,350	744	606	1,350	-	0.00%
Grounds Maintenance	14,250	15,949	(1,699)	14,925	675	4.74%
Rental of Equipment and Vehicles	375	-	375	375	-	0.00%
Liability Insurance	47,700	83,980	(36,280)	86,680	38,980	81.72%
Communications	6,379	6,341	38	6,379	-	0.00%
Office Supplies	1,875	186	1,689	1,875	-	0.00%
Natural Gas	750	561	189	750	-	0.00%
Electricity	64,125	62,340	1,785	64,125	-	0.00%
Gas, Oil & Diesel	1,875	549	1,326	1,875	-	0.00%
Laboratory Supplies and Chemicals	225	500	(275)	225	-	0.00%
Food	375	95	280	375	-	0.00%
Water Purchases	3,625	3,576	49	1,125	(2,500)	-68.97%
Janitorial Supplies	375	169	206	375	-	0.00%
Small Equipment	1,125	964	161	1,125	-	0.00%
Safety Supplies & Equipment	875	215	660	3,375	2,500	285.71%
Contingency	56,250	-	56,250	56,250	-	0.00%
Total Non-Personnel Costs	\$ 314,254	\$ 295,531	\$ 18,723	\$ 401,684	\$ 87,430	27.82%
Total Hickory Log Creek Expense	\$ 460,123	\$ 442,357	\$ 17,767	\$ 564,158	\$ 104,035	22.61%

Wyckoff Division

The Wyckoff Water Treatment Plant is located in the northwestern portion of 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 86 million gallons per day.

Full Time Equivalent Positions

Division	FY 2019	FY 2020	FY 2021	FY 2022
Wyckoff	21.00	21.00	20.00	20.00



Wyckoff Water Treatment Plant

Wyckoff Division

Goal	Objective	Performance Measure
Meet or exceed regulatory requirements for water treatment	Participate in AWWA Plant of the Year Award Program Achieve full compliance with all water quality, monitoring, & reporting requirements to qualify for the GAWP Platinum Award	> 90 score on program inspection # of years with total compliance (GAWP Platinum Award)
Develop a highly competent, committed, & supported workforce	Water Treatment Plant Operators with Class 1 Water Treatment license	> 75% with Class 1 license

Performance Measures (* projected)	2019	2020	2021	2022*
> 90 score for AWWA Plant of the Year inspection	97.3	97.8	99.5	95.0
Plant of the Year Winner – Surface Water > 50MGD Category	Yes	Yes	Yes	
# of years with total compliance (GAWP Platinum Award)	11	12	13	14
> 75% of Water Treatment Operators with Class 1 license	53.8%	61.5%	84.6%	100%



Major Budget Changes

- Increase to Salaries & Wages, Overtime, FICA, and Medicare due to a cost-of-living adjustment and merit increases, as well as five water treatment operators receiving a Class 1 license during 2021.
- Increase to Employee Benefits due to more employees selecting family health insurance coverage than in the prior year
- Increase to Coatings Maintenance & Repairs based on work schedule of coatings contractor
- Decrease to Electricity based on projected demand for 2022 and estimated facility production
- Increase to Sewer/Wastewater Handling for industrial pre-treatment permit fees paid to Cobb County

Wyckoff Division

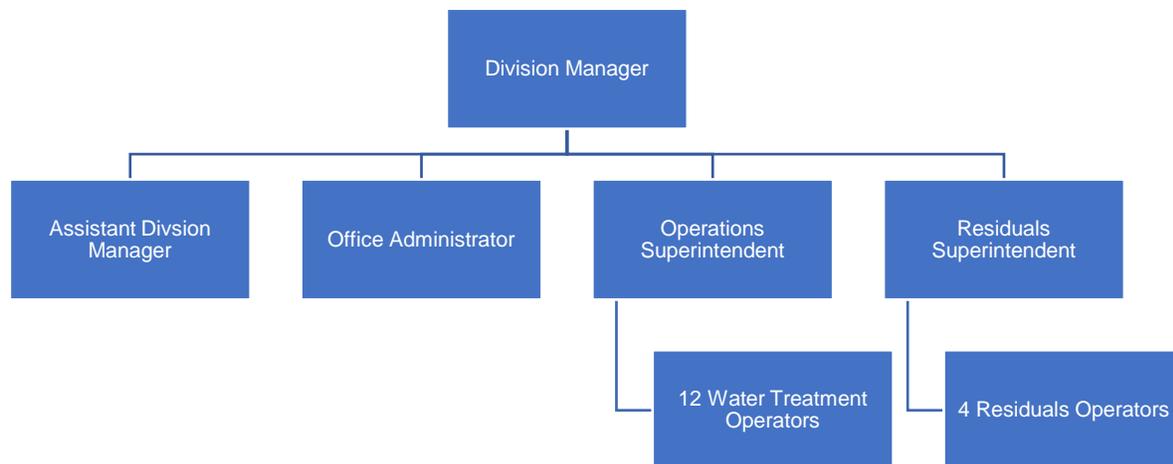
Wyckoff Division	2021 Budget	2021 Projected Actual	Variance Favorable (Unfavorable)	2022 Budget	Increase (Decrease) Over 2021 Budget (\$)	Increase (Decrease) Over 2021 Budget (%)
Personnel Costs						
Salaries & Wages	\$ 1,368,227	\$ 1,385,917	\$ (17,690)	\$ 1,554,653	\$ 186,426	13.63%
Overtime Wages	175,000	185,000	(10,000)	199,500	24,500	14.00%
Employee Benefits	274,818	294,851	(20,033)	353,561	78,743	28.65%
FICA - Employer Share	90,681	91,752	(1,071)	103,758	13,077	14.42%
Medicare - Employer Share	22,377	21,516	861	25,436	3,059	13.67%
Travel Expense	5,000	3,358	1,642	5,000	-	0.00%
Dues and Fees	3,250	3,250	-	1,500	(1,750)	-53.85%
Education and Training	13,000	13,000	-	13,000	-	0.00%
Uniforms	6,500	5,515	985	6,300	(200)	-3.08%
Total Personnel Costs	\$ 1,958,853	\$ 2,004,158	\$ (45,305)	\$ 2,262,708	\$ 303,855	15.51%
Non-Personnel Costs						
Motor / Gear Inspection	\$ 125,000	\$ 125,000	\$ -	\$ 150,000	\$ 25,000	20.00%
Land Application Soil Scientist	55,000	55,000	-	55,000	-	0.00%
General Maintenance & Repairs	356,000	356,000	-	350,000	(6,000)	-1.69%
Electrical Maintenance & Repairs	50,000	26,781	23,219	45,000	(5,000)	-10.00%
Coatings Maintenance & Repairs	100,000	26,576	73,424	200,000	100,000	100.00%
SCADA Maintenance & Repairs	120,000	126,957	(6,957)	120,000	-	0.00%
Security Maintenance & Repairs	35,100	35,100	-	20,000	(15,100)	-43.02%
Residuals Management	446,384	302,609	143,775	417,360	(29,024)	-6.50%
Automotive Maintenance & Repairs	2,000	1,281	719	2,000	-	0.00%
Grounds Maintenance	66,800	66,800	-	60,000	(6,800)	-10.18%
Rental of Equipment & Vehicles	5,000	-	5,000	5,000	-	0.00%
Communications	57,796	53,182	4,614	52,889	(4,907)	-8.49%
Office Supplies	5,000	2,700	2,300	5,000	-	0.00%
Water Treatment Chemicals	1,454,750	1,454,750	-	1,434,020	(20,730)	-1.42%
Natural Gas	15,200	15,200	-	15,000	(200)	-1.32%
Electricity	2,500,000	2,380,077	119,923	2,200,000	(300,000)	-12.00%
Gasoline, Oil & Diesel Fuel	11,000	11,000	-	12,000	1,000	9.09%
Laboratory Supplies & Chemicals	26,800	26,800	-	35,000	8,200	30.60%
Backup / Emergency Electric Power	124,001	124,045	(44)	125,000	999	0.81%
Food	5,000	4,000	1,000	5,000	-	0.00%
Water Purchases	300,000	300,000	-	300,000	-	0.00%
Sewer / Wastewater Handling	298,620	298,620	-	352,000	53,380	17.88%
Janitorial Supplies	14,000	14,000	-	12,000	(2,000)	-14.29%
Small Equipment	12,000	8,755	3,245	12,000	-	0.00%
Safety Supplies & Equipment	19,000	19,000	-	15,000	(4,000)	-21.05%
Total Non-Personnel Costs	\$6,204,451	\$5,834,232	\$370,219	\$ 5,999,269	\$ (205,182)	-3.31%
Total Wyckoff Expense	\$ 8,163,304	\$ 7,838,390	\$ 324,914	\$ 8,261,977	\$ 98,673	1.21%

Quarles Division

The Quarles Water Treatment Plant is located in 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 87 million gallons per day. CCMWA's original water treatment plant, known as Quarles Water Treatment Plant 1, was replaced with a new plant in 2021 and is located partially within the footprint of the old building.

Full Time Equivalent Positions

Division	FY 2019	FY 2020	FY 2021	FY 2022
Quarles	21.00	21.00	21.00	21.00



Goal	Objective	Performance Measure
Meet or exceed regulatory requirements for water treatment	Participate in AWWA Plant of the Year Award Program Achieve full compliance with all water quality, monitoring, & reporting requirements to qualify for the GAWP Platinum Award	> 90 score on program inspection # of years with total compliance (GAWP Platinum Award)
Develop a highly competent, committed, & supported workforce	Water Treatment Plant Operators with Class 1 Water Treatment license	> 75% with Class 1 license

Performance Measures (* projected)	2019	2020	2021	2022*
> 90 score for AWWA Plant of the Year inspection	92.7	97.0	98.1	95.0
# of years with total compliance (GAWP Platinum Award)	11	12	13	14
> 75% of Water Treatment Operators with Class 1 license	73.3%	80.0%	81.3%	100%

Quarles Division

Major Budget Changes

- Increase to Salaries & Wages, Overtime, FICA, and Medicare due to a cost-of-living adjustment and merit increases
- Increase to Employee Benefits due to increased premiums for health insurance upon renewal
- Increase to various repair and maintenance categories to address aging equipment at Plant 2
- Increase to Water Treatment Chemicals and Electricity based on projected demand for 2022 and estimated facility production



Quarles Division

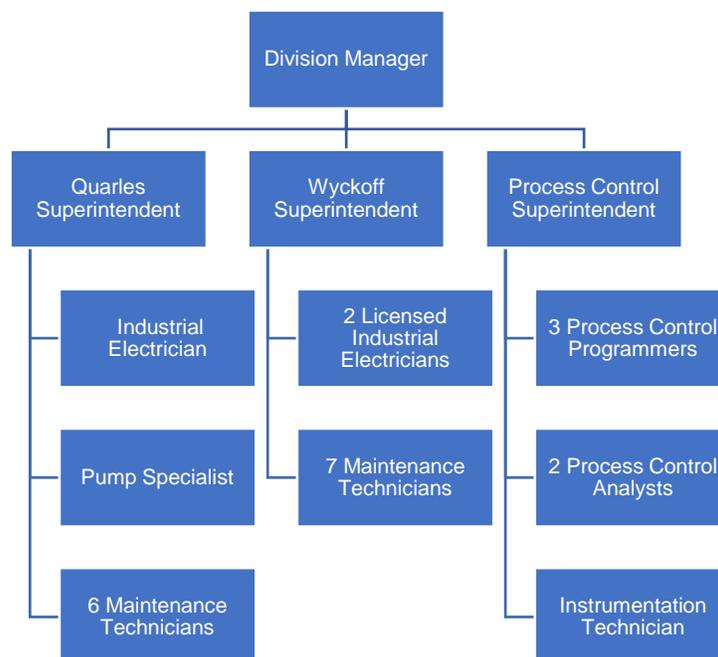
Quarles Division	2021 Budget	2021 Projected Actual	Variance Favorable (Unfavorable)	2022 Budget	Increase (Decrease) Over 2021 Budget (\$)	Increase (Decrease) Over 2021 Budget (%)
Personnel Costs						
Salaries & Wages	\$ 1,573,694	\$ 1,509,994	\$ 63,700	\$ 1,642,595	\$ 68,901	4.38%
Overtime Wages	265,000	352,164	(87,164)	278,250	13,250	5.00%
Employee Benefits	429,791	395,549	34,242	471,551	41,760	9.72%
FICA - Employer Share	114,000	112,246	1,754	119,093	5,093	4.47%
Medicare - Employer Share	26,662	26,223	439	27,853	1,191	4.47%
Travel Expense	6,000	829	5,171	6,000	-	0.00%
Dues and Fees	5,000	4,160	840	2,500	(2,500)	-50.00%
Education and Training	9,000	4,257	4,743	9,000	-	0.00%
Uniforms	7,350	4,135	3,215	7,350	-	0.00%
Total Personnel Costs	\$ 2,436,497	\$ 2,409,555	\$ 26,942	\$ 2,564,192	\$ 127,695	5.24%
Non-Personnel Costs						
Motor / Gear Inspection	\$ 133,000	\$ 100,785	\$ 32,215	\$ 165,000	\$ 32,000	24.06%
Land Application Soil Scientist	55,000	55,000	-	55,000	-	0.00%
Cleaning Services	41,500	41,500	-	70,000	28,500	68.67%
General Maintenance & Repairs	336,395	299,393	37,002	350,000	13,605	4.04%
Electrical Maintenance & Repairs	150,000	127,584	22,416	125,000	(25,000)	-16.67%
Coatings Maintenance & Repairs	100,000	26,173	73,827	200,000	100,000	100.00%
SCADA Maintenance & Repairs	100,000	100,000	-	145,000	45,000	45.00%
Security Maintenance & Repairs	20,000	18,179	1,821	25,000	5,000	25.00%
Residuals Management	300,000	300,000	-	350,000	50,000	16.67%
Automotive Maintenance & Repairs	2,500	2,500	-	2,500	-	0.00%
Grounds Maintenance	60,000	58,505	1,495	70,000	10,000	16.67%
Rental of Equipment & Vehicles	59,100	59,100	-	102,300	43,200	73.10%
Communications	62,307	53,544	8,763	50,750	(11,557)	-18.55%
Office Supplies	5,500	5,500	-	5,000	(500)	-9.09%
Water Treatment Chemicals	850,000	850,000	-	1,000,000	150,000	17.65%
Natural Gas	25,000	17,799	7,201	20,000	(5,000)	-20.00%
Electricity	2,550,000	2,578,384	(28,384)	2,743,000	193,000	7.57%
Gasoline, Oil & Diesel Fuel	10,500	10,500	-	11,000	500	4.76%
Laboratory Supplies & Chemicals	50,000	50,000	-	60,000	10,000	20.00%
Backup / Emergency Electric Power	22,500	22,500	-	25,000	2,500	11.11%
Food	5,000	3,846	1,154	5,000	-	0.00%
Sewer / Wastewater Handling	187,681	187,681	-	207,810	20,129	10.73%
Janitorial Supplies	2,500	1,366	1,134	2,500	-	0.00%
Small Equipment	16,200	16,200	-	36,983	20,783	128.29%
Safety Supplies & Equipment	21,600	21,600	-	19,000	(2,600)	-12.04%
Total Non-Personnel Costs	\$ 5,166,283	\$ 5,007,640	\$ 158,643	\$ 5,845,843	\$ 679,560	13.15%
Total Quarles Expense	\$ 7,602,780	\$ 7,417,195	\$ 185,585	\$ 8,410,035	\$ 807,255	10.62%

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 and the Engineering Division 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.

Full Time Equivalent Positions

Division	FY 2019	FY 2020	FY 2021	FY 2022
Maintenance	26.25	26.25	27.00	27.00



Goal	Objective	Performance Measure
Fully utilize the life of all capital assets	Implement a condition-based O&M program	> 80% of work orders are preventative or predictive vs corrective
Maintain a sustainable capital replacement program	Complete planned AR&R projects on time (within budget year)	% of AR&R projects completed on time

Performance Measures (* projected)	2019	2020	2021	2022*
> 80% of work orders are preventative or predictive	73%	78%	77%	80%
% of AR&R projects completed on time	100%	73%	83%	100%

Maintenance Division

Major Budget Changes

- Decrease to Salaries & Wages due to three long-tenured employees retiring during 2021
- Increase to Employee Benefits due to more employees selecting family health insurance coverage than in the prior year
- Increase to Education & Training for specialized equipment training
- Increase to Communications for remote site monitoring device internet connections

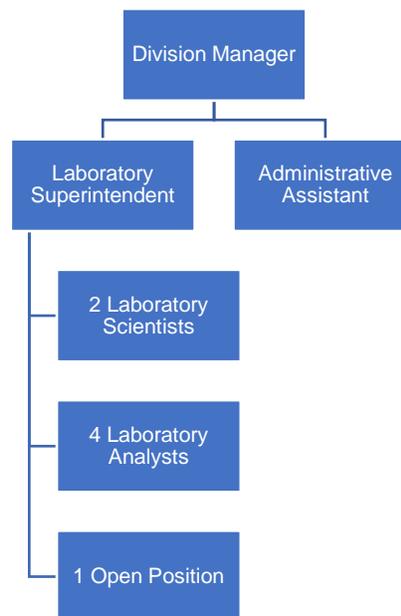
Maintenance Division	2021 Budget	2021 Projected Actual	Variance Favorable (Unfavorable)	2022 Budget	Increase (Decrease) Over 2021 Budget (\$)	Increase (Decrease) Over 2021 Budget (%)
Personnel Costs						
Salaries & Wages	\$ 2,135,779	\$ 2,161,757	\$ (25,978)	\$ 2,073,940	\$ (61,839)	-2.90%
Overtime Wages	36,000	31,839	4,161	37,800	1,800	5.00%
Employee Benefits	480,210	412,021	68,189	503,225	23,015	4.79%
FICA - Employer Share	134,651	130,390	4,261	130,928	(3,723)	-2.76%
Medicare - Employer Share	31,491	30,533	958	30,621	(870)	-2.76%
Travel Expense	8,000	1,504	6,496	8,000	-	0.00%
Dues and Fees	3,000	1,827	1,173	3,000	-	0.00%
Education and Training	20,000	12,583	7,417	30,000	10,000	50.00%
Uniforms	10,500	10,500	-	10,800	300	2.86%
Total Personnel Costs	\$ 2,859,631	\$ 2,792,953	\$ 66,678	\$ 2,828,314	\$ (31,317)	-1.10%
Non-Personnel Costs						
Automotive Maintenance & Repairs	\$ 26,400	\$ 18,150	\$ 8,250	\$ 26,000	\$ (400)	-1.52%
Rental of Equipment and Vehicles	10,000	20,129	(10,129)	15,000	5,000	50.00%
Communications	42,795	42,174	621	59,723	16,928	39.56%
Office Supplies	7,500	5,074	2,426	7,500	-	0.00%
Gas, Oil & Diesel	24,500	13,893	10,607	24,500	-	0.00%
Food	6,000	3,057	2,943	6,000	-	0.00%
Small Equipment	50,000	50,000	-	45,000	(5,000)	-10.00%
Safety Supplies & Equipment	32,000	22,437	9,563	30,000	(2,000)	-6.25%
Total Non-Personnel Costs	\$ 199,195	\$ 174,914	\$ 24,281	\$ 213,723	\$ 14,528	7.29%
Total Maintenance Expense	\$ 3,058,826	\$ 2,967,867	\$ 90,959	\$ 3,042,037	\$ (16,789)	-0.55%

Laboratory Division

The Laboratory Division is responsible for testing the water that CCMWA provides its wholesale customers to ensure that it meets state and federal water quality standards. The laboratory facility houses a research lab, chemistry lab, microbiology lab, media prep lab, and an incubator lab. Beyond its regulatory monitoring and reporting work, the Division provides support for operations through analysis of raw water sources and water at various stages of the treatment process.

Full Time Equivalent Positions

Division	FY 2019	FY 2020	FY 2021	FY 2022
Laboratory	10.00	10.00	10.00	10.00



Goal	Objective	Performance Measure
Exceed laboratory quality assurance & quality control for drinking water analysis	Participate in GAWP Laboratory Quality Assurance Award Program	> 95 score on program inspection
Assist Operations with water treatment decisions	Provide valid Total Organic Compound (TOC) data to Operations by maintaining < 20% difference from EPD compliance samples	< 20% ± difference from EPD results
Meet or exceed regulatory requirements for water treatment	Maintain standard of zero samples out of compliance	# of samples out of compliance

Performance Measures (* projected)	2019	2020	2021	2022*
> 95 score on GAWP Laboratory Quality Assurance inspection	98.4	98.5	99.2	95.0
GAWP Laboratory QA/QC Gold Award (> 95 on inspection)	Yes	Yes	Yes	
< 20% ± difference from EPD results on TOC samples	12.5%	11.1%	19.9%	< 15%
# of samples out of compliance	0	0	0	0

Laboratory Division

Major Budget Changes

- Increase to Salaries & Wages, Overtime, FICA, and Medicare due to a cost-of-living adjustment and merit increases
- Increase to Employee Benefits due to increased premiums for health insurance upon renewal
- Increase to Education & Training for specialized equipment training
- Increase to Small Equipment for furniture and lab equipment replacements

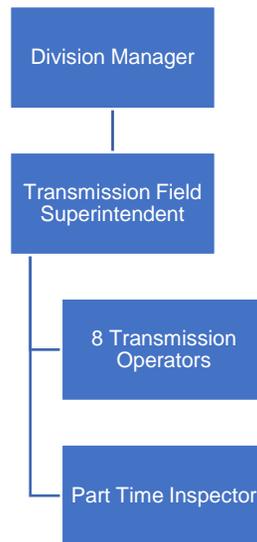
Laboratory Division	2021 Budget	2021 Projected Actual	Variance Favorable (Unfavorable)	2022 Budget	Increase (Decrease) Over 2021 Budget (\$)	Increase (Decrease) Over 2021 Budget (%)
Personnel Costs						
Salaries & Wages	\$ 630,184	\$ 630,184	\$ -	\$ 696,804	\$ 66,620	10.57%
Overtime Wages	10,000	10,000	-	11,025	1,025	10.25%
Employee Benefits	135,115	132,685	2,430	161,052	25,937	19.20%
FICA - Employer Share	39,692	37,709	1,983	43,886	4,194	10.57%
Medicare - Employer Share	9,283	8,786	497	10,264	981	10.57%
Travel Expense	3,200	94	3,106	7,300	4,100	128.13%
Dues and Fees	800	834	(34)	500	(300)	-37.50%
Education and Training	5,100	4,064	1,036	11,500	6,400	125.49%
Uniforms	2,400	1,249	1,151	2,400	-	0.00%
Total Personnel Costs	\$ 835,774	\$ 825,605	\$ 10,169	\$ 944,731	\$ 108,957	13.04%
Non-Personnel Costs						
EPD Compliance Sampling	\$ 39,000	\$ 31,629	\$ 7,371	\$ 39,000	\$ -	0.00%
Cleaning Services	12,320	12,320	-	13,655	1,335	10.84%
General Maintenance & Repairs	65,000	56,332	8,668	65,000	-	0.00%
SCADA Maintenance & Repairs	4,200	3,131	1,069	4,000	(200)	-4.76%
Security Maintenance & Repairs	5,000	1,640	3,360	8,000	3,000	60.00%
Automotive Maintenance & Repairs	3,000	4,253	(1,253)	3,000	-	0.00%
Grounds Maintenance	10,000	5,944	4,056	10,000	-	0.00%
Rental Equipment and Vehicles	2,800	2,321	479	2,500	(300)	-10.71%
Communications	23,806	21,381	2,425	26,317	2,511	10.55%
Office Supplies	5,800	3,176	2,624	5,600	(200)	-3.45%
Natural Gas	3,000	2,066	934	3,000	-	0.00%
Electricity	27,000	25,624	1,376	28,000	1,000	3.70%
Gas, Oil & Diesel	7,000	6,548	452	8,000	1,000	14.29%
Laboratory Supplies	150,000	150,000	-	155,000	5,000	3.33%
Food	2,220	749	1,471	2,220	-	0.00%
Janitorial Supplies	2,500	1,755	745	2,500	-	0.00%
Small Equipment	7,100	11,988	(4,888)	14,600	7,500	105.63%
Safety Supplies & Equipment	3,000	2,378	622	3,000	-	0.00%
Total Non-Personnel Costs	\$ 372,746	\$ 343,233	\$ 29,513	\$ 393,392	\$ 20,646	5.54%
Total Laboratory Expense	\$ 1,208,520	\$ 1,168,839	\$ 39,681	\$ 1,338,123	\$ 129,603	10.72%

Transmission Division

The Transmission Division is responsible for maintaining the transmission pipeline system and storage tanks. The Division’s primary functions include monthly meter reading, providing utility locates of 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 provide updates on buried infrastructure.

Full Time Equivalent Positions

Division	FY 2019	FY 2020	FY 2021	FY 2022
Transmission	10.75	10.75	10.50	10.50



Goal	Objective	Performance Measure
Meet or exceed regulatory requirements for drinking water distribution	Participate in GAWP Water Distribution System Award Program	> 95 score on program inspection
Proactively replace meters as they approach the end of their useful lives	Prioritize meter replacements annually with ≥ 5 changed per year	# of meters replaced per year
Ensure system operability through regular maintenance	Continue valve maintenance program to ensure all valves are located and operable	% of valves exercised and evaluated per year
Proactively replace critical blow-off valves	Replace valves through the Blow-Off Replacement program	# of valves replaced per year

Performance Measures (* projected)	2019	2020	2021	2022*
> 95 score on GAWP Distribution System inspection	98	120	115	95.0
GAWP Water Distribution System Gold Award (> 95 on inspection)	Yes	Yes	Yes	
# of meters replaced per year	6	6	9	5
% of valves exercised and evaluated per year	53%	16%	43%	25%
% of critical “high-risk” blow-off valves replaced per year	5	9	5	7

Transmission Division

Major Budget Changes

- Increase to Employee Benefits to more employees selecting family health insurance coverage than in the prior year
- Increase to Tank Maintenance & Repairs and Right of Way & Tank Grounds Maintenance for routine tank cleanings and additional easement clearing

Transmission Division	2021 Budget	2021 Projected Actual	Variance Favorable (Unfavorable)	2022 Budget	Increase (Decrease) Over 2021 Budget (\$)	Increase (Decrease) Over 2021 Budget (%)
Personnel Costs						
Salaries & Wages	\$ 727,782	\$ 680,032	\$ 47,750	\$ 741,339	\$ 13,557	1.86%
Overtime Wages	24,500	18,996	5,504	25,725	1,225	5.00%
Employee Benefits	124,893	144,634	(19,741)	180,824	55,931	44.78%
FICA - Employer Share	46,642	41,539	5,103	47,558	916	1.96%
Medicare - Employer Share	10,909	9,722	1,187	11,123	214	1.96%
Travel Expense	8,000	3,758	4,243	8,000	-	0.00%
Dues and Fees	1,500	868	632	1,000	(500)	-33.33%
Education and Training	9,500	4,644	4,856	9,500	-	0.00%
Uniforms	6,000	4,722	1,278	5,000	(1,000)	-16.67%
Total Personnel Costs	\$ 959,726	\$ 908,914	\$ 50,812	\$ 1,030,069	\$ 70,343	7.33%
Non-Personnel Costs						
Security Maintenance & Repairs	\$ 2,000	\$ -	\$ 2,000	\$ 2,000	\$ -	0.00%
Pipeline Maintenance & Repairs	850,000	850,000	-	850,000	-	0.00%
Tanks Maintenance & Repairs	220,420	162,759	57,661	260,420	40,000	18.15%
Meters Maintenance & Repairs	90,000	105,640	(15,640)	105,000	15,000	16.67%
Automotive Maintenance & Repairs	20,000	12,206	7,794	20,000	-	0.00%
Right of Way & Tank Grounds Maintenance	600,000	600,000	-	660,000	60,000	10.00%
Rental Equipment and Vehicles	1,000	-	1,000	1,000	-	0.00%
Communications	18,690	19,359	(669)	26,849	8,159	43.65%
Office Supplies	2,000	1,000	1,000	2,000	-	0.00%
Gas, Oil & Diesel	25,000	29,755	(4,755)	30,000	5,000	20.00%
Food	3,500	1,882	1,618	3,500	-	0.00%
Small Equipment	10,000	1,823	8,177	7,500	(2,500)	-25.00%
Safety Supplies & Equipment	15,000	7,400	7,600	15,000	-	0.00%
Total Non-Personnel Costs	\$ 1,857,610	\$ 1,791,825	\$ 65,785	\$ 1,983,269	\$ 125,659	6.76%
Total Transmission Expense	\$ 2,817,336	\$ 2,700,739	\$ 116,597	\$ 3,013,338	\$ 196,002	6.96%

Capital Budget

Capital Budget Overview

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 2022 and 2026. 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. CCMWA plans for capital projects on a 20-year schedule through long-term replacement programs, with projects currently prioritized beyond 2042. Projects are funded with cash reserves that are aligned with the 20-year schedule to ensure funding will be available when the projects are scheduled to begin.

The presented 5-year plan does not include any capital expenditures after 2026, nor any costs incurred before 2022. Projects that have continued into 2022 are budgeted for the remaining project spending and past spending is shown as a prior year investment. All projects listed in CCMWA's capital budget will be financed with designated reserves and net income.

The projects defined in the 2022-2026 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 have been prioritized based on criticality with one or two projects budgeted per year through 2055.
- **Blow-Off and Critical Valve Replacements** – Projects in this category were identified through an internal review and have been prioritized based on history of failures, age, and criticality.
- **Pipeline Improvements** - Projects in this category are large, multi-year pipeline projects that are focused on addressing system performance or expansion.
- **Plant Improvements** - Projects in this category are focused on the replacement, renovation, or addition of infrastructure at CCMWA's water treatment plants.
- **Pump Station Improvements** - Projects in this category are focused on the replacement, renovation, or addition of pump station infrastructure.
- **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 potential land purchases and pipeline relocation projects required by other entities, such as the Department of Transportation.

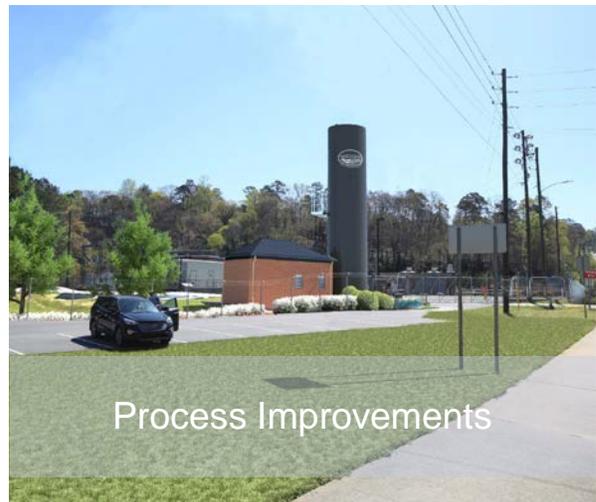
5-Year Capital Improvement Plan

5-Year Capital Improvement Plan 2022 - 2026

Project Description	Estimated Project Timeline	Prior Year(s) Investments	2022 Budgeted Cost	2023 Estimated Cost	2024 Estimated Cost	2025 Estimated Cost	2026 Estimated Cost	5-Year Estimated Cost
Aged Pipe Replacements								
Blackjack Tank Supply 36" Water Main	2019-2023	17,635,553	8,828,592	500,000	-	-	-	9,328,592
Factory Shoals 30" & Six Flags 24" Water Mains	2022-2025	-	425,000	5,792,046	3,023,802	449,946	-	9,690,794
Mars Hill Church Rd to Pine Mountain 36" Water Main	2022-2026	-	470,000	4,528,902	10,118,058	11,497,220	2,339,717	28,953,897
Pine Mountain to Old Hwy 41 42"/30" Water Main	2023-2027	-	-	509,600	5,954,659	10,692,301	9,950,134	27,106,694
Trickum Road 20" Water Main	2024-2026	-	-	-	324,480	3,971,951	350,958	4,647,389
Wooten Lake Road 24" Water Main	2025-2027	-	-	-	-	309,338	5,648,867	5,958,204
White Circle 24" & Old Hwy 41 20" Water Main	2026-2029	-	-	-	-	-	514,738	514,738
Dallas Highway 20" Water Main	2026-2028	-	-	-	-	-	330,719	330,719
Blow-Off & Critical Valve Replacements								
BOR 2022 - Acworth Due West Rd to McEver Park Dr (7)	2021-2022	15,000	1,985,000	-	-	-	-	1,985,000
BOR 2023 - Beech Haven Trail to Maner Rd (6)	2022-2023	-	15,000	1,336,400	-	-	-	1,351,400
BOR 2024 - Mableton Pkwy/Discovery Blvd/Riverview Rd (8)	2023-2024	-	-	15,600	1,822,496	-	-	1,838,096
BOR 2025 - Six Flags Way/Lee Ind./Mableton Pkwy (6)	2024-2025	-	-	-	16,224	1,445,450	-	1,461,674
BOR 2026 - Legacy Park to Jiles Rd (8)	2025-2026	-	-	-	-	16,873	1,971,212	1,988,085
BOR 2027 - Beech Haven Trail to Cumberland Blvd	2026-2027	-	-	-	-	-	17,548	17,548
Critical Valve Replacement Program	Ongoing	-	515,000	1,055,600	1,638,624	1,141,737	1,187,407	5,538,368
Pipeline Improvements								
Wyckoff 42" Raw Water Pipeline Improvements	2020-2023	689,731	8,029,111	3,500,000	-	-	-	11,529,111
Maner Road 36" Water Main Replacement	2020-2023	469,606	1,965,341	6,106,620	-	-	-	8,071,961
Cedarcrest New 16" Water Main	2022-2023	-	200,000	1,872,000	-	-	-	2,072,000
Plant Improvements								
Corrosion Control Feed System (Both Plants)	2022-2024	-	200,000	832,000	648,960	-	-	1,680,960
Quarles - Plant 2 SCADA Replacement	2018-2025	1,620,804	4,150,000	8,580,000	5,408,000	1,124,864	-	19,262,864
Quarles - Taste & Odor Process Improvements	2020-2022	742,967	3,799,742	-	-	-	-	3,799,742
Quarles - Reservoir Cleaning	2020-2023	233,904	300,000	3,500,000	-	-	-	3,800,000
Quarles - Plant 2 Filter Valve & Actuator Replacements	2021-2024	100,000	1,150,000	2,860,000	1,081,600	-	-	5,091,600
Quarles - Chemical Building Replacement	2022-2026	-	200,000	832,000	5,948,800	7,874,048	4,094,505	18,949,353
Quarles - Main Switchgear Replacement	2023-2025	-	-	520,000	2,433,600	2,530,944	-	5,484,544
Quarles - Plant 2 Pump Station Valve & Actuator Replacements	2024-2026	-	-	-	540,800	2,530,944	2,632,182	5,703,926
Quarles - Plant 2 Sludge Removal Improvements	2024-2026	-	-	-	324,480	1,012,378	935,887	2,272,744
Quarles - Thickener #3 Addition	2024-2025	-	-	-	173,056	1,619,804	-	1,792,860
Quarles - High Service & Transfer Pump Stations Exhaust Fans	2024-2025	-	-	-	162,240	1,518,566	-	1,680,806
Quarles - Campus Building Improvements	2025-2027	-	-	-	-	224,973	1,052,873	1,277,846
Quarles - 2MG Clearwell Replacement	2025-2028	-	-	-	-	697,416	1,813,281	2,510,696
Quarles - Advanced Treatment Process	2026-2030	-	-	-	-	-	1,169,859	1,169,859
Wyckoff - 6MG Clearwell Addition	2019-2022	11,976,513	7,005,200	-	-	-	-	7,005,200
Wyckoff - Maintenance Facility Improvements	2019-2023	134,292	400,000	2,184,000	-	-	-	2,584,000
Wyckoff - Press Filtrate Discharge Pre-Treatment	2021-2024	-	425,000	3,380,000	3,163,680	-	-	6,968,680
Wyckoff - Filter Underdrain Replacements (Filters 1-8)	2022-2024	-	200,000	1,976,000	2,055,040	-	-	4,231,040
Wyckoff - Dewatering Equipment Building & Thickener Additions	2023-2026	-	-	660,400	686,816	6,428,598	6,685,742	14,461,556
Wyckoff - Electrical Switchgear 2 Replacement	2024-2025	-	-	-	324,480	2,699,674	-	3,024,154
Pump Station Improvements								
Wyckoff Raw Water Pump Station Replacement	2024-2028	-	-	-	432,640	3,374,592	14,389,260	18,196,492
Water Storage Tank Improvements								
Blackjack Mountain Tank Replacement (5 MG)	2021-2023	100,000	700,000	2,808,000	-	-	-	3,508,000
Pine Mountain Tank No. 1 Replacement (5 MG)	2023-2025	-	-	104,000	2,055,040	1,687,296	-	3,846,336
Tank Painting Program	Ongoing	-	-	-	21,632	764,908	-	786,540
Other Capital Projects								
Sharp Mountain Creek Reservoir Land Purchases			Contingency	Contingency	Contingency	Contingency	Contingency	-
Department of Transportation Projects			2,200,000	1,040,000	1,081,600	1,124,864	1,169,859	6,616,323
Asset Renewal & Replacement Projects			5,758,537	6,760,000	7,030,400	7,311,616	10,528,727	37,389,280
General Contingency			2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	12,500,000
Totals			51,421,523	63,753,168	58,971,207	74,550,300	69,283,472	317,979,670

Note:
 Projects in **green font** are scheduled to be under design as of December 31, 2021.
 Projects in **purple font** are scheduled to be under construction as of December 31, 2021.
 Projects in **red font** are ongoing land purchases made when land is available or as condemnations are resolved.
 All other projects are not scheduled to start until after January 1, 2022.

Capital Project Descriptions



Blackjack Tank Supply 36" Water Main Replacement

This project will replace 32,000 feet of 30" pre-stressed concrete cylinder pipe with new 30"/36" zinc-coated ductile iron pipe. The water line being replaced was installed in the early 1950's as the first water supply line for the City of Marietta. This project will extend from the Quarles Water Treatment Plant on Lower Roswell Road to the Blackjack Mountain storage tank and from the Blackjack Mountain storage tank to U.S. Highway 41. Most of the original pipeline lies within a 60-foot-wide permanent easement through several residential neighborhoods, including the Indian Hills Country Club. The intent of this project is to eliminate critical, vulnerable infrastructure that is prone to leaks, with the last failure in 2016 that required emergency repairs.

Classification	Prior Year(s) Actual Spending	2021 Actual Spending (Estimated)	2022 Budgeted Spending	2023 Estimated Spending	Total Anticipated Spending at Completion
Design Engineering	395,423	-	-	-	395,423
Construction Engineering	132,473	303,316	367,340	89,237	892,366
Construction	4,022,316	11,228,802	8,270,081	410,763	23,931,962
Other Professional Services	34,632	4,821	547	-	40,000
Land & Easements	1,050,708	463,061	190,625	-	1,704,394
Totals	\$ 5,635,552	\$ 12,000,000	\$ 8,828,593	\$ 500,000	\$ 26,964,145

Project Justification and Operating Impact

This project was identified for replacement as part of the Aged Pipe Replacement (APR) Program study. By proactively replacing aged pipe, CCMWA mitigates the risk of catastrophic failure and costly repair.

Electricity costs associated with pumping are expected to decrease due to the new pipeline's improved hydraulic capabilities. Operational costs associated with emergency pipeline repairs are also expected to decrease as the average age of the transmission system decreases. Operational costs associated with these types of repairs are classified in the Transmission Division operating budget, while repairs over \$10,000 are capitalized as part of the annual AR&R budget.

Project Details

Project Manager:	Jacob Wilson		
Project Start Date:	Fiscal Year 2019	Engineering Contract:	\$1,287,789
Scheduled Completion Date:	Fiscal Year 2023	Construction Contract:	\$23,931,962

Factory Shoals 30” & Six Flags 24” Water Main Replacements

This project will replace 11,500 feet of 30” pre-stressed concrete cylinder pipe and 24” pre-stressed concrete cylinder pipe (installed in 1972) with new ductile iron pipe. The project begins near the intersection of South Gordon Road and Factory Shoals Road at Wade Farm Drive and is planned to run south along the travel lanes of Factory Shoals Road to the intersection of Factory Shoals Road and Riverside Parkway. The project includes a feed from this intersection to the Factory Shoals Tank Site. The project also continues southeast along Riverside Parkway to its termination point near the intersection of Six Flags Way and Six Flags Parkway with a tie-in to CCMWA’s existing 24-inch DIP water main.

Classification	2022 Budgeted Spending	2023 Estimated Spending	2024 Estimated Spending	2025 Estimated Spending	Total Anticipated Spending at Completion
Design Engineering	400,000	-	-	-	400,000
Construction Engineering	20,000	300,000	200,000	50,000	570,000
Construction	-	4,942,046	2,278,802	399,946	7,620,794
Other Professional Services	5,000	50,000	45,000	-	100,000
Land & Easements	-	500,000	500,000	-	1,000,000
Totals	\$ 425,000	\$ 5,792,046	\$ 3,023,802	\$ 449,946	\$ 9,690,794

Project Justification and Operating Impact

This project was identified for replacement as part of the Aged Pipe Replacement (APR) Program study. By proactively replacing aged pipe, CCMWA mitigates the risk of catastrophic failure and costly repair.

Electricity costs associated with pumping is expected to decrease, as the new pipeline will have improved hydraulic capabilities. Operational costs associated with emergency pipeline repairs are also expected to decrease as the average age of the transmission system decreases. Operational costs associated with these types of repairs are classified in the Transmission Division operating budget, while repairs over \$10,000 are capitalized as part of the annual AR&R budget.

Project Details

Project Manager:	Chris Dillard		
Project Start Date:	Fiscal Year 2022	Engineering Contract:	Not Awarded
Scheduled Completion Date:	Fiscal Year 2025	Construction Contract:	Not Awarded

Mars Hill Church Rd to Pine Mountain 36” Water Main Replacement

This project will replace 22,000 feet of 30” and 36” pre-stressed concrete cylinder pipe (installed in 1964) with new 36” ductile iron pipe. This section of pipeline is in the northwestern portion of Cobb County and generally follows Mars Hill Church Rd, Acworth Due West Rd, and Old Stilesboro Rd. The project also includes a cross-country phase between Paul Samuel Rd and the existing CCMWA Pine Mountain Tank site.

Classification	2022 Budgeted Spending	2023 Estimated Spending	2024 Estimated Spending	2025-2026 Estimated Spending	Total Anticipated Spending at Completion
Design Engineering	470,000	130,000	-	-	600,000
Construction Engineering	-	100,000	200,000	400,000	700,000
Construction	-	3,648,902	8,168,058	12,336,937	24,153,897
Other Professional Services	-	150,000	250,000	100,000	500,000
Land & Easements	-	500,000	1,500,000	1,000,000	3,000,000
Totals	\$ 470,000	\$ 4,528,902	\$ 10,118,058	\$ 13,836,937	\$ 28,953,897

Project Justification and Operating Impact

This project was identified for replacement as part of the Aged Pipe Replacement (APR) Program study. By proactively replacing aged pipe, CCMWA mitigates the risk of catastrophic failure and costly repair.

Electricity costs associated with pumping is expected to decrease, as the new pipeline will have improved hydraulic capabilities. Operational costs associated with emergency pipeline repairs are also expected to decrease as the average age of the transmission system decreases. Operational costs associated with these types of repairs are classified in the Transmission Division operating budget, while repairs over \$10,000 are capitalized as part of the annual AR&R budget.

Project Details

Project Manager:	Jacob Wilson		
Project Start Date:	Fiscal Year 2022	Engineering Contract:	Not Awarded
Scheduled Completion Date:	Fiscal Year 2026	Construction Contract:	Not Awarded

2022 Blow-Off Replacements

This project will replace seven 8" and 12" saddle outlets and associated blow-off piping on existing 48" and 42" ductile iron pipe (DIP) water mains installed between 1994 and 1999 in the area of Acworth Due West Rd and McEver Park Drive. Although the ductile iron pipelines are less than 30 years old, they have experienced blow-off saddle failures in 2014 and 2017.

Classification	2021 Actual Spending (Estimated)	2022 Budgeted Spending	Total Anticipated Spending at Completion
Design Engineering	14,340	10,266	24,606
Construction Engineering	-	74,670	74,670
Construction	-	1,899,724	1,899,724
Other Professional Services	660	340	1,000
Totals	\$ 15,000	\$ 1,985,000	\$ 2,000,000

Project Justification and Operating Impact

CCMWA has created a multi-year program to replace critical blow-off assemblies to prevent failure of these appurtenances. Delay in addressing this ongoing risk could result in widespread water outages, property damage and personal injury. Prioritization of the critical blow-offs throughout CCMWA's transmission system was generated from information gathered for the Aged Pipe Replacement Program. A procurement plan for effective and efficient replacement of the identified blow-offs was then developed by staff.

Operational costs associated with emergency pipeline repairs are expected to decrease as the average age of the transmission system decreases. Operational costs associated with these types of repairs are classified in the Transmission Division operating budget, while repairs over \$10,000 are capitalized as part of the annual AR&R budget.

Project Details

Project Manager:	Chris Dillard		
Project Start Date:	Fiscal Year 2021	Engineering Contract:	\$99,276
Scheduled Completion Date:	Fiscal Year 2022	Construction Contract:	\$1,350,592

2023 Blow-Off Replacements

This project will replace six 6” saddle outlets and associated blow-off piping with 8” tees and blow-offs on existing 36” ductile iron pipe (DIP) water mains installed in 1989 in the area of Maner Road/Plant Atkinson Road to Beech Haven Trail. Although the ductile iron pipelines are only 33 years old, they have experienced blow-off saddle failures in 2013 and 2014.

Classification	2022 Budgeted Spending	2023 Estimated Spending	Total Anticipated Spending at Completion
Design Engineering	14,500	10,000	24,500
Construction Engineering	-	55,500	55,500
Construction	-	1,270,400	1,270,400
Other Professional Services	500	500	1,000
Totals	\$ 15,000	\$ 1,336,400	\$ 1,351,400

Project Justification and Operating Impact

CCMWA has created a multi-year program to replace critical blow-off assemblies to prevent failure of these appurtenances. Delay in addressing this ongoing risk could result in widespread water outages, property damage and personal injury. Prioritization of the critical blow-offs throughout CCMWA’s transmission system was generated from information gathered for the Aged Pipe Replacement Program. A procurement plan for effective and efficient replacement of the identified blow-offs was then developed by staff.

Operational costs associated with emergency pipeline repairs are expected to decrease as the average age of the transmission system decreases. Operational costs associated with these types of repairs are classified in the Transmission Division operating budget, while repairs over \$10,000 are capitalized as part of the annual AR&R budget.

Project Details

Project Manager:	Chris Dillard	Engineering Contract:	Not Awarded
Project Start Date:	Fiscal Year 2022	Construction Contract:	Not Awarded
Scheduled Completion Date:	Fiscal Year 2023		

Wyckoff 42" Raw Water Pipeline Improvements

This project will replace 7,200 feet of 30" pre-stressed concrete cylinder pipe with new 54" ductile iron pipe. The Wyckoff Water Treatment Plant is supplied by two raw water mains from Allatoona Lake that were installed in stages to meet water demands. The initial raw water main was installed in 1965 and consists of approximately 23,000 feet of 30", 36", and 42" pre-stressed concrete cylinder pipe. A second 60" raw water main was installed in 1977 and runs parallel to the original raw water main. The 30" section of the original raw water main, that runs from Allatoona Lake to State Route 293, will be replaced during this project and remaining sections have been prioritized for replacement in the future.

Classification	Prior Year(s) Actual Spending	2021 Actual Spending (Estimated)	2022 Budgeted Spending	2023 Estimated Spending	Total Anticipated Spending at Completion
Design Engineering	34,255	125,185	-	-	159,440
Construction Engineering	-	2,700	254,988	28,000	285,688
Construction	-	217,146	7,769,568	3,472,000	11,458,714
Other Professional Services	4,617	5,828	4,555	-	15,000
Land & Easements	50,859	249,141	-	-	300,000
Totals	\$ 89,731	\$ 600,000	\$ 8,029,111	\$ 3,500,000	\$ 12,218,842

Project Justification and Operating Impact

This section of pipe was selected for replacement due to hydraulic issues caused by the raw water main's varying diameters, which will be improved by replacing the 30" diameter section with 54" diameter pipe.

Operational costs associated with emergency pipeline repairs are expected to decrease as the average age of the transmission system decreases. Operational costs associated with these types of repairs are classified in the Transmission Division operating budget, while repairs over \$10,000 are capitalized as part of the annual AR&R budget.

Project Details

Project Manager:	Chris Dillard		
Project Start Date:	Fiscal Year 2020	Engineering Contract:	\$445,128
Scheduled Completion Date:	Fiscal Year 2023	Construction Contract:	\$11,458,714

Maner Road 36" Water Main Replacement

This project will replace up to 4,000 feet of 36" ductile iron pipe that has experienced multiple corrosion related failures in the last 18 years. The last failure occurred in 2019 and resulted in loss of pressure to some customers of Cobb County Water System. This section of pipeline is in the southern portion of Cobb County and is adjacent to Georgia Power's Plant McDonough-Atkinson near the intersection of I-285 and South Cobb Drive. A Business Case Evaluation was completed in 2020 and determined that, rather than a miles-long replacement project in a new corridor, replacing pipe in the corrosion-affected area would be the most viable alternative. The project scope has been finalized and will include Fiberglass Reinforced Polymer (FRP) pipe, a non-metallic material.

Classification	Prior Year(s) Actual Spending	2021 Actual Spending (Estimated)	2022 Budgeted Spending	2023 Estimated Spending	Total Anticipated Spending at Completion
Design Engineering	32,733	194,050	107,959	-	334,742
Construction Engineering	-	-	33,399	300,595	333,994
Construction	-	-	1,716,806	5,756,025	7,472,831
Other Professional Services	-	242,823	57,177	-	300,000
Land & Easements	-	-	50,000	50,000	100,000
Totals	\$ 32,733	\$ 436,873	\$ 1,965,341	\$ 6,106,620	\$ 8,541,567

Project Justification and Operating Impact

Due to the criticality of this project, it was introduced into the 2020-2024 CIP to enhance the reliability of the transmission system.

The proactive replacement of this pipe section before another corrosion related failure occurs will reduce operational costs associated with emergency pipeline repairs. The repair made in 2019 resulted in unplanned operational costs of over \$280,000.

Project Details

Project Manager:	Jacob Wilson		
Project Start Date:	Fiscal Year 2020	Engineering Contract:	\$668,736
Scheduled Completion Date:	Fiscal Year 2023	Construction Contract:	Not Awarded

Cedarcrest New 16” Water Main

This project will install 2,500 feet of new 16” ductile iron pipe water main in northwestern Cobb County, along Highway 41/Cobb Parkway and Cedarcrest Road. This project will connect CCMWA’s existing pipeline along Highway 41 to an existing 16” water main, owned by CCMWA’s largest customer Cobb County Water System, and will result in improved reliability in the area.

Classification	2022 Budgeted Spending	2023 Estimated Spending	Total Anticipated Spending at Completion
Design Engineering	25,000	-	25,000
Construction Engineering	10,000	40,000	50,000
Construction	150,000	1,827,000	1,977,000
Other Professional Services	5,000	5,000	10,000
Land & Easements	10,000	-	10,000
Totals	\$ 200,000	\$ 1,872,000	\$ 2,072,000

Project Justification and Operating Impact

This project is necessary due to a Georgia Department of Transportation road-widening project and the future abandonment of a pipeline and meter that supplies water to Paulding County Water System. By adding this pipeline section, supply to this area will shift away from the meter that currently supplies Paulding County to an existing meter on Cedarcrest Road.

This project will have no impact on the operating budget, as pipelines require little maintenance until they near the end of their useful lives, which is expected to be more than 50 years.

Project Details

Project Manager:	Jacob Wilson		
Project Start Date:	Fiscal Year 2022	Engineering Contract:	Not Awarded
Scheduled Completion Date:	Fiscal Year 2023	Construction Contract:	Not Awarded

Corrosion Control Feed System

This project will add a new chemical feed system for orthophosphate at both water treatment plants. Orthophosphate is used for internal corrosion control and will replace CCMWA's current corrosion control chemical. The new systems will include truck fill stations, storage tanks, chemical containment, feed pumps, and SCADA controls which will be added to both the Quarles and Wyckoff treatment plant chemical buildings. Safety and spill response will also be part of the design due to orthophosphate being a strong acid.

Classification	2022 Budgeted Spending	2023 Estimated Spending	2024 Estimated Spending	Total Anticipated Spending at Completion
Design Engineering	200,000	-	-	200,000
Construction Engineering	-	125,000	75,000	200,000
Construction	-	706,000	573,960	1,279,960
Other Professional Services	-	1,000	-	1,000
Totals	\$ 200,000	\$ 832,000	\$ 648,960	\$ 1,680,960

Project Justification and Operating Impact

CCMWA worked with Hazen and Sawyer to complete a desk top evaluation and a 17-month pilot study to determine the best corrosion control chemical for the next 20 years. In 1994, the pH-Alkalinity strategy was implemented by CCMWA, which has accomplished compliance with the Lead and Copper Rule. However, pinhole leaks have become more common in copper pipe in residential homes on our customers' systems since 2010. In addition, EPA revised the Lead and Copper rule in 2021 to be more precise on lead and copper levels in home, schools, and daycare centers. To stay ahead of this regulation, CCMWA performed a lead and copper treatment optimization pilot study. The results of the study indicated that orthophosphate produce would be more beneficial for lead and copper control. It is also expected to have benefits of slowing the pinhole leak issues occurring in some residences with copper pipe. CCMWA will seek approval from EPD to implement this new strategy in 2022 and then proceed with the design, construction, and phased introduction of the new chemical.

Water treatment chemical costs will increase for both plants when orthophosphate is added.

Project Details

Project Manager:	Patrick Pherson		
Project Start Date:	Fiscal Year 2022	Engineering Contract:	Not Awarded
Scheduled Completion Date:	Fiscal Year 2024	Construction Contract:	Not Awarded

Quarles - Plant 2 SCADA Replacement

This project is intended to overhaul and upgrade the Supervisory Control and Data Acquisition (SCADA) system at Quarles Plant 2. The current system was installed in 2002 and has reached the end of its useful life due to hardware and software obsolescence. The project scope includes replacement of SCADA hardware and software, server equipment, programmable logic controls (PLCs), panels, and field instruments. The project will also include installation of new conduit and fiber between the Quarles Water Treatment Plant and the Quarles Raw Water Pump Station, modifications to the Plant 2 operators' station, a new server room on the second level, and removal of control panels.

Classification	Prior Year(s) Actual Spending	2021 Actual Spending (estimated)	2022 Budgeted Spending	2023 Estimated Spending	2024-2025 Estimated Spending	Total Anticipated Spending at Completion
Design Engineering	496,939	845,423	-	-	-	1,342,362
Construction Engineering	-	254,442	357,041	835,476	430,397	1,877,355
Construction	-	-	3,716,959	7,644,524	6,052,467	17,363,951
Materials	-	-	50,000	100,000	50,000	250,000
Other Prof. Services	23,865	135	26,000	-	-	50,000
Totals	\$ 520,804	\$ 1,100,000	\$4,150,000	\$8,580,000	\$6,532,864	\$ 20,883,668

Project Justification and Operating Impact

The SCADA system has become an integral part of the water treatment process since its installation almost 20 years ago. However, due to the age of the system it is becoming difficult to locate replacement parts for the existing equipment. Older PLCs are slower to respond to system changes and have been failing at an increasing rate over the last two years.

Replacement of the existing SCADA system should minimize the likelihood of potential downtime, which would impact operation of the plant and decrease the cost of maintaining aging equipment. The Quarles Division budget for SCADA maintenance and repairs has increased in the last three years in response to failing equipment. After the SCADA system is upgraded, maintenance costs for SCADA should decrease in the Quarles operating budget.

Project Details

Project Manager:	Rita Neely		
Project Start Date:	Fiscal Year 2018	Engineering Contract:	\$3,219,717
Scheduled Completion Date:	Fiscal Year 2025	Construction Contract:	Not Awarded

Quarles - Taste & Odor Process Improvements

This project will involve the addition of a new treatment process located at the Quarles Raw Water Pump Station site to address intermittent taste and odor problems. The actual pretreatment process will be selected during the design process of this project but will most likely involve the use of powdered activated carbon, which is already effectively in use at the Wyckoff Raw Water Pump Station to address taste and odor concerns.

Classification	Prior Year(s) Actual Spending	2021 Actual Spending (estimated)	2022 Budgeted Spending	Total Anticipated Spending at Completion
Design Engineering	242,967	255,335	-	498,302
Construction Engineering	-	22,313	205,994	228,307
Construction	-	220,722	3,584,278	3,805,000
Other Professional Services	-	1,630	9,470	11,100
Totals	\$ 242,967	\$ 500,000	\$ 3,799,742	\$ 4,542,709

Project Justification and Operating Impact

The existing treatment process at the Quarles Water Treatment Plant does not include any specific processes to address intermittent taste and odor events which might occur.

If powdered activated carbon is chosen as the pretreatment process for this project, the annual cost of procuring the product is estimated to be less than \$20,000 and would be charged to the Quarles Division budget under water treatment chemicals.

Project Details

Project Manager:	Rita Neely		
Project Start Date:	Fiscal Year 2019	Engineering Contract:	\$726,609
Scheduled Completion Date:	Fiscal Year 2022	Construction Contract:	\$3,805,000

Quarles - Reservoir Cleaning

The Quarles Water Treatment Plant utilizes an approximate 7.5-acre reservoir for temporary storage of raw water pumped from the Chattahoochee River by the Quarles Raw Water Intake. The reservoir provides for equalization of the raw water, additional capacity in the event of a failure of the intake or contamination plume in the Chattahoochee River, and optimization of pumping schedules to reduce power usage. Preliminary engineering for this project was originally scheduled to begin in 2021; however, in the summer of 2019, an unprecedented episode of increased growth of aquatic plant vegetation and algae in the reservoir created problems in the downstream treatment process. This event caused the project scheduled to be escalated, with design occurring in 2020 and construction activities beginning in 2021.

Classification	Prior Year(s) Actual Spending	2021 Actual Spending (estimated)	2022 Budgeted Spending	2023 Estimated Spending	Total Anticipated Spending at Completion
Design Engineering	50,000	150,000	65,901	-	299,805
Construction Engineering	-	-	26,268	236,512	262,680
Construction	-	-	202,831	3,258,588	3,461,419
Other Professional Services	-	-	5,000	5,000	10,000
Totals	\$ 83,904	\$ 150,000	\$ 300,000	\$ 3,500,000	\$ 4,033,904

Project Justification and Operating Impact

Sediment builds up in the reservoir over time, reducing its storage capacity and its ability to function effectively. The reservoir was last cleaned in 2010 and since then, sediment levels have been monitored periodically to determine when the next cleaning will be required. Removing the accumulated sediment will significantly reduce the potential for growth of aquatic vegetation in the reservoir.

This project will not have an annual impact on the operating budget, but it does help the Quarles Division control costs related to water treatment chemicals. Improved conditions in the reservoir will help to mitigate water quality issues coming into the treatment process, which would require more chemicals to address than water without algae and vegetation.

Project Details

Project Manager:	Tom Ginn		
Project Start Date:	Fiscal Year 2020	Engineering Contract:	\$562,485
Scheduled Completion Date:	Fiscal Year 2023	Construction Contract:	Not Awarded

Quarles - Plant 2 Filter Valve & Actuator Replacements

This project will replace the filter valves on Filters 1 - 11 and the actuators on Filters 4 -11 in the Quarles Water Treatment Plant 2, the actuators in the High Service Pump Station and Transfer Pump Station, and the oil-actuated cylinder valves at the Quarles Raw Water Pump Station. All actuators will be replaced with electric operated actuators.

Classification	2021 Actual Spending (estimated)	2022 Budgeted Spending	2023 Estimated Spending	2024 Estimated Spending	Total Anticipated Spending at Completion
Design Engineering	100,000	131,358		-	231,358
Construction Engineering	-	66,805	133,610	66,804	267,219
Construction	-	926,837	2,726,390	1,014,796	4,668,023
Other Professional Services	-	25,000	-	-	25,000
Totals	\$ 100,000	\$ 1,150,000	\$ 2,860,000	\$ 1,081,600	\$ 5,191,600

Project Justification and Operating Impact

The current valves and actuator equipment are hydraulic (oil) actuators which have reached the end of their useful lives and are prone to leaks. Hydraulic actuators also require air compressors and oil accumulators to be maintained in case of a power failure. Electric actuators will increase reliability and eliminate the need for additional equipment.

Maintenance and repair costs associated with actuators are classified in the Quarles Division operating budget and costs associated with these types of repairs are expected to decrease as the average age of plant equipment decreases.

Project Details

Project Manager:	Rita Neely		
Project Start Date:	Fiscal Year 2021	Engineering Contract:	\$498,577
Scheduled Completion Date:	Fiscal Year 2024	Construction Contract:	Not Awarded

Quarles - Chemical Building Replacement

This project will replace the current Quarles chemical buildings with a new building to house current and future chemical feed systems. Construction will be planned so that the water treatment plant remains operational, with the new building fully operational before the old buildings are demolished. Each chemical housed in the chemical building as health and safety hazards which must be considered in the design of the facility. The design of this project will include truck unloading stations, chemical storage tanks, chemical containment, generating equipment for chlorine dioxide and hypochlorite, feed pumping equipment, and SCADA controls. A new feed system will be added to boost the alkalinity of the water by adding carbon dioxide and an orthophosphate feed system, which is being designed and constructed as a smaller project, will also be housed in the new building.

Classification	2022 Budgeted Spending	2023 Estimated Spending	2024 Estimated Spending	2025-2026 Estimated Spending	Total Anticipated Spending at Completion
Design Engineering	200,000	300,000	-	-	500,000
Construction Engineering		50,000	250,000	700,000	1,000,000
Construction		477,000	5,698,800	11,268,553	17,444,353
Other Professional Services	-	5,000	-	-	5,000
Totals	\$ 200,000	\$ 832,000	\$ 5,948,800	\$ 11,968,553	\$ 18,949,353

Project Justification and Operating Impact

The current chemical building has been retrofitted over the years to accommodate the addition of new chemical feed systems. However, these modifications resulted in issues with ventilation, safety, and ease of access for maintenance of equipment. Two new chemical processes are planned for the Quarles Water Treatment Plant, but the current chemical building cannot accommodate further additions. The new chemical building will consolidate all systems into a single facility and include specific chemical resistant coatings, safety upgrades, proper ventilation, and a covered area for truck offloading.

Maintenance and repair costs associated with the chemical building are expected to decrease once the building and equipment is replaced. Costs associated with the addition of orthophosphate are considered in the operating impact of the Corrosion Control Feed System project.

Project Details

Project Manager:	Patrick Pherson		
Project Start Date:	Fiscal Year 2022	Engineering Contract:	Not Awarded
Scheduled Completion Date:	Fiscal Year 2026	Construction Contract:	Not Awarded

Wyckoff - 6MG Clearwell Addition

This project will provide approximately 6 million gallons (MG) of additional clearwell storage for the Wyckoff Water Treatment Plant. Water stored in clearwells has been fully treated but is being detained for the required contact time with chlorine disinfectant prior to being pumped into the transmission system. The two existing 3 MG clearwells at the Wyckoff Plant were constructed in 1964 and 1984. Both clearwells are in good structural condition and should have more than 25 years of useful life remaining. A facilities assessment conducted in 2014 determined that the existing clearwell storage capacity was inadequate for a 72 MGD plant, providing a storage to treatment ratio of only 8.33% compared to the industry standard of 15%. The addition of a 6 MG clearwell will increase the storage to treatment ratio at Wyckoff to 15% for an 82 MGD plant, which covers the existing plant plus 10 MGD to allow for future plant expansion.

Classification	Prior Year(s) Actual Spending	2021 Actual Spending (estimated)	2022 Budgeted Spending	Total Anticipated Spending at Completion
Design Engineering	142,464	-	-	142,464
Construction Engineering	118,261	430,436	159,139	707,836
Construction	2,214,883	9,069,564	6,596,753	17,791,200
Other Professional Services	905	-	249,308	340,213
Totals	\$ 2,476,513	\$ 9,500,000	\$ 7,005,200	\$ 18,981,713

Project Justification and Operating Impact

Although CCMWA can take one clearwell out of service for maintenance, the remaining clearwell does not provide enough storage for adequate contact time with chlorine disinfectant. To accommodate the decreased storage capacity, the plant must chlorinate raw water instead of finished water to provide the necessary contact time, which can increase disinfection byproducts. By adding an additional clearwell, the Wyckoff plant would be able to take clearwells out of service for necessary maintenance without sacrificing treatment standards.

This project will not have an annual impact on the operating budget; however, every five years the Wyckoff Division will budget approximately \$75,000 in general maintenance and repairs for cleaning and inspection of the additional clearwell.

Project Details

Project Manager:	Chris Dillard		
Project Start Date:	Fiscal Year 2019	Engineering Contract:	\$850,300
Scheduled Completion Date:	Fiscal Year 2022	Construction Contract:	\$17,791,200

Wyckoff - Maintenance Facility Improvements

This project will involve the renovation of the Maintenance Building at the Wyckoff Water Treatment Plant campus and possibly the finishing of the second floor of the Wyckoff Water Treatment Plant to provide additional space. The Maintenance Building was designed and built in 1997 for a smaller staff than is currently housed in the building and was not designed to contain communication hub equipment. Interim building improvements have been made as part of this project, including the replacement of ventilation equipment in areas where electronics are stored. Initially, a consultant will be engaged to perform a space needs analysis, which will result in a detailed scope of work. Any decision related to staffing and space needs will be made in conjunction with other space relocations across the organization.

Classification	Prior Year(s) Actual Spending	2021 Actual Spending (estimated)	2022 Budgeted Spending	2023 Estimated Spending	Total Anticipated Spending at Completion
Design Engineering	-	60,306	139,694	-	200,000
Construction Engineering	-	-	10,000	190,000	200,000
Construction	-	-	245,306	1,894,000	2,139,306
Materials	73,986	-	-	100,000	173,986
Other Professional Services	-	-	5,000	-	5,000
Totals	\$ 73,986	\$ 60,306	\$ 400,000	\$ 2,184,000	\$ 2,718,292

Project Justification and Operating Impact

The current Maintenance Building on the Wyckoff Water Treatment Plant property cannot provide enough workspace for the employees assigned to the building and many employees share offices. In addition, there have been ongoing roof condensation issues in the building resulting in damage to stored electronics equipment. By renovating the space and possibly utilizing space elsewhere on the Wyckoff property, enough workspace can be provided to meet the needs of current staff and allow for adequate storage of climate sensitive, computerized equipment.

The operating impact of this project is difficult to estimate because the scope of the project is not clearly defined. If unused space in the Treatment Plant is finished to provide additional workspace, there could be an impact to electricity and natural gas expenses because the unused space is not currently climate controlled. As this project moves further along in the design phase, operational costs will be estimated based on the selected design.

Project Details

Project Manager:	Lance Buchanan	Engineering Contract:	Not Awarded
Project Start Date:	Fiscal Year 2019	Construction Contract:	Not Awarded
Scheduled Completion Date:	Fiscal Year 2023		

Wyckoff - Press Filtrate Discharge Pre-Treatment

The Wyckoff Water Treatment plant will need to acquire an industrial wastewater discharge permit from the Cobb County Water System for use of the wastewater system to dispose of Press Filtrate from the Residuals process. This permit has specific limits on the water quantity and quality that can be discharged to the sewer. Staff will work with Cobb County Water System to determine the specific requirements of Wyckoff's permit, then design and install the required equipment to meet the permit requirements. Most likely the permit will require the addition of a flow meter, online pH analyzer, and possibly the addition of a chemical system to neutralize the press filtrate.

Classification	2022 Budgeted Spending	2023 Estimated Spending	2024 Estimated Spending	Total Anticipated Spending at Completion
Design Engineering	150,000	-	-	150,000
Construction Engineering	20,000	40,000	40,000	100,000
Construction	254,000	3,339,000	3,123,680	6,716,680
Other Professional Services	1,000	1,000	-	2,000
Totals	\$ 425,000	\$ 3,380,000	\$ 3,163,680	\$ 6,968,680

Project Justification and Operating Impact

This project will address a regulatory requirement from Cobb County Water System, the entity that operates wastewater treatment plants in the county.

The industrial wastewater discharge permit fee increased sewer handling costs in the Wyckoff Division operating budget beginning in 2021. The cost of the new permit is approximately \$950,000, to be paid in monthly installments over a 3-year period. If the completed project requires a chemical system, the Wyckoff Division budget will also have increased water treatment chemical expenses beginning in 2024.

Project Details

Project Managers:	Lance Buchanan		
Project Start Date:	Fiscal Year 2022	Engineering Contract:	Not Awarded
Scheduled Completion Date:	Fiscal Year 2024	Construction Contract:	Not Awarded

Wyckoff – Filter Underdrain Replacements (Filters 1-8)

This project will replace the existing filter underdrains and media in Filters 1, 3, 4, 6, 7, and 8 with stainless steel underdrains and new media to match the existing filter media specifications. The underdrains and media in Filters 2 and 5 were replaced with stainless steel underdrains in the last two years due to premature failures. By replacing the remaining underdrains, potential failures will be mitigated, and all eight filters will be consistent with standardized operating procedures.

Classification	2022 Budgeted Spending	2023 Estimated Spending	2024 Estimated Spending	Total Anticipated Spending at Completion
Design Engineering	200,000	-	-	200,000
Construction Engineering	-	50,000	100,000	150,000
Construction	-	1,901,000	1,955,040	3,856,040
Other Professional Services	-	25,000	-	25,000
Totals	\$ 200,000	\$ 1,976,000	\$ 2,055,040	\$ 4,231,040

Project Justification and Operating Impact

In 2003, the subsurface wash system that was originally installed in Filters 1 through 8 of the Wyckoff Water Treatment Plant was demolished and an air scour system was installed along with new Leopold Type S underdrains with an IMS Cap. Over the past couple of years, plant staff has noticed failures in the underdrains because of either plugging of the underdrain or the undrain blocks uplifting during backwash cycles. Two of the right filter underdrains have already been replaced due to premature failure and the remaining six underdrains have begun to show signs of possible failure.

Once installed, the filter underdrains and media require no additional maintenance outside of the normal operating procedures.

Project Details

Project Managers:	Lance Buchanan	Engineering Contract:	Not Awarded
Project Start Date:	Fiscal Year 2022	Construction Contract:	Not Awarded
Scheduled Completion Date:	Fiscal Year 2024		

Blackjack Mountain Tank Replacement

This project will replace the existing steel 4.2-million-gallon finished water storage tank at the Blackjack Mountain location with a new 4.2-million-gallon finished water storage tank.

Classification	2021 Actual Spending (estimated)	2022 Budgeted Spending	2023 Estimated Spending	Total Anticipated Spending at Completion
Design Engineering	100,000	58,009	-	158,009
Construction Engineering	-	10,261	92,349	102,610
Construction	-	630,730	2,714,651	3,345,381
Other Professional Services	-	1,000	1,000	2,000
Totals	\$ 100,000	\$ 700,000	\$ 2,808,000	\$ 3,608,000

Project Justification and Operating Impact

A structural assessment of the tank was performed in January 2021, while the tank was out of service for the Blackjack Tank Supply 36" Water Line Replacement. The structural assessment determined that immediate repairs will be needed to put the tank back in service after the water line project is complete and additional repairs would be needed within 3-5 years. A cost analysis indicated that replacement of the tank would be more cost effective than making the necessary repairs.

This project will not have an annual impact on the operating budget; however, every other year the Transmission Division budget includes approximately \$20,000 under tank maintenance and repairs for cleaning and inspection of each water storage tank.

Project Details

Project Managers:	Rita Neely		
Project Start Date:	Fiscal Year 2021	Engineering Contract:	\$260,619
Scheduled Completion Date:	Fiscal Year 2023	Construction Contract:	Not Awarded

Asset Renewal & Replacement Projects

	Prior Year Allocations Carried Over	2022 Allocation	Total Project Allocation	Estimated Prior Year Investments	2022 Budgeted Project Spending
Engineering					
Remote Flow and Pressure Monitoring Sites (2)	85,800	-	85,800	55,458	30,342
	85,800	-	85,800	55,458	30,342
Information Technology					
Wyckoff Filter Building Copier Replacement	-	9,000	9,000	-	9,000
Security Camera Software Replacement	-	76,695	76,695	-	76,695
Enterprise Directory Server for Camera System	-	9,100	9,100	-	9,100
	-	94,795	94,795	-	94,795
Security					
Wyckoff Main Gate Guard Shack Installation	328,750	216,250	545,000	151,069	393,931
Quarles Main Gate Operator Replacements	-	20,000	20,000	-	20,000
Quarles Intake Camera Server Replacement	-	19,740	19,740	-	19,740
Administration 1190 Building Camera Server	-	18,180	18,180	-	18,180
Wyckoff Camera Server Replacement (3 servers to 1 server)	-	22,775	22,775	-	22,775
	328,750	296,945	625,695	151,069	474,626
Hickory Log Creek					
Electric Valve Actuator Replacement - Bottom of dam	-	12,000	12,000	-	12,000
Water Quality Sonde Replacement - Upstream location	-	13,500	13,500	-	13,500
Hickory Log Creek Camera Server Replacement	-	15,765	15,765	-	15,765
	-	41,265	41,265	-	41,265
Wyckoff Treatment Division					
Wyckoff SCADA Network Segmentation	110,000	-	110,000	20,739	89,261
Post Flash Mix Gate 1 Actuator Replacement	13,475	-	13,475	-	13,475
Chlorine Dioxide Generator	-	60,000	60,000	-	60,000
Disc-Flo Pump Replacement	-	60,576	60,576	-	60,576
High Service Pump #4 Refurbishment	-	49,875	49,875	-	49,875
Filter Console PLC Upgrades	-	50,000	50,000	-	50,000
Turbidimeter Replacements (30 units)	-	160,000	160,000	-	160,000
TOC Analyzer for GAC effluent	-	27,441	27,441	-	27,441
Particle Counter Replacements (30 units)	-	171,150	171,150	-	171,150
Electrical Building HVAC Replacement	-	500,000	500,000	-	500,000
MRI Flume Covers	-	154,000	154,000	-	154,000
Wyckoff SCADA Server Replacement and Software Upgrade	-	620,000	620,000	-	620,000
	123,475	1,853,042	1,976,517	20,739	1,955,778

	Prior Year Allocations Carried Over	2022 Allocation	Total Project Allocation	Estimated Prior Year Investments	2022 Budgeted Project Spending
Quarles Treatment Division					
Hypo Building HVAC Improvements	300,000	-	300,000	32,877	267,123
Quarles RWPS Rakes 4, 5, & 6 Drive Chain Replacement	-	53,319	53,319	-	53,319
Replace 2006 International Dump Truck (Vehicle 06-02)	-	143,833	143,833	86	143,747
Raw Water #1 Vacuum Priming System Replacement	50,000	20,000	70,000	4,840	65,160
High Service Pump Vacuum Priming System Replacement	50,000	20,000	70,000	4,840	65,160
Chlorine Dioxide Generator	-	60,000	60,000	-	60,000
Residuals Filter Press #3 - Rebuild	-	225,000	225,000	-	225,000
Disc-Flo Pump Replacement	-	55,982	55,982	-	55,982
Sulfuric Acid Bulk Tanks Replacement	-	27,676	27,676	-	27,676
Fluoride Bulk Tanks Replacement	-	58,064	58,064	-	58,064
Q2 High Service Pump #2 Rebuild	-	63,465	63,465	-	63,465
Quarles Transfer Pump #3 Rebuild	-	39,875	39,875	-	39,875
Quarles Raw Water Pump #1 Rebuild	-	88,985	88,985	-	88,985
Quarles Recycle Pump #1 Rebuild	-	22,250	22,250	-	22,250
Q2 High Service Pump 5 VFD Controller Replacement	-	51,905	51,905	-	51,905
Sludge Conditioning Tanks 1 & 2 Mixers Replacement	-	61,500	61,500	-	61,500
Quarles SCADA Server Replacement	-	130,000	130,000	-	130,000
	400,000	1,121,854	1,521,854	42,643	1,479,211
Maintenance					
Replace 2000 Ford F550 Dump Truck (Vehicle 00-01)	-	53,560	53,560	-	53,560
Replace 2009 Ford E350 Van (Vehicle 09-05)	-	34,265	34,265	-	34,265
Electrical Testing Equipment	-	58,195	58,195	-	58,195
Replace 1998 Bobcat Skid Steer Loader	-	43,000	43,000	-	43,000
	-	189,020	189,020	-	189,020
Laboratory					
Yokogawa Fluid Imaging Flow Cam	-	110,000	110,000	-	110,000
Replace 2012 Ford Escape (Vehicle 12-01)	-	32,000	32,000	-	32,000
Exterior Window Replacements in Original Portion of Lab Building	-	50,000	50,000	-	50,000
	-	192,000	192,000	-	192,000
Transmission					
Pipe Yard Replacement Inventory - 2022	-	200,000	200,000	-	200,000
Meter Replacement - Hwy 41/Checkers (Acct 12-7)	-	40,000	40,000	-	40,000
Meter Replacement - Dallas Hwy/Dragstrip Rd (Acct 5-3)	-	40,000	40,000	-	40,000
Meter Replacement - Old Alabama/Cardell Rd (Acct 4-0)	-	60,000	60,000	-	60,000
Meter Replacement - Sweetwater/Clay Rd (Acct 9-6)	-	40,000	40,000	-	40,000
GIS Equipment Upgrade	-	39,000	39,000	-	39,000
Pete Shaw Tank 1 Handrail	-	72,500	72,500	-	72,500
Lost Mountain Tank 2 Handrail	-	60,000	60,000	-	60,000
Reservation for Unplanned Pipe & Valve Replacements	-	750,000	750,000	-	750,000
	-	1,301,500	1,301,500	-	1,301,500
Totals	\$ 938,025	\$ 5,090,421	\$ 6,028,446	\$ 269,909	\$ 5,758,537

*Note: Red font indicates project carrying over from prior year(s)

Projects Completed in Prior Year



Equipment Replacements



Facility Upgrades



Pipeline Improvements



System Reliability

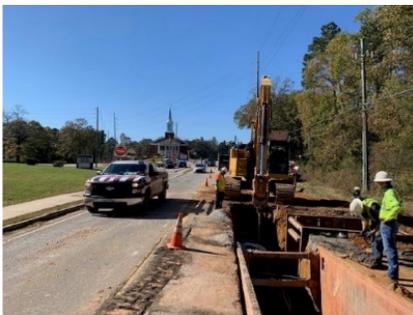
2021 Capital Improvement Projects



U.S. Highway 41 Parallel 20" Water Main Replacement
Completed: January 2021
Total Project Budget: \$3,892,655



Pete Shaw Tank #2
Completed: June 2021
Total Project Budget: \$2,812,562



West Side Loop Section #2, 36" Water Main Replacement
Completed: October 2021
Total Project Budget: \$19,180,234



Quarles Water Treatment Plant 1 Replacement
Completed: December 2021
Total Project Budget: \$78,702,110

2021 Asset Renewal & Replacement Projects

A total of 43 Asset Renewal and Replacement Projects were completed in 2021, for a total of \$5 million. Projects in this category range from small purchases, like multi-function printers, to vehicle replacements, water treatment plant equipment, and meter replacements. Three of the projects completed in 2021 are highlighted below.

The demographic of CCMWA's workforce has changed dramatically over the last 5 years. To address the needs of current employees, a lactation pod was purchased to comply with legal requirements of a private, non-bathroom space for new mothers. All offices within the Administration building have glass walls and other CCMWA facilities have shared workspaces, making it difficult to establish lactation rooms at every facility. A Mamava brand lactation pod was determined to be a cost-effective solution because it can be transported to other locations throughout the organization as needed and can only be accessed through a keycode or mobile device. CCMWA is excited to provide this benefit to our working mothers and join the ranks of other government agencies offering lactation spaces in the workplace.



CCMWA's Transmission Division purchased a new front end loader in 2021 to replace a 20-year-old loader, for which repair parts had become difficult to locate. The division maintains an inventory of pipe sections, valves, saddles, and meters to be used for pipeline repairs in the transmission system. This inventory allows CCMWA to quickly respond to failures or identified leaks and make repairs without needing to locate the necessary materials from a local vendor. The loader allows staff to easily unload and organize material as inventory items are frequently used and re-ordered.



During 2021, the underdrain in filter #5 of the Wyckoff Water Treatment Plant failed prematurely, marking the second underdrain at this plant to fail within a two-year period. The repair involved removing the filter media, demolishing the existing filter underdrain system, replacing the underdrain with a new stainless-steel underdrain, and installing new filter media. Filters of this type receive conditioned raw water at the top of the basin, which flows down through the filter media and is collected by the underdrain system. This failure and the one before it resulted in a series of planned projects to proactively replace the remaining filters of this age and type. The first of these projects will begin in 2022 and additional details can be found in the capital project description, [Wyckoff – Filter Underdrain Replacements](#).



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
- Capitalization Policy
- Investment 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
 - 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
 - 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

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:
 - Promote orderly, economical, efficient, and effective operations
 - Safeguard resources against loss due to waste, abuse, mismanagement, errors, and fraud
 - 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 [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 an Annual Comprehensive Financial Report ([ACFR](#)) in accordance with [GAAP](#) and will strive to prepare the ACFR 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:

<u>Capital Asset Class</u>	<u>Threshold</u>	<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 and 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 non-depreciable.
- 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 adopted within a line item of the annual budget under \$100,000 and task authorizations under an approved Demand Services Contract under \$200,000 may be signed by the General Manager or a Director and do not require further action by the Board.
- Contracts in excess of \$100,000 and task authorizations under an approved Demand Services Contract in excess of \$200,000 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.

Statistical 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.

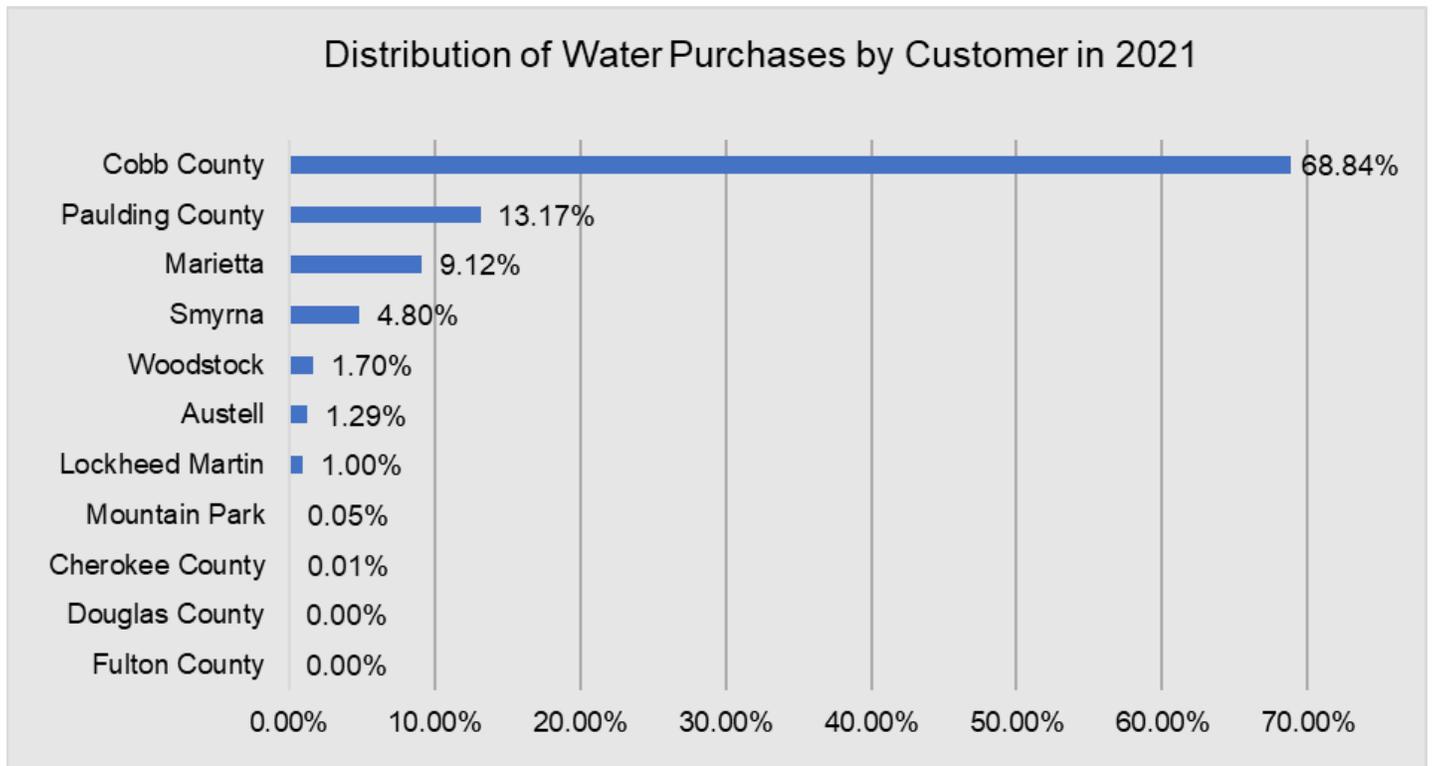
Demographic and economic measures of CCMWA's service area are presented to provide context for CCMWA's business environment. All demographic information is taken directly from the CCMWA's most recent Annual Comprehensive Financial Report and is reported on a fiscal year basis (as of December 31st). Information 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 presented 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:

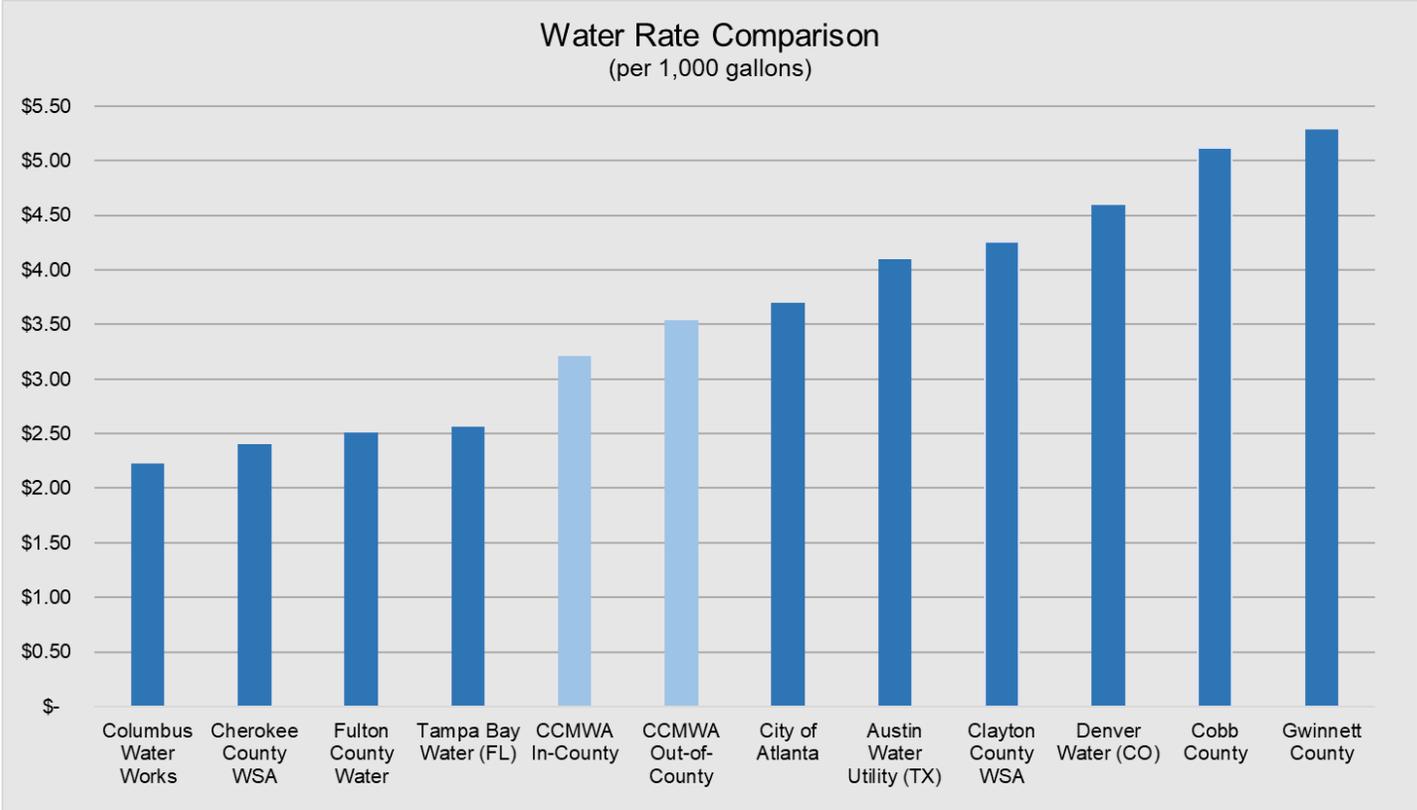
- Cherokee County Water and Sewer Authority (CCWSA)
- City of Austell
- City of Mountain Park
- City of Smyrna
- City of Woodstock
- Cobb County Water System
- Douglasville/Douglas County Water and Sewer Authority (DDCWSA)
- Lockheed Martin Aerospace and Defense Company
- Marietta Board of Lights and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

Cobb County-Marietta Water Authority also has an inactive contract with Fulton County Public Works. The terms of this contract are still in effect, but there are no active connections between Fulton County's system and CCMWA's system.



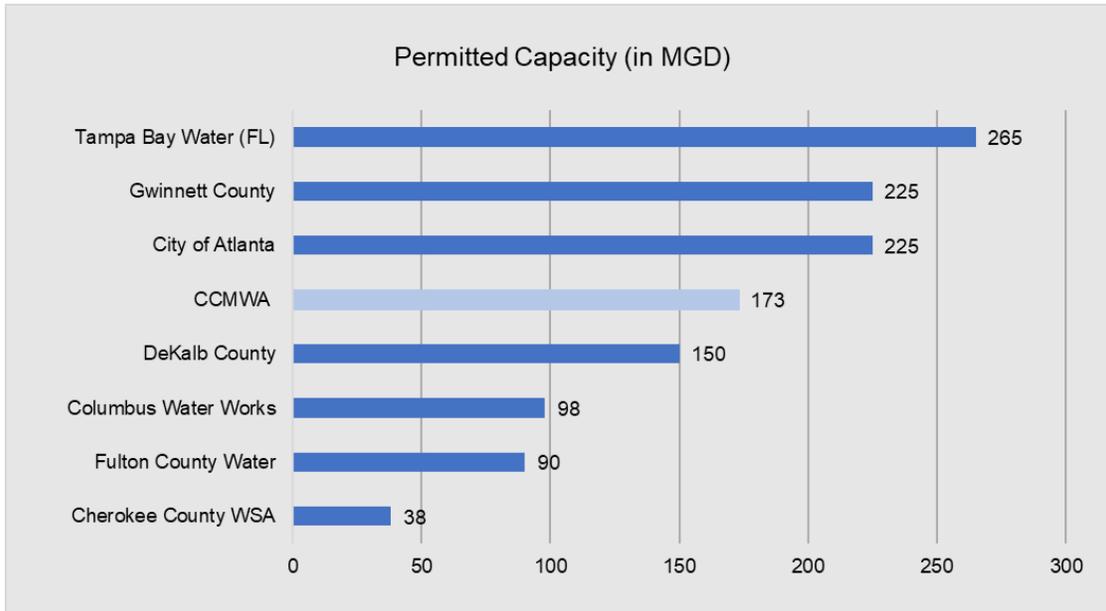
Rate Comparison Information

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.

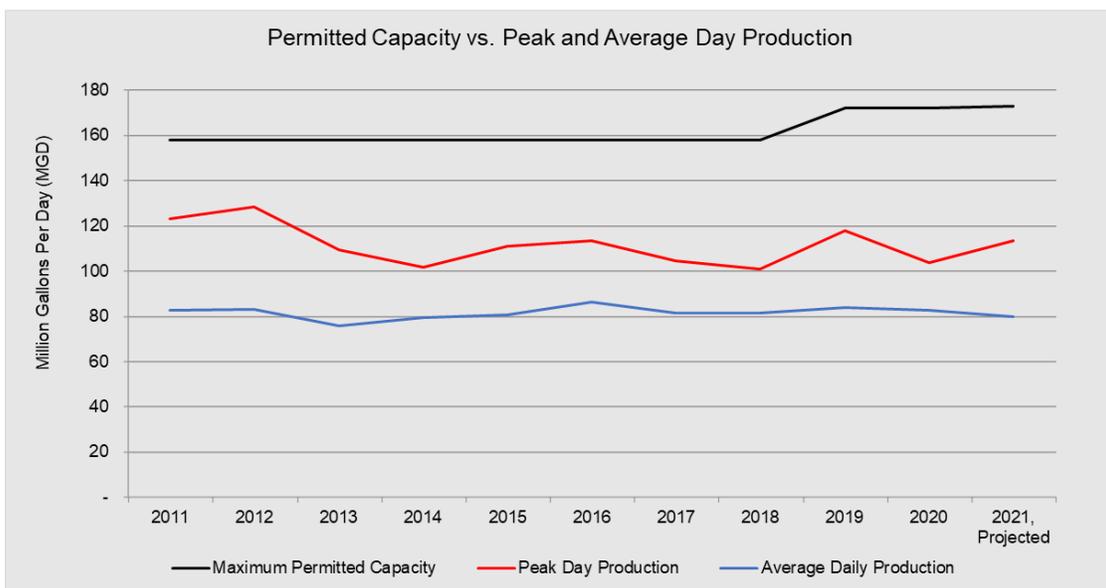


Permitted Production Capacity Comparison Information

The chart 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 chart below compares CCMWA’s permitted capacity to average daily production. In 2021, the permitted capacity at the Quarles Water Treatment Plant was increased from 86 MGD to 87 MGD to match the plant’s withdrawal permit after replacement of the Quarles Plant 1. During the last ten years, average daily production has not exceeded 55% of production capacity and peak day production has not exceeded 81% of production capacity.



Costs per Thousand Gallons of Water Produced

Operating Cost per Thousand Gallons Produced				
Fiscal Year	Operating Expense	1,000 Gallons	Cost/1,000 gal	
2014	44,701,985	28,728,039	1.56	
2015	45,099,147	29,369,116	1.54	
2016	46,224,169	31,499,532	1.47	
2017	46,093,835	29,612,782	1.56	
2018	48,964,073	29,842,139	1.64	
2019	48,609,734	30,949,853	1.57	
2020	48,498,392	30,222,797	1.60	
2021	49,400,193	29,105,117	1.70	
2022, Projected	54,181,690	26,333,000	2.06	

kWh Used per Thousand Gallons Produced				
Fiscal Year	1,000 Gallons	Kilowatts Used	kWh/1,000 gal	
2014	28,728,039	71,318,540	2.48	
2015	29,369,116	72,424,851	2.47	
2016	31,499,532	76,901,520	2.44	
2017	29,612,782	73,595,318	2.49	
2018	29,842,139	73,131,071	2.45	
2019	30,949,853	75,198,508	2.43	
2020	30,222,797	73,686,172	2.44	
2021, Projected	29,105,117	72,887,372	2.50	

Demographic Information

DEMOGRAPHIC AND ECONOMIC STATISTICS LAST TEN YEARS

Unaudited

Fiscal Year	Population (1)	Personal Income (1)	Per Capita Personal Income (1)	County Unemployment Rate (2)
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%
2017	753,860	35,656,700,000	47,299	3.60%
2018	773,930	37,682,170,000	48,689	3.20%
2019	774,300	40,221,270,000	51,945	3.20%
2020	773,290	42,575,110,000	55,057	5.70%

City	Population
Acworth	22,818
Austell	7,170
Kennesaw	34,077
Marietta	60,867
Powder Springs	15,758
Smyrna	56,666

***Sources:**

- (1) Woods and Poole Economics 2020 Data Pamphlet
 (2) Cobb County Office of Economic Development and Cobb County Chamber of Commerce

PRINCIPAL EMPLOYERS CURRENT AND NINE YEARS AGO

Unaudited

Employer	Industry	2020		2011	
		Employees	Percentage of Total County Employment	Employees	Percentage of Total County Employment
Brand Energy & Infrastructure Holdings	Retail	2,800	0.52%	-	-
Cobb County Government	Government	5,296	0.98%	4,964	1.34%
Cobb County Schools	Government	17,743	3.27%	18,914	5.09%
Home Depot	Retail	13,000	2.39%	11,784	3.17%
Kennesaw State University	Education	4,834	0.89%	4,578	1.23%
Kroger Co.	Retail	2,500	0.46%	2,618	0.70%
Lockheed Martin	Aircraft/Defense	4,700	0.87%	8,100	2.18%
Publix Super Markets	Retail	3,569	0.66%	3,097	0.83%
Ryla Teleservices Inc. (Alorica)	Call Center	-	-	1,800	0.48%
Six Flags Over Georgia	Theme Park	1,926	0.35%	2,031	0.55%
Walmart	Retail	-	-	2,338	0.63%
Wellstar Health System	Healthcare	14,971	2.76%	12,492	3.36%
Worldspan	Retail	-	-	-	-

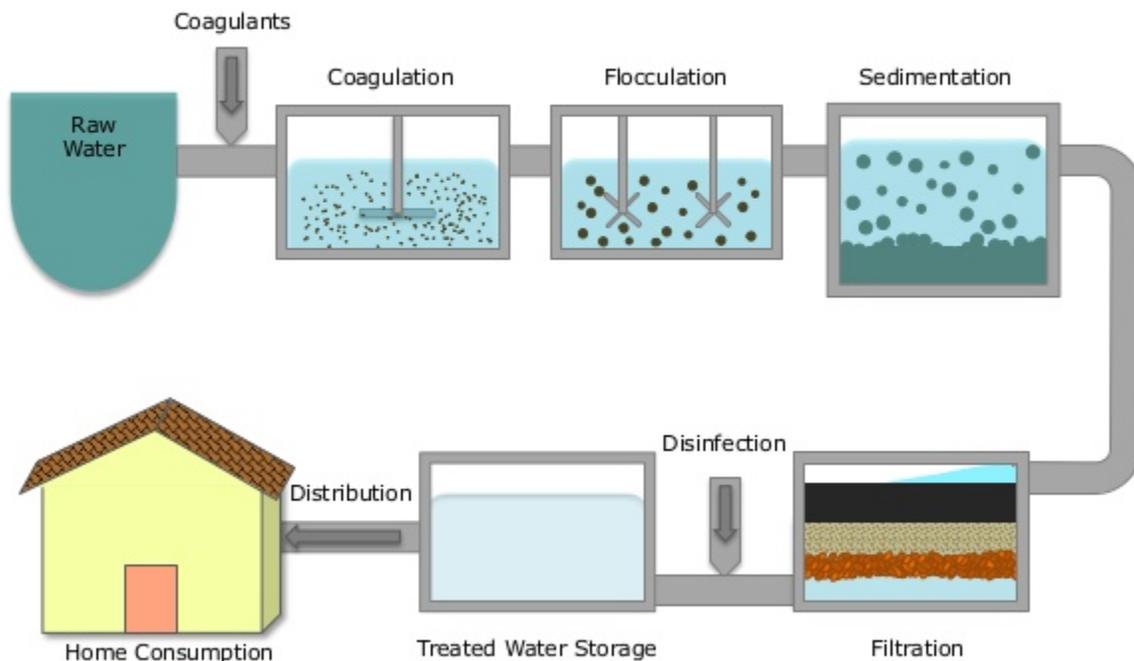
*Source: Cobb County Office of Economic Development and Cobb County Chamber of Commerce

Water Quality Information

Water Treatment Process

The process begins by pumping untreated water from the Chattahoochee River or Allatoona Lake to the Quarles or Wyckoff Plant, respectively. A primary coagulant, alum, is added along with other chemicals to begin removal of particulate and dissolved organic matter from the raw water. The water is then directed to a process called flocculation, in which a gentle mixing of the water with coagulant produces larger particles, called floc, to form. The next process, sedimentation, occurs in a large, still basin, where the floc particles can settle to the bottom, clarifying the water. Next, the water flows through filters composed of anthracite coal and silica sand, trapping particles too small to settle in the sedimentation basins. After filtration, chlorine is added to maintain disinfection of the water all the way to the consumer, along with lime to provide protection from corrosion of copper and lead in home plumbing systems, and fluoride as required by the State of Georgia to provide protection from dental cavities. 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.

Water Treatment Process



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 untreated 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 storm water runoff, 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 County Water System's Consumer Confidence Report. 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.

Consumer Confidence Report

Drinking Water Analysis Table							
The tables show the results of our water quality analyses. Every contaminant <i>regulated</i> by EPA that was detected in the water, even at trace levels, is listed here. All Results Meet Or Exceed EPA standards.							
(The data presented in this report are furnished by the CCMWA and are from the most recent testing done in accordance with regulations.)							
EPA Regulated Inorganic Substances or Contaminants							
Substance (Unit)	Date Tested	MCL	MCLG	Detected Level	Range	Major Sources	Violation
Fluoride ¹ (ppm)	2020	4	4	0.93	0.70 - 0.93	Erosion of natural deposits; water additive which promotes strong teeth	NO
Nitrate/Nitrite ² (ppm)	2020	10	10	0.59	0.28 - 0.59	Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits	NO
Substance (Unit)	Date Tested	AL	MCLG	90% of Tested sites were less than	# Sites Exceeding the AL	Major Sources	Violation
Lead ³ (ppb)	2020	15	0	2.0	1*	Corrosion of household plumbing systems	NO
Copper ⁴ (ppm)	2020	1.3	0	0.040	0	Corrosion of household plumbing systems	NO
Notes: ¹ Fluoride is added to water to help in the prevention of dental cavities (caries) in children. ² The next round of testing is due in 2023. ³ Sampling covers all of CCMWA's system. No CCWS sites exceeded AL. ⁴ Nitrate and Nitrite are measured together as N. ⁵ The next round of testing is due in 2023.							
Disinfection By-Products, By-Product Precursors and Disinfectant Residuals							
Substance (Unit)	Date Tested	MCL	MCLG	Detected Level	Range	Major Sources	Violation
TTHMs (Total Trihalomethanes) (ppb)	2020	80	n/a	51 ¹ Highest LRAA at site 501	21.6 - 77.1	By-products of drinking water disinfection	NO
HAA5s (Haloacetic Acids) (ppb)	2020	60	n/a	32 ¹ Highest LRAA at site 501,502,508,512,513	16 - 43.7	By-products of drinking water disinfection	NO
TOC (Total Organic Carbon) (ppm)	2020	TT	n/a	1.9	1.00 - 1.90	Decay of organic matter in the water withdrawn from sources such as lakes and streams	NO
Chlorite (ppm)	2020	1.0	0.8	0.40	0.17 - 0.40	By-product of drinking water disinfection	NO
Chlorine _{Free} (ppm)	2020	MRDL= 4	MRDLG= 4	2.10	0.00 - 2.10	Drinking water disinfection	NO
Note: ¹ The highest detected LRAA (Locational Running Annual Average)							
Turbidity							
Substance	Date Tested	MCL	MCLG	Detected Level	Range	Typical Sources	Violation
Turbidity ¹	2020	TT=1 NTU	0	0.13	n/a	Soil runoff	NO
		TT=percentage of samples <0.3 NTU		100%	n/a		
Notes: ¹ 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.							
Microbiological Contaminants							
(Data presented in this table were from Systems that collected more than 40 Total coliform samples per month.)							
Substance	Date Tested Positive	MCL	MCLG	TT Level 1 Assessment Trigger	Level Detected	Likely Sources	Violation
Total Coliform	08/2020 09/2020 12/2020	TT	n/a	Exceeds 5.0% TC+ samples in a month	0.41% ¹ 0.41% ¹ 0.81% ²	Naturally present in the environment	NO
E. coli	None	One Positive Sample ³	0	n/a	0.0%	Human or animal fecal waste	NO
Notes: ¹ 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. ² one positive sample out of 243 samples tested during the month. ³ Two positive samples out of 246 samples tested during the month.							

Performance Indicators

Return on Assets			
(Net Income/Total Assets)			
Fiscal Year	Net Income	Total Assets	Return on Assets
2015	33,921,068	603,441,449	5.62%
2016	42,769,492	642,946,957	6.65%
2017	39,390,219	670,815,017	5.87%
2018	42,881,718	708,927,648	6.05%
2019	51,626,927	745,801,332	6.92%
2020	52,045,797	803,049,354	6.48%
2021, Projected	44,356,119	836,281,096	5.30%
AWWA Benchmark (Median Quartile, 2012)			2.20%

Debt Ratio	
(Total Liabilities/Total Assets)	
2014, Audited	16.3%
2015, Audited	16.0%
2016, Audited	14.0%
2017, Audited	11.7%
2018, Audited	10.8%
2019, Audited	7.6%
2020, Audited	7.6%
2021, Projected	6.7%
AWWA Industry Benchmark	34.0%

Million Gallons per Day of Water Delivered per Full Time Equivalent			
(Average MGD Delivered/Number of FTEs)			
Fiscal Year	MGD	FTEs	MGD per FTE
2015	80.8	114.5	0.71
2016	86.3	116	0.74
2017	81.4	116	0.70
2018	84.3	116	0.73
2019	81.9	116	0.71
2020	82.6	116	0.71
2021	79.7	116	0.69

Budget Terminology

Glossary

Accrual Basis of Accounting: a method of accounting that recognizes the financial effect of transactions, events, and activities when they occur, regardless of the related cash flows.

Annual Comprehensive Financial Report (ACFR): 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.

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

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.

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

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

Economies of scale: a proportionate savings in costs gained by an increased level of production.

Enterprise Fund: a proprietary fund used to account for business-like operations of a government to provide goods and/or services to the public and are primarily funded through user charges. GAAP requires state and local governments to use the enterprise fund type to account for “business-type activities”

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.

Generally Accepted Accounting Principles (GAAP): a common set of accounting principles, standards, and practices issued by the Financial Accounting Standards Board that must be followed by public companies in the United States.

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

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.

Total Net Assets: total assets minus total liabilities.

Acronyms

A

ACF	Apalachicola-Chattahoochee-Flint River Basin
ACFR	Annual Comprehensive Financial Report
ACT	Alabama-Coosa-Tallapoosa River Basin
APR.....	Aged Pipe Replacement
AR&R	Asset Renewal and Replacement

C

CIP	Capital Improvement Plan
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D

DCA.....	Georgia Department of Community Affairs
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E

EPA	United States Environmental Protection Agency
EPD	Georgia's Environmental Protection Division

F

FASB	Financial Accounting Standards Board
FTE	Full Time Equivalent

G

GAAS	Generally Accepted Auditing Standards
GASB	Governmental Accounting Standards Board
GEFA	Georgia Environmental Finance Authority
GFOA	Governmental Finance Officers Association
GIS	Geographic Information System

K

KPI's.....	Key Performance Indicators
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L

LGIPLocal Government Investment Pool

M

MGD Million Gallons per Day

O

OCGAOfficial Code of Georgia Annotated

P

PCCPPre-Stressed Concrete Cylinder Pipe

R

RFPRequest for Proposal

S

SCADA Supervisory Control and Data Acquisition