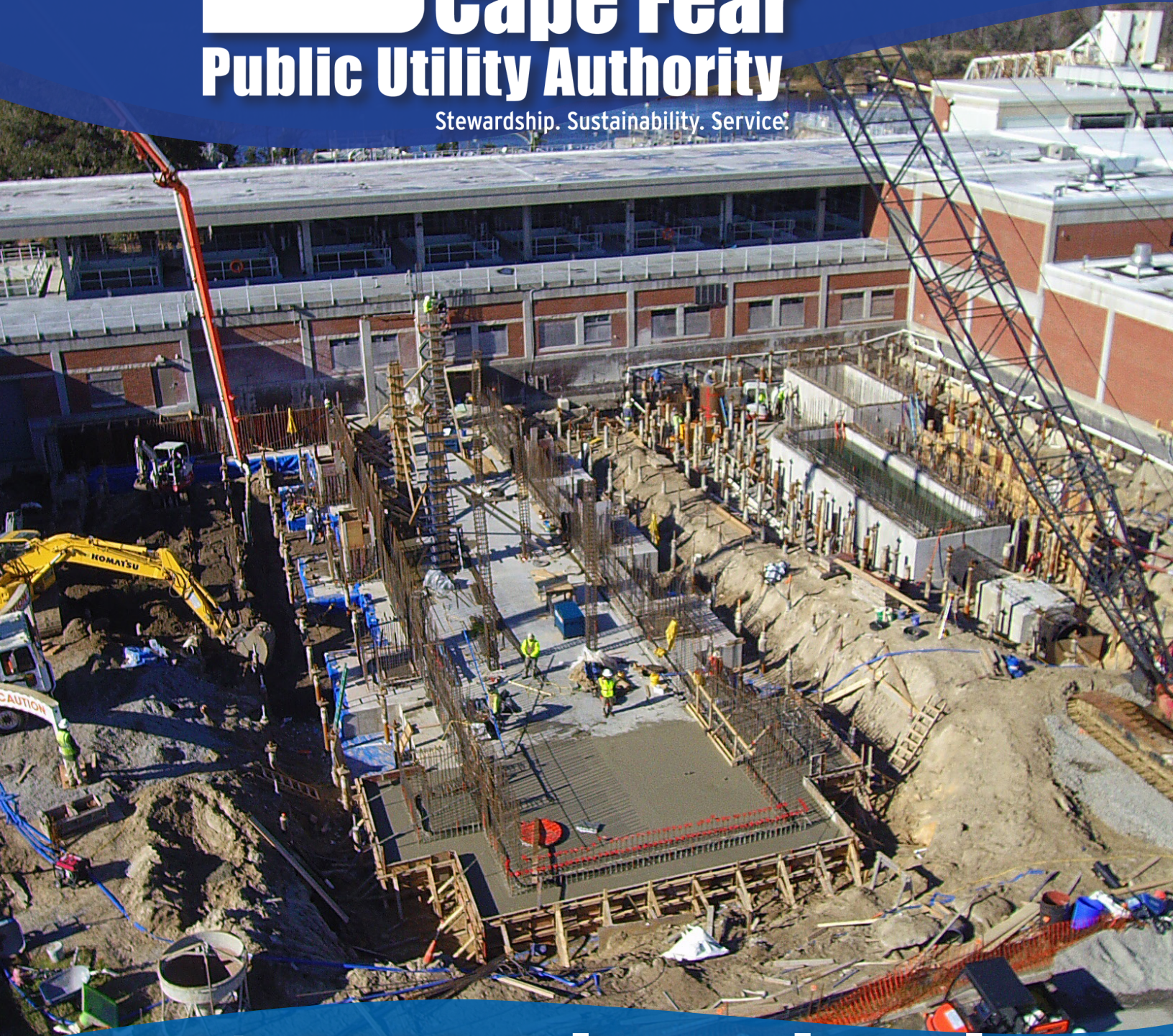




Cape Fear Public Utility Authority

Stewardship. Sustainability. Service.



2021-2022 Adopted Budget



**CAPE FEAR PUBLIC UTILITY AUTHORITY
RECOMMENDED BUDGET
FISCAL YEAR 2021-2022**

Board Members

Wesley P. Corder, Chair
William A. Norris, Vice Chair
Deans Hackney, Secretary
Jennifer Adams, Treasurer
Jonathan Barfield, Jr., New Hanover County Commissioner
Hollis B. Briggs, Jr.
Jessica Cannon, M.D.
Kevin O’Grady, City of Wilmington Councilman
Charles Rivenbark, City of Wilmington Councilman
Larry Sneed
Rob Zapple, New Hanover County Commissioner

Kenneth R. Waldroup, PE, Executive Director
John B. McLean, CPA, Chief Financial Officer

235 Government Center Drive
Wilmington, NC 28403
www.cfpua.org

Board Members



Wesley P. Corder

Chairman

Jointly appointed by City of Wilmington and New Hanover County

Seated in 2017

Term ends in 2023

Committees: Executive, Finance & Communications



William A. Norris

Vice-Chair

Appointed by the City of Wilmington

Seated in 2013

Term ends 2021

Committee: Executive & Finance



Deans Hackney

Secretary

Appointed by City of Wilmington

Seated in 2018

Term ends 2022

Committee: Executive, Finance & Human Resources



Jessica Cannon, M.D.

Member

Appointed by City of Wilmington

Seated in 2019

Term ends 2023

Committees: Long Range Planning & Sustainability



Kevin O'Grady

Councilman

Appointed by City of Wilmington

Seated in 2014

Term ends 2022

Committee: Human Resources & Communications



Charles Rivenbark

Councilman

Appointed by City of Wilmington

Seated in 2010

Term ends in 2021

Committees: Long Range Planning



Jennifer Adams

Treasurer

Appointed by New Hanover County

Seated in 2016

Term ends in 2022

Committees: Executive, Finance
& Sustainability



Jonathan Barfield, Jr.

Commissioner

Appointed by New Hanover County

Seated in 2019

Term ends 2021

Committees: Communications &
Human Resources



Hollis Briggs, Jr.

Member

Appointed by New Hanover County

Seated in 2019

Term ends in 2022

Committees: Long Range Planning



Larry Sneed

Member

Appointed by New Hanover County

Seated in 2012

Term ends in 2023

Committees: Long Range Planning



Rob Zapple

Commissioner

Appointed by New Hanover County

Seated in 2019

Term ends in 2021

Committees: Finance, Long Range
Planning & Sustainability



Donna S. Pope

Clerk to the Board



GOVERNMENT FINANCE OFFICERS ASSOCIATION

*Distinguished
Budget Presentation
Award*

PRESENTED TO

**Cape Fear Public Utility Authority
North Carolina**

For the Fiscal Year Beginning

July 1, 2020

Christopher P. Morrill

Executive Director

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BUDGET GUIDE

This document contains Cape Fear Public Utility Authority's Fiscal Year 2021-2022 Budget, which is the financial plan that will guide the Authority's operations over the year.

The budget document is divided into the following sections:

Introduction – This section begins with the Executive Director's Budget Message which explains the major goals and challenges, major changes in financial policies, important features of the activities incorporated into the budget, and the reasons for changes in appropriation levels. Next, information is presented to help stakeholders understand some of the environmental, organizational, and policy factors that drive the development of the Authority's budget including the Strategic Plan, organizational profile and structure, financial structure, a description of the Authority's budget process, budget calendar, and key financial policies.

Financial Summaries – The Financial Summaries section provides a detailed picture of the Authority's FY 2021-2022 annual operating and capital budget including information on total budgeted expenditures, revenues, and net position. Consolidated financial schedules are provided. Long-Term financial management provides a big picture, entity-wide, multi-year view of the Authority's finances including operating and capital expenditures, debt, liquidity, and rate affordability.

Capital Budget & Debt – This section details the Authority's FY 2021-2022 capital budget and the approach to funding the capital program as well as information on the Authority's debt obligations.

Department Information – This section describes each department and their goals, objectives, and performance measures.

Supplemental & Statistical Information – This section provides stakeholders with statistical and background information that may serve as context to supplement the budgetary and financial information contained in this document.

BUDGET MESSAGE

Members of the Authority Board
Cape Fear Public Utility Authority
235 Government Center Drive
Wilmington, NC 28403

Dear Members of the Authority Board:

I am pleased to present the Authority's Fiscal Year 2021-2022 budget. This budget was prepared in accordance with the Local Government Budget and Fiscal Control Act, and is designed to provide services meeting or exceeding all applicable state regulations and rate covenants. This budget contains the necessary projects and operational funding to ensure that we continue providing the highest quality water and wastewater services to our customers at the lowest practical cost.

As we enter our 13th year of service, we continue to successfully operate under our guiding principles of Stewardship, Sustainability, and Service. These tenets provide a strong base upon which we have built award-winning services. At the same time, they drive us to continually increase the value of the services we offer.

Given the complex issues facing water and sewer providers, I am confident this budget continues the Authority in the right direction. It addresses a broad spectrum of important topics such as customer service, public health, environmental stewardship, staff development, risk management and emergency preparedness. With the Authority's human and financial resources focused on the right areas, we will remain ready to meet the needs of our community.

The following factors influenced the decisions made in developing the budgets for FY 21-22:

- The rehabilitation and replacement of aging infrastructure - We are pleased to report that deliberate investment in infrastructure and operations is consistently paying dividends, improving our resiliency and enhancing our services while reducing risk. The primary components of this budget include projects identified in the 10-year Capital Improvement Program (CIP), forecasted water and wastewater demands, projected operating costs required to sustain service levels, and debt obligations. With continued input from you and key stakeholders, our budgets will accurately assess and meet community needs, both now and into the future.
- Commitment to sustainable capital funding – CFPUA's debt limit and long-term capital funding needs imply that \$18 million of capital investment must be funded through current-year water and wastewater rate revenue collections each year.
- In June 2017, the issue of water quality became the focus of our community when per- and polyfluoroalkyl substances (PFAS) were discovered in the drinking water and in the Cape Fear River—the largest source of drinking water for our region. Cape Fear Public Utility Authority has taken legal action, continued to monitor and track levels of these compounds, and is currently undertaking a \$43.0 million treatment upgrade at the Sweeney Water Treatment Plant to more effectively remove PFAS and other emerging contaminants. As of April 30, 2020, the Authority has spent \$16.8 million related to emerging contaminants. These expenditures include \$320,500 for water and wastewater treatment costs related to water removed from the Authority's

BUDGET MESSAGE

contaminated aquifer storage and recovery well. Except for \$607,000 in state grants, all of these costs were funded with rate revenues.

- COVID-19 poses several potential challenges from a financial perspective including additional expenditures, decreased revenues due to stay-at-home orders and mandated business closures, and adverse effects to cash flow due to customers' inability to pay and mandated suspensions of late fees and shut-offs. Forecasted expenditures and revenue assumptions included in the FY 20-21 operating budget do not include any provision for potential adverse financial effects related to COVID-19. CFPUA has already begun the process of applying for federal assistance to reimburse expenditures related to COVID-19. CFPUA cash reserve policy mandates that a minimum of \$50 million be held in undesignated fund balance. This reserve balance is deliberately designed to insulate CFPUA from revenue shortfalls and unanticipated increases in expenditures. To the extent that COVID-19 adversely affects our finances, the unrestricted fund balance is available to ensure that services continue to be delivered.

OPERATING BUDGET

The total Fiscal Year 2021-2022 operating budget is approximately \$92.0 million. The tables below detail the approved operating budget by major revenue sources and major categories of expenditures.

Appropriations	FY21 Adopted	FY22 Adopted	Increase/ (Decrease)	%Difference
Salaries & Benefits	\$ 25,755,773	\$ 27,056,318	\$ 1,300,545	5.0%
Operating	20,477,349	21,727,653	\$ 1,250,304	6.1%
Debt Service	25,746,559	25,184,354	\$ (562,205)	-2.2%
Transfers to Capital Projects Fund	18,000,000	18,000,000	\$ -	0.0%
Total	\$ 89,979,681	\$ 91,968,325	\$ 1,988,644	2.2%

Estimated Revenues	FY21 Adopted	FY22 Adopted	Increase/ (Decrease)	%Difference
Water/Wastewater Charges - Fixed	\$ 31,100,185	\$ 31,387,935	\$ 287,750	0.9%
Water/Wastewater Charges - Volumetric	45,340,246	47,348,560	\$ 2,008,314	4.4%
System Development Charges	5,785,500	7,095,000	\$ 1,309,500	22.6%
Investment Earnings	1,657,650	200,000	\$ (1,457,650)	-87.9%
Other Charges for Service	5,596,100	4,657,000	\$ (939,100)	-16.8%
Appropriated Fund Balance	500,000	1,279,830	\$ 779,830	156.0%
Total	\$ 89,979,681	\$ 91,968,325	\$ 1,988,644	2.2%

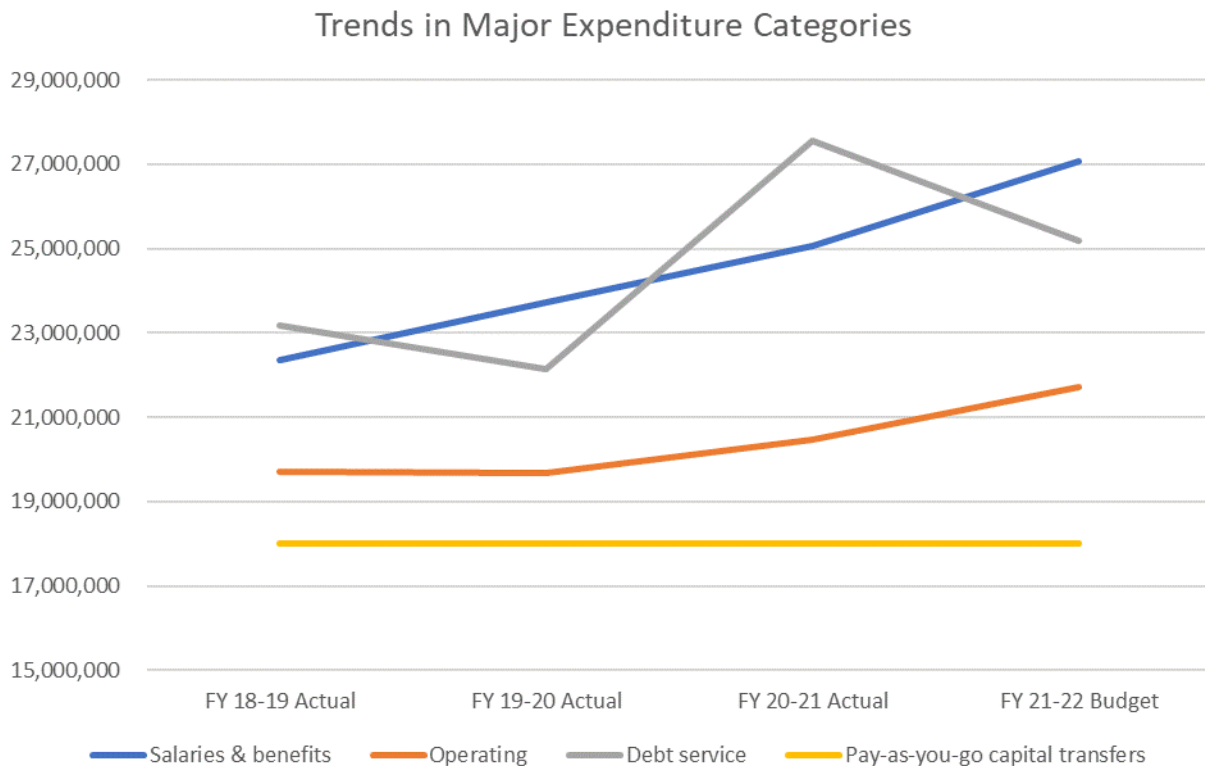
Despite the \$2.0 million increase in appropriations and a decrease in investment earnings and other revenues, the FY 21-22 budget includes no change to water and wastewater rates. Staff has been focused on forecasting key revenue drivers as accurately as possible including customer growth, consumption per customer, and the number of new customers that will be assessed a system development charges in the upcoming year. Fixed and volumetric rate revenues are projected to increase by \$288,000 and \$2.0 million, respectively, compared to the FY 20-21 budget due to projected growth in customers and consumption per customer. System development charges are projected to be approximately \$7.1 million an increase of approximately \$1.3 million compared to the FY 20-21 adopted budget.

BUDGET MESSAGE

As a foundation for the FY 21-22 budget process, key goals and assumptions are identified and highlighted below:

- A commitment to adequately staff and retain employees to ensure continued excellence in providing service to our customers. The FY 21-22 operating budget includes a \$1.3 million increase to salaries & benefits for 4 new full-time equivalent positions in water and wastewater treatment; a 1.5% cost-of-living adjustments and 3% merit increases for existing staff; and equity adjustments for staff to meet market levels and reduce attrition. The increase to salaries and benefits also includes increases in the required employer contributions to the North Carolina Local Government Employees' Retirement System.
- Operating costs are projected to increase by \$1.3 million. Some of this increase is due to enhancing the level of service we provide to our customers. In particular, the FY21-22 operating budget includes increases in software licensing related to our customer information system and projected increases in postage as we transition to monthly billing. The remaining increases are due to inflationary pressures in insurance premiums and raw water costs.
- A \$562,000 decrease in debt service requirements, attributable to the early payoff of state revolving loans and reduced interest payments on 2019A bonds.
- \$18 million in pay-as-you-go capital funding that balances CFPUA's debt load and provides for an high level of debt service coverage

For historical context, the following graph provides trends in the Authority's actual activity over the past 3 years and appropriations in FY21-22 budget by major expenditure category.



BUDGET MESSAGE

During the last three years, the Authority's customer base has grown 3% per year on average. The growth in salaries and benefits and operating expenditures has grown necessarily to keep pace with the growing system and the customers we serve. In addition, the growth in salaries & benefits reflects market and merit increases for existing staff and consistent growth in the required contributions to the Local Government Employees' Retirement System. Debt service decreased from FY 18-19 to FY 19-20 as no new debt was issued during this time period. The increase in debt service in FY 20-21 reflects additional debt service payments related to the new money component on the Authority's 2019 Water and Sewer Revenue and Refunding Bonds, the proceeds of which were used to finance treatment upgrades at the Sweeney Water Treatment Plant for the removal of PFAS from the treated surface water and a new raw water transmission main in partnership with Brunswick County. The increase in debt service in FY 20-21 also reflects the early retirement of a Clean Water State Revolving loan that was financed with settlement proceeds from a class action lawsuit. Finally, pay-as-you-go funding for the Authority's capital program has remained consistent over the timeframe presented. The \$18 million represents the Authority's target level of annual pay-as-you-go funding that is designed to achieve consistent debt service coverage of at least 1.6 times given the level of the Authority's capital expenditures.

CAPITAL BUDGET

Major drivers of the capital budget include system growth, aging infrastructure, and emerging contaminants including PFAS. New projects appropriated in FY 21-22 total \$27.5 million. Combined with remaining unspent appropriations from prior years, the total capital budget is \$105.4 million. Major projects include the rehabilitation and replacement of pump stations, water lines, and sewer lines; treatment upgrades; new raw water transmission main; and new infrastructure to accommodate a growing service area.

The Authority adopts a 10-Year Capital Improvement Plan (CIP) each year. The total 10-Year CIP adopted for Fiscal Years 2022 through 2031 is \$370.1 million. All projects were evaluated by preparing initial business cases. This process reviewed the best information available to identify project alternatives, pros and cons for each alternative, and planning level cost comparisons.

The initial business cases assess current risk and the risk reduction achieved by various project alternatives, in terms of consequence of failure and likelihood of failure. All projects were also prioritized using one or more of the following criteria:

- Compliance with regulatory requirements.
- Efficiency leading to future operating or capital savings.
- Capacity increases necessary for current and future flows.
- Growth in the number of customers served.

Once projects are prioritized, the 10-Year CIP is incorporated into the Authority's long-term financial plan prepared within the constraints established in policy to determine the financial impact on debt and debt service coverage, fund balance, and rates. This process is iterative in which the goal is to optimize system investment while being responsible to our customers and ensuring the financial sustainability of the organization.

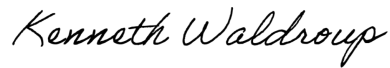
BUDGET MESSAGE

AWARDS

The Government Finance Officers Association of the United States and Canada (GFOA) presented a Distinguished Budget Presentation Award to the Authority for its annual budget for the fiscal year beginning July 1, 2020. The Authority has received this prestigious award for seven years. To receive this award, a governmental unit must publish a budget document that meets criteria as a policy document, as an operations guide, as a financial plan and as a communications device. We believe our FY 21-22 budget continues to conform to program requirements, and we are submitting it to GFOA to determine eligibility for another award.

This budget represents the combined efforts, experience, and expertise of the Authority Board, its Committees, and staff. This important work allows Cape Fear Public Utility Authority to meet the short and long-term needs of our customers. We have established a clear and transparent track record of responsibly employing our funding for the betterment of our customers, and I am confident we will continue on this path in FY 21-22.

Respectfully submitted,

A handwritten signature in black ink that reads "Kenneth Waldroup". The script is cursive and fluid.

Kenneth Waldroup, P.E.
Executive Director

CAPE FEAR PUBLIC UTILITY AUTHORITY PROFILE

Organizational Overview

Cape Fear Public Utility Authority was formed by the City of Wilmington and New Hanover County to combine the water and wastewater operations, and began operations on July 1, 2008. The Authority was established pursuant to the Chapter 162A, Article 1 of the North Carolina General Statutes, known as the North Carolina Water and Sewer Authorities Act. The Authority's service area consists of the City of Wilmington and areas of New Hanover County previously served by the New Hanover County Water and Sewer District (District). It does not include the municipalities of Carolina Beach, Kure Beach, and Wrightsville Beach; although by agreement, wastewater flows from Wrightsville Beach and a portion of Pender County are conveyed to and treated by the Authority. Recently, the Authority entered into a three-year bulk purchase agreement that provides the Town of Wrightsville Beach additional available drinking water during tourist season up to 45 million gallons per year. New Hanover County's population is approximately 235,000 in an area encompassing approximately 220 square miles. Of this total, 21 square miles consist of water and wetlands. New Hanover County is the second smallest county in North Carolina by land area and is also the second most densely populated of the 100 counties. The County's beaches provide miles of unspoiled natural beauty and are the area's most popular tourist attractions. The County is the eastern terminus of Interstate Highway 40, a transcontinental route ending in Barstow, California.

An eleven-member board governs the Authority. The City and County appoint five members each, with four of those appointments (two each) coming from their respective governing boards. The eleventh member is jointly appointed. The Authority board is responsible for the adoption of the annual budget, setting water and wastewater rates, making policy decisions, and managing the Executive Director and Legal Counsel.

The Water System

The water system is composed of a surface water system and two groundwater systems. There are 71,463 customer accounts, an increase of 899 compared to the previous year. Also, an additional 3,420 locations have services available (vacant lots). The Authority recently entered into a three-year bulk purchase agreement providing the Town of Wrightsville Beach additional drinking water during tourist season. The water system has 1,168 miles of distribution lines on June 30, 2020. The Authority also keeps twelve wells on standby to supplement the water supply during emergencies or peak demand periods. Metered water consumption for the fiscal year June 30, 2020 increased 7.65% from the previous year.

The Authority has a needs-based contract to purchase up to 23.0 million gallons per day MGD of raw water from the Lower Cape Fear Water and Sewer Authority (LCFWASA) with a term ending in 2030. Raw surface water is either drawn from the Cape Fear River through the Authority's 10 million gallon per day (MGD) raw water intake at King's Bluff or purchased through a connection with the LCFWASA at U.S. Highway 421. The raw surface water is pumped to the Sweeney Water Treatment Plant (SWTP), which provides potable water to most of the Authority's service area. The SWTP has a rated capacity of 35 MGD. Average production during the fiscal year ended June 30, 2020 was 15.34 MGD. The surface water distribution system has been providing water service for more than 100 years and includes 16.0 million gallons of covered finished water storage and 5.5 million gallons of storage in four elevated tanks. The LCFWASA and CFPWA share in the 106 MGD (combined) allocation of raw water from the Cape Fear River withdrawn at the Kings Bluff Raw Water Facilities.

CAPE FEAR PUBLIC UTILITY AUTHORITY PROFILE

In October 2009, the Authority placed a Nano-Filtration Groundwater Membrane Plant (the Richardson Plant) into operation to serve the northeast section of the distribution system. The source of raw water is from 25 wells drawing from two different aquifers. The plant softens the groundwater and removes organic and inorganic contaminants to produce a blended groundwater that is followed by disinfection, fluoridation, corrosion control, and pH adjustment. The Richardson Plant has a rated capacity of 7.0 MGD. The Richardson Plant had a daily average production during the fiscal year ended June 30, 2020 of 2.99 MGD. The distribution system provides water service to customers and includes 2.8 million gallons of covered ground storage and 2.1 million gallons of elevated storage in four elevated tanks. In addition, the Authority operates one smaller groundwater system, Monterey Heights, providing groundwater directly to customers from five wells and a single 0.5 million gallon elevated storage tank. The groundwater receives disinfection and pH adjustment before being pumped to the distribution system and the storage tank. Average production of the Monterey Heights system during the fiscal year ended June 30, 2020 was 0.911MGD.

The Wastewater System

There are 71,675 wastewater accounts, an increase of 1,675 compared to the previous year. Also, an additional 3,743 locations have services available (vacant lots). The Authority also provides wholesale wastewater treatment services to the Town of Wrightsville Beach and provides wastewater services to a portion of Pender County. The Authority's collection system consists of approximately 923 miles of gravity lines, 22,855 manholes, 150 pump stations and 157 miles of pressurized sewage force main. Wastewater consumption, based on metered water (excluding irrigation) for the fiscal year June 30, 2020 increased 5.15% from the previous year.

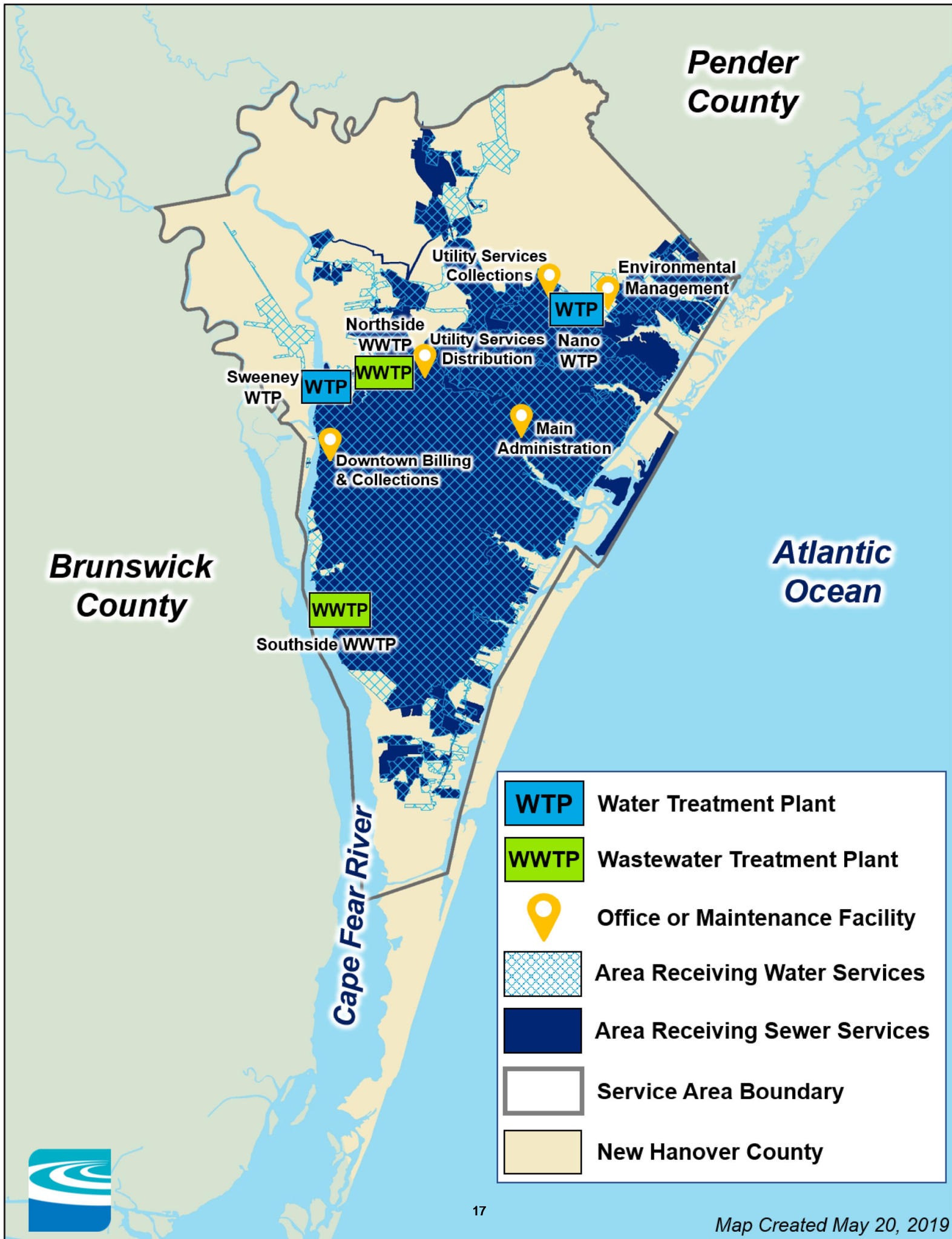
The Authority currently owns and operates the James A. Loughlin, or Northside Wastewater Treatment Plant (NSWWTP) and the M'Kean Maffitt, or Southside Wastewater Treatment Plant (SSWWTP). The NSWWTP is permitted to treat up to 16.0 MGD. The SSWWTP is permitted to treat up to 12.0 MGD. For the fiscal year ended June 30, 2020, the combined average daily flows were 16.6 MGD of the combined 28.0 MGD permitted. The NSWWTP and SSWWTP both use physical, chemical and biological processes to clean the wastewater. After the wastewater flows are collected and treated, the treated effluent from the SSWWTP and the NSWWTP is discharged into the Cape Fear River. The Authority also has a hauled waste program receiving septage and other non-hazardous wastes to NSWWTP for processing.

The Authority has a sewer use ordinance that is administered under the pretreatment program. Ordinance revisions were approved by the Board on October 10, 2012, to ensure compliance with state and federal requirements and incorporate federal streamlining revisions. The pretreatment program monitors and regulates significant wastewater dischargers that are either connected to the Authority's wastewater collection system or hauled to the wastewater treatment plants. Currently, six significant industrial users (SIU) are permitted under the program. SIU permits contain discharge limits for pollutants such as biochemical oxygen demand (BOD), total suspended solids (TSS), chemical oxygen demand (COD), oil and grease, chlorides, ammonia, total nitrogen (TKN), fluoride, certain metals, and organics. All SIUs pre-treat wastewater prior to discharging to the Authority. All SIUs submit monthly monitoring reports. Authority staff conducts semi-annual monitoring. Surcharges are applied to waste that contains pollutants in excess of domestic strength waste. A NC Division of Water Quality approved enforcement response plan ensures permit violations are addressed timely and equitably. Additionally, the pretreatment program permits and monitors food service establishments and other dischargers of

CAPE FEAR PUBLIC UTILITY AUTHORITY PROFILE

non-domestic wastewater that could be harmful to the treatment works, employees, bio-solids, public health, and receiving waters.

Additional information regarding the Authority's service area and operating statistics are located in the supplemental and statistical section of this document.



Cape Fear Public Utility Authority

Strategic Plan 2019

Mission Statement

"We are a customer-centric organization that delivers high-quality water services."

Vision

Supporting our community's quality of life through the responsible use and care of water.

Values

Excellence, transparency, education, and collaboration

Goals

Goal One: Understand and respond to the community's current and future needs.

Strategies:

- 1.1. Understand, anticipate, and respond to our customers and our community's needs in a professional, prompt, and efficient manner.
- 1.2. Maintain a stable financial position that balances rates, affordability, the environment, and the organization's long-term capital and operating needs.
- 1.3. Identify partnerships, develop alliances, and encourage participation with both public and private community stakeholders.
- 1.4. Recruit and retain a well-qualified and motivated workforce that reflects the diversity of the community we serve.
- 1.5. Develop and communicate CFPUA service standards to ensure we operate a responsive and cost-effective collection, treatment, and distribution system.

Goal Two: Championing a positive customer service culture.

Strategies:

- 2.1. Remain committed to a vision of customer service delivery that understands our community's needs, increases our partnership, and ensures that our customers get the right help and support – while enjoying a consistent, positive experience.
- 2.2. Promote customer self-reliance through a range of online services that can be easily accessed from any device; and support those who need individual service.
- 2.3. Develop process improvement initiatives that are cost-effective, compliant, and address the needs of our customers and the organization.
- 2.4. Provide and promote a framework to keep customers informed and up-to-date using their preferred communication method.



Goal Three: Providing exemplary leadership in protecting natural resources.

Strategies:

- 3.1. Consistently maintain and operate the utility, and all its human and physical assets, in a manner that optimizes the care and use of water and other natural resources.
- 3.2. Build a culture of sustainability by creating new energy-reducing goals and challenging existing ones.
- 3.3. Comply and many times surpass federal, state, county, city, and industry standards.
- 3.4. Continue and enhance community education around current programming, environmental stewardship, and CFPUA's role in protecting the environment.
- 3.5. Advocate for water quality protection and related issues.
- 3.6. Explore the use of highly-treated waste water for potable or other non-potable applications.

Goal Four: Cultivating community ownership and advancing relationships.

Strategies:

- 4.1. Develop and share compelling content to deepen CFPUA's relationship with customers and inspire positive engagement.
- 4.2. Partner with the community and media to carry a credible brand message to CFPUA's customers and to a broader audience.
- 4.3. Shift organizational messaging from CFPUA as an organization to focus on the people who provide water service.

Goal Five: Fostering an engaged and forward-thinking workforce.

Strategies:

- 5.1. Adopt state-of-the-art tools, systems, and processes that prepare CFPUA for future technological advancements.
- 5.2. Establish best practices around a culture of talent management and employee development to ensure employees are trained and ready to advance.
- 5.3. Implement leadership and communication best practices to grow employee morale, engagement, and productivity.
- 5.4. Acquire and implement technologies and tools that allow for enhanced interdepartmental collaboration, enterprise-wide sharing of information, and operational efficiencies.



STRATEGIC GOALS & ACTIONS

This section outlines how specific actions to advance the goals contained in the Strategic Plan are incorporated into the FY 21-22 budget.

The Authority's Strategic Plan is evaluated annually by management and the Board each year to determine if changes need to be made. As part of the annual budget development process, management develops a 3-to-5-year action plan that is aimed at advancing the goals contained in the Strategic Plan. These actions are incorporated in the operating and capital budgets subject to funding constraints.

The following table contains the strategic actions to be accomplished in FY 21-22, links to goals in the Strategic Plan, and the financial impact to the FY 21-22 budget.

Goal One: Understand and respond to the community's current and future needs				
	Action Plan/Strategy	Total estimated cost	Timeline	Impact on FY 21-22 Budget
1.1 Understand, anticipate, and respond to our customers and our community's needs in a professional, prompt, and efficient manner.	Incorporate the Sweeney GAC Enhancement project into daily operation to remove PFAS	Approximately \$575,000/year for contactors, electricity and staff	June 2022	40,000
1.2 Maintain a stable financial position that balances rates, affordability, the environment, and the organization's long-term capital and operating needs.	Explore revenue-neutral rate structure alternatives that optimize equity, affordability, and conservation.	\$0	January 2022	TBD based on any necessary rate increases
1.3 Identify partnerships, develop alliances, and encourage participation with both public and private community stakeholders.	Identify partnerships around environmental education and collaboration; build alliances with nonprofits to assist in bill affordability	\$0	Annual	No impact
1.4 Recruit and retain a well-qualified and motivated workforce that reflects the diversity of the community we serve.	Diversify recruitment sources and ensure compensation structures reflect the external market through market analysis	\$0	January 2022	No impact
1.5 Develop and communicate CFPUA service standards to ensure we operate a responsive and cost-effective collection, treatment, and distribution system.	Review and update the CFPUA Construction Standards	\$10,000 per year	Annual	\$10,000

STRATEGIC GOALS & ACTIONS

Goal Two: Championing a positive customer service culture				
	Action	Total estimated cost	Timeline	Impact on FY 21-22 Budget
2.1 Remain committed to a vision of customer service delivery that understands our community's needs, increases our partnership, and ensures that our customers get the right help and support – while enjoying a consistent, positive experience.	Begin billing customers on a monthly basis rather than on a bimonthly basis to allow customers to be more up-to-date on their consumption behavior and better manage household expenses.	\$300,000	September 2021	\$200,000
2.2 Promote customer self-reliance through a range of online services that can be easily accessed from any device; and support those who need individual service.	Offer additional on-line services and payment options.	\$0	June 2022	No impact
2.3 Develop process improvement initiatives that are cost-effective, compliant, and address the needs of our customers and the organization.	Review customer facing solutions (i.e., application and form submittal)	\$0	June 2022	No impact
2.4 Provide and promote a framework to keep customers informed and up-to-date using their preferred communication method.	Expand frequency and reach of social media messaging	\$0	Annual	No impact

STRATEGIC GOALS & ACTIONS

Goal Three: Provide exemplary leadership in protecting natural resources.				
	Action	Total estimated cost	Timeline	Impact on FY 21-22 Budget
3.1 Consistently maintain and operate the utility, and all its human and physical assets, in a manner that optimizes the care and use of water and other natural resources.	Effectively maintain water and wastewater treatment plant equipment as well as conduct routine maintenance on linear assets and pump stations	This is annual cost made up of Treatment/ Engineering Budget and Linear Asset and Project Management budget as well the CIP Budget	Annual	Treatment/ Engineering Budget and Linear Asset and Project Management budget
3.2 Build a culture of sustainability by creating new energy-reducing goals and challenging existing ones.	Monitor organizational greenhouse gas emissions and set emissions reduction goals	\$0	June 2022	No impact
	Monitor Energy Consumption at Plant sites	\$0	Annual	No impact
3.3 Comply and many times surpass federal, state, county, city, and industry standards.	Manage the Water and Wastewater Treatment plants to comply with Federal and State drinking water treatment regulations, standards, and permits	This is annual ongoing cost made up of the Water and Wastewater Treatment Budgets	Annual	Water and Wastewater Treatment Budgets
	Ensure all testing on water and wastewater is performed and reported accurately and timely	\$0	Annual	No impact
3.4 Continue and enhance community education around current programming, environmental stewardship, and CFPUA's role in protecting the environment.	Continue to participate in community events such as river fest, earth day, and look for other opportunities to participate and promote CFPUAs role in the community	\$1,000 per year	Annual	\$1,000
3.5 Advocate for water quality protection and related issues.	Participate in regional water quality centric environmental groups	\$1,000 per year	Annual	\$1,000
3.6 Explore the use of highly-treated waste water for potable or other non-potable applications.	Continue to evaluate opportunities for potable reuse and provide updates to the Board	\$5,000 annually for research. Actual implementation would require a CIP project	Annual	\$5,000

STRATEGIC GOALS & ACTIONS

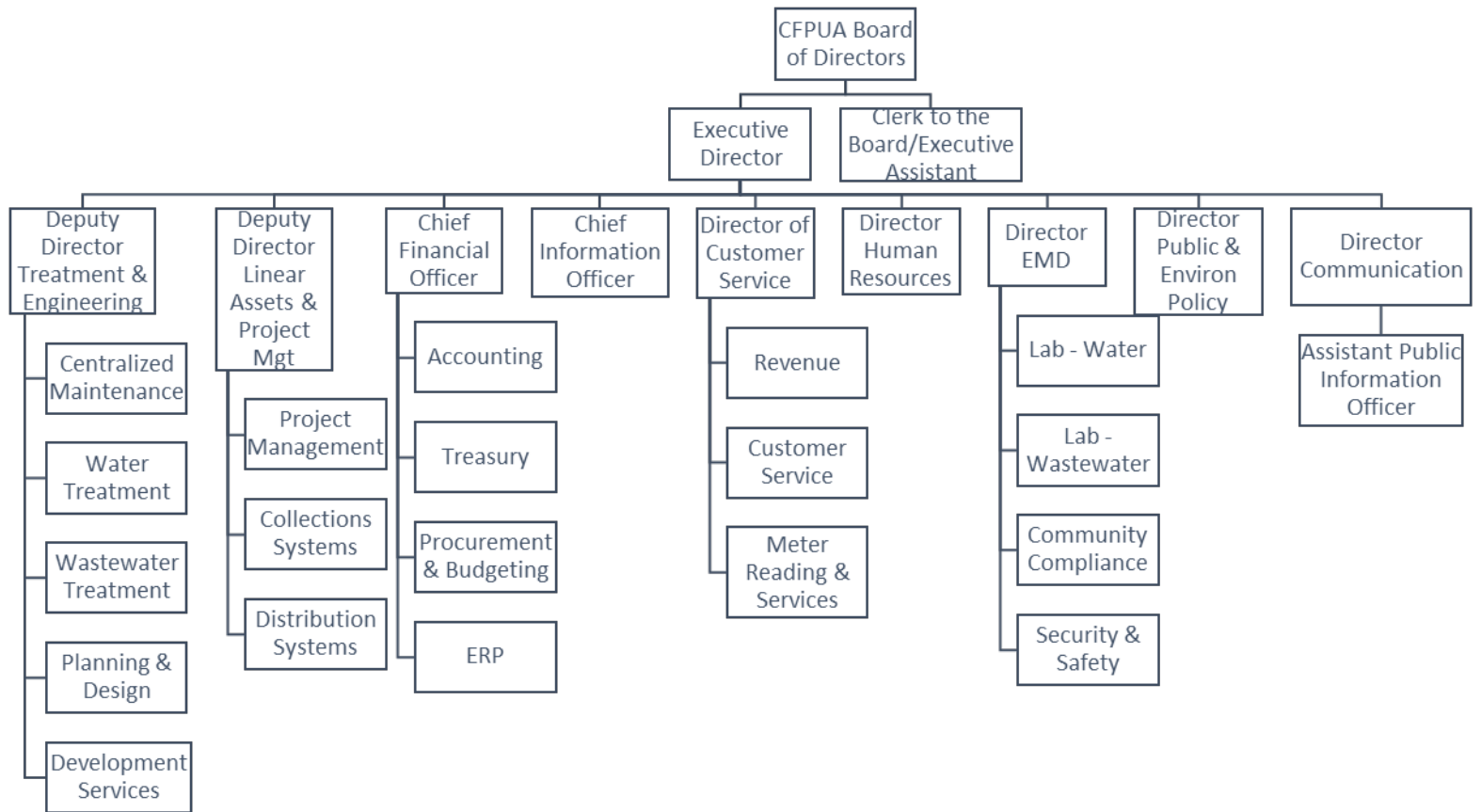
Goal Four: Cultivating community ownership and advancing relationships.

	Action	Total estimated cost	Timeline	Impact on FY 21-22 Budget
4.1 Develop and share compelling content to deepen CFPUA's relationship with customers and inspire positive engagement.	Increase awareness about key CFPUA initiatives, including customer education about preventing FOG-related sewer clogs, promoting prudent irrigation practices, help for customers struggling financially, and providing updates on major projects such as the Sweeney Treatment Enhancements Project through paid community outreach with local TV Stations	\$54,000 per year	Annual	\$54,000
4.2 Partner with the community and media to carry a credible brand message to CFPUA's customers and to a broader audience.	Keep customers and the community updated on major projects with a focus on their effectiveness at treating for PFAS and legal efforts to recoup costs	Part of 4.1	Annual	Part of 4.1
4.3 Shift organizational messaging from CFPUA as an organization to focus on the people who provide water service.	Identify and spotlight employees throughout the organization who exemplify the organization's dedication to customer service.	\$180 per year	Annual	\$180

STRATEGIC GOALS & ACTIONS

Goal Five: Fostering an engaged and forward-thinking workforce.				
	Action	Total estimated cost	Timeline	Impact on FY 21-22 Budget
5.1 Adopt state-of-the-art tools, systems, and processes that prepare CFPUA for future technological advancements.	Increase CFPUA's Cyber Security Posture	\$200,000	Complete June 2022	\$200,000.00
	Implement a sewer capacity tracking system that continuously updates	\$0	Complete June 2022	No Impact
5.2 Establish best practices around a culture of talent management and employee development to ensure employees are trained and ready to advance.	Provide employees access to training that improves customer service, safety, professional competency, and appropriate use of technology.	Annual ongoing cost made up of all dept training budgets and HR organization wide training	Annual	\$100,000
5.3 Implement leadership and communication best practices to grow employee morale, engagement, and productivity.	Review external resources related to organizational development, training development and coaching.	\$0	Complete December 2022	No Impact
5.4 Acquire and implement technologies and tools that allow for enhanced interdepartmental collaboration, enterprise-wide sharing of information, and operational efficiencies.	Expand Virtual Desktop Implementation	\$1,000,000	Complete December 2022	\$1,000,000
	Utilize enterprise-wide asset management system for inventory and production tracking to promote informed decisions.	Annual \$100,000 licensing cost	Annual	\$100,000

ORGANIZATION CHART

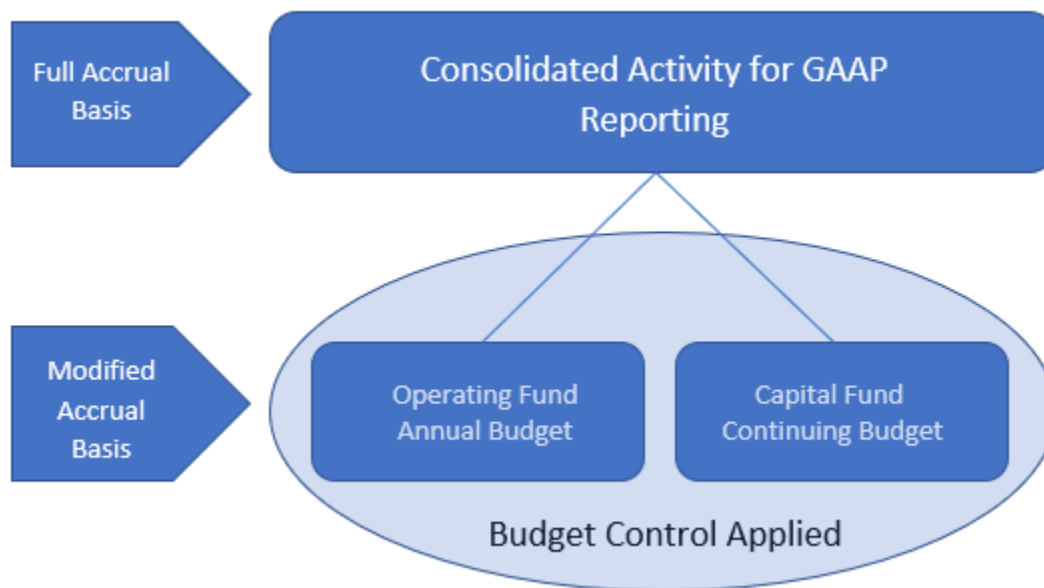


FINANCIAL STRUCTURE

Fund Description, Fund Structure and Basis of Accounting

The Authority uses fund accounting to account for its financial resources and report the results of its operations. In fund accounting, accounts are organized based on funds, each of which is considered an independent fiscal entity with a separate set of self-balancing accounts consisting of assets, liabilities, fund balance, revenues and expenditures. The establishment of discrete funds helps to ensure that public monies are only spent for approved purposes as established by budget ordinances and other actions of the Board, laws and regulations, contracts and other agreements.

The Authority is obligated to maintain a financial structure that provides for budgetary control and meets all financial reporting requirements. The following diagram depicts the Authority's financial structure.



Budget Control and Reporting

For budgetary accounting and reporting, the Authority uses two funds: the Operating Fund and the Capital Projects Fund. Though not required, two funds are maintained mainly because of differences in how budgets are adopted and controlled. The annual budget is adopted as required by NC General Statute 159-8 for the Operating Fund. The annual budget ordinance establishes appropriations and estimated revenues for a single fiscal year. Expenditures in the Operating Fund include salaries and benefits for the Authority's employees, system maintenance, and other administrative costs for all departmental units. Revenues to fund these costs include charges for water and wastewater service, system development charges, investment earnings, and other miscellaneous revenues.

On the other hand, budgets related to the activity accounted for in the Capital Projects Fund are established by the adoption of capital project ordinances in accordance with NC General Statute 159-

FINANCIAL STRUCTURE

13.2. Capital project ordinances provide for budgeted expenditures and funding sources for those expenditures over the life of capital projects, rather than for a single fiscal year. The Capital Projects Fund accounts for system-wide, water, and wastewater capital projects that are appropriated in the capital budget. Funding sources include transfers from the Operating Fund, proceeds from the issuance of debt obligations, grant revenues, and contributions from third parties through cost-sharing agreements.

The Authority uses the modified accrual basis of accounting for budgetary purposes as required by NC General Statute 159-26(c). The modified accrual basis of accounting takes a short-term perspective and is intended to provide information to help the public determine whether a government was able to meet its financial obligations in the current year with available financial resources.

GAAP Financial Reporting

For financial reporting in accordance with generally accepted accounting principles, the Authority is considered a special-purpose government engaged exclusively in business-type activities. This means that the Authority reports both its operating and capital activities together in the basic financial statements on the full-accrual basis of accounting similar to a private business.

For financial reporting in accordance with generally accepted accounting principles, the Authority uses the accrual basis of accounting. The accrual basis of accounting takes a longer-term perspective and doesn't just account for a government's current year obligations and financial resources, but accounts for all economic resources and liabilities. For example, capital costs for water and wastewater infrastructure under the accrual basis of accounting are capitalized as assets and expensed over the estimated useful life because these costs represent economic resources that have a future service capacity. However, under the modified accrual basis of accounting, these costs are not capitalized as assets since newly constructed infrastructure isn't a financial resource that's available to fund short-term liabilities. Rather, these costs are expensed when paid.

BUDGET PROCESS

This section outlines the process and procedures that guide the preparation and management of the Authority's annual budget. The Authority follows guidelines established in board-adopted policies.

Preparation of the annual budget begins approximately eight months prior to the start of each fiscal year with the development of the budget calendar. The budget calendar provides the projected dates and items that must be completed to meet the mandatory budget adoption as required by NC General Statute 159-8. The calendar is updated and revised as the budget process progresses and is a primary communication tool of the budget process. The Authority's budget calendar must adhere to the following requirements detailed in NC General Statute 159-8.

Before

April 30 Each department head shall transmit to the budget officer the budget requests and revenue estimates for their department for the budget year.

No Later Than

June 1 The budget together with the budget message shall be submitted to the governing board. The public hearing on the budget should be scheduled at this time.

No Later Than

July 1 The governing board shall adopt a budget ordinance.

Operating Budget

CFPUA uses a modified zero-based budgeting approach to develop its annual operating budget. Budget development is centralized to ensure that line item estimates are consistent among departments and consistent with assumed consumption and other factors upon which revenue estimates are based. Only significant line items are forecasted at a detailed level to reduce the overall administrative burden. A recommended operating budget is developed by management that considers the estimated cost to maintain current service levels for the next budget year (a continuation budget) and a recommended number of expansions to current service levels, including actions to achieve goals outlined in the Strategic Plan (the expansion budget). Although the operating budget is developed at a department and line item level, the operating budget is controlled at the department and category level. The categories in the operating budget include salaries and benefits, operating, capital outlay, debt service, and pay-as-you-go capital funding. Controlling the budget by department and category, rather than by line item, gives departments budgetary flexibility during the budget year. The legal level of budget control is at the fund level (operating fund versus capital fund).

The continuation budget is the estimated cost of maintaining existing, authorized levels of recurring service without major structural changes. The continuation budget is developed for each department as follows:

1. Salaries and benefits line items for the continuation budget consist of two pieces: 1) cost estimates related to existing staff levels and 2) cost estimates related to approved new staff needed to maintain existing service levels (e.g. new staff needed to carry out a service currently provided but additional staff are needed due to customer growth). New position requests are submitted by each department and considered by the management team. Estimates are then

BUDGET PROCESS

developed for currently authorized positions and approved new positions that include any approved merit and cost-of-living increases and estimated increases for health, dental, life insurance, retirement, and other benefits.

2. For line items in the operating category, Finance staff determine which departmental line items are significant based on dollar amount. Finance collaborates with departmental staff to develop cost estimates for individually significant budget line items. Non-significant line items are forecasted based on historical averages. Afterwards, significant and non-significant line items are combined for each department and submitted to each department head for review. Adjustments are made to individual non-significant line items when needed.
3. Each department submits requests for capital outlay included in the operating budget. These requests generally include small pumps and other equipment with a useful life greater than one year that aren't covered by the capital budget.
4. The debt service category includes scheduled maturities of principal and interest payments. Pay-as-you-go capital funding is set at the level necessary to maintain the level of annual capital investment needed to support CFPUA's capital improvement plan and the debt limitation established in policy.

The expansion budget is the estimated incremental cost of major structural changes to existing service levels. Items included in the expansion budget come from two sources: 1) the action plans developed by management and the Board to advance the goals outlined in the Strategic Plan and 2) departmental requests including new programs, studies, and pilot projects. Management evaluates and prioritizes these requests. A number of service level decision packages are developed that combine the continuation operating budget and various expansion budget requests. Management considers these decision packages subject to estimated funding and organizational priorities and develops a recommended operating budget to present to the Finance Committee and the Board.

Capital Budget

The development of the capital budget involves a risk-based prioritization process based on asset management best practices that results in the 10-Year Capital Improvement Plan. This plan is reviewed by the Finance Department to identify funding sources and ensure that the plan is consistent with CFPUA's financial policies and that key financial metrics will continue to be achieved. The proposed 10-Year Capital Improvement plan is reviewed by the Long-Range Planning Committee, Finance Committee, and the full Board in February through May. Changes are made based on these deliberations.

After discussions over several months, the Board adopts the operating and capital budget ordinances upon recommendation of the Finance Committee in June. A public hearing is held at the June meeting for public input.

Except as restricted by law, the Authority Board may amend the budget ordinance, according to board-adopted policies, at any time after the ordinance's adoption, so long as the ordinance continues to satisfy the requirements of North Carolina General Statutes 159-8 and 159-13. The following procedures are used to amend the budget as provided for by policy:

BUDGET PROCESS

- Transfers of budget authority among appropriation lines in the Budget Ordinances require approval of the Chief Financial Officer and must be reported to the Board at the meeting subsequent to such transfer. These transfers must be recorded in the meeting minutes.
- Changes to the appropriation levels provided for in the Budget Ordinances may only be made by the Board through an adopted budget ordinance.

BUDGET CALENDAR

Day/Date/Time	Event	Group
September 2020 – December 2020	Multi Departmental CIP Team Develops Draft FY21 CIP and Ten-Year CIP	Multi Departmental CIP Team
Friday, December 31, 2020	New Position/Reclassification Requests due to HR	
Friday, January 15, 2021	Departmental non-recurring maintenance requests due to Centralized Maintenance	
Thursday, January 28, 2021	FY21 CIP Draft Budget to LRPC	Engineering/LRPC
Friday, January 15, 2021	Expansion Budget Requests Due	
Wednesday, January 20, 2020	Departmental Estimates of Significant Continuing Budget Operating Items due to Finance	
January 21, 2021- February 19, 2021	Review and meet with Departments to discuss Operating Budgets	CFPUA Staff
Wednesday, February 3, 2021 9:00 am Virtual	Regular Finance Committee Meeting - Review SDC Calculation	Finance Committee
Wednesday, February 10, 2021 9:00 am Wilmington Convention Center	Regular Board Meeting - Review SDC Calculation	Engineering/Authority Board
Wednesday February 10, 2021	Publish System Development Charge on CFPUA website for Public Comment	
Thursday, February 18, 2021	Meeting to finalize new position/reclassification requests for the Continuation Budget	
Friday, February 28, 2021	Performance Evaluations Due to HR	Human Resources
Monday, March 1, 2021	Business Insurance Estimates Due	CFPUA Staff
Wednesday, March 3, 2021 9:00 am Virtual	Regular Finance Committee Meeting Preliminary Recommended Budget Review Review of CIP	Finance Committee
Wednesday, March 10, 2021 9:00 am Wilmington Convention Center	Regular Board Meeting Preliminary Recommended Budget Review Review of CIP	Authority Board
Thursday, March 25, 2021	FY21 CIP Approval by LRPC	Engineering/LRPC
Wednesday, March 31, 2021	End of public comment period for proposed system development charges	
Wednesday, April 7, 2020 9:00 am Virtual	Regular Finance Committee Meeting Preliminary Recommended Budget Review	Finance Committee
Wednesday, April 14, 2020 9:00 am Wilmington Convention Center	Regular Board Meeting/Public Hearing - Preliminary Recommended Budget Review - Public Hearing on SDC Calculation and Adoption of SDCs (if no revisions are needed) - FY21 CIP Recommended for Approval	Authority Board
Friday, April 30, 2021	Recommended Budget Completed	CFPUA Staff

BUDGET CALENDAR

Day/Date/Time	Event	Group
Wednesday, May 5, 2021 9:00 am Virtual	Regular Finance Committee Meeting - Recommended Budget Submitted	Finance Committee
Wednesday, May 12, 2021 9:00 am Wilmington Convention Center	Regular Board Meeting - Recommended Budget Submitted	Authority Board
Wednesday, June 2, 2021 IT Conference Room	Regular Finance Committee Meeting - Recommendation of Budget Adoption Submitted (including rates)	Finance Committee
Wednesday, June 9, 2021 9:00 am Wilmington Convention Center	Regular Board Meeting/Public Hearing - Budget Adoption (including rates)	Authority Board

FINANCIAL POLICIES

Policies that affect the Authority's long-term financial sustainability are adopted by the Board. These policies are periodically reviewed. These policies are summarized below.

Adopted Budget

- The Adopted Budget and Budget Ordinance for the Authority is the basis for the financial plan for the fiscal year. The budget is prepared and presented in conformity with the North Carolina Local Government Budget and Fiscal Control Act under NC General Statute 159-8. The Authority operates under an annual balanced budget ordinance in which the sum of estimated net revenues and appropriated fund balances are equal to the authorized expenditures. Refer to the Budget Process for detailed information on the adopted budget.
- Operating appropriations lapse at the end of each fiscal year and are controlled at the department and expenditure category level. Capital appropriations do not lapse at the end of each fiscal year and are controlled at the project level.

Debt Management

- The Authority issues debt under the guidance of the Local Government Commission, a division of the State of North Carolina. Debt is issued in accordance with North Carolina General Statutes 162A.
- The Authority generally limits debt issuance to only those projects that are high-dollar, emergency-related, or growth-oriented.
- Debt may not be issued if such issuance would cause the ratio of outstanding debt to the value of capital assets to exceed 45%, consistent with target debt coverage and expected long-term borrowing costs.

Unrestricted Fund Balance and One-time Revenues

- The Authority periodically evaluates the targeted level of unrestricted fund balance that is needed to maintain sufficient liquidity for working capital needs and to provide for a reserve for unanticipated expenditures and/or revenue shortfalls that is tailored to the specific business risks relevant to the Authority's operations. The Authority's current unrestricted fund balance target is \$50 million.
- The Authority is precluded from using "one-time" revenues, including operating surpluses generated in prior years, to fund recurring expenditures. After the end of each fiscal year, operating surpluses are identified and designated through Board action for the early retirement of debt, the accumulation of capital reserves, the payment of post-retirement healthcare benefits, or to remain as unrestricted fund balance available to fund future non-recurring expenditures.

FINANCIAL POLICIES

Revenues

The Authority sets rates and charges in accordance with North Carolina General Statute 162A-9. Water and wastewater rates consist of fixed and volumetric charges. Fixed charges are based on the greater of annual debt service requirements or 35% of the operating budget. Volumetric charges are established to fund all operating costs less the estimated fixed charges, system development charges, and other revenues.

Investments

- The Authority is empowered to invest in types of securities in accordance with North Carolina General Statute 159-30 (c).
- The Authority prepares detailed cash flow forecasts to maximize the amount and maturity of investments to optimize investment returns.
- The State Treasurer of North Carolina enforces strict standards of financial stability for each depository that collateralizes public deposits under the pooling method. The State Treasurer enforces standards of minimum capitalization for all pooling method financial institutions. The Authority relies on the State Treasurer to monitor those financial institutions. The Authority analyzes the financial soundness of any other financial institution used by the Authority. The Authority complies with the provisions of G.S. 159-31 when designating official depositories and verifying that deposits are properly collateralized.
- The investment portfolio shall be properly diversified in order to minimize risks brought on by economic and market changes. To achieve this diversification:
 - No more than 25% of the Authority's total investment portfolio shall be invested in a single security type.
 - The Authority will not invest in securities maturing more than five years from date of purchase and the weighted average maturity of the portfolio shall never exceed one year.

Long-term Financial Planning

In order to plan and demonstrate the Authority's long-term operational and financial sustainability, the Authority is required to annually prepare a long-term financial plan which incorporates long-term capital expenditure plans and projected operating costs constrained by the Authority's debt and revenue policies. The long-term financial plan is an iterative, multi-departmental process that seeks to balance efficient and effective service delivery, sufficient capital investment, the Authority's financial health, and rate affordability.

EXPENDITURE SUMMARY

The Authority's operating budget covers the cost to operate the system each year including water and wastewater treatment, water distribution, wastewater collection, system maintenance, environmental management, engineering, customer service, and administration. Appropriations in the operating budget are made on an annual basis meaning that budget authority lapses at the end of each fiscal year. This contrasts with the capital budget in which specific project appropriations continue through the life of the project, which may span multiple fiscal years. The FY 21-22 operating budget is \$91,968,325, an increase of 2.2% compared to the adopted FY 20-21 operating budget. The information below summarizes the major expenditure categories and some of the key factors and assumptions driving the FY 21-22 operating budget.

Salaries and Benefits

Salaries and benefits costs related to the Authority's employees and retirees budgeted for FY 21-22 are approximately \$27.05 million, which makes up 29% of the Authority's operating budget. The following chart details the Authority's staffing trends over the upcoming budget year and the previous two years. The FY 21-22 budget authorizes a total of 327.75 full-time equivalent (FTE) positions, an increase of 4 FTEs from the current staffing levels.

Authorized Full-time Equivalent Positions by Fiscal Year			
	<u>FY 19-20</u>	<u>FY 20-21</u>	<u>FY 21-22</u>
Administration (1101)	4.00	4.00	2.0
Communications (1102)			2.0
Finance (1201)	12.00	12.00	12.0
Human Resources (1301)	4.00	4.00	4.0
Public & Environmental Policy (1401)	3.00	3.00	3.0
Information Technology (2504)	9.00	9.00	9.0
Treatment & Engineering Services:			
Administration (2001)	5.00	5.00	5.0
Engineering (2002 & 2004)	16.00	17.00	17.0
Centralized Maintenance (2401 & 2402)	21.00	22.00	22.0
Water Treatment (2600's)	27.00	28.00	30.0
Wastewater Treatment (2700's)	32.00	32.00	33.0
Linear Assets & Project Management			
Administration (2501)	4.00	4.00	4.0
Utility Services (2800's & 2900's)	91.00	94.00	94.0
Project Management (2003)	6.00	6.00	6.0
Environmental Management/Safety (3000's)	29.75	29.75	30.75
Customer Service/Meter Services (3500's)	57.00	54.00	54.0
Total	320.75	323.75	327.75

EXPENDITURE SUMMARY

The following table details the change in individual salary and benefits line items compared to the adopted FY 20-21 operating budget.

	FY21 Adopted	FY22 Adopted	Increase/ (Decrease)	%Difference
Regular Salary & Wages	\$ 17,722,587	\$ 18,699,025	\$ 976,438	5.5%
Health/Dental Insurance	3,158,283	3,059,151	\$ (99,132)	-3.1%
LGERS Pension Contribution	1,878,103	2,202,228	\$ 324,125	17.3%
FICA - Social Security	1,109,449	1,166,067	\$ 56,618	5.1%
Overtime	673,700	692,300	\$ 18,600	2.8%
401K Matching Contribution	669,089	696,607	\$ 27,518	4.1%
FICA - Medicare	259,494	272,730	\$ 13,236	5.1%
Standby	212,200	187,300	\$ (24,900)	-11.7%
Life/AD&D Insurance	44,300	44,370	\$ 70	0.2%
Long Term Disability	23,768	23,740	\$ (28)	-0.1%
Miscellaneous	4,800	4,800	\$ -	0.0%
Employee License Incentive	-	8,000	\$ 8,000	100.0%
Grand Total	\$ 25,755,773	\$ 27,056,318	\$ 1,300,545	5.0%

Regular salaries and wages increased by 5.2% due to the following:

- The addition of 4 new FTE positions
 - Planner/Schedulers (2 FTE) in the Water Treatment division to keep up with an increased workload, due to new projects in the field services division and the new Granulated Activated Carbon filtration process beginning at the Sweeney Water Treatment Plant.
 - Chemist (1 FTE) in the Environmental Management Department to keep up with the increased workload required by the new lead and copper rule.
 - Operator (1 FTE) in the Wastewater Treatment division to maintain current service levels. An Operator position was reclassified into a supervisor position to manage the bio-solids program. The Operator position will backfill the position that was reclassified.
- A 1.5% cost-of-living and 3% merit increases for certain employees.
- Equity adjustments totaling \$88,000 for staff to meet market levels and reduce attrition.

The increases in regular salaries and wages and overtime resulted in commensurate increases in amounts budgeted for FICA taxes and 401(k) matching contributions. In addition to the increases in regular salaries and wages and overtime, required employer contributions to the North Carolina Local Government Employees Retirement System increased from 10.15% to 11.35% of covered payroll resulting in an overall increase of 17.3% compared to the FY 20-21 adopted budget. Budgeted expenditures for health and dental benefits decreased 3.1% from the prior year's adopted budget due to a \$17.40 reduction per employee per month to the North Carolina state health plan premiums starting in January 2021.

EXPENDITURE SUMMARY

Operations and Maintenance

Operations and maintenance costs include all direct, non-capital costs to operate the water and wastewater systems including water and wastewater treatment, water distribution, wastewater collection, engineering, customer service, environmental management and testing, and administrative costs. Operations and maintenance budgeted for FY 21-22 total approximately \$21.7 million, an increase of 6.1% from the FY 20-21 adopted budget.

The table below details changes in budgeted operating expenditures by department.

	FY21 Adopted	FY22 Adopted	Increase/ (Decrease)	%Difference
Authority Board	\$ 21,344	\$ 19,794	\$ (1,550)	-7.3%
Administration	532,498	571,880	39,382	7.4%
Communications	-	65,676	65,676	
Finance	152,449	147,714	(4,735)	-3.1%
Human Resources	132,148	134,960	2,812	2.1%
Public & Environmental Policy	25,764	23,294	(2,470)	-9.6%
Information Technology	2,209,224	2,503,609	294,385	13.3%
Treatment & Engineering Services:			-	
Administration	44,968	66,077	21,109	46.9%
Engineering	98,636	65,573	(33,063)	-33.5%
Centralized Maintenance	1,985,219	1,864,141	(121,078)	-6.1%
Water Treatment	4,974,819	5,159,071	184,252	3.7%
Wastewater Treatment	2,521,943	2,581,201	59,258	2.3%
Linear Assets & Project Management			-	
Administration	16,230	11,254	(4,976)	-30.7%
Utility Services	4,055,348	4,097,950	42,602	1.1%
Project Management	16,260	14,728	(1,532)	-9.4%
Environmental Management/Safety	719,862	803,014	83,152	11.6%
Customer Service/Meter Services	956,849	1,176,774	219,925	23.0%
Non-departmental	2,013,788	2,420,943	407,155	20.2%
Total	\$ 20,477,349	\$ 21,727,653	\$ 1,250,304	6.1%

Significant increases in operations and maintenance expenditures from the FY 20-21 adopted budget by department are as follows:

- Non-Departmental – The \$407,155 increase is primarily due to property and auto insurance premiums. Property and wind/hail insurance has increased because of the number of catastrophic events over the past 2 years. In addition, auto insurers are passing on rate increases created by losses and increases from the NC Automobile Reinsurance Facility.
- Information Technology – The \$294,385 increase is a result of increased licensing cost of the new ERP system that was implemented in FY 20-21. In addition, there is an increased cost to maintain the virtual server platform.

EXPENDITURE SUMMARY

- Customer Service – The \$219,925 increase is primarily due to moving from bi-monthly billing to monthly billing, which will require additional postage.
- Water Treatment – The \$184,252 increase is a result of a 19.4% increase in the raw water purchase rate, an increase in production, and a rise in raw materials cost for chemicals.
- Environmental Management/Safety – The \$83,152 increase is for additional lab testing for the new lead and copper rule and additional PFAS testing on new filters.

Debt Service

The Authority is empowered to issue revenue bonds to fund its capital program. Pursuant to the interlocal agreement transferring the City of Wilmington's and New Hanover County's water and wastewater system to the Authority, the Authority assumed responsibility for the related debt. All the debt transferred from the City has been retired, while the 2012 Limited Obligation Bonds assumed from the County remain outstanding.

The Authority is required to structure its rates to maintain coverage at 1.2 times the annual debt service requirement; however, the Authority's debt management policies are designed to maintain coverage of at least 1.8 times the annual debt service requirement. In addition, this policy provides that the Authority cannot issue debt if the issuance of such debt would cause the Authority's debt balance to exceed 45% of the Authority's capital asset balance.

The following chart compares the budgeted debt service in FY 21-22 to the FY 20-21 adopted budget:

	FY 20-21 Adopted	FY 21-22 Adopted	Increase/ (Decrease)	%Difference
Water and Sewer Rate Revenue Bonds	\$ 23,050,500	\$ 22,751,847	\$ (298,653)	-1.3%
Debt Assumed from New Hanover County	1,328,150	1,278,350	\$ (49,800)	-3.7%
State Revolving Loans	1,367,909	1,154,157	\$ (213,752)	-15.6%
Total	\$ 25,746,559	\$ 25,184,354	\$ (562,205)	-2.2%

The debt service appropriation for the FY 21-22 budget is \$25.2 million, a decrease of 2.2% compared to the FY 20-21 adopted budget. The decrease is mainly attributable to the early payoff of a state revolving loan, reducing the debt service by \$177,000 per year, and reduced interest payments on the 2019A bond.

The Authority does not plan to issue any new debt during FY 21-22; however, the Authority was approved to receive a Clean Water State Revolving loan to fund a \$4.5 million project to rehabilitate gravity sewer on 5th Ave, in downtown Wilmington. The Authority is also applying for a Drinking Water State Revolving Loan of approximately \$1.75 million to fund the replacement of water mains, valves and services on 5th Ave in downtown Wilmington. Debt service payments for these loans will begin when these projects are completed. None of these projects are expected to be completed during FY 21-22.

EXPENDITURE SUMMARY

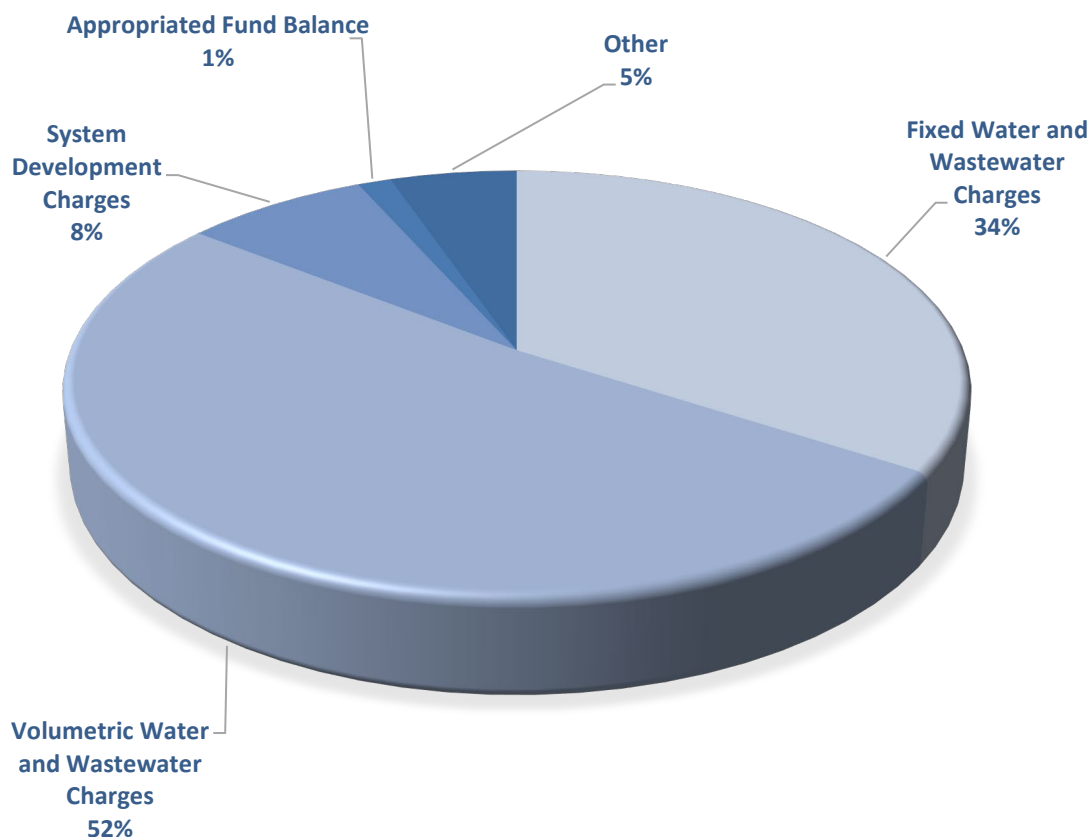
Transfers to Capital Projects Fund

In addition to proceeds from the issuance of debt, transfers of current year revenues to the capital projects fund is the other major source of funding for the Authority's capital program. The FY 21-22 operating budget includes \$18 million in pay-as-you-go capital funding. The \$18 million in annual pay-as-you-go capital funding is the amount that is needed each year to both support the Authority's long-term capital needs while also complying with the Authority's debt limit over the long term.

REVENUE SUMMARY

The Authority sets rates, fees and charges with oversight, supervision, and approval from the Board. The Authority's operations, capital improvement program and debt payments are funded almost entirely through rates, fees and other charges for water and wastewater services, with occasional grants from the state or federal government and contributions from the City of Wilmington, New Hanover County or other governmental and nongovernmental entities.

Fiscal Year 2021-2022 Revenues by Type



Water and Wastewater Fixed and Volumetric Charges

Most of the Authority's revenues (86%) are generated from rate revenues for water and wastewater service. Rates are composed of fixed and volumetric portions. Fixed charges represent the minimum amount a customer will pay regardless of usage. The volumetric component charges a cost per 1,000 gallons of usage. As shown above, in FY 21-22, 52% of total budgeted revenue are from volumetric charges and 34% of total budgeted revenue are from fixed charges. Fixed charges are estimated to total \$31.4 million (\$15.6 million from water and \$15.8 million from wastewater), a 0.9% increase from the FY 20-21 adopted budget. Volumetric revenues are anticipated to total \$47.3 million (\$23.5 million from water and

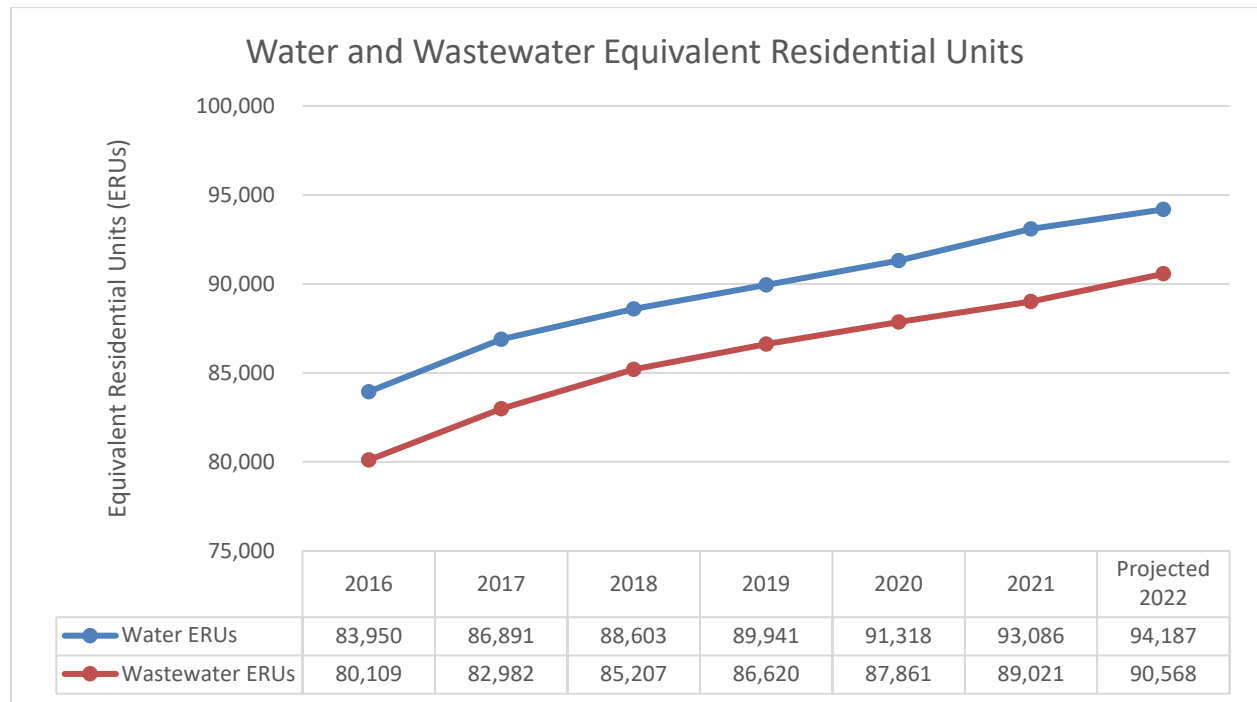
REVENUE SUMMARY

\$23.8 million from wastewater), a 4.4% increase from the FY 20-21 adopted budget. These increases are attributable to projected increases in the number of equivalent residential units (ERUs) and usage per equivalent residential unit compared to the FY 20-21 adopted budget.

Water and wastewater fixed charges are developed to recover the greater of debt service due during the year or 35% of the operating budget. This policy exists for two reasons: 1) to guarantee that sufficient amounts are available to pay debt service irrespective of usage and 2) in periods in which annual debt service requirements are declining, to ensure that the Authority's revenues are insulated from significant decreases in water and wastewater usage.

The fixed meter charges are incremented such that customers with larger water meter sizes pay a higher fixed charge. Fixed meter charges are calculated based on the number of ERUs, which expresses the number of active accounts as if each customer were a residential customer. ERUs assumed for the FY 21-22 budget are based on current actual ERUs inflated by a growth factor based on recent experience.

The chart below provides trends in actual water and wastewater ERUs since FY 15-16 and projected water and wastewater ERUs for FY 21-22.



The number of ERUs served has grown steadily over the last several years. This trend in growth is expected to continue through FY 21-22 based on the number of plan reviews and building inspections.

REVENUE SUMMARY

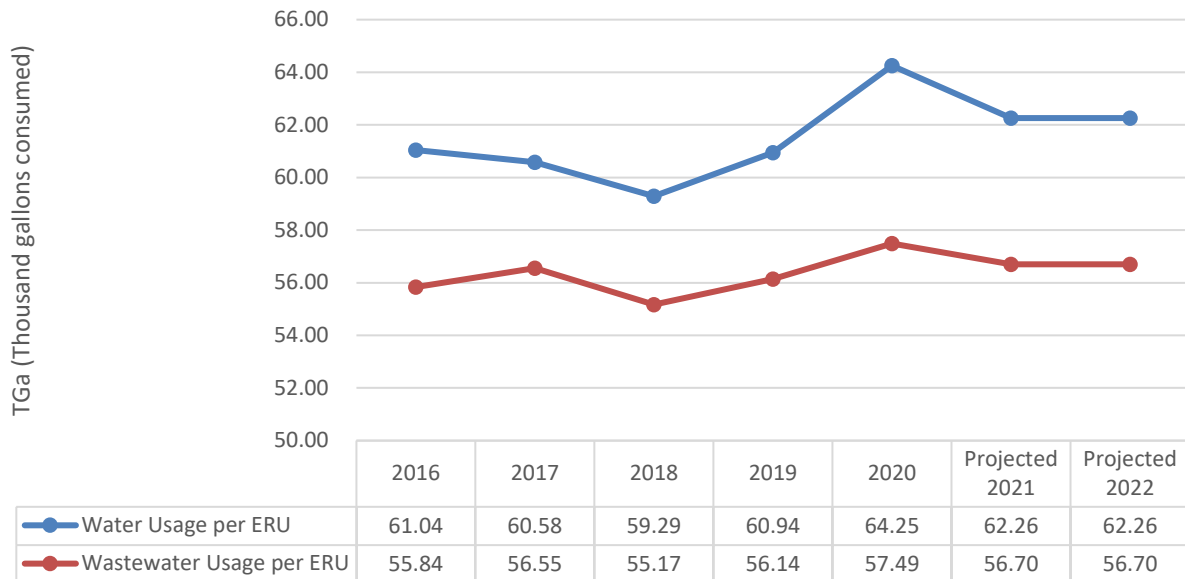
The table below compares the ERU assumptions and fixed charge revenues in the FY 20-21 and FY 21-22 budgets.

	FY21 Adopted	FY22 Adopted	Increase/ (Decrease)	% Difference
Assumed ERUs - Water	93,300	94,187	887	1.0%
Bimonthly Fixed Water Charge	\$ 27.56	\$ 27.56	\$ -	0.0%
Total Fixed Charges Water	\$ 15,428,089	\$ 15,574,762	\$ 146,673	3.0%
Assumed ERUs - Wastewater	89,760	90,568	808	0.9%
Bimonthly Fixed Wastewater Charge	\$ 29.10	\$ 29.10	\$ -	0.0%
Total Fixed Charges Wastewater	\$ 15,672,096	\$ 15,813,173	\$ 141,077	0.9%
Total Fixed Charges	\$ 31,100,185	\$ 31,387,935	\$ 287,750	0.9%

The volumetric charge utilizes a uniform rate structure such that the rate per 1,000 gallons remains constant for all levels of usage. Volumetric charges are developed to recover operating costs allocated to water and wastewater, respectively, that aren't recovered from fixed charges and other revenues. The remaining allocated cost pools for water and wastewater are divided by projected water and wastewater usage. Usage projections for FY 21-22 are equal to actual FY 20-21 usage projected through the end of fiscal year.

The chart below provides trends in actual water and wastewater consumption per ERU since FY 15-16 and projected water and wastewater consumption per ERU for FY 20-21 and FY 21-22.

Water and Wastewater Consumption per ERU by Fiscal Year



REVENUE SUMMARY

Water and wastewater consumption depend largely on rainfall. FY 19-20 was a relatively dry year resulting in greater billed water and wastewater consumption. The increase in consumption per ERU in FY 19-20 was more pronounced for water due to irrigation usage which is not billed wastewater charges. Since that time we have seen a return to normal rainfall resulting in a decrease in the consumption per ERU.

The table below compares the usage assumptions and volumetric charge revenues in the FY 19-20 and FY 20-21 budgets.

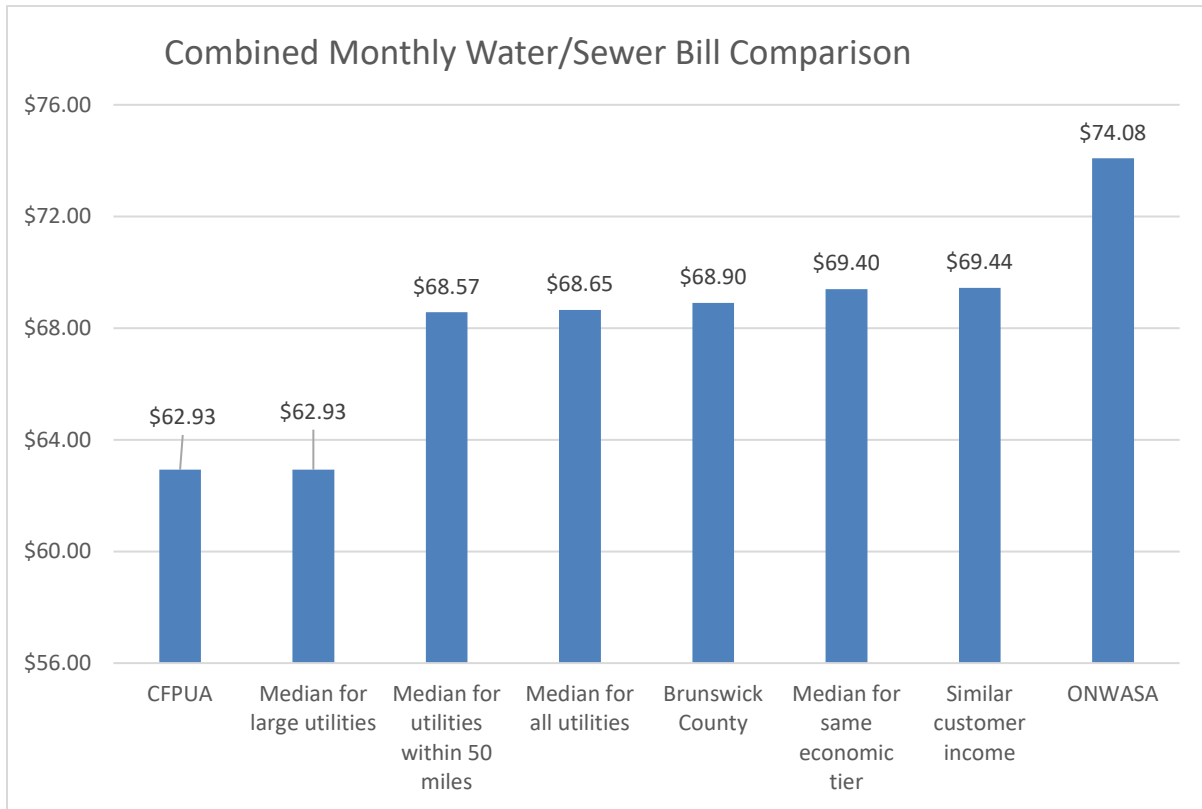
	FY21 Adopted	FY22 Adopted	Increase/ (Decrease)	% Difference
Assumed ERUs - Water	93,300	94,187	887	1.0%
Assumed Annual Usage per ERU - Water	59.29	62.26	2.97	5.0%
Assumed Annual Usage - Water (TGal)	5,531,757	5,863,612	331,855	6.0%
Volumetric Charge - Water	\$ 4.02	\$ 4.02	\$ -	0.0%
Total Volumetric Charges - Water	\$ 22,237,665	\$ 23,571,719	\$ 1,334,054	6.0%
Assumed ERUs - Wastewater	89,760	90,568	808	0.9%
Assumed Annual Usage per ERU - Wastewater	55.59	56.70	1.11	2.0%
Assumed Annual Usage - Wastewater (Tgal)	4,989,758	5,135,387	145,629	2.9%
Volumetric Charge - Wastewater	\$ 4.63	\$ 4.63	\$ -	0.0%
Total Volumetric Charges - Wastewater	\$ 23,102,581	\$ 23,776,841	\$ 674,260	2.9%
Total Volumetric Charges	\$ 45,340,246	\$ 47,348,560	\$ 2,008,314	4.4%

The Authority's water and wastewater rates remain at or below the median rates within North Carolina. Assuming monthly usage of 4,000 gallons, a residential customer will pay \$62.93 per month (\$125.86 every two months) in FY 21-22. The bar graph below compares CFPUA's monthly combined water and sewer bill to the median combined bills of all North Carolina utilities, all large North Carolina utilities, all North Carolina utilities within the same economic tier, all North Carolina utilities with similar income, and all North Carolina utilities within 50 miles of CFPUA. The combined bills for Brunswick County and Onslow Water and Sewer Authority (ONWASA) are also included. These two utilities are CFPUA's most direct peers in terms of topography, size, and income level.

It should be noted that the monthly combined bill for each peer is based on rates in effect for FY 20-21. The amounts presented for the Authority are based on rates for FY 21-22. Therefore, any rate increases effective for FY 21-22 are not included in the peers' monthly bills.

The chart on the next page provides a comparison of CFPUA's bill to the bills for various peer groups assuming 4,000 gallons per month.

REVENUE SUMMARY



Source: Environmental Finance Center, *North Carolina Utilities Dashboard*

System Development Charges

The system development charge (SDC) is the upfront contribution that a new customer pays to buy into infrastructure that will benefit the new customer that has been paid for with past rate collections. The SDC calculation consists of two parts: 1) quantifying the value of infrastructure paid for by current and past rate payers that will benefit new customers (i.e. rate payer equity) and 2) allocating rate payer equity to existing and new customers. Rate payer equity is calculated by reducing the depreciated value of infrastructure by amounts that were not paid by past rate payers including the outstanding balance of debt issued to acquire or construct the infrastructure, conveyed infrastructure, grant funding, and cash contributions from developers and governmental entities. Rate payer equity is then allocated between water and wastewater in proportion to cumulative capital investment in the water and wastewater systems. These allocations are then divided by the number of equivalent residential units projected for water and sewer for the upcoming fiscal year.

REVENUE SUMMARY

The table below presents the adopted SDCs (for 5/8" meters) for FY 20-21 and FY 21-22:

	FY 20-21 Adopted	FY 21-22 Adopted	Increase/ (Decrease)	% Difference
System Development Charge - Water	\$ 1,920	\$ 2,120	\$ 200	10.4%
System Development Charge - Wastewater	\$ 2,070	\$ 2,180	\$ 110	5.3%

The increases in the adopted SDCs are a direct result of the adoption of revisions to the Authority's debt management policy. These revisions have increased the proportion of cumulative capital investments that are funded on a pay-as-you-go basis and consequently increased rate payer equity. Estimated total SDC revenues are derived by multiplying the SDCs by the number of new customers (on an ERU basis) that are expected to be assessed the SDC during the year. Total SDC revenues are estimated to be \$7,095,000, which assumes 1,650 new ERUs will be assessed SDCs for both water and wastewater. This assumed level of ERUs is consistent with recent trends over the last three fiscal years. All leading indicators such as the level of plan reviews and inspections suggest that this level of growth should continue during FY 21-22.

Other Revenues (Other Charges for Service and Investment Earnings)

Other revenues account for 5% of total budgeted revenues. Other revenues include penalties and late fees, application and premise visit fees, meter fees, tap fees, and investment earnings. Budgeted amounts are based on historical averages adjusted for current trends. Other charges for FY 21-22 are \$4.6 million, a decrease of approximately \$2.4 million from the FY 20-21 budget. The decrease is due to a \$1.5 million decrease in projected investment earnings attributable to the low yields that CFPUA is able to earn on its investments. The remainder of the decrease is due to the suspension of shutoffs and the assessment of late fees implemented to assist customers that may be experiencing economic difficulty due to the COVID-19 pandemic.

Appropriated Fund Balance

Upon inception of the Authority, the City of Wilmington and New Hanover County transferred funds that were explicitly designated for funding post-employment health insurance benefits to legacy employees. The FY 21-22 budget includes an estimated use of \$500,000 of appropriated fund balance to fund appropriations related to the provision of retiree health insurance benefits. The FY21-22 budget also includes \$779,930 of debt service reserve funds that have been designated to pay off final maturities for the Authority's 2011 revenue bonds.

CONSOLIDATED FINANCIAL SCHEDULE

	Operating Fund		Capital Fund		All Funds	
	FY 21-22 Adopted Budget	FY 21-22 Adopted Budget	Prior Year Appropriations	Available Budget	Available Budget	
REVENUES						
Water Revenues	\$ 39,146,481	\$ -	\$ -	\$ -	\$ 39,146,481	
Wastewater Revenues	39,590,014	-	-	-	39,590,014	
Investment Earnings	200,000	-	-	-	200,000	
System Development Charges	7,095,000	-	-	-	7,095,000	
Grants	-	-	2,425,262	2,425,262	2,425,262	
Other Revenues	4,507,000	-	7,835,391	7,835,391	12,342,391	
TOTAL REVENUES	\$ 90,538,495	\$ -	\$ 10,260,653	\$ 10,260,653	\$ 100,799,148	
EXPENDITURES						
Operating						
Authority Board	\$ 69,357.0	\$ -	\$ -	\$ -	\$ 69,357.0	
Administration	934,891	-	-	-	934,891	
Communications	308,868	-	-	-	308,868	
Finance	1,400,748	-	-	-	1,400,748	
Human Resources	645,010	-	-	-	645,010	
Public & Environmental Policy	346,439	-	-	-	346,439	
Information Technology	3,493,521	-	-	-	3,493,521	
Treatment & Engineering Services:						
Administration	831,781	-	-	-	831,781	
Engineering	1,627,459	-	-	-	1,627,459	
Centralized Maintenance	3,481,753	-	-	-	3,481,753	
Water Treatment	7,592,456	-	-	-	7,592,456	
Wastewater Treatment	5,077,501	-	-	-	5,077,501	
Linear Assets & Project Management:						
Administration	575,239	-	-	-	575,239	
Collections	7,028,642	-	-	-	7,028,642	
Distribution	3,787,132	-	-	-	3,787,132	
Project Management	661,980	-	-	-	661,980	
Environmental Management	3,403,474	-	-	-	3,403,474	
Customer Service	4,596,777	-	-	-	4,596,777	
Nondepartmental	2,920,943	-	-	-	2,920,943	
Debt Service	25,184,354	-	-	-	25,184,354	
Contingency	-	-	-	-	-	
Total Operating	\$ 73,968,325	\$ -	\$ -	\$ -	\$ 73,968,325	
Capital						
System-wide	\$ -	\$ 3,350,000.00	\$ 2,505,710	\$ 5,855,710.00	\$ 5,855,710.00	
Water	-	9,480,000	51,206,986	60,686,986	60,686,986	
Wastewater	-	14,700,000	24,168,053	38,868,053	38,868,053	
Total Capital	\$ -	\$ 27,530,000	\$ 77,880,749	\$ 105,410,749	\$ 105,410,749	
TOTAL EXPENDITURES	\$ 73,968,325	\$ 27,530,000	\$ 77,880,749	\$ 105,410,749	\$ 179,379,074	
OTHER FINANCING SOURCES/(USES)						
Sale of Capital Assets	\$ 150,000	\$ -	\$ -	\$ -	\$ 150,000	
Proceeds from Bonds/Installment Obligations	-	6,590,308	38,716,017	45,306,325	45,306,325	
Appropriated Fund Balance	1,279,830	-	4,204,628	4,204,628	5,484,458	
Transfers to Capital Fund	(18,000,000)	-	-	-	(18,000,000)	
Transfers from Operating Fund	-	20,939,692	24,699,451	45,639,143	45,639,143	
TOTAL OTHER FINANCING SOURCES/(USES)	\$ (16,570,170)	\$ 27,530,000	\$ 67,620,096	\$ 95,150,096	\$ 78,579,926	
CHANGE IN FUND BALANCE	\$ -	\$ -	\$ -	\$ -	\$ -	

THREE YEAR CONSOLIDATED AND FUND FINANCIAL SCHEDULES

CAPE FEAR PUBLIC UTILITY AUTHORITY

For the Twelve Months Ending Thursday, June 30, 2022

	Operating Fund			Capital Fund*			Total All Funds		
	FY 2020	FY 2021	FY 2022	FY 2020	FY 2021	FY 2022	FY 2020	FY 2021	FY 2022
	Actual	Actual	Budget	Actual	Actual	Budget	Actual	Actual	Budget
REVENUES									
Water Revenues	\$ 38,652,703	\$ 38,519,467	\$ 39,146,481	\$ -	\$ -	\$ -	\$ 38,652,703	\$ 38,519,467	\$ 39,146,481
Wastewater Revenues	38,317,157	38,589,100	39,590,014	-	-	-	38,317,157	38,589,100	39,590,014
Investment Earnings	2,046,294	260,774	200,000	-	-	-	2,046,294	260,774	200,000
System Development Charges	6,570,775	8,047,468	7,095,000	-	-	-	6,570,775	8,047,468	7,095,000
Grants	48,189	261,954	-	8,158,463	2,333,442	2,425,262	8,206,652	2,595,396	2,425,262
Other Revenues	5,523,733	6,307,632	4,507,000	5,987,994	14,445,691	7,835,391	11,511,727	20,753,323	12,342,391
TOTAL REVENUES	\$ 91,158,851	\$ 91,986,395	\$ 90,538,495	\$ 14,146,457	\$ 16,779,133	\$ 10,260,653	\$ 105,305,308	\$ 108,765,528	\$ 100,799,148
EXPENDITURES									
Authority Board	\$ 53,278	\$ 68,950	\$ 69,357	\$ -	\$ -	\$ -	\$ 53,278	\$ 68,950	\$ 69,357
Administration	903,725	1,555,693	934,891	-	-	-	903,725	1,555,693	934,891
Communications	-	75,132	308,868	-	-	-	-	75,132	308,868
Finance	1,257,289	1,297,844	1,400,748	-	-	-	1,257,289	1,297,844	1,400,748
Human Resources	568,272	582,121	645,010	-	-	-	568,272	582,121	645,010
Public & Environmental Policy	308,789	328,454	346,439	-	-	-	308,789	328,454	346,439
Information Technology	2,585,036	3,167,648	3,493,521	-	-	-	2,585,036	3,167,648	3,493,521
Treatment & Engineering Services:									
Administration	730,498	761,080	831,781	-	-	-	730,498	761,080	831,781
Engineering	1,316,164	1,480,973	1,627,459	-	-	-	1,316,164	1,480,973	1,627,459
Centralized Maintenance	3,203,783	3,925,340	3,481,753	-	-	-	3,203,783	3,925,340	3,481,753
Water Treatment	7,017,890	6,854,459	7,592,456	-	-	-	7,017,890	6,854,459	7,592,456
Wastewater Treatment	5,086,816	4,458,164	5,077,501	-	-	-	5,086,816	4,458,164	5,077,501
Linear Assets & Project Management:									
Administration	537,402	550,525	575,239	-	-	-	537,402	550,525	575,239
Collections	6,309,674	6,628,065	7,028,642	-	-	-	6,309,674	6,628,065	7,028,642
Distribution	3,553,989	3,522,014	3,787,132	-	-	-	3,553,989	3,522,014	3,787,132
Project Management	566,227	629,068	661,980	-	-	-	566,227	629,068	661,980
Environmental Management	2,884,865	3,063,151	3,403,474	-	-	-	2,884,865	3,063,151	3,403,474
Customer Service	4,206,743	4,255,334	4,596,777	-	-	-	4,206,743	4,255,334	4,596,777
Capital Outlay	-	-	-	67,725,532	66,473,016	105,410,749	67,725,532	66,473,016	105,410,749
Nondepartmental	2,313,262	2,316,461	2,920,943	-	-	-	2,313,262	2,316,461	2,920,943
Debt Service	22,141,316	27,552,093	25,184,354	-	-	-	22,141,316	27,552,093	25,184,354
TOTAL EXPENDITURES	\$ 65,545,018	\$ 73,072,569	\$ 73,968,325	\$ 67,725,532	\$ 66,473,016	\$ 105,410,749	\$ 133,270,550	\$ 139,545,585	\$ 179,379,074
OTHER FINANCING SOURCES/(USES)									
Sale of Capital Assets	\$ 131,623	\$ 215,914	\$ 150,000	\$ -	\$ -	\$ -	\$ 131,623	\$ 215,914	\$ 150,000
Proceeds from Bonds/Debt	48,157,032	-	-	58,924,336	155,083	45,306,325	107,081,368	155,083	45,306,325
Appropriated Fund Balance	-	-	1,279,830	4,853,643	6,965,050	4,204,628	4,853,643	6,965,050	5,484,458
Insurance Proceeds	22,500	-	-	228,190	459,266	-	250,690	459,266	-
Transfers from Operating Fund	-	-	-	18,000,000	18,000,000	45,639,143	18,000,000	18,000,000	45,639,143
Transfers to Capital Projects	(18,000,000)	(18,000,000)	(18,000,000)	-	-	-	(18,000,000)	(18,000,000)	(18,000,000)
Payment to Refunded Bond Escrow Agent	(48,105,675)	-	-	-	-	-	(48,105,675)	-	-
TOTAL OTHER FINANCING SOURCES/(USES)	\$ (17,794,520)	\$ (17,784,086)	\$ (16,570,170)	\$ 82,006,169	\$ 25,579,399	\$ 95,150,096	\$ 64,211,649	\$ 7,795,313	\$ 78,579,926
CHANGE IN FUND BALANCE	\$ 7,819,313	\$ 1,129,740	\$ -	\$ 28,427,094	\$ (24,114,484)	\$ -	\$ 36,246,407	\$ (22,984,744)	\$ -

* The budget amounts presented for the Capital Fund include total available appropriations as of July 1, 2021. Actual spending of these appropriations and recognition of the associated revenues will occur over multiple years. Consequently, comparison cannot be made between actual revenues and expenditures presented for FY 2020 and FY 2021 and the available budget amounts.

PROJECTED CHANGES IN FUND BALANCE & NET POSITION

The Authority does not have any governmental funds. Rather, the Authority reports its operations as a single enterprise fund using the economic resources measurement focus and accrual basis of accounting for general purpose external financial reporting. Consequently, net position is the most appropriate measure of the Authority's financial position. Net position represents the extent to which the Authority's assets and deferred outflows of resources exceed its liabilities and deferred inflows of resources on the accrual basis of accounting similar to a private company.

As discussed in the Financial Structure section, the Authority is required by law to budget using the modified accrual basis of accounting. For budgetary control and reporting purposes, the Authority uses two funds: the Operating Fund and the Capital Fund. Operating Fund appropriations lapse at the end of the fiscal year for which the appropriations were made. Capital Fund appropriations do not lapse at the end of the fiscal year in which the appropriations was made. The Authority monitors the combined unrestricted fund balance for the Operating Fund and the Capital Fund to ensure that unrestricted fund balance does not fall below \$50 million in accordance with the Authority's financial policies.

The following table projects the changes in restricted and unrestricted fund balance for the Operating Fund and the Capital Fund and the changes in the Authority's overall net position that are anticipated to occur during FY 21-22.

	Operating Fund	Capital Fund	Total
Restricted fund balance:			
Balance July 1, 2021	\$ 13,053,615	\$ 33,351,898	\$ 46,405,513
Change in debt service reserve	91,815	-	91,815
Expenditure of bonds proceeds restricted for capital projects	-	(9,687,405)	(9,687,405)
Expenditure of capital reserves restricted for capital projects	-	(1,429,895)	(1,429,895)
Projected balance June 30, 2022	\$ 13,145,430	\$ 22,234,599	\$ 35,380,029
Unrestricted fund balance:			
Balance July 1, 2021	\$ 67,147,753	\$ (6,182,086)	\$ 60,965,667
Post-employment healthcare costs	(500,000)	-	(500,000)
Prior year budget carryforwards	(888,756)	-	(888,756)
Pay-as-you-go funding	-	18,000,000	18,000,000
Pay-as-you-go funded capital expenditures	-	(15,289,349)	(15,289,349)
Projected balance June 30, 2022	\$ 65,758,997	\$ (3,471,435)	\$ 62,287,562
Total fund balance	\$ 78,904,427	\$ 18,763,164	\$ 97,667,590
Net position			
Balance July 1, 2021			\$ 606,889,773
Adjustments to convert fund balance to net position			
Capitalized expenditures funded with FY 21-22 revenues			\$ 17,831,155
Capital contributions			9,500,000
Depreciation on capital assets			(25,510,723)
Retirement of debt principal funded with current year revenues			13,548,030
Amortization of bond premiums			3,612,754
Amortization of deferred outflows related to debt refundings			(2,174,720)
Total adjustments			\$ 16,806,496
Projected balance June 30, 2022			\$ 623,696,269
Projected percentage change in net position			2.8%

PROJECTED CHANGES IN FUND BALANCE & NET POSITION

The Authority is projecting a combined unrestricted fund balance at the end of FY 21-22 of \$62.3 million, well above the policy minimum of \$50 million. Overall, fund balance is projected to be \$97.7 million which is a decrease of \$9.7 million. The projected decrease is due to an \$11.0 decrease in restricted fund balance driven the expenditure of revenue bond proceeds and capital reserve funds for capital projects. Unrestricted fund balance is projected to increase by \$1.3 million. The projected increase is mainly driven by pay-as-you-go funding exceeding projected pay-as-you-go funded capital expenditures. Net position is projected to increase \$16.8 million (2.8%) during FY 21-22 to \$624.5 million. The increase is mainly due to additions to capital assets and the retirement of outstanding debt with FY 21-22 revenues in excess of depreciation expense.

LONG-TERM FINANCIAL MANAGEMENT

Consistent with the Strategic Plan, the Authority seeks to protect the environment, ensure public health and safety, and provide the highest quality services to both new and existing customers while maintaining a stable financial position that balances rates and the organization's long-term capital and operating needs. Balancing these objectives presents both challenges and opportunities. Long-term financial planning is a critical tool in developing strategies to ensure that this balance is maintained. Long-term financial planning is the process of aligning financial capacity with long-term service objectives. Financial planning uses forecasts to provide insight into future financial capacity so that strategies can be developed to achieve long-term sustainability considering service objectives and financial challenges.

The development of the Authority's 20-year financial plan is an iterative, multi-departmental process and ultimately guided by the Authority's adopted policies and key benchmarks. The goal of this process is to ensure that the Authority remains both operationally and financially sustainable while minimizing the impact to ratepayers. With this goal in mind, the Authority's long-term financial plan seeks to optimize the balance among efficient and effective service delivery; strategic capital investment to address the riskiest infrastructure and facilitate growth and economic development; key financial metrics including debt service coverage and liquidity; and rate affordability.

Operational Sustainability

Operational sustainability means that high-quality service will continue to be delivered to customers over the long-term. This notion not only includes providing water and wastewater treatment, distribution, collection, customer service, engineering, and compliance services but also that the Authority makes sufficient, deliberate capital investments to minimize the risk of infrastructure failure and service disruption. The operating expenditure projections incorporated in the Authority's long-term financial plan were developed with the goals of fully funding operating and maintenance costs at current levels plus inflation; retaining and attracting high-quality staff through competitive salaries and benefits; and executing a capital program focused on rehabilitating and replacing aging, high-risk infrastructure and other major projects.

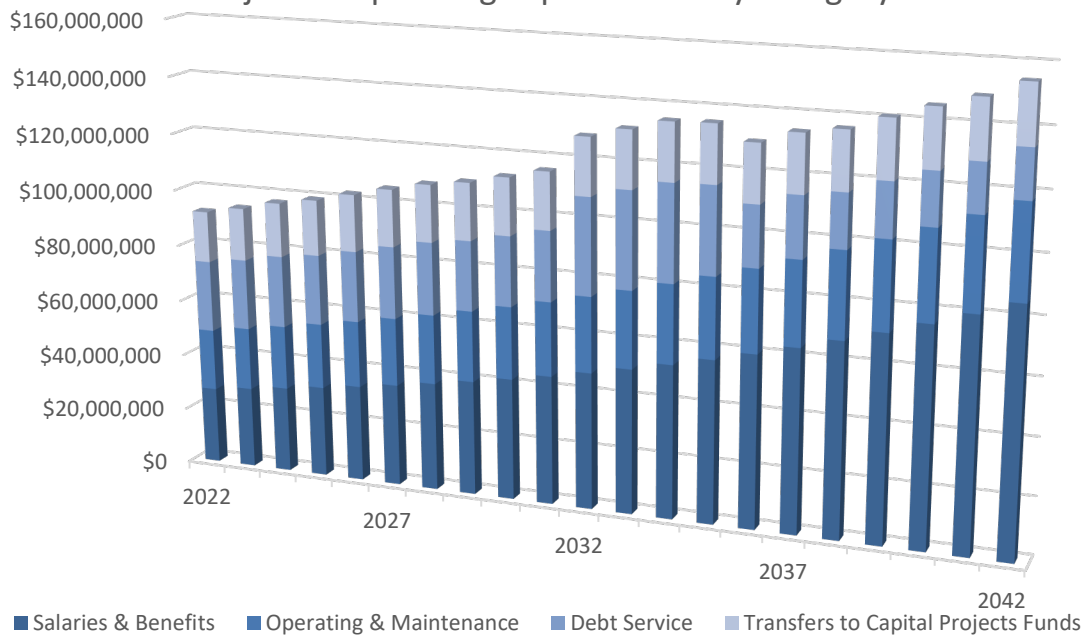
Capital expenditure projections are based on the Authority's Ten-Year Capital Improvement Program, which is developed using risk-based analyses to plan the extent and timing of water and wastewater system improvements. Capital expenditures funded with water and wastewater rate revenues throughout the 20-year time horizon include scheduled replacement and rehabilitation of water and wastewater system assets that average approximately \$20 million per year. Layered upon these expenditures are large projects that will be debt funded through the issuance of revenue bonds. The expenditure of revenue bond proceeds in FY 21-22, FY 22-23 and FY 23-24 relate to the treatment upgrades at the Sweeney Water Treatment Plant for PFAS removal and the Authority's share of the construction of a new raw water transmission main from the King's Bluff intake station to Brunswick County's water treatment plant. The expenditure of revenue bonds in FY 30-31 through FY 33-34 relates to a \$150 million capacity upgrade to the Southside Wastewater Treatment Plant and the expenditure of revenue bonds starting in FY 35-36 through FY 37-38 relate to a \$30 million capacity upgrade at the Northside Wastewater Treatment Plant. Projected expenditures funded with state revolving loans include rehabilitation of replacement of pump stations and wastewater collection lines.

LONG-TERM FINANCIAL MANAGEMENT

Projected Capital Spending by Funding Source



Projected Operating Expenditures by Category



LONG-TERM FINANCIAL MANAGEMENT

Operating expenditures, excluding debt service expenditures, were assumed to grow in accordance with inflationary assumptions. Salaries and benefits are assumed to grow at 6% per year to accommodate growth in the workforce tied to customer, system growth and cost-of-living and merit-based increases, and growth in benefit costs. Projected operating expenditures include \$1.6 million for maintenance and replacement of granular activated carbon filters at the Sweeney Water Treatment Plant each year starting in FY 22-23. Debt service expenditures are based on existing amortization schedules for outstanding debt. Debt service related to planned future debt issuance was based on the Authority's historical borrowing rate, maturities on existing debt, and amortized with level payments for principal and interest.

Financial Sustainability

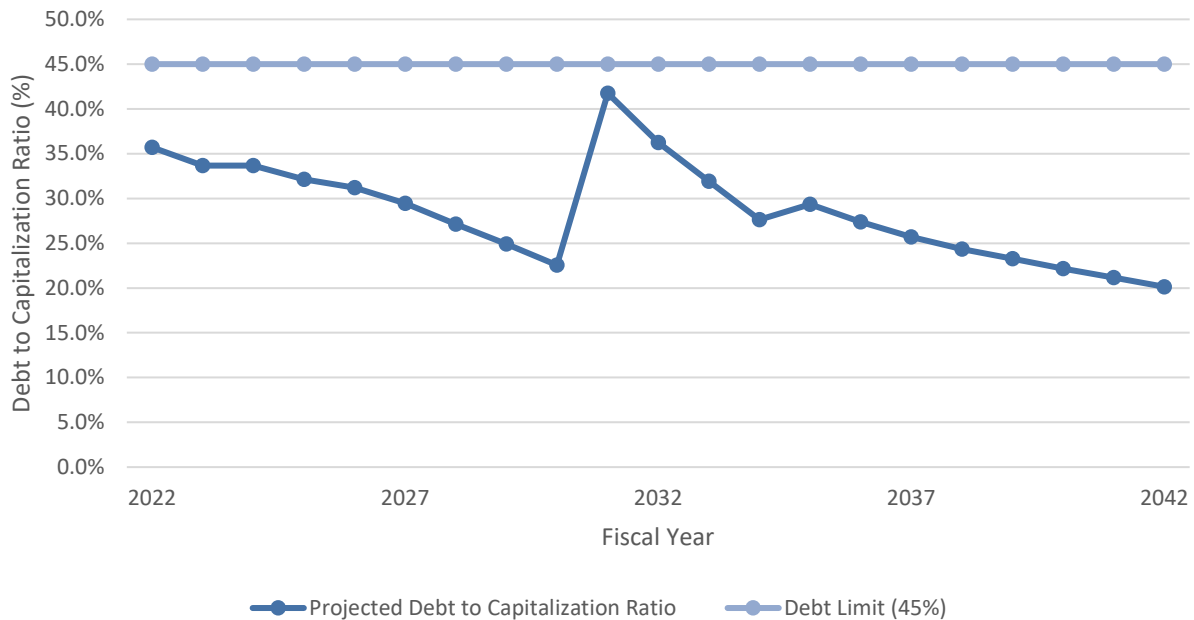
In addition to delivering and executing these services and projects, the Authority's long-term financial plan is focused on achieving the budgetary flexibility resulting from high levels of debt service coverage and liquidity. Further, maintaining debt service coverage and liquidity at high levels is viewed positively by credit markets and helps to ensure that the Authority continues borrowing at low costs.

The Authority's long-term financial plan incorporates the Authority's policy on debt limitations and cash reserve levels. These policies were adopted in February 2017 to produce a resilient financial structure by reducing the proportion of the annual operating budget reserved for mandatory debt service payments, "free up" future borrowing capacity, and achieve robust coverage levels expected of the highest rated water and wastewater utilities. In accordance with these policies, rates were deliberately increased in FY 17-18 and FY 18-19 to achieve \$18 million in annual pay-as-you-go capital funding. Debt is a critical capital financing mechanism that provides an immediate funding source and allows for the gradual pay-back of borrowed funds in the future. Debt, however, can be excessive when annual debt service requirements grow to levels that cause rates to increase to unaffordable levels or force cuts to services in the absence of rate increases. The Authority's debt management policy is focused on maintaining the balance between debt funding, rate affordability, and operational sustainability by placing limits on debt issuance.

The Authority's debt management policy explicitly limits debt in two ways. First, the policy provides specific attributes that projects should generally have to be candidates for debt funding (e.g. for high-dollar projects where pay-go funding is impractical or for growth-oriented projects in which it makes sense for future rate payers to pay for those improvements). Second, the policy establishes a debt limit expressed in terms of the debt-to-capitalization ratio (debt outstanding as a percentage of the value of capital assets). The Authority may not issue debt if such issuance would cause the debt to capitalization ratio to exceed 45%. Measuring the Authority's debt load using the debt-to-capitalization is an appropriate way to quantify the Authority's debt load because the ratio reflects the Authority's long-term mix of debt and pay-as-you-go funding. The policy debt metric limit of 45% was derived considering the Authority's debt service coverage target and its expectation of long-term borrowing costs.

LONG-TERM FINANCIAL MANAGEMENT

Projected Debt to Capitalization Ratio

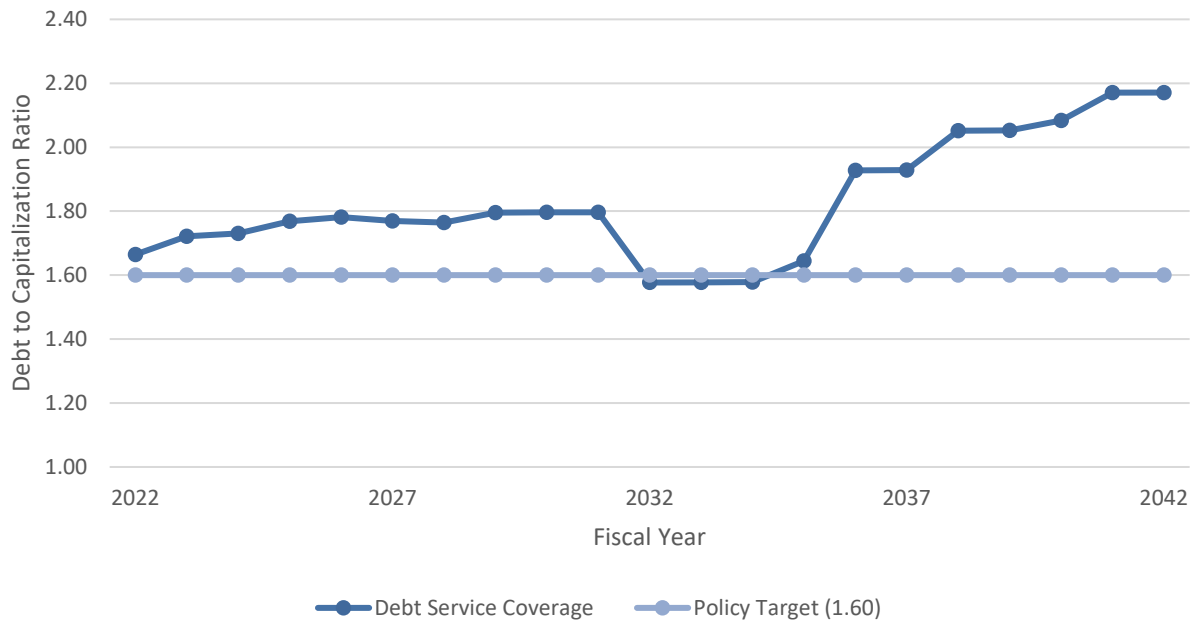


Over the 20-year forecast horizon, the debt-to-capitalization ratio is projected to be below the 45% limit. The debt-to-capitalization ratio is projected to decrease through FY 30-31 as the balance of outstanding debt decreases and the projected capital investment outpaces projected depreciation on system assets. The debt-to-capitalization ratio is projected to increase to 41.7% in FY 30-31 due to the planned issuance of debt to fund a capacity upgrade for the Southside Wastewater Treatment Plant. For financial flexibility, debt issuances have been projected so that the projected debt-to-capitalization never approaches the 45% limit too closely. Therefore, there is always some excess debt capacity available as circumstances may arise that require the issuance of debt.

Debt service coverage measures an entity's ability to pay principal and interest on its debt obligations with current year revenues. Debt service coverage more than 1.0 indicates that net operating revenues (revenues minus operating expenses) were greater than the principal and interest due during the period. Financial structures that provide for relatively high debt service coverage ratios are valued by credit markets – the higher the debt service coverage ratio, the more assurance that debt service requirements will be met. The Authority is required to structure its rates so that revenues in any given year are equal to at least 1.2 times of the principal and interest due on its outstanding debt obligations. However, credit markets and raters generally prefer higher debt service coverage ratios. The Authority's debt service coverage target is 1.6.

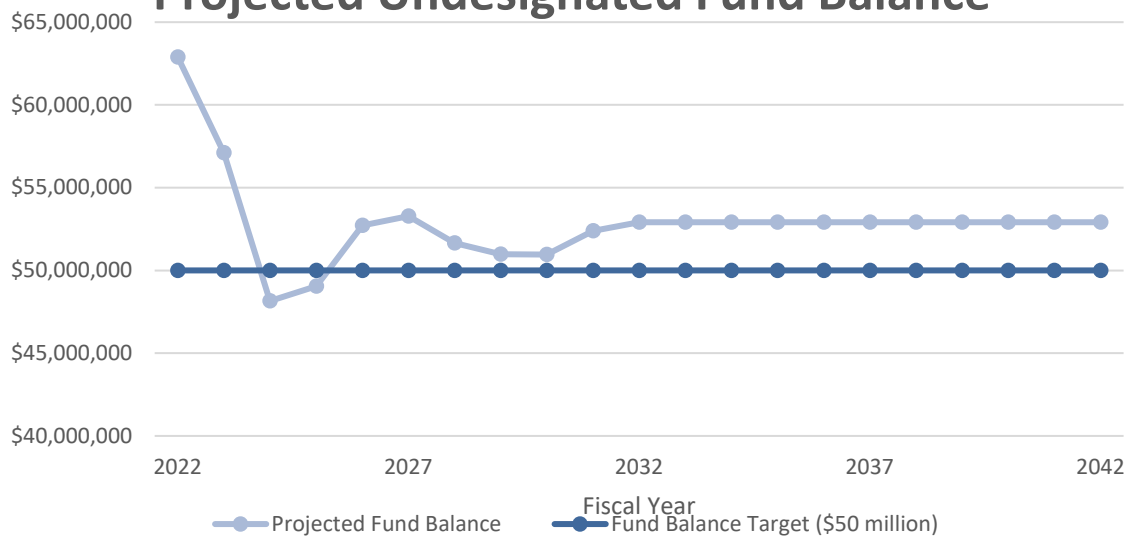
LONG-TERM FINANCIAL MANAGEMENT

Projected Debt Service Coverage



The graph above indicates that coverage is projected to be relatively stable through FY 30-31. Projected coverage decreases to around 1.6 in FY 30-31 due to increased debt service requirements related to the issuance of debt to fund the capacity upgrade at the Southside Wastewater Treatment Plant. Projected coverage sharply increases in FY 35-36 due to decreased debt service requirements as much of the Authority's existing debt fully matures.

Projected Undesignated Fund Balance



LONG-TERM FINANCIAL MANAGEMENT

Available fund balance is another key indicator of financial health. The higher the available fund balance, the higher the capacity to absorb periods of declining revenues, unbudgeted expenditures, or both. At the same time, to minimize the impact to rate payers, it's critical that rates are developed and financial resources spent so that fund balance in excess of targeted levels is not accumulated. To ensure this balance, Authority policy requires that a risk-based reserve/fund balance target is periodically determined. The Authority's current unrestricted fund balance target is \$50 million.

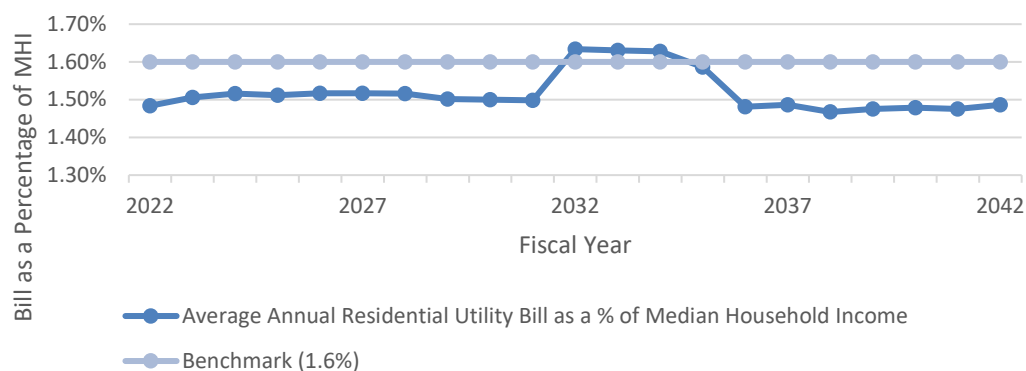
The graph on the previous page reflects CFPUA's deliberate plan to spend available fund balance on its capital program to around the \$50 million target through FY 23-24. Fund balance is projected to stay roughly flat at the \$50 million target through the remainder of the forecast horizon.

Rate Affordability

While there's no universal metric of affordability, one common metric is to quantify the average annual residential bill as a percentage of median household income for the service area. The Authority's long-term financial plan includes a projection of residential bimonthly combined water and wastewater bills based on consumption of 8,100 gallons per billing cycle with an assumed 2% increase per year in both consumption and equivalent residential units. Estimated median household income data for calendar year 2018 per the U.S. Census Bureau was used as a base year and is projected to grow by 1% per year.

Over the Authority's 20-year financial planning horizon, annual costs of residential water and wastewater service are projected to approach but remain below the target 1.6% of median household income for the service area. The annual residential utility bill as a percentage of median household income is projected to increase from 1.63% in FY 30-31 due to increased debt service requirements related to the issuance of debt to fund the capacity upgrade at the Southside Wastewater Treatment Plant and then decreases sharply in FY35-36 due to decreased debt service requirements as much of the Authority's existing debt fully matures.

Projected Average Annual Residential Utility Bill as a % Median Household Income



LONG-TERM FINANCIAL MANAGEMENT

Conclusion

Ensuring that the Authority continues to provide high-quality water and wastewater service to its customers, remains in a strong financial position, and minimizes the impact to customers requires a careful balance. Long-term financial planning is an important tool that the Authority uses to maintain this balance in a proactive manner. Guided by financial policies, the Authority's long-term financial plan fully funds operations at current levels plus inflation and funds an aggressive capital program focused on rehabilitating and replacing aging infrastructure. At the same time, target levels of debt, debt service coverage, and liquidity are projected to be attained while keeping the cost of service affordable for customers.

The biggest threat to remaining within these various financial benchmarks is the \$150 million capacity upgrade to the Southside Wastewater Treatment Plant, specifically the impact of this project on projected debt service coverage and the average annual residential utility bill as a percentage of median household income. Knowing that such a large project is on the horizon, management will be developing strategies to smooth out the projected impact of the project on debt service coverage and rate affordability. One strategy could be to borrow more in the years up to FY 30-31 in the form of state revolving loans. Doing so will not change the overall mix of debt and pay-as-you-go funding, but would smooth out the projected downward spike in debt service and projected upward spike in the average annual residential utility bill as a percentage of median household income in two ways. First, a gradual build-up of debt balance will result in a gradual increase to rates and reduce the amount needed to be borrowed to finance the Southside Wastewater Treatment plant capacity upgrade. Second, gradually building up the debt balance through low-interest state revolving loans will reduce overall debt service requirements through interest savings.

CAPITAL BUDGET

Costs related to the rehabilitation, replacement, acquisition, and construction of the Authority's infrastructure are generally budgeted through project ordinances that appropriate funds to be used over the life of the project, which may span several budget years. This contrasts with the Authority's operating budget appropriations which lapse at the end of each budget year. The capital budget includes projects having a total estimated cost exceeding \$100,000 that provide for the following:

- Construction or acquisition of new facilities, infrastructure, and equipment;
- Major repair, rehabilitation or replacement of existing facilities and infrastructure; or
- Upgrades to existing facilities and infrastructure to increase capacity, enhance treatment and service delivery, or mitigate the risk of loss.

Capital expenditures are those expenditures that qualify for capitalization in accordance with generally accepted accounting principles and the Authority's capitalization policies. The Authority defines capital expenditures as outlays with an initial cost in excess of \$5,000 that provide present service capacity in excess of one year. The scope of the projects included in the capital budget are not strictly aligned with the Authority's definition of capital expenditures. This means that not all expenditures included in the capital budget qualify for capitalization and some expenditures included in the operating budget may qualify for capitalization.

Each year the Authority develops a 10-year Capital Improvement Plan. The 10-Year Capital Improvement Plan begins with evaluating proposed projects in terms of risk (defined as the product of the consequence of failure and the likelihood of failure) and whether the projects are necessary for compliance with regulatory requirements, improve efficiency, increase capacity, or are necessary to accommodate growth. Projects are prioritized based on risk and these other criteria resulting in a draft 10-year Capital Improvement Plan. The draft plan is incorporated into the Authority's long-term financial planning model to determine whether the plan is financially feasible. Financial feasibility is assessed by determining whether the draft plan is projected to maintain target levels of debt service coverage, debt-to-capitalization ratio, rate affordability, and undesignated fund balance. The 10-year Capital Improvement Plan is adjusted, and funding strategies developed based on this analysis.

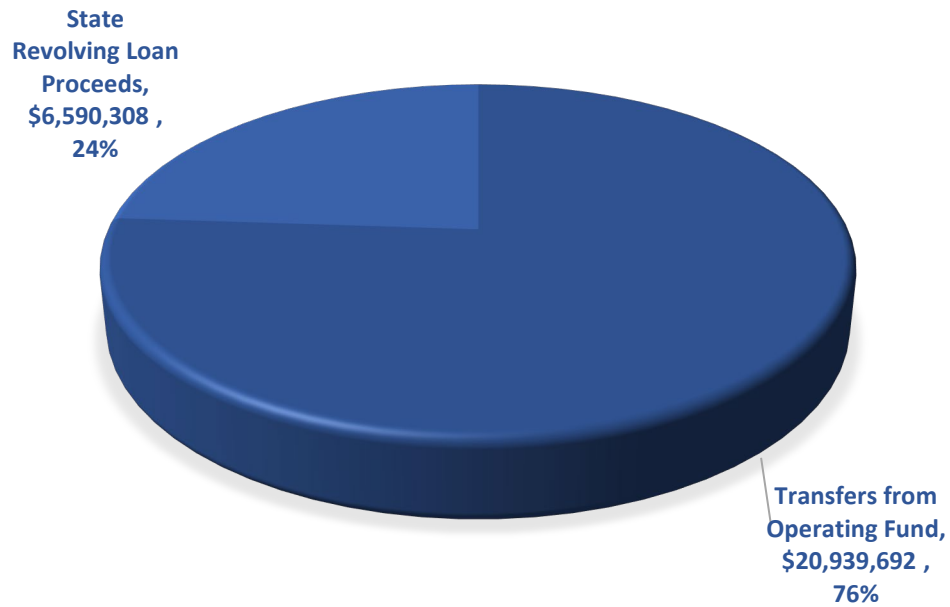
Although a 10-Year Capital Improvement Plan is developed each year, only the first year in the plan is appropriated. For FY 21-22 capital budget appropriations total \$27.5 million. A large portion, (47%) of the FY 21-22 capital budget, is focused on improving wastewater collection and conveyance. This includes \$5.7 million for the rehab and replacement of gravity sewer mains in our downtown area that are over 70 years old. In addition, \$3.35 million is programmed to construct a new pump station and \$2.05 million is programmed to upgrade Pump Station #69. Both are in the southern part of the county, where growth is outpacing current infrastructure. The pump stations are anticipated to be complete in the fall of 2022 and will affect future operating budgets. Annual operating costs for stations of the same size are around \$20,000 for electricity and maintenance cost, which could include pump repairs, electrical panel repairs and generator maintenance. The full FY 22 capital budget can be found on the Authority website: <https://www.cfpua.org/654/Capital-Improvement-Plan>.

The FY 22 capital project appropriations total \$27,530,000. The pie charts on the following pages detail FY 21-22 capital project appropriations by fund, type and area and funding sources. The majority of the

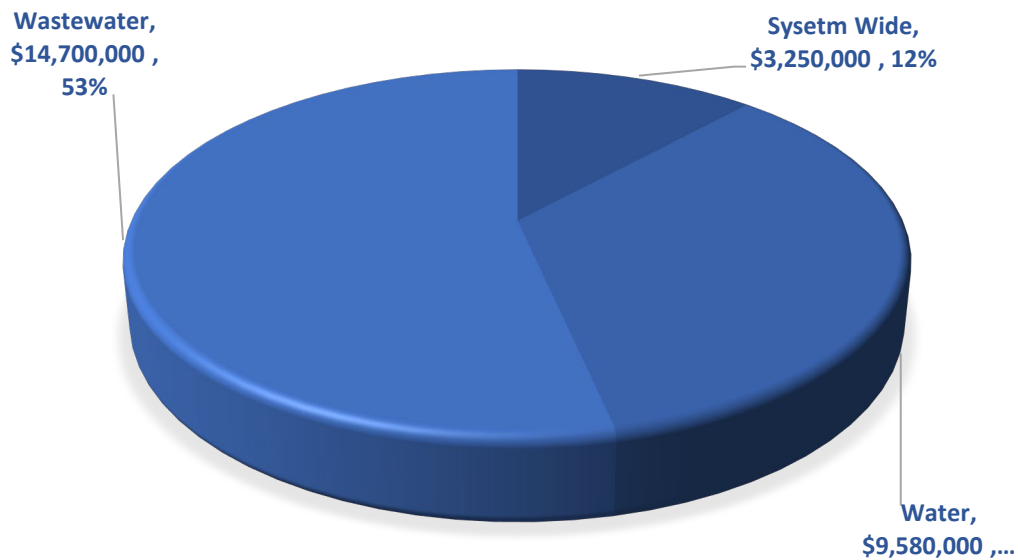
CAPITAL BUDGET

FY 21-22 appropriations are for wastewater projects and focus on rehabilitation and replacement. The FY 21-22 capital budget is mainly funded by transfers from the operating fund.

FY 21-22 CAPITAL FUNDING SOURCES

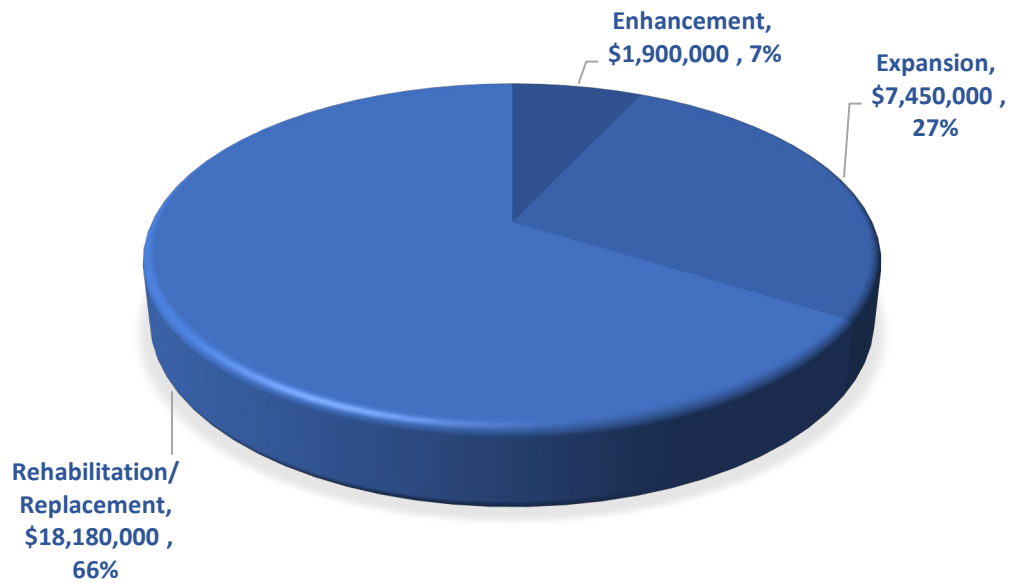


FY 21-22 CAPITAL APPROPRIATIONS BY FUND

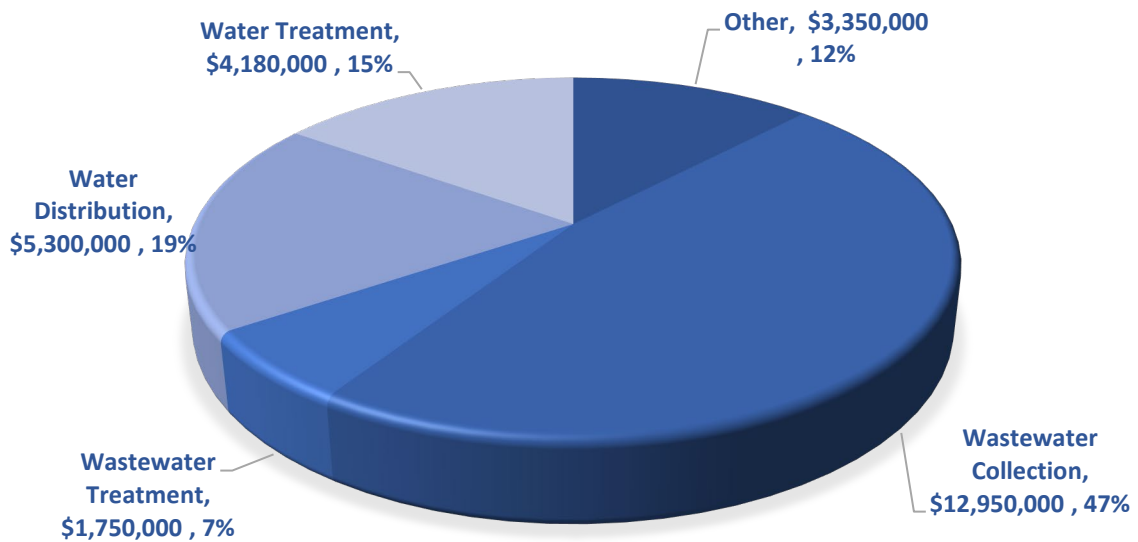


CAPITAL BUDGET

FY 21-22 CAPITAL APPROPRIATIONS BY PROJECT TYPE



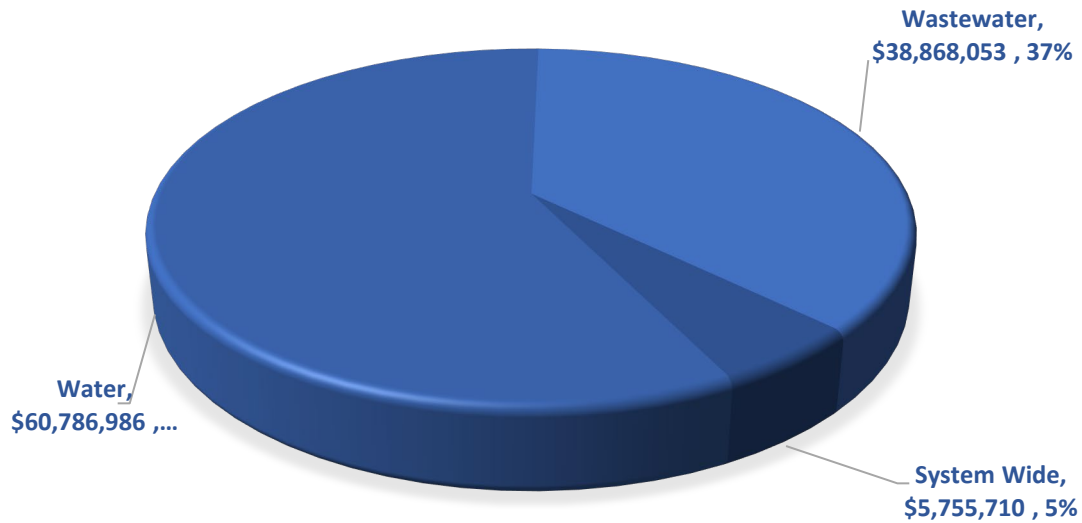
FY 21-22 CAPITAL APPROPRIATIONS BY PROJECT AREA



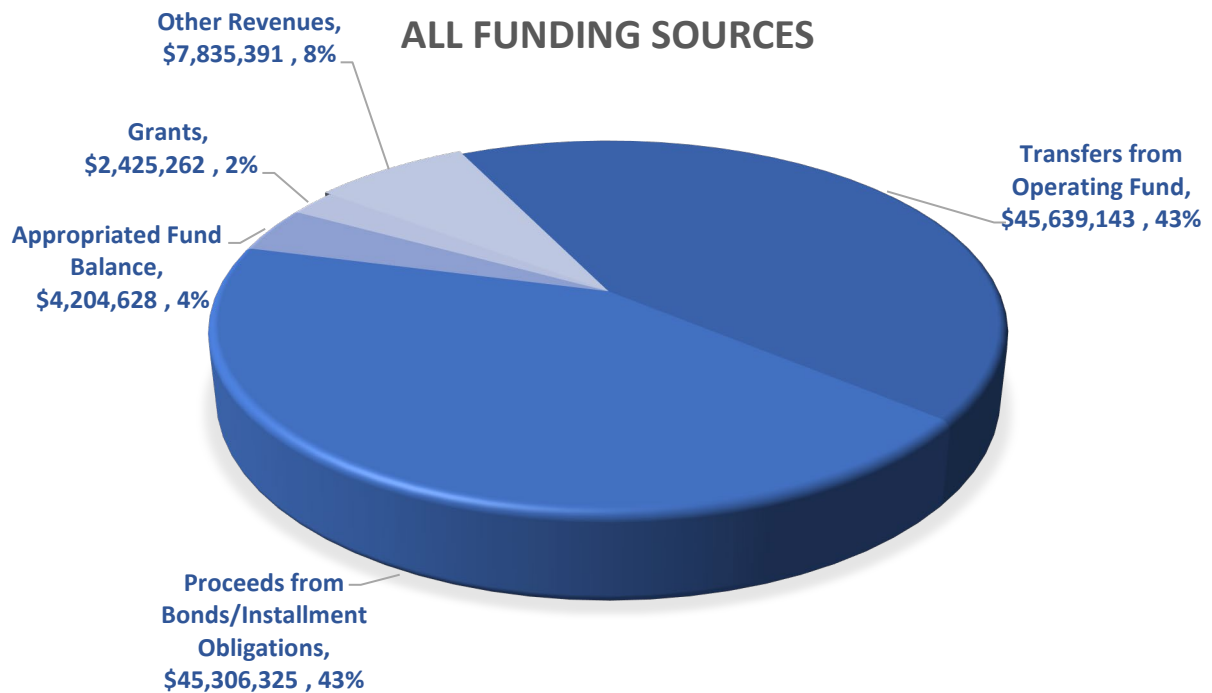
CAPITAL BUDGET

All capital appropriations for existing and new FY 22 appropriations total \$105,410,479. The breakdown by fund is shown below along with funding sources.

ALL CAPITAL APPROPRIATIONS BY FUND



ALL FUNDING SOURCES



CAPITAL BUDGET

Major nonrecurring projects include the Sweeney Water Treatment Plant Enhancements and the construction of a new raw water line. The projects were undertaken in prior budget years but will be completed this year.

The Sweeney Water Treatment Plan Enhancement project was undertaken to reduce the contaminate levels of multiple per and polyfluoroalkyl compounds that are present in the raw water source for the Sweeney Water Treatment Plant. This requires the construction of a deep bed Granular Activated Carbon (GAC) contractor process. Construction is expected to be complete by the end of FY 22. To date, \$51.1 Million has been budgeted for the overall project with \$41 million of that earmarked for construction and design of the facility. To date \$24 million has been spent with the remaining \$17 million expected to be expended during FY 22. Future operating budgets will be impacted by the cost associated with the GAC contactor exchanges. Each contactor exchange will cost approximately \$465,000. Up to two exchanges may be required per year, depending on performance. Other expenses include, \$55,000 for increased electricity costs and \$56,000 for a full-time position to manage the new treatment process. No savings are anticipated with the project and any additional revenue would be generated by a rate increase to fund the increased operating cost and the debt service.

The raw water main project consists of the construction of a new 54 in raw water pipeline to convey water to the Sweeney Water Treatment plant. The new pipeline will provide redundancy to and additional raw water capacity in the area. It is a joint project between the Authority and Brunswick County. The Authority is responsible for 36.585% of the overall project cost and Brunswick County is responsible for 63.415%. The line will be conveyed to Lower Cape Fear Water and Sewer Authority (LCFWASA) upon completion. Construction is expected to be completed by January 2022. The overall project budget was \$44 million with the Authority responsible for 36.585% of that. To date \$34 million has been expended with \$10 million expected to be expended in FY 22. After completion, the expected operating costs associated with the new line are expected to be minimal. The LCFWASA will maintain the line. Any major expenditures for repairs would result in an increase to the raw water rate charged to the Authority by LCFWASA. Also, if additional capacity is needed, the Authority would be responsible for the additional gallons purchased, which would be offset by the revenue generated from the increased demand. The FY 22 budget for raw water is \$1.3 million. If less maintenance is needed it could result in savings if the LCFWASA were to lower rates based on lower operating cost. However, this is not anticipated.

DEBT

The Authority issues debt in accordance with North Carolina General Statutes 162A and under the guidance of the Local Government Commission, a division within the North Carolina Department of State Treasurer. The Authority is authorized to issue revenue bonds and installment obligations under certain federal programs including the Clean Water Revolving Loan Program and the Drinking Water Revolving Loan Program to fund capital improvements. The Authority also carries a share of limited obligations bonds assumed from New Hanover County upon creation of the Authority.

The following table contains information on the Authority's outstanding debt obligations:

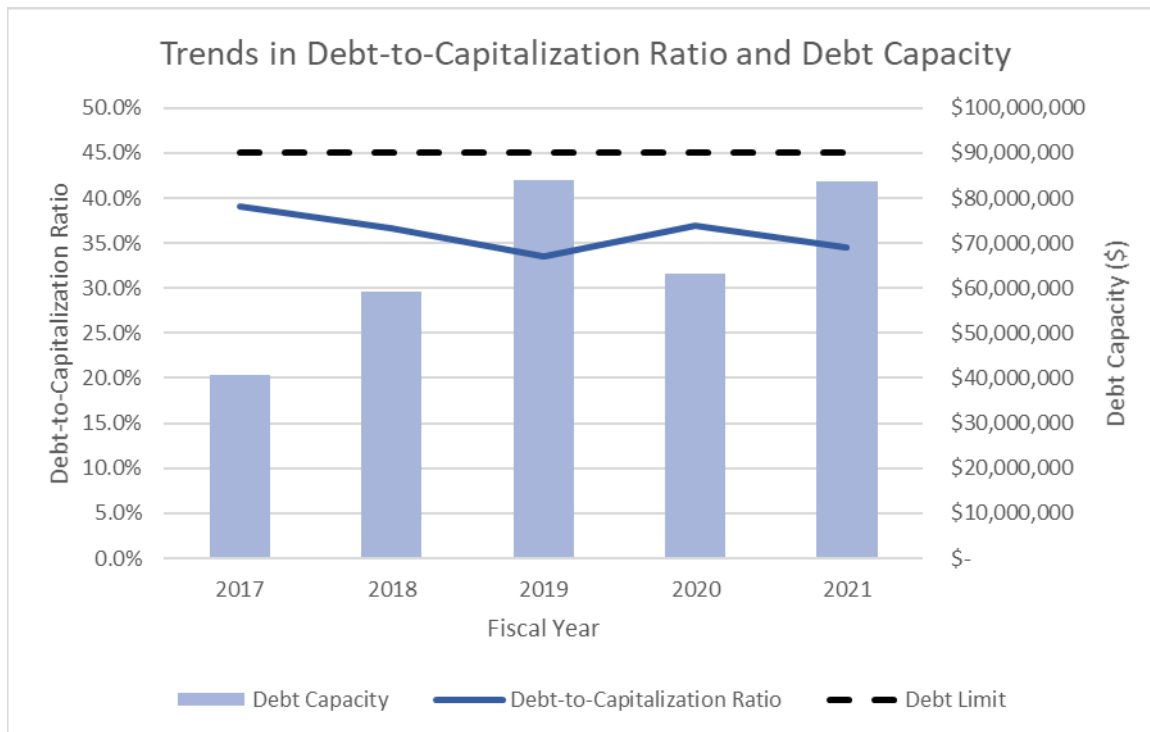
Type of Security	Series/Issue Description	Original Issuance	Remaining Principal at June 30, 2021	Purpose of Issuance
Revenue Bonds	Series 2019A	\$ 77,580,000	\$ 76,970,000	To pay the costs of granular activated carbon treatment upgrades at the Sweeney Water Treatment Plant; to pay for a share cost of a new raw surface water transmission line; refund all of the outstanding 2017 Bonds
Revenue Bonds	Series 2019B	\$ 15,185,000	\$ 14,905,000	To refund a portion of the outstanding 2014A Bonds
Revenue Bonds	Series 2016	\$ 155,770,000	\$ 121,635,000	To refund all outstanding 2008 Bonds
Revenue Bonds	Series 2014A	\$ 60,355,000	\$ 34,785,000	To pay the costs of certain water and sewer system improvements and to refund a portion of outstanding 2005 Bonds
Revenue Bonds	Series 2011	\$ 44,100,000	\$ 1,365,000	To pay the costs of certain water and sewer system improvements and to refund a portion of outstanding 2003 Bonds
Limited Obligation Bonds	Series 2012	\$ 20,540,000	\$ 6,750,000	To refund New Hanover County's 2003 Certificates of Participation
Clean Water State Revolving Loan	CS370923-02	\$ 429,000	\$ 278,850	To pay for the rehabilitation of Pump Station #28
Clean Water State Revolving Loan	CS370923-03	\$ 1,086,266	\$ 706,073	To pay for the rehabilitation of sewer on 30th Street
Clean Water State Revolving Loan	CS370923-04	\$ 1,097,140	\$ 713,141	To pay for the rehabilitation of the McCumber's Ditch sewer outfall
Clean Water State Revolving Loan	CS370923-05	\$ 2,201,480	\$ 1,430,962	To pay for the rehabilitation of the Greenfield Lake sewer outfall
Clean Water State Revolving Loan	CS370923-06	\$ 1,913,623	\$ 1,243,855	To pay for the rehabilitation of the Smith Creek Alandale pump station
Clean Water State Revolving Loan	CS370923-08	\$ 6,158,625	\$ 4,797,738	To pay for the rehabilitation of the Southside Wastewater Treatment Plant
Clean Water State Revolving Loan	CS370923-09	\$ 461,950	\$ 375,932	To pay for the rehabilitation and replacement of the Quail Woods Pump Station #137
Clean Water State Revolving Loan	CS370923-10	\$ 3,519,432	\$ 3,167,489	To pay for the rehabilitation and replacement of the Pump Station #10 Force Main
Clean Water State Revolving Loan	CS370923-11	\$ 1,354,287	\$ 1,218,858	To pay for the rehabilitation and replacement of the Pump Station #12 Force Main
Drinking Water State Revolving Loan	H-LRX-F-10-1314B	\$ 204,082	\$ 114,346	To pay for a portion of the cost to construct an aquifer storage and recover well
Drinking Water State Revolving Loan (ARRA H-ARRA-09-1314		\$ 1,131,523	\$ 678,914	To pay for a portion of the cost to construct an aquifer storage and recover well

DEBT

The following table lists the principal and interest requirements through maturity on the Authority's outstanding debt obligations:

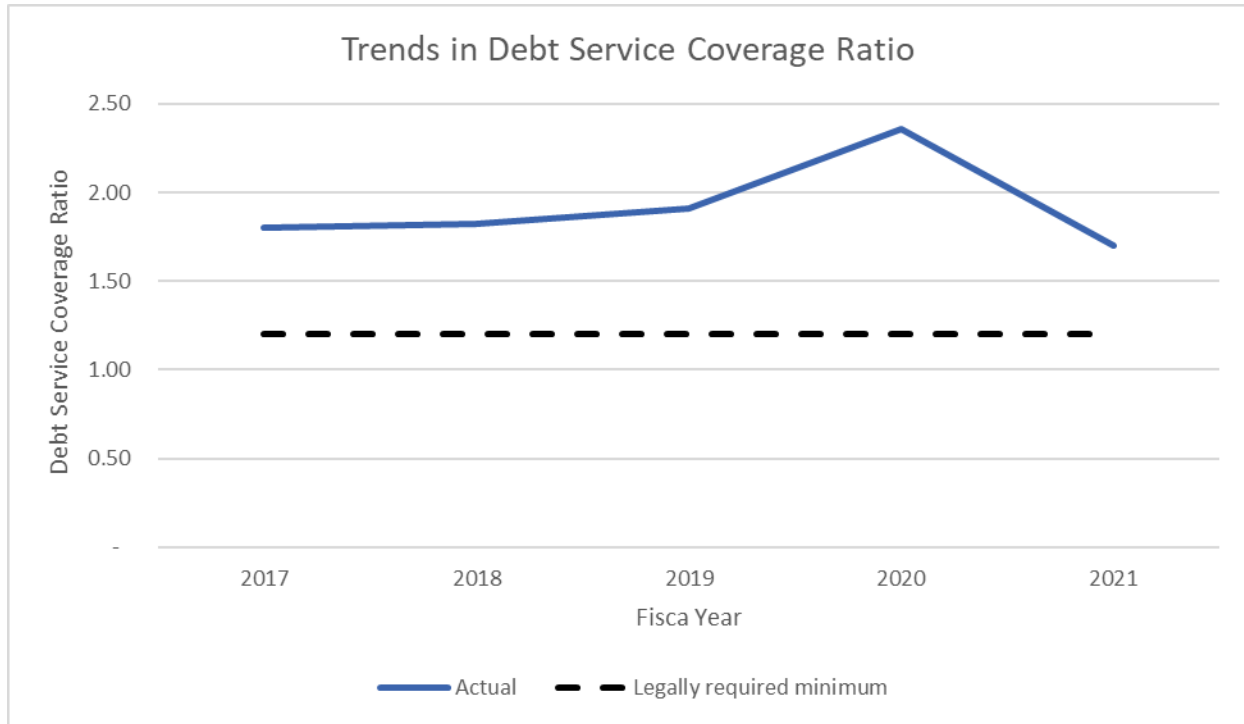
Fiscal Year	Revenue Bonds		Locality Compensation		Installment Obligations		Total	
	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest
2022	12,405,000	10,346,847	990,000	288,350	932,860	221,298	14,327,860	10,856,495
2023	12,850,000	9,723,908	980,000	248,950	932,860	207,135	14,762,860	10,179,993
2024	13,510,000	9,073,653	970,000	207,525	932,860	192,972	15,412,860	9,474,150
2025	12,740,000	8,458,731	960,000	164,100	932,860	178,809	14,632,860	8,801,640
2026	13,355,000	7,847,679	955,000	118,625	932,860	164,646	15,242,860	8,130,950
2027 - 2031	76,465,000	29,529,157	1,895,000	94,625	4,664,298	610,782	83,024,298	30,234,564
2032 - 2036	76,425,000	12,333,124	-	-	3,804,227	263,432	80,229,227	12,596,556
2037 - 2041	19,870,000	4,144,025	-	-	1,593,336	44,613	21,463,336	4,188,638
2042 - 2045	12,040,000	987,600	-	-	-	-	12,040,000	987,600
	249,660,000	92,444,724	6,750,000	1,122,175	14,726,158	1,883,686	271,136,158	95,450,585

Under the Authority's debt policy, debt issuances are generally limited to only those projects that are high-dollar, emergency-related, or growth-oriented. Debt may not be issued if such issuance would cause the ratio of outstanding debt to the value of capital assets (debt-to-capitalization ratio) to exceed 45%. The debt-to capitalization ratio is currently 34.5%. This means the Authority has the capacity to issue approximately \$83.6 million in debt before reaching the 45% limitation. The following chart shows trends in the Authority's debt-to-capitalization ratio and available debt capacity over the last 5 fiscal years:



DEBT

Under the rate covenant contained in the Authority's General Trust Indenture, the Authority must maintain debt service coverage ratio of at least 1.2. The Authority, however, budgets to achieve debt service coverage between 1.6 and 1.8 times. The chart below provides trends in the Authority's actual debt service coverage ratio over the past 5 fiscal years compared to the legally required minimum.

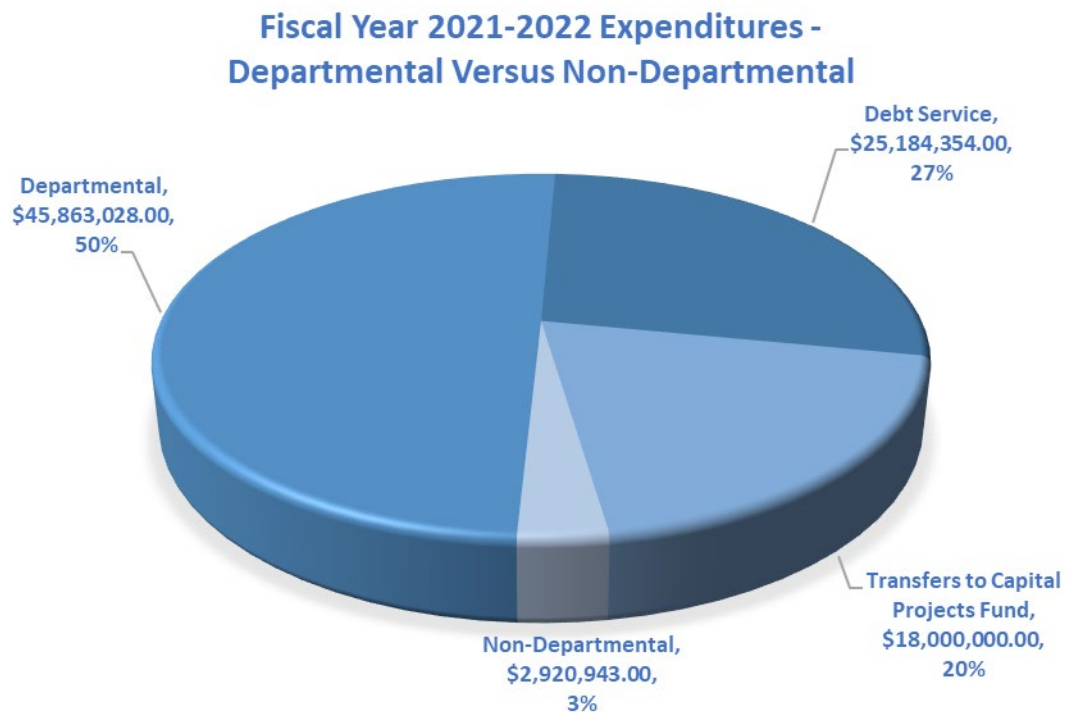


Between FY 16-17 and FY 18-19 coverage increased slightly due to a decrease in debt service requirements while net revenues remained relatively stable over the period. Coverage spiked in FY 19-20 as annual debt service requirements decreased by 7.1% and net revenue increased by 14.9%. The increase in net revenues was attributable to an increase in rate revenues related to increased billed water consumption driven by dry weather conditions. In FY 21-22, debt service coverage returned to target levels. Debt service requirements increased related to the new money component of the 2019A Bonds. In addition, net revenues also returned to historical levels as weather conditions returned to normal.

The Authority currently carries credit ratings of AA+ and Aa2 from Standard and Poor's and Moody's, respectively. The Authority does not plan to issue debt in FY 21-22.

DEPARTMENTAL SUMMARIES

As the chart below shows, 50% of the \$91.6 million FY 21-22 budget is controlled by the Authority's various departments including salaries and benefits and operational costs to execute the Strategic Plan. The remaining 50% are not controlled by individual departments and include transfers to the capital projects fund, debt service, and various overhead expenditures that aren't attributable to a specific department such as expenditures for rent and insurance.



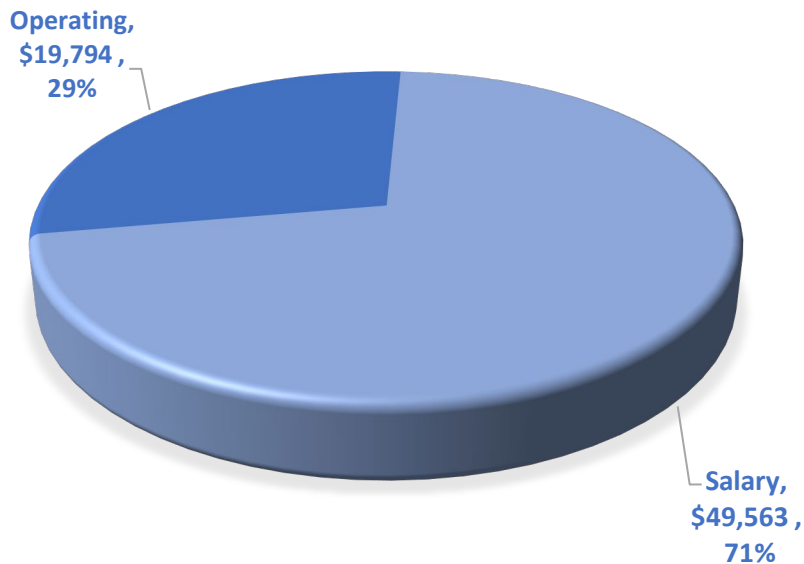
DEPARTMENTAL SUMMARIES

AUTHORITY BOARD

The Cape Fear Public Utility Authority Board consists of eleven members. The City of Wilmington and New Hanover County appoint five members each; two of those appointments come from their respective governing boards. The eleventh member is jointly appointed. The Board is responsible for, among other things, adopting the annual budget, setting water and sewer rates, making policy decisions, managing the Executive Director, and contracting with the Authority's Legal Counsel.

Departmental Budget

The Authority Board budget for FY 21-22 is \$69,357 or .08% of the total FY 21-22 operating budget. Of the total departmental budget 71% is budgeted to pay monthly stipends for the Board's 11 members. The remaining 29% is budgeted for various expenditures including costs to broadcast Board meetings, advertise public hearings, and cell phone and tablet stipends.



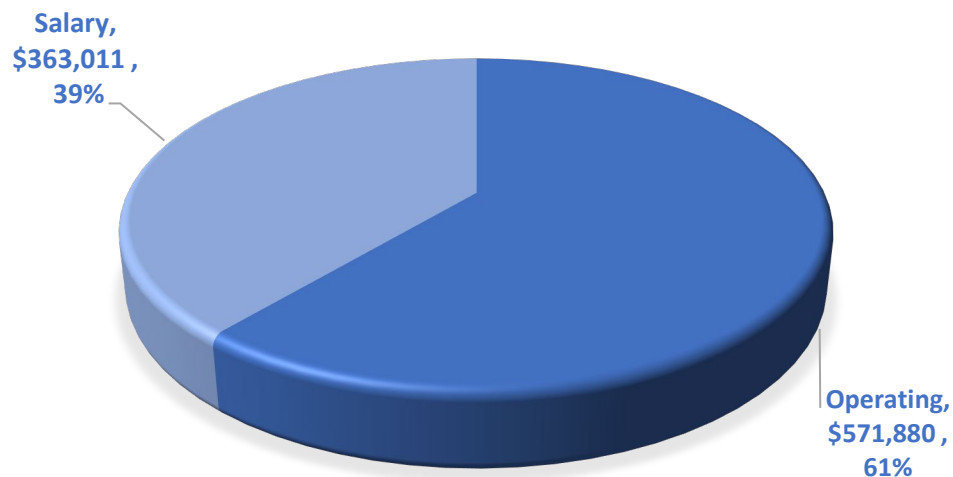
DEPARTMENTAL SUMMARIES

ADMINISTRATION

The Administration Department consists of the Executive Director and Clerk to the Board. The Executive Director serves at the pleasure of the Board and is responsible for executing the Board's strategic vision, policies, and objectives.

Departmental Budget

The Administration Department budget for FY 21-22 is \$934,891, or 1.02% of the total FY 21-22 operating budget. Of the total departmental budget, \$363,011 (or 39%) is budgeted to pay salaries and benefits for the department's 2 full-time equivalent positions. The remaining \$571,880 (or 61%) is budgeted for various expenditures including \$565,000 for legal costs including those for the contracted attorney and the Annual PFAS lawsuit with Chemours.



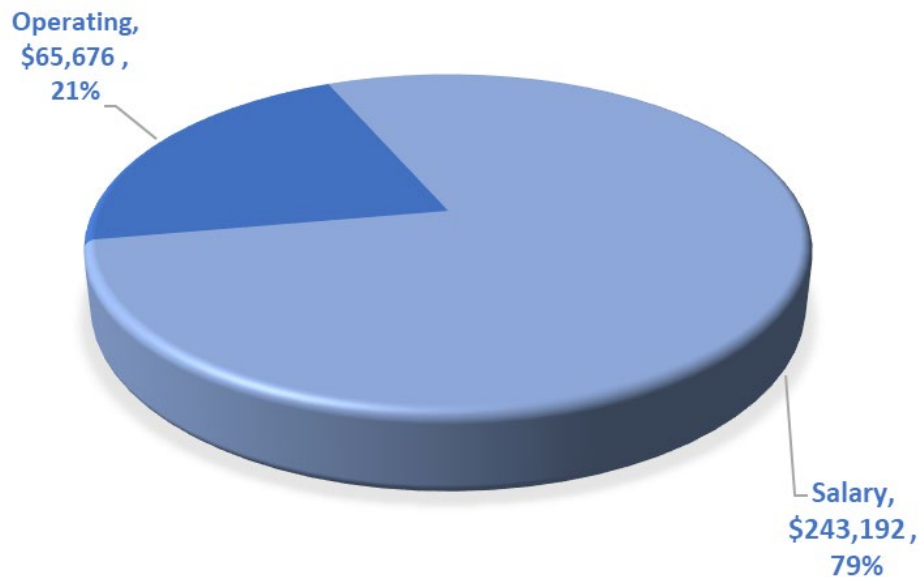
DEPARTMENTAL SUMMARIES

COMMUNICATIONS

The Communications Department consists of the Public Information Officer and Assistant Public Information Officer. The Public Information Officer and Assistant Public Information Officer are responsible for keeping customers and other key stakeholders, including the news media, informed about CFPUA's activities and issues affecting customers and the region. They also support departments with outreach to customers affected by scheduled construction projects or by providing emergency response assistance.

Departmental Budget

The Communications Department budget for FY 21-22 is \$308,868 or 0.34% of the total FY 21-22 operating budget. Salaries for the 2 full time positions make up the majority of the departmental budget. The remaining amount is budgeted for various expenditures, including \$54,000 for community media outreach.



DEPARTMENTAL SUMMARIES

Departmental Goals

Dept Goal(s)	Objectives	Timeline	Impact on FY 21-22 Budget	CFPUA Strategic Goal
Increase awareness about online customer self-service offerings.	Produce and distribute materials through Paid Community Outreach program that demonstrate our online services and the benefits they offer customers.	Annual	\$54,000	Goal 2, Strategy 2.2
Expand frequency and reach of social media messaging	Increase frequency of Facebook, Twitter, and Instagram posts. Promote direct messaging as an effective channel for customers to communicate with CFPUA.	Annual	No Impact	Goal 2, Strategy 2.4
Continue paid community outreach program with local TV Stations	Increase awareness about key CFPUA initiatives, including customer education about preventing FOG-related sewer clogs.	Annual	Part of Paid Community Outreach	Goal 3, Strategy 3.4
Increase awareness about key CFPUA initiatives, including customer education about preventing FOG-related sewer clogs, promoting prudent irrigation practices, help for customers struggling financially, and providing updates on major projects such as the Sweeney Treatment Enhancements Project.	Produce and distribute materials through Paid Community Outreach program that address these key topics.	Annual	Part of Paid Community Outreach	Goal 4, Strategy 4.1
Keep customers and the community updated on major projects such with a focus on their effectiveness at treating for PFAS and legal efforts to recoup costs	Produce and distribute materials through Paid Community Outreach program that address these key topics.	Annual	Part of Paid Community Outreach	Goal 4, Strategy 4.2

DEPARTMENTAL SUMMARIES

Identify and spotlight employees throughout the organization who exemplify the organization's dedication to customer service.	Feature one employee in each month's Customer Email Newsletter.	Annual	\$180.00	Goal 4, Strategy 4.3
Continue Monthly Employee Email Newsletter	Originally implemented to help employees keep connected during the Covid-19 pandemic, we have continued this initiative to shine a spotlight on a couple of staff each month at various locations and in various functions in our organization. This is also a tool to share information important to all employees, including events such as benefits signups and changes to policies.	Annual	No Impact	Goal 5, Strategy 5.3

Performance Measures

The Communication Department was created in FY 22. Therefore, there are no prior year performance measures. The Department will develop performance measures during the year.

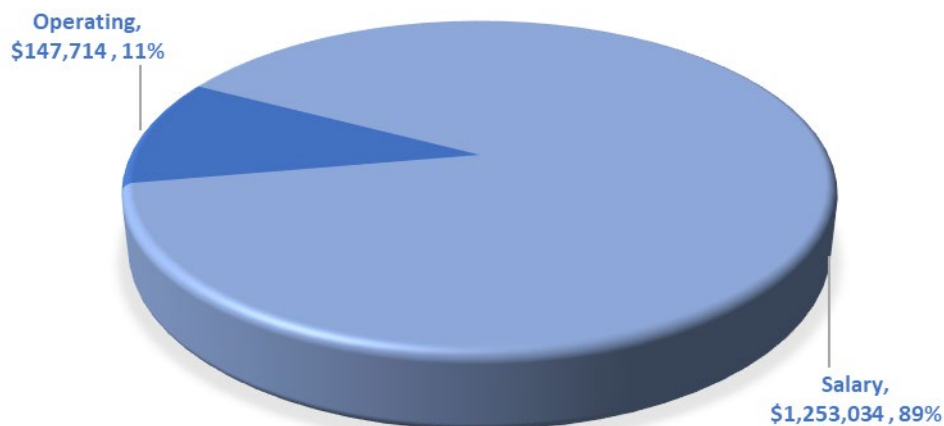
DEPARTMENTAL SUMMARIES

FINANCE

The Finance Department is responsible for developing and recommending financial policies that facilitate the fiscal sustainability of the organization and developing and executing budgets and financial plans in accordance with these policies including rate development, debt issuance, and the investment of public funds. Finance also supports organization wide operations through the timely, accurate payment of vendors, employees, and other parties; managing the procurement of goods and services; budget management; and enterprise resource planning system support. Finance also communicates financial information to stakeholders including customers, the Board, credit rating agencies, the development community, and governmental partners.

Departmental Budget

The Finance Department budget for FY 21-22 is \$ 1,400,748 or 1.52% of the total FY 21-22 operating budget. Finance has 12 full time positions that account for 89% of the departmental budget. The remaining 11% is budgeted for various expenditures including the cost of the annual financial audit, financial advisors/consultants, and professional development.



DEPARTMENTAL SUMMARIES

Departmental Goals

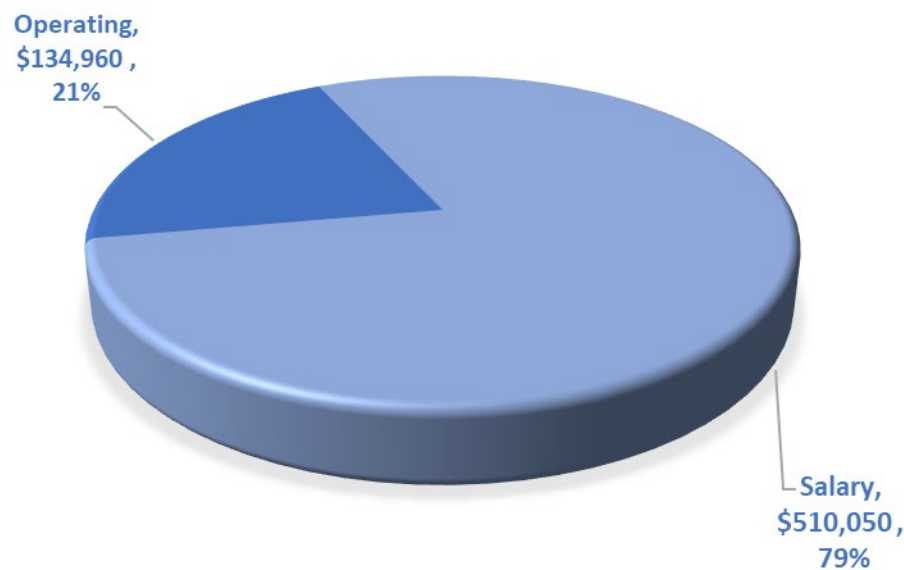
Dept Goal(s)	Objectives	Timeline	Impact on FY 21-22 Budget	CFPUA Strategic Goal
Explore revenue-neutral rate structure alternatives that optimize equity, affordability, and conservation.	Develop a new rate model	January 2022	TBD	Goal 1, Strategy 1.2
Develop financial policies that support the goals of CFPUA	Develop annual budgets that balance rate affordability and provide the best level of service to the community	Annual	No Impact	Goal 1, Strategy 1.2
	Develop investment policies that efficiently use ratepayer funds to offset potential rate increases by maximizing investment yields	Annual	No Impact	Goal 1, Strategy 1.2
	Develop Accounts Payable policies that optimize the timing of vendor payments to delay cash outflows while avoiding business interruption due to late payment	Annual	No Impact	Goal 1, Strategy 1.2
Provide guidance on daily task to ensure business continuity and improve processes	Develop a finance procedures manual	June 2022	No impact	Goal 2, Strategy 2.3
Provide employees the tools to advance by setting goals and training on new tasks	Offer one on one assistance and allow staff to seek outside training	Annual	\$4,000	Goal 5, Strategy 5.2
Utilize the ERP system to develop automated financial reports and processes	Generate monthly reports more efficiently and leverage the ERP system to facilitate closing the month sooner	Annual	No impact	Goal 5, Strategy 5.4
Leverage technology to improve purchasing processes	Research electronic bidding services and contract management systems	June 2022	No impact	Goal 5, Strategy 5.4

DEPARTMENTAL SUMMARIES

HUMAN RESOURCES

The Human Resources Department provides quality service and support in employment, employee relations, benefits, compensation, health and safety, and training to the employees so that they can best serve the needs of the customers of Cape Fear Public Utility Authority.

The Human Resources Department budget for FY 21-22 is \$645,010 or .70% of the total FY 21-22 operating budget. The majority of the departmental budget is for salaries and benefits for the department's 4 full-time equivalent positions. The remaining amount is budgeted for various expenditures including costs related to insurance brokerage services for employee benefits, worker's compensation claims administration, organizational training, employee recognition and education assistance, and advertisement of position vacancies.



DEPARTMENTAL SUMMARIES

Departmental Goals

Dept Goal(s)	Objectives	Timeline	Impact on FY 21-22 Budget	CFPUA Strategic Goal
Diversify recruitment sources.	Increase recruitment sources by 30%.	December 2022	No impact	Goal 1, Strategy 1.4
Ensure compensation structure reflects the external market for CFPUA positions.	Ensure job classification grades are within 10% of external sources and that positions are classified in the appropriate grade and comp-ratio within the grade.	January 2022	No impact	Goal 1, Strategy 1.4
Utilize performance metrics to measure recruitment, diversity and retention efforts.	Reduce vacancy and turnover rates by 10%.	June 2022	No impact	Goal 1, Strategy 1.4
	Compare EEO demographics to the community annually and track year over year	June 2022	No impact	Goal 1, Strategy 1.4
	Encourage tuition assistance and incentive pay usage.	June 2022	No impact	Goal 1, Strategy 1.4
Implement technology to manage human capital	Continue researching project to consider HR/Payroll solutions.	Annual	No impact	Goal 5, Strategy 5.1
Research and develop best practices.	Review external resources related to organizational development, training development and coaching.	December 2022	No impact	Goal 5, Strategy 5.2 & 5.3
Develop metrics to direct objectives related to employee development	Review appropriate metrics and set up tracking. (tenure, eligibility for retirement, T&D, etc.)	December 2022	No impact	Goal 5, Strategy 5.2 & 5.3

DEPARTMENTAL SUMMARIES

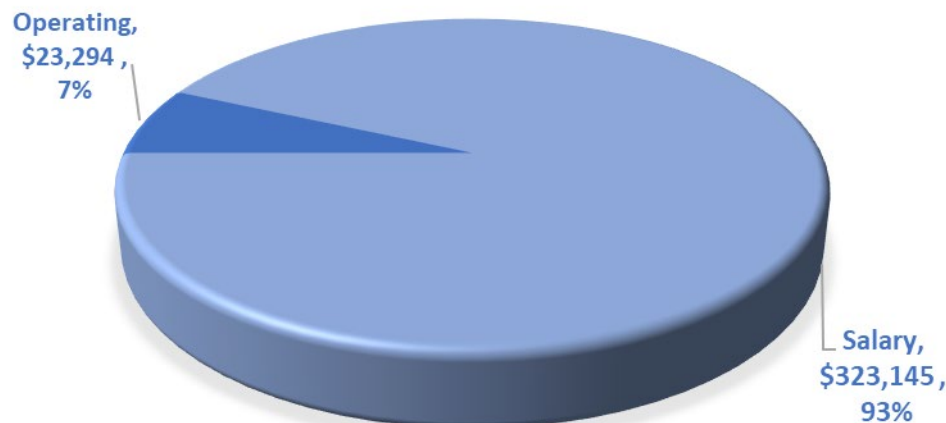
PUBLIC & ENVIRONMENTAL POLICY

The Public and Environmental Policy Department consists of the Director, the Public and Environmental Policy Specialist and the Environmental Data Analyst. The mission of the Public and Environmental Policy Department is to ensure that CFPUA contributes to the long-term sustainability of Wilmington and New Hanover County. The department helps create strategic environmental and public policy goals and assists other departments in implementing and maintaining programs to meet them.

The department provides white papers, regulatory research, data analysis and educational materials to help the organization monitor and improve its environmental and public policy initiatives. The department also conducts external outreach to customers, environmental groups, research organizations and local government, ensuring that CFPUA has stakeholder input and local expertise looped into our policies and programs.

Departmental Budget

The Public & Environmental Policy Department budget for FY 21-22 is \$346,439, or .38% of the total FY 21-22 operating budget. Salaries for the 3 full time positions makes up the majority of the departmental budget. The remaining amount is budgeted for various expenditures including software licenses and training, printing for special educational materials, and various computer hardware.



DEPARTMENTAL SUMMARIES

Departmental Goals

Dept Goal(s)	Objectives	Timeline	Impact on FY 21-22 Budget	CFPUA Strategic Goal
Identify and apply for external grant funding opportunities that will reduce pressure on rates.	Apply for at least 3 grants per year	Annual	\$8,000	Goal 1, Strategy 1.2
Identify partnerships around environmental education and collaboration; build alliances with nonprofits to assist in bill affordability	Reach out to professors at UNCW, teachers at local schools; nonprofit orgs; work with County affordable housing task force; build support and awareness for CFPUA Assist	Annual	Approx. \$1000 in supplies for educational events	Goal 1, Strategy 1.3
Find growth opportunities for employees; continuously improve PEP internship program; use remote work capabilities to encourage a more diverse internship program	Semiannual conversations with employees to gather feedback; create business plans for employee projects to document success; exit interviews with interns on improvement strategies; cast wide recruiting net	Annual	No impact	Goal 1, Strategy 1.4
Continue to analyze bill affordability in the service area and find ways to improve customer assistance options.	Update affordability dashboard each year	Annual	No impact	Goal 2, Strategy 2.1
Track CFPUA energy data over time; use drone program to conduct asset checks and identify leaks/breaks; work with stormwater programs to find areas of common interest	Maintain energy use database in Maximo and update reports for Plant staff; conduct seasonal drone missions with linear assets staff, regular calls with the airport and make a new contact at the county	Annual	No impact.	Goal 3, Strategy 3.1

DEPARTMENTAL SUMMARIES

Monitor organizational greenhouse gas emissions; work with Energy Team to support their initiatives; set emissions reduction goals; maintain electric vehicle program	Produce annual GHG inventory; provide data support for the Energy Team's energy efficiency pilot at SSWWTP; bring goal options to Board; add new EVs to fleet using cost benefit methodology	Annual; FY 22; FY 22; FY 22	No impact this year; no impact; no impact; Potential impact on fleet line in CIP.	Goal 3, Strategy 3.2
Create content for CFPUA presentations, tv spots, and the website; Write white papers and reports for the Board on environmental projects and initiatives	Continue youtube series on EV program and update website with new ArcStories; create annual resiliency report on CFPUA actions and goals	Annual	No impacts	Goal 3, Strategy 3.4
Maintain the source water protection plan; help the organization approach policymakers at the state and federal levels on this topic	Update potential contaminant sources and the interactive map every three years; draft public comments and letters to policymakers in Raleigh, DC	every 3 years; Annual	No impacts	Goal 3, Strategy 3.5
Monitor legislation at the state and federal levels that would allow for more reuse at CFPUA; work with engineering and local planners to begin community education on the topic.	Participate in webinars and other training materials from Water Reuse Association; Participate in wastewater master planning process with ENG	Annual; FY 22	No impact	Goal 3, Strategy 3.6
Work with communications dept to develop content from environmental and public policy work; ensure our own content is accessible and interesting	Regularly contribute to weekly updates and to social media needs; find new ways to design and format our reports	Annual	No impact; Approx \$1,000 in graphic design of resiliency plan template	Goal 4, Strategy 4.1

DEPARTMENTAL SUMMARIES

Expand drone program to increase types of imagery available; encourage employees to participate in trainings and courses that increase their skills	Improve our ability to collect and use flood imagery; continue to take classes from memberships and tools we subscribe to.	Annual	\$2,000 in additional imagery capabilities and video processing software; \$5,000 in membership and educational subscriptions	Goal 5, Strategy 5.1
Continue to improve tools already implemented; Find new tools that can help communication	Fine tune CFPUA work processes that have been transferred to cloud computing software in Teams and expand general employee awareness; Find new tools to improve remote work functionality	Annual	TBD	Goal 5, Strategy 5.4

Performance Measures

FY 20	FY 21	FY 22 Target	Performance Metric	Dept Goal
N/A	Applied for 4, Approved for 3	Anticipate achieving the goal	Approval of 50% or more of grants applied for	Identify and apply for external grant funding opportunities that will reduce pressure on rates.
N/A	N/A	TBD	Board approval of ghg emissions	Set ghg emissions reduction goals

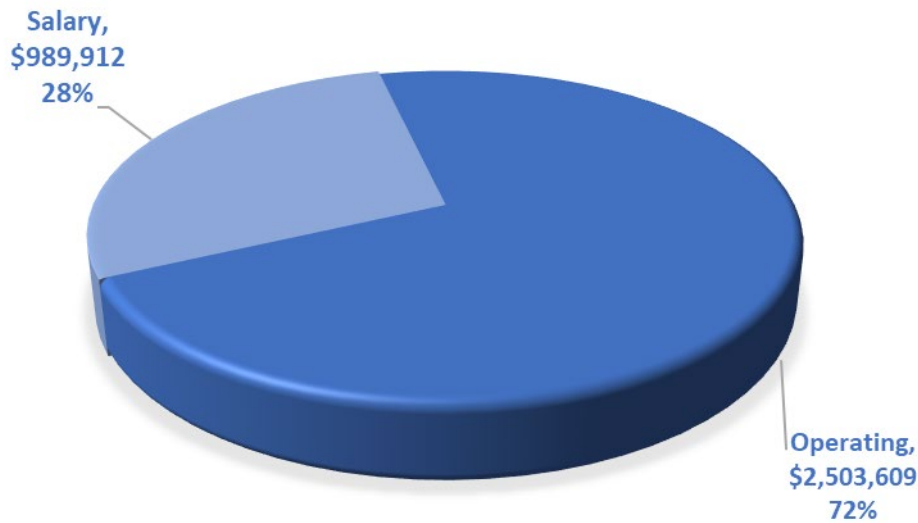
DEPARTMENTAL SUMMARIES

INFORMATION TECHNOLOGY

The Information Technology Department is responsible for the connectivity of eight facilities, as well as the SCADA network that consists of over 250 outlying sites. It also supports and maintains all Authority servers, personal computers (PC's), network equipment, and telephone systems. In addition, the Information Technology Department is responsible for the Authority's technology security, the website, closed-circuit television (CCTV), and network security across the organization.

Departmental Budget

The Information Technology Department budget for FY 21-22 is \$3,493,521, or 3.80% of the total FY 21-22 operating budget. The salary consists of 9 full time positions and the operating expenditures include the cost of software licenses, scheduled replacement of computers, data connection services and regular maintenance on the Authority's SCADA system.



DEPARTMENTAL SUMMARIES

Departmental Goals

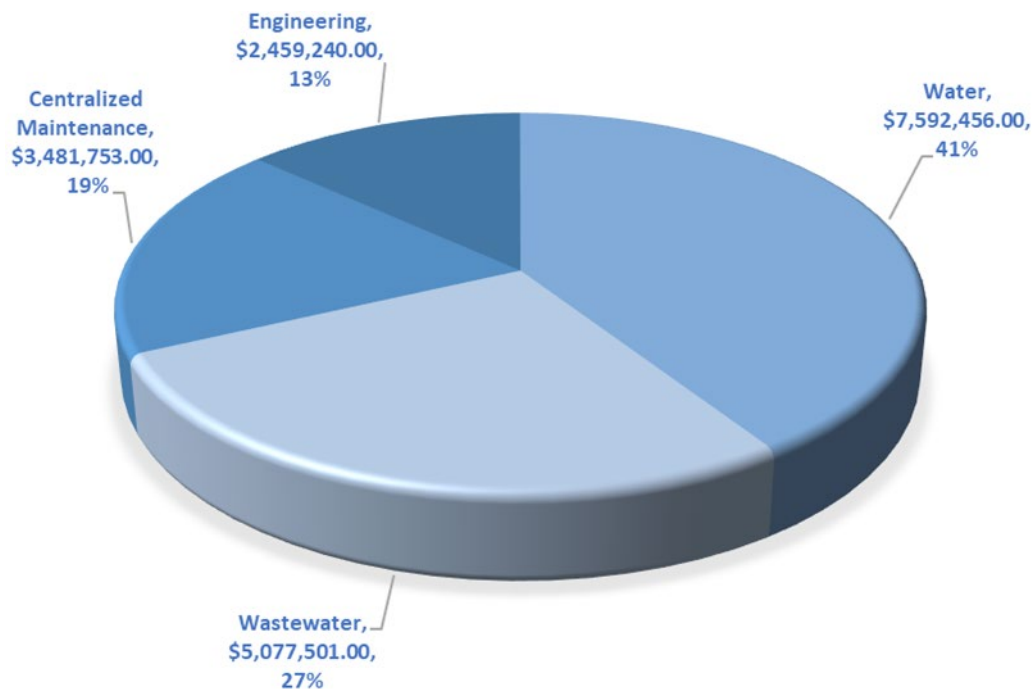
Dept Goal(s)	Objectives	Timeline	Impact on FY 21-22 Budget	CFPUA Strategic Goal
Increase CFPUA's Cyber Security Posture	Continue adding technology resources to our existing monitoring application.	Annual	No Impact	Goal 5, Strategy 5.1
	Upgrade Network equipment to more sophisticated hardened devices.	Annual	None, equipment purchased in previous budget	Goal 5, Strategy 5.1
	Additional network segmentation which will allow for better redundancy and improve communication continuity and security across the business and ICS networks,	July 2022	No Impact	Goal 5, Strategy 5.1
	Continue adding remote devices to the existing Mobile Device Management solution in order to support security enhancements and remote wipe capability	July 2022	None, solution was purchased in previous budget	Goal 5, Strategy 5.1
	Migrate all facilities to the new access control system which replaces antiquated equipment and improves security.	July 2022	\$193,395	Goal 5, Strategy 5.1
Improve management of technology resources to improve efficiency and IT support response time.	Continue implementing the SCADA Master Plan	July 2021 - July 2025	750,000	Goal 5, Strategy 5.4
Improve centralized management of technology resources to improve efficiency and IT support response time.	Expand Virtual Desktop Implementation	December 2021	\$1,023,509	Goal 5, Strategy 5.4

DEPARTMENTAL SUMMARIES

TREATMENT/ENGINEERING

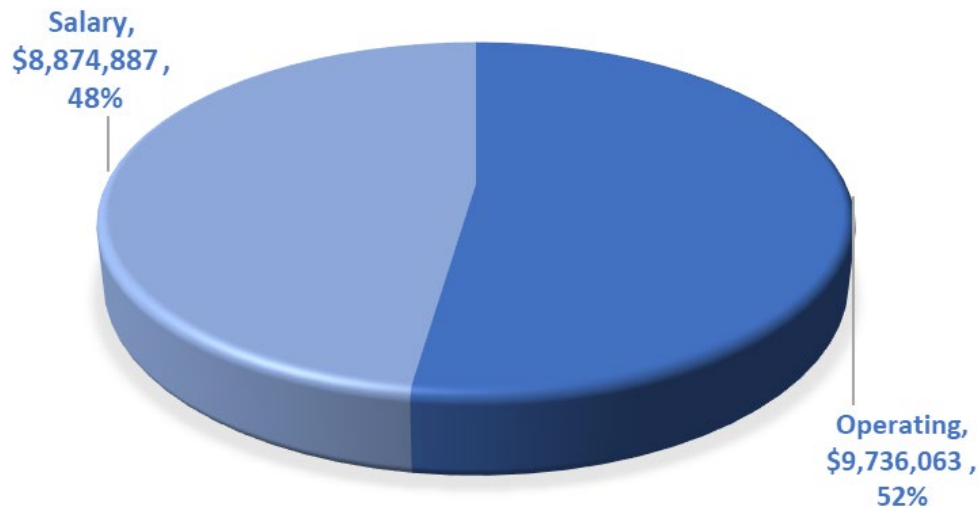
The Treatment/Engineering Department is comprised of Water and Wastewater Treatment, Centralized Maintenance and Engineering. Overall, the total departmental budget for FY 21-22 is \$ 18,610,950.00 or 20% of the total FY 21-22 operating budget. The pie charts below detail the breakdown of the total departmental budget between divisions and the breakdown between salary and operating for the entire department.

Total Departmental Budget



DEPARTMENTAL SUMMARIES

Departmental Salary vs Operating Budget



Treatment/Engineering - Engineering

The Administration Division is responsible for the overall management of the Engineering Department and for ensuring that department functions are aligned to meet the Authority's strategic objectives. The Department is comprised of three divisions: Administration, Planning and Design, and Development Services.

The Engineering Department budget for FY 21-22 is \$2,459,240, or 3% of the total FY 21-22 operating budget. Of the total departmental budget, \$ 2,327,590 (or 95%) is budgeted to pay salaries and benefits for the department's 22 full-time equivalent positions. The remaining \$ 131,650 (or 5%) is budgeted for various expenditures including the cost of updates to the Authority's construction specifications and CIP database maintenance.

Treatment/Engineering – Centralized Maintenance

The Centralized Maintenance Division is responsible for maintenance activities associated with the water and wastewater treatment plants, well sites, buildings and other facilities, as well as fleet management. Efforts to consolidate maintenance resources have proven beneficial. Centralized Maintenance is continuing to evaluate strategies to become more efficient by moving towards a more predictive approach to maintenance. The Authority's Computerized Maintenance and Management System (CMMS) has proven to be a key component in this transition and will continue to prove effective.

DEPARTMENTAL SUMMARIES

The Centralized Maintenance budget for FY 21-22 is \$3,481,753, or 3.79% of the total FY 21-22 operating budget. Of the total division budget, \$1,617,612 (or 46%) is budgeted to pay salaries and benefits for the division's 22 full-time equivalent positions. The remaining \$1,864,141 (or 54%) is budgeted for various expenditures including contracted services for fleet and equipment maintenance, landscaping, and materials costs for various plant and facilities maintenance.

Treatment/Engineering – Water Treatment

The Water Treatment Division processes source water from the Cape Fear River and confined aquifers to distribute clean, treated drinking water through three different systems within New Hanover County. A staff of state-certified treatment operators and a team of skilled maintenance technicians keep all facilities operational 24 hours per day, seven days per week to ensure that a supply of safe drinking water is available for customers of the Authority.

The Water Treatment budget for FY 21-22 is \$7,592,456 or 8% of the total FY 21-22 operating budget. Of the total division budget, \$2,433,385 (or 32%) is budgeted to pay salaries and benefits for the division's 30 full-time equivalent positions. The remaining \$5,159,071 (or 68%) is budgeted for various expenditures including electricity and chemicals used in the treatment process, the purchase of raw water, maintenance and instrumentation contracts, plant maintenance, wellsite maintenance and equipment replacement.

Treatment/Engineering – Wastewater Treatment

The Wastewater Treatment Division manages the operation and maintenance of the Authority's two wastewater treatment plants (WWTPs): Northside (NSWWTP) and Southside (SSWWTP). These facilities have received diligent operation and maintenance attention, exhibited exemplary regulatory permit compliance, and observed strict compliance with the approved budget.

The Staff has participated in many Cape Fear Public Utility Authority program initiatives including: asset management, SCADA master planning, centralized maintenance, contingency emergency generator connection provisions and treatment chemical bidding and award. The Staff has maintained high training and certification standards, including operator, backflow prevention, and pesticide application certifications.

The Wastewater Treatment budget for FY 21-22 is \$5,077,501 or 6% of the total FY 21-22 operating budget. Of the total division budget, \$2,496,300 (or 49%) is budgeted to pay salaries and benefits for the division's 33 full-time equivalent positions. The remaining \$2,581,201 (or 51%) is budgeted for various expenditures including electricity and chemicals used in the treatment process, the disposal of wastewater residuals, plant maintenance, and equipment replacement.

DEPARTMENTAL SUMMARIES

Departmental Goals

Dept Goal(s)	Objectives	Timeline	Impact on FY 21-22 Budget	CFPUA Strategic Goal
Incorporate the Sweeney GAC Enhancement project into daily operation to remove PFAS	Develop operational and GAC replacement plans for the new GAC treatment process	Complete by June 2022	\$40,000 for 0.5 FTE planner scheduler	Goal 1, Strategy 1.1
Update 10-year Capital Improvements Plan Annually	Maintain financial and Infrastructure asset data to develop business case evaluations and facilitate incremental improvements to risk-based Capital Improvements Plan annually.	Draft CIP - January 2022 Final CIP - June 2022	\$10,000	Goal 1, Strategy 1.2
Develop Beneficial interlocal Agreements with the City and New Hanover County, where appropriate	Evaluate opportunities and draft interlocal Agreements that benefit our customers and community by working with local government agencies.	Annual	Capital Budget	Goal 1, Strategy 1.3
Review and Update CFPUA Construction Standards	Review and update the CFPUA Construction Standards	January 2022	\$10,000	Goal 1, Strategy 1.5
Development Advisory Committee Coordination	Continuously improve exchange of information and stakeholder relationships with the Development Community through Development Advisory Committee meetings.	Meet as needed with the Committee throughout the year	No impact	Goal 2, Strategy 2.1
Promote electronic submittals and review of development plans	Perform electronic reviews of development plans whenever possible	Annual	No impact	Goal 2, Strategy 2.2
Improve Online tools for Master Planning and Capacity Management	Develop, implement and measure initiatives that improve the due diligence master planning response and online tools available to customers.	Complete by June 2022	No impact	Goal 2, Strategy 2.2
Provide online map that Dev Customers can use to determine status of plan review and details of previously reviewed projects.	Develop, implement and deploy online GIS map with plan review data available to customers in real time.	Complete by December 2021.	No impact	Goal 2, Strategy 2.4

DEPARTMENTAL SUMMARIES

Update 30-year Sewer Master Plan	Evaluate 30-year growth projections and update Authority's 30-year sewer master plans. The water master plan was updated in 2019.	Complete by June 2022	\$100,000 FY22 capital	Goal 3, Strategy 3.1
Effectively maintain water and wastewater treatment plant equipment	Effectively and timely maintain water and wastewater treatment plant equipment to support compliance with Federal and State wastewater regulations, standards, and permits.	Annual	Centralize Maintenance Budget	Goal 3, Strategy 3.1
Implement recommendations from the FY2021 Non-Revenue Water Analysis	Conduct annual calibration testing of water supply meters at the treatment plants and production wells; Perform annual audit utilizing the AWWA Water Audit Software	Complete by June 2022	\$27,000	Goal 3, Strategy 3.1
Monitor and review energy consumption at treatment plants and well sites	Review energy consumption monthly and compare to historical trends. Investigate increases in energy consumption	Annual	No impact	Goal 3, Strategy 3.2
Comply with Federal and State drinking water treatment regulations, standards, and permits	Effectively manage the operation of CFPUA's drinking water treatment plants to comply with Federal and State drinking water regulations, standards, and permits.	Annual	Drinking Water Budget	Goal 3, Strategy 3.3
Implement the recommendations from the corrosion control study	Implement corrosion control chemicals in the Monterey Heights groundwater system and convert the Sweeney and Richardson systems from a 50/50 chemical blend to a 70/30 chemical blend	December 2021	\$150,000	Goal 3, Strategy 3.3
Comply with Federal and State wastewater treatment regulations, standards, and permits	Effectively manage the operation of CFPUA's wastewater treatment plants to comply with Federal and State drinking water regulations, standards, and permits.	Annual	Wastewater Budget	Goal 3, Strategy 3.3

DEPARTMENTAL SUMMARIES

Effectively manage copper concentrations in the Southside Wastewater Treatment Plant effluent	Develop and conduct a pilot test for chemical addition to reduce copper concentrations	Complete pilot testing in the summer of 2022	\$100,000	Goal 3, Strategy 3.3
Evaluate Opportunities for Potable Reuse Annually	Evaluate and report changes to North Carolina Law and national trends regarding Potable Reuse to the Long Range Planning Committee.	Annual	\$5,000	Goal 3, Strategy 3.6
Engage technical workforce to develop data analytics skills and tools that support customers and utility operations. Inspire workforce toward implementing a capacity tracking system that continually updates and is easily viewable.	Access data in GIS, Maximo, Umax and other sources to populate a reliable tool easily accessible to staff that continually tracks sewer capacity optimizing automatic updates where possible.	Beta version June 2022.	No impact	Goal 5, Strategy 5.1
Improve Employee Effectiveness through Training	Provide employees access to training that improves customer service, safety, professional competency, and appropriate use of technology.	Annual	\$35,000	Goal 5, Strategy 5.2
Develop and reinforce employee skills through Job specific training and certifications	Further reinforce a culture of employee pride and internal advancement throughout vital operational and maintenance staff positions as budgeted.	Annual	No impact	Goal 5, Strategy 5.2
Improve Asset, Risk and GIS Data Quality	Improve data quality related to asset management, risk and geographical location of infrastructure assets.	Annual	No impact	Goal 5, Strategy 5.4

DEPARTMENTAL SUMMARIES

Performance Measures

FY 20	FY 21	FY 22 Target	Performance Metric	Dept Goal
99%	92%	90%	Number of development plans reviewed within 20 business days	Promote electronic submittals and review of development plans/Improve Employee Effectiveness through Training
100%	100%	90%	Number of building permits reviewed within 100 business days	Promote electronic submittals and review of development plans/Improve Employee Effectiveness through Training
100%	100%	90%	Number of inspections reviewed within 10 business days	Improve Employee Effectiveness through Training
100%	100%	90%	Number of RFIs processed within 5 business days	Improve Employee Effectiveness through Training
100%	100%	90%	Total number of FTSE's completed for new sewer permits within 20 days	Improve Employee Effectiveness through Training
New Goal FY 21	20,127	Tracking Only	Total number of feet of sewer main lined (tracking only)	CFPUA Goal: Consistently maintain and operate the utility, and all its human and physical assets, in a manner that optimizes the care and use of water and other natural resources.
100%	100%	90%	Number of as-built sheets entered into GIS within 30 business days after received	Improve Online tools for Master Planning and Capacity Management
94%	94%	90%	Number of master plan requests completed within 5 business days	Improve Online tools for Master Planning and Capacity Management
88	41	Tracking Only	Total number of manholes rehabilitated	CFPUA Goal: Consistently maintain and operate the utility, and all its human and physical assets, in a manner that optimizes the care and use of water and other natural resources.
\$1,246,429	\$1,149,673	Tracking Only	Cumulative \$-value of asset management projects awarded/encumbered	Improve Asset, Risk and GIS Data Quality
\$2,425,000	\$869,782	Tracking Only	Cumulative \$-value of asset management projects completed	Improve Asset, Risk and GIS Data Quality

DEPARTMENTAL SUMMARIES

New Goal FY 21	17.12 hrs	27 hrs	Maintain on average more than 27 hours of training per employee per year	Develop and reinforce employee skills through Job specific training and certifications
New Goal FY 21	FY 21 Goal 18,650,000 KWH	18,900,000 KWH	Maintain annual electrical energy usage (KWH) at or below the goal	Monitor and review energy consumption at treatment plants and well sites
New Goal FY 21	FY 21 Goal 4,028MG FY 21 Actual 4,058 MG	4,050 MG	Cumulative raw water purchased within the budgeted amount	CFPUA Goal: Consistently maintain and operate the utility, and all its human and physical assets, in a manner that optimizes the care and use of water and other natural resources.
New Goal FY 21	4.75%	10%	Percent of total raw water volume returned to plant. Allowed up to 10%.	CFPUA Goal: Consistently maintain and operate the utility, and all its human and physical assets, in a manner that optimizes the care and use of water and other natural resources.
New Goal FY 21	100%	Tracking Only	Percent availability of emergency well water by water system (7.6 MGD Total)	CFPUA Goal: Consistently maintain and operate the utility, and all its human and physical assets, in a manner that optimizes the care and use of water and other natural resources.
New Goal FY 21	100%	100%	Comply with all State and Federal drinking water standards	Comply with Federal and State drinking water treatment regulations, standards, and permits
New Goal FY 21	100%	100%	Comply with all NPDES permit requirements	Comply with Federal and State drinking water treatment regulations, standards, and permits
New Goal FY 21	FY 21 Goal 10,800,000 KWH	11,200,00 KWH	Maintain annual electrical energy usage (KWH) at or below the goal Wastewater	Monitor and review energy consumption at treatment plants and well sites
New Goal FY 21	100%	100%	Comply with all NPDES permit requirements	Comply with Federal and State wastewater treatment regulations, standards, and permits
New Goal FY 21	17.70%	18%	Produce an average percent cake solids at or above the goal	Comply with Federal and State wastewater treatment regulations, standards, and permits
New Goal FY 21	FY 21 Goal 1,245,00 FY Actual 1,190,596	\$1,250,000	Manage hauling and disposal costs within the targeted budget	Comply with Federal and State wastewater treatment regulations, standards, and permits
New Goal FY 21	2.08	Tracking Only	Target a _:1 total annual ratio of PM:CM for overall lower life cycle costs	Effectively maintain water and wastewater treatment plant equipment

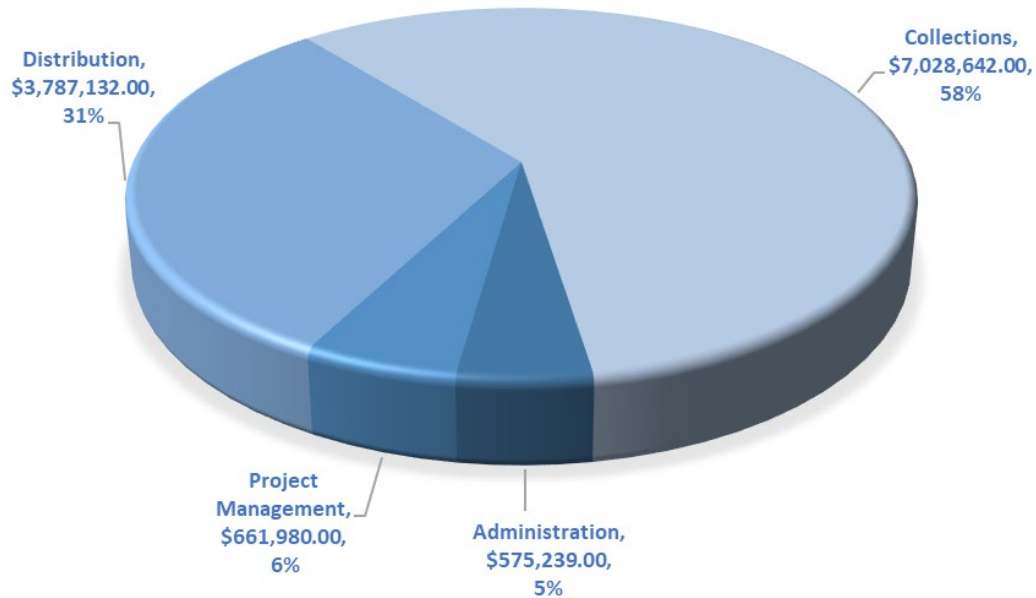
DEPARTMENTAL SUMMARIES

LINEAR ASSETS & PROJECT MANAGEMENT

Departmental Budget

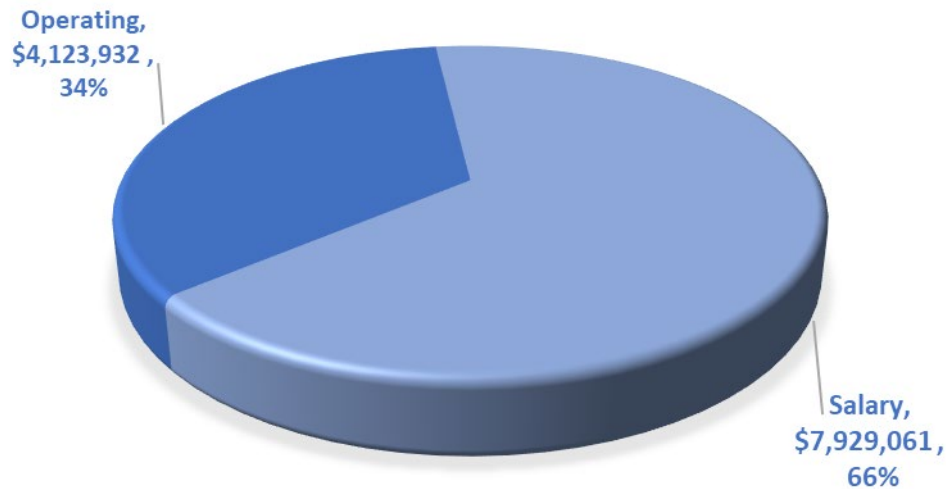
The Linear Assets and Project Management Department is comprised of Administration, Project Management, Distribution and Collections. Overall, the total departmental budget for FY 21-22 is \$12,052,993 or 13% of the total FY 21-22 operating budget. The pie charts below detail the breakdown of the total departmental budget between divisions and the breakdown between salary and operating for the entire department.

Total Departmental Budget



DEPARTMENTAL SUMMARIES

Departmental Salary vs Operating Budget



Linear Assets & Project Management– Administration

The Administration Division is responsible for overseeing the project management, distribution and collections divisions and providing administrative support.

The Administration budget for FY 21-22 is \$ 575,239, or .63% of the total FY 21-22 operating budget. Of the total departmental budget, \$563,985 (or 98%) is budgeted to pay salaries and benefits for the department's 4 full-time equivalent positions. The remaining \$11,254 (or 2%) is budgeted for various expenditures including cell phone stipends, dues and subscriptions, and office supplies.

Linear Assets & Project Management– Project Management

The Project Management Division is responsible for overseeing numerous capital improvement projects. Staff assist with programming long-term CIP budgets, oversees planning and design work, and manage construction phase activities. The primary role of the Project Management Division is executing the Capital Improvement Program.

The Project Management budget for FY 21-22 is \$661,980 or .72% of the total FY 21-22 operating budget. Of the total departmental budget, \$647,252 (or 98%) is budgeted to pay salaries and benefits for the department's 6 full-time equivalent positions. The remaining \$14,728 (or 2%) is budgeted for various expenditures including cell phone stipends, dues and subscriptions, training, and office supplies.

DEPARTMENTAL SUMMARIES

Linear Assets & Project Management – Distribution

The Distribution Division repairs breaks to water and sewer lines, performs locate services, and ensures water quality through regular line flushing.

The Distribution budget for FY 21-22 is \$3,787,132 or 4% of the total FY 21-22 operating budget. Of the total division budget, \$2,765,112 (or 73%) is budgeted to pay salaries and benefits for the division's 37 full-time equivalent positions. The remaining \$1,022,020 (or 27%) is budgeted for various expenditures including contracted services for asphalt and concrete repair, fuel for service vehicles, and construction materials for water and sewer repairs.

Linear Assets & Project Management – Collections

The Collections Division maintains the collection systems through regular inspection and cleaning of gravity lines, maintains outfalls, and operates and maintains 150 pump stations. These duties help reduce the frequency and volume of sanitary sewer overflows (SSOs).

Collections Divisions budget for FY 21-22 is \$7,028,642, or 8% of the total FY 21-22 operating budget. Of the total division budget, \$3,952,712 (or 56%) is budgeted to pay salaries and benefits for the division's 57 full-time equivalent positions. The remaining \$3,075,930 (or 44%) is budgeted for various expenditures including contracted service for odor and corrosion control and root control, pump replacement, electricity for pump stations, fuel for service vehicles and generators, materials costs for line and pump station repairs, maintenance costs for CCTV inspection equipment, and contracted surveying and clearing services for right-of-way maintenance.

Departmental Goals

Dept Goal(s)	Objectives	Timeline	Impact on FY 21-22 Budget	CFPUA Strategic Goal
Effectively minimize odor and corrosion control in collection system.	Respond to odor complaints in a timely manner	Annual	No impact	Goal 1, Strategy 1.1
	Maintain contracted odor and corrosion prevention program.	Annual	\$1,175,000.00	Goal 1, Strategy 1.1
	Track location and frequency of odor complaints to identify systematic issues.	Annual	No impact	Goal 1, Strategy 1.1

DEPARTMENTAL SUMMARIES

Program scheduled work to minimize public impacts.	Coordinate with City, County, and DOT to program scheduled work activities.	Annual	No impact	Goal 1, Strategy 1.3
Execute Capital Projects in most effective manner.	Consider projects implementation using traditional design-bid-build or the design-build procurement based on project complexity, cost and schedule.	Annual	No impact	Goal 2, Strategy 2.3
Reduce the number and volume of sanitary sewer overflows.	Conduct and track routine collection systems asset inspections.	Annual	No impact	Goal 3, Strategy 3.1
	Conduct easement maintenance activities to provide for access to infrastructure.	Annual	\$760,000.00	Goal 3, Strategy 3.1
	Conduct routine distribution system flushing to ensure water quality in the distribution system.	Annual	\$50,000.00	Goal 3, Strategy 3.1
	Respond to and address water main breaks in a timely manner.	Annual	Based on size and quantity of breaks	Goal 3, Strategy 3.1
Consider safety as paramount.	Conduct routine safety training with work units.	Annual	\$10,000.00	Goal 3, Strategy 3.1
Protect public infrastructure	Continue to maintain the utility location program	Annual	\$444,000.00	Goal 3, Strategy 3.5
Utilize enterprise-wide asset management system for inventory and production tracking to promote informed decisions.	Track inspection and work activities using IBM-Maximo Computerized Maintenance Management System (CMMS)	Annual	\$100,000.00	Goal 5, Strategy 5.4

DEPARTMENTAL SUMMARIES

Performance Measures

FY 20	FY 21	FY 22 TARGET	Performance Metric	Dept Goal
0	0	2	Expedite one project using an alternative project delivery method per year.	Execute Capital Projects in most effective manner.
25.5	25.5	25.5	12-month rolling number of miles of gravity sewer mains CCTV'd.	Reduce the number and volume of sanitary sewer overflows.
87	87	87	12-month rolling number of miles of gravity mains cleaned.	Reduce the number and volume of sanitary sewer overflows.
18.75	18.75	18.75	12-month rolling number of miles of outfall easements cleared.	Reduce the number and volume of sanitary sewer overflows.
100%	100%	100%	Number of weekly pump station inspections completed as percentage of total scheduled inspections.	Reduce the number and volume of sanitary sewer overflows.
<10%	<10%	<10%	12-month rolling percentage of routine distribution sampling events where additional corrective flushing is required.	Reduce the number and volume of sanitary sewer overflows.
≤ 3	≤ 3	≤ 3	12-month rolling number of complaints per thousand customer accounts.	Reduce the number and volume of sanitary sewer overflows.
<30	<30	<30	Average time to complete locate work orders per month (in minutes).	Protect public infrastructure.

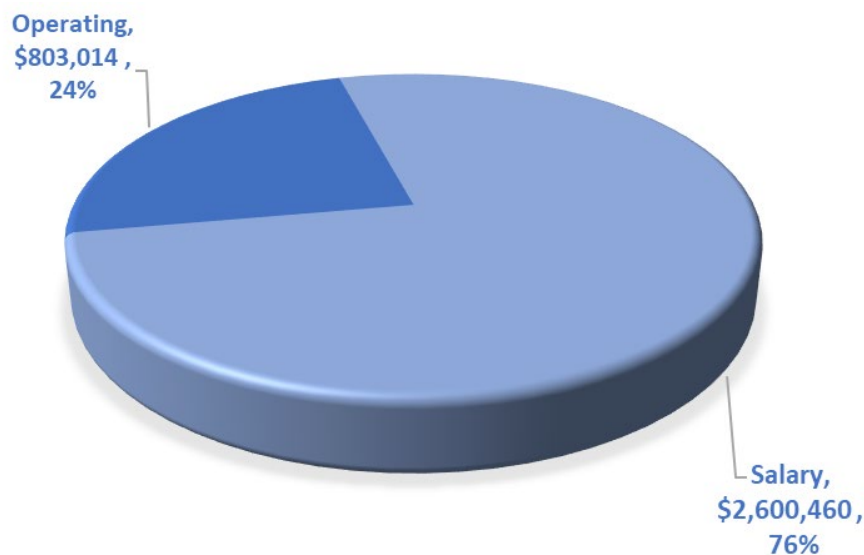
DEPARTMENTAL SUMMARIES

ENVIRONMENTAL MANAGEMENT/SAFETY

The Environmental and Safety Management Department supports the core mission of the Authority through operational and administrative activities. Laboratory Services provides critical operational and compliance lab data daily to support operation of both the water and wastewater systems. Community Compliance ensures proper implementation of the Sewer Use and Cross Connection control ordinances to help prevent treatment disruptions at the wastewater treatment plants and eliminate sanitary sewer overflows. The oversight of the cross-connection program helps ensure protection of public health and drinking water quality by minimizing system vulnerabilities that could allow system contamination. Emergency Response and Security and Safety Management works with staff in each department and other agencies to identify system threats and vulnerabilities and to develop and implement plans and training opportunities to mitigate and respond to risk. Safety Management works with staff and OSHA to ensure safe work practices meet or exceed safety requirements. These programs ensure staff are performing their work safely. Environmental Management supports compliance efforts and activities to drive continual improvement and environmental stewardship. This area works with staff and other environmental agencies to formalize processes and programs and identify opportunities for improvement.

Departmental Budget

The Environmental Management/Safety Department budget for FY 21-22 is \$3,403,474 or 4% of the total FY 21-22 operating budget. Much of the departmental budget is made up of salaries and benefits for the department's 30.75 full-time equivalent positions. The remaining 24% is budgeted for various expenditures including the cost of chemicals and supplies for in-house lab testing, third party lab testing services, maintenance agreements on lab equipment, and employee safety training.



DEPARTMENTAL SUMMARIES

Departmental Goals

Dept Goal(s)	Objectives	Timeline	Impact on FY 21-22 Budget	CFPUA Strategic Goal
Provide support and guidance across functional areas to reduce energy	Identify a pilot campus for energy management system implementation	FY 2021	No impact	Goal 3, Strategy 3.2
	Using energy management principles, identify opportunities for improved process energy tracking	January 2022	No impact	Goal 3, Strategy 3.2
	Evaluate and implement programs/processes for energy reductions	FY 2022	No impact	Goal 3, Strategy 3.2
	Track / report energy usage per million gallons treated in areas of focus, where possible, and overall	Annual	No impact	Goal 3, Strategy 3.2
	Determine appropriate target reduction	July 2022	No impact	Goal 3, Strategy 3.2
Ensure all testing on water and wastewater is performed and reported accurately and timely	Maintain up to date testing schedules and open communication with operations on changing needs and data results/trends	Annual	No impact	Goal 3, Strategy 3.3
Improve Compliance of all Food Service establishments FOG requirements	Update the FOG commercials	April 2022	\$10,000	Goal 3, Strategy 3.3
	Ensure all FSEs are inspected and educated on requirements	Annual	No impact	Goal 3, Strategy 3.3
Improve cross connection compliance rate	Identify gap areas within the system; provide communication and timelines to comply with enforcement to follow if not brought into compliance	July 2022	No impact	Goal 3, Strategy 3.3

DEPARTMENTAL SUMMARIES

	Utilize UMAX to improve the efficiency, enforcement, and compliance of Cross Connection	Annual	No impact	Goal 3, Strategy 3.3
Continue and enhance community education around current programming, environmental stewardship, and CFPUA's role in protecting the environment.	Continue to participate in community events such as river fest, earth day, and look for other opportunities to participate and promote CFPUA's role in the community	Annual	\$1,000.00	Goal 3, Strategy 3.4
Participate in regional water quality centric environmental groups	Maintain active memberships in Cape Fear River Watch	Annual	\$1,000	Goal 3, Strategy 3.5
	Remain active in water quality groups such as the NHC water quality round table and Lower Cape Fear River Program	Annual	No impact	Goal 3, Strategy 3.5
	Provide cross agency resource support of regional water quality improvement programs where CFPUA resources provide enhancement of data and resource protection	Annual	No impact	Goal 3, Strategy 3.5
Ensure all testing is conducted to maintain the Reclaimed Water permit	Maintain testing schedules and training of staff on requirements	Annual	No impact	Goal 3, Strategy 3.6
Provide growth and development to recruit and retain a high quality work force	Provide opportunities for cross training and growth that provide skills and knowledge to move lab staff to the next levels of the lab step plan	Annual	No impact	Goal 5, Strategy 5.2
	Evaluate opportunities to expand the step plan to other areas of the department such as community compliance	FY 22	No impact	Goal 5, Strategy 5.2

DEPARTMENTAL SUMMARIES

Expand and promote the Environmental Management System, Energy Management System, and Safety Management System as a overall management system to drive continual improvement	Increase training of all staff on the programs and benefits	Annual	No impact	Goal 5, Strategy 5.3
	Increase employee engagement in the process through empowerment of staff to bring ideas for ways to improve efficiencies and process improvement - Management Review processes and CPAR	Annual	No impact	Goal 5, Strategy 5.3
Use technology to improve data management	Evaluate, purchase and implement a data management system to improve document control, Corrective actions, root cause, and training for next FY	FY 2022	No impact	Goal 5, Strategy 5.4
	Obtain training in resources available such as Power BI and Sharepoint to improve performance tracking and reporting	January 2022	No impact	Goal 5, Strategy 5.4
	Evaluate and budget for Laboratory Information management system	Spring 2022	No impact	Goal 5, Strategy 5.4

DEPARTMENTAL SUMMARIES

Performance Measures

FY 20	FY 21	FY 22 TARGET	Performance Metric	Dept Goal
78.90%	75.40%	80%	Cross Connection Control	Improve cross connection compliance rate
99.40%	99.50%	100%	Food Service Establishment Compliance	Improve Compliance of all Food Service establishments FOG requirements
263	297	Dependent on outside forces	Lab - Tests/Analyst/Month	Ensure all testing on water and wastewater is performed and reported accurately and timely
\$38.67	\$34.34	Dependent on outside forces	Lab - Costs/Test/Month	Ensure all testing on water and wastewater is performed and reported accurately and timely
100%	99.20%	99%	Safety - % training completed	CFPUA Goal: Consistently maintain and operate the utility, and all its human and physical assets, in a manner that optimizes the care and use of water and other natural resources.
7.4	8.12	8	Safety Training hours/employee	CFPUA Goal: Consistently maintain and operate the utility, and all its human and physical assets, in a manner that optimizes the care and use of water and other natural resources.

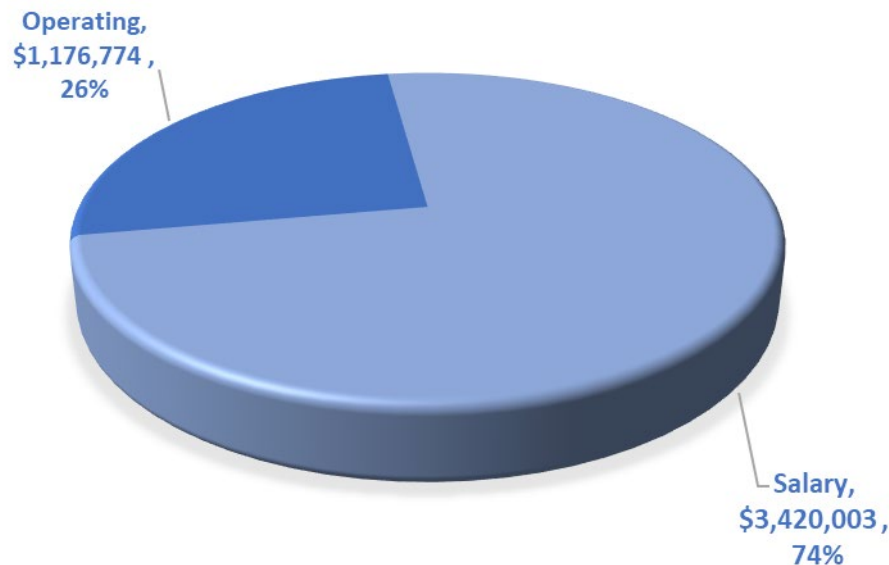
DEPARTMENTAL SUMMARIES

CUSTOMER SERVICE

The Customer Service Department is responsible for customer service-related functions including reading and maintaining meter services, billing customer accounts, addressing customer concerns and collecting on customer accounts. In addition, Customer Service bills for miscellaneous receivables and processes payments for service through multiple payment channels. There are two customer service locations and a call center staffed to address customer inquiries in an efficient and timely manner. The Department's objective is to provide an exceptional customer experience by meeting our customers' needs through timely response, effective service and managed financial costs.

Departmental Budget

The Customer Service Department budget for FY 21-22 is \$4,596,777, or 5% of the total FY 21-22 operating budget. The department has 54 full time equivalent positions making up 74% of the overall budget. The remaining 26% is budgeted for various expenditures including contracted services for utility bill printing and mailing, materials to repair/replace water meters, licenses for automatic meter reading software, fuel for meter reading vehicles, fees to third-party collections agencies, and annual fees for the interactive voice response system.



DEPARTMENTAL SUMMARIES

Departmental Goals

Dept Goal(s)	Objectives	Timeline	Impact on FY 21-22 Budget	CFPUA Strategic Goal
Move from bi-monthly billing to monthly billing.	Complete billing route resequencing to align with Monthly Billing and use this data to set up billing structure in the ERP system	6 months	\$200,000	Goal 2, Strategy 2.1
	Communicate the change to customers	6 months	No Impact	Goal 2, Strategy 2.1
Respond to customer needs in a timely manner	Be responsive to customer work orders and remain on schedule for meter reads	Annual	Meter Service Division Budget	Goal 2, Strategy 2.1
Offer additional on-line services and payment options.	research unassisted options for customers to utilize for convenience and immediate results.	6 mths; 12 mths	No impact	Goal 2, Strategy 2.2
Review customer facing solutions (i.e., application and form submittal)	Find more feasible and customer friendly methods to receive and complete to speed up customer response time.	12 months	No impact	Goal 2, Strategy 2.3

Performance Measures

FY 20	FY 21	FY 22	Performance Metric	Dept Goal
94%	95%	98%	Percentage of meters read on time	Respond to customer needs in a timely manner
21 days	10 days	7 days	Minimize the time to complete meter service work orders	Respond to customer needs in a timely manner
6:11	6:05	6:00	Average call length	Review customer facing solutions
2 months	6 months	1 month	Process leak adjustments timely	Respond to customer needs in a timely manner

ACRONYMS

TERM	STANDS FOR
AMR	Automatic Meter Reading
APWA	American Public Works Association
ARRA	American Recovery and Reinvestment Act
ASR	Aquifer Storage and Recovery
AWOP	Area Wide Optimization Program
AWWA	American Water Works Association
BOD	Biochemical Oxygen Demand
CAFR	Comprehensive Annual Financial Report
CAMA	Coastal Area Management Act
CBOD	Carbonaceous Biochemical Oxygen Demand
CFPUA	Cape Fear Public Utility Authority
CIP	Capital Improvement Program
CMMS	Computer Maintenance Management System
CMOM	Capacity Management, Operations & Maintenance
COD	Chemical Oxygen Demand
COPS	Certificates of Participation
COW	City of Wilmington
C-PAR	Corrective/Preventative Action Report
CWM	Clean Water Management
CWSRF	Clean Water State Revolving Funds
CY	Calendar Year
DART	Days Away Restricted Transferred
DBP	Disinfection Byproduct
DHS	Department of Homeland Security
DMR	Discharge Monitoring Report
DO	Dissolved Oxygen
DR	Disaster Recovery
DWQ	Division of Water Quality
EDC	Endocrine Disrupting Compound
EDMR	Electronic Discharge Monitoring Report
EEOC	Equal Employment Opportunity Commission
EMS	Environmental Management System
EOC	Emergency Operations Center
EFT	Electronic Funds Transfer
EPA	Environmental Protection Agency
ERT	Encoder Receiver Transmitter

TERM	STANDS FOR
ERP	Enterprise Resource Planning
FEMA	Federal Emergency Management Agency
FOG	Fats, Oils and Grease
FSE	Food Service Establishment
FTE	Full Time Equivalent Positions
FY	Fiscal Year
GAAP	Generally Accepted Accounting Principles
GASB	Government Accounting Standards Board
GC	Gas Chromatograph
GFOA	Government Finance Officers Association
GIS	Geographic Information Systems
GPD	Gallons per day
GPS	Global Positioning System
GS	General Statute
HAZMAT	Hazardous Material
HMI	Human Machine Interface
HVAC	Heating, Ventilation and Air Conditioning
I/I	Infiltration and Inflow
ICP-MS	Inductively Coupled Plasma-Mass Spectrometry
ICS	Incident Command System
ILA	Interlocal Agreement
IRR	Irrigation
ISO	International Organization for Standardization (Greek)
IT	Information Technology
IU	Industrial User
IVR	Interactive Voice Response
KPI	Key Performance Indicator
LCFWSA	Lower Cape Fear Water & Sewer Authority
LCS	Lab Control Samples
LIMS	Laboratory Information Management System
LWSP	Local Water Supply Plan
MDD	Maximum Daily Demand
MDF	Maximum Daily Flow
MGD	Million gallons per day
MOU	Memorandum of Understanding
MSDS	Material Safety Data Sheet

ACRONYMS

TERM	STANDS FOR
NACWA	National Association of Clean Water Agencies
NCDENR	North Carolina Department of Environment & Natural Resources
NCDWQ	North Carolina Division of Water Quality
NCRWA	North Carolina Rural Water Association
NEI	Northeast Interceptor
NHC	New Hanover County
NIMS	National Incident Management System
NOAA	National Oceanic and Atmospheric Administration
NOV	Notice of Violation
NPDES	National Pollutant Discharge Elimination System
NTU	Nephelometric Turbidity Units
O & M	Operational & Maintenance
ORC	Operator in Responsible Charge
OSHA	Occupational Safety and Health Administration
PER	Preliminary Engineering Report
PFAS	Polyfluoroalkyl Substances
pH	Potential of Hydrogen
POSM	Pipeline Observation System Management
POTW	Public Owned Treatment Works
PPCP	Pharmaceuticals and Personal Care Products
PPM	Parts per million
PS	Pump Station
PSA	Protective Security Advisor
PWS	Public Water Supply
QA	Quality Assurance
QC	Quality Control
RFP	Request for Proposal
SBR	Sequencing Batch Reactor
SCADA	Supervisory Control and Data Acquisition
SDC	System Development Charge
SIU	Significant Industrial User
SKN	Soluble Kjeldahl Nitrogen
SNC	Significant Non-Compliant

TERM	STANDS FOR
SOI	Standard Operating Instructions
SOP	Standard Operating Procedures
SSO	Sanitary Sewer Overflow
SUO	Sewer Use Ordinance
TDS	Total Dissolved Solids
TKN	Total Kjeldahl Nitrogen
TMDL	Total Maximum Daily Loads
TOC	Total Organic Carbon
TRC	Technical Review Committee
TSS	Total Suspended Solids
TTHM	Total Trihalomethanes
UNCW	University of North Carolina at Wilmington
USACE	United States Army Corp. of Engineers
USEPA	United States Environmental Protection Agency
VPN	Virtual Private Network
WEA	Water Environment Association
WEF	Water Environment Federation
WERF	Water Environment Research Foundation

GLOSSARY

WORD/CONCEPT	DEFINITION
Account	A basic component of the accounting ledger used to classify financial transactions that are similar in terms of a given frame of reference; such as purpose, object or source.
Accrual Basis	A basis of accounting in which transactions are recognized at the time they are incurred as opposed to when cash is received or spent.
Adopted Budget	The budget document formally approved by the Authority Board. This document sets forth authorized expenditures and the means of financing those expenditures; used interchangeably with the term "Final Budget".
Annualized	Taking charges that occurred mid-year and calculating their cost for a full year for the purpose of preparing an annual budget.
Appropriation	A legal authorization to incur obligations and to make expenditures for specific purposes.
Aquifer	A wet underground layer of water-bearing permeable rock or unconsolidated materials (gravel, sand or silt) from which groundwater can be usefully extracted using a water well.
Asset	Resources owned that has monetary value.
Asset Management	A systematic process of operating, maintaining and upgrading assets cost-effectively.
Audit	An examination of some or all of the following items: documents, records, reports, systems of internal control, accounting procedures, and other evidence, or one or more of the following purposes: (a) determining the propriety, legality and mathematical accuracy of proposed or completed transactions; (b) ascertaining whether all transactions have been recorded; and (c) determining whether transactions are accurately recorded in the accounts and in the statements drawn from in accordance with accepted accounting practices.
Authorized Positions	Employee positions that are authorized in the adopted budget to be filled during the year.
Backflow	A term in plumbing for an unwanted flow of water in the reverse direction. It can be a serious health risk for the contamination of potable water supplies with foul water.
Backflow Prevention Device	A device used to protect water supplies from contamination or pollution.
Balance Sheet	A formal statement of assets, liabilities and fund balance as of a specific date.
Balanced Budget	Refers to a budget in which revenues are equal to expenditures. Thus, neither a budget deficit nor a budget surplus exists.
Benchmarking	The process of comparing one's business processes and performance metrics to industry bests and/or best practices from other industries; often treated as a continuous process in which organizations continually seek to improve their practices.
Collateral	Property acceptable as a security for a loan or other obligation; guaranteed by a security pledged against the performance of an obligation.
Collateralize	To secure (a loan) through the use of collateral.
Compensated Absences	Refers to employees' time off with pay for vacations, holidays and sick days.

GLOSSARY

WORD/CONCEPT	DEFINITION
Computer Maintenance	A CMMS software package maintains a computer database of information.
Contingency	A budgetary reserve set aside for emergencies or unforeseen expenditures not otherwise budgeted.
Corporate Governance	Processes, customers, policies, laws and institutions affecting the way a corporation is directed, administered or controlled.
Debt Coverage Ratio	The ratio of cash available for debt servicing to interest, principal and lease payments. It is a popular benchmark used in the measurement of an entity's ability to produce enough cash to cover its debt payments. The higher this ratio is, the easier it is to obtain a loan.
Debt Management	A formal agreement between the Authority and its' creditors.
Debt Service	The cost of paying principal and interest on borrowed money according to a pre-determined payment schedule.
Department	A basic organizational unit that is functionally unique in its delivery of services; each department can be subdivided into divisions.
Depreciation	Drop in value; a method of allocating the cost of a tangible asset over its useful life.
Disbursement	The expenditure of monies from an account.
Distinguished Budget	A voluntary awards program administered by the Government of Finance.
Effluent	An outflowing of water or gas from a natural body of water, or from a human-made structure.
Encoder Receiver Transmitter (ERT)	Communications modules that fit on electric, gas or water meters. ERT's encode consumption and tamper information from the meters and communicates the data to Itron data collection systems including handheld devices, mobile automatic reading devices and networks.
Encumbrance	A commitment of appropriated funds to purchase an item or service. To encumber funds means to set aside or commit funds for a specified future expenditure.
Enterprise Fund	A government owned fund that sells goods and services to the general public; are common in local government.
Environmental Management System (EMS)	Refers to the management of an organization's environmental programs in a comprehensive, systematic, planned and documented manner. It includes the organizational structure, planning and resources for developing, implementing and maintaining policy for environmental protection.
Environmental Protection Agency (EPA)	The agency of the federal government of the United States charged with protecting human health and the environment by writing and enforcing regulations based on laws passed by Congress.
Expenditure	The payment of funds against appropriations that reduce cash balance; are made for the purpose of acquiring an asset, service or settling a loss.
Feasibility Report	An evaluation and analysis of the potential of a proposed project which is based on extensive investigation and research to support the process of decision making.

GLOSSARY

WORD/CONCEPT	DEFINITION
Fiscal Year	A 12-month period designated as the operating year for accounting and budgeting purposes in an organization.
Fixed Assets	Assets of long-term character that are intended to continue to be held or used; includes land, buildings, machinery, furniture and other equipment.
Full time Equivalent	A position converted to the decimal equivalent of a full-time position .
Fund Accounting	System used by non-profit organizations, particularly governments.
Fund Balance	Difference between assets and liabilities reported in a governmental fund on the modified accrual basis of accounting.
Generally Accepted Accounting Principles (GAAP)	Uniform minimum standards for financial accounting and recording, encompassing the conventions, rules and procedures that define accepted accounting principles.
Goal	A statement of broad direction, purpose or intent; general and timeless.
Government Accounting Standards Board	The accepted standard setting body for establishing accounting and financial reporting principles.
Ground Water	Water located beneath the ground surface in soil pore spaces and in the fractures of rock formations.
Infrastructure	The basis physical and organizational structures needed for the operation of a society of enterprise (1), or the services the facilities necessary for an economy to function (2). It can be generally defined as the set of interconnected structural elements that provide the framework supporting an entire structure of development.
Interest	Cost of using money.
Interest Earnings	Interest earned on cash held in interest bearing deposits and accounts.
National Incident Management System (NIMS)	An emergency management doctrine used nationwide to coordinate emergency preparedness and incident management and response among the public and private sectors.
National Pollutant Discharge Elimination System (NPDES)	Controls water pollution by regulating point sources that discharge pollutants into waters of the United States.
Non-Departmental Accounts	Items of expenditure essential to the operation of the Authority that do not fall within the function of any department.
Operating Budget	The annual budget of an activity stated in terms of Budget Classification Code, functional/sub functional categories and cost accounts. It contains estimates of the total value of resources required for the performance of the operation; used to keep track of maintenance operations, salaries and interest payments.
Operating Expenses	The cost for personnel, materials and equipment required for a department to function.
Operating Revenue	Funds received to pay for on-going operations. It includes rates and fees; used to pay for day-to-day services.
Ordinance	A law made by a municipality or other local authority.
Outfall	The discharge point of a waste stream into a body of water; alternatively it may be the outlet of a river, drain or a sewer where it discharges into the sea, a lake, etc. A wastewater treatment system discharges treated effluent to a water body from an outfall.

GLOSSARY

WORD/CONCEPT	DEFINITION
Pay-As-You-Go Basis	AKA “Pay-Go”; a term used to describe a financial policy by which capital outlays or capital projects are financed from current revenues rather than from borrowing.
Performance Measure	Defines data that documents how effectively or efficiently a program is achieving its objectives.
Potable Water	Drinking water.
Procurement	The acquisition of goods or services. It is favorable that the goods or services are appropriate and that they are procured at the best possible cost to meet the needs of the purchaser in terms of quality and quantity, time and location.
Proprietary Fund	An account in which certain (government) transactions are handled. Services that fit into a proprietary fund are grouped by similarities to evaluate their performance.
Revenues	Sources of income financing the operations of the Authority.
Risk Management	The process of identifying, assessing and controlling risks arising from operational factors and making decisions that balance risk costs with mission benefits.
SCADA (Supervisory Control & Data Acquisition)	A computer system that monitors and controls industrial, infrastructure or facility-based processes.
Septage	The material pumped out of a septage tank or onsite sewage facility.
Service	Helping others with a specific need or want.
Stewardship	An ethic that embodies responsible planning and management of resources.
Strategic Plan	A process for determining where an organization is going over the next year or, more typically, 3 to 5 years (long term); some extend their vision to 20 years.
Strategic Vision	Outlines what the organization wants to be, or how it wants the world in which it operates to be. This is a long-term view and concentrates on the future.
Surface Water	Water collecting on the ground or in a stream, river, lake, wetland or ocean; it is related to water collecting as groundwater or atmospheric water.
Sustainability	The long-term maintenance of responsibility, which has environmental, economic and social dimensions, and encompasses the concept of stewardship, the responsible management of resource use.
System Development Charges	Calculated charges to cover the cost of capacity in the Authority’s existing water and wastewater plants and transmission facilities, and the estimated cost of capacity in future treatment plants and facilities that are covered in the 10-year Capital Improvement Plan.

Budget Ordinance

Ordinance Making Appropriations For the Fiscal Year Beginning July 1, 2021

LEGISLATIVE INTENT/PURPOSE:

Appropriations and estimated revenues for the Fiscal Year Beginning July 1, 2021.

THEREFORE, BE IT ORDAINED by the Board of the Cape Fear Public Utility Authority:

SECTION I: The following appropriations are hereby made. The following revenues are estimated to be available during the fiscal year to meet these appropriations.

Appropriations

Salaries & Benefits	\$27,056,318
Operating	21,727,653
Debt Service	25,184,354
Transfers to Capital Projects Funds	18,000,000
Total Appropriations	<u>\$91,968,325</u>

Revenues

Water/Wastewater Charges - Volumetric	\$47,348,560
Water/Wastewater Charges - Fixed	31,387,935
System Development Charges	7,095,000
Investment Earnings	200,000
Other Charges for Service	4,657,000
Appropriated Fund Balance	1,279,830
Total Revenues	<u>\$91,968,325</u>

SECTION II: That appropriations herein authorized shall have the amount of outstanding purchase orders as of June 30, 2021 added to each appropriation as it appears in order to account for the payment against the fiscal year in which it is paid.

SECTION III: Pursuant to NCGS 159-15, the Executive Director is hereby authorized to transfer moneys among appropriations in SECTION I above. Such transfers shall be reported to the Board at the next regular meeting after such transfer has occurred. The transfers shall be entered in the minutes.

SECTION IV: Pursuant to NCGS 159-13.2, the following appropriations are hereby made. Expenditures authorized by these appropriations may occur over multiple fiscal years. The following revenues are estimated to be available in the fiscal year the expenditures occur.

Appropriations	
System-Wide Capital Improvement Projects	\$3,350,000
Water Capital Improvement Projects	9,480,000
Wastewater Capital Improvement Projects	14,700,000
Total Appropriations	<u>\$27,530,000</u>
 Revenues	
Transfers from Operating Fund	\$20,939,692
State Revolving Loan Proceeds	6,590,308
Total Revenues	<u>\$27,530,000</u>

SECTION V: Pursuant to NCGS 159-15, the Executive Director is hereby authorized to transfer moneys among available appropriations authorized in this and prior project ordinances. Such transfers shall be reported to the Board at the next regular meeting after such transfer has occurred. The transfers shall be entered in the minutes.

Wesley P. Corder, Chairman

Adopted at a regular meeting
On June 9, 2021

ATTEST:

Donna S. Pope, Clerk to the Board

CAPE FEAR PUBLIC UTILITY AUTHORITY
RATES AND FEES SCHEDULE FY 21-22

		Rates and Fees Effective 7/1/20	Rates and Fees Effective 7/1/21	Ordinance Reference
1	WATER RATES & FEES			
	Water rates include both a fixed meter charge based on meter size and consumption charge based on metered consumption, billed bi-monthly (every two months).			
A.	Fixed Meter Charge by Meter Size*	Bi-Monthly	Bi-Monthly	
	5/8"	\$ 27.56	\$ 27.56	Sec. 1-97 (1) f
	1" (Single-Family Residential with fire sprinkler system)	\$ 27.56	\$ 27.56	Sec. 1-97 (1) f
	1"	\$ 68.90	\$ 68.90	Sec. 1-97 (1) f
	1 1/2"	\$ 137.80	\$ 137.80	Sec. 1-97 (1) f
	2"	\$ 220.48	\$ 220.48	Sec. 1-97 (1) f
	3"	\$ 413.40	\$ 413.40	Sec. 1-97 (1) f
	4"	\$ 689.00	\$ 689.00	Sec. 1-97 (1) f
	6"	\$ 1,378.00	\$ 1,378.00	Sec. 1-97 (1) f
	8"	\$ 2,204.80	\$ 2,204.80	Sec. 1-97 (1) f
	10"	\$ 3,445.00	\$ 3,445.00	Sec. 1-97 (1) f
	12"	\$ 4,134.00	\$ 4,134.00	Sec. 1-97 (1) f
	* Fixed Meter Charge is not applied to Irrigation Meters if a separate Water Meter exists.			
B.	Consumption Charge (per 1,000 gallons)**	\$ 4.02	\$ 4.02	Sec. 1-97 (1) c
	** Single-Family Residential is serviced by one domestic meter			
C.	Availability Charge for unconnected 5/8" water service; Availability Charge for larger meters based on meter size	Bi-Monthly	Bi-Monthly	Sec. 1-97 (1) a
		\$ 27.56	\$ 27.56	
D.	Bulk Water Rates			
	Bulk Water Resale Rate (per 1,000 gallons)	\$ 3.48	\$ 3.48	Sec. 1-97 (1) b
	Bulk Reclaimed Water In-Service Area Rate (per 1,000 gallons)	\$ 2.55	\$ 2.55	Sec. 1-97 (1) b
	Bulk Reclaimed Water Deposit In-Service Area Rate ***	\$100 minimum	\$100 minimum	Sec. 1-97 (1) b
	Bulk Reclaimed Water Out-of-Service Area Rate (per 1,000 gallons)	\$ 3.19	\$ 3.19	Sec. 1-97 (1) b
	Bulk Reclaimed Water Deposit Out-of-Service Area Rate***	\$125 minimum	\$125 minimum	Sec. 1-97 (1) b
	*** Greater of 3 months estimated usage or the minimum			
E.	Water Service Connection Fee*			
	Service Line Connection Fee by Service Size			
	1" Service	\$ 1,850.00	\$ 1,850.00	Sec. 1-97 (2) a; Sec. 1-5 c
	2" Service	\$ 2,300.00	\$ 2,300.00	Sec. 1-97 (2) a; Sec. 1-5 c
	Inspection Fee for Developer-Installed Connection	\$ 55.00	\$ 55.00	Sec. 1-97 (2) b; Sec. 1-6 a
	Inspection Fee for Developer-Installed Connection (After hours - Minimum of 2 hours)	\$75/hour	\$75/hour	Sec. 1-97 (2) b; Sec. 1-6 a
F.	Meter Set Fee by Meter Size (includes labor and materials)			
	5/8"	\$ 250.00	\$ 250.00	Sec. 1-97 (2) c; Sec. 1-5 c
	5/8" Split Service	\$ 375.00	\$ 375.00	Sec. 1-97 (2) c; Sec. 1-5 c
	1"	\$ 350.00	\$ 350.00	Sec. 1-97 (2) c; Sec. 1-5 c
	1 1/2"	\$ 1,600.00	\$ 1,600.00	Sec. 1-97 (2) c; Sec. 1-5 c
	2"	\$ 1,800.00	\$ 1,800.00	Sec. 1-97 (2) c; Sec. 1-5 c
G.	System Development Charges			
	Water by Meter Size			Sec. 4-27 (a)
	5/8"	\$ 1,920.00	\$ 2,120.00	Sec. 1-97 (2) d
	1" (Single-Family Residential with fire sprinkler system)	\$ 1,920.00	\$ 2,120.00	Sec. 1-97 (2) d
	1"	\$ 4,800.00	\$ 5,300.00	Sec. 1-97 (2) d
	1 1/2"	\$ 9,600.00	\$ 10,600.00	Sec. 1-97 (2) d
	2"	\$ 15,360.00	\$ 16,960.00	Sec. 1-97 (2) d
	3"	\$ 28,800.00	\$ 31,800.00	Sec. 1-97 (2) d
	4"	\$ 48,000.00	\$ 53,000.00	Sec. 1-97 (2) d
	6"	\$ 96,000.00	\$ 106,000.00	Sec. 1-97 (2) d
	8"	\$ 153,600.00	\$ 169,600.00	Sec. 1-97 (2) d
	10"	\$ 240,000.00	\$ 265,000.00	Sec. 1-97 (2) d
H.	Special Use of Water			
	Water Rates include both a fixed meter charge as referenced in Section A based on meter size or backflow preventer size, whichever is less, plus consumption charge based on metered consumption as referenced in Section B, billed bi-monthly (every two months).			
	Fixed Meter Charge by Size	Initial Fee	Initial Fee	
	5/8"	\$ 31.00	\$ 31.00	Sec. 1-97 (3) g
	3/4"	\$ 35.00	\$ 35.00	Sec. 1-97 (3) g
	1"	\$ 45.00	\$ 45.00	Sec. 1-97 (3) g
	1 1/2"	\$ 56.00	\$ 56.00	Sec. 1-97 (3) g
	2"	\$ 96.00	\$ 96.00	Sec. 1-97 (3) g
	3"	\$ 165.00	\$ 165.00	Sec. 1-97 (3) g
	4"	\$ 254.00	\$ 254.00	Sec. 1-97 (3) g
	Lost or stolen special use sign	\$ 50.00	\$ 50.00	Sec. 1-97 (3) g
I.	Water Quality Fees			
	Inspection Fees Backflow Assembly			
	Initial inspection	No Charge	No Charge	Sec. 1-97 (2) b
	Subsequent inspections	\$ 55.00	\$ 55.00	Sec. 1-97 (2) b
J.	Fire Line Service			
	Fixed Fire Line Charge by Size	Bi-Monthly	Bi-Monthly	
	2"	\$ 20.00	\$ 20.00	Sec. 1-97 (1) e

CAPE FEAR PUBLIC UTILITY AUTHORITY
RATES AND FEES SCHEDULE FY 21-22

		Rates and Fees Effective 7/1/20	Rates and Fees Effective 7/1/21	Ordinance Reference
	3"	\$ 30.00	\$ 30.00	Sec. 1-97 (1) e
	4"	\$ 40.00	\$ 40.00	Sec. 1-97 (1) e
	6"	\$ 80.00	\$ 80.00	Sec. 1-97 (1) e
	8"	\$ 140.00	\$ 140.00	Sec. 1-97 (1) e
	10"	\$ 220.00	\$ 220.00	Sec. 1-97 (1) e
	12"	\$ 320.00	\$ 320.00	Sec. 1-97 (1) e
2	SEWER RATES & FEES			
	Sewer rates include both a fixed meter charge based on meter size and consumption charge based on metered consumption, billed bi-monthly (every two months).			
A.	Fixed Meter Charge by Meter Size	Bi-Monthly	Bi-Monthly	
	5/8"	\$ 29.10	\$ 29.10	Sec. 1-97 (1) f; Sec. 1-75
	1" (Single-Family Residential with fire sprinkler system)	\$ 29.10	\$ 29.10	Sec. 1-97 (1) f; Sec. 1-75
	1"	\$ 72.75	\$ 72.75	Sec. 1-97 (1) f; Sec. 1-75
	1 1/2"	\$ 145.50	\$ 145.50	Sec. 1-97 (1) f; Sec. 1-75
	2"	\$ 232.80	\$ 232.80	Sec. 1-97 (1) f; Sec. 1-75
	3"	\$ 436.50	\$ 436.50	Sec. 1-97 (1) f; Sec. 1-75
	4"	\$ 727.50	\$ 727.50	Sec. 1-97 (1) f; Sec. 1-75
	6"	\$ 1,455.00	\$ 1,455.00	Sec. 1-97 (1) f; Sec. 1-75
	8"	\$ 2,328.00	\$ 2,328.00	Sec. 1-97 (1) f; Sec. 1-75
	10"	\$ 3,637.50	\$ 3,637.50	Sec. 1-97 (1) f; Sec. 1-75
	12"	\$ 4,365.00	\$ 4,365.00	Sec. 1-97 (1) f; Sec. 1-75
B.	Consumption Charge (per 1,000 gallons) See Notes 1,2,3,4	\$ 4.63	\$ 4.63	Sec. 1-97 (1) c; Sec. 1-75
	Note 1 Single-Family Residential metered consumption capped at 30,000 gallons per bi-monthly billing			Sec. 1-97 (1) c; Sec. 1-75
	Note 2 Single Family Residential non-metered consumption based on the average residential consumption plus the fixed metered charge for a 5/8" meter			Sec. 1-97 (1) g; Sec. 1-75
	Note 3 Nonresidential non metered consumption capped at 24,000 gallons per bimonthly billing			Sec. 1-97 (1) g; Sec. 1-75
	Note 4 No cap for non-residential metered consumption			Sec. 1-97 (1) c; Sec. 1-75
	Note 5 Single-Family Residential is serviced by one domestic meter			
		Bi-Monthly	Bi-Monthly	
C.	Availability Charge for unconnected 5/8" sewer service; Availability Charge for larger meters based on meter size	\$ 29.10	\$ 29.10	Sec. 1-97 (1) a
D.	Bulk Wastewater Collection and Treatment Rate (per 1,000 gallons)	\$3.34	\$3.34	Sec. 1-97 (1) b
E.	Sewer Service Connection Fee			
	Installation Fee by Service Size			
	4" Service	\$ 2,200.00	\$ 2,200.00	Sec. 1-97 (2) a; Sec. 1-5 c
	6" Service	\$ 2,800.00	\$ 2,800.00	Sec. 1-97 (2) a; Sec. 1-5 c
	Inspection Fee for Developer-Installed Connection	\$ 55.00	\$ 55.00	Sec. 1-97 (2) b; Sec. 1-6 a
	Inspection Fee for Developer-Installed Connection (After hours - Minimum of 2 hours)	\$75/hour	\$75/hour	Sec. 1-97 (2) b; Sec. 1-6 a
F.	System Development Charges			
	Sewer by Meter Size			Sec. 4-47 (a)
	5/8"	\$ 2,070.00	\$ 2,180.00	Sec. 1-97 (2) d
	1" (Single-Family Residential with fire sprinkler system)	\$ 2,070.00	\$ 2,180.00	Sec. 1-97 (2) d
	1"	\$ 5,175.00	\$ 5,450.00	Sec. 1-97 (2) d
	1 1/2"	\$ 10,350.00	\$ 10,900.00	Sec. 1-97 (2) d
	2"	\$ 16,560.00	\$ 17,440.00	Sec. 1-97 (2) d
	3"	\$ 31,050.00	\$ 32,700.00	Sec. 1-97 (2) d
	4"	\$ 51,750.00	\$ 54,500.00	Sec. 1-97 (2) d
	6"	\$ 103,500.00	\$ 109,000.00	Sec. 1-97 (2) d
	8"	\$ 165,600.00	\$ 174,400.00	Sec. 1-97 (2) d
	10"	\$ 258,750.00	\$ 272,500.00	Sec. 1-97 (2) d
		\$10/gallon	\$10/gallon	
	Unmetered service (sewer only)	projected flow	projected flow	Sec. 1-97 (2) d
G.	Development Capacity Fees			
	Chair Road Associates - Regional Lift Station (PS #157) Only	\$1.50 per gpd	\$1.55 per gpd	Per Contract
	CFPUA Cost Recovery - Northwest Forcemain Improvements Only	\$3.96 per gpd	\$4.09 per gpd	Sec. 4-4 (c)
	Kirkland Sewer Project Capacity Fee	\$2.71 per gpd	\$2.71 per gpd	Per Contract
	CFPUA Cost Recovery - Pump Station 36 Improvements	\$2.31 per gpd	\$2.31 per gpd	Per Contract
	CFPUA Cost Recovery - Northern Water Main	\$2.13 per gpd	\$2.13 per gpd	Per Contract
	CFPUA Cost Recovery - Forest Creek Outfall	N/A	\$12.87 per gpd	Per Contract
H.	Grinder Pump Fees			
	Residential grinder pump fee, bi monthly	\$30.00	\$30.00	
	Developer grinder pump fee per platted lot	\$300.00	\$300.00	
3	Wastewater Pretreatment			
A.	Discharge Permit Applications and Annual Fees:			
	Significant Industrial Users, Industrial Users flow > 15,000 gallons/day			
	Initial and Annual Permit	\$ 750.00	\$ 750.00	Sec. 5-58: Sec. 5-91 (b)
	Modification of Permit (each occurrence)	\$ 200.00	\$ 200.00	Sec. 5-58: Sec. 5-91 (b)
	Restoration of Revoked Permit (each occurrence)	\$ 1,500.00	\$ 1,500.00	Sec. 5-58: Sec. 5-91 (b)

CAPE FEAR PUBLIC UTILITY AUTHORITY
RATES AND FEES SCHEDULE FY 21-22

		Rates and Fees Effective 7/1/20	Rates and Fees Effective 7/1/21	Ordinance Reference
	Monitoring Fee	Individually determined	Individually determined	Sec. 5-58
	Enforcement Cost Recovery	Individually determined	Individually determined	Sec. 1-97 (3) j; Sec. 5-58
B. Other Wastewater Permits				
	Flow Less than 1,000 gallons/day (initial and annual)	\$ 100.00	\$ 100.00	Sec. 5-58; Sec. 5-91 (a)
	Flow Between 1,000 and 7,500 gallons/day (initial and annual)	\$ 200.00	\$ 200.00	Sec. 5-58; Sec. 5-91 (a)
	Flow Between 7,501 and 15,000 gallons/day (initial and annual)	\$ 300.00	\$ 300.00	Sec. 5-58; Sec. 5-91 (a)
	Monitoring Fee	Individually determined	Individually determined	Sec. 5-58
	Food Service Establishment Permit and Annual Inspection Fee (per location)	\$ 100.00	\$ 100.00	Sec. 5-58; Sec. 5-91 (a)
	Grease Interceptor Pumping Variance (each occurrence)	\$ 220.00	\$ 220.00	Sec. 5-58
	Enforcement Cost Recovery	Individually determined	Individually determined	Sec. 1-97 (3) j; Sec. 5-58
	Restoration Fee of Revoked Other Wastewater Permit (each occurrence)	2x permit fee	2x permit fee	Sec. 1-97 (1) d; Sec. 5-58
	Residuals permit application fee (initial and renewals)	\$ 100.00	\$ 100.00	Sec. 5-58
C. Pretreatment Wastewater Treatment Surcharges		Monthly	Monthly	
	Surcharge for BOD (per 100 lbs; when BOD>200mg/L and COD < 3x BOD)****	\$ 36.00	\$ 36.00	Sec. 1-97 (1) d; Sec. 5-57
	Surcharge for COD (per 100 lbs; when COD>600mg/L and >/=3xBOD)****	\$ 36.00	\$ 36.00	Sec. 1-97 (1) d; Sec. 5-57
	Surcharge for TSS (per 100 lbs; when TSS >200mg/l)	\$ 21.00	\$ 21.00	Sec. 1-97 (1) d; Sec. 5-57
	**** Surcharge is assessed for either BOD or COD, but not both.			
D. Charges for Septage Haulers		Monthly	Monthly	
	In-Service Area Rate (per gallon)	\$ 0.1378	\$ 0.1378	Sec. 1-97 (1) b; Sec. 5-33
	Out-of-Service Area Rate (per gallon)	\$ 0.1723	\$ 0.1723	Sec. 1-97 (1) b; Sec. 5-33
	Utility Deposit	\$ 500.00	\$ 500.00	Sec. 1-6
E. Charges for Miscellaneous Hauled Wastewater Fees (subject to applicable surcharges)				
Short-Term Permit		Monthly	Monthly	
	Per gallon Within Service Area	\$ 0.030	\$ 0.030	Sec. 1-97 (1) b; Sec. 5-33
	Per gallon Out-of-Service Area	\$ 0.060	\$ 0.060	Sec. 1-97 (1) b; Sec. 5-33
Long-Term Permit				
	One Time System Development Charge In accordance with Fee Schedule and specified in permit.			Sec. 1-97 (2)d; Sec. 5-58
	Long-Term Permit Monthly Consumption Charge (per 1,000 gallons)	\$ 4.63	\$ 4.63	Sec. 1-97 (1) c; Sec. 5-58
	Long-Term Permit Monthly Fixed Meter Charge by Meter Size/Flow:			
	5/8" (Flow between 0-28,800 gpd)	\$ 29.10	\$ 29.10	Sec. 1-97 (1) f; Sec. 5-58
	1" (Flow between 28,801-72,000 gpd)	\$ 72.75	\$ 72.75	Sec. 1-97 (1) f; Sec. 5-58
	1 1/2" (Flow between 72,001-144,000 gpd)	\$ 145.50	\$ 145.50	Sec. 1-97 (1) f; Sec. 5-58
	2" (Flow between 144,001-230,400 gpd)	\$ 232.80	\$ 232.80	Sec. 1-97 (1) f; Sec. 5-58
	3" (Flow between 230,401-460,800 gpd)	\$ 436.50	\$ 436.50	Sec. 1-97 (1) f; Sec. 5-58
	4" (Flow between 460,801-720,000 gpd)	\$ 727.50	\$ 727.50	Sec. 1-97 (1) f; Sec. 5-58
	6" (Flow between 720,001-1,440,000 gpd)	\$ 1,455.00	\$ 1,455.00	Sec. 1-97 (1) f; Sec. 5-58
	8" (Flow between 1,440,001-2,304,000 gpd)	\$ 2,328.00	\$ 2,328.00	Sec. 1-97 (1) f; Sec. 5-58
	10" (Flow between 2,304,001-3,312,000 gpd)	\$ 3,637.50	\$ 3,637.50	Sec. 1-97 (1) f; Sec. 5-58
	12" (Flow > 3,312,001 gpd)	\$ 4,365.00	\$ 4,365.00	Sec. 1-97 (1) f; Sec. 5-58
F. Processing Charge for Haulers of Non-Hazardous Wastewater Treatment Plant (WWTP) Residuals as delivered to a designated CFPWA WWTP (Per Pound Total Solids Dry Weight Basis as Delivered/Received)		Monthly	Monthly	
	Unstabilized/Less Than Class B Residuals In-Service Area Rate	\$ 0.8020	\$ 0.8020	Sec. 1-97 (1) b; Sec. 5-33
	Stabilized/Equal to or Better Than Class B Residuals In-Service Area Rate	\$ 0.6015	\$ 0.6015	Sec. 1-97 (1) b; Sec. 5-33
	Unstabilized/Less Than Class B Residuals Out-of-Service Area Rate	\$ 1.0025	\$ 1.0025	Sec. 1-97 (1) b; Sec. 5-33
	Stabilized/Equal to or Better Than Class B Residuals Out-of-Service Area Rate	\$ 0.7519	\$ 0.7519	Sec. 1-97 (1) b; Sec. 5-33
4 Penalties				
A. Tampering Violations				
	Unauthorized non-metered use of water (greater of 30,000 gallons consumption or the highest billed consumption in the past 24 months)	\$120.60 minimum	\$120.60 minimum	Sec. 1-97 (3) m; Sec 1-166 (c)
	Unauthorized non-metered use of sewer (capped at 30,000 gallons consumption)	\$138.90	\$138.90	Sec. 1-97 (3) m; Sec 1-166 (c)
	Cut Lock Fee	\$75.00	\$75.00	Sec. 1-97 (3) f; Sec. 1-166 (c)
	Unauthorized turn on or turn off water supplied by Authority	\$55.00	\$55.00	Sec. 1-9 (g); Sec. 1-9(h)
	Meter Obstruction Fee	\$55.00	\$55.00	Sec. 1-97 (3) q
		Triple the amount of losses and damages sustained by the Authority or \$5000, whichever is greater	Triple the amount of losses and damages sustained by the Authority or \$5000, whichever is greater	
	System Tampering Civil Action Violation, in accordance with N.C.G.S. 14-151(e)			Sec. 1-97 (3) r
	Violation of Cross Connection Control Ordinance	Up to \$1,000/day	Up to \$1,000/day	Sec. 2-10 (j)
B. Backflow Preventer Violations				
	Commercial failure to submit required backflow preventer test report	\$200.00	\$200.00	Sec. 2-10 (d)
	Residential failure to submit required backflow preventer test report	\$100.00	\$100.00	Sec. 2-10 (d)
	Submission of falsified backflow preventer test report	\$200.00	\$200.00	Sec. 2-10 (d)
	First violation of backflow installation requirements	\$250.00	\$250.00	Sec. 2-10 (b)
	Subsequent violation of backflow installation requirements	\$1,000.00	\$1,000.00	Sec. 2-10 (b)
C. Pretreatment Violations				

CAPE FEAR PUBLIC UTILITY AUTHORITY
RATES AND FEES SCHEDULE FY 21-22

		Rates and Fees Effective 7/1/20	Rates and Fees Effective 7/1/21	Ordinance Reference
	Violation of Wastewater Discharge Permit	Up to \$25,000	Up to \$25,000	Sec. 5-189
	Violation of Sewer Use Ordinance	Up to \$25,000	Up to \$25,000	Sec. 5-189
D. Water Emergency Management Ordinance				
	Violation of Water Emergency Management Regulations	Up to \$500/day	Up to \$500/day	Sec. 3-13 (d)
5 Miscellaneous and Other				
A. Service/repair costs				
	Contracted services at actual cost plus 10% administrative fee	Individually determined	Individually determined	Sec. 1-9 (e)
	CFPUA staff and equipment at FEMA reimbursable cost	Individually determined	Individually determined	Sec. 1-9 (e)
B. Other Fees				
	After Hours Fee	Individually determined	Individually determined	Sec. 1-97 (3) a
	Emergency Reconnect Fee	\$ 110.00	\$ 110.00	Sec. 1-97 (3) c
	Late Day Reconnect Fee	\$ 55.00	\$ 55.00	Sec. 1-97 (3) b
	Late Fee	10% of balance; \$25 maximum on Single-Family Residential services	10% of balance; \$25 maximum on Single-Family Residential services	Sec. 1-97 (3) h
	Loan Processing Fee/Deferral Fee	Actual Cost to File	Actual Cost to File	Sec. 1-97 (3) k
	Meter Test	\$ 55.00	\$ 55.00	Sec. 1-97 (3) i; Sec. 1-36; Sec. 1-161
	Large Meter Test (requested by Customer) (Meters 3" and larger)	\$ 150.00	\$ 150.00	Sec. 1-36; Sec. 1-161
	New Service Charge	\$ 55.00	\$ 55.00	Sec. 1-97 (3) d; Sec. 1-6 (a)
	Premise Visit Fee	\$ 55.00	\$ 55.00	Sec. 1-97 (3) p; Sec. 1-15
	Delinquency Fee	\$ 55.00	\$ 55.00	Sec. 1-97 (3)m; Sec. 1-166 (a)
	Reread Fee (requested by Customer)			
	Correct Read	\$ 55.00	\$ 55.00	Sec. 1-97 (3) o
	Incorrect Read (CFPUA error)	No Cost	No Cost	Sec. 1-97 (3) o
	Reconnection Fee (after disconnect)	\$ 55.00	\$ 55.00	Sec. 1-97 (3) n
	Utility Deposit Single-Family Residential (may be adjusted by Customer Service Director based on services provided and prior payment history)	Up to \$200	Up to \$200	Sec. 1-6
	Utility Deposit Commercial	Determined by Policy	Determined by Policy	Sec. 1-6
	Hydrant Meter Deposit for festivals (up to 1 1/2" meter size)	\$ 500.00	\$ 500.00	Sec. 1-97 (3) g
	Hydrant Meter Deposit for festivals (2" and higher meter size)	Actual Cost	Actual Cost	Sec. 1-97 (3) g
	Hydrant Meter Installation & Removal for festivals (per meter)	\$ 55.00	\$ 55.00	Sec. 1-97 (3) g
	Plan Review Fees:			
	Minor Subdivisions - no required NCDEQ water or sewer permits	\$ 120.00	\$ 120.00	Sec. 1-97 (3) i; Sec. 4-3 (a)
	Commercial Plans (multi-family residential/commercial) - no required NCDEQ water and sewer permits	\$ 120.00	\$ 120.00	Sec. 1-97 (3) i; Sec. 4-3 (a)
	Main Extensions/Utility relocation/ROW widening less than 500 Linear Feet	\$ 240.00	\$ 240.00	Sec. 1-97 (3) i; Sec. 4-3 (a)
	Main Extensions/Utility relocation/ROW widening 500-999 Linear Feet	\$ 300.00	\$ 300.00	Sec. 1-97 (3) i; Sec. 4-3 (a)
	Main Extensions/Utility relocation/ROW widening 1,000-4,999 linear feet	\$ 600.00	\$ 600.00	Sec. 1-97 (3) i; Sec. 4-3 (a)
	Main Extensions/Utility relocation/ROW widening 5,000-9,999 linear feet	\$ 850.00	\$ 850.00	Sec. 1-97 (3) i; Sec. 4-3 (a)
	Main Extensions/Utility relocation/ROW widening 10,000 linear feet and greater	\$ 1,400.00	\$ 1,400.00	Sec. 1-97 (3) i; Sec. 4-3 (a)
	Pump Station Review (plus the main extensions fee above)	\$ 350.00	\$ 350.00	Sec. 1-97 (3) i; Sec. 4-3 (a)
	Re-review Fee	\$ 50.00	\$ 50.00	Sec. 1-97 (3) i; Sec. 4-3 (a)
	Water/Sewer Line Acceptance Testing Reinspection	\$55/hour	\$55/hour	Sec. 4-3 (c)
	Water/Sewer Line Acceptance Testing Reinspection - After Hours Fee	\$75/hour	\$75/hour	Sec. 4-3 (c)
	Inspection Fee for Developer-Installed Main Lines (After hours - Minimum of 2 hours)	\$75/hour	\$75/hour	Sec. 1-97 (2) b; Sec. 1-6 (a)
	Demolition Inspection Fee	\$ 55.00	\$ 55.00	Sec. 1-97 (3) s; Sec. 1-6 (a)
	Violation of Extension Policy	\$100, \$200, \$500	\$100, \$200, \$500	Sec. 4-103
	Copy and Printing Fees, including Public Records Request	Actual cost	Actual cost	
	Tank Mounted Equipment Structural Analysis Review Fee	\$ 1,500.00	\$ 2,025.00	Sec. 1-97 (3) t
	Water Tower Lease	Individually determined; \$2,500 minimum	Individually determined; \$2,500 minimum	Set by contract
	Additional Antenna Fee - per antenna exceeding nine antennas	\$ 300.00	\$ 300.00	
	Ground Space Fee - Additional ground space above 400 square feet	\$5.92/square foot	\$5.92/square foot	
C. Miscellaneous Administrative Fees				
	Returned Check Fee (Per event; Closed Account, NSF, Stop Payment of Customer/Vendor issued Check)	\$ 25.00	\$ 25.00	Sec. 1-97 (3) j
	Convenience Fee per transaction; maximum payment amount up to \$500 per transaction.	\$ 3.75	\$ 3.75	
	Dishonored Bank Draft Fee (Per event; Closed Account, NSF, Stop Payment of Customer/Vendor Draft)	\$ 25.00	\$ 25.00	Sec. 1-97 (3) j
	Check Stop Payment Fee (Stop Payment of CFPUA issued Check requested by Customer/Vendor)	\$ 5.00	\$ 5.00	Sec. 1-97 (3) j

**Cape Fear Public Utility Authority
Demographic Statistics
Current Fiscal Year and Last Nine Fiscal Years**

Fiscal Year Ended June 30	City of Wilmington Population (1)	New Hanover County Population (1)	Median Age (1)	Public School Enrollment (2)	Local Unemployment Rate % (3)	Personal Income (000's) (4)	Per Capita Income (4)
2020	122,610	232,248	39	25,952	7.6%	\$10,518,512	\$45,290
2019	122,607	232,274	39	25,512	4.0%	10,155,484	\$43,722
2018	119,045	227,198	38	26,263	3.9%	9,717,031	\$42,769
2017	117,525	223,483	38	26,096	3.9%	9,885,994	44,236
2016	115,933	220,358	38	25,901	4.8%	9,312,770	42,262
2015	113,657	216,298	38	26,241	5.6%	8,757,257	40,487
2014	112,067	213,267	38	25,470	6.1%	8,324,877	39,035
2013	109,922	209,234	38	25,364	9.1%	7,669,054	36,653
2012	108,297	206,189	37.5	25,253	9.3%	7,433,938	36,054
2011	106,476	202,667	36.7	23,934	10.1%	7,300,065	36,020

(1) US Census Bureau.

(2) Provided by the NHC Schools Finance Department

(3) North Carolina Department of Commerce

(4) Federal Agency Data: Bureau of Economic Analysis. Data provided for as many years as available.

**Cape Fear Public Utility Authority
Principal Water Customers
Current Fiscal Year and Nine Years Prior**

2020					2011				
Ten Largest Users of the Water System Annual Consumption	Thousands of Gallons	% of System	Revenues (\$)	% of Revenues	Ten Largest Users of the Water System Annual Consumption	Thousands of Gallons	% of System	Revenues (\$)	% of Revenues
1 UNC Wilmington	145,286	2.44%	\$ 514,961	1.21%	1 UNC Wilmington	183,400	3.34%	\$ 670,500	2.37%
2 New Hanover Regional Medical Center	78,114	1.31%	372,722	0.88%	2 New Hanover Regional Medical Center	60,103	1.10%	253,431	0.90%
3 Town of Wrightsville Beach	58,590	0.98%	39,483	0.09%	3 New Hanover County Schools	51,773	0.94%	288,296	1.02%
4 New Hanover County Schools	57,907	0.97%	310,197	0.73%	4 Wilmington Housing Authority	37,520	0.68%	158,505	0.56%
5 Wilmington Housing Authority	48,845	0.82%	233,116	0.55%	5 New Hanover County	36,290	0.66%	195,927	0.69%
6 New Hanover County	46,755	0.79%	275,009	0.65%	6 Lake Forest Apartments	33,107	0.60%	128,507	0.45%
7 Bedrock Holdings	46,049	0.77%	284,785	0.67%	7 College Manor Apartments	30,588	0.56%	123,732	0.44%
8 Tribute Properties	28,323	0.48%	231,799	0.55%	8 Mayfaire Complex	25,244	0.46%	163,222	0.58%
9 City of Wilmington	27,912	0.47%	243,032	0.57%	9 Tribute Properties	24,645	0.45%	174,715	0.62%
10 NC State Port	26,113	0.44%	153,426	0.36%	10 Wilmington Hilton	18,448	0.34%	71,652	0.25%
Total Net Consumption / Net Revenue	563,894	9.48%	\$ 2,658,531	6.27%	Total Net Consumption / Net Revenue	501,118	9.14%	\$ 2,228,487	7.88%
Total Annual System Net Consumption / Net Revenue	5,949,676		\$ 42,403,504		Total Annual System Net Consumption / Net Revenue	5,485,532		\$ 28,288,199	

Cape Fear Public Utility Authority
Principal Wastewater Customers
Current Fiscal Year and Nine Years Prior

2020					2011				
Ten Largest Users of the Wastewater System Annual Consumption	Thousands of Gallons	% of System	Revenues (\$)	% of Revenues	Ten Largest Users of the Wastewater System Annual Consumption	Thousands of Gallons	% of System	Revenues (\$)	% of Revenues
1 Town of Wrightsville Beach	234,896	4.46%	\$ 845,626	1.97%	1 Town of Wrightsville Beach	242,837	4.79%	\$ 358,180	1.28%
2 NHRMC	74,046	1.41%	402,636	0.94%	2 UNC Wilmington	111,952	2.21%	399,691	1.42%
3 UNC Wilmington	68,670	1.30%	391,051	0.91%	3 New Hanover County Schools	49,331	0.97%	272,876	0.97%
4 New Hanover County Schools	53,704	1.02%	327,111	0.76%	4 New Hanover Regional Medical Center	59,071	1.17%	236,881	0.84%
5 Wilmington Housing Authority	48,642	0.92%	262,865	0.61%	5 New Hanover County	34,159	0.67%	172,881	0.62%
6 Bedrock Holdings	44,629	0.85%	302,542	0.70%	6 Wilmington Housing Authority	37,420	0.74%	149,983	0.53%
7 New Hanover County	40,707	0.77%	265,842	0.62%	7 College Manor Apartments	30,588	0.60%	117,478	0.42%
8 Corning, Inc.	28,282	0.54%	132,095	0.31%	8 Lake Forest Apartments	33,107	0.65%	120,990	0.43%
9 Tribute	27,546	0.52%	250,430	0.58%	9 Mayfaire Complex	25,012	0.49%	159,386	0.57%
10 Lake Forest Apartments	25,472	0.48%	134,462	0.31%	10 Tribute Properties	24,382	0.48%	192,464	0.69%
Total Net Consumption / Net Revenue	646,593	10.94%	\$ 3,314,660	7.70%	Total Net Consumption / Net Revenue	647,859	12.78%	\$ 2,180,810	7.77%
Total Annual System Net Consumption / Net Revenue	5,269,523		\$ 43,022,105		Total Annual System Net Consumption / Net Revenue	5,070,084		\$ 28,052,866	

**Cape Fear Public Utility Authority
Principal Employers
Current Fiscal Year and Nine Years Ago**

2020				2011			
Employers	Employees (1)	Rank	Percentage of Total County Employment	Employers	Employees (3)	Rank	Percentage of Total County Employment
New Hanover Regional Medical Center	7,500	1	6.29%	New Hanover Regional Medical Center	4,738	1	5.04%
New Hanover County Schools	4,211	2	3.53%	New Hanover County Schools	3,666	2	3.90%
Wal-Mart Stores	2,857	3	2.40%	Wal-Mart Stores	2,592	3	2.76%
GE Hitachi Nuclear Energy and GE Aviation	2,800	4	2.35%	GE Hitachi Nuclear Energy and GE Aviation	2,100	4	2.23%
University of North Carolina Wilmington	2,409	5	2.02%	University of North Carolina at Wilmington	1,898	5	2.02%
New Hanover County Government	1,822	6	1.53%	PPD	1,500	6	1.60%
PPD	1,500	7	1.26%	New Hanover County	1,480	7	1.57%
Duke Energy	1,136	8	0.95%	Corning, Inc.	1,000	8	1.06%
City of Wilmington	1,000	9	0.84%	City of Wilmington	981	9	1.04%
Wilmington Health	917	10	0.77%	Cape Fear Community College	541	10	0.58%
			21.93%				21.80%
Total # Employed at June 30 of the respective FY (2)			119,249	Total # Employed at June 30 of the respective FY (3)			94,030

(1) Source: 2020 Book on Business; www.wilmingtonbiz.com

(2) Source: www.nccommerce.com

(3) Source: CFPUA CAFR for the fiscal year ended June 20, 2011

Cape Fear Public Utility Authority
Operating Statistics
Current Year and Last Nine Fiscal Years

	Fiscal Year									
	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Water System										
Number of available service connections ⁽¹⁾	74,883	75,772	74,700	73,118	71,439	70,356	68,794	68,033	67,067	64,602
Number of treatment plants - surface water system	1	1	1	1	1	1	1	1	1	1
Treatment capacity (mgd) - surface water	35	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	27.50
Average production (mgd) - surface water	15.34	15.44	14.49	14.63	14.35	13.56	13.44	13.20	13.50	13.70
Number of groundwater systems	2	2	2	2	3	3	3	3	3	3
Number of treatment plants - groundwater system	1	1	1	1	1	1	1	1	1	1
Number of active wells - groundwater system	39	37	38	37	34	36	36	36	36	36
Treatment capacity (mgd) - groundwater plant	6	6	6	6	6	6	6	6	6	6
Treatment capacity (mgd) - other groundwater systems	1.02	1.02	1.02	0.90	0.70	0.70	0.70	0.70	0.70	0.70
Average production (mgd) - groundwater	3.49	3.49	3.07	3.08	3.04	2.94	2.48	2.95	2.95	3.20
Miles of water mains	1,150	1,142	1,131	1,113	1,114	1,089	1,041 ⁽²⁾	1,078	1,072	1,070 ⁽²⁾
Wastewater System										
Number of available service connections ⁽¹⁾	75,409	74,116	73,043	71,539	69,222	68,246	66,829	66,059	64,529	64,330
Number of treatment plants	2	2	2	2	3	3	3	3	3	3
WPC plant permit (mgd)	28	28.00	28.10	28.10	28.10	28.10	22.10	22.10	22.10	22.10
Average annual daily flow (mgd)	16.85	19.59	17.49	17.16	18.76	17.48	16.45	16.17	15.10	15.80
Number of lift stations	150	147	148	146	142	143	141	141	141	141
Miles of wastewater gravity mains ⁽²⁾	907	912	892	877	848	844	827 ⁽²⁾	850	840	840 ⁽²⁾
Miles of wastewater force mains	154	144	143	142	131	131	112	110	104	104
Number of manholes	22,395	22,134	22,097	22,017	21,221	21,049	20,918	20,300	20,300	20,300

(1) In prior billing system, non-irrigation base services available at a premise were not removed from the total count which inflated the number of available services.

(2) Based on more accurate information as a result of implementing and improving the accuracy of an asset management system.

Cape Fear Public Utility Authority
Consumption by Customer Group
Current Fiscal Year and Last Nine Fiscal Years

	2020		2019		2018		2017		2016		2015		2014		2013		2012		2011	
	Thousand Gallons	% of Consumption	Thousand Gallons	% of Consumption	Thousand Gallons	% of Consumption	Thousand Gallons	% of Consumption	Thousand Gallons	% of Consumption	Thousand Gallons	% of Consumption	Thousand Gallons	% of Consumption	Thousand Gallons	% of Consumption	Thousand Gallons	% of Consumption	Thousand Gallons	% of Consumption
Water Customers																				
Residential	4,107,969	69.05%	3,718,024	67.27%	3,614,451	68.57%	3,651,875	69.45%	3,630,541	69.20%	3,461,812	68.80%	3,415,831	69.87%	3,522,531	69.85%	3,806,074	70.45%	3,887,894	70.88%
Commercial	1,284,322	21.59%	1,238,734	22.41%	1,175,036	22.29%	1,151,382	21.90%	1,128,569	21.51%	1,053,502	20.94%	1,006,253	20.58%	1,026,039	20.35%	1,059,983	19.62%	1,075,703	19.61%
Town of Wrightsville Beach ⁽¹⁾	47,968	0.81%	-	0.00%	-	0.00%	-	0.00%	-	0.00%	-	0.00%	-	0.00%	-	0.00%	-	0.00%	-	0.00%
Industrial	69,941	1.18%	109,343	1.98%	90,719	1.72%	68,109	1.30%	74,645	1.42%	65,334	1.30%	63,349	1.30%	59,116	1.17%	62,267	1.15%	62,278	1.14%
Institutional and Government	439,476	7.39%	460,658	8.34%	391,058	7.42%	386,583	7.35%	413,036	7.87%	451,090	8.96%	403,523	8.25%	435,048	8.63%	474,130	8.78%	459,656	8.38%
Total	5,949,676	100.00%	5,526,758	100.00%	5,271,263	100.00%	5,257,949	100.00%	5,246,790	100.00%	5,031,738	100.00%	4,888,957	100.00%	5,042,734	100.00%	5,402,454	100.00%	5,485,531	100.00%
Wastewater Customers																				
Residential	3,524,127	66.88%	3,312,519	66.11%	3,259,728	66.14%	3,277,428	67.57%	3,287,280	67.36%	3,171,068	67.33%	3,184,447	68.27%	3,246,521	68.52%	3,424,127	68.94%	3,497,483	68.98%
Commercial	1,173,859	22.28%	1,143,289	22.82%	1,078,506	21.88%	1,048,627	21.62%	1,019,892	20.90%	956,150	20.30%	922,045	19.77%	923,952	19.50%	941,927	18.96%	957,062	18.88%
Town of Wrightsville Beach	234,896	4.46%	223,691	4.46%	254,728	5.17%	184,695	3.81%	227,370	4.66%	207,905	4.41%	210,681	4.52%	203,370	4.29%	207,561	4.18%	214,479	4.23%
Pender County	8,296	0.16%	12,715	0.25%	14,374	0.29%	11,291	0.23%	10,562	0.22%	10,033	0.21%	9,008	0.19%	10,473	0.22%	11,550	0.23%	16,224	0.32%
Industrial	17,330	0.33%	16,613	0.33%	17,144	0.35%	15,470	0.32%	18,257	0.37%	21,027	0.45%	19,468	0.42%	16,296	0.34%	16,197	0.33%	18,219	0.36%
Institutional and Government	311,014	5.90%	302,154	6.03%	303,850	6.17%	312,907	6.45%	316,946	6.49%	343,878	7.30%	318,809	6.83%	337,107	7.12%	365,297	7.35%	366,618	7.23%
Total ⁽²⁾	5,269,523	100.00%	5,010,981	100.00%	4,928,329	100.00%	4,850,418	100.00%	4,880,306	100.00%	4,710,062	100.00%	4,664,457	100.00%	4,737,719	100.00%	4,966,659	100.00%	5,070,085	100.00%

(1) Beginning in Fiscal Year 2020, CFPUA entered into a bulk wholesale water agreement with the Town of Wrightsville Beach limited to 45 million gallons per calendar year.

(2) The Total value for Thousand Gallons listed for Wastewater Customers does not include an estimation for the volumetric value of the Flat Wastewater customer class.