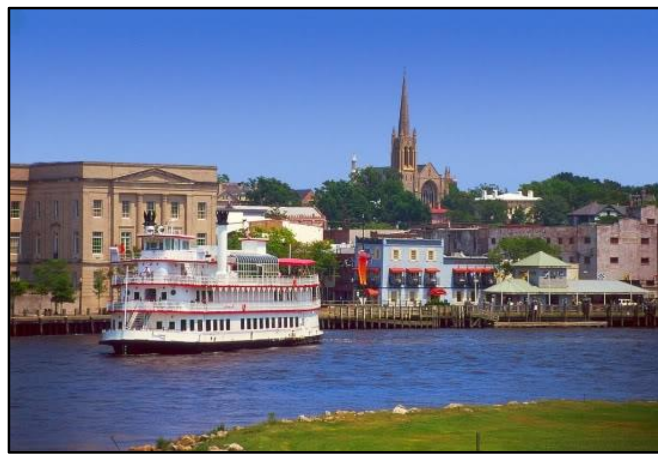
Adopted Budget for Fiscal Year 2016-2017

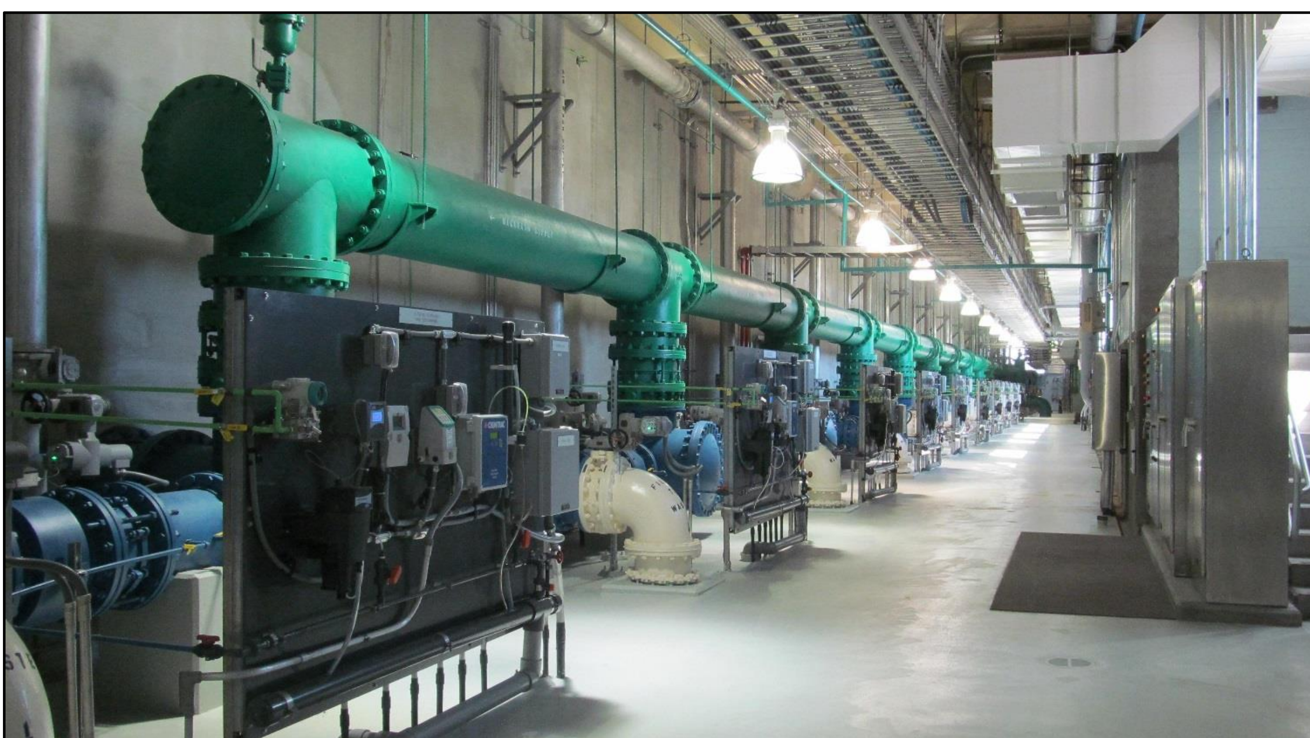
Cape Fear Public Utility Authority
Stewardship. Sustainability. Service.

James R. Flechtner, PE
Executive Director

John McLean, CPA
Chief Financial Officer

235 Government Center Drive
Wilmington, NC 28403





On the Cover: Top left: Manhole Cover, photographed by Jacqueline Valade. Top right: Downtown Wilmington courtesy of www.wilmingtonandbeaches.com. Bottom: Filter Gallery, photographed by Sam Yarboro.

CAPE FEAR PUBLIC UTILITY AUTHORITY
ADOPTED BUDGET

FISCAL YEAR 2016 - 2017

James R. Flechtner, PE, Executive Director
John McLean, Chief Financial Officer

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

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CAPE FEAR PUBLIC UTILITY AUTHORITY
STRATEGIC PLAN
JULY 2014

MISSION STATEMENT

The Cape Fear Public Utility Authority's mission is to provide high quality water and sewer service in an environmentally responsible manner that protects public health, while maintaining the lowest practicable cost.

STRATEGIC VISION

Cape Fear Public Utility Authority is committed to excellence. The Authority effectively and efficiently manages operations, infrastructure, and investments to protect, restore, and enhance the natural environment; responsibly uses water and other natural resources; promotes economic vitality; supports public safety and health; and engenders overall community improvement and involvement on significant issues. The Authority continuously improves and not only meets but also strives to exceed all regulatory requirements.

GUIDING PRINCIPLES

The Authority is committed to the principles of ***Stewardship***, ***Sustainability*** and ***Service***. These principles serve as a guide for ethical decisions, provide a gauge for measuring success, and define our responsibility to the community. They guide our organization in the following way:

Stewardship

- Of the region's natural resources
- Of the financial resources and assets our customers entrust to us

Sustainability

- Of the region through dependable water and wastewater utilities that support public health and economic prosperity
- Of the Authority's ability to meet the community's current and future water and wastewater needs and expectations

Service

- To our customers by providing reliable, cost-effective water and wastewater utilities
- To our community as a thoughtful and participatory corporate citizen

GOALS & STRATEGIES

GOAL 1: The Authority will hold paramount our responsibility to protect the environment, ensure public health and safety, and respond effectively to the needs of our customers.

Strategy 1.A – Optimize the protection and use of water and other natural resources, and recycle where cost effective. Utilize the Environmental Management System to ensure and monitor regulatory compliance. Maintain and enhance the natural environment.

Strategy 1.B – Provide a safe work environment for our staff, contractors, and customers.

Strategy 1.C – Understand, anticipate, and respond to our customers and our community's needs in a professional, prompt, and efficient manner.

Strategy 1.D – Identify partnerships, develop alliances, and encourage public participation with both public and private community stakeholders.

GOAL 2: The Authority will maintain a stable financial position that balances rates, the environment, and the organization's long-term capital and operating needs.

Strategy 2.A– Establish and maintain a responsible balance among the fee schedule, long-term debt, asset values, Capital Improvement Program needs, operating expenses, and revenues.

Strategy 2.B– Operate as a fiscally sound entity that identifies and implements cost-efficiencies, as well as exceeds benchmarks, targets, and measures comparable to similar utilities and consistent with industry standards.

Strategy 2.C – Build, operate, and maintain high quality and cost-effective collection, treatment, and distribution systems and maximize the life expectancy of physical assets.

GOAL 3: The Authority will build, maintain and operate the enterprise, and all of its human and physical assets, in a manner that provides both new and existing customers with consistently high quality services.

Strategy 3.A – Establish criteria to prioritize the systematic extension of wastewater collection systems to areas with failing septic systems and water distribution systems to areas with poor quality well water in an equitable manner to maximize public health and economic development.

Strategy 3.B – Establish a creative and forward thinking organizational culture that rewards integrity and innovation, and brings about efficiencies.

Strategy 3.C – Acquire and implement technologies and tools that allow for improved inter-departmental communication, enterprise-wide sharing of information, and operational efficiencies.

Strategy 3.D – Recruit and retain a well-qualified and motivated workforce. Provide opportunities for individual growth, and with that, organizational improvement.

Cape Fear
Public Utility Authority
Stewardship. Sustainability. Service.

June 8, 2016

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

Subject: FY 16-17 Adopted Budget

Dear Members of the Authority Board:

I am pleased to present the fiscal year 2016–2017 budget for Cape Fear Public Utility Authority as adopted June 8, 2016. This budget document represents the Authority's comprehensive budget plans and policies for the upcoming fiscal year.

The FY 16-17 recommended budget was presented to the Authority Board on May 11, 2016; the budget message following this letter provides a summary of that presentation. The recommended budget was made available for public inspection on the Authority's website and at the Authority's Administrative office located at 235 Government Center Drive. In accordance with the North Carolina Local Government Budget and Fiscal Control Act, a notice of public hearing was published in the *Star News* to encourage public input into the budget process. This public hearing was held on the recommended budget on June 8, 2016.

At the June 8 Authority Board meeting, no changes were made to the recommended budget. The total net budget for the Operating Sub-Fund was adopted at $75,615,566.

The staff of the Authority looks forward to serving our community over the next year as we continue to build on our record of success.

Regards,

James R. Flechtner, P.E.
Executive Director

Cape Fear Public Utility Authority

Stewardship. Sustainability. Service.

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May 11, 2016

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

Subject: FY 16-17 Recommended Budget

Dear Members of the Authority Board:

I am pleased to present the Authority's recommended FY 16-17 budget for your consideration. 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 proposes 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 ninth year of serving nearly 200,000 people in the City of Wilmington and New Hanover County, 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 the Authority to continually increase the value of the services we offer.

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

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 ten-year Capital Improvements 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.

OPERATING BUDGET

The total recommended FY 16-17 budget is approximately $75.6 million. As a foundation for the FY 16-17 budget process, key goals and assumptions are identified and highlighted below:

- FY 16-17 operating expenditures, excluding salaries and benefits, are based on FY 14-15 actual expenditures, with a goal of increasing by no more than 2% over the FY 15-16 adopted budget.

- Salaries budgeted with position reclassifications of the phased Class & Compensation Study and 1.75% merit adjustments.

- Benefits budgeted with: 1) a 5% increase in health care costs, 2) a 15% increase in dental premiums, and 3) an increase in the State mandated retirement system employer contribution of 7.25% from 6.67%.

- Debt service (principal, interest, fees & issuance costs) is estimated at $24.95 million, an increase of approximately $640,000. In FY16, the 2008 Revenue Bonds and the City's 2006A Refunding COPs were refunded with an annual reduction in the FY17 debt service of $2.58 million.

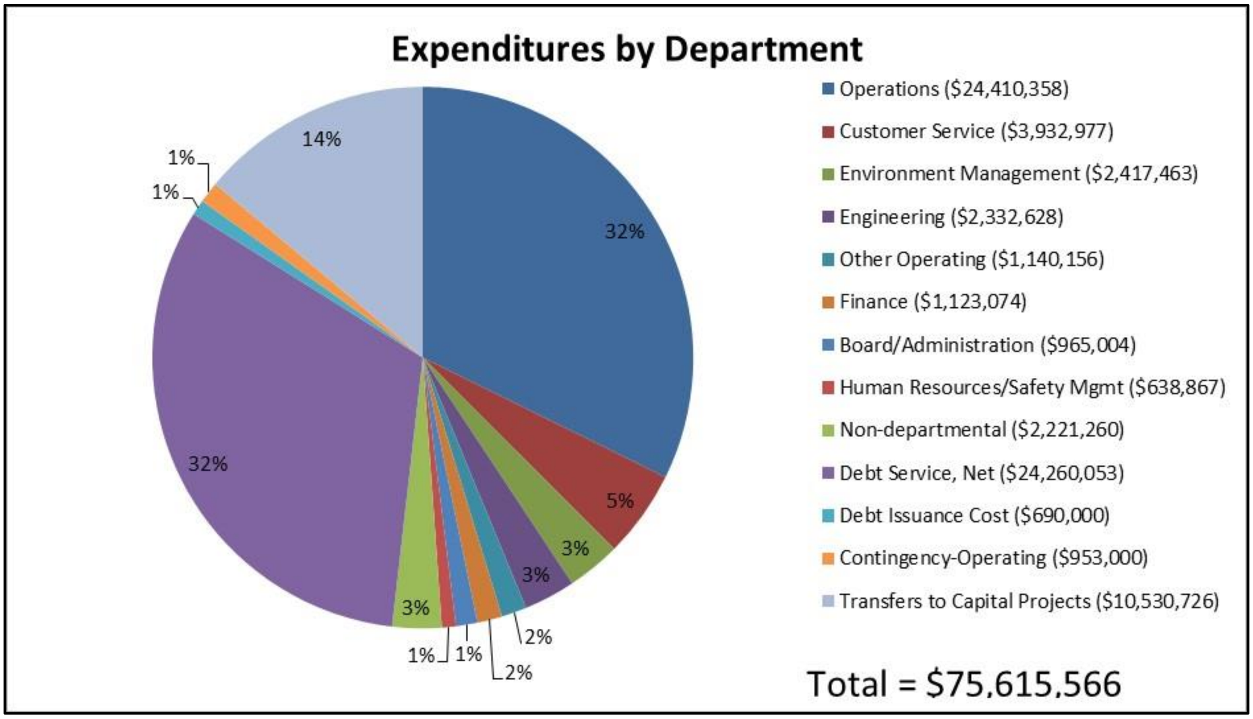
EXPENDITURES

Operating

The operating expenditure budget, excluding debt service and transfers, is $39.90 million as compared to $38.87 million in FY 15-16 which is $1.03 million greater than the FY15-16 adopted budget and includes significant changes highlighted below.

Operating Expenditures in FY 16-17 Recommended Budget
$1 Million Greater Than FY 15-16 Adopted Budget

- **Personnel (+$482,400)**
    - Class & Comp Study Implementations and 1.75% Merit Adjustment (+$495,400)
    - Three new positions (+$72,100)
    - Other miscellaneous changes (-$85,100)
- **Benefits (+$3,100)**
    - Class & Comp Study Implementations and 1.75% Merit Adjustment and new positions (+$210,600)
    - Decrease in Authority's change to the State Employee Health Plan, and incorporating a 5% increase in health insurance premiums and 15 increase in dental insurance premiums (-$207,500)
- **Operating Expenditures - Departmental (+$306,000)**
    - Repairs & Maintenance (-$203,000)
    - Electricity & Fuel oil (+$162,000)
    - Overtime & Standby (+$70,000)
    - Fees (+$84,000)
    - Computer Hardware, Software & Licensing (+$75,000)
    - Chemicals (+$73,000)
    - Training, Professional Development & Travel (+$43,000)
    - Employee Licensure & Certification Program (-$20,000)
- **Other Operating Expenditures (+$27,500)**
    - Computer Replacement Program (+$76,000)
    - Outside Partnerships (-$6,200)
    - Non-Capital Construction (+$195,000)
    - Scada Program (-$29,000)
    - Non-departmental (-$208,000)
- **Capital Outlay (+$28,000)**
    - Other equipment (+$28,000)
- **Contingency (+$153,000)**



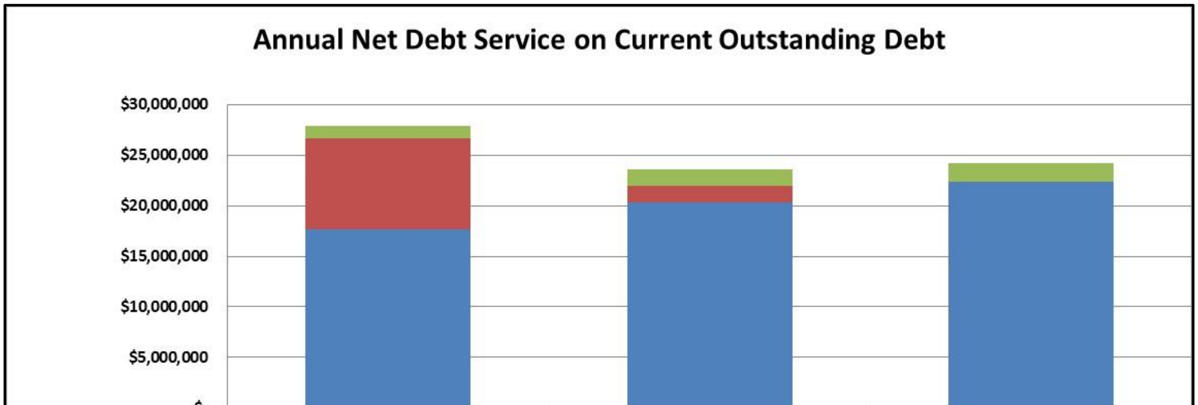
Operations	$	24,410,358	32.3%
Customer Service	$	3,932,977	5.2%
Environment Management	$	2,417,463	3.2%
Engineering	$	2,332,628	3.1%
Other Operating	$	1,140,156	1.5%
Finance	$	1,123,074	1.5%
Board/Administration	$	965,004	1.3%
Human Resources/Safety Mgmt	$	638,867	0.8%
Non-departmental	$	2,221,260	2.9%
Debt Service, Net	$	24,260,053	32.1%
Debt Issuance Cost	$	690,000	0.9%
Contingency-Operating	$	953,000	1.3%
Transfers to Capital Projects	$	10,530,726	13.9%
Total	**$**	**75,615,566**	**100.0%**

Debt Service

The Authority issued revenue bonds in 2008, 2011, 2014 and 2016. In addition, pursuant to the inter-local agreement transferring the City of Wilmington and New Hanover County water and wastewater systems to the Authority, the Authority is responsible for all of the debt related to those systems. Under the inter-local agreement, New Hanover County agreed to a reduction in the amount of the debt service payments made by the Authority for a period of 10 years beginning in FY 08-09.

Net debt service on bonded and installment debt, including debt service fees of $225,000, for the Authority will increase in FY 16-17 by approximately $700,000. In FY16, the 2008 Revenue Bonds and the City's 2006A Refunding COPs were refunded with an annual reduction in the FY17 debt service of $2.58 million. Debt issuance costs of $690,000 are also budgeted in FY 16-17 for a total debt service of $24,950,053.

The following chart presents actual annual net debt service for fiscal year 2015, and estimated annual net debt service for current and future fiscal years 2016-2017. Debt service is broken out by the original debt issuer.



	FY 15	FY16	FY17
NEW HANOVER COUNTY	$1,327,000	$1,572,000	$1,845,000
WILMINGTON	$8,979,000	$1,612,000	$-
CFPUA	$17,646,000	$20,376,000	$22,415,000
TOTAL DEBT SERVICE	$27,952,000	$23,560,000	$24,260,000

Contingency

The FY 16-17 budget includes a $953,000 contingency. The contingency budget is for unexpected needs and emergencies and unplanned opportunities. Contingencies were also added in FY16-17 for health premiums for uncovered employees of $63,000 and virtual desktop replacement of $90,000.

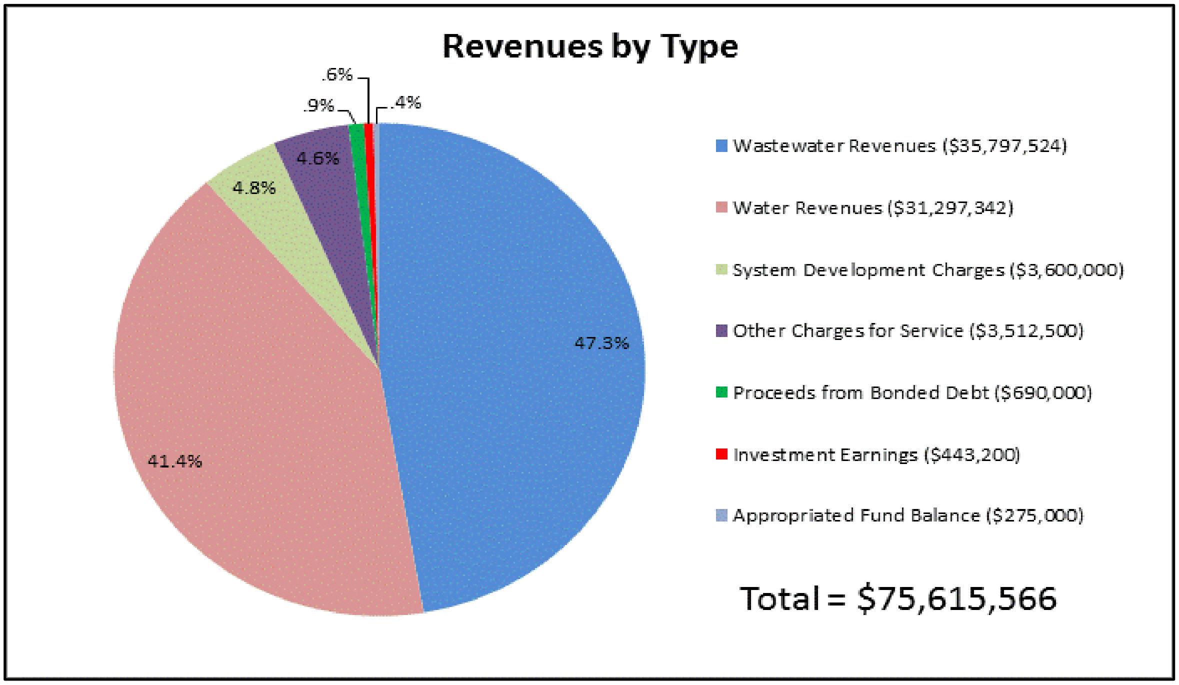
The FY 16-17 budget will continue to be monitored closely and aligned with any significant changes in the Authority's revenue projections. In addition staff will continue to look for opportunities to improve the efficiency of our operations.

Expenditure Trends

	FY 13-14 Actual	FY 14-15 Actual	FY 15-16 Adjusted Budget	FY 16-17 Adopted Budget
Personnel	$ 13,167,610	$ 14,236,603	$ 14,850,672	$ 15,260,887
Benefits	4,512,970	4,966,618	5,355,395	5,303,553
Operating	12,506,337	14,635,876	14,925,905	15,255,931
Computer Replacement Program	-	100,000	-	76,000
Damage Claims	-	16,500	59,550	50,000
Outside Partnerships	-	75,015	82,839	76,650
Non-Capital Construction	-	255,000	285,000	415,000
Fines and Penalties	-	19,100	26,000	26,000
Scada Program	-	-	108,800	108,800
Capital Outlay	302,368	508,638	525,985	387,706
Nondepartmental	2,072,341	1,993,605	2,398,500	2,221,260
Litigation Settlement	-	-	871,000	-
Debt Service, Net	26,571,851	26,190,598	34,153,693	24,260,053
Debt Issuance Cost	-	619,539	1,466,100	690,000
Payment to Refunded Bond Escrow Agent	-	49,035,703	187,785,880	-
Contingency-Operating	-	-	472,000	953,000
Transfers to Capital Projects	7,586,214	15,915,100	14,288,454	10,530,726
	$ 66,719,691	**$ 128,567,895**	**$ 277,655,773**	**$ 75,615,566**

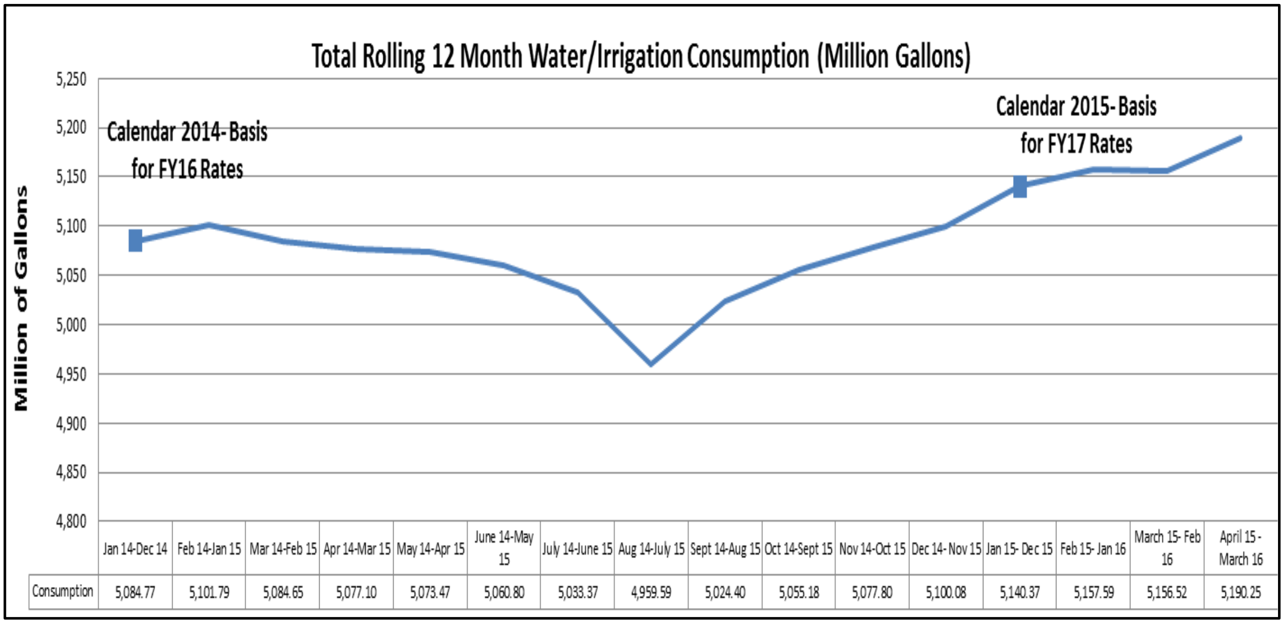
REVENUES

Total revenues (excluding bond proceeds and appropriated fund balance) for the Authority are projected at $74.6 million in FY 16-17 as compared to $73.8 million in FY 15-16, which is a 1% increase. Budgeted FY 16-17 water revenues of $31.3 million are projected to be $100,000 higher than the FY 15-16 budget of $31.2 million. Budgeted FY 16-17 wastewater revenues are projected at $35.8 million or approximately $500,000 higher than the FY 15-16 budget of $35.3million.



Wastewater Revenues	$	35,797,524	47.3%
Water Revenues	$	31,297,342	41.4%
System Development Charges	$	3,600,000	4.8%
Other Charges for Service	$	3,512,500	4.6%
Proceeds from Bonded Debt	$	690,000	0.9%
Investment Earnings	$	443,200	0.6%
Appropriated Fund Balance	$	275,000	0.4%
Total	$	75,615,566	100.0%

The FY 16-17 water and wastewater rates were modeled using calendar year 2015 customer billing data and budgeted expenditures. As shown on the 12-month rolling average water consumption chart below, water consumption increased 1.0% in calendar year 2015. This has a positive effect on revenues since both water and wastewater rates are based on water meter readings. Based on this model, water and wastewater rates that were approved and effective May 1, 2014 are remained unchanged in FY 15-16 and proposed to remain unchanged in FY 16-17.



Bi-monthly Rates

	Rates
Water Fixed Charge	$25.81
Water Volume per 1,000 gallons	$ 3.67
Wastewater Fixed Charge	$29.10
Wastewater Volume per 1,000 gallons	$ 4.56

Annual Residential Bill – 9,000 Gallons Bi-monthly

Water	
5/8 Fixed Meter Charge	$25.81
Volume - 9K gallons	$33.03
Wastewater	
5/8 Fixed Meter Charge	$29.10
Volume - 9K gallons	$41.04
Total Bi-Monthly Bill	$128.98
Annual	$773.88

System Development Charges (SDCs), which are paid at the time of building permit, are showing increases in FY15-16. However, we believe it is prudent to budget these one-time revenues at $3.6 million in FY 16-17, which represents no change from FY 15-16.

Interest earnings remain stable. Staff continues to monitor interest rates and look for additional opportunities to increase yield on the Authority's investments, while maintaining safety and liquidity. Further discussion of revenues is found in the Revenues Summary section.

Revenue Trends

	FY13-14 Actual	FY14-15 Actual	FY15-16 Adjusted Budget	FY 16-17 Adopted Budget
Water Revenues	$ 30,530,929	$ 31,406,862	$ 31,084,000	$ 31,297,342
Wastewater Revenues	34,964,993	36,022,159	35,297,000	35,797,524
Other Charges for Service	3,564,189	3,848,264	3,092,500	3,512,500
Operating Grants and Contributions	-	-	35,000	-
System Development Charges	4,396,392	4,740,567	5,545,400	3,600,000
Investment Earnings	825,045	831,429	2,810,710	443,200
Sale of Capital Assets	73,780	77,599	90,521	-
Proceeds from Bonded Debt and Premium	-	49,524,868	183,750,224	690,000
Appropriated Fund Balance	51,468	-	15,950,418	275,000
	$ 74,406,796	**$ 126,451,748**	**$ 277,655,773**	**$ 75,615,566**

CAPITAL IMPROVEMENTS PROGRAM (CIP)

The total of the approved 10 Year Capital Improvements Program is $213.1 million. The FY 16-17 Capital Improvements Budget totals $21,940,000 and the majority of the work planned for FY 16-17 is to rehabilitate or replace existing infrastructure as part of asset management and addressing aging infrastructure.

The proposed 10 Year plan is reevaluated each year and provides opportunities to revisit the priorities and progress of these criteria. The proposed FY 15-16 Capital Improvements Budget and the proposed 10 Year CIP were built around the following criteria.

All projects were required to meet the following criteria to qualify for consideration:

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

The FY 16-17 CIP will be funded with a combination of proceeds from future revenue bonds and with cash (Pay-Go) funding as recommended in the FY 16-17 Budget.

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, 2015. The Authority has received this prestigious award for four years. In order 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 16-17 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 CFPUA to meet the short and long-term needs of the people we serve. A clear and transparent track record of responsibly employing our funding to the betterment of our customers and community has been established, and I am confident CFPUA will continue on this path in FY 16-17.

Respectfully submitted,

James R. Flechtner, P.E.
Executive Director

Patricia O. Kusek
Chair

James Brumit
Vice Chair

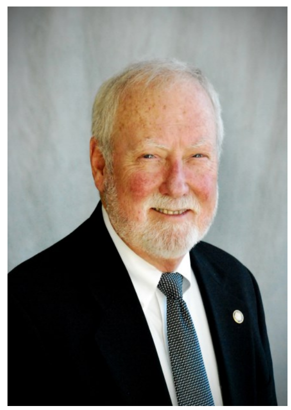
Michael C. Brown III
Secretary

C. Lawrence Sneeden, Jr.
Treasurer

Cape Fear Public Utility Authority Board Members

William A. Norris
Member

Kevin O'Grady
Councilman



James L. Quinn III
Member

Charles Rivenbark
Councilman

Woody White
Commissioner

Cindee Wolf
Member

Rob Zapple
Commissioner

Other Principal Officials

James R. Flechtner, PE
Executive Director

Melinda Hoggard, CPA
Interim Chief Financial Officer

GOVERNMENT FINANCE OFFICERS ASSOCIATION

Distinguished Budget Presentation Award

PRESENTED TO

Cape Fear Public Utility Authority

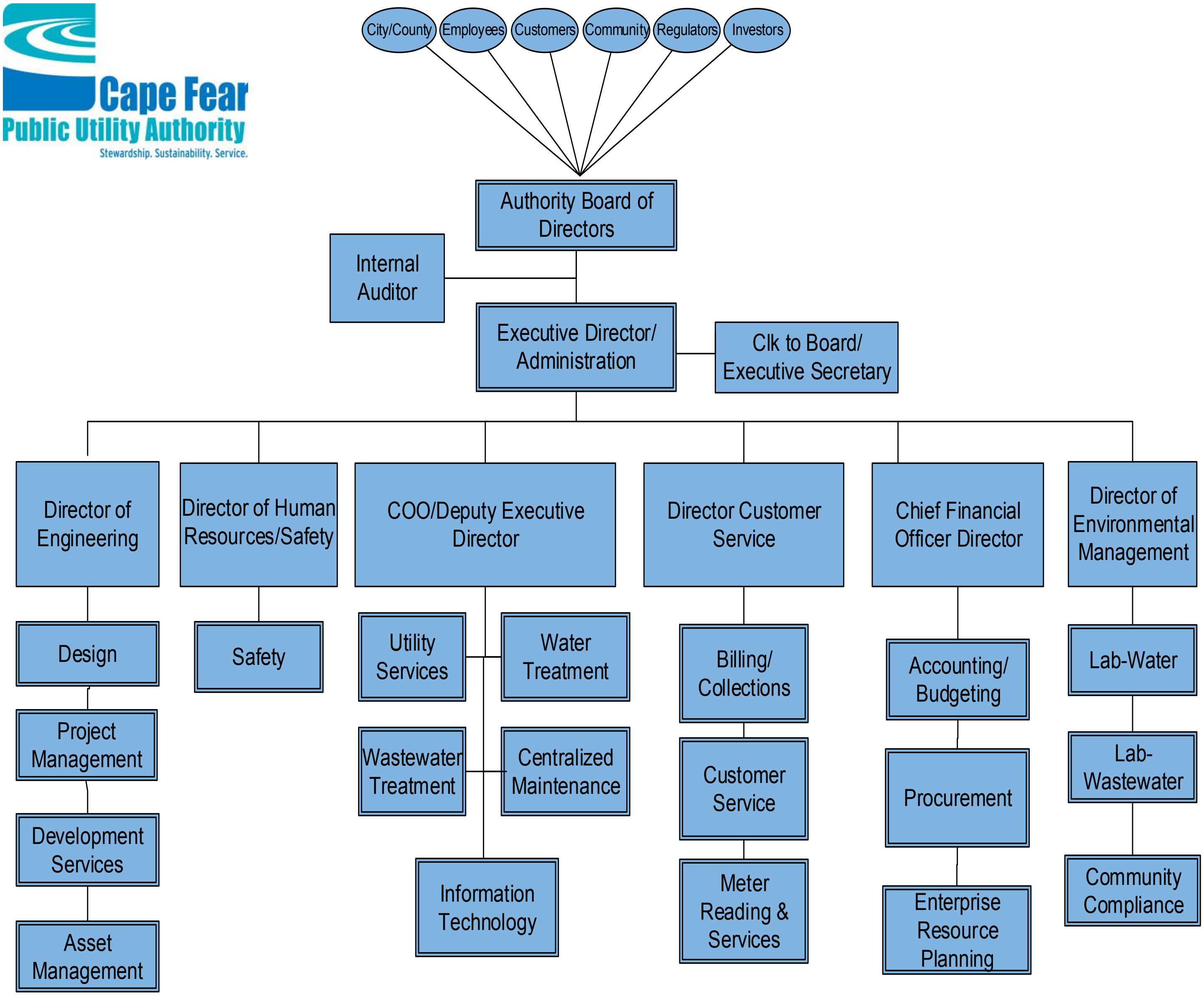
North Carolina

For the Fiscal Year Beginning

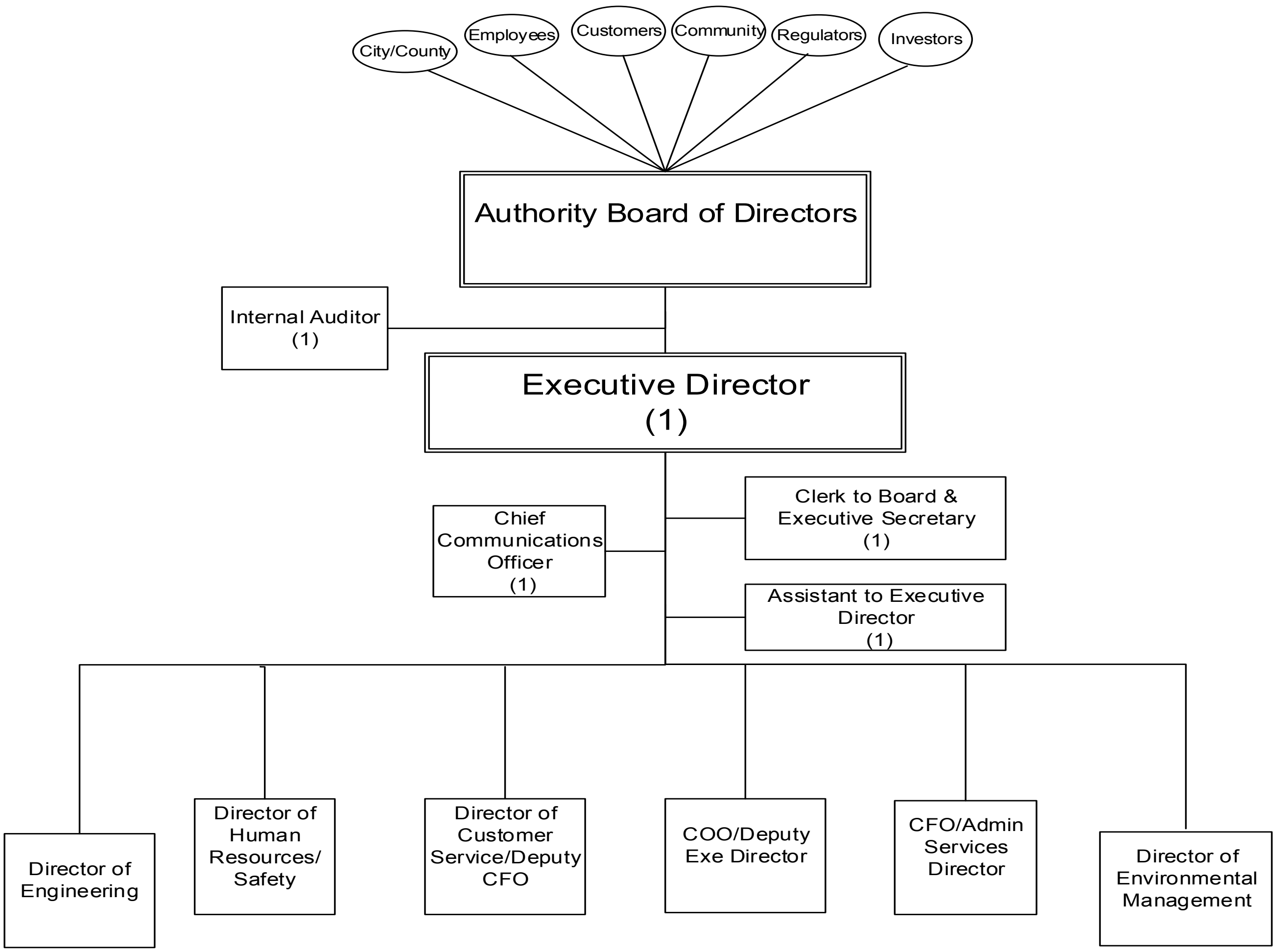
July 1, 2015

Executive Director

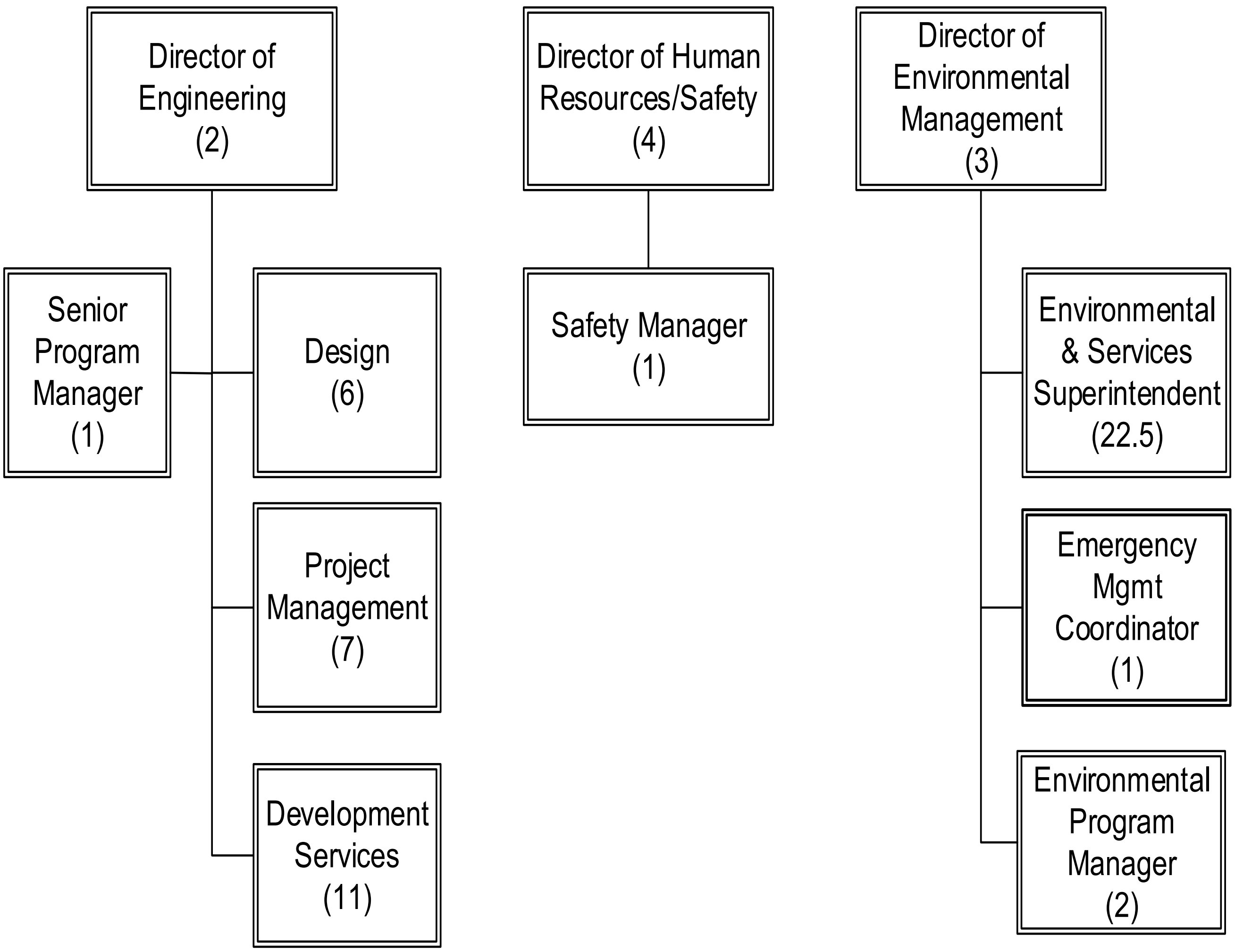
TAB INSERT: FINANCIAL STRUCTURE, POLICY & PROCESS


City/County
Employees
Customers
Community
Regulators
Investors
Authority Board of Directors
Internal Auditor
Executive Director/ Administration
Clk to Board/ Executive Secretary
Director of Engineering
Director of Human Resources/Safety
COO/Deputy Executive Director
Director Customer Service
Chief Financial Officer Director
Director of Environmental Management
Design
Project Management
Development Services
Asset Management
Safety
Utility Services
Water Treatment
Wastewater Treatment
Centralized Maintenance
Information Technology
Billing/ Collections
Customer Service
Meter Reading & Services
Accounting/ Budgeting
Procurement
Enterprise Resource Planning
Lab-Water
Lab-Wastewater
Community Compliance

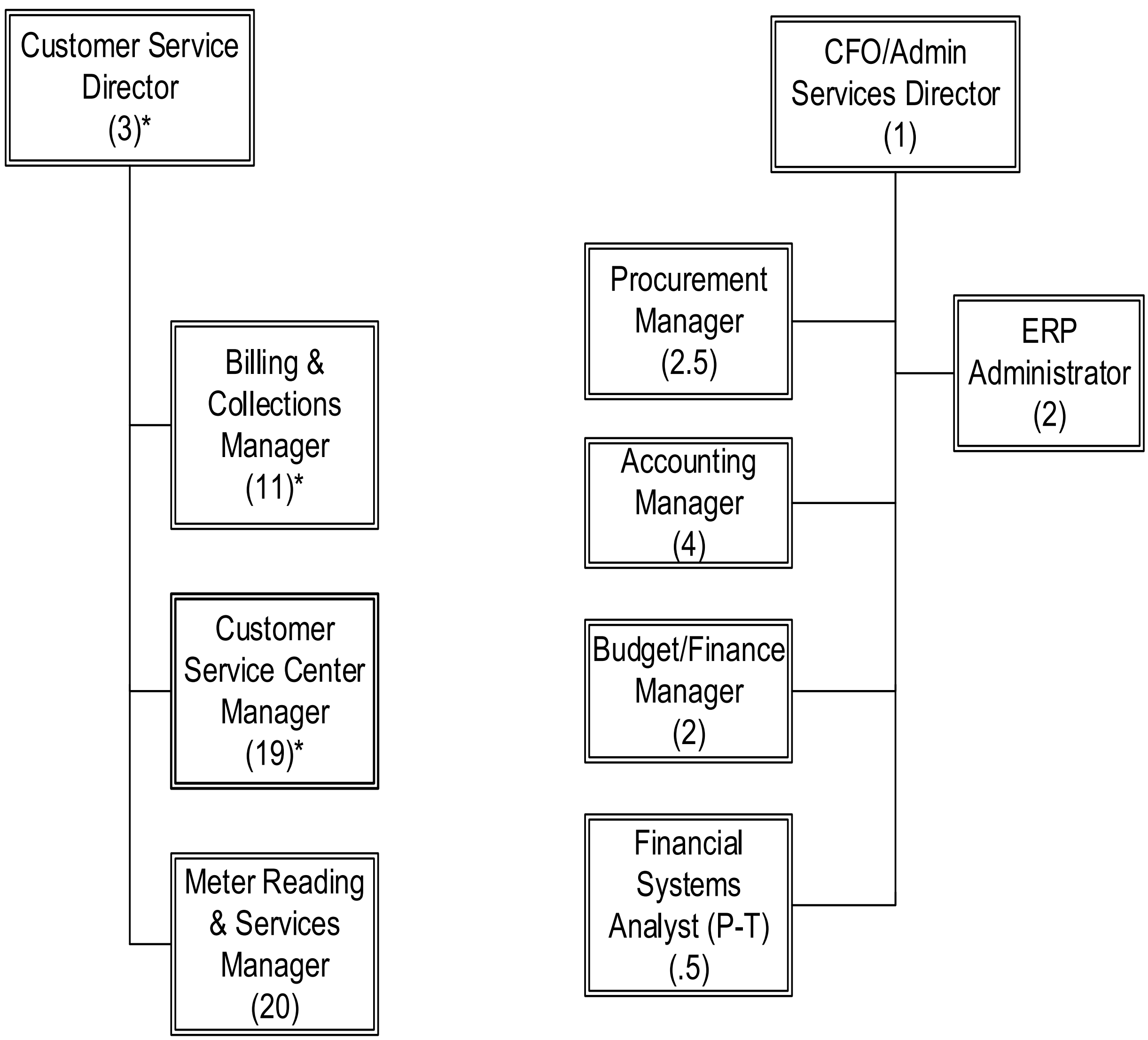
ADMINISTRATION
DIRECT REPORTS



ENGINEERING, HUMAN RESOURCES/ SAFETY, ENVIRONMENTAL MANAGEMENT DIRECT REPORTS

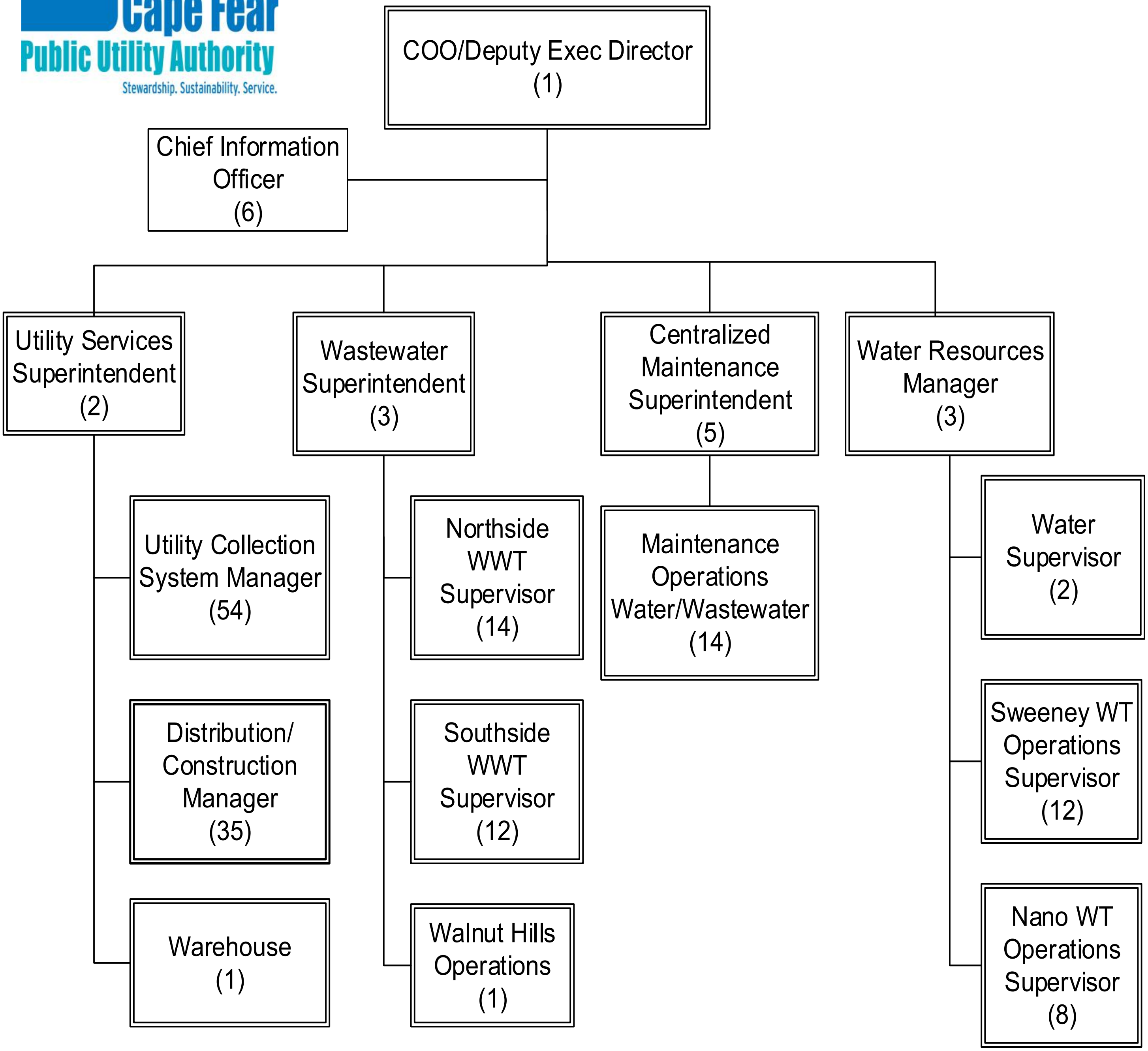


FINANCE, ERP,
CUSTOMER SERVICE
DIRECT REPORTS



*Includes 3 Back Fill positions for ERP

OPERATIONS
DIRECT REPORTS



Cape Fear
Public Utility Authority
Stewardship. Sustainability. Service.

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CAPE FEAR PUBLIC UTILITY AUTHORITY
FINANCIAL STRUCTURE

Fund Description and Fund Structure

The Authority uses fund accounting to account for its financial resources and report the results of its operations. In fund accounting, accounts are organized on the basis of funds, each of which is considered an independent fiscal entity with a separate set of self-balancing accounts comprising of assets, liabilities, fund balance, revenues and expenditures. The establishment of discrete funds is beneficial in ensuring that public monies are only spent for approved and legitimate purposes.

The Authority accounts for its operations as a Proprietary Fund. The Proprietary Fund type is an Enterprise Fund which accounts for operations which are managed in a manner similar to private business, where the intent of the governing body is that the costs of providing goods and services to the general public on a continuing basis be financed or recovered primarily through user charges.

Fund/Department Relationship

ENTERPRISE FUND (Proprietary Fund Type)	
Operating Fund	**Department/Divisions**
	Authority Board
	Administration
	Finance
	Human Resources/Safety
	Engineering
	Operations - Administration/IT
	Operations - Centralized Maintenance
	Operations - Utility Services
	Operations - Wastewater Treatment
	Operations - Water Treatment
	Environment Management
	Customer Service/Meter Services
System Development Funds	**Funds**
	Wastewater
	Water
Capital Projects Funds	**Funds**
	System-Wide
	Wastewater
	Water

Basis of Budgeting

The Authority uses the modified accrual basis of accounting for budgetary purposes for the Operating and System Development Funds as required by NC General Statute 159-26(c). The modified accrual basis is a budgetary basis of accounting in which revenues are recorded when measurable and available and expenditures are recorded when the liability is incurred. The annual budget is adopted as required by NC General Statute

159-8 for the Enterprise Fund, except for the Capital Projects Funds. Capital Projects Funds are established by the adoption of a project ordinance, which establishes the budget for the life of the capital project.

The Budget Ordinance reflects inflows and outflows of economic resources that ultimately represent activities related to the Operating Fund for the respective Department/Divisions of the Authority. Other funds are presented because of the close relationship of these funds to the Operating Fund and are included in the Budget Ordinance and adopted as such. The System Development Funds account for the collection of the water and wastewater system development charges which is the upfront charge new customers will pay for investment in system capacity that will serve the customer. Annual appropriated budgets are adopted at the Function level within the Operating Fund and at the Fund level for the System Development Funds.

The Capital Projects Funds account for the system-wide, wastewater and water capital projects that are approved under the Capital Improvements Program. Project ordinances are adopted for Capital Projects Funds.

All funds are treated as a part of the Enterprise Fund in the Authority's audited financial statements and the Enterprise Fund uses the accrual basis of accounting for financial reporting purposes. On the accrual basis, revenue is recorded when earned and expenses are recorded when incurred. The primary differences between application of the accrual basis of accounting for financial reporting and the modified accrual budgetary basis of accounting are illustrated below.

Transaction Type	**Financial Reporting (Accrual)**	**Budgetary (Modified Accrual)**
Depreciation expense	*Included* as an expense	*Excluded* as an expense
Principal portion of debt service	*Excluded* as an expense	*Included* as an expense
Compensated absences	*Included* as an expense	*Excluded* as an expense
Capital Outlay	*Excluded* as an expense	*Included* as an expense

CAPE FEAR PUBLIC UTILITY AUTHORITY
FINANCIAL POLICIES

The Authority's mission is to provide high quality water and wastewater services to its customers. The Authority is empowered to set rates, fees and charges without oversight, supervision, or direction from any other state or local entity or agency; therefore the Authority's operations, capital improvement program and debt payments are funded almost entirely through rates, fees and other charges for these water and wastewater services. The financial policies and statements of the Authority have been prepared in conformity with accounting principles generally accepted in the United States of America as applied to governmental units. The Governmental Accounting Standards Board ("GASB") is the accepted standard-setting body for establishing accounting and financial reporting principles. The more significant of the Authority's financial policies are described below. The Authority is in compliance with all financial policies.

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.

Revenues

- The Authority sets rates and charges in accordance with North Carolina General Statute 162A-9 and annually sets rates and charges at levels sufficient to; pay cost of maintaining, repairing and operating the system; pay principal and interest on all bond issues of the Authority; and, meet the rate covenant requirements with the Authority's Master Bond Indenture.

- The CFO develops a five-year revenue forecast for water and wastewater operations that is based on conservative estimates of growth in customers and usage.

Investments

- The Authority is empowered to invest in types of securities in accordance with North Carolina General Statute 159-30 (c).

- The CFO shall prepare a quarterly investment report for the Authority's Finance Committee to include the composition by investment type, amount invested and weighted average portfolio maturity and yield.

- 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 Authority shall utilize a third party custodial agent for book entry transactions, all of which shall be held in the Authority's name. The custodial agent shall be a trust department authorized to do trust work in North Carolina who has an account with the Federal Reserve. Certificated securities shall be in the custody of the CFO.

- 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.

Procurement

- The Authority can engage in contracts for construction, repair work, purchase of apparatus, materials, equipment or professional services in accordance with North Carolina General Statute 143-129 and the Authority's Purchasing Policy.

Capital Assets and Capitalized Interest

- Capital assets are defined by the Authority as assets with an initial, individual cost of more than $5,000 and estimated useful life in excess of one year.

- The Authority capitalizes interest on tax exempt debt issued to finance major construction activities under the Capital Improvements Program.

Capital Improvements Program

- The Authority prepares and adopts a ten-year Capital Improvements Program which is updated annually.

- The purpose of the Capital Improvements Program is to ensure that the Authority invests in its infrastructure in a logical and strategic manner and to serve as a central source of information on all planned construction for residents, agencies and other interest groups.

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 integrates its debt issuance with its Capital Improvements Program spending.

- The Authority complies with all covenants and requirements of its Master Bond Indenture.

    - ❖ Maintain a reserve amount sufficient to pay the current expenses for two months of the fiscal year as shown in the annual budget.

- ❖ Rate covenants: 1) Maintain debt service coverage ratio of 1.2 on the Authority's parity indebtedness, 2) Maintain debt service coverage ratio of 1.0 on the Authority's total indebtedness.
- ❖ In order to issue additional bonds, the Authority must maintain debt service coverage ratio of 1.2 on the Authority's total indebtedness for 12 consecutive months of 18 months preceding the issuance of new bonded debt.

Risk Management

- The Authority is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. The Authority has chosen to establish a risk financing fund for risks associated with the employee's health insurance program and workers' compensation coverage. The Authority carries commercial coverage for all other risks of loss including property and general liability coverage.

Corporate Governance

- The Authority expects management to adhere to the following guiding principles:

  - ❖ Transparency of financial conditions and operations;
  - ❖ Transparency of transactions with interested parties with no improper benefits at the expense of the organization; and
  - ❖ Access to sound counsel unaffected by conflict of interest.

- The external auditors report to the Finance Committee:

  - ❖ All critical accounting policies and practices used by the Authority that have been discussed with management;
  - ❖ All alternative treatments of financial information, ramifications of such use and the treatment preferred by the certified public accounting firm;
  - ❖ Other material written communication between the certified public accounting firm and management, such as the management letter or schedule of unadjusted differences.

CAPE FEAR PUBLIC UTILITY AUTHORITY
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 the Board approved Standard Operating Procedures on Finance and Accounting Policies, Section 5.0, Budget Policy (SOP-FIN1000.442).

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 moves forward and is a primary communication tool of the budget process. The Finance Department holds a Budget Kick-off Meeting in order to communicate with departments the instructions for each annual budget process, to help ensure the budget is prepared in a manner consistent with Authority policies and review items that may be new to each budget year. The departments are provided with budget instructions, forms and training material vital to the current budget year.

A budget calendar is included in the NC General Statute 159-8 which prescribes the last day on which certain steps of the budget procedures are to be performed. The following schedule lists the tasks to be performed and the date by which each is required to be completed. The Authority's FY 16-17 budget calendar is presented on the following page. The budget process began in August 2015.

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.

Other highlights of the Authority's Finance and Accounting Policies Budget Policy include:

- The Authority operates under an annual budget with a fiscal year period of July 1 through June 30.
- 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.
- The budget shall include only estimated revenues reasonably expected to be realized in the budget year.
- Legally available fund balance (Appropriated Fund Balance) can be used in balancing the annual budget when sufficient funds are available. To ensure compliance with revenue bond rate covenants, appropriated fund balance is used for one-time expenditures.
- Except as restricted by law, the Authority Board may amend the budget ordinance, according to the Budget Amendment and Transfer Policy of the Authority, 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.

CAPE FEAR PUBLIC UTILITY AUTHORITY
BUDGET PROCESS

The following procedures are used to amend the budget as provided in the approved Budget Amendment and Transfer Policy (SOP-FIN1100.442):

- May transfer funds between expenditure line items within the same department. Requires Department Head, or designee, approval.

- May make transfers between departments that do not alter the budget at the level shown in the budget ordinance. Requires Executive Director, or Executive Director's designee, approval.

- The Authority Board must approve all budget amendments that alter the budget at the level shown in the budget ordinance.

CAPE FEAR PUBLIC UTILITY AUTHORITY
BUDGET CALENDAR
FY 2016-2017

Day/Date/Time	Event	Group
Thursday, August 27, 2015 through Thursday, October 1, 2015	Multi Departmental CIP Team Develops Draft Four-Year CIP and identifies Ten-Year needs	Multi Departmental CIP Team
Thursday, October 1, 2015 through Monday, November 2, 2015	Prepare Draft Ten-year CIP	Engineering
Monday, November 2, 2015 through Saturday, November 13, 2015	Multi Departmental CIP Team Reviews Draft Ten-Year CIP	Multi Departmental CIP Team
Thursday, December 17, 2015	FY17 CIP Draft Budget to LRPC	Engineering/LRPC
Wednesday, January 06, 2016 9:00 am IT Conference Room	Regular Finance Committee Meeting - Budget Calendar	Finance Committee
Tuesday, January 12, 2016 9:00-10:00 am IT Conference Room	Budget Kickoff Meeting	CFPUA Staff
Monday, January 11, 2016 10:00-11:00 am IT Conference Room	Budget Training Sessions as Needed - Budget Forms Available to Departments	CFPUA Staff
Wednesday, January 13, 2016 9:00 am NHC-Harrell Room	Regular Board Meeting - Class & Comp Study Presentation - Budget Calendar	Authority Board Human Resources
Wednesday, January 13, 2016 Following Regular Board Meeting	FY17 CIP Board Work Session	Engineering/Authority Board
Thursday, January 28, 2016	FY17 CIP Approval by LRPC	Engineering/LRPC
Wednesday, February 03, 2016 9:00 am IT Conference Room	Regular Finance Committee Meeting	Finance Committee
Wednesday, February 10, 2016 9:00 am NHC-Harrell Room	Regular Board Meeting - FY17 CIP Recommended for Approval	Authority Board
Friday, February 12, 2016	New Position Requests due to HR	Human Resources
Monday, February 15, 2016	Departmental Budgets Submitted to Finance by 5:00 pm Fee Schedule Review Submitted to Finance by 5:00 pm	CFPUA Staff CFPUA Staff
Friday, February 26, 2016	Performance Evaluations Due to HR Departmental Budget Reviews	Human Resources ED/Finance
Monday, February 29, 2016 Tuesday, March 01, 2016	Departmental Budget Reviews Departmental Budget Reviews	ED/Finance ED/Finance
Tuesday, March 01, 2016	Employee Group and Business Insurance Estimates Due	HR
Wednesday, March 02, 2016 9:00 am IT Conference Room	Regular Finance Committee Meeting	Finance Committee
Wednesday, March 09, 2016 9:00 am NHC-Harrell Room	Regular Board Meeting - FY17 CIP Recommended for Approval	Authority Board

CAPE FEAR PUBLIC UTILITY AUTHORITY
BUDGET CALENDAR
FY 2016-2017

Day/Date/Time	Event	Group
Wednesday, April 06, 2016 9:00 am IT Conference Room	Regular Finance Committee Meeting - Preliminary Rate Review - Preliminary Budget Review	Finance Committee
Wednesday, April 13, 2016 9:00 am NHC-Harrell Room	Regular Board Meeting - Preliminary Rate Review - Preliminary Budget Review	Authority Board
Wednesday, April 20, 2016 9:00 am IT Conference Room	Bi-monthly Finance Committee Meeting (OPTIONAL) - Preliminary Rate Review Continued - Preliminary Budget Review Continued	Finance Committee
Wednesday, April 27, 2016	Recommended Budget Completed	CFPUA Staff
Wednesday, May 04, 2016 9:00 am IT Conference Room	Regular Finance Committee Meeting - Preliminary Rate Review Continued - Recommended Budget Submitted	Finance Committee
Wednesday, May 11, 2016 9:00 am NHC-Harrell Room	Regular Board Meeting - Preliminary Rate Review Continued - Recommended Budget Submitted	Authority Board
Wednesday, May 18, 2016 9:00 am IT Conference Room	Budget Workshop	Authority Board
Wednesday, June 01, 2016 9:00 am IT Conference Room	Regular Finance Committee Meeting - Budget Adoption Submitted (including rates)	Finance Committee
Wednesday, June 08, 2016 9:00 am NHC-Harrell Room	Regular Board Meeting/Public Hearing - Budget Adoption Submitted (including rates)	Authority Board/Public Hearing

Cape Fear
Public Utility Authority
Stewardship. Sustainability. Service.

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TAB INSERT: FINANCIAL SUMMARIES

CAPE FEAR PUBLIC UTILITY AUTHORITY
FY 16-17

STATEMENT OF REVENUES, EXPENDITURES AND CHANGES IN FUND BALANCE
(Budgetary Basis)

	CFPUA FY 13-14 Adjusted Budget	CFPUA FY13-14 Actual	CFPUA FY 14-15 Adjusted Budget	CFPUA FY 14-15 Actual	CFPUA FY 15-16 Adopted Budget	CFPUA FY 15-16 Amendments & Transfers	CFPUA FY 15-16 Adjusted Budget	CFPUA FY 15-16 Projected (Note 1)	CFPUA FY 16-17 Adopted Budget
REVENUES AND OTHER FINANCING SOURCES									
Operating Revenues									
Water Revenues	$ 29,794,000	$ 30,530,929	$ 29,165,000	$ 31,406,862	$ 31,067,000	$ 17,000	$ 31,084,000	$ 32,516,398	$ 31,297,342
Wastewater Revenues	34,739,000	34,964,993	33,939,000	36,022,159	35,280,000	17,000	35,297,000	37,020,267	35,797,524
Other Charges for Service	2,608,200	3,564,189	3,068,000	3,847,364	3,078,200	14,300	3,092,500	3,550,886	3,512,500
Operating Grants and Contributions	-	-	-	-	-	35,000	35,000	65,652	-
Total Operating Revenues	**67,141,200**	**69,060,111**	**66,172,000**	**71,276,385**	**69,425,200**	**83,300**	**69,508,500**	**73,153,203**	**70,607,366**
Non-Operating Revenues									
System Development Charges	4,131,000	4,396,392	4,300,000	4,741,467	3,600,000	1,945,400	5,545,400	5,724,049	3,600,000
Investment Earnings	684,000	825,045	747,000	831,429	796,000	2,014,710	2,810,710	2,981,139	443,200
Total Non-Operating Revenues	**4,815,000**	**5,221,437**	**5,047,000**	**5,572,896**	**4,396,000**	**3,960,110**	**8,356,110**	**8,705,188**	**4,043,200**
Total Revenues	**71,956,200**	**74,281,548**	**71,219,000**	**76,849,281**	**73,821,200**	**4,043,410**	**77,864,610**	**81,858,391**	**74,650,566**
Other Financing Sources									
Sale of Capital Assets	73,780	73,780	64,200	77,599	-	90,521	90,521	77,052	-
Proceeds from Bonded Debt and Premium	750,000	-	49,785,703	49,524,868	750,000	183,000,224	183,750,224	183,750,224	690,000
Appropriated Fund Balance	490,224	51,468	10,237,811	-	1,500,000	14,450,418	15,950,418	-	275,000
Total Other Financing Sources	**1,314,004**	**125,248**	**60,087,714**	**49,602,467**	**2,250,000**	**197,541,163**	**199,791,163**	**183,827,276**	**965,000**
Total Revenues and Other Financing Sources	**$ 73,270,204**	**$ 74,406,796**	**$ 131,306,714**	**$ 126,451,748**	**$ 76,071,200**	**$ 201,584,573**	**$ 277,655,773**	**$ 265,685,667**	**$ 75,615,566**
EXPENDITURES AND OTHER FINANCING USES									
Operating Expenditures									
Authority Board	$ 122,382	$ 73,807	$ 77,427	$ 71,616	$ 78,291	$ (11,748)	$ 66,543	$ 57,849	$ 64,630
Administration	854,863	675,306	894,432	863,960	884,862	(3,757)	881,105	774,164	900,374
Finance	833,586	786,454	1,083,007	883,432	1,186,405	(6,135)	1,180,270	1,036,703	1,123,074
Human Resources/Safety Management	607,119	556,768	647,282	618,901	668,983	(1,960)	667,023	630,635	638,867
Engineering	1,951,608	1,808,638	2,127,192	1,970,984	2,282,671	90,859	2,373,530	2,188,158	2,332,628
Operations - Centralized Maintenance	2,054,964	1,877,446	2,128,405	1,899,285	2,276,799	(55,664)	2,221,135	2,126,184	1,991,784
Operations - Administration/IT	1,965,012	1,765,059	1,634,160	1,595,061	1,576,944	90,133	1,667,077	1,764,685	1,768,402
Operations - Water Treatment	6,140,316	5,902,636	6,029,168	5,887,729	6,314,749	224,545	6,539,294	6,309,141	6,634,509
Operations - Wastewater Treatment	3,971,008	3,819,361	4,083,039	3,899,363	4,043,589	20,212	4,063,801	3,933,234	3,990,079
Operations - Utility Services	8,863,024	7,815,203	9,370,646	8,074,177	9,776,930	(267,445)	9,509,485	8,191,209	10,025,584
Environment Management	2,223,449	2,108,459	2,346,632	2,027,421	2,344,431	(39,432)	2,304,999	2,213,171	2,417,463
Customer Service	3,708,878	3,300,148	3,629,739	3,363,747	3,600,053	57,657	3,657,710	3,393,102	3,932,977

CAPE FEAR PUBLIC UTILITY AUTHORITY
FY 16-17

STATEMENT OF REVENUES, EXPENDITURES AND CHANGES IN FUND BALANCE (Budgetary Basis)

	CFPUA FY 13-14 Adjusted Budget	CFPUA FY13-14 Actual	CFPUA FY 14-15 Adjusted Budget	CFPUA FY 14-15 Actual	CFPUA FY 15-16 Adopted Budget	CFPUA FY 15-16 Amendments & Transfers	CFPUA FY 15-16 Adjusted Budget	CFPUA FY 15-16 Projected (Note 1)	CFPUA FY 16-17 Adopted Budget
Computer Replacement Program	-	-	85,100	68,496	-	-	-	-	76,000
Damage Claims	-	-	22,385	21,754	50,000	9,550	59,550	3,129	50,000
Outside Partnerships	-	-	75,015	74,037	82,839	-	82,839	78,490	76,650
Non-Capital Construction	-	-	255,000	236,188	220,000	65,000	285,000	76,870	415,000
Fines and Penalties	-	-	19,100	35	26,000	-	26,000	-	26,000
Scada Program	-	-	-	-	137,800	(29,000)	108,800	-	108,800
Capital Outlay	-	-	553,801	508,638	359,500	166,485	525,985	377,295	387,706
Nondepartmental	**2,134,080**	**2,072,341**	**2,244,300**	**1,993,605**	**2,154,500**	**244,000**	**2,398,500**	**2,018,938**	**2,221,260**
Litigation Settlement	-	-	-	-	-	**871,000**	**871,000**	**870,609**	-
Contingency-Operating	**638,306**	-	**348,182**	-	**800,000**	**(328,000)**	**472,000**	-	**953,000**
Contingency-Budget Reserve	**268,643**	-	-	-	-	-	-	-	-
Total Operating Expenditures Before Debt Service	**36,337,238**	**32,561,626**	**37,654,012**	**34,058,429**	**38,865,346**	**1,096,300**	**39,961,646**	**36,043,566**	**40,134,787**
Debt Service, Net	**28,596,752**	**26,571,851**	**27,951,899**	**26,190,598**	**23,559,921**	**10,593,772**	**34,153,693**	**33,469,200**	**24,260,053**
Other Financing Uses									
Debt Issuance Cost	750,000	-	750,000	619,539	750,000	716,100	1,466,100	1,466,100	690,000
Payment to Refunded Bond Escrow Agent	-	-	49,035,703	49,035,703	-	187,785,880	187,785,880	187,785,880	-
Transfers to Capital Project Funds	7,586,214	7,586,214	15,915,100	15,915,100	12,895,933	1,392,521	14,288,454	14,288,454	10,530,726
Total Other Financing Uses	**8,336,214**	**7,586,214**	**65,700,803**	**65,570,342**	**13,645,933**	**189,894,501**	**203,540,434**	**203,540,434**	**11,220,726**
Total Expenditures and Other Financing Uses	**$ 73,270,204**	**$ 66,719,691**	**$ 131,306,714**	**$ 125,819,369**	**$ 76,071,200**	**$ 201,584,573**	**$ 277,655,773**	**$ 273,053,200**	**$ 75,615,566**
Revenues and Other Sources Over Expenditures and Other Financing Uses	-	**7,687,105**	-	**632,379**	-	-	-	**(7,367,533)**	-
Fund Balance Beginning Balance (Note 3)	**27,660,785**	**27,660,785**	**35,347,890**	**34,585,160**	**35,217,539**	-	**35,217,539**	**35,217,539**	**35,217,539**
Fund Balance Ending Balance (Note 3)	**$ 27,660,785**	**$ 35,347,890**	**$ 35,347,890**	**$ 35,217,539**	**$ 35,217,539**	**$ -**	**$ 35,217,539**	**$ 27,850,006**	**$ 35,217,539**
Percent Change in Fund Balance	**0.00%**	**27.79%**	**0.00%**	**1.83%**	**0.00%**	**0.00%**	**0.00%**	**-20.92%**	**0.00%**

Note 1: FY 2016 Projected is based on estimates by the Finance Department using actual financial data as of May 31,2016.

Note 2: For bugetary purposes, the Enterprise Fund is shown in this schedule on the modified accrual basis. The values for fund balance will differ from the change of net assets reported in the financial statements using the full accrual basis for Generally Accepted Accounting Principles (GAAP) purposes due to accounting adjustments that are required to bring the modified accrual basis to the full accrual basis required by GAAP.

Note 3: Changes in Fund Balances resulted from Actual Operating Revenues greater thatn and expenditures less than adjusted budgets for both FY14 and FY15 and FY16.

EXPENDITURES SUMMARY BY DEPARTMENT AND CATEGORY

	CFPUA FY 13-14 Adjusted Budget	CFPUA FY 13-14 Actual	CFPUA FY 14-15 Adjusted Budget	CFPUA FY 14-15 Actual	CFPUA FY 15-16 Adopted Budget	CFPUA FY 15-16 Amendments & Transfers	CFPUA FY 15-16 Adjusted Budget	CFPUA FY 16-17 Adopted Budget	% Change FY 16-17 Adopted/FY 15-16 Adopted
EXPENDITURES BY DEPARTMENT									
Authority Board	$ 122,382	$ 73,807	$ 77,427	$ 71,616	$ 78,291	$ (11,748)	$ 66,543	$ 64,630	-17.45%
Administration	854,863	675,306	894,432	863,960	884,862	(3,757)	881,105	900,374	1.75%
Finance	833,586	786,454	1,083,007	883,432	1,186,405	(6,135)	1,180,270	1,123,074	-5.34%
Human Reseources/Safety Management	607,119	556,768	647,282	618,901	668,983	(1,960)	667,023	638,867	-4.50%
Engineering	1,951,608	1,808,638	2,127,192	1,970,984	2,282,671	90,859	2,373,530	2,332,628	2.19%
Operations - Centralized Maintenance	2,054,964	1,877,446	2,128,405	1,899,285	2,276,799	(55,664)	2,221,135	1,991,784	-12.52%
Operations - Administration/IT	1,965,012	1,765,059	1,634,160	1,595,061	1,576,944	90,133	1,667,077	1,768,402	12.14%
Operations - Water Treatment	6,140,316	5,902,636	6,029,168	5,887,729	6,314,749	224,545	6,539,294	6,634,509	5.06%
Operations - Wastewater Treatment	3,971,008	3,819,361	4,083,039	3,899,363	4,043,589	20,212	4,063,801	3,990,079	-1.32%
Operations - Utility Services	8,863,024	7,815,203	9,370,646	8,074,177	9,776,930	(267,445)	9,509,485	10,025,584	2.54%
Environment Management	2,223,449	2,108,459	2,346,632	2,027,421	2,344,431	(39,432)	2,304,999	2,417,463	3.12%
Customer Service	3,708,878	3,300,148	3,629,739	3,363,747	3,600,053	57,657	3,657,710	3,932,977	9.25%
Computer Replacement Program	-	-	85,100	68,496	-	-	-	76,000	0.00%
Damage Claims	-	-	22,385	21,754	50,000	9,550	59,550	50,000	0.00%
Outside Partnerships	-	-	75,015	74,037	82,839	-	82,839	76,650	-7.47%
Non-Capital Construction	-	-	255,000	236,188	220,000	65,000	285,000	415,000	88.64%
Fines and Penalties	-	-	19,100	35	26,000	-	26,000	26,000	0.00%
Scada Program	-	-	-	-	137,800	(29,000)	108,800	108,800	-21.04%
Capital Outlay	-	-	553,801	508,638	359,500	166,485	525,985	387,706	7.85%
Nondepartmental	2,134,080	2,072,341	2,244,300	1,993,605	2,154,500	244,000	2,398,500	2,221,260	3.10%
Debt Service, Net	28,596,752	26,571,851	27,951,899	26,190,598	23,559,921	10,593,772	34,153,693	24,260,053	2.97%
Debt Issuance Cost	750,000	-	750,000	619,539	750,000	716,100	1,466,100	690,000	-8.00%
Payment to Refunded Bond Escrow Agent	-	-	49,035,703	49,035,703	-	187,785,880	187,785,880	-	0.00%
Litigation Settlement	-	-	-	-	-	871,000	871,000	-	0.00%
Contingency-Operating	638,306	-	348,182	-	800,000	(328,000)	472,000	953,000	19.13%
Contingency-Budget Reserve	268,643	-	-	-	-	-	-	-	0.00%
Transfers to Capital Projects	7,586,214	7,586,214	15,915,100	15,915,100	12,895,933	1,392,521	14,288,454	10,530,726	-18.34%
TOTAL	**$ 73,270,204**	**$ 66,719,691**	**$ 131,306,714**	**$ 125,819,369**	**$ 76,071,200**	**$ 201,584,573**	**$ 277,655,773**	**$ 75,615,566**	-0.60%
EXPENDITURES BY CATEGORY									
Personnel	$ 13,830,805	$ 13,167,610	$ 14,245,858	$ 13,593,964	$ 14,713,643	$ 137,029	$ 14,850,672	$ 15,260,887	3.72%
Benefits	4,825,999	4,512,970	5,276,822	4,984,271	5,310,942	44,453	5,355,395	5,303,553	-0.14%
Operating	14,272,969	12,506,337	14,528,449	12,577,441	15,010,122	(84,217)	14,925,905	15,255,931	1.64%
Computer Replacement Program	-	-	85,100	68,496	-	-	-	76,000	0.00%
Damage Claims	-	-	22,385	21,754	50,000	9,550	59,550	50,000	0.00%
Outside Partnerships	-	-	75,015	74,037	82,839	-	82,839	76,650	-7.47%
Non-Capital Construction	-	-	255,000	236,188	220,000	65,000	285,000	415,000	88.64%
Fines and Penalties	-	-	19,100	35	26,000	-	26,000	26,000	0.00%
Scada Program	-	-	-	-	137,800	(29,000)	108,800	108,800	-21.04%
Capital Outlay	366,436	302,368	553,801	508,638	359,500	166,485	525,985	387,706	7.85%
Nondepartmental	2,134,080	2,072,341	2,244,300	1,993,605	2,154,500	244,000	2,398,500	2,221,260	3.10%
Debt Service, Net	28,596,752	26,571,851	27,951,899	26,190,598	23,559,921	10,593,772	34,153,693	24,260,053	2.97%
Debt Issuance Cost	750,000	-	750,000	619,539	750,000	716,100	1,466,100	690,000	-8.00%
Payment to Refunded Bond Escrow Agent	-	-	49,035,703	49,035,703	-	187,785,880	187,785,880	-	0.00%
Litigation Settlement	-	-	-	-	-	871,000	871,000	-	0.00%
Contingency-Operating	638,306	-	348,182	-	800,000	(328,000)	472,000	953,000	19.13%
Contingency-Budget Reserve	268,643	-	-	-	-	-	-	-	0.00%
Transfers to Capital Projects	7,586,214	7,586,214	15,915,100	15,915,100	12,895,933	1,392,521	14,288,454	10,530,726	-18.34%
TOTAL	**$ 73,270,204**	**$ 66,719,691**	**$ 131,306,714**	**$ 125,819,369**	**$ 76,071,200**	**$ 201,584,573**	**$ 277,655,773**	**$ 75,615,566**	-0.60%

CAPE FEAR PUBLIC UTILITY AUTHORITY
FY 16-17

EXPENDITURES DETAIL BY DEPARTMENT

	CFPUA FY 13-14 Adjusted Budget	CFPUA FY 13-14 Actual	CFPUA FY 14-15 Adjusted Budget	CFPUA FY 14-15 Actual	CFPUA FY 15-16 Adopted Budget	CFPUA FY 15-16 Amendments & Transfers	CFPUA FY 15-16 Adjusted Budget	CFPUA FY 16-17 Adopted Budget	% Change FY 16-17 Adopted/FY 15-16 Adopted
Authority Board									
Personnel	$ 28,100	$ 27,500	$ 39,603	$ 39,600	$ 39,603	$ (3)	$ 39,600	$ 39,600	-0.01%
Benefits	2,019	2,104	3,036	3,035	3,162	(117)	3,045	3,032	-4.11%
Operating	92,263	44,203	34,788	28,981	35,526	(11,628)	23,898	21,998	-38.08%
Total Authority Board	**122,382**	**73,807**	**77,427**	**71,616**	**78,291**	**(11,748)**	**66,543**	**64,630**	-2.65%
Administration									
Personnel	411,257	353,131	449,647	446,961	460,573	-	460,573	471,676	2.41%
Benefits	115,506	92,105	125,285	124,617	134,389	(3,257)	131,132	135,137	0.56%
Operating	328,100	230,070	319,500	292,382	289,900	(500)	289,400	293,561	1.26%
Total Administration	**854,863**	**675,306**	**894,432**	**863,960**	**884,862**	**(3,757)**	**881,105**	**900,374**	2.13%
Finance									
Personnel	599,093	592,573	711,519	640,026	834,062	465	834,527	799,535	-4.14%
Benefits	201,647	172,906	319,850	200,198	307,620	(4,797)	302,823	258,339	-16.02%
Operating	32,846	20,975	51,638	43,208	44,723	(1,803)	42,920	65,200	45.79%
Total Finance	**833,586**	**786,454**	**1,083,007**	**883,432**	**1,186,405**	**(6,135)**	**1,180,270**	**1,123,074**	-29.81%
Human Resources/Safety Management									
Personnel	337,293	336,302	352,880	351,904	366,208	(8,923)	357,285	391,810	6.99%
Benefits	103,303	102,639	112,602	114,072	116,703	(3,018)	113,685	104,497	-10.46%
Operating	166,523	117,827	181,800	152,925	186,072	9,981	196,053	142,560	-23.38%
Total Human Resources/Safety Management	**607,119**	**556,768**	**647,282**	**618,901**	**668,983**	**(1,960)**	**667,023**	**638,867**	4.27%
Engineering									
Personnel	1,368,334	1,311,329	1,511,202	1,418,889	1,622,560	93,075	1,715,635	1,718,387	5.91%
Benefits	455,089	401,454	503,800	461,292	529,203	18,074	547,277	526,680	-0.48%
Operating	128,185	95,855	112,190	90,803	130,908	(20,290)	110,618	87,561	-33.11%
Total Engineering	**1,951,608**	**1,808,638**	**2,127,192**	**1,970,984**	**2,282,671**	**90,859**	**2,373,530**	**2,332,628**	10.04%
Operations - Centralized Maintenance									
Personnel	827,785	804,052	858,590	836,601	878,808	(57)	878,751	891,092	1.40%
Benefits	289,234	282,649	317,292	308,897	315,642	2,671	318,313	322,148	2.06%
Operating	930,345	784,896	952,523	753,787	1,082,349	(58,278)	1,024,071	778,544	-28.07%
Capital Outlay	7,600	5,849	-	-	-	-	-	-	0.00%
Total Operations - Centralized Maintenance	**2,054,964**	**1,877,446**	**2,128,405**	**1,899,285**	**2,276,799**	**(55,664)**	**2,221,135**	**1,991,784**	4.91%
Operations - Administration/IT									
Personnel	808,372	782,162	752,451	734,780	695,080	(3,602)	691,478	724,223	4.19%
Benefits	229,944	222,335	218,854	214,017	200,369	(708)	199,661	222,446	11.02%
Operating	862,408	696,274	662,855	646,264	681,495	94,443	775,938	821,733	20.58%
Capital Outlay	64,288	64,288	-	-	-	-	-	-	0.00%
Total Operations - Administration/IT	**1,965,012**	**1,765,059**	**1,634,160**	**1,595,061**	**1,576,944**	**90,133**	**1,667,077**	**1,768,402**	-7.62%
Operations - Water Treatment									
Personnel	1,150,982	1,139,145	1,155,109	1,150,269	1,189,316	29,894	1,219,210	1,260,256	5.96%
Benefits	389,977	381,828	412,981	405,036	410,614	11,001	421,615	455,402	10.91%
Operating	4,573,769	4,357,059	4,461,078	4,332,424	4,714,819	183,650	4,898,469	4,918,851	4.33%
Capital Outlay	25,588	24,604	-	-	-	-	-	-	0.00%
Total Operations - Water Treatment	**6,140,316**	**5,902,636**	**6,029,168**	**5,887,729**	**6,314,749**	**224,545**	**6,539,294**	**6,634,509**	4.63%

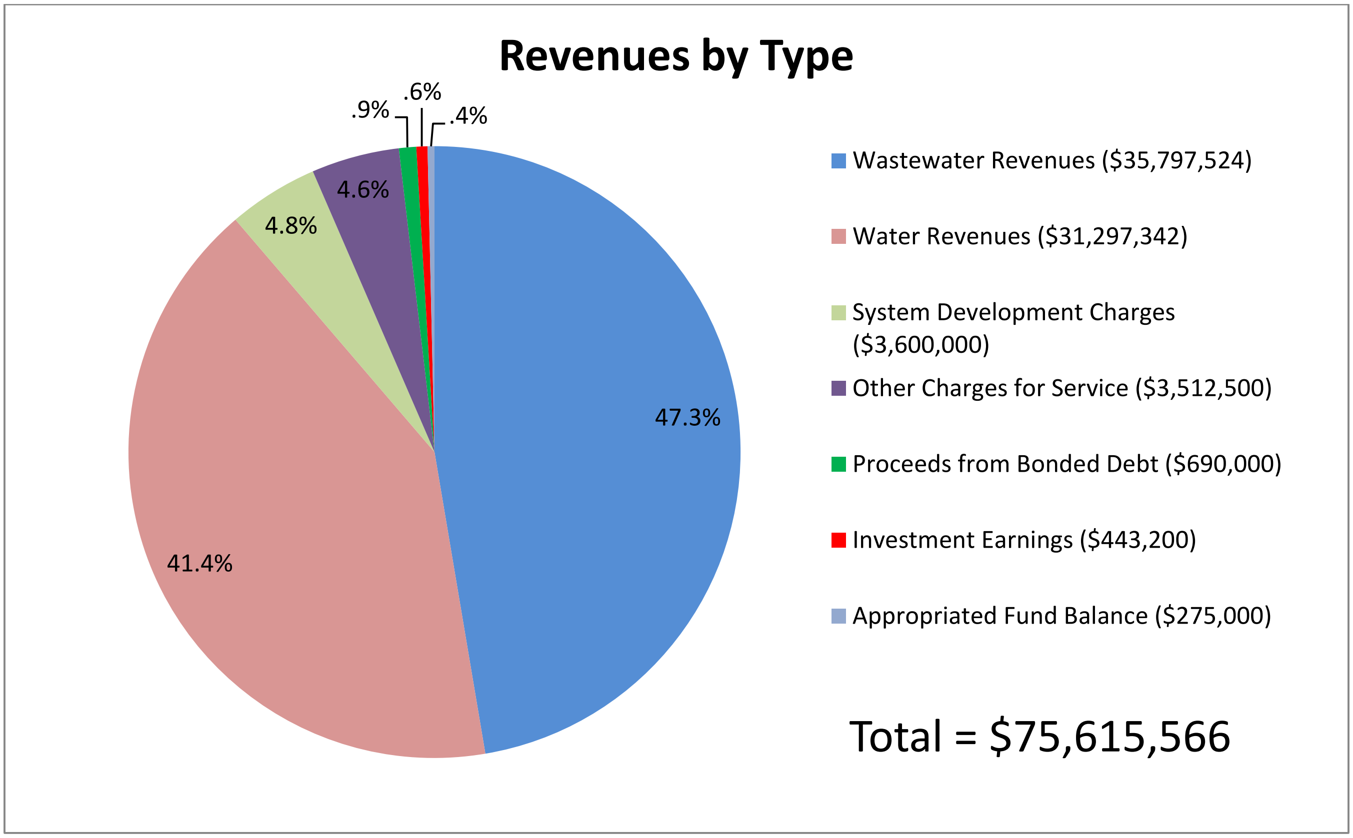
CAPE FEAR PUBLIC UTILITY AUTHORITY
FY 16-17

EXPENDITURES DETAIL BY DEPARTMENT

	CFPUA FY 13-14 Adjusted Budget	CFPUA FY 13-14 Actual	CFPUA FY 14-15 Adjusted Budget	CFPUA FY 14-15 Actual	CFPUA FY 15-16 Adopted Budget	CFPUA FY 15-16 Amendments & Transfers	CFPUA FY 15-16 Adjusted Budget	CFPUA FY 16-17 Adopted Budget	% Change FY 16-17 Adopted/FY 15-16 Adopted
Operations - Wastewater Treatment									
Personnel	$ 1,337,838	$ 1,312,069	$ 1,362,200	$ 1,394,849	$ 1,400,872	$ 1,265	$ 1,402,137	$ 1,371,226	-2.12%
Benefits	474,198	476,724	521,285	520,613	520,301	3,680	523,981	486,358	-6.52%
Operating	2,063,972	1,981,320	2,199,554	1,983,901	2,122,416	15,267	2,137,683	2,132,495	0.47%
Capital Outlay	95,000	49,248	-	-	-	-	-	-	0.00%
Total Operations - Wastewater Treatment	**3,971,008**	**3,819,361**	**4,083,039**	**3,899,363**	**4,043,589**	**20,212**	**4,063,801**	**3,990,079**	-0.48%
Operations - Utility Services									
Personnel	3,693,502	3,409,439	3,758,894	3,545,549	3,865,423	23,464	3,888,887	4,036,705	4.43%
Benefits	1,328,307	1,252,564	1,454,233	1,426,523	1,468,207	39,900	1,508,107	1,500,479	2.20%
Operating	3,713,255	3,026,276	4,157,519	3,102,105	4,443,300	(330,809)	4,112,491	4,488,400	1.02%
Capital Outlay	127,960	126,924	-	-	-	-	-	-	0.00%
Total Operations - Utility Services	**8,863,024**	**7,815,203**	**9,370,646**	**8,074,177**	**9,776,930**	**(267,445)**	**9,509,485**	**10,025,584**	5.01%
Environment Management									
Personnel	1,295,809	1,261,006	1,361,637	1,199,348	1,363,368	1,451	1,364,819	1,438,255	5.49%
Benefits	459,245	437,304	505,749	450,238	514,123	(17,006)	497,117	491,280	-4.44%
Operating	468,395	410,149	479,246	377,835	466,940	(23,877)	443,063	487,928	4.49%
Capital Outlay	-	-	-	-	-	-	-	-	0.00%
Total Environment Management	**2,223,449**	**2,108,459**	**2,346,632**	**2,027,421**	**2,344,431**	**(39,432)**	**2,304,999**	**2,417,463**	0.30%
Customer Service									
Personnel	1,972,440	1,838,902	1,932,126	1,835,188	1,997,770	-	1,997,770	2,118,122	6.02%
Benefits	777,530	688,358	781,855	755,733	790,609	(1,970)	788,639	797,755	0.90%
Operating	912,908	741,433	915,758	772,826	811,674	59,627	871,301	1,017,100	25.31%
Capital Outlay	46,000	31,455	-	-	-	-	-	-	0.00%
Total Customer Service	**3,708,878**	**3,300,148**	**3,629,739**	**3,363,747**	**3,600,053**	**57,657**	**3,657,710**	**3,932,977**	-2.59%
Computer Replacement Program	**-**	**-**	**85,100**	**68,496**	**-**	**-**	**-**	**76,000**	0.00%
Damage Claims	**-**	**-**	**22,385**	**21,754**	**50,000**	**9,550**	**59,550**	**50,000**	0.00%
Outside Partnerships	**-**	**-**	**75,015**	**74,037**	**82,839**	**-**	**82,839**	**76,650**	-7.47%
Non-Capital Construction	**-**	**-**	**255,000**	**236,188**	**220,000**	**65,000**	**285,000**	**415,000**	88.64%
Fine and Penalties	**-**	**-**	**19,100**	**35**	**26,000**	**-**	**26,000**	**26,000**	0.00%
Scada System	**-**	**-**	**-**	**-**	**137,800**	**(29,000)**	**108,800**	**108,800**	-21.04%
Capital Outlay	**-**	**-**	**553,801**	**508,638**	**359,500**	**166,485**	**525,985**	**387,706**	7.85%
TOTAL OPERATING EXPENDITURES	**33,296,209**	**30,489,285**	**35,061,530**	**32,064,824**	**35,910,846**	**309,300**	**36,220,146**	**36,960,527**	2.92%
Nondepartmental	**2,134,080**	**2,072,341**	**2,244,300**	**1,993,605**	**2,154,500**	**244,000**	**2,398,500**	**2,221,260**	3.10%
Debt Service, Net	**28,596,752**	**26,571,851**	**27,951,899**	**26,190,598**	**23,559,921**	**10,593,772**	**34,153,693**	**24,260,053**	2.97%
Debt Issuance Cost	**750,000**	**-**	**750,000**	**619,539**	**750,000**	**716,100**	**1,466,100**	**690,000**	-8.00%
Payment to Refunded Bond Escrow Agent	**-**	**-**	**49,035,703**	**49,035,703**	**-**	**187,785,880**	**187,785,880**	**-**	0.00%
Litigation Settlement	**-**	**-**	**-**	**-**	**-**	**871,000**	**871,000**	**-**	0.00%
Contingency-Operating	**638,306**	**-**	**348,182**	**-**	**800,000**	**(328,000)**	**472,000**	**953,000**	19.13%
Contingency-Budget Reserve	**268,643**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	0.00%
Transfers to Capital Projects	**7,586,214**	**7,586,214**	**15,915,100**	**15,915,100**	**12,895,933**	**1,392,521**	**14,288,454**	**10,530,726**	-18.34%
TOTAL EXPENDITURES	**$ 73,270,204**	**$ 66,719,691**	**$ 131,306,714**	**$ 125,819,369**	**$ 76,071,200**	**$ 201,584,573**	**$ 277,655,773**	**$ 75,615,566**	-0.60%

CAPE FEAR PUBLIC UTILITY AUTHORITY
REVENUES SUMMARY

The Authority is empowered to set rates, fees and charges without oversight, supervision, or direction from any other state or local entity or agency. The Authority's operations, capital improvement program and debt payments are funded almost entirely through rates, fees and other charges for these water and wastewater services, with occasional grants or loans from the state or federal governments and contributions from the City, the County or other entities.



Wastewater Revenues	$	35,797,524	47.3%
Water Revenues	$	31,297,342	41.4%
System Development Charges	$	3,600,000	4.8%
Other Charges for Service	$	3,512,500	4.6%
Proceeds from Bonded Debt	$	690,000	0.9%
Investment Earnings	$	443,200	0.6%
Appropriated Fund Balance	$	275,000	0.4%
Total	$	75,615,566	100.0%

Water and Wastewater Revenues

The majority of the Authority's revenues (88.7%) are generated by the sale of water and the collection and treatment of wastewater. As depicted above, in FY 16-17, 41.4% of total budgeted revenue is anticipated from water services and 47.3% of total budgeted revenue is anticipated from wastewater services. The existing water rates consist of 1) fixed meter charges that designate the minimum amount a customer will pay regardless of the actual amount of commodity utilized and 2) volumetric charges per 1,000 gallons based upon the amount of metered water flow. The fixed meter charges are incremented such that customers with larger water meter sizes pay a higher fixed charge. The volumetric charge utilizes a uniform rate structure such that the rate per 1,000 gallons remains constant for all levels of consumption. Similar to the water rates, the wastewater rates consist of 1) a fixed meter charge based on the size of the water meter and 2) a volumetric charge per 1,000 gallons based upon the volume of metered water consumption. The bi-monthly water and wastewater rates adopted for FY 16-17 are provided on the Rates and Fees Schedule. The fixed meter charges and volumetric charges remain unchanged.

System Development Charges

System Development Charges are calculated to cover the cost of capacity in the Authority's existing water and wastewater treatment plants and transmission facilities and the estimated cost of capacity in future water and wastewater treatment plants and transmission facilities that are included in the Authority's Ten-Year Capital Improvements Program. The calculation assumes many of these treatment plants and transmission facilities will be funded with debt that will be repaid with revenues generated from customer water and wastewater charges for 25 years. The System Development Charge is the upfront charge a new customer will pay for investment in system capacity that will serve the customer. The system development charges are applied based on the size of the water meter for the new connection and are incremented for larger connection sizes. For purposes of the calculation, the full cost of capacity is reduced by the present value of the principal portion of the debt service payments. Only projects (or portions thereof) that provide capacity are included in the System Development Charge calculation. Costs of repair and rehabilitation projects (or portions thereof) are not included in the calculation. In FY 16-17, 4.8% of total budgeted revenue is anticipated from System Development Charges.

Other Charges for Service

Other charges for service account for 4.6% of total budgeted revenues. Other charges include penalties and late fees, application and premise visit fees, meter fees and tap fees.

Investment Earnings

Authority funds are invested to maximize the return between the time funds are collected and used. Investment earnings remain stable, budgeted at $443,200 in FY 16-17 which is .6% of total budgeted revenue. Staff continues to monitor interest rates and look for additional opportunities to increase yield on the Authority's investments, while maintaining safety and liquidity.

Proceeds from Bonded Debt

The proceeds from bonded debt represent funds received in conjunction with the issuance of revenue bonds. The Authority may issue revenue bonds in FY 16-17 to cover the costs of various capital improvement projects and pay other costs incurred in connection with the issuance and sale of the bonds.

Appropriated Fund Balance

In accordance with the Local Government Fiscal Control Act, the Authority may use some unexpended funds from previous years to balance the budget. This is similar to an individual using their savings account. To ensure compliance with revenue bond rate covenants, appropriated fund balance is used for one-time expenditures.

Revenue Trends

	FY13-14 Actual	FY14-15 Actual	FY15-16 Adjusted Budget	FY 16-17 Adopted Budget
Water Revenues	$ 30,530,929	$ 31,406,862	$ 31,084,000	$ 31,297,342
Wastewater Revenues	34,964,993	36,022,159	35,297,000	35,797,524
Other Charges for Service	3,564,189	3,848,264	3,092,500	3,512,500
Operating Grants and Contributions	-	-	35,000	-
System Development Charges	4,396,392	4,740,567	5,545,400	3,600,000
Investment Earnings	825,045	831,429	2,810,710	443,200
Sale of Capital Assets	73,780	77,599	90,521	-
Proceeds from Bonded Debt and Premium	-	49,524,868	183,750,224	690,000
Appropriated Fund Balance	51,468	-	15,950,418	275,000
	$ 74,406,796	**$ 126,451,748**	**$ 277,655,773**	**$ 75,615,566**

TAB INSERT: RATES & FEE SCHEDULE

CAPE FEAR PUBLIC UTILITY AUTHORITY
RATES AND FEES SCHEDULE FY 16-17
(Changes Denoted in RED)

			Rates and Fees Effective 2/10/16	Rates and Fees Effective 7/1/16	Ordinance Reference
1	**WATER RATES**				
	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).				
	Fixed Meter Charge by Meter Size*		Bi-Monthly	Bi-Monthly	
		5/8"	$ 25.81	$ 25.81	4.2.a(vi)
		1" (Single-Family Residential with fire sprinkler system)	$ 25.81	$ 25.81	4.2.a(vi)
		1"	$ 64.53	$ 64.53	4.2.a(vi)
		1 1/2"	$ 129.05	$ 129.05	4.2.a(vi)
		2"	$ 206.48	$ 206.48	4.2.a(vi)
		3"	$ 387.15	$ 387.15	4.2.a(vi)
		4"	$ 645.25	$ 645.25	4.2.a(vi)
		6"	$ 1,290.50	$ 1,290.50	4.2.a(vi)
		8"	$ 2,064.80	$ 2,064.80	4.2.a(vi)
		10"	$ 3,226.25	$ 3,226.25	4.2.a(vi)
		12"	$ 3,871.50	$ 3,871.50	4.2.a(vi)
	* Fixed Meter Charge is not applied to Irrigation Meters if a separate Water Meter exists.				
	Consumption Charge (per 1,000 gallons)**		$ 3.67	$ 3.67	4.2.a(iii)
	** Single-Family Residential is serviced by one domestic meter				
	Unauthorized non-metered use of water (greater of 30,000 gallons consumption or the highest billed consumption in the past 24 months)		$110.10 minimum	$110.10 minimum	4.2c(xiii); 6.6c
	Mandatory Connection Water Penalty By Meter Size (ERU x $250)				
		5/8" - 1.00 (ERU)	$ 250.00	$ 250.00	1.13.g
		1" - 2.50 (ERU)	$ 625.00	$ 625.00	1.13.g
		1.5 - 5.00 (ERU)	$ 1,250.00	$ 1,250.00	1.13.g
		2" - 8.00 (ERU)	$ 2,000.00	$ 2,000.00	1.13.g
		3" - 15.00 (ERU)	$ 3,750.00	$ 3,750.00	1.13.g
		4" - 25.00 (ERU)	$ 6,250.00	$ 6,250.00	1.13.g
		6" - 50.00 (ERU)	$ 12,500.00	$ 12,500.00	1.13.g
		8" - 80.00 (ERU)	$ 20,000.00	$ 20,000.00	1.13.g
		10" - 125.00 (ERU)	$ 31,250.00	$ 31,250.00	1.13.g
	Availability Charge for unconnected 5/8" water service; Availability Charge for larger meters based on meter size		$ 25.81	$ 25.81	4.2.a(i)
	Bulk Water Resale Rate (per 1,000 gallons)		$ 2.95	$ 2.95	4.2.a(ii)
	Bulk Reclaimed Water In-Service Area Rate (per 1,000 gallons)		$ -	$ 2.45	4.2.a(ii)
	Bulk Reclaimed Water Deposit In-Service Area Rate ***		$ -	$100 minimum	4.2.a(ii)
	Bulk Reclaimed Water Out-of-Service Area Rate (per 1,000 gallons)		$ -	$ 3.06	4.2.a(ii)
	Bulk Reclaimed Water Deposit Out-of-Service Area Rate***		$ -	$125 minimum	4.2.a(ii)
	*** Greater of 3 months estimated usage or the minimum				
2	**SEWER RATES**				
	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).				
	Fixed Meter Charge by Meter Size		Bi-Monthly	Bi-Monthly	
		5/8"	$ 29.10	$ 29.10	3.5; 4.2.a(vi)
		1" (Single-Family Residential with fire sprinkler system)	$ 29.10	$ 29.10	3.5; 4.2.a(vi)
		1"	$ 72.75	$ 72.75	3.5; 4.2.a(vi)
		1 1/2"	$ 145.50	$ 145.50	3.5; 4.2.a(vi)
		2"	$ 232.80	$ 232.80	3.5; 4.2.a(vi)
		3"	$ 436.50	$ 436.50	3.5; 4.2.a(vi)
		4"	$ 727.50	$ 727.50	3.5; 4.2.a(vi)
		6"	$ 1,455.00	$ 1,455.00	3.5; 4.2.a(vi)
		8"	$ 2,328.00	$ 2,328.00	3.5; 4.2.a(vi)
		10"	$ 3,637.50	$ 3,637.50	3.5; 4.2.a(vi)
		12"	$ 4,365.00	$ 4,365.00	3.5; 4.2.a(vi)
	Consumption Charge (per 1,000 gallons) See Notes 1,2,3,4		$ 4.56	$ 4.56	3.5; 4.2.a(iii)
	Note 1	Single-Family Residential metered consumption capped at 30,000 gallons per bi-monthly billing			3.5; 4.2.a(iii)
	Note 2	Single-Family Residential non-metered consumption capped at 24,000 gallons per bi-monthly billing			3.5; 4.2.a(vii)
	Note 3	No cap for non-residential metered consumption			3.5; 4.2.a(iii)
	Note 4	Single-Family Residential is serviced by one domestic meter			
	Unauthorized non-metered use of sewer (capped at 30,000 gallons consumption)		$ 136.80	$ 136.80	4.2c(xiii); 6.6c
	Mandatory Connection Sewer Penalty By Meter Size (ERU x $250)				
		5/8" - 1.00 (ERU)	$ 250.00	$ 250.00	1.13.g
		1" - 2.50 (ERU)	$ 625.00	$ 625.00	1.13.g
		1.5 - 5.00 (ERU)	$ 1,250.00	$ 1,250.00	1.13.g
		2" - 8.00 (ERU)	$ 2,000.00	$ 2,000.00	1.13.g
		3" - 15.00 (ERU)	$ 3,750.00	$ 3,750.00	1.13.g
		4" - 25.00 (ERU)	$ 6,250.00	$ 6,250.00	1.13.g
		6" - 50.00 (ERU)	$ 12,500.00	$ 12,500.00	1.13.g
		8" - 80.00 (ERU)	$ 20,000.00	$ 20,000.00	1.13.g
		10" - 125.00 (ERU)	$ 31,250.00	$ 31,250.00	1.13.g
	Availability Charge for unconnected 5/8" sewer service; Availability Charge for larger meters based on meter size		$ 29.10	$ 29.10	4.2.a(i)

CAPE FEAR PUBLIC UTILITY AUTHORITY
RATES AND FEES SCHEDULE FY 16-17
(Changes Denoted in RED)

		Rates and Fees Effective 2/10/16	Rates and Fees Effective 7/1/16	Ordinance Reference
	Collection Treatment Charge			
	Surcharge for BOD (per 100 lbs; when BOD>200mg/L and COD < 3x BOD)****	$ 36.00	$ 36.00	4.2.a(iv);Appendix D3.3
	Surcharge for COD (per 100 lbs; when COD>600mg/L and >/=3xBOD)****	$ 36.00	$ 36.00	4.2.a(iv);Appendix D3.3
	Surcharge for TSS (per 100 lbs; when TSS >200mg/l)	$ 21.00	$ 21.00	4.2.a(iv);Appendix D3.3
	**** Surcharge is assessed for either BOD or COD, but not both.			
	Bulk Charges for Septage Haulers			
	In-Service Area Rate (per gallon)	$ 0.1375	$ 0.1375	4.2.a(ii); Appendix D2.9
	Out-of-Service Area Rate (per gallon)	$ -	$ 0.1719	4.2.a(ii); Appendix D2.9
	Utility Deposit	$ 500.00	$ 500.00	1.6
	Bulk Processing Charge for Haulers of Non-Hazardous Wastewater Treatment Plant (WWTP) Residuals as delivered to a designated CFPUA WWTP: *****			
	Unstabilized/Less Than Class B Residuals In-Service Area Rate	$ 0.80	$ 0.80	4.2.a(ii)
	Stabilized/Equal to or Better Than Class B Residuals In-Service Area Rate	$ 0.60	$ 0.60	4.2.a(ii)
	Unstabilized/Less Than Class B Residuals Out-of-Service Area Rate	$ -	$ 1.00	4.2.a(ii)
	Stabilized/Equal to or Better Than Class B Residuals Out-of-Service Area Rate	$ -	$ 0.75	4.2.a(ii)
	***** Per Pound Total Solids (TS) Dry Weight Basis (DWB) as delivered/received			
	Hauled and Miscellaneous Wastewater Fees (subject to applicable surcharges)			
	Short-Term Permit (per gallon) In-Service Area	$ 0.030	$ 0.030	4.2.a(iii); Appendix D 3.4
	Short-Term Permit (per gallon) Out-of-Service Area	$ 0.060	$ 0.060	4.2.a(iii); Appendix D 3.4
	Long-Term Permit: ******			
	Fixed Meter Charge by Meter Size:	**Bi-Monthly**	**Bi-Monthly**	
	5/8"	$ 29.10	$ 29.10	4.2.a.(vi); Appendix D 3.4
	1"	$ 72.75	$ 72.75	4.2.a.(vi); Appendix D 3.4
	1 1/2"	$ 145.50	$ 145.50	4.2.a.(vi); Appendix D 3.4
	2"	$ 232.80	$ 232.80	4.2.a.(vi); Appendix D 3.4
	3"	$ 436.50	$ 436.50	4.2.a.(vi); Appendix D 3.4
	4"	$ 727.50	$ 727.50	4.2.a.(vi); Appendix D 3.4
	6"	$ 1,455.00	$ 1,455.00	4.2.a.(vi); Appendix D 3.4
	8"	$ 2,328.00	$ 2,328.00	4.2.a.(vi); Appendix D 3.4
	10"	$ 3,637.50	$ 3,637.50	4.2.a.(vi); Appendix D 3.4
	12"	$ 4,365.00	$ 4,365.00	4.2.a.(vi); Appendix D 3.4
	Consumption Charge (per 1,000 gallons)	$ 4.56	$ 4.56	4.2.a.(iii); Appendix D 3.4
	****** Long-Term Permit System Development Charge in accordance with Section 9 of this schedule and specified in			4.2.b(iv); Appendix D 3.4
	Wholesale or Bulk rates will be individually determined in accordance with applicable interlocal agreement	Individually Determined	Individually Determined	4.2.a(ii)
3	**Fire Line Service**			
	Fixed Fire Line Charge by Size	**Bi-Monthly**	**Bi-Monthly**	
	2"	$ 20.00	$ 20.00	4.2.a(v)
	4"	$ 40.00	$ 40.00	4.2.a(v)
	6"	$ 80.00	$ 80.00	4.2.a(v)
	8"	$ 140.00	$ 140.00	4.2.a(v)
	10"	$ 220.00	$ 220.00	4.2.a(v)
	12"	$ 320.00	$ 320.00	4.2.a(v)
	Inspection Fee for Developer-Installed Connection	$ -	$ 55.00	1.6a; 4.2b(ii)
	Inspection Fee for Developer-Installed Connection (After hours - Minimum of 2 hours)	$ -	$75/hour	1.6a; 4.2b(ii)
4	**Water Service Connection Fee**			
	Service Line Connection Fee by Service Size			
	Up to 1" Service (to 45' in length) *******	$ 2,100.00	$ 2,100.00	1.5c; 4.2b(i)
	1 1/2" Service (to 45' in length) *******	$ 3,900.00	$ 3,900.00	1.5c; 4.2b(i)
	2" Service (to 45' in length) *******	$ 4,100.00	$ 4,100.00	1.5c; 4.2b(i)
	Services in excess of 45' based on actual cost	Individually Determined	Individually Determined	1.5c; 4.2b(i)
	Manifold	Individually Determined	Individually Determined	1.5c; 4.2b(i)
	******* 2" Service and under Connection Fee includes meter set.			
	Meter Set Fee by Meter Size (includes labor and materials)			
	5/8"	$ 250.00	$ 250.00	1.5c; 4.2b(iii)
	5/8" Split Service	$ 375.00	$ 375.00	1.5c; 4.2b(iii)
	1"	$ 350.00	$ 350.00	1.5c; 4.2b(iii)
	1 1/2"	$ 1,600.00	$ 1,600.00	1.5c; 4.2b(iii)
	2"	$ 1,800.00	$ 1,800.00	1.5c; 4.2b(iii)
	Inspection Fee for Developer-Installed Connection	$ 55.00	$ 55.00	1.6a; 4.2b(ii)
	Inspection Fee for Developer-Installed Connection (After hours - Minimum of 2 hours)	$75/hour	$75/hour	1.6a; 4.2b(ii)
	Locate Water Meter Fee	$ -	$ 55.00	1.6a; 4.2b(v)
5	**Sewer Service Connection Fee**			
	Installation Fee by Service Size			
	4" Service, actual cost or minimum	$ 2,200.00	$ 2,200.00	1.5c; 4.2b(i)
	6" Service, actual cost or minimum	$ 2,800.00	$ 2,800.00	1.5c; 4.2b(i)

CAPE FEAR PUBLIC UTILITY AUTHORITY
RATES AND FEES SCHEDULE FY 16-17
(Changes Denoted in RED)

			Rates and Fees Effective 2/10/16	Rates and Fees Effective 7/1/16	Ordinance Reference
	Inspection Fee for Developer-Installed Connection		$ 55.00	$ 55.00	1.5c; 4.2b(ii)
	Inspection Fee for Developer-Installed Connection (After hours - Minimum of 2 hours)		$75/hour	$75/hour	1.6a; 4.2b(ii)
	Locate Sewer Cleanout Fee		$ -	$ 55.00	1.6a; 4.2b(v)
6	**Special Use of Water**				
	Water Rates include both a fixed meter charge based on meter size or backflow preventer size, whichever is less, and consumption charge based on metered consumption, billed bi-monthly (every two months).				
	Fixed Meter Charge by Size		**Bi-Monthly**	**Bi-Monthly**	
		5/8"	$ 31.00	$ 31.00	4.2c(vii)
		3/4"	$ 35.00	$ 35.00	4.2c(vii)
		1"	$ 45.00	$ 45.00	4.2c(vii)
		1 1/2"	$ 56.00	$ 56.00	4.2c(vii)
		2"	$ 96.00	$ 96.00	4.2c(vii)
		3"	$ 165.00	$ 165.00	4.2c(vii)
		4"	$ 254.00	$ 254.00	4.2c(vii)
		Lost or stolen special use sign	$ 50.00	$ 50.00	4.2c(vii)
	Consumption Charge (per 1,000 gallons)		$ 3.67	$ 3.67	4.2.a(iii)
7	**Water Quality Fees**				
	Inspection Fees Backflow Assembly				
		Initial inspection	No Charge	No Charge	4.2.b(ii)
		Subsequent inspections	$ 55.00	$ 55.00	4.2.b(ii)
8	**Discharge Permit Fees**				
	Industrial Connection and Discharge Permit application and annual fee includes:				
		SIU, flows > 15,000 gpd, pretreatment	$ 750.00	$ 750.00	Appendix D 3.4
		Restoration of Revoked Industrial Permit (each occurrence)	$ 1,500.00	$ 1,500.00	Appendix D 3.4
		Modification of Permit (each occurrence)	$ 200.00	$ 200.00	Appendix D 3.4
	Other Wastewater Permits				
		Flow Less than 1,000 gallons/day	$ 100.00	$ 100.00	Appendix D 3.4
		Flow Between 1,000 and 7,500 gallons/day	$ 200.00	$ 200.00	Appendix D 3.4
		Flow Between 7,501 and 15,000 gallons/day	$ 300.00	$ 300.00	Appendix D 3.4
		Food Service Establishment Permit and Annual Inspection Fee (per location)	$ 100.00	$ 100.00	Appendix D 3.4
		Enforcement Cost Recovery	Individually determined	Individually determined	4.2.c(x);Appendix D 3.4
		Restoration Fee of Revoked Other Wastewater Permit (each occurrence)	2x permit fee	2x permit fee	
		Residuals permit application fee	$ 100.00	$ 100.00	Appendix D 3.4
	Monitoring Fee		Individually determined	Individually determined	Appendix D 3.4
	Grease Interceptor Variance (each occurrence)		$ 220.00	$ 220.00	Appendix D 3.4
9	**System Development Charges**				
	Water by Meter Size				Appendix C 2(a)
		5/8" (no Water SDC due on a 5/8" irrigation meter)	$ 1,920.00	$ 1,510.00	4.2.b(iv)
		1" (Single-Family Residential with fire sprinkler system)	$ 1,920.00	$ 1,510.00	4.2.b(iv)
		1"	$ 4,800.00	$ 3,775.00	4.2.b(iv)
		1 1/2"	$ 9,600.00	$ 7,550.00	4.2.b(iv)
		2"	$ 15,360.00	$ 12,080.00	4.2.b(iv)
		3"	$ 28,800.00	$ 22,650.00	4.2.b(iv)
		4"	$ 48,000.00	$ 37,750.00	4.2.b(iv)
		6"	$ 96,000.00	$ 75,500.00	4.2.b(iv)
		8"	$ 153,600.00	$ 120,800.00	4.2.b(iv)
		10"	$ 240,000.00	$ 188,750.00	4.2.b(iv)
	Shell Buildings Alternative Fee Calculation - former NHC Water & Sewer District. Fees base on class of use & 15A NCAC O2T.0114 - Design Flow Rates				
		Water Development Charge (minimum $1,348.00 = 400 gallons)	$3.37 per gallon	$3.37 per gallon	4.2b(iv)(4)
	Sewer by Meter Size				Appendix C 3(a)
		5/8"	$ 2,460.00	$ 2,030.00	4.2b(iv)
		1" (Single-Family Residential with fire sprinkler system)	$ 2,460.00	$ 2,030.00	4.2b(iv)
		1"	$ 6,150.00	$ 5,075.00	4.2b(iv)
		1 1/2"	$ 12,300.00	$ 10,150.00	4.2b(iv)
		2"	$ 19,680.00	$ 16,240.00	4.2b(iv)
		3"	$ 36,900.00	$ 30,450.00	4.2b(iv)
		4"	$ 61,500.00	$ 50,750.00	4.2b(iv)
		6"	$ 123,000.00	$ 101,500.00	4.2b(iv)
		8"	$ 196,800.00	$ 162,400.00	4.2b(iv)
		10"	$ 307,500.00	$ 253,750.00	4.2b(iv)
		Unmetered service (sewer only)	$10/gallon projected flow	$10/gallon projected flow	4.2b(iv)
	Shell Buildings Alternative Fee Calculation - former NHC Water & Sewer District. Fees base on class of use & 15A NCAC O2T.0114 - Design Flow Rates				
		Sewer Impact Fee (minimum $2,103.90 = 300 gallons)	$7.013 per gallon	$7.013 per gallon	4.2b(iv)(4)
		Sewer Development Charge	$1.50 per gallon	$1.50 per gallon	4.2b(iv)(4)

CAPE FEAR PUBLIC UTILITY AUTHORITY
RATES AND FEES SCHEDULE FY 16-17
(Changes Denoted in RED)

	Rates and Fees Effective 2/10/16	Rates and Fees Effective 7/1/16	Ordinance Reference
## Development Capacity Fees			
Chair Road Associates - Regional Lift Station (PS #157) and Northwest Forcemain Improvements	$4.75 per gpd	$4.84 per gpd	Per Contract
Chair Road Associates - Northwest Forcemain Improvements Only	$3.55 per gpd	$3.61 per gpd	Per Contract
Kirkland Sewer Project Capacity Fee	$2.71 per gpd	$2.71 per gpd	Per Contract
## Miscellaneous and Other			
Service/repair costs			
Contracted services at actual cost plus 10% administrative fee	Individually determined	Individually determined	1.9(e)
CFPUA staff and equipment at FEMA reimbursable cost	Individually determined	Individually determined	1.9(e)
Other Fees			
After Hours Fee	Indiviually determined	Indiviually determined	4.2C(i)
Cut Lock Fee	$ 75.00	$ 75.00	6.6c; 4.2c(vi)
Emergency Reconnect Fee	$ 110.00	$ 110.00	4.2c(iii)
Late Day Reconnect Fee	$ 55.00	$ 55.00	4.2c(ii)
Late Fee	10% of balance; $25 maximum on Single-Family Residential services	10% of balance; $25 maximum on Single-Family Residential services	4.2c(viii)
Loan Processing Fee	Actual Cost to File	Actual Cost to File	4.2c(xi)
Meter Obstruction Fee	$ 55.00	$ 55.00	4.2c(xvii)
Meter Test	$ 55.00	$ 55.00	2.3; 6.1; 4.2c(ix)
Large Meter Test (requested by Customer) (Meters 3" and larger)	$ -	$ 150.00	2.3; 6.1
New Service Charge	$ 55.00	$ 55.00	1.6a; 4.2c(iv)
Premise Visit Fee	$ 55.00	$ 55.00	1.15(a); 4.2c(xvi)
Reconnect/Delinquency Fee	$ 55.00	$ 55.00	6.6(a); 4.2c(xiii)
Reread Fee (requested by Customer)			
Correct Read	$ 55.00	$ 55.00	4.2c(xv)
Incorrect Read (CFPUA error)	No Cost	No Cost	4.2c(xv)
System Tampering Civil Action Violation, in accordance with N.C.G.S. 14-151(e)	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	4.2c(xviii)
Turn-On Fee (after disconnect)	$ 55.00	$ 55.00	4.2c(xiv)
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	1.6
Utility Deposit Commercial	Determined by Policy	Determined by Policy	1.6
Civil Penalties:			4.2c(v)
Commercial failure to submit required backflow preventer test report	$ 200.00	$ 200.00	Appendix A 10(d)
Residential failure to submit required backflow preventer test report	$ 100.00	$ 100.00	Appendix A 10(d)
Submission of falsified backflow preventer test report	$ 200.00	$ 200.00	Appendix A 10(d)
First violation of backflow installation requirements	$ 250.00	$ 250.00	Appendix A 10(b)
Subsequent violation of backflow installation requirements	$ 1,000.00	$ 1,000.00	Appendix A 10(b)
Violation of Extension Policy	$100, $200, $500	$100, $200, $500	Appendix C 5
Violation of Wastewater Discharge Permit	Up to $25,000	Up to $25,000	Appendix D 8.2
Violation of Sewer Use Ordinance	Up to $25,000	Up to $25,000	Appendix D 35d(i)
Violation of Cross Connection Control Ordinance	Up to $1,000/day	Up to $1,000/day	Appendix A 10(f)(vii)
Violation of Water Emergency Management Regulations	up to $500/day	up to $500/day	VII; Appendix B 13
Hydrant Meter Deposit for festivals (up to 1 1/2" meter size)	$ 500.00	$ 500.00	4.2c(vii)
Hydrant Meter Deposit for festivals (2" and higher meter size)	Actual Cost	Actual Cost	4.2c(vii)
Hydrant Meter Installation & Removal for festivals (per meter)	$ 55.00	$ 55.00	4.2.c(vii)
Plan Review Fees:			
Minor Subdivisions - no required NCDENR water or sewer permits	$ 120.00	$ 120.00	Appendix C.1(a); 4.2c(xii)
Commercial Plans (multi-family residential/commercial) - no required NCDENR water and sewer permits	$ 120.00	$ 120.00	Appendix C.1(a); 4.2c(xii)
Main Extensions/Utility relocation/ROW widening less than 500 Linear Feet	$ 240.00	$ 240.00	Appendix C.1(a); 4.2c(xii)
Main Extensions/Utility relocation/ROW widening 500-999 Linear Feet	$ 300.00	$ 300.00	Appendix C.1(a); 4.2c(xii)
Main Extensions/Utility relocation/ROW widening 1,000-4,999 linear feet	$ 600.00	$ 600.00	Appendix C.1(a); 4.2c(xii)
Main Extensions/Utility relocation/ROW widening 5,000-9,999 linear feet	$ 850.00	$ 850.00	Appendix C.1(a); 4.2c(xii)
Main Extensions/Utility relocation/ROW widening 10,000 linear feet and greater	$ 1,400.00	$ 1,400.00	Appendix C.1(a); 4.2c(xii)
Pump Station Review (plus the main extensions fee above)	$ 350.00	$ 350.00	Appendix C.1(a); 4.2c(xii)
Re-review Fee	$ 50.00	$ 50.00	Appendix C.1(a); 4.2c(xii)
Water/Sewer Line Acceptance Testing Reinspection	$ -	$55/hour	Appendix C.1(b)
Water/Sewer Line Acceptance Testing Reinspection - After Hours Fee	$ -	$75/hour	Appendix C.1(b)
Inspection Fee for Developer-Installed Main Lines (After hours - Minimum of 2 hours)	$ -	$75/hour	1.6a; 4.2b(ii)
Demolition Inspection Fee	$ -	$ 55.00	1.6a; 4.2c(xvii)
Miscellaneous Administrative Fees			
Returned Check Fee (Per event; Closed Account, NSF, Stop Payment of Customer/Vendor issued Check)	$ 25.00	$ 25.00	4.2c(x)
Dishonored Bank Draft Fee (Per event; Closed Account, NSF, Stop Payment of Customer/Vendor Draft)	$ 25.00	$ 25.00	4.2c(x)
Check Stop Payment Fee (Stop Payment of CFPUA issued Check requested by Customer/Vendor)	$ 5.00	$ 5.00	4.2c(x)
Copy and Printing Fees, including Public Records Request	Actual cost	Actual cost	
Tank Mounted Equipment Structural Analysis Review Fee	$ -	$ 1,000.00	4.2
Water Tower Lease	Individually determined; $2,500 minimum	Individually determined; $2,500 minimum	Set by contract

TAB INSERT: CAPITAL IMPROVEMENTS PROGRAM

Financial Feasibility Report

Since July 1, 2008, with the merger of the City of Wilmington and New Hanover County's utility systems to create the Authority and with the economic changes in the region, the Authority has focused a significant amount of attention and effort on strategic planning measures in all areas of the Authority operations to ensure that it remains prepared for the future. As part of the strategic planning measures, in FY 2011, the Authority commissioned a water and wastewater rate study designed to analyze the revenue sources and expenditures of the Authority and provide recommendations for rates and rate structures to meet the financial and administrative objectives of the Authority. The rate study results were finalized in March of 2011 and the recommended rates and rate structure for fiscal year ended June 30, 2012 were adopted by the Authority Board. Each fiscal year the rate model is updated and recommendations made for changes in the water and wastewater rates and rate structure.

In conjunction with the issuance of the 2014 Revenue Bonds in October, 2014 a Financial Feasibility Report was prepared by Utility Advisors' Network, Inc. (UAN). Based on the financial projections developed, UAN stated that it anticipated the Authority will generate sufficient revenues to meet revenue bond requirements.

During the FY 16-17 budget process, Authority staff updated the rate model and recommended no changes in the water and wastewater rates or rate structure. The current rates were adopted on April 9, 2014, effective May 1, 2014, and are provided on the Rates and Fees Schedule.

Five-Year Projections 2018-2022

During the FY 16-17 budget process, Authority staff projected 5-year operating results based on calendar 2015 customer billing data and estimated expenditures. The chart below shows the projections, including projected debt service coverage ratios and additional revenue needed from rates for the fiscal years ending June 30, 2018-22. These projections assume full funding of CIP projects with a combination of transfers from Operating Fund (Pay Go) and debt funding, 0.5% customer growth, 4% annual labor inflation, 15% annual employee health care increases and 2% annual other inflation.

Certain of these assumptions may not materialize and unforeseen events and circumstances may occur. Therefore, there will usually be differences between the forecasted operating results and the actual operating results and these differences may be material. Also, the Authority could chose to level any necessary rate increases to avoid significant variation between years.

CAPE FEAR PUBLIC UTILITY AUTHORITY

LONG RANGE FINANCIAL PLANS

	2017 Adopted Budget	2018 Projected Budget	2019 Projected Budget	2020 Projected Budget	2021 Projected Budget	2022 Projected Budget
Revenues	$74,650,566	$74,641,673	$76,702,769	$79,678,668	$82,616,966	$85,569,947
Expenditures, before Debt Service & Capital Outlay	39,697,081	41,195,946	42,788,884	44,485,656	46,297,338	48,236,510
Revenues over Expenditures before Debt Service & Capital Outla	34,953,485	33,445,727	33,913,885	35,193,012	36,319,628	37,333,437
Debt Service on Existing Debt and Pre-2016 CIP	24,035,053	25,154,419	24,200,236	22,680,189	22,618,896	22,551,125
Debt Service on New Debt	0	848,300	2,062,800	4,599,400	5,549,100	6,419,100
Total Estimated Debt Service	24,035,053	26,002,719	26,263,036	27,279,589	28,167,996	28,970,225
Revenue Available to Cash Fund CIP & Operating Capital Outlay	10,918,432	7,443,008	7,650,849	7,913,423	8,151,632	8,363,212
Debt Coverage Ratio	1.45	1.29	1.29	1.29	1.29	1.29
Average Combined Water & Sewer Bill	$125.69	$125.08	$128.18	$132.96	$137.67	$142.38
% Change in Average Combined Water and Sewer Bill	0%	0%	2%	4%	4%	3%
Summary CIP:						
Construction of new Raw Water Line with LCFWSA ILA	$0	$867,000	$32,252,400	$0	$0	$0
Southside WWTP Interim Rehabilitation	500,000	3,060,000	0	2,122,416	0	0
All Other Projects	21,440,000	19,818,600	9,446,832	18,539,304	19,830,157	19,144,761
Total CIP	$21,940,000	$23,745,600	$41,699,232	$20,661,720	$19,830,157	$19,144,761
Debt Balance	$301,800,962	$303,343,959	$324,918,609	$324,067,224	$322,693,784	$319,525,132

The Capital Improvements Program is included in a separate section of this document and provides the Projected Ten Year Plans for Water, Wastewater and System-wide capital projects.

CAPE FEAR PUBLIC UTILITY AUTHORITY
CAPITAL IMPROVEMENTS PROGRAM (CIP)

Engineering Executive Summary

Capital improvements are necessary for rehabilitation, replacement and addition of infrastructure and to provide safe, reliable, high quality water and wastewater services to current and future customers. Capital improvements expenditures are recorded as capital assets and are depreciated over the economic useful life of the assets. A 10 year planning period is used to develop the CIP and is reviewed and updated annually.

The total of the approved 10 Year Capital Improvements Program is $212,660,000. This total is $93.6 million less than was planned last year due to the deferment of the Southside Wastewater Treatment Plant (SSWWTP) capacity upgrade beyond the ten year planning horizon. Rehabilitation and replacement of key process components are planned for SSWWTP over the next five years to prolong the efficient and effective life of the treatment plant until customer growth necessitates a capacity upgrade.

The largest project in the Ten Year CIP is the proposed construction of a new raw water line through an Interlocal Agreement with Lower Cape Fear Water and Sewer Authority. The approximately $32 million planned for this project is an estimate of the Authority's cost to fund a regional project in cooperation with other communities dependent upon water from the Lower Cape Fear River.

The FY 16-17 Capital Improvements Budget totals $21,940,000 and the majority of the work planned for FY 16-17 is to rehabilitate or replace existing infrastructure as part of asset management, addressing aging infrastructure and implementing a comprehensive meter replacement program.

The proposed 10 Year plan is reevaluated each year and provides opportunities to revisit the priorities and progress of these criteria. The proposed FY 16-17 Capital Improvements Budget and the proposed 10 Year CIP were built around the following criteria.

All projects were required to meet the following criteria to qualify for consideration:

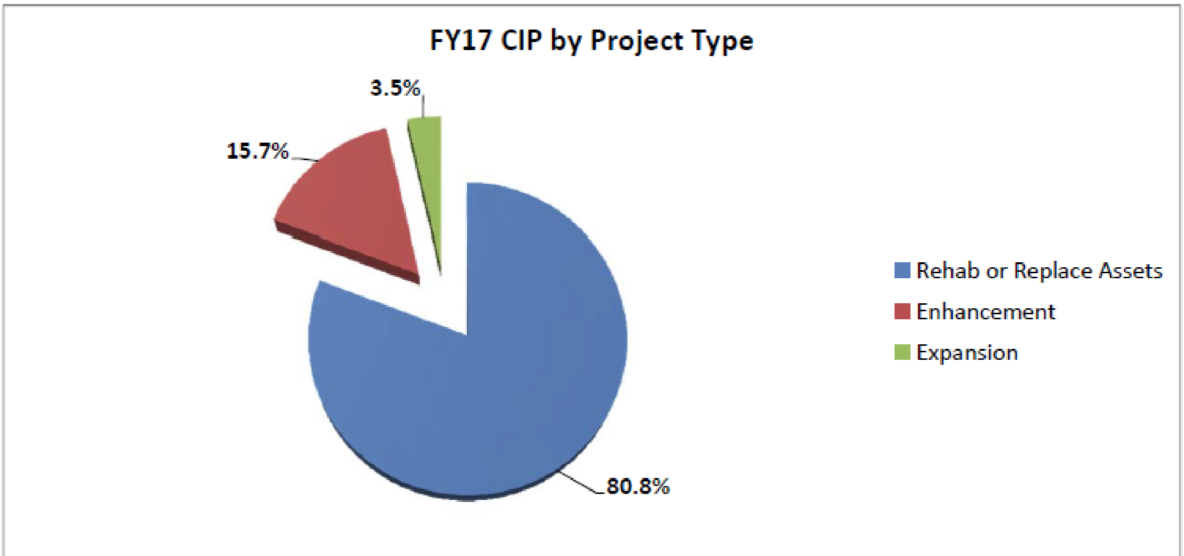
- Compliance with regulatory requirements.
- Efficiency leading to future operating or capital savings.
- Capacity increases necessary for current of future flows.
- Growth in the number of customers served.

The projects are further classified into the following categories:

- Projects that "Rehab or Replace Assets" are projects that generally increase the life of an existing asset or replace an existing asset that is at or beyond its expected life cycle.
- "Enhancement" projects tend to improve efficiency by reducing long term costs or increasing readiness.
- "Expansion" projects add customers as growth.

CAPE FEAR PUBLIC UTILITY AUTHORITY
CAPITAL IMPROVEMENTS PROGRAM (CIP)

FY-2017 CIP by Project Type	Percentage	$ Amount	# Projects
Rehab or Replace Assets	80.8%	$17,800,000	31
Enhancement	15.7%	$3,390,000	8
Expansion	3.5%	$750,000	4
TOTAL	100%	$21,940,000	43



A description of the FY 16-17 capital improvements projects and the impact of those projects showing the effects on the current and future operating costs or anticipated savings or revenues follow.

Capital Outlay Expenditures

The FY17 budget includes capital outlay expenditures budgeted in an individual department of the Operating Fund. The total budgeted for capital outlay expenditures of $387,706 is not significant to the total Operating Fund budget of $75.6 million.

CAPE FEAR PUBLIC UTILITY AUTHORITY
CAPITAL IMPROVEMENTS PROGRAM
CAPITAL PROJECTS FUNDED IN FY16-17

Capital Projects	FY 16-17 Budget
Comprehensive Meter Replacement Program	$ 4,500,000
Interconnect Monterey Heights Water System to Surface Water	2,500,000
Enterprise Software Replacement Project	2,200,000
Find It, Fix It Methodology Gravity Sewer Rehabilitation (AMP)	1,500,000
PS - 012 Fore Main	1,480,000
Motor Fleet Capital	1,000,000
Northside WWTP - Digester 4 & 5 Rehab and Coating	800,000
Sewer Emergency Repairs	750,000
Rehabilitation of Sewer Infrastructure Matching with City Streets & Stormwater Funds	600,000
Rehabilitation of Water Infrastructure Matching with City Streets & Stormwater Funds	600,000
Greenfield Lake Outfall Phase 3	560,000
Southside WWTP - Interim Rehabilitation	500,000
Runnymeade Capacity in Chair Road FM	460,000
Water Street Phase 2	430,000
PS - 089 Smith Creek Pump Station	400,000
PS - 008 Replacement	330,000
Ozone Power Supply Unit Upgrades	250,000
SCADA Implementation at Pump Stations	250,000
Water Meters for New Customers	250,000
PS - 011 Decommission & PS - 009 Upgrades	200,000
PS - 119 Beasley Road	200,000
Wastewater Treatment Facilities Rehabilitation (AMP)	200,000
Find It, Fix It Methodology Water Replace and Rehab (AMP)	200,000
Sewer Collection Expansion	200,000
Collection System - Standard Developer Agreements	150,000
Distribution System - Standard Developer Agreements	150,000
Virtual Desktop IT Mitigation	120,000
Find It, Fix It Methodology Fore Main Rehabilitation (AMP)	100,000
Generator Replacement (Water - AMP)	100,000
Information Technology Networking Infrastructure Replacement	100,000
Large Equipment Purchase	100,000
SCADA System Wide Improvements (AMP)	100,000
PS - 018 Greenhowe Woods	80,000
SCADA Expansion of Wireless Access	80,000
Portable Emergency Generator Connection Systems	70,000
PS - 001 Northchase SE	70,000
Water Distribution Sample Stations	70,000
SCADA Server at Northside	50,000
Auto Flushers	50,000
Water Treatment Facilities Rehabilitation (AMP)	50,000
Find It, Fix It Methodology Raw Water Line Rehabilitation (AMP)	50,000
Kings Bluff Pump Station Pump Replacement	50,000
SCADA Controls - Northside WWTP Digester	40,000
Total Capital Improvement Projects	**$ 21,940,000**
Total Water Capital Improvement Projects	**$ 9,250,000**
Total Wastewater Capital Improvement Projects	**$ 8,920,000**
Total System-Wide Capital Improvement Projects	**$ 3,770,000**
Capital Projects Funds Budget Ordinance	**$ 21,940,000**

CAPE FEAR PUBLIC UTILITY AUTHORITY
Ten Year Capital Improvement Program
Impact of FY17 Capital Improvement on Operating Budget
FY 16-17

Reference Number	Capital Project	Current Project #	FY 11 to FY 16 Budgeted	FY-2017 Budget	FY-2018 to FY- Annual Planned	Total Cumulative Project Cost Planned	Estimated Completion Fiscal Year	Quantifiable Annual Operating Budget Impact Expected	Unquantifiable Annual Operating Budget Impact	Annual Operating Budget Impact Comments
All dollar amounts are shown in 2015 dollars. No adjustments are made for projected inflation or deflation.										
1	Sewer Emergency Repair	16S340	$5,565,236	$750,000	$6,750,000	$13,065,236	Annual		Future Operating Budget Decrease	This project rehabilitates existing infrastructure that is at the end of its lifecycle. Long term efficiency gains are expected but cannot yet be quantified.
2	PS - 012 Force Main	15S303	$350,000	$1,480,000	$0	$1,830,000	2017		Future Operating Budget Decrease	This project rehabilitates existing infrastructure that is at the end of its lifecycle. Long term efficiency gains are expected but cannot yet be quantified.
3	Southside WWTP - Interim Rehabilitation	16S349	$380,531	$500,000	$5,000,000	$5,880,531	2020		Future Operating Budget Decrease	This project rehabilitates existing infrastructure that is at the end of its lifecycle. Long term efficiency gains are expected but cannot yet be quantified.
4	Find It, Fix It Methodology Gravity Sewer Rehabilitation (AMP)	16S342	$6,345,000	$1,500,000	$13,500,000	$21,345,000	Annual		Future Operating Budget Decrease	This project rehabilitates existing infrastructure that is at the end of its lifecycle. Long term efficiency gains are expected but cannot yet be quantified.
5	Interconnect Monterey Heights Water System to Surface Water	14W177	$1,190,000	$2,500,000	$4,500,000	$8,190,000	2020		Future Operating Budget Decrease	The project eliminates the operating costs of a well distribution system which leads to efficiencies that cannot be quantified without implementation.
6	Northside WWTP - Digester 4 & 5 Rehab and Coating	14S275	$145,000	$800,000	$0	$945,000	2017		Future Operating Budget Decrease	This project rehabilitates existing infrastructure that is at the end of its lifecycle. Long term efficiency gains are expected but cannot yet be quantified.
7	Greenfield Lake Outfall Phase 3	12S171	$2,844,111	$560,000	$0	$3,404,111	2017		Future Operating Budget Decrease	This project rehabilitates existing infrastructure that is at the end of its lifecycle. Long term efficiency gains are expected but cannot yet be quantified.
8	PS - 008 Replacement	14S283	$1,050,000	$330,000	$0	$1,380,000	2017		Future Operating Budget Decrease	This project rehabilitates existing infrastructure that is at the end of its lifecycle. Long term efficiency gains are expected but cannot yet be quantified.
9	Ozone Power Supply Unit Upgrades		$0	$250,000	$0	$250,000	2017		Future Operating Budget Decrease	This project rehabilitates existing infrastructure that is at the end of its lifecycle. Long term efficiency gains are expected but cannot yet be quantified.
10	SCADA Implementation at Pump Stations	16S344	$250,000	$250,000	$500,000	$1,000,000	2019		Future Operating Budget Decrease	This project rehabilitates existing infrastructure that is at the end of its lifecycle. Long term efficiency gains are expected but cannot yet be quantified.
11	PS - 011 Decommission & PS - 009 Upgrades	15S308	$2,205,000	$200,000	$0	$2,405,000	2017		Future Operating Budget Decrease	This project rehabilitates existing infrastructure that is at the end of its lifecycle. Long term efficiency gains are expected but cannot yet be quantified.
12	PS - 119 Beasley Road	13S235	$150,000	$200,000	$0	$350,000	2017		Future Operating Budget Decrease	This project rehabilitates existing infrastructure that is at the end of its lifecycle. Long term efficiency gains are expected but cannot yet be quantified.
13	Wastewater Treatment Facilities Rehabilitation (AMP)		$200,000	$200,000	$1,800,000	$2,200,000	Annual		Future Operating Budget Decrease	This project rehabilitates existing infrastructure that is at the end of its lifecycle. Long term efficiency gains are expected but cannot yet be quantified.
14	Find It, Fix It Methodology Force Main Rehabilitation (AMP)	16S341	$200,000	$100,000	$900,000	$1,200,000	Annual		Future Operating Budget Decrease	This project rehabilitates existing infrastructure that is at the end of its lifecycle. Long term efficiency gains are expected but cannot yet be quantified.
15	PS - 018 Greenhowe Woods	13S226	$75,000	$80,000	$0	$155,000	2017		Future Operating Budget Decrease	This project rehabilitates existing infrastructure that is at the end of its lifecycle. Long term efficiency gains are expected but cannot yet be quantified.
16	Portable Emergency Generator Connection Systems		$0	$70,000	$630,000	$700,000	2018		No Change to Future Operating Budget	This project provides enhanced capability to provide emergency power generation during an emergency event.
17	PS - 001 Northchase SE	13S221	$145,716	$70,000	$0	$215,716	2017		Future Operating Budget Decrease	This project rehabilitates existing infrastructure that is at the end of its lifecycle. Long term efficiency gains are expected but cannot yet be quantified.
18	Water Distribution Sample Stations		$0	$70,000	$210,000	$280,000	2020		Future Operating Budget Decrease	This project enables faster sample collection without customer coordination. Long term efficiency gains are expected but cannot yet be quantified.
19	SCADA Server at Northside		$0	$50,000	$0	$50,000	2017		Future Operating Budget Decrease	This project rehabilitates existing infrastructure that is at the end of its lifecycle. Long term efficiency gains are expected but cannot yet be quantified.
20	Auto Flushers		$57,245	$50,000	$100,000	$207,245	2019		Future Operating Budget Decrease	This project enables automatic flushing of water mains without dispatching a crew. Long term efficiency gains are expected but cannot yet be quantified.
21	SCADA Controls--Northside WWTP Digester		$0	$40,000	$270,000	$310,000	2018		Future Operating Budget Decrease	This project enables remote monitoring and operation Northside Digesters. Long term efficiency gains are expected but cannot yet be quantified.
22	Comprehensive Meter Replacement Program	13W143	$3,775,859	$4,500,000	$9,060,000	$17,335,859	Annual		Future Operating Budget Decrease	This project replaces meters that are past their lifecycle. Metered water revenues may increase but cannot be quantified without implementation.
23	Rehabilitation of Sewer Infrastructure Matching with City Streets & Stormwater Funds		$0	$600,000	$5,400,000	$6,000,000	Annual		Future Operating Budget Decrease	This project replaces meters that are past their lifecycle. Metered water revenues may increase but cannot be quantified without implementation.
24	Rehabilitation of Water Infrastructure Matching with City Streets & Stormwater Funds		$0	$600,000	$5,400,000	$6,000,000	Annual		Future Operating Budget Decrease	This project replaces meters that are past their lifecycle. Metered water revenues may increase but cannot be quantified without implementation.
25	Water Street Phase 2	16W216	$454,896	$430,000	$0	$884,896	2017		Future Operating Budget Decrease	This project replaces meters that are past their lifecycle. Metered water revenues may increase but cannot be quantified without implementation.
26	PS - 089 Smith Creek Pump Station	15S316	$100,000	$400,000	$0	$500,000	2017		Future Operating Budget Decrease	This project replaces meters that are past their lifecycle. Metered water revenues may increase but cannot be quantified without implementation.
27	Find It, Fix It Methodology Water Replace and Rehab (AMP)	15W191	$1,013,827	$200,000	$1,800,000	$3,013,827	Annual		Future Operating Budget Decrease	This project rehabilitates existing infrastructure that is at the end of its lifecycle. Long term efficiency gains are expected but cannot yet be quantified.

*These growth projects will have substantial capital cost recovery from new customers or other stakeholders. The entire project amount is programmed to allow construction prior to cost recovery.

CAPE FEAR PUBLIC UTILITY AUTHORITY
Ten Year Capital Improvement Program
Impact of FY17 Capital Improvement on Operating Budget
FY 16-17

Reference Number	Capital Project	Current Project #	FY 11 to FY 16 Budgeted	FY-2017 Budget	FY-2018 to FY- Annual Planned	Total Cumulative Project Cost Planned	Estimated Completion Fiscal Year	Quantifiable Annual Operating Budget Impact Expected	Unquantifiable Annual Operating Budget Impact	Annual Operating Budget Impact Comments
All dollar amounts are shown in 2015 dollars. No adjustments are made for projected inflation or deflation.										
28	Virtual Desktop IT Migration	16A008	$120,000	$120,000	$280,000	$520,000	2019		Future Operating Budget Decrease	The project enables process improvements that lead to efficiencies that cannot be quantified without implementation.
29	Generator Replacement (Water - AMP)	16W211	$95,664	$100,000	$900,000	$1,095,664	Annual		Future Operating Budget Decrease	This project rehabilitates existing infrastructure that is at the end of its lifecycle. Long term efficiency gains are expected but cannot yet be quantified.
30	Information Technology Networking Infrastructure Replacement	16A007	$164,271	$100,000	$900,000	$1,164,271	Annual		Future Operating Budget Decrease	This project rehabilitates existing infrastructure that is at the end of its lifecycle. Long term efficiency gains are expected but cannot yet be quantified.
31	Water Treatment Facilities Rehabilitation (AMP)	16W214	$290,059	$50,000	$450,000	$790,059	Annual		Future Operating Budget Decrease	This project rehabilitates existing infrastructure that is at the end of its lifecycle. Long term efficiency gains are expected but cannot yet be quantified.
32	Find it, Fix it Methodology Raw Water Line Rehabilitation (AMP)	16W212	$50,000	$50,000	$450,000	$550,000	Annual		Future Operating Budget Decrease	This project rehabilitates existing infrastructure that is at the end of its lifecycle. Long term efficiency gains are expected but cannot yet be quantified.
33	Enterprise Software Replacement Project	15A001	$2,000,000	$2,200,000	$0	$4,200,000	2017		Future Operating Budget Decrease	The project enables process improvements that lead to efficiencies that cannot be quantified without implementation.
34	Motor Fleet Capital	16A009	$1,088,736	$1,000,000	$5,400,000	$7,488,736	Annual		Future Operating Budget Decrease	The project replaces fleet vehicles past their lifecycle with savings that cannot be quantified without implementation.
35	Runnymeade Capacity in Chair Road FM		$0	$460,000	$0	$460,000	2017		Future Operating Budget Decrease	This project eliminates repumping sewage through two pump stations . Long term efficiency gains are expected but cannot yet be quantified.
36	Water Meters for New Customers	16W222	$150,000	$250,000	$2,250,000	$2,650,000	Annual		Future Operating Budget Increase	Minor increase in operating budget to support new customers will be offset by increase in revenues with no net loss.
37	Sewer Collection Expansion*	16S346	$300,000	$200,000	$800,000	$1,300,000	Annual		Future Operating Budget Increase	Minor increase in operating budget to support new customers will be offset by increase in revenues with no net loss.
38	Collection System - Standard Developer Agreements	16S347	$556,000	$150,000	$1,350,000	$2,056,000	Annual		Future Operating Budget Decrease	Revenues from any new customers expected to be offset by increased operating cost of new infrastructure.
39	Distribution System - Standard Developer Agreements	16W220	$216,493	$150,000	$1,350,000	$1,716,493	Annual		Future Operating Budget Decrease	Revenues from any new customers expected to be offset by increased operating cost of new infrastructure.
40	Large Equipment Purchase	16S357	$79,098	$100,000	$900,000	$1,079,098	Annual		Future Operating Budget Decrease	This project rehabilitates existing infrastructure that is at the end of its lifecycle. Long term efficiency gains are expected but cannot yet be quantified.
41	SCADA System Wide Improvements (AMP)	13S238	$778,046	$100,000	$100,000	$978,046	2019		Future Operating Budget Decrease	This project rehabilitates existing infrastructure that is at the end of its lifecycle. Long term efficiency gains are expected but cannot yet be quantified.
42	SCADA Expansion of Wireless Access		$0	$80,000	$0	$80,000	2017		Future Operating Budget Decrease	This project enhances data collection and remote control of assets . Long term efficiency gains are expected but cannot yet be quantified.
43	Kings Bluff Pump Station Pump Replacement		$0	$50,000	$450,000	$500,000	2018		Future Operating Budget Decrease	This project rehabilitates existing infrastructure that is at the end of its lifecycle. Long term efficiency gains are expected but cannot yet be quantified.
	TOTAL CAPITAL IMPROVEMENT PROJECTS		**$32,385,788**	**$21,940,000**	**$71,400,000**	**$125,725,788**				

*These growth projects will have substantial capital cost recovery from new customers or other stakeholders. The entire project amount is programmed to allow construction prior to cost recovery.

FY 2017 to FY 2026 CIP	Current Project #	Project Cost	FY 11 to FY 16 Budgeted	FY 17 Planned	FY 18 Planned	FY 19 Planned	FY 20 Planned	FY 21 Planned	FY 22 Planned	FY 23 Planned	FY 24 Planned	FY 25 Planned	FY 26 Planned
Water Capital Projects				*All dollar amounts are shown in 2017 dollars.*									
Raw Water Improvements: Surface or Well Sources and Transmission													
Replace Castle Hayne Aquifer Source Water in Well Field	16W210	$1,700,000	$300,000		$700,000		$700,000						
Access Road and Drainage Improvements (AMP)	14W166	$120,000				$40,000			$40,000			$40,000	
Construction of New Raw Water Line with LCFWSA ILA		$31,850,000			$850,000	$31,000,000							
Kings Bluff Pump Station Pump Replacement		$500,000		$50,000	$450,000								
Replacement of 24-inch Raw Water Lines		$6,500,000								$6,500,000			
Generator Replacement (Water - AMP)	16W211	$1,095,664	$95,664	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000
Find it, Fix it Methodology Raw Water Line Rehabilitation	16W212	$550,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000
Water Treatment Plant Improvements													
Automated Weir Cleaning System at Sweeney Clarifier		$40,000								$40,000			
Nano Membrane Replacement		$500,000						$500,000					
Ozone Power Supply Unit Upgrades		$250,000		$250,000									
Groundwater Way Facilities - Install Fiber Optic Line		$200,000						$200,000					
Sweeney Clear Well Rehabilitations	13W155	$3,444,752	$3,344,752					$50,000			$50,000		
Water Treatment Facilities Rehabilitation (AMP)	16W214	$790,059	$290,059	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000
Water Storage Improvements: Elevated, Ground and Aquifer Storage													
Aquifer Storage and Recovery Southern Area		$3,000,000							$500,000		$2,500,000		
Elevated Tank Rehabilitation and Coatings		$4,500,000			$500,000	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000
Bragg Drive Elevated Storage Tank		$6,000,000									$6,000,000		
River Lights Elevated Storage Tank		$6,000,000											$6,000,000
Emergency Well Rehabilitation		$200,000			$200,000								
Distribution System Upgrades and Rehabilitation													
Comprehensive Meter Replacement Program	13W143	$17,335,859	$3,775,859	$4,500,000	$4,930,000	$100,000	$3,430,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000
Water Emergency Repair	16W223	$2,867,658	$617,658		$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000
Interconnect Monterey Heights Water System to Surface Water	14W177	$8,190,000	$1,190,000	$2,500,000			$4,500,000						
Rehabilitation of Water Infrastructure Matching with City Streets & Stormwater Funds		$6,000,000		$600,000	$600,000	$600,000	$600,000	$600,000	$600,000	$600,000	$600,000	$600,000	$600,000
Find It, Fix It Methodology Water Replace and Rehab (AMP)	15W191	$3,013,827	$1,013,827	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000
Water Distribution Sample Stations		$280,000		$70,000	$70,000	$70,000	$70,000						
Auto Flushers		$207,245	$57,245	$50,000	$50,000	$50,000							
Northern Transmission Main Interconnections		$6,000,000										$1,000,000	$5,000,000
Water Street Phase 2	16W216	$884,896	$454,896	$430,000									
Growth Projects													
Water Distribution Expansion		$1,500,000			$300,000		$300,000		$300,000		$300,000		$300,000
Distribution System - Standard Developer Agreements	16W220	$1,716,493	$216,493	$150,000	$150,000	$150,000	$150,000	$150,000	$150,000	$150,000	$150,000	$150,000	$150,000
Water Meters for New Customers	16W222	$2,650,000	$150,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000
TOTAL WATER CAPITAL IMPROVEMENT PROJECTS		$117,886,453	$11,556,453	$9,250,000	$9,700,000	$33,410,000	$11,150,000	$3,000,000	$3,090,000	$8,790,000	$11,100,000	$3,290,000	$13,550,000
TOTAL WASTEWATER CAPITAL IMPROVEMENT PROJECTS		$115,284,151	$22,534,151	$8,920,000	$11,710,000	$3,930,000	$7,520,000	$14,520,000	$13,450,000	$8,150,000	$5,450,000	$15,650,000	$3,450,000
TOTAL SYSTEM WIDE CAPITAL IMPROVEMENT PROJECTS		$18,210,151	$4,230,151	$3,770,000	$1,870,000	$2,740,000	$800,000	$800,000	$800,000	$800,000	$800,000	$800,000	$800,000
PROPOSED TOTAL CAPITAL IMPROVEMENT PROJECTS		$213,060,000		$21,940,000	$23,280,000	$40,080,000	$19,470,000	$18,320,000	$17,340,000	$17,740,000	$17,350,000	$19,740,000	$17,800,000

CAPE FEAR PUBLIC UTILITY AUTHORITY
TEN YEAR CAPITAL IMPROVEMENT PROGRAM
FY 16-17

FY 2017 to FY 2026 CIP	Current Project #	Project Cost	FY 11 to FY 16 Budgeted	FY 17 Planned	FY 18 Planned	FY 19 Planned	FY 20 Planned	FY 21 Planned	FY 22 Planned	FY 23 Planned	FY 24 Planned	FY 25 Planned	FY 26 Planned
Wastewater Capital Projects				*All dollar amounts are shown in 2017 dollars.*									
Waste Water Treatment Plant Improvements													
Northside WWTP - Bulk Reclaim Water Inline Sidestream UV Reactor		$100,000					$100,000						
SCADA Controls - Northside WWTP Digester		$310,000		$40,000	$270,000								
Northside WWTP - Aeration Basin Piping		$800,000					$80,000	$720,000					
Northside WWTP - Tertiary Filter Walkway		$170,000				$30,000	$140,000						
Northside WWTP - Replace/ Upgrade Generator #1		$1,750,000					$1,750,000						
Northside WWTP - Digester 4 & 5 Rehab and Coating	14S275	$945,000	$145,000	$800,000									
Wastewater Treatment Facilities Rehabilitation (AMP)		$2,200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000
Southside WWTP - Interim Rehabilitation	16S349	$5,880,531	$380,531	$500,000	$3,000,000		$2,000,000						
Southside WWTP - Land Purchase	09S016	$650,000						$650,000					
SCADA Server at Northside		$50,000		$50,000									
Collection System Rehabilitation/Replacement													
Sewer Emergency Repair	16S340	$13,065,236	$5,565,236	$750,000	$750,000	$750,000	$750,000	$750,000	$750,000	$750,000	$750,000	$750,000	$750,000
Find It, Fix It Methodology Gravity Sewer Rehabilitation (AMP)	16S342	$21,345,000	$6,345,000	$1,500,000	$1,500,000	$1,500,000	$1,500,000	$1,500,000	$1,500,000	$1,500,000	$1,500,000	$1,500,000	$1,500,000
Rehabilitation of Sewer Infrastructure Matching with City Streets & Stormwater Funds		$6,000,000		$600,000	$600,000	$600,000	$600,000	$600,000	$600,000	$600,000	$600,000	$600,000	$600,000
Greenfield Lake Outfall Phase 3	12S171	$3,404,111	$2,844,111	$560,000									
Surry Downs Outfall Rehabilitation		$1,000,000						$1,000,000					
Chestnut Steet Outfall Rehabilitation		$1,000,000							$1,000,000				
Andover and Bradley Creek Outfall Rehabilitation		$500,000							$500,000				
Pump Station & Forcemain Improvements													
Find It, Fix It Methodology Force Main Rehabilitation (AMP)	16S341	$1,200,000	$200,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000
Sewer Pump Station Asset Rehab and Upgrade (AMP)	15S304	$450,000			$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000
SCADA Implementation at Pump Stations	16S344	$1,000,000	$250,000	$250,000	$250,000	$250,000							
Generator Replacement (Sewer - AMP)	15S306	$1,086,638	$186,638		$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000
Runnymeade Capacity in Chair Road FM		$460,000		$460,000									
PS - 001 Northchase SE	13S221	$215,716	$145,716	$70,000									
PS - 005 Lincoln Forest Replacement		$750,000								$750,000			
PS - 006 Newkirk Ave. Replacement		$750,000								$750,000			
PS - 008 Replacement	14S283	$1,380,000	$1,050,000	$330,000									
PS - 010 Force Main	14S278	$4,850,000	$350,000						$4,500,000				
PS - 010 Renovation and Capacity Upgrade	13S224	$9,156,371	$156,371		$500,000			$8,500,000					
PS - 011 Decommission & PS - 009 Upgrades	15S308	$2,405,000	$2,205,000	$200,000									
PS - 012 Force Main	15S303	$1,830,000	$350,000	$1,480,000									
PS - 013 Dawson St. Replacement		$1,500,000								$1,500,000			
PS - 016 Central Blvd. Replacement		$1,500,000								$1,500,000			
PS - 018 Greenhowe Woods	13S226	$155,000	$75,000	$80,000									
PS - 021 River Rd. Replacement		$1,500,000										$1,500,000	
PS - 022 Tangle Oaks 3	13S227	$380,000	$300,000		$80,000								
PS - 029 New Centre Dr. Replacement		$1,500,000										$1,500,000	
PS - 034 Hewlett's Creek Redirect to Northside WWTP through NEI Northern Route		$1,000,000							$1,000,000				
PS - 069 Motts Creek Pump Station Upgrade	15S307	$4,300,000	$400,000		$3,900,000								
PS - 089 Smith Creek Pump Station	15S316	$500,000	$100,000	$400,000									
PS - 119 Beasley Road	13S235	$350,000	$150,000	$200,000									
PS - 137 Quail Woods	13S237	$539,548	$279,548		$260,000								
Greenville Loop Pump Stations and FM Rehabillitation		$2,000,000							$2,000,000				
PS-021 River Road FM Rehabilitation or Replacement		$5,000,000									$1,000,000	$4,000,000	
PS-25A FM Rehabilitation		$1,000,000							$1,000,000				
PS-34 FM Rehabilitation		$6,000,000									$1,000,000	$5,000,000	
Growth Projects													
Sewer Collection Expansion	16S346	$1,300,000	$300,000	$200,000		$200,000		$200,000		$200,000		$200,000	
Collection System - Standard Developer Agreements	16S347	$2,056,000	$556,000	$150,000	$150,000	$150,000	$150,000	$150,000	$150,000	$150,000	$150,000	$150,000	$150,000
TOTAL WASTEWATER CAPITAL IMPROVEMENT PROJECTS		$115,284,151	$22,534,151	$8,920,000	$11,710,000	$3,930,000	$7,520,000	$14,520,000	$13,450,000	$8,150,000	$5,450,000	$15,650,000	$3,450,000
TOTAL WATER CAPITAL IMPROVEMENT PROJECTS		$117,886,453	$11,556,453	$9,250,000	$9,700,000	$33,410,000	$11,150,000	$3,000,000	$3,090,000	$8,790,000	$11,100,000	$3,290,000	$13,550,000
TOTAL SYSTEM WIDE CAPITAL IMPROVEMENT PROJECTS		$18,210,151	$4,230,151	$3,770,000	$1,870,000	$2,740,000	$800,000	$800,000	$800,000	$800,000	$800,000	$800,000	$800,000
PROPOSED TOTAL CAPITAL IMPROVEMENT PROJECTS		$213,060,000		$21,940,000	$23,280,000	$40,080,000	$19,470,000	$18,320,000	$17,340,000	$17,740,000	$17,350,000	$19,740,000	$17,800,000

FY 2017 to FY 2026 CIP	Current Project #	Project Cost	FY 11 to FY 16 Budgeted	FY 17 Planned	FY 18 Planned	FY 19 Planned	FY 20 Planned	FY 21 Planned	FY 22 Planned	FY 23 Planned	FY 24 Planned	FY 25 Planned	FY 26 Planned
System Wide Capital Projects				*All dollar amounts are shown in 2017 dollars.*									
Systemwide projects for both Water and Wastewater													
Large Equipment Purchase	**16S357**	**$1,079,098**	**$79,098**	**$100,000**	**$100,000**	**$100,000**	**$100,000**	**$100,000**	**$100,000**	**$100,000**	**$100,000**	**$100,000**	**$100,000**
Enterprise Software Replacement Project	**15A001**	**$4,200,000**	**$2,000,000**	**$2,200,000**									
Information Technology Networking Infrastructure Replacement	**16A007**	**$1,164,271**	**$164,271**	**$100,000**	**$100,000**	**$100,000**	**$100,000**	**$100,000**	**$100,000**	**$100,000**	**$100,000**	**$100,000**	**$100,000**
Virtual Desktop IT Migration	**16A008**	**$520,000**	**$120,000**	**$120,000**	**$140,000**	**$140,000**							
Motor Fleet Capital	**16A009**	**$7,488,736**	**$1,088,736**	**$1,000,000**	**$600,000**	**$600,000**	**$600,000**	**$600,000**	**$600,000**	**$600,000**	**$600,000**	**$600,000**	**$600,000**
Construct Utility Services Operations Center		**$2,000,000**			**$250,000**	**$1,750,000**							
CFPUA Portable Emergency Generator Connection Systems		**$700,000**		**$70,000**	**$630,000**								
SCADA Expansion of Wireless Access		**$80,000**		**$80,000**									
SCADA System Wide Implementation (AMP)	**13S238**	**$978,046**	**$778,046**	**$100,000**	**$50,000**	**$50,000**							
TOTAL SYSTEM WIDE CAPITAL IMPROVEMENT PROJECTS		**$18,210,151**	**$4,230,151**	**$3,770,000**	**$1,870,000**	**$2,740,000**	**$800,000**	**$800,000**	**$800,000**	**$800,000**	**$800,000**	**$800,000**	**$800,000**
TOTAL WATER CAPITAL IMPROVEMENT PROJECTS		**$117,886,453**	**$11,556,453**	**$9,250,000**	**$9,700,000**	**$33,410,000**	**$11,150,000**	**$3,000,000**	**$3,090,000**	**$8,790,000**	**$11,100,000**	**$3,290,000**	**$13,550,000**
TOTAL WASTEWATER CAPITAL IMPROVEMENT PROJECTS		**$115,284,151**	**$22,534,151**	**$8,920,000**	**$11,710,000**	**$3,930,000**	**$7,520,000**	**$14,520,000**	**$13,450,000**	**$8,150,000**	**$5,450,000**	**$15,650,000**	**$3,450,000**
PROPOSED TOTAL CAPITAL IMPROVEMENT PROJECTS		**$213,060,000**		**$21,940,000**	**$23,280,000**	**$40,080,000**	**$19,470,000**	**$18,320,000**	**$17,340,000**	**$17,740,000**	**$17,350,000**	**$19,740,000**	**$17,800,000**

TAB INSERT: DEBT

CAPE FEAR PUBLIC UTILITY AUTHORITY
DEBT

Debt in the form of revenue bonds has been issued to finance the Authority's capital improvements. Since the Authority issues revenue bonds, there is no statutory limit on the amount of debt; however, the Authority applies sound financial management principles in financing decisions. The Authority may issue debt in FY 2017.

Debt Policy

The Authority will comply with all covenants and requirements of its Master Bond Indenture.

- Maintain a reserve amount sufficient to pay the current expenses for two months of the fiscal year as shown in the annual budget.
- Rate covenants: 1) Maintain debt service coverage ratio of 1.2 on the Authority's parity indebtedness, 2) Maintain debt service coverage ratio of 1.0 on the Authority's total indebtedness.
- In order to issue additional bonds, the Authority must maintain debt service coverage ratio of 1.2 on the Authority's total indebtedness for 12 consecutive months of 18 months preceding the issuance of new bonded debt.

Authority Credit Rating

The Authority has maintained a credit rating of AA+ from Standard & Poor's and AA2 from Moody's.

Debt Service Coverage Ratio

The Debt Service Coverage Ratio for All Indebtedness increased to 1.77 in FY 2015 from 1.65 in FY 2014, remaining above the 1.0 ratio required by bond rate covenants. The Debt Service Coverage Ratio for Parity Indebtedness increased to 2.33 in FY 2015 compared to 2.15 in FY 2014, remaining above the 1.2 ratio required by bond rate covenants. The Debt Service Coverage Ratio for All Indebtedness is budgeted at 1.45 in FY 2017 and 1.52 in FY 2016. We expect actual debt coverage will be higher due to actual expenditures being lower than budgeted.

Debt Service Coverage Ratios	
Fiscal Year Ended June 30	**Debt Coverage Ratio**
2015	
Parity Debt Coverage Ratio	2.33
Total Debt Coverage Ratio	1.77
2014	
Parity Debt Coverage Ratio	2.15
Total Debt Coverage Ratio	1.65
2013	
Parity Debt Coverage Ratio	1.89
Total Debt Coverage Ratio	1.54

CAPE FEAR PUBLIC UTILITY AUTHORITY
DEBT

Outstanding Debt

The outstanding balance of existing bonded debt and installment obligations as of June 30, 2016 will be $314,672,235 as shown in the table below:

OUTSTANDING BALANCE OF EXISTING DEBT	
June 30, 2016	
REVENUE BONDS	
Series 2011 Water & Sewer Revenue Bonds	38,360,000
Series 2014A Water & Sewer Revenue & Refunding Revenue Bonds	58,175,000
Series 2014B Taxable Water & Sewer Refunding Revenue Bonds	3,535,000
Series 2016 Water & Sewer Refunding Revenue Bonds	155,770,000
Sub-total	**255,840,000**
INSTALLMENT OBLIGATIONS	
Series 2005A Certificates of Participation	1,749,800
Series 2012 Limited Obligation Bonds	11,930,000
ARRA Federal Revolving Loan	1,120,120
Clean Water State Revolving Loans	8,236,690
Sub-total	**23,036,610**
Total Outstanding Balance of Existing Debt	**$ 278,876,610**

Schedule of Debt Service

The annual debt service for existing outstanding and future debt issues are included on the Schedule of Debt Service for Fiscal Years 2017-2022 which follows.

CAPE FEAR PUBLIC UTILITY AUTHORITY
FY 16-17

Operating and Capital Budget Summary
Debt Service Coverage Ratio

	CFPUA FY16-17 Adopted Budget
REVENUES	
Water Revenues	$ 31,297,342
Wastewater Revenues	35,797,524
Other Charges for Service	3,512,500
Total Operating Revenues	**70,607,366**
System Development Charges	3,600,000
Investment Earnings	443,200
Total Non-Operating Revenues	**4,043,200**
Total Revenues	**74,650,566**
EXPENDITURES	
Operating Expenditures before Debt Service and Capital Outlay (Note 1)	**39,747,081**
Net Income before Debt Service and Capital Outlay	**34,903,485**
Debt Service (Principal & Interest Payments - Note 2)	**24,035,053**
Debt Service Coverage Ratio for All Indebtedness	**1.45**
Total Expenditures	**63,782,134**
NET INCOME	
Net Income after Debt Service, Available for Capital Outlay (Note 3)	**10,918,432**
CAPITAL OUTLAY	
Capital Outlay Funded in Operating Fund	**$ 387,706**
Transfers to Capital Project Funds	**$ 10,530,726**

Note 1: Operating Expenditures before Debt Service and Capital Outlay excluding debt service fees of $225,000.
Note 2: Debt Service shown net of $225,000 in debt service fees.
Note 3: Revenues & Appropriated Fund Balance Less: Operating Expenses, Debt Service & Debt Fees

CAPE FEAR PUBLIC UTILITY AUTHORITY
SCHEDULE OF DEBT SERVICE
FISCAL YEARS 2017-2022

Cape Fear Public Utility Authority Revenue Bonds	Original Par Amount	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22
Series 2011 Water & Sewer Revenue Bonds	44,100,000	3,312,013	3,313,563	3,045,463	2,812,063	2,809,663	2,808,038
Series 2014 Water & Sewer Revenue Bonds	65,085,000	5,647,040	5,655,970	5,652,900	4,426,750	4,424,750	4,427,500
Series 2016 Water & Sewer Refunding Revenue Bonds	155,770,000	12,483,829	12,487,725	12,484,600	12,490,600	12,499,600	12,491,100
Series 2017 Water & Sewer Revenue Bonds	12,000,000	0	851,430	851,430	851,430	851,430	851,430
Total Cape Fear Public Utility Authority Revenue Bonds	276,955,000	21,442,881	22,308,688	22,034,393	20,580,843	20,585,443	20,578,068
Principal portion of Cape Fear Public Utility Authority Revenue Bonds		12,825,000	11,046,429	11,244,001	10,307,201	10,831,061	11,375,614
Interest portion of Cape Fear Public Utility Authority Revenue Bonds		8,617,881	11,262,259	10,790,392	10,273,642	9,754,382	9,202,454
		21,442,881	22,308,688	22,034,393	20,580,843	20,585,443	20,578,068

Cape Fear Public Utility Authority Installment Debt	Original Par Amount	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22
ARRA Federal Revolving Loan (Aquifer Storage & Retrieval)	1,307,440	65,373	65,372	65,372	65,372	65,372	65,372
Clean Water State Revolving Loan (Burnt Mill Creek Phase II)	3,025,992	214,444	210,730	207,016	203,301	199,587	195,872
Clean Water State Revolving Loan (Greenfield Lake Outfall)	2,201,480	149,701	147,499	145,298	143,096	140,895	138,693
Clean Water State Revolving Loan (McCumber's Ditch Sewer Rehab)	1,250,000	85,000	83,750	82,500	81,250	80,000	78,750
Clean Water State Revolving Loan (Between the Creeks PS#28)	429,000	29,172	28,743	28,314	27,885	27,456	27,027
Clean Water State Revolving Loan (30th Street Sewer Rehab)	1,086,266	73,866	72,780	71,694	70,607	69,521	68,435
Clean Water State Revolving Loan (Smith Creek Alandale PS Removal)	1,913,623	130,126	128,213	126,299	124,385	122,472	120,558
	11,213,801	747,683	737,087	726,492	715,897	705,302	694,708
Principal portion of Cape Fear Public Utility Authority Installment Debt		560,691	560,690	560,690	560,690	560,690	560,690
Interest portion of Cape Fear Public Utility Authority Installment Debt		186,992	176,397	165,802	155,207	144,612	134,018
		747,683	737,087	726,492	715,897	705,302	694,708

New Hanover County Installment Debt	Original Par Amount	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22
Series 2005A Certificates of Participation	6,996,600	913,689	911,869	0	0	0	0
Series 2012 Limited Obligation Bonds Refunding	16,005,000	1,557,800	1,500,775	1,439,350	1,383,450	1,328,150	1,278,350
New Hanover County Debt Payment Reduction	0	(627,000)	(304,000)	0	0	0	0
Total New Hanover County Installment Debt	23,001,600	1,844,489	2,108,644	1,439,350	1,383,450	1,328,150	1,278,350
Principal portion of New Hanover County Installment Debt		1,938,000	1,946,800	1,030,000	1,015,000	1,000,000	990,000
Interest portion of New Hanover County Installment Debt		533,489	465,844	409,350	368,450	328,150	288,350
New Hanover County Debt Payment Reduction		(627,000)	(304,000)	0	0	0	0
		1,844,489	2,108,644	1,439,350	1,383,450	1,328,150	1,278,350
Total Debt Service	**$ 337,605,401**	**$ 24,035,053**	**$ 25,154,418**	**$ 24,200,235**	**$ 22,680,190**	**$ 22,618,895**	**$ 22,551,125**
Debt Service Fees		**225,000**	**231,750**	**238,703**	**245,864**	**253,239**	**260,837**
Total Debt Service and Fees		**$ 24,260,053**	**$ 25,386,168**	**$ 24,438,937**	**$ 22,926,053**	**$ 22,872,134**	**$ 22,811,962**
Less: Capitalized Interest (Proceeds from Revenue Bonds)		**0**	**0**	**0**	**0**	**0**	**0**
Less: Excess Bond Funds (Transfer from Capital Projects Funds)		**0**	**0**	**0**	**0**	**0**	**0**
Net Debt Service		**24,260,053**	**25,386,168**	**24,438,937**	**22,926,053**	**22,872,134**	**22,811,962**
Bond Issuance Costs (Proceeds from Revenue Bonds)		**$ 690,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

TAB INSERT: DEPARTMENT DESCRIPTIONS

CAPE FEAR PUBLIC UTILITY AUTHORITY
POSITIONS SUMMARY
FY 16-17

The budget authorizes a total of 303.5 positions.
Full-Time Equivalents (FTEs) by department.

	FY15	FY16	FY17	Note
Administration	5	5	**5**	
Finance	9	12	**12**	
Human Resources/Safety	5	5	**5**	
Engineering	24	25	**27**	**(1)**
Operations - Administration	10	8	**8**	
Operations - Information Technology	6	6	**6**	
Operations - Centralized Maintenance	14	14	**14**	
Operations - Utility Services	97	88	**90**	**(3)**
Operations - Wastewater Treatment	30	30	**30**	
Operations - Water Treatment	24	24	**25**	**(3)**
Environmental Management	28.5	28.5	**28.5**	
Customer Service/Meters	42	50	**53**	**(2)**
Total	**294.5**	**295.5**	**303.5**	

Notes: Changes in positions between FY16 and FY17
(1) Two new positions added in Engineering approved by Board in FY16.
(2) Three new temporary positions added in Customer Service for ERP Implementation.
(3) Three new positions recommended in FY17.

CAPE FEAR PUBLIC UTILITY AUTHORITY
APPROVED SALARY SCALE
FY 16-17

Grade	Minimum	1st Quartile	Midpoint	3 Quartile	Maximum
G06	$ 24,826.21	$ 28,239.81	$ 31,653.42	$ 35,067.02	$ 38,480.63
G07	$ 26,083.03	$ 29,669.45	$ 33,255.86	$ 36,842.28	$ 40,428.70
G08	$ 27,403.49	$ 31,171.47	$ 34,939.45	$ 38,707.43	$ 42,475.41
G09	$ 28,790.79	$ 32,749.52	$ 36,708.26	$ 40,666.99	$ 44,625.72
G10	$ 30,248.33	$ 34,407.48	$ 38,566.62	$ 42,725.77	$ 46,884.91
G11	$ 31,779.65	$ 36,149.35	$ 40,519.05	$ 44,888.76	$ 49,258.46
G12	$ 33,388.50	$ 37,979.42	$ 42,570.34	$ 47,161.26	$ 51,752.18
G13	$ 35,078.79	$ 39,902.12	$ 44,725.46	$ 49,548.79	$ 54,372.12
G14	$ 36,854.66	$ 41,922.18	$ 46,989.69	$ 52,057.21	$ 57,124.72
G15	$ 38,720.41	$ 44,044.47	$ 49,368.52	$ 54,692.58	$ 60,016.64
G16	$ 40,680.64	$ 46,274.23	$ 51,867.82	$ 57,461.40	$ 63,054.99
G17	$ 42,740.10	$ 48,616.86	$ 54,493.63	$ 60,370.39	$ 66,247.16
G18	$ 44,903.81	$ 51,078.08	$ 57,252.36	$ 63,426.63	$ 69,600.91
G19	$ 47,177.07	$ 53,663.92	$ 60,150.76	$ 66,637.61	$ 73,124.46
G20	$ 49,565.40	$ 56,380.64	$ 63,195.89	$ 70,011.13	$ 76,826.37
G21	$ 54,710.94	$ 62,233.69	$ 69,756.45	$ 77,279.20	$ 84,801.96
G22	$ 60,390.63	$ 68,694.34	$ 76,998.05	$ 85,301.76	$ 93,605.48
G23	$ 66,659.96	$ 75,825.70	$ 84,991.45	$ 94,157.19	$ 103,322.94
G24	$ 73,580.13	$ 83,697.40	$ 93,814.67	$ 103,931.93	$ 114,049.20
G25	$ 81,218.69	$ 92,386.26	$ 103,553.83	$ 114,721.40	$ 125,888.97
G26	$ 89,650.24	$ 101,977.15	$ 114,304.06	$ 126,630.96	$ 138,957.87
G27	$ 98,957.09	$ 112,563.69	$ 126,170.29	$ 139,776.89	$ 153,383.49

Source: CFPUA Human Resources-March 2016, C & C Study FY17

CAPE FEAR PUBLIC UTILITY AUTHORITY POSITION/GRADE BY DEPARTMENT FY 16-17			
DEPT	**Number Positions**	**POSITION**	**GRADE**
ADM	1	Executive Director	C
ADM	1	Chief Communications Officer	23
ADM	1	Executive Assistan/Board Clerk	18
ADM	1	Assistant to Executive Director	18
ADM	1	Internal Auditor	22
	5		
FIN	1	Chief Financial Officer	26
FIN	1	Budget/Finance Manager	22
FIN	1	Procurement Manager	22
FIN	0.5	Contract Specialist (P-T)	12
FIN	1	Assistant Procurement Manager	17
FIN	1	Fiscal Support Specialist	14
FIN	1	Accounts Payable Specialist	15
FIN	1	Payroll Specialist	15
FIN	1	ERP Systems Administrator	23
FIN	1	Enterprise Resource Planning Analyst	20
FIN	1	Capital Projects Finance Manager	21
FIN	1	Accounting Manager	22
FIN	0.5	Financial Systems Analyst (PT)	22
	12		
HR	1	Human Resources Director/Safety	25
HR	1	Benefits Manager	21
HR	1	Compensation Manager	22
HR	1	Safety Program Manager	21
HR	1	Human Resources Assistant	14
	5		
ENG	1	Director of Engineering	26
ENG	4	Project Manager	22
ENG	1	Project Engineer	21
ENG	2	Engineering Technician	16
ENG	1	GIS Administrator	21
ENG	1	GIS Specialist	17
ENG	5	Construction Inspector	15
ENG	1	Office Administrator	14
ENG	1	Customer Liaison	11
ENG	3	Engineering Manager	24
ENG	2	Senior Project Engineer	23
ENG	1	Property Acquisition Specialist	21
ENG	3	Senior Project Manager	23
ENG	1	Program Manager	22
	27		

DEPT	Number Positions	POSITION	GRADE
WT	1	Water Resources Manager	24
WT	1	Water Treatment Supervisor	21
WT	2	Water Treatment Operations Supervisor	20
WT	11	Water Control Operator	15
WT	1	Office Adminstrator	14
WT	5	Water Process Operator	13
WT	1	Administrative Support Technician	10
WT	1	Water Resources Technician	11
WT	2	Water Control Operator, Senior	17
	25		
WWT	1	Wastewater Superintendent	24
WWT	2	Wastewater Treatment Plant Supervisor	21
WWT	2	Wastewater Operations Supervisor	20
WWT	2	Utility Maintenance Technician	12
WWT	16	WWT Process Operator	13
WWT	3	WWT Control Operator	15
WWT	1	WWT Control Operator, Senior	17
WWT	2	Office Administrator	14
WWT	1	Custodian	6
	30		
US-ADM	1	Chief Operations Officer/Deputy Executive Director	27
US-ADM	1	Utility Services Superintendent	24
US-ADM	1	Office Administrator	14
US-CM	1	Maintenance Superintendent (Wtr/WW)	23
US-CM	1	Administrative Support Technician	10
US-CM	1	Facilities/Inventory Technician	12
US-CM	1	Asset Coordinator	21
US-CM	1	Water Treatment Plant Maintenance Supervisor	19
US-CM	1	Maintenance Welder/Fabricator	12
US-CM	1	Utility Maintenance Foreman	15
US-CM	2	Facilities Specialist-wtr	14
US-CM	2	Facilities Specialist-ww	14
US-CM	1	Electric & Instrument Technician	14
US-CM	6	Utility Maintenance Mechanic	12
US-CM	1	Wastewater Treatment Plant Maintenance Supv	19
US-COLL	3	Camera Assistant	10
US-COLL	1	Camera Crew Foreman	15
US-COLL	3	Camera Operator-3 crews	12
US-COLL	1	Collection System Supervisor	19
US-COLL	1	Collections Equipment Crew Foreman	15
US-COLL	6	Collections Equipment Operator	10
US-COLL	5	Collections Equipment Operator, Senior	12
US-COLL	1	Collections System Manager	23
US-COLL	2	Heavy Equipment Operator	12
US-COLL	1	Office Administrator	14
US-COLL	5	Pump Station Crew Foreman	15
US-COLL	1	Pump Station Operations Foreman	16
US-COLL	5	Pump Station Operator	12

DEPT	Number Positions	POSITION	GRADE
US-COLL	1	Pump Stations Supervisor	19
US-COLL	2	ROW/ Heavy Construction Maint Tech	12
US-COLL	2	ROW/Heavy Construction Crew Foreman	15
US-COLL	1	ROW/Heavy Construction Supervisor	19
US-COLL	1	Service Jet Foreman	15
US-COLL	2	Service Technician	12
US-COLL	2	Trades Specialist	14
US-COLL	7	Utility Maintenance Technician-pump stations	12
US-COLL	1	Warehouse Technician	9
US-D & C	2	Planner/Scheduler	17
US-DIS	1	Operations Project Manager	22
US-DIS	1	Construction Supervisor- 1 dist	17
US-DIS	1	Distribution/Construction Manager	23
US-DIS	1	Office Administrator	14
US-DIS	1	Warehouse Coordinator	15
US-DIS	1	Water Quality Foreman	15
US-DIS	3	Water Quality Technician-Dist	13
US-DIS	1	Adminstrative Support Technician	10
US-DIS	6	Construction Crew Foreman- 6 dist	15
US-DIS	4	Senior Construction Worker	11
US-DIS	9	Construction Worker	9
US-DIS	1	Utility Locator Foreman	15
US-DIS	4	Utility Locator	11
US-IT	1	Chief Information Officer	25
US-IT	1	IT Specialist	16
US-IT	1	Network Administrator	22
US-IT	1	SCADA Systems Manager	22
US-IT	1	Server Administrator	22
US-IT	1	Database Administrator	22
	118		
EMD	1	Environment Management Director	26
EMD	1	Environmental Program Manager	21
EMD	1	Laboratory Manager	22
EMD	1	Environmental Compliance Manager	22
EMD	2	Supervising Chemist- 1 Wtr, 1 WW	21
EMD	1	Environmental Data Analyst	18
EMD	1	Environmental Compliance Supervisor	19
EMD	2	Chemist - 1WW & 1 WTR	17
EMD	1	Chemist, Senior - WTR	19
EMD	1	Microbiology Technician	15
EMD	1	Environmental Program Auditor	16
EMD	3	Environmental Compliance Officer	16
EMD	8.5	Laboratory Technician-2ww, 4 wtr, .5qc(PT)	14
EMD	1	Administrative Assistant	12
EMD	1	Administrative Support Specialist	12
EMD	1	Environmental Services Superintendent	23
EMD	1	Security & Emergency Manager	22
	28.5		

DEPT	Number Positions	POSITION	GRADE
CS	1	Customer Service Director/Deputy Finance Officer	25
CS	2	Administrative Support Specialist	12
CS	1	Billings and Collections Manager	21
CS	1	Customer Service Manager	21
CS	1	Billing Supervisor	17
CS	1	Credit/Collections Supervisor	17
CS	4	Billing Specialist	11
CS	1	Account Specialist	13
CS	4	Collections Specialist	13
CS	11	Customer Service Representative	10
CS	1	Meter Reading & Services Manager	21
CS	1	Meter Services Supervisor	17
CS	1	Meter Reader Supervisor	17
CS	1	Meter Technician, Senior	12
CS	7	Meter Technician	11
CS	9	Meter Reader	9
CS	2	Customer Service Supervisor	17
CS	1	Cash Applications Technician	10
CS	1	Cash Applications Specialist	13
CS	2	Customer Service Rep, Lead	12
	53		
	303.5		

AUTHORITY BOARD

Board Chair, Patricia O. Kusek

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 the adoption of the annual budget, setting water and sewer rates, making policy decisions, and appointing the Executive Director, Internal Auditor, and the Authority's Legal Counsel.

Key Accomplishments for FY 16

- Supported regional, cooperative solutions to water and sewer needs through partnerships in the public and private sectors.
- Initiated survey of customers and key stakeholders.
- Reviewed and supported Executive Director and staff initiatives for system growth and community outreach.

Authority Board Notable Goals for FY 17

Goals	Relation to Strategic Plan	Responsible Party	Performance Metric
Continue to set policies and objectives for the organization.	Goals 1, 2 & 3	Board Members	Document policies and objectives; Minutes of Committee & Board meeting
Provide direction for the Authority to meet its Mission to *provide high-quality water and sewer service in an environmentally responsible manner, while maintaining the lowest practicable cost*.	Goals 1, 2 & 3	Board Members	Minutes of Committee & Board meetings

Summary of Expenditures

EXPENDITURES DETAIL BY DEPARTMENT	CFPUA FY 13-14 Adjusted Budget	CFPUA FY 13-14 Actual	CFPUA FY 14-15 Adjusted Budget	CFPUA FY 14-15 Actual	CFPUA FY 15-16 Adopted Budget	CFPUA FY 15-16 Amendments & Transfers	CFPUA FY 15-16 Adjusted Budget	CFPUA FY 16-17 Adopted Budget	% Change FY 16-17 Adopted/FY 15-16 Adopted
Authority Board									
Personnel	$ 28,100	$ 27,500	$ 39,603	$ 39,600	$ 39,603	$ (3)	$ 39,600	$ 39,600	-0.01%
Benefits	2,019	2,104	3,036	3,035	3,162	(117)	3,045	3,032	-4.11%
Operating	92,263	44,203	34,788	28,981	35,526	(11,628)	23,898	21,998	-38.08%
Total Authority Board	**122,382**	**73,807**	**77,427**	**71,616**	**78,291**	**(11,748)**	**66,543**	**64,630**	-2.65%

Cape Fear Public Utility Authority sign at 235 Government Center Drive in Wilmington

ADMINISTRATION
OFFICE OF THE EXECUTIVE DIRECTOR

Executive Director, James R. Flechtner, P.E.

The Executive Director is responsible for the overall management of Cape Fear Public Utility Authority. The Executive Director employs and manages the management staff, designates assignments, and is responsible for carrying out the policies and directives of the Board. The Authority's Administration Department includes an Executive Assistant who provides direct support to the Executive Director and the Chief Communications Officer.

Key Accomplishments for FY 16

- Provided leadership to ensure that the organization's overall mission was accomplished.
- Promoted and maintained outstanding service and communications with customers.
- Provided the Authority Board with timely support and information.
- Ensured that water and wastewater facilities operated in compliance with applicable standards.
- Implemented sound fiscal policies, budgets and controls.
- Implemented and maintained effective long-term financial, operational and environmental sustainability plans.
- Provided high-level direction and support for the sustainability and resource management activities throughout the Authority.
- Encouraged teamwork within the Authority and with our partners in the community.
- Promoted training and development of all employees in order to improve services.
- Promoted an environment of open communications within the Authority.
- Endorsed and encouraged a safe working environment.

ADMINISTRATION
OFFICE OF THE EXECUTIVE DIRECTOR

Office of the Executive Director Notable Goals for FY 17

Goals	Relation to Strategic Plan	Responsible Party	Performance Metric
Carry out the Authority's mission to provide high quality water and sewer service in an environmentally responsible manner, while maintaining the lowest practicable cost.	Goals 1, 2 & 3	Executive Director	Document policies and procedures that adhere to the mission; document number of SSO's; budget documents
Adhere to the Authority's Guiding Principles of: • ***Stewardship*** **– Maintain a stable financial position that balances rates, the environment and the Authority's long-term capital and operating needs.** • ***Sustainability*** **– Build partnerships that encourage growth while optimizing the protection and use of water and sewer resources.** • ***Service*** **– Strengthen relationships with customers, regulators, government officials, including the City of Wilmington and New Hanover County, and support staff by providing a competitive, safe, work environment that offers rewards for excellence.**	Goals 1, 2 & 3	Executive Director	Document policies and procedures that adhere to the Authority's Guiding Principles

Summary of Expenditures

EXPENDITURES DETAIL BY DEPARTMENT

	CFPUA FY 13-14 Adjusted Budget	CFPUA FY 13-14 Actual	CFPUA FY 14-15 Adjusted Budget	CFPUA FY 14-15 Actual	CFPUA FY 15-16 Adopted Budget	CFPUA FY 15-16 Amendments & Transfers	CFPUA FY 15-16 Adjusted Budget	CFPUA FY 16-17 Adopted Budget	% Change FY 16-17 Adopted/FY 15-16 Adopted
Administration									
Personnel	411,257	353,131	449,647	446,961	460,573	-	460,573	471,676	2.41%
Benefits	115,506	92,105	125,285	124,617	134,389	(3,257)	131,132	135,137	0.56%
Operating	328,100	230,070	319,500	292,382	289,900	(500)	289,400	293,561	1.26%
Total Administration	**854,863**	**675,306**	**894,432**	**863,960**	**884,862**	**(3,757)**	**881,105**	**900,374**	2.13%

ADMINISTRATION
COMMUNICATIONS DIVISION

Chief Communications Officer, Mike McGill

The Communications Division within the Administration Department is responsible for keeping customers and other key stakeholders, including the news media, informed about CFPUA's role within the City of Wilmington and New Hanover County. The division also supports various departments within CFPUA with outreach to customers affected by scheduled construction projects or by providing emergency response assistance.

Key Accomplishments for FY 16

Communications continued to build positive working relationships with the media. The relationships that have been built with the media allow for CFPUA to be able to get its side of the story out through at least neutral, and in many cases, positive coverage. Over the course of the year, CFPUA received positive or helpful neutral coverage on more than a dozen topics, including:

- A Sunday Star-News editorial titled, "CFPUA work is paying off," described CFPUA's good work and commended both our board and our employees;
- The editorial spun out of a media release that gained positive coverage about CFPUA's cuts in sewer spills by nearly 50% since we began our work in 2008;
- CFPUA's Flemington project. A major event was held at the Chamber of Commerce with New Hanover County, the City of Wilmington, and the Chamber. A video was also created highlighting the project which ran on newscasts, online, and on NHCTV;
- CFPUA's role in protecting public health during the VA Clinic water quality situation;
- CFPUA's role to protect the environment through our work during the Hurricane Joaquin-related deluges of early October;
- The positive results from the UNC School of Government Environmental Finance Center's study of water and sewer utility rates in NC;
- Our "Cease the Grease" lid campaign, which continues to be successful into its third year;
- Our efforts to get our customers to stop using "flushable wipes";
- The new CFPUA.org, which rolled out seamlessly;
- CFPUA's valve replacement program work throughout the city and county; and
- Our crews' excellent work during water main breaks and sewer spills.

ADMINISTRATION
COMMUNICATIONS DIVISION

Our updated emergency communications process continues to serve CFPUA well. Today, we continue to use more communications methods to communicate information about emergencies or items of interest to our customers than any other water and sewer utility in the state.

The long-needed update of CFPUA's website was completed in FY16. Working closely with the IT Department, CFPUA was able to seamlessly transition into the new website that is more usable. Customers and key stakeholders are provided the information they need in an easier-to-understand and navigate format.

A great deal of time was spent in FY16 focusing on communications surrounding several key construction projects. Working closely with the Engineering Department, we improved project communications for the public through a set system of communications and information flow. In addition to handling essential public meetings, Communications established a system of regular newsletters for both the Heritage Park and Marquis Hills Septic-to-Sewer projects, and served as a direct point-in-contact, enabling residents to address their concerns the moment the issues came to mind. A system was developed with the various project managers within Engineering and with our contractors to serve the customers, or at least give them fast feedback.

Communications wrote and produced the 2015 Annual Report, which received positive reviews from key stakeholders. We again managed assistance from all departments and a clear, well-designed piece relayed key messages about CFPUA to our stakeholders.

Communications made the "Cease the Grease" successful lid campaign permanent by helping to purchase 15,000 more lids and by committing to do so on a regular basis. Communications also provided "No Grease" magnets on select CFPUA vehicles and began to see results with our PSA outreach with an acceptance of our proposal for placement on WAVE buses throughout the Wilmington area.

Communications Division Notable Goals for FY 17

Goals	Relation to Strategic Plan	Responsible Party	Performance Metric
Maintain the progress with the media over the last three and-a-half years.	Goal 1, Strategy 1D	Chief Communications Officer	Track media coverage over the fiscal year
Use the improved Communications capabilities of the new website to make it more of a go-to destination for information about the Authority.	Goal 1, Strategy 1C Goal 3, Strategy 3C	Chief Communications Officer	Track website use
Continue to improve the established emergency communications process.	Goal 1, Strategy 1B Goal 1, Strategy 1C Goal 3, Strategy 3C	Chief Communications Officer	Document any improved policies or procedures related to emergency communications
Continue to improve upon direct communication with customers on project or "big-picture" issues through efficient phone and email response.	Goal 1, Strategy 1C Goal 3, Strategy 3C	Chief Communications Officer	Monitor phone and email responses and take corrective actions as necessary
Improve our social media work to develop a constant, beneficial presence using Twitter.	Goal 3, Strategy 3C	Chief Communications Officer	Monitor social media usage

FINANCE DEPARTMENT

Chief Financial Officer, John McLean, CPA

The Finance Department is responsible for managing the Authority's finances in the most cost efficient manner in accordance with generally accepted accounting principles and statutory requirements. The major responsibilities of the Finance Department include preparing the annual Budget and Comprehensive Annual Financial Report, making timely payments to vendors, processing payroll and managing the bidding and contract process.

Key Accomplishments for FY 16

- Advanced Refunded $180.8 million of bonds originally issued in 2008 and City certificates of participation, saving approximately $1.7 million per year over the next 20 years.
- Bond Rating with Standard & Poor's remained AA+ and rating with Moody's upgraded to Aa1.
- Performed a detailed analysis of all revenue and expenditure accounts for each department/division to prepare the FY17 budget.
- Worked with the Authority Board to update the rate model reflecting the Authority's mission.
- Prepared the Authority's seventh Comprehensive Annual Financial Reports (CAFR) for Fiscal Year ended June 30, 2015, obtaining an unqualified opinion on the annual independent audit. The Authority has continued to implement cost efficiencies with Operating Expenditures (total expenditures less debt service) coming in at 90% of budget.
- Awarded the Government Finance Officers Association's Certificate of Achievement for Excellence in Financial Reporting for the fiscal year ended June 30, 2014, for the sixth consecutive year.
- Awarded the Government Finance Officers Association Distinguished Budget Presentation Award for the FY16 Adopted Budget for the fourth consecutive year.
- Provided disclosure information to bondholders and bond rating agencies for timely disclosures to the Security and Exchange Commission (SEC) on the Authority's outstanding debt. Provided all required financial filings to the State of North Carolina State Treasurer's Office through the Local Government Commission for the Authority's deposits and investments.
- Selected an ERP Solution and finalized the Project Charter for the ERP Software Implementation.
- Continued the refinement and adoption of various finance, accounting and purchasing policies including revisions to the Procurement Policy, the Procurement Card Policy, the Construction Bidding Policy, the Finance Accounting Policy and the Travel Policy.
- Encouraged vendors to utilize Electronic Funds Transfer (EFT), increasing efficiencies and reducing costs related to the number of checks printed and mailed.

Finance Notable Goals for FY 17

Goals	Relation to Strategic Plan	Responsible Party	Performance Metric
Manage the Authority's finances in the most cost efficient manner and continue to look for expenditure efficiencies.	Goal 2	Chief Financial Officer	Document any expenditure efficiencies; review documented policies and operating procedures
Begin implementing the new Enterprise Resource Planning (ERP) solution.	Goal 1, Strategy 1C Goal 3, Strategy 3C	Chief Financial Officer	Track ERP implementation process
Continued review, improvement and cross training of finance, accounting and procurement processes.	Goal 2, Strategy 2B Goal 3, Strategy 3B	Chief Financial Officer	Track cross training hours
Prepare the Authority's FY17 Adopted Budget to meet the Government Finance Officers Association's Distinguished Budget Presentation Awards Program criteria.	Goal 2	Chief Financial Officer	Review final budget document
Prepare the Comprehensive Annual Financial Report for the fiscal year ended June 30, 2016 in accordance with the Government Finance Officers Association's Certificate of Achievement for Excellence in Finance Reporting Program.	Goal 2	Chief Financial Officer	Review final Comprehensive Annual Financial Report
Continue to review all services provided to the Authority to ensure selection by competitive process and that contracts are in place.	Goal 2	Chief Financial Officer	Track bid protests

FINANCE DEPARTMENT

Finance Department Performance Measures

Annual	Goal	FY14	FY15
Annual Debt Service Coverage	> 1.20	1.65	1.77
Operating Revenue/Operating Expenses	> 1.00	2.28	2.33
Quick Ratio	> 2.00	3.84	3.71
Days Cash on Hand	> 365	1,199	1,223
Cost Recovery – Operating Ratio	> 1.00	1.44	1.44
Leverage – Debt to Equity Ratio	< 1.00	0.78	0.74
Asset Depreciation	0% - 25%	11.78%	13.39%

Summary of Expenditures

EXPENDITURES DETAIL BY DEPARTMENT

	CFPUA FY 13-14 Adjusted Budget	CFPUA FY 13-14 Actual	CFPUA FY 14-15 Adjusted Budget	CFPUA FY 14-15 Actual	CFPUA FY 15-16 Adopted Budget	CFPUA FY 15-16 Amendments & Transfers	CFPUA FY 15-16 Adjusted Budget	CFPUA FY 16-17 Adopted Budget	% Change FY 16-17 Adopted/FY 15-16 Adopted
Finance									
Personnel	599,093	592,573	711,519	640,026	834,062	465	834,527	799,535	-4.14%
Benefits	201,647	172,906	319,850	200,198	307,620	(4,797)	302,823	258,339	-16.02%
Operating	32,846	20,975	51,638	43,208	44,723	(1,803)	42,920	65,200	45.79%
Total Finance	**833,586**	**786,454**	**1,083,007**	**883,432**	**1,186,405**	**(6,135)**	**1,180,270**	**1,123,074**	-29.81%

HUMAN RESOURCES DEPAREMENT

Director of Human Resources and Safety, Tom Morgan

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.

Key Accomplishments for FY 16

- Secured employee benefit renewal contracts consistent with the Authority's HR Committee recommendations for the fiscal year.
- Implemented the hi-deductible health care plan to accompany the existing PPO health care plan for employees.
- Transitioned the Authority's self-insured health plan to the State Health Plan.
- Maintained the employee health care clinic and scheduled seasonal flu vaccinations clinics.
- Scheduled and conducted Human Resources and Safety training classes totaling over 1,780 training hours.
- Maintained monthly tracking of Authority personnel training hours for Level of Service reporting; logged over 7,812.25 hours of training organization wide.
- Sponsored over 3,800 hours of organizational training hours with the equivalency of 1029 employees attending.
- Assisted with the annual CFPUA United Way Campaign.
- Organized the employee service awards ceremony honoring 32 employees who achieved service milestones. These employees represented a combined 410 years of service.
- Conducted annual driver's license record checks for all employees who are required to have a valid driver's license through NC DMV, and maintained the employee drug-testing program in accordance with the Authority's prescribed policies and procedures.
- Completed end of fiscal year annual compliance audit of personnel files and I-9 forms.
- Processed in excess of 1,174 employment applications.
- Managed the Classification and Compensation Study conducted by Evergreen Solutions.
- Held training programs through Cape Fear Community College – Annual Supervisory & Leadership Training, and intermediate Excel training.
- Developed and implemented the Employee Incentive Program for licenses and certifications.
- Managed the employee performance evaluation process and implemented merit pay increases based on established process.
- Participated in four (4) Virtual Job Fairs to obtain qualified applicants and promote CFPUA.
- Completed policies for an Employee Incentive Program and Employee of the Quarter Program.
- Participated in three (3) ISO audits with Environmental Management Department.

HUMAN RESOURCES DEPAREMENT

- Completed the 360° assessment process for management level personnel.
- Maintained and updated performance benchmarking measurements for HR department.
- Maintained and monitored budget and expenditures for HR and Safety department.
- Processed payments under CFPUA's self-insured workers' compensation insurance program.
- Managed the business insurance/risk management program and processed associated premium payments.
- Continued participation in enterprise resource planning software evaluation process.
- Implemented the Employee of the Quarter Recognition Program.
- Prepared the system to provide 1095C tax forms for employees as required under the Affordable Care Act.

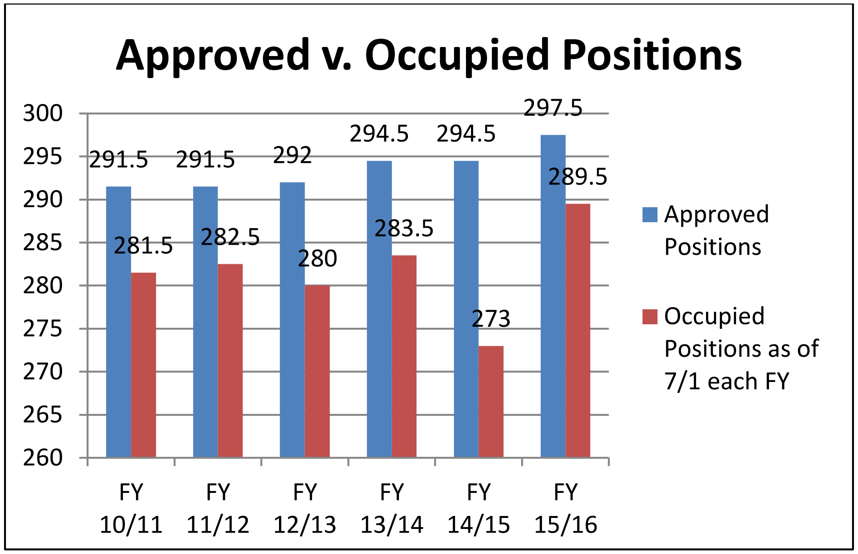
Human Resources Department Notable Goals for FY 17

Goals	Relation to Strategic Plan	Responsible Party	Performance Metric
Continue the core HR function of filling vacant positions, maintaining personnel files, administering the classification and compensation plan, complying with regulatory guidelines, administering the employee benefit plans, development and interpretation of policy and promoting positive employee relations.	Goal 3, Strategy 3D	Human Resources Director	Document approved versus occupied positions, administration of the compensation & classification study and employee benefit plans
Implement the adopted recommendations of the Classification and Compensation Study.	Goal 3, Strategy 3D	Human Resources Director	Document implementation of the Study
Finalize the transition from CFPUA's self-insurance health insurance plan to the State Health Plan for employee health insurance.	Goal 3, Strategy 3D	Human Resources Director	Document transition; review insurance plans and Board reports
Convert other employee benefit plans from fiscal year to calendar year renewal basis.	Goal 3, Strategy 3D	Human Resources Director	Document conversion; review insurance plans and Board reports

HUMAN RESOURCES DEPAREMENT

Continued to promote enhanced health and wellness initiatives for employees.	Goal 3, Strategy 3D	Human Resources Director	Provide & document health & wellness initiatives; review initiatives
Complete the conversion of inactive personnel files to electronic (Laserfiche) format.	Goal 3, Strategy 3C	Human Resources Director	Document conversion
Execute the first payments under the Employee Incentive Program and monitor to determine effectiveness.	Goal 3, Strategy 3B	Human Resources Director	Document payments & track employee progress
Promote cost-effective organizational training and workforce education to enhance employee's skills to meet the workforce needs of the Authority in the present and future.	Goal 3, Strategy 3B Goal 3, Strategy 3D	Human Resources Director	Document & track training and employee educational hours
Continue with the development and implementation of formalized programs to promote effective workforce succession management.	Goal 3, Strategy 3B Goal 3, Strategy 3D	Human Resources Director	Develop formal succession plan
Enhance the safety and risk management function to achieve greater effectiveness and efficiencies.	Goal 1, Strategy 1B Goal 3, Strategy 3B	Human Resources Director	Develop additional safety & risk management policies
Continue to participate in the ERP implementation process for the first phase and prepare for the second phase implementation.	Goal 3, Strategy 3C	Human Resources Director	Track implementation and document HR needs

Human Resources Department Performance Measures



Human Resources Key Indicators

	FY14	FY15	FY16
• No. of Worker Comp. Claims-	11	13	16[2]
• Average Monthly Vacancy Rate-	4.8%	4.4%	4.3%[2]
• Average Monthly Turnover Rate-	1.9%	0.9%	1.4%[2]
• Average Training Hrs./Employee[1]	7.17	3.96	7.5[2]

[1]Organizational training sponsored by HR Dept.
[2] Estimated thru end of FY 16

HUMAN RESOURCES DEPAREMENT

Summary of Expenditures

EXPENDITURES DETAIL BY DEPARTMENT

	CFPUA FY 13-14 Adjusted Budget	CFPUA FY 13-14 Actual	CFPUA FY 14-15 Adjusted Budget	CFPUA FY 14-15 Actual	CFPUA FY 15-16 Adopted Budget	CFPUA FY 15-16 Amendments & Transfers	CFPUA FY 15-16 Adjusted Budget	CFPUA FY 16-17 Adopted Budget	% Change FY 16-17 Adopted/FY 15-16 Adopted
Human Resources/Safety Management									
Personnel	337,293	336,302	352,880	351,904	366,208	(8,923)	357,285	391,810	6.99%
Benefits	103,303	102,639	112,602	114,072	116,703	(3,018)	113,685	104,497	-10.46%
Operating	166,523	117,827	181,800	152,925	186,072	9,981	196,053	142,560	-23.38%
Total Human Resources/Safety Management	**607,119**	**556,768**	**647,282**	**618,901**	**668,983**	**(1,960)**	**667,023**	**638,867**	4.27%

HUMAN RESOURCES DEPAREMENT
SAFETY MANAGEMENT DIVISION

Cape Fear Public Utility Authority's safety program requires the input and participation of all Authority employees. It is a comprehensive program that encompasses all areas of employee safety and health. The function of the Safety Management Division is to promote safety in the workplace, ensure that standards, laws and regulations are incorporated into the Authority safety program to provide the most up to date information regarding safety compliance as well as offering assistance for resolving safety concerns, conducting facility and job site inspections, and handling claims.

Key Accomplishments for FY 16

- Completed annual OSHA reporting requirements and posting of the 300-A Summaries
- Completed and submitted 15 NC Dept. of Labor Safety Award applications
- Completed 4 OSHA Safety & Health S.H.A.R.P. inspections for Environmental Services, NANO Filtration, SSWWTP and Administrative Services (235)
- Attended 3 safety & risk management training events.
- Completed an audit of training requirements and content for the departments.
- Maintained and produced monthly safety reports for the departments and Board meetings
- Continued to lead the monthly safety and accident review committee meetings
- Complete the monthly accident review report to HR for accidents that are reviewed at the monthly meetings.
- Facilitated all accident/incident review appeals
- Scheduled and facilitated training for First Aid/CPR and Crane Operator
- Conducted new employee orientation training and Powered Industrial Truck training.
- Processed 61 claims
- Completed the Chemical Hygiene Audit of the Laboratory.

OSHA Incident Rate – The OSHA Incident Rate is a metric used to compare safety performance against a national or state average. This comparison is a safety benchmark to gauge performance with other organizations in the same business group. The average recordable rate for our industry is 7.04 and the D.A.R.T rate is 4.21.

The OSHA Recordable Incident Rate includes all work-related employee injuries and illnesses that meet the reporting criteria for the OSHA 300 log. The OSHA Recordable Rate through January 2016 for the Authority is 4.54 compared to an industry average of 7.04.

HUMAN RESOURCES DEPAREMENT
SAFETY MANAGEMENT DIVISION

The D.A.R.T. Incident Rate includes all work-related employee injuries and illnesses that not only qualify as a recordable but also result in **D**ays **A**way from work, placed on **R**estricted duty, or **T**ransferred to another position because of an injury or illness. The D.A.R.T. Rate through January 2016 for the Authority is 3.4 compared to an industry average of 4.21.

Safety Management Division Notable Goals for FY 17

Goals	Relation to Strategic Plan	Responsible Party	Performance Metric
Continue to review and update safety policies and procedures.	Goal 1, Strategy 1B	Human Resources Director	Document any updates
Continue facility and job site inspections throughout the next fiscal year.	Goal 1, Strategy 1B	Human Resources Director	Document inspections
Work to reduce overall accident rate.	Goal 1, Strategy 1B	Human Resources Director	Track accident rate
Complete the S.H.A.R.P. designation application process for the remaining sites.	Goal 1, Strategy 1B	Human Resources Director	Document application process
Coordinate with departments on required training needs.	Goal 1, Strategy 1B Goal 3, Strategy 3B	Human Resources Director	Document coordination & training completed
Coordinate with Fleet Management to enhance visibility markings on CFPUA trucks and equipment.	Goal 1, Strategy 1B	Human Resources Director	Document enhancement efforts

HUMAN RESOURCES DEPAREMENT
SAFETY MANAGEMENT DIVISION

Employee Safety Performance Measures

	FY 11	FY 12	FY 13	FY 14	FY15	FY16 TD
# of accidents/incidents	25	41	27	25	29	20
# of OSHA Recordables	15	13	8	9	7	8
# of D.A.R.T Cases	13	8	7	8	7	5
OSHA Recordable Rate	6.02	5.05	3.14	3.51	2.66	4.54
D.A.R.T. Rate	5.21	3.1	2.75	3.52	2.66	3.4

ENGINEERING DEPARTMENT
ADMINISTRATION DIVISION

Director of Engineering, Carel Vandermeyden, P.E.

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 comprises four divisions: Administration, Planning and Design, Project Management and Development Services.

The Asset Management Program has matured from identification of infrastructure to focusing on those areas in greatest need of support. With the realignment of Asset Management into Engineering, it has helped to efficiently and effectively address rehabilitation issues in a timely manner. Staff continues to maximize asset life cycles, identify and mitigate areas of risk, explore means of efficient and effective decisions, and aid in more effective means of communication through the use of asset management principles and practices.

Key Accomplishments for FY 16

- Developed and implemented key performance indicators for the Engineering Department.
- Continued the implementation of project scheduling tools to help project managers manage the number of projects, sequence new projects, and help develop project spending plans and spending projections.
- Created a Development Process and Procedures Manual that documents all the steps and procedures in the development process. The manual was completed in 2015 and will be published in early 2016.
- Reorganized the Development Services Division and added a new position to oversee all development construction and supervise the inspection staff.
- Supported the development of the FY17 and 10-year CIP.
- Guided implementation of design-build as a tool for project delivery.
- Continued to refine and organize functions and procedures to promote efficiency and productivity. Good examples of this are the addition of in-house water and sewer modeling capabilities and the GIS tools that were created for internal and external customers.
- The Asset Management Program's key accomplishments in FY 16 include:
    - Established cross functional teams to understand and address areas of infrastructure that require rehabilitation or replacement.
    - Continued the transition to more effective management of Inventory through the use of the CMMS.

- Continued Quality Assurance to support better data input procedures that enable greater data quality and means to query information.
- Maintenance Strategies addressed critical spare parts management, aligning criticality with cost effective decisions.

Engineering Administration Division Overall Goal for FY 17

Goals	Relation to Strategic Plan	Responsible Party	Performance Metric
Ensure that engineering staff is provided adequate resources to successfully fulfill the department's goals, which includes maintaining an environment that promotes safety, flexibility and professional and personal development.	Goal 1, Strategy 1B Goal 3, Strategy 3D	Director of Engineering	Track safety measures & training/educational hours
Continue risk assessments on areas of infrastructure including gravity collection system.	Goal 2, Strategy 2C	Director of Engineering	Document risk assessments
Expand Maximo in the Engineering Department for greater understanding of life-cycle analysis and costs.	Goal 3, Strategy 3C	Director of Engineering	Track Maximo expansion
Establish a process to tie Finance Fixed Assets to Infrastructure Assets in a one-to-many relationship.	Goal 2, Strategy 2B Goal 2, Strategy 2C	Director of Engineering	Document process
Act as a resource to the Authority in determining cost effective solutions to infrastructure issues.	Goal 2, Strategy 2B Goal 2, Strategy 2C	Director of Engineering	Document cost effective solutions; Review Committee & Board meeting Minutes
Function as a means to increase communication across departments within the organization.	Goal 3, Strategy 3C	Director of Engineering	Monitor communication efforts
Support the BCE process as an effective decision making tool .	Goal 2, Strategy 2B Goal 2, Strategy 2C	Director of Engineering	Track BCE process

ENGINEERING DEPARTMENT
ADMINISTRATION DIVISION

Summary of Expenditures

EXPENDITURES DETAIL BY DEPARTMENT

	CFPUA FY 13-14 Adjusted Budget	CFPUA FY 13-14 Actual	CFPUA FY 14-15 Adjusted Budget	CFPUA FY 14-15 Actual	CFPUA FY 15-16 Adopted Budget	CFPUA FY 15-16 Amendments & Transfers	CFPUA FY 15-16 Adjusted Budget	CFPUA FY 16-17 Adopted Budget	% Change FY 16-17 Adopted/FY 15-16 Adopted
Engineering									
Personnel	1,368,334	1,311,329	1,511,202	1,418,889	1,622,560	93,075	1,715,635	1,718,387	5.91%
Benefits	455,089	401,454	503,800	461,292	529,203	18,074	547,277	526,680	-0.48%
Operating	128,185	95,855	112,190	90,803	130,908	(20,290)	110,618	87,561	-33.11%
Total Engineering	**1,951,608**	**1,808,638**	**2,127,192**	**1,970,984**	**2,282,671**	**90,859**	**2,373,530**	**2,332,628**	10.04%

ENGINEERING DEPARTMENT
PLANNING AND DESIGN DIVISION

Engineering Manager – Planning and Design Division, Gary McSmith

The Planning and Design Division contributes to the Authority's success by master planning, capital planning, modeling and managing system capacity, engineering design of gravity sewer rehabilitation projects and managing the Geographical Information System (GIS). In addition, the division develops maps and provides computer aided drafting that include CAD and hydraulic modeling to support development services and capital projects. The Division provides support as needed by directly managing several projects, programs and the business case evaluation asset management team.

Key Accomplishments for FY 16

- Assimilated the GIS function from IT into engineering and developed efficiency improvements from the reorganization.
- Created ARCGIS Online capacity management mapping and information readily available to customers on the web by computer and cell phone.
- Enhanced in-house water and sewer modeling capabilities to support capital projects, developer projects, operations and emergency response.
- Transitioned organization to vetting each capital project with a Preliminary Engineering Report sealed by a professional engineer.
- Drafted ordinance revisions to implement Petition and Assessment process.
- Developed program to line water mains as an effective tool for rehabilitation.
- Developed online master planning process and mapping tools to serve development.
- Managed Find-it-Fix-it gravity sewer rehabilitation throughout service area.
- Prepared ten-year CIP and FY-2017 capital budget at significant reduction from projections.
- Analyzed and drafted Board resolution for Cary, Apex Morrisville Interbasin Transfer
- Designed and bid multiple contracts for water and sewer service connections throughout the service area.
- Managed Preliminary Engineering Report for U.S. 421 Utilities.
- Managed Preliminary Engineering Report for integrating Monterey Heights water
- Managed Preliminary Engineering Report for PS 89 Capacity Upgrade
- Managed completion of Bald Eagle Water Extension CIP
- Drafted Ordinance revision to mandatorily connect commercial properties requiring a private permit.
- Drafted Deferral Policy revision allowing sewer connections to be deferred at no cost to customer within time frame.

ENGINEERING DEPARTMENT
PLANNING AND DESIGN DIVISION

Planning and Design Division Notable Goals for FY 17

Goals	Relation to Strategic Plan	Responsible Party	Performance Metric
Provide leadership and support in design, build and calibration of a sewer model that incorporates wet weather flows.	Goal 2, Strategy 2C Goal 3, Strategy 3C	Director of Engineering	Document & track the model
Provide leadership and support in increasing the accuracy of legacy data in the GIS.	Goal 3, Strategy 3C	Director of Engineering	Document & track the legacy data
Provide leadership and support in providing customers and staff appropriate access to information through ARCGIS Online mapping and analysis tools.	Goal 3, Strategy 3C	Director of Engineering	Document & tack access
Provide leadership and support in use of data analytics to enhance organizational efficiency.	Goal 3, Strategy 3C	Director of Engineering	Document & track data analytics
Provide leadership and support in use of cloud based project management software pilot tests.	Goal 3, Strategy 3C	Director of Engineering	Document results of pilot tests
Provide leadership and support in developing standards for Preliminary Engineering Reports.	Goal 3, Strategy 3C	Director of Engineering	Document standards
Provide leadership and support to revise the Authority Technical Standards.	Goal 3, Strategy 3C	Director of Engineering	Document revisions
Develop tools that leverage technology to serve our customers more efficiently.	Goal 1, Strategy 1C Goal 3, Strategy 3C	Director of Engineering	Document & track customer contacts

ENGINEERING DEPARTMENT
PROJECT MANAGEMENT DIVISION

Engineering Manager – Project Management Division, Phil Brower

The Project Management Division is responsible for overseeing numerous capital improvement projects ranging in scope from multi-year year projects such as the Northeast Interceptor upgrades to multi-month turnaround projects for minor repairs. CFPUA's project managers facilitate moving capital projects into the engineering and construction market place and monitoring the construction phase work for compliance with many internal and external agencies. The primary role of the Project Management Division is executing capital improvement projects.

Key Accomplishments for FY 16

Construction Projects Completed

The Project Management Division completed construction on 11 projects with a total construction value of over $21 million. Most of these projects were started several years ago with planning, design, and bidding, but their construction was substantially complete or closed-out in FY 2016. The table below lists these construction projects.

Construction Project	Type	Completed Cost
Heritage Park Area Service	Water/Sewer	$7,750,000
Flemington Area Service	Water	$3,650,000
Sweeney Clearwell Rehabilitation	Water	$2,237,004
Comprehensive Meter Replacement Phase 1	Water	$1,875,317
Greenfield Lake Outfall Rehabilitation Phase 1	Sewer	$1,875,191
Country Haven Pump Station Upgrade	Sewer	$1,157,028
McCumber's Ditch Outfall Rehabilitation	Sewer	$994,579
DBP Compliance Aeration Mixer Phase 1	Water	$681,825
Greenfield Lake Outfall Rehabilitation Phase 2	Sewer	$578,410
Raw Water Meter Vault Rehabilitation	Water	$314,925
Northside WWTP Digester 1-2-3 Coating	Sewer	$95,689
Total		**$21,209,968**

ENGINEERING DEPARTMENT

PROJECT MANAGEMENT DIVISION

Notable projects in the completed project list are as follows:

- The Flemington area was taken off its groundwater supply and is served by the Sweeney WTP. The project also includes a future sewer force main under the Cape Fear River to serve the 421 corridor.
- The Heritage Park area is served with water and sewer through financing by the Clean Water State Revolving Fund.
- Rehabilitation of existing assets on projects, including Sweeney Clearwell; Greenfield Lake Sewer Outfall; and McCumber's Ditch Outfall.
- Completion of the comprehensive meter replacement pilot project replaced 7,000 meters with automatic meter reading technology and set the stage for the replacement of meters throughout the service area in subsequent phases.
- Aerators installed in 17th Street and Dawson Street elevated storage tanks to reduce disinfection byproducts in the drinking water.
- Upgrades of existing structures and equipment accomplished at Northside WWTP and Sweeney WTP.

Construction Contract Awards

The Project Management Division bid and awarded 11 projects as shown below.

Construction Project	Contract Award
Kerr Avenue Water Main Ph2	$1,948,098
Northside Thickened Alum Sludge	$1,580,000
Edgewater Club Rd Pump Station*	$1,125,279
DBP Compliance - 4 MG Clearwell Aeration	$850,000
Walnut Hills WWTP Decommissioning Ph1	$779,610
Greenfield Lake Sewer Rehab Phase 2	$585,550
NSWWTP Digester 1, 2, & 3 Coating	$99,701
NSWWTP Caustic Storage Tank Replacement	$98,820
FM 12 Coupon Extractions	$52,924
Facility Aesthetics (multiple sites)	$49,616
Ringo Drive Water Main	$35,000
Total	**$7,204,598**

*The Flemington, Edgewater Club PS, DBP Compliance and Structural Removal projects were well executed by their managers to meet fast-tracking needs.

ENGINEERING DEPARTMENT
PROJECT MANAGEMENT DIVISION

Property & Easement Acquisitions

- Negotiated with owners and/or owners' representatives, making requests for 34 easements, completing 23.
- Negotiated with property owners and completed three well abandonments. Presently working with three additional owners on well abandonments.
- Worked with property owners to finalize nine easement encroachments to move the encroachment, to provide a variance and record it, or both based on decisions by Operations. Seven easement encroachments are actively in the resolution phase.
- Successfully negotiated lease extension, with Operations input, for the 2310 N. 23rd Street, Utility Services Building.

Project Management Division Notable Goals for FY 17

Goals	Relation to Strategic Plan	Responsible Party	Performance Metric
Provide leadership and support for timely FY 2017 project implementation.	Goal 2, Strategy 2C	Director of Engineering	Document & track project implementation; Long Range Planning Committee Minutes review
Continue leadership and support to further enhance the use of project scheduling and reporting as a tool to better manage and deliver projects.	Goal 3, Strategy 3C	Director of Engineering	Document & track project scheduling & reporting
Continue to recognize opportunities to coordinate projects and identify partnerships with area stakeholders, such as the City of Wilmington, New Hanover County, NC Ports, NC-DEQ, NC-DOT, Duke Energy Progress, etc.	Goal 1, Strategy 1D	Director of Engineering	Document & track partnerships
Continue working closely with Chief Communications Officer and assist with outreach to customers and public regarding impacts of major capital projects.	Goal 1, Strategy 1C Goal 1, Strategy 1D	Director of Engineering	Document & track outreach efforts

ENGINEERING DEPARTMENT
PROJECT MANAGEMENT DIVISION

Continue to recognize opportunities for efficiency in overall capital projects management, specifically; ➢ **Execute the design build projects identified and assist others involved in this new project delivery method.** ➢ **Explore and implement quality assurance and control measures during early project design phase as a means to improve overall project value and delivery. Engage internal and external stakeholders in this process.** ➢ **Seek and provide earlier tactical support and guidance in capital project definition and approach with the goal to improve overall project value and delivery.** ➢ **Provide support to modernize standard specifications and details to improve capital project quality and value.**	Goal 1, Strategy ID Goal 2, Strategy 2C Goal 3, Strategy 3C	Director of Engineering	Document & track design build projects; Document & track quality assurance & control measures; Document & track tactical support & guidance; Document the updated standard specifications and details

ENGINEERING DEPARTMENT
DEVELOPMENT SERVICES DIVISION

Engineering Manager – Interim Development Services Manager, Matthew Tribett

The Development Services Division (DSD) has a key role in new development, redevelopment, commercial construction and new home construction. DSD interacts with utility customers, contractors, and developers. DSD collaborates with the Operations, Customer Service, and Environmental Departments within the Authority to provide customers with accurate and timely information.

The division provides information regarding service availability, service connection requirements, and service connection fees. DSD works closely with the New Hanover County Building Inspections, Planning, and Health Departments as well as the City of Wilmington Development Services Department. DSD manages the plan review and construction inspection process for developer installed public water and sewer systems. To facilitate this process, staff participates in the City of Wilmington and New Hanover County Technical Review Committees, and regularly meets with individual developers to review projects and explain Authority standards.

Additionally, DSD manages the implementation of the Authority's mandatory connection requirements. New development, home construction, existing structures, and structures connected to failing septic and/or well systems are required to connect to the Authority's utility facilities if they are available.

The division assists developers and the Customer Service Department through the Request for Information (RFI) process by documenting service availability, connection requirements, and fees. These requests are most commonly associated with applications for new service or new development. Developer agreements that benefit the public and the developers are written by staff of DSD. This division serves and partners with developers to capitalize on opportunities to improve the utility system for the public benefit.

Key Accomplishments for FY 16

- Developers conveyed a record amount of completed infrastructure to the Authority for ownership this year.
- Utility infrastructure donations, plan reviews, inspections, and requests for information (RFI's) increased for the fifth straight year.
- Developed and implemented key performance indicators for plan review, building permit review and Requests for Information (RFI).
- S.O.P.'s were developed for the Chair Road Reimbursement, Conveyance, building permit review, plan review, RFI's and inspections.
- Participated in meetings with BASE to obtain policy and procedure input, address concerns and enhance customer service.
- Participated in the technical review committee of the City and the County.
- Implemented the One-Solution permitting software for building permit review.

ENGINEERING DEPARTMENT
DEVELOPMENT SERVICES DIVISION

- Implemented the mandatory connection program. The mandatory connection process focused on completion of the 95/98 Areas, and Northern New Hanover County.
- Prepared the Development Policy and Procedure Manual.
- Instituted a planner of the day to facilitate office coverage.
- After hours inspections and associated fees were approved.
- On-line inspection requests were enabled.
- The water specification was updated.
- Began tracking work orders, as-built review, and sewer video review with Maximo.
- Added a construction project manager and a construction inspector position to facilitate the increased volume in development.
- Began implementation of the ISO procedures in the Division.

Development Services Division Notable Goals for FY 17

Goals	Relation to Strategic Plan	Responsible Party	Performance Metric
Track and monitor key performance indicators for several key functions (RFI's, building permit review, expedited plan review) and make adjustments in the workflow where necessary.	Goal 2, Strategy 2B	Director of Engineering	Document key performance indicators and adjustments made
Maintain strong communications and trust with the Operations Department.	Goal 3, Strategy 3C	Director of Engineering	Document & track communications
Develop S.O.P. and policy where needed to improved work procedures in the DSD (e.g. RFI, plan review, building permit review, plat review, inspections, etc.)	Goal 3, Strategy 3B	Director of Engineering	Document SOP and policies
Participate in meetings with BASE to obtain policy and procedure input, address concerns and enhance customer service.	Goal 1, Strategy 1C Goal 1, Strategy 1D	Director of Engineering	Document meeting participation & outcomes
Continue to participate in the technical review committee of the City and the County.	Goal 1, Strategy 1C Goal 1, Strategy 1D	Director of Engineering	Document meeting participation & outcomes
Assist the County with the selection and implementation the replacement of the One-Solution permitting software for building permit review.	Goal 1, Strategy 1D Goal 3, Strategy 3C	Director of Engineering	Document selection & implementation activities
Continue to implement the mandatory connection program.	Goal 3, Strategy 3A	Director of Engineering	Document & track mandatory connections

ENGINEERING DEPARTMENT
DEVELOPMENT SERVICES DIVISION

Have the engineering technician to take the lead on the RFI function.	Goal 3, Strategy 3D	Director of Engineering	Document new work duties
Initiate the pilot expedited review program.	Goal 1, Strategy 1C	Director of Engineering	Document & track the pilot program
Complete the transition of construction to the construction project manager from plan review.	Goal 3, Strategy 3D	Director of Engineering	Document new work duties
Complete and publish the Development Policy and Procedure Manual.	Goal 1, Strategy 1C	Director of Engineering	Document the completed manual
Expand Maximo work order and project tracking.	Goal 3, Strategy 3C	Director of Engineering	Document work orders & project tracking
Continue to implement ISO procedures in the Division.	Goal 1, Strategy 1A	Director of Engineering	Document ISO procedures
Be involved in the community by joining local professional organizations (project manager, project engineer, construction project manager, and engineering manager).	Goal 1, Strategy 1D	Director of Engineering	Document meeting participation and organizations joined
Add the County and City legacy data into usable electronic format.	Goal 3, Strategy 3C	Director of Engineering	Document the data additions

OPERATIONS DEPARTMENT
ADMINISTRATION DIVISION

Chief Operations Officer, Frank C. Styers, P.E.

The Operations Department is committed to delivering essential water and wastewater services to our customers in an efficient and environmentally responsible manner. Divisions include water treatment, wastewater treatment, utility services, centralized maintenance and information technology. The department is responsible for regulatory compliance of the various utility systems and providing outstanding water and sewer service to our customers.

The Operations Department continues to evaluate the systems short and long term needs in order to renovate and construct the necessary assets to serve the needs our customer's needs. The department continues efforts to minimize sanitary sewer overflows (SSOs), to improve water quality in the distribution system, and to respond as rapidly as possible in order to minimize damages to infrastructure and the environment.

Summary of Expenditures (Includes IT Expenditures)

EXPENDITURES DETAIL BY DEPARTMENT

	CFPUA FY 13-14 Adjusted Budget	CFPUA FY 13-14 Actual	CFPUA FY 14-15 Adjusted Budget	CFPUA FY 14-15 Actual	CFPUA FY 15-16 Adopted Budget	CFPUA FY 15-16 Amendments & Transfers	CFPUA FY 15-16 Adjusted Budget	CFPUA FY 16-17 Adopted Budget	% Change FY 16-17 Adopted/FY 15-16 Adopted
Operations - Administration/IT									
Personnel	808,372	782,162	752,451	734,780	695,080	(3,602)	691,478	724,223	4.19%
Benefits	229,944	222,335	218,854	214,017	200,369	(708)	199,661	222,446	11.02%
Operating	862,408	696,274	662,855	646,264	681,495	94,443	775,938	821,733	20.58%
Capital Outlay	64,288	64,288	-	-	-	-	-	-	0.00%
Total Operations - Administration/IT	**1,965,012**	**1,765,059**	**1,634,160**	**1,595,061**	**1,576,944**	**90,133**	**1,667,077**	**1,768,402**	-7.62%

OPERATIONS DEPARTMENT
INFORMATION TECHNOLOGY DIVISION

IT Manager, Cord Ellison, CGCIO

The Information Technology Division 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 telephony systems. Additionally, the Information Technology Division is responsible for the Authority's physical security, the website, closed-circuit television (CCTV), and network security across the organization.

Key Accomplishments for FY 16

- Created 40 virtual desktop clients all of which are now in the testing phase.
- Replaced 35 physical computers throughout the Authority.
- Replaced and upgraded physical server equipment at the Authority's primary facility and disaster recovery facility.
- Upgraded 26 former city pump stations from telemetry to wireless Ethernet. There are 5 remaining and are expected to be complete this year.
- Physically separated the Authority PRI's (phone lines for inbound and outbound calling) with the primary located at the main datacenter, and secondary located at the Authority's disaster recovery site. This, in addition to the Authority's voice servers located at DR, allows for true redundancy for the Authority phone system.
- Completed the Authority website redesign.
- Completed the project to install additional external cameras at 235 Government Center Drive and replaced the CCTV monitoring/recording software for these cameras.
- Upgraded 14 server Operating Systems for Authority enterprise servers.
- Performed software upgrades at 8 application servers.
- Created a SCADA domain to be used for the centralization of Microsoft security accounts and Antivirus software for the SCADA servers.
- Upgrades of network equipment at 235 Government Center Drive and downtown location that increased speeds from 1Gb to 10Gb to the downtown customer service site. Additionally, once we complete network upgrades at the plants, they will also have this same increase in data speed.
- Added Southside plant to the SCADA wireless network.
- Migrated all City of Wilmington legacy data stored in Sungard to Maximo for retrieval so that it resides on Authority equipment. This migration eliminates the need for this data to be converted during the ERP project, thus reducing costs and scope of work.
- Created a GIS/SQL application for troubleshooting/monitoring the SCADA network.
- Upgraded the test/development environment for Maximo from 7.5 to 7.6.
- Moved Maximo to SQL server 2012 due to Microsoft ending support for the older version.

OPERATIONS DEPARTMENT
INFORMATION TECHNOLOGY DIVISION

- Developed SQL based backflow inspection postcard system to help ESMD achieve a higher compliance rate and significantly reduce postage cost due to return mailings.
- Designed and stood up a redundant POSM repository for DR that allows camera operators a more efficient way to upload their videos.
- Integrated sanitary sewer collection system risk assessment with Maximo to make data highly available to Maximo users in order to help them make better and faster decisions.
- GPS tagged all network fiber pull boxes for the Nano well fields to be added to GIS.

Information Technology Division Notable Goals for FY 17

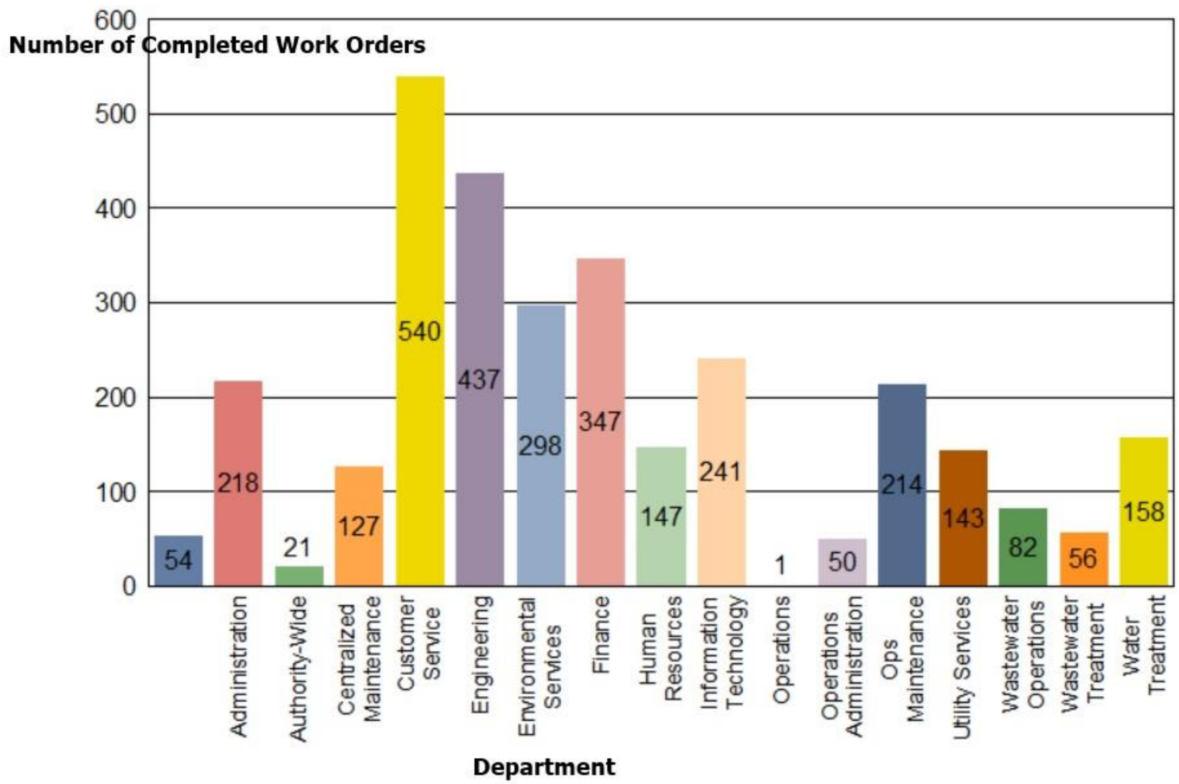
Goals	Relation to Strategic Plan	Responsible Party	Performance Metric
Completion of the Authority's SCADA Master Plan.	Goal 3, Strategy 3C	Chief Operations Officer	Document Plan
Continue replacement of antiquated pump station remote terminal units (RTU's) located throughout the service area across the SCADA wireless Ethernet network.	Goal 2, Strategy 2C Goal 3, Strategy 3C	Chief Operations Officer	Document & track replacement
Tie in the remaining facilities (Sweeney, Northside, and Administration building) to the SCADA backhaul wireless network. This will create an Authority owned wireless network, increase the speed of the links for each facility, and allow us to terminate the reoccurring fees we pay internet service providers at the remote facilities for network redundancy. This did not occur last fiscal year as planned due to the tanks requiring a structural analysis prior to installation of new communication equipment.	Goal 2, Strategy 2B Goal 3, Strategy 3C	Chief Operations Officer	Document & track increased speed and internet provider savings
Continue to test the Disaster Recovery/business continuity plan for the critical technology resources.	Goal 3, Strategy 3C	Chief Operations Officer	Document testing
Upgrade (physical and software) SCADA servers at all facilities and their transition to virtual servers, allowing for faster recovery of these critical servers if/when they fail and will tie in with the SCADA Master plan.	Goal 3, Strategy 3C	Chief Operations Officer	Document recovery times

OPERATIONS DEPARTMENT
INFORMATION TECHNOLOGY DIVISION

Remove Southside antiquated telemetry radio system from the plant and tower.	Goal 3, Strategy 3C	Chief Operations Officer	Document removal
Virtual Desktop implementation for an additional 40 users. This project will reduce the need to annually replace the Authority desktops, increase the lifespan of our assists while reducing costs, and will create efficiencies and centralization of maintenance within IT.	Goal 2, Strategy 2B Goal 3, Strategy 3C	Chief Operations Officer	Document & track implementation and cost savings
Replace network devices throughout the Authority. Many of our critical network devices have been running since the Authority formed. This will allow us to proactively replace these critical devices while at the same time increasing speeds throughout the network, and providing better redundancy and security. This project is reoccurring to avoid single year replacement of all devices and aligns with the SCADA Master plan in regards to logical security.	Goal 2, Strategy 2B Goal 3, Strategy 3C	Chief Operations Officer	Document & track replacements and increased speeds
Continue to upgrade server Operating Systems and Desktop Operating systems throughout the Authority.	Goal 3, Strategy 3C	Chief Operations Officer	Document & track upgrades
Complete remaining security measures for business/SCADA network, then begin penetration test to find out where gaps may exist.	Goal 3, Strategy 3C	Chief Operations Officer	Document & track security measures and testing

OPERATIONS DEPARTMENT
INFORMATION TECHNOLOGY DIVISION

Information Technology Division Help Desk Performance Measures



Total Helpdesk Tickets

Calendar Year 13	Calendar Year 14	Calendar Year 15
3,911	3,911	3,324

OPERATIONS DEPARTMENT
CENTRALIZED MAINTENANCE DIVISION

Maintenance Superintendent, Kevin Boyett

The Centralized Maintenance Division manages maintenance for the water and wastewater treatment plants as well as our facilities maintenance and fleet management needs. Efforts to consolidate maintenance resources have proven beneficial. Maintenance staff, through various cross-training efforts, now has a better understanding of plant demands and what is required to maintain them. Centralized Maintenance uses the CMMS system (Maximo) for maintenance tracking for all requests. The Authority now has a better record of actual repairs along with their associated costs, in addition to a better understanding of the fleet maintenance and replacement needs.

Key Accomplishments for FY 16

- Completed over 2000+ work orders at our wastewater and water plants, fleet and other facilities.
- Relocation of staff to different locations offers the opportunity for all to become familiar with each plants' operation and maintenance needs.
- Fleet replacement program has made a conscious effort to look at the needs of each department before simply replacing vehicles in like kind.
- Facilities maintenance has grown and continues to prove itself as a much needed resource within the Authority.
- Warehousing and Inventory has advanced with our entire inventory now located within Maximo. This has proven to be a valuable resource for our staff.
- Fleet Management continues to keep abreast of all maintenance needs associated with our fleet. This information proves valuable when making decisions about replacements.
- Staff's knowledge has grown due to working with vendors to resolve issues. Our need for outside resources, in some cases, has decreased.

OPERATIONS DEPARTMENT
CENTRALIZED MAINTENANCE DIVISION

Centralized Maintenance Division Notable Goals for FY 17

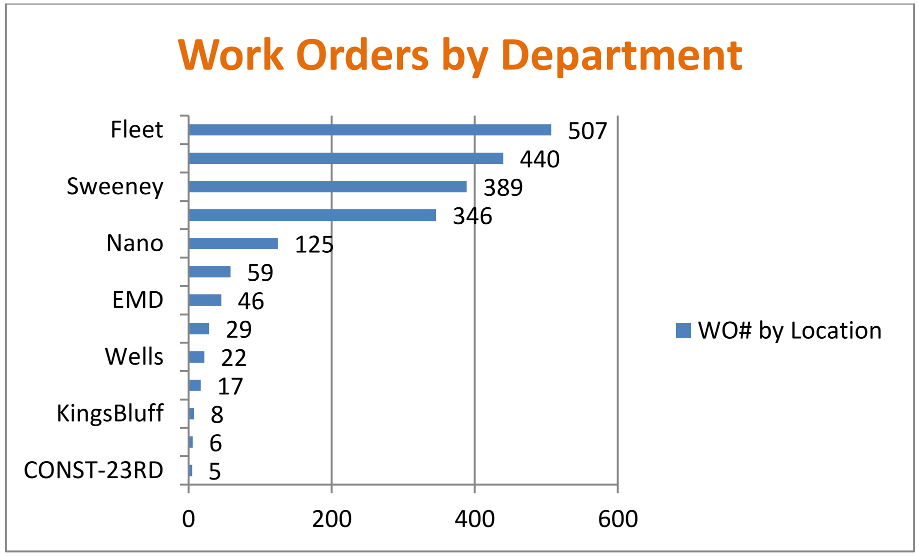
Goals	Relation to Strategic Plan	Responsible Party	Performance Metric
Promote Asset Management throughout the organization.	Goal 2, Strategy 2C	Chief Operations Officer	Document promotion
Combine all Landscaping contracts together and manage within Centralized Maintenance.	Goal 2, Strategy 2B	Chief Operations Officer	Document contacts
Expand our facilities maintenance and budgets to include all facilities across the organization.	Goal 2, Strategy 2B	Chief Operations Officer	Document & track budgets
Develop a stronger relationship with customers.	Goal 1, Strategy 1C	Chief Operations Officer	Document customer contacts
Further explore our fleet utilization to understand what we have and how it benefits the organization.	Goal 2, Strategy 2B	Chief Operations Officer	Review of fleet utilization
Relocation of staff to other locations to expand their working knowledge of all facilities.	Goal 3, Strategy 3D	Chief Operations Officer	Document & track staff training by location

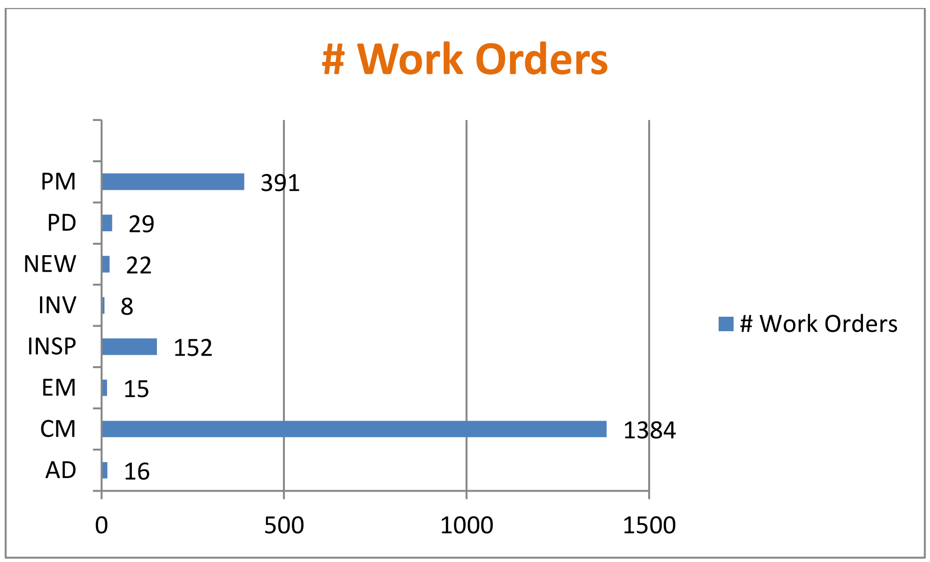
Centralized Maintenance Division Performance Measures

July 2015 to present

Total Work Orders: 2017

OPERATIONS DEPARTMENT
CENTRALIZED MAINTENANCE DIVISION





PM -Preventive Maintenance
PD -Predictive Maintenance
AD- Administrative
INV- Investigation
INSP-Inspection
EM- Emergency
CM –Corrective

OPERATIONS DEPARTMENT
CENTRALIZED MAINTENANCE DIVISION

Summary of Expenditures

EXPENDITURES DETAIL BY DEPARTMENT

	CFPUA FY 13-14 Adjusted Budget	CFPUA FY 13-14 Actual	CFPUA FY 14-15 Adjusted Budget	CFPUA FY 14-15 Actual	CFPUA FY 15-16 Adopted Budget	CFPUA FY 15-16 Amendments & Transfers	CFPUA FY 15-16 Adjusted Budget	CFPUA FY 16-17 Adopted Budget	% Change FY 16-17 Adopted/FY 15-16 Adopted
Operations - Centralized Maintenance									
Personnel	827,785	804,052	858,590	836,601	878,808	(57)	878,751	891,092	1.40%
Benefits	289,234	282,649	317,292	308,897	315,642	2,671	318,313	322,148	2.06%
Operating	930,345	784,896	952,523	753,787	1,082,349	(58,278)	1,024,071	778,544	-28.07%
Capital Outlay	7,600	5,849	-	-	-	-	-	-	0.00%
Total Operations - Centralized Maintenance	**2,054,964**	**1,877,446**	**2,128,405**	**1,899,285**	**2,276,799**	**(55,664)**	**2,221,135**	**1,991,784**	4.91%

OPERATIONS DEPARTMENT
UTILITY SERVICES DIVISION

Superintendent, James Craig, P.E.

Utility Services has effectively responded to the challenge of repairing the Authority's water and sewer infrastructure. Over 40% of the Authority's system has exceeded its expected useful life, which for water and sewer systems, is 50 years. The Utility Services Division is the front line with regard to maintaining flow through the pipelines and continues to be vigilant. Capital projects in the out years will provide relief as the remaining system ages. The division, among other things, provides for repairs to both the distribution and collection systems, as well as performs locates, maintains and monitors system water quality, maintains outfalls, and operates and maintains pump stations. As of December 2013, the Authority is under the review of the EPA through the executed consent decree, placing additional stringent recording and response requirements on the division.

Each day, the Authority safely collects and treats the vast majority of its wastewater. From time to time and under various circumstances, sanitary sewer overflows (SSOs) occur and wastewater is discharged before being treated. Causes of SSOs include, among other things, grease, debris, pipe failure, power failure and pump failure. Although most SSOs are typically caused by Fats, Oils and Grease (FOG), the largest SSO volumes are typically the result of pipe failures. Various initiatives are underway to meet the Authority's goal of minimizing SSO's.

Almost all initiatives involving the wastewater collection and treatment systems help reduce the frequency and volume of SSOs. Public outreach concerning the effects of grease and wipes raises awareness, and allows concerned citizens to understand how their actions affect the system. Likewise, regular cleaning of gravity lines removes grit and debris, in addition to restoring capacity. Ongoing condition assessments coupled with Asset Management's risk criteria ensure replacement and rehabilitation efforts address the most pressing pipe, pump station and plant issues. These activities are funded through various operating and capital improvement budgets, and are managed by staff throughout the Authority. Without question, reducing SSOs and their impacts is consistent with the Strategic Plan and is supported by the values and commitment of the Authority.

Key Accomplishments for FY 16

- Completed 1,028 work orders, installed 34 water services, repaired or replaced 122 hydrants, repaired 187 water services, repaired 91 water mains, replaced 54 water valves, made 10 repairs on the raw water main or bents and made 1,338 SY asphalt/concrete repairs.
- Completed 459 work orders, repaired 26 sewer mains, installed or replaced 87 sewer services, 82 sewer service cleanouts, 58 sewer manholes and made 1,167 of asphalt/concrete repairs.

OPERATIONS DEPARTMENT
UTILITY SERVICES DIVISION

- Completed 307 work orders responding to complaints, in addition to flushing, activating and testing of over 69,000 LF of new water mains.
- Completed 5,393 work orders, set 948 meters, tested 1 large meter and repaired/replaced 1,207 meters. Note: Meter Services was restructured to Customer Service by May, 2015.
- Completed 34,351 underground utility locates with in-house staff.
- Managed 13 contracted projects using CIP emergency funds to repair approximately 2,900 feet of pipe lines (2,300 feet of which were lined), 16 manholes and 34 sewer services at a cost of $915,000 to address imminent failures.
- Inspected/cleaned approximately 13.5% (113 miles) of mainline collection system to date exceeding the minimum required 10%.
- Inspected/videoed 45.71 miles of gravity sewer mains, approximately 5.4% of the system.
- Inspected and/or maintained/cleared 40 miles of outfall easements.
- Performed inspection on 3,130 sanitary sewer manholes.
- Completed over 11,840 work orders by pump station maintenance section.
- Responded to 8 reportable SSOs, discharging a total of 31,200 gallons of sewage with the commitment of stewardship as the foremost concern.
- Managed OCCP and root control programs.

Utility Services Division Notable Goals for FY 17

Goals	Relation to Strategic Plan	Responsible Party	Performance Metric
Continue affirmative efforts to address an aging sewer system that is subject to frequent failures.	Goal 2, Strategy 2C	Chief Operations Officer	Document & track affirmative efforts
Continue to implement Maximo and asset management.	Goal 3, Strategy 3C	Chief Operations Officer	Document & track implementation
Manage inventory through Maximo.	Goal 3, Strategy 3C	Chief Operations Officer	Review of inventory in Maximo
Promote Maximo ISO usage and implementation throughout the Authority.	Goal 1, Strategy 1A	Chief Operations Officer	Document & track usage and implementation

OPERATIONS DEPARTMENT
UTILITY SERVICES DIVISION

Utility Services Division Performance Measures

	FY 11	FY 12	FY 13	FY 14
Water line breaks/leaks per 100 miles of line[1]		7.09	7.09	6.58[2]
Collection system main/line breaks per 100 miles of line[1]		5.68	5.68	3.4[2]
Sanitary sewer overflows per 100 miles of line[1]		2.21	1.37	1.68
Water quality complaints per 1000 customers[1]		9.60	6.48	4.72
Miles of line CCTV	26.20	29.00	25.60	34.43
Miles of line cleaned	145.40	188.70	105.00	116.00

[1]*data available beginning FY 12*

[2]*data is a monthly average rate/100 miles*

Summary of Expenditures

EXPENDITURES DETAIL BY DEPARTMENT

	CFPUA FY 13-14 Adjusted Budget	CFPUA FY 13-14 Actual	CFPUA FY 14-15 Adjusted Budget	CFPUA FY 14-15 Actual	CFPUA FY 15-16 Adopted Budget	CFPUA FY 15-16 Amendments & Transfers	CFPUA FY 15-16 Adjusted Budget	CFPUA FY 16-17 Adopted Budget	% Change FY 16-17 Adopted/FY 15-16 Adopted
Operations - Utility Services									
Personnel	3,693,502	3,409,439	3,758,894	3,545,549	3,865,423	23,464	3,888,887	4,036,705	4.43%
Benefits	1,328,307	1,252,564	1,454,233	1,426,523	1,468,207	39,900	1,508,107	1,500,479	2.20%
Operating	3,713,255	3,026,276	4,157,519	3,102,105	4,443,300	(330,809)	4,112,491	4,488,400	1.02%
Capital Outlay	127,960	126,924	-	-	-	-	-	-	0.00%
Total Operations - Utility Services	**8,863,024**	**7,815,203**	**9,370,646**	**8,074,177**	**9,776,930**	**(267,445)**	**9,509,485**	**10,025,584**	5.01%

OPERATIONS DEPARTMENT

WASTEWATER TREATMENT DIVISION

Wastewater Treatment Superintendent, Kenneth L. Vogt, Jr., PE, BCEE

The Wastewater Treatment Division manages the operation and maintenance of the Authority's three wastewater treatment plants (WWTP): Northside (NSWWTP), Southside (SSWWTP), and Walnut Hills (WHWWTP). These facilities have received diligent operation and maintenance attention, exemplary regulatory permit compliance, and observed strict compliance with the approved budget. Staff has participated in many Cape Fear Public Utility Authority program initiatives including asset management, SCADA master planning, centralized maintenance and maintained high training and certification standards.

Key Accomplishments for FY 16

- The period 01/2015 – 12/2015 was characterized by outstanding plant performance. WWT Statistics: Overall (3 WWTPs) – Average Wastewater Flow = 18.285 MGD; % NPDES Compliance = 99.95; Treatment Operation and Maintenance Cost = $569/MG.
  - NSWWTP – Average Wastewater Flow = 9.237 MGD; % BOD Removed = 99.34; % TSS Removed = 99.95; % NPDES Compliance = 100.00; Wastewater Residuals Produced = 10,958 CY; Treatment Operation and Maintenance Cost = $622/MG.
  - SSWWTP – Average Wastewater Flow = 8.993 MGD; % CBOD Removed = 96.61; % TSS Removed = 97.32; % NPDES Compliance = 100.00; Wastewater Residuals Production = 7,668 CY; Treatment Operation and Maintenance Cost = $479/MG.
  - WHWWTP – Average Wastewater Flow = 0.056 MGD; % BOD Removed = 98.96; % TSS Removed = 99.95; % NPDES Compliance = 99.80; Wastewater Residuals Production = 70 CY; Treatment Operation and Maintenance Cost = $6,249/MG.
- The NSWWTP Expansion/Upgrade project, which transformed the former 8 MGD secondary plant to the current 16 MGD advanced plant was completed in 2009. Re-rating the plant for its design flow of 16 MGD occurred in December 2014. The exteriors of several process areas, including the headworks and the digesters, received application of new coatings. The NSWWTP is participating in two Duke Energy Progress energy conservation programs - Real Time Pricing (RTP) and Large Load Curtailment (LLC) - offering financial incentives. In order to better participate in these programs, the NSWWTP air permit was modified to enable one of its generators to operate for extended durations. The NSWWTP continues planning for the addition of liquid residuals storage tanks and the partial or complete recoating of all five digester covers.
- The SSWWTP Expansion/Upgrade project, transforming the current 12 MGD secondary plant to a proposed 16 MGD advanced plant, continues within the design phase, and plans and specifications near completion. A major NPDES permit modification to authorize SSWWTP expansion to 24 MGD with upgraded level of treatment from secondary to advanced has been received from NCDEQ and took effect on 10.01.2015. An additional benefit realized in the issuance of this permit was the substitution of a chronic whole effluent

toxicity test requirement instead of the previous acute whole effluent toxicity test requirement (which the plant had experienced some difficulty in passing on a consistent basis). Well-maintained, the SSWWTP awaits its projected 2025 Expansion/Upgrade Project construction commencement. Despite its advanced age, the SSWWTP received the NCAWWA WEA 2015 East Region Plant Operation and Maintenance Excellence Award. Plant condition assessments performed by both a consultant and CFPUA staff enable better anticipation and projection of necessary repairs, replacements and associated costs throughout this period. In conjunction with these condition assessments, the SSWWTP completed concrete repairs to the chlorine contact tanks and residuals containment area and emergency concrete repairs to the screw pump channels. Plans continue to be developed for the replacement of digester 4 heat exchanger and recirculation pumps, digester gas system piping, and the residuals dewatering building roof. The SSWWTP has been notified that it will receive the NCDOL/OSHA Safety and Health Achievement Recognition Program certificate for its outstanding safety and health record.

- While well operated and maintained, the WHWWTP exhibits high unit operating costs. The goal, consistent with the Authority's Integrated Water Resources Master Plan and Capital Improvement Program, has been to maintain plant performance and permit compliance at acceptable levels while plans are developed for its eventual decommissioning and conveyance of flow to the NSWWTP anticipated for 2016.
- In partnership with Pender County, the U.S. 421 WWTP has completed plans and specifications for a 0.5 MGD SBR WWTP. Project planning is considered to be scalable insofar as smaller or larger alternatives can be considered if changing conditions so dictate. In response to a request from Pender County, the Authority temporarily transferred its 421 WWTP NPDES permit to Pender County for its use in constructing a WWTP to service an industrial customer within its commerce park.
- WWTD staff has continued to participate in various Authority initiatives, including ISO 14001 program implementation, safety committees, capacity management, wastewater force main and gravity collection system assessment (risk management), capital improvement program development, asset management (representation on most if not all committees), computerized maintenance management software (CMMS) and work order implementation, Management of Assets in Sewer Treatment (MAST) participation, emergency preparedness (including exercises), reclaimed/reuse water, Contaminants of Emerging Concern (CECs), including Endocrine Disrupting Compounds and Pharmaceuticals and Personal Care Products (EDCs/PPCPs), acceptance and processing of non-connected wastes (septage; grease; residuals; non-hazardous liquid wastes), recovery and use of excess anaerobic digester gas, and evaluation of participation in Duke Energy Progress' Demand Response Automation (DRA) Program for the SSWWTP.
- Staff remains involved on various levels with many environmentally active organizations, including the Cape Fear River Assembly (CFRA), the Lower Cape Fear River Program (LCFRP), the North Carolina American Water Works Association – Water Environment Association

(NC AWWA – WEA), the American Water Works Association (AWWA), the Water Environment Federation (WEF), and the Water Environment Research Foundation (WERF).

- Work continues on several regulatory programs affecting our NPDES permits including Total Maximum Daily Loads (TMDLs) and water quality pollutant credit trading programs. Annual wastewater and residuals reports were prepared. Class A and Class B residuals permit renewals were processed and issued by NCDEQ; the Class A residuals distribution permit will remain in effect until 03.31.2020 while the Class B residuals land application permit will remain in effect until 05.31.2020. In addition, a Class B residuals permit modification application was subsequently submitted to NCDEQ to incorporate additional land application sites into its inventory.

Wastewater Treatment Division Notable Goals for FY 17

Goals	Relation to Strategic Plan	Responsible Party	Performance Metric
Continue implementation of creative revenue generation strategies, particularly the utilization/marketing of excess digester gas production at the NSWWTP and the SSWWTP.	Goal 2, Strategy 2B	Chief Operations Officer	Document & track revenue generation strategies
Continue the production of Type 1 reclaim water at the NSWWTP with a goal of securing a permit for its distribution.	Goal 2, Strategy 2B	Chief Operations Officer	Document & track production levels and efforts for securing permit
Complete the SSWWTP Expansion/Upgrade/Renovation plans and specifications while continuing diligent maintenance and capital investment in the existing plant as its condition-based improvements are deferred until construction commencement in 2025.	Goal 2, Strategy 2C	Chief Operations Officer	Document SSWWTP plans and specifications
Maintain WHWWTP performance and permit compliance at acceptable levels as plans continue for its eventual decommissioning and conveyance of flow to the NSWWTP.	Goal 1, Strategy 1A Goal 2, Strategy 2B	Chief Operations Officer	Track WHWWTP performance & permit compliance

OPERATIONS DEPARTMENT
WASTEWATER TREATMENT DIVISION

Wastewater Treatment Division Performance Measures

	FY 13	FY 14	FY 15
Volume Treated (gallons)	5,900,239,000	6,004,110,000	6,379,565,000
Cost per million gallons - NSWWTP	708	689	722
Cost per million gallons - SSWWTP	529	495	487
Cost per million gallons - WHWWTP	7,654	7,644	6,783
NPDES Permit Compliance (%) – NSWWTP	100.00	100.00	100.00
NPDES Permit Compliance (%) – SSWWTP	99.45	100.00	99.86
NPDES Permit Compliance (%) – WHWWTP	100.00	100.00	99.80

Summary of Expenditures

EXPENDITURES DETAIL BY DEPARTMENT

	CFPUA FY 13-14 Adjusted Budget	CFPUA FY 13-14 Actual	CFPUA FY 14-15 Adjusted Budget	CFPUA FY 14-15 Actual	CFPUA FY 15-16 Adopted Budget	CFPUA FY 15-16 Amendments & Transfers	CFPUA FY 15-16 Adjusted Budget	CFPUA FY 16-17 Adopted Budget	% Change FY 16-17 Adopted/FY 15-16 Adopted
Operations - Wastewater Treatment									
Personnel	$ 1,337,838	$ 1,312,069	$ 1,362,200	$ 1,394,849	$ 1,400,872	$ 1,265	$ 1,402,137	$ 1,371,226	-2.12%
Benefits	474,198	476,724	521,285	520,613	520,301	3,680	523,981	486,358	-6.52%
Operating	2,063,972	1,981,320	2,199,554	1,983,901	2,122,416	15,267	2,137,683	2,132,495	0.47%
Capital Outlay	95,000	49,248	-	-	-	-	-	-	0.00%
Total Operations - Wastewater Treatment	**3,971,008**	**3,819,361**	**4,083,039**	**3,899,363**	**4,043,589**	**20,212**	**4,063,801**	**3,990,079**	-0.48%

OPERATIONS DEPARTMENT
WATER TREATMENT DIVISION

Water Resources Manager, Mike E. Richardson

The Water Treatment Division processes source water from the Cape Fear River and aquifers, distributing 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, 7 days per week to ensure the supply of safe drinking water is available for the citizens and customers of the Authority.

Key Accomplishments for FY 16

- Met regulatory standards and goals for water quality set forth by state and federal standards through the implementation of recommendations and directions from consultants hired to investigate disinfection byproducts to improve and meet the standards.
- Continued the effort of interconnecting water systems to allow for blending of water and to improve operating control through the improved SCADA and management of all division water facilities into a single point of supervision and control.
- Maintained, trained and supported a full complement of certified water operators at all facilities and met the requirement for 6.0 hours of continued education credit per year per licensed operator.
- Integrated the full requirements of laboratory testing and record keeping as mandated by the Public Water Supply Section.
- Completed the revisions required to ASR well and reinstalled new pump, proceeded with completion of the cycle testing program to develop and operate the Aquifer Storage and Recovery (ASR) system and fully incorporated it into the daily operation of the water system through flow management, and as a tool to reduce system Disinfectants and Disinfection Byproducts (D/DBP) formation.
- Continued implementation and maintenance of the Maximo Computer Maintenance Management System (CMMS) into all facilities of the division to allow for the efficient operation of the new Centralized Maintenance Division.
- Managed source water flows between Lower Cape Fear Water and Sewer Authority (LCFWSA) and our own Kings Bluff Pump Station to provide the supply of raw water to meet demand at the most efficient and lowest practicable cost. Managed the overall ground water source water as needed to meet demand while attaining a balance within the ground water aquifers and the communities.
- Maintained all facilities to the highest degree of operational efficiency in order to meet the demands for water supply, to ensure adequate storage for fire protection, adequate staffing 24/7 of well qualified and trained operators, and provided full coverage and operation during emergencies.

OPERATIONS DEPARTMENT
WATER TREATMENT DIVISION

Water Treatment Division Goals for FY 17

Goals	Relation to Strategic Plan	Responsible Party	Performance Metric
Maintain the effort to interconnect the surface water and ground water systems to form one large water system to supply potable drinking water to all customers of the Authority.	Goal 2, Strategy 2C	Chief Operations Officer	Document & track interconnection efforts
Incorporate improvements as needed and recommended by consultants to achieve compliance with Stage Two Disinfection Byproduct at the water treatment plants and the distribution systems.	Goal 1, Strategy 1A	Chief Operations Officer	Document & track disinfection byproducts
Incorporate the operation of Westbrook ASR facilities into the water system.	Goal 1, Strategy 1A Goal 2, Strategy 2C	Chief Operations Officer	Document & track incorporation efforts
Continue the consolidation of the surface and ground water operations into a single control and operation point at Sweeney Water Treatment Plant to allow for more efficient and reliable decision making and operational strategy for the Division.	Goal 2, Strategy 2B	Chief Operations Officer	Document & track consolidation efforts
Incorporate changes into the Water Treatment SCADA systems and CFPUA network infrastructure to facilitate increased operational efficiencies of Water Treatment Facilities.	Goal 3, Strategy 3C	Chief Operations Officer	Document & track changes and efficiencies found
Implement an Apprenticeship Program for both surface and ground water operators through continued cooperation with the NC Department of Labor.	Goal 3, Strategy 3D	Chief Operations Officer	Document & track cooperation efforts and apprentices once hired
Institute and maintain a reliable network of distribution monitoring instruments to allow for real-time data gathering from distribution systems.	Goal 3, Strategy 3C	Chief Operations Officer	Track data obtained from instrumentation

OPERATIONS DEPARTMENT
WATER TREATMENT DIVISION

Water Treatment Division Performance Measures

	As of March 2014	As of March 2015	As of March 2016
Volume Treated- Surface to Ground Water	6.5 Billion Gallons	6.0 Billion Gallons	6.2 Billion Gallons
Compliance with all Federal & State Drinking Water Regulations	100%	100%	100%
Maintain Operating Costs at Sweeney WTP per one million gallons	$806.00	$900.00	$870.00
Maintain Operating Costs at Nano per one million gallons	$1,530.00	$1,530.00	$1,320.00
Operating Costs per 1000 gallons (electrical, chemical & O&M costs)	$0.93	$0.95	$0.95
Continue to meet AWOP[1] and partnership turbidity goals	0.1 ntu[2] in 95% in filtered water readings	0.1 ntu[2] in 95% in filtered water readings	0.1 ntu[2] in 95% in filtered water readings
Finished Water Total Organic Carbon Levels:			
Nano Filtration Plant:	1.0 mg/L or less	1.0 mg/L or less	1.0 mg/L or less
Sweeney Water Treatment Plant:	2.0 mg/L or less	2.0 mg/L or less	2.0 mg/L or less
[1]Area Wide Optimization Program			
[2]nephlometric turbidity units			

OPERATIONS DEPARTMENT
WATER TREATMENT DIVISION

Summary of Expenditures

EXPENDITURES DETAIL BY DEPARTMENT

	CFPUA FY 13-14 Adjusted Budget	CFPUA FY 13-14 Actual	CFPUA FY 14-15 Adjusted Budget	CFPUA FY 14-15 Actual	CFPUA FY 15-16 Adopted Budget	CFPUA FY 15-16 Amendments & Transfers	CFPUA FY 15-16 Adjusted Budget	CFPUA FY 16-17 Adopted Budget	% Change FY 16-17 Adopted/FY 15-16 Adopted
Operations - Water Treatment									
Personnel	1,150,982	1,139,145	1,155,109	1,150,269	1,189,316	29,894	1,219,210	1,260,256	5.96%
Benefits	389,977	381,828	412,981	405,036	410,614	11,001	421,615	455,402	10.91%
Operating	4,573,769	4,357,059	4,461,078	4,332,424	4,714,819	183,650	4,898,469	4,918,851	4.33%
Capital Outlay	25,588	24,604	-	-	-	-	-	-	0.00%
Total Operations - Water Treatment	**6,140,316**	**5,902,636**	**6,029,168**	**5,887,729**	**6,314,749**	**224,545**	**6,539,294**	**6,634,509**	4.63%

Sweeney Water Treatment Plant

ENVIRONMENTAL MANAGEMENT DEPARTMENT

Environmental Management Director, Beth Eckert

The Environmental Management Department comprises four divisions: Community Compliance, Laboratory Services, Environmental Management, and Emergency Planning and Response. This Department supports the Operations Department and other areas of the Authority by providing data that meets regulatory requirements for making operational decisions that can affect public health and/or the environment. Staff also works to ensure that the water and sewer systems are protected from harmful discharges that could be released into the sewer system or siphoned into the drinking water distribution system. In addition to routine operations, staff members play instrumental roles with development of the Authority's asset management program, environmental management system, emergency response plan, aquifer storage and recovery, and the discussions with EPA. Each division has made significant progress towards established goals and continues to work to support the strategic plan and guiding principles of the Authority.

Environmental Management Department Performance Measures

	Jul-Dec, 2012	Jul-Dec, 2013	Jul-Dec, 2014	Jul-Dec, 2015
Average Number of Inspections per Compliance Officer per month	30.1	15	22	21
Customer Compliance with Grease Interceptor Requirements	96%	90%	98%	98%
Average # of samples analyzed per employee	138.8	123	140	141
Average # of Tests per employee	455.6	365	435	438

Summary of Expenditures

EXPENDITURES DETAIL BY DEPARTMENT

	CFPUA FY 13-14 Adjusted Budget	CFPUA FY 13-14 Actual	CFPUA FY 14-15 Adjusted Budget	CFPUA FY 14-15 Actual	CFPUA FY 15-16 Adopted Budget	CFPUA FY 15-16 Amendments & Transfers	CFPUA FY 15-16 Adjusted Budget	CFPUA FY 16-17 Adopted Budget	% Change FY 16-17 Adopted/FY 15-16 Adopted
Environment Management									
Personnel	1,295,809	1,261,006	1,361,637	1,199,348	1,363,368	1,451	1,364,819	1,438,255	5.49%
Benefits	459,245	437,304	505,749	450,238	514,123	(17,006)	497,117	491,280	-4.44%
Operating	468,395	410,149	479,246	377,835	466,940	(23,877)	443,063	487,928	4.49%
Capital Outlay	-	-	-	-	-	-	-	-	0.00%
Total Environment Management	**2,223,449**	**2,108,459**	**2,346,632**	**2,027,421**	**2,344,431**	**(39,432)**	**2,304,999**	**2,417,463**	0.30%

EMD Lab Bottles

ENVIRONMENTAL MANAGEMENT DEPARTMENT
COMMUNITY COMPLIANCE DIVISION

The Community Compliance Assistance Division is responsible for administering the Pretreatment, Fats, Oil and Grease (FOG) and Backflow Prevention (Cross Connection Control) programs.

The Pretreatment and FOG programs include the regulation of discharge of non-domestic wastewater. These federal and state regulated programs ensure the protection of the Authority's publicly owned treatment works (POTW), employees, bio-solids, receiving stream, and other surface waters as well as compliance with National Pollutant Discharge Elimination System (NPDES) and collection system permits. The Community Compliance staff works closely with collection system personnel in responding to sanitary sewer overflows and sewer blockages that are caused by debris, FOG, or fibrous materials. Inspections are conducted in the affected areas and literature is distributed for educational purposes.

The Backflow Prevention Program ensures the quality of the potable water in the distribution system. Backflow prevention assemblies safeguard the distribution system by preventing potential contaminants within a customer's plumbing from flowing back into the distribution system in the event of pressure loss on the water main. New or expanding water services are reviewed for compliance in cooperation with the Engineering Department's Development Services Division's plan review process. Facilities with existing services are inspected to ensure compliance with backflow prevention requirements.

Key Accomplishments for FY 16

- During the 1st six months of the review period staff monitored and inspected 51% of 745 total FSEs ensuring compliance with the Sewer Use Ordinance.
- Provided compliance assistance to FSEs helping reduce their waste disposal cost through the grease interceptor pumping frequency variance program.
- Have permitted 85% of total FSEs after identifying approximately 100 new establishments over the last year.
- Updated the Headworks Analysis for the Northside Wastewater Treatment Plant's 16.0 MGD expansion.
- Investigated FOG related Sanitary Sewer Overflows and blockages in the collection system, providing educational resources and compliance assistance to over 1300 residential and commercial customers.
- Issued 17 Authorizations to Construct grease interceptors to FSEs.
- Completed long term sampling at both WWTPs, including additional sampling for HWA.
- Completed additional low level mercury samplings for data to be used in HWA and developing a mercury reduction program.
- Reviewed SIU and IU monthly monitoring reports for compliance within required time frames.

ENVIRONMENTAL MANAGEMENT DEPARTMENT
COMMUNITY COMPLIANCE DIVISION

- Issued Notices of Violations to SIUs as required.
- Issued draft permit to Duke Energy Progress to accept coal combustion residuals landfill leachate.
- Renewed or Modified 8 permits now in ISO 14001 document control
- Performed 28 water tampering investigations.
- Appeared in District Court 7 times recovering over $2,000 in past due billing.
- Performed 54 irrigation/well disconnection verification inspections.
- Distributed Public Educational material at Earth Day and Lake Fest.
- Provided cross connection control and water metering to 55 special water use accounts consuming and billed for approximately 3,000,000 gallons.
- Processed 604 applications and permits for backflow installations.
- Continued improvement with the implementation of Maximo within the division to better track inspection data and work time.
- Continued improvement with the automated process of transferring data from FSE inspections from field report to Maximo using Laserfiche.
- Partnered with the NC Rural Water Association in conducting training events that ensure competent backflow prevention assembly testers are available.
- Mailed past due “backflow preventer testing” postcard reminders to customers to improve testing compliance and customer safety.
- Continued updating Standard Operating Procedures (SOPs) and training to conform to ISO 14001 requirements.
- Performed multiple outreach efforts that included: can lid campaign; FOG educational billing inserts; participated in Earth Day and Lake Fest; gave FOG and water quality presentations at requested events.

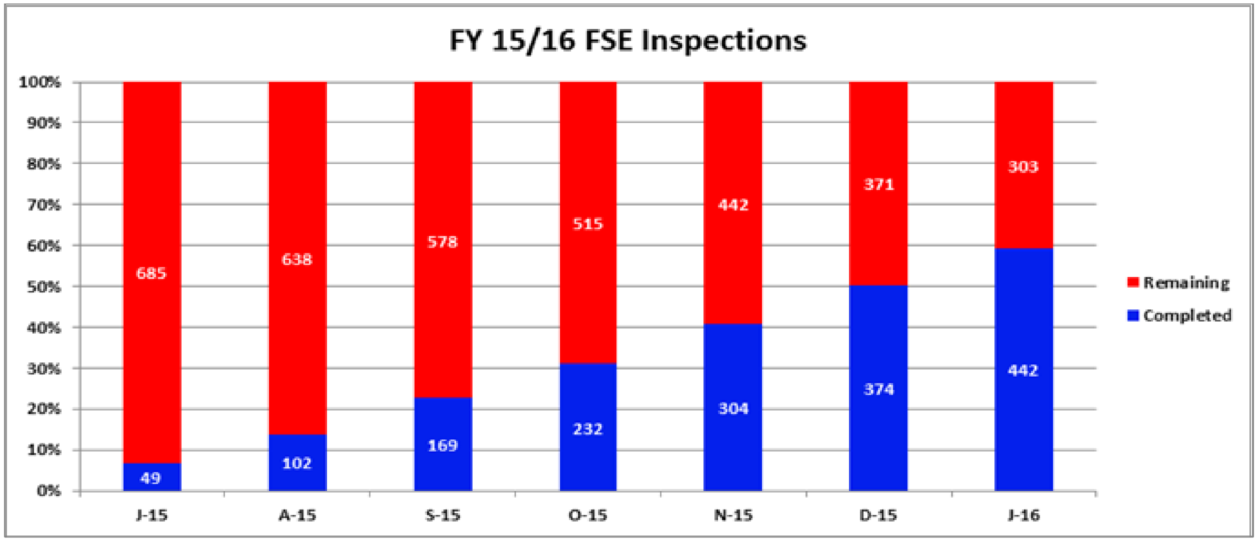
ENVIRONMENTAL MANAGEMENT DEPARTMENT
COMMUNITY COMPLIANCE DIVISION

Community Compliance Division Notable Goals for FY 17

Goals	Relation to Strategic Plan	Responsible Party	Performance Metric
Provide education outreach and enforcement for SSOs.	Goal 1, Strategy 1A Goal 1, Strategy 1C	Director of EMD	Document & track outreach & enforcement efforts
Inspect all FSEs within the fiscal year.	Goal 1, Strategy 1A Goal 1, Strategy 1C	Director of EMD	Document inspections
Meet all pretreatment requirements of monitoring, inspecting, and enforcement per permit requirements and sewer use ordinance.	Goal 1, Strategy 1A	Director of EMD	Document & track monitoring, inspecting and enforcement efforts
Work to support the Authority's mission by completing compliance tasks in a timely manner and by promptly responding and assisting other areas of the Authority.	Goal 1, Strategy 1A Goal 3, Strategy 3C	Director of EMD	Document & track completion completed tasks
Provide regulatory and billing support for the implementation of the reclaimed water and hauled residuals programs.	Goal 1, Strategy 1A Goal 2, Strategy 2B	Director of EMD	Document & track support efforts
Ensure all applicable backflow test due notices are sent out within the schedule.	Goal 1, Strategy 1A	Director of EMD	Track backflow notices for compliance
Update the Enforcement Response Plan.	Goal 1, Strategy 1A Goal 2, Strategy 2C	Director of EMD	Document Plan changes
Update the Cross Connection and Backflow Prevention Ordinance.	Goal 1, Strategy 1A Goal 2, Strategy 2C	Director of EMD	Document Ordinance changes
Update the Sewer Use Ordinance.	Goal 1, Strategy 1A Goal 2, Strategy 2C	Director of EMD	Document Ordinance changes

ENVIRONMENTAL MANAGEMENT DEPARTMENT
COMMUNITY COMPLIANCE DIVISION

Community Compliance Division Performance Measures



ENVIRONMENTAL MANAGEMENT DEPARTMENT
LABORATORY DIVISION

The EMD Laboratory successfully completed sampling and testing to meet regulatory requirements and operational process needs for all four of the Authority's water distribution systems, three wastewater treatment plants, two water treatment plants, and their associated distribution and collection systems. The lab is certified by the state of North Carolina to provide analytical services for drinking water, wastewater, industrial discharges, ground, surface and storm waters. More than 23,000 samples are collected by EMD lab staff and over 69,000 analyses for organic and inorganic chemical components and microbiological organisms are performed annually. The EMD laboratory works with CFPUA's Water Quality department to offer our customer's quick turnaround times for responding to boil water advisories, new line activations and customer complaints. The Laboratory follows a stringent Quality Assurance Program which ensures specified data quality objectives are achieved and results are accurate for reporting and decision making purposes.

Key Accomplishments for FY 16

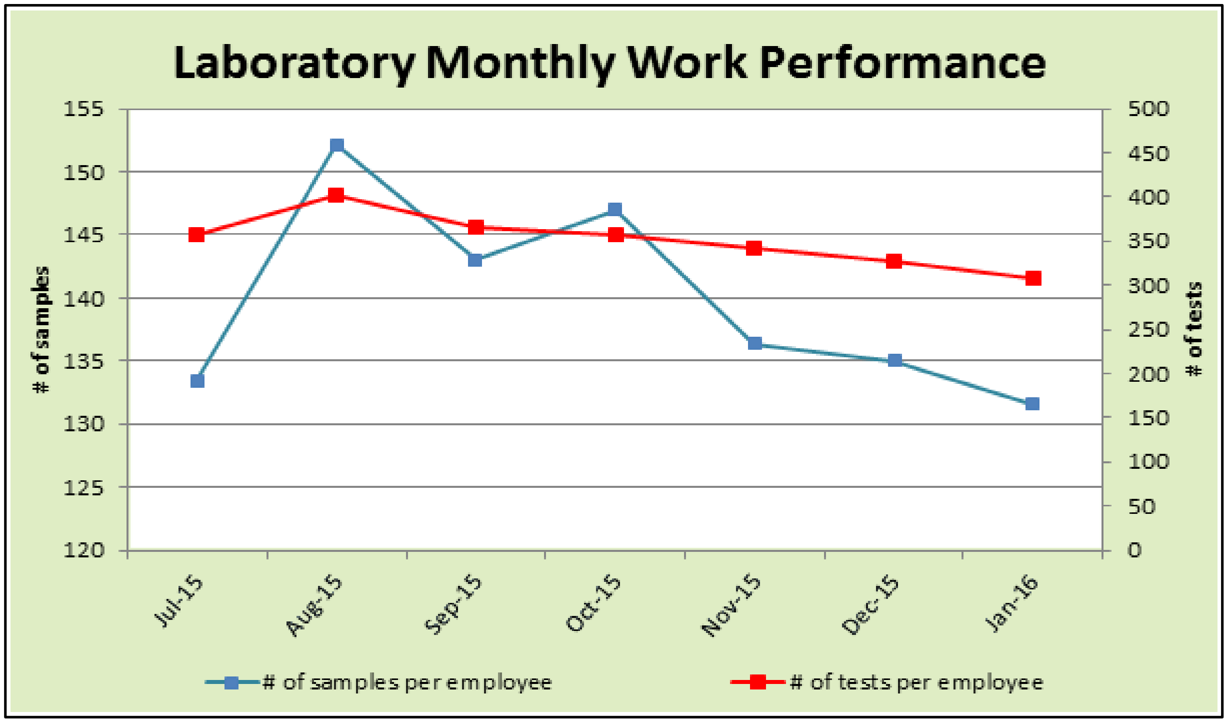
- Laboratory staff successfully completed all annual proficiency testing as required by the laboratory's drinking water and wastewater analytical certifications.
- The EMD Laboratory successfully passed an audit by the Drinking Water State Lab Certification Branch.
- The EMD Laboratory developed and SOP and gained Groundwater/Wastewater Lab Certification for the analysis of Total Dissolved Solids for NPDES compliance monitoring.
- The laboratory staff responded to three sanitary sewer overflows / environmental investigations and conducted related environmental monitoring of affected waterways.
- The Laboratory Continuity of Operations Plan was developed and training with all lab staff was conducted on the plan.
- Completed Lead and Copper sampling for the 04-65-191 water system.
- Collected and analyzed over 360 special samples for TOC and THM analysis to assist Operations staff with monitoring DBP in the distribution system.
- Completed Aeration Performance testing for the assessment of elevated tank aerators for Engineering and Operations staff.
- Continued to provide analytical data and reports in a timely fashion in support of all monitoring programs throughout the year.
- Worked with Operations and Compliance staff throughout the period conducting sampling, testing and reporting of data associated with several projects including:
  - Raw water TOC rush analysis for Sweeney.
  - Bromide analysis working with CFCC Chemical Technology program.
  - Rush sampling and analysis for VA Hospital water quality monitoring.
  - Quality control testing for water treatment and water quality groups.
  - Long Term Monitoring and Significant Industry User analysis.

- NPDES Permit Renewal Toxicity sampling and testing began for NSWWTP and SSWWTP.
- Annual TCLP (Toxicity Characteristic Leaching Procedure) was conducted at NSWWTP and SSWWTP.

Laboratory Division Notable Goals for FY 17

Goals	Relation to Strategic Plan	Responsible Party	Performance Metric
Complete all required sampling and testing accurately and efficiently.	Goal 1, Strategy 1A	Director of EMD	Document sampling & testing
Continue to meet all requirements to maintain water and wastewater lab certifications.	Goal 1, Strategy 1A	Director of EMD	Document & track certification requirements
Support Authority programs to ensure compliance with all environmental laws and requirements.	Goal 1, Strategy 1A	Director of EMD	Document support efforts
Begin submitting monthly reports for the new reclaimed water permit.	Goal 1, Strategy 1A	Director of EMD	Document & track reports
Complete all required lead and copper sampling within the 232 and 137 systems in a safe and accurate manner.	Goal 1, Strategy 1A	Director of EMD	Document & track sampling
Update and maintain laboratory business continuity plan.	Goal 2, Strategy 2B	Director of EMD	Document Plan
Update and maintain safety and chemical hygiene plan.	Goal 1, Strategy 1B	Director of EMD	Document Plan
Continue to maximize use of the Utility Cloud software to gain efficiencies in sampling.	Goal 3, Strategy 3C	Director of EMD	Document & track efficiencies
Continue to support succession planning, rotate job tasks among chemists and microbiologists to cross train and gain efficiencies. Further, look for ways to continue professional development of lab staff and cross training opportunities.	Goal 3, Strategy 3B Goal 3, Strategy 3D	Director of EMD	Document & track job rotations, and training & professional development activities
Continue to comply with EMS document control requirements; participate in audits; maintain certification.	Goal 1, Strategy 1A	Director of EMD	Document requirements, audits
Evaluate laboratory testing costs; alternate suppliers and maintenance contracts for potential cost savings.	Goal 2, Strategy 2B	Director of EMD	Track costs
Support ASR activities as needed including permit requirements, data analysis and management and monitoring schedule requirements.	Goal 1, Strategy 1A Goal 2, Strategy 2C	Director of EMD	Document & track requirements, data analysis & schedule

Laboratory Division Performance Measures



ENVIRONMENT MANAGEMENT DEPARTMENT
ENVIRONMENTAL MANAGEMENT DIVISION (EMD)

The major focus of this group is to further develop and implement the ISO 14001 environmental management system to formalize operating criteria and the system of plan-do-check-act to drive continual improvement. The division also works closely with the Authority's Operations and Engineering staff on construction and emergency projects to ensure compliance. Environmental Management staff continually collaborates with N.C. Sedimentation and Erosion Control and North Carolina Department of Environment and Natural Resources (NCDENR) as well as the U.S. Army Corps of Engineers (USACE) and N.C. Coastal Area Management (CAMA) on various projects.

Key Accomplishments for FY 16

- Maintained Third Party Certification for our ISO 14001 Environmental Management System (EMS) within the Collection System, Pump Station, Right of Way and Environmental Management groups.
- Began implementing the EMS with the Construction Services and Water Quality divisions, including incorporating each element of the EMS and continuing to work with staff to complete the operational control portion.
- Regrouped the Engineering EMS Team, finalized Environmental Aspects and Impacts, and performed a gap analysis.
- Performed EMS training for all areas of Operations and Engineering.
- Served as the liaison between CFPUA, N.C. Division of Water Quality (NCDWQ) and City of Wilmington during sanitary sewer overflow (SSO) events to ensure all reporting was done according to permit and SOP requirements.
- Implemented Authority wide recycling program at all CFPUA facilities.
- Represented CFPUA as a member of the Lower Cape Fear River Program.

ENVIRONMENT MANAGEMENT DEPARTMENT
ENVIRONMENTAL MANAGEMENT DIVISION (EMD)

Environment Management Division Notable Goals for FY 17

Goals	Relation to Strategic Plan	Responsible Party	Performance Metric
Identify and update staff on all pending and approved regulatory changes.	Goal 1, Strategy 1A	Director of EMD	Monitor and document pending & approved changes
Submit renewal packages for five NPDES permits.	Goal 1, Strategy 1A	Director of EMD	Document submittals and permit requirements
Support operations as necessary to help ensure continued compliance.	Goal 1, Strategy 1A	Director of EMD	Document support efforts & track compliance
Provide immediate response to sanitary sewer overflows (SSOs) throughout the review period.	Goal 1, Strategy 1A	Director of EMD	Document SSO events
Continue with EMS implementation in the Engineering, Wastewater, and Water Treatment areas.	Goal 1, Strategy 1A	Director of EMD	Document & track implementation
Seek ISO 14001 certification in Construction Services.	Goal 1, Strategy 1A	Director of EMD	Document & track certification requirements
Maintain existing ISO 14001 certifications.	Goal 1, Strategy 1A	Director of EMD	Document & track certification requirements
Further develop the environmental partnerships with the Cape Fear River Assembly, Partnership, and other local and state environmental stakeholders.	Goal 1, Strategy 1D	Director of EMD	Document partnership efforts

ENVIRONMENTAL MANAGEMENT DEPARTMENT
EMERGENCY PLANNING AND RESPONSE DIVISION

The Emergency Management Coordinator ensures that the Authority abides by relevant regulations for all-hazards mitigation, preparedness, response and recovery. The manager develops, maintains and trains employees on the Emergency Response Plan and associated Incident Action Plans, and works to meet EPA's seventeen National Incident Management System (NIMS) water sector compliance objectives. Authority departmental staff continues to refine emergency preparedness by planning and implementing standardized response as well as industry best practice measures as recommended by EPA, FEMA and North Carolina regulatory agencies.

Key Accomplishments for FY 16

- Continued active participation as Secretary of the NCWaterWARN Mutual Aid and Assistance Program for North Carolina. Served as session speaker for Asheville and Washington, NCDEQ regional workshops.
- Keynote speaker at NC AWWA-WEA Spring Conference and served as expert panelist on Emergency Response Planning.
- Continued to represent Cape Fear Public Utility Authority on the New Hanover County Local Emergency Planning Committee, which plans for Hazardous Materials (HAZMAT) response incidents within the community. Planned and facilitated community-wide LEPC water contamination table top exercise with state, county and city emergency response partners.
- Planned and held 1 regional wastewater workshop, 1 community-wide table top exercise and 2 departmental exercises to further refine and identify potential gaps in readiness, training, or planning.
- Further expanded the use of Incident Action Plans when critical infrastructure construction projects are occurring such as: clear well inspections and repair, air-release valve replacement project, and algal bloom Cape Fear River response.
- Identified ICWater Modeling and Impact software which allows CFPUA to timely track HAZMAT spills in source water for preparedness and response actions.

ENVIRONMENTAL MANAGEMENT DEPARTMENT
EMERGENCY PLANNING AND RESPONSE DIVISION

Emergency Planning and Response Division Notable Goals for FY 17

Goals	Relation to Strategic Plan	Responsible Party	Performance Metric
Conduct critical infrastructure system security inspections.	Goal 1, Strategy 1B Goal 2, Strategy 2C	Director of EMD	Document inspections
Identify critical security control standard and manage DHS CSET evaluation project.	Goal 1, Strategy 1B Goal 3, Strategy 3C	Director of EMD	Document critical security contract standards
Hold three exercises (TTX, FE, FSE).	Goal 1, Strategy 1B Goal 3, Strategy 3C	Director of EMD	Document exercise logistics & outcomes
Coordinate development of the source water protection plan as the regulation is further refined.	Goal 1, Strategy 1A	Director of EMD	Document & track plan and regulations
Continue training and working with staff to further expand the use of NIMS.	Goal 1, Strategy 1B Goal 1, Strategy 1C	Director of EMD	Document NIMS training hours
Continue to represent CFPUA at state and regional events to provide water sector emergency management training to improve utility readiness.	Goal 1, Strategy 1D	Director of EMD	Document event hours & participation
Increase functionality of NCWaterWARN website for mutual aid partners and transfer responsibilities of Secretary Position to other utility.	Goal 1, Strategy 1C Goal 3, Strategy 3C	Director of EMD	Document functionality improvements
Presentation of ICWater Modeling and Impact software to NC Emergency Managers forum.	Goal 1, Strategy 1D	Director of EMD	Document presentation
Revise Information Security Operation Procedure to include standard language for handling sensitive infrastructure information in accordance with N.C.G.S. Expand the use of the new easement / encroachment process with staff through training and standardization among departments.	Goal 3, Strategy 3C Goal 3, Strategy 3D	Director of EMD	Document revisions; document & track training hours
Continue training and working with staff to further expand the use of NIMS with an initial focus on the ESF#3 and New Hanover County Recovery Function 9 training and section chief functions.	Goal 1, Strategy 1C Goal 1, Strategy 1D	Director of EMD	Document NIMS training hours
Continue to represent CFPUA at state and regional events to provide utility industry sector emergency management training to improve readiness.	Goal 1, Strategy 1D	Director of EMD	Document event hours & participation

CUSTOMER SERVICE DEPARTMENT

Customer Service Director, Kristi Irick

The Customer Service Department is responsible for servicing nearly 67,000 customers for water and sewer services. This department reads meters and bills customers for services with a billing accuracy over 99%. 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 meet our customers' needs through timely response, effective service and managed financial costs.

Key Accomplishments for FY 16

- Point of contact for all customer service related inquiries that include payments, service set ups, answering questions and concerns, etc. Staff assists over 14,000 customers per month.
- Payment Processing:
    - Customer Service Representative (CSR) Assisted Payments: Only 22.3% of all payments received were handled by a CSR in FY15 compared to 21.9% in FY14. This is due to the implementation of the IVR in 2013. Self-help payments continue to increase since implementation of automated processes.
    - A/R Payments: Continued customer notification process via letter/phone call to ensure customers update account numbers in their online bank so we receive ACH in lieu of paper check. A/R payments have increased 4.6% from an average monthly volume of 6,286 in FY14 to 6,575 in FY15. A/R payments constitute approximately 18.8% of all payments received.
    - Remote Deposit: Remote deposit is the electronic same day deposit of payments received via mail or night drop box via automated file for batch creation. In FY15, 128,796 payments were processed through remote deposit, representing approximately 31.9% of all payments received.
    - IVR Payments: Total average monthly payments were up 32.1% from 1,821 in FY14 to 2,406 in FY15. Since implementation in July 2013, IVR payments now represent almost 7% of all payments received.
    - Bank drafts: The number of bank drafts has increased 10.1% from a monthly average of 2,123 in FY14 to 2,338 in FY15. Bank drafts represent about 7% of all payments.
    - EzBilling: EzBilling increased 14.7% from an average monthly payment total of 4,072 in FY14 to 4,672 in FY15. EzBilling represents about 13.9% of all payments.
- Customer Service management staff played a critical role in the ERP Project. Staff provided input for the preparation of the RFP, reviewed RFP submittals, attended on-site demos and attended an out of state site visit.

CUSTOMER SERVICE DEPARTMENT

- Continued implementation of the Meter Replacement Program, which provides a more extensive automated method of meter reading that will increase service levels in the meter reading section. Under the first phase of the meter replacement project, over 7,100 meters were converted to include AMR technology that cut read time from 43 hours to five hours.
- Debt Setoff – Debt Setoff has collected $86,752.25 in FY15. In FY14, $183,631.95 was collected. Changes to tax laws resulted in a decrease in collections via Debt Setoff.
- Outbound calls by CFPUA staff to customers with delinquent accounts resulted in the collection of $564,525.19 in FY15 and represents 60.4% of collection revenues.
- Changes to collection practices were implemented in FY15. All accounts that have charges that have aged more than 120 days are sent to Debt Setoff and the third party collection agent. This includes active accounts as well as terminated accounts. This change resulted in third party collections increasing from $58,100 to $224,910.
- Instituted a reconciliation process on collection accounts to ensure proper and timely receipt of payments.
- Continued collaboration efforts with Engineering and Operations departments to develop policies and procedures that support Authority goals and customers' needs, including community outreach and continued improvement of the Mandatory Connection process.
- Customer Service continues to leverage the use of GPS technology by assigning work orders to the meter reading staff closest to the work that needs to be done.
- Worked with EMD to complete implementation of monthly billing for food establishments from an annual billing cycle to a monthly billing cycle.

CUSTOMER SERVICE DEPARTMENT

Customer Service Division Notable Goals for FY 17

Goals	Relation to Strategic Plan	Responsible Party	Performance Metric
Increase calls handled in less than 6 minutes service level to 95% – Calendar year 2015 service level of 90.7% of all calls handled in less than 5 minutes, measured monthly.	Goal 1, Strategy 1C	Customer Service Director	Document & track call time
Successful integration of Meter Services and Meter Reading divisions.	Goal 3, Strategy 3B	Customer Service Director	Document integration
Continue development of a training program for Customer Service staff to include customer service skills, leadership, administrative, computer skills, safety, and cross training to provide the highest quality of customer service.	Goal 3, Strategy 3D	Customer Service Director	Document training hours
Continue to actively contact delinquent customers to increase the collection of revenue and to provide an increased level of customer service.	Goal 1, Strategy 1C Goal 2, Strategy 2B	Customer Service Director	Document & track contact efforts
Review and implement meter reader route changes to improve efficiency and productivity in meter reading activity.	Goal 2, Strategy 2B	Customer Service Director	Document & track route changes & outcomes
Implement proper test procedures for all sizes of water meters to ensure accuracy.	Goal 2, Strategy 2B	Customer Service Director	Document & track accuracy rates
Develop a guide to ensure meters are replaced at the end of their useful life.	Goal 2, Strategy 2B	Customer Service Director	Develop the guide
To maintain stable financial position by effectively billing and collecting revenues: ➢ **Maintain 100% on-time billing** ➢ **Maintain 99% bill preparation accuracy** ➢ **Maintain 99% meter reading accuracy**	Goal 2, Strategy 2B	Customer Service Director	Document & track billing, bill preparation accuracy rates and meter reading accuracy rates

CUSTOMER SERVICE DEPARTMENT

Customer Service Division Performance Measures

	FY13	FY14	FY15	Target
Calls answered in less than 5 minutes:	97.1%	96.3%	89.3%	95%
Average Speed of Answer (in seconds):	71	83	135	180
Abandoned Calls	5.9%	6.8%	10.7%	< 7%
Billing Accuracy	99.3%	99.2%	99.2%	99%

Summary of Expenditures

EXPENDITURES DETAIL BY DEPARTMENT

	CFPUA FY 13-14 Adjusted Budget	CFPUA FY 13-14 Actual	CFPUA FY 14-15 Adjusted Budget	CFPUA FY 14-15 Actual	CFPUA FY 15-16 Adopted Budget	CFPUA FY 15-16 Amendments & Transfers	CFPUA FY 15-16 Adjusted Budget	CFPUA FY 16-17 Adopted Budget	% Change FY 16-17 Adopted/FY 15-16 Adopted
Customer Service									
Personnel	1,972,440	1,838,902	1,932,126	1,835,188	1,997,770	-	1,997,770	2,118,122	6.02%
Benefits	777,530	688,358	781,855	755,733	790,609	(1,970)	788,639	797,755	0.90%
Operating	912,908	741,433	915,758	772,826	811,674	59,627	871,301	1,017,100	25.31%
Capital Outlay	46,000	31,455	-	-	-	-	-	-	0.00%
Total Customer Service	**3,708,878**	**3,300,148**	**3,629,739**	**3,363,747**	**3,600,053**	**57,657**	**3,657,710**	**3,932,977**	-2.59%

Cape Fear
Public Utility Authority
Stewardship. Sustainability. Service.

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TAB INSERT: STATISTICAL & SUPPLEMENTAL

CAPE FEAR PUBLIC UTILITY AUTHORITY
PROFILE

The Authority

Cape Fear Public Utility Authority was created in 2007 pursuant to Chapter 162A of the North Carolina General Statutes, by the governing bodies of New Hanover County (County) and the City of Wilmington (City), for the purpose of providing water and wastewater services to residents of the county. The Authority is authorized to, among other things, 1) set rates, fees and charges, 2) issue revenue bonds to pay the cost of maintaining the water and wastewater systems, and 3) maintain and operate the water and wastewater systems within its service area. The Authority Board consists of eleven members who hold office for staggered terms. Five members are appointed by the County and, five members are appointed by the City, and the eleventh member is jointly appointed by the County and the City. The five appointed members from each governing body include two current members from those respective governing bodies. All members must be residents of the County.

The Reporting Entity

Accounting principles generally accepted in the United States require that the reporting entity include (1) the primary government, (2) organizations for which the primary government is financially accountable and (3) other organizations for which the nature and significance of their relationship with the primary government are such that exclusion would cause the reporting entity's financial statements to be misleading or incomplete. The Authority has two blended component units, Cape Fear Utilities, Inc. and Quality Water Supplies, Inc., which are in substance part of the Authority's operations, and so data from these units is combined with data of the Authority. The Authority is a jointly governed organization, i.e. an entity governed primarily by representatives from other governments. The participants do not retain any ongoing financial interest in or financial responsibility for the Authority. The Authority is not included in any other reporting entity.

The Service Area

The service area of the Authority covers the incorporated area of the City and the majority of the unincorporated areas of the County. The service area does not include the Towns of Carolina Beach, Kure Beach and Wrightsville Beach. However, wastewater flows from the Town of Wrightsville Beach and a portion of Pender County are treated by the Authority.

History

The county was formed in 1729 as New Hanover Precinct of Bath County, from Craven Precinct. It was named for the House of Hanover, which was then ruling Great Britain.

In 1734, parts of New Hanover Precinct became Bladen Precinct and Onslow Precinct. With the abolition of Bath County in 1739, all of its constituent precincts became counties. When New Hanover County was originally established, it encompassed the current counties of Bladen, Onslow, Duplin, Brunswick and Pender. From 1734 through 1764, New Hanover County's land was divided to create Bladen, Onslow, Duplin and Brunswick counties. The last division occurred in 1875 to form Pender County. The county has retained the same boundaries since 1875.

CAPE FEAR PUBLIC UTILITY AUTHORITY
PROFILE

Geography

According to the U.S. Census Bureau, the county has a total area of 328 square miles (849 km^2), of which, 199 square miles (515 km^2) of it is land and 129 square miles (334 km^2) of it (39.33%) is water. Of all 100 counties in North Carolina, only Chowan County is smaller.[1]

City of Wilmington

Located in New Hanover County, the city of Wilmington is a coastal town situation in southeastern North Carolina. Known as the Port City, Wilmington is bordered by the Cape Fear River to the west and the Atlantic Ocean to the east.

History

Wilmington was named in honor of Spencer Compton, the Earl of Wilmington, who was Prime Minister under George II. Incorporated in 1739, Wilmington became a city in 1866. In 1840 it was the largest town in the state and remained so through the early 1900s, thanks to the thriving ports along the Cape Fear River and the arrival of the Wilmington & Raleigh Railroad (renamed the Wilmington & Weldon Railroad in 1854). When the railroad was completed in 1840, it was the largest continuous railroad track in the world.

The Port City is home to the WWII Battleship USS North Carolina (BB-55) and was the site of the commissioning of the Virginia Class USS North Carolina (777) submarine in May 2008 and the missile-guided destroyer USS Gravely in November 2010.

[1] *From Wikipedia*

Relevant Landmarks

Thalian Hall

New Hanover County Courthouse

W. Allen Cobb Judicial Annex

Bellamy Mansion

Wilmington International Airport

Serving southeast North Carolina, the Wilmington International Airport (ILM) provides flight options through Delta Airlines and American Airlines/US Airways. ILM offers many non-stop flights to popular destinations within the United States including Atlanta, Charlotte, New York City, Philadelphia and Washington DC. Serving over 3/4 million passengers per year, ILM prides itself on its convenient flight options, ease of use, and extremely friendly staff.

The University of North Carolina Wilmington

The University of North Carolina Wilmington, the state's coastal university, is dedicated to the integration of teaching and mentoring with research and service. Their commitment to student engagement, creative inquiry, critical thinking, thoughtful expression and responsible citizenship is expressed in their baccalaureate and master's programs, as well as doctoral programs in areas of expertise that serve state needs. Their culture reflects their values of diversity and globalization, ethics and integrity, and excellence and innovation. UNCW has a vision to be recognized for excellence in everything they do, a global mindset and community engagement. Their values include excellence, diversity, student-centered focus, community engagement, integrity and innovation.

UNCW has an annual budget of $285 million. Their current enrollment totals 13,261 undergraduate students and 1,708 graduate students. UNCW's faculty and staff includes 612 full-time faculty, 273 part-time faculty and 1,250 staff members.

Cape Fear Community College

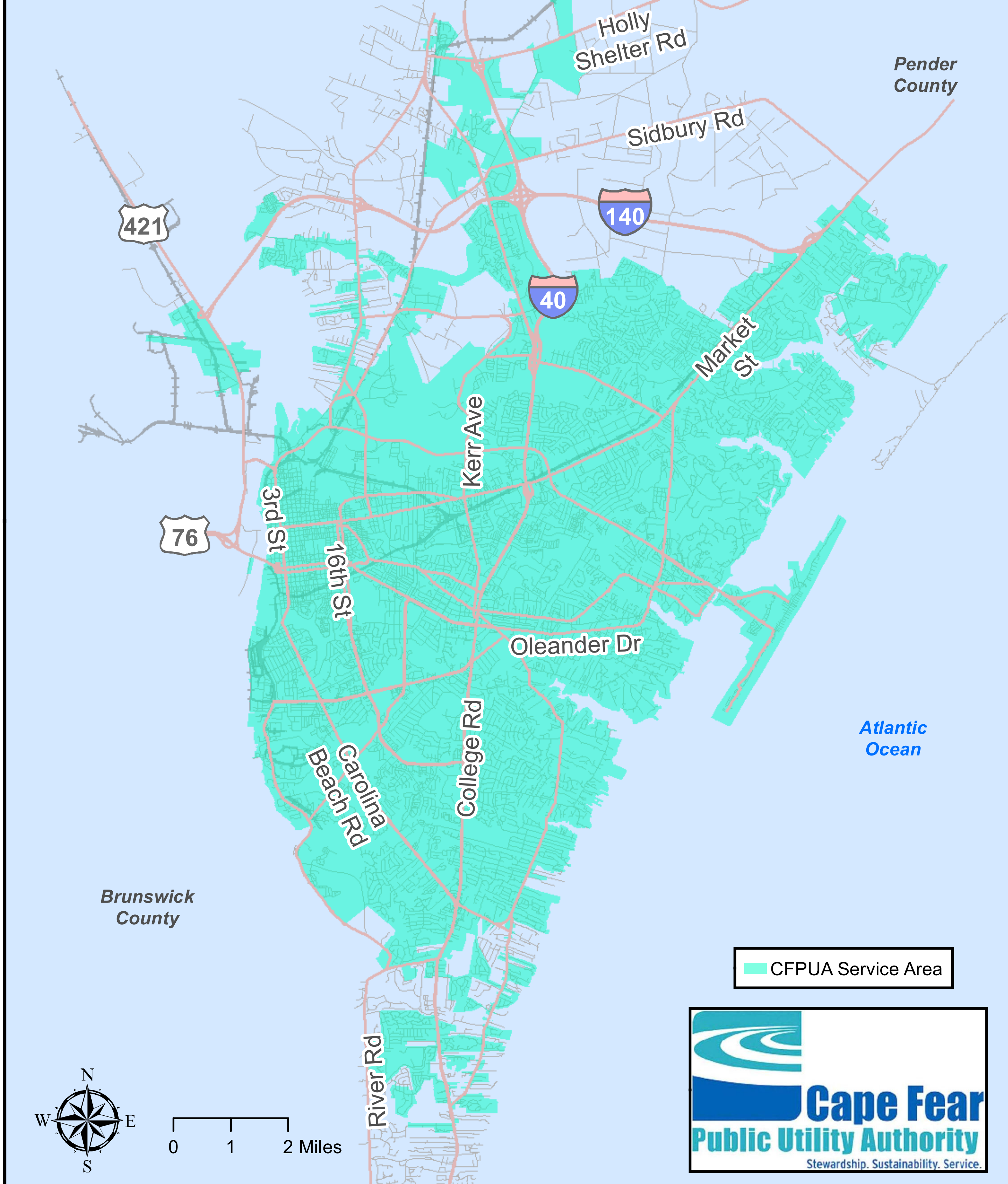
With over 28,000 students enrolling in classes every year, Cape Fear Community College is the sixth largest community college in the state and is a major economic development partner in southeastern North Carolina. Students can train for a new career in one of CFCC's technical programs or earn a two-year college transfer degree to continue their education at a four-year institution. CFCC also offers a wide variety of adult education and continuing education classes for lifelong learning. Additionally, CFCC offers customized employee training opportunities for businesses and industries planning to expand or relocate to the greater Wilmington area. CFCC's main campus is located in historic downtown Wilmington and a North Campus in northern New Hanover County.

New Hanover Regional Medical Center

New Hanover Regional Medical Center is a not-for-profit health care system serving southeastern North Carolina and northeastern South Carolina. A teaching hospital, regional referral center, and Level 2 Trauma Center, NHRMC is dedicated to providing a wide range of health care services.

New Hanover
Regional Medical Center

CFPUA Service Area
June 2016



Cape Fear Public Utility Authority
Demographic Statistics
Last Seven Fiscal Years

Fiscal Year Ended June 30	City of Wilmington Population (1)	New Hanover County Population (1)	Median Age (3)	Public School Enrollment (2)	Local Unemployment Rate % (3)	Personal Income (4)	Per Capita Income (4)
2015	**113,657**	**216,298**	**38**	**26,241**	**5.6%**	N/A	N/A
2014	112,067	213,267	38	25,470	6.1%	N/A	N/A
2013	109,922	209,234	38	25,364	9.1%	N/A	$38,846
2012	108,297	206,189	37.5	25,253	9.3%	$50,890	$37,559
2011	106,476	202,667	36.7	23,934	10.1%	$45,890	$36,108
2010	102,207	194,054	38.5	23,643	9.4%	$46,129	$34,692
2009	101,526	192,235	38	23,614	9.0%	$44,719	$34,578

Note: Fiscal year 2009 was the first year of operations for the Authority.

(1) US Census Bureau.
(2) Provided by the NHC Schools Finance Department
(3) North Carolina Department of Commerce
(4) Provided by www.ncworks.gov; data provided for as many years as available.

Cape Fear Public Utility Authority
Principal Water Customers
Current Fiscal Year and Six Years Ago

2015

Ten Largest Users of the Water System Annual Consumption	Thousands of Gallons	% of System	Revenues ($)	% of Revenues
1 UNC Wilmington	164,475	3.27%	$ 631,628	1.98%
2 New Hanover Regional Medical Center	59,458	1.18%	262,841	0.82%
3 New Hanover County Schools	43,871	0.87%	266,339	0.84%
4 Wilmington Housing Authority	42,430	0.84%	189,680	0.60%
5 New Hanover County	31,803	0.63%	193,623	0.61%
6 Mayfaire	27,269	0.54%	193,610	0.61%
7 LSREF3 Bravo, LLC (Multi-family Complexes)	26,755	0.53%	141,945	0.45%
8 College Manor Apartments	23,852	0.47%	111,927	0.35%
9 Lake Forest Apartments	23,440	0.47%	100,816	0.32%
10 Tribute	23,216	0.46%	208,782	0.66%
Total Net Consumption / Net Revenue	**466,569**	**9.27%**	**$ 2,301,191**	**7.22%**
Total Annual System Net Consumption / Net Revenue	**5,031,738**		**$ 31,869,097**	

2009 (1)

Ten Largest Users of the Water System Annual Consumption	Thousands of Gallons	% of System	Revenues ($)	% of Revenues
1 UNC Wilmington	136,483	2.34%	$ 430,613	1.89%
2 New Hanover County	63,232	1.08%	232,431	1.02%
3 New Hanover Regional Medical Center	61,473	1.05%	211,318	0.93%
4 New Hanover County Schools	47,862	0.82%	208,756	0.92%
5 Wilmington Housing Authority	40,956	0.70%	137,433	0.60%
6 Lake Forest Apartments	30,088	0.52%	97,305	0.43%
7 College Manor Apartments	23,411	0.40%	80,985	0.36%
8 Mayfaire Complex	22,955	0.39%	119,091	0.52%
9 Tribute Properties	21,463	0.37%	114,526	0.50%
10 Elementis Chromium	18,971	0.33%	58,243	0.26%
Total Net Consumption / Net Revenue	**466,893**	**8.00%**	**$ 1,690,699**	**7.42%**
Total Annual System Net Consumption / Net Revenue	**5,834,129**		**$ 22,781,177**	

Note: Fiscal year 2009 was the first year of operations for the Authority.

(1) Restated 2009 Top 10 Users to reflect "Net Consumption" and "Net Revenue"

Source: Cape Fear Public Utility Authority Customer Service Department.

Cape Fear Public Utility Authority
Principal Wastewater Customers
Current Fiscal Year and Six Years Ago

2015

Ten Largest Users of the Wastewater System Annual Consumption	Thousands of Gallons	% of System	Revenues ($)	% of Revenues
1 Town of Wrightsville Beach	207,905	4.41%	$ 641,061	1.77%
2 UNC Wilmington	100,358	2.13%	451,364	1.25%
3 New Hanover Regional Medical Center	57,642	1.22%	313,166	0.87%
4 Wilmington Housing Authority	40,519	0.86%	222,010	0.61%
5 New Hanover County Schools	39,780	0.84%	298,634	0.83%
6 New Hanover County	28,549	0.61%	204,162	0.56%
7 LSREF3 Bravo, LLC (Multi-family Complexes)	26,532	0.56%	166,317	0.46%
8 Mayfaire Complex	25,899	0.55%	222,432	0.62%
9 College Manor Apartments	23,852	0.51%	136,264	0.38%
10 Lake Forest Apartments	23,426	0.50%	123,496	0.34%
Total Net Consumption / Net Revenue	**574,462**	**12.20%**	**$ 2,778,906**	**7.69%**
Total Annual System Net Consumption / Net Revenue	**4,710,062**		**$ 36,136,378**	

2009 (1)

Ten Largest Users of the Wastewater System Annual Consumption	Thousands of Gallons	% of System	Revenues ($)	% of Revenues
1 Town of Wrightsville Beach	214,743	4.42%	$ 442,639	2.00%
2 UNC Wilmington	87,800	1.81%	269,249	1.22%
3 New Hanover Regional Medical Center	54,042	1.11%	176,741	0.80%
4 New Hanover County Schools	45,665	0.94%	199,592	0.90%
5 Wilmington Housing Authority	40,652	0.84%	129,175	0.58%
6 New Hanover County	34,744	0.72%	132,783	0.60%
7 Lake Forest Apartments	30,080	0.62%	92,040	0.42%
8 Mayfaire Complex	25,303	0.52%	125,124	0.57%
9 Tribute Properties	24,536	0.51%	154,676	0.70%
10 College Manor Apartments	23,411	0.48%	77,352	0.35%
Total Net Consumption / Net Revenue	**580,975**	**11.96%**	**$ 1,799,371**	**8.15%**
Total Annual System Net Consumption / Net Revenue	**4,856,146**		**$ 22,089,335**	

Note: Fiscal year 2009 was the first year of operations for the Authority.

(1) Restated 2009 Top 10 Users to reflect "Net Consumption" and "Net Revenue"

Source: Cape Fear Public Utility Authority Customer Service Department.

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

2015				2009			
Employers	Employees (1)	Rank	Percentage of Total County Employment	Employers	Employees (3)	Rank	Percentage of Total County Employment
New Hanover Regional Medical Center	6,123	1	5.88%	New Hanover Regional Medical Center	4,890	1	5.10%
New Hanover County Schools	4,443	2	4.27%	New Hanover County Schools	4,130	2	4.30%
GE Wilmington	2,175	3	2.09%	GE Wilmington	3,000	3	3.13%
University of North Carolina at Wilmington	1,860	4	1.79%	University of North Carolina at Wilmington	1,810	4	1.89%
Wal-Mart Stores	1,755	5	1.68%	New Hanover County	1,670	5	1.74%
New Hanover County	1,611	6	1.55%	PPD, Inc.	1,420	6	1.48%
PPD, Inc.	1,500	7	1.44%	Cape Fear Community College	1,260	7	1.31%
Verizon Wireless	1,411	8	1.35%	City of Wilmington	1,200	8	1.25%
Cape Fear Community College (4)	1,000	9	0.96%	Verizon Wireless	1,200	9	1.25%
City of Wilmington	998	10	0.96%	Corning, Inc.	1,000	10	1.04%
			21.96%				**22.49%**
Total # Employed at June 30 of the respective FY (2)			**106,218**	**Total # Employed at June 30 of the respective FY (2)**			**95,964**

Note: Fiscal year 2009 was the first year of operations for the Authority.

(1) Source: 2015 Book on Business; www.wilmingtonbiz.com
(2) Source: North Carolina Employment Security Commission (2009) and www.ncworks.gov (2015)
(3) Source: New Hanover County CAFR for Fiscal Year Ended June 30, 2009 using the Wilmington Industrial Development, Inc. and NC State Demographics Website.
(4) Source: North Carolina Employment Security Commission (4th Qtr 2014)

Cape Fear Public Utility Authority
Operating Statistics
Last Seven Fiscal Years

	Fiscal Year						
	2015	**2014**	**2013**	**2012**	**2011**	**2010**	**2009**
Water System							
Number of available service connections[1]	**70,356**	68,794	68,033	67,067	64,602	63,683	62,551
Number of treatment plants - surface water system	**1**	1	1	1	1	1	1
Treatment capacity (mgd) - surface water	**35**	35	35.00	35.00	27.50	27.50	27.50
Average production (mgd) - surface water	**13.56**	13.44	13.20	13.50	13.70	13.30	14.30
Number of groundwater systems	**3**	3	3	3	3	3	3
Number of treatment plants - groundwater system	**1**	1	1	1	1	1	-
Number of wells - groundwater system	**36**	36	36	36	36	36	36
Treatment capacity (mgd) - groundwater plant	**6**	6	6	6	6	6	-
Treatment capacity (mgd) - other groundwater systems	**0.70**	0.70	0.70	0.70	0.70	0.70	0.70
Average production (mgd) - groundwater	**2.94**	2.48	2.95	2.95	3.20	3.30	3.10
Miles of water mains	**1,089**	1,041 [2]	1,078	1,072	1,070 [2]	1,129	1,103
Wastewater System							
Number of available service connections[1]	**68,246**	66,829	66,059	64,529	64,330	63,793	62,296
Number of treatment plants	**3**	3	3	3	3	3	3
WPC plant permit (mgd)	**28.10**	22.10	22.10	22.10	22.10	22.10	22.10
Average annual daily flow (mgd)	**17.48**	16.45	16.17	15.10	15.80	16.80	15.60
Number of lift stations	**143**	141	141	141	141	142	142
Miles of wastwater gravity mains[2]	**844**	827[2]	850	840	840[2]	881	877
Miles of wastewater force mains	**131**	112	110	104	104	100	100
Number of manholes	**21,049**	20,918	20,300	20,300	20,300	N/A	N/A

Note: Fiscal year 2009 was the first year of operations for the Authority.

Source: Cape Fear Public Utility Authority Records

(1) Data restated to remove irrigation meters associated with domestic meters for the same location.
(2) Based on more accurate information as a result of implementating and improving the accuracy of an asset management system.

Cape Fear Public Utility Authority
Consumption by Customer Group
Last Seven Fiscal Years

	2015		2014		2013		2012		2011		2010 (1)		2009 (1)	
	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	**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%	3,652,988	70.13%	4,152,536	71.18%
Commercial	**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%	1,032,322	19.82%	1,094,936	18.77%
Industrial	**65,334**	**1.30%**	63,349	1.30%	59,116	1.17%	62,267	1.15%	62,278	1.14%	57,719	1.11%	102,707	1.76%
Institutional and Government	**451,090**	**8.96%**	403,523	8.25%	435,048	8.63%	474,130	8.78%	459,656	8.38%	465,940	8.94%	483,950	8.30%
Total	**5,031,738**	**100.00%**	4,888,957	100.00%	5,042,733	100.00%	5,402,454	100.00%	5,485,531	100.00%	5,208,969	100.00%	5,834,129	100.00%
Wastewater Customers														
Residential	**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%	3,329,608	69.30%	3,543,624	72.97%
Commercial	**956,150**	**20.30%**	922,045	19.77%	923,952	19.50%	941,927	18.96%	957,062	18.88%	842,782	17.54%	869,266	17.90%
Town of Wrightsville Beach	**207,905**	**4.41%**	210,681	4.52%	203,370	4.29%	207,561	4.18%	214,479	4.23%	234,303	4.88%	214,743	4.42%
Pender County	**10,033**	**0.21%**	9,008	0.19%	10,473	0.22%	11,550	0.23%	16,224	0.32%	13,550	0.28%	14,139	0.29%
Industrial	**21,027**	**0.45%**	19,468	0.42%	16,296	0.34%	16,197	0.33%	18,219	0.36%	23,060	0.48%	24,964	0.51%
Institutional and Government	**343,878**	**7.30%**	318,809	6.83%	337,107	7.12%	365,297	7.35%	366,618	7.23%	361,467	7.52%	189,410	3.90%
Total (2)	**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%	4,804,770	100.00%	4,856,146	100.00%

Note: Fiscal year 2009 was the first year of operations for the Authority.

Source: Cape Fear Public Utility Authority Customer Service Department.

(1) Prior year data has been updated to reflect adjustments made in the current year.
Water includes domestic and irrigation connections
(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.
For billing purposes, the calculation of Flat Wastewater charges is based on 24,000 gallons discharged bimonthly. There were an average of approximately 1,530 Flat Wastewater customers in 2015.

CAPE FEAR PUBLIC UTILITY AUTHORITY

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

CAPE FEAR PUBLIC UTILITY AUTHORITY
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	Nephlometric Turbidity Units
O & M	Operational & Maintenance
ORC	Operator in Responsible Charge
OSHA	Occupational Safety and Health Administration
PER	Preliminary Engineering Report
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
SOI	Standard Operating Instructions
SOP	Standard Operating Procedures

TERM	STANDS FOR
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
WTP	Water Treatment Plant
WWTP	Wastewater Treatment Plant

CAPE FEAR PUBLIC UTILITY AUTHORITY
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 case 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 owed 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.
Collaterize	To secure (a loan) through the use of collateral.
Compensated Absences	Refers to employees' time off with pay for vacations, holidays and sick days.

CAPE FEAR PUBLIC UTILITY AUTHORITY
GLOSSARY

WORD/CONCEPT	DEFINITION
Comprehensive Annual Financial Report (CAFR)	The official annual financial report of the Authority; summarizes and discloses the financial activity of the Authority.
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.

CAPE FEAR PUBLIC UTILITY AUTHORITY
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.

CAPE FEAR PUBLIC UTILITY AUTHORITY
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.

TAB INSERT: BUDGET ORDINANCE

Cape Fear Public Utility Authority

Stewardship. Sustainability. Service.

Budget Ordinance

Ordinance Making Revenues and Appropriations
For the Fiscal Year Beginning July 1, 2016

LEGISLATIVE INTENT/PURPOSE:
Revenues and Appropriations to the Operating Fund for the Fiscal Year Beginning July 1, 2016.

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

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

Operating Fund

Appropriations	
Operating Expenditures	$36,960,527
Non-Departmental	2,221,260
Contingency - Operating	953,000
Debt Service	24,260,053
Bond Issuance Costs	690,000
Transfer to Capital Projects Funds	10,530,726
Total Appropriations	**$75,615,566**
Revenues	
Wastewater Revenues	$35,797,524
Water Revenues	31,297,342
Investment Earnings	443,200
Other Charges for Service	3,512,500
Transfer from System Development Funds	3,600,000
Appropriated Fund Balance	275,000
Proceeds from Revenue Bonds (to pay Bond Issuance Costs)	690,000
Total Revenues	**$75,615,566**

SECTION II: That appropriations herein authorized shall have the amount of outstanding purchase orders as of June 30, 2016, 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: The following appropriations are hereby made to the System Development Funds and the following revenues are estimated to be available during the fiscal year to meet these appropriations.

System Development Funds

Appropriations	
Transfer to Operating Fund	$ 3,600,000
Total Appropriations	**$ 3,600,000**
Revenues	
System Development Charges	$ 3,600,000
Total Revenues	**$ 3,600,000**

SECTION IV: Pursuant to NCGS 159-13.2, the following appropriations are hereby made to the Capital Projects Funds and the following revenues are estimated to be available during the fiscal year to meet these appropriations.

Capital Projects Funds

Appropriations	
System-Wide Capital Improvement Projects	$3,770,000
Water Capital Improvement Projects	$9,250,000
Wastewater Capital Improvement Projects	$8,920,000
Total Appropriations	**$21,940,000**
Revenues	
Transfer from Operating Fund	$10,530,726
Proceeds from Revenue Bonds	11,409,274
Total Revenues	**$21,940,000**

Patricia O. Kusek

Patricia O. Kusek, Chairman

Adopted at a regular meeting on June 8, 2016.

ATTEST:

Donna S. Pope

Donna S. Pope, Clerk to the Board

SEAL