



NARRAGANSETT BAY COMMISSION

FISCAL YEAR 2019

BUDGET



Vincent J. Mesoella
Chairman

Raymond J. Marshall, P.E.
Executive Director





GOVERNMENT FINANCE OFFICERS ASSOCIATION

*Distinguished
Budget Presentation
Award*

PRESENTED TO

Narragansett Bay Commission

Rhode Island

For the Fiscal Year Beginning

July 1, 2017

Christopher P. Morrill

Executive Director

The Government Finance Officers Association of the United States and Canada (GFOA) presented a Distinguished Budget Presentation Award to Narragansett Bay Commission, (NBC), Rhode Island, for its annual budget for the fiscal year beginning July 1, 2017. The GFOA also awarded NBC Special Performance Measures Recognition. In order to receive the Distinguished Budget award, a governmental unit must publish a budget document that meets program criteria as a policy document, as a financial plan, as an operations guide, and as a communications device. To obtain Special Performance Measure Recognition the three reviewers must find the governmental unit Performance Measures to be outstanding. This award is valid for a period of one year only. We believe that the current budget continues to conform to the program requirements, and we will submit it to GFOA to determine its eligibility for another award.



Photo: Sunset over Narragansett Bay, East Providence

Contact Information:

*Narragansett Bay Commission
Division of Administration and Finance
One Service Road
Providence, Rhode Island 02905*

Telephone: (401)-461-8848

Fax: (401)-461-6540

www.narrabay.com



Proud Member of
NACWA

BOARD OF COMMISSIONERS

Narragansett Bay Commission (NBC) is governed by a Board of Commissioners (Board). The Board represents the municipalities in the service area, as well as ten gubernatorial appointments. Empowered with responsibilities ranging from ensuring that NBC operates a balanced budget to approving contracts for improving and sustaining the treatment facilities and wastewater collection system, the Board meets monthly to guide the direction of NBC.

*Vincent J. Mesolella, Chairman
Angelo S. Rotella, Vice Chairman
Robert P. Andrade, Treasurer*

*James S. Bennett
Dr. Bruce Campbell
Mario G. Carlino
Michelle R. DeRoche
Michael DiChiro, Esq.
Jonathan K. Farnum
Joseph Kimball
Paul E. Lemont, Esq.*

*Ronald Leone
John MacQueen
Joan P. Milas
Alessandro Montanari
Alan Nathan
Jina N. Petrarca, Esq.
Charles Ruggerio, Esq.
Richard D. Worrell*

Raymond J. Marshall, Executive Director and Secretary of the Board



Photo: Aerial View of Providence River

CITIZENS ADVISORY COMMITTEE

The Narragansett Bay Commission's Citizens Advisory Committee (CAC) is a diverse group of dedicated individuals, representing municipalities throughout NBC's service area, industrial and residential users, environmental organizations and the general public. This committee advises the Board of Commissioners on matters pertaining to sewer user rates, wastewater infrastructure construction, industrial pretreatment, public awareness, and education.

Howard Schachter, Chairman

*Lou Blais
Harold Gadon
Christopher Hamblett
Chris Hannifan*

*Phillip Holmes
Jean Lynch
Chandrasekhar Mohanty*

*Nilesh Patel
Howard Schachter
Jane Sherman
Dick Wendt*



Photo: Harbor Seals in Narragansett Bay

NARRAGANSETT BAY COMMISSION

Table of Contents

	Page No.
I. BUDGET MESSAGE	
NBC Outlook	1
Fiscal Year 2018 in Review	8
II. ABOUT NARRAGANSETT BAY COMMISSION	
NBC Organization	14
Facilities	17
Demographics	22
III. BUDGET PROCESS AND POLICIES	
The Budget Process.....	29
FY 2019 Budget Calendar.....	30
Budget Monitoring and Amendment Procedures	32
The Rate Setting Process	34
Financial Policies	35
IV. BUDGET SUMMARY	
Budget Summary	41
FY 2019 Budget – Key Assumptions.....	43
The Strategic Plan and FY 2019 Budget	46
Trust Indenture and Funds	51
Net Position	53
Fund Organization Matrix.....	55
Budget Resolution and Attachment 1.....	56
V. OPERATING BUDGET	
FY 2019 Budget Presentation	67
Sources and Uses of Revenue.....	68
Historical Overview.....	69
Revenue Profile.....	70
Expense Profile	77
Operating Budget Detail FY 2019.....	91
Division Summaries.....	93
VI. CAPITAL BUDGET	
Capital Budget Summary	213
Operating Capital Program	215
Capital Improvement Program	277
VII. CIP AND LONG TERM PLAN	
CIP Impact on Operating Budget	331
CIP Debt Service Impact	335
Projected Revenue and Expense	343
Sewer User Fee Rate Projections.....	345
VIII. SUPPORTING SCHEDULES	
Acronyms Glossary.....	347
Glossary of Terms	355



Budget Message

“The mission of the Narragansett Bay Commission is to maintain a leadership role in the protection and enhancement of water quality in Narragansett Bay and its tributaries by providing safe and reliable wastewater collection and treatment services to its customers at a reasonable cost.”



Photo: Sunset on the Seekonk River

Introduction

The Narragansett Bay Commission (NBC) is pleased to present its FY 2019 Budget. This budget reflects NBC’s dedication to water quality improvement through continued investment in capital improvements, the effective operation of its wastewater treatment and collections system, and water quality monitoring efforts. This budget also demonstrates NBC’s commitment to providing excellent service at a reasonable cost to its ratepayers through the careful allocation of resources.

NBC Outlook

NBC’s operating and capital budgets are based on the objectives and priorities outlined in NBC’s Strategic Plan. The Strategic Plan provides the framework of NBC’s long-term priorities over the next ten years. This narrative serves to link the allocation of resources in the FY 2019 Budget to the relationship between each program’s short-term service level objectives and NBC’s long-term strategic goals. This year’s budget also reflects the incorporation of GFOA S.M.A.R.T. Goal framework and a transition from output performance measures to indicators based on outcome and efficiency.

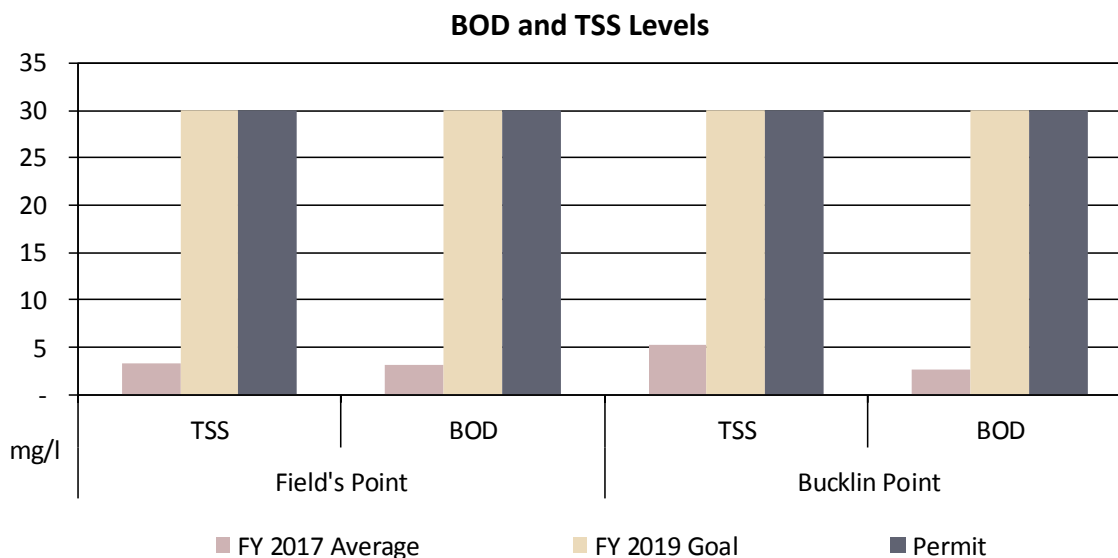
Core Business

NBC’s core business goal in FY 2019 and beyond is the successful operation and maintenance of the treatment and collection systems to ensure that federal and state requirements are met or surpassed. NBC operates its facilities under Rhode Island Pollution Discharge Elimination System (RIPDES) permits issued by the Rhode Island Department of Environmental Management (RIDEM). The RIPDES permits set forth effluent limitations and monitoring requirements. RIDEM issued new RIPDES permits to NBC on December 1, 2017 for the Field’s Point Wastewater Treatment Facility (WWTF) and Bucklin Point WWTF. Although NBC anticipates more stringent requirements

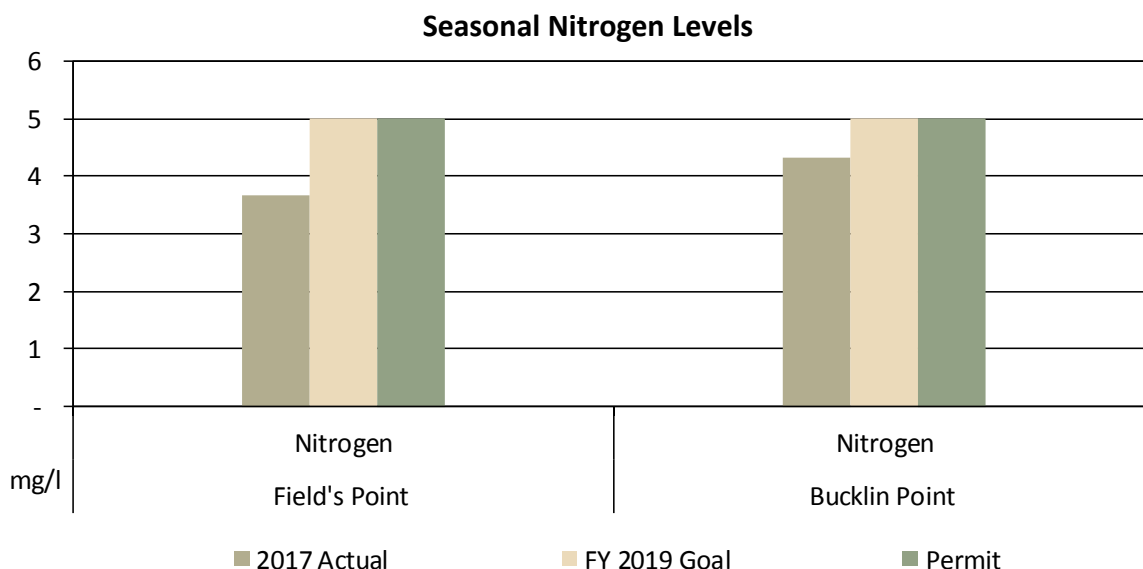


Photo: Providence River

may ultimately be promulgated in the new RIPDES permits, NBC remains in negotiation with RIDEM over the permit language. Since the timing of new requirements is uncertain, the FY 2019 budget and performance measures are based on the existing RIPDES permit limits of 30 milligrams per liter (mg/l) for both Biological Oxygen Demand (BOD) and Total Suspended Solids (TSS). BOD and TSS are wastewater industry standards for measuring the effectiveness of wastewater treatment and the quality of effluent discharged into the receiving waters. The following chart documents NBC's FY 2019 clean water goals of achieving the permitted treatment levels at both the WWTFs.



The RIDES permits also set forth seasonal nitrogen permit limits of 5 mg/l from May to October at both the Field's Point and Bucklin Point WWTFs. The chart below shows NBC's FY 2017 nitrogen treatment performance, FY 2019 nitrogen removal goals, and the permitted levels.



NBC continues to achieve excellent treatment results at both facilities and the FY 2019 Budget supports these efforts with increased funding for biosolids disposal, chemicals and maintenance contracts. Capital investments related to the WWTFs include Phase II of the Blower Improvements, WWTF Improvements, WWTF Electrical Improvements as well as the design of the Ultraviolet (UV) Disinfection Improvements, and Field's Point WWTF Maintenance Facilities at a total cost of \$3.7 million in FY 2019. NBC has also programmed \$500

thousand annually to ensure that funding is available to support treatment facility investments as they are identified through asset management and inspection.

The FY 2019 budget demonstrates NBC’s continued investment in capital assets required to meet current and future federal and state mandates, take advantage of technological advancements to achieve operational efficiencies and ensure the integrity of NBC’s infrastructure. This year NBC has modified the presentation of the capital budget, which includes the Capital Improvement Program (CIP) and the Operating Capital Program (OCP), and is shown as a separate Capital Budget section in this document.

NBC’s CIP includes programmed expense of \$356.9 million during FY 2020-2024, with additional expense of \$55.5 million in FY 2019, for a total of \$412.4 million. Additional information regarding the CIP including the detailed project descriptions, is included in the Capital Budget section of this document. The following table summarizes NBC’s CIP by fiscal year.

FY 2019-2024 Capital Improvement Program
(In Thousands)

Project	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Total FY 2020 - 2024
CSO Phase III A Facilities	\$ 29,692	\$ 28,328	\$ 45,955	\$ 59,551	\$ 78,579	\$ 102,560	\$ 314,972
WWTF Improvements	3,749	2,579	4,985	6,668	5,850	500	20,582
Interceptor Restoration & Construction	19,169	6,791	1,500	1,500	1,500	1,500	12,791
Other	2,894	3,628	2,812	857	730	528	8,554
Total	\$ 55,503	\$ 41,325	\$ 55,252	\$ 68,576	\$ 86,659	\$ 105,087	\$ 356,899

As has been the case for more than the last decade, the majority of NBC’s capital expenditures relate to the Combined Sewer Overflow (CSO) Abatement Facilities. NBC is now in the third and final phase of the federally mandated program. The total pre-design estimate for the four phases is \$779.1 million in 2018 dollars, with expenditures of approximately \$315.0 million for the Phase III A Facilities in the five year period of FY 2020-2024. As part of the RIDEM review and approval process, NBC will begin design of the Phase III B facilities contemporaneously with the Phase III A design. Phase III A includes the design and construction of a deep rock tunnel in Pawtucket approximately 13,000 feet in length along the Seekonk and Blackstone Rivers, a pump station to convey flow to the Bucklin Point WWTF in East Providence, drop shafts and consolidation conduits. Additionally, the Phase III B facilities includes Upper BVI relief, CSO 105 relief sewer, CSO 206 sewer separation, regulator modifications, and Green Stormwater Infrastructure (GSI). NBC has initiated design and has programmed \$29.7 million for the CSO Phase III A and B Facilities design in FY 2019. Funds are also programmed to support the construction of the first GSI demonstration project.



Photo: Interceptor Installation in Johnston

NBC’s CIP also includes funding for a number of projects in FY 2019 related to the wastewater treatment and collections system. The most significant collection system projects are the construction of new interceptors to include the Moshassuck Valley Interceptor at a cost of \$3.9 million, the Providence River Siphon \$5.8 million, the Johnston sewer extensions along Greenville Avenue and Hartford Avenue at a total cost of \$5.2 million, and lastly, the FY 2018 Interceptor lining and manhole rehabilitation at \$3.5 million. The Johnston sewer expansion projects will allow new users to connect to NBC’s system. In FY 2019, NBC has programmed \$426 thousand in new user fees related to these projects.

The FY 2019 budget also includes investments that are necessary to ensure continuous operation of NBC’s facilities, support services and core business functions. The OCP includes asset purchases, asset replacements,

asset renovations and betterments. The OCP has programmed expense of \$4.8 million in FY 2019 and a total of \$15.1 million during the five-year period of FY 2019-2023. The majority or 42% of the FY 2019 expense is for assets supporting the wastewater treatment and collection system in the Operations & Maintenance Division. The OCP budget for the Executive Affairs Division is 31% of the total and includes computer equipment and technology investments. The Construction & Engineering, Administration & Finance and the Environmental Science & Compliance Divisions account for the remaining 27% of asset purchases in FY 2019. The following table summarizes NBC’s OCP by Division and fiscal year.

FY 2019 – 2023 Operating Capital Program

Division	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Total
Executive Affairs	\$ 1,450,000	\$ 475,000	\$ 200,000	\$ 440,000	\$ 200,000	\$ 2,765,000
Construction & Engineering	30,000	230,000	30,000	68,000	30,000	388,000
Administration & Finance	756,000	285,000	70,000	130,000	65,000	1,306,000
Operations & Maintenance	2,001,000	1,938,500	1,945,000	1,576,000	1,015,000	8,475,500
Environmental Science & Compliance	515,000	327,000	427,000	439,000	471,000	2,179,000
	\$ 4,752,000	\$ 3,255,500	\$ 2,672,000	\$ 2,653,000	\$ 1,781,000	\$ 15,113,500

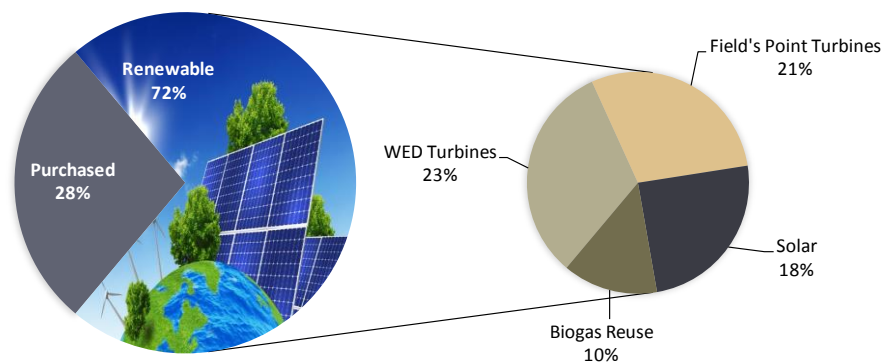
Environmental Performance

The FY 2019 budget reflects the results of NBC’s efforts to minimize environmental impacts through investments in energy efficiency and sustainability initiatives. NBC’s renewable energy investments are estimated to generate 72% of NBC’s total electricity needs in FY 2019. In addition to the environmental benefits, these renewable resources will generate both savings in electricity expense and revenue from the sale of Renewable Energy Credits (RECs).



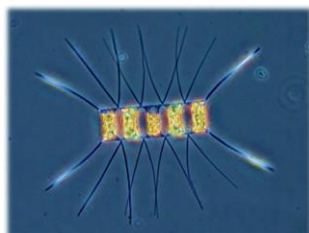
This year’s budget incorporates a full year of financial impact from two new renewable energy sources. First, NBC executed a solar Power Purchase Agreement (PPA) and projects that the facilities will produce 6.6 million kWh in FY 2019. Second, the Bucklin Point WWTF Biogas Reuse Project, a cogeneration system that burns the biogas generated from the anaerobic biosolids digestion process, is projected to generate approximately 3.7 million kWh of electricity in FY 2019. NBC has programmed an additional \$184 thousand in this year’s budget for supplemental natural gas needed to maximize the efficiency of the unit.

The following chart shows that in FY 2019, 72% of NBC’s electricity is from renewable sources with 23% from NBC’s wind turbines purchased from Wind Energy Development (WED), 21% from the Field’s Point wind turbines, 18% from the Solar Power Purchase Agreement (PPA), and 10% from the Biogas Reuse Project.



Of NBC’s four renewable energy sources, the three 1.5 MW Field’s Point wind turbines and the Bucklin Point Biogas are considered “behind” the meter and the energy is used on-site. These sources reduce the amount

of electricity purchased and are reflected in the budget as a reduction in purchased kWh. In FY 2019, NBC budgeted 31% of the projected 36.8 million kWh use as derived from these sources. The three 1.5 MW remote WED Turbines purchased in 2016 are “net metered” sources and the electricity is produced off-site, generating Net Metering Credits (NMC) that are applied to NBC’s invoice for purchased electricity. Lastly, solar energy derived from the PPA is net metered and NBC retains 25% of the NMCs. The NMCs from all of these renewable sources is reflected in the budget as a reduction in NBC’s electricity expense of \$1.2 million. NBC also benefits from the sale of Renewable Energy Credits (RECs) and the FY 2019 budget includes \$393 thousand in REC revenue.



**Photo: Diatomic
Phytoplankton, Chaetoceros**

The FY 2019 budget also supports NBC’s environmental strategic goal to continuously evaluate and minimize NBC’s impact on the environment. NBC’s monitoring program protects public health by ensuring proper operation of the wastewater treatment plants and the quality of receiving waters. NBC anticipates that the final RIPDES permits will require additional sampling and analysis. This year’s budget includes funding for the labor and supplies needed to perform enterococci testing twice daily in addition to fecal coliform bacteria and total residual chlorine testing.

NBC has also allocated resources to support the ancillary services needed for sampling and data analysis efforts. The FY 2019 budget includes approximately \$129,734 for maintenance contracts to ensure continuous operation of critical laboratory equipment including the water purification system, nutrient analyzers, autoclaves, spectrometry detectors and other machines. Replacement of laboratory and sampling equipment including the BOD analyzer, fresh water nutrient analyzer, water purification system, fixed site sondes, refrigerated plant samplers, and other equipment is also funded in the FY 2019 Budget.

Financial Management

The most significant financial challenge facing NBC is ensuring sufficient resources for operating, maintenance and capital needs while simultaneously mitigating ratepayer impact. This year’s budget includes a 2.98% across-the-board increase in user fee rates effective February 1, 2019. This rate increase is NBC’s first rate increase since July 1, 2016 and is required to support a planned \$45.0 million debt issuance to finance NBC’s CIP. The FY 2019 Operating Budget is approximately \$3.1 million or 3.1% higher than the prior year and includes a \$1.6 million transfer from the revenue fund balance. Overall, NBC’s debt service is anticipated to increase \$1.0 million from the prior year due to new debt issue as well as the debt service payment schedules.



	FY 2018 Budget	FY 2019 Budget	Percent Change
Revenue			
Operating Revenue	\$ 99,892,511	\$ 101,418,392	1.5%
Non-Operating Revenue	399,700	387,800	(3.0%)
Revenue Fund Balance	-	1,600,000	100.0%
Total Revenue	100,292,211	103,406,192	3.1%
Expense			
Operations and Maintenance	41,808,594	43,668,346	4.4%
Debt Service	46,786,894	47,787,187	2.1%
Transfer to Project Fund - Restricted Account	11,696,723	11,950,659	2.2%
Total Expense	\$ 100,292,211	\$ 103,406,192	3.1%

NBC has budgeted approximately \$423 thousand in new customer service fees to recover the costs associated with certain services such as the posting of collection notices. NBC also incorporated the CIP impact on the operating budget. In addition to the user fee rate increase, this year's budget includes increased user fee revenue of \$426,218 related to a new large user that is connecting to NBC's system enabled by the Johnston Sewer Improvements/Greenville Project. As is shown in the following table, this year's budget also includes expense of \$18,333 resulting from capital projects to be completed in FY 2019.

FY 2019 Capital Projects with Impact	Increased Revenue	Savings	Increased Expense
FPWWTF - Blower Improvements Phase II	\$ -	\$ -	\$ 18,333
Johnston Sewer Improvements/Greenville	426,218	-	-
Total	\$ 426,218	\$ -	\$ 18,333

The FY 2019 budget includes resources to enhance NBC's financial management capabilities. Specifically, \$150 thousand is budgeted for debt management and cash management software. In addition, \$250 thousand is budgeted for a wastewater system cost allocation and recovery study that will explore alternative rate design options. In accordance with the Rhode Island General Laws, Title 42, Chapter 155, the Quasi-Public Corporations Accountability and Transparency Act, NBC has included \$75,000 for the State of Rhode Island to hire an outside consultant to assist the Office of Internal Audit conduct a performance audit.

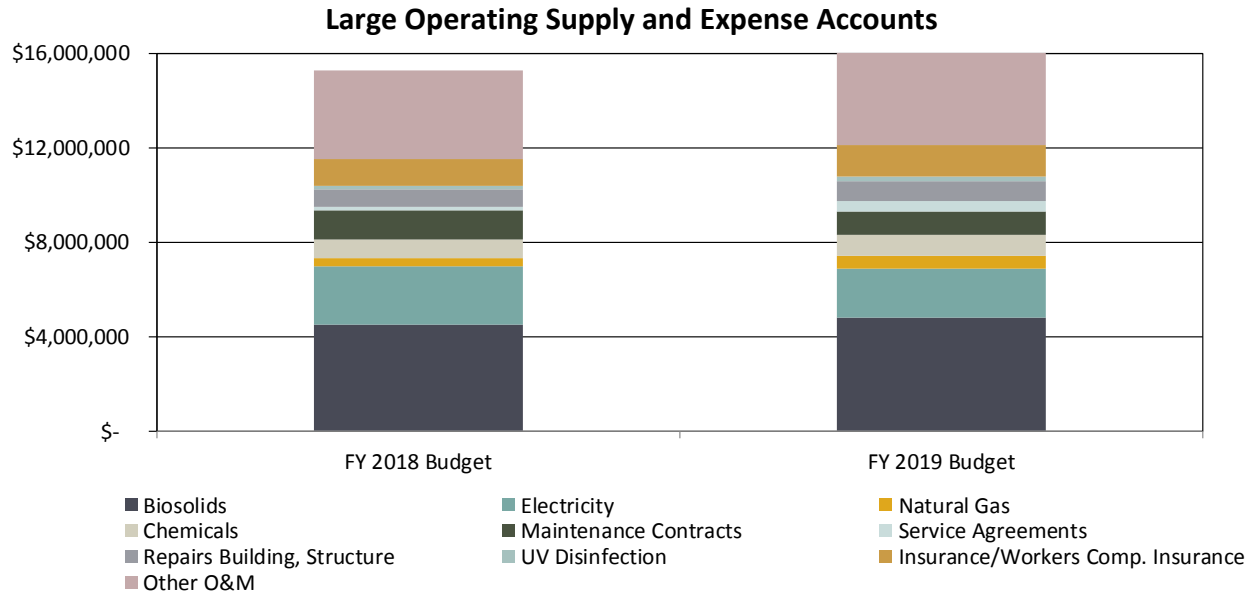
With respect to expense, budgeted Operations and Maintenance (O&M) Expense is 4.4% more than the prior year. Personnel expense represents 58.4% of total O&M expense and is 1.0% higher on a year-to-year basis. The budget includes contracted step increases for union employees and merit increases for non-union employees. Budgeted overtime is \$85,250 higher in FY 2019 due to staffing requirements for operations and maintenance. NBC's contribution rate on behalf of union employees to the State of Rhode Island Retirement System and union retirement health is unchanged on a year-to-year basis. The budgeted premiums for health insurance are 0.1% higher and the dental and vision insurance premiums remain unchanged from FY 2018. There is a 2.9% increase in the long-term disability premium over the prior year level.

The FY 2019 budget for Operating Supplies and Expense is 7.6% or approximately \$1.2 million higher than the prior year. Budgeted biosolids expense is \$291,239 higher on a year-to-year basis. This reflects increased dry ton production at Field's Point and a 3.0% increase in the contracted rate per dry ton. The electricity budget is \$48,138 lower in FY 2019, the net effect of renewable energy related savings and an 18.0% increase in the supply rate. The FY 2019 budget for natural gas is 46.8% higher than the prior year and is based on a 44% increase in budgeted therms to supplement the biogas cogeneration facility at Bucklin Point along with a 15% increase in the rate per therm. Maintenance Contracts expense is 13.8% lower in FY 2019 due to the reclassification of renewable energy support service contracts from this account to new budget line items. Service Agreements expense is \$290,604 higher than last year due to electrical testing at the WWTFs in the amount of \$325,231. The FY 2019 budget for chemicals is \$84,966 or 10.6% higher and includes a projected increase in use of four out of six chemicals. Lastly, Insurance is 21.2% higher in FY 2019 primarily as the result of increased insurance policy premiums and higher Workers' Compensation Insurance expense.



Photo: Moshassuck West River

The following chart shows a year-to-year comparison of the large operating supply and expense accounts.



Professional Services comprise 3.9% of the total O&M expense and the FY 2019 budget is \$453,600 or 36.7% higher than the FY 2018 budget. This includes an increase in funding for the PUC regulatory assessment fee, the State mandated performance audit, a study of non-union job specifications and compensation, legal services, audit fees, and other services.

As discussed previously, budgeted debt service in FY 2019 is \$1.0 million or 2.14% higher than the prior year as a result of the principal payments related to the 2016 Series A bonds and the anticipated \$45.0 million debt issuance in FY 2019. The FY 2019 budgeted Transfer to Project Fund – Restricted Account is calculated at revenue less O&M and debt service expense and is \$254,753 more than the prior year. Please refer to the CIP Impact and Long-Term Plan section of the budget for more information regarding debt.

Staffing

Another NBC strategic objective is to recruit, develop and retain highly qualified staff. To this end, NBC offers its employees comprehensive benefits. In FY 2019, NBC will continue to offer a strong benefits package. The FY 2019 budget reflects a new three year Collective Bargaining Agreement (CBA) effective July 2018. The CBA resulted in a reduction in the budgeted employer premium of approximately 0.6% with minimum changes in the health plan structure. This year’s budget continues to support NBC’s Workplace Wellness initiative that includes an incentive component for employees who actively participate in wellness programs. In addition to Workplace Wellness, NBC places a high importance on worker safety and supports safety training. Employees will be also be offered opportunities to meet with NBC’s Investment Advisor to discuss retirement planning.

This year’s budget reflects the reorganization of the Human Resources and Information Technology functions from the Administration and Finance Division to the Executive Affairs Division and the Insurance and Risk management functions from the Operations and Maintenance Division to the Administration and Finance Division. The budgeted positions and benefits are further discussed in the Operating Budget section.

Customer Service and Communication



Photo: NBC Customer Service application training

The FY 2019 budget reflects NBC's continued commitment to remain customer focused and provide excellent service with resources allocated to the timely and accurate monthly billing of NBC's 84,455 customer accounts. In FY 2019, NBC's new Customer Service (CS) application will come online and employ new technology that will streamline processes, enhance functionality and better serve customers through expanded on-line services and e-billing capabilities. In terms of communication, the FY 2019 budget includes resources for NBC's Watershed Explorers education program that reaches out to elementary schools in NBC's service area. The program takes place in the classroom and at various river locations, and culminates with an environmental education conference attended by all of the students.

Fiscal Year 2018 in Review

NBC was honored to be one of only two recipients in the nation to receive the Platinum Excellence in Management Award from the National Association of Clean Water Agencies (NACWA) for implementing and sustaining successful programs for a continuous three-year period. NBC's wastewater treatment was exceptional this past year, an accomplishment also recognized by NACWA. NBC received the Gold Award for no permit excursions at Bucklin Point and the Silver Award for fewer than five permit excursions at Field's Point.



In addition to NACWA's recognition of excellent wastewater operations, NBC had a number of other achievements in FY 2018. NBC's cost centers reported 169 accomplishments with 77 or 46% focused on NBC's Core Business. In addition, 23% of the FY 2018 accomplishments related to Financial Management and 12% of the accomplishments related to Customer Focus. The following table outlines the percentage of FY 2018 accomplishments by goal and also the totals by division.

FY 2018 Major Accomplishments

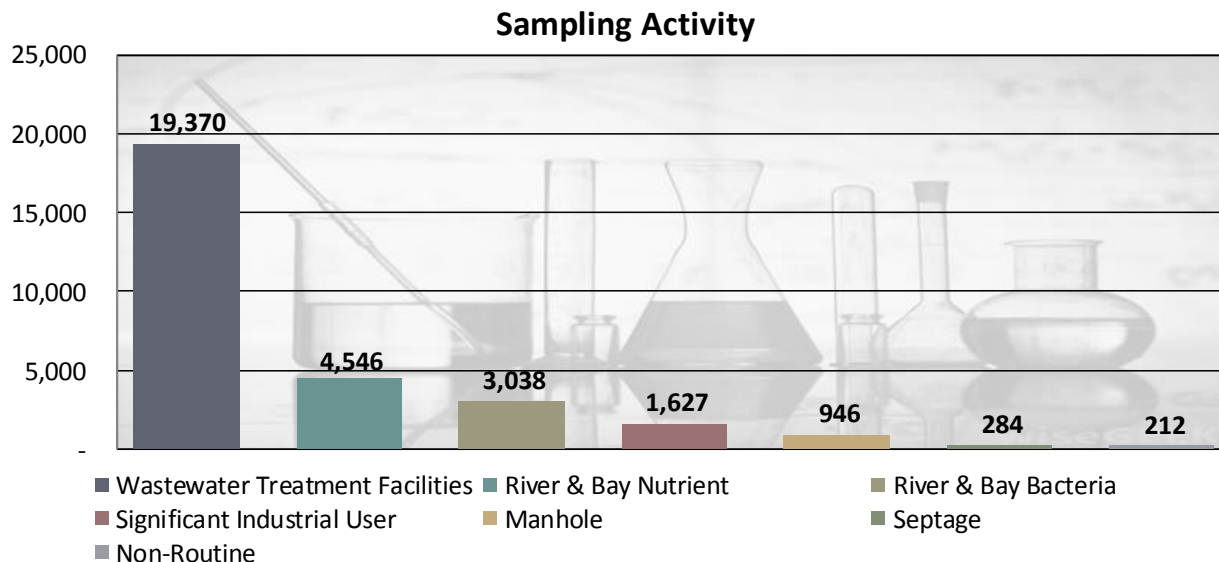
Goals	Executive Affairs	Construction Services	Administration & Finance	Operations & Maintenance	Environmental Science & Compliance	Total	Percent
Core Business	21	10	8	16	22	77	46%
Environmental	-	-	-	2	7	9	5%
Financial Management	4	-	32	2	1	39	23%
Customer Focus	1	-	11	1	7	20	12%
Staffing	8	-	1	4	1	14	8%
Communication	4	-	1	-	2	7	4%
Organizational	2	-	1	-	-	3	2%
Total	40	10	54	25	40	169	100%

During FY 2018, NBC's Interceptor Maintenance (IM) section inspected nearly three miles of interceptors. In addition, 121 tons of sediment was removed from the collection system and 19 tons of material captured in the CSO netting facilities was removed and prevented from entering the waterbody.

NBC also received two prestigious awards at the New England Water Environment Association's (NEWEA) annual conference in Boston, MA. The first award was the Environmental Protection Agency's Operations and Maintenance Award. NBC was nominated by RIDEM to acknowledge the outstanding work that was performed

by the Field's Point WWTF Plant Manager. The second award was the Alfred E. Peloquin Award, which recognized NBC's Lab Sample Compliance Coordinator for his personal service and contribution to excellence in plant operations.

NBC conducted daily sampling at both the Field's Point and Bucklin Point treatment facilities to ensure compliance with the RIPDES permit requirements and federal mandates. NBC continued to monitor the urban rivers twice per week for bacteria in support of the nine minimum controls program. Staff collected a total of 30,023 samples, with the majority or 61% related to WWTF monitoring. In addition, in order to assess water quality, 14% of the samples related to river and bay nutrients, while 10% of the samples collected were for river and bay bacteria. The following chart shows the number of samples collected by type.



NBC was also pleased to be recognized as a leader in conservation for its renewable energy projects. NBC was recognized by both the US Department of Energy with the 2017 Better Projects Award for Sustainable Energy Projects and by the RI Office of Energy Resources with the Lead by Example Award. NBC continued its environmental performance efforts in FY 2018 and expanded its renewable energy source portfolio with the execution of the solar PPA. NBC also installed a wastewater reuse irrigation system at Field's Point which uses treated effluent to irrigate a 7,000 square foot area, saving approximately 80,000 gallons of potable water per season. This system will help both NBC and RIDEM better understand existing wastewater reuse requirements and how they may be improved to encourage more use of reclaimed water throughout the state. Lastly, NBC installed avian monitoring cameras at Bucklin Point.



Photo: Solar Array in Richmond, RI

In FY 2018, NBC completed nine capital projects at a cost of \$17.1 million. One of the largest projects was Bucklin Point WWTF Biogas Reuse (12000) at a cost of \$7.8 million. Other large projects completed include the FPWWTF Final Clarifier Improvements (13000) at a cost of \$3.8 million, the BPWWTF Digester and Miscellaneous Improvements (81400) at \$1.3 million and Improvements to Interceptors FY 2017 (30463) at \$1.1 million. The completed projects are summarized in the following table.

Project Number	Project Name	Cost (In thousands)
12000	BPWWTF Biogas Reuse	\$ 7,752
13000	FPWWTF Final Clarifier Improvements	3,825
81400	BPWWTF Digester & Miscellaneous Improvements	1,274
12900	FPWWTF Operations and Lab Building Reuse	760
30438	NBC Interceptor Easement Restoration - AVI	716
30501	NBC Interceptor Easements Restoration, BVI	821
30475	Providence-South Providence Interceptor Inspection Cleaning	650
30463	Improvements to Interceptors FY 2017	1,070
1100000	Site Specific Study	211
Total		\$ 17,080

From a financial perspective, NBC projects FY 2018 user fee revenue will be \$1.2 million lower than the budgeted level. Flat fee revenue is projected to be 0.2% higher than budgeted, while consumption revenue is projected to be 2.2% lower than budgeted. Investment income is projected to be \$56 thousand higher than the budget due to higher interest rates while rental income is anticipated to be \$83 thousand lower due to fewer leases. REC revenue is also expected to be \$21 thousand lower than budgeted due to a decrease of approximately 40% in the weighted average rate per REC.

Overall, NBC anticipates finishing FY 2018 well under budget. Turnover during the year was higher than the budgeted level and NBC projects personnel expense will be 7.7% or nearly \$2.0 million below budget. The performance of the WED turbines exceeded projections, generating additional electricity net metering credits of \$290 thousand. The Field's Point wind turbines also generated 418 thousand kWh more than was budgeted, further reducing electricity expense. Although the wind turbines produced higher than budgeted kWh, the savings was somewhat offset by an increase in National Grid's distribution rate per kWh. Other significant savings in operations and maintenance expense were realized from lower than budgeted natural gas usage and maintenance contract expense. NBC also projects professional service expense will be \$141 thousand below budget as neither the Succession Planning Study nor rate case filings were performed. On the other hand, NBC is projecting that biosolids and chemical expense will be a total of \$208 thousand higher than budget due to higher dry ton production at Field's Point and increased chemical use at both treatment facilities. NBC continued to benefit from historic low short-term interest rates and is projected to realize interest savings of more than \$1.2 million on the Variable Rate Demand Bonds (VRDBs). NBC did not issue any new debt in FY 2018 but did realize savings as part of a Rhode Island Infrastructure Bank refunding. Lastly, NBC transferred \$5.0 million from its Restricted Account to the State of Rhode Island, to comply with the 2017 Rhode Island Public Laws, Chapter 302, Article 1, Section 20, which required NBC to transfer \$5.0 million to the State of Rhode Island by June 30, 2018.

NBC received the GFOA Distinguished Budget Presentation Award for the fifteenth consecutive year for NBC's FY 2018 Budget. The FY 2018 Budget was also recognized by GFOA as Outstanding as a Policy Document along with Special Performance Measures Recognition. NBC enhanced the budget process with the addition of fillable forms and reference guides on the internal web page. NBC also received the Certificate of Achievement for Excellence in Financial Reporting for Fiscal Year 2017 for the sixteenth consecutive year. NBC's consistently sound financial performance is evident with 26 consecutive years of operating surpluses.

In FY 2018, NBC implemented a purchase card program to streamline the purchasing and accounts payable functions. NBC also worked with National Grid to reduce the number of printed natural gas and electricity

invoices from 74 to 13 and modified internal tracking systems to administer all of the renewable energy projects. Additionally, NBC updated the standard operating procedures for insurance and integrated the insurance policies into the Asset Management Program. NBC also secured a cyber-security insurance policy.

With respect to the retirement plans, NBC conducted quarterly investment meetings and completed the FY 2017 Non-Union Defined Benefit Plan Financial Report. NBC has also placed a priority on improving the actuarial funded ratio of the Non-Union Defined Benefit Plan, which increased to 93.02% in FY 2017 from 77.03% in FY 2016.

In FY 2018, the NBC's Customer Service department completed timely and accurate billings of NBC's 84,455 accounts, billing nearly \$100 million in user fees. The section also received and responded to an average of 4,700 customer calls each month and collected approximately \$550,000 per month through the Water Shut-off Program. NBC's collection activity has also been effective, with accounts receivable continuing to decline from prior year levels.



NBC initiated the replacement of its legacy Customer Service application with a new third party application. Discovery, training and data migration activities occurred throughout the year and will continue until "go-live" in FY 2019. With respect to affordability, NBC initiated a cost allocation and revenue recovery study to recover operating and capital costs through a system of sewer user charges.

NBC continued to protect its investments in technology with the completion of a facility and equipment condition analysis, performance of a security audit and implementation of a cyber-security plan. Various computer equipment was upgraded to maximize network stability, controls and increase data storage. Implementation of the new Laboratory Information System was completed as a result of a joint effort of IT, Laboratory and Environmental Monitoring and Data Analysis staff. IT completed the migration of the databases to the latest version of Oracle and changed launch features to enhance security. Lastly, as part of the effort to protect NBC from malicious activity, more than 2.2 million items were scanned. NBC's firewall blocked more than 1.3 million emails including more than 8,582 with viruses.

From a human resources standpoint, NBC received the 2017 Best Places to Work in Rhode Island Award for the seventh consecutive year. This involved the completion of a workplace assessment process including employee surveys and an inventory of company benefits, policies and offerings. The reorganization of the Engineering and permitting functions were completed. NBC's vision and dental insurance policies and flexible spending account plans were evaluated and renewed. Lastly, a three year Collective Bargaining Agreement (CBA) was negotiated with NBC's two unions. As part of the new CBA, the health insurance plan was modified and the employer funded Health Savings Accounts will be replaced with a Health Reimbursement Arrangement funded at the same level.

In FY 2018, NBC issued 293 new sewer connection permits and administered the NBC Earth Day River Cleanup Grant program to support initiatives involving 21 non-profit organizations throughout the NBC service area. NBC coordinated two shellfish transplants with RIDEM and RI Shellfisherman's Association, moving in excess of 100,000 pounds of shellfish.

In terms of public outreach, NBC conducted 57 educational tours of the FPWWTF and 26 water quality testing field trips. NBC also conducted numerous watershed education programs through the NBC's Watershed Explorers program. Through this program, more than 700 students from 12 schools in NBC's service area received monthly lessons and learned about the health of their school's watershed. The students will present their macro invertebrate data projects and student essays at the annual NBC environmental conference to be held at Goddard Park.

NBC received the National Environmental Achievement Award for Excellence in Education for its "Mr. Can" campaign, which educates the public on how to properly dispose of household grease and prevent collection system clogs.



*Photo: Watershed Explorers
Spring macro field trip*

Summary

NBC's reputation in the environmental community continues to grow both regionally and nationally. NBC continues to excel in wastewater treatment, environmental leadership and sound financial management, and its efforts have been recognized nationally by many professional organizations and publications. The awards validate NBC's commitment and dedication to the continuous 24 hour effective operation of its facilities, protection of public health, significant investment in new technologies and facilities and ongoing commitment to its ratepayers.

In conclusion, during FY 2019, NBC will continue to work to protect its community, ratepayers and all Rhode Islanders through the enhancement of water quality in Narragansett Bay.

A handwritten signature in black ink, which reads "Raymond J. Marshall". The signature is fluid and cursive.

Raymond J. Marshall, P.E.
Executive Director



NBC's Executive Director was the recipient of the Elizabeth Cutone Executive Leadership Award from the New England Water Environment Association for outstanding leadership!

About the Narragansett Bay Commission

Background

In 1979, the Governor of Rhode Island's Sewage Facilities Task Force reported that the discharge of pollutants into Narragansett Bay, and particularly in the Providence metropolitan area of the Bay, posed problems of such scope and cost that they were beyond the City of Providence's capability to control them. Additionally, the prospect of continued federal funding of sewer construction programs under the Clean Water Act was clouded by the scheduled expiration of the Clean Water Act at the close of the 1982 federal fiscal year.

Consequently, the Task Force recommended, and the Rhode Island General Assembly in 1980 approved, the establishment of a regional district commission to correct and minimize pollution discharges into the Upper Bay. The Narragansett Bay Water Quality Management District Commission, renamed the Narragansett Bay Commission in 1999, was authorized to acquire, operate and upgrade the metropolitan Providence wastewater collection and treatment facility.

On January 1, 1992, the former Blackstone Valley District Commission was merged into NBC, expanding the service area.



Photo: Providence River Basin in Twilight

The Commission

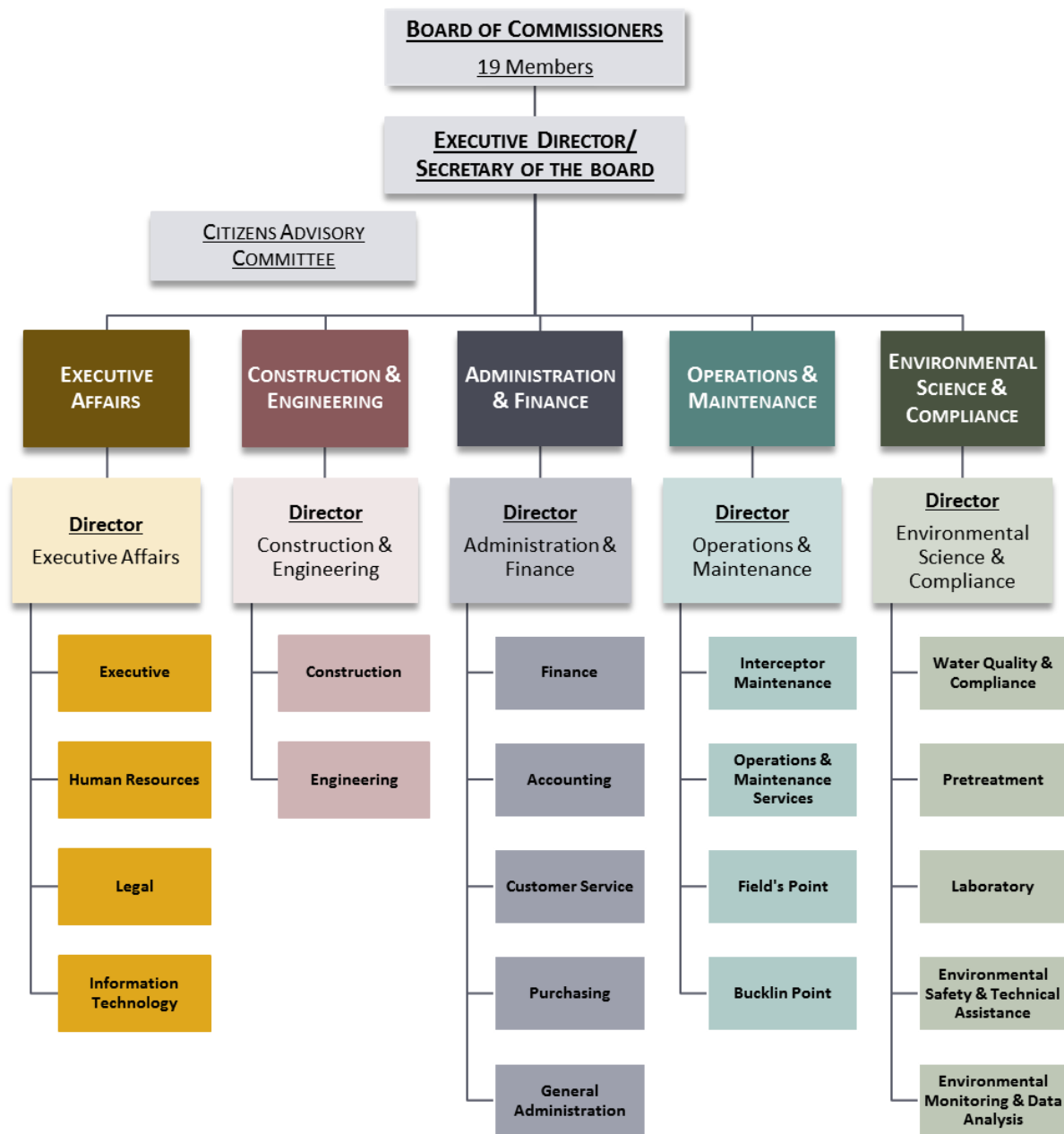
NBC is governed by a 19 member Board of Commissioners (Board). The Board consists of nine members representing the municipalities in the service area, as well as ten gubernatorial appointments. Empowered with responsibilities ranging from ensuring that NBC operates with a balanced budget, to approving contracts for improving and maintaining the treatment facilities and wastewater collection system, the Board meets monthly to guide the direction of NBC.

The NBC is regulated by the Rhode Island Public Utilities Commission (PUC). Accordingly, both the Board and the PUC must authorize adjustments to sewer user rates. NBC funds its operation and maintenance expense as well as debt service through user charges.

NBC Organization

NBC is comprised of a team of dedicated professionals who are committed to the fulfillment of NBC's goals. NBC's organizational structure consists of five Divisions headed by Division Directors who report to the Executive Director. Within each Division there are sections headed by Program Managers who report to the Division Director.

This year's operating budget reflects the transfer of the Human Resources and Information Technology functions from the Administration and Finance Division to the Executive Affairs Division. One additional organizational change is the transfer of the Insurance and Risk management functions from the Operations and Maintenance Division to the Administration and Finance Division. Additional discussion of the organization is located in the Operating Budget section. The next page contains a brief description of the Divisions and the responsibilities of each program or section level.



Program Level Operational Responsibilities Overview

EXECUTIVE AFFAIRS DIVISION

The Executive Affairs Division is responsible for creating, planning, implementing and integrating the strategic direction of the organization. Provide support function including human resources and information technology.

EXECUTIVE: Leads and directs the resources of the organization to provide safe and reliable wastewater collection and treatment services to NBC ratepayers at a reasonable cost. Advises the Board of Commissioners on daily operations and collaborates on policy development and strategic issues.

HUMAN RESOURCES: Administer and process employee records, recruitment & retention, workers' compensation, employee benefits and collective bargaining agreements.

LEGAL: Provide legal advice to NBC staff regarding issues that may arise in the course of NBC's business activities.

INFORMATION TECHNOLOGY: Maintain all aspects of networks, telecommunications, hardware, software and databases for NBC.

CONSTRUCTION AND ENGINEERING DIVISION

The Construction and Engineering Division is responsible for the planning, design and construction of capital improvement projects.

CONSTRUCTION SERVICES: Manage the construction of NBC's capital improvement projects including bidding, contract award and resident engineering.

ENGINEERING: Plan and design facilities necessary for the collection and treatment of wastewater and the issuance of sewer connection permits.

ADMINISTRATION AND FINANCE DIVISION

The Administration and Finance Division is responsible for finance, cash management, payroll, long-term debt, rate filings, the administration of retirement plans and ensuring compliance with applicable state and federal laws, rules and regulations.

FINANCE: Ensure overall sound financial management including the operating budget, CIP, OCP, debt management, rate setting, NBC retirement plans, cash management, and compliance. This section is also responsible Insurance and Risk Management.

ACCOUNTING: Maintain NBC financial records, issues monthly financial statements in accordance with GAAP, payroll and payment processing and IRS related reporting.

CUSTOMER SERVICE: Provide accurate and timely billing and collection of approximately 84,455 accounts in the NBC service area and all other aspects of providing excellent customer service.

PURCHASING: Ensure the legal, timely and cost-effective purchasing of goods and services and supports renewable energy efforts.

GENERAL ADMINISTRATION: Overhead section that includes expense for debt service, maintenance of the corporate office building, NBC's electricity, renewable energy credits and net metering credits along with other overhead items.

OPERATIONS AND MAINTENANCE DIVISION

Responsible for operating and maintaining NBC's infrastructure.

INTERCEPTOR MAINTENANCE: Maintain NBC's infrastructure and collection system throughout the service area to ensure system capacity and proper sewage flow conditions.

OPERATIONS & MAINTENANCE SERVICES: Ensure process control for NBC's treatment facilities in accordance with State and Federal regulatory requirements. This section is also responsible for maintaining the Asset Management Program.

FIELD'S POINT: Operate and maintain the Field's Point facilities to produce the highest quality effluent in the most efficient manner.

BUCKLIN POINT: Operate and maintain the Bucklin Point facilities to produce the highest quality effluent in the most efficient manner.

ENVIRONMENTAL SCIENCE AND COMPLIANCE DIVISION

Responsible for ensuring agency compliance with state and federal regulations and permits, agency energy and environmental sustainability and water quality science.

WATER QUALITY & COMPLIANCE: Ensure compliance with EPA and DEM permits and regulations and develop sound environmental science to support NBC's mission.

PRETREATMENT: Maintain the federally mandated pretreatment program to protect NBC's wastewater treatment plants and infrastructure from toxins and pollutants.

LABORATORY: Ensure the production of high quality analytical data through the use of diagnostic measurements in order to comply with federal and state regulations.

ENVIRONMENTAL SAFETY & TECHNICAL ASSISTANCE: Perform pollution prevention, energy management, environmental compliance and sustainability; health and safety assistance services for NBC.

ENVIRONMENTAL MONITORING & DATA ANALYSIS: Monitor water quality throughout NBC's service area through sampling. Analyze resultant data to NBC staff, regulatory authorities, stakeholders and the public.

Governmental Regulation

NBC's core business goal actions for target measures are designed to ensure compliance with state and federal regulations.

Environmental Compliance

The NBC is regulated by the Rhode Island Department of Environmental Management (RIDEM) and the U.S. Environmental Protection Agency (USEPA) to ensure compliance with the Federal Clean Air and Clean Water Acts.

NBC has been issued new Rhode Island Pollutant Discharge Elimination System (RIPDES) permits for each of its wastewater treatment plants in 2017. These new permits include more stringent limits for certain parameters and require various studies and evaluations to be undertaken by NBC. NBC has appealed these permits but is working toward a Consent Agreement that will resolve most if not all of these issues.

The NBC has a Consent Agreement with RIDEM for nitrogen limits at both the Field's Point Wastewater Treatment Facility (FPWWTF) and the Bucklin Point Wastewater Treatment Facility (BPWWTF). The Consent Agreement requires that NBC achieve a monthly average total nitrogen limit of 5 milligrams per liter (mg/l) on a seasonal basis (May to October). In order to achieve this limit, NBC constructed new facilities for the FPWWTF, which were completed in May 2013, and for the BPWWTF, which were completed in August 2014.

The NBC is also under a Consent Agreement with RIDEM to implement a federally mandated Combined Sewer Overflow (CSO) Program that will address the NBC's 61 CSOs in both the Field's Point and Bucklin Point service areas. Approximately 98% of the annual CSO volume will receive treatment when all three phases of the CSO Program are completed. The first phase of the CSO abatement facilities was completed in November, 2008 and addresses 40% of the CSO volume. The NBC constructed additional CSO abatement facilities in Phase II and those facilities became operational in December, 2014. NBC's 18-month reevaluation of the third and final phase as set forth in the RIDEM-approved 1998 Conceptual Design Report Amendment concluded in June 2015, and resulted in the selection of an alternative that the NBC determined would provide the best combination of affordability and water quality improvement. The reevaluation report was submitted to RIDEM in July 2015, and RIDEM provided comments to NBC in March 2016. NBC incorporated RIDEM's comments into a revised reevaluation report, which was approved by RIDEM in December 2017. NBC's Consent Agreement must be renegotiated based upon the approved plan.

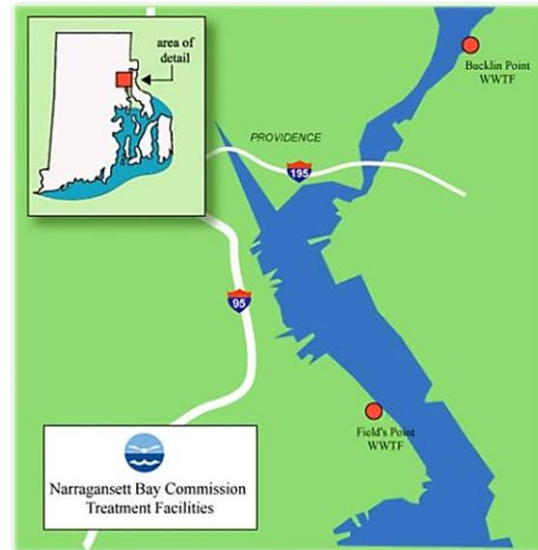
Financial Compliance

The NBC is subject to regulation by the Rhode Island Public Utilities Commission (PUC) and NBC's user fees and long-term debt issuance is subject to regulatory approval. In addition, must restrict the use of certain funds for pay-as-you-go capital and operating capital.

NBC has financed the majority of its Capital Improvement Program through the issuance of tax-exempt revenue bonds. In accordance with SEC Rule 15c2-12, NBC has entered into Continuous Disclosure agreements that require the timely filing of audited financial statements, financial information and operating data through the Municipal Securities Rulemaking Board's Electronic Municipal Market Access (EMMA) website. In addition, SEC Rule 15c2-12 requires disclosure on EMMA of certain events within 10 business days. NBC is also subject to Internal Revenue Service (IRS) post-issuance compliance requirements to ensure the tax-exempt status of its bonds. The credit rating of NBC's Variable Rate Demand Bonds, which are in weekly mode, is reviewed annually by Standard & Poor's. NBC also secures a credit review from Standard and Poor's prior to the issuance of new debt.

Facilities

NBC owns and operates Rhode Island's two largest Wastewater Treatment Facilities (WWTF's) along with an extensive infrastructure of interceptors, pump stations, tide-gates, a septage receiving station and combined sewer overflows. The location of the two wastewater treatment facilities is shown on the adjacent map. The Field's Point WWTF is located in Providence and serves the greater Providence metropolitan area including the City of Providence, the Town of Johnston, the Town of North Providence and portions of the Town of Lincoln and the City of Cranston. The Bucklin Point WWTF is located in East Providence and serves the Cities of Pawtucket and Central Falls, and parts of the Towns of Cumberland, Lincoln, East Providence and Smithfield.



Field's Point Service Area Facilities and Technology



Photo: Aeration Tanks at the Field's Point Wastewater Treatment Facility

The Field's Point WWTF provides advanced wastewater treatment for dry weather flows of up to 65 million gallons per day ("MGD") and sustained wet weather flows of 77 MGD. The plant provides primary treatment and disinfection for an additional 123 MGD of wet weather flows through its wet weather facility. Total treatment capacity at Field's Point is 200 MGD.

The Field's Point facility uses an Integrated Fixed Film Activated Sludge ("IFAS") process for advanced wastewater treatment, which includes grit removal, primary sedimentation, secondary aeration, nitrogen removal, final clarification and chlorination and dechlorination after disinfection. Final effluent is discharged to the Providence River.

The Field's Point facility uses an Integrated Fixed Film Activated Sludge ("IFAS") process for

The NBC also owns, operates and maintains three outlying pump stations in the Field's Point service area: the Washington Park and Reservoir Avenue Pump Stations located within the City of Providence, and the Central Avenue Pump Station located in the Town of Johnston. The Ernest Street Pump Station, located at the FPWWTF, handles 98% of the flow. The Tunnel Pump Station, located next to the Ernest Street Pump Station, pumps stored combined sewage flow from the CSO tunnel to the Field's Point for full treatment.

The NBC also maintains nineteen permanent flow metering stations to measure flow at various points in the sewer system. In addition, the NBC owns and maintains 35 CSOs, 32 tide gates and 80 miles of interceptors in the Field's Point service area. The NBC has begun a comprehensive long-term construction program to minimize overflows from its combined sewers.

Bucklin Point Service Area Facilities and Technology

The Blackstone Valley District Commission (“BVDC”) was established by the Rhode Island General Assembly in 1947 to plan, design, construct, operate and maintain facilities including the Bucklin Point WWTF for the abatement of pollution generated in the Blackstone Valley. BVDC was merged into the NBC on January 1, 1992.



Photo: Bucklin Point Wastewater Treatment Facility

The BPWWTF provides secondary treatment and nitrogen removal for flows of up to 46 MGD per day and primary treatment and disinfection for flows of up to 116 MGD.

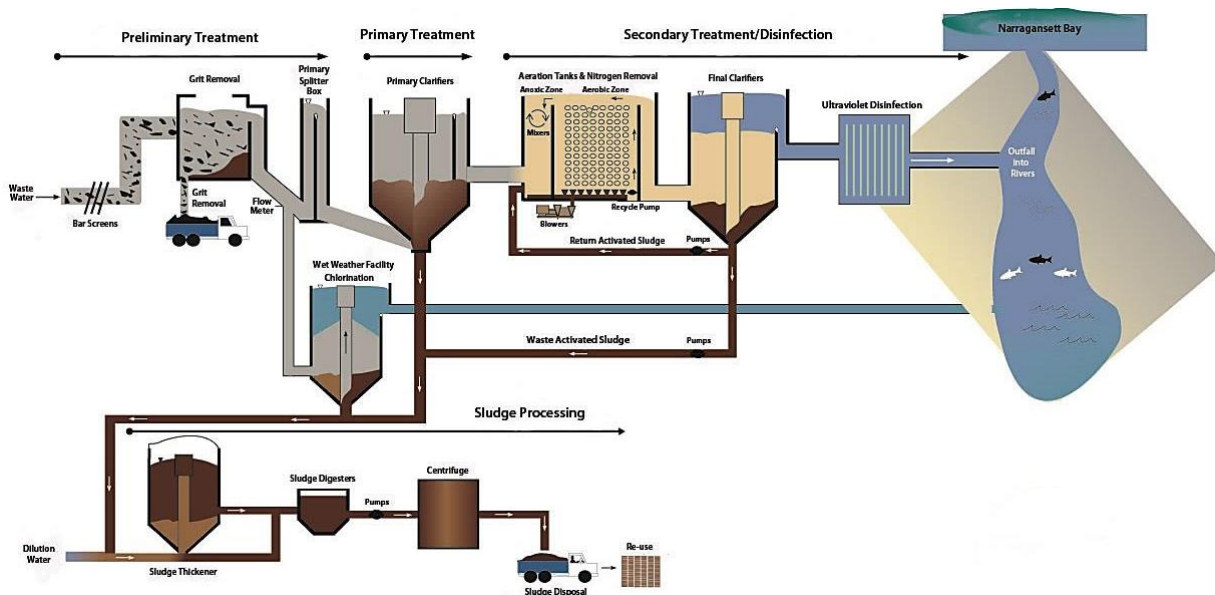
The NBC also owns and operates three pump stations in the Bucklin Point service area including the Omega Pump Station (East Providence), the Saylesville Pump Station (Lincoln) and the Washington Highway Pump Station (Lincoln). NBC also owns and operates a Septage Receiving Station in Lincoln.

The NBC is responsible for ensuring that the overflows from the 26 CSOs in the Bucklin Point service area comply with federal and State discharge requirements. NBC also owns and maintains 30 miles of interceptors

Wastewater Treatment Process

NBC works hard to protect the water quality of Narragansett Bay and its tributaries. NBC’s task is to protect public health by taking billions of gallons of dirty water every year and making it clean. This is accomplished by operating 24 hours per day and 365 days per year.

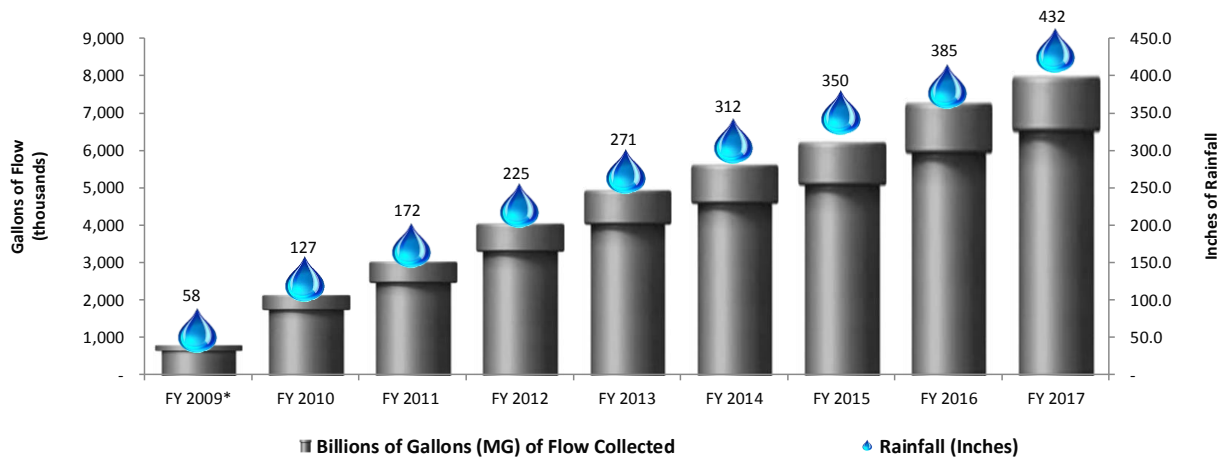
The schematic below shows the state-of-the-art treatment process at the Bucklin Point WWTF.



CSO Phase I Facilities and Tunnel Pump Station

NBC's CSO Phase I Facilities became operational in FY 2009. The centerpiece of the Phase I facilities is a three mile long, 250 foot deep tunnel. During periods of significant precipitation, drop shafts transport combined stormwater and wastewater from various locations into the tunnel for storage until the flows can be pumped to the Field's Point WWTF for safe treatment and discharge. Since its inception, over 8 billion gallons of flow that previously would have overflowed directly into rivers and Narragansett Bay have been stored and treated. The graph below shows the millions of gallons of flow collected and rainfall from FY 2009 to date.

CSO Phase I Facilities - Collection of Flow



*Facilities operational in November 2008

CSO Phase II Facilities

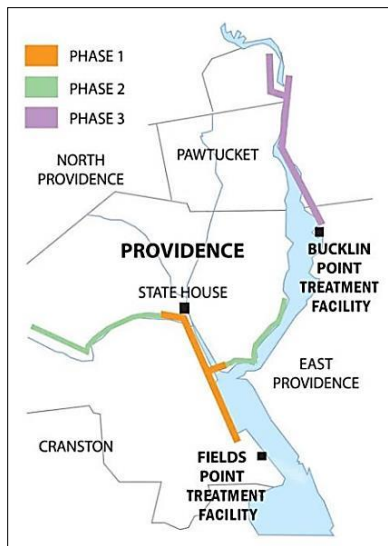
The CSO Phase II Facilities became operational in FY 2015. The most significant components of the Phase II Facilities are two main interceptors in the Field's Point Service area and a wetlands treatment facility. The Seekonk Interceptor is approximately 7,000 feet along the Seekonk River and the Woonasquatucket Interceptor is approximately 17,200 feet along the Woonasquatucket River. The interceptors convey the flows to the CSO Tunnel constructed in Phase I. Additionally, a wetlands treatment facility was constructed to include a storage tank for small storm flows to be stored until the flow can be pumped into the collection system for treatment; and for larger storms, treatment is provided by the wetland.



Photo: WCS01 Gate & Screening Structure

CSO Phase III Facilities

The CSO Phase III Facilities represent the third and final phase of the federally mandated CSO Abatement Program required as part of a Consent Agreement between NBC and RIDEM. The Program includes four phases, A, B, C, and D, to be completed by 2041. Each phase includes expenditures of \$10 million on the construction of Green Stormwater Infrastructure (GSI) to reduce stormwater inflow to the existing CSO system.



Phase III A includes the design and construction of a 13,000 foot long deep rock tunnel in Pawtucket along the Seekonk and Blackstone Rivers and a pump station to convey flow to the Bucklin Point WWTF in East Providence. Additionally, this phase is to design the Upper BVI relief, the CSO No. 105 relief sewer, and the CSO No. 206 sewer separation and regulator modifications. Lastly, this phase is to design and construct O&M Support Facilities at Bucklin Point to maintain the operational infrastructure necessary to provide space for construction of the tunnel pump station. NBC will also complete design the Phase III B facilities contemporaneously with the Phase III A design.

The total pre-design estimate for the four phases of the CSO Phase III Facilities is \$779.1 million in 2018 dollars, with expenditures of approximately \$29.7 million in FY 2019 and \$315.0 million in the five year period of FY 2020-2024. A description of the facilities to be constructed in each of the four phases, as well as the estimated costs and schedules, are included in the CIP Impact and Long-Term Plan section.

Sustainable Energy and Renewable Resources

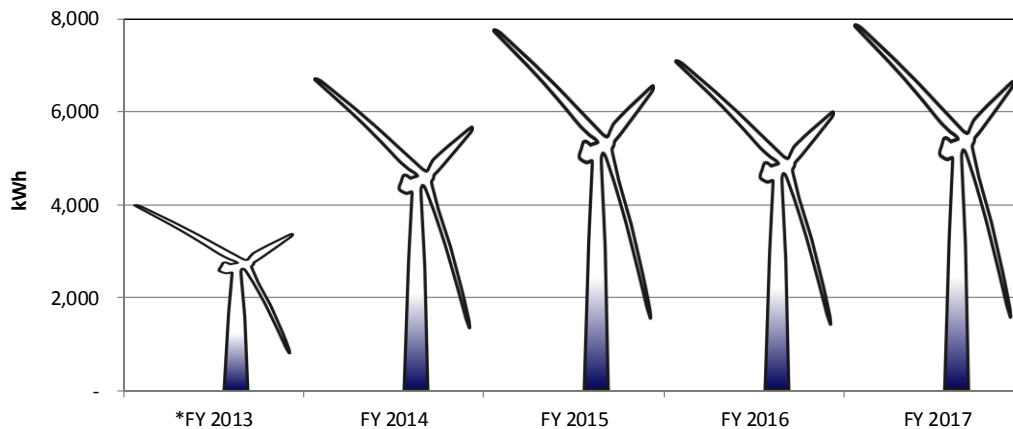
In accordance with NBC’s environmental performance goals of minimizing environmental impact, NBC plans to maximize energy efficiencies and renewable resources through its Energy Sustainability program. This program involves the identification and implementation of conservation methods, improved efficiency options and the use of sustainable renewable energy resources.



Field’s Point Wind Turbines

In October 2012, NBC began operation of three 1.5 MW wind turbines located at the Field’s Point campus. The turbines convert wind energy into electricity which is used on-site to support facility operations. Any excess electricity is net metered to the state’s electric grid to offset billable usage. In addition to generating Renewable Energy Credit (REC) revenue, the turbines have generated more than 33.7 million kWh of clean renewable energy since becoming operational in 2013, as shown in the following graph.

Field’s Point Wind Turbine Electricity Production
(in Thousand kWh)



*Facilities operational in October 2012

Wind Energy Development (WED) Turbines



Photo: NBC's "WED 4" turbine in Coventry, RI

In 2016, NBC purchased three 1.5 MW wind turbines at a remote site located in Coventry, RI. Two of the turbines, WED 3 and 4 were purchased in July 2016 and a third turbine, WED 1 was purchased in October 2016. The WED turbines have generated millions of kWh of clean renewable wind energy which is net metered to the state's electric grid to offset NBC's electricity bills. In addition, the WED turbines generate RECs which are sold by NBC.

Biogas Reuse

In 2018, NBC completed the construction of a biogas reuse project at Bucklin Point. A cogeneration system will burn the biogas generated from the anaerobic digestion of biosolids. The process converts the biogas into heat and electricity to support facility operations on-site. The project also generates thermal and electric RECs which will be sold by NBC. In addition, this system will reduce NBC's greenhouse gas emissions.



Photo: Bucklin Point Biogas Cogenerator

Solar Power Purchase Agreement (PPA)

In 2017, NBC executed a Power Purchase Agreement (PPA) for three solar power projects located at off-site locations. In accordance with the 25-year contract, the electricity generated is net-metered on NBC's electric accounts. NBC will compensate the contractor based on 75% of kWh generated multiplied by the prevailing net metering rate and will retain the remaining 25% of the net metering credits. The projects also generate solar RECs which will be sold by NBC. As of January 2018, two of the projects are online.

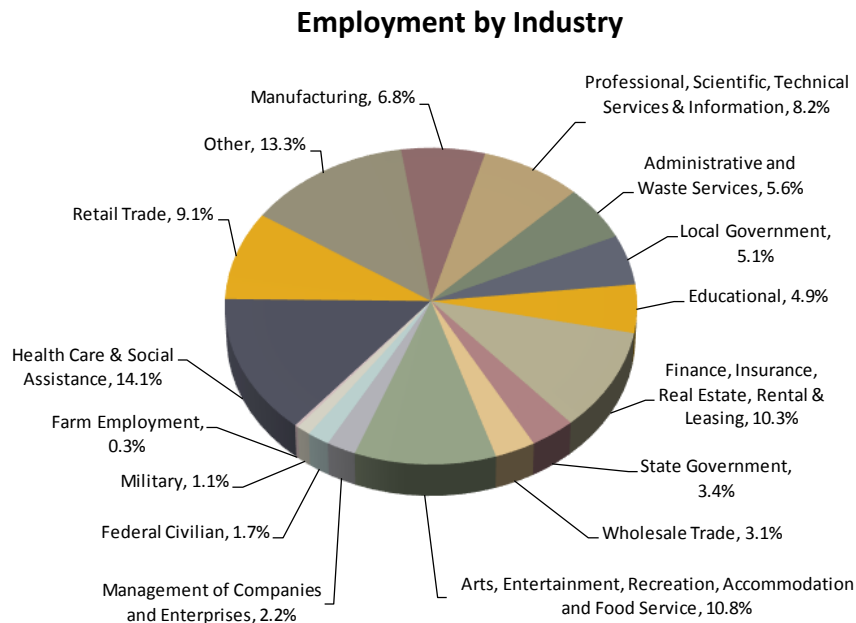


Photo: NBC's Solar Project in Richmond, RI

Demographics

Rhode Island Economy

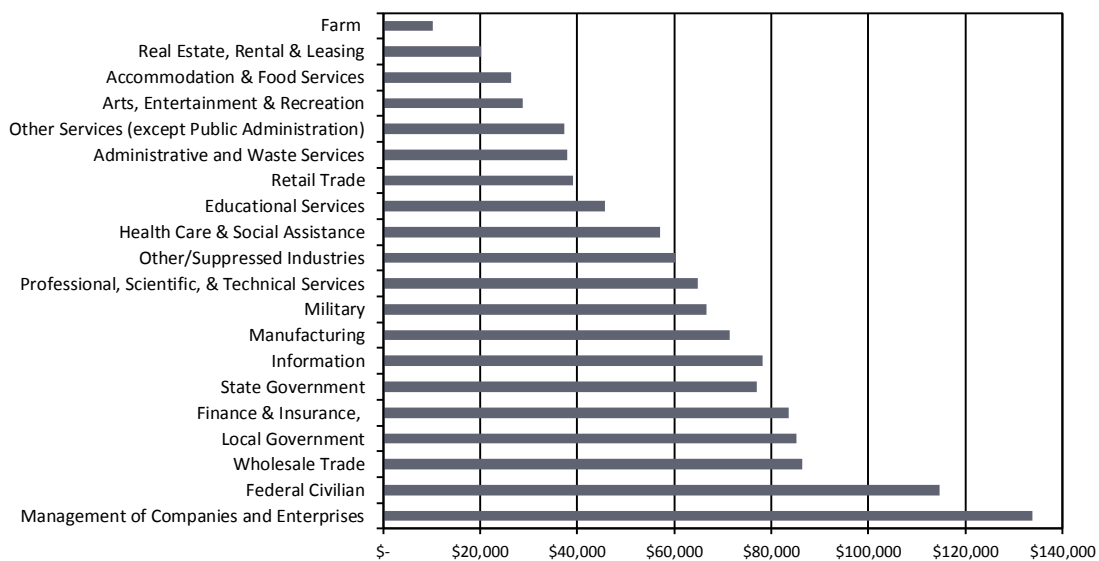
According to the Rhode Island Department of Economic Development, the economic base of Rhode Island continues to shift from manufacturing and goods to service industries over the last decade. The chart below shows employment by industry for the calendar year 2016.



*Source: United States Regional Economic Analysis Project Industries by State 2016

Employment in Rhode Island reflects the national trend towards higher employment in the services sector. The chart below illustrates Rhode Island's average annual earnings per employee in each major industry for 2016.

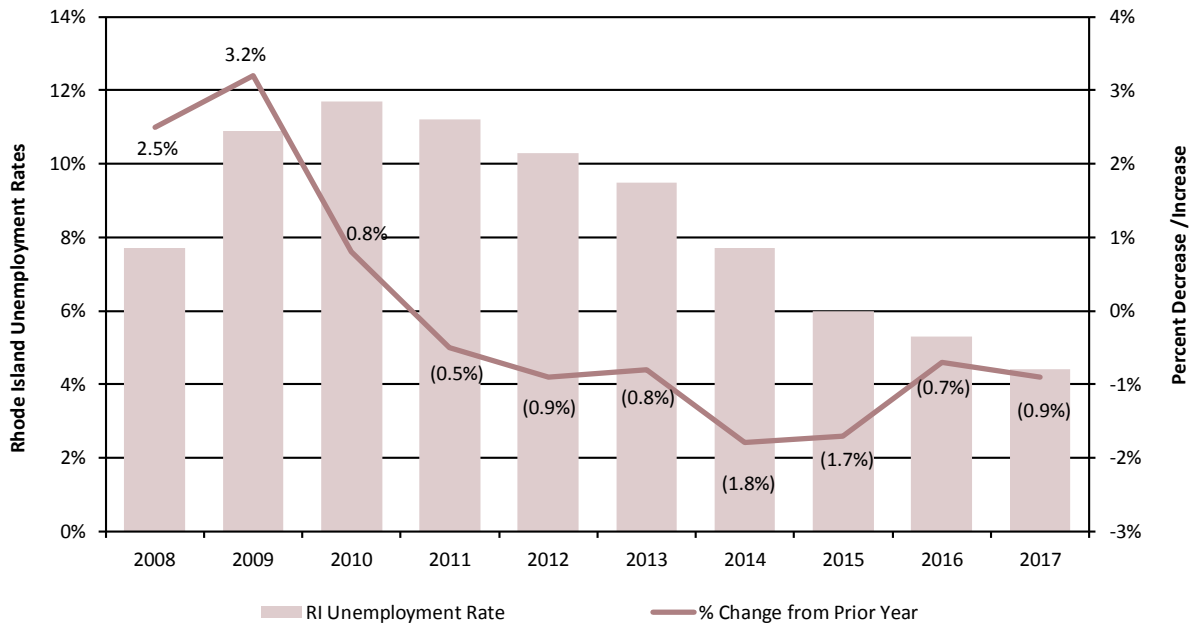
Rhode Island Average Annual Earnings per Employee by Major Industry



*Source: United States Regional Economic Analysis Project Industries by State 2016

The graph below, compiled from data from the Bureau of Labor Statistics, shows historical unemployment figures over the past ten years for Rhode Island. The Rhode Island unemployment rate has decreased in each of the last seven years from a peak rate of 11.7% in 2010 to 4.4% in 2017.

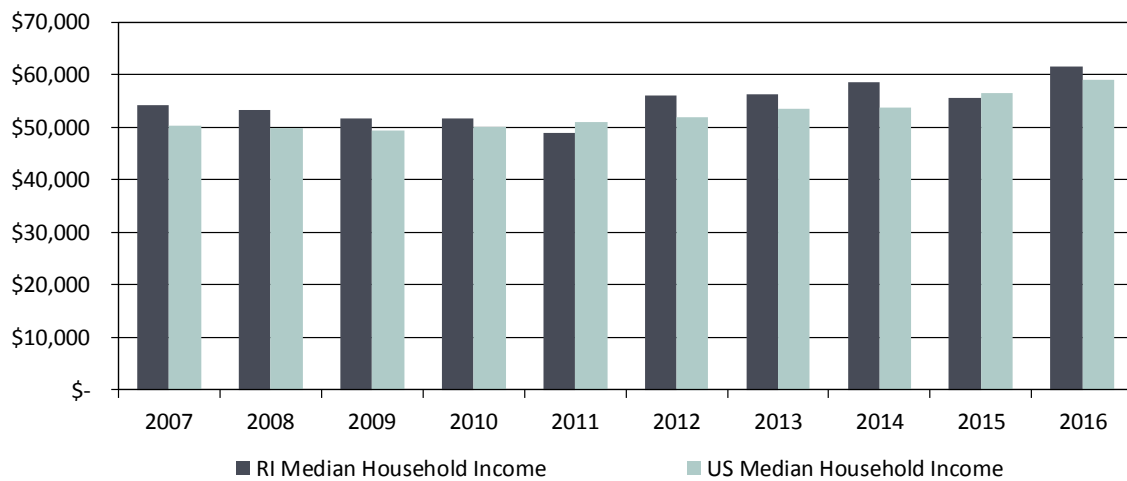
Rhode Island Unemployment Rates



*Source: Bureau of Labor Statistics. RI state-wide Unemployment Rates Seasonally Adjusted.

The graph below shows the median household income in Rhode Island for the years 2007-2016 compared to national statistics. Rhode Island's median household income was above the national level all years except 2011 and 2015 when it dropped below the national level by 4% and 1% respectively. In 2016, the Rhode Island median household income rose by approximately 10% or \$5,827 in 2016 CPI-U-RS (Consumer Price Index Research Series Using Current Methods) adjusted dollars, with median household income of \$61,528.

Median Household Income - Rhode Island vs. United States

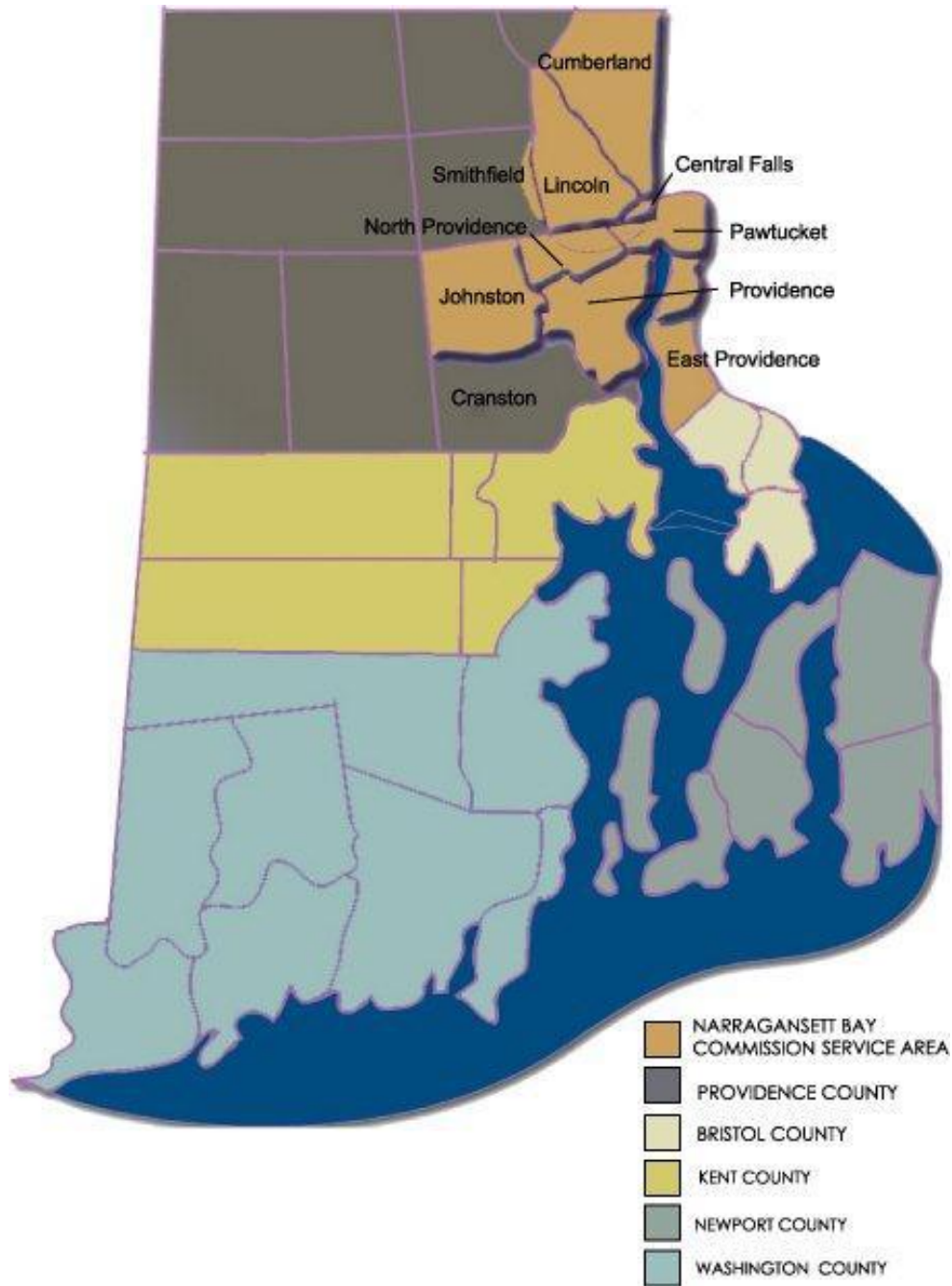


*Source: United States Census Bureau – Median Household Income by Country and State – 1984-2016

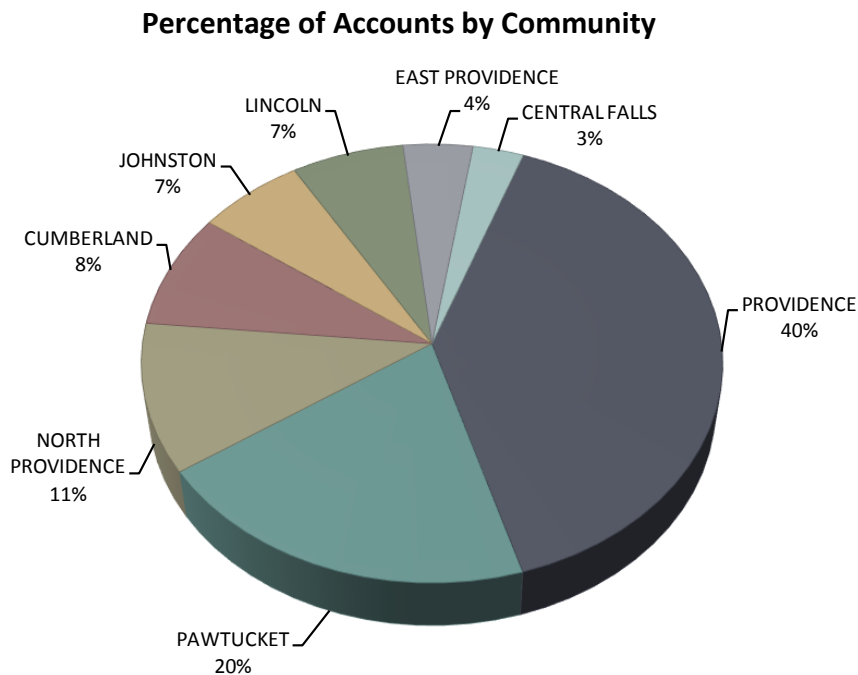
NBC Service Area

NBC provides reliable, cost-effective wastewater collection and treatment services to over 360,000 residents and approximately 7,730 businesses in the metropolitan Providence and Blackstone Valley areas. These communities include: Providence, North Providence, Johnston, Pawtucket, Central Falls, Cumberland, Lincoln, the northern portion of East Providence and small sections of Cranston and Smithfield. The map below shows the NBC's service area.











NBC Service Area



NBC's customer base consists of residential and non-residential customer classes, which include commercial and industrial users. Of the eight major communities serviced by NBC, Providence, Pawtucket and North Providence account for the majority of users with 71% of the accounts. The following chart illustrates the distribution of accounts across the eight communities.



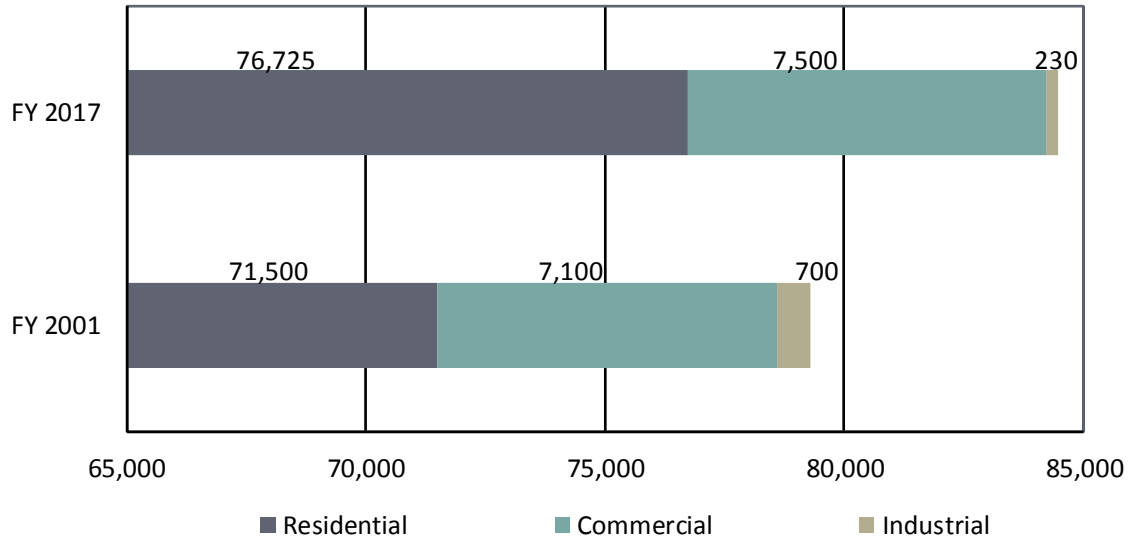
The residential customer class has approximately 76,725 accounts, while the non-residential customer class has approximately 7,730 accounts. The largest NBC customers are primarily service and education providers. The ten largest customers based on FY 2017 billings are also listed in the table below:

Top Ten NBC Customers		
Customer	FY 2017 Billings	Percentage of Total Annual User Charges
 Providence Housing Authority	\$ 1,512,022	1.57%
 Rhode Island Hospital	1,422,321	1.47%
 Brown University	1,181,064	1.22%
 City of Providence	644,621	0.67%
 City of Pawtucket	615,641	0.64%
 Johnson & Wales University	436,748	0.45%
 Providence College	433,361	0.45%
 Providence School Department	395,432	0.41%
 Rhode Island Resource Recovery	360,764	0.37%
 State of Rhode Island	350,897	0.36%

Source: NBC's FY 2017 Audit

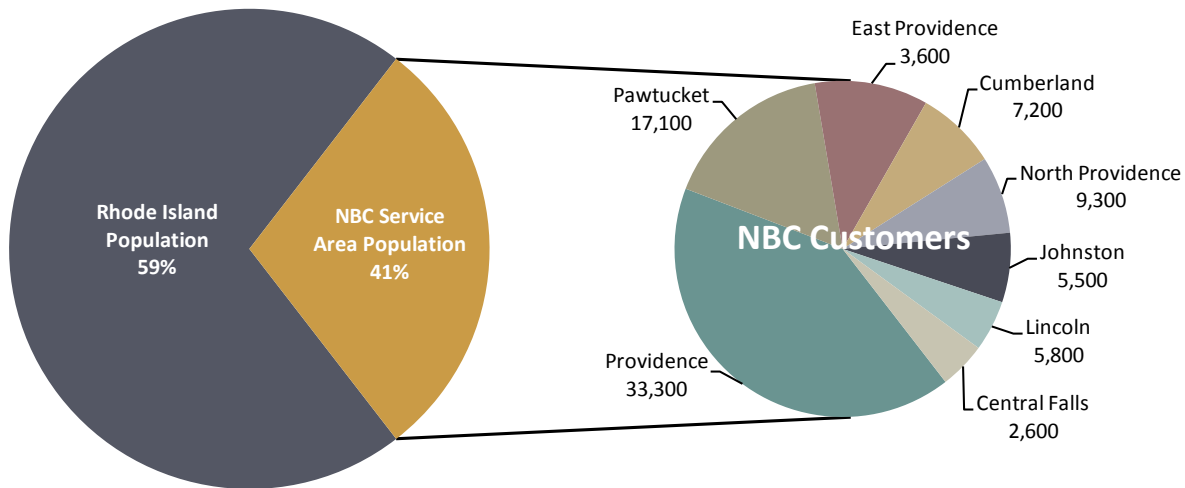
Over the last sixteen years, there has been a 6.5% increase in the number of customer accounts. This is the net effect of a 67.1% decrease in the number of industrial accounts from 700 to 230 which has been offset by a 7.3% increase in the number of residential accounts and a 5.6% increase in the number of commercial accounts.

Number of Accounts by Customer Class



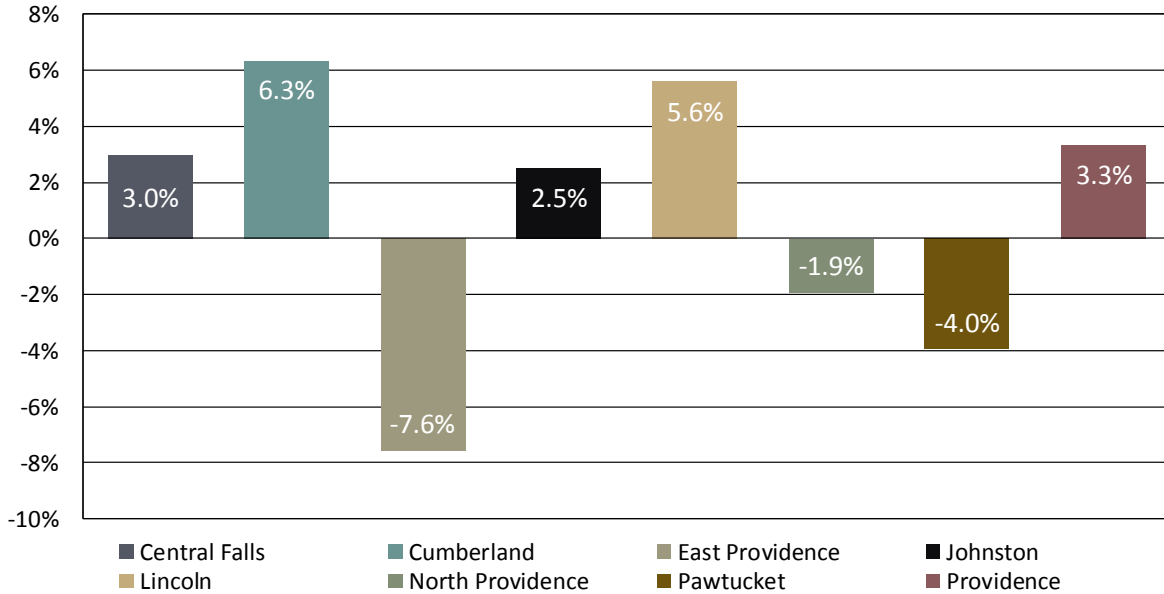
NBC Service Area Population and Statistical Information

According to the 2010 United States Census Bureau, the total population of Rhode Island is 1,052,567. The graphs below show that NBC services approximately 41% of the State of RI population and that the majority of NBC’s customers are in the City of Providence with approximately 33,300 customers followed by the City of Pawtucket with approximately 17,100 customers.



The Rhode Island Office of Statewide Planning projects the state population by city and town. The graph below displays the projected population growth for NBC’s service area for the years 2025 to 2040. The most significant percentage increases in population over the fifteen years is projected to be in the towns of Cumberland and Lincoln, in which the populations are projected to grow by 6.3% and 5.6% respectively. The population in East Providence is projected to decline by 7.6% over this same period.

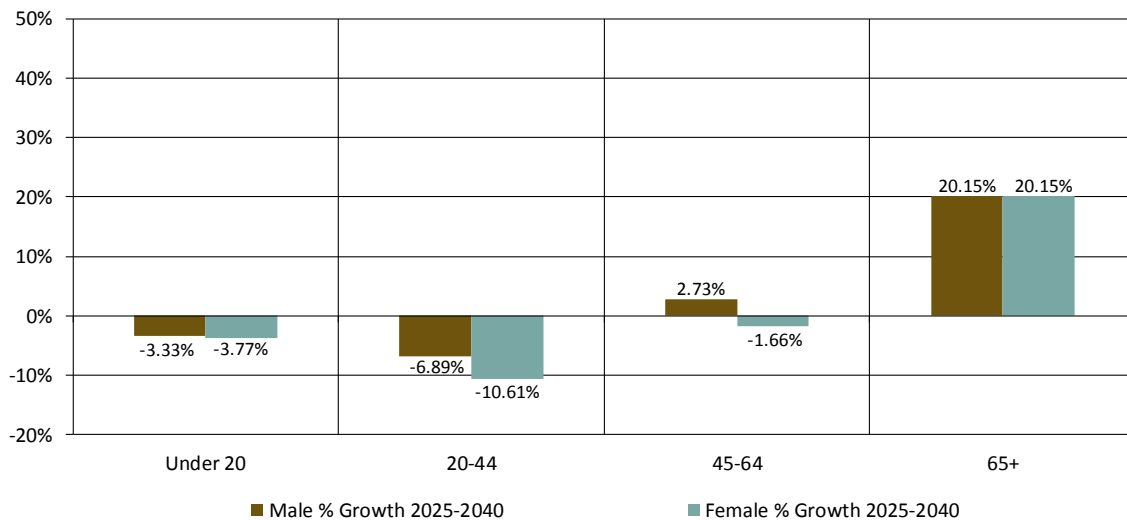
Projected Population Growth by City/Town 2025-2040



*Source: Rhode Island Statewide Planning - Population Projections

The graph below illustrates the projected population growth from 2025-2040 in Rhode Island by age group and gender. The population is projected to decrease in the 45-64 age groups for females and in both the male and female populations for both the Under 20 and 20-44 age groups. The steepest decline will be among the female population in the 20-44 age groups at 10.61%. The population is projected to increase in the 45-64 age groups for males, and for both males and females in the 65+ age groups. The most significant increase will be for both males and females within the 65+ age group at 20.15%.

Rhode Island Projected Population Percent Growth by Age Group and Gender 2025-2040



*Source: Rhode Island Statewide Planning - Population Projections



Budget Process and Policies

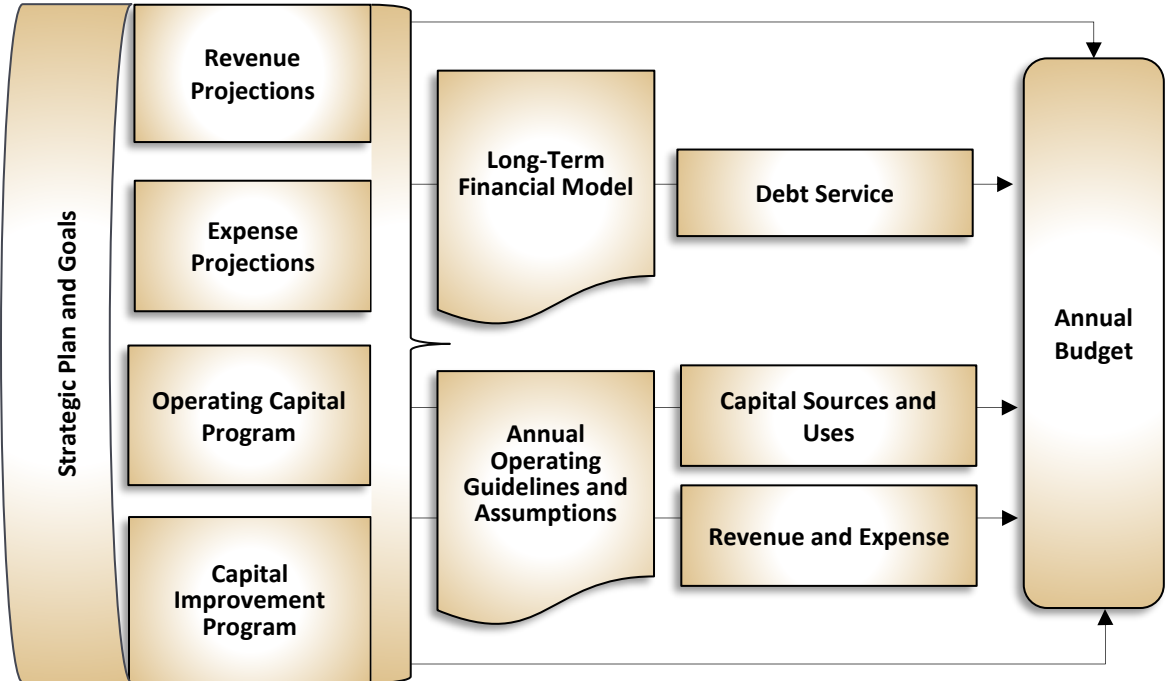
The Budget Process

As a regulated agency, it is important that NBC analyze financial and operational needs continuously throughout the year. The formal review for the budget, however, begins in July and August of each year. As part of this process, regulatory requirements are reviewed, as well as major program changes and capital needs. Large capital projects requiring major changes to facilities and infrastructure, are identified in the Capital Improvement Program (CIP). New assets or asset replacements identified through the Asset Management Program, inspection or technology reviews are included in the Operating Capital Program (OCP). Both the CIP and OCP are developed in conjunction with the annual budget, all of which are developed within the context of the Strategic Plan’s long-term goals. The CIP and OCP identify projects on a five-year basis. The five-year programs, as well as known operating expense parameters and revenue projections, are integrated into the long-term financial model to assess the need for new debt issuance. The model identifies available funding sources and uses for the next decade (see CIP Impact and Long-Term Plan for more details). The model projects new debt service which is incorporated into the annual budget.

Revenue forecasts for the upcoming fiscal year are determined by projecting user fee revenue and factors affecting other operating revenue such as pretreatment fees and late fees and non-operating revenue, such as the expected rate of return on cash balances. Operating expense projections are prepared with a focus on the allocation of resources needed to meet NBC’s Strategic objectives. Operational impacts of the CIP are also included in the budget. If it is determined that user fee revenue will not be sufficient to meet NBC’s financial obligations, the NBC applies for rate relief with the Rhode Island Public Utilities Commission (PUC). A rate filing application for the recovery of expense line items, other than debt service is subject to a nine month review and approval process before new rates can be implemented.

The flow chart below illustrates the relationship between long-range planning and the budget process.

Relationship between the Budget Process and Long-Range Planning



FY 2019 Budget Calendar

JULY 2017 – AUGUST 2017

- Projections of FY 2019 Revenue, Expense, and Financial Obligations
- Comparison of needs to PUC Approved Cost of Service

OCTOBER 2017

- Budget Kick-off, Short and Long Term Budget Directives

NOVEMBER 2017

- Overview, Responsibilities, FY 2018 Accomplishments, FY 2019 Priorities submitted by November 1st
- Capital Improvement Program (CIP – Project Overview, Cash Flow and Schedule Detail forms submitted by November 22nd
- Submittal of FY 2019 and 5-year Operating Capital Program (OCP) requests

DECEMBER 2017

- CIP Budget Impact review on December 5th
- Performance Data submitted by December 15th
- CIP Review Committee meeting on December 18th
- Analysis and preparation of FY 2020 – FY 2024 CIP
- New Projects and/or CIP Workbook Changes due by December 30th

JANUARY 2018

- Analysis of Large Operating Accounts
- Completion of Salary and Fringe Benefit Calculations
- Major Accomplishments, Top Priorities, Five Year Operating Capital Program, FY 2019 Budget submittals by January 10th
- Incorporation of Capital Project Submittals and Analysis of CIP operating impacts
- Review OCP submittals for Asset Criteria and GL Account Code on January 19th
- FY 2018 Mid-Year Budget reviews conducted on January 25th

FEBRUARY 2018

- Budget Presentations to Executive Director on February 14th & 15th
- Capital Improvement Program Narrative and addition of enhancements
- Addition of enhancements to Budget document
- FY 2019 Budget Change Request and OCP Change Request submittals due February 23rd
- Preparation of Operating Capital Program document

MARCH 2018

- Comparison to Prior Year Expenditures and PUC Approved Cost of Service
- Analysis of FY 2018 Budget vs. Actual Revenue and Expense
- Incorporation of Operating Capital Submittals, OCP Narrative and addition of enhancements
- Projection of FY 2018 Finish
- Preparation of FY 2019 Revenue Projections
- Long-Term Planning Committee and Board Review and Approval of FY 2020-2024 CIP on March 6th
- Preparation of Operating Capital Program document

APRIL 2018

- Presentation of Proposed Budget adjustments and status to Executive Director
- Balance Budget
- Preparation of Budget documents
- Update of Long-Term Financing Model, CIP sources and uses
- Projection of Restricted CIP Carry-Forward, Fund Balances
- Incorporation of final Health Benefit and Workers' Compensation Renewal Rates
- Finance Committee and Board Review and Approval of FY 2019 Proposed Budget on April 10th
- Finance Committee and Board Review and Approval of FY 2019-2023 OCP on April 10th

MAY 2018

- Final Budget revisions and Budget document preparation
- Finance Committee and Board Review and Approval of FY 2019 Budget on May 9th

Budget Amendments

- NBC exercises strong financial controls to ensure total expense does not exceed the amount approved in the current year's budget.
- The Program Manager and Division Director authorize budget transfers within a section. Finance staff then review and authorize the proposed budget transfers. By Resolution, the Director of Administration and Finance must then approve all budgetary line item adjustments within and between categories.
- No budget transfers shall be made from capital to operating expense under normal circumstances.
- All budget transfers are reviewed by Finance and tracked on NBC's computerized financial system.
- All budget transfers are reported to the Finance Committee monthly.

Operating Capital Program Changes

- Program Managers may request reallocation of OCP funds for unanticipated or emergency items.
- Finance and accounting review all OCP reallocation change requests.
- The Director of Administration and Finance is authorized to approve changes to the OCP, make adjustments between line items and between cost centers for the budget year as long as the total expenditures do not exceed the total amount approved in the budget year.
- All capital asset items are purchased in accordance with NBC's Capital Asset Policy and NBC's Purchasing Rules and Regulations.
- All Operating Capital Reallocations are reported to the Finance Committee monthly.

Capital Improvement Program

- The Executive Director is authorized to expend funds on capital projects for preliminary planning, staff time and other services in order to assess project need, scope and feasibility prior to project review and approval by the Board and inclusion in the CIP.
- Once a project has been developed in scope and the basis for capital budget estimated, the Director of Construction and Engineering or the Engineering Manager, through the Executive Director will seek an Authorizing Resolution from NBC's Board to authorize contract expenditures and ancillary costs.
- The Executive Director may authorize Change Order Requests (CORs) up to a maximum of 5% of the total contract amount. Once the 5% limit is reached, the Executive Director must receive Board approval to raise the limit. In the case of an emergency or safety issue, the Executive Director may exceed the 5% limit without Board approval and will notify the Board members by any means of correspondence and the COR will be discussed at the next Board meeting.

In July and August, Finance staff begins the process of forecasting the upcoming fiscal year revenue, expense and financial obligations. NBC's rate increases for operating expense and rate base adjustments are subject to a 9-month review process by the PUC. Therefore, if it is determined that user charges must be adjusted, staff seeks Board approval to file with the PUC for rate relief. If feasible, staff will prepare and submit an application with the PUC by September 30th to ensure that new rates are in effect by the following July 1st (see The Rate Setting Process for more information).

In October, the Administration and Finance Division presents short and long-term budget directives to all Division Directors and Program Managers. The managers are given online budget files which include the following:

- Budget Calendar
- Program Overview worksheet, which includes the prior fiscal year Major Accomplishments, current year budgeted priorities by key code and Program Objectives
- Performance Measure worksheet with SMART goal standards and outcome and efficiency indicator examples
- Personnel worksheet with salary and benefit rates and guidelines
- Proposed Budget worksheet with budget account detail forms
- Program and Operational change detail forms
- Maintenance Contracts, Service Agreements and Large Operating Account detail forms
- Awards and Recognitions forms

In November, Program Managers are asked to provide their program's mission and overview and operational responsibilities, as well as to submit their program's prior year major accomplishments and top priorities for the upcoming year. Both accomplishments and priorities are identified by a Goal Action for Achievement in connection with each of the seven Strategic Goals. The Goal Actions for Achievement are identified by a key code which is located in the About NBC section of this document.

Development of the Capital Budget begins in November. Program Managers submit their Operating Capital Program (OCP) requests and supply detailed supporting documentation for budget year requests including the need, type and useful life of each asset along with the strategic goal criteria.

The development of the Capital Improvement Program (CIP) also begins in November. Project Managers identify new and completed projects and also provide updated information regarding ongoing capital projects. Project Managers submit cash flow, cost, schedule, and operating expense impact projections for each capital project. Finance staff reviews the CIP operational impacts with Project Managers and the CIP Review Committee also meets in November to review each of the project submittals. Analysis and preparation of the FY 2020-2024 CIP is initiated and staff works closely with the Project Managers. Capital Project Change Requests are due by December 30th. With respect to the Operating Budget, Program Managers submit the section objectives and provide performance data in November.

In January, Program Managers prepare their budget submittals with support from the Finance section. The Finance section conducts mid-year reviews of the current year budget to identify potential issues and trends that should be considered by Program Managers as part of the development of the upcoming budget. After a preliminary review of the draft budgets with Administration and Finance staff, the Division Directors and Program Managers present their budget submittals to the Director of Administration and Finance and the Executive Director in February.

In February, the Capital Budget CIP narrative is developed and the operating impact of CIP projects are finalized and incorporated into the budget. Program Managers must submit Budget Change Requests for their budget and the OCP by February 23rd. The Accounting section reviews the OCP submittals to ensure conformance with NBC's asset policy. The Capital Improvement Program document is drafted and the OCP is prepared during this time.

In March, the Finance section assesses year-to-date budget performance and analyzes funding requests. The proposed Budget undergoes a detailed review by Finance staff and feedback obtained through the rate case process, if any, is used to update revenue and expense projections. With respect to the Capital Budget, preparation of the OCP document continues and it is incorporated into the long-term financial model. The CIP is brought before the Long-Range Planning Committee and Board for review and approval on March 6th.

In April, additional fine-tuning of the Budget takes place. The long-term financial model is updated to incorporate the CIP and the outputs are used to identify the funding sources and uses for the capital budget as well as projected debt service. These outputs, along with the operating expense impacts from the CIP are incorporated into NBC's internal rate model to determine if a rate adjustment is required as well as to develop five-year rate projections. Revenue projections are finalized and final adjustments are made to expense. Finance staff prepares recommended budget adjustments for the Executive Director's review to arrive at a balanced budget. The OCP is brought before the Finance Committee and Board for review and approval on April 10th. A detailed presentation of the proposed budget is presented to the Finance Committee on April 10th.

Drafting of the final Budget document is completed and printed in early May. The Budget and the Authorizing Resolution are presented to the Finance Committee and Board of Commissioners for review and approval at the May 9th Board meeting.

Budget Monitoring and Amendment Procedures

General

- A line item budget is maintained for each cost center. Budget transfers are required to prevent any significant expense overrun on any line item and ensure overall spending is below budget.
- Finance staff reviews the budget versus actual status by cost center monthly and ensures that budget transfers are prepared and processed.
- At each monthly Board of Commissioner's meeting, the monthly financial statements including budget vs. actual status and a summary of applicable operating capital program changes are submitted to the Board and are presented to the Finance Committee.
- Revenue and expense accruals are made at the close of every accounting period in order to reflect the most accurate portrait of the current financial status.

The Rate Setting Process

NBC uses two types of applications for rate relief including 1) a general rate relief application, and 2) a debt service compliance filing for rate relief related to debt service and debt service coverage. With respect to general rate cases, by law the filing is subject to a nine-month review process, resulting in a nine-month period passing prior to new rates being effective. Debt service compliance filings have a shorter review period with PUC decisions rendered typically in less than 90 days.

All filings for rate relief are authorized by NBC’s Board of Commissioners. Staff prepares and files the rate application with the PUC and serves copies to the Rhode Island Division of Public Utilities and Carriers (DPUC) and the Rhode Island Attorney General’s (AG) Office. The DPUC represents the interests of consumers in rate case proceedings and the AG acts as legal counsel to the DPUC. Once an application is filed and determined by the Clerk to substantially conform in all material aspects to the filing requirements, it is assigned a docket number.

Typically the PUC’s legal counsel holds a pre-hearing conference for general rate filings within 60 days of the filing to establish the procedural schedule. NBC provides notice to its customers of the rate application with a billing insert. The rate application and all other documents are posted on the PUC’s website and are made available for public review at the PUC’s office. NBC is represented by legal counsel throughout this process.

General Rate Relief

In addition to specific filing requirements, a rate application will include pre-filed direct testimony and schedules from NBC witnesses, including outside experts that support the application. NBC must respond to data requests from both the PUC and the DPUC during the review process and the DPUC submits pre-filed testimony and schedules to support their position. The PUC holds public hearings in NBC’s service area for ratepayer comment. The NBC may submit pre-filed rebuttal testimony and the DPUC may subsequently file surrebuttal pre-filed testimony. If the NBC and the DPUC agree on most of the issues, the parties may negotiate a settlement agreement which is subject to PUC approval. The PUC conducts hearings to enter the documents into evidence and examine the expert witnesses. The PUC must render a decision within nine months of the filing date which may be a bench decision or through a majority vote at an open meeting. NBC must then make a compliance filing that sets forth the final tariffs. A written Report and Order is issued subsequent to the effective date of the new rates.

Rate Relief for Debt Service and Debt Service Coverage

The PUC first approved the “Debt Service Compliance Filing Mechanism” for rate relief related to debt service and debt service coverage in 2003. This approach includes five-years of projected rate increases required to support NBC’s CIP and has been reauthorized by the PUC three times, most recently for FY 2018 through FY 2023. NBC must request rate relief no later than 60 days prior to the proposed effective date and the request is limited to debt service and debt service coverage. Because the scope is limited, the review process is more expeditious and rate relief is generally granted within 90 days. The public notice requirements also apply to these filings and the PUC conducts a hearing prior to issuing their decision.

Effective Date	Rate History				
	1/1/2013	7/1/2013	9/19/2014	7/1/2015	7/1/2016
Type of Filing	Compliance	General	General	Compliance	Compliance
Purpose	Debt	O&M/Rate Base	O&M/Rate Base	Debt	Debt
Revenue Increase	7.09%	9.32%	3.83%	2.29%	1.48%
User Rate Increase	7.35%	9.67%	3.97%	2.40%	1.53%
Average Annual Residential Fee (150 gpd)	\$403	\$442	\$459	\$470	\$477

Financial Policies

NBC’s financial policies guide the financial management and planning process of NBC. These policies encourage NBC to take a long-term, agency-wide approach to financial planning and incorporate various regulatory and legislative requirements.

Long-Range Planning

- NBC will update and modify the Strategic Plan as needed, to accurately reflect priorities and goals.
- NBC shall update and maintain the long-term financial model, in order to assess the impacts of current and future operating and capital requirements. The model will be used to develop and support financing strategies that will provide stability, continuity and minimize ratepayer impact (for more detail, see the Debt Policy).

Measure of Compliance	FY 2018 Goal	FY 2019 Goal
Review and update of Strategic Plan	Annually	Annually
Update Long-Term Financial Plan	Semi-Annually	Semi-Annually

Revenue Policies

- NBC will develop and seek PUC approval of rates that will result in net revenue (gross revenue less operating expense) at least equal to 125% of the annual debt service to meet the rate covenants as set forth in the Trust Indenture.
- NBC will continually review capital and operating needs to determine if a rate adjustment is required.
- Restricted receipts for debt service and debt service coverage shall be administered in accordance with the Report & Orders from the PUC and the Trust Indenture.

Measure of Compliance	FY 2018 Goal	FY 2019 Goal
File with PUC to maintain sufficient operating and capital funding	No filing	No filing
Revise Capital cash flow projected draw	2 Updates	2 Updates
Update Long-Term Financial Plan	Semi-Annually	Semi-Annually
Prepare monthly financial statements within five business days of month-end	Monthly	Monthly
Prepare the restricted account reporting monthly	100%	100%
Complete trust transfers on the fourth business day before month-end	100%	100%
Perform monthly fund reconciliation	100%	100%
Prepare and transmit capital compliance reports to the PUC	2	2
Transmit restricted account reports to the PUC	4	4

Expense Policies

- All purchases shall be in accordance with NBC’s Purchasing Rules and Regulations and applicable State and Federal legislation.
- The Executive Director shall provide a report to the Finance Committee of all purchase requisitions greater than \$10,000 for items included in the budget. The Executive Director will present all purchase requisitions greater than \$50,000 not included in the budget for approval by the Finance Committee.
- The Finance Committee will review and approve the creation of new positions and the upgrading of existing positions not included in this budget. The Executive Director may post for vacancies of existing positions or newly created positions included in this budget.

Measure of Compliance	FY 2018 Goal	FY 2019 Goal
Purchase requisitions completed within two weeks	100%	100%
Complete 85% of bid specifications within 30 days	85%	85%
Review all contracts three months prior to expiration	100%	100%
Ensure contracts are awarded within 60 days of RFQP	Within 60 days	Within 60 days
Provide Finance Committee with list of requisitions greater than \$10,000	100%	100%

Auditing, Accounting and Financial Statements

- NBC will prepare financial reports in accordance with Generally Accepted Accounting Principles (GAAP) as outlined by the Governmental Accounting Standards Board (GASB).
- An independent audit of NBC's financial statements is performed annually.

Measure of Compliance	FY 2018 Goal	FY 2019 Goal
Receive the GFOA Certificate of Achievement for Excellence in Financial Reporting	16 Years	17 Years
Complete audit by September 30 th	9/30/2018	9/30/2019
Complete audit with clean opinion and no management letter	Yes	Yes
Complete single audit by March 31 st	3/31/2019	3/31/2020
Prepare monthly financial statements within five business days of month-end	Monthly	Monthly
Prepare the restricted account reporting within 25 days of month-end	≤25 days	≤25 days
Perform monthly fund reconciliation within 25 day after month-end	≤25 days	≤25 days
Implement GASB pronouncements that apply to NBC	100%	100%

Budget Policy

- NBC shall prepare a balanced budget in which total expense is equal to total revenue.
- The Finance Committee will review and approve the monthly financial statements, including the status of the budget versus expense, prior to the monthly Board Meeting.
- NBC will monitor the budget to ensure that sufficient resources are available to safely and effectively provide wastewater treatment.

Measure of Compliance	FY 2018 Goal	FY 2019 Goal
Prepare and transmit monthly financial report to NBC's Finance Committee	Monthly	Monthly
Upload and maintain Budget and CIP internet features	Monthly	Monthly
Develop and administer a high quality annual Budget and Capital Budget	Yes	Yes
Receive GFOA Distinguished Budget Presentation Award	16 Years	17 Years
Process 100% of budget transfers 5 days prior to month end	100%	100%
Budget receives a proficient or better rating as a communication device	Yes	Yes
Complete Annual Sewer User Fee Survey	Yes	Yes

Capital Budget Policy

- NBC will adopt and maintain a five-year Capital Budget that includes the Operating Capital Program (OCP) and Capital Improvement Program (CIP) and update it on an annual basis.
- The Capital Budget will be developed within the context of the Strategic Plan's short-term and long-term goals and prioritized based upon strategic importance.
- The Capital Budget will be identified based upon the Asset Management Program as well as system and facility inspections.
- All assets will be purchased in accordance with the Capital Asset Policy.

- All costs associated with the planning, design or construction of capital projects in the CIP shall be included in the asset valuation.
- All OCP allocations will be categorized based upon their asset type.

Measure of Compliance	FY 2018 Goal	FY 2019 Goal
Revise capital cash flow projected draw	2 Updates	2 Updates
Develop and administer a high quality CIP and OCP	Yes	Yes

Financing Policy

- In accordance with the Trust Indenture, subsequent to the fiscal year end, a calculation is made to determine the amount that can be transferred from the Stabilization Account in the Debt Service Fund to the Restricted Accounts in the Project Fund to support the Capital Budget. This is also consistent with the Report and Order from the Rhode Island Public Utilities Commission.
- An additional calculation is performed to allocate funds to the Restricted Account – Operating Capital and Restricted Account – Capital Improvement Program.
- NBC shall ensure capital assets are systematically and accurately recorded, classified and documented in the financial statements in accordance with Generally Accepted Accounting Principles (GAAP).

Debt Policy

- NBC has a significant CIP and recognizes the importance of proper financial and debt management to ensure the successful implementation of its CIP, obtain the highest possible credit ratings and ensure that ratepayer impact is minimized. NBC may issue debt to finance capital improvements as well as to meet short-term operating and capital cash flow needs.
- NBC will maintain a Long-Term Financing Model that takes into consideration the CIP, cash flows, NBC’s annual operating revenue and expense, debt service coverage, State Revolving Fund (SRF) capacity and other relevant items. The long-term financial plan shall be used as the basis for determining debt issuance needs.
- There are a wide variety of financial products available. The Director of Administration and Finance, in conjunction with NBC’s Financial Advisor, will evaluate the options and implement recommendations that will minimize risk and maximize benefits. NBC’s lowest cost of permanent financing is through subsidized SRF loans from the Rhode Island Infrastructure Bank. NBC will use SRF funds to the extent they are available and may issue short or long-term debt in fixed or variable mode to finance its capital program. Variable rate debt may be issued in various modes and NBC may use financial products that will result in either a synthetic variable or a synthetic fixed rate. Short-term debt may also be issued to meet operating cash flow needs.
- NBC may employ one or more financial products to manage interest rate risk and maximize market benefit upon the recommendation of the Director of Administration and Finance and NBC’s Financial Advisor.
- In accordance with Rhode Island General Law (RIGL) 39-3-15, the Division of Public Utilities and Carriers must approve NBC’s issuance of long-term debt.

- The Director of Administration and Finance will determine the issuance method (competitively bid or negotiated) in conjunction with NBC’s Financial Advisor. The method may be modified from time to time as NBC’s needs change or new or modified financial market methods emerge. The issuance method will be modified if a lower effective market interest rate is expected to result.
- Appropriate Ratio Levels:
 - Debt service coverage ratio minimum of 1.25 (calculated as Gross Revenue less Operating Expense (excluding depreciation) divided by annual principal and interest.)
 - Principal maturities for fixed and variable rate debt are not to exceed thirty years.
 - Outstanding long-term maturity variable rate bonds are not to exceed a sum equal to 25% of total long-term fixed rate debt except for the inaugural issue.
- NBC does not have a statutory limit on debt issuance.

Measure of Compliance	FY 2018 Goal	FY 2019 Goal
Credit Rating with Standard & Poor’s	AA-	AA-
Update Long-Term Financial Plan Semi-Annually	Semi-Annually	Semi-Annually
Ensure compliance with federal tax laws and regulations to maintain tax exempt status of NBC’s bond issues	100%	100%
Determine Arbitrage Liability by August 31 st	8/31/2017	8/31/2018
Provide Arbitrage Calculation Information	100%	100%
File with PUC to maintain sufficient operating and capital funding	10/1/2017	10/1/2018
Compliance with Continuing Disclosure Commitments	3/31/2019	3/31/2020

Continuous Disclosure Procedures (in part)

- NBC will file all required financial-based disclosures on the Electronic Municipal Market Access (EMMA), no later than the filing date set forth in the Continuing Disclosure Agreements (CDA).
- The Director of Administration and Finance shall file Significant Events, required under the Securities and Exchange Commission (SEC) Rule 15c2-12 and Notice Events that require disclosure within 10 days of occurrence on EMMA and RIIB.

Measure of Compliance	FY 2018 Goal	FY 2019 Goal
Annual Operating Data and CAFR on EMMA	3/31/2019	3/31/2020
Annual Operating Data and CAFR with RIIB	3/31/2019	3/31/2020
Material Events within 10 days of Occurrence	<10 Days	<10 Days

- NBC’s Chief Compliance Coordinator (CCO) shall be the Director of Administration and Finance. The CCO is responsible for the administration and supervision of NBC’s post-issuance compliance management program.

Measure of Compliance	FY 2018 Goal	FY 2019 Goal
Tax Due Diligence Prior to Issuance	100%	100%
RIGL 35-14-6 Fiscal Integrity & Accountability Report	12/31/2017	12/31/2018
RIGL 42-10.1-9 PFMB Debt Affordability Study	9/30/2017	9/30/2018
RIGL 42-90-1 Government Consultants Disclosure Report	10/1/2017	10/1/2018
Governments Survey of Public Pensions	12/31/2017	12/31/2018

Compliance Reporting (in part)

- NBC will ensure ongoing compliance with applicable federal tax laws and related federal regulations and federal and state statutory requirements to preserve the tax-exempt status of NBC's bond issues.

Measure of Compliance	FY 2018 Goal	FY 2019 Goal
Ensure compliance with federal tax laws and regulations to maintain tax exempt status of NBC's bond issues	100%	100%

- NBC will submit a Fiscal Integrity and Accountability report to the Rhode Island Office of Management and Budget, in accordance with Rhode Island General Law (RIGL) 35-14-6, to report on the adequacy of the agency's systems of internal accounting and administrative control of the previous fiscal year by December 31st of each year.
- In accordance with Rhode Island General Law (RIGL) 42-10.1-9, the Rhode Island Public Finance Management Board (PFMB) requests NBC to report all debt authorized, sold and unsold each fiscal year. The Board compiles and publishes the information from all public state, regional, municipal, and public and quasi-public corporations. NBC submits this report to PFMB by September 30th of each year.
- In compliance with Rhode Island General Law (RIGL) 42-90-1, NBC submits a list of any person, privatization contractor, or vendor who performed professional, technical or consulting services on a contractual basis during the previous fiscal year and the amount of compensation each vendor received. This report is submitted to the Rhode Island Office of Management and Budget by October 1st of each year.
- The U.S. Census Bureau conducts the Annual Survey of Public Pensions as authorized by Title 13, U.S. Code, Sections 161 and 182 and provides revenue, expense, financial assets, membership, and liabilities information for defined benefit public pension systems. These systems are an important component of the nation's government sector. NBC submits responses to the U.S. Census Bureau by December 31st of each year.
- In accordance with the Public Utilities Commission's Report and Order No. 19178 "NBC Non-Union Defined Benefit Plan Compliance Reporting", NBC submits an annual compliance report to the PUC to include:
 - Annual contributions made by NBC and its employees to the Non-Union Defined Contribution Plan
 - Annual contribution NBC makes to the Non-Union Defined Benefit Plan
 - Any changes to the Defined Benefit Plan
 - Total wages paid to non-union employees
 - The cost NBC incurred for administration of the Defined Benefit Plan, including actuary costs
 - NBC's annual actuary report on the Defined Benefit Plan
 - Annual audit report on the Defined Benefit Plan

Unit of Measure	FY 2018 Goal	FY 2019 Goal
Annual Non-Union Retirement Plans Compliance Report to PUC	1	1

- In accordance with the Public Utilities Commission's Report and Order No. 16751 "Capital Projects Compliance Reporting", NBC submits the Restricted Account and Capital Projects Compliance Report.

Unit of Measure	FY 2018 Goal	FY 2019 Goal
Bi-Annual Capital Projects Compliance Report to the PUC	2	2
Quarterly Restricted Accounts Compliance Reporting to PUC	4	4

Investment Policy (in part)

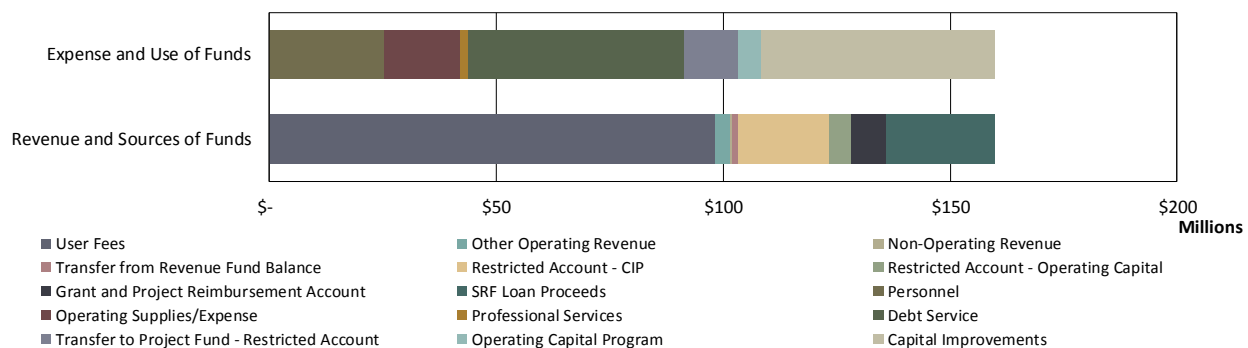
- The “prudent investor” standard shall be applied in the context of managing an overall portfolio.
- Investment of financial assets shall be diversified to minimize the risk of loss that may occur due to concentration in a specific maturity, a specific issuer or a specific class of securities.
- All financial assets shall be invested in a manner that will preserve the value and safety of capital.
- NBC shall invest funds in order to maximize earnings and minimize risk during the period of availability of the funds.
- NBC shall comply with all Federal, State and other legal requirements.

Budget Summary

NBC's budget presentation is new this year. In prior years, the operating and capital budgets were shown separately. This year the presentation has been modified so that the budget summary shows the operating budget and capital budget fully integrated into a consolidated budget. The detail of the Operating Budget is provided in the Operating Budget Section of this document and Capital Budget supporting detail is included in the Capital Budget Section. The FY 2019 Budget is \$159.7 million which is 4.0% or \$6.1 million higher than the prior year.

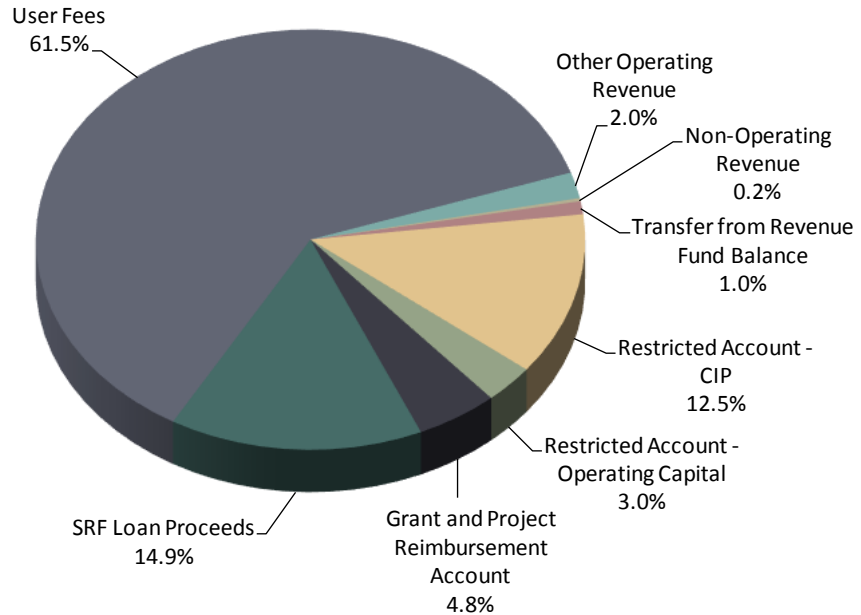
Budget Summary

	FY 2017 Actual	FY 2018 Budget	FY 2019 Budget	Budgeted Difference
Revenue and Sources of Funds				
User Fees	\$ 96,610,156	\$ 97,058,926	\$ 98,225,193	\$ 1,166,267
Pretreatment Fees	1,090,541	1,100,000	1,100,000	-
Septage Fees	328,590	325,000	325,000	-
Connection Permit Fees	145,713	130,000	130,000	-
Late Fees	874,396	900,000	800,000	(100,000)
Customer Service Fees	7,128	6,700	445,100	438,400
Renewable Energy Credits	581,007	371,885	393,099	21,214
Investment Income	80,876	120,000	200,000	80,000
Miscellaneous Non-Operating Revenue	252,508	279,700	187,800	(91,900)
Transfer from Revenue Fund Balance	-	-	1,600,000	1,600,000
Restricted Account - CIP	26,618,486	15,684,322	20,015,021	4,330,699
Restricted Account - Operating Capital	3,872,038	5,310,678	4,752,000	(558,678)
Grant and Project Reimbursement Account	20,969	-	7,715,796	7,715,796
SRF Loan Proceeds	9,853,609	32,327,000	23,828,148	(8,498,852)
Total Revenue and Source of Funds	\$ 140,336,017	\$ 153,614,211	\$ 159,717,157	\$ 6,102,946
Expense and Use of Funds				
Personnel	\$ 23,417,267	\$ 25,264,376	\$ 25,509,996	\$ 245,620
Operating Supplies/Expense	14,310,702	15,308,168	16,468,700	1,160,532
Professional Services	1,078,443	1,236,050	1,689,650	453,600
Debt Service	43,589,827	46,786,894	47,787,187	1,000,293
Transfer to Project Fund - Restricted Account	17,574,676	11,696,723	11,950,659	253,936
Operating Capital Program	3,872,038	5,310,678	4,752,000	(558,678)
Capital Improvements	35,205,347	48,011,322	50,558,965	2,547,643
Debt Service Payment Account	1,287,717	-	450,000	450,000
Cost of Issuance	-	-	550,000	550,000
Total Use of Funds	\$ 140,336,017	\$ 153,614,211	\$ 159,717,157	\$ 6,102,946



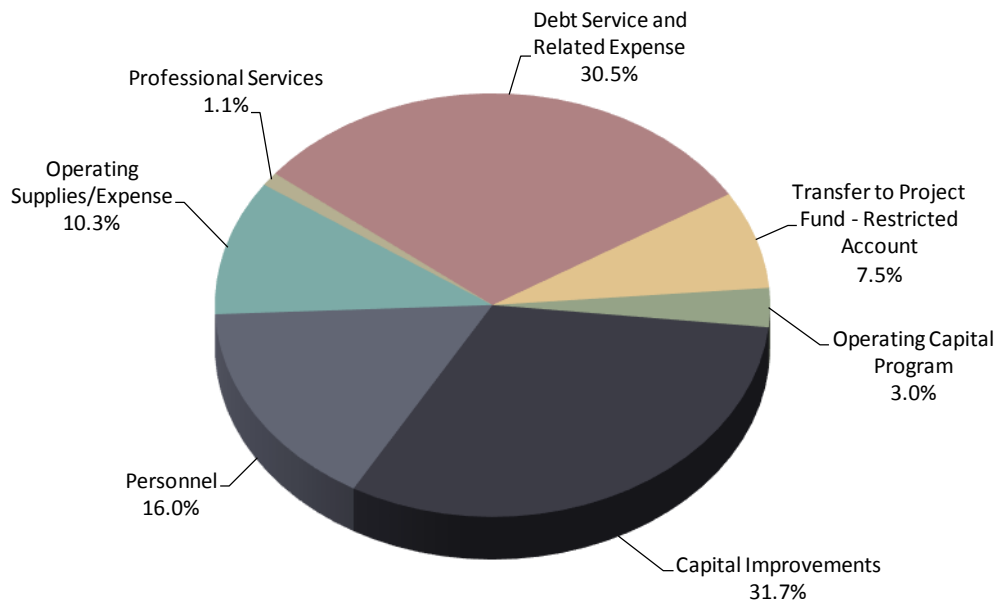
The FY 2019 budgeted revenue and sources of funds is shown in the graph below. FY 2019 budgeted user fees are \$98.2 million and comprise the majority or 61.5% of the revenue and sources of funds. Capital related sources of funds total \$56.3 million or 35.2% of the total.

Revenue and Source of Funds



The graph below shows the FY 2019 budgeted expense and use of funds. The largest programmed line item is \$50.6 million or 31.7% for capital improvements which is followed by debt service at \$47.8 million or 30.5%. Operating expense consisting of personnel, operating supplies/expense and professional services is 27.4% of the total budgeted expense and use in FY 2019.

Expense and Use of Funds



FY 2019 Budget – Key Assumptions

The development of the FY 2019 budget was governed by the following:

Key long-term guidelines:

- The Strategic Plan guides the development of priorities, as well as program objectives and measures; and also determines the strategic value of the capital projects in the Capital Improvement Program (CIP) and the capital assets in the Operating Capital Program (OCP).
- The operating capital policy defines operating capital assets as those with cost greater than \$5,000 and a minimum useful life of three years that are new, replacements, betterments, or renovations.
- The operating budget incorporates the revenue, expense and savings impact of capital projects.

*** Key short-term guidelines:**

- User fee revenue reflects a 2.98% across-the-board rate increase effective February 1, 2019.
- Flat fee revenue is based on the FY 2018 projected flat fees adjusted for projected 0.55% increase in residential dwelling units.
- Consumption fee revenue is based on a three-year average consumption adjusted for a projected increase of 82 thousand HCF for a new large new commercial user.
- Renewable Energy Credit (REC) rates of \$16.25/REC for all types of REC's generated from NBC's renewable energy projects.
- New miscellaneous customer service fees will be in place for the complete budget year.
- The budget includes contracted step increases for union employees and merit increases for non-union employees.
- NBC's FY 2019 contribution rate to the Rhode Island State Retirement System on behalf of participating union employees is unchanged from the prior year at 26.34% in FY 2019.
- NBC's contribution rate to the State Retirement Health Benefit for participating union employees is unchanged from the prior year at 5.97% in FY 2019.
- The health insurance line item reflects a 14.9% increase in the High Deductible Health Plan (HDHP) premium for a family plan. The budget also reflects the transition of all employees enrolled in the HDHP from a Health Savings Account to a Health Reimbursement Arrangement (HRA).
- Dental and vision insurance premiums are unchanged from FY 2018 and Long-Term Disability insurance premiums increased by 2.9% over the prior year level.

- Fringe benefits are budgeted based on actual enrollment and a weighted average for unfilled positions.
- The FY 2019 budget includes funding for six new positions which is partially offset by an increase in the budgeted turnover from two to five positions resulting in a net increase of three FTEs.
- The FY 2019 budget reflects the transfer of the Human Resources and IT functions to the Executive Affairs Division and the transfer of the Risk Management function to the Administration and Finance Division.
- Biosolids expense reflects a projected Consumer Price Index (CPI) adjustment of 3.0% to the contracted biosolids disposal rate and dry tons are based on the two year average dry to production increased by 3.0%.
- An 18.0% budgeted increase in the electricity supply rate to \$0.07476 per kWh effective July 1, 2018 through June 30, 2019.
- Electricity use is based on the two year average usage to the extent that two years of data are available.
- Electricity expense reflects the net impact of NBC's renewable energy sources including the Field's Point wind turbines, the WED wind turbines, the Solar Power Purchase Agreement (PPA) and the Bucklin Point Biogas Reuse project.
- Increase of 15% in the budgeted natural gas supply rate to \$0.5481 and a 43.6% net increase in the number of budgeted therms from the prior year primarily to supplement the biogas reuse facility.
- Chemical rate changes are as follows:

	Price per Unit		
	FY 2018	FY 2019	% Change
Hypochlorite	\$ 0.52090	\$ 0.52090	0.0%
Bisulfite	1.12000	1.12000	0.0%
Sodium Hydroxide	1.69480	1.69480	0.0%
Carbon Feed	2.10000	1.79000	(14.8%)
Polymer-Liquid	1.11000	1.11000	0.0%
Polymer-Powder	1.92000	1.92000	0.0%
Soda Ash	445.000	445.000	0.0%

Other Assumptions:

- A new debt issue of \$45.0 million is programmed in FY 2019, reflecting the results of the Long-Term Financial Planning model that incorporates the cash flow requirements and capital reimbursements identified in the FY 2020-2024 CIP.
- Monthly trust transfers are made in accordance with the Trust Indenture.

Fiscal Year:

NBC’s fiscal year runs from July 1st through the following June, and is numbered with the calendar year in which it ends. The FY 2019 budget year begins July 1, 2018 and ends June 30, 2019. The prior fiscal year or FY 2018 is the 12 month period that ends June 30, 2018.

Basis of Accounting:

The accounting policies of NBC conform to Generally Accepted Accounting Principles (GAAP) as applicable to governmental proprietary fund types (enterprise funds). For enterprise funds, the intent of the governing body is that the expense of providing goods and services to the general public on a continuing basis be financed or recovered through user charges. The financial statements of NBC are prepared using the accrual basis of accounting; however, the budget is adopted on a modified accrual basis of accounting consistent with GAAP. The major difference is how debt service and capital expenditures are reflected.

Basis of Budgeting:

The NBC prepares its budget on a modified accrual basis. Accordingly, revenue must be both measurable and available for the current period. With respect to expense, there are a few differences between how certain items are treated in the financial statements and the budget. Although capital expenditures are depreciated in the financial statements, they are expensed in the budget. In addition, in the financial statements principal payments are shown as a reduction of a liability but they are budgeted as expense. Lastly, depreciation and bad debt expense are included in the financial statements but they are not budgeted or expensed. See the table below for a summary of the differences.

	Basis of Accounting Full Accrual	Basis of Budget Modified Accrual
Revenue Recognition	When earned	When measurable and available
Expense Recognition	When liability incurred	When liability incurred
Capital Expenditures	Increase Asset	Budgeted as expense
Depreciation	Expensed	Not Budgeted as expense
Principal Payments	Reduction of liability	Budgeted as expense
Bad Debt	Expensed	Not budgeted as expense

The Strategic Plan and the FY 2019 Budget

Narragansett Bay is Rhode Island's greatest resource, and the actions of NBC have a significant impact on its water quality. Water quality, in turn, has effects on aquatic life, recreational activities, tourism, waterfront development, and the livelihoods of many who make a living on or near Narragansett Bay. To ensure NBC's ability to meet its water quality objectives within the constraints of a regulated environment, NBC continuously strives to achieve the plan's objectives and goals.

This year's budget was developed using the framework of the assumptions and guidelines discussed on the following pages. The service level objectives and performance levels were developed based upon NBC's Strategic Plan prior to the development of budget figures. Once NBC's priorities were identified on a programmatic basis, program managers identified the resources required to meet these service levels. All programs submitted their budgets and identified variances between the proposed funding levels and the prior year budget. With guidance from the Executive Director, Finance staff assessed short and long-term requirements for each program. The budget was allocated based on these needs and the total resources available. This planning process has resulted in a budget document with an integrated Performance Data section for each program and a greater focus on resource allocation for both operating programs and CIP projects based on NBC's strategic goals.

History of the Strategic Plan

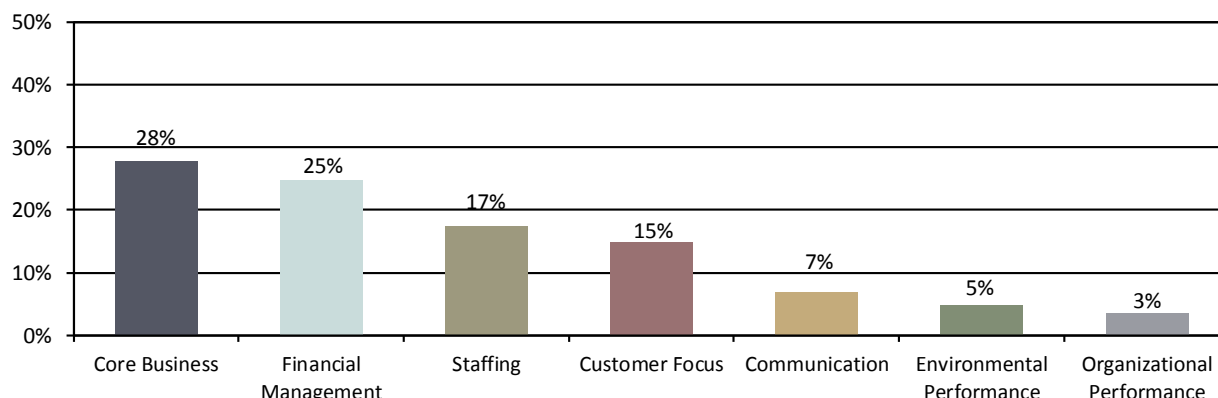
NBC's first Strategic Plan was developed in 2004 with input from the outside stakeholders such as NBC's Commissioners, Citizen Advisory Committee members, regulatory agencies, and other interest groups, as well as NBC staff. The Strategic Plan is a dynamic document and its content was expanded in 2005, 2006, 2011, and again in 2016. NBC strives to achieve the plan's objectives and goals to demonstrate its environmental commitment and ensure compliance with current and future regulatory requirements. The goals of the Strategic Plan are listed below.

NBC'S Strategic Goals

CORE BUSINESS:	Operate, maintain and protect our collection and treatment systems to ensure that all State and Federal requirements are met or surpassed.
ENVIRONMENTAL PERFORMANCE:	Continuously evaluate NBC environmental performance to identify, quantify and minimize NBC impacts to the environment in a cost effective manner.
FINANCIAL MANAGEMENT:	Manage NBC's finances through strong financial planning and controls such that sewer users charges are minimized.
CUSTOMER FOCUS:	Maintain a customer-focused attitude throughout the organization.
STAFFING:	Attract, develop and retain highly qualified employees.
COMMUNICATION:	Improve and enhance internal and external communication to increase understanding of "who we are" and "what we do".
ORGANIZATIONAL PERFORMANCE:	Ensure that the NBC organization is aligned with and supports our strategic goals.

Finance and program managers worked to identify and incorporate Strategic Plan driven actions for achievement, service level objectives, and key target measures into their budgets. The Actions for Achievement or Service Level Objectives are linked to Target Measures and indicate a clear pathway between the long-term and short-term objectives. Program Managers determined that approximately 53% of the Actions for Achievement were aligned to Core Business and Financial Management goals. In addition, 17% of the Actions for Achievement relate to Staffing and 15% to Customer Focus. All of the objectives and measures were reviewed and approved by the Executive Director. The following graph illustrates the percentage of Actions for Achievement aligned with each Strategic Objective.

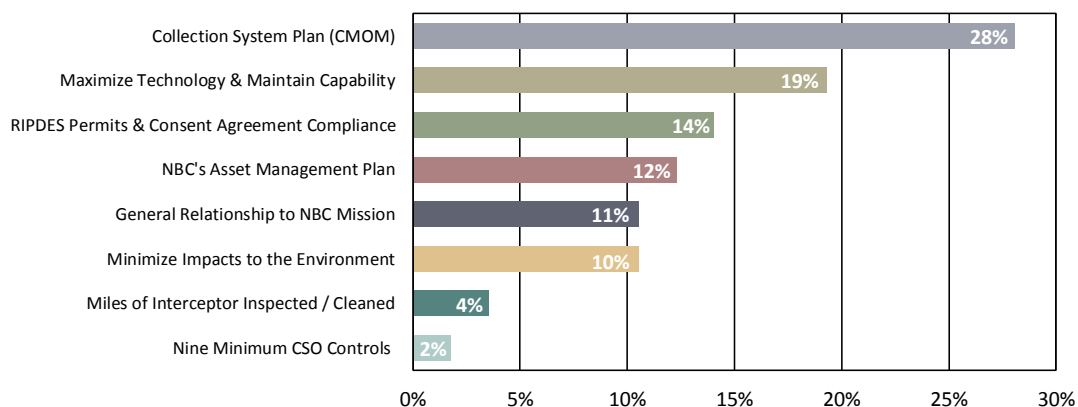
Percentage of Actions for Achievement by Strategic Objective



The Strategic Plan is also integrated into the Capital Improvement Program. Due to the magnitude of the CIP and NBC's funding constraints, NBC evaluated proposed capital investments based on strategic value. As part of the CIP development process, project managers determine the specific strategic goal or goals that the project will address.

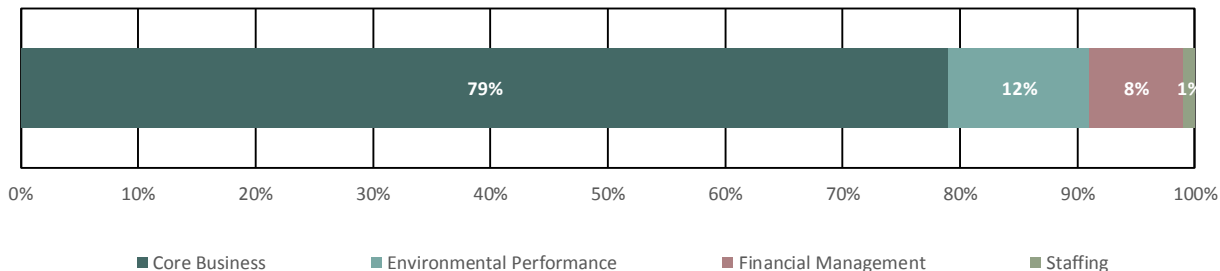
Of the 36 CIP projects, 28% are related to NBC's Collection System Plan strategic objective. These include interceptor restoration and construction projects. In addition, 19% of the projects in the CIP are aligned with the Maximize Technology & Maintain Capability strategic objective and 14% of the projects are aligned with the RIPDES Permit/RIDEM Consent Agreement strategic objective. The remaining projects are aligned with NBC's Asset Management Plan and General Relationship to NBC Mission objectives.

Percentage of Capital for Achievement by Strategic Objective

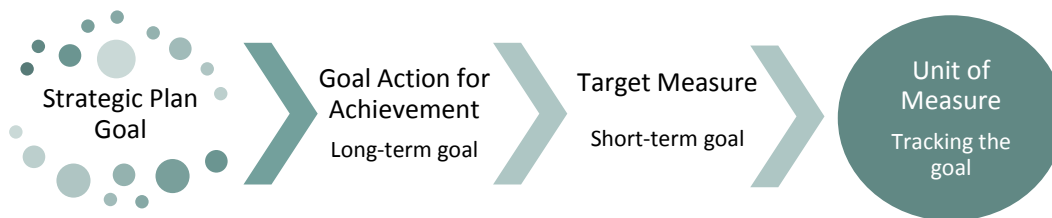


The Strategic Plan is also incorporated into NBC’s Operating Capital Program. Program Managers align each of the proposed capital assets to NBC’s strategic plan goals. This process ensures funds are available to meet both short-term and long-term objectives in order to maintain continuous facility operations and core business functions. Approximately 79% of assets support NBC’s Core Business and include infrastructure, applications and compliance at \$3.7M. In addition, 12% of assets align to NBC’s Environmental Performance and support sampling and laboratory analysis. The following graph shows the percentage of FY 2019 programmed capital assets by strategic goal.

Percentage of Operating Capital for Achievement by Strategic Objective



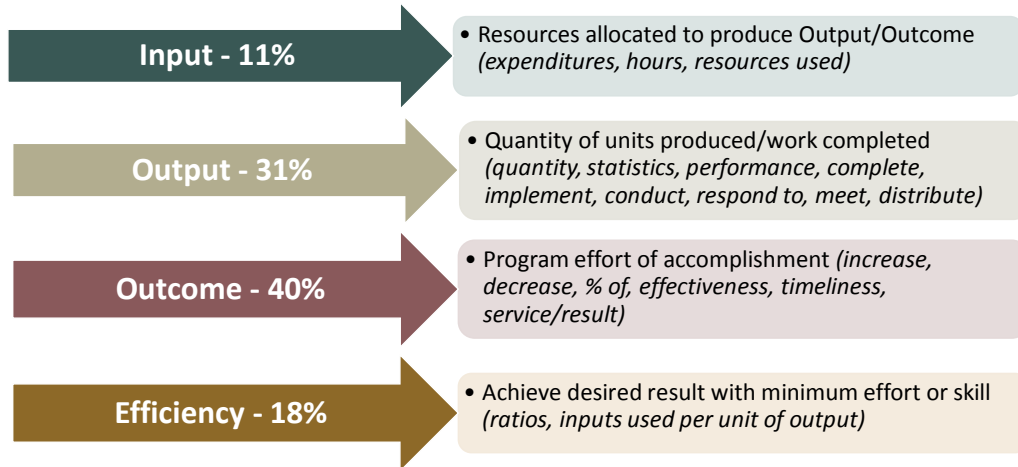
Actions for Achievement or long-term goals are then linked to each Programs target measures or short-term goals by one of four types of performance indicators. The four types of performance indicators are input, output, efficiency, and outcome. A unit of measure is then depicted by the Program Manager in order to track the budgeted goal and actual performance for each of the target measures within their section.



The FY 2019 budget further aligns the performance measures to the S.M.A.R.T goal framework of GFOA. This goal setting framework “ensures the best chance of success for achieving goals” and transitions performance measures to represent indicators of outcome and efficiency. This planning process further ensures the allocation of budgeted resources in line with each Programs short-term service level objections or target measures and the long-term strategic goals for goal actions for achievement. Finance staff worked with each of the Program Managers to ensure performance data aligned with the indicators in accordance with this framework as shown below.

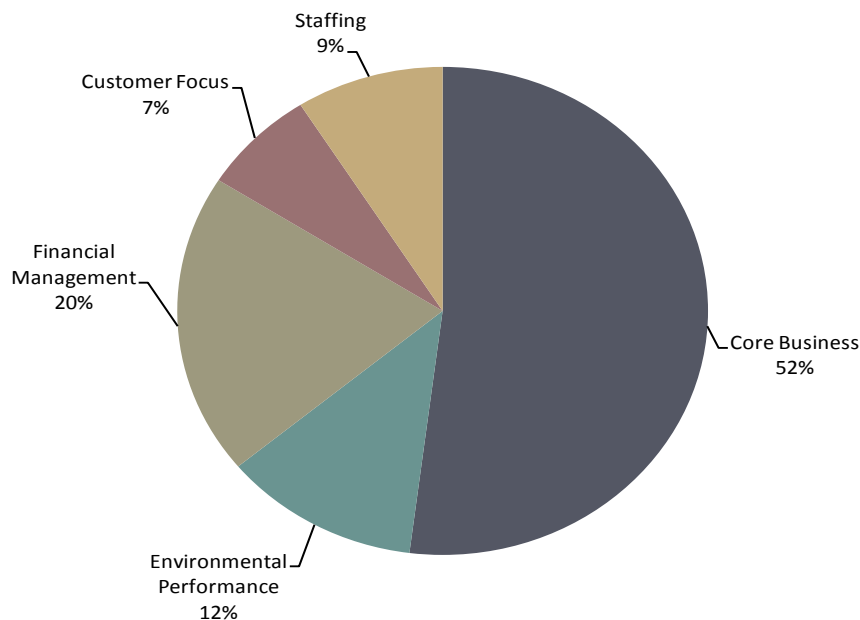
SPECIFIC	A specific goal is more likely to be reached because people know precisely what the objective is
MEASURABLE	Establish standards of evidence for gauging progress toward the goal and whether intended benefits are being realized
ATTAINABLE	Goals should have a certain amount of “stretch” in them – achieving the goal should require going beyond current patterns of performance and ways of thinking
RESULT-ORIENTED	The goal should be focused on results that make a real difference to financial position
TIME-LIMITED	The goal should have a clear timeframe for achievement

The following represents the percentage of the target measures and short term goals by indicator for the entire NBC Organization. Of the 230 target measures, the majority or 40% are Outcome or result related whereas 31% of the measures are Output or quantifiable measures. The remaining 29% correlate to resources used or productivity and are either Efficiency or Input related. Both the Actions for Achievement and the Target Measures are further outlined in the Division Summaries section of this document. Each of the Division summaries further provides a chart outlining their performance data by performance indicator.



This year each section included their top priorities for FY 2019 and indicated the corresponding key code from the Strategic Plan. Additional information regarding these priorities is included in the Division Summaries section of this document. Of the 60 priorities for FY 2019 for the NBC, 31 or 52% are categorized under Core Business followed by Financial Management at 20% or 12 priorities. The following graph shows the percentage of NBC's section's priorities by goal action for achievement.

Fiscal Year 2019 Priorities



Goal Actions for Target Measures by Key Code

Core Business

CB 1	Ensure compliance with all State and Federal regulations, permits, consent agreements, certifications, NBC regulations and reporting requirements
CB 2	Manage the planning, design and construction of NBC's capital improvements in the most cost-effective manner and in compliance with regulatory requirements
CB 3	Ensure the highest level of availability of systems' applications and network stability
CB 4	Maximize efficiency through service automation, applications security and NBC campus security
CB 5	Maintain NBC's asset management program for infrastructure and assets, ensure integrity and maximize the investment

Environmental Performance

EP 1	Minimize environmental impacts and implement conservation and sustainability measures
EP 2	Evaluate the NBC Program and report the data to the public
EP 3	Provide technical assistance to evaluate energy conservation and renewable energy opportunities
EP 4	Provide quality and expedient sample collection, data analyses and water quality monitoring to evaluate NBC's impacts and document improvements

Financial Management

FM 1	Ensure sufficient funding and receive the lowest cost of borrowing with the least rate payer impact
FM 2	Integrate NBC's strategic goals into the allocation of NBC's resources
FM 3	Maximize the efficiency, effectiveness, and accuracy of NBC's rate structures and collection processes to reduce accounts receivable
FM 4	Develop and manage NBC's operating and capital budgets to maximize benefits, minimize expense and unplanned expenditures
FM 5	Comply with IRS, Federal and State Rules and Regulations, Trust Indenture and Generally Accepted Accounting Principles
FM 6	Ensure goods and services are procured, reviewed and processed in a timely, efficient and cost effective manner
FM 7	Initiate and evaluate incentive programs
FM 8	Evaluate savings opportunities and optimize NBC operations and processes

Customer Focus

CF 1	Maintain programs and conduct projects that give back to the community
CF 2	Provide prompt, courteous, efficient and educational services
CF 3	Enhance communications to ensure consistency, reliability and satisfaction
CF 4	Maximize customer focus attitude by providing excellent customer service and developing strong customer relationships
CF 5	Ensure compliance with NBC internal controls

Staffing

S 1	Ensure compliance with Federal and State labor laws
S 2	Foster a positive working environment through effective communication
S 3	Provide professional, technical and/or safety training to optimize team performance and ensure user comfort with systems and processes
S 4	Provide a healthy and safe working environment
S 5	Develop mechanisms and establish opportunities for continued growth and professional development

Communication

C 1	Continue to expand and conduct NBC public outreach programs
C 2	Proactively manage NBC's public and legislative affairs and communicate NBC initiatives and ongoing activities
C 3	Effectively communicate status of capital projects to NBC staff and Board members
C 4	Enhance operating budget, CIP and compliance reports as a communication device
C 5	Strengthen and expand NBC's positive relations with key stakeholders (customers, Board, elected officials/delegates, regulatory officials and the public) to ensure support of NBC's mission

Organizational Performance

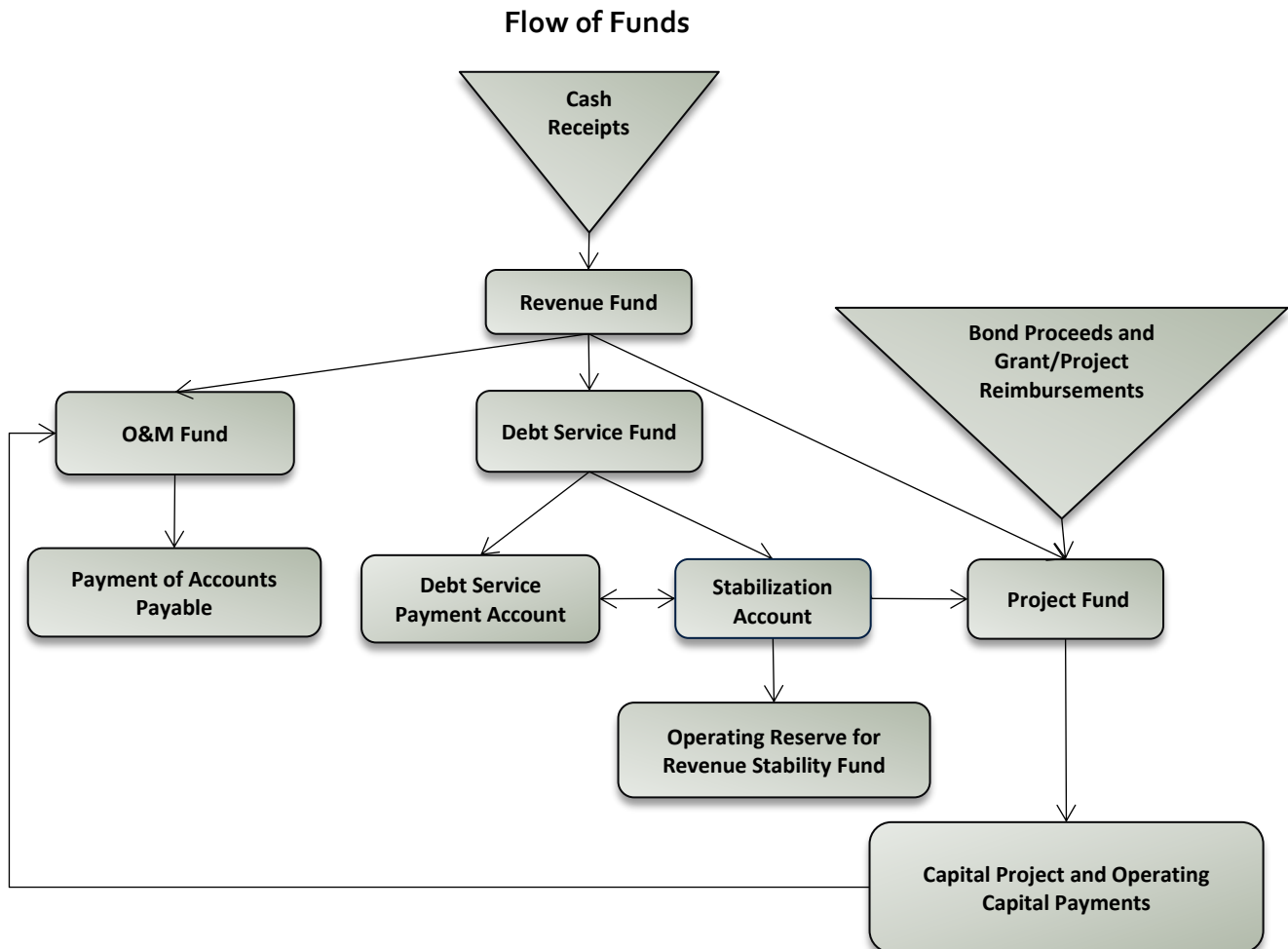
OP 1	Conduct NBC business in an open manner
OP 2	Promote diversity in hiring practices
OP 3	Ensure compliance with State ethics and regulatory agenda filing
OP 4	Provide end-user technology and systems to meet NBC's strategic goals

Trust Indenture and Funds

In accordance with GASB criteria, NBC is considered an Enterprise Fund for accounting purposes. In addition, NBC has several funds established pursuant to a Trust Indenture and First Supplemental Indenture executed on April 15, 2004 by and between NBC and the Trustee. NBC has also executed 24 Supplemental Indentures (see table below), and collectively these are referred to as the “Trust Indenture.”

Indenture Number	Date	Indenture Number	Date
2	December 30, 2004	14	March 29, 2011
3	August 4, 2005	15	June 28, 2012
4	December 15, 2005	16	November 28, 2012
5	December 21, 2006	17	March 21, 2013
6	February 8, 2007	18	June 6, 2013
7	October 15, 2007	19	December 12, 2013
8	December 12, 2007	20	March 6, 2014
9	July 1, 2008	21	October 28, 2014
10	November 1, 2008	22	May 5, 2015
11	October 6, 2009	23	July 30, 2015
12	February 12, 2010	24	June 2, 2016
13	June 24, 2010		

The schematic below provides a general overview of the flow of cash as directed by the Trust Indenture. The schematic is not meant to be a complete representation of the Trust Indenture.



Due to the complexity of the documents, it is difficult to present a detailed description of all of the funds and their interrelationships. The following serves as a brief summary of the twelve funds established pursuant to the documents.

Revenue Fund

- The Revenue Fund is the initial depository for all NBC user fee receipts and other miscellaneous receipts. These funds are transferred to the other funds as required once a month.

Operation and Maintenance Fund

- The Operation and Maintenance (O&M) Fund is used to pay for current operations, administrative, maintenance, ordinary current repairs of NBC's facilities and infrastructure expense.

Debt Service Fund

- The Debt Service Fund is designated for the payment of debt service and also includes the Stabilization Account where debt service coverage funds are held.

Project Fund

- Funds from the Project Fund are designated to pay for improvements and additions to NBC's capital assets. This includes expenditures related to the Capital Budget for the Capital Improvement Program and Operating Capital Program.

Operating Reserve for Revenue Stability Fund

- The Operating Reserve for Revenue Stability Fund may be used when there are insufficient funds in the Revenue Fund to make the monthly transfers to other accounts.

Renewal and Replacement Fund

- The Renewal and Replacement Fund is used for the replacement or renewal of capital assets of the wastewater treatment system and related infrastructure when the expense is not covered by the Project Fund. This fund is not funded.

Debt Service Reserve Fund

- The Debt Service Reserve Fund is used when there are insufficient funds in the Debt Service Fund to cover debt service or a reserve is required as part of a debt issuance. NBC funded a \$3.5M Reserve for the 2013 Series C Wastewater System Revenue Bond issue.

Operation and Maintenance Reserve Fund

- The O&M Reserve Fund is designated to pay current operating expense for NBC whenever monies on deposit in the O&M Fund are deemed insufficient. This Fund is not funded.

Redemption Fund

- The Redemption Fund is used for redemption fees, and/or principal and interest on the redemption of bonds. This Fund is not funded.

Insurance Reserve Fund

- The Insurance Reserve Fund is used should NBC determine that it cannot reasonably obtain required insurance. This Fund is not funded.

Unrestricted Fund

- The Unrestricted Fund is the depository for any cash surplus once all funds and accounts established under the Trust Indenture are funded. These funds may be used for any deficiency in amounts required by other funds. This Fund is not funded.

Rebate Fund

- The Rebate Fund is used should NBC's series of bonds or subordinated bonds issued, become subject to the rebate requirement of Section 148(f) of the Internal Revenue Code.

The Environmental Enforcement Fund is within the Revenue Fund and consists of monies recovered through administrative or civil enforcement action and cannot be used for normal operating expense in accordance with chapter 46-25 of the Rhode Island General Laws. This Fund is insignificant and is not included in the annual budget.

Monthly Trust Transfers

The Trust Indenture establishes the flow of funds and all revenue, with minor exceptions, which must be deposited into the Revenue Fund. On the third day prior to the last business day of each calendar month, the NBC must apply amounts from the Revenue Fund for certain purposes in a specific order. The first such amount applied is the transfer from the Revenue Fund and deposit into the Operation and Maintenance Account in the Operation and Maintenance Fund. The NBC has calculated the FY 2019 monthly transfers for operating expense in accordance with Section 504(2) (i) of the Trust Indenture. The transfer amounts are based on the actual operating expense in FY 2018 multiplied by the percentage increase in the FY 2019 budget, or 10.0%. The FY 2019 monthly Operation and Maintenance Fund transfers are shown in the table below.

O&M Monthly Certified Trust Transfer		
Month		Amount
Jul-18	\$	5,133,197
Aug-18		4,120,321
Sep-18		3,359,201
Oct-18		3,066,579
Nov-18		4,198,115
Dec-18		4,061,515
Jan-19		3,549,079
Feb-19		3,089,336
Mar-19		3,470,895
Apr-19		3,100,774
May-19		3,850,000
Jun-19		3,850,000
	\$	44,849,012

Net Position

The data in this budget has been used to project net position for June 30, 2019, as shown in the table below.

Fund	Net Position	Net Change	Projected	Net Change	Projected
	FY 2017		Net Position		Net Position
			FY 2018		FY 2019
Revenue Fund	\$ 24,855,576	\$ (1,448,694)	\$ 23,406,882	\$ (1,600,000)	\$ 21,806,882
Operation and Maintenance Fund	(17,700,340)	2,255,806	(15,444,534)	-	(15,444,534)
Debt Service Fund	37,958,980	(1,051,130)	36,907,850	(1,033,420)	35,874,430
Project Fund	428,090,486	21,142,001	449,232,487	27,532,748	476,765,235
Operating Reserve for Revenue Stability Fur	4,502,869	(2,869)	4,500,000	-	4,500,000
Renewal and Replacement Fund	-	-	-	-	-
Debt Service Reserve Fund	3,499,229	(2,229)	3,497,000	-	3,497,000
Operation and Maintenance Reserve Fund	-	-	-	-	-
Redemption Fund	-	-	-	-	-
Insurance Reserve Fund	-	-	-	-	-
Unrestricted Fund	-	-	-	-	-
Rebate Fund	-	-	-	-	-
Environmental Enforcement Fund	96,095	(7,800)	88,295	(7,800)	80,495
Net Position	\$ 481,302,895	\$ 20,885,085	\$ 502,187,980	\$ 24,891,528	\$ 527,079,509

Significant changes in the net position are as follows:

Revenue Fund: The Revenue Fund is the initial depository for all NBC receipts except those deposited into the Environmental Enforcement Fund (EEF). The Revenue Fund net position is expected to decrease by \$1.4 million or 5.8% from FY 2017 to FY 2018 and \$1.6 million or 6.8% from FY 2018 to FY 2019. In FY 2018, user fee revenue was less than budgeted, resulting in a decreased net position. The FY 2019 budget includes a Revenue Fund transfer of \$1.6 million that will result in a decrease in net position of the Revenue Fund.

Operation & Maintenance (O&M) Fund: The FY 2017 negative net position reflects the net pension liability recorded as a result of the implementation of GASB Statement 68. From FY 2017 to FY 2018 the O&M Fund net position is expected to increase by \$2.3 million due to the projected budget surplus. No change to the O&M Fund net position is projected between the FY 2018 and FY 2019.

Debt Service Fund: The Debt Service Fund net position is projected to decrease by 2.8% in FY 2017 and in FY 2018 by an additional 2.8%. This decrease is the net result the annual outgoing transfer of prior year coverage to the Project fund, and payment of principal less the transfer for the PUC restricted debt calculation.

Project Fund: In FY 2018, the Project Fund net position is projected to increase by 4.9% or \$21.1 million based upon the March fund balance, projected through June 30, 2018, less the \$5.0 million transfer to the State of Rhode Island. The net position is projected to increase by 6.1% or \$27.5 million in FY 2019, based on the average increase in the project fund for the last two years. The increase in net position is the result of the incoming transfers from the Debt Service Fund for prior year coverage, plus principal payments less the depreciation expense for the fiscal year.

Operating Reserve for Revenue Stability Fund: The PUC maximum cash balance allowed in this fund is \$4.5 million. The net position is returned to this level at fiscal year-end with the transfer of interest earnings to the Revenue Fund.

Renewal & Replacement Fund: This fund has no assets or liabilities and NBC does not plan on using this fund.

Debt Service Reserve Fund: NBC funded a Debt Service Reserve Fund related to the 2013 Series C Wastewater System Revenue Bonds in the amount of \$3.5 million. The net position is returned to this level at fiscal year-end with the transfer of interest earnings to the Revenue Fund.

Redemption Fund: This fund has no assets or liabilities and NBC does not plan on using this fund.

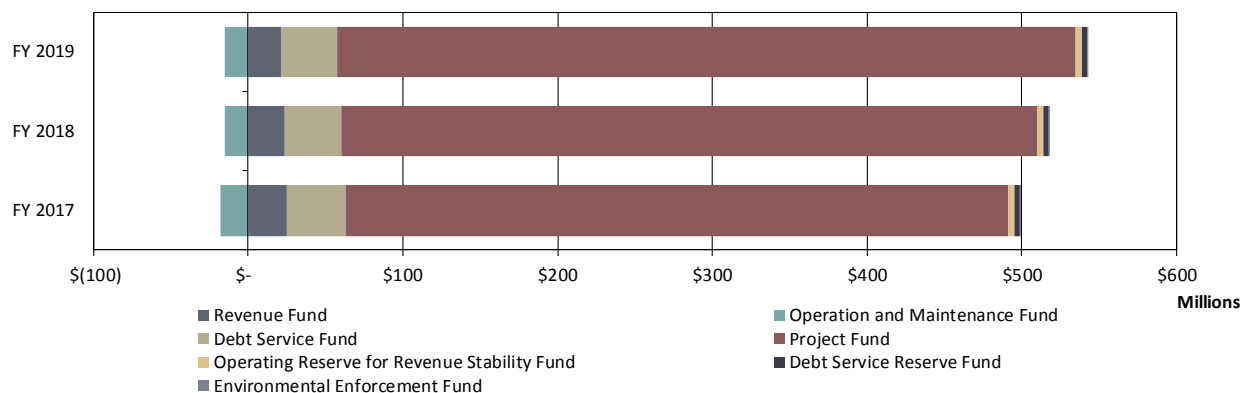
Insurance Reserve Fund: This fund has no assets or liabilities and NBC does not plan on using this fund.

Unrestricted Fund: This fund has no assets or liabilities and NBC does not plan on using this fund.

Rebate Fund: This fund has no assets or liabilities and NBC does not plan on using this fund.

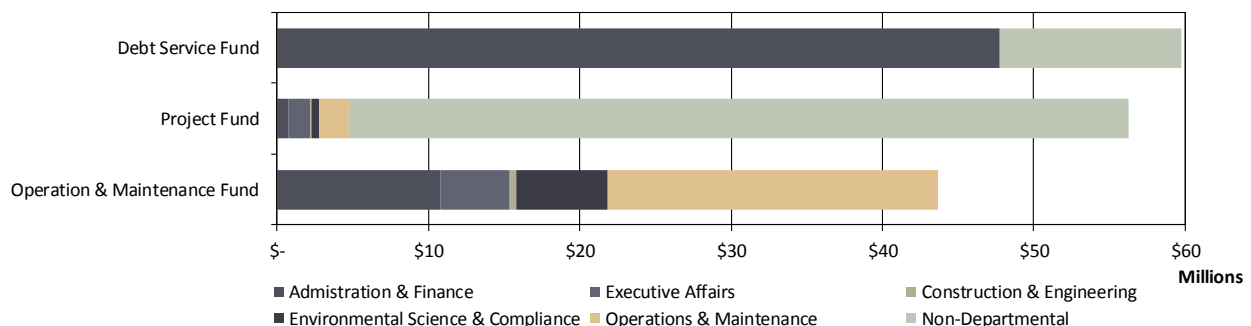
Environmental Enforcement Fund: This fund is not impacted by activity in the budget. A \$7,800 decrease in net position is projected for FY 2018 and FY 2019 as no significant receipts are anticipated and the expense is projected to be at the same level as prior years.

The year-end projected net position for FY 2017, FY 2018 and FY 2019 is shown in the chart below.



The following serves as an overview, showing the relationship between major funds and Divisions / Sections.

Fund - Organization Matrix				
Division / Section	Operation & Maintenance Fund	Project Fund	Debt Service Fund	TOTAL
<u>Executive Affairs</u>				
Executive	\$ 1,467,605	\$ -	\$ -	\$ 1,467,605
Human Resources	495,605	-	-	495,605
Legal	606,662	50,000	-	656,662
IT	2,006,139	1,400,000	-	3,406,139
<i>Subtotal</i>	<i>4,576,011</i>	<i>1,450,000</i>	<i>-</i>	<i>6,026,011</i>
<u>Construction & Engineering</u>				
Construction Services	127,103	30,000	-	157,103
Engineering	317,452	-	-	317,452
<i>Subtotal</i>	<i>444,555</i>	<i>30,000</i>	<i>-</i>	<i>474,555</i>
<u>Administration & Finance</u>				
Finance	3,211,553	500,000	-	3,711,553
Accounting	829,284	75,000	-	904,284
Customer Service	2,654,492	31,000	-	2,685,492
Purchasing	268,084	-	-	268,084
Administration	3,817,997	150,000	47,787,187	51,755,184
<i>Subtotal</i>	<i>10,781,410</i>	<i>756,000</i>	<i>47,787,187</i>	<i>59,324,597</i>
<u>Operations & Maintenance</u>				
IM	2,108,061	54,000	-	2,162,061
Operations & Maintenance Services	1,088,409	160,000	-	1,248,409
Fields Point	11,543,525	823,000	-	12,366,525
Bucklin Point	7,078,134	964,000	-	8,042,134
<i>Subtotal</i>	<i>21,818,129</i>	<i>2,001,000</i>	<i>-</i>	<i>23,819,129</i>
<u>Environmental Science & Compliance</u>				
Water Quality & Compliance	505,218	-	-	505,218
Pretreatment	1,183,634	40,000	-	1,223,634
Lab	2,250,510	255,000	-	2,505,510
ESTA	436,124	-	-	436,124
EMDA	1,672,755	220,000	-	1,892,755
<i>Subtotal</i>	<i>6,048,241</i>	<i>515,000</i>	<i>-</i>	<i>6,563,241</i>
<u>Non-Departmental</u>				
Capital Improvement Program	-	51,558,965	-	51,558,965
Operating Capital Program	-	-	-	-
Transfer to Project Fund - Restricted Account	-	-	11,950,659	11,950,659
<i>Subtotal</i>	<i>-</i>	<i>51,558,965</i>	<i>11,950,659</i>	<i>63,509,624</i>
TOTAL	\$ 43,668,346	\$ 56,310,965	\$ 59,737,846	\$ 159,717,157



RESOLUTION 2018:12

**APPROVAL OF THE NARRAGANSETT BAY COMMISSION
FISCAL YEAR 2019 BUDGET**

WHEREAS, the Narragansett Bay Commission Board of Commissioners (Board) adopts an annual budget; and

WHEREAS, the Board has adopted and approved the FY 2020 – FY 2024 Capital Improvement Program (CIP) and the FY 2019 – FY 2023 Operating Capital Program (OCP); and

WHEREAS, the Finance Committee of the Board reviewed the Proposed Fiscal Year 2019 Budget in detail at the April 10, 2018 meeting;

WHEREAS, the Finance Committee and Board have reviewed the final Fiscal Year 2019 Budget;

NOW THEREFORE BE IT RESOLVED, that the Fiscal Year Budget is hereby approved as follows:

Revenue and Sources of Funds

User Fees	\$ 98,225,193
Pretreatment Fees	1,100,000
Septage Fees	325,000
Connection Permit Fees	130,000
Late Fees	800,000
Customer Service Fees	445,100
Renewable Energy Credits	393,099
Investment Income	200,000
Miscellaneous Non-Operating Revenue	187,800
Transfer from Revenue Fund Balance	1,600,000
Restricted Account - CIP	20,015,021
Restricted Account - Operating Capital	4,752,000
Grant and Project Reimbursement Account	7,715,796
SRF Loan Proceeds	23,828,148
Total Revenue and Source of Funds	<u>\$ 159,717,157</u>

Expense and Use of Funds

Personnel	\$ 25,509,996
Operating Supplies/Expense	16,468,700
Professional Services	1,689,650
Debt Service	47,787,187
Transfer to Project Fund - Restricted Account	11,950,659
Operating Capital Program	4,752,000
Capital Improvements	50,558,965
Debt Service Payment Account	450,000
Cost of Issuance	550,000
Total Expense and Use of Funds	<u>\$ 159,717,157</u>

BE IT FURTHER RESOLVED; the FY 2019 Budget shall be administered as follows:

1. The Executive Director shall at all times seek to ensure that total operating and maintenance expense including debt service expense does not exceed \$91,455,532 for the period July 1, 2018 to June 30, 2019.
2. The number of full-time equivalent positions funded in the FY 2019 budget is 275. A list of the funded positions is included as part of this Resolution as Attachment 1.
3. Personnel Committee review and approval is required for the creation of new positions and the upgrading of existing positions not included in this budget. Finance Committee approval is also required if the action will result in a net increase in operating costs.
4. The Executive Director may post and fill vacancies of existing positions, modified positions or newly created positions included in this budget as well as positions added or modified in accordance with item 3 above.
5. The budget includes a 5.0% employer contribution to the non-union defined contribution retirement plan, funding of the employer share of the non-union defined benefit plan and an employer contribution to the union retirement plan at the rate established by the State Retirement Board. Budgeted operating and maintenance funds unspent at the end of the fiscal year may be used to increase the employer contribution to the non-union defined benefit plan as long the action does not impair NBC from meeting its coverage requirements.
6. The Executive Director shall report all purchase requisitions greater than \$10,000 for items included in the budget to the Finance Committee. The Executive Director shall present purchase requisitions greater than \$50,000 not included in this budget to the Finance Committee for approval.
7. The Executive Director shall administer this budget consistent with the restricted accounts as so ordered by the Public Utilities Commission until such time as the restricted accounts are modified, adjusted or amended.
8. The Executive Director shall administer this budget consistent with the Trust Indenture and all Supplemental Trust Indentures.
9. The Executive Director is hereby authorized to expend funds on capital projects for preliminary planning, staff time and other services in order to assess project need, scope and feasibility prior to project review and approval by the Board for inclusion in the CIP and/or as separate stand-alone projects.
10. The Director of Administration and Finance is hereby authorized to finance the FY 2019 Operating Capital Program (OCP) and capital projects included in the NBC's FY 2020 - 2024 Capital Improvement Program from the Project Fund-Restricted Account. Capital payments by month and source shall be included in the monthly financial report submitted to the Board.
11. The Director of Administration and Finance is hereby authorized to make adjustments (transfers) between Operating Budget line items within categories and adjustments between cost centers. These budget transfers shall be included in the monthly financial report submitted to the Board.
12. The Director of Administration and Finance may authorize changes to the FY 2019 Operating Capital Program as long as the total expenditures do not exceed the total amount approved for the budget year. Any changes to the FY 2019 Operating Capital Program shall be presented to the Finance Committee as part of the monthly financial report.

13. The Director of Administration and Finance is hereby authorized to modify budgeted Capital Improvement Program (CIP) funding sources as required to meet CIP cash draw needs, funding restrictions or emergencies.

14. The Director of Administration and Finance shall prepare and submit a monthly financial report which shall include monthly financial statements, a detailed budget versus expense report, capital payments by month and source, operating budget transfers and changes to the OCP, and other related information. The monthly financial report shall be provided to the Board and presented to the Finance Committee for review prior to a regularly scheduled Board meeting.

ADOPTED ON: _____

SIGNED: _____

JOB CODE	TITLE	FTE's	UNION/NON-UNION
<u>Executive</u>			
EX010	Director of Administration	1	Non-Union
EX005	Environmental Education Coordinator	1	Non-Union
EX003	Executive Assistant	1	Non-Union
EX001	Executive Director	1	Non-Union
EX007	Government Affairs Manager	1	Non-Union
EX008	Labor & Employee Relations Manager	1	Non-Union
EX004	Public Affairs Manager	1	Non-Union
EX006	Public Affairs Specialist	1	Non-Union
		8	
<u>Human Resources</u>			
HR004	Human Resources Clerk	1	Union
HR001	Human Resources Manager	1	Non-Union
HR003	Human Resources Representative/Benefits Coordinator	1	Non-Union
HR002	Senior Human Resources Representative	1	Non-Union
		4	
<u>Legal</u>			
LE003	Chief Legal Counsel	1	Non-Union
NEW	General Counsel	1	Non-Union
LE005	Executive Paralegal	1	Non-Union
LE007	Executive Paralegal II	1	Non-Union
LE001	Legal Counsel	1	Non-Union
LE004	Legal Counsel	1	Non-Union
		6	
<u>Construction Services</u>			
CG002	Construction Manager	1	Non-Union
CG006	Construction Office Coordinator	1	Non-Union
CG009	CSO Construction Manager	1	Non-Union
CG001	Director of Construction & Engineering	1	Non-Union
CG015	Engineering Construction Coordinator	1	Non-Union
CG010	Mechanical Inspector	1	Non-Union
CG007	Resident Representative	1	Non-Union
CG008	Resident Representative	1	Non-Union
CG013	Resident Representative	1	Non-Union
CG003	Senior Construction Coordinator	1	Non-Union
		10	
<u>Engineering</u>			
NEW	CSO Program Manager	1	Non-Union
EC002	Engineering Manager	1	Non-Union
EC005	Environmental Engineer	1	Non-Union
EC001	Facilities Engineer	1	Non-Union
EC006	Permits Coordinator	1	Non-Union
EC003	Principal Environmental Engineer	1	Non-Union
EC004	Principal Environmental Engineer	1	Non-Union
		7	

JOB CODE	TITLE	FTE's	UNION/NON-UNION
<u>Finance</u>			
FI001	Chief Financial Officer	1	Non-Union
FI005	Compliance Analyst	1	Non-Union
FI004	Financial Analyst	1	Non-Union
FI011	Insurance Coordinator	1	Non-Union
FI010	Programs Analyst	1	Non-Union
FI009	Rate Analyst	1	Non-Union
FI007	Senior Budget Analyst	1	Non-Union
		<u>7</u>	
<u>Accounting</u>			
AC001	Accounting Manager	1	Non-Union
AC011	Capital Accounting Assistant	1	Non-Union
AC006	Capital Principal Accountant	1	Non-Union
AC003	Fiscal Clerk	1	Union
AC005	Payroll Administrator	1	Non-Union
AC004	Payroll Supervisor	1	Non-Union
AC007	Principal Accountant	1	Non-Union
AC002	Senior Fiscal Clerk	1	Union
AC008	Staff Accountant	1	Non-Union
AC010	Staff Accountant	1	Non-Union
		<u>10</u>	
<u>Information Technology</u>			
IT003	Computer Training Support Specialist	1	Non-Union
IT001	Information Technology Manager	1	Non-Union
IT007	Junior Network & Communications Administrator	1	Non-Union
IT010	PC/Phone Support/Systems Administrator Specialist	1	Non-Union
IT014	Senior .Net Developer	1	Non-Union
IT005	Senior Applications System Supervisor	1	Non-Union
IT008	Senior Database & Linux Administrator	1	Non-Union
IT009	Senior Database Administrator	1	Non-Union
IT002	Senior Network & Communications Administrator	1	Non-Union
IT004	Senior Systems Administrator	1	Non-Union
IT013	Senior Systems Development Programmer	1	Non-Union
IT012	Systems Design Programmer	1	Non-Union
		<u>12</u>	
<u>Customer Service</u>			
CS027	Assistant Billing Supervisor	1	Non-Union
NEW	Assistant Billing Supervisor	1	Non-Union
CS028	Assistant Collections Supervisor	1	Non-Union
CS008	Billing Supervisor	1	Non-Union
CS029	Collections Analyst	1	Non-Union
CS025	Collections Supervisor	1	Non-Union
CS003	Customer Research Supervisor	1	Non-Union
CS004	Customer Service Analyst	1	Non-Union
CS005	Customer Service Analyst	1	Non-Union

JOB CODE	TITLE	FTE's	UNION/NON-UNION
CS001	Customer Service Manager	1	Non-Union
CS013	Customer Service Representative	1	Union
CS014	Customer Service Representative	1	Union
CS016	Customer Service Representative	1	Union
CS017	Customer Service Representative	1	Union
CS018	Customer Service Representative	1	Union
CS020	Customer Service Representative	1	Union
CS024	Customer Service Representative	1	Union
CS026	Customer Service Representative - Fiscal Clerk	1	Union
CS019	Customer Service Representative - Fiscal Clerk	1	Union
CS006	Customer Service Support Supervisor	1	Non-Union
CS009	Field Investigator	1	Union
CS010	Field Investigator	1	Union
CS011	Field Investigator	1	Union
CS022	Fiscal Clerk - Customer Service	1	Union
CS021	Senior Fiscal Clerk	1	Union
		<u>25</u>	
<u>Purchasing</u>			
PU005	Office Administrator	1	Non-Union
PU002	Purchasing Coordinator	1	Non-Union
PU001	Purchasing Manager	1	Non-Union
		<u>3</u>	
<u>Interceptor Maintenance</u>			
IM002	Assistant Interceptor Maintenance Manager	1	Non-Union
IM006	Clerk	1	Union
IM027	Environmental Engineer	1	Non-Union
IM004	Interceptor Maintenance Inspector	1	Non-Union
IM001	Interceptor Maintenance Manager	1	Non-Union
NEW	Interceptor Maintenance Supervisor	1	Non-Union
IM003	Interceptor Maintenance Senior Supervisor	1	Non-Union
IM031	Instrumentation Engineer	1	Non-Union
IM011	Operator III	1	Union
IM012	Operator III	1	Union
IM013	Operator IV	1	Union
IM014	Operator II	1	Union
IM015	Operator II	1	Union
IM019	Operator II	1	Union
IM020	Operator II	1	Union
IM021	Operator II	1	Union
IM025	Operator II	1	Union
IM029	Operator IV	1	Union
IM030	Operator III	1	Union
IM005	Senior Technical Assistant	1	Non-Union
		<u>20</u>	

JOB CODE	TITLE	FTE's	UNION/NON-UNION
<u>Operations & Maintenance Services</u>			
EN015	Asset Management Administrator	1	Non-Union
EN014	Assistant Control Systems Administrator	1	Non-Union
EN013	Control Systems Administrator	1	Non-Union
EN016	Control Systems Associate	1	Non-Union
EN001	Director of Operations & Maintenance	1	Non-Union
EN012	Operations & Maintenance Fiscal Coordinator	1	Non-Union
		6	
<u>Field's Point</u>			
FP002	Assistant Operations Manager	1	Non-Union
FP003	Clerk	1	Union
FP038	Electronics & Instrumentation Technician	1	Union
FP070	Electronics & Instrumentation Technician	1	Union
FP063	Electrician	1	Union
FP058	Fleet Mechanic	1	Union
FP046	Inventory Control Clerk	1	Union
FP047	Inventory Control Clerk	1	Union
FP061	Lead Electrician	1	Union
FP045	Maintenance Manager	1	Non-Union
FP013	Maintenance Supervisor	1	Non-Union
FP073	Maintenance Supervisor	1	Non-Union
FP049	Mechanic II	1	Union
FP050	Mechanic II	1	Union
FP051	Mechanic II	1	Union
FP053	Mechanic I	1	Union
FP054	Mechanic I	1	Union
FP056	Mechanic I	1	Union
FP057	Mechanic I	1	Union
FP065	Mechanic I	1	Union
FP066	Mechanic II	1	Union
FP069	Mechanic II	1	Union
FP541	Mechanic I	1	Union
FP008	Operations & Maintenance Coordinator	1	Non-Union
FP005	Operations & Maintenance Technician	1	Non-Union
FP001	Operations Manager	1	Non-Union
FP009	Operations Supervisor	1	Non-Union
FP010	Operations Supervisor	1	Non-Union
FP011	Operations Supervisor	1	Non-Union
FP012	Operations Supervisor	1	Non-Union
FP015	Operations Supervisor	1	Non-Union
FP027	Operator/HEO	1	Union
FP025	Operator II	1	Union
FP026	Operator II	1	Union
FP030	Operator I	1	Union
FP032	Operator I	1	Union
FP034	Operator I	1	Union

JOB CODE	TITLE	FTE's	UNION/NON-UNION
FP043	Operator I	1	Union
FP044	Operator I	1	Union
FP128	Operator I	1	Union
FP129	Operator I	1	Union
FP139	Operator I	1	Union
FP016	Process Monitor	1	Union
FP017	Process Monitor	1	Union
FP018	Process Monitor	1	Union
FP019	Process Monitor	1	Union
FP020	Process Monitor	1	Union
FP021	Process Monitor	1	Union
FP023	Process Monitor	1	Union
FP024	Process Monitor	1	Union
NEW	Process Monitor	1	Union
FP072	Senior Electrician	1	Union
FP059	Senior Electronics & Instrumentation Technician	1	Union
FP022	Senior Process Monitor	1	Union
		<hr/>	
		54	

Bucklin Point

BP055	Asset Management Assistant	1	Union
BP040	Assistant Electronics & Instrumentation Technician	1	Union
BP039	Assistant Maintenance Planner/Scheduler	1	Union
BP041	Assistant Operations Manager	1	Non-Union
BP047	Clerk	1	Union
BP031	Electrical Foreman	1	Union
BP022	Electrician	1	Union
BP032	Electrician	1	Union
BP030	Electronics & Instrumentation Technician	1	Union
BP021	Heavy Equipment Operator	1	Union
BP033	Inventory Control Clerk	1	Union
BP042	Maintenance Manager	1	Non-Union
BP023	Maintenance Planner/Scheduler	1	Union
BP054	Maintenance Supervisor	1	Non-Union
BP024	Mechanic I	1	Union
BP026	Mechanic I	1	Union
BP029	Mechanic I	1	Union
BP034	Mechanic II	1	Union
BP035	Mechanic II	1	Union
BP048	Mechanic II	1	Union
BP103	Operations Foreman	1	Union
BP001	Operations Manager	1	Non-Union
BP043	Operations Supervisor	1	Non-Union
BP044	Operations Supervisor	1	Non-Union
BP045	Operations Supervisor	1	Non-Union
BP046	Operations Supervisor	1	Non-Union
BP011	Operator II	1	Union

JOB CODE	TITLE	FTE's	UNION/NON-UNION
BP012	Operator II	1	Union
BP013	Operator I	1	Union
BP016	Operator I	1	Union
BP017	Operator I	1	Union
BP025	Operator I	1	Union
BP037	Operator I	1	Union
BP519	Operator I	1	Union
NEW	Operator I	1	Union
NEW	Operator I	1	Union
BP005	Process Monitor	1	Union
BP006	Process Monitor	1	Union
BP007	Process Monitor	1	Union
BP008	Process Monitor	1	Union
BP009	Process Monitor	1	Union
BP050	Process Monitor	1	Union
BP051	Process Monitor	1	Union
BP052	Process Monitor	1	Union
BP053	Process Monitor	1	Union
BP049	Senior Electronics & Instrumentation Technician	1	Union
BP004	Utility Crew Foreman	1	Union
		<u>47</u>	
<u>Water Quality & Compliance</u>			
PE001	Director of Environmental Science & Compliance	1	Non-Union
PE002	Environmental Coordinator	1	Non-Union
PE006	Environmental Scientist	1	Non-Union
PE004	Planning Manager	1	Non-Union
		<u>4</u>	
<u>Pretreatment</u>			
PT002	Assistant Pretreatment Manager	1	Non-Union
PT014	Pretreatment Clerk	1	Union
PT015	Pretreatment Clerk	1	Union
PT016	Pretreatment Clerk	1	Union
PT004	Pretreatment Engineer	1	Non-Union
PT008	Pretreatment Engineer	1	Non-Union
PT001	Pretreatment Manager	1	Non-Union
PT009	Pretreatment Technician	1	Non-Union
PT010	Pretreatment Technician	1	Non-Union
PT011	Pretreatment Technician	1	Non-Union
PT012	Pretreatment Technician	1	Non-Union
PT013	Pretreatment Technician	1	Non-Union
PT003	Principal Pretreatment Engineer	1	Non-Union
PT018	Senior Pretreatment Technician	1	Non-Union
		<u>14</u>	

JOB CODE	TITLE	FTE's	UNION/NON-UNION
<u>Laboratory</u>			
LA002	Assistant Laboratory Manager	1	Non-Union
LA005	Biologist	1	Union
LA008	Chemist	1	Union
LA009	Chemist	1	Union
LA015	Clerk	1	Union
LA006	Environmental Chemist	1	Non-Union
LA011	Environmental Chemist	1	Non-Union
LA001	Laboratory Manager	1	Non-Union
LA020	Quality Chemist	1	Non-Union
LA007	Sample Compliance Coordinator	1	Non-Union
LA004	Senior Environmental Chemist	1	Non-Union
LA003	Senior Organic Chemist	1	Non-Union
LA012	Technician	1	Union
LA013	Technician	1	Union
LA017	Technician	1	Union
LA018	Technician	1	Union
LA510	Technician	1	Union
		<u>17</u>	
<u>Environmental Safety & Technical Assistance</u>			
EA502	Environmental Compliance Technical Assistant	1	Non-Union
EA001	Environmental Safety & Technical Assistance Manager	1	Non-Union
EA003	Environmental Sustainability Engineer	1	Non-Union
EA504	Safety Compliance Coordinator	1	Non-Union
		<u>4</u>	
<u>Environmental Monitoring & Data Analysis</u>			
EM002	Assistant Environmental Monitoring Manager	1	Non-Union
EM017	Clerk	1	Union
EM022	Environmental Data Analyst	1	Non-Union
EM009	Environmental Monitor	1	Union
EM011	Environmental Monitor	1	Union
EM012	Environmental Monitor	1	Union
EM013	Environmental Monitor	1	Union
EM014	Environmental Monitor	1	Union
EM015	Environmental Monitor	1	Union
EM016	Environmental Monitor	1	Union
EM021	Environmental Monitor	1	Union
EM001	Environmental Monitoring Manager	1	Non-Union
EM003	Environmental Scientist	1	Non-Union
EM004	Environmental Scientist	1	Non-Union
EM007	Monitoring Field Supervisor	1	Non-Union
EM008	Monitoring Field Supervisor	1	Non-Union
EM506	Monitoring Field Supervisor	1	Non-Union
		<u>17</u>	
	TOTAL FTEs	<u><u>275</u></u>	



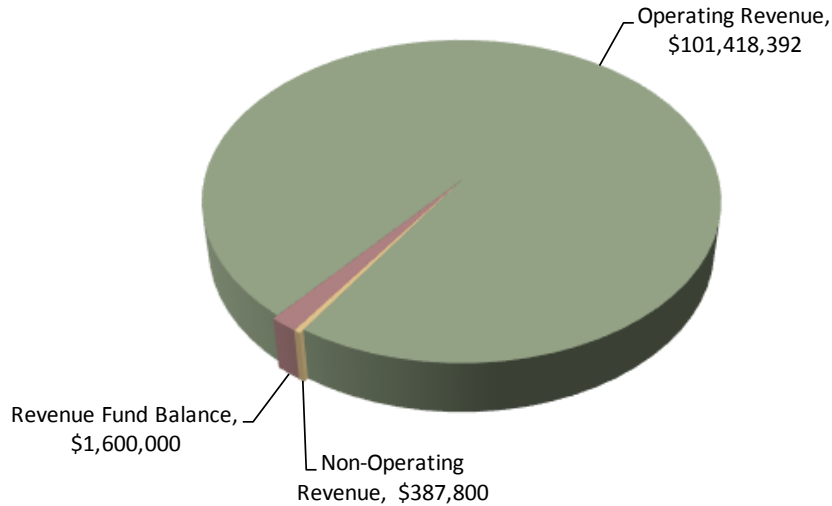
Operating Budget

NBC has refined the budget presentation of revenue as operating or non-operating this year to be consistent with how it is shown in the financial statements. In addition, beginning in FY 2019, the Operating Capital Program is in a separate stand-alone document similar to NBC's CIP. As a result, revenue and expense associated with operating capital has been removed from the operating budget. Lastly, NBC has renamed the debt service coverage line item to the Transfer to the Project Fund - Restricted Account consistent with the language in the Trust Indenture. NBC's FY 2019 Operating Budget is \$103.4 million which is 3.1% or \$3.1 million higher than the prior year.

	FY 2017 Actual	FY 2018 Budget	FY 2019 Budget	Budgeted Difference
Revenue				
Operating Revenue:				
User Fees	\$ 96,610,156	\$ 97,058,926	\$ 98,225,193	\$ 1,166,267
Pretreatment Fees	1,090,541	1,100,000	1,100,000	-
Septage Income	328,590	325,000	325,000	-
Connection Fees	145,713	130,000	130,000	-
Late Fees	874,396	900,000	800,000	(100,000)
Customer Service Fees	7,128	6,700	445,100	438,400
Renewable Energy Credits	581,007	371,885	393,099	21,214
<i>Total Operating Revenue</i>	99,637,531	99,892,511	101,418,392	1,525,881
Non-Operating Revenue:				
Investment Income	80,876	120,000	200,000	80,000
Miscellaneous	252,508	279,700	187,800	(91,900)
<i>Total Non-Operating Revenue</i>	333,384	399,700	387,800	(11,900)
Transfer from Revenue Fund Balance	-	-	1,600,000	1,600,000
Total Revenue	\$ 99,970,915	\$ 100,292,211	\$ 103,406,192	\$ 3,113,981
Expense				
Operations and Maintenance Expense:				
Personnel	\$ 23,417,267	\$ 25,264,376	\$ 25,509,996	\$ 245,620
Operating Supplies/Expense	14,310,702	15,308,168	16,468,700	1,160,532
Professional Services	1,078,443	1,236,050	1,689,650	453,600
<i>Total O & M</i>	38,806,412	41,808,594	43,668,346	1,859,752
Debt Service:				
Principal	25,783,150	27,529,555	28,801,973	1,272,418
Interest	17,806,677	19,257,339	18,985,214	(272,125)
<i>Total Debt Service</i>	43,589,827	46,786,894	47,787,187	1,000,293
Transfer to Project Fund - Restricted Account	17,574,676	11,696,723	11,950,659	253,936
Total Expense	\$ 99,970,915	\$ 100,292,211	\$ 103,406,192	\$ 3,113,981

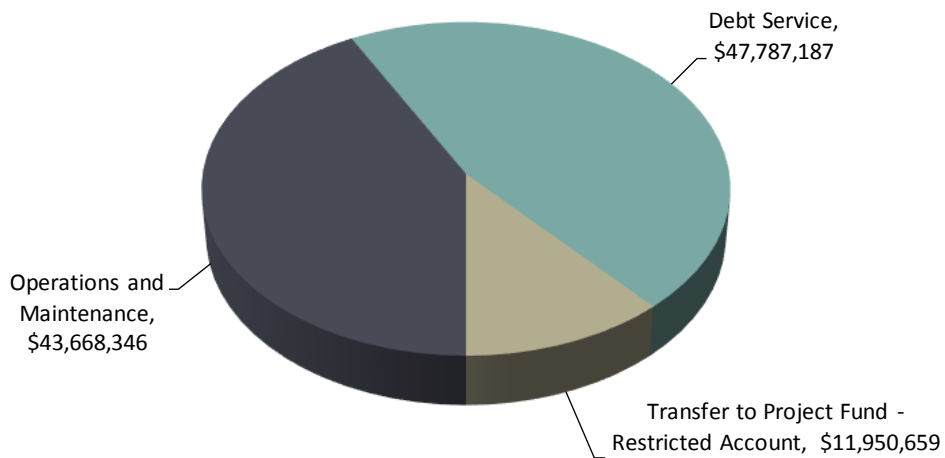
The Budget Overview on the previous page shows that budgeted operating revenue is \$1.5 million or 1.5% higher than last year’s budget. Total projected revenue for FY 2019 is approximately \$103.4 million, with User Fees being the most significant source of revenue at \$98.2 million or 95.0%. User fee revenue includes a 2.98% across-the-board increase, effective February 1, 2019. The chart below illustrates the sources of FY 2019 budgeted revenue.

Sources of Revenue



The largest category of expense in FY 2019 is Debt Service, which is approximately \$47.8 million and represents 46.2% of total uses of revenue. A \$45.0 million debt issuance is anticipated in FY 2019. Budgeted Operations and Maintenance expense is \$43.7 million or 42.2%. The budget also includes a Transfer to the Project Fund – Restricted Account of \$11.9 million. The chart below illustrates FY 2019 budgeted uses of revenue.

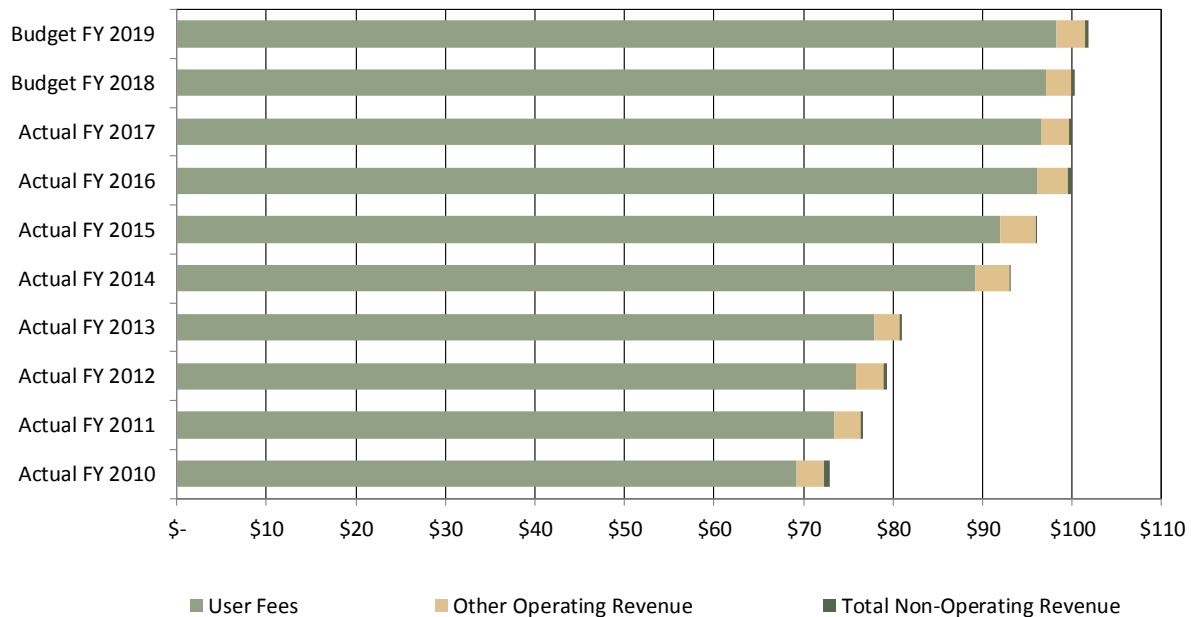
Uses of Revenue



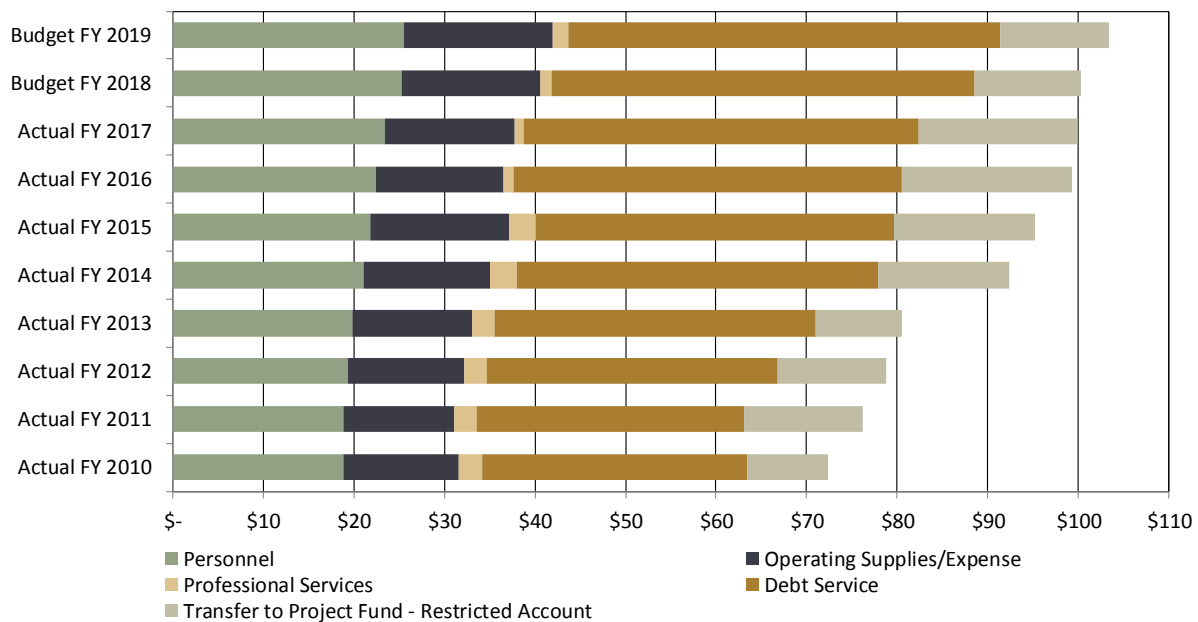
Historical Overview

Revenue has grown significantly over the past ten years, primarily to support the debt service and debt service coverage associated with NBC’s capital program. The charts on this page represent a ten year historical overview of NBC’s revenue and expense.

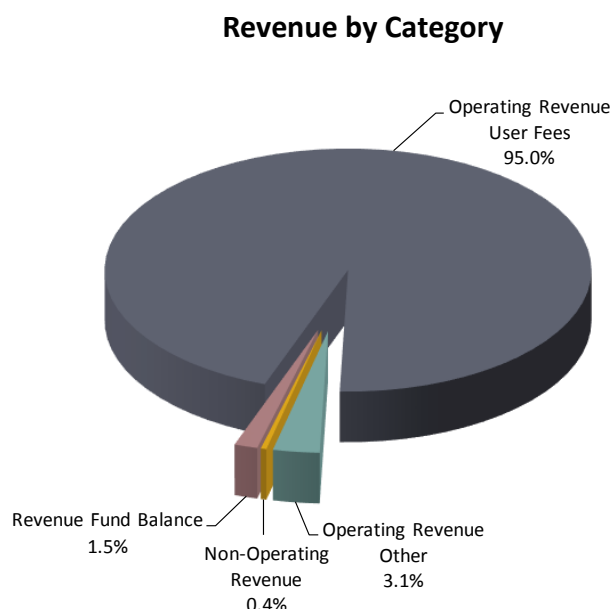
Ten-Year Historical Revenue Comparison (Millions \$)



Ten-Year Historical Expense Comparison (Million \$)



Revenue Profile



Budgeted revenue in FY 2019 is approximately \$103.4 million or 3.1% more than FY 2018. This is the net effect of a 1.5% increase in operating revenue, a 3.0% decrease in non-operating revenue and a \$1.6 million transfer from revenue fund balance not budgeted in the prior year. Historical and budgeted revenue is shown in the table below.

Revenue	FY 2016 Actual	FY 2017 Actual	FY 2018 Budget	FY 2019 Budget	Percent Change	FY 19 vs. 18 Budget
Operating Revenue						
User Fees	\$ 96,078,624	\$ 96,610,156	\$ 97,058,926	\$ 98,225,193	1.2%	\$ 1,166,267
Pretreatment Fees	1,088,763	1,090,541	1,100,000	1,100,000	0.0%	-
Septage Income	358,719	328,590	325,000	325,000	0.0%	-
Connection Fees	124,450	145,713	130,000	130,000	0.0%	-
Late Fees	932,178	874,396	900,000	800,000	(11.1%)	(100,000)
Customer Service Fees	-	7,128	6,700	445,100	6543.3%	438,400
Renewable Energy Credits	422,260	581,007	371,885	393,099	5.7%	21,214
<i>Total Operating Revenue</i>	<i>99,004,994</i>	<i>99,637,531</i>	<i>99,892,511</i>	<i>101,418,392</i>	<i>1.5%</i>	<i>1,525,881</i>
Non-Operating Revenue						
Investment Income	112,094	80,876	120,000	200,000	66.7%	80,000
Miscellaneous	203,855	252,508	279,700	187,800	(32.9%)	(91,900)
<i>Total Non-Operating Revenue</i>	<i>315,949</i>	<i>333,384</i>	<i>399,700</i>	<i>387,800</i>	<i>(3.0%)</i>	<i>(91,900)</i>
Transfer from Revenue Fund Balance	-	-	-	1,600,000	100.0%	1,600,000
Total Revenue	\$99,320,943	\$99,970,915	\$ 100,292,211	\$ 103,406,192	3.10%	\$ 4,562,675

Of the \$103.4 million in total revenue, approximately \$98.2 million is from user fees, \$3.2 million is from other operating revenue and \$388 thousand is from non-operating revenue. NBC plans to file for a rate increase effective February 1, 2019 to support new debt needed to fund the Capital Improvement Program.

The chart below shows NBC's rate increases since January 1, 2013.

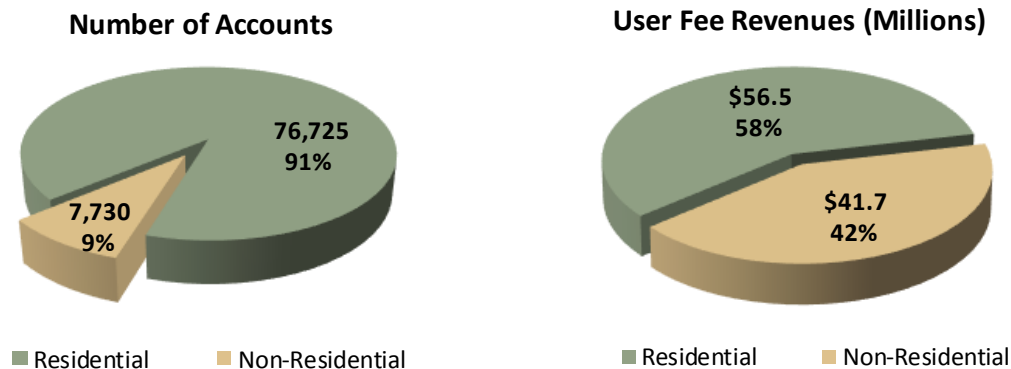
Effective Date	Rate History				
	1/1/2013	7/1/2013	9/19/2014	7/1/2015	7/1/2016
Type of Filing	Compliance	General	General	Compliance	Compliance
Purpose	Debt	O&M/Rate Base	O&M/Rate Base	Debt	Debt
Revenue Increase	7.09%	9.32%	3.83%	2.29%	1.48%
User Rate Increase	7.35%	9.67%	3.97%	2.40%	1.53%
Average Annual Residential Fee (150 gpd)	\$403	\$442	\$459	\$470	\$477

On a year-to-year basis, budgeted user fees are approximately 1.2% higher than last year's budget. Budgeted late charge revenue is \$100,000 or 11.1% lower than the prior year due to lower accounts receivable. The FY 2019 budget shows an increase of more than \$430 thousand in customer service fees from new miscellaneous service fees filed with the PUC for approval on March 26, 2018. Budgeted REC revenue is 5.7% higher than the prior year as a result of the RECs projected to be generated from NBC's new renewable energy projects.

User Fees

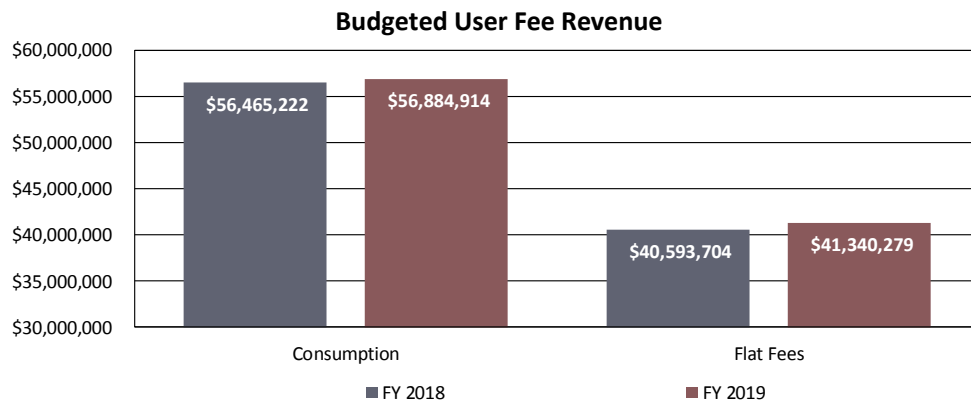
In FY 2019, user fees represent 96.9% of the operating revenue and 95.0% of total revenue. NBC's user fee rate structure classifies users as residential, commercial or industrial. Residential customers include residential structures up to and including six dwelling units, and all condominiums regardless of the number of dwelling units. Commercial and industrial users, or the non-residential accounts, include residential structures containing more than six dwelling units, commercial, mixed-use and industrial properties. Approximately 91% of NBC's customer accounts are residential and 9% are non-residential.

All customers are billed a flat fee and a consumption based fee. Residential customers are charged a flat fee based upon the number of dwelling units. Non-residential customers are charged a flat fee based upon meter size. Residential accounts generate 58% of the FY 2019 budgeted user fees and non-residential accounts generate 42%. The following charts show the residential versus non-residential split between the number of accounts and user fees billed.



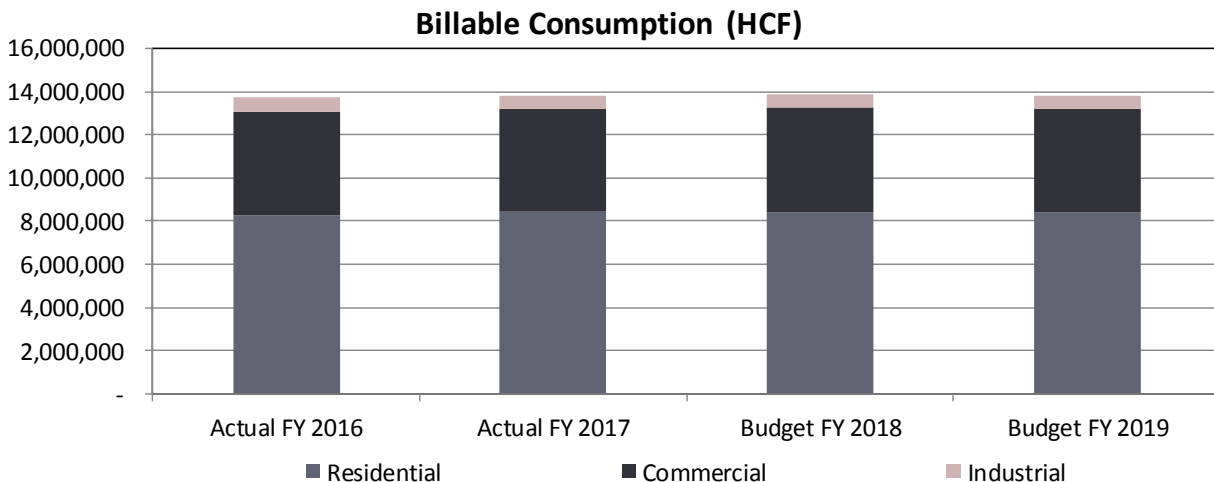
The FY 2019 budgeted user fee revenue is \$98.2 million which is 1.2% higher than the prior year. This is the combination of a number of factors including a projected 2.98% rate increase effective February 1, 2019. Budgeted consumption revenue is \$419,692 or 0.7% higher in FY 2019. Budgeted flat fee revenue in FY 2019 is 1.8% higher than the prior year.

FY 2019 Budgeted User Fee Revenue			
	Consumption	Flat Fees	Total
Residential	\$ 29,841,300	\$ 26,696,443	\$ 56,537,743
Commerical	24,952,521	13,936,677	38,889,198
Industrial	2,091,093	707,159	2,798,252
Total	\$ 56,884,914	\$ 41,340,279	\$ 98,225,193



In FY 2019, NBC is budgeting consumption fee revenue based upon water usage. The non-residential consumption revenue is based on a three year average plus revenue anticipated from the new Citizens Bank Complex connecting to NBC's collection system extension in Johnston.

Billable Consumption (HCF)				
	Residential	Commercial	Industrial	Total
Actual FY 2016	8,300,215	4,771,320	647,064	13,718,599
Actual FY 2017	8,457,830	4,755,534	610,116	13,823,480
Budget FY 2018	8,433,400	4,832,511	590,653	13,856,564
Budget FY 2019	8,347,801	4,813,604	627,422	13,788,827

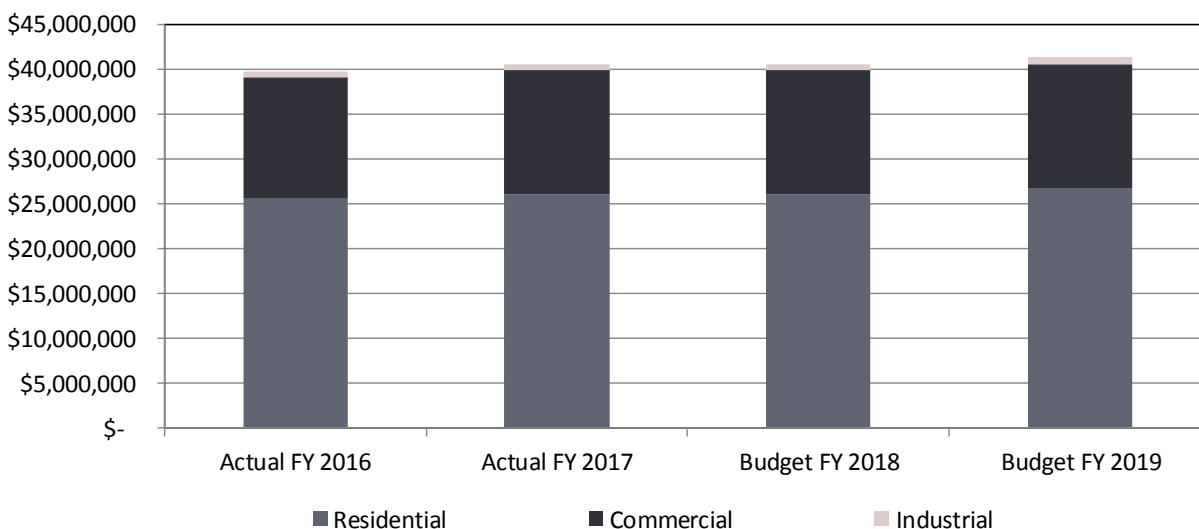


FY 2019 budgeted flat fees are 1.8% higher than the prior year in part to reflect the continuous growth in the number of residential dwelling units. The budget reflects a 0.55% increase in dwelling units, from 119,860 to 120,519 based on a three-year average. The budgeted flat fee revenue also reflects the projected 2.98% across-the-board rate increase, effective February 1, 2019.

FY 2019 Budgeted Flat Fee Revenue

	Residential	Commercial	Industrial	Total
Actual FY 2016	\$ 25,572,039	\$ 13,473,120	\$ 737,425	\$ 39,782,584
Actual FY 2017	26,057,961	13,884,401	705,464	40,647,825
Budget FY 2018	26,003,254	13,849,474	740,976	40,593,704
Budget FY 2019	26,696,443	13,936,677	707,159	41,340,279

Flat Fee Revenue

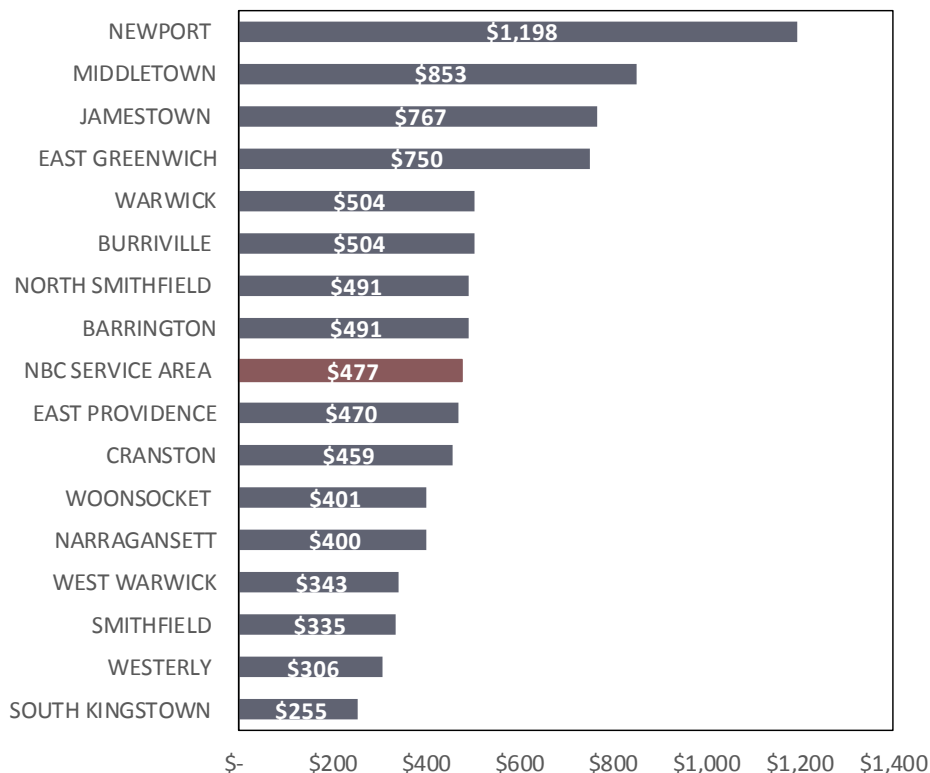


The table below shows NBC's projected FY 2019 user rates for residential and non-residential users. At these rates, NBC's estimated average annual residential sewer user fee based on annual usage of 150 gallons per day is \$491.

NBC User Fees Effective 2/1/2019**		
Residential:	Non-Residential	
Customer Charge - based on number of Dwelling Units	Meter Size	Charge
Residential Customer Charge: \$225.32 /dwelling unit	5/8"	\$539
Consumption Charge \$3.636 /hcf	3/4"	\$805
Total Annual Average Residential Rate \$491	1"	\$1,339
(Based on 73.2 hcf* or 150 gallons per day)	1 1/2"	\$2,685
Non-Residential:	2"	\$4,288
Customer Charge - Based on Meter Size	3"	\$8,034
Commercial Consumption Charge \$5.273 /hcf	4"	\$13,387
Industrial Consumption Charge \$3.390 /hcf	6"	\$26,785
*hcf = hundred cubic feet	8"	\$42,855
**Projected Rate Filing	10"	\$61,607

In FY 2018, NBC began to calculate the average annual residential sewer user fee based on consumption of 150 gallons per day, the updated actual average consumption per dwelling unit. The following table shows the results of NBC's 2017 sewer rate survey based upon usage of 150 gallons per day. It shows that despite NBC's large operations and significant capital improvements, NBC's average residential user rate of \$477 is below the State average of \$530.

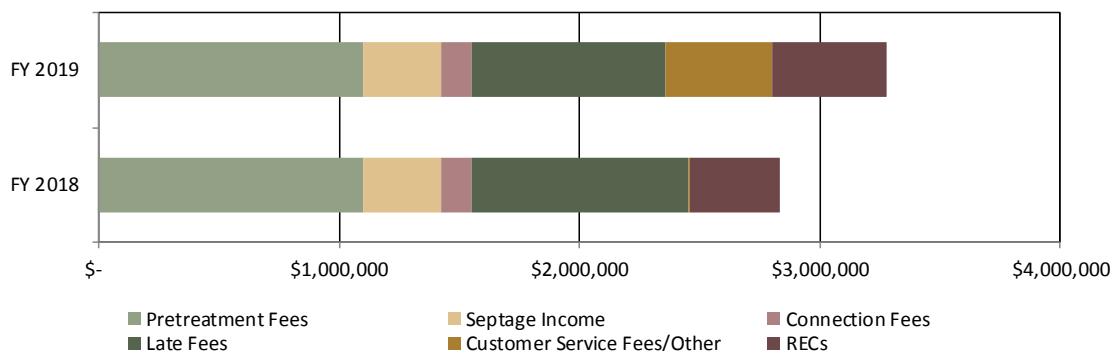
2017 Annual Rhode Island Residential Sewer Fees



Other Operating Revenue

While NBC's primary source of operating revenue is user fees, NBC has other operating revenue, which represents the remaining 3.2%. The chart below shows that the largest sources of other operating revenue are pretreatment fees, followed by late fee revenue, REC revenue, customer service fees, septage fees and connection fees. This year's budget also includes new customer service fees, effective July 1, 2018. Overall, budgeted other operating revenue is \$3,193,199 or 12.7% higher in FY 2019 than the prior year.

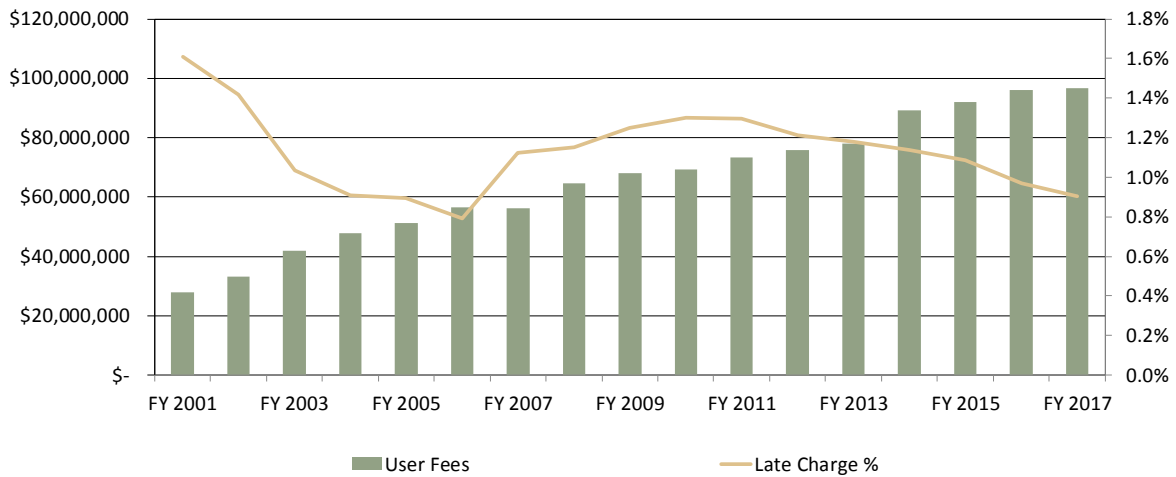
Other Operating Revenue



The NBC is federally mandated to have a Pretreatment program that controls the discharge of metals and other toxic chemicals into the sewer system. To accomplish this, NBC requires certain users to obtain a discharge permit so that NBC can limit and monitor permitted discharges into the sewer system. Customers are billed pretreatment fees based on a user classification system. In order to keep fees consistent with industry levels, these fees have not increased since FY 2004. The FY 2019 budgeted Pretreatment fee revenue is the same as the prior year.

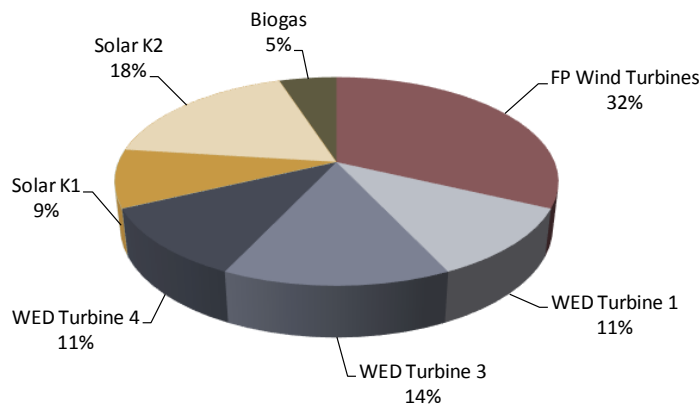
Late fees are assessed at a rate of 1% per month on any unpaid balance past due 30 days from the billing date. NBC's collection efforts have been effective in reducing accounts receivable, which in turn has reduced late fee revenue. As a result, FY 2019 budgeted late fee revenue is \$100,000 or 11.1% lower than the prior year. The chart below shows how late fee revenue as a percentage of user fee revenue has been declining over the past four fiscal years, an indication of effective collections.

Late Fees as a Percentage of User Fee Revenue



The FY 2019 budget reflects a \$21,214 or 5.7% increase in Renewable Energy Credit (REC) revenue over the prior year. This is the net effect of a 47% increase in RECs generated due to new renewable energy sources which is offset by a projected 68% decline in the price per REC from \$50.00/kWh to \$16.25/kWh. The chart below shows that the majority of the REC revenue is to be derived from WED Turbines at 36%, followed by the Field's Point Turbines at 32%, Solar PPAs at 27% and the Biogas Reuse at 5%. Total REC revenue budgeted in FY 2019 is \$393,099.

REC Revenue by Source



Budgeted customer service fees are \$438,400 higher than the prior year primarily due to new charges for miscellaneous customer services. Specifically, NBC requested approval from the PUC on March 26, 2018 to modify its tariffs to allow for cost recovery of services related to the abatement program, collection activity and real estate closings. Based on historical service volume, NBC projects that these fees will generate additional revenue of \$422,900. The following table shows the estimated increase in revenue by fee.

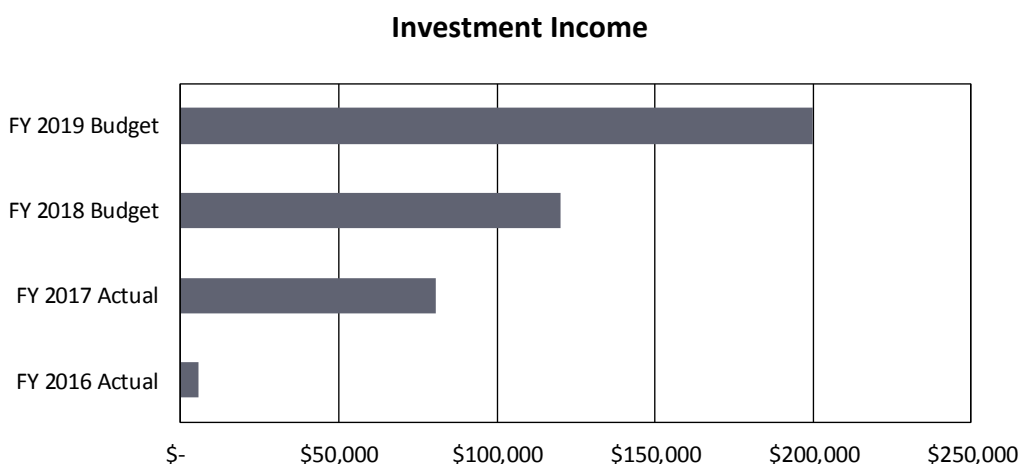
Budgeted Customer Service Fees			
	FY 2018	FY 2019	Difference
Abatement Application Fee	\$ 2,200	\$ 6,000	\$ 3,800
Abatement Meter Reading Fee	-	2,100	2,100
Real Estate Closing Fee	-	204,000	204,000
Collection Notice Posting Fee	-	213,000	213,000
Total	\$ 2,200	\$ 425,100	\$ 422,900

Septage fees are paid by permitted haulers based upon the amount of septage that they discharge at NBC's Septage Receiving Station. In FY 2019 septage revenue is projected to remain unchanged from the FY 2018 budgeted level.

Lastly, NBC's connection permit fees, for new sewer connections to NBC facilities are projected to remain unchanged in the FY 2019 budget year based upon FY 2018 activity.

Non-Operating Revenue

Non-Operating revenue includes investment income and miscellaneous revenue. Total Non-Operating revenue is projected to decrease \$11,900 or 3.0% from the FY 2018 budget level as a result of the net impact of two items. Investment income is budgeted \$80,000 higher than the prior year due to higher interest rates; however, this is offset by a 33% decline in miscellaneous revenue primarily related to lower rental income. The following chart shows the investment income from the balances in the Revenue Fund and the Operation and Maintenance Fund.



Transfer from Revenue Fund

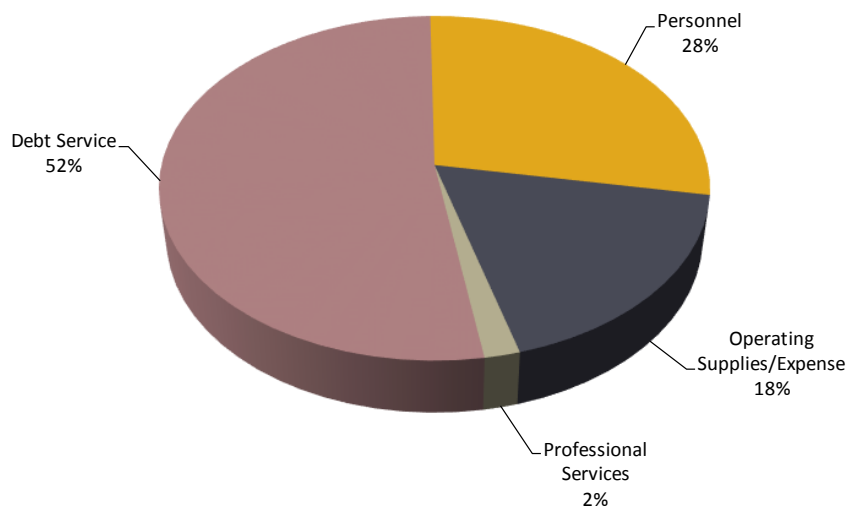
The FY 2019 budget also includes a \$1.6 million transfer from the Revenue Fund. FY 2015 was the last budget year that NBC included such a transfer.

Expense Profile

Expense by Element

The chart below shows the fiscal year 2019 operating expense by element. Debt Service accounts for more than half of the total Operating Budget, at 52%. The next largest expense category is Personnel, at 28% of the budget followed by Operating Supplies and Expense at 18% and Professional Services at 2%.

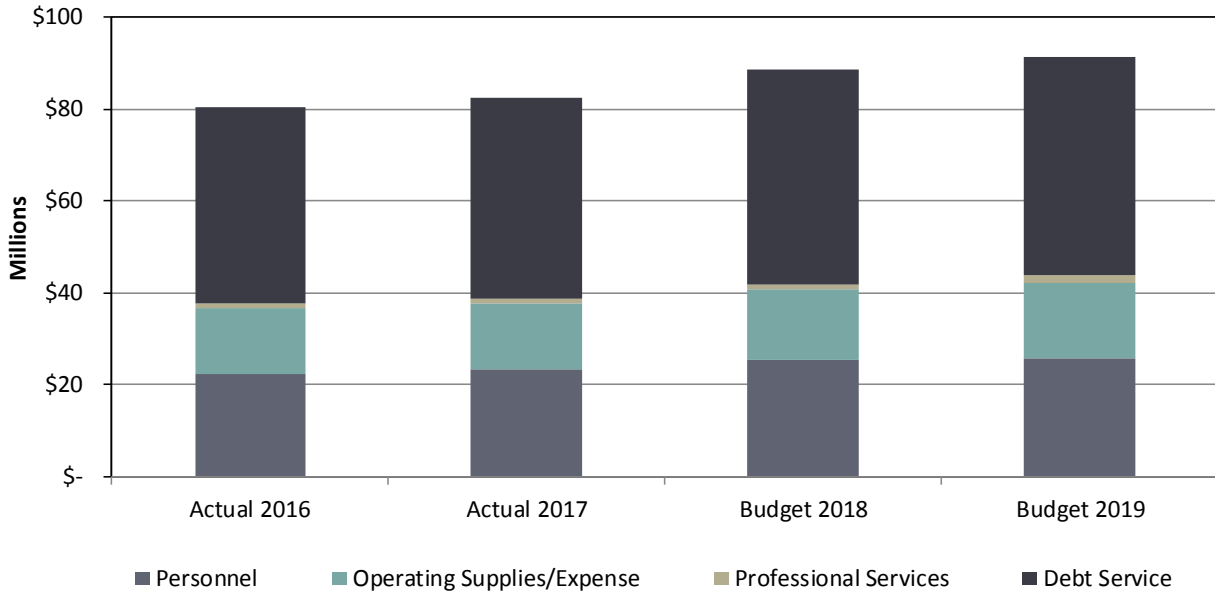
FY 2019 Operating Budget by Element of Expense



NBC's total Operating Budget for FY 2019 is \$91,455,532 excluding the Transfer to Restricted Account – Project Fund. This is an increase of approximately \$2.9 million, or 3.2% from the approved FY 2018 budget. The following table and chart show historical and budgeted expense over a four-year period.

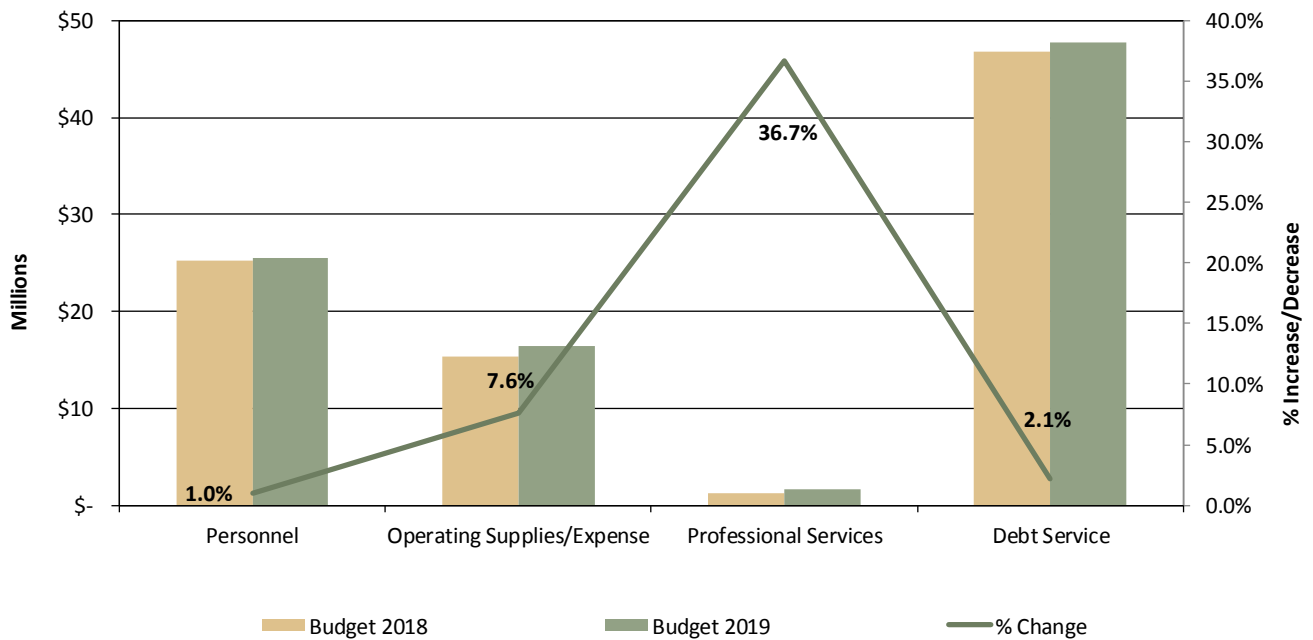
	Actual 2016	Actual 2017	Budget 2018	Budget 2019	FY 18 - FY 19 % Change	FY 2019 % Budget
Personnel	\$ 22,401,349	\$ 23,417,267	\$ 25,264,376	\$ 25,509,996	1.0%	27.9%
Operating Supplies/Expense	14,177,379	14,310,702	15,308,168	16,468,700	7.6%	18.0%
Professional Services	1,019,108	1,078,443	1,236,050	1,689,650	36.7%	1.8%
	37,597,836	38,806,412	41,808,594	43,668,346	4.4%	47.7%
Debt Service	42,907,662	43,589,827	46,786,894	47,787,186	2.1%	52.4%
Total	\$ 80,505,498	\$ 82,396,239	\$ 88,595,488	\$ 91,455,532	3.2%	100.0%

Budget by Element of Expense



The graph below compares budgeted expense in fiscal year 2018 to 2019 and illustrates the increases and decreases for each element of expense. Expense has increased in all four categories over the prior year's budget. Personnel expense increased by 1.0% or \$245,620; Operating Supplies/Expense increased by 7.6% or \$1,160,532; Professional Services increased by 36.7% or \$453,600; and Debt Service increased by 2.1% or \$1,000,293 from last year's budget.

FY 2018/2019 Budget Comparison of Expense by Element



Major highlights by element of expense are discussed in the sections that follow.

Personnel

Personnel expense consists primarily of employee wages and benefits, employer payroll taxes and unemployment expense. Personnel expense is budgeted net of capital reimbursements for staff working on capital projects. The FY 2019 budgeted personnel expense is \$25.5 million, which represents a net increase of approximately 1.0% or \$245,620 over the prior year.

The NBC employs non-union employees and union employees. The NBC's union employees are members of either the Rhode Island Laborers' District Council Public Service Employees' Local 1033 of the Laborers' International Union of North America (LIUNA), American Federation of Labor - Congress of Industrial Organizations (AFL-CIO), or of the Rhode Island Council 94, American Federation of State, County and Municipal Employees (AFSCME), AFL-CIO, Local 1010 and Local 2884.

With respect to salaries and wages, this year's budget includes contracted step increases and the negotiated 2.5% COLA for union employees in accordance with the CBA contract. Salaries for non-union employees reflect comparable merit increases.

FY 2019 budgeted overtime for union and non-union employees, is \$53,600 and \$36,650 higher respectively. This reflects increased hours related to mandatory sampling and analysis as well as other requirements associated with continuous operation of the wastewater treatment facilities 24 hours per day.

Budgeted Positions and Reorganization

The total number of FTEs included in FY 2019 is 275.0, which is six more than the prior year budget.

Program	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
Executive	8	8	8	8	8
Human Resources	4	4	4	4	4
Legal	5	5	5	5	6
Information Technology	12	12	12	12	12
Construction	13	11	11	10	10
Engineering	-	-	-	6	7
Finance	5	5	5	6	7
Accounting	10	10	10	10	10
Customer Service	24	25	25	25	25
Purchasing	4	4	4	3	3
Interceptor Maintenance	20	20	20	18	20
Operations & Maintenance Services	9	9	9	7	6
Field's Point	59	59	59	54	54
Bucklin Point	35	43	45	45	47
Water Quality & Compliance	5	5	5	4	4
Pretreatment	14	14	14	14	14
Laboratory	17	17	17	17	17
ESTA	4	4	4	4	4
EMDA	17	17	17	17	17
Total	261	265	272	269	275

The FY 2019 budget reflects funding for six new positions and turnover has been increased from 2.0 FTEs to 6.0 FTEs. As a result, the net number of positions funded in FY 2019 is 269.0 FTEs or 2.0 FTEs more than FY 2018.

Number of FTE's	FY 2018 Budget	FY 2019 Budget	Change 2018/2019
Union	129.0	132.0	3.0
Non-Union	140.0	143.0	3.0
<i>Total</i>	<u>269.0</u>	<u>275.0</u>	<u>6.0</u>
Less: Turnover	(2.0)	(6.0)	(4.0)
<i>Net Positions</i>	<u>267.0</u>	<u>269.0</u>	<u>2.0</u>

This year's budget also reflects changes to the organizational chart effective July 1, 2018 as well as funding for a number of proposed non-union grade changes.

CC	Union FTEs			Non-Union FTEs			Total FTEs			
	FY 2018*	FY 2019 Changes	FY 2019	FY 2018	FY 2019 Changes	FY 2019	FY 2018	New Positions	Turnover	Net Funded Positions
21	-	-	-	8	-	8	8	-	-	8
22	-	-	-	10	-	10	10	-	-	10
24	-	-	-	5	1	6	5	1	-	6
25	-	-	-	6	1	7	6	1	-	7
31	-	-	-	6	1	7	6	1	-	7
23	1	-	1	3	-	3	4	-	-	4
32	2	-	2	8	-	8	10	-	-	10
33	-	-	-	12	-	12	12	-	-	12
34	15	-	15	10	-	10	25	-	-	25
36	-	-	-	3	-	3	3	-	-	3
43	11	1	12	7	1	8	18	2	(1)	19
44	-	-	-	7	(1)	6	7	(1)	-	6
46	41	-	41	12	-	12	53	-	(1)	52
47	36	2	38	8	-	8	44	2	(2)	44
51	-	-	-	4	-	4	4	-	-	4
52	3	-	3	11	-	11	14	-	-	14
53	9	-	9	8	-	8	17	-	-	17
54	-	-	-	4	-	4	4	-	-	4
55	9	-	9	8	-	8	17	-	-	17
	<u>127</u>	<u>3</u>	<u>130</u>	<u>140</u>	<u>3</u>	<u>143</u>	<u>267</u>	<u>6</u>	<u>(4)</u>	<u>269</u>

* Net of 1 FTE turnover in both 46 and 47

The FY 2019 Budget reflects six new positions to address staffing needs as is shown in the following table. One of the new positions is a Legal Counsel position in the Legal section to assist with the reassignment of lobbying duties and RIPDES permit negotiations. The budget also includes a new CSO Program Manager position in the Engineering section that is required to manage the complex design of the CSO Phase III A and III B Facilities. The Interceptor Maintenance section has budgeted for an additional Supervisor. Lastly, a new Process Monitor position is budgeted at Field's Point and two new Operator positions are budgeted at Bucklin Point.

Position Title	Cost Center
General Counsel	Legal
CSO Program Manager	Engineering
IM Supervisor	Interceptor Maintenance
Process Monitor	Field's Point
Operator	Bucklin Point
Operator	Bucklin Point

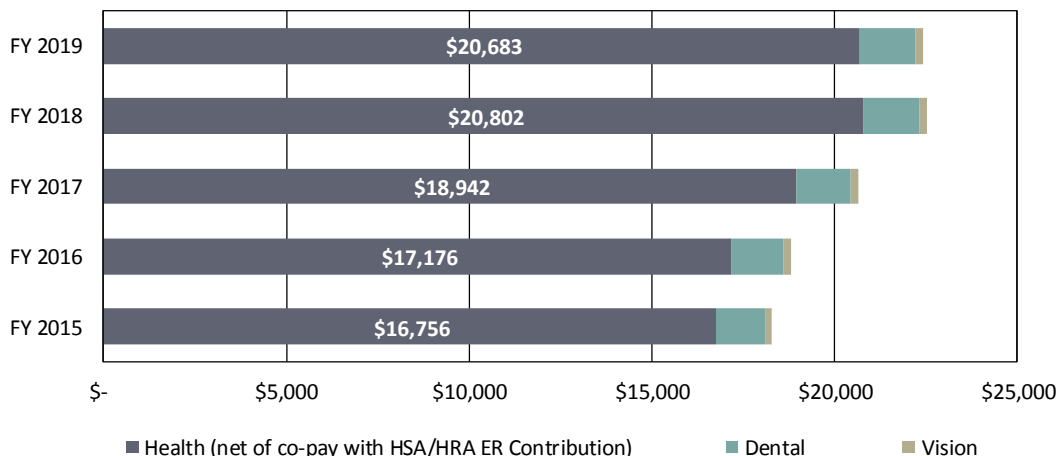
The FY 2019 budget also reflects the reorganization of certain functions in the budget year as follows:

From	To
Administration and Finance Division	Executive Affairs Division
CC 23 - Human Resources	CC 23 - Human Resources
CC 33 - Information Technology	CC 33 - Information Technology
Operations and Maintenance Division	Administration and Finance Division
Insurance and Risk Management	Insurance and Risk Management

Health, Dental and Vision Benefits

Health, dental and vision benefits are budgeted based on actual enrollment and a weighted average for unfilled positions. The FY 2019 budget reflects an increase of 0.1% to the health insurance budgeted line item. This is the net result of the increase in budgeted FTEs which is offset by a lower budgeted health insurance premium. In FY 2019, NBC will offer a HDHP with employer funding up to \$1,800 (individual) and \$3,600 (family) of a Health Reimbursement Arrangement. As is shown in the chart below, the budgeted health insurance premium for family coverage is 0.6% lower than the prior year. This is the net effect of a 14.9% increase in the insurance premium which is offset by the transition to a HRA.

Budgeted Health Insurance for Family Coverage



The FY 2019 Budget includes funding for the wellness initiative program offered by NBC that encourages employees to participate in wellness activities. Dental and vision insurance premiums are unchanged from FY 2018. There is a 3.0% increase in the non-union Long-Term Disability insurance premium over the prior year level. The budgeted benefits comparison for a family plan is shown in the following table.

Healthcare Benefits	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
Health*	\$ 16,756	\$ 17,176	\$ 18,942	\$ 20,802	\$ 20,683
Dental	1,335	1,435	1,510	1,510	1,510
Vision	195	195	195	217	217
Total	\$ 18,286	\$ 18,806	\$ 20,647	\$ 22,529	\$ 22,410

* Net of employee premium co-payment with HSA/HRA employer contribution

Retirement

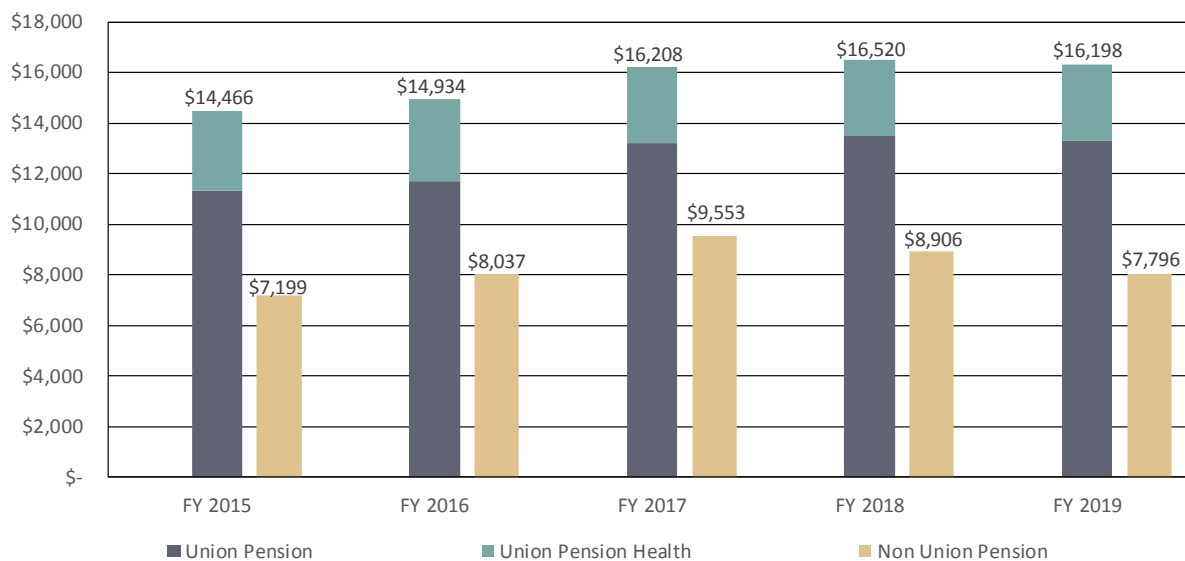
Union employees participate in the Employees' Retirement System of Rhode Island (ERSRI). ERSRI sets the annual employer contribution rate for both the pension and retiree health benefits. The FY 2019 employer contribution to the union pension and retiree health benefits remains unchanged from the FY 2018 budget rates of 26.34% and 5.97% respectively. The budget for the union pension increased \$32,693 from the prior year budget due to an increase in the number of budgeted union positions.

Other Benefits:	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
State Retirement (Union)	24.33%	24.64%	26.34%	26.34%	26.34%
Non-Union Retirement	10.00%	10.00%	10.00%	10.00%	10.00%
FICA	6.20%	6.20%	6.20%	6.20%	6.20%
Medicare	1.45%	1.45%	1.45%	1.45%	1.45%
Retirement Health (Union)	6.75%	6.75%	5.97%	5.97%	5.97%

NBC's non-union employees participate in a defined contribution and a defined benefit plan, which are both administered by NBC. The FY 2019 budget for non-union retirement expense is slightly more than 10% of the budgeted non-union salaries and wages which is \$131,957 less than the prior year. This is a reflection of the improved funding status of the non-union defined benefit plan as the plan fiduciary net position as a percentage of total pension liability was 93.02% as of June 30, 2017.

The following chart shows that the average employer retirement contribution per FTE for union employees is nearly double that of non-union employees.

Average Budgeted Pension and Retiree Health Benefit Expense per FTE



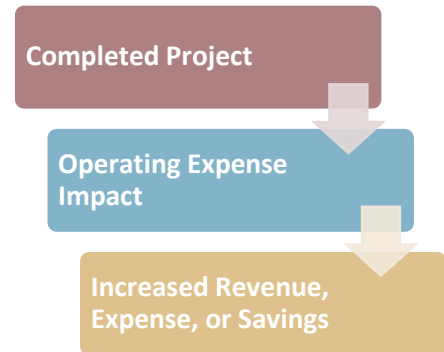
Operating Supplies and Expense

Operating Supplies and Expense (OSE) represent 18.0% of the total FY 2019 Operating Budget. On an ongoing basis, the largest operating expense is related to the wastewater treatment processes and includes biosolids disposal, utilities, chemicals, repairs to buildings and structures, maintenance contracts, service agreements, and insurance expense. The FY 2019 OSE budget increased 7.6% or \$1,160,532 from the FY 2018 budget.

CIP Operating Expense Impacts

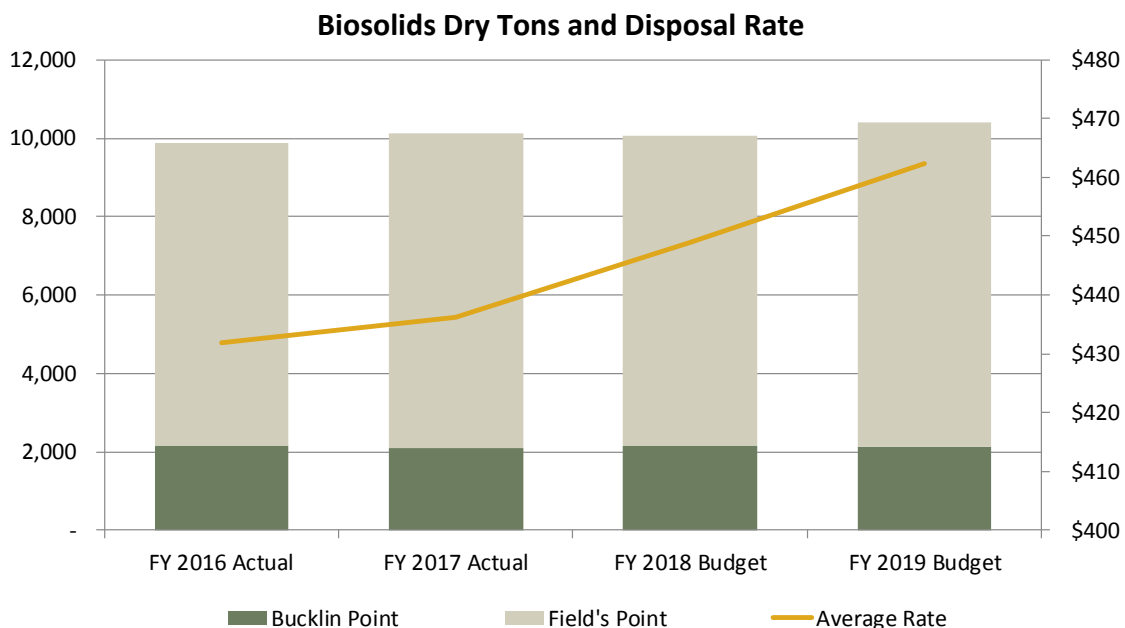
The FY 2019 budget includes information regarding the operating expense impact, identified on a project by project basis. NBC recognizes the importance of financial planning and certain capital improvements will directly impact operating expense. The impact is shown as either an increase in revenue, expense or savings (a reduction in expense). NBC plans on additional revenue of \$426,218 as a result of new customers connecting to NBC's system and nine months of expense related to the new blower building at Field's Point at \$18,333 for additional electricity and maintenance expense.

The expense impact on future years and an in-depth overview of the operating impacts by project are provided in the CIP Impact and Long-Term Plan section of this document.



Large Operating Supply and Expense

Approximately 29.2% of NBC's FY 2019 budgeted OSE is for biosolids disposal at the WWTFs. The FY 2019 budget reflects a projected increase in the contracted biosolids rate of 3.0% or approximately \$13.40 per dry ton. The budgeted dry ton production is 338 higher than the prior year. This is the net effect of a 364 dry ton increase at Field's Point, which is offset by a 26 dry ton decrease at Bucklin Point. Overall, the FY 2019 biosolids expense is \$291,239 greater than the FY 2018 budgeted level. The following chart illustrates the historical and budget data for biosolids dry ton production and average disposal rates.



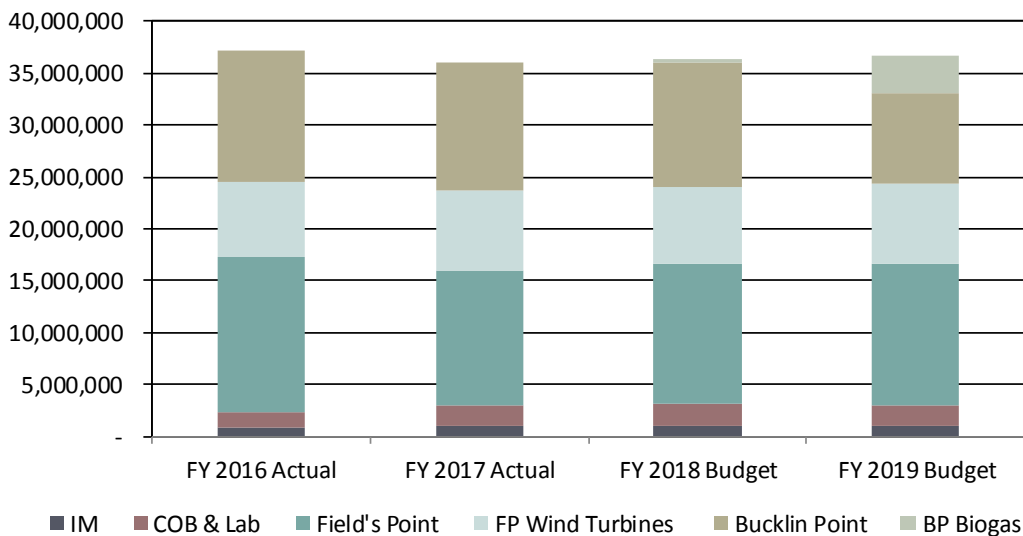
The FY 2019 electricity budget is a complex calculation that takes into consideration NBC’s renewable energy sources. The first step is the determination of the total number of kWh that are anticipated to be needed in the budget year. The FY 2019 budgeted kWh usage is based upon the following assumptions:

- Purchased kWh for IM, COB and Lab locations - based on two-year average
- Field’s Point - purchased kWh – based on two-year average
- Bucklin Point - purchased kWh – based on two-year average
- Biogas Reuse production - based on 12 months of operation at 80% of engineered capacity
- Field’s Point Wind Turbine production – based on a two-year average

Budgeted kWh					
Facility	FY 2016 Actual	FY 2017 Actual	FY 2018 Budget	FY 2019 Budget	Budgeted Difference
Interceptor Maintenance	914,657	966,408	970,301	1,033,209	62,908
Field’s Point	15,036,343	13,013,036	13,594,741	13,602,302	7,561
Bucklin Point	12,804,747	12,304,000	12,029,756	8,736,600	(3,293,156)
COB & Lab	1,392,427	2,002,229	2,119,297	1,918,884	(200,413)
kWh	30,148,174	28,285,673	28,714,095	25,290,995	(3,423,100)
FP Wind Turbines kWh	7,111,499	7,747,293	7,307,579	7,782,148	474,569
BP Biogas kWh	-	-	399,244	3,682,400	3,283,156
Total kWh	37,259,673	36,032,966	36,420,918	36,755,543	334,625

As is shown in the table above and the chart below, the FY 2019 budget is based on usage of 36,755,543 kWh which is 334,625 kWh or 0.9% more than the prior year.

Budgeted Electricity (kWh)



The next step is the calculation of the electricity expense. The FY 2019 budget incorporates the electricity expense impacts of NBC’s renewable energy projects. The location of the renewable energy source impacts how NBC realizes the resulting financial benefit. There are differences between the two types of renewable energy resource facilities. Specifically, “Behind the Meter” projects reduce NBC’s purchase of electricity whereas “Net-Metered” projects reduce NBC’s electricity expense through the application of Net Metering Credits (NMC). The following table highlights some of the distinctions.

Budgetary Impact of Renewable Energy Resources

"Behind the Meter" Projects	"Net Metered" Projects
Field's Point Wind Turbines Bucklin Point Biogas Reuse	WED Turbines Solar PPA
The energy is produced and used on-site Reduces the kWh purchased through National Grid Reflected in the budget as a reduction in purchased kWh NBC saves supply, distribution and other related costs	Energy is produced off-site and net metered Generates Net Metering Credits - applied to National Grid Invoices Reflected in the budget as a reduction in National Grid Expense Net Metering Credit is variable and is based on C-06 Rate

Additional assumptions with respect to the calculation of budgeted electricity expense as follows:

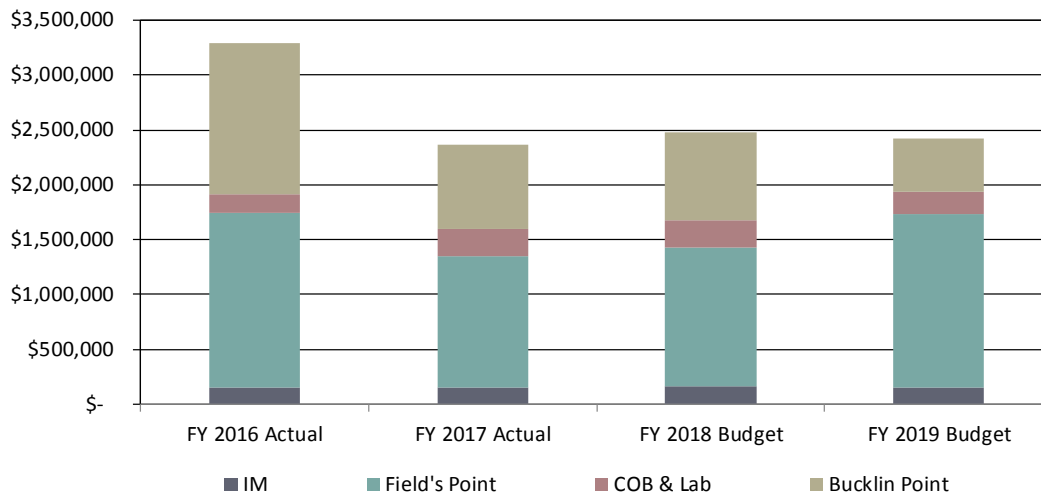
- NBC purchased electricity supply rate is \$0.07476 per kWh
- Budgeted NMC rate is \$0.1189/kWh
- 100% of the WED 1 and WED 3 NMCs are applied to Bucklin Point
- 100% of the WED 4 and WED Solar K2 NMCs are applied to Field's Point
- 85% of the WED Solar K1 credits shall be applied to the COB
- 15% of the WED Solar K1 credits shall be applied to IM

Budgeted Electricity Expense Post Net Metering Credits					
Facility	FY 2016 Actual	FY 2017 Actual	FY 2018 Budget*	FY 2019 Budget	Budgeted Difference
Interceptor Maintenance	\$ 156,599	\$ 158,059	\$ 163,063	\$ 157,559	\$ (5,504)
Field's Point	1,592,525	1,194,389	1,265,670	1,571,539	305,869
Bucklin Point	1,375,846	763,609	800,177	484,605	(315,572)
COB & Lab	160,733	244,382	245,896	212,965	(32,931)
Total Expense	<u>\$ 3,285,703</u>	<u>\$ 2,360,439</u>	<u>\$ 2,474,806</u>	<u>\$ 2,426,668</u>	<u>\$ (48,138)</u>

*Budgeted kWh and Expense modified based on Schedule B's for Net Metering Credits

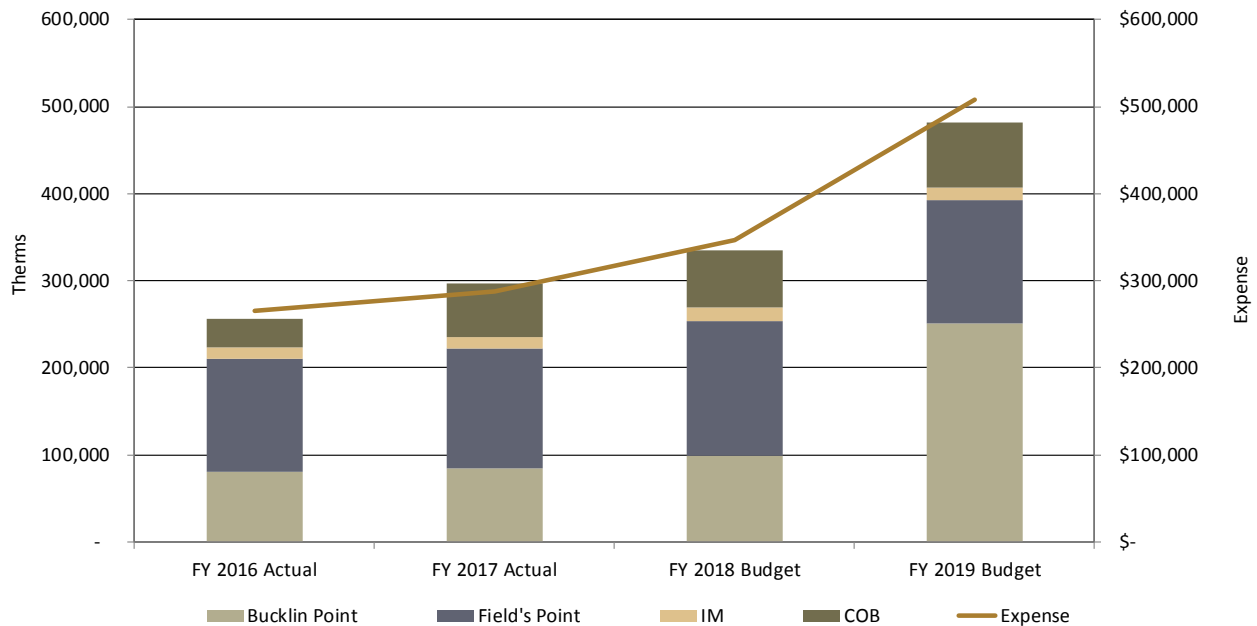
The table above shows that the FY 2019 electricity budget is \$2,426,668 which is \$48,138 or 1.9% lower than the prior year. The chart below shows that NBC's electricity expense is projected to decline by approximately \$859 thousand from FY 2016 levels as a result of the purchase of the WED turbines, the operation of the biogas reuse facility and the execution of the Solar PPA.

Budgeted Electricity Expense



The FY 2019 budgeted natural gas represents 3.1% of the FY 2019 OSE budget. The budgeted amount of \$508,051 is approximately 46.8% higher than the prior year. The higher budgeted amount is due to an increase in the number of budgeted therms, reflecting a two year average plus a 44% increase in budgeted therms required to supplement the Biogas Reuse Facility at Bucklin Point. The budget also reflects a 15% increase in the budgeted rate to \$1.055 per therm.

Natural Gas Use and Expense



Chemical expense represents approximately 5.4% of the FY 2019 OSE budget. Budgeted chemical expense is \$883,736 in FY 2019. Budgeted chemical use is higher for five of six chemicals, while the prices remain unchanged or lower than the prior year. As a result, the budget is \$84,966 or 10.6% higher than the prior year. The table below shows the change in budgeted chemicals compared to the prior year.

Chemical Quantity and Expense

Chemical	FY 2018 Budget	FY 2019 Budget	Percent Change
Sodium Hypochlorite (Gallons)	663,286	688,124	3.7%
Bisulfite (Gallons)	219,368	236,613	7.9%
Sodium Hydroxide (Gallons)	32,285	34,754	7.6%
Carbon Feed (Gallons)	24,089	27,081	12.4%
Polymer-Liquid (Gallons)	50,000	52,500	5.0%
Polymer-Powder (Lbs.)	18,000	18,000	0.0%
Soda Ash (Tons)	135	135	0.0%
Chemical Expense	\$ 798,770	\$ 883,736	10.6%

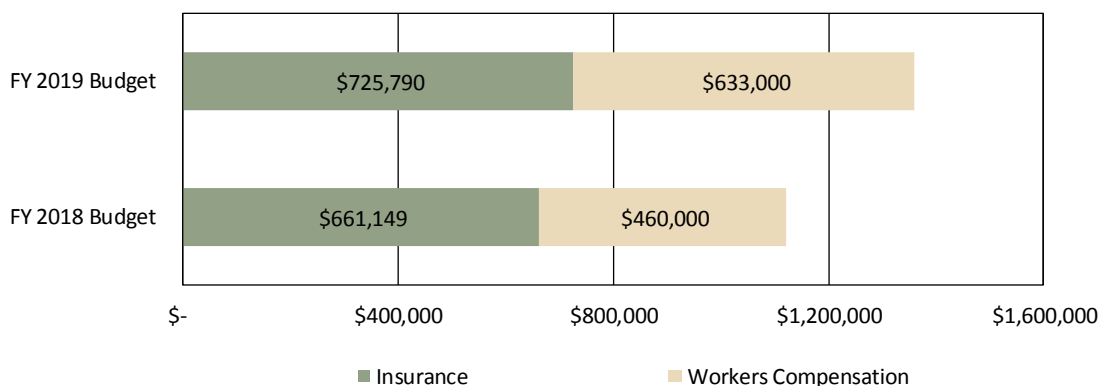
Maintenance contract expense represents approximately 7.1% of the FY 2019 OSE budget. The FY 2019 budget for maintenance contract expense has decreased by approximately 13.8% or \$186,099 on a year-to-year basis. This reflects the transfer and funding of the Field's Point (FP) Wind Turbine annual maintenance and warranty expense from the maintenance contract budgeted line item to the new FP Turbine expense line item. The following table shows the change in budgeted maintenance contract expense by cost center compared to FY 2018.

Maintenance Contract Expense

	FY 2018 Budget	FY 2019 Budget	Budgeted Difference
Executive	\$ 100	\$ 50	\$ (50)
Legal	75	50	(25)
Human Resources	100	-	(100)
Information Technology	413,025	440,950	27,925
Engineering	19,325	13,425	(5,900)
Accounting	75	50	(25)
Customer Service	5,375	480	(4,895)
Purchasing	100	-	(100)
General Administration	72,000	62,000	(10,000)
Interceptor Maintenance	43,850	14,676	(29,174)
Operations & Maintenance Services	266,543	277,040	10,497
Field's Point	329,120	165,057	(164,063)
Bucklin Point	57,792	56,396	(1,396)
Pretreatment	1,000	1,000	-
Laboratory	137,647	129,734	(7,913)
Environmental Monitoring & Data Analysis	4,600	3,720	(880)
Total	\$1,350,727	\$1,164,628	\$ (186,099)

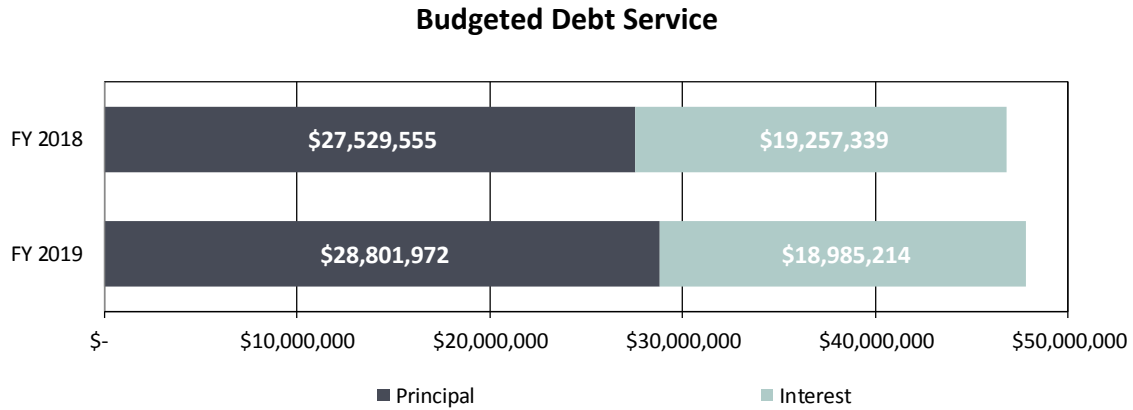
Insurance and Workers Compensation expense represents 8.3% of the FY 2019 OSE budget. The FY 2019 budgeted amount of \$1.4 million is approximately 21.2% or \$185,272 higher than the FY 2018 budget. This year's budget reflects increased policy premiums. The following graph shows the total budgeted insurance and workers compensation expense on a year-to-year basis.

Insurance & Workers Compensation



Debt Service

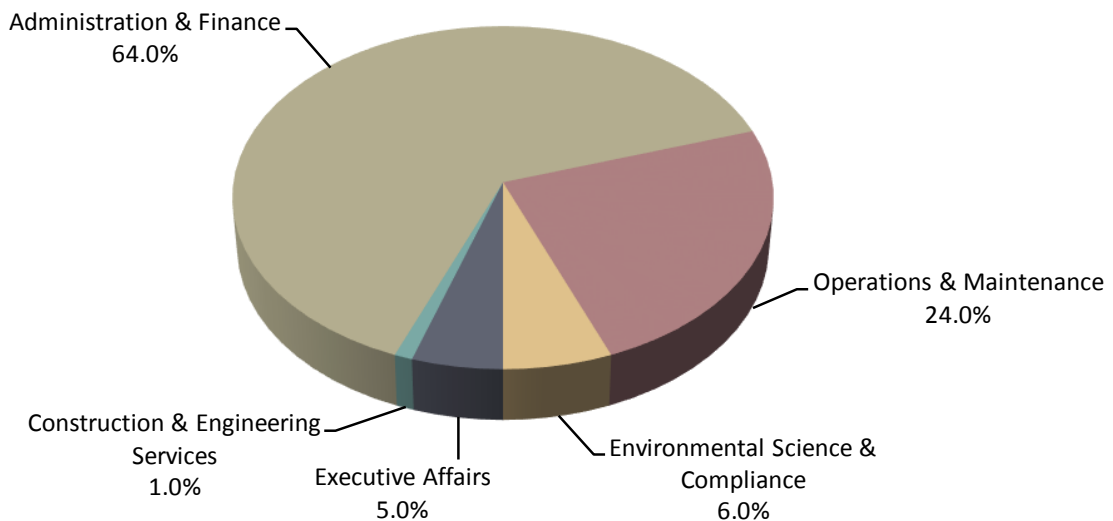
Debt service is the largest element of expense in NBC's FY 2019 budget, representing 46.2% of the total budget. Budgeted debt service in FY 2019 is \$47.8 million which is 2.1% more than the prior year. The higher debt service is the result of the amortization of NBC's existing debt and a planned \$45.0 million borrowing through the RIIB in FY 2019.



For more information related to financing and debt service, please refer to the CIP Impact and Long-Term Plan in this document.

Expense by Division

NBC is organized into five Divisions. The graph below depicts the percentage of the FY 2019 budget that the Divisions represent.



A number of organizational changes were incorporated into the FY 2019 budget and these are detailed in the Personnel section of the Expense Profile discussed earlier. This year's budget includes the transfer of the Human Resources and Information Technology functions from the Administration and Finance Division to the Executive Affairs Division. In addition, the Insurance and Risk Management functions were transferred from the Operations and Maintenance Division to the Administration and Finance Division.

	Actual 2016	Actual 2017	Budget 2018*	Budget 2019*	Budgeted % Change	FY 2019 % of Budget
Executive Affairs	\$ 1,575,081	\$ 1,532,944	\$ 1,848,606	\$ 4,576,011	147.5%	5.0%
Construction & Engineering Services	95,275	71,876	597,634	444,555	(25.6%)	1.0%
Administration & Finance	51,553,573	53,034,886	56,891,242	58,568,597	2.9%	64.0%
Operations & Maintenance	21,867,891	22,020,315	23,230,603	21,818,129	(6.1%)	24.0%
Environmental Science & Compliance	5,413,678	5,736,218	6,027,403	6,048,241	0.3%	6.0%
Total	\$ 80,505,498	\$ 82,396,239	\$ 88,595,488	\$ 91,455,533	3.2%	100.0%

*Reflects organizational changes

Executive Affairs Division

The Executive Affairs Division's FY 2019 budget represents approximately 5.0% of the total operating budget. This reflects an overall increase of \$2.7 million or 248% more than the FY 2018 budget. The increase reflects the reorganization of the Human Resources and Information Technology functions from the Administration and Finance Division to the Executive Affairs Division. Personnel reflects 1.0 new FTE in Legal and the reorganization of 4.0 FTEs in Human Resources and 12.0 FTEs in Information Technology for an increase of 17.0 FTEs over the prior year. Operating supplies and expense and professional services have increased by \$852,190 compared to FY 2018 as a result of increased public outreach, maintenance contracts, the reallocation of telecommunications expense to Information Technology, and consulting services.

Construction and Engineering Division

The Construction and Engineering Division budget represents 1.0% of the FY 2019 operating budget. On a year-to-year basis, the budget is \$153,080 or 26.0% lower than the FY 2018 budget. Personnel reflects one additional FTE in Engineering and increased salary reimbursements for an overall decrease of \$151,580 from the prior year. Operating supplies and expense and professional services reflect an overall decrease of \$1,500 due to the reallocation of telecommunications expense to Information Technology.

Administration and Finance Division

The Administration and Finance Division's FY 2019 budget represents 64.0% of the total operating budget. The FY 2019 budget is approximately \$2.3 million or 3.5% higher than the FY 2018 budget. Personnel includes the transfer and funding of the HRA employer contributions in the General Administration section; the reorganization of the Human Resources and Information Technology functions to the Executive Affairs Division; and the transfer of the insurance and risk management functions from the Operations and Maintenance, for a net decrease of \$1.5 million or 33% from the prior year. Operating supplies and expense increased by \$1.8 million. This includes the transfer and funding of the electricity budgets to the General Administration section, due to the complexity of the billing and payments associated with the electricity accounts; and increased Insurance and Workers' Compensation premiums. Professional services increased by \$323,000 and includes an increased PUC regulatory assessment fee and a State mandated performance audit. Debt service increased by approximately \$1.0 million over the prior year and includes the amortization of existing debt service and the anticipated \$45.0 million debt issuance in FY 2019.

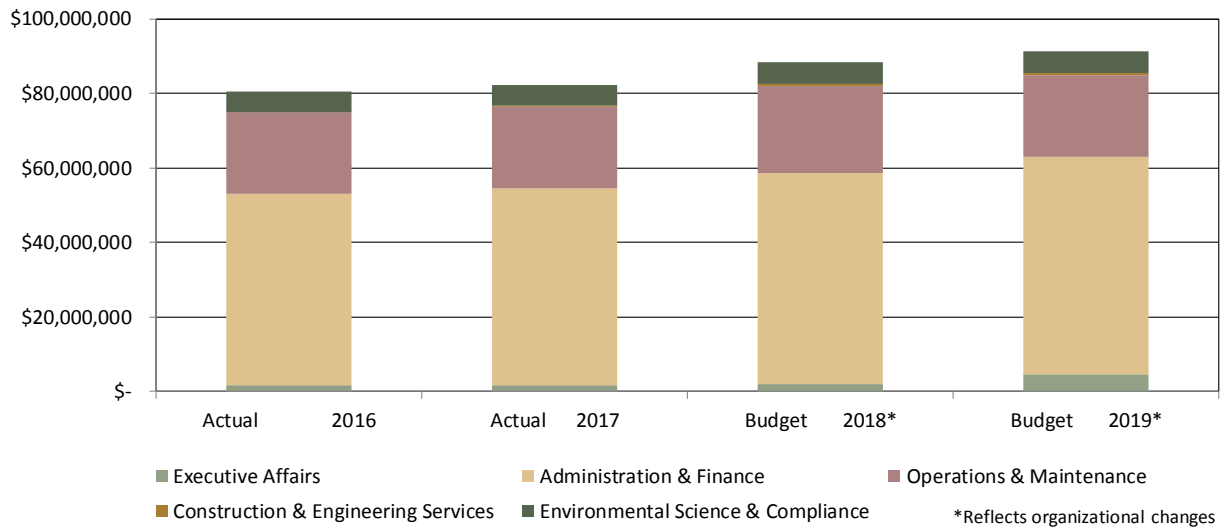
Operations and Maintenance Division

The Operations and Maintenance Division represents approximately 24.0% of the total operating budget. The FY 2019 budget for the Operations and Maintenance Division decreased by approximately 6.0% or \$1.4 million from the FY 2018 budget. Personnel increased by \$110,940 and includes the transfer of the insurance and risk management functions to the Administration & Finance Division; funding of two additional FTEs at Bucklin Point and budgeted turnover of 3.0 FTEs for a net increase of \$47,480 over prior year. Operating supplies and expense reflects increased biosolids, natural gas, chemicals and maintenance contracts, which is offset by the transfer and funding of the electricity budget to the General Administration section. Professional services reflects an increase of \$7,500 for security services.

Environmental Science and Compliance Division

The Environmental Science and Compliance Division represents 6.0% of the total operating budget. The FY 2019 budget has increased by \$20,838 from the prior year. Personnel expense increased by \$10,801. Operating supplies and expense and professional services expense have increased by \$10,037 over the prior year and include funding for additional sampling and analysis required as part of the new RIPDES Permit.

Budget by Division



More detailed data for each Division may be found in the Division Summaries section of this document.

ACCT. NUMBER	BUDGET ACCOUNT	FY 2018 BUDGET	FY 2019 PROPOSED	CHANGE FROM FY 2018	EXECUTIVE AFFAIRS				CONSTRUCTION & ENGINEERING		ADMINISTRATION & FINANCE				
					EXECUTIVE CC 21	HR CC 23	LEGAL 24	IT CC 33	CONSTRUCTION CC 22	ENGINEERING 25	FINANCE CC 31	ACCT. CC 32	CUST. SVC. CC 34	PURCH. CC 36	GEN. ADM. CC 80
PERSONNEL															
52100	UNION - REGULAR	\$ 6,549,604	\$ 6,617,727	\$ 68,123	\$ -	\$ 47,864	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 95,084	\$ 676,580	\$ -	\$ -
52150	UNION OVERTIME	542,400	596,000	53,600	-	-	-	-	-	-	-	-	5,000	-	
52300	NON-UNION REGULAR	10,326,643	10,645,426	318,783	862,415	235,352	450,280	982,815	840,605	554,564	561,170	532,477	622,613	206,842	
52350	NON-UNION OVERTIME	141,400	178,050	36,650	-	-	-	-	20,000	-	50	27,000	-	-	
52400	NON-UNION LIMITED	33,200	32,220	(980)	1,500	-	-	-	5,000	5,000	-	-	-	-	
52800	UNION PENSION	1,710,415	1,743,108	32,693	-	12,607	-	-	-	-	-	25,045	178,211	-	
52810	FICA	1,345,884	1,390,574	44,690	66,089	21,666	34,446	75,185	66,219	42,807	42,930	48,012	103,749	15,823	
52820	UNEMPLOYMENT	30,000	30,000	-	-	-	-	-	-	-	-	-	-	30,000	
52920	NON UNION PENSION	1,246,806	1,114,849	(131,957)	86,242	23,535	45,028	98,282	86,061	55,456	56,117	53,253	64,961	20,684	
52940	UNION RETIREMENT HEALTH	387,668	395,079	7,411	-	2,857	-	-	-	-	-	5,677	40,392	-	
52950	HEALTH INSURANCE	4,207,952	4,210,703	2,751	132,042	66,021	66,667	153,873	181,568	103,093	66,822	125,211	319,721	17,764	
52970	DENTAL INSURANCE	336,920	336,698	(222)	10,102	5,051	7,786	17,131	14,245	9,296	7,603	10,733	29,553	2,552	
52980	VISION INSURANCE	50,293	50,948	655	1,504	752	1,155	2,488	2,077	1,372	1,171	1,822	4,582	419	
52990	DISABILITY INSURANCE	44,500	45,835	1,335	-	-	-	-	-	-	-	-	-	45,835	
53000	SUPP PENSION RETIREES	-	-	-	-	-	-	-	-	-	-	-	-	-	
53690	WORK. COMP. - OLD CLAIMS	5,000	5,000	-	-	-	-	-	-	-	-	-	-	5,000	
TOTAL PERSONNEL															
59000	SALARY REIMBURSEMENT	26,958,685	27,392,217	433,532	1,159,894	415,705	605,362	1,329,774	1,215,775	771,588	735,813	897,364	2,072,362	264,084	
59001	FRINGE REIMBURSEMENT	(1,093,103)	(1,214,336)	(121,233)	(39,735)	-	(20,000)	-	(714,514)	(320,362)	-	(75,000)	-	-	
		(601,206)	(667,885)	(66,679)	(21,854)	-	(11,000)	-	(392,983)	(176,199)	-	(41,250)	-	-	
NET PERSONNEL SERVICES															
		25,264,376	25,509,996	245,620	1,098,305	415,705	574,362	1,329,774	108,278	275,027	735,813	781,114	2,072,362	264,084	
OPERATING SUPPLIES/EXPENSE															
52610	MEDICAL SVCS.	14,390	14,390	-	-	10,000	-	-	125	-	-	-	-	-	
53210	POSTAGE	407,068	405,100	(1,968)	-	-	-	-	-	-	100	380,000	-	25,000	
53240	DUES & SUBSCRIPTIONS	57,700	67,934	10,234	37,000	3,500	7,500	-	900	1,600	3,900	1,000	500	1,400	
53250	FREIGHT	44,050	49,050	5,000	1,500	400	200	500	200	300	250	100	200	100	
53310	PRINTING & BINDING	154,810	158,510	3,700	9,500	50	100	-	100	300	8,000	60	128,000	700	
53320	ADVERTISING	18,175	20,100	1,925	2,500	-	1,500	2,500	2,000	-	2,500	-	100	2,500	
53330	RENTAL- EQUIPMENT	35,800	39,950	4,150	8,800	-	-	-	-	-	-	-	-	6,000	
53340	RENTAL- CLOTHING	32,000	29,000	(3,000)	-	-	-	-	-	-	-	-	-	-	
53350	RENTAL-OUTSIDE PROPERTY	305,134	8,200	(296,934)	5,000	-	-	-	-	-	-	-	-	-	
53360	MISCELLANEOUS EXPENSE	3,600	4,600	1,000	-	4,000	-	-	600	-	-	-	-	-	
53370	PUBLIC OUTREACH ED.	35,000	45,000	10,000	45,000	-	-	-	-	-	-	-	-	-	
53410	LOCAL TRAVEL	5,550	6,900	1,350	500	100	350	500	100	1,000	300	100	-	100	
53420	LONG DISTANCE TRAVEL	116,100	129,700	13,600	35,000	-	12,500	30,000	1,500	12,000	10,500	-	6,000	-	
53470	BLDG. & GRND. MAINT.	208,700	245,058	36,358	-	-	-	-	-	-	-	-	-	102,200	
53480	BIOSOLIDS DISPOSAL	4,517,020	4,808,259	291,239	-	-	-	-	-	-	-	-	-	-	
53490	SCREENING & GRIT DISPOSAL	195,210	195,600	390	-	-	-	-	-	-	-	-	-	-	
53510	VEHICLE FUEL & MAINTENANCE	188,900	199,650	10,750	3,000	-	-	-	6,500	2,000	-	-	7,000	-	
53610	REPAIRS BLDG. STRUCT, EQUIP.	793,865	936,865	143,000	250	100	-	315	-	1,000	-	-	-	40,000	
53620	REPAIR-HIGHWAY & WALKS	15,000	12,500	(2,500)	-	-	-	-	-	-	-	-	-	5,000	
53630	MAINTENANCE CONTRACTS	1,207,100	1,022,811	(184,289)	-	-	-	440,950	-	13,275	-	-	-	-	
53635	MAINT. CONTRACTS - OFFICE EQUIP.	143,627	141,817	(1,810)	50	-	50	-	-	150	-	50	480	62,000	
53640	SERVICE AGREEMENTS	410,089	434,231	24,142	-	-	-	5,000	-	-	-	-	-	-	
53650	HIGHWAY & LANDSCAPE	15,500	15,500	-	-	-	-	-	-	-	-	-	-	-	
53660	INSURANCE	661,149	725,790	64,641	-	-	-	-	-	-	725,790	-	-	-	
53680	WORK. COMP. INSURANCE	460,000	633,000	173,000	-	-	-	-	-	-	633,000	-	-	-	
53900	CENTRAL PHONE SVCS.	4,000	4,000	-	-	-	-	-	-	-	-	-	-	4,000	
54000	TELEPHONE	181,020	204,320	23,300	-	-	-	122,200	-	-	-	-	3,000	25,000	
54020	FUEL OIL #2 - DIESEL	20,000	40,000	20,000	-	-	-	-	-	-	-	-	-	-	
54060	FUEL-GAS	346,180	508,051	161,871	-	-	-	-	-	-	-	-	-	72,225	
54090	ELECTRICITY	2,474,806	2,426,668	(48,138)	-	-	-	-	-	-	-	-	-	2,426,668	
54091	NET METERING CREDIT	-	-	-	-	-	-	-	-	-	-	-	-	-	
54092	FP TURBINES	-	184,000	184,000	-	-	-	-	-	-	-	-	-	10,000	
54093	WED WIND	-	330,000	330,000	-	-	-	-	-	-	-	-	-	330,000	
54094	WED SOLAR	-	-	-	-	-	-	-	-	-	-	-	-	-	
54095	WED PPA	-	-	-	-	-	-	-	-	-	-	-	-	-	
54096	BIOGAS	-	20,000	20,000	-	-	-	-	-	-	-	-	-	20,000	
54110	WATER	67,500	76,500	9,000	-	-	-	-	-	-	-	-	-	5,500	
54200	CLOTHING	42,600	44,325	1,725	2,000	-	-	-	2,000	600	-	2,100	-	-	
54332	CHLORINE/HYPOCHLORITE	345,505	358,444	12,939	-	-	-	-	-	-	-	-	-	-	
54333	CARBON FEED	50,586	48,475	(2,111)	-	-	-	-	-	-	-	-	-	-	
54335	POLYMER	90,060	92,835	2,775	-	-	-	-	-	-	-	-	-	-	
54336	SODIUM HYDROXIDE	54,717	58,901	4,184	-	-	-	-	-	-	-	-	-	-	
54337	SODIUM BISULFITE	245,692	265,006	19,314	-	-	-	-	-	-	-	-	-	-	
54338	SODA ASH	12,210	60,075	47,865	-	-	-	-	-	-	-	-	-	-	
54339	UV DISINFECTION	175,000	175,000	-	-	-	-	-	-	-	-	-	-	-	
54340	LAB SUPPLIES	360,670	370,550	9,880	-	-	-	-	-	-	-	-	-	-	
54370	SUPPLIES BUILDING & MAINT.	449,310	461,710	12,400	100	-	-	300	500	500	60	50	-	5,000	
54410	EDUCATIONAL SUPP. & EXP.	83,950	86,600	2,650	8,000	1,750	2,800	12,000	500	1,500	6,000	2,500	1,500	100	
54420	COMPUTER SUPPLIES	82,150	102,950	20,800	500	-	150	60,000	1,000	200	-	200	-	5,000	
54430	OTHER OP. SUPPLIES & EXP.	11,950	14,450	2,500	500	-	-	1,500	-	-	-	-	-	3,000	
54440	SAFETY EQUIPMENT	51,850	57,900	6,050	100	-	-	-	200	-	-	-	1,000	1,000	
54500	OFFICE EXPENSE	112,875	128,425	15,550	25,000	3,000	650	600	2,600	3,000	5,500	6,000	15,900	1,500	
57913	LEASE INTEREST EXPENSE	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOTAL OPERATING SUPPLIES/EXPENSE															
		15,308,168	16,468,700	1,160,532	184,300	22,900	25,800	676,365	18,825	37,425	1,395,740	10,170	545,730	4,000	
PROFESSIONAL SERVICES															
52600	REGULATORY EXPENSE	457,850	642,850	185,000	-	-	-	-	-	-	625,000	-	-	-	
52620	ARCHITECT/ENG. SERVICES	-	-	-	-	-	-	-	-	-	-	-	-	-	
52630	LECTURES/ED./PROF. SVCS.	-	-	-	-	-	-	-	-	-	-	-	-	-	
52650	SECURITY SERVICES	43,200	45,800	2,600	2,500	-	-	-	-	-	-	9,900	-	-	
52660	LEGAL SERVICES	196,000	221,000	25,000	50,000	-	5,000	-	-	50,000	-	1,000	-	115,000	
52670	MGMT/AUDIT SERVICES	293,000	458,000	165,000	50,000	38,000	-	-	-	335,000	35,000	-	-	-	
52680	CERLICAL SERVICES	41,000	26,500	(14,500)	7,000	-	1,500	-	-	-	3,000	-	-	10,000	
52690	OTHER SERVICES	205,000	295,500	90,500	75,500	19,000	-	-	-	5,000	70,000	-	25,500	30,000	
TOTAL PROFESSIONAL SERVICES															
		1,236,050	1,689,650	453,600	185,000	57,000	6,500	-	-	5,000	1,080,000	38,000	36,400	155,000	

ACCT. NUMBER	BUDGET ACCOUNT	FY 2018 BUDGET	FY 2019 PROPOSED	CHANGE FROM FY 2018	OPERATIONS & MAINTENANCE				ENVIRONMENTAL SCIENCE & COMPLIANCE							
					IM	OPER. MAINT.	SERV.	FIELDS PT.	BUCK. PT.	WATER QUAL. COMPL.	PT	LAB	ESTA	EMDA		
					CC 43	CC 44	CC 46	CC 47	CC 51	CC 52	CC 53	CC 54	CC 55			
PERSONNEL																
52100	UNION - REGULAR	\$ 6,549,604	\$ 6,617,727	\$ 68,123	\$ 570,672	\$ -	\$ 2,201,501	\$ 1,995,020	\$ -	\$ 134,036	\$ 476,113	\$ -	\$ -	\$ 420,857		
52150	UNION OVERTIME	542,400	596,000	53,600	25,000	-	225,000	275,000	-	1,000	30,000	-	-	35,000		
52300	NON-UNION REGULAR	10,326,643	10,645,426	318,783	521,285	545,531	816,247	559,846	359,360	632,240	576,854	270,576	514,354			
52350	NON-UNION OVERTIME	141,400	178,050	36,650	10,000	5,000	60,000	45,000	200	600	4,000	1,000	5,200			
52400	NON-UNION LIMITED	33,200	32,220	(980)	-	-	-	-	5,000	2,000	7,000	-	6,720			
52800	UNION PENSION	1,710,415	1,743,108	32,693	150,315	-	579,875	525,488	-	35,305	125,408	-	110,854			
52810	FICA	1,345,884	1,390,574	44,690	86,595	-	42,116	256,103	221,304	27,889	58,896	84,606	20,776			
52820	UNEMPLOYMENT	30,000	30,000	-	-	-	-	-	-	-	-	-	-			
52920	NON UNION PENSION	1,246,806	1,114,849	(131,957)	53,129	55,053	89,625	60,985	35,956	63,284	58,085	27,158	51,955			
52940	UNION RETIREMENT HEALTH	387,668	395,079	7,411	34,069	-	131,430	119,103	-	8,002	28,424	-	25,125			
52950	HEALTH INSURANCE	4,207,952	4,210,703	2,751	301,647	104,947	746,866	653,142	54,190	196,364	283,547	66,021	214,128			
52970	DENTAL INSURANCE	336,920	336,698	(222)	26,956	9,060	65,850	55,422	4,062	14,795	21,714	5,051	19,736			
52980	VISION INSURANCE	50,293	50,948	655	3,914	1,302	9,884	8,558	636	2,342	3,225	752	2,993			
52990	DISABILITY INSURANCE	44,500	45,835	1,335	-	-	-	-	-	-	-	-	-			
53000	SUPP PENSION RETIREES	-	-	-	-	-	-	-	-	-	-	-	-			
53690	WORK. COMP. - OLD CLAIMS	5,000	5,000	-	-	-	-	-	-	-	-	-	-			
TOTAL PERSONNEL					26,958,685	27,392,217	433,532	1,783,582	763,009	5,182,381	4,518,868	487,293	1,148,864	1,698,976	391,334	1,482,285
59000	SALARY REIMBURSEMENT	(1,093,103)	(1,214,336)	(121,233)	(20,000)	-	(23,225)	(20,000)	-	-	-	-	-	(1,500)		
59001	FRINGE REIMBURSEMENT	(601,206)	(667,885)	(66,679)	(11,000)	-	(12,774)	-	-	-	-	-	-	(825)		
NET PERSONNEL SERVICES					25,264,376	25,509,996	245,620	1,752,582	727,010	5,182,381	4,518,868	487,293	1,148,864	1,698,976	389,009	1,482,285
OPERATING SUPPLIES/EXPENSE																
52610	MEDICAL SVCS.	14,390	14,390	-	-	-	-	-	-	-	-	-	4,265	-		
53210	POSTAGE	407,068	405,100	(1,968)	-	-	-	-	-	-	-	-	-	-		
53240	DUES & SUBSCRIPTIONS	57,700	67,934	10,234	1,500	609	3,500	1,000	725	450	600	1,750	500			
53250	FREIGHT	44,050	49,050	5,000	2,000	100	11,000	10,000	200	400	7,000	100	2,500			
53310	PRINTING & BINDING	154,810	158,510	3,700	-	150	500	500	100	3,450	-	1,000	3,000			
53320	ADVERTISING	18,175	20,100	1,925	500	-	2,000	1,000	-	2,000	1,000	-	-			
53330	RENTAL- EQUIPMENT	35,800	39,950	4,150	1,500	-	10,000	13,500	-	-	150	-	-			
53340	RENTAL- CLOTHING	32,000	29,000	(3,000)	1,000	-	15,000	13,000	-	-	-	-	-			
53350	RENTAL-OUTSIDE PROPERTY	305,134	8,200	(296,934)	-	-	-	-	700	-	-	2,500	-			
53360	MISCELLANEOUS EXPENSE	3,600	4,600	1,000	-	-	-	-	-	-	-	-	-			
53370	PUBLIC OUTREACH ED.	35,000	45,000	10,000	-	-	-	-	-	-	-	-	-			
53410	LOCAL TRAVEL	5,550	6,900	1,350	600	500	200	250	500	50	400	750	600			
53420	LONG DISTANCE TRAVEL	116,100	129,700	13,600	2,000	-	4,000	1,000	3,000	2,000	4,500	2,500	3,200			
53470	BLDG. & GRND. MAINT.	208,700	245,058	36,358	8,500	-	48,000	43,258	-	200	42,900	-	-			
53480	BIO SOLIDS DISPOSAL	4,517,020	4,808,259	291,239	-	-	3,826,589	981,670	-	-	-	-	-			
53490	SCREENING & GRIT DISPOSAL	195,210	195,600	390	42,000	-	105,600	48,000	-	-	-	-	-			
53510	VEHICLE FUEL & MAINTENANCE	188,900	199,650	10,750	65,000	2,550	55,000	30,000	-	8,000	-	1,600	19,000			
53610	REPAIRS BLDG, STRUCT.EQUIP.	793,865	936,865	143,000	35,000	25,000	525,000	250,000	-	200	39,000	-	21,000			
53620	REPAIR-HIGHWAY & WALKS	15,000	12,500	(2,500)	7,500	-	-	-	-	-	-	-	-			
53630	MAINTENANCE CONTRACTS	1,207,100	1,022,811	(184,289)	8,626	277,040	124,622	36,161	-	-	119,017	-	3,120			
53635	MAINT. CONTRACTS - OFFICE EQUIP.	143,627	141,817	(1,810)	6,050	-	40,435	20,235	-	1,000	10,717	-	600			
53640	SERVICE AGREEMENTS	410,089	434,231	24,142	48,400	29,000	194,952	156,879	-	-	-	-	-			
53650	HIGHWAY & LANDSCAPE	15,500	15,500	-	6,000	-	3,500	6,000	-	-	-	-	-			
53660	INSURANCE	661,149	725,790	64,641	-	-	-	-	-	-	-	-	-			
53680	WORK. COMP. INSURANCE	460,000	633,000	173,000	-	-	-	-	-	-	-	-	-			
53900	CENTRAL PHONE SVCS.	4,000	4,000	-	-	-	-	-	-	-	-	-	-			
54000	TELEPHONE	181,020	204,320	23,300	28,000	-	15,000	5,000	-	3,220	-	-	2,900			
54020	FUEL OIL #2 - DIESEL	20,000	40,000	20,000	-	-	15,000	25,000	-	-	-	-	-			
54060	FUEL-GAS	346,180	508,051	161,871	18,003	-	144,899	272,924	-	-	-	-	-			
54090	ELECTRICITY	2,474,806	2,426,668	(48,138)	-	-	-	-	-	-	-	-	-			
54091	NET METERING CREDIT	-	-	-	-	-	-	-	-	-	-	-	-			
54092	FP TURBINES	-	184,000	184,000	-	-	174,000	-	-	-	-	-	-			
54093	WED WIND	-	330,000	330,000	-	-	-	-	-	-	-	-	-			
54094	WED SOLAR	-	-	-	-	-	-	-	-	-	-	-	-			
54095	WED PPA	-	-	-	-	-	-	-	-	-	-	-	-			
54096	BIOGAS	-	20,000	20,000	-	-	-	-	-	-	-	-	-			
54110	WATER	67,500	76,500	9,000	3,000	-	21,000	31,000	-	-	16,000	-	-			
54200	CLOTHING	42,600	44,325	1,725	5,500	-	10,000	10,000	225	1,500	3,900	500	6,000			
54332	CHLORINE/HYPOCHLORITE	345,505	358,444	12,939	-	-	336,896	21,548	-	-	-	-	-			
54333	CARBON FEED	50,586	48,475	(2,111)	-	-	44,938	3,537	-	-	-	-	-			
54335	POLYMER	90,060	92,835	2,775	-	-	-	92,835	-	-	-	-	-			
54336	SODIUM HYDROXIDE	54,717	58,901	4,184	-	-	58,901	-	-	-	-	-	-			
54337	SODIUM BISULFITE	245,692	265,006	19,314	-	-	236,612	28,394	-	-	-	-	-			
54338	SODA ASH	12,210	60,075	47,865	-	-	-	60,075	-	-	-	-	-			
54339	UV DISINFECTION	175,000	175,000	-	-	-	-	175,000	-	-	-	-	-			
54340	LAB SUPPLIES	360,670	370,550	9,880	-	-	24,000	15,000	-	2,550	260,000	500	68,500			
54370	SUPPLIES BUILDING & MAINT.	449,310	461,710	12,400	30,000	200	250,000	160,000	100	500	3,500	7,400	3,500			
54410	EDUCATIONAL SUPP. & EXP.	83,950	86,600	2,650	1,000	250	4,500	4,000	1,800	3,000	5,400	11,000	4,000			
54420	COMPUTER SUPPLIES	82,150	102,950	20,800	500	25,000	2,000	5,000	50	1,200	500	1,200	450			
54430	OTHER OP. SUPPLIES & EXP.	11,950	14,450	2,500	1,000	-	1,500	1,500	2,200	50	-	3,000	200			
54440	SAFETY EQUIPMENT	51,850	57,900	6,050	5,500	-	20,000	15,000	100	1,000	1,500	5,500	7,000			
54500	OFFICE EXPENSE	112,875	128,425	15,550	6,000	1,000	15,000	9,000	3,225	4,000	3,500	3,550	4,400			
57913	LEASE INTEREST EXPENSE	-	-	-	-	-	-	-	-	-	-	-	-			
TOTAL OPERATING SUPPLIES/EXPENSE					15,308,168	16,468,700	1,160,532	334,679	361,399	6,344,144	2,547,266	12,925	34,770	519,584	47,115	150,470
PROFESSIONAL SERVICES																
52600	REGULATORY EXPENSE	457,850	642,850	185,000	300	-	8,000	9,000	-	-	550	-	-			
52620	ARCHITECT/ENG. SERVICES	-	-	-	-	-	-	-	-	-	-	-	-			
52630	LECTURES/ED./PROF. SVCS.	-	-	-	-	-	-	-	-	-	-	-	-			
52650	SECURITY SERVICES	43,200	45,800	2,600	20,000	-	9,000	3,000	-	-	1,400	-	-			
52660	LEGAL SERVICES	196,000	221,000	25,000	-	-	-	-	-	-	-	-	-			
52670	MGMT/AUDIT SERVICES	293,000	458,000	165,000	-	-	-	-	-	-	-	-	-			
52680	CLERICAL SERVICES	41,000	26,500	(14,500)	-	-	-	-	5,000	-	-	-	-			
52690	OTHER SERVICES	205,000	295,500	90,500	500	-	-	-	-	-	30,000	-	40,000			
TOTAL PROFESSIONAL SERVICES					1,236,050	1,689,650	453,600	20,800	-	17,000	12,000	5,000	31,950	-	40,000	
TOTAL OPERATIONS & MAINTENANCE					41,808,594	43,668,346	1,859,752	2,108,061	1,088,409	11,543,525	7,078,134	505,218	1,183,634	2,250,510	436,124	1,672,755

EXECUTIVE AFFAIRS DIVISION

Division Summary

EXECUTIVE

HUMAN RESOURCES

LEGAL

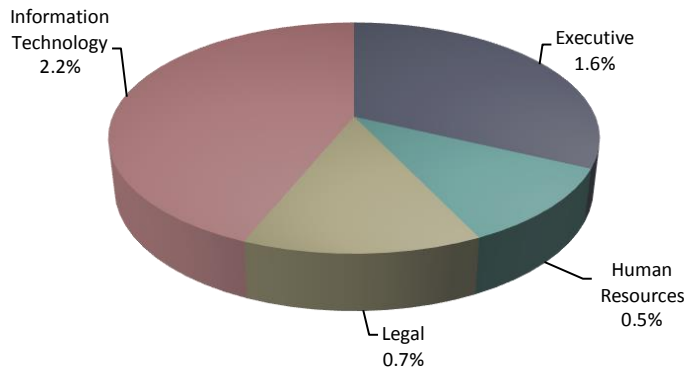
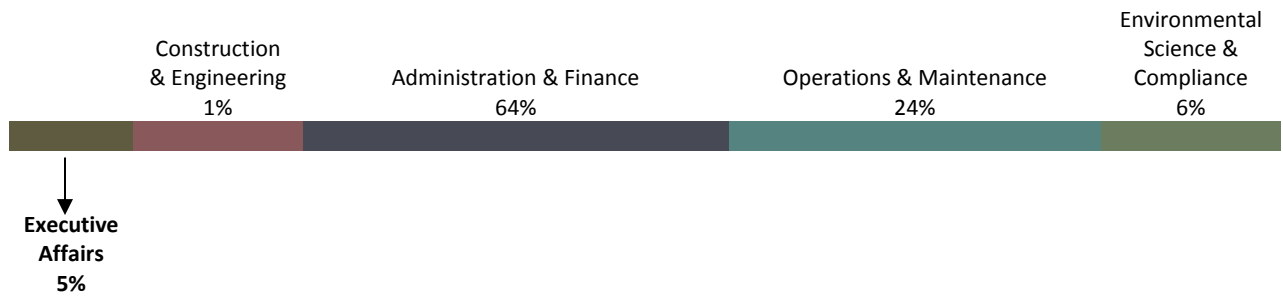
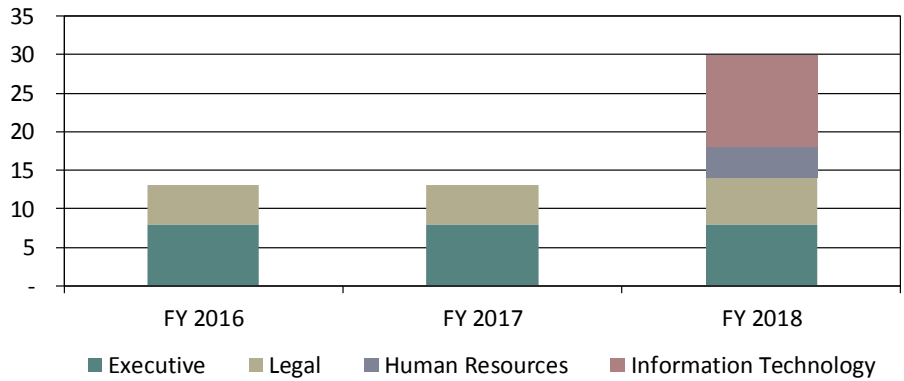
INFORMATION TECHNOLOGY

The Program

The Executive Affairs Division is responsible for Executive Affairs, Public Relations, Government Affairs, Labor/Employee Relations, Human Resources, Legal Services and Information Technology.

All of the agency divisions: Executive Affairs; Construction and Engineering; Administration and Finance; Operations and Maintenance; and Environmental Science and Compliance report directly to the Executive Director.

**Budgeted Positions (FTEs)
Executive Affairs Division**



EXECUTIVE AFFAIRS DIVISION

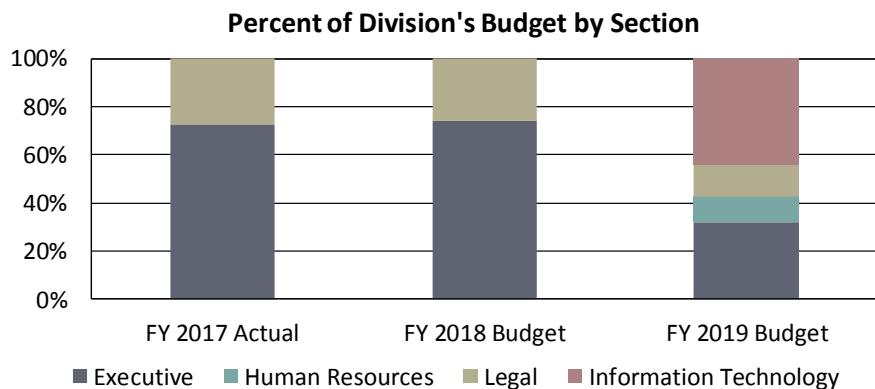
Division Summary

The Budget

Operations & Maintenance Expense	FY 2017 Actual	FY 2018 Budget	FY 2019 Budget
Personnel	\$ 1,532,944	\$ 1,542,931	\$ 3,418,146
Operating Supplies/Expense	141,652	189,675	909,365
Professional Services	28,798	116,000	248,500
Total O&M	\$ 1,703,394	\$ 1,848,606	\$ 4,576,011
Funds by Source - Revenue	\$ 1,703,394	\$ 1,848,606	\$ 4,576,011

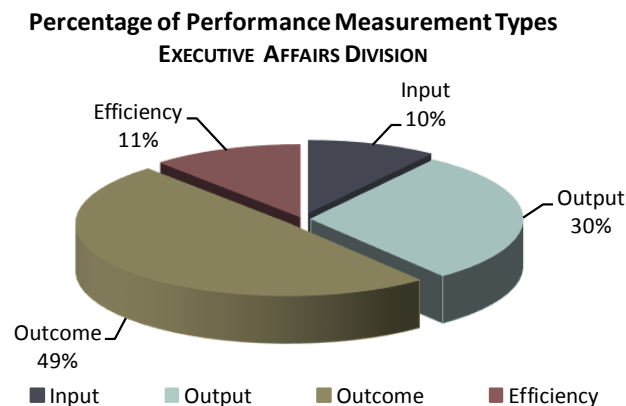
Significant Budget Modifications

The FY 2019 Executive Affairs Division budget reflects an overall increase of \$2.7 million or 248% more than the FY 2018 budget. The increase reflects the reorganization of the Human Resources and Information Technology functions from the Administration and Finance Division to the Executive Affairs Division. Personnel reflects 1.0 new FTE in Legal and the reorganization of 4.0 FTEs in Human Resources and 12.0 FTEs in Information Technology for an increase of 17.0 FTEs over the prior year. Operating supplies and expense and professional services have increased by \$852,190 compared to FY 2018 as a result of increased public outreach, maintenance contracts, the reallocation of telecommunications expense to Information Technology and consulting services.



Executive Affairs Division Performance Data Summary

The chart below illustrates the Executive Affairs Division's Performance Data by type of measure. The measures can be found in the individual sections following this division summary. In this Division, Outcome and Efficiency make up 60% of the performance measures.



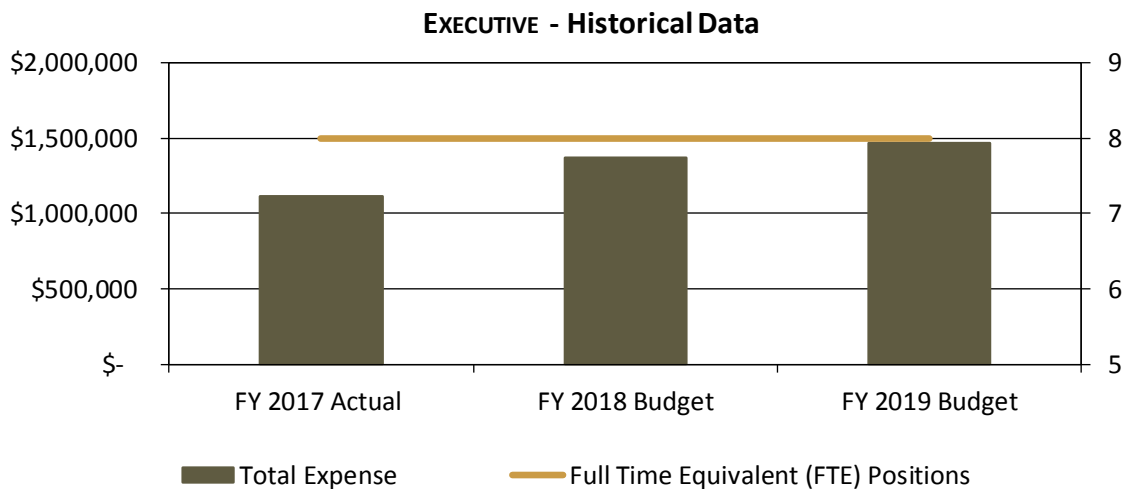
EXECUTIVE Section Summary

The Program

The Executive section includes the Executive Director, Director of Executive Affairs, Public Affairs, Labor/Employee Relations and Government Affairs. The Executive section is responsible for overall agency management responsibilities, including policy development, collective bargaining negotiations, contract compliance, liaison activities with local, state and federal entities and officials, legal oversight and maintenance of a strong public information program.

The Budget

Operations & Maintenance Expense	FY 2017 Actual	FY 2018 Budget	FY 2019 Budget
Personnel	\$ 955,714	\$ 1,097,238	\$ 1,098,305
Operating Supplies/Expense	129,151	166,450	184,300
Professional Services	27,503	109,500	185,000
Total O&M	\$ 1,112,368	\$ 1,373,188	\$ 1,467,605
Funds by Source - Revenue	\$ 1,112,368	\$ 1,373,188	\$ 1,467,605



PROGRAM STAFFING (BUDGETED)			
Executive Director	1.0	Government Affairs Manager	1.0
Director of Executive Affairs	1.0	Labor and Employee Relations Manager	1.0
Environmental Education Coordinator	1.0	Public Affairs Manager	1.0
Executive Assistant	1.0	Public Affairs Specialist	1.0
8.0 FTEs			

Goal Actions for Target Measures by Key Code

Core Business

CB 1	Ensure compliance with all State and Federal regulations, permits, consent agreements, certifications, NBC regulations and reporting requirements
CB 2	Manage the planning, design and construction of NBC's capital improvements in the most cost-effective manner and in compliance with regulatory requirements
CB 3	Ensure the highest level of availability of systems' applications and network stability
CB 4	Maximize efficiency through service automation, applications security and NBC campus security
CB 5	Maintain NBC's asset management program for infrastructure and assets, ensure integrity and maximize the investment

Environmental Performance

EP 1	Minimize environmental impacts and implement conservation and sustainability measures
EP 2	Evaluate the NBC Program and report the data to the public
EP 3	Provide technical assistance to evaluate energy conservation and renewable energy opportunities
EP 4	Provide quality and expedient sample collection, data analyses and water quality monitoring to evaluate NBC's impacts and document improvements

Financial Management

FM 1	Ensure sufficient funding and receive the lowest cost of borrowing with the least rate payer impact
FM 2	Integrate NBC's strategic goals into the allocation of NBC's resources
FM 3	Maximize the efficiency, effectiveness, and accuracy of NBC's rate structures and collection processes to reduce accounts receivable
FM 4	Develop and manage NBC's operating and capital budgets to maximize benefits, minimize expense and unplanned expenditures
FM 5	Comply with IRS, Federal and State Rules and Regulations, Trust Indenture and Generally Accepted Accounting Principles
FM 6	Ensure goods and services are procured, reviewed and processed in a timely, efficient and cost effective manner
FM 7	Initiate and evaluate incentive programs
FM 8	Evaluate savings opportunities and optimize NBC operations and processes

Customer Focus

CF 1	Maintain programs and conduct projects that give back to the community
CF 2	Provide prompt, courteous, efficient and educational services
CF 3	Enhance communications to ensure consistency, reliability and satisfaction
CF 4	Maximize customer focus attitude by providing excellent customer service and developing strong customer relationships
CF 5	Ensure compliance with NBC internal controls

Staffing

S 1	Ensure compliance with Federal and State labor laws
S 2	Foster a positive working environment through effective communication
S 3	Provide professional, technical and/or safety training to optimize team performance and ensure user comfort with systems and processes
S 4	Provide a healthy and safe working environment
S 5	Develop mechanisms and establish opportunities for continued growth and professional development

Communication

C 1	Continue to expand and conduct NBC public outreach programs
C 2	Proactively manage NBC's public and legislative affairs and communicate NBC initiatives and ongoing activities
C 3	Effectively communicate status of capital projects to NBC staff and Board members
C 4	Enhance operating budget, CIP and compliance reports as a communication device
C 5	Strengthen and expand NBC's positive relations with key stakeholders (customers, Board, elected officials/delegates, regulatory officials and the public) to ensure support of NBC's mission

Organizational Performance

OP 1	Conduct NBC business in an open manner
OP 2	Promote diversity in hiring practices
OP 3	Ensure compliance with State ethics and regulatory agenda filing
OP 4	Provide end-user technology and systems to meet NBC's strategic goals

**EXECUTIVE
Performance Data**

Major Accomplishments FY 2018 by Key Code:

- CB 1** Completed RIPDES permit negotiations for FPWWTF and BPWWTF
- CB 1** Negotiated CSO Phase III Facilities Consent Agreements with RIDEM
- CB 1** Obtained approval from RIDEM on the revised CSO Phase III Facilities Plan Conceptual Design Report
- CB 2** Completed sewer system expansion projects
- CB 4** Contributed to the re-purposing of the old lab building to a records storage facility
- FM 4** Negotiated a 3-year CBA contract with the Unions
- S 5** Completed the solar energy power purchase agreement
- C 1** Conducted 57 educational tours of the FPWWTF
- C 1** Involved 12 schools in the NBC Watershed Explorers program and provided education to 700 students from cities and towns within NBC's service district
- C 2** Successfully lobbied against legislation relative to open meetings, purchasing and payments to subcontractors that would have had a negative impact on NBC
- OP 1** Received NACWA Excellence in Management Award - Platinum Level

Top Priorities for FY 2019 and How They Relate to the Strategic Plan/Goals and by Key Code:

- S 4** Consolidate the NBC Campus
- S 5** Continue NBC succession planning
- S 5** Dispose of surplus CSO Phase II easement properties

Target Measures

CORE BUSINESS: *Operate, maintain and protect our collection and treatment systems to ensure that all State and Federal requirements are met or surpassed.*

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Manage the planning, design and construction of NBC's capital improvements in the most cost-effective manner and in compliance with regulatory requirements • CB 2

TARGET MEASURE:

Conduct a minimum of 9 capital project meetings to update managers on the status of capital projects

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Quantity	10	9	9	9

CUSTOMER FOCUS: *Maintain a customer-focused attitude throughout the organization.*

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Maintain programs and conduct projects that give back to the community • CF 1

TARGET MEASURE:

Grant 40 or more awards/scholarships

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Quantity	53 Awards/Scholarships	40	40	40

TARGET MEASURE:

Conduct a minimum of 100 lessons at schools in the NBC service area

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Lessons Conducted	100	100	100	100
Participating Students	700	480	480	480

TARGET MEASURE:

Arrange a minimum of 20 water quality testing field trips for local schools

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Quantity	26	20	20	20

TARGET MEASURE:

Ensure 100% of participating schools attend the Watershed Explorer Environmental Education Conference

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	12 Schools	100%	100%	100%

TARGET MEASURE:

Respond to 100% of requests for WWTF presentations/tours

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Quantity	57 Presentations/Tours	100%	100%	100%

STAFFING: *Attract, develop and retain highly qualified employees.*

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Foster a positive working environment through effective communication • S 2

TARGET MEASURE:

Meet 2 or more times with union and non-union staff

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Frequency	1	2	2	2

TARGET MEASURE:

Receive the Best Places to Work in RI Award

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Consecutive Years	7	7	8	9

TARGET MEASURE:

Create NBC monthly newsletter and include a minimum of 50 NBC Staff articles

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Frequency	12	Monthly	Monthly	Monthly
Quantity - Articles	65	50	50	50

COMMUNICATION: *Improve and enhance internal and external communication to increase understanding of "who we are" and "what we do".*

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Continue to expand and conduct NBC public outreach programs • C 1

TARGET MEASURE:

Update website a minimum of once per week to provide current information on NBC activity

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Frequency	52 Updates	Weekly	Weekly	Weekly

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Proactively manage and communicate NBC's public and legislative affairs, initiatives and ongoing activities • C 2

TARGET MEASURE:

Review 100% of bills introduced each year

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	2,416 Bills Reviewed	100%	100%	100%

TARGET MEASURE:

Propose 100% of NBC related legislation amendments where appropriate

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	6 Proposed Amendments	100%	100%	100%

TARGET MEASURE:

Provide the annual report to members of the General Assembly by due date and Final Legislative Report to Board

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Due Date	1/31/2017	1/31/2017	1/31/2018	1/31/2019

TARGET MEASURE:

Provide legislative reports to the Board on 100% of legislation of interest to NBC and present the Final Report in September

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Legislative Reports	19 Pieces of Legislation	100%	100%	100%
Final Legislative Report	September 25, 2016	9/2016	9/2017	9/2018

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Strengthen and expand NBC's positive relations with key stakeholders (customers, Board, elected officials/ delegates, regulatory officials and the public) to ensure support of NBC's mission • C 5

TARGET MEASURE:

Meet with RIDEM Officials quarterly

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Quantity	4	4	4	4

TARGET MEASURE:

Meet and/or correspond 4 or more times with Rhode Island's Congressional Delegation

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Frequency	4	4	4	4

ORGANIZATIONAL PERFORMANCE:*Ensure that the NBC organization is aligned with and supports our strategic goals.***GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:**

Conduct NBC business in an open manner • OP 1

TARGET MEASURE:

Post NBC Board and/or Committee meeting notices 48 hours prior to meeting date on RI Secretary of State website, at State Library, RI State House, and NBC facilities. Post all draft/approved meeting minutes within 35 days on RI Secretary of State website

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Meeting Notices <i>More than 48 Hours Prior to Meeting</i>	>48 hours	>48 hours	>48 hours	>48 hours
Draft Minutes <i>Less than 35 Days of Meeting</i>	<35 days	<35 days	<35 days	<35 days
Approved Minutes <i>Less than 35 Days of Approval</i>	<35 days	<35 days	<35 days	<35 days

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Promote diversity in hiring practices • OP 2

TARGET MEASURE:

Submit affirmative action plan to the Equal Employment Opportunity Commission by due date

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Due Date	8/1/2016	8/1/2016	8/1/2017	8/1/2018



HUMAN RESOURCES

Section Summary

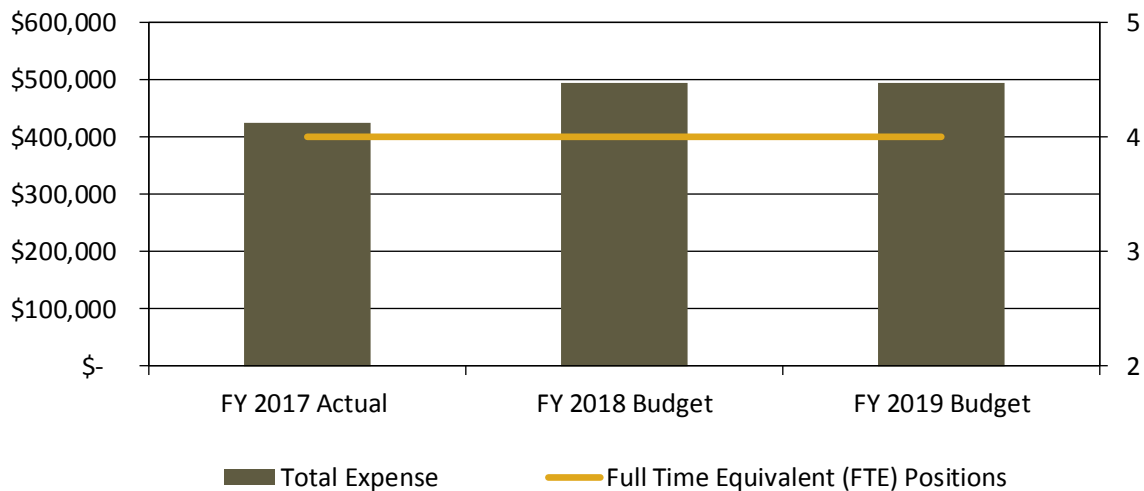
The Program

The Human Resources section is responsible for the administration and processing of employee records, employee recruitment and retention, workers' compensation, non-union retirement plans and equal employment opportunity for union and non-union personnel. This section is also responsible for regulatory compliance, the evaluation and administration of employee benefits and for administering provisions of the two collective bargaining agreements.

The Budget

Operations & Maintenance Expense	FY 2017 Actual	FY 2018 Budget	FY 2019 Budget
Personnel	\$ 400,677	\$ 417,090	\$ 415,705
Operating Supplies/Expense	16,891	22,000	22,900
Professional Services	7,105	57,000	57,000
Total O&M	\$ 424,673	\$ 496,090	\$ 495,605
Funds by Source - Revenue	\$ 424,673	\$ 496,090	\$ 495,605

HUMAN RESOURCES - Historical Data



PROGRAM STAFFING (BUDGETED)			
Human Resources Manager	1.0	Human Resources Representative/Benefits Coordinator	1.0
Human Resources Clerk	1.0	Senior Human Resources Representative	1.0
4.0 FTEs			

Goal Actions for Target Measures by Key Code

Core Business

CB 1	Ensure compliance with all State and Federal regulations, permits, consent agreements, certifications, NBC regulations and reporting requirements
CB 2	Manage the planning, design and construction of NBC's capital improvements in the most cost-effective manner and in compliance with regulatory requirements
CB 3	Ensure the highest level of availability of systems' applications and network stability
CB 4	Maximize efficiency through service automation, applications security and NBC campus security
CB 5	Maintain NBC's asset management program for infrastructure and assets, ensure integrity and maximize the investment

Environmental Performance

EP 1	Minimize environmental impacts and implement conservation and sustainability measures
EP 2	Evaluate the NBC Program and report the data to the public
EP 3	Provide technical assistance to evaluate energy conservation and renewable energy opportunities
EP 4	Provide quality and expedient sample collection, data analyses and water quality monitoring to evaluate NBC's impacts and document improvements

Financial Management

FM 1	Ensure sufficient funding and receive the lowest cost of borrowing with the least rate payer impact
FM 2	Integrate NBC's strategic goals into the allocation of NBC's resources
FM 3	Maximize the efficiency, effectiveness, and accuracy of NBC's rate structures and collection processes to reduce accounts receivable
FM 4	Develop and manage NBC's operating and capital budgets to maximize benefits, minimize expense and unplanned expenditures
FM 5	Comply with IRS, Federal and State Rules and Regulations, Trust Indenture and Generally Accepted Accounting Principles
FM 6	Ensure goods and services are procured, reviewed and processed in a timely, efficient and cost effective manner
FM 7	Initiate and evaluate incentive programs
FM 8	Evaluate savings opportunities and optimize NBC operations and processes

Customer Focus

CF 1	Maintain programs and conduct projects that give back to the community
CF 2	Provide prompt, courteous, efficient and educational services
CF 3	Enhance communications to ensure consistency, reliability and satisfaction
CF 4	Maximize customer focus attitude by providing excellent customer service and developing strong customer relationships
CF 5	Ensure compliance with NBC internal controls

Staffing

S 1	Ensure compliance with Federal and State labor laws
S 2	Foster a positive working environment through effective communication
S 3	Provide professional, technical and/or safety training to optimize team performance and ensure user comfort with systems and processes
S 4	Provide a healthy and safe working environment
S 5	Develop mechanisms and establish opportunities for continued growth and professional development

Communication

C 1	Continue to expand and conduct NBC public outreach programs
C 2	Proactively manage NBC's public and legislative affairs and communicate NBC initiatives and ongoing activities
C 3	Effectively communicate status of capital projects to NBC staff and Board members
C 4	Enhance operating budget, CIP and compliance reports as a communication device
C 5	Strengthen and expand NBC's positive relations with key stakeholders (customers, Board, elected officials/delegates, regulatory officials and the public) to ensure support of NBC's mission

Organizational Performance

OP 1	Conduct NBC business in an open manner
OP 2	Promote diversity in hiring practices
OP 3	Ensure compliance with State ethics and regulatory agenda filing
OP 4	Provide end-user technology and systems to meet NBC's strategic goals

HUMAN RESOURCES

Performance Data

Major Accomplishments FY 2018 by Key Code:

- FM 4** Evaluated and renewed NBC's Vision and Dental Insurance and Flexible Spending Account Plans
- FM 4** Provided daily administration of the non-union retirement plans
- S 1** Completed timely reporting of all state and federal required disclosures to staff and government agencies
- S 1** Submitted the EEO report by the due date
- S 1** Reviewed and revised federal/state regulatory procedures and forms
- S 2** Received Best Places to Work in RI Award
- S 4** Provided workplace wellness and training programs to staff
- S 4** Achieved workers' compensation experience modification of 1.19
- S 5** Implemented the reorganization of the engineering and operations support functions

Top Priorities for FY 2019 and How They Relate to the Strategic Plan/Goals and by Key Code:

- FM 4** Effectively manage NBC's employee benefits programs
- S 1** Ensure timely administration of NBC hiring procedures in accordance with Federal & State labor laws
- S 4** Continue the workplace wellness initiative

Target Measures

FINANCIAL MANAGEMENT: *Manage NBC's finances through strong financial planning and controls such that sewer user charges are minimized.*

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Develop and manage NBC's operating and capital budgets to maximize benefits, minimize expense and unplanned expenditures • FM 4

TARGET MEASURE:

Evaluate comparable benefit solutions six months prior to renewal

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	100%	100%	100%	100%

TARGET MEASURE:

Complete Retirement Plan Census by due date

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Due Date - Defined Benefit	2/28/2017	2/28/2017	2/28/2018	2/28/2019
Due Date - Defined Contribution	7/30/2016	7/30/2016	7/30/2017	7/30/2018

CUSTOMER FOCUS:*Maintain a customer-focused attitude throughout the organization.***GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:**

Enhance internal communications to ensure consistency, reliability and satisfaction • CF 3

TARGET MEASURE:

Provide up to date information on NBC's Benefits Webpage quarterly

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Frequency	10 Updates	Quarterly	Quarterly	Quarterly

STAFFING:*Attract, develop and retain highly qualified employees.***GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:**

Ensure compliance with the Federal and State labor laws • S 1

TARGET MEASURE:

Submit annual EEO report by due date

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Due date	11/1/2016	11/1/2016	11/1/2017	11/1/2018

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Foster a positive working environment through effective communication • S 2

TARGET MEASURE:

Conduct exit interviews

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	25 Exit Interviews	100%	100%	100%

TARGET MEASURE:

Prepare and distribute employment postings within 1 week of approval

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	44 Employment Postings	100%	100%	100%

TARGET MEASURE:

Implement a minimum of 2 "Good Health" programs

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Quantity	4	2	2	2

TARGET MEASURE:

Implement a minimum of 1 employee training program

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Quantity	1	1	1	1

TARGET MEASURE:

Receive the Best Places to Work in RI Award

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Consecutive Years	7	7	8	9

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Provide professional, technical and/or safety training to optimize team performance and ensure user comfort with systems and processes • S 3

TARGET MEASURE:

Attend a minimum of 2 outside HR related seminars

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Quantity	2	2	2	2

TARGET MEASURE:

Provide a minimum of 10 participant meetings with NBC's investment advisor

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Participant Meetings	26	10	10	10

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Provide a healthy and safe working environment • S 4

TARGET MEASURE:

Investigate workers' compensation injuries and make recommendations to prevent reoccurrence

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	22 Investigations	100%	100%	100%

TARGET MEASURE:

Implement a minimum of 2 Wellness Incentive Programs

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Programs Offered	4	2	2	2
Participating Employees	88%	50%	50%	50%
Employees Reaching Wellness Maximum	38%	30%	30%	30%

TARGET MEASURE:

Maintain a workers' compensation experience modification rating of 1.00 or lower

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Rating	1.19	≤1.00	≤1.00	≤1.00



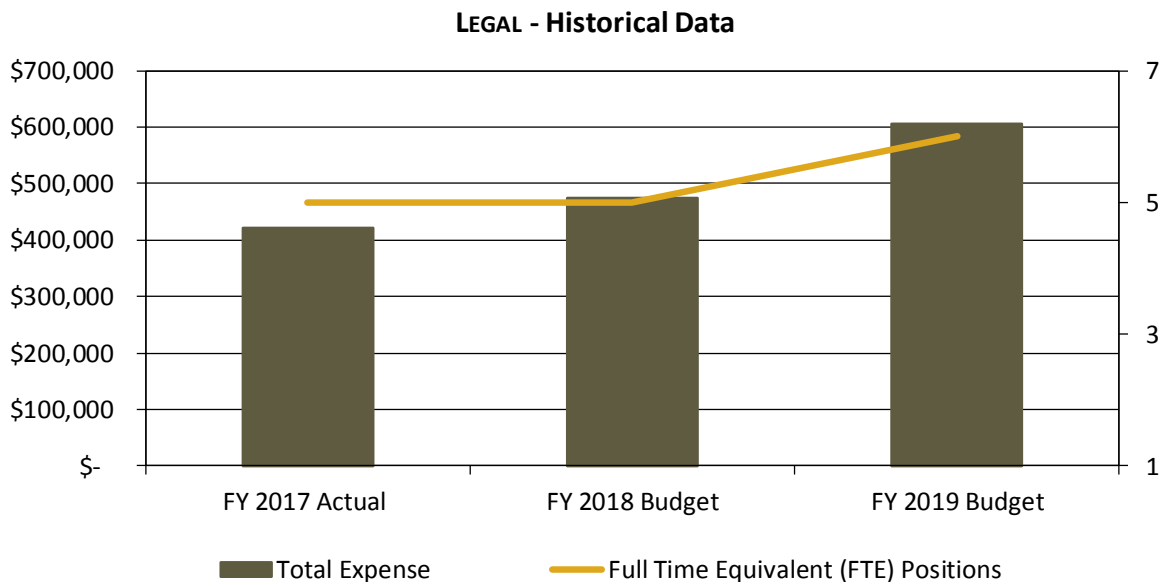
LEGAL Section Summary

The Program

The Legal section provides prompt and accurate legal advice to agency staff with regard to issues that arise in the course of NBC's business activities. NBC's legal staff has expertise in environmental, contractual, corporate, legislative, real estate, collections and bankruptcy law. Outside legal services are used to supplement in-house expertise as needed.

The Budget

Operations & Maintenance Expense	FY 2017 Actual	FY 2018 Budget	FY 2019 Budget
Personnel	\$ 406,780	\$ 445,693	\$ 574,362
Operating Supplies/Expense	12,501	23,225	25,800
Professional Services	1,295	6,500	6,500
Total O&M	\$ 420,576	\$ 475,418	\$ 606,662
Funds by Source - Revenue	\$ 420,576	\$ 475,418	\$ 606,662



PROGRAM STAFFING (BUDGETED)			
Chief Legal Counsel	1.0	Executive Paralegal II	1.0
General Counsel	1.0	Legal Counsel	2.0
Executive Paralegal	1.0		
	6.0 FTEs		

Goal Actions for Target Measures by Key Code

Core Business

CB 1	Ensure compliance with all State and Federal regulations, permits, consent agreements, certifications, NBC regulations and reporting requirements
CB 2	Manage the planning, design and construction of NBC's capital improvements in the most cost-effective manner and in compliance with regulatory requirements
CB 3	Ensure the highest level of availability of systems' applications and network stability
CB 4	Maximize efficiency through service automation, applications security and NBC campus security
CB 5	Maintain NBC's asset management program for infrastructure and assets, ensure integrity and maximize the investment

Environmental Performance

EP 1	Minimize environmental impacts and implement conservation and sustainability measures
EP 2	Evaluate the NBC Program and report the data to the public
EP 3	Provide technical assistance to evaluate energy conservation and renewable energy opportunities
EP 4	Provide quality and expedient sample collection, data analyses and water quality monitoring to evaluate NBC's impacts and document improvements

Financial Management

FM 1	Ensure sufficient funding and receive the lowest cost of borrowing with the least rate payer impact
FM 2	Integrate NBC's strategic goals into the allocation of NBC's resources
FM 3	Maximize the efficiency, effectiveness, and accuracy of NBC's rate structures and collection processes to reduce accounts receivable
FM 4	Develop and manage NBC's operating and capital budgets to maximize benefits, minimize expense and unplanned expenditures
FM 5	Comply with IRS, Federal and State Rules and Regulations, Trust Indenture and Generally Accepted Accounting Principles
FM 6	Ensure goods and services are procured, reviewed and processed in a timely, efficient and cost effective manner
FM 7	Initiate and evaluate incentive programs
FM 8	Evaluate savings opportunities and optimize NBC operations and processes

Customer Focus

CF 1	Maintain programs and conduct projects that give back to the community
CF 2	Provide prompt, courteous, efficient and educational services
CF 3	Enhance communications to ensure consistency, reliability and satisfaction
CF 4	Maximize customer focus attitude by providing excellent customer service and developing strong customer relationships
CF 5	Ensure compliance with NBC internal controls

Staffing

S 1	Ensure compliance with Federal and State labor laws
S 2	Foster a positive working environment through effective communication
S 3	Provide professional, technical and/or safety training to optimize team performance and ensure user comfort with systems and processes
S 4	Provide a healthy and safe working environment
S 5	Develop mechanisms and establish opportunities for continued growth and professional development

Communication

C 1	Continue to expand and conduct NBC public outreach programs
C 2	Proactively manage NBC's public and legislative affairs and communicate NBC initiatives and ongoing activities
C 3	Effectively communicate status of capital projects to NBC staff and Board members
C 4	Enhance operating budget, CIP and compliance reports as a communication device
C 5	Strengthen and expand NBC's positive relations with key stakeholders (customers, Board, elected officials/delegates, regulatory officials and the public) to ensure support of NBC's mission

Organizational Performance

OP 1	Conduct NBC business in an open manner
OP 2	Promote diversity in hiring practices
OP 3	Ensure compliance with State ethics and regulatory agenda filing
OP 4	Provide end-user technology and systems to meet NBC's strategic goals

LEGAL

Performance Measures

Major Accomplishments FY 2018 by Key Code:

- CB 1** Filed RIPDES appeals for both FPWWTF and BPWWTF within the required timeframes
- CB 1** Worked with the Rhode Island Office of Regulatory Reform to standardize codification process for statewide Rules and Regulations
- CB 1** Assisted Pretreatment with legal aspects of the Pretreatment Program
- CB 2** Assisted Construction and Engineering with legal and regulatory aspects of the CSO Phase III Facilities project
- FM 3** Conducted two lien sales, which resulted in the collection of approximately \$800,000. All funds in the first sale were collected prior to the scheduled lien sale
- CF 2** Responded to all public record requests within the statutory timeframe to the appropriate Rhode Island agencies/parties
- C 2** Reviewed, analyzed and opined on pending legislation
- OP 3** Filed all ethics and public records training compliance within the required timeframe

Top Priorities for FY 2019 and How They Relate to the Strategic Plan/Goals and by Key Code:

- CB 1** Assist Construction and Engineering with legal aspects of the FPWWTF and BPWWTF RIPDES Permit Appeals and CSO Phase III Consent Decrees
- FM 3** Conduct two lien sales to collect past due customer accounts and reduce accounts receivable
- FM 3** Monitor customer accounts subject to the US Bankruptcy Code/RI Receivership Petitions, including filing proof of claims within the required timeframes

Target Measures

CORE BUSINESS:

Operate, maintain and protect our collection and treatment systems to ensure that all State and Federal requirements are met or surpassed.

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Ensure compliance with all State and Federal regulations, permits, consent agreements, certifications, NBC regulations and reporting requirements • CB 1

TARGET MEASURE:

Issue Enforcement Actions within two weeks of request

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	3 Enforcement Actions	100%	100%	100%

FINANCIAL MANAGEMENT:*Manage NBC's finances through strong financial planning and controls such that sewer user charges are minimized.***GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:**

Maximize the efficiency, effectiveness, and accuracy of NBC's rate structures and collection processes to reduce accounts receivable • FM 3

TARGET MEASURE:

Conduct a minimum of 2 lien sales annually

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Frequency	1 Lien Sale	2	2	2

TARGET MEASURE:

Ensure at least 65% of accounts are paid prior to lien sale

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	94%	65%	65%	65%

TARGET MEASURE:

Monitor 100% of bankruptcies and file proof of claims where appropriate

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Flagged Bankruptcies/Proof of Claims	109	100%	100%	100%
Discharged Accounts	46	100%	100%	100%

CUSTOMER FOCUS:*Maintain a customer-focused attitude throughout the organization.***GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:**

Provide prompt, courteous, efficient and educational services • CF 2

TARGET MEASURE:

Maintain APRA Certification and respond to all public records requests within 30 days

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Certifications	4	4	4	4
Request Response Time	5 Days	≤30 days	≤30 days	≤30 days
Number of Responses	7 Reponses	100%	100%	100%

STAFFING:*Attract, develop and retain highly qualified employees.***GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:**

Provide professional, technical and/or safety training to optimize team performance and ensure user comfort with systems and processes • S 3

TARGET MEASURE:

Provide a minimum of 30 training hours

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Hours	52	30	30	30

COMMUNICATION:*Improve and enhance internal and external communication to increase understanding of "who we are" and "what we do".***GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:**

Strengthen and expand NBC's positive relations with key stakeholders (customers, Board, elected officials/ delegates, regulatory officials and the public) to ensure support of NBC's mission • C 5

TARGET MEASURE:

Conduct/coordinate a minimum of 2 presentations

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Quantity	3	2	2	2

ORGANIZATIONAL PERFORMANCE:*Ensure that the NBC organization is aligned with and supports our strategic goals.***GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:**

Ensure compliance with State ethics and regulatory agenda filing • OP 3

TARGET MEASURE:

Execute 100% of conflict of interest forms for NBC staff/Board of Commissioners

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	3 Forms Executed	100%	100%	100%

TARGET MEASURE:

Prepare and file regulatory agenda bi-annually

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Frequency	1	2	NA	NA



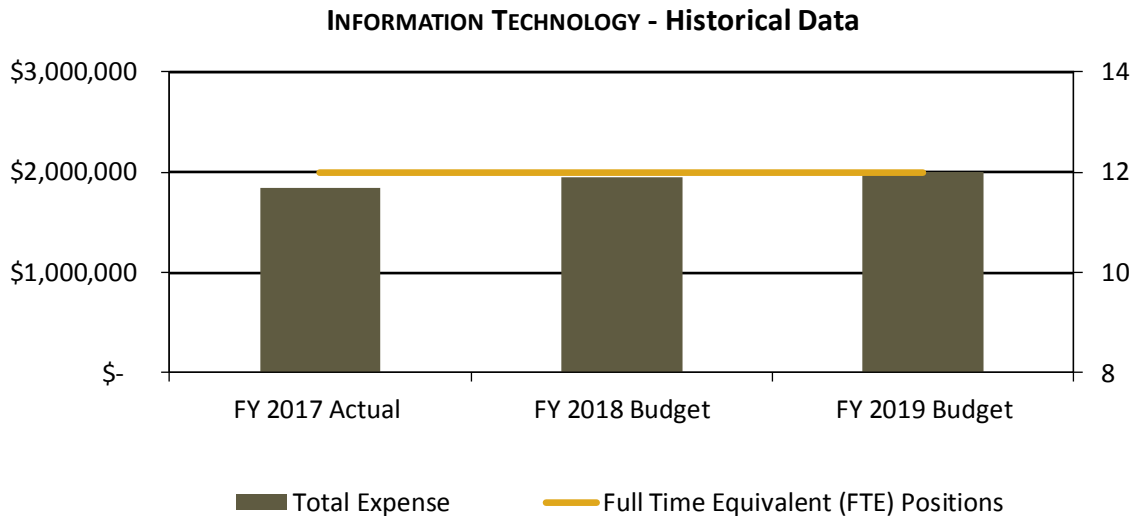
INFORMATION TECHNOLOGY Section Summary

The Program

The IT section is responsible for NBC's networks, telecommunications, hardware, software and databases. IT ensures the agency has the technology to perform at the expected level of 99% uptime.

The Budget

Operations & Maintenance Expense	FY 2017 Actual	FY 2018 Budget	FY 2019 Budget
Personnel	\$ 1,280,281	\$ 1,342,256	\$ 1,329,774
Operating Supplies/Expense	559,720	603,240	676,365
Professional Services	-	-	-
Total Expense	\$ 1,840,001	\$ 1,945,496	\$ 2,006,139
Funds by Source - Revenue	\$ 1,840,001	\$ 1,945,496	\$ 2,006,139



PROGRAM STAFFING (BUDGETED)			
Information Technology Manager	1.0	Senior Database and Linux Administrator	1.0
Computer Training Support Specialist	1.0	Senior Network and Communications Administrator	1.0
Junior Network and Communications Administrator	1.0	Senior Systems Administrator	1.0
PC/Phone Support/Systems Administrator Specialist	1.0	Senior Systems Development Programmer	1.0
Senior Applications System Supervisor	1.0	Senior .NET Developer	1.0
Senior Database Administrator	1.0	Systems Design Programmer	1.0
12.0 FTEs			

Goal Actions for Target Measures by Key Code

Core Business

CB 1	Ensure compliance with all State and Federal regulations, permits, consent agreements, certifications, NBC regulations and reporting requirements
CB 2	Manage the planning, design and construction of NBC's capital improvements in the most cost-effective manner and in compliance with regulatory requirements
CB 3	Ensure the highest level of availability of systems' applications and network stability
CB 4	Maximize efficiency through service automation, applications security and NBC campus security
CB 5	Maintain NBC's asset management program for infrastructure and assets, ensure integrity and maximize the investment

Environmental Performance

EP 1	Minimize environmental impacts and implement conservation and sustainability measures
EP 2	Evaluate the NBC Program and report the data to the public
EP 3	Provide technical assistance to evaluate energy conservation and renewable energy opportunities
EP 4	Provide quality and expedient sample collection, data analyses and water quality monitoring to evaluate NBC's impacts and document improvements

Financial Management

FM 1	Ensure sufficient funding and receive the lowest cost of borrowing with the least rate payer impact
FM 2	Integrate NBC's strategic goals into the allocation of NBC's resources
FM 3	Maximize the efficiency, effectiveness, and accuracy of NBC's rate structures and collection processes to reduce accounts receivable
FM 4	Develop and manage NBC's operating and capital budgets to maximize benefits, minimize expense and unplanned expenditures
FM 5	Comply with IRS, Federal and State Rules and Regulations, Trust Indenture and Generally Accepted Accounting Principles
FM 6	Ensure goods and services are procured, reviewed and processed in a timely, efficient and cost effective manner
FM 7	Initiate and evaluate incentive programs
FM 8	Evaluate savings opportunities and optimize NBC operations and processes

Customer Focus

CF 1	Maintain programs and conduct projects that give back to the community
CF 2	Provide prompt, courteous, efficient and educational services
CF 3	Enhance communications to ensure consistency, reliability and satisfaction
CF 4	Maximize customer focus attitude by providing excellent customer service and developing strong customer relationships
CF 5	Ensure compliance with NBC internal controls

Staffing

S 1	Ensure compliance with Federal and State labor laws
S 2	Foster a positive working environment through effective communication
S 3	Provide professional, technical and/or safety training to optimize team performance and ensure user comfort with systems and processes
S 4	Provide a healthy and safe working environment
S 5	Develop mechanisms and establish opportunities for continued growth and professional development

Communication

C 1	Continue to expand and conduct NBC public outreach programs
C 2	Proactively manage NBC's public and legislative affairs and communicate NBC initiatives and ongoing activities
C 3	Effectively communicate status of capital projects to NBC staff and Board members
C 4	Enhance operating budget, CIP and compliance reports as a communication device
C 5	Strengthen and expand NBC's positive relations with key stakeholders (customers, Board, elected officials/delegates, regulatory officials and the public) to ensure support of NBC's mission

Organizational Performance

OP 1	Conduct NBC business in an open manner
OP 2	Promote diversity in hiring practices
OP 3	Ensure compliance with State ethics and regulatory agenda filing
OP 4	Provide end-user technology and systems to meet NBC's strategic goals

INFORMATION TECHNOLOGY

Performance Data

Major Accomplishments FY 2018 by Key Code:

- CB 3** Replaced edge switches with non-end of life models
- CB 4** Assumed responsibility of NBC campus key scan entry and security
- CB 4** Upgraded VMware vSphere environment from 5.5 to 6.5
- CB 4** Implemented Oracle Database Appliances to run NBC's Oracle Application databases
- CB 4** Patched Oracle E-Business Suite to the latest level and changed from NPAPI Java launch to JWS to enhance security
- CB 4** Performed the Information Technology Security Audit
- CB 4** Upgraded from 2010 to 2016 SharePoint
- CB 4** Finalized the new Customer Service solution plan and initiated implementation
- CB 4** Completed the implementation of the new Laboratory Information Management System
- CB 4** Implemented the Cyber Security Plan
- CB 5** Replaced older 3PAR SAN and Actifio Backup systems with new 3PAR SAN to accommodate the growing need for data storage and Barracuda backup solution for increased retention and ease of use
- CB 5** Implemented new Pretreatment system

Top Priorities for FY 2019 and How They Relate to the Strategic Plan/Goals and by Key Code:

- CB 3** Develop cloud based Disaster Recovery model
- CB 4** Finalize the implementation of Infinity Link, the new Customer Service application
- CB 5** Replace aged network cores and disaster recovery equipment

Target Measures

CORE BUSINESS: *Operate, maintain and protect our collection and treatment systems to ensure that all State and Federal requirements are met or surpassed.*

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Ensure the highest level of availability of systems' applications and network stability • CB 3

TARGET MEASURE:

Ensure no more than 10 downtime hours to maintain system availability

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Hours	1	≤10	≤10	≤10

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Maximize efficiency through service automation, applications security and NBC campus security • CB 4

TARGET MEASURE:

Ensure 100% of servers are running current supported Applications and Operating systems

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	95%	100%	100%	100%

Prevent 100% of security breaches into NBC servers and applications

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	2,226,832 Scanned 36,015 Violations	100%	100%	100%

TARGET MEASURE:

Prevent 100% of security breaches into NBC email server

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	1,347,818 Blocked 8,582 Quarantined	100%	100%	100%

TARGET MEASURE:

Complete Bi-Annual Security audit and implement suggestions within 12 months

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Audit Complete	No Audit	No Audit	Yes	Yes

FINANCIAL MANAGEMENT:

Manage NBC's finances through strong financial planning and controls such that sewer user charges are minimized.

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Develop and manage NBC's operating and capital budgets to maximize benefits, minimize expense and unplanned expenditures • FM 4

TARGET MEASURE:

Complete 100% of planned capital items

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Budgeted	13	100%	100%	100%
Completed	12			

CUSTOMER FOCUS:

Maintain a customer-focused attitude throughout the organization.

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Enhance internal communications to ensure consistency, reliability and satisfaction • CF 3

TARGET MEASURE:

Respond to 100% service desk requests within two hours

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	100%	100%	100%	100%

STAFFING:

Attract, develop and retain highly qualified employees.

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Provide professional, technical and/or safety training to optimize team performance and ensure user comfort with systems and processes • S 3

TARGET MEASURE:

Provide a minimum of 140 user training sessions

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Incentive	37	50	50	50
Non-Incentive	67	90	100	100

TARGET MEASURE:

Provide a minimum of 250 employee training hours

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Hours	263	210	250	250

ORGANIZATIONAL PERFORMANCE:*Ensure that the NBC organization is aligned with and supports our strategic goals.***GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:**

Provide end-user technology and systems to meet NBC's strategic goals • OP 4

TARGET MEASURE:

Ensure computer hardware does not exceed 5-year Desktop lifecycle

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
PCs	99%	100%	100%	100%
Thin Clients	100%	100%	100%	100%

TARGET MEASURE:

Ensure NBC software updates are at least one version behind the latest released version

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Oracle	100%	100%	100%	100%
Hansen	100%	100%	100%	100%
GIS	100%	100%	100%	100%

TARGET MEASURE:

Ensure maximum number of current supported versions of application and operating systems are maintained

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
PCs	100%	100%	100%	100%
Thin Clients	100%	100%	100%	100%



CONSTRUCTION AND ENGINEERING DIVISION

Division Summary

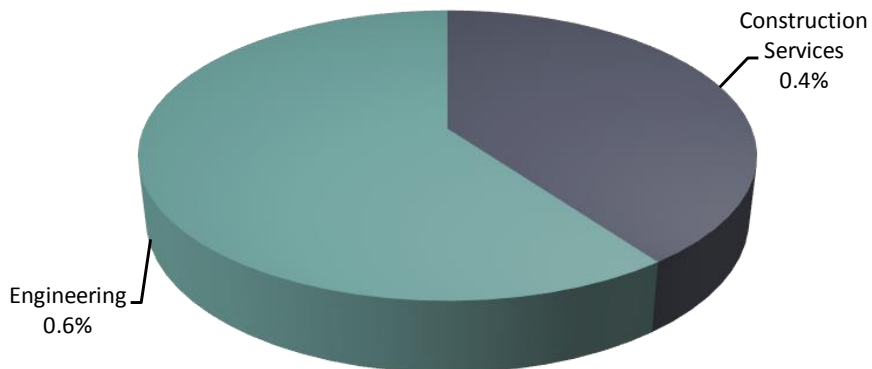
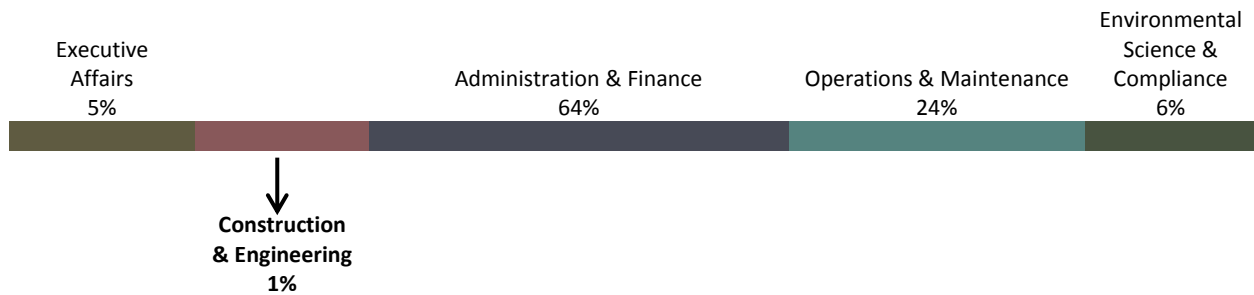
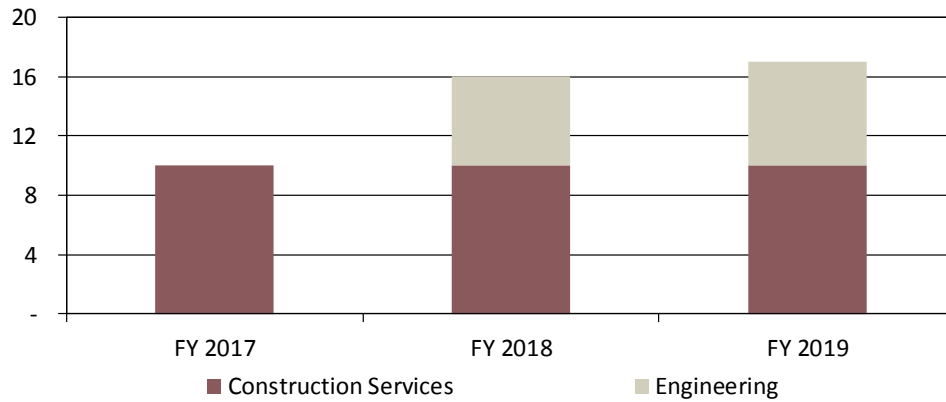
CONSTRUCTION SERVICES

ENGINEERING

The Program

The Construction and Engineering Division is responsible for the planning, design and construction of capital improvements necessary to comply with regulatory requirements, take advantage of technological advancements, ensure the integrity of NBC's infrastructure and achieve operational efficiencies. These improvements represent construction of new facilities, rehabilitation and replacement of existing infrastructure as well as incorporating the needs identified through NBC's Asset Management Program. This Division also provides facilities engineering services for the entire NBC campus.

Budgeted Positions (FTEs)
CONSTRUCTION & ENGINEERING DIVISION



CONSTRUCTION AND ENGINEERING DIVISION

Division Summary

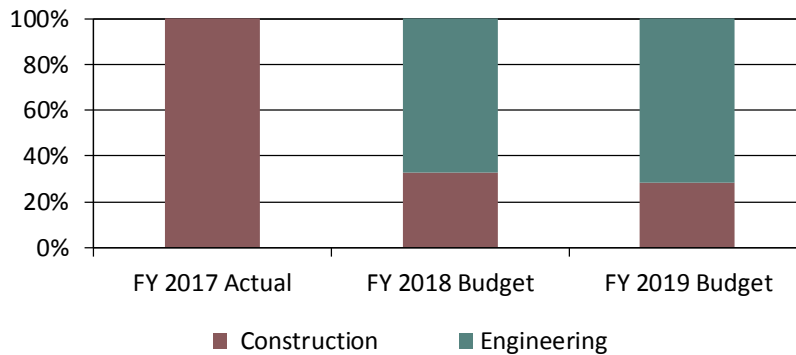
The Budget

Operations & Maintenance Expense	FY 2017 Actual	FY 2018 Budget	FY 2019 Budget
Personnel	\$ 52,790	\$ 534,885	\$ 383,305
Operating Supplies/Expense	19,086	59,250	56,250
Professional Services	-	3,500	5,000
Total O&M	\$ 71,876	\$ 597,635	\$ 444,555
Funds by Source - Revenue	\$ 71,876	\$ 597,635	\$ 444,555

Significant Budget Modifications

The FY 2019 Construction and Engineering Division budget is a total of \$153,080 or 26.0% lower than the FY 2018 budget. Personnel reflects one additional FTE in Engineering and increased salary reimbursements for an overall decrease of \$151,580 from the prior year. Operating supplies and expense and professional services reflect an overall decrease of \$1,500 due to the reallocation of telecommunications expense to Information Technology.

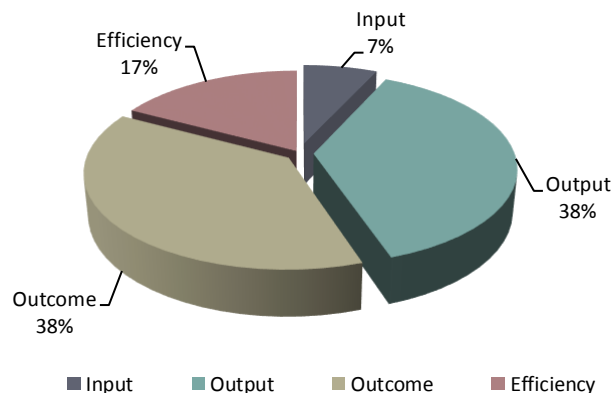
Percent of Division's Budget by Section



Construction and Engineering Division Performance Data Summary

The chart below illustrates the Construction and Engineering Division's Performance Data by type of measure. The measures can be found in the individual sections following this division summary. In this Division, Outcome and Efficiency make up 55% of the performance measures.

Percentage of Performance Measurement Types
CONSTRUCTION & ENGINEERING DIVISION



CONSTRUCTION SERVICES

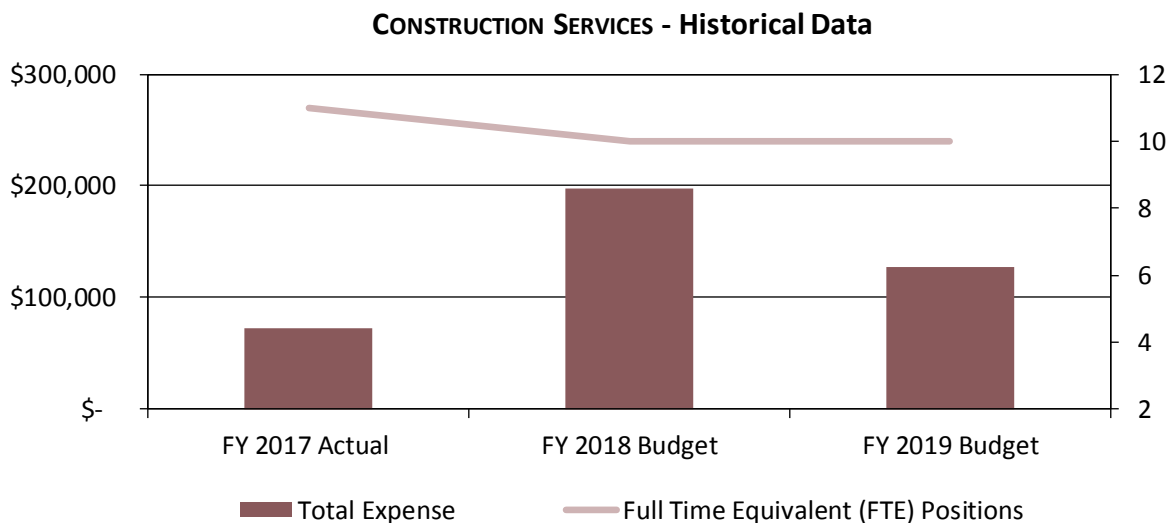
Section Summary

The Program

The Construction Services section is responsible for overseeing construction of capital improvement projects related to NBC's collection system and wastewater treatment facilities. Improvements to NBC's infrastructure are necessary to ensure proper collection and treatment of wastewater and stormwater flows that enter NBC's collection system.

The Budget

Operations & Maintenance Expense	FY 2017 Actual	FY 2018 Budget	FY 2019 Budget
Personnel	\$ 52,790	\$ 175,310	\$ 108,278
Operating Supplies/Expense	19,086	22,325	18,825
Professional Services	-	-	-
Total Expense	\$ 71,876	\$ 197,635	\$ 127,103
Funds by Source - Revenue	\$ 71,876	\$ 197,635	\$ 127,103



PROGRAM STAFFING (BUDGETED)			
Director of Construction and Engineering	1.0	Engineering Construction Coordinator	1.0
Construction Manager	1.0	Mechanical Inspector	1.0
Construction Office Coordinator	1.0	Resident Representative	3.0
CSO Construction Manager	1.0	Senior Construction Coordinator	1.0
10.0 FTEs			

Goal Actions for Target Measures by Key Code

Core Business

CB 1	Ensure compliance with all State and Federal regulations, permits, consent agreements, certifications, NBC regulations and reporting requirements
CB 2	Manage the planning, design and construction of NBC's capital improvements in the most cost-effective manner and in compliance with regulatory requirements
CB 3	Ensure the highest level of availability of systems' applications and network stability
CB 4	Maximize efficiency through service automation, applications security and NBC campus security
CB 5	Maintain NBC's asset management program for infrastructure and assets, ensure integrity and maximize the investment

Environmental Performance

EP 1	Minimize environmental impacts and implement conservation and sustainability measures
EP 2	Evaluate the NBC Program and report the data to the public
EP 3	Provide technical assistance to evaluate energy conservation and renewable energy opportunities
EP 4	Provide quality and expedient sample collection, data analyses and water quality monitoring to evaluate NBC's impacts and document improvements

Financial Management

FM 1	Ensure sufficient funding and receive the lowest cost of borrowing with the least rate payer impact
FM 2	Integrate NBC's strategic goals into the allocation of NBC's resources
FM 3	Maximize the efficiency, effectiveness, and accuracy of NBC's rate structures and collection processes to reduce accounts receivable
FM 4	Develop and manage NBC's operating and capital budgets to maximize benefits, minimize expense and unplanned expenditures
FM 5	Comply with IRS, Federal and State Rules and Regulations, Trust Indenture and Generally Accepted Accounting Principles
FM 6	Ensure goods and services are procured, reviewed and processed in a timely, efficient and cost effective manner
FM 7	Initiate and evaluate incentive programs
FM 8	Evaluate savings opportunities and optimize NBC operations and processes

Customer Focus

CF 1	Maintain programs and conduct projects that give back to the community
CF 2	Provide prompt, courteous, efficient and educational services
CF 3	Enhance communications to ensure consistency, reliability and satisfaction
CF 4	Maximize customer focus attitude by providing excellent customer service and developing strong customer relationships
CF 5	Ensure compliance with NBC internal controls

Staffing

S 1	Ensure compliance with Federal and State labor laws
S 2	Foster a positive working environment through effective communication
S 3	Provide professional, technical and/or safety training to optimize team performance and ensure user comfort with systems and processes
S 4	Provide a healthy and safe working environment
S 5	Develop mechanisms and establish opportunities for continued growth and professional development

Communication

C 1	Continue to expand and conduct NBC public outreach programs
C 2	Proactively manage NBC's public and legislative affairs and communicate NBC initiatives and ongoing activities
C 3	Effectively communicate status of capital projects to NBC staff and Board members
C 4	Enhance operating budget, CIP and compliance reports as a communication device
C 5	Strengthen and expand NBC's positive relations with key stakeholders (customers, Board, elected officials/delegates, regulatory officials and the public) to ensure support of NBC's mission

Organizational Performance

OP 1	Conduct NBC business in an open manner
OP 2	Promote diversity in hiring practices
OP 3	Ensure compliance with State ethics and regulatory agenda filing
OP 4	Provide end-user technology and systems to meet NBC's strategic goals

CONSTRUCTION SERVICES

Performance Data

Major Accomplishments FY 2018 by Key Code:

- CB 2** Completed construction of the following projects:
- FPWWTF Blower Improvements Phase II (Project 10908)
 - BPWWTF Biogas Reuse (Project 12000)
 - FPWWTF Final Clarifier Improvements (Project 13000)
 - NBC Interceptor Easement Restoration, Abbott Valley Interceptor (Project 30438)
 - Johnston Sewer Improvements/Greenville Avenue (Project 30460)
 - NBC East Providence Interceptor Improvements (Project 30462)
 - NBC Improvements to Interceptors FY 17 (Project 30463)
 - Johnston Sewer Improvements/Hartford Avenue (Project 30464)
 - NBC Interceptor Easement Restoration, Blackstone Valley Interceptor (Project 30501)
 - Omega Pump Station Improvements (Project 70800)
 - BPWWTF Flood Protection (Project 81300)
 - BPWWTF Digester Piping and Miscellaneous Improvements (Project 81400)
- CB 2** Bid and awarded the following projects:
- Moshassuck Valley Interceptor (Project 30444)
 - Providence River Siphon (Project 30457)
 - CSO Phase III Facilities GSI Demonstration Project
- CB 2** Continued to assist with the design of the CSO Phase III Facilities

Top Priorities for FY 2019 and How They Relate to the Strategic Plan/Goals and by Key Code:

- CB 2** Assist with design of the CSO Phase III Facilities

Target Measures

CORE BUSINESS: *Operate, maintain and protect our collection and treatment systems to ensure that all State and Federal requirements are met or surpassed.*

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Manage the planning, design and construction of NBC's capital improvements in the most cost-effective manner and in compliance with regulatory requirements • CB 2

TARGET MEASURE:

Resident engineering cost is 15% or less of construction cost (non-CSO contracts)

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	5%	≤15%	≤15%	≤15%

TARGET MEASURE:

Contract cost is less than 8% higher than original bid amount on an annual basis

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	-.08%	≤8%	≤8%	≤8%

TARGET MEASURE:

Ensure 85% of CIP contracts completed within six months of master schedule

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	100%	85%	85%	85%

TARGET MEASURE:

Receive 100% WBE, MBE and EEO plans for approval prior to award of contract

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	4 Plans	100%	100%	100%

TARGET MEASURE:

Collect, review and maintain certified payrolls

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Frequency	12	Monthly	Monthly	Monthly

TARGET MEASURE:

Process 100% of Change Orders

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	8 Change Orders	100%	100%	100%

TARGET MEASURE:

Ensure all Awards of Contracts are presented to the Board for Approval

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	4 Contracts	100%	100%	100%

TARGET MEASURE:

Conduct weekly meetings with all contractors for active ongoing projects.

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Quantity	52	52	52	52

TARGET MEASURE:

Apply for and receive a Certificate of Approval from RIDEM prior to Funding

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	4	100%	100%	100%

TARGET MEASURE:

Comply with MBE/WBE quarterly reporting requirements

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Frequency	4	4	4	4

TARGET MEASURE:

Develop 100% of contract plans and specifications by NBC staff as requested

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	1 Plan/Specification	100%	100%	100%

TARGET MEASURE:

Review constructability and bid ability of all design specifications

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	4 Design Specifications	100%	100%	100%

FINANCIAL MANAGEMENT:

Manage NBC's finances through strong financial planning and controls such that sewer user charges are minimized.

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Ensure goods and services are procured, reviewed and processed in a timely, efficient and cost effective manner

- FM 6

TARGET MEASURE:

Review and process 100% of contractual capital invoices

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	35 Capital Invoices	100%	100%	100%

CUSTOMER FOCUS:*Maintain a customer-focused attitude throughout the organization.***GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:**

Ensure compliance with NBC's internal controls • CF 5

TARGET MEASURE:

Ensure Change Orders that exceed 5% of bid are presented to the Board for approval

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	0 Changes Orders	100%	100%	100%

STAFFING:*Attract, develop and retain highly qualified employees.***GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:**

Provide professional, technical and/or safety training to optimize team performance and ensure user comfort with systems and processes • S 3

TARGET MEASURE:

Provide a minimum of 100 training hours

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Quantity	75	100	100	100

COMMUNICATION:*Improve and enhance internal and external communication to increase understanding of "who we are" and "what we do".***GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:**

Effectively communicate status of capital projects to NBC staff and Board members • C 3

TARGET MEASURE:

Ensure a minimum of 4 meetings with NBC staff, Board Members and public to provide ongoing construction updates

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Frequency	5	0	0	0



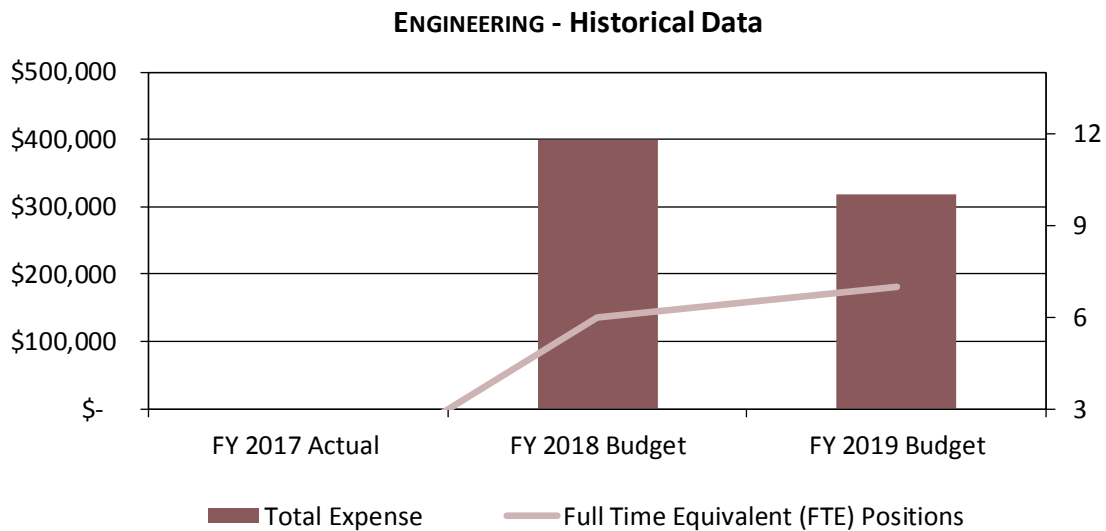
ENGINEERING Section Summary

The Program

The primary responsibility of the Engineering section is to plan and design facilities, necessary for the collection and treatment of wastewater within NBC's service area and the issuance of sewer connection permits. Projects designed by the Engineering section are identified in NBC's five-year Capital Improvement Plan include CSO facilities, improvements to the wastewater treatment facilities, sewer system improvement projects and CSO interceptor repair and construction projects. The Engineering section also provides facilities engineering services for the NBC campus.

The Budget

Operations & Maintenance Expense	FY 2017 Actual	FY 2018 Budget	FY 2019 Budget
Personnel	\$ -	\$ 359,575	\$ 275,027
Operating Supplies/Expense	-	36,925	37,425
Professional Services	-	3,500	5,000
Total Expense	\$ -	\$ 400,000	\$ 317,452
Total Expenditures by Source	\$ -	\$ 400,000	\$ 317,452



PROGRAM STAFFING (BUDGETED)			
CSO Program Manager	1.0	Facilities Engineer	1.0
Engineering Manager	1.0	Permits Coordinator	1.0
Environmental Engineer	1.0	Principal Environmental Engineer	2.0
7.0 FTEs			

Goal Actions for Target Measures by Key Code

Core Business

CB 1	Ensure compliance with all State and Federal regulations, permits, consent agreements, certifications, NBC regulations and reporting requirements
CB 2	Manage the planning, design and construction of NBC's capital improvements in the most cost-effective manner and in compliance with regulatory requirements
CB 3	Ensure the highest level of availability of systems' applications and network stability
CB 4	Maximize efficiency through service automation, applications security and NBC campus security
CB 5	Maintain NBC's asset management program for infrastructure and assets, ensure integrity and maximize the investment

Environmental Performance

EP 1	Minimize environmental impacts and implement conservation and sustainability measures
EP 2	Evaluate the NBC Program and report the data to the public
EP 3	Provide technical assistance to evaluate energy conservation and renewable energy opportunities
EP 4	Provide quality and expedient sample collection, data analyses and water quality monitoring to evaluate NBC's impacts and document improvements

Financial Management

FM 1	Ensure sufficient funding and receive the lowest cost of borrowing with the least rate payer impact
FM 2	Integrate NBC's strategic goals into the allocation of NBC's resources
FM 3	Maximize the efficiency, effectiveness, and accuracy of NBC's rate structures and collection processes to reduce accounts receivable
FM 4	Develop and manage NBC's operating and capital budgets to maximize benefits, minimize expense and unplanned expenditures
FM 5	Comply with IRS, Federal and State Rules and Regulations, Trust Indenture and Generally Accepted Accounting Principles
FM 6	Ensure goods and services are procured, reviewed and processed in a timely, efficient and cost effective manner
FM 7	Initiate and evaluate incentive programs
FM 8	Evaluate savings opportunities and optimize NBC operations and processes

Customer Focus

CF 1	Maintain programs and conduct projects that give back to the community
CF 2	Provide prompt, courteous, efficient and educational services
CF 3	Enhance communications to ensure consistency, reliability and satisfaction
CF 4	Maximize customer focus attitude by providing excellent customer service and developing strong customer relationships
CF 5	Ensure compliance with NBC internal controls

Staffing

S 1	Ensure compliance with Federal and State labor laws
S 2	Foster a positive working environment through effective communication
S 3	Provide professional, technical and/or safety training to optimize team performance and ensure user comfort with systems and processes
S 4	Provide a healthy and safe working environment
S 5	Develop mechanisms and establish opportunities for continued growth and professional development

Communication

C 1	Continue to expand and conduct NBC public outreach programs
C 2	Proactively manage NBC's public and legislative affairs and communicate NBC initiatives and ongoing activities
C 3	Effectively communicate status of capital projects to NBC staff and Board members
C 4	Enhance operating budget, CIP and compliance reports as a communication device
C 5	Strengthen and expand NBC's positive relations with key stakeholders (customers, Board, elected officials/delegates, regulatory officials and the public) to ensure support of NBC's mission

Organizational Performance

OP 1	Conduct NBC business in an open manner
OP 2	Promote diversity in hiring practices
OP 3	Ensure compliance with State ethics and regulatory agenda filing
OP 4	Provide end-user technology and systems to meet NBC's strategic goals

ENGINEERING
Performance Data

Major Accomplishments FY 2018 by Key Code:

- CB 2** Initiated design of the Lab Building Reuse Project (Project 12900)
- CB 2** Initiated the planning phase for the FPWWTF Maintenance Facilities (Project 13200)
- CB 2** Completed design of the Johnston Sewer Improvements/Greenville Avenue (Project 30460)
- CB 2** Completed design of the Johnston Sewer Improvements/Hartford Avenue (Project 30464)
- CB 2** Completed the hypochlorite tank pad improvements portion of the FY 2017 WWTF Improvements (Project 20100)
- CB 5** Improved the on-line sewer permit application process for sewer connection and stormwater permits
- CF 5** Issued 293 sewer connection and stormwater permits

Top Priorities for FY 2019 and How They Relate to the Strategic Plan/Goals and by Key Code:

- CB 2** Initiate preliminary design for the CSO Phase III A and Phase III B Facilities
- CB 2** Initiate design of replacement of disinfection facilities for BPWWTF
- CB 2** Complete planning for BPWWTF O&M support facilities

Target Measures

CORE BUSINESS: *Operate, maintain and protect our collection and treatment systems to ensure that all State and Federal requirements are met or surpassed.*

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Manage the planning, design and construction of NBC’s capital improvements in the most cost-effective manner and in compliance with regulatory requirements • CB 2

TARGET MEASURE:

Complete design phase of projects to ensure integrity of NBC’s infrastructure and achieve operating efficiencies

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Nutrient Removal	1	1	1	0
Sewer Collection System	1	2	1	2
Phase III Combined Sewer Overflow	1	1	2	4
WWTF Improvements	2	3	4	4

TARGET MEASURE:

Planning and design contract expense is ≤10% of approved contract

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	100%	100%	100%	100%

TARGET MEASURE:

Record 100% of file easements for projects

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	100%	100%	100%	100%

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Maximize efficiency through service automation, applications security and NBC campus security • CB 4

TARGET MEASURE:

Update NBC's GIS database and application software

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Database Updates	100%	100%	100%	100%
Software Updates	100%	100%	100%	100%

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Maintain NBC's asset management program for infrastructure and assets, ensure integrity and maximize the investment • CB 5

TARGET MEASURE:

Perform required facility inspections

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Mechanical Equipment	7 Inspections	100%	100%	100%

FINANCIAL MANAGEMENT: *Manage NBC's finances through strong financial planning and controls such that sewer user charges are minimized.*

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Maximize the efficiency, effectiveness, and accuracy of NBC's rate structures and collection processes to reduce accounts receivable • FM 3

TARGET MEASURE:

Collect 100% of Permit Fees

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	\$145,713	100%	100%	100%

CUSTOMER FOCUS: *Maintain a customer-focused attitude throughout the organization.*

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Maximize customer focus attitude by providing excellent customer service and developing strong customer relationships • CF 4

TARGET MEASURE:

Issue Sewer and Stormwater Connection Permits within 10 business days

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Timeframe	5 Business Days	≤10 Business Days	≤10 Business Days	≤10 Business Days

TARGET MEASURE:

Issue Sewer Alteration Permits within 10 business days

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Timeframe	2.5 Business Days	≤10 Business Days	≤10 Business Days	≤10 Business Days

TARGET MEASURE:

Provide Customer Service with 100% of new sewer connection permit data

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	277 New Accounts	100%	100%	100%

STAFFING:*Attract, develop and retain highly qualified employees.***GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:**

Provide professional, technical and/or safety training to optimize team performance and ensure user comfort with systems and processes • S 3

TARGET MEASURE:

Attend a minimum of 1 professional training session per year

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Sessions	1	1	1	1

COMMUNICATION:*Improve and enhance internal and external communication to increase understanding of "who we are" and "what we do".***GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:**

Effectively communicate status of capital projects to NBC staff and Board members • C 4

TARGET MEASURE:

Conduct monthly capital project meetings

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Quantity	10	10	10	10



ADMINISTRATION AND FINANCE DIVISION

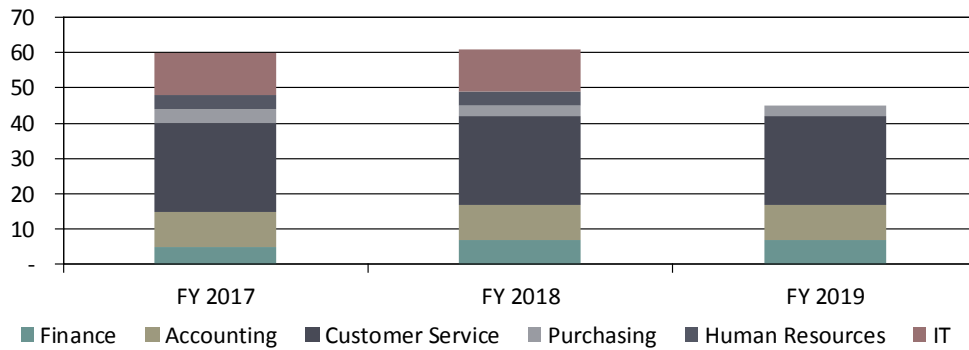
Division Summary



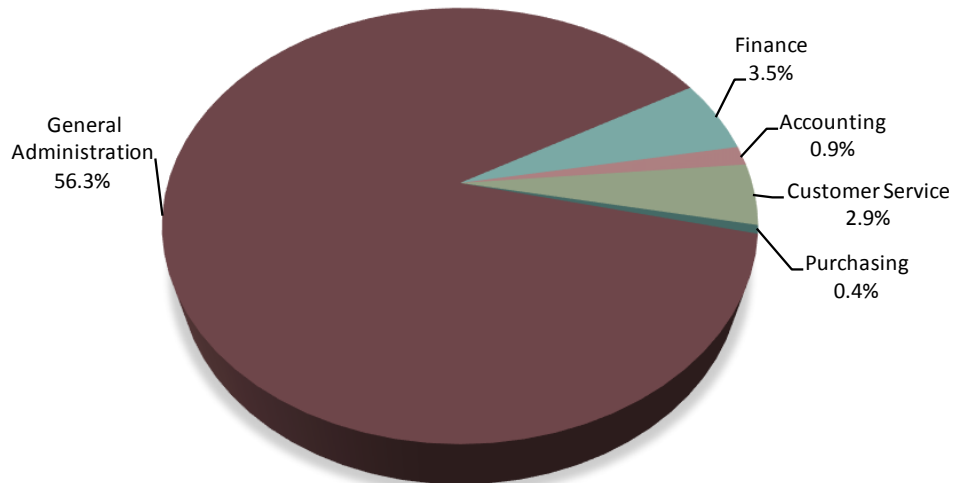
The Program

The Administration and Finance Division is responsible for the Finance, Cash Management, Payroll, Employee Benefits, Accounting, Customer Service, and Purchasing functions at NBC. This Division is responsible for providing sound financial leadership and support to all areas of NBC, and for the production of monthly financial statements in accordance with "Generally Accepted Accounting Principles". The Division is also responsible for the issuance of long-term debt, rate filings, the administration of the retirement plans, and ensuring compliance with applicable state and federal laws, rules and regulations.

Budgeted Positions (FTEs)
ADMINISTRATION & FINANCE DIVISION



↓
Administration & Finance
64%



ADMINISTRATION & FINANCE DIVISION

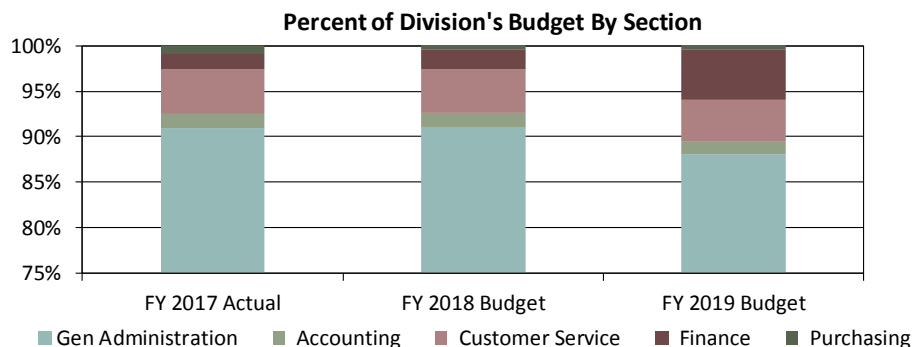
Division Summary

The Budget

Operations & Maintenance Expense	FY 2017 Actual	FY 2018 Budget	FY 2019 Budget
Personnel	\$ 5,577,020	\$ 5,857,573	\$ 4,321,277
Operating Supplies/Expense	2,967,065	3,260,375	5,150,733
Professional Services	900,974	986,400	1,309,400
<i>Total O&M</i>	9,445,059	10,104,348	10,781,410
Debt Service			
Debt Service	43,589,827	46,786,894	47,787,186
<i>Total Debt Service</i>	43,589,827	46,786,894	47,787,186
Total Expense	\$ 53,034,886	\$ 56,891,242	\$ 58,568,597
Funds by Source - Revenue	\$ 53,034,886	\$ 56,891,242	\$ 58,568,597

Significant Budget Modifications

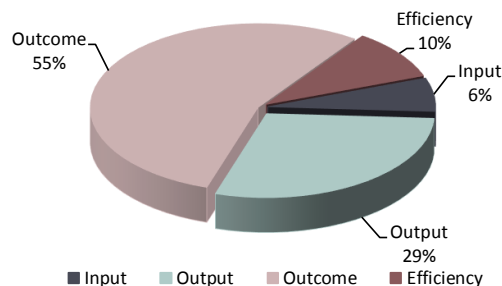
The FY 2019 Administration & Finance Division budget is approximately \$2.3 million or 3.5% higher than the FY 2018 budget. Personnel includes the transfer and funding of the HRA employer contributions; the reorganization of the HR and IT functions to the Executive Affairs Division; and the transfer of the insurance and risk management functions from the Operations & Maintenance Division for a net decrease of \$1.5 million. Operating supplies and expense increased by \$1.8 million and includes the transfer and funding of the electricity budgets and increased Insurance and Workers' Compensation premiums. Professional services includes an increased PUC assessment fee and a State mandated performance audit. Debt service increased by \$1.0 million and includes the anticipated \$45.0 million debt issuance.



Administration & Finance Division Performance Data Summary

The chart below illustrates the Administration and Finance Division's Performance Data by type of measure. The measures can be found in the individual sections following this division summary. In this Division, Outcome and Efficiency make up 65% of the performance measures.

**Percentage of Performance Measurement Types
ADMINISTRATION & FINANCE DIVISION**



FINANCE Section Summary

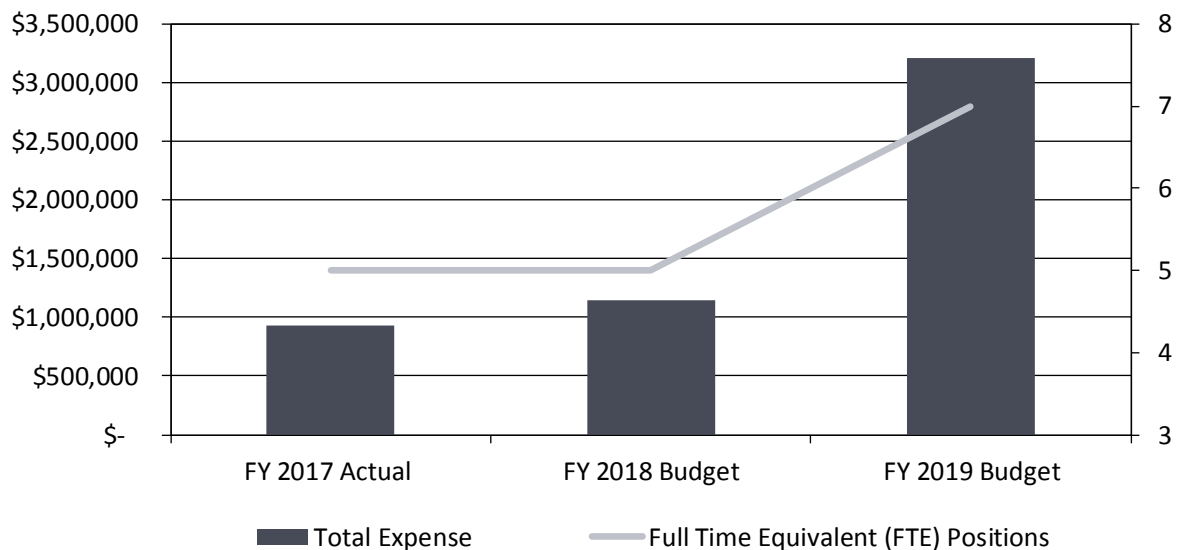
The Program

The Finance section ensures that NBC has sufficient resources and employs sound fiscal policies and practices to provide the highest quality service at a reasonable cost. The Finance section is responsible for development and management of the annual Operating Budget, the Capital Improvement Program, Operating Capital Program, the establishment of user charges and management of long-term debt. The Finance section ensures compliance with requirements of the RIPUC, the Trust Indenture and Supplemental Indentures, Continuing Disclosure, Post-Issuance Compliance and other regulatory requirements. This section is also responsible for cash management, NBC's retirement plans and NBC's Insurance and Risk Management.

The Budget

Operations & Maintenance Expense	FY 2017 Actual	FY 2018 Budget	FY 2019 Budget
Personnel	\$ 475,240	\$ 636,441	\$ 735,813
Operating Supplies/Expense	12,285	30,050	1,395,740
Professional Services	442,501	480,000	1,080,000
Total O&M	\$ 930,026	\$ 1,146,491	\$ 3,211,553
Funds by Source - Revenue	\$ 930,026	\$ 1,146,491	\$ 3,211,553

FINANCE - Historical Data



PROGRAM STAFFING (BUDGETED)			
Director of Administration and Finance	1.0	Rate Analyst	1.0
Compliance Analyst	1.0	Programs Analyst	1.0
Financial Analyst	1.0	Senior Budget Analyst	1.0
Insurance Coordinator	1.0		
7.0 FTEs			

Goal Actions for Target Measures by Key Code

Core Business

CB 1	Ensure compliance with all State and Federal regulations, permits, consent agreements, certifications, NBC regulations and reporting requirements
CB 2	Manage the planning, design and construction of NBC's capital improvements in the most cost-effective manner and in compliance with regulatory requirements
CB 3	Ensure the highest level of availability of systems' applications and network stability
CB 4	Maximize efficiency through service automation, applications security and NBC campus security
CB 5	Maintain NBC's asset management program for infrastructure and assets, ensure integrity and maximize the investment

Environmental Performance

EP 1	Minimize environmental impacts and implement conservation and sustainability measures
EP 2	Evaluate the NBC Program and report the data to the public
EP 3	Provide technical assistance to evaluate energy conservation and renewable energy opportunities
EP 4	Provide quality and expedient sample collection, data analyses and water quality monitoring to evaluate NBC's impacts and document improvements

Financial Management

FM 1	Ensure sufficient funding and receive the lowest cost of borrowing with the least rate payer impact
FM 2	Integrate NBC's strategic goals into the allocation of NBC's resources
FM 3	Maximize the efficiency, effectiveness, and accuracy of NBC's rate structures and collection processes to reduce accounts receivable
FM 4	Develop and manage NBC's operating and capital budgets to maximize benefits, minimize expense and unplanned expenditures
FM 5	Comply with IRS, Federal and State Rules and Regulations, Trust Indenture and Generally Accepted Accounting Principles
FM 6	Ensure goods and services are procured, reviewed and processed in a timely, efficient and cost effective manner
FM 7	Initiate and evaluate incentive programs
FM 8	Evaluate savings opportunities and optimize NBC operations and processes

Customer Focus

CF 1	Maintain programs and conduct projects that give back to the community
CF 2	Provide prompt, courteous, efficient and educational services
CF 3	Enhance communications to ensure consistency, reliability and satisfaction
CF 4	Maximize customer focus attitude by providing excellent customer service and developing strong customer relationships
CF 5	Ensure compliance with NBC internal controls

Staffing

S 1	Ensure compliance with Federal and State labor laws
S 2	Foster a positive working environment through effective communication
S 3	Provide professional, technical and/or safety training to optimize team performance and ensure user comfort with systems and processes
S 4	Provide a healthy and safe working environment
S 5	Develop mechanisms and establish opportunities for continued growth and professional development

Communication

C 1	Continue to expand and conduct NBC public outreach programs
C 2	Proactively manage NBC's public and legislative affairs and communicate NBC initiatives and ongoing activities
C 3	Effectively communicate status of capital projects to NBC staff and Board members
C 4	Enhance operating budget, CIP and compliance reports as a communication device
C 5	Strengthen and expand NBC's positive relations with key stakeholders (customers, Board, elected officials/delegates, regulatory officials and the public) to ensure support of NBC's mission

Organizational Performance

OP 1	Conduct NBC business in an open manner
OP 2	Promote diversity in hiring practices
OP 3	Ensure compliance with State ethics and regulatory agenda filing
OP 4	Provide end-user technology and systems to meet NBC's strategic goals

FINANCE

Performance Data

Major Accomplishments FY 2018 by Key Code:

- FM 1** Received affirmation of the AA-/Stable Long Term unenhanced credit rating from Standard & Poor's and AAA/A-1+ Long Term rating
- FM 1** Initiated the Cost Allocation and Revenue Recovery Study
- FM 4** Amended the NBC Non-Union Defined Contribution Plan and associated Summary of Material Modifications
- FM 4** Updated the internal Budget webpage with additional fillable forms and reference guides
- FM 4** Developed and administered the budget, finishing under budget for the 26th year
- FM 4** Developed the five-year Capital Improvement Program and managed capital funding
- FM 5** Completed the FY 2017 Non-Union Defined Benefit Plan Financial Reports in conformance with GASB 67, GASB 68 and GASB 82
- FM 5** Achieved a funding level of 93% and reduced the net pension liability for the Defined Benefit Plan
- FM 5** Filed tariff advice for proposed changes to Schedule B - Miscellaneous Charges
- FM 5** Filed Miscellaneous Petitions for Relief with PUC for the extension of NBC's debt filing mechanism under the Variable Rate Debt Obligation and the Capital Fund Transfer to satisfy the mandated \$5M payment to the State of Rhode Island
- FM 6** Revised the Investment Policy and modified the cash and trust transfer process and recordkeeping
- FM 6** Worked with National Grid to reduce NBC's paper invoices from 74 to 13 and developed NMC tracking and REC revenue tracking systems
- FM 8** Implemented a Purchase Card Program
- C 4** Received the Government Finance Officers' Association (GFOA) Distinguished Budget Presentation Award and received Special Performance Measures Recognition
- OP 3** Prepared and submitted information to comply with Continuing Disclosure, Post-Issuance Compliance, Trust Indenture, Letter of Credit, RIPUC Orders, IRS and other commitments
- CF 5** Updated Insurance Standard Operating Procedures
- CB 4** Developed a Cyber Security Plan
- CB 5** Integrated Asset Management Program assets into the insurance schedules

Top Priorities for FY 2019 and How They Relate to the Strategic Plan/Goals and by Key Code:

- FM 1** Ensure sufficient operating and capital funding with the least ratepayer impact by filing a general rate case with RIPUC by September 30, 2018
- FM 1** Maintain AA- and AAA/A-1+ credit ratings from Standard and Poor's
- FM 5** Ensure compliance with the Trust Indenture and Supplemental Indentures, IRS, SEC, RIPUC and all applicable laws, rules and regulations

Target Measures

FINANCIAL MANAGEMENT: *Manage NBC's finances through strong financial planning and controls such that sewer user charges are minimized.*

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Ensure sufficient funding and receive the lowest cost of borrowing with the least rate payer impact • FM 1

TARGET MEASURE:

Timely filing with PUC to maintain sufficient operating and capital funding by due date and spend .5% or less of Requested Revenue on Outside Rate Case Assistance

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
General Rate Filing	Filing not needed	No filing	No filing	9/30/2018
Debt Service Filing	Filing not needed	No filing	No filing	9/30/2018
Rate Case Assistance (Percentage)	0%	0.5%	0.5%	0.5%

TARGET MEASURE:

Transmit compliance reports to the Public Utilities Commission

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Capital Projects	2	2	2	2
Restricted Accounts	4	4	4	4
Non-Union Retirement Plans	11/6/2017	1	1	1

TARGET MEASURE:

Maintain at Least "A+" Unenhanced Credit Rating with Standard and Poor's

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
S&P Credit Rating	AA- AAA/A-1+	AA- AAA/A-1+	AA- AAA/A-1+	AA- AAA/A-1+

TARGET MEASURE:

Update Long-Term Financial Plan annually

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Frequency	2	2	1	1

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Maximize the efficiency, effectiveness, and accuracy of NBC's rate structures and collection processes to reduce accounts receivable • FM 3

TARGET MEASURE:

Evaluate and ensure sufficient insurance policies are in effect prior to expiration

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	48	100%	100%	100%

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Comply with IRS, State of Rhode Island Rules and Regulations, Trust Indenture and Generally Accepted Accounting Principles • FM 5

TARGET MEASURE:

Compliance with Continuing Disclosure Commitments

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Annual Operating Data and CAFR on EMMA	12/15/2017	3/31/2018	3/31/2019	3/31/2020
Annual Operating Data and CAFR with RIIB	1/2/2018	3/31/2018	3/31/2019	3/31/2020
Material Events within 10 days of Occurrence	No Events	<10 Days	<10 Days	<10 Days

TARGET MEASURE:

Ensure compliance with federal and state statutory requirements

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Tax Due Diligence Prior to Issuance	No Issuances	100%	100%	100%
RIGL 35-14 Fiscal Integrity & Accountability	9/22/2016	12/31/2016	12/31/2017	12/31/2018
RIGL 42-10-1-1 PFMB Debt Reporting	9/30/2016	9/30/2016	9/30/2017	9/30/2018
RIGL 42-90-1 Government Consultants	10/1/2016	10/1/2016	10/1/2017	10/1/2018
Governments Survey of Public Pensions	12/31/2016	12/31/2016	12/31/2017	12/31/2018

TARGET MEASURE:

Perform Post-Issuance Compliance monthly reporting

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Tax Exempt Spend Down Requirements	Monthly	Monthly	Monthly	Monthly
Due Date - Determine Arbitrage Liability	9/29/2017	8/31/2017	8/31/2018	8/31/2019
Provide Arbitrage Calculation Information	2 Requests	100%	100%	100%

TARGET MEASURE:

Revise Capital Cash Flow Projected Draw a minimum of 2 times per year

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Frequency	2	2 Updates	2 Updates	2 Updates

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Develop and manage NBC's operating and capital budgets to maximize benefits, minimize expense and unplanned expenditures • FM 4

TARGET MEASURE:

Receive GFOA Distinguished Budget Presentation Award

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Consecutive Years	15	15	16	17

TARGET MEASURE:

Process 100% of budget transfers 5 days prior to month end

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	100% (144 budget transfers)	100%	100%	100%

TARGET MEASURE:

Prepare and transmit monthly finance report to Finance Committee

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Frequency	12	Monthly	Monthly	Monthly

TARGET MEASURE:

Upload Budget, Operating Capital Program, and Capital Improvement Program updates to budget webpage

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Frequency	Monthly (421 updates)	Monthly	Monthly	Monthly

TARGET MEASURE:

Prudently administer the non-union defined benefit plan

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Due Date - Actuarial Study	8/18/2016	3/31/2017	3/31/2018	3/31/2019
Percentage - Funded Minimum ARC	100%	100%	100%	100%
Due Date - GASB Financial Report	8/30/2016	8/31/2016	8/31/2017	8/31/2018

TARGET MEASURE:

Review retirement plan investments quarterly

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Quantity	4	4/Year	4/Year	4/Year

CUSTOMER FOCUS:*Maintain a customer-focused attitude throughout the organization.***GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:**

Ensure compliance with NBC's internal controls • CF 5

TARGET MEASURE

Process 100% of operating capital transfer requests and provide monthly transfer summary to Finance Committee

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Total Transfer Requests	100% (18 requests)	100%	100%	100%
Transfer Requests >\$50,000	100% (4 >\$50K requests)	100%	100%	100%
Frequency	12	12	12	12

STAFFING:*Attract, develop and retain highly qualified employees.***GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:**

Provide professional, technical and/or safety training to optimize team performance and ensure user comfort with systems and processes • S 3

TARGET MEASURE:

Provide a minimum of 30 Training/Seminars hours

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Hours	119	30	30	50

COMMUNICATION:*Improve and enhance internal and external communication to increase understanding of "who we are" and "what we do".***GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:**

Enhance Budget, CIP and compliance reports and as communication device • C 4

TARGET MEASURE:

Budget Receives a Proficient or Better Rating as a Communication Device by GFOA

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Received	Proficient/Outstanding	Yes	Yes	Yes

TARGET MEASURE:

Complete Annual Sewer User Fee Survey

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
MWRA	03/08/2017	Yes	Yes	Yes
NACWA	12/13/2016	Yes	Yes	Yes
NBC Statewide	04/17/2017	Yes	Yes	Yes

ACCOUNTING Section Summary

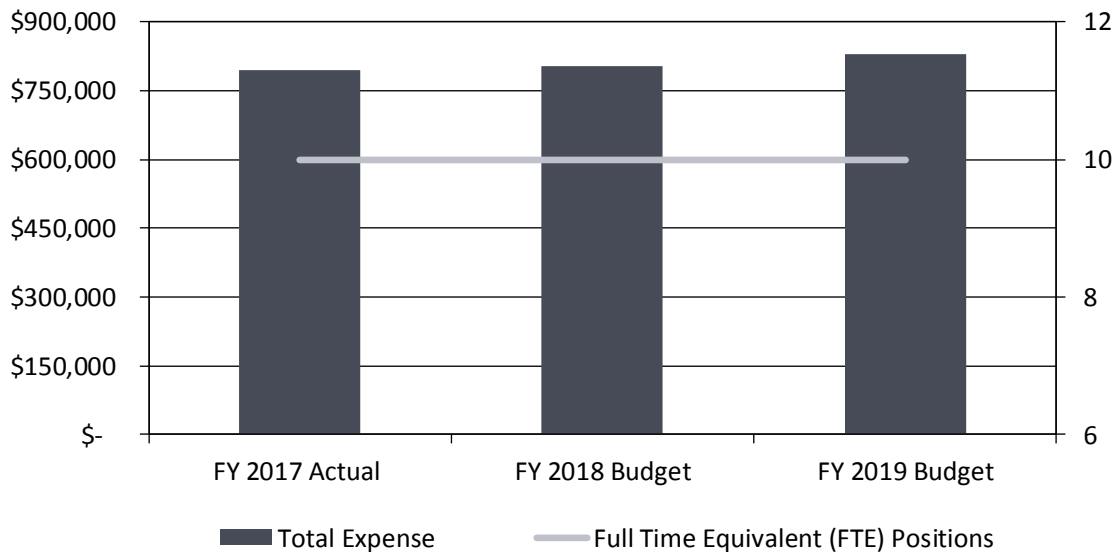
The Program

The Accounting section is responsible for preparing and issuing monthly financial statements in accordance with "Generally Accepted Accounting Principles". Accounting provides cash management support and ensures compliance with the flow of funds set forth in the Trust Indenture and PUC Orders. The Accounting section is also responsible for processing payroll, vendor payments, capital project expenditures, maintaining the general ledger and assisting with rate filings.

The Budget

Operations & Maintenance Expense	FY 2017 Actual	FY 2018 Budget	FY 2019 Budget
Personnel	\$ 751,210	\$ 756,124	\$ 781,114
Operating Supplies/Expense	11,470	10,095	10,170
Professional Services	31,991	38,000	38,000
Total O&M	\$ 794,671	\$ 804,219	\$ 829,284
Funds by Source - Revenue	\$ 794,671	\$ 804,219	\$ 829,284

ACCOUNTING - Historical Data



PROGRAM STAFFING (BUDGETED)			
Accounting Manager	1.0	Payroll Administrator	1.0
Capital Accounting Assistant	1.0	Payroll Supervisor	1.0
Capital Principal Accountant	1.0	Principal Accountant	1.0
Fiscal Clerk	1.0	Senior Fiscal Clerk	1.0
		Staff Accountant	2.0
10.0 FTEs			

Goal Actions for Target Measures by Key Code

Core Business

CB 1	Ensure compliance with all State and Federal regulations, permits, consent agreements, certifications, NBC regulations and reporting requirements
CB 2	Manage the planning, design and construction of NBC's capital improvements in the most cost-effective manner and in compliance with regulatory requirements
CB 3	Ensure the highest level of availability of systems' applications and network stability
CB 4	Maximize efficiency through service automation, applications security and NBC campus security
CB 5	Maintain NBC's asset management program for infrastructure and assets, ensure integrity and maximize the investment

Environmental Performance

EP 1	Minimize environmental impacts and implement conservation and sustainability measures
EP 2	Evaluate the NBC Program and report the data to the public
EP 3	Provide technical assistance to evaluate energy conservation and renewable energy opportunities
EP 4	Provide quality and expedient sample collection, data analyses and water quality monitoring to evaluate NBC's impacts and document improvements

Financial Management

FM 1	Ensure sufficient funding and receive the lowest cost of borrowing with the least rate payer impact
FM 2	Integrate NBC's strategic goals into the allocation of NBC's resources
FM 3	Maximize the efficiency, effectiveness, and accuracy of NBC's rate structures and collection processes to reduce accounts receivable
FM 4	Develop and manage NBC's operating and capital budgets to maximize benefits, minimize expense and unplanned expenditures
FM 5	Comply with IRS, Federal and State Rules and Regulations, Trust Indenture and Generally Accepted Accounting Principles
FM 6	Ensure goods and services are procured, reviewed and processed in a timely, efficient and cost effective manner
FM 7	Initiate and evaluate incentive programs
FM 8	Evaluate savings opportunities and optimize NBC operations and processes

Customer Focus

CF 1	Maintain programs and conduct projects that give back to the community
CF 2	Provide prompt, courteous, efficient and educational services
CF 3	Enhance communications to ensure consistency, reliability and satisfaction
CF 4	Maximize customer focus attitude by providing excellent customer service and developing strong customer relationships
CF 5	Ensure compliance with NBC internal controls

Staffing

S 1	Ensure compliance with Federal and State labor laws
S 2	Foster a positive working environment through effective communication
S 3	Provide professional, technical and/or safety training to optimize team performance and ensure user comfort with systems and processes
S 4	Provide a healthy and safe working environment
S 5	Develop mechanisms and establish opportunities for continued growth and professional development

Communication

C 1	Continue to expand and conduct NBC public outreach programs
C 2	Proactively manage NBC's public and legislative affairs and communicate NBC initiatives and ongoing activities
C 3	Effectively communicate status of capital projects to NBC staff and Board members
C 4	Enhance operating budget, CIP and compliance reports as a communication device
C 5	Strengthen and expand NBC's positive relations with key stakeholders (customers, Board, elected officials/delegates, regulatory officials and the public) to ensure support of NBC's mission

Organizational Performance

OP 1	Conduct NBC business in an open manner
OP 2	Promote diversity in hiring practices
OP 3	Ensure compliance with State ethics and regulatory agenda filing
OP 4	Provide end-user technology and systems to meet NBC's strategic goals

ACCOUNTING

Performance Data

Major Accomplishments FY 2018 by Key Code:

- FM 5** Completed the FY 2017 audit of the financial statements by the September 30th statutory deadline
- FM 5** Completed the FY 2017 Single Audit by the November 30th deadline
- FM 5** Received a clean audit opinion and no management letter for the 20th consecutive year
- FM 5** Received the GFOA Certificate of Achievement for Excellence in Financial Reporting for the 15th consecutive year
- FM 5** Calculated the monthly trust transfers
- FM 5** Prepared and distributed IRS W-2 and 1099 forms and ACA reporting for CY 2017 by the required due dates
- FM 5** Completed the restricted account reporting
- FM 6** Processed and submitted approximately \$28.6 million in capital invoices for payment
- FM 6** Processed operating invoices and bi-weekly payrolls in a timely manner and received \$5,044 in discounts for prompt payment
- FM 6** Revised and improved the process for cash flow, fund accounting and the year-end carry-over calculation
- FM 6** Revised and improved the process for prepaid expense and electricity accruals
- FM 8** Assisted with implementation of the Purchase Card Program
- FM 8** Developed new accounts to record and track net metering credits by source

Top Priorities for FY 2019 and How They Relate to the Strategic Plan/Goals and by Key Code:

- FM 5** Complete the FY 2018 audit in a timely manner and receive a clean audit opinion and no management letter
- FM 5** Ensure proper calculation of the monthly trust transfers
- FM 6** Process all operating invoices, capital invoices, and the bi-weekly payroll in a timely manner

Target Measures

FINANCIAL MANAGEMENT:

Manage NBC's finances through strong financial planning and controls such that sewer user charges are minimized.

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Comply with IRS, State of Rhode Island Rules and Regulations, Trust Indenture and Generally Accepted Accounting Principles • FM 5

TARGET MEASURE:

Receive the GFOA Certificate of Achievement for Excellence in Financial Reporting

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Consecutive Years	15	15	16	17

TARGET MEASURE:

Timely completion of financial audit

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Completion of CAFR	9/30/2017	9/30/2017	9/30/2018	9/30/2019
Consecutive Years - No Management Letter	19	19	20	21
Address Findings within 5 days	0 Findings	0 Findings	0 Findings	0 Findings
Receive a clean opinion	Yes	Yes	Yes	Yes

TARGET MEASURE:

Timely completion of single audit if required

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Completion of Single Audit	12/31/2017	3/31/2018	3/31/2019	3/21/2020
Address findings within 5 days	0 Findings	0 Findings	0 Findings	0 Findings

TARGET MEASURE:

Prepare monthly financial statements within five business days of month-end

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Timeframe	5 Days	≤5 days	≤5 days	≤5 days

TARGET MEASURE:

Implement Government Accounting Standard Boards (GASB) pronouncements that apply to NBC

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	1 Pronouncement Implemented	100%	100%	100%

TARGET MEASURE:

Prepare the restricted account reporting within 25 days of month-end

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Timeframe	19 Days	≤25 Days	≤25 Days	≤25 Days

TARGET MEASURE:

Prepare trust transfers on the fourth business day prior to month-end

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Timeframe	4 th Business Day	4 th Business Day	4 th Business Day	4 th Business Day

TARGET MEASURE:

Perform monthly fund reconciliation within 25 days after month-end

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Timeframe	15 Days	≤25 Days	≤25 Days	≤25 Days

TARGET MEASURE:

Prepare W-2s and 1099s at the end of the calendar year and the quarterly 941 payroll tax returns

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
W-2s	280 - W-2s	100%	100%	100%
1099s	109 - 1099s	100%	100%	100%
941s	4 - 941s	100%	100%	100%

TARGET MEASURE:

Prepare and submit the consultant report for the RI Secretary of State by October 1st of each year

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Due Date	8/31/2017	10/1/2017	10/1/2018	10/1/2019

TARGET MEASURE:

Post quarterly financial statements on NBC's website and submit the quarterly surcharge reports to RIDEM

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Financials Posted	4	4	4	4
Surcharge Reports Submitted	4	4	4	4

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Ensure goods and services are procured, reviewed and processed in a timely, efficient and cost effective manner

- FM 6

TARGET MEASURE:

Process 100% of invoices

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Operating Invoices	7,749 Operating Invoices	100%	100%	100%
Capital Invoices	402 Capital Invoices	100%	100%	100%

STAFFING:

Attract, develop and retain highly qualified employees.

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Provide professional, technical and/or safety training to optimize team performance and ensure user comfort with systems and processes • S 3

TARGET MEASURE:

Ensure accountants and payroll administrators complete a minimum of 50 training hours

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Hours	77	50	50	50



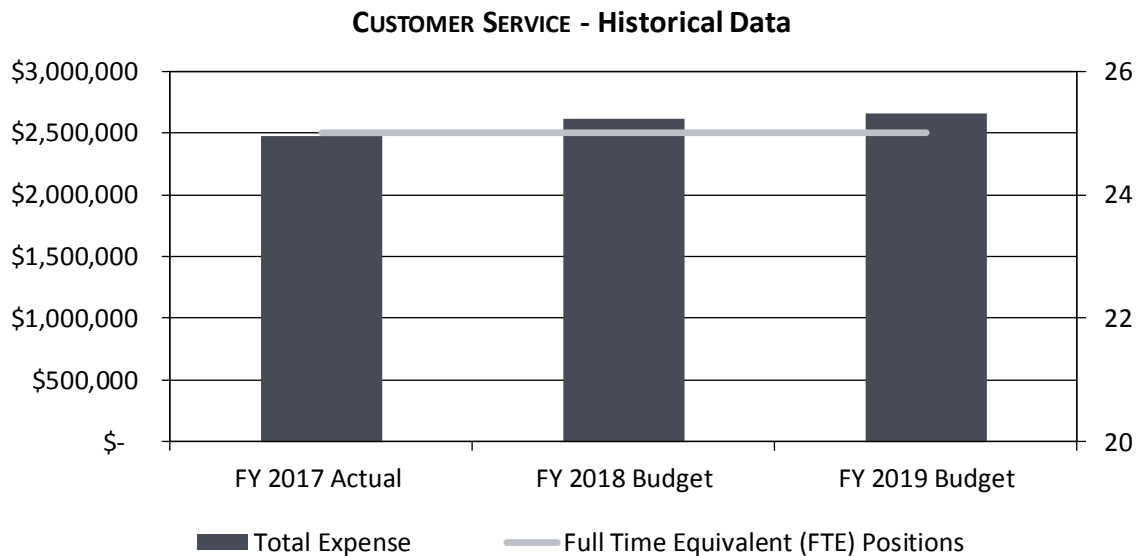
CUSTOMER SERVICE Section Summary

The Program

The Customer Service Section is responsible for accurate and timely monthly billing of approximately 84,455 accounts in the NBC service area. Water consumption based billings comprise more than half of the annually billed user charges, and NBC receives water consumption data from seven different water supply boards. The billing section responds to customer inquiries including closing requests. Additionally, Customer Service has field investigators who research accounts and facilitate the abatement program. Collection activity includes phone calls, the water shut-off process and support for the lien sale. Customer Service is committed to providing NBC's customers with excellent service.

The Budget

Operations & Maintenance Expense	FY 2017 Actual	FY 2018 Budget	FY 2019 Budget
Personnel	\$ 1,920,391	\$ 2,030,018	\$ 2,072,362
Operating Supplies/Expense	513,423	539,793	545,730
Professional Services	44,588	46,400	36,400
Total O&M	\$ 2,478,402	\$ 2,616,211	\$ 2,654,492
Funds by Source - Revenue	\$ 2,478,402	\$ 2,616,211	\$ 2,654,492



PROGRAM STAFFING (BUDGETED)			
Customer Service Manager	1.0	Customer Service Analyst	2.0
Assistant Billing Supervisor	2.0	Customer Service Representative	7.0
Assistant Collections Supervisor	1.0	Customer Service Representative - Fiscal Clerk	2.0
Billing Supervisor	1.0	Customer Service Support Supervisor	1.0
Collections Analyst	1.0	Field Investigator	3.0
Collections Supervisor	1.0	Fiscal Clerk	1.0
Customer Research Supervisor	1.0	Senior Fiscal Clerk	1.0
25.0 FTEs			

Goal Actions for Target Measures by Key Code

Core Business

CB 1	Ensure compliance with all State and Federal regulations, permits, consent agreements, certifications, NBC regulations and reporting requirements
CB 2	Manage the planning, design and construction of NBC's capital improvements in the most cost-effective manner and in compliance with regulatory requirements
CB 3	Ensure the highest level of availability of systems' applications and network stability
CB 4	Maximize efficiency through service automation, applications security and NBC campus security
CB 5	Maintain NBC's asset management program for infrastructure and assets, ensure integrity and maximize the investment

Environmental Performance

EP 1	Minimize environmental impacts and implement conservation and sustainability measures
EP 2	Evaluate the NBC Program and report the data to the public
EP 3	Provide technical assistance to evaluate energy conservation and renewable energy opportunities
EP 4	Provide quality and expedient sample collection, data analyses and water quality monitoring to evaluate NBC's impacts and document improvements

Financial Management

FM 1	Ensure sufficient funding and receive the lowest cost of borrowing with the least rate payer impact
FM 2	Integrate NBC's strategic goals into the allocation of NBC's resources
FM 3	Maximize the efficiency, effectiveness, and accuracy of NBC's rate structures and collection processes to reduce accounts receivable
FM 4	Develop and manage NBC's operating and capital budgets to maximize benefits, minimize expense and unplanned expenditures
FM 5	Comply with IRS, Federal and State Rules and Regulations, Trust Indenture and Generally Accepted Accounting Principles
FM 6	Ensure goods and services are procured, reviewed and processed in a timely, efficient and cost effective manner
FM 7	Initiate and evaluate incentive programs
FM 8	Evaluate savings opportunities and optimize NBC operations and processes

Customer Focus

CF 1	Maintain programs and conduct projects that give back to the community
CF 2	Provide prompt, courteous, efficient and educational services
CF 3	Enhance communications to ensure consistency, reliability and satisfaction
CF 4	Maximize customer focus attitude by providing excellent customer service and developing strong customer relationships
CF 5	Ensure compliance with NBC internal controls

Staffing

S 1	Ensure compliance with Federal and State labor laws
S 2	Foster a positive working environment through effective communication
S 3	Provide professional, technical and/or safety training to optimize team performance and ensure user comfort with systems and processes
S 4	Provide a healthy and safe working environment
S 5	Develop mechanisms and establish opportunities for continued growth and professional development

Communication

C 1	Continue to expand and conduct NBC public outreach programs
C 2	Proactively manage NBC's public and legislative affairs and communicate NBC initiatives and ongoing activities
C 3	Effectively communicate status of capital projects to NBC staff and Board members
C 4	Enhance operating budget, CIP and compliance reports as a communication device
C 5	Strengthen and expand NBC's positive relations with key stakeholders (customers, Board, elected officials/delegates, regulatory officials and the public) to ensure support of NBC's mission

Organizational Performance

OP 1	Conduct NBC business in an open manner
OP 2	Promote diversity in hiring practices
OP 3	Ensure compliance with State ethics and regulatory agenda filing
OP 4	Provide end-user technology and systems to meet NBC's strategic goals

CUSTOMER SERVICE

Performance Data

Major Accomplishments FY 2018 by Key Code:

- CB 4** Began implementation of Infinity Link, a new Customer Service Application to replace the legacy system
- FM 3** Completed timely and accurate monthly billings of NBC's 84,455 accounts
- FM 3** Billed more than \$100 million in user fee revenue
- FM 3** Collected approximately \$550,000 per month through the Water Shut-off program and expanded the program to year-round activity
- CF 5** Obtained site meter readings for more than 285 customers per month on average
- CF 5** Received and responded to an average of 4,739 customer calls per month

Top Priorities for FY 2019 and How They Relate to the Strategic Plan/Goals and by Key Code:

- CB 4** Complete implementation of Infinity Link, the new Customer Service System Application
- FM 3** Ensure complete and accurate billings and streamline collection strategies to maximize results
- CF 2** Provide excellent customer service

Target Measures

FINANCIAL MANAGEMENT: *Manage NBC's finances through strong financial planning and controls such that sewer user charges are minimized.*

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Maximize the efficiency, effectiveness, and accuracy of NBC's rate structures and collection processes to reduce accounts receivable • FM 3

TARGET MEASURE:

Ensure a minimum of 98% of accounts have an actual meter reading within 12 months

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	97% - 932,520 Meter Readings	98%	98%	98%

TARGET MEASURE:

Call a minimum of 90% of accounts with over 30-day balances

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	94% - 20,131 Accounts	90%	90%	90%

TARGET MEASURE:

Create a minimum of 8% of Budget Agreements for accounts with over 30-day balances

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	8.45% - 1,607 Accounts	8%	8%	8%

TARGET MEASURE:

Send foreclosure letters to 100% properties going into foreclosure

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	548 Accounts	100%	100%	100%

TARGET MEASURE:

Select a minimum of 5,000 accounts for Water Shut-off

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Selected	5,793	5,000	5,000	5,000
Posted	84% - 4,886 Accounts	50%	50%	50%
Terminated	15% - 856 Accounts	18%	18%	18%

TARGET MEASURE:

Late fees are 1.5% or less of the percentage of user fee billing

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	.90%	<1.5%	<1.5%	<1.5%

CUSTOMER FOCUS:*Maintain a customer-focused attitude throughout the organization.***GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:**

Provide prompt, courteous, efficient and educational services • CF 2

TARGET MEASURE:

Add new meters into customer service application

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	1,611 Meters	100%	100%	100%

TARGET MEASURE:

Investigate new sewer connection permits

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	277 Permits	100%	100%	100%

TARGET MEASURE:

Process 100% of Abatement Applications

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	149 Applications	100%	100%	100%

TARGET MEASURE:

Process 100% of requests for new and updating of existing Pretreatment accounts

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
New	277 Accounts	100%	100%	100%
Updated	548 Accounts	100%	100%	100%

TARGET MEASURE:

Resolve account disputes within 30 days

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	96% - 1,697 Resolutions	96%	96%	96%

TARGET MEASURE:

Process closing requests within 48 hours

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Total Closing Requests	6,059	95%	95%	95%
Processed within 48 hours	95% - 5,756 Requests			

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Maximize customer focus attitude by providing excellent customer service and developing strong customer relationships • CF 4

TARGET MEASURE:

Review 15 or more large user accounts and conduct a minimum of 500 manual site meter readings

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Quantity - Reviewed	15	15	15	15
Quantity - Read	1,656	500	500	500

STAFFING:*Attract, develop and retain highly qualified employees.***GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:**

Provide professional, technical and/or safety training to optimize team performance and ensure user comfort with systems and processes • S 3

TARGET MEASURE:

Provide a minimum of 1,500 employee training hours

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Hours	1,500	1,500	1,500	1,500



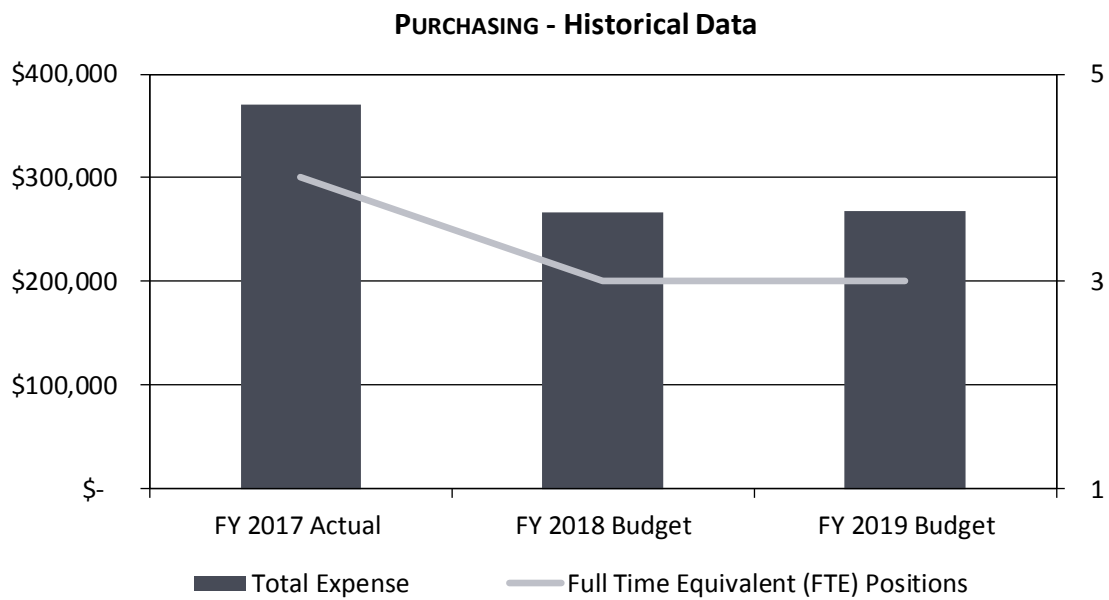
PURCHASING Section Summary

The Program

The Purchasing section is responsible for ensuring the legal, timely and cost-effective purchasing of goods and services. This section also provides support for security and maintenance of the Corporate Office Building.

The Budget

Operations & Maintenance Expense	FY 2017 Actual	FY 2018 Budget	FY 2019 Budget
Personnel	\$ 368,225	\$ 263,035	\$ 264,084
Operating Supplies/Expense	2,877	3,200	4,000
Professional Services	-	-	-
Total O&M	\$ 371,102	\$ 266,235	\$ 268,084
Funds by Source - Revenue	\$ 371,102	\$ 266,235	\$ 268,084



PROGRAM STAFFING (BUDGETED)			
Purchasing Manager	1.0	Purchasing Coordinator	1.0
Office Administrator	1.0		
3.0 FTEs			

Goal Actions for Target Measures by Key Code

Core Business

CB 1	Ensure compliance with all State and Federal regulations, permits, consent agreements, certifications, NBC regulations and reporting requirements
CB 2	Manage the planning, design and construction of NBC's capital improvements in the most cost-effective manner and in compliance with regulatory requirements
CB 3	Ensure the highest level of availability of systems' applications and network stability
CB 4	Maximize efficiency through service automation, applications security and NBC campus security
CB 5	Maintain NBC's asset management program for infrastructure and assets, ensure integrity and maximize the investment

Environmental Performance

EP 1	Minimize environmental impacts and implement conservation and sustainability measures
EP 2	Evaluate the NBC Program and report the data to the public
EP 3	Provide technical assistance to evaluate energy conservation and renewable energy opportunities
EP 4	Provide quality and expedient sample collection, data analyses and water quality monitoring to evaluate NBC's impacts and document improvements

Financial Management

FM 1	Ensure sufficient funding and receive the lowest cost of borrowing with the least rate payer impact
FM 2	Integrate NBC's strategic goals into the allocation of NBC's resources
FM 3	Maximize the efficiency, effectiveness, and accuracy of NBC's rate structures and collection processes to reduce accounts receivable
FM 4	Develop and manage NBC's operating and capital budgets to maximize benefits, minimize expense and unplanned expenditures
FM 5	Comply with IRS, Federal and State Rules and Regulations, Trust Indenture and Generally Accepted Accounting Principles
FM 6	Ensure goods and services are procured, reviewed and processed in a timely, efficient and cost effective manner
FM 7	Initiate and evaluate incentive programs
FM 8	Evaluate savings opportunities and optimize NBC operations and processes

Customer Focus

CF 1	Maintain programs and conduct projects that give back to the community
CF 2	Provide prompt, courteous, efficient and educational services
CF 3	Enhance communications to ensure consistency, reliability and satisfaction
CF 4	Maximize customer focus attitude by providing excellent customer service and developing strong customer relationships
CF 5	Ensure compliance with NBC internal controls

Staffing

S 1	Ensure compliance with Federal and State labor laws
S 2	Foster a positive working environment through effective communication
S 3	Provide professional, technical and/or safety training to optimize team performance and ensure user comfort with systems and processes
S 4	Provide a healthy and safe working environment
S 5	Develop mechanisms and establish opportunities for continued growth and professional development

Communication

C 1	Continue to expand and conduct NBC public outreach programs
C 2	Proactively manage NBC's public and legislative affairs and communicate NBC initiatives and ongoing activities
C 3	Effectively communicate status of capital projects to NBC staff and Board members
C 4	Enhance operating budget, CIP and compliance reports as a communication device
C 5	Strengthen and expand NBC's positive relations with key stakeholders (customers, Board, elected officials/delegates, regulatory officials and the public) to ensure support of NBC's mission

Organizational Performance

OP 1	Conduct NBC business in an open manner
OP 2	Promote diversity in hiring practices
OP 3	Ensure compliance with State ethics and regulatory agenda filing
OP 4	Provide end-user technology and systems to meet NBC's strategic goals

**PURCHASING
Performance Data**

Major Accomplishments FY 2018 by Key Code:

- CB 4** Added bid specifications and sole source documentation to SharePoint
- FM 5** Ensured that all purchases were in conformance with State of RI and NBC Purchasing Regulations
- FM 6** Prepared 15 bid proposals and specifications within 30 days
- FM 6** Assisted with emergency purchases
- FM 8** Facilitated the sale of RECs generated by FPWWTF wind turbines, WED turbines, biogas and the solar PPA
- FM 8** Secured new electricity supply contract
- FM 8** Assisted with the implementation of a Purchase Card Program
- CF 2** Assisted with the issuance of renewable energy RFQPs
- CF 5** Provided assistance to NBC staff to ensure compliance with State of RI Purchasing Regulations
- CF 5** Posted bid requests and awards online
- CF 5** Reviewed draft legislation to assess impact and ensure compliance
- S 3** Provided new employee training on the Oracle purchasing system

Top Priorities for FY 2019 and How They Relate to the Strategic Plan/Goals and by Key Code:

- CB 1** Ensure compliance with Federal and State purchasing laws
- FM 6** Review and maintain proper preparation of purchasing specifications to ensure competitive bids
- FM 6** Ensure the timely, efficient and cost effective purchase of goods and services needed to operate, maintain and improve NBC’s Facilities

Target Measures

FINANCIAL MANAGEMENT: *Manage NBC's finances through strong financial planning and controls such that sewer user charges are minimized.*

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Ensure goods and services are procured, reviewed and processed in a timely, efficient and cost effective manner

- FM 6

TARGET MEASURE:

Process 100% of purchase requisitions

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	3,035 Requisitions	100%	100%	100%

TARGET MEASURE:

Complete 85% of bid specifications within 30 days

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	95% - 37 Bid Specifications	85%	85%	85%

TARGET MEASURE:

Ensure contracts are awarded within 60 days of RFQP

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Timeframe	60 Days - 27 Contracts	≤60 days	≤60 days	≤60 days

TARGET MEASURE:

Review all contracts three months prior to expiration

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	7 Contracts	100%	100%	100%

CUSTOMER FOCUS:*Maintain a customer-focused attitude throughout the organization.***GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:**

Ensure compliance with NBC's internal controls • CF 5

TARGET MEASURE:

Provide Finance Committee with list of purchase requisitions greater than \$10,000

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	233 Requisitions	100%	100%	100%

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Enhance internal communications to ensure consistency, reliability and satisfaction • CF 3

TARGET MEASURE:

Ensure NBC's does not have more than 50 vehicles that weigh less than 8,500 tons

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Quantity	47	≤50	≤50	≤50

STAFFING:*Attract, develop and retain highly qualified employees.***GOAL ACTION FOR ACHIEVEMENT BY KEY CODE**

Provide professional, technical and/or safety training to optimize team performance and ensure user comfort with systems and processes • S 3

TARGET MEASURE:

Provide a minimum of 24 employee training hours

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Hours	24	24	24	24

GENERAL ADMINISTRATION
Section Summary

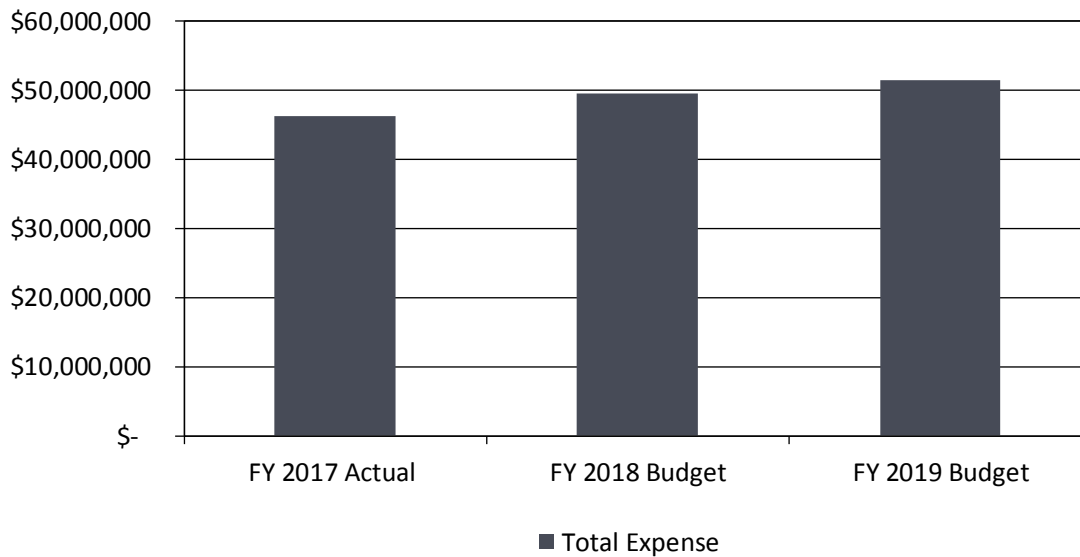
The Program

The General Administration section includes overhead items such as funding of the HDHP, Health Reimbursement Arrangement, unemployment, NBC's electricity energy credits, renewable energy credits and net metering credits, property management related to the Corporate Office Building and debt service.

The Budget

Operations & Maintenance Expense	FY 2017 Actual	FY 2018 Budget	FY 2019 Budget
Personnel	\$ 380,996	\$ 412,609	\$ 467,904
Operating Supplies/Expense	1,850,399	2,051,997	3,195,093
Professional Services	374,789	365,000	155,000
<i>Total O&M</i>	<i>2,606,184</i>	<i>2,829,606</i>	<i>3,817,997</i>
Debt Service			
Debt Service	43,589,827	46,786,894	47,787,186
<i>Total Debt Service</i>	<i>43,589,827</i>	<i>46,786,894</i>	<i>47,787,186</i>
Total Expense	\$ 46,196,011	\$ 49,616,500	\$ 51,605,183
Funds by Source - Revenue	\$ 46,196,011	\$ 49,616,500	\$ 51,605,183

GENERAL ADMINISTRATION - Historical Data



PROGRAM STAFFING (BUDGETED)
Responsibilities are executed by Purchasing Staff

Goal Actions for Target Measures by Key Code

Core Business

CB 1	Ensure compliance with all State and Federal regulations, permits, consent agreements, certifications, NBC regulations and reporting requirements
CB 2	Manage the planning, design and construction of NBC's capital improvements in the most cost-effective manner and in compliance with regulatory requirements
CB 3	Ensure the highest level of availability of systems' applications and network stability
CB 4	Maximize efficiency through service automation, applications security and NBC campus security
CB 5	Maintain NBC's asset management program for infrastructure and assets, ensure integrity and maximize the investment

Environmental Performance

EP 1	Minimize environmental impacts and implement conservation and sustainability measures
EP 2	Evaluate the NBC Program and report the data to the public
EP 3	Provide technical assistance to evaluate energy conservation and renewable energy opportunities
EP 4	Provide quality and expedient sample collection, data analyses and water quality monitoring to evaluate NBC's impacts and document improvements

Financial Management

FM 1	Ensure sufficient funding and receive the lowest cost of borrowing with the least rate payer impact
FM 2	Integrate NBC's strategic goals into the allocation of NBC's resources
FM 3	Maximize the efficiency, effectiveness, and accuracy of NBC's rate structures and collection processes to reduce accounts receivable
FM 4	Develop and manage NBC's operating and capital budgets to maximize benefits, minimize expense and unplanned expenditures
FM 5	Comply with IRS, Federal and State Rules and Regulations, Trust Indenture and Generally Accepted Accounting Principles
FM 6	Ensure goods and services are procured, reviewed and processed in a timely, efficient and cost effective manner
FM 7	Initiate and evaluate incentive programs
FM 8	Evaluate savings opportunities and optimize NBC operations and processes

Customer Focus

CF 1	Maintain programs and conduct projects that give back to the community
CF 2	Provide prompt, courteous, efficient and educational services
CF 3	Enhance communications to ensure consistency, reliability and satisfaction
CF 4	Maximize customer focus attitude by providing excellent customer service and developing strong customer relationships
CF 5	Ensure compliance with NBC internal controls

Staffing

S 1	Ensure compliance with Federal and State labor laws
S 2	Foster a positive working environment through effective communication
S 3	Provide professional, technical and/or safety training to optimize team performance and ensure user comfort with systems and processes
S 4	Provide a healthy and safe working environment
S 5	Develop mechanisms and establish opportunities for continued growth and professional development

Communication

C 1	Continue to expand and conduct NBC public outreach programs
C 2	Proactively manage NBC's public and legislative affairs and communicate NBC initiatives and ongoing activities
C 3	Effectively communicate status of capital projects to NBC staff and Board members
C 4	Enhance operating budget, CIP and compliance reports as a communication device
C 5	Strengthen and expand NBC's positive relations with key stakeholders (customers, Board, elected officials/delegates, regulatory officials and the public) to ensure support of NBC's mission

Organizational Performance

OP 1	Conduct NBC business in an open manner
OP 2	Promote diversity in hiring practices
OP 3	Ensure compliance with State ethics and regulatory agenda filing
OP 4	Provide end-user technology and systems to meet NBC's strategic goals

GENERAL ADMINISTRATION

Performance Data

Major Accomplishments FY 2018 by Key Code:

- CB 1** Reviewed documentation with the State of Rhode Island Archivist for record destruction
- CB 5** Completed monthly analysis of Corporate Office Building (COB) maintenance expense
- CB 5** Completed preventive and corrective maintenance at the COB
- CB 5** Maintained and tracked the inventory associated with HVAC parts and components
- CF 2** Managed service request logs and ensured timely responses

Top Priorities for FY 2019 and How They Relate to the Strategic Plan/Goals and by Key Code:

- CB 5** Provide cost-effective property management of the Corporate Office Building
- CF 2** Ensure timely completion of service requests
- CF 4** Facilitate record relocation to new storage facility

Target Measures

CORE BUSINESS: *Operate, maintain and protect our collection and treatment systems to ensure that all State and Federal requirements are met or surpassed.*

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Maintain NBC's asset management program for infrastructure and assets, ensure integrity and maximize the investment • CB 5

TARGET MEASURE:

Perform quarterly facility inspections

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Elevators	12	Quarterly	Quarterly	Quarterly
Fire Alarms	4	Quarterly	Quarterly	Quarterly

TARGET MEASURE:

Complete 85% of building maintenance requests within two weeks

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	92% - 69 Requests	85%	85%	85%

FINANCIAL MANAGEMENT: *Manage NBC's finances through strong financial planning and controls such that sewer user charges are minimized.*

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Develop and manage NBC's operating and capital budgets to maximize benefits, minimize expense and unplanned expenditures • FM 4

TARGET MEASURE:

Complete 100% of planned capital items

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Budgeted	7	100%	100%	100%
Completed	6			

TARGET MEASURE:

Spend \$8/sq. ft. or less on NBC corporate office building maintenance

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Dollars per square foot	\$4.72	\$8.00	\$8.00	\$8.00

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Evaluate savings opportunities and optimize NBC operations and processes • FM 8

TARGET MEASURE:

Ensure renewable energy credits are bundled and transferred at least semi-annually

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Frequency	4 – 8,174 RECs	≥2	≥2	≥2

CUSTOMER FOCUS:

Maintain a customer-focused attitude throughout the organization.

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Ensure compliance with NBC internal controls • CF 5

TARGET MEASURE:

Ensure 100% of NBC records are recorded and archived as required

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	27 Records	100%	100%	100%

COMMUNICATION:

Improve and enhance internal and external communication to increase understanding of "who we are" and "what we do".

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Strengthen and expand NBC’s positive relations with key stakeholders (customers, Board, elected officials/ delegates, regulatory officials and the public • C 5

TARGET MEASURE:

Process 100% of outgoing mail daily

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	30,033 Pieces of Mail	100%	100%	100%

OPERATIONS AND MAINTENANCE DIVISION

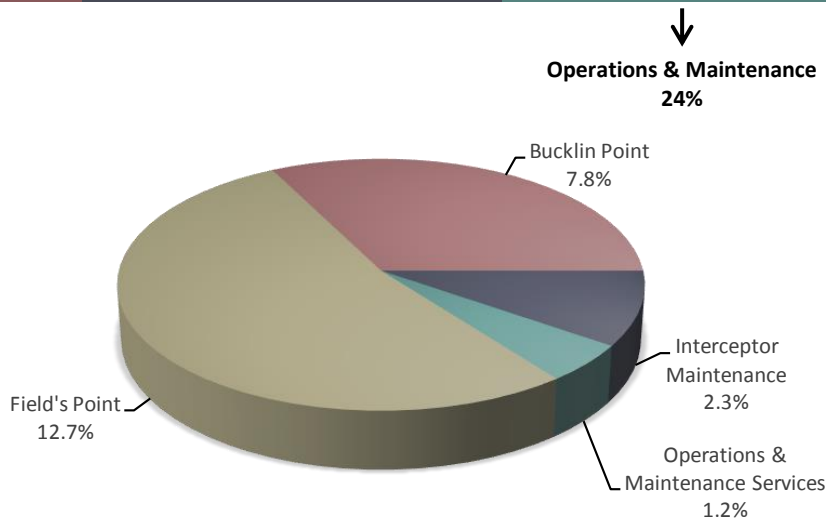
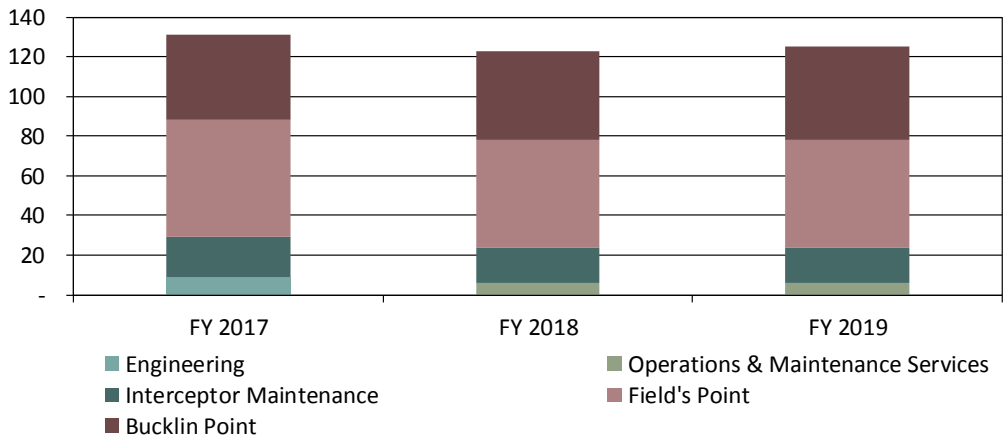
Division Summary



The Program

The Operations and Maintenance Division is responsible for managing, operating and maintaining NBC's wastewater treatment facilities, infrastructure and collection system. This Division also ensures process control for continuous collection and treatment of wastewater throughout NBC's service area in accordance with all State and Federal regulatory requirements. This Division also maintains the Asset Management Program to ensure proper maintenance, repair and replacement of NBC's assets.

Budgeted Positions (FTEs)
OPERATIONS AND MAINTENANCE DIVISION



OPERATIONS AND MAINTENANCE DIVISION

Division Summary

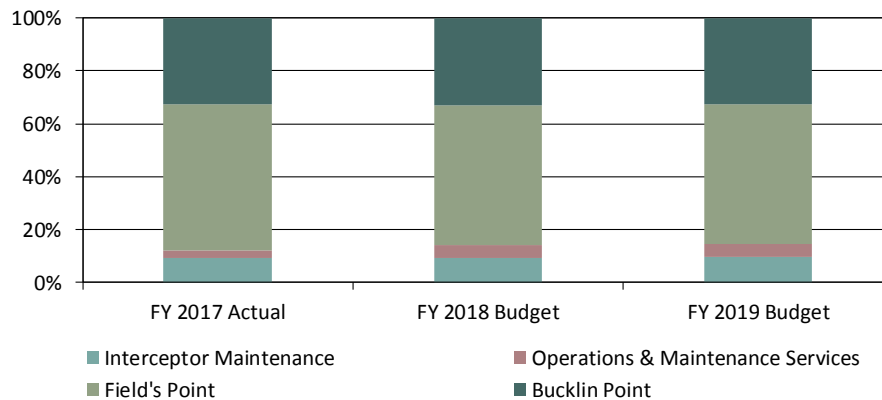
The Budget

Operations & Maintenance Expense	FY 2017 Actual	FY 2018 Budget	FY 2019 Budget
Personnel	\$ 11,369,951	\$ 12,133,361	\$ 12,180,841
Operating Supplies/Expense	10,584,011	11,054,941	9,587,488
Professional Services	66,352	42,300	49,800
Total O&M	\$ 22,020,314	\$ 23,230,602	\$ 21,818,129
Funds by Source - Revenue	\$ 22,020,314	\$ 23,230,602	\$ 21,818,129

Significant Budget Modifications

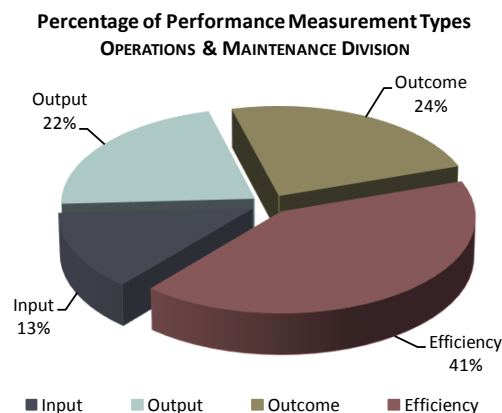
The FY 2019 Operations and Maintenance Division budget decreased by approximately 6.0% or \$1.4 million from the FY 2018 budget. Personnel increased by \$110,940 and includes the transfer of the insurance and risk management function to the Administration and Finance Division; two additional FTEs at Bucklin Point and budgeted turnover of 3.0 FTEs. Operating supplies and expense reflects increased biosolids, natural gas, chemicals and maintenance contracts, which is offset by the transfer and funding of the electricity budget to the General Administration section. Professional services reflects an increase of \$7,500 for security services.

Percent of Division's Budget by Section



Operations Division Performance Data Summary

The chart below illustrates the Operations and Maintenance Division's Performance Data by type of measure. The measures can be found in the individual sections following the division summary. In this Division, Outcome and Efficiency make up 65% of the performance measures.



INTERCEPTOR MAINTENANCE

Section Summary

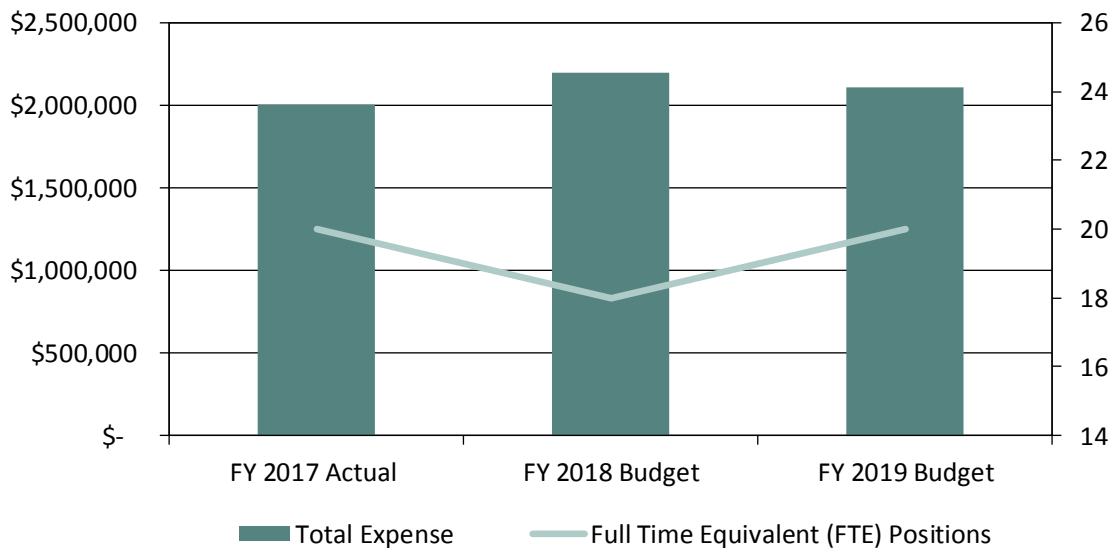
The Program

The Interceptor Maintenance (IM) section is responsible for maintaining NBC's infrastructure and collection system throughout the service area to ensure sufficient capacity and transport flow to the WWTF's in compliance with State and Federal requirements. The section performs various maintenance and inspection tasks as mandated by the RIPDES permit, which include the validation of infrastructure and proper flow conditions, video monitoring inspections, correction of infrastructure impediments, performing minor construction repairs and monitoring any new development projects that may impact flow. This section also provides assistance to communities as needed, general oversight of the entire district's wastewater flow conditions, as well as numerous other activities required or deemed necessary to ensure flow conditions are uninterrupted.

The Budget

Operations & Maintenance Expense	FY 2017 Actual	FY 2018 Budget	FY 2019 Budget
Personnel	\$ 1,446,467	\$ 1,634,328	\$ 1,752,582
Operating Supplies/Expense	543,309	551,960	334,679
Professional Services	16,816	15,800	20,800
Total O&M	\$ 2,006,592	\$ 2,202,088	\$ 2,108,061
Funds by Source - Revenue	\$ 2,006,592	\$ 2,202,088	\$ 2,108,061

INTERCEPTOR MAINTENANCE - Historical Data



PROGRAM STAFFING (BUDGETED)			
Interceptor Maintenance Manager	1.0	Interceptor Maintenance Senior Supervisor	1.0
Assistant Interceptor Maintenance Manager	1.0	Interceptor Maintenance Supervisor	1.0
Clerk	1.0	Instrumental Engineer	1.0
Environmental Engineer	1.0	Operator	11.0
Interceptor Maintenance Inspector	1.0	Senior Technical Assistant	1.0
20.0 FTEs			

Goal Actions for Target Measures by Key Code

Core Business

CB 1	Ensure compliance with all State and Federal regulations, permits, consent agreements, certifications, NBC regulations and reporting requirements
CB 2	Manage the planning, design and construction of NBC's capital improvements in the most cost-effective manner and in compliance with regulatory requirements
CB 3	Ensure the highest level of availability of systems' applications and network stability
CB 4	Maximize efficiency through service automation, applications security and NBC campus security
CB 5	Maintain NBC's asset management program for infrastructure and assets, ensure integrity and maximize the investment

Environmental Performance

EP 1	Minimize environmental impacts and implement conservation and sustainability measures
EP 2	Evaluate the NBC Program and report the data to the public
EP 3	Provide technical assistance to evaluate energy conservation and renewable energy opportunities
EP 4	Provide quality and expedient sample collection, data analyses and water quality monitoring to evaluate NBC's impacts and document improvements

Financial Management

FM 1	Ensure sufficient funding and receive the lowest cost of borrowing with the least rate payer impact
FM 2	Integrate NBC's strategic goals into the allocation of NBC's resources
FM 3	Maximize the efficiency, effectiveness, and accuracy of NBC's rate structures and collection processes to reduce accounts receivable
FM 4	Develop and manage NBC's operating and capital budgets to maximize benefits, minimize expense and unplanned expenditures
FM 5	Comply with IRS, Federal and State Rules and Regulations, Trust Indenture and Generally Accepted Accounting Principles
FM 6	Ensure goods and services are procured, reviewed and processed in a timely, efficient and cost effective manner
FM 7	Initiate and evaluate incentive programs
FM 8	Evaluate savings opportunities and optimize NBC operations and processes

Customer Focus

CF 1	Maintain programs and conduct projects that give back to the community
CF 2	Provide prompt, courteous, efficient and educational services
CF 3	Enhance communications to ensure consistency, reliability and satisfaction
CF 4	Maximize customer focus attitude by providing excellent customer service and developing strong customer relationships
CF 5	Ensure compliance with NBC internal controls

Staffing

S 1	Ensure compliance with Federal and State labor laws
S 2	Foster a positive working environment through effective communication
S 3	Provide professional, technical and/or safety training to optimize team performance and ensure user comfort with systems and processes
S 4	Provide a healthy and safe working environment
S 5	Develop mechanisms and establish opportunities for continued growth and professional development

Communication

C 1	Continue to expand and conduct NBC public outreach programs
C 2	Proactively manage NBC's public and legislative affairs and communicate NBC initiatives and ongoing activities
C 3	Effectively communicate status of capital projects to NBC staff and Board members
C 4	Enhance operating budget, CIP and compliance reports as a communication device
C 5	Strengthen and expand NBC's positive relations with key stakeholders (customers, Board, elected officials/delegates, regulatory officials and the public) to ensure support of NBC's mission

Organizational Performance

OP 1	Conduct NBC business in an open manner
OP 2	Promote diversity in hiring practices
OP 3	Ensure compliance with State ethics and regulatory agenda filing
OP 4	Provide end-user technology and systems to meet NBC's strategic goals

INTERCEPTOR MAINTENANCE

Performance Data

Major Accomplishments FY 2018 by Key Code:

- CB 5** Inspected approximately 2.7 miles of interceptors throughout the collection system
- CB 5** Removed approximately 121 tons of sediment from the collection system to optimize capacity
- CB 5** Completed the update of flow monitoring site information to improve data collection
- EP 1** Removed approximately 19 tons of floatable material captured at CSO's prior to reaching the waterbody
- EP 1** Incurred no dry weather overflow events
- CF 4** Performed 16 man-hours of assistance to communities within the service area
- S 3** Completed 53 hours of staff training
- S 4** Improved the Safety Committee by providing a more inclusive and active Safety Team

Top Priorities for FY 2019 and How They Relate to the Strategic Plan/Goals and by Key Code:

- CB 1** Maintain proactive maintenance program to minimize and prevent dry weather overflow events and comply with the RIPDES permit requirements
- CB 5** Completed at least 80% of the work orders issued each month
- S 3** Maintain a training program to provide up to date training programs with a goal of completing 200 training hours

Target Measures

CORE BUSINESS: *Operate, maintain and protect our collection and treatment systems to ensure that all State and Federal requirements are met or surpassed.*

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Ensure compliance with all State and Federal regulations, permits, consent agreements, certifications, NBC regulations and reporting requirements • CB 1

TARGET MEASURE:

Comply with RIPDES permit required inspections and reporting

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage - Event Reporting	100% 1 Event	100%	100%	100%
Pump Station Inspections	Weekly	Weekly	Weekly	Weekly
Regulators Inspections	Bimonthly	Bimonthly	Bimonthly	Bimonthly
Tide Gates Inspections	Monthly	Monthly	Monthly	Monthly
Sump Pumps Inspections	Quarterly	Quarterly	Quarterly	Quarterly
Hurricane Barrier Inspections	Pre & Post Season	Pre & Post Season	Pre & Post Season	Pre & Post Season
Catch Basins Inspections	Semiannually	Semiannually	Semiannually	Semiannually

TARGET MEASURE:

Submit BMP report semi-annually and CMOM report by due date

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Frequency - BMP Report	2	2	2	2
Due Date - CMOM Report	1/31/2017	1/31/2017	1/31/2018	1/31/2019

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Maintain NBC's asset management program for infrastructure and assets, ensure integrity and maximize the investment • CB 5

TARGET MEASURE:

Address emergency situations within 24 hours of notification

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	34 Emergencies	100%	100%	100%

TARGET MEASURE:

Perform at least 90% of work orders

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Preventative Work Orders Completed	6,047	90%	90%	90%
Corrective Work Orders Completed	671			
Quantity - Staff Hours	10,000	5,000	5,000	5,000

ENVIRONMENTAL PERFORMANCE:

Continuously evaluate NBC environmental performance to identify, quantify and minimize NBC impacts to the environment in a cost effective manner.

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Minimize environmental impacts and implement conservation and sustainability measures • EP 1

TARGET MEASURE:

Alleviate dry weather bypass within 6 hours of initial notification

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Hours	2.8	≤6	≤6	≤6

TARGET MEASURE:

Remove pollutants from CSO trash nets within 72 hours of event

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	47.8 Tons	100%	100%	100%

FINANCIAL MANAGEMENT:

Manage NBC's finances through strong financial planning and controls such that sewer user charges are minimized.

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Develop and manage NBC's operating and capital budgets to maximize benefits, minimize expense and unplanned expenditures • FM 4

TARGET MEASURE:

Complete 100% of planned capital items

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Budgeted	6	100%	100%	100%
Completed	6			

CUSTOMER FOCUS:*Maintain a customer-focused attitude throughout the organization.***GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:**

Maintain programs and conduct projects that give back to the community • CF 1

TARGET MEASURE:

Provide assistance to NBC communities with collection system maintenance

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Hours	64.5	75	40	40

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Provide prompt, courteous, efficient and educational services • CF 2

TARGET MEASURE:

Review sewer connection permits within 3 business days

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Timeframe	2 Business Days	≤3 Business Days	≤3 Business Days	≤3 Business Days

STAFFING:*Attract, develop and retain highly qualified employees.***GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:**

Provide professional, technical and/or safety training to optimize team performance and ensure user comfort with systems and processes • S 3

TARGET MEASURE:

Provide staff a minimum of 100 technical/standard operating procedures training hours

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Hours	169	100	100	100

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Provide a healthy and safe working environment • S 4

TARGET MEASURE:

Schedule quarterly safety committee meetings with staff and post minutes

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Quantity	4	4	4	4



OPERATIONS AND MAINTENANCE SERVICES

Section Summary

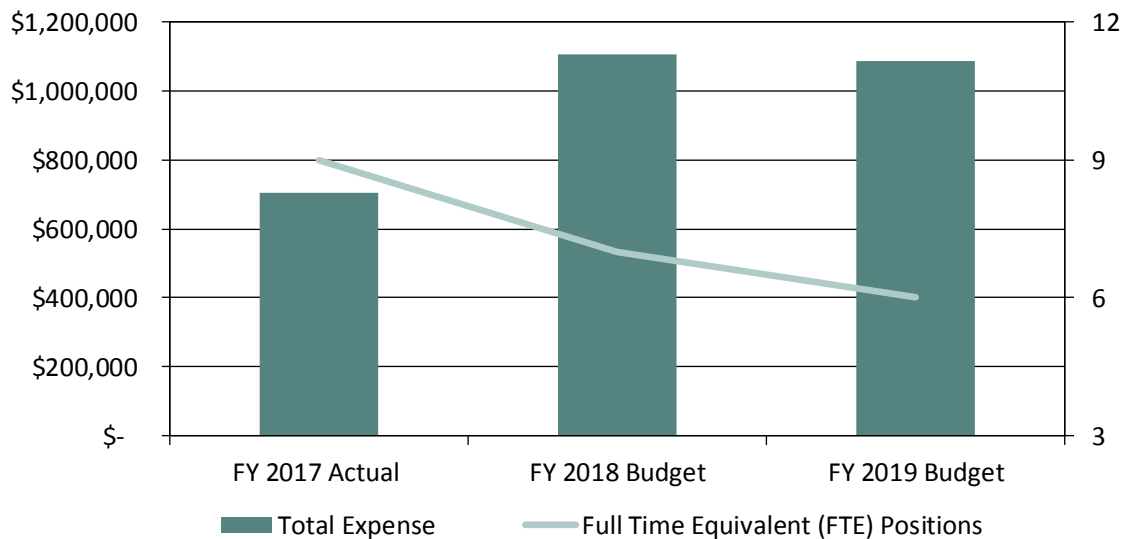
The Program

The Operations and Maintenance Services section is responsible for the management of NBC's two wastewater treatment facilities and interceptor maintenance. This section ensures compliance with all State and Federal regulations, reporting requirements, consent agreements and permits. The Operations and Maintenance Services section maintains the Asset Management Program and the control systems to allow for continuous operations and process control.

The Budget

Operations & Maintenance Expense	FY 2017 Actual	FY 2018 Budget	FY 2019 Budget
Personnel	\$ 667,656	\$ 813,537	\$ 727,010
Operating Supplies/Expense	32,867	292,273	361,399
Professional Services	5,159	-	-
Total O&M	\$ 705,682	\$ 1,105,810	\$ 1,088,409
Funds by Source - Revenue	\$ 705,682	\$ 1,105,810	\$ 1,088,409

OPERATIONS AND MAINTENANCE SERVICES - Historical Data



PROGRAM STAFFING (BUDGETED)			
Director of Operations and Maintenance	1.0	Control Systems Administrator	1.0
Asset Management Administrator	1.0	Control Systems Associate	1.0
Assistant Control Systems Administrator	1.0	Operations and Maintenance Fiscal Coordinator	1.0
6.0 FTEs			

Goal Actions for Target Measures by Key Code

Core Business

CB 1	Ensure compliance with all State and Federal regulations, permits, consent agreements, certifications, NBC regulations and reporting requirements
CB 2	Manage the planning, design and construction of NBC's capital improvements in the most cost-effective manner and in compliance with regulatory requirements
CB 3	Ensure the highest level of availability of systems' applications and network stability
CB 4	Maximize efficiency through service automation, applications security and NBC campus security
CB 5	Maintain NBC's asset management program for infrastructure and assets, ensure integrity and maximize the investment

Environmental Performance

EP 1	Minimize environmental impacts and implement conservation and sustainability measures
EP 2	Evaluate the NBC Program and report the data to the public
EP 3	Provide technical assistance to evaluate energy conservation and renewable energy opportunities
EP 4	Provide quality and expedient sample collection, data analyses and water quality monitoring to evaluate NBC's impacts and document improvements

Financial Management

FM 1	Ensure sufficient funding and receive the lowest cost of borrowing with the least rate payer impact
FM 2	Integrate NBC's strategic goals into the allocation of NBC's resources
FM 3	Maximize the efficiency, effectiveness, and accuracy of NBC's rate structures and collection processes to reduce accounts receivable
FM 4	Develop and manage NBC's operating and capital budgets to maximize benefits, minimize expense and unplanned expenditures
FM 5	Comply with IRS, Federal and State Rules and Regulations, Trust Indenture and Generally Accepted Accounting Principles
FM 6	Ensure goods and services are procured, reviewed and processed in a timely, efficient and cost effective manner
FM 7	Initiate and evaluate incentive programs
FM 8	Evaluate savings opportunities and optimize NBC operations and processes

Customer Focus

CF 1	Maintain programs and conduct projects that give back to the community
CF 2	Provide prompt, courteous, efficient and educational services
CF 3	Enhance communications to ensure consistency, reliability and satisfaction
CF 4	Maximize customer focus attitude by providing excellent customer service and developing strong customer relationships
CF 5	Ensure compliance with NBC internal controls

Staffing

S 1	Ensure compliance with Federal and State labor laws
S 2	Foster a positive working environment through effective communication
S 3	Provide professional, technical and/or safety training to optimize team performance and ensure user comfort with systems and processes
S 4	Provide a healthy and safe working environment
S 5	Develop mechanisms and establish opportunities for continued growth and professional development

Communication

C 1	Continue to expand and conduct NBC public outreach programs
C 2	Proactively manage NBC's public and legislative affairs and communicate NBC initiatives and ongoing activities
C 3	Effectively communicate status of capital projects to NBC staff and Board members
C 4	Enhance operating budget, CIP and compliance reports as a communication device
C 5	Strengthen and expand NBC's positive relations with key stakeholders (customers, Board, elected officials/delegates, regulatory officials and the public) to ensure support of NBC's mission

Organizational Performance

OP 1	Conduct NBC business in an open manner
OP 2	Promote diversity in hiring practices
OP 3	Ensure compliance with State ethics and regulatory agenda filing
OP 4	Provide end-user technology and systems to meet NBC's strategic goals

OPERATIONS AND MAINTENANCE SERVICES

Performance Data

Major Accomplishments FY 2018 by Key Code:

- CB 1** Ensured compliance with all State and Federal Rules and Regulations
- CB 3** Completed the wind turbine network and control room upgrade
- CB 5** Utilized the Asset Management Program to assist with the incorporation of new assets into NBC's insurance policies
- CB 5** Updated and maintained NBC's Asset Management Program
- CB 5** Completed the NBC Facility and Equipment Condition Analysis Report
- CB 5** Incorporated the Asset Management Program into the NBC Policy Manual

Top Priorities for FY 2019 and How They Relate to the Strategic Plan/Goals and by Key Code:

- CB 1** Complete the State of RI Assessment of NBC Buildings Report
- CB 3** Upgrade the fiber optic repeater/interface modules for the main process data highway at FPWWTF

Target Measures

CORE BUSINESS:

Operate, maintain and protect our collection and treatment systems to ensure that all State and Federal requirements are met or surpassed.

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Ensure compliance with all State and Federal regulations, permits, consent agreements, certifications, NBC regulations and reporting requirements • CB 1

TARGET MEASURE:

Ensure the dry tons report is submitted to RIDEM annually

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Timeframe	1/20/2017	Annual	Annual	Annual

TARGET MEASURE:

Complete and submit the Coastal Resources Management Council (CRMC) annual report

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Due Date	12/6/2016	12/31/2016	12/31/2017	12/31/2018

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Maximize efficiency through service automation, applications security and NBC campus security • CB 4

TARGET MEASURE

Ensure 100% up-to-date supported levels of applications and operating systems and licensing requirements

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Quantity-FP	3	100%	100%	100%
Quantity-BP	2	100%	100%	100%

STAFFING:*Attract, develop and retain highly qualified employees.***GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:**

Foster a positive working environment through effective communication • S2

TARGET MEASURE:

Monthly planning/scheduling meeting with each WWTF managers

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Quantity	48	24	24	24

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Provide professional, technical and/or safety training to optimize team performance and ensure user comfort with systems and processes • S 3

TARGET MEASURE:

Director attend a minimum of 1 professional training session per year

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Quantity	0	1	1	1

FIELD'S POINT Section Summary

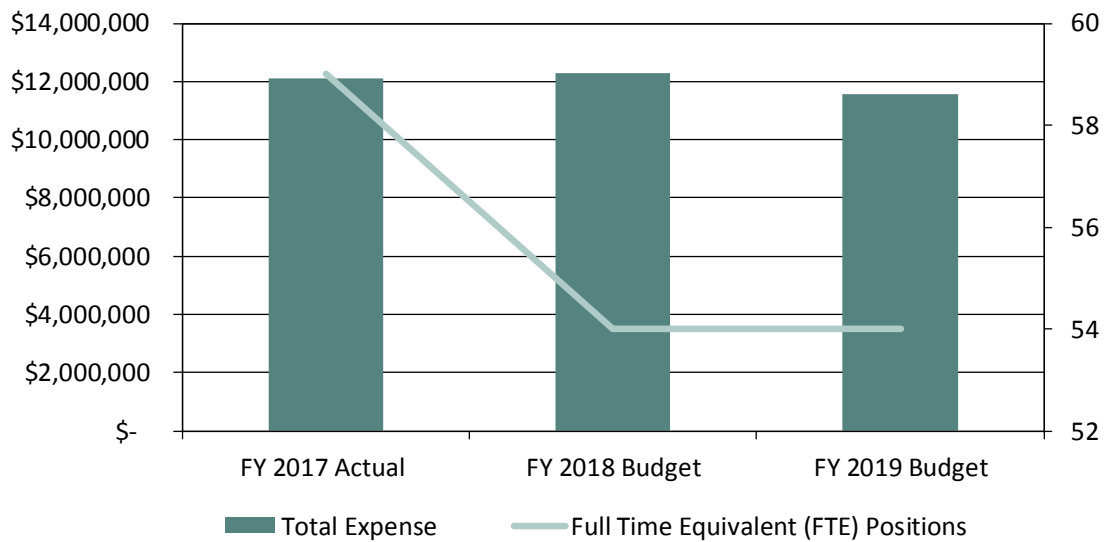
The Program

The Field's Point WWTF is the largest wastewater treatment facility in Rhode Island with capacity of receiving flows up to 77 MGD and ensuring they receive full tertiary treatment. Flows greater than 77 MGD are initially sent to the CSO Tunnel system for storage until the flows can be pumped from the Tunnel Pump Station to the treatment plant to receive primary treatment and disinfection. The staff efficiently and effectively operates these facilities to produce the highest quality effluent to meet or exceed RIPDES permit requirements. This section must ensure that all process functions are constantly optimized in order to meet each of the permit requirements.

The Budget

Operations & Maintenance Expense	FY 2017 Actual	FY 2018 Budget	FY 2019 Budget
Personnel	\$ 5,109,229	\$ 5,174,133	\$ 5,182,381
Operating Supplies/Expense	6,988,249	7,090,565	6,344,144
Professional Services	10,214	14,500	17,000
Total O&M	\$ 12,107,692	\$ 12,279,198	\$ 11,543,525
Funds by Source - Revenue	\$ 12,107,692	\$ 12,279,198	\$ 11,543,525

FIELD'S POINT - Historical Data



PROGRAM STAFFING (BUDGETED)			
Operations Manager	1.0	Mechanic	11.0
Assistant Operations Manager	1.0	Operations and Maintenance Coordinator	1.0
Clerk	1.0	Operations and Maintenance Technician	1.0
Electronics and Instrumentation Technician	2.0	Operations Supervisor	5.0
Electrician	1.0	Operator	10.0
Fleet Mechanic	1.0	Operator/HEO	1.0
Inventory Control Clerk	2.0	Process Monitor	9.0
Lead Electrician	1.0	Senior Electronics and Instrumentation Technician	1.0
Maintenance Manager	1.0	Senior Electrician	1.0
Maintenance Supervisor	2.0	Senior Process Monitor	1.0
54.0 FTEs			

Goal Actions for Target Measures by Key Code

Core Business

CB 1	Ensure compliance with all State and Federal regulations, permits, consent agreements, certifications, NBC regulations and reporting requirements
CB 2	Manage the planning, design and construction of NBC's capital improvements in the most cost-effective manner and in compliance with regulatory requirements
CB 3	Ensure the highest level of availability of systems' applications and network stability
CB 4	Maximize efficiency through service automation, applications security and NBC campus security
CB 5	Maintain NBC's asset management program for infrastructure and assets, ensure integrity and maximize the investment

Environmental Performance

EP 1	Minimize environmental impacts and implement conservation and sustainability measures
EP 2	Evaluate the NBC Program and report the data to the public
EP 3	Provide technical assistance to evaluate energy conservation and renewable energy opportunities
EP 4	Provide quality and expedient sample collection, data analyses and water quality monitoring to evaluate NBC's impacts and document improvements

Financial Management

FM 1	Ensure sufficient funding and receive the lowest cost of borrowing with the least rate payer impact
FM 2	Integrate NBC's strategic goals into the allocation of NBC's resources
FM 3	Maximize the efficiency, effectiveness, and accuracy of NBC's rate structures and collection processes to reduce accounts receivable
FM 4	Develop and manage NBC's operating and capital budgets to maximize benefits, minimize expense and unplanned expenditures
FM 5	Comply with IRS, Federal and State Rules and Regulations, Trust Indenture and Generally Accepted Accounting Principles
FM 6	Ensure goods and services are procured, reviewed and processed in a timely, efficient and cost effective manner
FM 7	Initiate and evaluate incentive programs
FM 8	Evaluate savings opportunities and optimize NBC operations and processes

Customer Focus

CF 1	Maintain programs and conduct projects that give back to the community
CF 2	Provide prompt, courteous, efficient and educational services
CF 3	Enhance communications to ensure consistency, reliability and satisfaction
CF 4	Maximize customer focus attitude by providing excellent customer service and developing strong customer relationships
CF 5	Ensure compliance with NBC internal controls

Staffing

S 1	Ensure compliance with Federal and State labor laws
S 2	Foster a positive working environment through effective communication
S 3	Provide professional, technical and/or safety training to optimize team performance and ensure user comfort with systems and processes
S 4	Provide a healthy and safe working environment
S 5	Develop mechanisms and establish opportunities for continued growth and professional development

Communication

C 1	Continue to expand and conduct NBC public outreach programs
C 2	Proactively manage NBC's public and legislative affairs and communicate NBC initiatives and ongoing activities
C 3	Effectively communicate status of capital projects to NBC staff and Board members
C 4	Enhance operating budget, CIP and compliance reports as a communication device
C 5	Strengthen and expand NBC's positive relations with key stakeholders (customers, Board, elected officials/delegates, regulatory officials and the public) to ensure support of NBC's mission

Organizational Performance

OP 1	Conduct NBC business in an open manner
OP 2	Promote diversity in hiring practices
OP 3	Ensure compliance with State ethics and regulatory agenda filing
OP 4	Provide end-user technology and systems to meet NBC's strategic goals

**FIELD'S POINT
Performance Data**

Major Accomplishments FY 2018 by Key Code:

- CB 1** Achieved the seasonal RIPDES limit for total nitrogen (5mg/l) in May 2017 through October 2017
- CB 2** Integrated Final Clarifier Improvements (Project 13000) with minimal operational disruption
- CB 2** Integrated New Blower Building (Project 10908) with minimal operation disruption
- CB 5** Continued maintenance efforts to protect infrastructure at the CSO facilities, gate and screenings structures, remote pumping stations and flow monitoring stations
- S 3** Implemented a basic training assessment checklist for all areas of the plant to identify training needs and provided instruction as needed
- S 4** Minimized the number of OSHA reportable injuries through continued safety awareness training

Top Priorities for FY 2019 and How They Relate to the Strategic Plan/Goals and by Key Code:

- CB 5** Incorporate the operation of the new single stage blowers with the existing turbo blowers and multi-stage blowers to achieve peak operating efficiency
- CB 5** Continue to update the Hansen Maintenance Management system
- CB 5** Implement bar coding for inventory management

Target Measures

CORE BUSINESS: *Operate, maintain and protect our collection and treatment systems to ensure that all State and Federal requirements are met or surpassed.*

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Ensure compliance with all State and Federal regulations, permits, consent agreements, certifications, NBC regulations and reporting requirements • CB 1

TARGET MEASURE:

Minimize discharge parameters violations

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
TSS	0	0	0	0
BOD	0	0	0	0
Fecal Coliform	0	0	0	0
Enterococci	0	0	0	0
CBOD	0	0	0	0

TARGET MEASURE:

Ensure residual chlorine complies with permit limit of 65 parts per billion

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Average Parts per Billion (ppb)	.59	≤65	≤65	≤65

TARGET MEASURE:

Achieve total seasonal nitrogen permit limit of 5 mg/l

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
mg/l	3.7	<5	<5	<5

TARGET MEASURE:

Ensure treatment of wastewater and stormwater collected through the Tunnel Pump Station

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Gallons	1,207.42	100%	100%	100%

TARGET MEASURE:

Process 100% of regulatory permits for treatment by due date

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	3 Regulatory Permits	100%	100%	100%

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Maintain NBC's asset management program for infrastructure and assets, ensure integrity and maximize the investment • CB 5

TARGET MEASURE

Perform no less than 90% of work orders

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Preventative Maintenance Work Orders	89% (8,740)	90%	90%	90%
Corrective Maintenance Work Orders	11% (1,063)	10%	10%	10%
Total Staff Hours	84% (3,029)	80%	80%	80%

TARGET MEASURE:

Integrate Asset Management into Operating Capital Program for treatment plants

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Budgeted Items	42			
New Needs	6	42	24	14
Completed Items	39			

ENVIRONMENTAL PERFORMANCE:

Continuously evaluate NBC environmental performance to identify, quantify and minimize NBC impacts to the environment in a cost effective manner.

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Minimize environmental impacts and implement conservation and sustainability measures • EP 1

TARGET MEASURE:

Implement 100% of energy conservation initiatives

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	3 Initiatives	100%	100%	100%

FINANCIAL MANAGEMENT:

Manage NBC's finances through strong financial planning and controls such that sewer user charges are minimized.

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Evaluate savings opportunities and optimize NBC operations and processes • FM 8

TARGET MEASURE:

Limit gallons of chemicals added to treatment process

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Hypochlorite	584,910	<600,000	<600,000	<600,000
Sodium Bisulfite	239,705	<219,000	<219,000	<219,000
Carbon Feed	36,667	<27,300	<27,300	<27,300
Sodium Hydroxide	34,904	<45,500	<45,500	<45,500

TARGET MEASURE:

Produce less than 25 dry tons of sludge per day

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Quantity	Daily Average – 22 DT	<25 Dry Tons	<25 Dry Tons	<22 Dry Tons

STAFFING:*Attract, develop and retain highly qualified employees.***GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:**

Provide professional, technical and/or safety training to optimize team performance and ensure user comfort with systems and processes • S 3

TARGET MEASURE:

Offer a minimum of 300 training/safety hours

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Hours	700	300	300	300



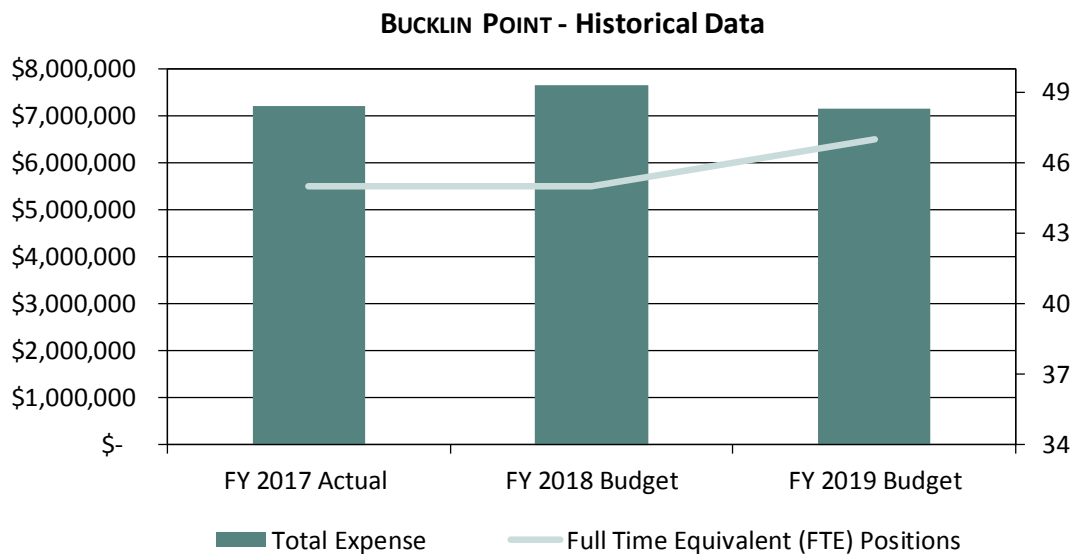
BUCKLIN POINT Section Summary

The Program

The BPWWTF is the second largest treatment facility in Rhode Island with the capacity of treating up to 116 MGD of flow through its treatment processes. The secondary treatment process can fully treat up to 46 MGD. Influent flows greater than 46 MGD and up to 116 MGD are diverted to the Wet Weather Treatment Facility, where they receive primary treatment, disinfection with sodium hypochlorite and de-chlorination with sodium bisulfite before being released into the Seekonk River. This section strives to optimize treatment efficiency to produce a high quality effluent that exceeds national secondary treatment standards.

The Budget

Operations & Maintenance Expense	FY 2017 Actual	FY 2018 Budget	FY 2019 Budget
Personnel	\$ 4,146,599	\$ 4,511,363	\$ 4,518,868
Operating Supplies/Expense	3,019,587	3,120,143	2,547,266
Professional Services	34,163	12,000	12,000
Total O&M	\$ 7,200,349	\$ 7,643,506	\$ 7,078,134
Funds by Source - Revenue	\$ 7,200,349	\$ 7,643,506	\$ 7,078,134



PROGRAM STAFFING (BUDGETED)			
Operations Manager	1.0	Maintenance Manager	1.0
Asset Management Assistant	1.0	Maintenance Planner/Scheduler	1.0
Assistant Electronics and Instrumentation Technician	1.0	Maintenance Supervisor	1.0
Assistant Maintenance Planner/Scheduler	1.0	Mechanic	6.0
Assistant Operations Manager	1.0	Operations Foreman	1.0
Clerk	1.0	Operations Supervisor	4.0
Electronics and Instrumentation Technician	1.0	Operator	10.0
Electrical Foreman	1.0	Process Monitor	9.0
Electrician	2.0	Senior Electronics and Instrumentation Technician	1.0
Heavy Equipment Operator	1.0	Utility Crew Foreman	1.0
Inventory Control Clerk	1.0		
	47.0 FTEs		

Goal Actions for Target Measures by Key Code

Core Business

CB 1	Ensure compliance with all State and Federal regulations, permits, consent agreements, certifications, NBC regulations and reporting requirements
CB 2	Manage the planning, design and construction of NBC's capital improvements in the most cost-effective manner and in compliance with regulatory requirements
CB 3	Ensure the highest level of availability of systems' applications and network stability
CB 4	Maximize efficiency through service automation, applications security and NBC campus security
CB 5	Maintain NBC's asset management program for infrastructure and assets, ensure integrity and maximize the investment

Environmental Performance

EP 1	Minimize environmental impacts and implement conservation and sustainability measures
EP 2	Evaluate the NBC Program and report the data to the public
EP 3	Provide technical assistance to evaluate energy conservation and renewable energy opportunities
EP 4	Provide quality and expedient sample collection, data analyses and water quality monitoring to evaluate NBC's impacts and document improvements

Financial Management

FM 1	Ensure sufficient funding and receive the lowest cost of borrowing with the least rate payer impact
FM 2	Integrate NBC's strategic goals into the allocation of NBC's resources
FM 3	Maximize the efficiency, effectiveness, and accuracy of NBC's rate structures and collection processes to reduce accounts receivable
FM 4	Develop and manage NBC's operating and capital budgets to maximize benefits, minimize expense and unplanned expenditures
FM 5	Comply with IRS, Federal and State Rules and Regulations, Trust Indenture and Generally Accepted Accounting Principles
FM 6	Ensure goods and services are procured, reviewed and processed in a timely, efficient and cost effective manner
FM 7	Initiate and evaluate incentive programs
FM 8	Evaluate savings opportunities and optimize NBC operations and processes

Customer Focus

CF 1	Maintain programs and conduct projects that give back to the community
CF 2	Provide prompt, courteous, efficient and educational services
CF 3	Enhance communications to ensure consistency, reliability and satisfaction
CF 4	Maximize customer focus attitude by providing excellent customer service and developing strong customer relationships
CF 5	Ensure compliance with NBC internal controls

Staffing

S 1	Ensure compliance with Federal and State labor laws
S 2	Foster a positive working environment through effective communication
S 3	Provide professional, technical and/or safety training to optimize team performance and ensure user comfort with systems and processes
S 4	Provide a healthy and safe working environment
S 5	Develop mechanisms and establish opportunities for continued growth and professional development

Communication

C 1	Continue to expand and conduct NBC public outreach programs
C 2	Proactively manage NBC's public and legislative affairs and communicate NBC initiatives and ongoing activities
C 3	Effectively communicate status of capital projects to NBC staff and Board members
C 4	Enhance operating budget, CIP and compliance reports as a communication device
C 5	Strengthen and expand NBC's positive relations with key stakeholders (customers, Board, elected officials/delegates, regulatory officials and the public) to ensure support of NBC's mission

Organizational Performance

OP 1	Conduct NBC business in an open manner
OP 2	Promote diversity in hiring practices
OP 3	Ensure compliance with State ethics and regulatory agenda filing
OP 4	Provide end-user technology and systems to meet NBC's strategic goals

BUCKLIN POINT
Performance Data

Major Accomplishments FY 2018 by Key Code:

- CB 1** Achieved the seasonal RIPDES limit for total nitrogen (5 mg/l) in May 2017 through October 2017
- CB 2** Completed Biogas Cogeneration Reuse facility
- CB 5** Optimized inventory management procedures to ensure appropriate inventory levels and reduce work order processing time
- CB 5** Continued with the electrical testing of BPWWTF assets
- CB 5** Upgraded the flame arrestor, critical explosion proof equipment, and piping in the gas control building
- FM 8** Optimized treatment processes to produce high quality effluent
- FM 8** Replaced the ultraviolet lamps in bank “B” of the UV disinfection system

Top Priorities for FY 2019 and How They Relate to the Strategic Plan/Goals and by Key Code:

- CB 4** Complete programmable logic controller upgrade to improve communications
- CB 5** Optimize the Asset Management Program by performing conditional assessments on critical equipment
- EP 4** Optimize the process on newly purchased meters and analyzers for nitrogen removal

Target Measures

CORE BUSINESS: *Operate, maintain and protect our collection and treatment systems to ensure that all State and Federal requirements are met or surpassed.*

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Ensure compliance with all State and Federal regulations, permits, consent agreements, certifications, NBC regulations and reporting requirements • CB 1

TARGET MEASURE:

Minimize discharge parameters violations

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
TSS	0	0	0	0
BOD	0	0	0	0
Fecal Coliform	0	0	0	0
Enterococci	0	0	0	0
CBOD	0	0	0	0

TARGET MEASURE:

Achieve total seasonal nitrogen permit limit of 5 mg/l

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
mg/l	3.7	5.0	5.0	5.0

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Maintain NBC's asset management program for infrastructure and assets, ensure integrity and maximize the investment • CB 5

TARGET MEASURE:

Conduct a minimum of 20 inspections of the UV Disinfection system per month

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Quantity	54	20	20	20

TARGET MEASURE:

Perform no less than 90% of maintenance work orders

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Preventative Maintenance Work Orders	91% (9,338)	90%	90%	90%
Corrective Maintenance Work Orders	9% (875)	10%	10%	10%
Total Staff Hours	83% (2,361)	80%	80%	80%

TARGET MEASURE:

Integrate Asset Management into Operating Capital Budget for treatment plants

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Budgeted Items	40			
New Needs	2	40	35	15
Completed Items	35			

ENVIRONMENTAL PERFORMANCE:

Continuously evaluate NBC environmental performance to identify, quantify and minimize NBC impacts to the environment in a cost effective manner.

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Minimize environmental impacts and implement conservation and sustainability measures • EP 1

TARGET MEASURE:

Implement 100% of energy conservation initiatives

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	2 Initiatives	100%	100%	100%

FINANCIAL MANAGEMENT:

Manage NBC's finances through strong financial planning and controls such that sewer user charges are minimized.

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Evaluate savings opportunities and optimize NBC operations and processes • FM 8

TARGET MEASURE:

Limit gallons/pounds of chemicals added to treatment process

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Carbon Feed Gallons	1,976	0	<2,500	<2,500
Powder Polymer Pounds	24,200	<9,000	<9,000	<9,000
Liquid Polymer Gallons	49,078	<40,000	<40,000	<40,000
Soda Ash Tons	0	<30	<30	<30

TARGET MEASURE:

Produce less than 10 dry tons of sludge per day

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Quantity	Daily Average 5.72 DT	<10 Dry Tons	<10 Dry Tons	<10 Dry Tons

STAFFING:*Attract, develop and retain highly qualified employees.***GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:**

Provide professional, technical and/or safety training to optimize team performance and ensure user comfort with systems and processes • S 3

TARGET MEASURE:

Offer a minimum of 200 training/safety hours

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Hours	350	200	200	200



ENVIRONMENTAL SCIENCE AND COMPLIANCE

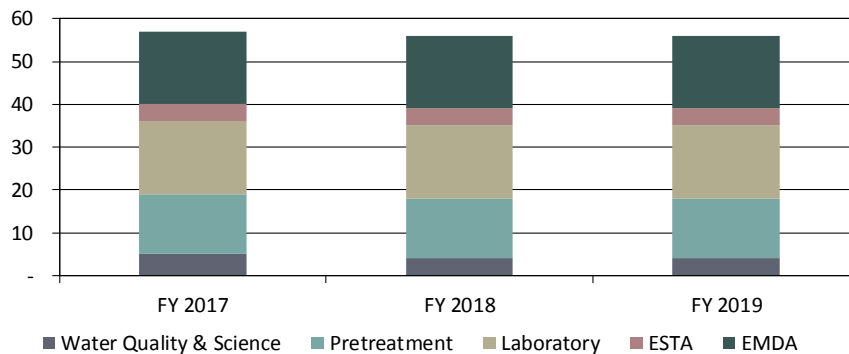
Division Summary



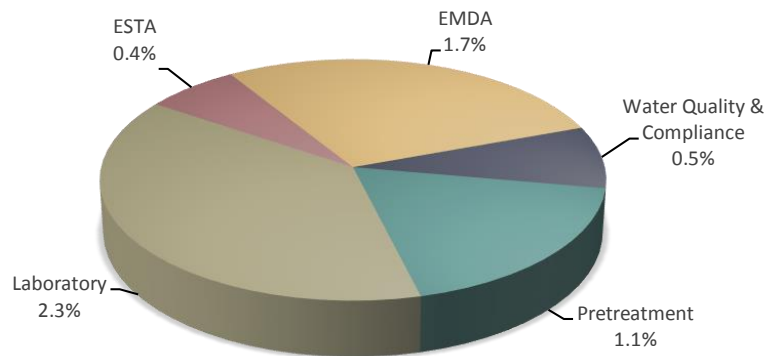
The Program

The Environmental Science and Compliance Division is responsible for ensuring NBC compliance with all state and federal permits and regulations, evaluating agency energy and environmental sustainability and water quality science. The Division includes Water Quality and Compliance, Pretreatment, Laboratory, Environmental Safety & Technical Assistance, and Environmental Monitoring & Data Analysis. The Division provides technical support to the Operations and Maintenance Division and performs a variety of special studies.

Budgeted Positions (FTEs)
ENVIRONMENTAL SCIENCE & COMPLIANCE DIVISION



↓
Environmental Science & Compliance
6%



ENVIRONMENTAL SCIENCE AND COMPLIANCE DIVISION

Division Summary

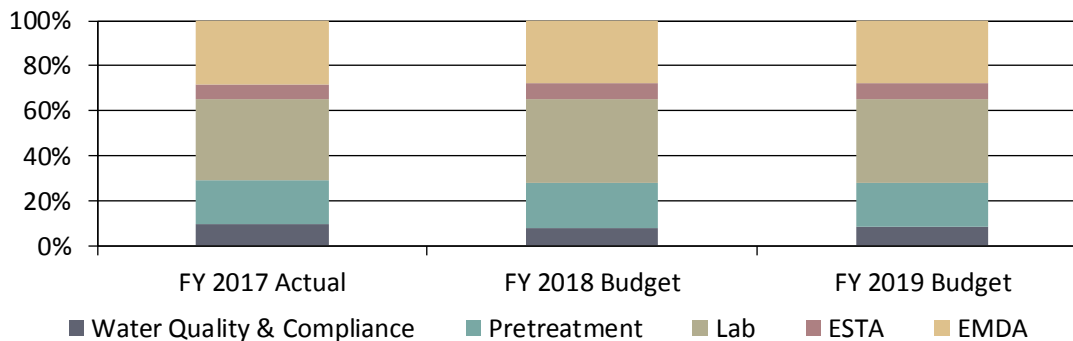
The Budget

Operations & Maintenance Expense	FY 2017 Actual	FY 2018 Budget	FY 2019 Budget
Personnel	\$ 5,055,011	\$ 5,195,626	\$ 5,206,427
Operating Supplies/Expense	598,888	743,927	764,864
Professional Services	82,319	87,850	76,950
Total O&M	\$ 5,736,218	\$ 6,027,403	\$ 6,048,241
Funds by Source - Revenue	\$ 5,736,218	\$ 6,027,403	\$ 6,048,241

Significant Budget Modifications

The FY 2019 Environmental Science and Compliance Division budget has increased by \$20,838 from the prior year. Personnel expense increased by \$10,801. Operating supplies and expense and professional services expense have increased by \$10,037 over the prior year and include funding for additional sampling and analysis required as part of the new RIPDES permit.

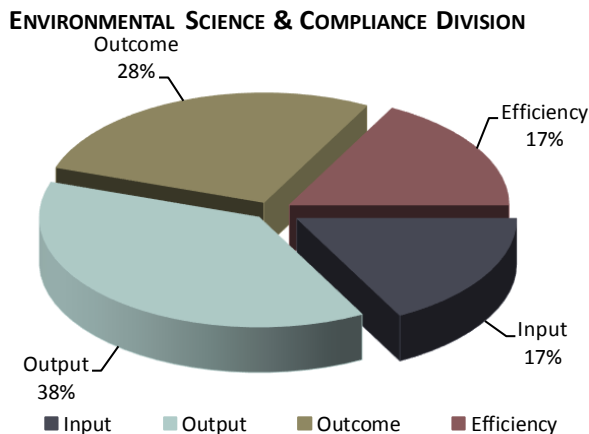
Percent of Division's Budget By Section



Environmental Science and Compliance Division Performance Data Summary

The chart below illustrates the Environmental Science and Compliance Division's Performance Data by type of measure. The measures can be found in the individual sections following this division summary. In this Division, Outcome and Efficiency make up 45% of the performance measures.

Percentage of Performance Measurement Types



WATER QUALITY AND COMPLIANCE

Section Summary

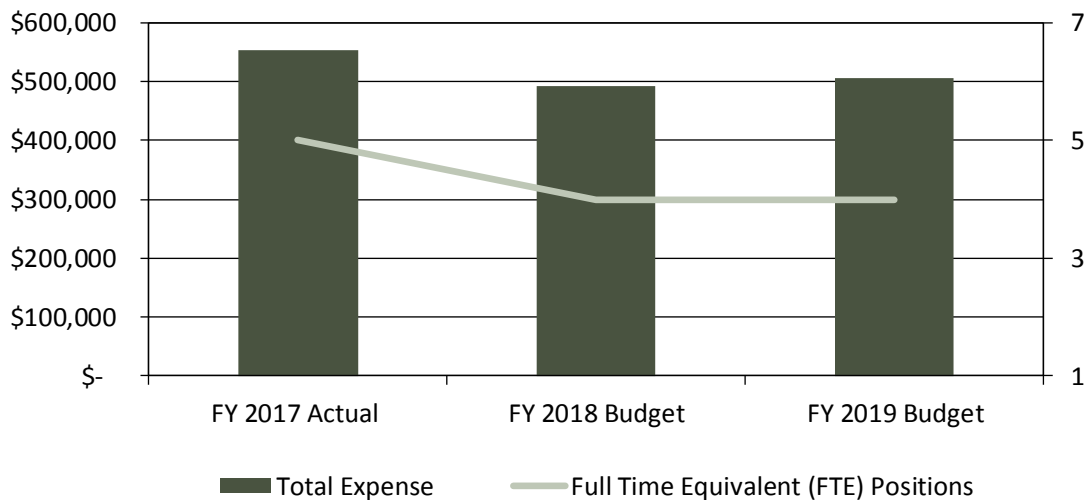
The Program

The Water Quality and Compliance section is responsible for ensuring NBC's compliance with all Federal and State environmental permits and regulations, and negotiating RIPDES Permit issues with RIDEM. The section is responsible for the electronic submittals required by RIPDES and EPA, including the monthly Discharge Monitoring, annual Stormwater and Biosolids reporting. This section provides oversight of the Environmental Science and Compliance Division to ensure that all regulatory requirements, projects and deadlines are met. This section provides guidance regarding the enforcement of NBC Rules and Regulations in the NBC service area, and works closely with regulatory agencies and environmental stakeholders and conducts public outreach programs. This section is also responsible for seeking incentive and award opportunities for NBC, the issuance and revision of NBC Policies and the review and update of NBC's Strategic Plan.

The Budget

Operations & Maintenance Expense	FY 2017 Actual	FY 2018 Budget	FY 2019 Budget
Personnel	\$ 538,237	\$ 468,524	\$ 487,293
Operating Supplies/Expense	10,476	13,625	12,925
Professional Services	4,443	10,000	5,000
Total O&M	\$ 553,156	\$ 492,149	\$ 505,218
Funds by Source - Revenue	\$ 553,156	\$ 492,149	\$ 505,218

WATER QUALITY & COMPLIANCE - Historical Data



PROGRAM STAFFING (BUDGETED)			
Director of Environmental Science and Compliance	1.0	Environmental Scientist	1.0
Environmental Coordinator	1.0	Planning Manager	1.0
4.0 FTEs			

Goal Actions for Target Measures by Key Code

Core Business

CB 1	Ensure compliance with all State and Federal regulations, permits, consent agreements, certifications, NBC regulations and reporting requirements
CB 2	Manage the planning, design and construction of NBC's capital improvements in the most cost-effective manner and in compliance with regulatory requirements
CB 3	Ensure the highest level of availability of systems' applications and network stability
CB 4	Maximize efficiency through service automation, applications security and NBC campus security
CB 5	Maintain NBC's asset management program for infrastructure and assets, ensure integrity and maximize the investment

Environmental Performance

EP 1	Minimize environmental impacts and implement conservation and sustainability measures
EP 2	Evaluate the NBC Program and report the data to the public
EP 3	Provide technical assistance to evaluate energy conservation and renewable energy opportunities
EP 4	Provide quality and expedient sample collection, data analyses and water quality monitoring to evaluate NBC's impacts and document improvements

Financial Management

FM 1	Ensure sufficient funding and receive the lowest cost of borrowing with the least rate payer impact
FM 2	Integrate NBC's strategic goals into the allocation of NBC's resources
FM 3	Maximize the efficiency, effectiveness, and accuracy of NBC's rate structures and collection processes to reduce accounts receivable
FM 4	Develop and manage NBC's operating and capital budgets to maximize benefits, minimize expense and unplanned expenditures
FM 5	Comply with IRS, Federal and State Rules and Regulations, Trust Indenture and Generally Accepted Accounting Principles
FM 6	Ensure goods and services are procured, reviewed and processed in a timely, efficient and cost effective manner
FM 7	Initiate and evaluate incentive programs
FM 8	Evaluate savings opportunities and optimize NBC operations and processes

Customer Focus

CF 1	Maintain programs and conduct projects that give back to the community
CF 2	Provide prompt, courteous, efficient and educational services
CF 3	Enhance communications to ensure consistency, reliability and satisfaction
CF 4	Maximize customer focus attitude by providing excellent customer service and developing strong customer relationships
CF 5	Ensure compliance with NBC internal controls

Staffing

S 1	Ensure compliance with Federal and State labor laws
S 2	Foster a positive working environment through effective communication
S 3	Provide professional, technical and/or safety training to optimize team performance and ensure user comfort with systems and processes
S 4	Provide a healthy and safe working environment
S 5	Develop mechanisms and establish opportunities for continued growth and professional development

Communication

C 1	Continue to expand and conduct NBC public outreach programs
C 2	Proactively manage NBC's public and legislative affairs and communicate NBC initiatives and ongoing activities
C 3	Effectively communicate status of capital projects to NBC staff and Board members
C 4	Enhance operating budget, CIP and compliance reports as a communication device
C 5	Strengthen and expand NBC's positive relations with key stakeholders (customers, Board, elected officials/delegates, regulatory officials and the public) to ensure support of NBC's mission

Organizational Performance

OP 1	Conduct NBC business in an open manner
OP 2	Promote diversity in hiring practices
OP 3	Ensure compliance with State ethics and regulatory agenda filing
OP 4	Provide end-user technology and systems to meet NBC's strategic goals

WATER QUALITY AND COMPLIANCE

Performance Data

Major Accomplishments FY 2018 by Key Code:

- CB 1** Submitted monthly Discharge Monitoring Reports to EPA and RIDEM on time
- CB 1** Submitted the annual Stormwater Reports to RIDEM on time
- CB 1** Reviewed and assessed the draft and final RIPDES permits issued by RIDEM
- EP 1** Attended various presentations and workshops and collaborated with stakeholder groups regarding climate change, sea level rise and water quality improvements
- CF 1** Administered the NBC Earth Day Grant Program to 21 non-profit organizations in support of river cleanups throughout the NBC service area
- CF 1** Coordinated two shellfish transplants with RIDEM and the RI Shellfisherman's Association, resulting in the relocation of more than 100,000 pounds of shellfish

Top Priorities for FY 2019 and How They Relate to the Strategic Plan/Goals and by Key Code:

- CB 1** Timely submittal of Discharge Monitoring Reports to the EPA and RIDEM
- CB 1** Timely submittal of the annual Stormwater Reports to RIDEM
- CF 1** Continuation of the Earth Day Grant Program for local non-profit organizations as part of NBC's River Restoration Initiative

Target Measures

CORE BUSINESS: *Operate, maintain and protect our collection and treatment systems to ensure that all State and Federal requirements are met or surpassed.*

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Ensure compliance with all State and Federal regulations, permits, consent agreements, certifications, NBC regulations and reporting requirements • CB 1

TARGET MEASURE:

Prepare annual stormwater inspection report for both WWTF's

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
FPWWTF Due Date	9/26/2016	12/30/2016	12/30/2017	12/30/2018
BPWWTF Due Date	9/27/2016	12/30/2016	12/30/2017	12/30/2018

TARGET MEASURE:

Renewal of RIPDES stormwater permits per RIDEM requirements within 30 days of notice

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Timeframe	≤30 Days	≤30 days	≤30 days	≤30 days

CUSTOMER FOCUS:*Maintain a customer-focused attitude throughout the organization.***GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:**

Maintain programs and conduct projects that give back to the community • CF 1

TARGET MEASURE:

Earth Day River Cleanup Event/Grant Program in NBC Service Area

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Event Date	4/22/2017	4/30/2017	4/30/2018	4/30/2019
Quantity - Grants	18	20	20	20
Total Grants	\$11,000	\$10,000	\$10,000	\$10,000

STAFFING:*Attract, develop and retain highly qualified employees.***GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:**

Foster a positive working environment through effective communication • S 1

TARGET MEASURE:

Conduct monthly staff meetings

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Frequency	12	12	12	12

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Provide professional, technical and/or safety training to optimize team performance and ensure user comfort with systems and processes • S 3

TARGET MEASURE:

Provide a minimum of 16 professional training hours

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Hours	16	16	16	16

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Develop mechanisms and establish opportunities for continued growth and professional development • S 5

TARGET MEASURE:

Conduct semiannual review meetings with staff to discuss professional development opportunities

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Frequency	2	2	2	2

COMMUNICATION:*Improve and enhance internal and external communication to increase understanding of "who we are" and "what we do".***GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:**

Strengthen and expand NBC's positive relations with key stakeholders (customers, Board, elected officials/delegates, regulatory officials and the public) to ensure support of NBC's mission • C 5

TARGET MEASURE:

Educate the public and NBC stakeholders by giving presentations about the NBC and water quality improvements

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Quantity	6	4	4	4

TARGET MEASURE:

Annual review and update of Strategic Plan

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Frequency	9/15/2016	1	1	1

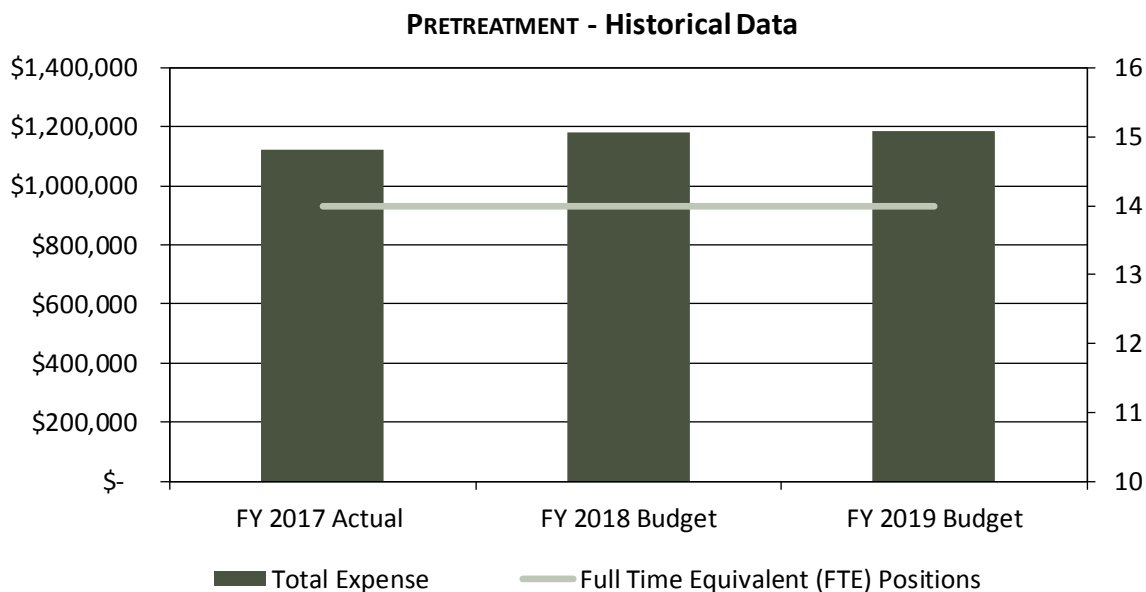
PRETREATMENT Section Summary

The Program

The Pretreatment section is responsible for administering the federally mandated pretreatment program. The primary purpose of the pretreatment program is to protect NBC's wastewater treatment plants and the infrastructure from toxins and pollutants that could disrupt and interfere with plant operations, as well as to protect the receiving waters, rivers and Narragansett Bay. The Pretreatment section uses various tools to accomplish this task, including the issuance of Wastewater Discharge Permits to industrial and commercial users. This section also performs site inspections of these users, responds to spills within NBC's service area and tracks toxic discharges through the sewer system to determine the source.

The Budget

Operations & Maintenance Expense	FY 2017 Actual	FY 2018 Budget	FY 2019 Budget
Personnel	\$ 1,088,212	\$ 1,144,213	\$ 1,148,864
Operating Supplies/Expense	32,457	38,270	34,770
Professional Services	-	-	-
Total O&M	\$ 1,120,669	\$ 1,182,483	\$ 1,183,634
Funds by Source - Revenue	\$ 1,120,669	\$ 1,182,483	\$ 1,183,634



PROGRAM STAFFING (BUDGETED)			
Pretreatment Manager	1.0	Pretreatment Technician	5.0
Assistant Pretreatment Manager	1.0	Principal Pretreatment Engineer	1.0
Pretreatment Clerk	3.0	Senior Pretreatment Technician	1.0
Pretreatment Engineer	2.0		
14.0 FTEs			

Goal Actions for Target Measures by Key Code

Core Business

CB 1	Ensure compliance with all State and Federal regulations, permits, consent agreements, certifications, NBC regulations and reporting requirements
CB 2	Manage the planning, design and construction of NBC's capital improvements in the most cost-effective manner and in compliance with regulatory requirements
CB 3	Ensure the highest level of availability of systems' applications and network stability
CB 4	Maximize efficiency through service automation, applications security and NBC campus security
CB 5	Maintain NBC's asset management program for infrastructure and assets, ensure integrity and maximize the investment

Environmental Performance

EP 1	Minimize environmental impacts and implement conservation and sustainability measures
EP 2	Evaluate the NBC Program and report the data to the public
EP 3	Provide technical assistance to evaluate energy conservation and renewable energy opportunities
EP 4	Provide quality and expedient sample collection, data analyses and water quality monitoring to evaluate NBC's impacts and document improvements

Financial Management

FM 1	Ensure sufficient funding and receive the lowest cost of borrowing with the least rate payer impact
FM 2	Integrate NBC's strategic goals into the allocation of NBC's resources
FM 3	Maximize the efficiency, effectiveness, and accuracy of NBC's rate structures and collection processes to reduce accounts receivable
FM 4	Develop and manage NBC's operating and capital budgets to maximize benefits, minimize expense and unplanned expenditures
FM 5	Comply with IRS, Federal and State Rules and Regulations, Trust Indenture and Generally Accepted Accounting Principles
FM 6	Ensure goods and services are procured, reviewed and processed in a timely, efficient and cost effective manner
FM 7	Initiate and evaluate incentive programs
FM 8	Evaluate savings opportunities and optimize NBC operations and processes

Customer Focus

CF 1	Maintain programs and conduct projects that give back to the community
CF 2	Provide prompt, courteous, efficient and educational services
CF 3	Enhance communications to ensure consistency, reliability and satisfaction
CF 4	Maximize customer focus attitude by providing excellent customer service and developing strong customer relationships
CF 5	Ensure compliance with NBC internal controls

Staffing

S 1	Ensure compliance with Federal and State labor laws
S 2	Foster a positive working environment through effective communication
S 3	Provide professional, technical and/or safety training to optimize team performance and ensure user comfort with systems and processes
S 4	Provide a healthy and safe working environment
S 5	Develop mechanisms and establish opportunities for continued growth and professional development

Communication

C 1	Continue to expand and conduct NBC public outreach programs
C 2	Proactively manage NBC's public and legislative affairs and communicate NBC initiatives and ongoing activities
C 3	Effectively communicate status of capital projects to NBC staff and Board members
C 4	Enhance operating budget, CIP and compliance reports as a communication device
C 5	Strengthen and expand NBC's positive relations with key stakeholders (customers, Board, elected officials/delegates, regulatory officials and the public) to ensure support of NBC's mission

Organizational Performance

OP 1	Conduct NBC business in an open manner
OP 2	Promote diversity in hiring practices
OP 3	Ensure compliance with State ethics and regulatory agenda filing
OP 4	Provide end-user technology and systems to meet NBC's strategic goals

**PRETREATMENT
Performance Data**

Major Accomplishments FY 2018 by Key Code:

- CB 1** Issued 11 educational form letters to users
- CB 1** Inspected all Significant Industrial Users (SIU) multiple times
- CB 1** Issued 1,737 Notices of Violation for each incident of non-compliance
- CB 1** Submitted the Annual Pretreatment Report to RIDEM by 3/15/18 as required by the RIPDES permit
- CB 1** Continuously permitted all SIUs in accordance with federal regulations
- C 1** Participated in six public presentations and workshops

Top Priorities for FY 2019 and How They Relate to the Strategic Plan/Goals and by Key Code:

- CB 1** Complete and submit the Annual Pretreatment Report by March 15th in accordance with the RIPDES permit
- CB 1** Protect the treatment plants and collection systems from toxic and nuisance pollutant discharges that would adversely impact and interfere with NBC facilities and prevent pass through of these pollutants into Narragansett Bay
- CB 1** Ensure all SIUs are continuously permitted and inspected in accordance with State and Federal requirements as well as goals established by NBC

Target Measures

CORE BUSINESS: *Operate, maintain and protect our collection and treatment systems to ensure that all State and Federal requirements are met or surpassed.*

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Ensure compliance with all State and Federal regulations, permits, consent agreements, certifications, NBC regulations and reporting requirements • CB 1

TARGET MEASURE:

Conduct EPA and RIDEM required annual site inspection for NBC facilities.

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
FPWWTF	9/26/2017	Annually	Annually	Annually
BPWWTF	9/27/2017	Annually	Annually	Annually

TARGET MEASURE:

Conduct annual RIDEM mandated training for NBC staff

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	2 Trainings	100%	100%	100%

TARGET MEASURE:

Conduct non-sampling inspections of 100% Significant Industrial Users (SIUs) within the required 12 month period

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	70 Inspections	100%	100%	100%

TARGET MEASURE:

Complete and submit Annual Pretreatment Report to DEM

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Completion date	3/13/2017	3/15/2017	3/15/2018	3/15/2019

TARGET MEASURE:

Issue Notices of Violations (NOVs) for 100% of incidents of non-compliance

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	1,603 NOVs	100%	100%	100%

ENVIRONMENTAL PERFORMANCE:

Continuously evaluate NBC environmental performance to identify, quantify and minimize NBC impacts to the environment in a cost effective manner.

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Evaluate the NBC Program and report the data to the public • EP 2

TARGET MEASURE:

Compile and publish in the newspaper a list of companies in significant non-compliance

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Date	2/23/2017	2/28/2017	2/28/2018	2/28/2019

CUSTOMER FOCUS:

Maintain a customer-focused attitude throughout the organization.

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Provide prompt, courteous, efficient and educational services • CF 2

TARGET MEASURE:

Review 100% of process operations and pretreatment system plan submittals

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	218 Submittals	100%	100%	100%

TARGET MEASURE:

Respond to 100% of reports of unusual influent, illegal dumping, spills and blockages

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	14 Reports	100%	100%	100%

TARGET MEASURE:

Process 100% Wastewater Discharge Permit Applications

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	443 Applications	100%	100%	100%

TARGET MEASURE:

Issue Wastewater Discharge Permits to previously unpermitted users within 30 days from the submittal of the permit application package.

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Timeframe	23 Days	<30 Days	<30 Days	<30 Days

TARGET MEASURE:

Issue a minimum of 8 educational form letters

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Quantity	9	≥8	≥8	≥8

TARGET MEASURE:

Participate in a minimum of 3 public presentations/workshops

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Quantity	5	≥3	≥3	≥3

COMMUNICATION:

Improve and enhance internal and external communication to increase understanding of "who we are" and "what we do".

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Strengthen and expand NBC's positive relations with key stakeholders (customers, Board, elected officials/delegates, regulatory officials and the public) to ensure support of NBC's mission • C 5

TARGET MEASURE:

Complete pretreatment annual report and post on NBC's website

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Date	4/6/2017	4/15/2017	4/15/2018	4/15/2019



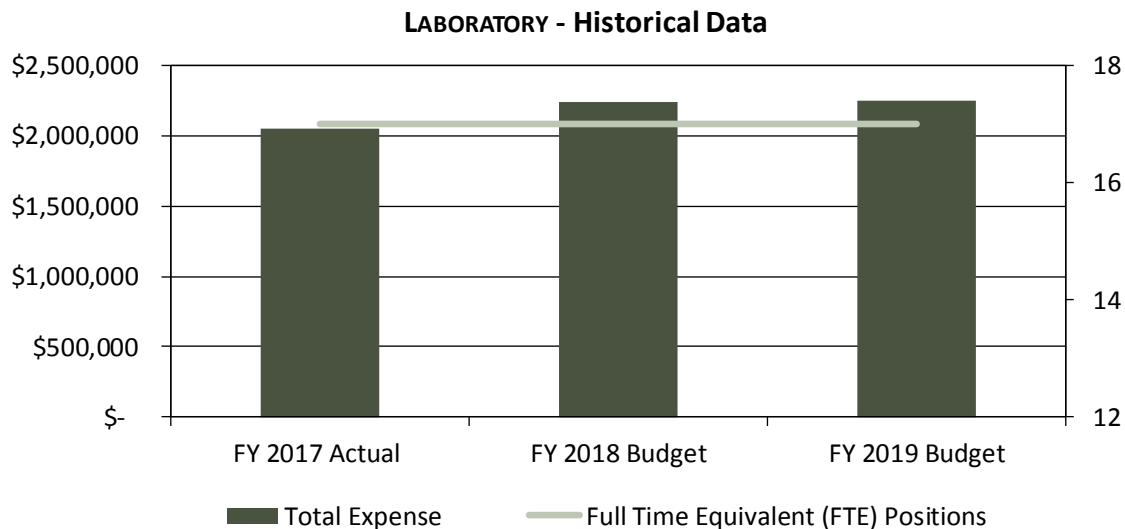
LABORATORY Section Summary

The Program

The Laboratory section is responsible for producing timely, high quality analytical data through the use of analytical measurements that are accurate, reliable and achieve the most precise measurements possible in order to comply with Federal and State regulations. The Laboratory is certified by the State of RI and must comply with certification requirements by the Department of Health (DOH) and USEPA. The Laboratory section performs all RIPDES required analyses for the FPWWTF and BPWWTF, Pretreatment programs, monitoring activities, and impacts of nutrients and fecal coliform of the urban rivers and receiving water evaluations of the upper Narragansett Bay.

The Budget

Operations & Maintenance Expense	FY 2017 Actual	FY 2018 Budget	FY 2019 Budget
Personnel	\$ 1,648,157	\$ 1,706,684	\$ 1,698,976
Operating Supplies/Expense	364,371	496,717	519,584
Professional Services	39,121	41,850	31,950
Total O&M	\$ 2,051,649	\$ 2,245,251	\$ 2,250,510
Funds by Source - Revenue	\$ 2,051,649	\$ 2,245,251	\$ 2,250,510



PROGRAM STAFFING (BUDGETED)			
Laboratory Manager	1.0	Quality Chemist	1.0
Assistant Laboratory Manager	1.0	Sample Compliance Coordinator	1.0
Biologist	1.0	Senior Environmental Chemist	1.0
Chemist	2.0	Senior Organic Chemist	1.0
Clerk	1.0	Technician	5.0
Environmental Chemist	2.0		
17.0 FTEs			

Goal Actions for Target Measures by Key Code

Core Business

CB 1	Ensure compliance with all State and Federal regulations, permits, consent agreements, certifications, NBC regulations and reporting requirements
CB 2	Manage the planning, design and construction of NBC's capital improvements in the most cost-effective manner and in compliance with regulatory requirements
CB 3	Ensure the highest level of availability of systems' applications and network stability
CB 4	Maximize efficiency through service automation, applications security and NBC campus security
CB 5	Maintain NBC's asset management program for infrastructure and assets, ensure integrity and maximize the investment

Environmental Performance

EP 1	Minimize environmental impacts and implement conservation and sustainability measures
EP 2	Evaluate the NBC Program and report the data to the public
EP 3	Provide technical assistance to evaluate energy conservation and renewable energy opportunities
EP 4	Provide quality and expedient sample collection, data analyses and water quality monitoring to evaluate NBC's impacts and document improvements

Financial Management

FM 1	Ensure sufficient funding and receive the lowest cost of borrowing with the least rate payer impact
FM 2	Integrate NBC's strategic goals into the allocation of NBC's resources
FM 3	Maximize the efficiency, effectiveness, and accuracy of NBC's rate structures and collection processes to reduce accounts receivable
FM 4	Develop and manage NBC's operating and capital budgets to maximize benefits, minimize expense and unplanned expenditures
FM 5	Comply with IRS, Federal and State Rules and Regulations, Trust Indenture and Generally Accepted Accounting Principles
FM 6	Ensure goods and services are procured, reviewed and processed in a timely, efficient and cost effective manner
FM 7	Initiate and evaluate incentive programs
FM 8	Evaluate savings opportunities and optimize NBC operations and processes

Customer Focus

CF 1	Maintain programs and conduct projects that give back to the community
CF 2	Provide prompt, courteous, efficient and educational services
CF 3	Enhance communications to ensure consistency, reliability and satisfaction
CF 4	Maximize customer focus attitude by providing excellent customer service and developing strong customer relationships
CF 5	Ensure compliance with NBC internal controls

Staffing

S 1	Ensure compliance with Federal and State labor laws
S 2	Foster a positive working environment through effective communication
S 3	Provide professional, technical and/or safety training to optimize team performance and ensure user comfort with systems and processes
S 4	Provide a healthy and safe working environment
S 5	Develop mechanisms and establish opportunities for continued growth and professional development

Communication

C 1	Continue to expand and conduct NBC public outreach programs
C 2	Proactively manage NBC's public and legislative affairs and communicate NBC initiatives and ongoing activities
C 3	Effectively communicate status of capital projects to NBC staff and Board members
C 4	Enhance operating budget, CIP and compliance reports as a communication device
C 5	Strengthen and expand NBC's positive relations with key stakeholders (customers, Board, elected officials/delegates, regulatory officials and the public) to ensure support of NBC's mission

Organizational Performance

OP 1	Conduct NBC business in an open manner
OP 2	Promote diversity in hiring practices
OP 3	Ensure compliance with State ethics and regulatory agenda filing
OP 4	Provide end-user technology and systems to meet NBC's strategic goals

TARGET MEASURE:

Prepare and submit the Department of Health certification renewal application

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Date submitted	12/16/2016	12/1/2016	12/1/2017	12/1/2018

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Maintain NBC’s asset management program for infrastructure and assets, ensure integrity and maximize the investment • CB 5

TARGET MEASURE:

Ensure laboratory equipment required maintenance is completed within 7 days

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Timeframe	3 Days	≤7 Days	≤7 Days	≤7 Days

ENVIRONMENTAL PERFORMANCE:

Continuously evaluate NBC environmental performance to identify, quantify and minimize NBC impacts to the environment in a cost effective manner.

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Provide quality and expedient sample collection, data analyses and water quality monitoring to evaluate NBC’s impacts and document improvements • EP 4

TARGET MEASURE:

Analyze 100% of collected samples for water quality monitoring

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Nutrients	10,086 Tests	100%	100%	100%
Fecal Coliform	7,343 Tests	100%	100%	100%

STAFFING:

Attract, develop and retain highly qualified employees.

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Provide professional, technical and/or safety training to optimize team performance and ensure user comfort with systems and processes • S 3

TARGET MEASURE:

Provide a minimum of 300 training hours

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Hours	310	300	300	300

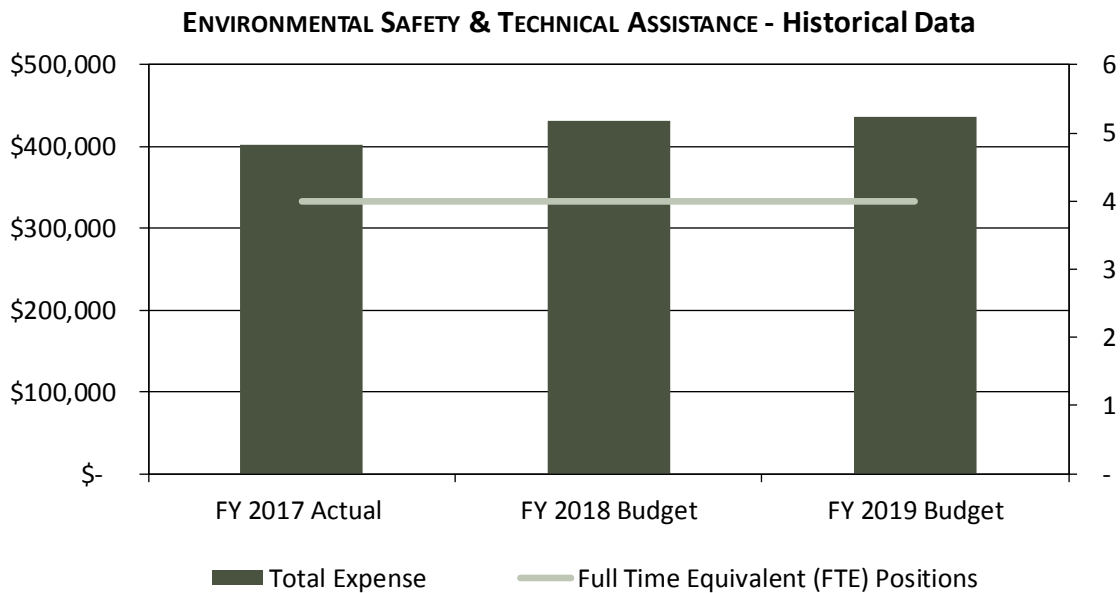
ENVIRONMENTAL SAFETY & TECHNICAL ASSISTANCE Section Summary

The Program

The Environmental Safety and Technical Assistance (ESTA) section provides environmental, health, safety and technical assistance to NBC staff, customers, environmental organizations and the general public. The ESTA section interacts with RIDEM, local emergency planning and response authorities, publicly owned treatment works and the EPA to assist in identifying and developing new and innovative ways to improve the environmental performance of NBC operations and to ensure the operations are performed in a safe, efficient and sustainable manner. The ESTA section provides pollution prevention, energy management, environmental compliance and sustainability, health and safety assistance through research activities, written publications, workshops, on-site technical assistance and public outreach.

The Budget

Operations & Maintenance Expense	FY 2017 Actual	FY 2018 Budget	FY 2019 Budget
Personnel	\$ 370,291	\$ 390,262	\$ 389,009
Operating Supplies/Expense	32,044	41,815	47,115
Professional Services	-	-	-
Total O&M	\$ 402,335	\$ 432,077	\$ 436,124
Funds by Source - Revenue	\$ 402,335	\$ 432,077	\$ 436,124



PROGRAM STAFFING (BUDGETED)			
Environmental Safety and Technical Assistance Manager	1.0	Environmental Sustainability Engineer	1.0
Environmental Compliance Technical Assistant	1.0	Safety Compliance Coordinator	1.0
4.0 FTEs			

Goal Actions for Target Measures by Key Code

Core Business

CB 1	Ensure compliance with all State and Federal regulations, permits, consent agreements, certifications, NBC regulations and reporting requirements
CB 2	Manage the planning, design and construction of NBC's capital improvements in the most cost-effective manner and in compliance with regulatory requirements
CB 3	Ensure the highest level of availability of systems' applications and network stability
CB 4	Maximize efficiency through service automation, applications security and NBC campus security
CB 5	Maintain NBC's asset management program for infrastructure and assets, ensure integrity and maximize the investment

Environmental Performance

EP 1	Minimize environmental impacts and implement conservation and sustainability measures
EP 2	Evaluate the NBC Program and report the data to the public
EP 3	Provide technical assistance to evaluate energy conservation and renewable energy opportunities
EP 4	Provide quality and expedient sample collection, data analyses and water quality monitoring to evaluate NBC's impacts and document improvements

Financial Management

FM 1	Ensure sufficient funding and receive the lowest cost of borrowing with the least rate payer impact
FM 2	Integrate NBC's strategic goals into the allocation of NBC's resources
FM 3	Maximize the efficiency, effectiveness, and accuracy of NBC's rate structures and collection processes to reduce accounts receivable
FM 4	Develop and manage NBC's operating and capital budgets to maximize benefits, minimize expense and unplanned expenditures
FM 5	Comply with IRS, Federal and State Rules and Regulations, Trust Indenture and Generally Accepted Accounting Principles
FM 6	Ensure goods and services are procured, reviewed and processed in a timely, efficient and cost effective manner
FM 7	Initiate and evaluate incentive programs
FM 8	Evaluate savings opportunities and optimize NBC operations and processes

Customer Focus

CF 1	Maintain programs and conduct projects that give back to the community
CF 2	Provide prompt, courteous, efficient and educational services
CF 3	Enhance communications to ensure consistency, reliability and satisfaction
CF 4	Maximize customer focus attitude by providing excellent customer service and developing strong customer relationships
CF 5	Ensure compliance with NBC internal controls

Staffing

S 1	Ensure compliance with Federal and State labor laws
S 2	Foster a positive working environment through effective communication
S 3	Provide professional, technical and/or safety training to optimize team performance and ensure user comfort with systems and processes
S 4	Provide a healthy and safe working environment
S 5	Develop mechanisms and establish opportunities for continued growth and professional development

Communication

C 1	Continue to expand and conduct NBC public outreach programs
C 2	Proactively manage NBC's public and legislative affairs and communicate NBC initiatives and ongoing activities
C 3	Effectively communicate status of capital projects to NBC staff and Board members
C 4	Enhance operating budget, CIP and compliance reports as a communication device
C 5	Strengthen and expand NBC's positive relations with key stakeholders (customers, Board, elected officials/delegates, regulatory officials and the public) to ensure support of NBC's mission

Organizational Performance

OP 1	Conduct NBC business in an open manner
OP 2	Promote diversity in hiring practices
OP 3	Ensure compliance with State ethics and regulatory agenda filing
OP 4	Provide end-user technology and systems to meet NBC's strategic goals

ENVIRONMENTAL SAFETY & TECHNICAL ASSISTANCE

Performance Data

Major Accomplishments FY 2018 by Key Code:

- EP 1 Coordinated the installation of a wastewater reuse sprinkler system at FPWWTF
- EP 2 Presented a paper at the Water Environment Federation Technical Conference on NBC's renewable energy projects
- EP 3 Assisted with the Solar Power Purchase Agreements that will generate 10 MW of solar energy
- EP 3 Monitored wind energy production from the FPWWTF and Coventry Wind Turbines
- FM 7 Worked with National Grid and the Regional Greenhouse Gas Initiative (RGGI) to secure incentives for the BPWWTF Biogas Reuse Project
- CF 1 Coordinated the installation and operation of an avian monitoring camera at the BPWWTF
- CF 1 Played a leadership role in the Rhode Island Water/Wastewater Agency Response Network
- C 5 Participated in various New England Water Environment Association Committees

Top Priorities for FY 2019 and How They Relate to the Strategic Plan/Goals and by Key Code:

- EP 1 Monitor the use of reclaimed wastewater sprinkler system at the FPWWTF and identify further uses of reclaimed wastewater
- EP 3 Monitor biogas production at the BPWWTF and work with Bucklin Point Operations and NBC Engineering to maximize biogas generation
- EP 3 Monitor renewable production and identify mechanism for NBC to achieve "net zero" grid supplied electricity demand

Target Measures

CORE BUSINESS: *Operate, maintain and protect our collection and treatment systems to ensure that all State and Federal requirements are met or surpassed.*

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Ensure compliance with all State and Federal regulations, permits, consent agreements, certifications, NBC regulations and reporting requirements • CB 1

TARGET MEASURE:

Compile and process annual OSHA 300 logs and Tier II reports two weeks prior to respective due dates

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Completion Date - OSHA 300 logs	1/25/2017	2/1/2017	2/1/2018	2/1/2019
Completion Date - Tier II Reports	2/26/2017	3/1/2017	3/1/2018	3/1/2019

TARGET MEASURE:

Perform a minimum of 8 internal environmental health & safety audits

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Quantity	8	8	8	8

ENVIRONMENTAL PERFORMANCE:

Continuously evaluate NBC environmental performance to identify, quantify and minimize NBC impacts to the environment in a cost effective manner.

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Provide technical assistance to evaluate energy conservation and renewable energy opportunities • EP 3

TARGET MEASURE:

Complete a minimum of 3 energy assessments to increase use of renewable energy

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Assessments	3	3	3	3
% Renewable Energy Achieved	44%	35%	75%	90%

FINANCIAL MANAGEMENT:

Manage NBC's finances through strong financial planning and controls such that sewer user charges are minimized.

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Initiate and evaluate incentive programs • FM 7

TARGET MEASURE:

Submit incentive program applications

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Applications submitted	4	1	1	1
Amount received	\$569,482	\$13,200	\$13,200	\$500,000

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Evaluate savings opportunities and optimize NBC operations and processes • FM 8

TARGET MEASURE:

Monitoring of NBC's energy use and renewable energy production

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Energy Produced on-site	52	Weekly	Weekly	Weekly
Energy Produced off-site	52	Weekly	Weekly	Weekly
Energy Purchased	12	Monthly	Monthly	Monthly

CUSTOMER FOCUS:

Maintain a customer-focused attitude throughout the organization.

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Provide prompt, courteous, efficient and educational services • CF 2

TARGET MEASURE:

Conduct 100% of requested technical site visits

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	12 Site Visits	100%	100%	100%

TARGET MEASURE:

Conduct a minimum of 5 fats, oils and grease Best Management Practices Assessments

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Quantity	5 Assessments	5	5	5

STAFFING:*Attract, develop and retain highly qualified employees.***GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:**

Provide professional, technical and/or safety training to optimize team performance and ensure user comfort with systems and processes • S 3

TARGET MEASURE:

Conduct a minimum of 2 CPR/Defibrillator training classes

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Classes	2	2	2	2
Attendees Certified	100%	100%	100%	100%

TARGET MEASURE:

Provide a minimum of 60 training hours

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Hours	60	60	60	60

TARGET MEASURE:

Ensure 100% of employees complete the OSHA required training

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Percentage	49 Training Sessions	100%	100%	100%

COMMUNICATION:*Improve and enhance internal and external communication to increase understanding of "who we are" and "what we do".***GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:**

Strengthen and expand NBC's positive relations with key stakeholders (customers, Board, elected officials/ delegates, regulatory officials and the public) to ensure support of NBC's mission • C 5

TARGET MEASURE:

Review 100% of NBC's annual environmental merit awards program applications and present a minimum of 2 external educational presentations

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Merit Awards	100%	100%	100%	100%
Presentations	7	2	2	2

TARGET MEASURE:

Submit 4 technical papers/abstracts for publication and 8 articles for publication in the 'NBC Pipeline'

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Papers	4	4	4	4
Articles	9	8	8	8



ENVIRONMENTAL MONITORING & DATA ANALYSIS

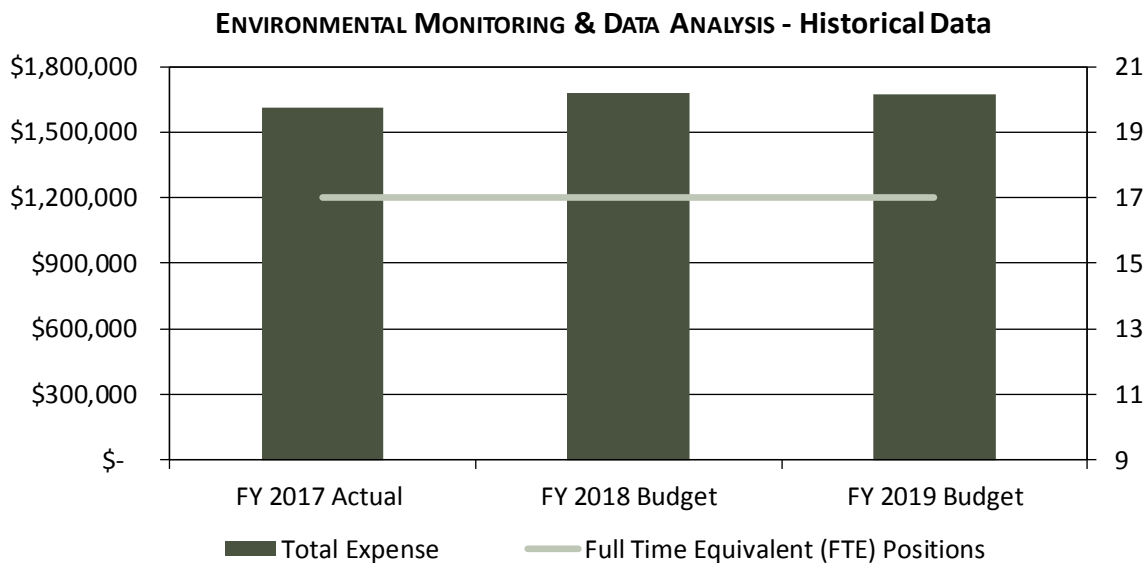
Section Summary

The Program

The Environmental Monitoring and Data Analysis (EMDA) section is responsible for water quality monitoring throughout NBC's service area, including the two wastewater treatment facilities, the collection system and permitted pretreatment customers in upper Narragansett Bay and its urban rivers. EMDA serves to protect the health of area residents, ensure the proper operation of the wastewater treatment plants and the quality of receiving waters. EMDA conducts significant industrial user and manhole sampling to ensure compliance with discharge permits and conducts daily wastewater treatment facility sampling. This section provides routine analysis of the data obtained from monitoring projects in a timely manner to sections of NBC, Federal and State agencies and the public. EMDA designs and implements monitoring programs to assess the impact of constructed improvements and to respond to State and Federal mandates, including all RIPDES permit required monitoring.

The Budget

Operations & Maintenance Expense	FY 2017 Actual	FY 2018 Budget	FY 2019 Budget
Personnel	\$ 1,410,114	\$ 1,485,943	\$ 1,482,285
Operating Supplies/Expense	159,540	153,500	150,470
Professional Services	38,755	36,000	40,000
Total O&M	\$ 1,608,409	\$ 1,675,443	\$ 1,672,755
Funds by Source - Revenue	\$ 1,608,409	\$ 1,675,443	\$ 1,672,755



PROGRAM STAFFING (BUDGETED)			
Environmental Monitoring Manager	1.0	Environmental Monitor	8.0
Assistant Environmental Monitoring Manager	1.0	Environmental Scientist	2.0
Clerk	1.0	Monitoring Field Supervisor	3.0
Environmental Data Analyst	1.0		
	17.0 FTEs		

Goal Actions for Target Measures by Key Code

Core Business

CB 1	Ensure compliance with all State and Federal regulations, permits, consent agreements, certifications, NBC regulations and reporting requirements
CB 2	Manage the planning, design and construction of NBC's capital improvements in the most cost-effective manner and in compliance with regulatory requirements
CB 3	Ensure the highest level of availability of systems' applications and network stability
CB 4	Maximize efficiency through service automation, applications security and NBC campus security
CB 5	Maintain NBC's asset management program for infrastructure and assets, ensure integrity and maximize the investment

Environmental Performance

EP 1	Minimize environmental impacts and implement conservation and sustainability measures
EP 2	Evaluate the NBC Program and report the data to the public
EP 3	Provide technical assistance to evaluate energy conservation and renewable energy opportunities
EP 4	Provide quality and expedient sample collection, data analyses and water quality monitoring to evaluate NBC's impacts and document improvements

Financial Management

FM 1	Ensure sufficient funding and receive the lowest cost of borrowing with the least rate payer impact
FM 2	Integrate NBC's strategic goals into the allocation of NBC's resources
FM 3	Maximize the efficiency, effectiveness, and accuracy of NBC's rate structures and collection processes to reduce accounts receivable
FM 4	Develop and manage NBC's operating and capital budgets to maximize benefits, minimize expense and unplanned expenditures
FM 5	Comply with IRS, Federal and State Rules and Regulations, Trust Indenture and Generally Accepted Accounting Principles
FM 6	Ensure goods and services are procured, reviewed and processed in a timely, efficient and cost effective manner
FM 7	Initiate and evaluate incentive programs
FM 8	Evaluate savings opportunities and optimize NBC operations and processes

Customer Focus

CF 1	Maintain programs and conduct projects that give back to the community
CF 2	Provide prompt, courteous, efficient and educational services
CF 3	Enhance communications to ensure consistency, reliability and satisfaction
CF 4	Maximize customer focus attitude by providing excellent customer service and developing strong customer relationships
CF 5	Ensure compliance with NBC internal controls

Staffing

S 1	Ensure compliance with Federal and State labor laws
S 2	Foster a positive working environment through effective communication
S 3	Provide professional, technical and/or safety training to optimize team performance and ensure user comfort with systems and processes
S 4	Provide a healthy and safe working environment
S 5	Develop mechanisms and establish opportunities for continued growth and professional development

Communication

C 1	Continue to expand and conduct NBC public outreach programs
C 2	Proactively manage NBC's public and legislative affairs and communicate NBC initiatives and ongoing activities
C 3	Effectively communicate status of capital projects to NBC staff and Board members
C 4	Enhance operating budget, CIP and compliance reports as a communication device
C 5	Strengthen and expand NBC's positive relations with key stakeholders (customers, Board, elected officials/delegates, regulatory officials and the public) to ensure support of NBC's mission

Organizational Performance

OP 1	Conduct NBC business in an open manner
OP 2	Promote diversity in hiring practices
OP 3	Ensure compliance with State ethics and regulatory agenda filing
OP 4	Provide end-user technology and systems to meet NBC's strategic goals

ENVIRONMENTAL MONITORING & DATA ANALYSIS

Performance Data

Major Accomplishments FY 2018 by Key Code:

- CB 1** Collected approximately 30,023 samples and ensured compliance with all Federal and State mandates
- CB 1** Collected samples from all Significant Industrial Users that discharged process wastewater
- CB 1** Sampled the BPWWTF and FPWWTF daily to ensure compliance with RIPDES permit requirements
- CB 1** Contributed to the review of the final RIPDES permits and the preparation of response letters
- CB 4** Implemented continuous temperature monitoring and data recording system on all automatic samplers and RIPDES plant sampler video surveillance and recording systems
- CB 5** Contributed to the implementation of the new Laboratory Information Management System (LIMS)
- CF 3** Conducted monthly meetings with Operations, IM, Laboratory, Pretreatment, ESTA, Executive and Engineering staff to discuss environmental monitoring data, as well as plant data and operational issues
- CF 3** Presented the following at the Coastal Estuary Research Foundation (CERF) Conference:
 - “Receiving waters monitoring following WWTF upgrades to reduce nitrogen loading” presentation
 - “Comprehensive Environmental Monitoring in a Rapidly Changing Estuary” poster
 - “Benthic Video Monitoring in Narragansett Bay – Observations Using the CMEC Language” poster
- CF 3** Presented a talk at the Narragansett Bay Estuary Program on NBC water quality monitoring initiatives

Top Priorities for FY 2019 and How They Relate to the Strategic Plan/Goals and by Key Code:

- CB 1** Sample the treatment facilities 365 days/year to comply with RIPDES permit requirements, process and provide data and assistance to Operations to evaluate plant performance, optimize treatment plant processes and resolve operational issues
- CB 1** Sample all discharging Significant Industrial Users twice to meet established Pretreatment goals
- CB 4** Integrate automated sample collection into LIMS
- EP 4** Provide quality and expedient sample collection services related to the CSO Phase II Facilities and BNR Projects that will enable the evaluation of their environmental impacts

Target Measures

CORE BUSINESS:

Operate, maintain and protect our collection and treatment systems to ensure that all State and Federal requirements are met or surpassed.

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Ensure compliance with all State and Federal regulations, permits, consent agreements, certifications, NBC regulations and reporting requirements • CB 1

TARGET MEASURE:

Collect EPA mandated samples

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
SIUs	1,727 Samples	100%	100%	100%
WWTFs	22,624 Samples	100%	100%	100%
Manholes	890 Samples	100%	100%	100%
Septage	287 Samples	100%	100%	100%

TARGET MEASURE:

Prepare and submit RIPDES DMR Report by the 15th of each month

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Quantity	12	12	12	12

TARGET MEASURE:

Conduct annual Environmental Land Use Restriction (ELUR) inspections.

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Quantity	4	3	3	3

ENVIRONMENTAL PERFORMANCE:

Continuously evaluate NBC environmental performance to identify, quantify and minimize NBC impacts to the environment in a cost effective manner.

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Provide quality and expedient sample collection, data analyses and water quality monitoring to evaluate NBC's impacts and document improvements • EP 4

TARGET MEASURE:

Collect samples to support water quality monitoring efforts

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
River	4,698 Samples	100%	100%	100%
Bay	3,318 Samples	100%	100%	100%

TARGET MEASURE:

Publish monitoring activities and analyses for prior year on NBC's website by due date

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Date	4/20/2017	4/30/2017	4/30/2018	4/30/2019

TARGET MEASURE:

Annually deploy fixed site monitoring equipment at a minimum of 2 sites

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Quantity	2	2	2	2

TARGET MEASURE:

Determine impact of nutrient reductions on ecology through video monitoring a minimum of 4/year

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Frequency	6	4	4	4

STAFFING:*Attract, develop and retain highly qualified employees.***GOAL ACTION FOR ACHIEVEMENT BY KEY CODE**

Foster a positive working environment through effective communication • S 2

TARGET MEASURE:

Conduct monthly data meetings to disseminate data and optimize operations

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Frequency	12	12	12	12

GOAL ACTION FOR ACHIEVEMENT BY KEY CODE:

Provide professional, technical and/or safety training to optimize team performance and ensure user comfort with systems and processes • S 3

TARGET MEASURE:

Provide a minimum of 250 training hours

Unit of Measure	FY 2017 Actual	FY 2017 Goal	FY 2018 Goal	FY 2019 Goal
Hours	648	250	250	250



Capital Budget

NBC's Capital Budget includes the Operating Capital Program (OCP) and the Capital Improvement Program (CIP). The FY 2019 Capital Budget is \$56.3 million which is \$3.0 million or 5.6% higher than the prior year.

Sources of Funds	FY 2017	FY 2018	FY 2019	Budgeted
	Actual	Budget	Budget	Difference
Restricted Account - CIP	\$ 26,618,486	\$ 15,684,322	\$ 20,015,021	\$ 4,330,699
Restricted Account - Operating Capital	3,872,038	5,310,678	4,752,000	(558,678)
Grant and Project Reimbursement Account	20,969	-	7,715,796	7,715,796
SRF Loan Proceeds	9,853,609	32,327,000	23,828,148	(8,498,852)
Total Sources of Funds	\$ 40,365,102	\$ 53,322,000	\$ 56,310,965	\$ 2,988,965

Uses of Funds	FY 2017	FY 2018	FY 2019	Budgeted
Operating Capital Program (OCP)	\$ 3,872,038.0	\$ 5,311,000.0	\$ 4,752,000.0	\$ (559,000.0)
Capital Improvement Program	35,205,347	48,011,000	50,558,965	2,547,965
Debt Service Payment Account	1,287,717	-	450,000	450,000
Cost of Issuance	-	-	550,000	550,000
Total Uses of Funds	\$ 40,365,102	\$ 53,322,000	\$ 56,310,965	\$ 2,988,965

The CIP and OCP identify capital expenditures over a five-year planning period and are developed within the context of the Strategic Plan's short-term and long-term goals. NBC staff identify capital needs based upon the Asset Management Program as well as system and facility inspections. In addition, NBC engineers and scientists identify improvements that may be required to meet new permit requirements such as more stringent discharge limits as well as consent agreements. Additional capital needs such as improvements to Information Technology hardware and software are also identified as new technologies become available.

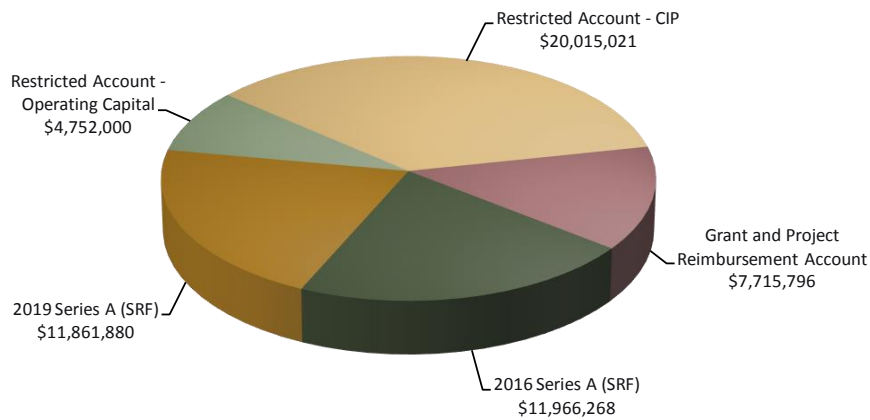


Items identified for inclusion in the Capital Budget must meet NBC's criteria to be considered an asset. NBC's asset criteria is further discussed in the OCP portion of this document. In general, assets that are to be purchased and installed by NBC staff within the fiscal year are included in the OCP. The highest priority items are included in the budget year and the remaining assets are programmed in subsequent years. The CIP includes larger, more complex and expensive assets that will be completed over a number of years. CIP items typically require the services of outside professional services to assist with planning, design and construction. The CIP projects are assigned priority codes and funding is allocated accordingly.

The Operating Budget includes debt service associated with the financing of the CIP. In addition, the Operating Budget line item "Transfer to Project Fund – Restricted Account" is used in the subsequent fiscal year to fund the OCP and pay-as-you-go CIP projects. Additional funding for the CIP is available from the Grant and Project Reimbursement Account in the Project Fund. Lastly, NBC funds the CIP with proceeds from the issuance of tax-exempt revenue bonds issued through the Rhode Island Infrastructure Bank, which is also referred to in this document as State Revolving Fund or "SRF" debt. If there is insufficient SRF capacity, the NBC also funds the CIP through the issuance of tax-exempt revenue bonds.

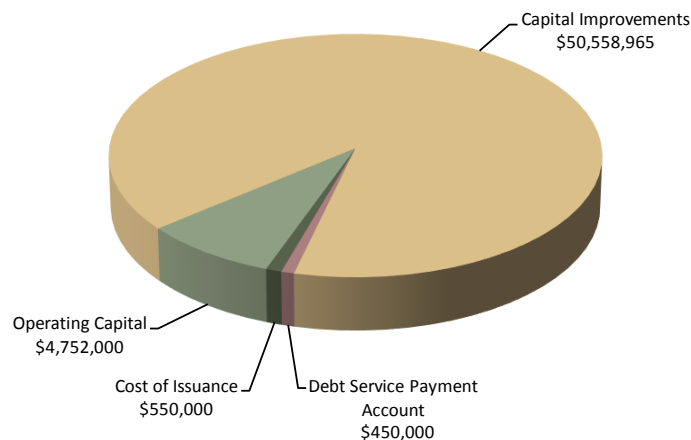
In Fiscal Year 2019, the total sources of capital funds are approximately \$56.3 million and the largest source is SRF Proceeds at \$23.8 million. The 2016 Series A (SRF) and the 2019 Series A (SRF) funds comprise 21.3% and 21.1%, of the SRF Proceeds respectively. The second largest source is the Restricted Account – CIP at \$20.0 million or 36%. The Grant and Project Reimbursement Account has \$7.7 million programmed for expenditure in FY 2019 or 14.0% of the total. Lastly, NBC has \$4.8 million in the Restricted Account – Operating Capital budgeted. The following chart illustrates the capital funding sources by type.

Sources of Funds



The largest category of capital budget expense in FY 2019 is Capital Improvements, which represents \$50.6 million or 90% of the total capital budget funds. The following chart illustrates the capital funding uses by type.

Uses of Funds

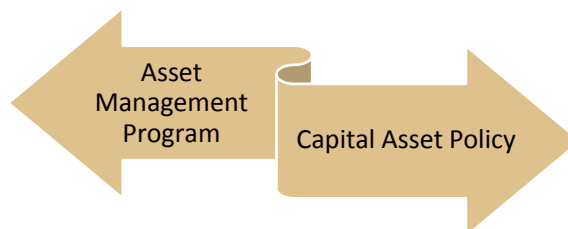


Operating Capital Program

The Operating Capital Program

This is the first year that the Narragansett Bay Commission (NBC) is presenting the Operating Capital Program (OCP) as a separate document for review and approval by NBC’s Board of Commissioners. NBC funds operating capital from the Restricted Account – Operating Capital in the Project Fund. In prior years, operating capital was included as a budget expense item and the associated funding was shown as a transfer from operating capital revenue item. Historically, NBC has funded asset purchases from the Operation and Maintenance Fund and subsequently sought reimbursement from the Project Fund through the Trustee. Beginning in FY 2019, NBC will instruct the Trustee to directly pay for assets from the Restricted Account in the Project Fund. This is the same process that NBC uses for the payment of pay-as-you-go capital projects identified in the CIP.

NBC’s OCP identifies programmed asset purchases for the current budget year and subsequent four years. The OCP is based primarily on information from NBC’s Asset Management Program (AMP) and includes new assets, asset replacements, asset renovations, and betterments. Examples of these assets include pumps, blowers, actuators, and bar racks. Additional operating capital items are identified through facility inspections and established programmatic priorities. Examples of these assets include fleet vehicles and laboratory equipment as well as computer hardware and software licensing. In accordance with NBC’s Capital Asset Policy, all assets must have an acquisition cost greater than \$5,000 and a useful life of three years or more.



Operating Capital Program Overview

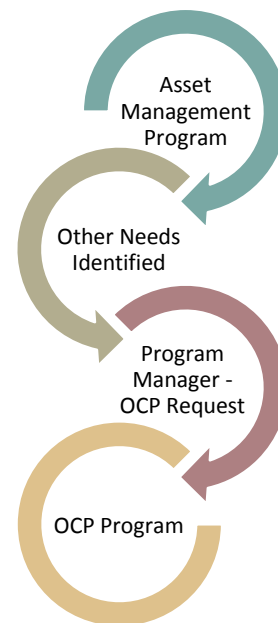
This year’s OCP identifies 92 assets programmed for acquisition in FY 2019 at a total cost of approximately \$4.8 million. NBC has also programmed asset purchases in FY 2020 through FY 2023 of approximately \$10.4 million for a total of \$15.2 million over the five year period reflected in the Program. As is shown in the following table, the majority of the asset purchases, \$8.5 million or 56%, are for items required to support the wastewater treatment and collection functions in the Operations and Maintenance Division.

FY 2019 – 2023 Operating Capital Program

Division	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Total
Executive Affairs	\$ 1,450,000	\$ 475,000	\$ 200,000	\$ 440,000	\$ 200,000	\$ 2,765,000
Construction & Engineering	30,000	230,000	30,000	68,000	30,000	388,000
Administration & Finance	756,000	285,000	70,000	130,000	65,000	1,306,000
Operations & Maintenance	2,001,000	1,938,500	1,945,000	1,576,000	1,015,000	8,475,500
Environmental Science & Compliance	515,000	327,000	427,000	439,000	471,000	2,179,000
	\$ 4,752,000	\$ 3,255,500	\$ 2,672,000	\$2,653,000	\$ 1,781,000	\$ 15,113,500

Operating Capital Program Development

NBC is committed to making the investments needed to ensure continuous operation of its facilities, support services and core business functions. In order to achieve this goal, NBC adopted and implemented an Asset Management Program (AMP), which is the primary source used to identify operating capital needs. The AMP is a comprehensive and detailed document maintained by the Asset Management Administrator that identifies all of NBC's assets. This includes assets acquired as part of a capital improvement project as well as assets purchased through the annual budget process. Detailed asset information is captured in the asset management system including an asset's location, cost, and useful life. In addition, each asset is assigned a criticality factor that takes into consideration redundancy. NBC's computerized work order system is integrated into the AMP so that preventive and corrective maintenance activity is also captured for each asset. The information in the AMP enables NBC to produce a facilities and equipment condition analysis report that is used to identify and prioritize capital asset needs. The asset maintenance history and useful life information assists with the determination of whether an asset should be repaired or replaced.



In addition to the AMP, other new assets or asset replacements are identified through the operation and inspection of facilities. Investment in Information Technology (IT) assets are typically programmed in advance to address specific needs such as the implementation of new software applications, disaster recovery solutions, or network improvements. Laboratory and sampling equipment needs are often identified through the planning process to ensure compliance with new RIPDES permit or water quality sampling requirements.

Program managers use the information from the AMP and other sources as the basis for requesting funding for operating capital assets. The OCP includes requests for the upcoming budget year as well as the subsequent four years to arrive at a five-year program.

With respect to the upcoming budget year, as part of the annual budget process, each section submits detailed operating capital requests with supporting documentation for each asset. Each request is unique and includes the asset title, description, estimated cost, location, useful life, purchase justification and indicates if the asset is new, a replacement or a betterment. The requests are first reviewed by the Accounting staff to determine if the request meets the capital asset criteria. Once approved by Accounting, the requests are reviewed by Finance to ensure that the information is complete and that there is documentation to support the estimated cost. The information is compiled and included for funding in the OCP for the budget year. Each asset included in the budget is assigned a unique asset allocation number, which is referenced when the asset is purchased to ensure that it was authorized.



The OCP also reflects planned asset purchases for the subsequent four years. Although detailed information is required for all requested operating capital assets in the budget year, less specific information is needed to program future purchases. Each section submits a five-year operating capital needs form as part of the annual budget process. The first year ties into the budget year and must be accompanied by the operating capital request form discussed previously. Assets in subsequent years must include the asset title, location, a brief explanation of how the asset will be used, and justification. These requests are reviewed by Finance and are incorporated into the OCP.

Operating Capital Program Guidelines

The development of the FY 2019 Operating Capital Program is governed by the following:

- The operating capital policy defines operating capital items as those with costs greater than \$5,000 and a minimum useful life of three years.
- The Asset Management Policy requires the identification of short-term capital needs and the development of a long-term (five-year) asset replacement Program.
- The Accounting Manager must ensure that asset criteria is met and approve the capitalization of assets.

Operating Capital Program Calendar

Development of the Operating Capital Program is as follows:

DECEMBER 2017

- Budget Forms Available

JANUARY 2018

- FY 2019 – 2023 Operating Capital Submittals due to Finance on January 10th
- Review Operating Capital Submittals for Asset Criteria and GL account code on January 19th

FEBRUARY 2018

- Operating Capital Budget Change Requests due to Finance on February 23rd

MARCH 2018

- Incorporation of Operating Capital Submittals
- Operating Capital Narrative
- Addition of Enhancements to Operating Capital Program Document

APRIL 2018

- Final revisions and Operating Capital Program document preparation
- Finance Committee and Board Review and Approval of Operating Capital Program on April 10th

Operating Capital Program Amendment Procedures

During the fiscal year there may be a need to make changes to the operating capital budget to accommodate circumstances where the actual bids received for particular items are higher than budget amounts or where the installation of a new asset may require additional resources beyond what was anticipated. In addition, changes may be required to accommodate emergencies. In these cases, a Division Director may request a modification to the operating capital budget. If a modification to the operating capital budget is needed, it is preferred that the entire amount of the asset is reallocated to the new item. In some cases this is not possible and partial reallocations are accommodated. The Director of Administration and Finance may authorize changes in the operating capital budget as long as the total expenditures do not exceed the total amount approved for the fiscal year. Procedures for modifications to the operating capital budget during the year are as follows:

Non-Emergencies:

- Prior to Purchase, the Operating Capital Reallocation Request Form is completed, signed by the Division Director and accompanied by a vendor quote for the estimated cost.
- The Form is reviewed by the Accounting and Finance Departments to determine if the item meets the criteria to be considered an asset in accordance with NBC's Capital Asset Policy.
- The Form is reviewed with the Director of Administration and Finance
- If approved, a new Asset Allocation number is assigned and operating capital funding is transferred.

Emergencies:

- Item is purchased in accordance with NBC's Purchasing Rules and Regulations for emergency purchases.
- The Operating Capital Reallocation Request Form is completed and signed by the Division Director and accompanied by a quote for the estimated cost.
- The Form is reviewed by the Accounting and Finance Departments to determine if the item meets the criteria to be considered an asset in accordance with NBC's Capital Asset Policy. Form is reviewed with the Director of Administration and Finance.
 - Capital Asset Criteria Met – funding is transferred in the operating capital budget and Asset Allocation number assigned.
 - Capital Asset Criteria Not Met – purchase will be expensed in the budget.

Operating Capital Program by Strategic Objective

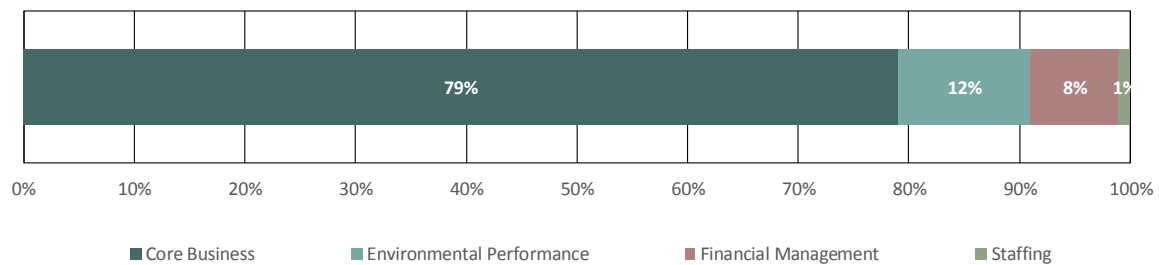
The Strategic Plan guides NBC operations and ensures facilities and infrastructure are maintained. As part of the OCP development, the budgeted capital assets have been categorized by the goal the asset will address. NBC's Strategic Plan Goals are listed below.

NBC'S Strategic Goals

CORE BUSINESS:	Operate, maintain and protect our collection and treatment systems to ensure that all State and Federal requirements are met or surpassed.
ENVIRONMENTAL PERFORMANCE:	Continuously evaluate NBC's environmental performance to identify, quantify and minimize NBC impacts to the environment in a cost effective manner.
FINANCIAL MANAGEMENT:	Manage NBC's finances through strong financial planning and controls such that sewer users charges are minimized.
STAFFING:	Attract, develop and retain highly qualified employees.

Of the ninety-two FY 2019 budgeted capital assets, \$3.7 million or 79% are related to NBC's Core Business goal for infrastructure, applications and compliance. In addition, 12% relate to NBC's Environmental Performance goal and represent sampling and laboratory analysis assets. The remaining assets are aligned with the Financial Management and Staffing goals. The following chart illustrates the percentage of budgeted assets by strategic goal.

Percentage of Capital Assets by Strategic Goal

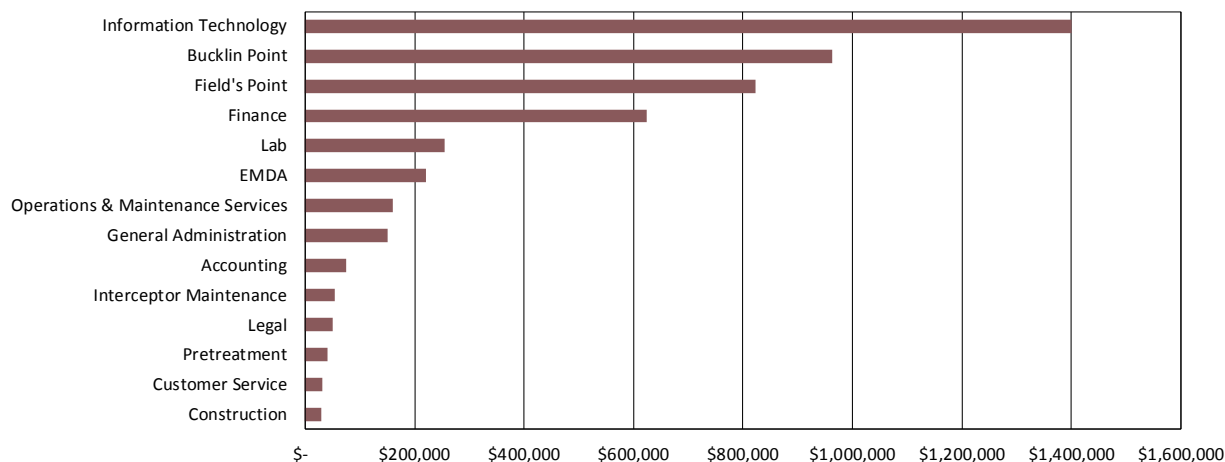


Operating Capital Program by Cost Center

The largest percentage of the FY 2019 operating capital is in the Information Technology (IT) section at \$1.4 million or 29%. This includes several hardware and software updates as well as the implementation of the new customer service application. The two wastewater treatment facility sections represent 37% of the programmed operating capital with \$964 thousand at Bucklin Point and \$823 thousand at Field's Point. NBC has prioritized the replacement of numerous pumps, vehicles, grinders, bar rack rebuilds and other equipment required to operate the facilities and maintain infrastructure. Finance represents 13% or \$625 thousand of the FY 2019 operating capital and the capital budget includes funding for a Wastewater System Cost Allocation and Recovery Study as well as the reconfiguration of the office space. The Laboratory and EMDA sections each represent 5% respectively for a total of \$475 thousand. Budgeted laboratory and sampling equipment includes

replacement of nutrient analyzers, water purification systems, plant samplers and monitoring sondes, probes and meters. The FY 2019 operating capital by cost center is reflected in the following chart.

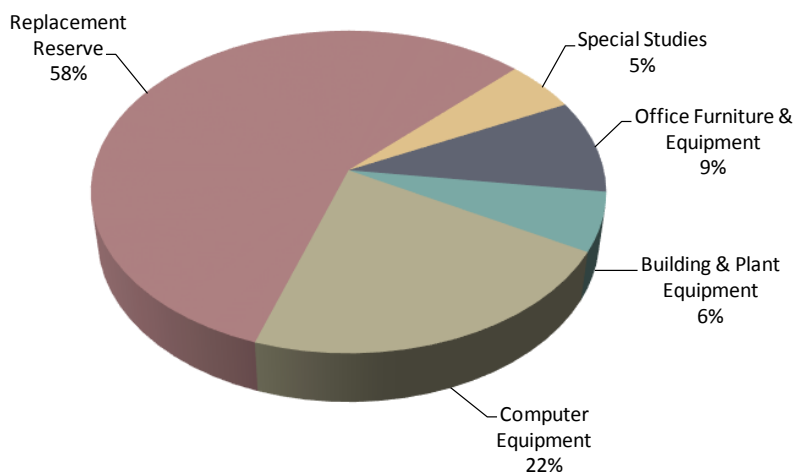
FY 2019 Operating Capital by Cost Center



Fiscal Year 2019 Operating Capital Program by Type

The FY 2019 OCP identifies asset purchases totaling approximately \$4.8 million. The majority, or 58% of the assets are for Replacement Reserve items at \$2.8 million. Followed by the next largest category for Computer Equipment, representing approximately \$1.1 million or 22% of costs. Lastly, Office Furniture and Equipment, Building and Plant Equipment and Special Studies comprise 9%, 6% and 5% of the FY 2019 asset acquisitions.

FY 2019 Operating Capital by Type



NBC's strategic goal of maximizing technology and maintaining capability is exemplified with the programmed computer equipment purchases in FY 2019. The majority, or 47%, is related to the purchase and implementation of a new customer service application that will replace NBC's legacy system. The new system will employ technology to make NBC's business processes more efficient and enhance the customer experience

through expanded online capabilities. In addition, NBC has programmed an upgrade to Microsoft Office, the purchase of debt management software, and the installation of a redundant fiber connection.

Computer Equipment	Total	% of Total
Customer Service Application	\$ 500,000	47%
Microsoft Office Upgrades	175,000	16%
Debt Management Application	110,000	10%
Computer Hardware and Software Upgrades	140,000	13%
Redundant Fiber Connection	55,000	5%
Other	100,000	9%
Total	\$ 1,080,000	100%

The following table shows NBC's FY 2019 programmed Replacement Reserve investments that ensures protection of assets and continuous operation. The majority of the Replacement Reserve items are comprised of pumps and vehicles at 17% and 13% respectively. Other significant items include computer hardware, sampling and analysis equipment, and items needed to operate the treatment plants.

Replacement Reserve	Total	% of Total
Pumps	\$ 446,000	17%
Vehicles	369,000	13%
Network Core Replacement	150,000	5%
Board Room Refresh	150,000	5%
Bar Rack Rebuilds	147,000	5%
Fixed Site Sondes	130,000	5%
SAN Switch	120,000	4%
Grinders	100,000	4%
BOD Skalar Analyzer	93,000	3%
Fresh Water Nutrient Analyzer	85,000	3%
Equipment 009 - Yard Sweeper	85,000	3%
Disaster Recovery Servers and Infrastructure	75,000	3%
Conveyor	75,000	3%
Annual PC Refresh Program	75,000	3%
Grit Tank Components	70,000	2%
Flow Meter	70,000	2%
HVAC Components	50,000	2%
Other	513,000	18%
Total	\$ 2,803,000	100%

With respect to the office furniture and equipment category, NBC has programmed \$331,000 for office reconfigurations and updates to ensure the space is conducive to departmental operational requirements.

Office Furniture & Equipment	Total	% of Total
Office Reconfiguration	\$ 331,000	100%
Total	\$ 331,000	100%

NBC plans on purchasing new assets in the building and plant equipment category that will support operations and ensure core business goals are met. Dissolved oxygen sensors and probes to monitor wastewater as required by permit total \$90,000 and represent 32% of the total for this category. Pumps represent 24% and antennas and repeaters 10% of programmed investments to support treatment operations at both WWTFs.

Building & Plant Equipment	Total	% of Total
Dissolved Oxygen Sensors and Probes	\$ 90,000	32%
Pumps	70,000	24%
Antennas & Repeater	30,000	10%
Other	98,000	34%
Total	\$ 288,000	100%

Lastly, NBC has programmed \$250,000 in the Special Studies category for a wastewater system cost allocation and recovery study. This study will examine NBC’s cost of service and explore alternative rate designs as part of NBC’s financial management goals. NBC plans to file for a rate adjustment in the fall, which will be based upon the results of the study.

Special Studies	Total	% of Total
WW System Cost Allocation and Recovery Study	\$ 250,000	100%
Total	\$ 250,000	100%

Operating Capital Program Funding

Operating Capital is funded from the Restricted Account – Operating Capital in the Project Fund. In accordance with the Trust Indenture, subsequent to fiscal year end, a calculation is made to determine the amount that can be transferred from the Stabilization Account in the Debt Service Fund to the Restricted Accounts in the Project Fund to support the Capital Budgets. This is also consistent with the Order from the Rhode Island Public Utilities Commission. An additional calculation is performed to further allocate the funds to the Operating Capital and Capital Improvement Program Restricted Accounts.

The following table shows that in FY 2019, NBC plans to fund the OCP with \$4.8 million from the Restricted Account – Operating Capital in the Project Fund. NBC has also programmed funding of \$5.0 million per year for FY 2020 through FY 2024 for the OCP from this same source.

Sources of Funds (Thousands)	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Total FY 2020-2024
Restricted Account-Operating Capital	\$ 4,752	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 25,000
Total	\$ 4,752	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 25,000

The FY 2019 programmed asset purchases total approximately \$4.8 million. In FY 2020 through FY 2024, NBC has programmed the acquisition of the assets identified in the OCP as well as an additional placeholder amount so that total programmed uses are \$5.0 million per year in the five-year window.

Uses of Funds (Thousands)	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Total FY 2020-2024
Operating Capital Program	\$ 4,752	\$ 3,256	\$ 2,672	\$ 2,653	\$ 1,781	\$ -	\$ 10,362
Operating Capital Placeholder	-	1,744	2,328	2,347	3,219	5,000	14,638
Total	\$ 4,752	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 25,000

Operating Capital Summary by Fiscal Year

Asset Type	Asset Title	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Total Cost
EXECUTIVE AFFAIRS							
Legal							
Betterment	Office Reconfiguration	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ 50,000
	<i>Subtotal Legal</i>	50,000	-	-	-	-	50,000
Information Technology							
New	Customer Service Application	500,000	-	25,000	-	25,000	550,000
Replacement	Board Room Refresh	150,000	-	-	-	-	150,000
Replacement	Network Core	150,000	-	-	-	-	150,000
New	Microsoft Office Upgrade	125,000	-	-	-	-	125,000
Replacement	SAN Switch	120,000	-	-	-	-	120,000
Replacement	Disaster Recovery Servers and Infrastructure	75,000	75,000	75,000	75,000	75,000	375,000
Replacement	Annual PC Refresh Program	75,000	-	-	-	-	75,000
New	Redundant Fiber Connection	55,000	-	-	-	-	55,000
New	Microsoft Exchange Upgrade	50,000	-	-	-	-	50,000
New	Software Licensing Updates	40,000	40,000	40,000	40,000	40,000	200,000
New	Computer Room Enhancements	25,000	25,000	25,000	25,000	25,000	125,000
New	Conference Room Upgrades	25,000	25,000	25,000	25,000	25,000	125,000
New	Antivirus Updates	10,000	10,000	10,000	10,000	10,000	50,000
New	Bi-Annual Security Assessment	-	75,000	-	75,000	-	150,000
New	LIMS Enhancements	-	50,000	-	50,000	-	100,000
Replacement	Edge Switch Upgrades	-	50,000	-	50,000	-	100,000
New	Oracle ERP/Database Enhancements	-	40,000	-	40,000	-	80,000
Replacement	Large Form Scanner/Printer	-	35,000	-	-	-	35,000
New	Hansen Upgrades	-	25,000	-	25,000	-	50,000
New	Project Tracking Software	-	25,000	-	25,000	-	50,000
	<i>Subtotal Information Technology</i>	1,400,000	475,000	200,000	440,000	200,000	2,715,000
CONSTRUCTION & ENGINEERING							
Construction							
Replacement	Vehicle 427	30,000	-	-	-	-	30,000
Betterment	Office Reconfiguration	-	200,000	-	-	-	200,000
Replacement	Vehicle 400	-	30,000	-	-	-	30,000
Replacement	Vehicle 388	-	-	30,000	-	-	30,000
Replacement	Vehicle 357	-	-	-	30,000	-	30,000
Replacement	Vehicle 343	-	-	-	-	30,000	30,000
	<i>Subtotal Construction Services</i>	30,000	230,000	30,000	30,000	30,000	350,000
Engineering							
Replacement	GPS Rover	-	-	-	25,000	-	25,000
Replacement	Survey Equipment	-	-	-	13,000	-	13,000
	<i>Subtotal Engineering</i>	-	-	-	38,000	-	38,000
ADMINISTRATION & FINANCE							
Finance							
New	WW System Cost Allocation & Recovery Study	250,000	-	-	-	-	250,000
New	Debt Management Application	110,000	-	-	-	-	110,000
Betterment	Office Reconfiguration	100,000	-	-	-	-	100,000
New	Cash Management Application	40,000	-	-	-	-	40,000
New	Capital Budget Software	-	75,000	-	-	-	75,000
Replacement	Time & Attendance System	-	80,000	-	-	-	80,000
	<i>Subtotal Finance</i>	500,000	155,000	-	-	-	655,000
Accounting							
Betterment	Office Reconfiguration	75,000	-	-	-	-	75,000
	<i>Subtotal Accounting</i>	75,000	-	-	-	-	75,000
Customer Service							
Replacement	Vehicle 385	25,000	-	-	-	-	25,000
Betterment	Office Reconfiguration	6,000	5,000	5,000	5,000	5,000	26,000
Replacement	Vehicle 377	-	25,000	-	-	-	25,000
Replacement	Vehicle 372	-	-	25,000	-	-	25,000
Replacement	Vehicle 339	-	-	-	25,000	-	25,000
Replacement	Vehicle 335	-	-	-	-	25,000	25,000
	<i>Subtotal Customer Service</i>	31,000	30,000	30,000	30,000	30,000	151,000

Asset Type	Asset Title	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Total Cost
General Administration							
Betterment	Office Reconfiguration	100,000	-	-	-	-	100,000
Replacement	HVAC Components	50,000	-	-	-	-	50,000
Betterment	Office Reconfiguration	-	50,000	-	50,000	-	100,000
New	Phone System Upgrades	-	25,000	-	25,000	-	50,000
Replacement	Security - Camera	-	25,000	-	25,000	-	50,000
Replacement	Color Copier	-	-	40,000	-	-	40,000
Replacement	Water Heater	-	-	-	-	20,000	20,000
Replacement	Copier	-	-	-	-	15,000	15,000
<i>Subtotal General Administration</i>		<u>150,000</u>	<u>100,000</u>	<u>40,000</u>	<u>100,000</u>	<u>35,000</u>	<u>425,000</u>
OPERATIONS AND MAINTENANCE							
Interceptor Maintenance							
Replacement	Equipment 007	37,000	-	-	-	-	37,000
Replacement	Pole Camera	17,000	-	-	-	-	17,000
Replacement	Vehicle 455	-	70,000	-	-	-	70,000
Replacement	HVAC Components	-	35,000	-	-	-	35,000
Replacement	Vehicle 355	-	-	35,000	-	-	35,000
Replacement	Vehicle 387	-	-	35,000	-	-	35,000
Replacement	Vehicle 367	-	-	25,000	-	-	25,000
Replacement	Vehicle 376	-	-	-	140,000	-	140,000
Replacement	Vehicle 398	-	-	-	5,000	-	5,000
Replacement	Vehicle 348	-	-	-	-	40,000	40,000
Replacement	Vehicle 347	-	-	-	-	38,000	38,000
Replacement	Vehicle 459	-	-	-	-	16,000	16,000
Replacement	Vehicle 354	-	-	-	-	15,000	15,000
<i>Subtotal Interceptor Maintenance</i>		<u>54,000</u>	<u>105,000</u>	<u>95,000</u>	<u>145,000</u>	<u>109,000</u>	<u>508,000</u>
Operations & Maintenance Services							
New	Computer System Upgrade	84,000	20,000	-	-	-	104,000
Replacement	Vehicle 442	35,000	-	-	-	-	35,000
Replacement	Flow Meter	25,000	-	-	-	-	25,000
New	Software Licensing Updates	16,000	70,000	-	-	-	86,000
<i>Subtotal Interceptor Maintenance</i>		<u>160,000</u>	<u>90,000</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>250,000</u>
Field's Point							
Replacement	Bar Rack	147,000	-	-	-	150,000	297,000
Replacement	Grinders	100,000	-	-	-	-	100,000
Replacement	Equipment 009	85,000	-	-	-	-	85,000
Replacement	Grit Tank Components	70,000	-	-	-	95,000	165,000
Replacement	Vehicle 447	45,000	-	-	-	-	45,000
Replacement	Flow Meter	45,000	-	-	-	-	45,000
Replacement	Vehicle 487	40,000	-	-	-	-	40,000
Replacement	Hydraulic Controls	40,000	-	-	-	-	40,000
Replacement	RAS & Dewatering Pump	35,000	-	-	-	-	35,000
New	Antennas & Repeaters	30,000	-	-	-	-	30,000
Replacement	Metering Pump	27,000	-	-	-	-	27,000
Replacement	Hypo Pump and Motor	25,000	-	-	-	-	25,000
Replacement	Equipment 0026	22,000	-	-	-	-	22,000
Replacement	Equipment 0028	22,000	-	-	-	-	22,000
Replacement	Screw Pump Motor	20,000	-	-	-	-	20,000
New	Nitrate Analyzer	17,000	-	-	-	-	17,000
New	Grit Aeration Blower	15,000	-	-	-	-	15,000
New	Underflow Valve Actuator	15,000	-	-	-	-	15,000
Replacement	Automatic Self Cleaning Strainer	13,000	-	-	-	-	13,000
Replacement	Compressor	10,000	-	-	-	-	10,000
Replacement	Bar Rack	-	147,000	-	-	-	147,000
Replacement	Butterfly Valve	-	90,000	-	-	-	90,000
Replacement	Grit Tank	-	85,000	-	-	-	85,000
Replacement	Tank Turntable Assembly	-	75,000	-	-	-	75,000
Replacement	Gravity Thickener Pump	-	50,000	-	-	-	50,000
Replacement	Vehicle 405	-	30,000	-	-	-	30,000
Replacement	Vehicle 495	-	30,000	-	-	-	30,000
Replacement	Return Sludge Pump	-	27,500	-	-	-	27,500
Replacement	Metering Pump	-	27,000	-	-	-	27,000
Replacement	Equipment 0040	-	22,000	-	-	-	22,000
Replacement	Equipment 0069	-	22,000	-	-	-	22,000
Replacement	Equipment 0070	-	22,000	-	-	-	22,000

Asset Type	Asset Title	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Total Cost
Replacement	Nitrate Probe	-	16,000	-	-	-	16,000
Replacement	Equipment 004	-	14,000	-	-	-	14,000
Replacement	Wasting Pump	-	13,000	-	-	-	13,000
Replacement	Screw Pump Motor	-	12,000	-	-	-	12,000
Replacement	Analyzer	-	12,000	-	-	-	12,000
Replacement	Variable Frequency Drive	-	12,000	-	-	-	12,000
Replacement	Variable Frequency Drive	-	8,000	-	-	-	8,000
Replacement	TSS Meter	-	8,000	-	-	-	8,000
Replacement	pH Probe	-	8,000	-	-	-	8,000
New	Variable Frequency Drive	-	8,000	-	-	-	8,000
Replacement	LEL Gas Monitor Panel	-	7,000	-	-	-	7,000
Replacement	Vehicle 384	-	7,000	-	-	-	7,000
Replacement	Bar Rack	-	-	150,000	-	-	150,000
Rehabilitation	Grit Tank	-	-	90,000	-	-	90,000
Replacement	Vehicle 386	-	-	85,000	-	-	85,000
Replacement	Wet Weather Tank Components	-	-	75,000	-	-	75,000
Replacement	Pump Motors	-	-	50,000	-	50,000	100,000
Replacement	Vehicle 446	-	-	45,000	-	-	45,000
Replacement	Vehicle 406	-	-	40,000	-	-	40,000
Replacement	Sodium Bisulfite Tank	-	-	35,000	-	-	35,000
Replacement	Vehicle 375	-	-	35,000	-	-	35,000
Replacement	Vehicle 379	-	-	35,000	-	-	35,000
Replacement	Uninterrupted Power Supply	-	-	30,000	-	-	30,000
Replacement	Return Sludge Pump	-	-	30,000	-	-	30,000
Replacement	Flexim Flow Meters	-	-	25,000	-	-	25,000
Replacement	Equipment 0024	-	-	25,000	-	-	25,000
Replacement	Variable Frequency Drive	-	-	24,000	-	-	24,000
Replacement	Metering Pump	-	-	20,000	-	-	20,000
Replacement	Sludge Pump	-	-	19,000	-	-	19,000
Rehabilitation	Crane Rake and Components	-	-	18,000	-	-	18,000
Replacement	Wasting Pump	-	-	15,000	-	-	15,000
Rehabilitation	Hypo Storage Tank	-	-	12,000	-	-	12,000
Replacement	Variable Frequency Drive	-	-	12,000	-	-	12,000
Replacement	Ammonia Meter	-	-	10,000	-	-	10,000
Replacement	Equipment 0025	-	-	10,000	-	-	10,000
New	Variable Frequency Drive	-	-	7,000	-	-	7,000
Replacement	Hydroflow Screen	-	-	-	200,000	-	200,000
Replacement	Bar Rack	-	-	-	150,000	-	150,000
Rehabilitation	Grit Tank	-	-	-	90,000	-	90,000
Replacement	Process Control Unit	-	-	-	90,000	-	90,000
Replacement	Wet Weather Tank Components	-	-	-	80,000	-	80,000
Rehabilitation	Tunnel S1 Crane Recoating	-	-	-	50,000	-	50,000
Replacement	Sodium Bisulfite Tank	-	-	-	35,000	-	35,000
Replacement	Vehicle 366	-	-	-	35,000	-	35,000
Replacement	Vehicle 486	-	-	-	35,000	-	35,000
Replacement	Grit Pump and Motor	-	-	-	30,000	-	30,000
Replacement	Flow Meters	-	-	-	25,000	-	25,000
Replacement	Sludge Pump	-	-	-	22,000	-	22,000
Replacement	Ammonia Probe	-	-	-	20,000	-	20,000
Replacement	Dewatering Pump and Motor	-	-	-	19,000	-	19,000
Rehabilitation	Crane Drive, Trolley Units and Drum Hoist	-	-	-	18,000	-	18,000
Replacement	Variable Frequency Drive	-	-	-	14,000	-	14,000
Replacement	Dewatering Pump	-	-	-	12,000	-	12,000
Replacement	Sewage Pump and Motor	-	-	-	-	210,000	210,000
Replacement	Tank Turntable Assembly	-	-	-	-	80,000	80,000
Replacement	Vehicle 485	-	-	-	-	75,000	75,000
Replacement	Vehicle 464	-	-	-	-	40,000	40,000
Replacement	Vehicle 360	-	-	-	-	35,000	35,000
Replacement	Sludge Pump	-	-	-	-	24,000	24,000
Replacement	Sludge Pump with Motor	-	-	-	-	20,000	20,000
Replacement	Copy Machine	-	-	-	-	8,500	8,500
Replacement	Copy Machine	-	-	-	-	8,500	8,500
Replacement	Tank Level Indicators	-	-	-	-	7,000	7,000
	<i>Subtotal Field's Point</i>	823,000	752,500	897,000	925,000	803,000	4,200,500

Asset Type	Asset Title	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Total Cost
Bucklin Point							
New	DO Sensors and Probes	90,000	-	-	-	-	90,000
Replacement	Conveyor	75,000	-	-	-	-	75,000
Replacement	Effluent Pumps	60,000	-	60,000	-	-	120,000
Replacement	Screw Pump Motor & Upper Bearing	60,000	-	-	-	-	60,000
Replacement	Flow Serve Pump	60,000	-	-	-	-	60,000
Replacement	Vehicle 418	45,000	-	-	-	-	45,000
Replacement	Vehicle 424	45,000	-	-	-	-	45,000
Replacement	Grit Pump	44,000	-	-	-	-	44,000
New	Thickener Wasting Pump	40,000	-	-	-	-	40,000
Replacement	Air Handling Unit	40,000	-	-	-	-	40,000
Replacement	Vehicle 378	40,000	-	-	-	-	40,000
Replacement	Dewatering Building Roof	40,000	-	-	-	-	40,000
Replacement	Primary Sludge Pump	35,000	-	-	-	-	35,000
Replacement	Primary Scum Pump	35,000	-	-	-	-	35,000
New	Transfer Pump	30,000	-	-	-	-	30,000
Replacement	Dewatering Pump	25,000	-	-	-	-	25,000
Replacement	Equipment 0027	22,000	-	-	-	-	22,000
Replacement	Equipment 0046	22,000	-	-	-	-	22,000
Replacement	Equipment 0047	22,000	-	-	-	-	22,000
New	EIM Actuators & Gear Operators	20,000	-	-	-	-	20,000
Replacement	Hoist	15,000	-	-	-	-	15,000
New	Retrieval System	15,000	-	-	-	-	15,000
New	Diesel Mower	12,000	12,000	14,000	-	-	38,000
Replacement	60" Mower	10,000	-	-	-	-	10,000
Replacement	Hot Water Recycling Pump	10,000	-	-	-	-	10,000
Replacement	Hot Water Recycling Pump	10,000	-	-	-	-	10,000
Replacement	Equipment 0100A	10,000	-	-	-	-	10,000
New	Leaf Vac Trailer w/ Cyclone	8,000	-	-	-	-	8,000
New	Tripod Confined Space	8,000	-	-	-	-	8,000
Replacement	Truck Mounted Sander	8,000	-	-	-	-	8,000
Replacement	Plow	8,000	-	-	-	-	8,000
Rehabilitation	Primary Digester	-	200,000	-	-	-	200,000
New	Screw Pump Motor & Upper Bearing Assembly	-	60,000	-	-	-	60,000
Rehabilitation	Tank Screw Rebuild	-	60,000	-	-	-	60,000
Replacement	Vehicle 382	-	60,000	-	-	-	60,000
Replacement	Air Handling Unit	-	40,000	-	-	-	40,000
Replacement	Pumps	-	40,000	-	-	-	40,000
Replacement	Vehicle 444	-	40,000	-	-	-	40,000
Replacement	Grinders	-	35,000	35,000	-	40,000	110,000
Replacement	Dewatering Pump	-	35,000	-	-	-	35,000
Replacement	Collector Tank	-	32,000	32,000	35,000	35,000	134,000
New	Seal Water System	-	30,000	-	-	-	30,000
Replacement	DeWatering Pump	-	30,000	-	-	-	30,000
Replacement	Air Handling Unit	-	30,000	-	-	-	30,000
Replacement	Flushing Water Pumps	-	26,000	-	26,000	-	52,000
Replacement	UV Hydraulic Power System	-	25,000	25,000	-	-	50,000
Replacement	Grit Pump	-	25,000	-	-	-	25,000
Replacement	Hoist	-	25,000	-	-	-	25,000
Replacement	Equipment 0060	-	25,000	-	-	-	25,000
Replacement	Equipment 0039	-	22,000	-	-	-	22,000
Replacement	Equipment 0057	-	22,000	-	-	-	22,000
Replacement	Turbo Blower Harmonic Filter	-	20,000	-	-	-	20,000
Replacement	UPS Unit / Battery Replacement Generator	-	20,000	-	-	-	20,000
Replacement	Sump Pumps	-	15,000	-	-	-	15,000
Replacement	Centrifugal Blower Cartridge	-	15,000	-	-	-	15,000
Replacement	Sludge Flow Meter	-	15,000	-	-	-	15,000
Replacement	Bubbler System/ Flow Meter	-	12,000	-	-	-	12,000
Replacement	Flow Meter, Bubbler, Gas Detection	-	12,000	-	-	-	12,000
Replacement	Plow	-	8,000	-	-	-	8,000
Rehabilitation	Primary Digester	-	-	200,000	-	-	200,000
Replacement	Sodium Hypo Tank	-	-	120,000	-	-	120,000
Replacement	Bar Rack	-	-	85,000	-	-	85,000
Rehabilitation	Tank Screw Rebuild	-	-	60,000	-	-	60,000
Replacement	Screening and Conveyor System	-	-	50,000	-	-	50,000
Replacement	Grit Collector Tank	-	-	40,000	-	-	40,000
Replacement	Vehicle 390	-	-	40,000	-	-	40,000

Asset Type	Asset Title	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Total Cost
Replacement	Vehicle 479	-	-	40,000	-	-	40,000
Replacement	Grit and Screening Equipment	-	-	25,000	-	-	25,000
Replacement	Equipment 0061	-	-	25,000	-	-	25,000
Replacement	Equipment 0061	-	-	25,000	-	-	25,000
New	Scum Pump	-	-	20,000	-	-	20,000
Replacement	Equipment 406A	-	-	12,000	-	-	12,000
Replacement	Centrate Pump	-	-	10,000	-	-	10,000
Replacement	Equipment 0063	-	-	9,000	-	-	9,000
Replacement	Equipment 0064	-	-	9,000	-	-	9,000
Replacement	Equipment 0065	-	-	9,000	-	-	9,000
Replacement	Plow	-	-	8,000	-	-	8,000
Rehabilitation	Primary Digester	-	-	-	200,000	-	200,000
Replacement	Bar Rack	-	-	-	85,000	-	85,000
Replacement	Vehicle 356	-	-	-	40,000	-	40,000
Replacement	Hypo Pump	-	-	-	25,000	-	25,000
Replacement	Equipment 0066A	-	-	-	25,000	-	25,000
Replacement	Equipment 0067A	-	-	-	25,000	-	25,000
Replacement	EV368 Loader	-	-	-	14,000	-	14,000
Replacement	EV368 Mower	-	-	-	12,000	-	12,000
Replacement	EV368 Backhoe	-	-	-	10,000	-	10,000
Replacement	Copier	-	-	-	9,000	-	9,000
Replacement	UTV Probe	-	-	-	-	20,000	20,000
Replacement	Plow	-	-	-	-	8,000	8,000
	<i>Subtotal Bucklin Point</i>	<u>964,000</u>	<u>991,000</u>	<u>953,000</u>	<u>506,000</u>	<u>103,000</u>	<u>3,517,000</u>
ENVIRONMENTAL SCIENCE & COMPLIANCE							
Pretreatment							
Replacement	Vehicle 423	30,000	-	-	-	-	30,000
Replacement	Window Blinds	10,000	-	-	-	-	10,000
Replacement	Vehicle 386	-	-	30,000	-	-	30,000
Replacement	Vehicle 371	-	-	-	-	30,000	30,000
	<i>Subtotal Pretreatment</i>	<u>40,000</u>	<u>-</u>	<u>30,000</u>	<u>-</u>	<u>30,000</u>	<u>100,000</u>
Laboratory							
Replacement	BOD Skalar Analyzer	93,000	-	-	-	-	93,000
Replacement	Fresh Water Nutrient Analyzer	85,000	-	-	-	-	85,000
Replacement	TOC Analyzer	37,000	-	-	-	-	37,000
Replacement	Water Purification Systems	28,000	-	-	-	-	28,000
Replacement	Microscope Camera System	12,000	-	-	-	-	12,000
Replacement	Automated Titration System	-	96,000	-	-	-	96,000
Replacement	Microbiology Microscope	-	50,000	-	-	-	50,000
Replacement	Autoclave	-	49,000	-	-	-	49,000
Replacement	Analytical Balances	-	23,000	-	-	-	23,000
Replacement	ICP-Trace	-	-	85,000	-	-	85,000
Replacement	Water Purification Systems	-	-	50,000	-	-	50,000
Replacement	Autoclave	-	-	49,000	-	-	49,000
Replacement	Mercury Analyzer	-	-	45,000	-	-	45,000
Replacement	Microbiology Incubators	-	-	25,000	-	-	25,000
Replacement	ICP-MS	-	-	-	160,000	-	160,000
Replacement	Salt Water Nutrient Analyzer	-	-	-	85,000	-	85,000
Replacement	Water Purification Systems	-	-	-	50,000	-	50,000
Replacement	Cyanide Analyzer	-	-	-	-	85,000	85,000
Replacement	ICP-IND	-	-	-	-	80,000	80,000
Replacement	GC-MS	-	-	-	-	80,000	80,000
Replacement	Oil and Grease Analyzer	-	-	-	-	52,000	52,000
	<i>Subtotal Laboratory</i>	<u>255,000</u>	<u>218,000</u>	<u>254,000</u>	<u>295,000</u>	<u>297,000</u>	<u>1,319,000</u>
EMDA							
Replacement	Fixed Site Sondes	130,000	50,000	50,000	50,000	50,000	330,000
Replacement	Vehicle 432	34,000	-	-	-	-	34,000
Replacement	Fixed Site Probes & Meter	30,000	32,000	32,000	32,000	32,000	158,000
Replacement	Refrigerated Plant Samplers	26,000	27,000	27,000	28,000	28,000	136,000
Replacement	Vehicle 369	-	-	34,000	-	-	34,000
Replacement	Vehicle 365	-	-	-	34,000	-	34,000
Replacement	Vehicle 432	-	-	-	-	34,000	34,000
	<i>Subtotal EMDA</i>	<u>220,000</u>	<u>109,000</u>	<u>143,000</u>	<u>144,000</u>	<u>144,000</u>	<u>760,000</u>
	Total	<u>\$ 4,752,000</u>	<u>\$ 3,255,500</u>	<u>\$ 2,672,000</u>	<u>\$ 2,653,000</u>	<u>\$ 1,781,000</u>	<u>\$ 15,113,500</u>

FY 2019 Operating Capital

Budget						Approved
Account	Allocation	Asset Type	Asset Title	Asset Description	Budget	
EXECUTIVE AFFAIRS						
Legal						
16580	19-024-001	Betterment	Office Reconfiguration	New office space for 3rd floor	\$	50,000
					<i>Subtotal Legal</i>	50,000
Information Technology						
16584	19-033-001	New	Customer Service Application	Implementation of new 3rd party billing system application		500,000
16600	19-033-002	Replacement	Board Room Refresh	Audio & visual technologies in the Board room		150,000
16600	19-033-003	Replacement	Network Core Replacement	Network routing core for all of NBC's network traffic		150,000
16584	19-033-004	New	Microsoft Office Upgrade	Upgrade to latest version of Microsoft Office		125,000
16600	19-033-005	Replacement	SAN Switch Replacement	Storage Area Network switches		120,000
16600	19-033-006	Replacement	Disaster Recovery Servers and Infrastructure	Restores technology infrastructure and operations		75,000
16600	19-033-007	Replacement	Annual PC Refresh Program	Laptops, desktops and monitors		75,000
16584	19-033-008	New	Redundant Fiber Connection	Install redundant physical paths for the internet connection		55,000
16584	19-033-009	New	Microsoft Exchange Upgrade	Upgrade to the latest version of Exchange email		50,000
16584	19-033-010	New	Software Licensing Updates	Purchase new software for network applications		40,000
16584	19-033-011	New	Computer Room Enhancements	Computer room hardware		25,000
16584	19-033-012	New	Conference Room Upgrades	Upgrade audio & visual technology in the conference rooms		25,000
16584	19-033-013	New	Antivirus Updates	Antivirus software upgrades		10,000
					<i>Subtotal Information Technology</i>	1,400,000
					<i>Subtotal Executive Affairs</i>	1,450,000
CONSTRUCTION & ENGINEERING						
Construction Services						
16600	19-022-001	Replacement	Vehicle 427	2007 Ford Escape used to conduct NBC business		30,000
					<i>Subtotal Construction Services</i>	30,000
					<i>Subtotal Construction & Engineering</i>	30,000
ADMINISTRATION & FINANCE						
Finance						
16620	19-031-001	New	WW System Cost Allocation & Recovery Study	Develop rate structure of sewer user charges		250,000
16584	19-031-002	New	Debt Management Application	Treasury management software		110,000
16580	19-031-003	Betterment	Office Reconfiguration	Reconfigure and update the office space on the 2nd floor		100,000
16584	19-031-004	New	Cash Management Application	Cash management software		40,000
					<i>Subtotal Finance</i>	500,000
Accounting						
16580	19-032-001	Betterment	Office Reconfiguration	Reconfigure and update the Accounting Dept. on the 2nd floor		75,000
					<i>Subtotal Accounting</i>	75,000
Customer Service						
16600	19-034-001	Replacement	Vehicle 385	2009 Ford Ranger used to conduct NBC business		25,000
16580	19-034-002	New	Office Reconfiguration	Additional office equipment for new Customer Service system		6,000
					<i>Subtotal Customer Service</i>	31,000
General Administration						
16580	19-080-001	Betterment	Office Reconfiguration	Remodel office areas		100,000
16600	19-080-002	Replacement	HVAC Components	Heating, ventilation and air conditioning roof components		50,000
					<i>Subtotal General Administration</i>	150,000
					<i>Subtotal Administration & Finance</i>	756,000
OPERATIONS AND MAINTENANCE						
Interceptor Maintenance						
16600	19-043-001	Replacement	Equipment 007	Skid Steer Loader		37,000
16600	19-043-002	Replacement	Pole Camera	High resolution camera		17,000
					<i>Subtotal Interceptor Maintenance</i>	54,000
Operations & Maintenance Services						
16584	19-044-001	New	Computer System Upgrade	Upgrade to the Scada Computer System		84,000
16600	19-044-002	Replacement	Vehicle 442	2006 F150 pickup used to conduct NBC business		35,000
16600	19-044-003	Replacement	Flow Meter	Flow measurement equipment		25,000
16584	19-044-004	New	Software Licensing Updates	Upgrade Scada system		16,000
					<i>Subtotal Operations & Maintenance Services</i>	160,000

Budget						Approved
Account	Allocation	Asset Type	Asset Title	Asset Description		Budget
Field's Point						
16600	19-046-001	Replacement	Bar Rack	Rebuild influent screening bar rack		147,000
16600	19-046-002	Replacement	Grinders	Grinders that macerate larger items in sewer influent		100,000
16600	19-046-003	Replacement	Equipment 009	Yard sweeper		85,000
16600	19-046-004	Replacement	Grit Tank Components	Grit tank components which remove inorganic material		70,000
16600	19-046-005	Replacement	Vehicle 447	2006 pickup used to conduct NBC business		45,000
16600	19-046-006	Replacement	Flow Meter	Flow meter equipment		45,000
16600	19-046-007	Replacement	Vehicle 487	2004 E250 van used to conduct NBC business		40,000
16600	19-046-008	Replacement	Hydraulic Controls	Influent and effluent gate controls		40,000
16600	19-046-009	Replacement	RAS & Dewatering Pump	Final clarifier pump #4		35,000
16520	19-046-010	New	Antennas & Repeaters	Antennas and repeaters for site communications		30,000
16600	19-046-011	Replacement	Metering Pump	Sodium bisulfite metering pump #2		27,000
16600	19-046-012	Replacement	Hypo Pump and Motor	Hypochlorite pump and motor		25,000
16600	19-046-013	Replacement	Equipment 026	EZ Go Utility Terrain Vehicle		22,000
16600	19-046-014	Replacement	Equipment 028	EZ Go Utility Terrain Vehicle		22,000
16600	19-046-015	Replacement	Screw Pump Motor	Blower building screw lift pump motor #1		20,000
16520	19-046-016	New	Nitrate Analyzer	Analyze levels of nitrates in sewage		17,000
16520	19-046-017	New	Grit Aeration Blower	Aeration grit blower		15,000
16520	19-046-018	New	Underflow Valve Actuator	Valve actuator on final tank #4		15,000
16600	19-046-019	Replacement	Automatic Self Cleaning Strainer	Self cleaning strainer		13,000
16600	19-046-020	Replacement	Compressor	Compressor at Tunnel Pump Station		10,000
<i>Subtotal Field's Point</i>						823,000
Bucklin Point						
16520	19-047-001	New	DO Sensors and Probes	Monitoring sensors and probes		90,000
16600	19-047-002	Replacement	Conveyor	Grit and screenings transport conveyor		75,000
16600	19-047-003	Replacement	Effluent Pumps	Pumps 1 & 2 at the Dry Weather Effluent Pump Station		60,000
16600	19-047-004	Replacement	Screw Pump Motor & Upper Bearing	Screw pump #4 motor and upper bearing assemblies		60,000
16600	19-047-005	Replacement	Flow Serve Pump	Vertical dry pit pedestal chopper pump at Omega Pump Station		60,000
16600	19-047-006	Replacement	Vehicle 418	2006 Chevrolet box van used to conduct NBC business		45,000
16600	19-047-007	Replacement	Vehicle 424	2005 Chevrolet Equinox used to conduct NBC business		45,000
16600	19-047-008	Replacement	Grit Pump	Grit pumps 2 & 4 at Screening and Grit Building		44,000
16520	19-047-009	New	Thickener Wasting Pump	Sludge thickener wasting pump		40,000
16600	19-047-010	Replacement	Air Handling Unit	Saylesville Pump Station exhaust fan		40,000
16600	19-047-011	Replacement	Vehicle 378	2010 Ford F250 Pickup used to conduct NBC business		40,000
16600	19-047-012	Replacement	Dewatering Building Roof	Roof on dewatering building		40,000
16600	19-047-013	Replacement	Primary Sludge Pump	Sludge pump #3 at Dry Weather Primary Sludge Pump Station		35,000
16600	19-047-014	Replacement	Primary Scum Pump	Scum pump #2 at Dry Weather Primary Sludge Pump Station		35,000
16520	19-047-015	New	Transfer Pump	Transfer pump used in solids handling		30,000
16600	19-047-016	Replacement	Dewatering Pump	De-water pump #3 at Wet Weather De-Watering Pump Station		25,000
16600	19-047-017	Replacement	Equipment 0027	EZ Go Utility Terrain Vehicle		22,000
16600	19-047-018	Replacement	Equipment 0046	EZ Go Utility Terrain Vehicle		22,000
16600	19-047-019	Replacement	Equipment 0047	EZ Go Utility Terrain Vehicle		22,000
16520	19-047-020	New	EIM Actuators & Gear Operators	Blower building EIM actuators and gear operators		20,000
16520	19-047-021	New	Hoist Retrieval System	Confined space hoist retrieval system		15,000
16600	19-047-022	Replacement	Hoist	2 ton heavy equipment hoist		15,000
16600	19-047-023	Replacement	Diesel Mower	Mower used for grounds keeping		12,000
16600	19-047-024	Replacement	60" Mower	Husqvarna mower used for grounds keeping		10,000
16600	19-047-025	Replacement	Hot Water Recycling Pump	Heat Exchange Building hot water recycling pump 1		10,000
16600	19-047-026	Replacement	Hot Water Recycling Pump	Heat Exchange Building hot water recycling pump 6		10,000
16600	19-047-027	Replacement	Equipment 0100A	Truck mounted salt/sander		10,000
16520	19-047-028	New	Leaf Vac Trailer w/ Cyclone	Grounds keeping leaf vacuum system		8,000
16520	19-047-029	New	Tripod Confined Space	Confined space tripod unit		8,000
16600	19-047-030	Replacement	Equipment 0101A	Truck mounted salt/sander		8,000
16600	19-047-031	Replacement	Equipment Vehicle 382	Plow assembly		8,000
<i>Subtotal Bucklin Point</i>						964,000
<i>Subtotal Operations & Maintenance</i>						2,001,000

Budget						Approved	
Account	Allocation	Asset Type	Asset Title	Asset Description	Budget		
ENVIRONMENTAL SCIENCE & COMPLIANCE							
Pretreatment							
16600	19-052-001	Replacement	Vehicle 423	2007 Ford Escape used to conduct NBC business		30,000	
16600	19-052-002	Replacement	Window Blinds	Pretreatment Building window blinds		<u>10,000</u>	
						<i>Subtotal Laboratory</i>	40,000
Laboratory							
16600	19-053-001	Replacement	BOD Skalar Analyzer	Biochemical oxygen demand analyzer system		93,000	
16600	19-053-002	Replacement	Fresh Water Nutrient Analyzer	Nitrogen testing analyzer		85,000	
16600	19-053-003	Replacement	TOC Analyzer	Total organic carbon testing analyzer		37,000	
16600	19-053-004	Replacement	Water Purification Systems	Water purification systems		28,000	
16600	19-053-005	Replacement	Microscope Camera System	Wastewater and sea water analysis camera system		<u>12,000</u>	
						<i>Subtotal Laboratory</i>	255,000
EMDA							
16600	19-055-001	Replacement	Fixed Site Sondes	Buoy stations sondes and equipment		130,000	
16600	19-055-002	Replacement	Vehicle 432	2008 Ford E-150 van used to conduct NBC business		34,000	
16600	19-055-003	Replacement	Fixed Site Probes & Meter	Nutrient sampling probes, meters and associated equipment		30,000	
16600	19-055-004	Replacement	Refrigerated Autosamplers	Refrigerated autosamplers		<u>26,000</u>	
						<i>Subtotal EMDA</i>	220,000
						<i>Subtotal Environmental Science & Compliance</i>	515,000
						Total Operating Capital FY 2018	<u>\$ 4,752,000</u>

Asset Allocation No. **19-024-001**

Asset Title	Office Reconfiguration	Cost Center:	Legal
Asset Location	COB	Amount:	\$ 50,000

Need identified: Asset Management Inspection Other _____

Reconfigure and update office space in the legal department on the 3rd floor to allow for additional staff and make it more conducive to the work conducted.

Budget Account 16580 Office Furniture & Equipment

Type: **BETTERMENT**

Original date in service: 2001 Original estimated useful life: 20 Years Useful life: 20 Years

Asset Allocation No. **19-033-001**

Asset Title	Customer Service Application	Cost Center:	Information Technology
Asset Location	COB	Amount:	\$ 500,000

Need identified: Asset Management Inspection Other Need Based

Implement a new 3rd party billing system application.

Budget Account 16584 Computer Equipment

Type: **NEW**

Original date in service: N/A Original estimated useful life: N/A Useful life: 10 Years

Asset Allocation No. **19-033-002**

Asset Title	Board Room Refresh	Cost Center:	Information Technology
Asset Location	COB	Amount:	\$ 150,000

Need identified: Asset Management Inspection Other Need Based

Refresh audio & visual technologies in the Board room.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2006 Original estimated useful life: 10 Years Useful life: 10 Years

Asset Allocation No. **19-033-003**

Asset Title	Network Core Replacement	Cost Center:	Information Technology
Asset Location	COB	Amount:	\$ 150,000

Need identified: Asset Management Inspection Other _____

Replace current network routing cores, used to do the core routing of network traffic, that are beyond their lifecycle.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2009 Original estimated useful life: 10 Years Useful life: 10 Years

Asset Allocation No. **19-033-004**

Asset Title **Microsoft Office Upgrade**

Cost Center: Information Technology

Asset Location COB

Amount: \$ 125,000

Need identified: Asset Management Inspection Other Need Based

Upgrade to latest version of Microsoft Office application.

Budget Account 16584 Computer Equipment

Type: **NEW**

Original date in service: N/A Original estimated useful life: N/A Useful life: 5 Years

Asset Allocation No. **19-033-005**

Asset Title **SAN Switch Replacement**

Cost Center: Information Technology

Asset Location COB

Amount: \$ 120,000

Need identified: Asset Management Inspection Other _____

Replace end of life Storage Area Network switches.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2012 Original estimated useful life: 5 Years Useful life: 5 Years

Asset Allocation No. **19-033-006**

Asset Title	Disaster Recovery Site Servers and Infrastructure	Cost Center:	Information Technology
Asset Location	COB	Amount:	\$ 75,000

Need identified: Asset Management Inspection Other Need Based

Disaster recovery infrastructure replacement which is past it's lifecycle. This will ensure the site is able to handle the network load should a disaster or service interruption occur.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2013 Original estimated useful life: 5 Years Useful life: 5 Years

Asset Allocation No. **19-033-007**

Asset Title	Annual PC Refresh Program	Cost Center:	Information Technology
Asset Location	Various	Amount:	\$ 75,000

Need identified: Asset Management Inspection Other _____

Replace various laptops, desktops and monitors beyond the 5 year lifecycle.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2014 Original estimated useful life: 5 Years Useful life: 5 Years

Asset Allocation No. **19-033-008**

Asset Title	Redundant Fiber Connection	Cost Center:	Information Technology
Asset Location	COB	Amount:	\$ 55,000

Need identified: Asset Management Inspection Other Need Based

Install redundant physical paths for the internet connection to ensure no single point of failure to internet connections between facilities.

Budget Account 16584 Computer Equipment

Type: **NEW**

Original date in service: N/A Original estimated useful life: N/A Useful life: 10 Years

Asset Allocation No. **19-033-009**

Asset Title	Microsoft Exchange Upgrade	Cost Center:	Information Technology
Asset Location	COB	Amount:	\$ 50,000

Need identified: Asset Management Inspection Other Need Based

Upgrade to the latest version of Exchange email to keep current with latest software versions.

Budget Account 16584 Computer Equipment

Type: **NEW**

Original date in service: N/A Original estimated useful life: N/A Useful life: 5 Years

Asset Allocation No. **19-033-010**

Asset Title **Software Licensing Updates**

Cost Center: Information Technology

Asset Location COB

Amount: \$ 40,000

Need identified: Asset Management Inspection Other Need Based

Purchase new software for various network applications.

Budget Account 16584 Computer Equipment

Type: NEW

Original date in service: N/A Original estimated useful life: N/A Useful life: 5 Years

Asset Allocation No. **19-033-011**

Asset Title **Computer Room Enhancements**

Cost Center: Information Technology

Asset Location COB

Amount: \$ 25,000

Need identified: Asset Management Inspection Other Need Based

Computer room hardware to ensure efficient operations.

Budget Account 16584 Computer Equipment

Type: NEW

Original date in service: N/A Original estimated useful life: N/A Useful life: 5 Years

Asset Allocation No. **19-033-012**

Asset Title	Conference Room Upgrades	Cost Center:	Information Technology
Asset Location	COB	Amount:	\$ 25,000

Need identified: Asset Management Inspection Other Need Based

Upgrade conference rooms audio & visual technology.

Budget Account 16584 Computer Equipment

Type: **NEW**

Original date in service: N/A Original estimated useful life: N/A Useful life: 5 Years

Asset Allocation No. **19-033-013**

Asset Title	Antivirus Updates	Cost Center:	Information Technology
Asset Location	COB	Amount:	\$ 10,000

Need identified: Asset Management Inspection Other Need Based

Antivirus software upgrades to correlate with implementation of new technologies.

Budget Account 16584 Computer Equipment

Type: **NEW**

Original date in service: N/A Original estimated useful life: N/A Useful life: 5 Years

Asset Allocation No. **19-022-001**

Asset Title	Vehicle 427	Cost Center:	Construction Services
Asset Location	Bucklin Point	Amount:	\$ 30,000

Need identified: Asset Management Inspection Other

Replace 2007 Ford Escape used to conduct NBC business.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2007 Original estimated useful life: 10 Years Useful life: 10 Years

Asset Allocation No. **19-031-001**

Asset Title	WW System Cost Allocation & Recovery Study	Cost Center:	Finance
Asset Location	COB	Amount:	\$ 250,000

Need identified: Asset Management Inspection Other Need Based

Develop a rate structure to recover operating and capital costs through a system of sewer user charges.

Budget Account 16620 Special Studies

Type: **NEW**

Original date in service: N/A Original estimated useful life: N/A Useful life: 5 Years

Asset Allocation No. **19-031-002**

Asset Title	Debt Management Application	Cost Center:	Finance
Asset Location	COB	Amount:	\$ 110,000

Need identified: Asset Management Inspection Other Need Based

Implement a debt management software application to assist with debt management.

Budget Account 16584 Computer Equipment

Type: **NEW**

Original date in service: N/A Original estimated useful life: N/A Useful life: 3 Years

Asset Allocation No. **19-031-003**

Asset Title	Office Reconfiguration	Cost Center:	Accounting
Asset Location	COB	Amount:	\$ 100,000

Need identified: Asset Management Inspection Other _____

Reconfigure and update the Finance/Accounting department on the 2nd floor to make it more conducive to the work conducted.

Budget Account 16580 Office Furniture & Equipment

Type: **BETTERMENT**

Original date in service: 2002 Original estimated useful life: 15 Years Useful life: 15 Years

Asset Allocation No. **19-031-004**

Asset Title	Cash Management Application	Cost Center:	Finance
Asset Location	COB	Amount:	\$ 40,000

Need identified: Asset Management Inspection Other Need Based

Implement a cash management software application for daily cash management.

Budget Account 16584 Computer Equipment

Type: **NEW**

Original date in service: N/A Original estimated useful life: N/A Useful life: 3 Years

Asset Allocation No. **19-032-001**

Asset Title	Office Reconfiguration	Cost Center:	Accounting
Asset Location	COB	Amount:	\$ 75,000

Need identified: Asset Management Inspection Other _____

Reconfigure and update the Accounting department on the 2nd floor to make it more conducive to the work conducted.

Budget Account 16580 Office Furniture & Equipment

Type: **BETTERMENT**

Original date in service: 2001 Original estimated useful life: 15 Years Useful life: 15 Years

Asset Allocation No. **19-034-001**

Asset Title	Vehicle 385	Cost Center:	Customer Service
Asset Location	COB	Amount:	\$ 25,000

Need identified: Asset Management Inspection Other

Replace 2009 Ford Ranger used to conduct NBC business.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2009 Original estimated useful life: 9 Years Useful life: 9 Years

Asset Allocation No. **19-034-002**

Asset Title	Office Reconfiguration	Cost Center:	Customer Service
Asset Location	COB	Amount:	\$ 6,000

Need identified: Asset Management Inspection Other As Needed with New CS System

Update the Customer Service department on the 1st floor to make it conducive to the work conducted with the new billing system application.

Budget Account 16580 Office Furniture & Equipment

Type: **NEW**

Original date in service: N/A Original estimated useful life: N/A Useful life: 5 Years

Asset Allocation No. **19-080-001**

Asset Title	Office Reconfiguration	Cost Center:	General Administration
Asset Location	COB	Amount:	\$ 100,000

Need identified: Asset Management Inspection Other

Remodel COB office areas to make it more conducive to the work conducted.

Budget Account 16580 Office Furniture & Equipment

Type: **BETTERMENT**

Original date in service: 2001 Original estimated useful life: 15 Years Useful life: 15 Years

Asset Allocation No. **19-080-002**

Asset Title	HVAC Components	Cost Center:	General Administration
Asset Location	COB	Amount:	\$ 50,000

Need identified: Asset Management Inspection Other

Replace heating, ventilation, and air conditioning roof components.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2013 Original estimated useful life: 5 Years Useful life: 5 Years

Asset Allocation No.	19-043-001		
Asset Title	Equipment 007	Cost Center:	Interceptor Maintenance
Asset Location	IM Building	Amount:	\$ 37,000

Need identified: Asset Management Inspection Other

Replace skid steer loader used to clean Screening facilities and aid in small construction projects.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2006 Original estimated useful life: 10 Years Useful life: 10 Years

Asset Allocation No.	19-043-002		
Asset Title	Pole Camera	Cost Center:	Interceptor Maintenance
Asset Location	IM Building	Amount:	\$ 17,000

Need identified: Asset Management Inspection Other

Replace compact high resolution camera and assembly used to inspect manholes and buried pipes.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2008 Original estimated useful life: 8 Years Useful life: 8 Years

Asset Allocation No. **19-044-001**
 Asset Title **Computer System Upgrade** Cost Center: Operations & Maintenance Services
 Asset Location Field's Point Amount: \$ 84,000

Need identified: Asset Management Inspection Other

Upgrades to the Scada Computer System

Budget Account 16584 Computer Equipment

Type: NEW

Original date in service: N/A Original estimated useful life: N/A Useful life: 10 Years

Asset Allocation No. **19-044-002**
 Asset Title **Vehicle 442** Cost Center: Operations & Maintenance Services
 Asset Location Field's Point Amount: \$ 35,000

Need identified: Asset Management Inspection Other

Replace 2006 F150 Plant Controls Systems pickup used to conduct NBC business.

Budget Account 16600 Replacement Reserve

Type: REPLACEMENT

Original date in service: 2006 Original estimated useful life: 10 Years Useful life: 10 Years

Asset Allocation No. **19-044-003**
 Asset Title **Flow Meter** Cost Center: Operations & Maintenance Services
 Asset Location Rathbone Street, Providence Amount: \$ 25,000

Need identified: Asset Management Inspection Other

Replace flow measurement equipment with newer/safer technology.

Budget Account 16600 Replacement Reserve

Type: REPLACEMENT

Original date in service: 2015 Original estimated useful life: 5 Years Useful life: 10 Years

Asset Allocation No. **19-044-004**
 Asset Title **Software Licensing Updates** Cost Center: Operations & Maintenance Services
 Asset Location Field's Point & Bucklin Point Amount: \$ 16,000

Need identified: Asset Management Inspection Other

Upgrade Supervisory Control and Data Acquisition (Scada) system software.

Budget Account 16584 Computer Equipment

Type: NEW

Original date in service: N/A Original estimated useful life: N/A Useful life: 5 Years

Asset Allocation No. **19-046-001**

Asset Title	Bar Rack	Cost Center:	Field's Point
Asset Location	Ernest Street Pump Station	Amount:	\$ 147,000

Need identified: Asset Management Inspection Other

Replace components and extend the life of influent screening Bar Rack.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 1989 Original estimated useful life: 4 Years Useful life: 4 Years

Asset Allocation No. **19-046-002**

Asset Title	Grinders	Cost Center:	Field's Point
Asset Location	Field's Point	Amount:	\$ 100,000

Need identified: Asset Management Inspection Other

Replace grinders that macerate large debris in sewer influent.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2004 Original estimated useful life: 15 Years Useful life: 15 Years

Asset Allocation No. **19-046-003**

Asset Title	Equipment 009	Cost Center:	Field's Point
Asset Location	Field's Point	Amount:	\$ 85,000

Need identified: Asset Management Inspection Other

Replace yard sweeper used to clean plant grounds.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2003 Original estimated useful life: 10 Years Useful life: 10 Years

Asset Allocation No. **19-046-004**

Asset Title	Grit Tank Components	Cost Center:	Field's Point
Asset Location	Field's Point	Amount:	\$ 70,000

Need identified: Asset Management Inspection Other

Replace grit tank components which remove inorganic material and prevent pump wear and tear.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2003 Original estimated useful life: 10 Years Useful life: 4 Years

Asset Allocation No. **19-046-005**

Asset Title	Vehicle 447	Cost Center:	Field's Point
Asset Location	Field's Point	Amount:	\$ 45,000

Need identified: Asset Management Inspection Other

Replace 2006 pickup used to conduct NBC business.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2006 Original estimated useful life: 10 Years Useful life: 10 Years

Asset Allocation No. **19-046-006**

Asset Title	Flow Meters	Cost Center:	Field's Point
Asset Location	Field's Point	Amount:	\$ 45,000

Need identified: Asset Management Inspection Other

Replace 3-Dual Channel flow meters with new technology.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 1997 Original estimated useful life: 15 Years Useful life: 10 Years

Asset Allocation No. **19-046-007**

Asset Title	Vehicle 487	Cost Center:	Field's Point
Asset Location	Field's Point	Amount:	\$ 40,000

Need identified: Asset Management Inspection Other

Replace 2004 E250 van used to conduct NBC business.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2004 Original estimated useful life: 10 Years Useful life: 10 Years

Asset Allocation No. **19-046-008**

Asset Title	Hydraulic Controls	Cost Center:	Field's Point
Asset Location	Ernest Street Pump Station	Amount:	\$ 40,000

Need identified: Asset Management Inspection Other

Replace hydraulic influent and effluent gate controls at Ernest Street Pump Station.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 1989 Original estimated useful life: 20 Years Useful life: 20 Years

Asset Allocation No. **19-046-009**

Asset Title	RAS & Dewatering Pump	Cost Center:	Field's Point
Asset Location	Field's Point	Amount:	\$ 35,000

Need identified: Asset Management Inspection Other

Replace return activated sludge and dewatering final clarifiers pump # 4 used in secondary treatment at the sludge pump station.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 1987 Original estimated useful life: 15 Years Useful life: 15 Years

Asset Allocation No. **19-046-010**

Asset Title	Antennas & Repeaters	Cost Center:	Field's Point
Asset Location	Field's Point	Amount:	\$ 30,000

Need identified: Asset Management Inspection Other Need Based

Install new antennas and repeaters to allow for better site communications and increase safety at the campus.

Budget Account 16520 Building & Plant Equipment

Type: **NEW**

Original date in service: N/A Original estimated useful life: N/A Useful life: 10 Years

Asset Allocation No. **19-046-011**

Asset Title	Metering Pump	Cost Center:	Field's Point
Asset Location	Field's Point	Amount:	\$ 27,000

Need identified: Asset Management Inspection Other

Replace metering pump #2 that pumps sodium bisulfite into the contact tank to de-chlorinate effluent.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 1999 Original estimated useful life: 15 Years Useful life: 15 Years

Asset Allocation No. **19-046-012**

Asset Title	Hypo Pump and Motor	Cost Center:	Field's Point
Asset Location	Field's Point	Amount:	\$ 25,000

Need identified: Asset Management Inspection Other

Replace Hypo pump # 1 and motor that pumps sodium hypochlorite into contact tank to treat effluent.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 1998 Original estimated useful life: 15 Years Useful life: 15 Years

Asset Allocation No. **19-046-013**

Asset Title	Equipment 026	Cost Center:	Field's Point
Asset Location	Field's Point	Amount:	\$ 22,000

Need identified: Asset Management Inspection Other

Replace EZ Go utility terrain vehicle used to conduct NBC business.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2009 Original estimated useful life: 7 Years Useful life: 10 Years

Asset Allocation No. **19-046-014**

Asset Title	Equipment 028	Cost Center:	Field's Point
Asset Location	Field's Point	Amount:	\$ 22,000

Need identified: Asset Management Inspection Other

Replace EZ Go utility terrain vehicle used to conduct NBC business.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2009 Original estimated useful life: 7 Years Useful life: 10 Years

Asset Allocation No. **19-046-015**

Asset Title	Screw Pump Motor	Cost Center:	Field's Point
Asset Location	Field's Point	Amount:	\$ 20,000

Need identified: Asset Management Inspection Other

Replace screw lift pump #1 motor that has bad bearings and shaft located in the blower building.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2010 Original estimated useful life: 15 Years Useful life: 15 Years

Asset Allocation No. **19-046-016**

Asset Title	Nitrate Analyzer	Cost Center:	Field's Point
Asset Location	Field's Point	Amount:	\$ 17,000

Need identified: Asset Management Inspection Other Permit Requirement

Purchase nitrate analyzer for use at tunnel pump station to report levels of nitrates in sewage as required by RIPDES permits.

Budget Account 16520 Building & Plant Equipment

Type: **NEW**

Original date in service: N/A Original estimated useful life: N/A Useful life: 10 Years

Asset Allocation No. **19-046-017**

Asset Title	Grit Aeration Blower	Cost Center:	Field's Point
Asset Location	Field's Point	Amount:	\$ 15,000

Need identified: Asset Management Inspection Other

Purchase grit aeration blower to assist in the settling of the grit in the tanks in the Grit Building.

Budget Account 16520 Building & Plant Equipment

Type: NEW

Original date in service: N/A Original estimated useful life: N/A Useful life: 15 Years

Asset Allocation No. **19-046-018**

Asset Title	Underflow Valve Actuator	Cost Center:	Field's Point
Asset Location	Field's Point	Amount:	\$ 15,000

Need identified: Asset Management Inspection Other

Purchase underflow valve actuator required to control flow to final tank 4 at the return sludge pump station 2.

Budget Account 16520 Building & Plant Equipment

Type: NEW

Original date in service: N/A Original estimated useful life: N/A Useful life: 10 Years

Asset Allocation No. **19-046-019**

Asset Title	Automatic Self Cleaning Strainer	Cost Center:	Field's Point
Asset Location	Field's Point	Amount:	\$ 13,000

Need identified: Asset Management Inspection Other _____

Replace screen cleaning strainer with automatic self cleaning strainer to improve efficiency and require less maintenance in the Screen & Caustic building.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2011 Original estimated useful life: 10 Years Useful life: 15 Years

Asset Allocation No. **19-046-020**

Asset Title	Compressor	Cost Center:	Field's Point
Asset Location	Field's Point	Amount:	\$ 10,000

Need identified: Asset Management Inspection Other _____

Replace the compressor used to open and close valves at the tunnel pump station.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2007 Original estimated useful life: 10 Years Useful life: 10 Years

Asset Allocation No. **19-047-001**

Asset Title	DO Sensors and Probes	Cost Center:	Bucklin Point
Asset Location	Bucklin Point	Amount:	\$ 90,000

Need identified: Asset Management Inspection Other Need Based

Purchase sensors and probes required for monitoring wastewater as required by RIPDES permit.

Budget Account 16520 Building & Plant Equipment

Type: **NEW**

Original date in service: N/A Original estimated useful life: N/A Useful life: 8 Years

Asset Allocation No. **19-047-002**

Asset Title	Conveyor	Cost Center:	Bucklin Point
Asset Location	Bucklin Point	Amount:	\$ 75,000

Need identified: Asset Management Inspection Other _____

Replace grit cross conveyor that transport the grit and screenings as part of the preliminary treatment process in the Screening and Grit building.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2004 Original estimated useful life: 15 Years Useful life: 15 Years

Asset Allocation No. **19-047-003**

Asset Title	Effluent Pumps	Cost Center:	Bucklin Point
Asset Location	Bucklin Point	Amount:	\$ 60,000

Need identified: Asset Management Inspection Other _____

Replace effluent pumps 1 & 2 that transport effluent through the disinfection process at the Dry Weather Effluent Pump Station.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2003 Original estimated useful life: 15 Years Useful life: 15 Years

Asset Allocation No. **19-047-004**

Asset Title	Screw Pump Motor & Upper Bearing	Cost Center:	Bucklin Point
Asset Location	Influent Pump Station	Amount:	\$ 60,000

Need identified: Asset Management Inspection Other _____

Replace screw pump motor and upper bearing assemblies that operate screw pump # 4 at the Influent Pump Station.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2004 Original estimated useful life: 15 Years Useful life: 15 Years

Asset Allocation No. **19-047-005**

Asset Title	Flow Serve Pump	Cost Center:	Bucklin Point
Asset Location	Bucklin Point	Amount:	\$ 60,000

Need identified: Asset Management Inspection Other

Replace vertical dry pit pedestal chopper pump used to pump sewage at the Omega pump station.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2004 Original estimated useful life: 15 Years Useful life: 15 Years

Asset Allocation No. **19-047-006**

Asset Title	Vehicle 418	Cost Center:	Bucklin Point
Asset Location	Bucklin Point	Amount:	\$ 45,000

Need identified: Asset Management Inspection Other

Replace 2006 Chevrolet box van used to conduct NBC business.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2007 Original estimated useful life: 10 Years Useful life: 10 Years

Asset Allocation No. **19-047-007**

Asset Title	Vehicle 424	Cost Center:	Bucklin Point
Asset Location	Bucklin Point	Amount:	\$ 45,000

Need identified: Asset Management Inspection Other

Replace 2005 Chevrolet Equinox used to conduct NBC business.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2005 Original estimated useful life: 10 Years Useful life: 10 Years

Asset Allocation No. **19-047-008**

Asset Title	Grit Pump	Cost Center:	Bucklin Point
Asset Location	Bucklin Point	Amount:	\$ 44,000

Need identified: Asset Management Inspection Other

Replace grit pumps 2 & 4 that remove grit in the influent wastewater at the Screening and Grit building.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2005 Original estimated useful life: 15 Years Useful life: 15 Years

Asset Allocation No. **19-047-009**

Asset Title	Thickener Wasting Pump	Cost Center:	Bucklin Point
Asset Location	Bucklin Point	Amount:	\$ 40,000

Need identified: Asset Management Inspection Other

Purchase thickener wasting pump required to thicken sludge prior to transfer to digester pump.

Budget Account 16520 Building & Plant Equipment

Type: **NEW**

Original date in service: N/A Original estimated useful life: N/A Useful life: 15 Years

Asset Allocation No. **19-047-010**

Asset Title	Air Handling Unit	Cost Center:	Bucklin Point
Asset Location	Bucklin Point	Amount:	\$ 40,000

Need identified: Asset Management Inspection Other

Replace Saylesville pump station air handling unit exhaust fan.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 1995 Original estimated useful life: 20 Years Useful life: 20 Years

Asset Allocation No. **19-047-011**

Asset Title	Vehicle 378	Cost Center:	Bucklin Point
Asset Location	Bucklin Point	Amount:	\$ 40,000

Need identified: Asset Management Inspection Other

Replace 2010 Ford F250 Pickup used to conduct NBC business.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2009 Original estimated useful life: 10 Years Useful life: 10 Years

Asset Allocation No. **19-047-012**

Asset Title	Dewatering Building Roof	Cost Center:	Bucklin Point
Asset Location	Bucklin Point	Amount:	\$ 40,000

Need identified: Asset Management Inspection Other

Replace roof at dewatering building to prevent damage to electrical equipment.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 1950 Original estimated useful life: 20 Years Useful life: 20 Years

Asset Allocation No. **19-047-013**

Asset Title	Primary Sludge Pump	Cost Center:	Bucklin Point
Asset Location	Bucklin Point	Amount:	\$ 35,000

Need identified: Asset Management Inspection Other

Replace primary sludge pump 3 that moves sludge to digesters at the Dry Weather Primary Sludge Pump Station.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2004 Original estimated useful life: 15 Years Useful life: 15 Years

Asset Allocation No. **19-047-014**

Asset Title	Primary Scum Pump	Cost Center:	Bucklin Point
Asset Location	Bucklin Point	Amount:	\$ 35,000

Need identified: Asset Management Inspection Other

Replace primary scum pump 2 that moves scum to digesters at Dry Weather Primary Sludge Pump Station.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2005 Original estimated useful life: 15 Years Useful life: 15 Years

Asset Allocation No. **19-047-015**

Asset Title	Transfer Pump	Cost Center:	Bucklin Point
Asset Location	Bucklin Point	Amount:	\$ 30,000

Need identified: Asset Management Inspection Other

Purchase transfer pump used in treatment of solids handling at the Sidestream Building.

Budget Account 16520 Building & Plant Equipment

Type: **NEW**

Original date in service: N/A Original estimated useful life: N/A Useful life: 15 Years

Asset Allocation No. **19-047-016**

Asset Title	Dewatering Pump	Cost Center:	Bucklin Point
Asset Location	Bucklin Point	Amount:	\$ 25,000

Need identified: Asset Management Inspection Other

Replace dewatering pump 3 used to remove liquids from wet weather tanks at the Wet Weather De-Watering Pump Station.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2003 Original estimated useful life: 15 Years Useful life: 15 Years

Asset Allocation No. **19-047-017**

Asset Title	Equipment 0027	Cost Center:	Bucklin Point
Asset Location	Bucklin Point	Amount:	\$ 22,000

Need identified: Asset Management Inspection Other

Replace EZ Go with sturdier utility terrain vehicle.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2009 Original estimated useful life: 8 Years Useful life: 10 Years

Asset Allocation No. **19-047-018**

Asset Title	Equipment 0046	Cost Center:	Bucklin Point
Asset Location	Bucklin Point	Amount:	\$ 22,000

Need identified: Asset Management Inspection Other

Replace EZ Go unit with sturdier utility terrain vehicle.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2010 Original estimated useful life: 8 Years Useful life: 10 Years

Asset Allocation No. **19-047-019**

Asset Title	Equipment 0047	Cost Center:	Bucklin Point
Asset Location	Bucklin Point	Amount:	\$ 22,000

Need identified: Asset Management Inspection Other

Replace EZ Go unit with sturdier utility terrain vehicle.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2010 Original estimated useful life: 8 Years Useful life: 10 Years

Asset Allocation No. **19-047-020**

Asset Title	EIM Actuators & Gear Operators	Cost Center:	Bucklin Point
Asset Location	Bucklin Point	Amount:	\$ 20,000

Need identified: Asset Management Inspection Other

Purchase EIM actuators and gear operators used to control valves in the blower building.

Budget Account 16520 Building & Plant Equipment

Type: **NEW**

Original date in service: N/A Original estimated useful life: N/A Useful life: 10 Years

Asset Allocation No. **19-047-021**

Asset Title	Hoist Retrieval System	Cost Center:	Bucklin Point
Asset Location	Bucklin Point	Amount:	\$ 15,000

Need identified: Asset Management Inspection Other _____

Purchase confined space hoist retrieval system designed for manhole and confined space entry/retrieval and fall arrest applications.

Budget Account 16520 Building & Plant Equipment

Type: **NEW**

Original date in service: N/A Original estimated useful life: N/A Useful life: 10 Years

Asset Allocation No. **19-047-022**

Asset Title	Hoist	Cost Center:	Bucklin Point
Asset Location	Bucklin Point	Amount:	\$ 15,000

Need identified: Asset Management Inspection Other _____

Replace 2 ton hoist for lifting heavy equipment throughout NBC facilities.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 1999 Original estimated useful life: 20 Years Useful life: 20 Years

Asset Allocation No. **19-047-023**

Asset Title	Diesel Mower	Cost Center:	Bucklin Point
Asset Location	Bucklin Point	Amount:	\$ 12,000

Need identified: Asset Management Inspection Other

Replace diesel Gravely mower used for grounds keeping.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2009 Original estimated useful life: 10 Years Useful life: 10 Years

Asset Allocation No. **19-047-024**

Asset Title	60" Mower	Cost Center:	Bucklin Point
Asset Location	Bucklin Point	Amount:	\$ 10,000

Need identified: Asset Management Inspection Other

Replace 60" Husqvarna mower used for grounds keeping.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2013 Original estimated useful life: 6 Years Useful life: 6 Years

Asset Allocation No. **19-047-025**

Asset Title	Hot Water Recycling Pump	Cost Center:	Bucklin Point
Asset Location	Bucklin Point	Amount:	\$ 10,000

Need identified: Asset Management Inspection Other

Replace hot water recycling pump 1 used in heat exchange process at the Heat Exchange Building.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2005 Original estimated useful life: 15 Years Useful life: 15 Years

Asset Allocation No. **19-047-026**

Asset Title	Hot Water Recycling Pump	Cost Center:	Bucklin Point
Asset Location	Bucklin Point	Amount:	\$ 10,000

Need identified: Asset Management Inspection Other

Replace hot water recycling pump 6 used in heat exchange process at the Heat Exchange Building.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2005 Original estimated useful life: 15 Years Useful life: 15 Years

Asset Allocation No. **19-047-027**

Asset Title	Equipment 0100A	Cost Center:	Bucklin Point
Asset Location	Bucklin Point	Amount:	\$ 10,000

Need identified: Asset Management Inspection Other

Replace E0100A truck mounted salt/sander used to treat roads at NBC facilities.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2008 Original estimated useful life: 10 Years Useful life: 10 Years

Asset Allocation No. **19-047-028**

Asset Title	Leaf Vacuum Trailer w/ Cyclone	Cost Center:	Bucklin Point
Asset Location	Bucklin Point	Amount:	\$ 8,000

Need identified: Asset Management Inspection Other

Purchase leaf vacuum trailer system w/Cyclone to assist grounds keeping.

Budget Account 16520 Building & Plant Equipment

Type: **NEW**

Original date in service: N/A Original estimated useful life: N/A Useful life: 10 Years

Asset Allocation No. **19-047-029**

Asset Title	Tripod Confined Space	Cost Center:	Bucklin Point
Asset Location	Bucklin Point	Amount:	\$ 8,000

Need identified: Asset Management Inspection Other _____

Purchase tripod unit to aid maintenance and instrumentation staff while conducting work in confined spaces.

Budget Account 16520 Building & Plant Equipment

Type: **NEW**

Original date in service: N/A Original estimated useful life: N/A Useful life: 8 Years

Asset Allocation No. **19-047-030**

Asset Title	Equipment 0101A	Cost Center:	Bucklin Point
Asset Location	Bucklin Point	Amount:	\$ 8,000

Need identified: Asset Management Inspection Other _____

Replace truck mounted salt/sander used to treat roads at NBC facilities.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2008 Original estimated useful life: 10 Years Useful life: 10 Years

Asset Allocation No. **19-047-031**

Asset Title	Equipment Vehicle 382	Cost Center:	Bucklin Point
Asset Location	Bucklin Point	Amount:	\$ 8,000

Need identified: Asset Management Inspection Other

Replace plow equipment assembly.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2009 Original estimated useful life: 8 Years Useful life: 10 Years

Asset Allocation No. **19-052-001**

Asset Title	Vehicle 423	Cost Center:	Pretreatment
Asset Location	Pretreatment	Amount:	\$ 30,000

Need identified: Asset Management Inspection Other

Replace 2007 Ford Escape used to conduct inspections of industrial and commercial users and emergency response.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2009 Original estimated useful life: 12 Years Useful life: 12 Years

Asset Allocation No. **19-052-002**

Asset Title	Window Blinds	Cost Center:	Pretreatment
Asset Location	Pretreatment	Amount:	\$ 10,000

Need identified: Asset Management Inspection Other

Replace current window blinds that are at the Pretreatment building.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 1990 Original estimated useful life: N/A Useful life: 20 Years

Asset Allocation No. **19-053-001**

Asset Title	BOD Skalar Analyzer	Cost Center:	Laboratory
Asset Location	Water Quality Science Building	Amount:	\$ 93,000

Need identified: Asset Management Inspection Other

Replace BOD Skalar analyzer system that does not have the capacity to analyze all samples required by new RIPDES permit.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2014 Original estimated useful life: 5 Years Useful life: 5 Years

Asset Allocation No. **19-053-002**

Asset Title	Fresh Water Nutrient Analyzer	Cost Center:	Laboratory
Asset Location	Water Quality Science Building	Amount:	\$ 85,000

Need identified: Asset Management Inspection Other

Replace fresh water nutrient analyzer system for nitrogen testing required by RIDES permits.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2013 Original estimated useful life: 5 Years Useful life: 5 Years

Asset Allocation No. **19-053-003**

Asset Title	TOC Analyzer	Cost Center:	Laboratory
Asset Location	Water Quality Science Building	Amount:	\$ 37,000

Need identified: Asset Management Inspection Other

Replace TOC analyzer system for total organic carbon testing as required by EPA and RI Department of Health.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2010 Original estimated useful life: 5 Years Useful life: 5 Years

Asset Allocation No. **19-053-004**

Asset Title	Water Purification Systems	Cost Center:	Laboratory
Asset Location	Water Quality Science Building	Amount:	\$ 28,000

Need identified: Asset Management Inspection Other _____

Replace water purification systems that are over due for replacement.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2010 Original estimated useful life: 7 Years Useful life: 7 Years

Asset Allocation No. **19-053-005**

Asset Title	Microscope Camera System	Cost Center:	Laboratory
Asset Location	Water Quality Science Building	Amount:	\$ 12,000

Need identified: Asset Management Inspection Other _____

Replace out of date camera system not compatible with Windows 10 used to analyze wastewater and sea water to help with facilities operations.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2010 Original estimated useful life: 7 Years Useful life: 5 Years

Asset Allocation No. **19-055-001**

Asset Title	Fixed Site Sondes	Cost Center:	EMDA
Asset Location	Water Quality Science Building	Amount:	\$ 130,000

Need identified: Asset Management Inspection Other

Replace antiquated fixed site sondes and associated equipment used for fixed site and buoy stations in upper bay.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2008 Original estimated useful life: 10 Years Useful life: 10 Years

Asset Allocation No. **19-055-002**

Asset Title	Vehicle 432	Cost Center:	EMDA
Asset Location	Field's Point	Amount:	\$ 34,000

Need identified: Asset Management Inspection Other

Replace 2008 Ford E-150 van used to collect samples within the NBC service area.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2008 Original estimated useful life: 10 Years Useful life: 10 Years

Asset Allocation No. **19-055-003**

Asset Title	Fixed Site Probes & Meter	Cost Center:	EMDA
Asset Location	Water Quality Science Building	Amount:	\$ 30,000

Need identified: Asset Management Inspection Other _____

Replace fixed site probes, meters and associated equipment used for deployment in the upper bay and to provide river data during nutrients sampling collections.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2008 Original estimated useful life: 10 Years Useful life: 10 Years

Asset Allocation No. **19-055-004**

Asset Title	Refrigerated Auto Samplers	Cost Center:	EMDA
Asset Location	FPWWTF & BPWWTF	Amount:	\$ 26,000

Need identified: Asset Management Inspection Other _____

Replace refrigerated auto samplers installed at the treatment plants to satisfy all RIPDES sampling requirements.

Budget Account 16600 Replacement Reserve

Type: **REPLACEMENT**

Original date in service: 2008 Original estimated useful life: 10 Years Useful life: 10 Years

Capital Improvement Program

The Capital Improvement Program

The Narragansett Bay Commission’s (NBC) Capital Improvement Program (CIP) is a planning document which identifies programmed capital investments necessary to comply with current and future regulatory requirements, take advantage of technological advancements, ensure the integrity of NBC’s infrastructure and achieve operational efficiencies. The projects, schedules and costs that are included in the CIP have been developed through a planning process that involves NBC’s Engineering and Construction staff and incorporates needs identified through NBC’s asset management program. These capital improvements include construction of new facilities, rehabilitation and replacement of existing infrastructure as well as energy efficiency and sustainability projects. The CIP shows programmed expenditures for the current Fiscal Year (FY) 2019 as well as the following five-year period of FY 2020-2024, which is referred to in this document as the “window”. Structuring the CIP this way also enables NBC’s program to be easily incorporated into the capital budget of the State of Rhode Island.

Capital Improvement Program Overview

This year’s CIP identifies a total of 36 projects that are either in progress, to be initiated, or to be completed during FY 2019-2024. The estimated costs for this year’s CIP window are \$356.9 million, with additional expenditures of \$55.5 million in FY 2019 for a total of \$412.4 million. The majority or 88% of the expenditures are related to the third and final phase of the Combined Sewer Overflow (CSO) Abatement Facilities. Other projects in the CIP account for the remaining 12% and reflect the continued investment in NBC’s wastewater treatment and collection system infrastructure.

FY 2019-2024 CIP Costs

(In thousands)

Category	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2020-2024
Administrative	\$ 2,428	\$ 1,743	\$ 1,671	\$ 1,434	\$ 1,447	\$ 1,167	\$ 7,461
Land	1,998	50	-	2,000	-	-	2,050
A/E Professional	22,259	19,627	17,280	3,154	3,100	3,058	46,219
Construction	22,039	14,559	31,685	57,572	77,904	97,175	278,894
Contingency	4,875	3,600	2,893	3,350	3,650	2,550	16,043
Other	1,906	1,746	1,723	1,066	558	1,138	6,231
Total	\$ 55,503	\$ 41,325	\$ 55,252	\$ 68,576	\$ 86,659	\$ 105,087	\$ 356,899

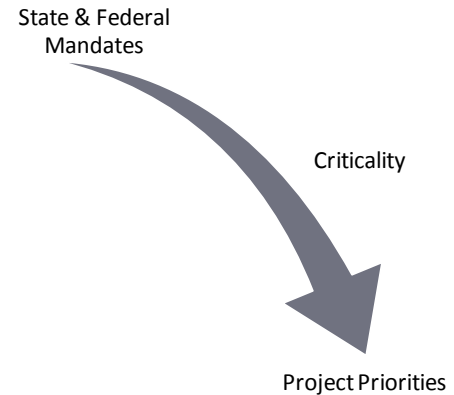
The CIP document reflects all phases of a construction project, including planning and design as a single project. In addition, for planning purposes, projects that are substantially complete with only retainage and/or “punch-list” items remaining are considered complete and are not carried in the CIP summary or detailed project listing; however, these projects are discussed in the completed projects section of the CIP that begins on page 12. The CIP projects are also identified by priority classifications to rank them in terms of priority. The CIP includes additional information regarding changes in the CIP from the prior year, new projects and the projected budget impact of each project.

Capital Improvement Program Development

The CIP is updated annually as part of the budget cycle and takes into consideration the project's relationship to the strategic plan, program priorities, the permitting process, project readiness, scheduling and other factors. The CIP drives NBC's long-term financing requirements, and therefore the particulars of each project are an essential component of NBC's financial plan.

NBC's Project Managers begin the annual CIP process with the development of detailed justifications for each capital project including project scope, basis for the cost estimate and key factors impacting costs and schedules. The Project Managers also explain modifications from the prior year's CIP and provide the overall project schedule. A timeline with all of the detailed project schedules can be found in the Appendix.

The CIP Review Committee reviews the proposed capital projects including the assignment of priorities and schedules. Projects approved for inclusion in the CIP are subsequently analyzed to assess major program changes, overall capital funding needs and the strength of the project's connection to the objectives in NBC's Strategic Plan, as well as financing and operating cost impacts.



Capital Improvement Program Guidelines

The costs and schedules included in this year's CIP reflect NBC's best estimates and are based on a number of assumptions as follows:

- Costs and cash flows are based on planning or design estimates and/or bids once available.
- The majority of construction projects include a 10% contingency based on the original construction cost estimate, which reflects recent industry experience. The contingency may be modified based upon the bids. Cost estimates for new design and construction projects include a 7% allowance for NBC staff salary and fringe associated with project management, based on historical experience.
- Financing costs and debt service associated with the CIP are not included in the CIP expenditures or the project cash flows. Financing costs are capitalized and amortized over the length of the debt payment schedule and debt service is included as an expense in the annual budget.
- The CIP does not include the acquisition or replacement of certain assets that are identified in NBC's annual budget and are outlined in the five-year Operating Capital Program.

Capital Improvement Program Calendar

The development of the CIP begins in the fall and is completed in the spring. The FY 2020-2024 CIP calendar is as follows:

NOVEMBER 2017

- Project Overview, Cash Flow and Schedule Details Forms Available on November 6th
- Project Form Submittals Due November 22nd

DECEMBER 2017

- Conduct CIP Budget Impact Review on December 5th
- Conduct CIP Review Committee Meeting on December 18th
- New Projects and/or Project Form Changes Due on December 30th

JANUARY 2018

- Incorporation of Capital Project Submittals
- Development of CIP Budget Impact Analysis

FEBRUARY 2018

- Capital Improvement Program Narrative
- Development of additional CIP supporting information

MARCH 2018

- Presentation of the FY 2020-2024 CIP to the Long-Range Planning Committee and Board for Review and Approval on March 6th

Capital Project Authorization and Amendment Procedures

Initial Capital Project Authorization

The Executive Director is authorized to expend funds for preliminary planning, staff time and other services in order to assess project need, scope and feasibility. Once it is determined that a project should move forward, an authorizing resolution that includes the contract and ancillary costs is presented to the Board for review and approval.

Engineering Contract Amendments

The Executive Director is authorized to approve engineering contract amendments up to a maximum of 5% of the original contract amount or \$20,000 whichever is greater, without further Board approval. All other contract amendments require Board approval.

Construction Contract Change Order Requests

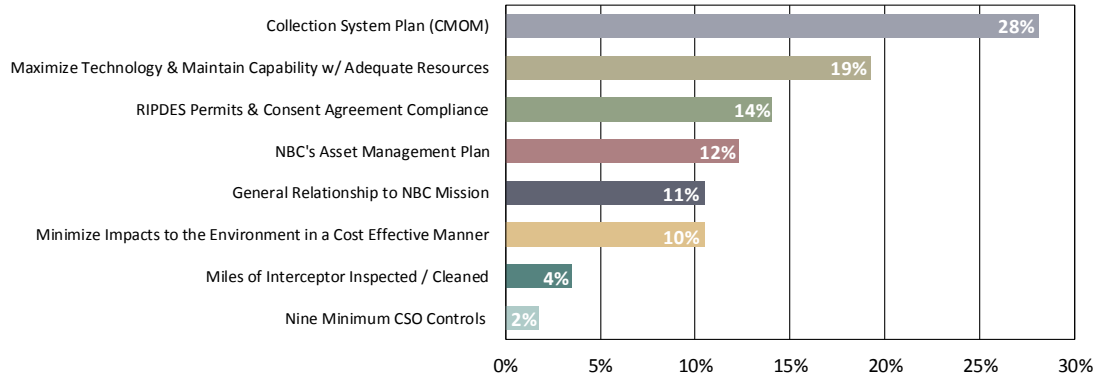
As a construction project proceeds, additional funds may be required to accommodate a Change Order Request (COR). There are a number of reasons for COR as is shown in the following chart.

Reasons for Change Order Requests					
Differing Site Conditions	Extra Work or Conditions	Contract Errors or Omissions	Changes Required by Regulatory Agencies	Contractor Claims for Work in Dispute	Over/Under Supplemental or Unit Price Items

The Executive Director may authorize CORs up to a maximum of 5% of the contract amount. Any changes above the 5%, for reasons other than emergency or safety work, require approval by the Board prior to execution. If there is an emergency or safety issue, the Executive Director may exceed the 5% limit without Board approval and inform the Board thereafter.

Capital Projects by Strategic Objective

NBC's Strategic Plan ensures NBC's ability to meet water quality objectives set forth by regulatory requirements through achieving short-term and long-term objectives at a reasonable cost. As part of the CIP development process, Project Managers identify the one or more strategic goals that a project will address. The following chart illustrates the percentage of capital projects in this year's CIP aligned with each Strategic Objective.

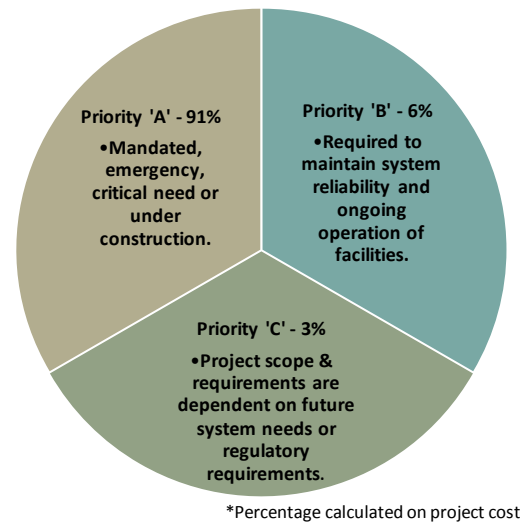


Of the 36 CIP projects, 28% are related to NBC's Collection System Plan Strategic Objective. These include interceptor restoration and construction projects. In addition, 19% of the projects in the CIP are aligned with the Maximize Technology & Maintain Capability with Adequate Resources strategic objective and 14% of the projects are aligned with the RIPDES Permit/RIDEM Consent Agreement strategic objective. The remaining projects are aligned with NBC's Asset Management Plan and General Relationship to NBC Mission objectives.

Project Priorities

As part of the CIP program development, the criticality of each project is assessed and a priority ranking is assigned based on that assessment. Projects with a ranking of "A", represent a critical need and are either mandated, an emergency or currently under construction. Approximately 91% of the projects identified in the window are prioritized with an "A" ranking for a total of \$323.6 million.

In addition, 6% of projects are identified with a "B" ranking for a total of \$20.5 million. This includes projects that are required to maintain system reliability and ongoing operations of NBC's facilities. The remaining 3% or \$12.8 million are identified with a rank of "C" and are dependent on future system needs or regulatory requirements.

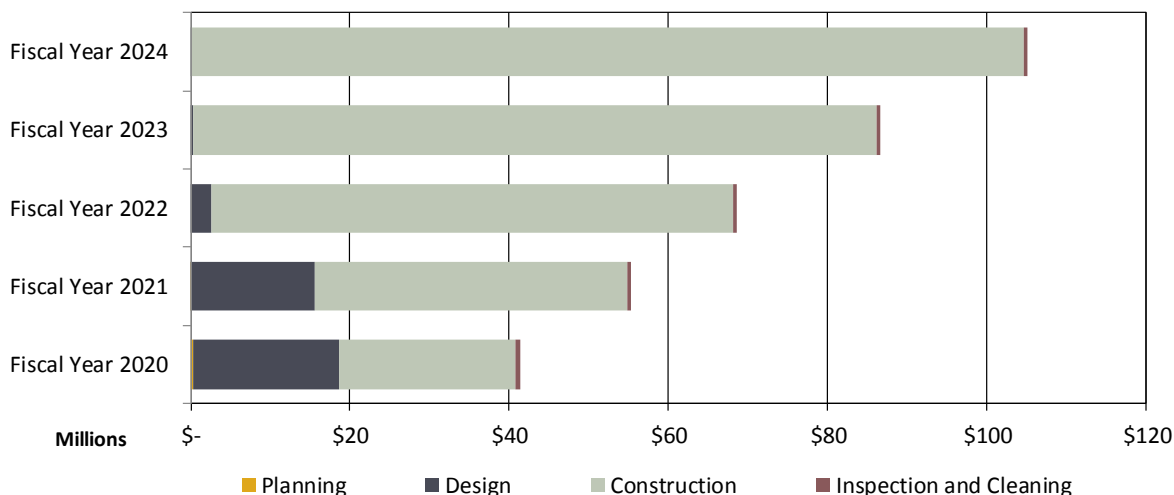


Capital Expenditure by Phase

NBC's construction projects are generally comprised of three phases including planning, design, and construction. Planning consists of tasks such as feasibility studies and determination of the technology to be implemented. The design phase includes the development of plans and specifications and the acquisition of easements and permits. During the construction phase, facility improvements and infrastructure are constructed. The CIP also includes some programmed capital projects which are not broken down into phases,

such as the inspection, cleaning and repair of NBC’s interceptors, or other one-time special studies. As is evident in the chart below the majority or 89% of the programmed expenditures during the five-year CIP window relate to the construction phase at \$317.3 million.

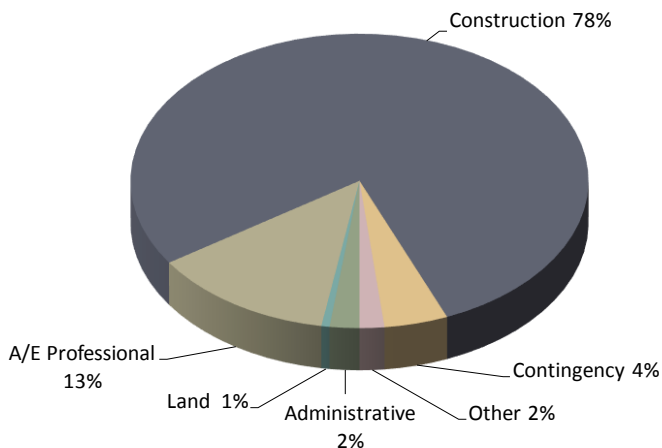
Capital Expenditure by Phase



Capital Expenditure by Cost Category

For planning purposes, the project costs are shown by categories including the Administrative category, which includes NBC’s project management costs as well as police, legal and advertising expense. The Land category includes costs for easements, as well as land acquisition. The Architectural/Engineering (A/E) Professional cost category includes costs for professional planning or design services. The Construction cost category reflects contractor and outside construction management costs. Lastly, the Contingency cost category includes an allowance for construction cost increases based upon industry experience related to construction cost factors. As shown in the chart below, construction costs represent \$278.9 million, or approximately 78% of the total costs within the FY 2020-2024 window. A/E Professional services represent approximately \$46.2 million or 13% of the costs during this same period.

CIP Costs by Type of Activity



Capital Expenditures by Functional Area

For planning purposes, NBC also groups capital projects into functional areas, according to the scope and tasks involved with the capital project. The functional areas are described below.

Functional Area	Project Examples
Wastewater Treatment Facility (WWTF)	Blower Improvements, Biogas Reuse, UV Disinfection and WWTF Improvements
Infrastructure Management (IM)	RIPDES Compliance Improvements
CSO Phase III Facilities	CSO Phase III A ,B, C, and D
Sewer System Improvements	Easement Restoration, Sewer System and Pump Station Improvements
Interceptor Inspection and Cleaning (IIC)	Remote Television Inspection and Grit/Debris Removal and Disposal
Interceptor Restoration and Construction (IRC)	Interceptor Expansion, Improvements, Lining and Manhole Rehabilitation

The following table shows how the CIP costs have shifted by functional area on a year-to-year basis. The most significant change is the \$214.0 million increase in the CSO Phase III A Facilities compared to last year's CIP. This is primarily the result of an earlier construction start and the shift in the CIP window to include FY 2024. The most significant increase in percentage terms is the 100% increase in a new Sewer System Improvement cost category as these projects were previously included as part of Infrastructure Management. Finally, costs programmed in the Interceptor Restoration and Construction functional area decreased 41% from the prior year as several projects are scheduled for completion in FY 2019. Overall, programmed expenditures are \$200.8 million or 129% more in the current CIP window compared to last year.

Functional Area (In thousands)	Prior Year CIP (FY 2019-2023)	Current Year CIP (FY 2020-2024)	% Change
Wastewater Treatment Facility	\$ 28,890	\$ 20,582	(29%)
Infrastructure Management	2,087	2,191	5%
CSO Phase III A Facilities	100,994	314,972	212%
Sewer System Improvements	-	3,863	100%
Interceptor Inspection and Cleaning	2,500	2,500	0%
Interceptor Restoration and Construction	21,648	12,791	(41%)
Total	\$ 156,119	\$ 356,899	129%

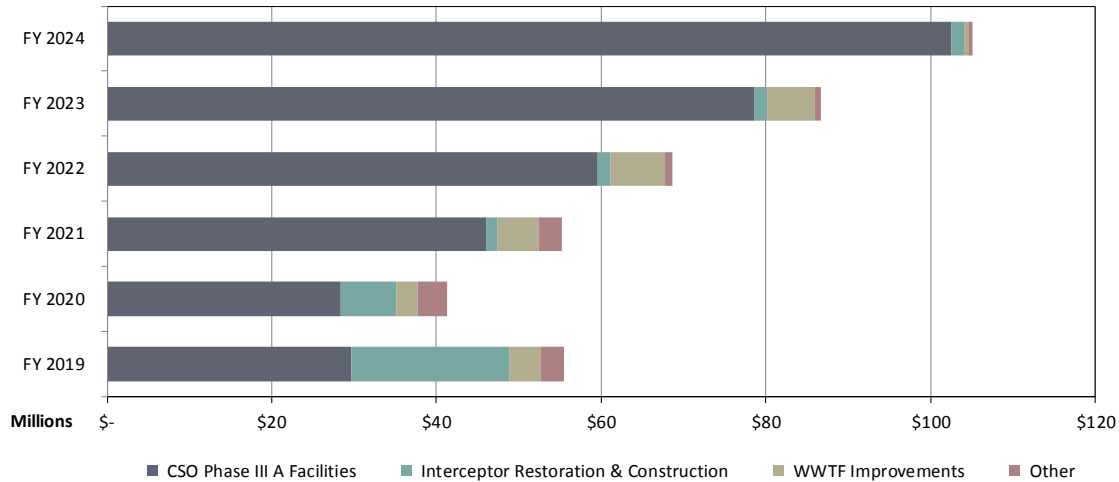
Significant Capital Improvement Projects

The CSO Phase III A Facilities is the most significant project included in this year's CIP and accounts for \$315.0 million or 88% of the CIP's programmed costs. Expenditures on this project are projected to increase significantly when construction begins in FY 2021. Other projects account for the remaining 12% of the CIP programmed costs. The following table and graph show the programmed expenditures for the CSO Phase III A Facilities and other projects included in the current CIP window.

Expenditures by Major Project

Project (in Thousands)	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Total Costs FY 2020 - 2024	% of Five Year Window
CSO Phase III A Facilities	\$ 29,692	\$ 28,328	\$ 45,955	\$ 59,551	\$ 78,579	\$ 102,560	\$ 314,972	88%
WWTF Improvements	3,749	2,579	4,985	6,668	5,850	500	20,582	6%
Interceptor Restoration & Construction	19,169	6,791	1,500	1,500	1,500	1,500	12,791	4%
Other	2,894	3,628	2,812	857	730	528	8,554	2%
Total	\$ 55,503	\$ 41,325	\$ 55,252	\$ 68,576	\$ 86,659	\$ 105,087	\$ 356,899	100%

Expenditures by Major Project



Projects related to WWTF Improvements at Field’s Point include Phase II of the Blower Improvements at \$9.3 million; Maintenance Facilities at \$6.5 million, and the IM Facilities at \$6.4 million. Improvements at Bucklin Point include Ultraviolet (UV) Disinfection Improvements at \$5.7 million. In addition, NBC has allocated \$500 thousand annually for improvements to the wastewater treatment facilities to ensure funding is available to support required investments at the facilities as they are identified through asset management and inspection.

NBC’s CIP includes funding for various NBC’s Interceptor Restoration and Construction Projects. Two larger projects include, the Johnston Sewer Improvements/Greenville at a cost of \$8.9 million and Johnston Sewer Improvements/Hartford at a cost of \$2.8 million. These projects will extend NBC’s interceptors in the NBC’s district to locations that are not presently served. NBC has also programmed improvements to the Moshassuck Valley Interceptor at \$6.5 million, the Louisquisset Pike Interceptor at \$4.6 million and the Providence River Siphon at \$6.5 million.

Programmed expense for Sewer System Improvements includes the Lincoln Septage Station replacement at a cost of \$2.8 million and the Omega Pump Station Upgrade at \$912 thousand. Additionally, this year’s CIP reflects the reallocation of easement restoration projects of \$1.1 million into the Sewer System Improvements classification.

Overall, the total programmed expenditures for non-CSO projects has increased by \$10.1 million compared to the prior year’s CIP, as shown in the table below.

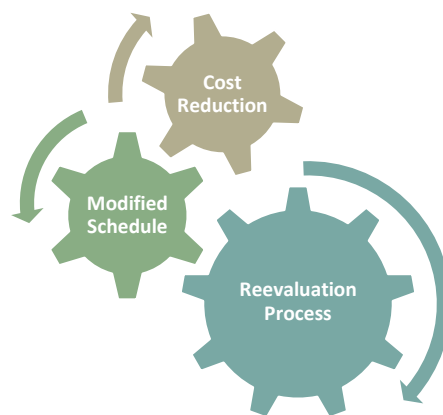
Year-over-Year Difference in the Capital Improvement Program by Major Project						
	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Total
WWTF Improvements	\$ (958)	\$ (8,167)	\$ (2,692)	\$ 3,802	\$ 2,956	\$ (5,059)
Interceptor Restoration & Construction	5,777	3,035	-	-	-	8,812
Other	1,061	2,603	2,082	357	230	6,333
Total Change Non-CSO Projects	\$ 5,880	\$ (2,529)	\$ (611)	\$ 4,159	\$ 3,186	\$ 10,085
Percent Change in Non-CSO Projects	29%	-16%	-6%	85%	65%	18%

CSO Phase III Facilities (Project 308)

In accordance with the terms and schedule set forth in the Consent Agreement between NBC and RIDEM, this CIP includes design and construction of the third and final phase of the federally mandated CSO Abatement Program. The CSO Phase III Program represents NBC's largest capital investment in this year's CIP.

Subsequent to a reevaluation of the Phase III Facilities completed in 2015, NBC's Board of Commissioners selected an alternative on April 28, 2015, with a pre-design cost estimate of \$815.0 million in 2018 dollars. The Program includes four phases to be completed by 2041 and includes \$10.0 million for the construction of Green Stormwater Infrastructure in each phase to reduce stormwater inflow by implementing stormwater infiltration projects.

NBC submitted the reevaluation report to RIDEM in July 2015 and RIDEM provided comments to NBC in March 2016. NBC subsequently incorporated RIDEM's comments into an amended reevaluation report which RIDEM approved in December 2017. NBC completed an updated Environmental Assessment of the Program which was approved by RIDEM in December 2017. As a result of the RIDEM review and approval process, NBC will begin design of the Phase III B facilities contemporaneously with the Phase III A design. NBC's Consent Agreement must be renegotiated based upon the final RIDEM approved plan.

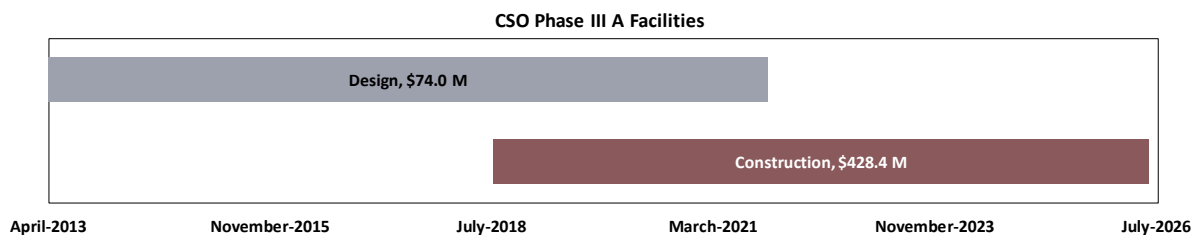


This year's CIP reflects the schedule and scope changes required by RIDEM. In order to provide space for construction of the tunnel pump station, the Program also includes the design and construction of O&M Support Facilities at Bucklin Point, which was previously carried in the CIP as a separate project.

This year's CIP includes expenditures of approximately \$29.7 million in FY 2019 and \$315.0 million in the five year period of FY 2020-2024 with a total pre-design cost estimate of \$779.1 million in 2018 dollars. The estimated construction costs will be updated as additional information is gained through the design process. A description of the facilities to be constructed in each of the four phases, as well as estimated costs and schedules are as follows.

Phase III A

This Phase includes design and construction of a deep rock tunnel in Pawtucket approximately 13,000 feet in length along the Seekonk and Blackstone Rivers, a pump station to convey flow to the Bucklin Point WWTF in East Providence, drop shafts and consolidation conduits. Additionally, this project is to design the Upper BVI relief, CSO 105 relief sewer, CSO 206 sewer separation, green stormwater infrastructure and regulator modifications. Lastly, this project is to design and construct O&M Support Facilities at Bucklin Point to maintain operational infrastructure necessary to provide space for construction of the tunnel pump station. The pre-design cost estimate for design and construction of these facilities in 2018 dollars is \$502.4 million. Construction of a small component of this phase, the green stormwater infrastructure, is scheduled to begin in FY 2019.



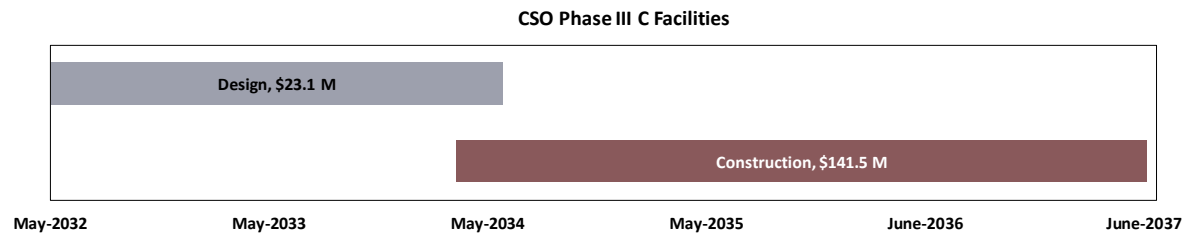
Phase III B

This phase is to construct the Upper BVI Relief, CSO 206 sewer separation, CSO 105 Relief sewer, regulator modifications and green stormwater infrastructure. The pre-design cost estimate for construction of these facilities in 2018 dollars is \$28.5 million. Construction of this phase is scheduled to begin in FY 2028.



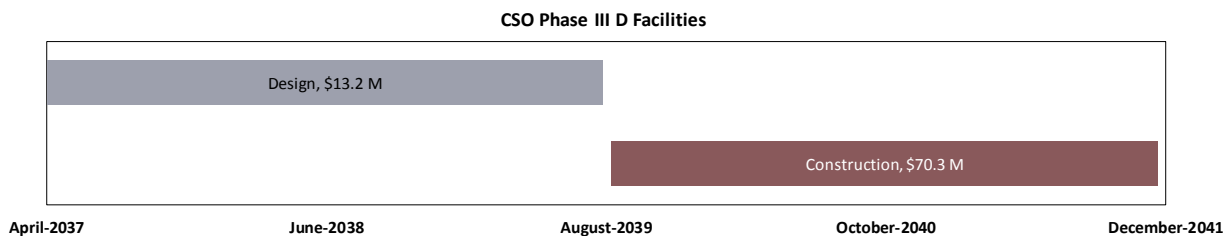
Phase III C

This phase is to design and construct a stub tunnel to convey flow from OF-220 to the Pawtucket tunnel. The pre-design cost estimate in 2018 dollars is \$164.7 million. Construction of this phase is scheduled to begin in FY 2034.



Phase III D

This phase is to design and construct an interceptor that will store flow from OF 039 and OF 056 during a storm and later release the flow into the system as capacity allows. The pre-design cost estimate in 2018 dollars is \$83.5 million. Construction of this phase is scheduled to begin in FY 2039.



Regulatory Compliance

In anticipation of increasingly stringent permit discharge limitations and other permit requirements that may necessitate improvements to existing facilities or construction of new facilities, this year's CIP includes a new RIPDES Compliance Improvements project. The project incorporates initiatives previously reflected individually in the CIP including the Site Specific Study that was established to address metals and the Upper Bay Dissolved Oxygen Evaluation related to potential nitrogen permit reductions. The project also incorporates a new a climate resiliency initiative that may be required to protect critical functions as part of the RIPDES permit issued by RIDEM.



Photo: Greenhouse Gas Collection

As part of NBC’s environmental performance goals of minimizing environmental impact, NBC has programmed a Green House Gas Study which involves quantifying NBC's overall carbon footprint by measuring the gas emissions from the wastewater collection and treatment process. The results will enable NBC to respond quickly to new emissions regulatory requirements. NBC also plans to maximize energy efficiencies and renewable resources through the Energy Sustainability Program which involves the identification and implementation of conservation methods, improved efficiency and sustainable renewable energy resources.

Wastewater Treatment Facility Improvements

This year’s CIP includes \$32.8 million in programmed funding for projects related to NBC’s wastewater treatment facilities. One of the major projects at Field’s Point is Phase II of the Blower Improvements (10908) which includes a new blower building and aeration blowers to ensure a reliable air source for the aeration treatment process. The CIP also includes construction of maintenance and equipment storage facilities as part of the FPWWTF Maintenance Facilities Project (13200). With respect to Bucklin Point, the CIP includes funding for the UV Disinfection Improvements Project (81000) which will replace the UV disinfection equipment that is nearing the end of its useful life with a more energy efficient system.



Photo: Ultraviolet Disinfection

This year’s CIP includes three projects developed to address the integrity of NBC’s electrical equipment and facilities. The NBC Facility Electrical Improvements Project (40100) involves the evaluation of NBC's existing electrical equipment and facilities and the identification and implementation of improvements needed to ensure reliable and continuous operation. The FPWWTF Project (40101) consists of the assessment and installation of standby power capabilities for critical facilities and the upgrade or replacement of the electrical and control systems at Field's Point and lastly Bucklin Point Facilities Project (40102) specifically addresses needs at Bucklin Point.

Project Number	Project Name	Costs (in thousands)
10908	FPWWTF Blower Improvements Phase II	\$ 9,285
12400	IM Facilities	6,425
13200	FPWWTF Maintenance Facilities	6,478
20000	WWTF Improvements	3,296
20100	FY 17 WWTF Improvements	675
40100	NBC Facility Electrical Improvements	130
40101	FPWWTF Facility Electrical Improvements	170
40102	WWTF Electrical Improvements	605
81000	BPWWTF UV Disinfection Improvements	5,726
Total		\$ 32,790

On a system-wide basis NBC continues to program \$500 thousand annually for wastewater treatment facility improvements to ensure resources are available in years that do not have specific projects identified in order to maintain the integrity of the treatment facilities. Lastly, the CIP has funding programmed for the construction of new IM Facilities (12400) that would be needed should NBC be required by legislation to assume ownership of lateral sewers currently owned by local communities within its district.

Collection System Infrastructure

This CIP includes several collection system infrastructure projects totaling \$43.7 million. The major projects include construction of improvements to expand NBC's service area along Greenville Avenue (30460) and Hartford Avenue (30464) in the Town of Johnston, replacement of a portion of the Moshassuck Valley Interceptor (30444), replacement of the Providence River Siphon (30457) interceptor and increasing the capacity of the Louisquisset Pike Interceptor (30421).



Photo: Infrastructure Repairs

In addition, the Field's Point Drive Interceptor Improvements (30465) and Improvements to Interceptors FY 2018 (30466) will address various deficiencies throughout NBC's service area and includes sewer lining, point repairs, replacements and outfall pipes and manhole rehabilitation. Lastly, NBC is committed to maintaining its infrastructure and collection system by programming an allocation of \$500 thousand for interceptor inspection and cleaning and \$1.5 million for interceptor restoration and construction annually in years that do not have specific projects identified.

Completed and New Capital Projects

Completed Projects

NBC considers a project complete when the project has been deemed substantially complete and has only retainage and/or "punch list" items remaining. In FY 2018, NBC completed nine capital projects at a cost of \$17.1 million.

The BPWWTF Biogas Reuse (12000) project involving the installation of a biogas cogeneration system was completed at a cost of \$7.8 million. Two projects that replaced critical components of the treatment process were completed, including the FPWWTF Final Clarifier Improvements (13000) and the BPWWTF Digester & Miscellaneous Improvements (81400) at a cost of \$3.8 million and \$1.3 million respectively. The old operations and laboratory buildings were repurposed as part of the FPWWTF Operations and Lab Building Reuse (12900) at a cost of \$760 thousand. Two interceptor easement restoration projects were completed including Abbott Valley (30438) at a cost of \$716 thousand and Blackstone Valley (30501) at a cost of \$821 thousand. Two interceptor improvement projects were also completed in FY 2018. Providence/ South Providence Interceptor Inspection and Cleaning (30475) and Improvements to Interceptors FY 2017 (30463) were completed at a cost of \$650 thousand and \$1.1 million respectively. Lastly, the Site Specific Study (1100000) related to dissolved and total metals in the receiving waters was completed at a cost of \$211 thousand. The following table shows the projects completed in FY 2018 and estimated costs.

Project Number	Project Name	Cost (In thousands)
12000	BPWWTF Biogas Reuse	\$ 7,752
13000	FPWWTF Final Clarifier Improvements	3,825
81400	BPWWTF Digester & Miscellaneous Improvements	1,274
12900	FPWWTF Operations and Lab Building Reuse	760
30438	NBC Interceptor Easement Restoration - AVI	716
30501	NBC Interceptor Easements Restoration, BVI	821
30475	Providence-South Providence Interceptor Inspection Cleaning	650
30463	Improvements to Interceptors FY 2017	1,070
1100000	Site Specific Study	211
Total		\$ 17,080

New Projects

This year's CIP includes seven new capital projects totaling \$10.0 million. This includes projects related to infrastructure, electrical improvements, regulatory compliance, sewer system improvements and interceptor improvements. The new projects and their estimated costs are summarized in the following table and are discussed below.

Project Number	Project Name	Estimated Cost (In thousands)
40102	WWTF Electrical Improvements	\$ 605
1140600	RIPDES Compliance Improvements	1,551
30503	NBC Interceptor Easements Restoration, BVI Wetlands	194
70900	Omega Pump Station Upgrade	912
71000	Lincoln Septage Station Replacement	2,804
30476	N. Providence, Johnston, Lincoln Interceptor Inspection & Cleaning	320
30466	Improvements to Interceptors FY 2018	3,572
Estimated Total		\$ 9,958

Project (40102) WWTF Electrical Improvements will address the electrical and control systems at both wastewater treatment facilities to ensure continuous uninterrupted operations and that equipment meets safety requirements. As discussed earlier, Project (1140600) RIPDES Compliance Improvements has been established in anticipation of new facilities or improvements that may be required as a result of increasingly stringent permit discharge limitations and other permit requirements. Project (30503) NBC Interceptor Easements Restoration, BVI Wetlands involves clearing easements along the Blackstone Valley Interceptor (BVI) in Cumberland that couldn't be completed as originally planned in Project 30501 due to wetlands issues.

With respect to new sewer system improvements, the Lincoln Septage Station Replacement (71000) project at a cost of \$2.8 million involves the design and construction of a new septage receiving station that will be equipped with a screening mechanism and sample collection capabilities. Project (70900) Omega Pump Station Upgrade at a cost of \$912 thousand involves the design and replacement of the Omega Pump Station pumps, piping and valves to incorporate new screening and grit technology. It is envisioned that the new technology will improve the reliability and efficiency of the pump station.

Lastly, this year's CIP includes funding for two collection system infrastructure projects. These projects include the inspection and cleaning of interceptors in North Providence, Johnston and Lincoln as part of Project (30476) and restoration of approximately 6,000 feet of interceptors ranging in size from 18" to 48" and rehabilitation of manholes in various locations in Providence, North Providence and Pawtucket as part of Project (30466).

Capital Improvement Program Funding

The CIP is funded from several different sources. Project Managers prepare monthly cash draw projections as part of the CIP submittal process. The cash draws are assigned to a specific funding source to ensure sufficient funding is available and to determine when new debt issuance is required to meet projected funding needs. NBC takes into consideration whether or not the item is eligible for subsidized loan interest loan funding through the Rhode Island Infrastructure Bank (RIIB), when funding sources are assigned. In order for a project to be eligible for RIIB funding, it must be included on the State of Rhode Island's Department of Environmental Management Project Priority List (PPL). Due to limited RIIB funding, a project must also be ranked high enough on the PPL to be funded since it is competing with other eligible projects.

NBC programs Restricted Account – CIP funds and Grant and Project Reimbursement Account funds for three specific purposes. First, to the extent possible, land and easement purchases are funded from these accounts so that NBC does not have to perform additional tracking that may be required with tax-exempt financing. Second, NBC uses these funds for smaller, unplanned, or emergency projects when it is not in NBC’s best interest to go through the additional requirements associated with a federally subsidized program. Lastly, NBC programs these funds for interceptor improvements. It should be noted that the current capital budget does not include funding for contingency or placeholder projects.

The following table shows that in FY 2019, NBC plans to fund the CIP with \$20.0 million from the Restricted Account - CIP. In addition, NBC plans to fund the CIP with \$7.7 million from the Grant and Project Reimbursement Account and \$12.0 million in unspent 2016 Series A bond proceeds. NBC plans on borrowing \$45 million in FY 2019 from the RIIB and the funding source is shown in the table below as 2019 Series A (SRF). Lastly, the CIP contingency of \$4.9 million is unfunded. Please see the CIP Impact and Long-Term Plan section for a discussion of the FY 2020 – 2024 sources and uses and projected rate impacts.

Sources of Funds (Thousands)	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Total FY 2020-2024
Restricted Account - CIP	\$ 20,015	\$ 5,522	\$ 11,020	\$ 7,649	\$ 8,588	\$ 9,018	\$ 41,796
Grant and Project Reimbursement Account	7,716	-	-	-	-	-	-
2016 Series A (SRF)	11,966	-	-	-	-	-	-
2019 Series A (SRF)	11,862	28,020	5,119	-	-	-	33,138
New SRF Revenue Bonds	-	-	35,962	40,500	40,500	40,500	157,462
New Revenue Bonds	-	-	-	16,225	31,854	54,588	102,667
Unfunded	4,875	3,600	2,893	3,350	3,650	2,550	16,043
Total	\$ 56,434	\$ 37,142	\$ 54,994	\$ 67,724	\$ 84,593	\$ 106,655	\$ 351,107

Uses of Funds (Thousands)	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Total FY 2020-2024
Capital Improvements	\$ 50,559	\$ 33,542	\$ 51,291	\$ 63,312	\$ 79,724	\$ 102,660	\$ 330,527
Capital Improvements Contingency	4,875	3,600	2,893	3,350	3,650	2,550	16,043
Debt Service Payment Account	450	-	355	562	719	946	2,582
Cost of Issuance	550	-	455	500	500	500	1,955
Total	\$ 56,434	\$ 37,142	\$ 54,994	\$ 67,724	\$ 84,593	\$ 106,655	\$ 351,107



Capital Project Summary by Fiscal Year

(In Thousands)

Project Number	Project Name	Project Priority	Pre-Fiscal Year 2019	Fiscal Year 2019	Fiscal Years 2020-2024	Post-Fiscal Year 2024	Total Estimated Project Cost
Wastewater Treatment Facility Improvements							
10908	FPWWTF Blower Improvements Phase II	A	\$ 7,085	\$ 2,159	\$ 40	\$ -	\$ 9,285
12400	IM Facilities	C	-	-	6,425	-	6,425
13200	FPWWTF Maintenance Facilities	B	17	342	6,119	-	6,478
20000	WWTF Improvements	B	-	296	2,500	500	3,296
20100	FY 17 WWTF Improvements	A	471	204	-	-	675
40100	NBC Facility Electrical Improvements	B	-	21	109	-	130
40101	FPWWTF Facility Electrical Improvements	B	53	117	-	-	170
40102	WWTF Electrical Improvements	A	312	293	-	-	605
81000	BPWWTF UV Disinfection Improvements	A	20	317	5,389	-	5,726
	<i>Subtotal</i>		7,959	3,749	20,582	500	32,790
Infrastructure Management							
1140100	River Model Development	C	360	30	148	-	538
1140300	Greenhouse Gas Study	C	55	22	-	-	77
1140500	NBC Energy Sustainability	C	125	60	40	-	225
1140600	RIPDES Compliance Improvements	C	192	481	879	-	1,551
30700	NBC System-wide Facilities Planning	C	-	28	358	-	386
40200	NBC System-wide Inflow Reduction	B	-	48	407	-	455
40300	Municipal Lateral Sewer Acquisition Impact	C	-	1	295	-	296
40400	FPWWTF Facilities Plan Update	A	242	138	-	-	380
40500	RIPDES Flow Monitoring System	C	58	725	65	-	848
	<i>Subtotal</i>		1,032	1,533	2,191	-	4,755
CSO Phase III Facilities							
30800	CSO Phase III A Facilities	A	22,450	29,692	314,972	135,293	502,406
30810	CSO Phase III B Facilities	A	-	-	-	28,484	28,484
30820	CSO Phase III C Facilities	A	-	-	-	164,660	164,660
30830	CSO Phase III D Facilities	A	-	-	-	83,500	83,500
	<i>Subtotal</i>		22,450	29,692	314,972	411,937	779,051
Sewer System Improvements							
30500	NBC Interceptor Easements Restoration, Various Locations	B	2	191	685	-	878
30503	NBC Interceptor Easements Restoration, BVI Wetlands	A	28	166	-	-	194
70900	Omega Pump Station Upgrade	B	23	169	720	-	912
71000	Lincoln Septage Station Replacement	B	11	335	2,458	-	2,804
	<i>Subtotal</i>		64	861	3,863	-	4,788
Interceptor Inspection & Cleaning							
30400M	Interceptor Inspection and Cleaning	B	-	288	2,500	500	3,288
30476	N. Providence, Johnston, Lincoln Interceptor Inspection & Cleaning	B	108	212	-	-	320
	<i>Subtotal</i>		108	500	2,500	500	3,608
Interceptor Restoration & Construction							
30400C	Interceptor Restoration and Construction	B	-	-	4,984	1,500	6,484
30421	Louisquisset Pike Interceptor Improvements	C	-	34	4,560	-	4,594
30444	Moshassuck Valley Interceptor	A	20	3,851	2,660	-	6,531
30457	Providence River Siphon	A	68	5,818	572	-	6,458
30460	Johnston Sewer Improvements/Greenville Avenue	A	4,051	4,823	-	-	8,874
30464	Johnston Sewer Improvements/Hartford Avenue	A	2,398	373	-	-	2,771
30465	Field's Point Drive Interceptor Improvements	A	71	734	-	-	805
30466	Improvements to Interceptors FY 2018	B	21	3,536	15	-	3,572
	<i>Subtotal</i>		6,629	19,169	12,791	1,500	40,089
Total			\$ 38,241	\$ 55,503	\$ 356,899	\$ 414,437	\$ 865,080

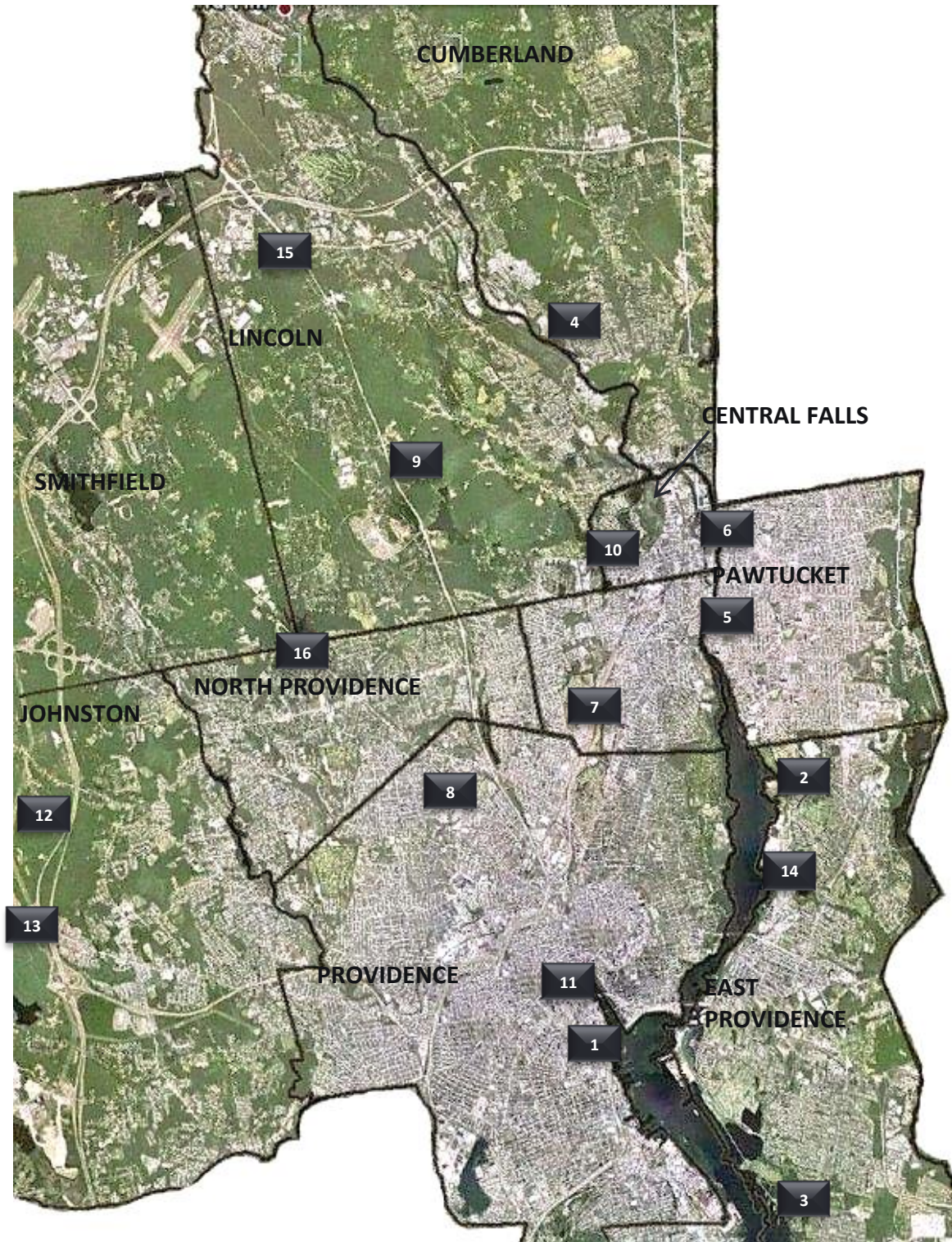
Priority	Description
A	Mandated, emergency, critical need or under construction.
B	Required to maintain system reliability and ongoing operation of facilities.
C	Project scope and requirements are dependent on futures system needs or regulatory requirements.

Capital Improvement Program Project Locations

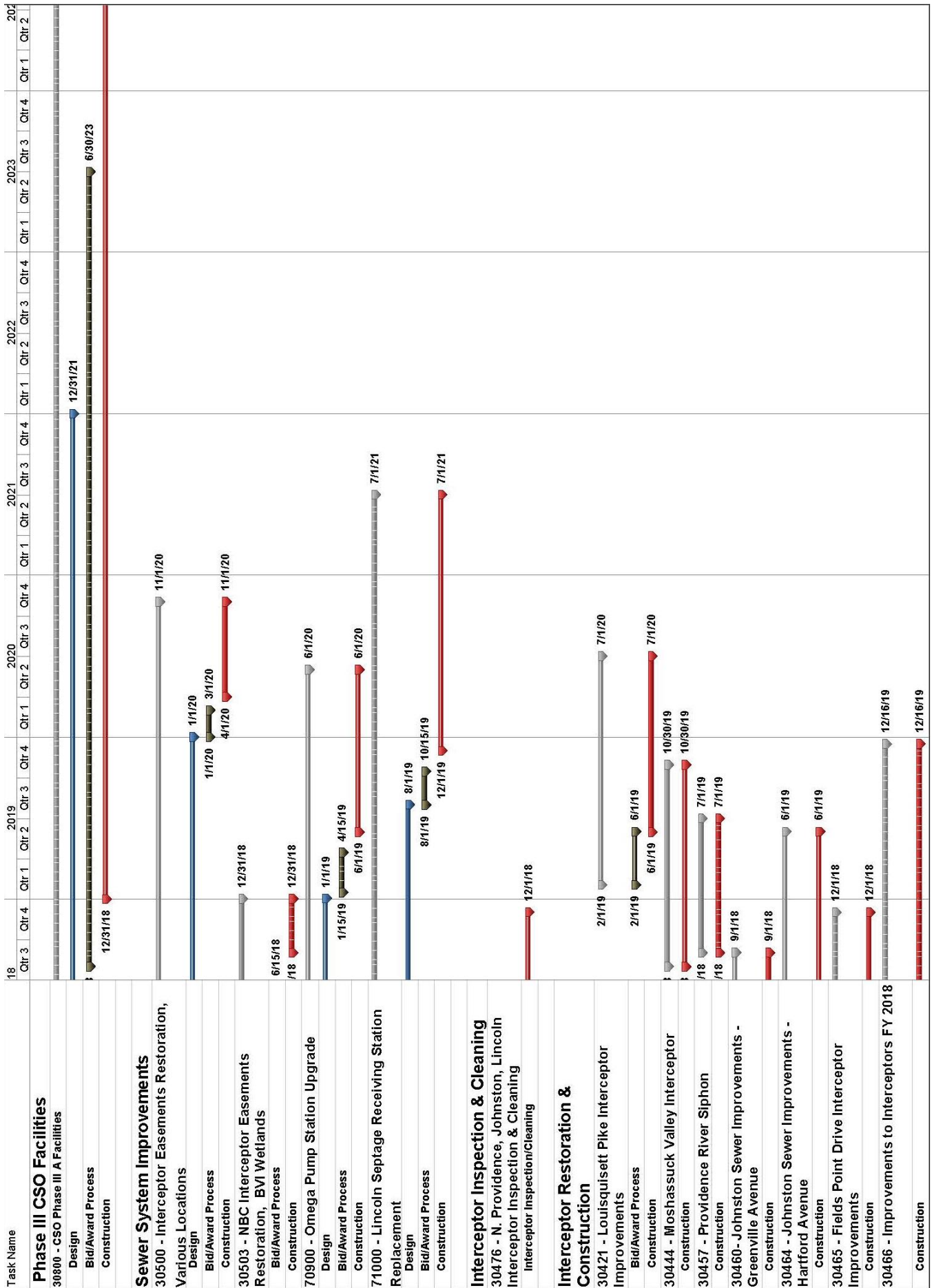
The capital projects identified in this year's CIP are shown on the map on the following page. The map highlights 16 project locations as identified below. Some projects are System-Wide and noted as SW.

Legend Key	Project Number	Project Name
Wastewater Treatment Facility Improvements		
1	10908	FPWWTF Blower Improvements Phase II
1	12400	IM Facilities
1	13200	FPWWTF Maintenance Facilities
1	20100	FY 17 WWTF Improvements
1, 2	40100	NBC Facility Electrical Improvements
1	40101	FPWWTF Facility Electrical Improvements
1, 2	40102	WWTF Electrical Improvements
2	81000	BPWWTF UV Disinfection Improvements
Infrastructure Management		
3	1140100	River Model Development
1,2	1140300	Greenhouse Gas Study
SW	1140500	NBC Energy Sustainability
SW	1140600	RIPDES Compliance Improvements
SW	30700	NBC System-wide Facilities Planning
SW	40200	NBC System-wide Inflow Reduction
SW	40300	Municipal Lateral Sewer Acquisition Impact
1	40400	FPWWTF Facilities Plan Update
SW	40500	RIPDES Flow Monitoring System
CSO Phase III Facilities		
5	30800	CSO Phase III A Facilities
6	30810	CSO Phase III B Facilities
7	30820	CSO Phase III C Facilities
8	30830	CSO Phase III D Facilities
Sewer System Improvements		
SW	30500	NBC Interceptor Easements Restoration, Various Locations
4	30503	NBC Interceptor Easements Restoration, BVI Wetlands
14	70900	Omega Pump Station Upgrade
15	71000	Lincoln Septage Station Replacement
Interceptor Cleaning / Restoration and Construction		
16	30476	N. Providence, Johnston, Lincoln Interceptor Inspection & Cleaning
9	30421	Louisquisset Pike Interceptor Improvements
10	30444	Moshassuck Valley Interceptor
11	30457	Providence River Siphon
12	30460	Johnston Sewer Improvements/Greenville Avenue
13	30464	Johnston Sewer Improvements/Hartford Avenue
1	30465	Field's Point Drive Interceptor Improvements
SW	30466	Improvements to Interceptors FY 2018

Capital Improvement Program Project Locations



Task Name	2018			2019			2020			2021			2022			2023			
	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	
Wastewater Treatment Facility Improvements																			
10908 - FPWWTF Blower Improvements - Phase II																			
Construction																			
12400 - IM Facilities																			
Design																			
Bid/Award Process																			
Construction																			
13200 - FPWWTF Maintenance Facilities																			
Design																			
Bid/Award Process																			
Construction																			
20100 - FY 17 WWTF Improvements																			
Construction																			
40100 - NBC Facility Electrical Improvements																			
Planning																			
40101 - FPWWTF Facility Electrical Improvements																			
Planning																			
40102 - WWTF Electrical Improvements																			
Construction																			
81000 - BPWWTF UV Disinfection																			
Design																			
Bid/Award Process																			
Construction																			
Infrastructure Management																			
30700 - NBC System-Wide Facilities Planning																			
Design																			
40200 - NBC Systemwide Inflow Reduction																			
Design																			
Bid/Award Process																			
Construction																			
40300 - Municipal Lateral Sewer Acquisition																			
Impact Planning																			
40400P - FPWWTF Facilities Plan Update																			
Planning																			
40500 - RIPDES Flow Monitoring System																			
Design																			



10908

FPWWTF Blower Improvements Phase II

Project Manager: Rich Bernier, P.E.
 Contractor(s): Hart Engineering, Corp.

Location: Field's Point (Providence, RI)
 Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	February-15	April-16	14 Months	\$682
Construction	October-16	August-19	35 Months	9,285
Total Project	February-15	August-19	55 Months	\$9,967



Photo: Motor control center room in blower building

This project involves the construction of a new blower building, equipped with four new 500 HP single stage centrifugal blowers to provide a reliable air source for the aeration treatment process.

CIP Window Summary

Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
\$ 7,085	\$ 2,159	\$ 40	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,285

Projected Expenditures - Planning

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Design

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ 81	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 81
Land	-	-	-	-	-	-	-	-	-
A/E Professional	582	-	-	-	-	-	-	-	582
Other	19	-	-	-	-	-	-	-	19
Total	\$ 682	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 682

Projected Expenditures - Construction

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ 123	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 128
A/E Professional	354	91	-	-	-	-	-	-	445
Construction	6,557	941	40	-	-	-	-	-	7,538
Contingency	-	1,074	-	-	-	-	-	-	1,074
Other	51	49	-	-	-	-	-	-	100
Total	\$ 7,085	\$ 2,159	\$ 40	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,285

Note: Cash Flow Basis in Thousands

12400

IM Facilities

Project Manager: Thomas Brueckner, P.E.
 Contractor(s): N/A

Location: Field's Point (Providence, RI)
 Project Priority: C

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	March-15	June-21	75 Months	\$606
Construction	July-21	May-23	22 Months	5,819
Total Project	March-15	May-23	98 Months	\$6,425



Photo: Existing IM Building

This project involves the design and construction of a new building that would be needed if NBC is required by legislation to assume ownership of lateral sewers currently owned by local communities within its district. The building will include an administrative area along with a garage and storage yard.

CIP Window Summary

Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
\$ -	\$ -	\$ 213	\$ 393	\$ 2,014	\$ 3,805	\$ -	\$ -	\$ 6,425

Projected Expenditures - Planning

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Design

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ 38	\$ 48	\$ -	\$ -	\$ -	\$ -	\$ 86
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	175	325	-	-	-	-	500
Other	-	-	-	20	-	-	-	-	20
Total	\$ -	\$ -	\$ 213	\$ 393	\$ -	\$ -	\$ -	\$ -	\$ 606

Projected Expenditures - Construction

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ 51	\$ 55	\$ -	\$ -	\$ 106
A/E Professional	-	-	-	-	33	30	-	-	63
Construction	-	-	-	-	1,900	3,100	-	-	5,000
Contingency	-	-	-	-	-	600	-	-	600
Other	-	-	-	-	30	20	-	-	50
Total	\$ -	\$ -	\$ -	\$ -	\$ 2,014	\$ 3,805	\$ -	\$ -	\$ 5,819

Note: Cash Flow Basis in Thousands

13200

FPWWTF Maintenance Facilities

Project Manager: Thomas Brueckner, P.E.
 Contractor(s): N/A

Location: Field's Point WWTF (Providence, RI)
 Project Priority: B

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	February-18	April-20	25 Months	\$746
Construction	June-20	November-22	29 Months	5,732
Total Project	February-18	November-22	56 Months	\$6,478



Photo: Existing Maintenance Building

This project involves the design and construction of a new maintenance building and support facilities at the FPWWTF. While not critical to plant operations, it will improve efficiency in maintenance support, since the existing maintenance building was originally built in 1900 and is insufficient to meet the needs of operations.

CIP Window Summary

Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
\$ 17	\$ 342	\$ 394	\$ 1,676	\$ 2,504	\$ 1,545	\$ -	\$ -	\$ 6,478

Projected Expenditures - Planning

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Design

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ 17	\$ 45	\$ 40	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 102
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	297	327	-	-	-	-	-	624
Other	-	-	20	-	-	-	-	-	20
Total	\$ 17	\$ 342	\$ 387	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 746

Projected Expenditures - Construction

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ 5	\$ 42	\$ 60	\$ 25	\$ -	\$ -	\$ 132
A/E Professional	-	-	2	24	24	10	-	-	60
Construction	-	-	-	1,600	2,400	1,000	-	-	5,000
Contingency	-	-	-	-	-	500	-	-	500
Other	-	-	-	10	20	10	-	-	40
Total	\$ -	\$ -	\$ 7	\$ 1,676	\$ 2,504	\$ 1,545	\$ -	\$ -	\$ 5,732

Note: Cash Flow Basis in Thousands

20000

WWTF Improvements

Project Manager: Thomas Brueckner, P.E.
Contractor(s): N/A

Location: Field's Point & Bucklin Point WWTF's
Project Priority: B

Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	March-18	Ongoing	Ongoing	3,296
Total Project	March-18	Ongoing	Ongoing	\$3,296



Photo: Aeration Tank Pumps

Project 20000 consists of facility improvements at NBC's WWTF's to comply with current and future regulatory requirements and ensure uninterrupted wastewater treatment processing, 24 hours per day and 365 days per year. NBC programs \$500 thousand annually for improvements to ensure resources are available in years that do not have specific projects identified in order to maintain the integrity of the treatment facilities.

CIP Window Summary

	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
	\$ -	\$ 296	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 3,296

Projected Expenditures - Planning

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Design

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Construction

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ 35	\$ 58	\$ 58	\$ 58	\$ 58	\$ 58	\$ 58	\$ 383
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	250	422	422	422	422	422	422	2,782
Contingency	-	-	-	-	-	-	-	-	-
Other	-	12	20	20	20	20	20	20	132
Total	\$ -	\$ 296	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 3,296

Note: Cash Flow Basis in Thousands

20100

FY 17 WWTF Improvements

Project Manager: Thomas Brueckner, P.E.
Contractor(s): N/A

Location: 2 Ernest Street, Providence, RI
Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	February-17	November-18	20 Months	675
Total Project	February-17	November-18	20 Months	\$675



Photo: Hypochlorite Tank Pad

Project 20100 involves improvements to the hypochlorite tank pad and the chlorination building. Other improvements include rehabilitation of the aeration tank wall, installation of an energy recovery system for air handling and replacement of piping in the grit building.

CIP Window Summary

Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
\$ 471	\$ 204	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 675

Projected Expenditures - Planning

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Design

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Construction

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ 60	\$ 35	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 95
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	391	129	-	-	-	-	-	-	520
Contingency	-	40	-	-	-	-	-	-	40
Other	20	-	-	-	-	-	-	-	20
Total	\$ 471	\$ 204	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 675

Note: Cash Flow Basis in Thousands

40100

NBC Facility Electrical Improvements

Project Manager: Thomas Brueckner, P.E.
 Contractor(s): N/A

Location: Providence, RI
 Project Priority: B

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	May-19	May-20	12 Months	\$130
Design	N/A	N/A	N/A	N/A
Construction	N/A	N/A	N/A	N/A
Total Project	May-19	May-20	12 Months	\$130



Photo: Field's Point Electrical Switchgear & Transformers

This project involves the evaluation of NBC's existing electrical equipment and facilities. Upon completion of the evaluation, improvements will be performed as necessary to ensure reliable and continuous operation of NBC's facilities.

CIP Window Summary

Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
\$ -	\$ 21	\$ 109	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 130

Projected Expenditures - Planning

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ 3	\$ 17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20
A/E Professional	-	8	92	-	-	-	-	-	100
Other	-	10	-	-	-	-	-	-	10
Total	\$ -	\$ 21	\$ 109	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 130

Projected Expenditures - Design

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Construction

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Note: Cash Flow Basis in Thousands

40101

FPWWTF Facility Electrical Improvements

Project Manager: Thomas Brueckner, P.E.
 Contractor(s): SED Associates Corp.

Location: Providence, RI
 Project Priority: B

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	January-16	May-19	40 Months	\$170
Design	N/A	N/A	N/A	N/A
Construction	N/A	N/A	N/A	N/A
Total Project	January-16	May-19	40 Months	\$170



Photo: Field's Point Electrical Facilities

This project involves the evaluation and installation of standby power capabilities for critical facilities at the FPWWTF to maintain uninterrupted operation of treatment processes.

CIP Window Summary

Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
\$ 53	\$ 117	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 170

Projected Expenditures - Planning

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ 19	\$ 31	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50
A/E Professional	34	85	-	-	-	-	-	-	119
Other	-	1	-	-	-	-	-	-	1
Total	\$ 53	\$ 117	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 170

Projected Expenditures - Design

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Construction

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Note: Cash Flow Basis in Thousands

40102

WWTF Electrical Improvements

Project Manager: Thomas Brueckner, P.E.
 Contractor(s): Graybar Electric Company, Inc.

Location: Field's Point and Bucklin Point WWTF's
 Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	September-17	December-18	16 Months	605
Total Project	September-17	December-18	16 Months	\$605



Photo: Field's Point Electrical Panel

This project involves the upgrade or replacement of the electrical and control systems at the Field's Point and Bucklin Point facilities and includes switchgears, electrical feed controls and telecommunications equipment. An arc flash study will also be conducted to ensure equipment at both facilities meets safety requirements and ensure uninterrupted operations.

CIP Window Summary

Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
\$ 312	\$ 293	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 605

Projected Expenditures - Planning

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Design

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Construction

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ 32	\$ 23	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 55
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	280	270	-	-	-	-	-	-	550
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ 312	\$ 293	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 605

Note: Cash Flow Basis in Thousands

81000

BPWWTF UV Disinfection Improvements

Project Manager: Thomas Brueckner, P.E.
 Contractor(s): N/A

Location: Bucklin Point WWTF (East Providence, RI)
 Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	January-18	July-19	18 Months	\$360
Construction	June-19	November-21	29 Months	5,366
Total Project	January-18	November-21	46 Months	\$5,726



Photo: Ultraviolet Disinfection System

This project involves the evaluation of the current Ultraviolet (UV) Disinfection system at Bucklin Point and implementation of a system replacement/upgrade. The current UV equipment is nearing the end of its useful life and the medium pressure, high intensity lamps are expensive and less efficient than newer technologies.

CIP Window Summary

Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
\$ 20	\$ 317	\$ 1,323	\$ 2,416	\$ 1,650	\$ -	\$ -	\$ -	\$ 5,726

Projected Expenditures - Planning

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Design

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ 20	\$ 47	\$ 3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 70
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	230	20	-	-	-	-	-	250
Other	-	40	-	-	-	-	-	-	40
Total	\$ 20	\$ 317	\$ 23	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 360

Projected Expenditures - Construction

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ 57	\$ 60	\$ 25	\$ -	\$ -	\$ -	\$ 142
A/E Professional	-	-	33	36	15	-	-	-	84
Construction	-	-	1,200	2,300	1,000	-	-	-	4,500
Contingency	-	-	-	-	600	-	-	-	600
Other	-	-	10	20	10	-	-	-	40
Total	\$ -	\$ -	\$ 1,300	\$ 2,416	\$ 1,650	\$ -	\$ -	\$ -	\$ 5,366

Note: Cash Flow Basis in Thousands

1140100

River Model Development

Project Manager: Thomas Uva
 Contractor(s): Kincaid Consulting

Location: NBC Receiving Waters
 Project Priority: C

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	March-05	February-24	228 Months	\$538
Construction	N/A	N/A	N/A	N/A
Total Project	March-05	February-24	228 Months	\$538

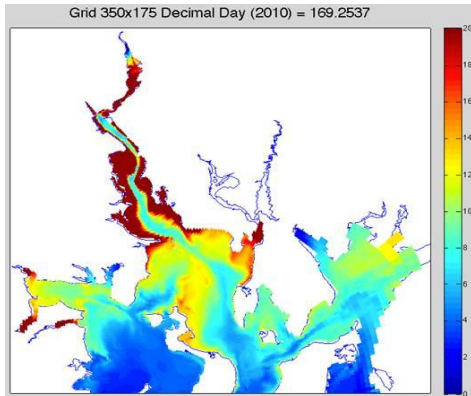


Photo: Map of ROMS model showing near-bottom phytoplankton concentrations during simulated bloom

The Regional Ocean Modeling System (ROMS) for the Providence and Seekonk Rivers and Narragansett Bay tracks the circulation and transport of nutrients and determines how changing nitrogen loads affect the biology and water quality of the receiving waters. Work continues on the model to improve predictions and validate accuracy.

CIP Window Summary

	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
	\$ 360	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 28	\$ -	\$ 538

Projected Expenditures - Planning

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Design

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ 56.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 56.00
Land	-	-	-	-	-	-	-	-	-
A/E Professional	266	30	30	30	30	30	28	-	444
Other	38	-	-	-	-	-	-	-	38
Total	\$ 360	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 28	\$ -	\$ 538

Projected Expenditures - Construction

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Note: Cash Flow Basis in Thousands

1140300

Green House Gas Study

Project Manager: James McCaughey, P.E.
 Contractor(s): University of Rhode Island

Location: Field's Point (Providence, RI)
 Project Priority: C

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	October-14	February-19	53 Months	\$77
Construction	N/A	N/A	N/A	N/A
Total Project	October-14	February-19	53 Months	\$77



Photo: Greenhouse Gas Collection

The Greenhouse Gas Study is designed to quantify NBC's overall carbon footprint by measuring greenhouse gas emissions from wastewater collection and treatment operations. The study will ensure NBC can quickly address future regulatory requirements related to greenhouse gas emissions.

CIP Window Summary

Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
\$ 55	\$ 22	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 77

Projected Expenditures - Planning

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Design

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ 15	\$ 2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 17
Land	-	-	-	-	-	-	-	-	-
A/E Professional	40	20	-	-	-	-	-	-	60
Other	-	-	-	-	-	-	-	-	-
Total	\$ 55	\$ 22	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 77

Projected Expenditures - Construction

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Note: Cash Flow Basis in Thousands

1140500

NBC Energy Sustainability

Project Manager: James McCaughey, P.E.
 Contractor(s): Various

Location: Various Locations
 Project Priority: C

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	January-16	September-19	45 Months	\$225
Construction	N/A	N/A	N/A	N/A
Total Project	January-16	September-19	45 Months	\$225



Photo: Methods of generating energy

The Energy Sustainability Program is designed to identify, measure, and implement ways of obtaining and using energy so that energy needs are met while minimizing environmental impacts and assuring sufficient energy sources are available to meet future needs. The Energy Sustainability Program maximizes conservation, efficiencies and employment of sustainable renewable energy resources in an economically viable and reliable manner.

CIP Window Summary

Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
\$ 125	\$ 60	\$ 40	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 225

Projected Expenditures - Planning

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Design

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ 110	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 110
Land	-	-	-	-	-	-	-	-	-
A/E Professional	5	10	-	-	-	-	-	-	15
Other	10	50	40	-	-	-	-	-	100
Total	\$ 125	\$ 60	\$ 40	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 225

Projected Expenditures - Construction

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Note: Cash Flow Basis in Thousands

1140600

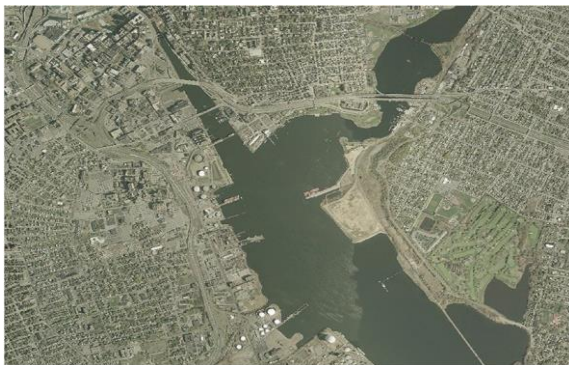
RIPDES Compliance Improvements

Project Manager: Thomas Uva
 Contractor(s): N/A

Location: NBC District
 Project Priority: C

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	February-18	February-23	61 Months	\$1,551
Construction	N/A	N/A	N/A	N/A
Total Project	February-18	February-23	61 Months	\$1,551



This project includes improvements to the wastewater treatment and collections system that may be required to comply with new permit limits and mandates. Specific improvements shall be identified through a metals translator study, a site specific study, an upper bay dissolved oxygen evaluation, and the development of a climate resiliency plan.

Photo: The Providence River, the northernmost part of Narragansett Bay

CIP Window Summary

Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
\$ 192	\$ 481	\$ 639	\$ 20	\$ 20	\$ 200	\$ -	\$ -	\$ 1,551

Projected Expenditures - Planning

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Design

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ 157	\$ 263	\$ 450	\$ -	\$ -	\$ 200	\$ -	\$ -	\$ 1,070
Land	-	-	-	-	-	-	-	-	-
A/E Professional	20	158	139	20	20	-	-	-	356
Other	15	60	50	-	-	-	-	-	125
Total	\$ 192	\$ 481	\$ 639	\$ 20	\$ 20	\$ 200	\$ -	\$ -	\$ 1,551

Projected Expenditures - Construction

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Note: Cash Flow Basis in Thousands

30700

NBC System-wide Facilities Planning

Project Manager: Thomas Brueckner, P.E.
 Contractor(s): N/A

Location: NBC Service Area
 Project Priority: C

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	February-19	September-20	19 Months	\$386
Construction	N/A	N/A	N/A	N/A
Total Project	February-19	September-20	19 Months	\$386

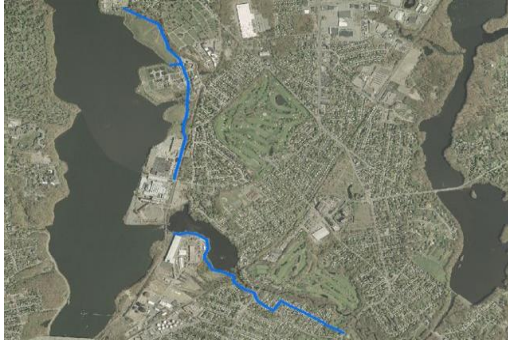


Photo: Proposed area for the East Providence capacity analysis

Project 30700 consists of planning activities that will determine if there is adequate system capacity for the next twenty years and if there is any excess infiltration/inflow in NBC's interceptors. As the evaluations begin for specific cities and towns, each will be given a unique project number.

CIP Window Summary

Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
\$ -	\$ 28	\$ 268	\$ 90	\$ -	\$ -	\$ -	\$ -	\$ 386

Projected Expenditures - Planning

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Design

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ 12	\$ 62	\$ 8	\$ -	\$ -	\$ -	\$ -	\$ 82
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	16	206	52	-	-	-	-	274
Other	-	-	-	30	-	-	-	-	30
Total	\$ -	\$ 28	\$ 268	\$ 90	\$ -	\$ -	\$ -	\$ -	\$ 386

Projected Expenditures - Construction

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Note: Cash Flow Basis in Thousands

40200

NBC System-wide Inflow Reduction

Project Manager: Thomas Brueckner, P.E.
 Contractor(s): N/A

Location: NBC Service Area
 Project Priority: B

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	September-18	January-20	16 Months	\$137
Construction	March-20	June-21	15 Months	318
Total Project	September-18	June-21	33 Months	\$455



Photo: Downspouts at NBC's Corporate Office Building

This project involves the development and implementation of an inflow reduction program to remove stormwater from sanitary sewers in the NBC's service area. This project is imperative to ongoing operation to prevent surcharging of sewers that could cause illegal sanitary sewer overflows during wet weather events.

CIP Window Summary

Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
\$ -	\$ 48	\$ 107	\$ 300	\$ -	\$ -	\$ -	\$ -	\$ 455

Projected Expenditures - Planning

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Design

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ 18	\$ 14	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 32
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	30	70	-	-	-	-	-	100
Other	-	-	5	-	-	-	-	-	5
Total	\$ -	\$ 48	\$ 89	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 137

Projected Expenditures - Construction

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ 9	\$ 47	\$ -	\$ -	\$ -	\$ -	\$ 56
A/E Professional	-	-	9	33	-	-	-	-	42
Construction	-	-	-	200	-	-	-	-	200
Contingency	-	-	-	10	-	-	-	-	10
Other	-	-	-	10	-	-	-	-	10
Total	\$ -	\$ -	\$ 18	\$ 300	\$ -	\$ -	\$ -	\$ -	\$ 318

Note: Cash Flow Basis in Thousands

40300

Municipal Lateral Sewer Acquisition Impact

Project Manager: Thomas Brueckner, P.E.
 Contractor(s): N/A

Location: NBC Service Area
 Project Priority: C

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	June-18	July-20	25 Months	\$296
Design	N/A	N/A	N/A	N/A
Construction	N/A	N/A	N/A	N/A
Total Project	June-18	July-20	25 Months	\$296



Photo: Municipal Sewer Manhole Cover

This project involves the evaluation of the impact of NBC assuming ownership of lateral sewers that are currently owned by municipalities within the NBC service area. This project will be required should legislation be passed by the General Assembly requiring NBC to take over ownership and maintenance of local sewers within the NBC district.

CIP Window Summary

Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
\$ -	\$ 1	\$ 268	\$ 27	\$ -	\$ -	\$ -	\$ -	\$ 296

Projected Expenditures - Planning

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ 1	\$ 33	\$ 2	\$ -	\$ -	\$ -	\$ -	\$ 36
A/E Professional	-	-	225	25	-	-	-	-	250
Other	-	-	10	-	-	-	-	-	10
Total	\$ -	\$ 1	\$ 268	\$ 27	\$ -	\$ -	\$ -	\$ -	\$ 296

Projected Expenditures - Design

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Construction

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Note: Cash Flow Basis in Thousands

40400

FPWWTF Facilities Plan Update

Project Manager: Thomas Brueckner, P.E.
 Contractor(s): CH2M Hill

Location: Providence, RI
 Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	January-17	December-18	23 Months	\$380
Design	N/A	N/A	N/A	N/A
Construction	N/A	N/A	N/A	N/A
Total Project	January-17	December-18	23 Months	\$380



Photo: Aeration Tanks FPWWTF

This project involves the update of the FPWWTF Facilities Plan and determining the maximum Nitrogen and Biochemical Oxygen Demand loads that can be accepted at the facility while meeting RIPDES permit limits. Additionally, services will be provided to review the RIPDES permit recently issued by RIDEM.

CIP Window Summary

Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
\$ 242	\$ 138	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 380

Projected Expenditures - Planning

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ 222	\$ 138	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 360
A/E Professional	20	-	-	-	-	-	-	-	20
Other	-	-	-	-	-	-	-	-	-
Total	\$ 242	\$ 138	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 380

Projected Expenditures - Design

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Construction

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Note: Cash Flow Basis in Thousands

40500

RIPDES Flow Monitoring System

Project Manager: Meg Goulet, P.E.
 Contractor(s): N/A

Location: Field's Point & Bucklin Point WWTF
 Project Priority: C

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	December-17	July-19	19 Months	\$848
Construction	N/A	N/A	N/A	N/A
Total Project	December-17	July-19	19 Months	\$848



Photo: Flow Meter Installed

This project involves condition assessments of existing flow monitoring equipment located throughout NBC's collection system. An evaluation will be conducted to determine whether the equipment should be upgraded or replaced with an alternate advanced technology in order to provide consistent and accurate monitoring of flow conditions and measurements in accordance with the RIPDES permit. In addition, field services and data analysis will be conducted throughout the collection system.

CIP Window Summary

Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
\$ 58	\$ 725	\$ 65	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 848

Projected Expenditures - Planning

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Design

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ 58	\$ 40	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 98
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	685	65	-	-	-	-	-	750
Other	-	-	-	-	-	-	-	-	-
Total	\$ 58	\$ 725	\$ 65	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 848

Projected Expenditures - Construction

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Note: Cash Flow Basis in Thousands

30800

CSO Phase III A Facilities

Project Manager: Kathryn Kelly, P.E.
 Contractor(s): Stantec Consulting Services

Location: Pawtucket, RI
 Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	April-13	December-21	105 Months	\$74,022
Construction	August-18	July-26	95 Months	428,384
Total Project	April-13	July-26	159 Months	\$502,406



Photo: Proposed Phase III CSO Facilities

Phase III A involves the design and construction of a deep rock tunnel in Pawtucket approximately 13,000 feet in length along the Seekonk and Blackstone Rivers, a pump station to convey flow to the Bucklin Point WWTF in East Providence, drop shafts and consolidation conduits. Additionally, this project is to design the Upper BVI relief, CSO 105 relief sewer, CSO 206 sewer separation, green stormwater infrastructure and regulator modifications. Lastly, this project is to design and construct O&M Support Facilities at Bucklin Point to maintain operational infrastructure necessary to provide space for construction of the tunnel pump station.

CIP Window Summary

Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
\$ 22,450	\$ 29,692	\$ 28,328	\$ 45,955	\$ 59,551	\$ 78,579	\$ 102,560	\$ 135,293	\$ 502,406

Projected Expenditures - Planning

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Design

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ 1,186	\$ 552	\$ 262	\$ 252	\$ 126	\$ -	\$ -	\$ -	\$ 2,378
Land	3	1,998	-	-	2,000	-	-	-	4,001
A/E Professional	17,887	16,682	14,910	13,681	-	-	-	-	63,160
Other	791	1,081	1,083	1,056	473	-	-	-	4,484
Total	\$ 19,867	\$ 20,313	\$ 16,254	\$ 14,989	\$ 2,599	\$ -	\$ -	\$ -	\$ 74,022

Projected Expenditures - Construction

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ 150	\$ 481	\$ 363	\$ 979	\$ 979	\$ 979	\$ 979	\$ 1,933	\$ 6,843
A/E Professional	1,263	3,030	3,030	3,030	3,030	3,030	3,030	6,058	25,501
Construction	-	3,060	5,862	24,139	50,130	71,762	95,133	121,462	371,547
Contingency	1,000	2,400	2,400	2,400	2,400	2,400	2,400	5,000	20,400
Other	170	408	418	418	413	408	1,018	840	4,093
Total	\$ 2,583	\$ 9,379	\$ 12,073	\$ 30,966	\$ 56,951	\$ 78,579	\$ 102,560	\$ 135,293	\$ 428,384

Note: Cash Flow Basis in Thousands

30810

CSO Phase III B Facilities

Project Manager: Kathryn Kelly, P.E.
 Contractor(s): N/A

Location: Central Falls, RI
 Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	December-27	December-30	37 Months	28,484
Total Project	December-27	December-30	37 Months	\$28,484



Photo: Proposed Phase III CSO Facilities

Phase III B involves the construction of the Upper BVI relief and the CSO 105 relief sewer. In addition, this phase includes one sewer separation project and construction of green stormwater infrastructure to reduce stormwater inflow to the combined sewer system. Design of the Phase III B facilities is included in Phase III A.

CIP Window Summary

Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 28,484	\$ 28,484

Projected Expenditures - Planning

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Design

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Construction

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 615	\$ 615
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	26,433	26,433
Contingency	-	-	-	-	-	-	-	1,356	1,356
Other	-	-	-	-	-	-	-	80	80
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 28,484	\$ 28,484

Note: Cash Flow Basis in Thousands

30820

CSO Phase III C Facilities

Project Manager: Kathryn Kelly, P.E.
 Contractor(s): N/A

Location: Pawtucket, RI
 Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	May-32	June-34	26 Months	\$23,120
Construction	April-34	June-37	39 Months	141,540
Total Project	May-32	June-37	62 Months	\$164,660



Photo: Proposed Phase III CSO Facilities

Phase III C consists of the design and construction of a stub tunnel that will convey flow from CSO 220 to the tunnel to be constructed in Phase III A. In addition, GSI facilities will be constructed to reduce stormwater inflow to the combined sewers.

CIP Window Summary

	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 164,660	\$ 164,660

Projected Expenditures - Planning

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Design

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 968	\$ 968
Land	-	-	-	-	-	-	-	2,500	2,500
A/E Professional	-	-	-	-	-	-	-	14,440	14,440
Other	-	-	-	-	-	-	-	5,212	5,212
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 23,120	\$ 23,120

Projected Expenditures - Construction

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,160	\$ 2,160
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	135,040	135,040
Contingency	-	-	-	-	-	-	-	3,360	3,360
Other	-	-	-	-	-	-	-	980	980
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 141,540	\$ 141,540

Note: Cash Flow Basis in Thousands

30830

CSO Phase III D Facilities

Project Manager: Kathryn Kelly, P.E.
 Contractor(s): N/A

Location: Providence, RI
 Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	April-37	September-39	29 Months	\$13,180
Construction	August-39	December-41	28 Months	70,320
Total Project	April-37	December-41	57 Months	\$83,500



Photo: Proposed Phase III CSO Facilities

Phase III D involves the design and construction of an interceptor that will store flow during a storm and later release the flow into the system as capacity allows. In addition, Green Stormwater Infrastructure facilities will be constructed to reduce stormwater inflow to the combined sewer system. Storm sewers will be constructed to separate stormwater flow from entering the combined sewer.

CIP Window Summary

Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 83,500	\$ 83,500

Projected Expenditures - Planning

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Design

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,110	\$ 1,110
Land	-	-	-	-	-	-	-	1,000	1,000
A/E Professional	-	-	-	-	-	-	-	8,000	8,000
Other	-	-	-	-	-	-	-	3,070	3,070
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13,180	\$ 13,180

Projected Expenditures - Construction

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,010	\$ 1,010
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	67,760	67,760
Contingency	-	-	-	-	-	-	-	1,320	1,320
Other	-	-	-	-	-	-	-	230	230
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 70,320	\$ 70,320

Note: Cash Flow Basis in Thousands

30500

NBC Interceptor Easements Restoration, Various Locations

Project Manager: Thomas Brueckner, P.E.
 Contractor(s): N/A

Location: NBC Service Area
 Project Priority: B

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	June-18	January-20	19 Months	\$439
Construction	January-20	November-20	10 Months	439
Total Project	June-18	November-20	29 Months	\$878

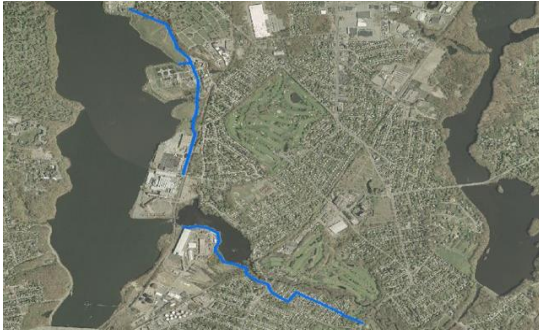


Photo: Proposed area for the East Providence easement investigation

This project involves verification of easement locations and clearing the easements in overland areas to ensure sufficient access and enable NBC to maintain the integrity of the collection system.

CIP Window Summary

Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
\$ 2	\$ 191	\$ 364	\$ 321	\$ -	\$ -	\$ -	\$ -	\$ 878

Projected Expenditures - Planning

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Design

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ 2	\$ 31	\$ 41	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 74
Land	-	-	50	-	-	-	-	-	50
A/E Professional	-	160	140	-	-	-	-	-	300
Other	-	-	15	-	-	-	-	-	15
Total	\$ 2	\$ 191	\$ 246	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 439

Projected Expenditures - Construction

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ 18	\$ 20	\$ -	\$ -	\$ -	\$ -	\$ 38
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	100	250	-	-	-	-	350
Contingency	-	-	-	35	-	-	-	-	35
Other	-	-	-	16	-	-	-	-	16
Total	\$ -	\$ -	\$ 118	\$ 321	\$ -	\$ -	\$ -	\$ -	\$ 439

Note: Cash Flow Basis in Thousands

30503

NBC Interceptor Easements Restoration, BVI Wetlands

Project Manager: Rich Bernier, P.E.
 Contractor(s): N/A

Location: Cumberland, RI
 Project Priority: A

Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	March-18	December-18	10 Months	194
Total Project	March-18	December-18	10 Months	\$194



Photo: Easement Clearing in Cumberland

This project involves clearing easements along the Blackstone Valley Interceptor in Cumberland that couldn't be completed as originally planned in Project 30501 due to wetlands issues. Wetlands permits will be obtained under Project 30501 and wetlands easements will be cleared under this project.

CIP Window Summary

Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
\$ 28	\$ 166	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 194

Projected Expenditures - Planning

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Design

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Construction

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ 14	\$ 40	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 54
A/E Professional	4	16	-	-	-	-	-	-	20
Construction	-	100	-	-	-	-	-	-	100
Contingency	-	10	-	-	-	-	-	-	10
Other	10	-	-	-	-	-	-	-	10
Total	\$ 28	\$ 166	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 194

Note: Cash Flow Basis in Thousands

70900

Omega Pump Station Upgrade

Project Manager: Thomas Brueckner, P.E.
 Contractor(s): N/A

Location: Omega Pump Station, East Providence, RI
 Project Priority: B

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	January-18	January-19	12 Months	\$164
Construction	January-19	June-20	17 Months	748
Total Project	January-18	June-20	29 Months	\$912



Photo: Omega Pump Station

This project involves the evaluation, design and replacement of pumps, piping and valves at the Omega Pump Station, which were originally built in the 1950's and are nearing the end of their useful life. New screening and grit technology will shred and reduce the size of coarse solid materials within the wastewater and facilitate their transport to the wastewater treatment facility. Additionally, the new technology will provide for the upgrade of the facility to improve reliability of the motor control center and streamline operations.

CIP Window Summary

Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
\$ 23	\$ 169	\$ 720	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 912

Projected Expenditures - Planning

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Design

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ 23	\$ 21	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 44
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	100	-	-	-	-	-	-	100
Other	-	20	-	-	-	-	-	-	20
Total	\$ 23	\$ 141	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 164

Projected Expenditures - Construction

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ 20	\$ 36	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 56
A/E Professional	-	8	24	-	-	-	-	-	32
Construction	-	-	600	-	-	-	-	-	600
Contingency	-	-	60	-	-	-	-	-	60
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ 28	\$ 720	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 748

Note: Cash Flow Basis in Thousands

71000

Lincoln Septage Station Replacement

Project Manager: Thomas Brueckner, P.E.
 Contractor(s): N/A

Location: Bucklin Point (Lincoln)
 Project Priority: B

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	March-18	August-19	17 Months	\$404
Construction	August-19	July-21	23 Months	2,400
Total Project	March-18	July-21	40 Months	\$2,804



Photo: Septage Receiving Station

The existing Lincoln Septage Receiving Station has reached the end of its useful life and needs to be replaced. This project includes design and construction of a new septage receiving station equipped with a screening mechanism and sample collection capabilities in accordance with NBC's Standard Operating Procedures for monitoring septage.

CIP Window Summary

Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
\$ 11	\$ 335	\$ 627	\$ 1,524	\$ 307	\$ -	\$ -	\$ -	\$ 2,804

Projected Expenditures - Planning

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Design

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ 11	\$ 45	\$ 8	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 64
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	250	50	-	-	-	-	-	300
Other	-	40	-	-	-	-	-	-	40
Total	\$ 11	\$ 335	\$ 58	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 404

Projected Expenditures - Construction

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ 47	\$ 60	\$ 5	\$ -	\$ -	\$ -	\$ 112
A/E Professional	-	-	22	24	2	-	-	-	48
Construction	-	-	500	1,400	100	-	-	-	2,000
Contingency	-	-	-	-	200	-	-	-	200
Other	-	-	-	40	-	-	-	-	40
Total	\$ -	\$ -	\$ 569	\$ 1,524	\$ 307	\$ -	\$ -	\$ -	\$ 2,400

Note: Cash Flow Basis in Thousands

304 M Summary

Interceptor Inspection and Cleaning

Project Manager: Meg Goulet, P.E.
 Contractor(s): Various

Location: NBC Service Area
 Project Priority: B

Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Inspection and Cleaning	July-09	Ongoing	Ongoing	3,608
Total Project	July-09	Ongoing	Ongoing	\$3,608



Photo: Interceptor grit removal

The 304 M Project includes the inspection and cleaning of interceptors in order to maintain NBC's infrastructure and collection system. The inspections determine pipe condition and identify infrastructure issues. NBC allocates \$500 thousand annually for inspections and cleaning in years that do not have specific projects identified to ensure resources are available. As new inspection and cleaning projects are identified, they will be given a unique project number.

CIP Window Summary	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
	\$ 108	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 3,608

Projected Expenditures - Planning

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Design

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Construction

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ 21	\$ 61	\$ 55	\$ 55	\$ 55	\$ 55	\$ 55	\$ 55	\$ 412
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	80	373	370	370	370	370	370	370	2,673
Contingency	-	-	-	-	-	-	-	-	-
Other	7	66	75	75	75	75	75	75	523
Total	\$ 108	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 3,608

Note: Cash Flow Basis in Thousands

30400C

Interceptor Restoration and Construction

Project Manager: Rich Bernier, P.E.
Contractor(s): Various

Location: NBC Service Area
Project Priority: B

Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	July-01	Ongoing	Ongoing	6,484
Total Project	July-01	Ongoing	Ongoing	\$6,484



Photo: Proposed portion of Lincoln Interceptor Replacement

Project 30400C consists of funding programmed for potential restoration and construction to correct issues such as structural damage, aging or inaccessible infrastructure, odor control and emergency situations. NBC allocates \$1.5 million annually for interceptor restoration and construction, in years that do not have specific projects identified to ensure resources are available. As new projects are identified, they will be given a unique project number.

CIP Window Summary

Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
\$ -	\$ -	\$ -	\$ 484	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 6,484

Projected Expenditures - Planning

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Design

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Construction

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ 24	\$ 75	\$ 75	\$ 75	\$ 75	\$ 324
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	403	1,250	1,250	1,250	1,250	5,403
Contingency	-	-	-	48	150	150	150	150	648
Other	-	-	-	8	25	25	25	25	108
Total	\$ -	\$ -	\$ -	\$ 484	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 6,484

Note: Cash Flow Basis in Thousands

30421

Louisquisset Pike Interceptor Improvements

Project Manager: Thomas Brueckner, P.E.
 Contractor(s): N/A

Location: Lincoln, RI
 Project Priority: C

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	May-07	May-09	24 Months	N/A
Construction	February-19	July-20	17 Months	4,594
Total Project	May-07	July-20	158 Months	\$4,594



Photo: Lincoln Interceptor Replacement Location

This project involves the construction of a larger diameter interceptor in the northern section of the Town of Lincoln. The larger capacity pipe will accommodate the additional flow resulting from expected development.

CIP Window Summary

Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
\$ -	\$ 34	\$ 3,544	\$ 1,016	\$ -	\$ -	\$ -	\$ -	\$ 4,594

Projected Expenditures - Planning

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Design

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Construction

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ 22	\$ 103	\$ 16	\$ -	\$ -	\$ -	\$ -	\$ 141
A/E Professional	-	12	41	-	-	-	-	-	53
Construction	-	-	3,400	600	-	-	-	-	4,000
Contingency	-	-	-	400	-	-	-	-	400
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ 34	\$ 3,544	\$ 1,016	\$ -	\$ -	\$ -	\$ -	\$ 4,594

Note: Cash Flow Basis in Thousands

30444

Moshassuck Valley Interceptor

Project Manager: Thomas Brueckner, P.E.
 Contractor(s): N/A

Location: Central Falls, RI
 Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	January-12	January-18	73 Months	\$504
Construction	February-18	October-19	21 Months	6,531
Total Project	January-12	October-19	94 Months	\$7,035



Photo: Portion of the Moshassuck Valley Interceptor to be replaced

An inspection of the Moshassuck Valley Interceptor from Higginson Street in Central Falls to Lockbridge Street in Pawtucket revealed that this line has sunk from its original grade at numerous points by as much as 2.5 feet. This project consists of design and construction of a new sewer to replace the existing sewer.

CIP Window Summary

Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
\$ 20	\$ 3,851	\$ 2,660	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,531

Projected Expenditures - Planning

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Design

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ 79	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 79
Land	95	-	-	-	-	-	-	-	95
A/E Professional	324	-	-	-	-	-	-	-	324
Other	6	-	-	-	-	-	-	-	6
Total	\$ 504	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 504

Projected Expenditures - Construction

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ 14	\$ 65	\$ 20	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 99
A/E Professional	6	26	10	-	-	-	-	-	42
Construction	-	3,750	2,050	-	-	-	-	-	5,800
Contingency	-	-	580	-	-	-	-	-	580
Other	-	10	-	-	-	-	-	-	10
Total	\$ 20	\$ 3,851	\$ 2,660	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,531

Note: Cash Flow Basis in Thousands

30457

Providence River Siphon

Project Manager: Thomas Brueckner, P.E.
 Contractor(s): Stantec Consulting Services

Location: Providence, RI
 Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	March-13	May-15	26 Months	N/A
Design	July-15	June-18	35 Months	\$464
Construction	February-18	July-19	17 Months	6,458
Total Project	March-13	July-19	76 Months	\$6,922



Photo: Siphon Outlet Chamber

During the planning phase of this project, it was determined that the existing Providence River siphon was in good condition but that a section of the 78" interceptor needed to be replaced and that the inlet and outlet siphon chambers needed repair. These deficiencies will be corrected in the design and construction phases.

CIP Window Summary

	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
	\$ 68	\$ 5,818	\$ 572	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,458

Projected Expenditures - Planning

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Design

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ 168	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 168
Land	21	-	-	-	-	-	-	-	21
A/E Professional	269	-	-	-	-	-	-	-	269
Other	6	-	-	-	-	-	-	-	6
Total	\$ 464	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 464

Projected Expenditures - Construction

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ 20	\$ 68	\$ 4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 92
A/E Professional	48	96	8	-	-	-	-	-	152
Construction	-	5,604	-	-	-	-	-	-	5,604
Contingency	-	-	560	-	-	-	-	-	560
Other	-	50	-	-	-	-	-	-	50
Total	\$ 68	\$ 5,818	\$ 572	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,458

Note: Cash Flow Basis in Thousands

30460

Johnston Sewer Improvements/Greenville Avenue

Project Manager: Rich Bernier, P.E.
 Contractor(s): DiGregorio, Inc.

Location: Johnston, RI
 Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	May-16	February-18	21 Months	\$410
Construction	December-16	September-18	21 Months	8,874
Total Project	May-16	September-18	28 Months	\$9,285



Photo: Construction on Greenville Avenue

The Facilities Plan for Johnston has been completed and approved by RIDEM. The plan recommended that sewers in the Town be expanded to accommodate future development in NBC's service area. This project involves design and construction of approximately 7,300 linear foot of 12" pipe in Greenville Avenue from Salina Road to west of Route 295.

CIP Window Summary

	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
	\$ 4,051	\$ 4,823	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,874

Projected Expenditures - Planning

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Design

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ 145	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 145
Land	50	-	-	-	-	-	-	-	50
A/E Professional	210	-	-	-	-	-	-	-	210
Other	5	-	-	-	-	-	-	-	5
Total	\$ 410	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 410

Projected Expenditures - Construction

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ 335	\$ 60	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 395
A/E Professional	121	209	-	-	-	-	-	-	330
Construction	3,594	3,906	-	-	-	-	-	-	7,500
Contingency	-	649	-	-	-	-	-	-	649
Other	1	-	-	-	-	-	-	-	1
Total	\$ 4,051	\$ 4,823	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,874

Note: Cash Flow Basis in Thousands

30464

Johnston Sewer Improvements/Hartford Avenue

Project Manager: Rich Bernier, P.E.
 Contractor(s): D'Ambra Construction

Location: Johnston, RI
 Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	February-17	December-17	10 Months	\$253
Construction	June-17	June-19	23 Months	2,771
Total Project	February-17	June-19	27 Months	\$3,024



Photo: Aerial View Hartford Avenue in Johnston

This project includes the extension of the 12" Hartford Avenue sewer pipe by approximately 5,500 linear foot to the area west of Route 295 to extend service to areas in NBC's service district that are not presently served.

CIP Window Summary

Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
\$ 2,398	\$ 373	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,771

Projected Expenditures - Planning

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Design

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ 60	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 60
Land	-	-	-	-	-	-	-	-	-
A/E Professional	189	-	-	-	-	-	-	-	189
Other	4	-	-	-	-	-	-	-	4
Total	\$ 253	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 253

Projected Expenditures - Construction

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ 222	\$ 20	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 242
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	1,766	71	-	-	-	-	-	-	1,837
Contingency	-	282	-	-	-	-	-	-	282
Other	410	-	-	-	-	-	-	-	410
Total	\$ 2,398	\$ 373	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,771

Note: Cash Flow Basis in Thousands

30465

Field's Point Drive Interceptor Improvements

Project Manager: Thomas Brueckner, P.E.
 Contractor(s): N/A

Location: Providence, RI
 Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	January-18	December-18	11 Months	805
Total Project	January-18	December-18	11 Months	\$805



Photo: Field's Point Drive

The Field's Point Drive sewer has collapsed in one location and in several other locations the pipe is broken and will need to be repaired. In other locations the pipe is cracked and will need to be lined. These measures will restore the sewer to its original capacity.

CIP Window Summary

Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
\$ 71	\$ 734	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 805

Projected Expenditures - Planning

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Design

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Construction

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ 51	\$ 54	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 105
A/E Professional	20	10	-	-	-	-	-	-	30
Construction	-	600	-	-	-	-	-	-	600
Contingency	-	60	-	-	-	-	-	-	60
Other	-	10	-	-	-	-	-	-	10
Total	\$ 71	\$ 734	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 805

Note: Cash Flow Basis in Thousands

30466

Improvements to Interceptors FY 2018

Project Manager: Rich Bernier, P.E.
 Contractor(s): N/A

Location: Providence, N. Providence, and Pawtucket, RI
 Project Priority: B

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	January-18	April-18	2 Months	\$20
Construction	April-18	December-19	20 Months	3,572
Total Project	January-18	December-19	23 Months	\$3,592



Photo: Conducting Sewer System Repairs

This project consists of lining approximately 6,000 feet of interceptors ranging in size from 18" to 48". Additionally, approximately 61 manholes will be rehabilitated in various locations in Providence, North Providence and Pawtucket.

CIP Window Summary

Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
\$ 21	\$ 3,536	\$ 15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,572

Projected Expenditures - Planning

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected Expenditures - Design

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ 20	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	\$ 20	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20

Projected Expenditures - Construction

Cost Category	Pre FY 19	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Post FY 24	Total
Administrative	\$ 21	\$ 191	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 212
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	2,985	15	-	-	-	-	-	3,000
Contingency	-	360	-	-	-	-	-	-	360
Other	-	-	-	-	-	-	-	-	-
Total	\$ 21	\$ 3,536	\$ 15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,572

Note: Cash Flow Basis in Thousands

CIP Impact and Long-Term Plan

This year’s CIP identifies a total of 36 projects that are either in progress, to be initiated, or to be completed during FY 2019-2024. The estimated costs for this year’s CIP window are \$356.9 million, with additional expenditures of \$55.5 million in FY 2019 for a total of \$412.4 million. The majority or 88% of the expenditures are related to the third and final phase of the Combined Sewer Overflow (CSO) Abatement Facilities. Other projects in the CIP account for the remaining 12% and reflect the continued investment in NBC’s wastewater treatment and collection system infrastructure.

CIP Impact on Operating Budget

Certain capital improvements will directly impact the operating budget either through increased revenue, increased expense, or savings. NBC has identified these impacts on a project by project basis. The following table describes the impact categories and should be used to interpret the figures in the detailed operating impact tables in this section of the Budget.

Impact	Description	Reflection in Tables
Savings	A reduction in operating costs resulting from no longer operating facilities, reduced energy consumption, and/or the purchase of electricity	Shown as a reduction in Operating Costs
Increased Expense	An increase in operating costs resulting from new facilities becoming operational	Shown as an increase in Operating Costs
Increased Revenue	An increase in revenue through new user charges, incentives, and/or the sale of Renewable Energy Credits	Shown as an increase in Operating Revenue or Non-Operating Revenue

FY 2019 Revenue and Expense Impacts

NBC has determined the operating and expense impacts related to eleven capital projects scheduled for completion in FY 2019. Eight projects are inspections, restorations, improvements or studies and are not anticipated to have any first year operating impacts or start-up costs. Two projects, the Johnston Sewer Improvements/Greenville Avenue and the FPWWTF - Blower Improvements Phase II are projected to have operating impacts resulting in a \$426,218 increase in revenue and \$18,333 increase in expense in FY 2019. A third project, the Johnston Sewer Improvements/Hartford Avenue will have increased costs in FY 2024 for maintenance. Projects with savings, expense or revenue impacts are discussed in the following section.

Johnston Sewer Improvements/Greenville Avenue

The Johnston Sewer Improvements/Greenville Avenue Project (30460) includes the installation of approximately 6,750 linear feet of 12” pipe along Greenville Avenue in Johnston which will expand NBC’s collection system. The revenue generated as a result of new customers connecting to NBC’s system is estimated at \$426,218 annually. One connection will take place in FY 2018 and the remaining connections in FY 2019. The FY 2019 figure represents one full year of revenue. NBC estimates operating expense of \$10,000 every 5 years for ongoing maintenance of the collection system, beginning in FY 2023. All start-up costs are included in the project.

Johnston Sewer Improvements/Greenville Avenue			
	FY 2019	FY 2020	Annual
Increased Revenue			
User Fees	\$ 426,218	\$ 426,218	\$ 426,218
Revenue Impact	\$ 426,218	\$ 426,218	\$ 426,218
Increased Expense			
Maintenance	\$ -	\$ -	\$ 10,000
Expense Impact	\$ -	\$ -	\$ 10,000

FPWWTF - Blower Improvements Phase II

The FPWWTF Blower Improvements Phase II Project (10908) includes construction of a new blower building that will house four new centrifugal blowers to provide a reliable air source for the aeration treatment process. The estimated annual ongoing expense is \$20,000 and includes \$10,000 for 83,333 kWh of additional electricity usage and maintenance expense at \$10,000. The FY 2019 expense represents eleven months of operation and the full year is reflected in the subsequent year. All start-up costs are carried in the project.

FPWWTF - Blower Improvements Phase II			
	FY 2019	FY 2020	Annual
Increased Expense			
Electricity	\$ 9,167	\$ 10,000	\$ 10,000
Maintenance	9,166	10,000	10,000
Expense Impact	\$ 18,333	\$ 20,000	\$ 20,000

Johnston Sewer Improvements/Hartford Avenue

The Johnston Sewer Improvements/Hartford Avenue Project (30464) will extend the Hartford Avenue sewer approximately 5,400 feet to the area west of Route 295 to provide service to areas in NBC's district that are not presently sewered in the Town of Johnston. NBC estimates operating expense of \$10,000 every 5 years for ongoing maintenance of the collection system, beginning in FY 2024. There are no start-up costs associated with the construction of this sewer extension.

Johnston Sewer Improvements/Hartford Avenue			
	FY 2019	FY 2020	Annual
Increased Expense			
Maintenance	\$ -	\$ -	\$ 10,000
Expense Impact	\$ -	\$ -	\$ 10,000

FY 2020-2024 Revenue and Expense Impacts

The table below summarizes the projected impact of new capital projects scheduled to become operational in FY 2019-2024. Projects that involve inspection, studies, cleaning and rehabilitation generally do not have operating cost impacts and are excluded from this list. In FY 2024, the estimated impact as a result of these projects is increased annual revenue of \$666,218, savings of \$200,000 and increased expense of \$260,883. Projects with revenue, savings or expense impacts are discussed in the following section.

	Incremental CIP Impacts					
	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Increased Revenue						
Johnston Sewer Improvements/Greenville	\$ 426,218	\$ 426,218	\$ 426,218	\$ 426,218	\$ 426,218	\$ 426,218
Louisquisset Pike Interceptor Replacement	-	-	240,000	240,000	240,000	240,000
Revenue Impact	\$ 426,218	\$ 426,218	\$ 666,218	\$ 666,218	\$ 666,218	\$ 666,218
Savings						
BPWWTF UV Disinfection Improvements	-	-	-	(150,000)	(200,000)	(200,000)
<i>Subtotal</i>	-	-	-	(150,000)	(200,000)	(200,000)
Increased Expense						
Johnston Sewer Improvements/Greenville	-	-	-	-	10,000	-
FPWWTF - Blower Improvements Phase II	18,333	20,000	20,000	20,000	20,000	20,000
CSO Phase III A Facilities	-	-	-	70,864	70,864	70,864
New IM Facilities	-	-	-	-	24,289	97,155
FPWWTF Maintenance Facilities	-	-	-	-	41,909	62,864
Johnston Sewer Improvements/Hartford	-	-	-	-	-	10,000
<i>Subtotal</i>	18,333	20,000	20,000	90,864	167,062	260,883
Net O&M Impact	\$ 18,333	\$ 20,000	\$ 20,000	\$ (59,136)	\$ (32,938)	\$ 60,883

Louisquisset Pike Interceptor Replacement

The Louisquisset Pike Interceptor Replacement Project (30421) is scheduled to be completed in FY 2021. The project involves construction of a larger replacement interceptor in the northern section of the Town of Lincoln to accommodate additional flow. Preliminary estimates indicate that the flow will generate additional sewer user fee revenue of \$240,000 annually. The estimated operating expense is \$10,000 every 5 years for ongoing maintenance of the collection system. There are no start-up costs associated with the construction of this interceptor.

Louisquisset Pike Interceptor Replacement				
	Savings	Increased Expense	Increased Revenue	
User Fees	\$ -	\$ -	\$	240,000
Maintenance	-	10,000	-	-
Total	\$ -	\$ 10,000	\$	240,000

BPWWTF UV Disinfection Improvements

The BPWWTF UV Disinfection Improvements Project (81000) involves an evaluation of the current UV disinfection system and implementation of a system replacement/upgrade. The new, lower cost technology will result in estimated savings of \$200,000 annually as a result of lower electricity use of 1,666,667 kWh. Completion of this project is scheduled for FY 2022.

BPWWTF UV Disinfection Improvements				
	Savings	Increased Expense	Increased Revenue	
Electricity	\$ (200,000)	\$ -	\$	-
Total	\$ -	\$ -	\$	-

CSO Phase III A Facilities

Operating impacts related to the CSO Phase III A Facilities Project (30800) are anticipated to occur in FY 2022 when the facilities at Bucklin Point become operational. The increased expense associated with these facilities is \$70,864 annually and includes electricity, natural gas for heating, water and maintenance costs. Start-up costs are included in the project.

CSO Phase III A Facilities				
	Savings	Increased Expense	Increased Revenue	
Electricity	\$ -	\$ 20,000	\$	-
Natural Gas	-	39,864	-	-
Water	-	6,000	-	-
Maintenance	-	5,000	-	-
Total	\$ -	\$ 70,864	\$	-

IM Facilities

The IM Facilities Project (12400) is scheduled for completion in FY 2023. This project includes the construction of a new building that will be necessary if NBC is required by legislation to assume ownership of lateral sewers currently owned by local communities within the service area. The new building will include an administrative area, garage area and storage yard to house the existing IM staff and equipment. The increased expense associated with the new building is approximately \$97,155 annually for utilities and maintenance costs. All project startup costs, such as staff and equipment relocation are included in the project cost.

New IM Facilities				
	Savings	Increased Expense	Increased Revenue	
Electricity	\$ -	\$ 23,180	\$	-
Natural Gas	-	38,939	-	-
Water	-	3,000	-	-
Maintenance	-	32,036	-	-
Total	\$ -	\$ 97,155	\$	-

FPWWTF Maintenance Facilities

The FPWWTF Maintenance Facilities Project (13200) involves the design and construction of a new maintenance building and facilities at the FPWWTF. While not critical to plant operations, it will improve efficiency in maintenance support, since the existing maintenance building was originally built in 1900 and is insufficient to meet the needs of operations. The new facilities are scheduled for completion in FY 2023 and estimated to have increased expense of \$62,864 for utilities.

FPWWTF Maintenance Facilities				
	Savings	Increased Expense	Increased Revenue	
Electricity	\$ -	\$ 20,000	\$ -	-
Natural Gas	-	39,864	-	-
Water	-	3,000	-	-
Total	\$ -	\$ 62,864	\$ -	-

Field's Point Drive Interceptor Improvements

The Field's Point Drive Interceptor Improvements Project (30465) is scheduled for completion in FY 2019. The project includes replacement of a collapsed sewer pipe in one location and repair of broken pipe in several other locations. These improvements will restore the sewer to its original capacity. The estimated operating expense is \$10,000 every 5 years for ongoing maintenance of the collection system. There are no start-up costs associated with this project.

Field's Point Drive Interceptor Improvements				
	Savings	Increased Expense	Increased Revenue	
User Fees	\$ -	\$ -	\$ -	-
Maintenance	-	10,000	-	-
Total	\$ -	\$ 10,000	\$ -	-

Projects in Progress or Initiated but Not Completed in FY 2020-2024

CSO Phase III Facilities

The remaining operating impacts for the CSO Phase III A Facilities Project (30800) is estimated to occur in FY 2027. The increased expense of \$1.0 million includes electricity to pump flow and provide dehumidification in the Pawtucket tunnel pump station, natural gas for heating, screening and grit disposal, biosolids disposal, water, treatment chemicals, maintenance and labor costs. The start-up costs are included in this project phase. The operating impacts of the remaining three phases will be determined once the design plans are available.

CSO Phase III Facilities				
Capital Project	Projected Year Facilities Online	Savings	Increased Expense	Increased Revenue
CSO Phase III A Facilities				
Electricity	FY 2027	\$ -	\$ 646,950	\$ -
Natural Gas	FY 2027	-	64,240	-
Screening & Grit	FY 2027	-	49,660	-
Biosolids	FY 2027	-	194,866	-
Water	FY 2027	-	968	-
Hypochlorite	FY 2027	-	12,110	-
Sodium Bisulfite	FY 2027	-	4,942	-
Maintenance	FY 2027	-	29,033	-
Personnel	FY 2027	-	9,811	-
	Total	\$ -	\$ 1,012,580	\$ -
CSO Phase III B Facilities	FY 2031	-	TBD	-
CSO Phase III C Facilities	FY 2037	-	TBD	-
CSO Phase III D Facilities	FY 2042	-	TBD	-

CIP Debt Service Impact

In addition to operating cost impacts, the debt service related to financing the NBC’s capital improvement program also impacts the operating budget. NBC’s operating budget includes the principal and interest payments as well as a Transfer to the Project Fund-Restricted Account. NBC uses a long-term financial model to identify capital funding needs and sources and to project debt issuance. The debt service and user fee projections associated with financing the CIP are identified in the Long-Term Plan section of the Operating Budget. While NBC has other CIP financing sources, NBC primarily finances the capital improvement program through the issuance of long-term debt. The CIP funding sources, uses and debt service impacts are discussed in the following section.

Funding Sources

NBC has four sources of capital funding as follows:

Funding Source	Description
Restricted Account – CIP	Transfers from Stabilization Account in the Debt Service Fund
Grant and Project Reimbursement Account	Reimbursements of capital costs due to grants, impact fees, etc.
State Revolving Fund Loans through RIIB	Borrowings from the RIIB backed by NBC tax-exempt revenue bonds – traditionally subsidized at 1/3 of NBC’s market rate
Revenue Bonds	NBC tax-exempt debt issuance

Restricted Account – CIP

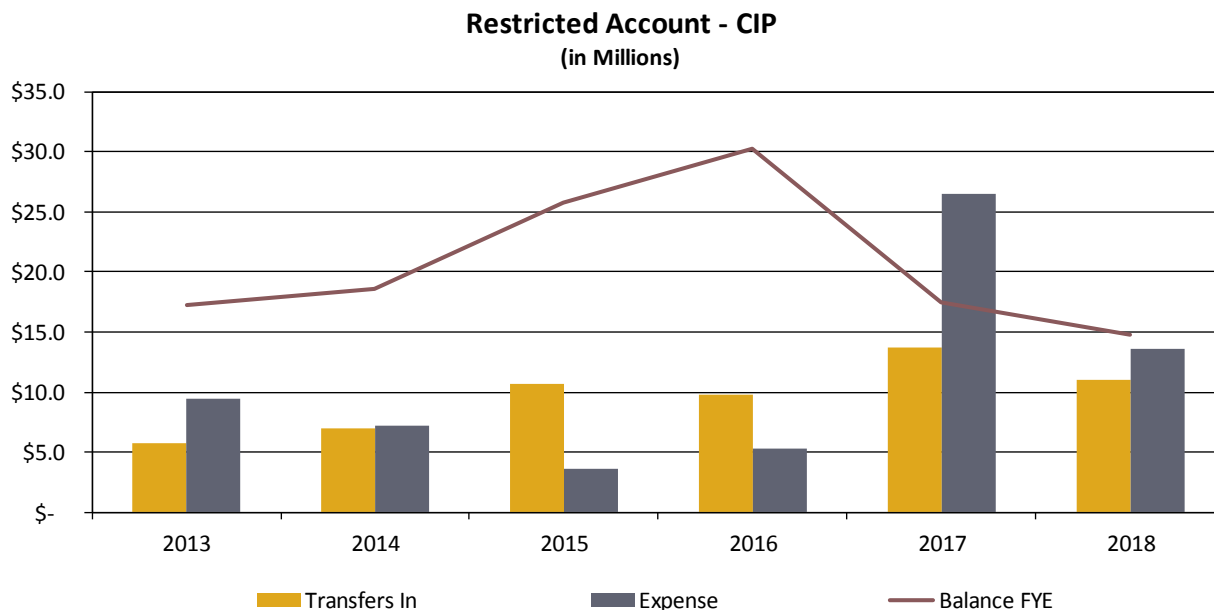
In accordance with the Trust Indenture and the directives of the Rhode Island Public Utilities Commission (PUC), NBC makes monthly deposits into the Stabilization Account in the Debt Service Fund. Subsequent to fiscal year end, a calculation is performed to determine the funds that can be transferred from the Stabilization Account to the Restricted Account – CIP in the Project Fund to finance “pay as you go” capital. NBC typically uses these funds for interceptor cleaning and inspection, studies, land and other projects that may not be eligible or reachable for funding from the RIIB.

Through March 2018, NBC funded approximately \$11.1 million in capital improvements from the Restricted Account - CIP. This included costs of \$5.7 million for the Johnston Sewer Improvements, \$1.1 million for collection system infrastructure and \$1.0 million for the Bucklin Point WWTF Digester and Miscellaneous Improvements. In addition, NBC funded \$2.3 million of the CSO Phase III Facilities design costs with Restricted Account – CIP funds which were subsequently reimbursed from SRF funding once RIDEM determined that the costs were eligible. A listing of the projects and amounts that were funded with Restricted Account – CIP funds in FY 2018 is as follows:

Restricted Account - CIP Expenditures*	
Major Project	Amount
Johnston Sewer Improvements	\$ 5,679,315
CSO Phase III Facilities	2,316,405
Collection System Infrastructure	1,105,583
BPWWTF Digester & Misc Improvements	1,029,942
WWTF Improvements	506,421
Other	455,422
Total	\$ 11,093,087

* Based on 9 months, through March 2018

The projected Restricted Account – CIP balance available on July 1, 2018 is \$14.8 million. NBC estimates that the carry-forward transfer from FY 2018 will be \$10.1 million, bringing the Restricted Account – CIP balance available for capital projects in FY 2019 to \$24.9 million. The following chart shows the transfers into the Restricted Account - CIP, Capital Projects expense and the Fiscal Year End (FYE) Restricted Account – CIP balance by fiscal year.



Grant and Project Reimbursement Account

The Grant and Project Reimbursement Account is in the Project Fund. In accordance with the Trust Indenture, Federal or State grants or reimbursements, funds withdrawn from the Renewal and Replacement Reserve Fund (not presently funded by NBC), and certain other amounts are deposited into the Grant and Project Reimbursement Account and are used to fund capital improvements. The projected balance in this account on July 1, 2018 is \$8.7 million. The higher balance in this account is due to the reimbursement of \$7.7 million in CSO Phase III Facilities design costs that were originally funded through the Restricted Account - CIP and subsequently reimbursed from SRF proceeds.

NBC anticipates that it will receive \$955,000 in incentives related to the Bucklin Point WWTF Biogas Reuse project and the Bucklin Point WWTF UV Disinfection Improvement project in FY 2019. Any incentives received by NBC will be deposited into the Grant and Project Reimbursement Account to be used for capital improvements. Due to the uncertainty of the timing and final amount of the incentives, NBC has not programmed these funds for use during FY 2019. The following schedule shows the breakdown of the incentives by project, source and amount.

Capital Investment Incentives		
Project	Source	Amount
Bucklin Point WWTF Biogas Reuse	National Grid	\$ 540,000
Bucklin Point WWTF Biogas Reuse	Regional Greenhouse Gas Initiative	200,000
Bucklin Point WWTF Biogas Reuse	Rhode Island Renewable Energy Fund	80,000
Bucklin Point WWTF UV Disinfection Improvements	National Grid	135,000
Total		\$ 955,000

State Revolving Fund Loans – RIIB

NBC's least cost of debt financing is through the RIIB. The RIIB provides subsidized loans to eligible borrowers with interest rates that are 1/3 off of the market rate. In some instances, these loans include an additional subsidy through a principal forgiveness component. Typically NBC submits a loan application in April for a loan that will be executed in June of the next year. In order for a project to be eligible for SRF funding, the project must be listed in the application and on the RIDEM's Project Priority List. In order for a project cost to be eligible for payment, NBC must receive a Certificate of Approval (COA) from RIDEM. NBC does not directly receive the loan proceeds, rather the invoices are submitted to RIIB for payment.

The table below shows the SRF Expenditures through March 2018. In FY 2018, NBC fully expended \$14.2 million in 2015 Series B SRF proceeds and \$7.3 million in 2016 Series A SRF proceeds. NBC estimates that there will be \$12.0 million in unexpended proceeds from the 2016 Series A bonds available on July 1, 2018 to finance the CIP.

SRF Expenditures*		
Major Project	2015 Series B	2016 Series A
BPWWTF Biogas Reuse	\$ 4,478,342	\$ -
CSO Phase II Facilities	668,208	-
CSO Phase III Facilities	8,059,243	-
Collection System Infrastructure	668,089	-
FPWWTF Blower Improvements Phase II	-	4,737,621
WWTF Improvements	370,225	2,508,488
Total	\$ 14,244,107	\$ 7,246,109

* Based on 9 months, through March 2018

NBC has outstanding debt of \$331.8 million from the RIIB. Below is a chart that shows the 18 outstanding loans by issue and also indicates the interest rate and final maturity.

Bond Issue	Interest Rate*	Outstanding June 30, 2018	Final Maturity
1997 Series - \$8.150M	3.14473%	\$ 1,102,907	September 1, 2020
1999 Series - \$23.955M	3.03200%	4,220,000	September 1, 2021
2001 Series - \$57.0M	2.67100%	10,950,000	September 1, 2022
2002 Series - \$57.0M	1.07850%	17,162,246	September 1, 2023
2003 Series - \$40.0M	1.34900%	15,750,000	September 1, 2025
2004 Series B - \$40.0M	1.40400%	19,221,000	September 1, 2025
2005 Series B - \$30.0M	1.39700%	13,375,000	September 1, 2026
2006 Series A - \$30.0M	1.27000%	14,803,000	September 1, 2027
2007 Series B - \$25.0M	1.47500%	16,211,000	September 1, 2029
2009 Series A - \$55.0M	0.87700%	39,126,885	September 1, 2031
2010 Series A - \$2.0M	0.52200%	1,129,240	September 1, 2030
2010 Series B - \$20.0M	2.14300%	14,147,000	September 1, 2031
2011 Series A - \$30.0M	2.25900%	21,253,010	September 1, 2032
2012 Series A - \$25.75M	2.08800%	19,981,244	September 1, 2033
2013 Series B - \$25.0M	2.09200%	20,749,639	September 1, 2034
2014 Series A - \$45.0M	2.46700%	39,387,000	September 1, 2035
2015 Series B - \$41.7535M	2.54900%	40,207,235	September 1, 2045
2016 Series A - \$23.0M	1.96700%	23,000,000	September 1, 2037
		\$ 331,776,406	

* RIIB loans have a 0.5% service fee

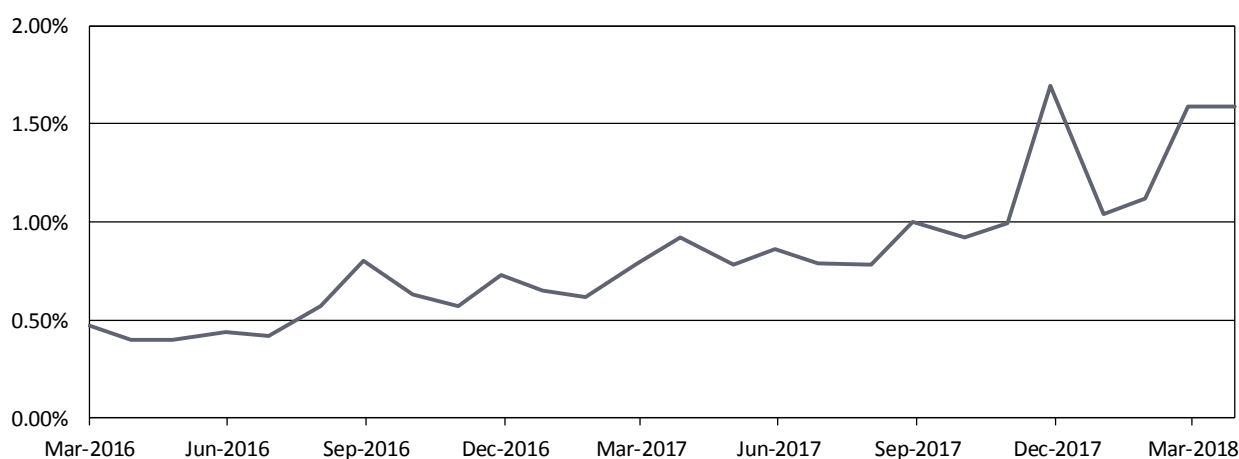
Revenue Bonds

Since the statewide demand for SRF loans has periodically exceeded the RIIB lending capacity, NBC has issued revenue bonds to the extent that SRF funds are not available. NBC did not have any unspent proceeds in FY 2018. The table below shows NBC's outstanding revenue bonds by issue and final maturity date.

Bond Issue	Interest Rate	Outstanding June 30, 2018	Final Maturity
2008 Series A - \$66.0M	Variable	\$ 56,465,000	September 1, 2034
2013 Series A - \$71.48M	4.33291%	71,480,000	September 1, 2043
2013 Series C - \$34.97M	4.68715%	34,970,000	September 1, 2033
2014 Series B - \$39.82M Refunding	4.86125%	39,820,000	September 1, 2035
2015 Series A - \$40.085M Refunding	4.94207%	40,085,000	February 1, 2037
		\$ 242,820,000	

The 2008 Series A bonds are a variable rate issue that is in weekly mode. The graph below shows that these bonds have been pricing well under 2.0%.

2008 Series A - Variable Rate Weekly Mode



With respect to this year's Capital Improvement Program, a number of funding sources have been identified as part of the Long-Term Plan. The table below shows each source and description of funds.

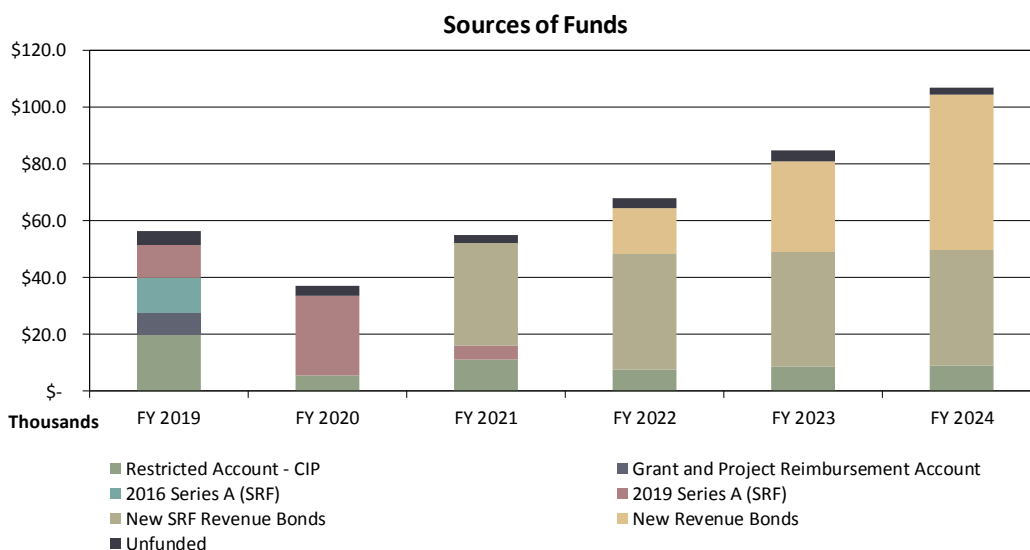
Funding Source	Description
Restricted Account - CIP	Transfers from the Stabilization Account in the Debt Service Fund
Grant and Project Reimbursement Account	Reimbursements of capital costs due to grants, impact fees, etc.
2016 Series A (SRF)	Unspent proceeds from the 2016 Series A RIIB Loan
2019 Series A (SRF)	Planned new \$45.0 million debt issuance through RIIB in early 2019
New SRF Revenue Bonds	New tax-exempt loans from RIIB
New Revenue Bonds	New NBC tax-exempt Revenue Bonds

In FY 2019, NBC plans to fund its CIP with approximately \$20.0 million in Restricted Account – CIP funds, \$7.7 million in Grant and Project Reimbursement Account funds and \$12.0 million in unspent 2016 Series A (SRF) proceeds. In addition, NBC plans to borrow \$45.0 million in FY 2019 from the RIIB which is reflected in the table above as 2019 Series A (SRF). Lastly, \$4.8 million of contingency costs in FY 2019 are not funded. During

the period of FY 2020-2024, the long-term model reflects the use of \$41.8 million in Restricted Account – CIP funds to finance “pay-as-you-go” capital, \$33.1 million in proceeds from the 2019 Series A (SRF) planned borrowing, \$157.5 million in new borrowings through the RIIB and \$102.7 million in new Revenue Bonds. The long-term model also reflects \$16.0 million in unfunded contingency costs during this period. The table below shows the projected sources of funds in FY 2019-2024.

Sources of Funds (Thousands)	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Total FY 2020-2024
Restricted Account - CIP	\$ 20,015	\$ 5,522	\$ 11,020	\$ 7,649	\$ 8,588	\$ 9,018	\$ 41,797
Grant and Project Reimbursement Account	7,716	-	-	-	-	-	-
2016 Series A (SRF)	11,966	-	-	-	-	-	-
2019 Series A (SRF)	11,862	28,020	5,119	-	-	-	33,139
New SRF Revenue Bonds	-	-	35,962	40,500	40,500	40,500	157,462
New Revenue Bonds	-	-	-	16,225	31,854	54,588	102,667
Unfunded	4,875	3,600	2,893	3,350	3,650	2,550	16,043
Total	\$ 56,434	\$ 37,142	\$ 54,994	\$ 67,724	\$ 84,592	\$ 106,656	\$ 351,108

The graph below illustrates the projected sources of funds from FY 2019-2024.



The actual timing and type of debt issuance will be determined based upon cash flows, market conditions, RIIB loan availability, and other factors. NBC also plans to pursue funding through EPA’s Water Infrastructure Finance and Innovation Act (WIFIA). The WIFIA program offers loans with low, fixed interest rates with repayment terms of up to 35 years after substantial project completion. NBC’s financial plan will change if NBC is a recipient of WIFIA funding for the CSO Phase III Facilities.

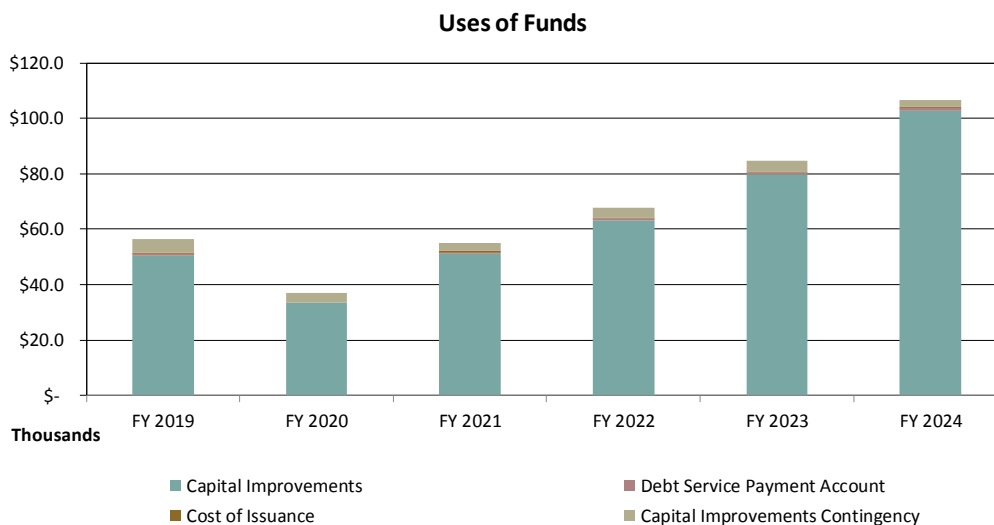
NBC must also take into consideration the appropriate uses of capital funds as part of the planning process. In addition to payments for capital projects, the table identifies the capital project contingency costs and the incremental increase to the debt service payment account. Lastly, the cost of issuance expense is shown and is financed from bond proceeds. The following table lists each use and description of funds.

Funding Use	Description
Capital Improvements	Projects identified in the Capital Improvement Program
Capital Improvements Contingency	Programmed contingency of 10% for construction projects
Debt Service Payment Account	Incremental increase in monthly deposits due to debt issuance
Cost of Issuance	RIIB service fee, underwriting, bond counsel, etc.

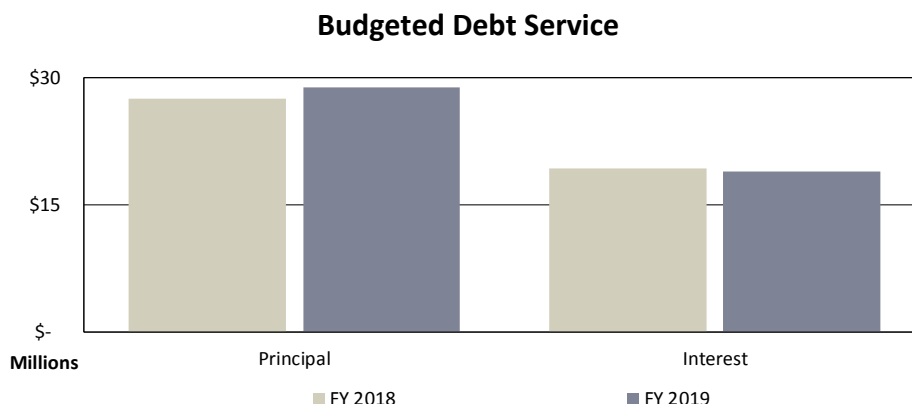
Expenditures on capital improvements are \$50.6 million in FY 2019 and will increase to \$102.7 million in FY 2024 as NBC initiates construction of the CSO Phase III Facilities. Other identified uses of funds include the built-in contingency for construction projects at \$16.0 million during the FY 2020-2024 period. NBC has also estimated increases to the required deposits to the debt service payment account in the Debt Service Fund, which reduces the funds available for transfer to the Restricted Account – CIP in the Project Fund. Lastly, the model shows debt issuance costs of nearly \$2.0 million to support NBC’s anticipated borrowings. The following table shows the uses of capital funds in FY 2019-2024.

Uses of Funds (Thousands)	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Total FY 2020-2024
Capital Improvements	\$ 50,559	\$ 33,542	\$ 51,291	\$ 63,312	\$ 79,724	\$ 102,660	\$ 330,528
Capital Improvements Contingency	4,875	3,600	2,893	3,350	3,650	2,550	16,043
Debt Service Payment Account	450	-	355	562	719	946	2,582
Cost of Issuance	550	-	455	500	500	500	1,955
Total	\$ 56,434	\$ 37,142	\$ 54,994	\$ 67,724	\$ 84,593	\$ 106,656	\$ 351,108

The graph below illustrates the projected uses of funds from FY 2019 – FY 2024.



Since the CIP is financed primarily through the issuance of long-term debt, the capital program’s primary impact on the operating budget is through the payment of principal and interest. Budgeted debt service in FY 2019 is \$47.8 million, which is 4.6% higher than the prior year. The following table shows debt service expense in Fiscal Year 2019 compared to the prior year. The higher debt service reflects the debt service associated with NBC’s most recent borrowings from the RIIB.



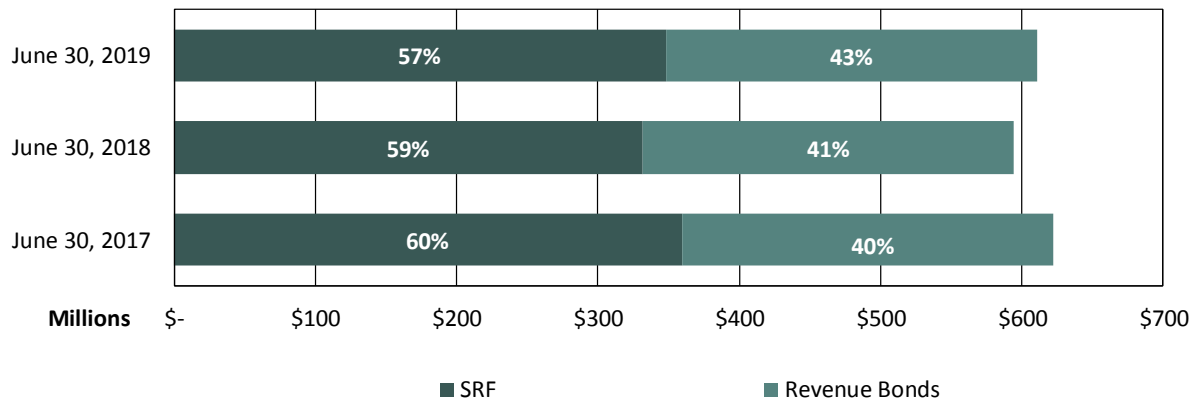
The table below shows the changes in outstanding debt at fiscal year-end for 2017, 2018 and 2019. The Additions/Principal Payments column reflects the net effect of principal payments and new SRF bond issuance. Outstanding debt is projected to decrease 4.4% or \$27.5 million from \$621.9 million at June 30, 2017 to \$594.4 million at June 30, 2018. NBC plans on borrowing \$45.0 million through the SRF loan program in FY 2019 and as a result the net increase in outstanding debt as of June 30, 2019 is \$16.2 million for a total of \$610.6 million.

Outstanding Debt

Issuance	Outstanding Debt as of June 30, 2017	Additions/ Principal Payments	Outstanding Debt as of June 30, 2018	Additions/ Principal Payments	Outstanding Debt as of June 30, 2019
SRF Loans					
SRF Loans	\$ 359,305,961	\$ (27,529,555)	\$ 331,776,406	\$ 16,198,028	\$ 347,974,434
<i>Subtotal SRF</i>	359,305,961	(27,529,555)	331,776,406	16,198,028	347,974,434
Revenue Bonds					
2008 Series A Refunding Bonds	56,465,000	-	56,465,000	-	56,465,000
2013 Series A	71,480,000	-	71,480,000	-	71,480,000
2013 Series C	34,970,000	-	34,970,000	-	34,970,000
2014 Series B Refunding Bonds	39,820,000	-	39,820,000	-	39,820,000
2015 Series A Refunding Bonds	40,085,000	-	40,085,000	-	40,085,000
<i>Subtotal Revenue Bonds</i>	242,820,000	-	242,820,000	-	242,820,000
Subtotal Bonds	\$ 602,125,961	\$ (27,529,555)	\$ 574,596,406	\$ 16,198,028	\$ 590,794,434
Premiums					
2013 Series A	\$ 4,131,888	\$ -	\$ 4,131,888	\$ -	\$ 4,131,888
2013 Series C	2,274,637	-	2,274,637	-	2,274,637
2014 Series B Refunding Bonds	7,381,545	-	7,381,545	-	7,381,545
2015 Series A Refunding Bonds	5,996,114	-	5,996,114	-	5,996,114
Subtotal Premiums	\$ 19,784,184	\$ -	\$ 19,784,184	\$ -	\$ 19,784,184
Total Outstanding Debt	\$ 621,910,145	\$ (27,529,555)	\$ 594,380,590	\$ 16,198,028	\$ 610,578,618

The chart below shows the decrease in outstanding debt is related to the SRF borrowings since NBC's revenue bonds have 30 year maturities and were structured to "wrap" around the SRF loans.

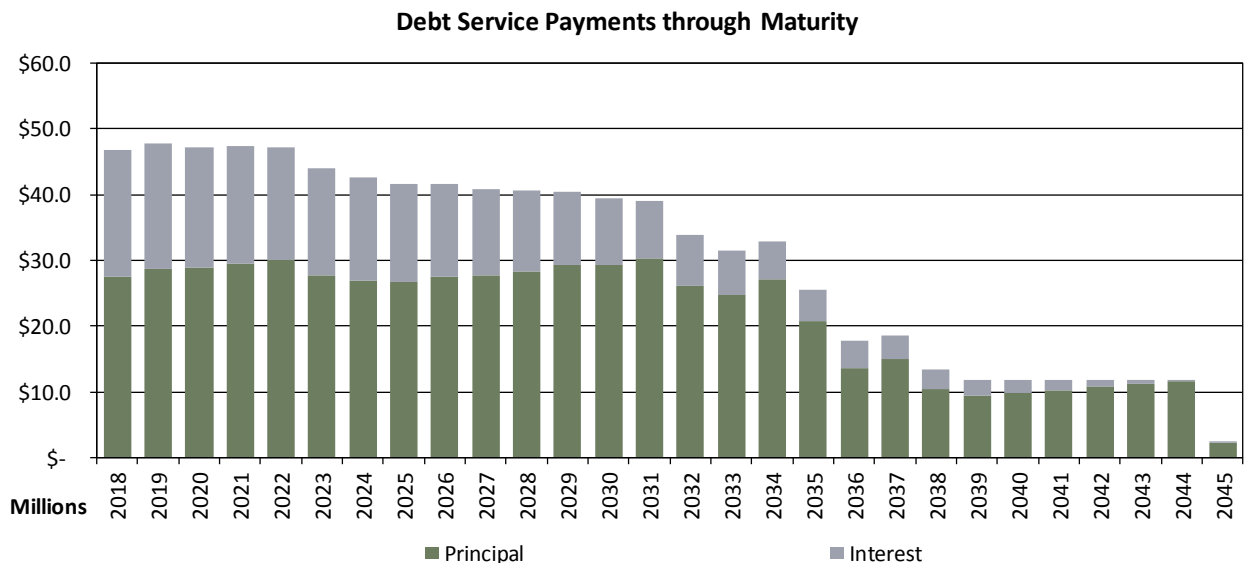
Outstanding Debt by Issuance Type



The following table shows debt service payments through maturity.

Existing Debt Service Payments through Maturity

Debt Service Payments through Maturity				
Fiscal Year	Debt	Principal	Interest	Total Payment
2018	\$ 854,112,617	\$ 27,529,555	\$ 19,325,165	\$ 46,854,720
2019	807,257,897	28,801,972	19,011,195	47,813,167
2020	759,444,730	28,848,394	18,405,267	47,253,661
2021	712,191,069	29,564,498	17,751,697	47,316,195
2022	664,874,874	30,181,899	17,060,829	47,242,728
2023	617,632,146	27,725,747	16,354,696	44,080,443
2024	573,551,703	26,964,509	15,636,516	42,601,025
2025	530,950,678	26,741,562	14,873,236	41,614,798
2026	489,335,880	27,564,901	14,047,285	41,612,185
2027	447,723,694	27,797,035	13,127,895	40,924,930
2028	406,798,765	28,408,268	12,204,311	40,612,579
2029	366,186,185	29,273,863	11,176,253	40,450,117
2030	325,736,069	29,356,698	10,081,924	39,438,622
2031	286,297,447	30,212,923	8,939,929	39,152,852
2032	247,144,595	26,120,242	7,842,435	33,962,676
2033	213,181,918	24,647,493	6,827,764	31,475,257
2034	181,706,661	27,196,453	5,784,122	32,980,574
2035	148,726,087	20,685,448	4,837,774	25,523,223
2036	123,202,864	13,644,000	4,186,104	17,830,104
2037	105,372,760	14,988,000	3,535,274	18,523,274
2038	86,849,486	10,498,000	2,833,224	13,331,224
2039	73,518,262	9,508,000	2,377,495	11,885,495
2040	61,632,767	9,919,000	1,962,201	11,881,201
2041	49,751,566	10,311,000	1,569,886	11,880,886
2042	37,870,681	10,721,000	1,162,043	11,883,043
2043	25,987,638	11,142,000	738,108	11,880,108
2044	14,107,530	11,581,000	297,525	11,878,525
2045	2,229,005	2,192,500	36,505	2,229,005
Total		\$ 602,125,960	\$ 251,986,658	\$ 854,112,618



Projected Revenue and Expense

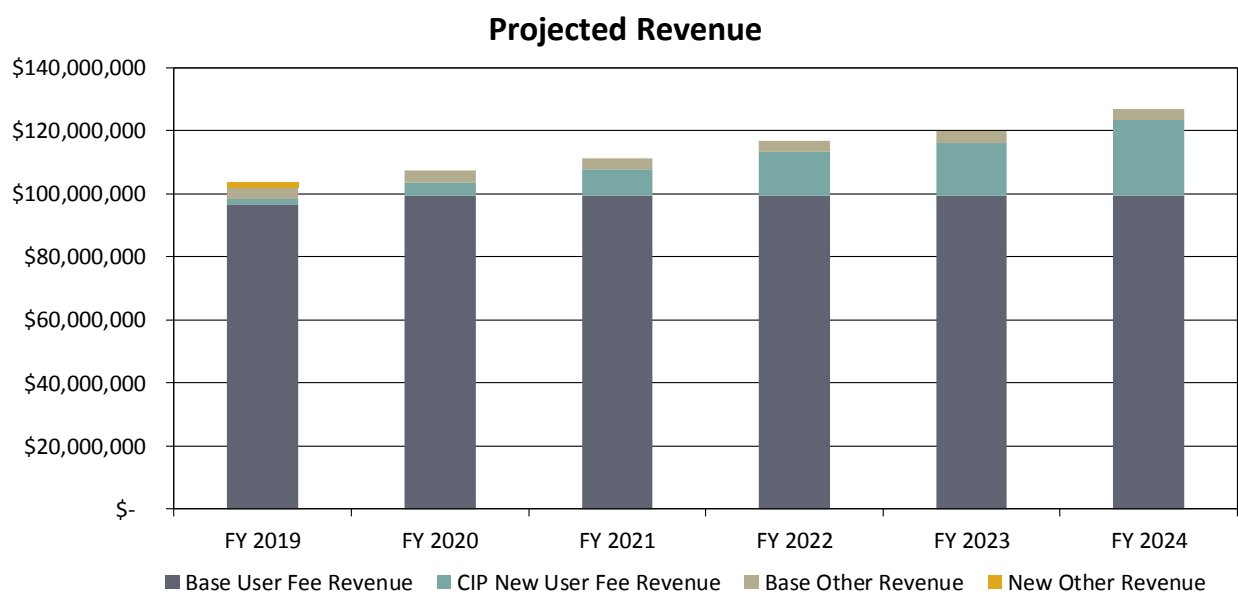
NBC has projected operating budget revenue and expense for FY 2019-2024 taking into consideration the Capital Improvement Program and a number of other assumptions. The FY 2019 base figures reflect the operating budget levels and the CIP impacts are incorporated into the base revenue and expense figures. NBC will continue to update and validate assumptions as part of the ongoing planning process each year.

Projected Revenue

User fees are the largest source of NBC's revenue. Over the six-year period, user fee revenue is projected to increase 25.7% due to the CIP and rate increases. The table below shows projected incremental changes in revenue assuming that all budgeted FY 2019 impacts are included in the base figures. With respect to the CIP, collection system expansion projects are estimated to increase user fee revenue in FY 2019 and again in FY 2021. NBC projects user fee rate increases each year beginning in FY 2019 to ensure that rates will generate sufficient revenue to meet debt service and debt service coverage requirements during the three years subsequent to new debt issuance.

REVENUE	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Base User Fee Revenue	\$ 96,435,820	\$ 99,306,019	\$ 99,306,019	\$ 99,306,019	\$ 99,306,019	\$ 99,306,019
CIP New User Fee Revenue	-	-	240,000	240,000	240,000	240,000
Rate Increase Revenue	1,789,373	4,349,504	8,069,170	13,596,931	16,696,606	23,882,782
Total User Fee Revenue	98,225,193	103,655,523	107,615,189	113,142,950	116,242,625	123,428,801
Base Other Revenue	3,580,999	3,580,999	3,580,999	3,580,999	3,580,999	3,580,999
New Other Revenue	1,600,000	-	-	-	-	-
Total Other Revenue	5,180,999	3,580,999	3,580,999	3,580,999	3,580,999	3,580,999
Total Revenue	\$103,406,192	\$107,236,522	\$111,196,188	\$116,723,949	\$119,823,624	\$127,009,800

Other Revenue is not anticipated to increase during the FY 2019 to FY 2024 period as NBC does not plan to budget a Revenue Fund balance in future years. The following chart shows the increase in user fee revenue over the six-year period.



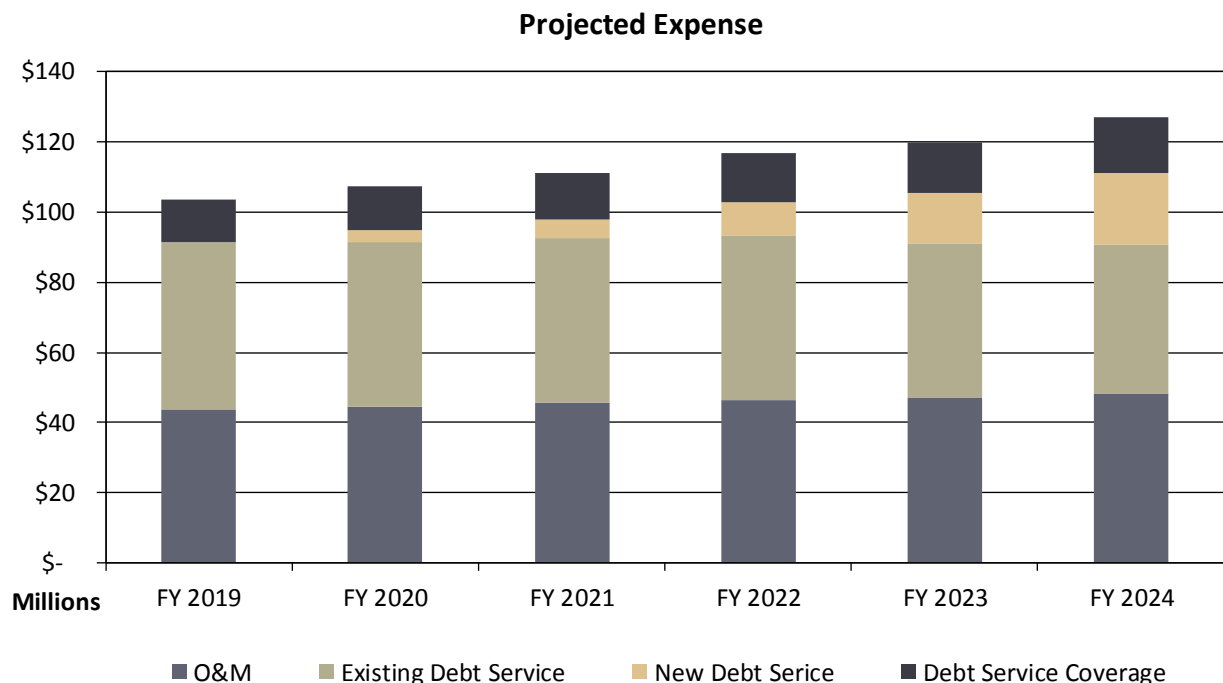
Projected Expense

With respect to projected Operation and Maintenance (O&M) expense, a number of assumptions have been incorporated into the projections. NBC has inflated annual O&M at 2.0% per year. The incremental net impact of the CIP is anticipated to increase O&M expense by \$20,000 in FY 2020, with additional changes in FY 2022, FY 2023 and FY 2024. The net result is a projected 10.5% increase in O&M over the six-year period.

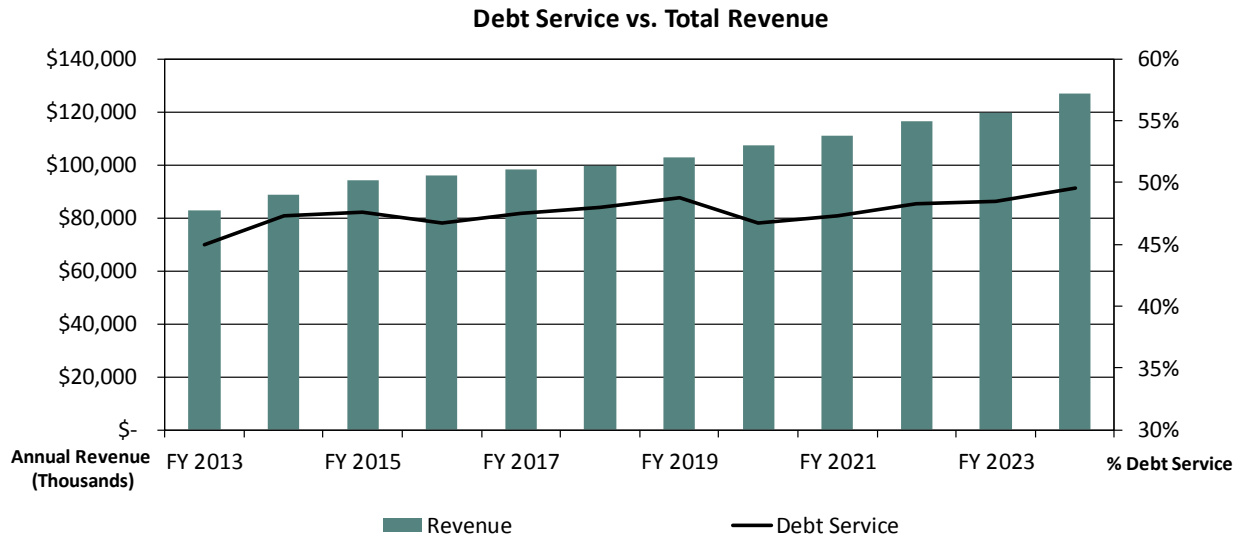
NBC's largest expense is for debt service. NBC's model shows the need to access the capital market in FY 2019 to finance its CIP. Projected debt service is considerably higher than was projected last year due to the shift in the schedule and costs for the CSO Phase III Facilities. Although the existing debt service associated with NBC's earlier issues is projected to decrease by 11.5%, new debt issuance is projected to increase overall debt service by 31.8% over the six-year period. The table below shows that NBC will meet coverage requirements during the six-year period and NBC will update the projections as part of the ongoing planning process.

EXPENSE	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Base O&M Expense with CPI @ 2.0%	\$ 43,668,346	\$ 44,541,713	\$ 45,432,547	\$ 46,341,198	\$ 47,268,022	\$ 48,213,382
CIP Net Expense Impact	-	20,000	20,000	(59,136)	(32,938)	60,883
Total O&M	43,668,346	44,561,713	45,452,547	46,282,062	47,235,084	48,274,265
Existing Debt Service	47,787,186	47,026,222	47,026,563	46,932,147	43,771,157	42,293,528
New Debt Service	-	3,113,625	5,568,350	9,421,363	14,299,675	20,694,900
Total Debt Service	47,787,186	50,139,847	52,594,913	56,353,510	58,070,832	62,988,428
Transfer to Project Fund - Restricted Account	11,950,660	12,534,962	13,148,728	14,088,377	14,517,708	15,747,107
Total Expense	\$ 103,406,192	\$ 107,236,522	\$ 111,196,188	\$ 116,723,949	\$ 119,823,624	\$ 127,009,800
Net Income (Loss)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Debt Service Coverage @ 25%	1.25	1.25	1.25	1.25	1.25	1.25

The chart below shows the significant projected increase in new debt service and more modest increases in O&M over the six-year period of FY 2019-2024.

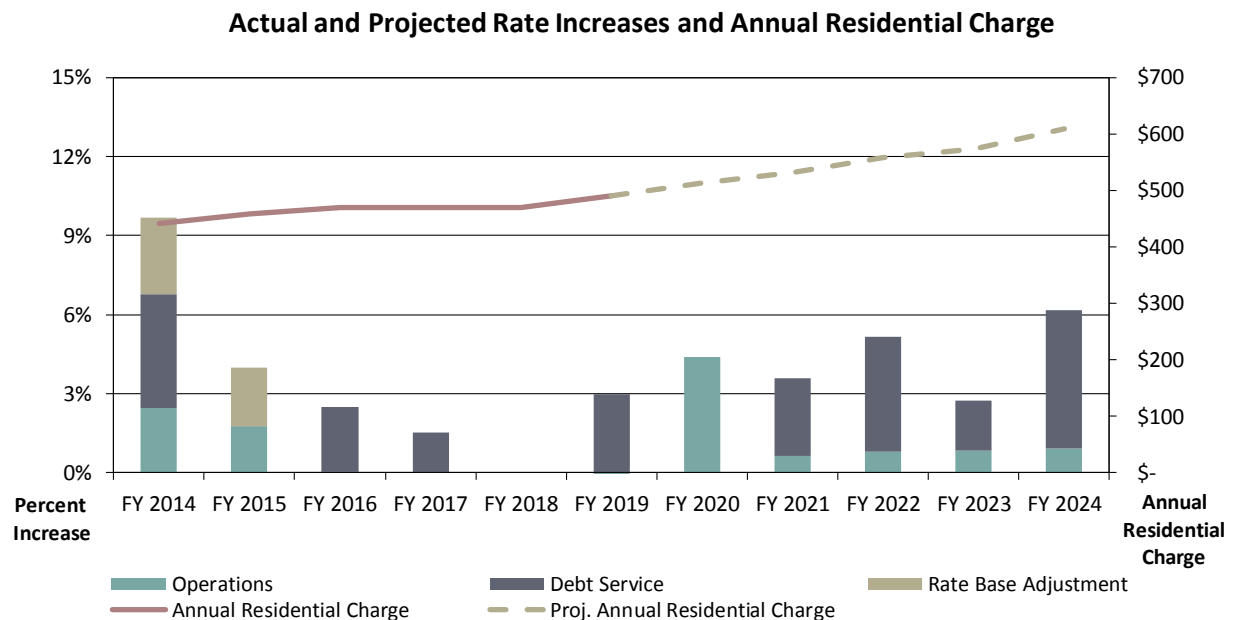


The chart below shows how debt service as a percent of total revenue is projected to decrease from approximately 49.0% of total revenue in FY 2019 to 47.0% of total revenue in FY 2020. As NBC issues new debt to finance the CSO Phase III A Facilities, debt service as a percent of total revenue is projected to increase to 50.0%. The debt service projections are based on a number of assumptions including the cash flow estimates outlined in the CIP.



Sewer User Fee Rate Projections

The following chart shows the actual and projected rate increases along with the annual residential charge for FY 2014 through FY 2024. Based on projections, it is anticipated that NBC will need a rate increase in FY 2019 to support the \$45.0 million borrowing through the RIIB. In FY 2020, rate relief will be required to meet projected higher O&M costs. Annual rate increases are projected for both debt service and O&M in FY 2021 through FY 2024.



NBC’s average annual residential user charge is projected to increase from \$470 in FY 2018 to \$609 in FY 2024. The largest projected rate increase over the five-year period is in FY 2024 at 6.18%. This is significantly higher than what was projected last year due to the forward shift in the schedule of the CSO Phase III A Facilities. The projected rate increases are subject to change, if there are changes in the schedule or scope of the CSO Phase III A Facilities or other capital projects, changes to operation and maintenance costs or if the CIP impacts are different than projected, or variances in renewable energy production occur. The impacts may also change if there are changes to the rate base or other factors out of NBC’s control including short and long-term interest rates, health insurance renewals, new regulatory requirements, etc.

Even with past rate increases required to support the CIP, NBC’s sewer rates remain competitive. As can be seen in the following table, when NBC’s 2017 rate is calculated based on consumption of 120 HCF, it is approximately 13.4% below the national average of \$741 for major U.S. Cities. Survey results for the State of Rhode Island are shown in the Operating Budget section of this document.

2017 Annual Residential Sewer Charges for Major U.S. Cities					
Seattle, WA	\$	1,552	Indianapolis, IN	\$	656
San Francisco, CA		1,488	Providence, RI		642
Honolulu, HI		1,264	Houston, TX		641
Portland, ME		1,158	San Diego, CA		594
MWRA Service Area		953	Los Angeles, CA		564
Austin, TX		934	Columbus, OH		548
Flint, MI		931	Dallas, TX		534
Boston, MA		845	Fort Worth, TX		512
Washington, DC		788	Saint Paul, MN		509
Saint Louis, MO		735	Philadelphia, PA		478
New York, NY		727	Newark, NJ		457
Detroit, MI		701	San Jose, CA		455
New Orleans, LA		697	San Antonio, TX		447
Jacksonville, FL		687	Milwaukee, WI		253
				National Average	\$ 741

Narragansett Bay Commission

Acronyms Glossary

ACA – Affordable Care Act

Commonly referred to as **Obamacare**, is landmark health insurance legislation passed by the 111th United States Congress in March 2010.

AFL-CIO – American Federation of Labor-Congress of Industrial Organizations

AFSCME – American Federation of State, County & Municipal Employees

AMP - Asset Management Plan

A technical plan for managing infrastructure and other assets to provide continuous, effective service.

AMS - Asset Management System

The computer system that incorporates all the processes, tools, data and policies needed to effectively manage assets.

APRA – Access to Public Records Act

The Rhode Island state law that gives individuals the right to see and obtain records. The law provides guidelines for obtaining access to these records and also defines which records are subject to public inspection and which are exempt.

BLS – Bureau of Labor Statistics

The Bureau of Labor Statistics is the principal fact-finding agency for the Federal Government in the broad field of labor economics and statistics.

BMP – Best Management Practices

The EPA defines a BMP as a “technique, measure or structural control that is used for a given set of conditions to manage the quantity and improve the quality of stormwater runoff in the most cost effective manner”.

BNR - Biological Nutrient Removal

A biological process to remove nitrogen from wastewater, to prohibit excessive algal growth and low oxygen levels in receiving waters.

BOD - Biochemical Oxygen Demand

An indicator of the amount of oxygen being depleted from the receiving waters by sewage; the greater the BOD, the greater the degree of pollution.

BVDC - Blackstone Valley District Commission

BVI - Blackstone Valley Interceptor

CAC - Citizens’ Advisory Committee

An advisory group to NBC, CAC represents users, the general public and environmental groups.

CAFR - Comprehensive Annual Financial Report

A report completed by NBC which conveys the annual financial position and results of operations of the NBC and complies with the accounting requirements promulgated by the GASB.

CBA - Collective Bargaining Agreement

Agreement reached between management and union representatives as to the terms of future union contracts.

CBOD – Carbonaceous Biochemical Oxygen Demand

A method defined test measured by the depletion of dissolved oxygen by biological organisms in a body of water in which the contribution from nitrogenous bacteria has been suppressed.

CDL - Commercial Driver’s License

A license that meets certain “standards” uniform to all states, as required by federal law, and is mandatory for the operation of particular commercial vehicles.

CIP - Capital Improvement Program

A plan for major capital expenditures to be incurred each year over a fixed period of five years to meet capital needs arising from the long-term work program. It sets forth each project and specifies the full resources estimated to be available to finance the projected expenditures.

CMOM - Capacity Management Operation and Maintenance Program

A dynamic and adaptable system management approach that utilizes feedback regarding system performance, variable conditions and operating & maintenance practices to direct and adjust responses, routine activities procedures, and capital investments.

CRMC - The Coastal Resources Management Council

A management agency with regulatory functions responsible for the preservation, protection, development, and where possible, the restoration of the coastal areas of the state via the implementation of its integrated and comprehensive coastal management plans and the issuance of permits for work with the coastal zone of the state.

COB - The NBC’s Corporate Office Building.

COLA - Cost of Living Adjustment

An annual adjustment made to the salary of a union employee of NBC to maintain the level of wages against inflation.

CPI - Consumer Price Index

Measures changes in the price level of a market basket of consumer goods and services purchased by households.

CSO - Combined Sewer Overflows

Areas along Rhode Island rivers where combined sewers overflow during significant rain events.

DMR – Discharge Monitoring Report

Reports required to be submitted to the RIDEM every month; these reports summarize the findings of daily samplings conducted at each wastewater treatment facility.

DOH – Rhode Island Department of Health**DT/day – Dry Tons per Day****EAP – Employee Assistance Program**

An arrangement between a corporation, academic institution or government agency and its employees that provides a variety of support programs for the employees.

EEF – Environmental Enforcement Fund

Includes funds recovered through administrative or civil enforcement action that are not available for normal operating expense per Chapter 46-25 of RI General Laws.

EEO – Equal Employment Opportunity

In compliance with Federal and State legislation, NBC promotes fair and equitable treatment to all employees regardless of race, color, sex, age, national origin, handicap/disability status, veteran status, sexual orientation or gender identity or expression.

ELUR – ENVIRONMENTAL LAND USE RESTRICTION

A declaration consistent with the regulations adopted by the Rhode Island Department of Environmental Management pursuant to R.I.G.L. § 23-19.14-1 which manages environmental risks associated with property containing soil and/or groundwater which is contaminated with certain hazardous materials and/or petroleum in excess of applicable criteria pursuant to the Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases.

EMMA – Electronic Municipal Market Access

EMMA is a service of the Municipal Securities Rulemaking Board, which protects investors, state and local governments, and the public interest. Portions of EMMA data provided by Standard & Poor's Securities Evaluations, Inc., CUSIP Global Services & American Bankers Association.

EMPACT – Environmental Monitoring for Public Access and Community Tracking

Evaluates the quality of the receiving water at certain buoy and fixed station sites and provides the means to measure the water quality improvements resulting from NBC's nutrient removal and CSO facilities.

EPA - Environmental Protection Agency

An agency of the federal government designated to oversee environmental protection in the United States.

EPCRA – Emergency Planning and Community Right-to-Know Act

An Act passed by Congress in 1984 in response to concerns regarding the environmental and safety hazards posed by the storage and handling of toxic chemicals. As a result, Congress imposed reporting on hazardous and toxic chemicals and emergency planning requirements for federal, state and local governments, tribes and industries.

ERP – Environmental Results Program

An innovative environmental management approach that uses compliance assistance, self-audits/certifications, and statistically based inspections and performance measurements to help educate owners and operators of regulated facilities to more effectively meet or exceed regulatory compliance obligations, while enabling regulators to obtain long-term verifiable results at less cost and effort.

FSA – Flexible Spending Account

Also known as a flexible spending arrangement is one of a number of tax-advantaged financial accounts that can be set up through a cafeteria plan of an employer in the United States.

FSP – Fiscal Sustainability Plan

A fiscal sustainability plan is a living document that is regularly reviewed, revised, expanded, and implemented as an integral part of the operation and management of the system. A plan for maintaining, repairing, and, as necessary, replacing the treatment works and a plan for funding such activities.

FTEs - Full-time Equivalents

The amount of hours worked being equal to a full-time employee.

FY - Fiscal Year

The twelve-month financial period used by the NBC, that runs from July 1st through June 30th of the following calendar year. The year is represented by the end date.

GAAP - Generally Accepted Accounting Principles

The concepts, principles, and procedures developed to serve as the norm for the fair presentation of financial statements.

GASB – Governmental Accounting Standards Board

A private not-for-profit organization that seeks to establish and improve standards of accounting and financial reporting for U.S. state and local governments.

GFOA - Government Finance Officers Association

GFOA is the professional association of state/provincial and local finance officers in the United States and Canada, and has served the public finance profession since 1906. Over 15,500 GFOA members are dedicated to the sound management of government financial resources.

GIS - Geographic Information Systems

A mapping technology that allows the user to create and interact with a variety of maps and data sources.

GPS - Global Positioning Satellite System

This system uses information obtained by satellites to indicate the coordinates of a specific location.

HCF - Hundred Cubic Feet

Unit of liquid measure, used to bill NBC's consumption fees.

HDHP – High Deductible Health Plan

A health insurance plan with lower premiums and higher deductibles than a traditional health plan.

HR – Human Resources

A section within the NBC that is responsible for the administration and processing of employee records, employee recruitment and retention, workers' compensation and equal employment opportunity for union and non-union personnel.

HRA – Health Reimbursement Arrangement

Employer-funded plans that reimburse employees for any incurred medical expense that is not covered by the company's standard insurance plan.

HSA – Health Savings Account

A tax-advantaged medical savings account available to taxpayers in the United States who are enrolled in a high-deductible health plan (HDHP).

HVAC – Heating, Ventilating and Air Conditioning

The mechanical systems that provide temperature and air quality control in an office space and are generally interconnected.

IFAS – Integrated Fixed Film Activated Sludge

A process of adding media, usually plastic, to aeration tanks to increase surface area for bacterial growth.

kWh – Kilowatt hour

A unit of energy used to measure electricity usage and 1 kWh is equal to 1,000 watt hours and powers a 100 watt light bulb for 10 hours.

LED - Light-emitting Diode

A two-lead semiconductor light source, which emits light when activated. When a fitting voltage is applied to the leads, electrons are able to recombine with electron holes within the device, releasing energy in the form of photons.

LEED - Leadership in Energy and Environmental Design

A high performance green building's certification program created by the U.S. Green Building Council which focuses primarily on new, commercial building projects and based upon a points system. The more points you earn, the higher your rating.

LID – Low Impact Design

An approach to land development (or re-development) that works with nature to manage stormwater as close to its source as possible.

LIMs – Laboratory Information Management System

A software-based laboratory and information management system that supports a modern laboratory's operations. The system allows a way of tracking samples to be tested from the point of acquisition through the process of entering the results into the database.

LIUNA – Laborers' International Union of North America**LOC – Letter of Credit**

A guarantee of payment issued by a bank on behalf of a client that is used as "payment of last resort" should the client fail to fulfill a contractual commitment with a third party.

LRP – Long Range Planning**Mgd/MGD - Million Gallons per Day****Mg/L - Milligrams per Liter. 1 mg/L can also be expressed as 1 part per million****ml – Milliliter**

A metric unit of volume that is equal to one thousandth of a liter.

MPN – Most Probable Number

Expressed as the number of organisms which are most likely to have produced the laboratory results noted in a particular test.

MVI – Moshassuck Valley Interceptor**MW - Megawatt**

A megawatt is a unit of measure of electricity and one MW is equal to one million (10^6) watts.

MSRB - Municipal Securities Rulemaking Board

The Municipal Securities Rulemaking Board (MSRB) protects investors, state and local governments and other municipal entities, and the public interest by promoting a fair and efficient municipal securities market.

MWRA - Massachusetts Water Resource Authority

N/A - The information is *Not Available* or *Not Applicable*.

NACWA - National Association of Clean Water Agencies

An organization which represents the interests of over 300 public agencies and organizations involved with wastewater treatment.

NBEP – Narragansett Bay Estuary Program

As part of the National Estuary Program, created in 1987 under the Clean Water Act, NBEP serves to protect and preserve Narragansett Bay and its watershed through partnerships that conserve and restore natural resources, enhance water quality and promote community involvement.

NEWEA – New England Water Environment Association

An organization of over 2,100 Water and Wastewater Professionals, who volunteer their time, energy and expertise in order to preserve, protect and manage New England's water environment.

NMC – Net Metering Credit**NWPCA – Narragansett Water Pollution Control Association**

Established in 1952, the NWPCA is a non-profit organization created to promote the advancement of knowledge concerning the nature, collection, treatment, and disposal of domestic and industrial wastewaters.

O & M - Operations and Maintenance

Expense related to performing the functions required to safely and effectively operate and maintain NBC's wastewater treatment and collection services.

OCP – Operating Capital Program

A plan for programmed asset purchases for the current budget year and subsequent four years. The OCP is based primarily on information from NBC's Asset Management Program and includes new assets, asset replacements, asset renovations and betterments.

OSE – Operating Supplies and Expense**OSHA – Occupational Safety and Health Act of 1970**

OSHA's role is to set and enforce standards that assist employers with their responsibility to promote workplace safety and the health of their employees.

PFMB – Rhode Island Public Finance Management Board

The Rhode Island Public Finance Management Board (PFMB) is a nine-member volunteer body with a goal of promoting transparency in government and improving the financial health of municipal entities and quasi-public corporations in Rhode Island, the PFMB provides debt-related information which can be used to determine the feasibility of issuing bonds.

PLC – Programmable Logic Controller

An industrial computer control system that continuously monitors the state of input devices and makes decisions based upon a custom program to control the state of output devices

PUC - Public Utilities Commission

In accordance with RIGL, this state agency regulates certain public utilities in the State of Rhode Island, including the NBC.

PPA – Power Purchase Agreement

An agreement between two parties, one who generates electricity for the purpose (the seller) and one who is looking to purchase electricity (the buyer).

RAS – Return Activated Sludge

The settled activated sludge (which contains bacteria that feeds on the organic content in sewage) collected in the secondary clarifiers then returned to the aeration basins to re-seed the process for the incoming wastewater.

REC – Renewable Energy Credits

Tradable, non-tangible energy commodities in the United States that represent proof that 1 megawatt-hour (MWh) of electricity was generated from an eligible renewable energy resource (renewable electricity).

RGGI – Regional Greenhouse Gas Initiative

The first mandatory market-based program in the United States to reduce greenhouse gas emissions. RGGI is a cooperative effort among the states of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont to cap and reduce CO2 emissions from the power sector.

RIIB - Rhode Island Infrastructure Bank

Formerly known as the Rhode Island Clean Water Finance Agency, this state agency administers the State Revolving Fund which finances wastewater related projects and other programs.

RIDEM - Rhode Island Department of Environmental Management

The environmental regulatory department of the State and serves as a delegated authority of the USEPA with respect to the federal Clean Water Act and other programs.

RIGL – Rhode Island General Laws**RIPDES Permit - Rhode Island Pollution Discharge Elimination System**

A permit issued by the RIDEM which sets discharge limitation requirements for wastewater utilities.

RIPEC - Rhode Island Public Expenditure Council

An independent, nonprofit and nonpartisan public policy research and education organization.

RIRRC - Rhode Island Resource Recovery Corporation**RIWARN – Rhode Island Water/Wastewater Agency Response Network**

A mutual aid agreement between cities, towns or agencies to provide assistance in the event of an emergency.

ROMS – Regional Ocean Model System

A numerical hydrodynamic computer model in the public domain that is being applied to the Narragansett Bay by the URI-Graduate School of Oceanography. This model will predict circulation, thermal and pollutant transport for Narragansett Bay, including the Providence and Seekonk river systems.

S&P – Standard & Poor’s Stock Market Index**SEC – Security and Exchange Commission**

An independent agency of the United States Government that holds primary responsibility for enforcing the federal securities laws, proposing securities rules, and regulating the securities industry.

SIUs - Significant Industrial Users

NBC’s largest industrial customers.

SMART – SMART Goals

S.M.A.R.T. is a framework for goal setting. Follow the framework to ensure the best chance of success for achieving goals. (Specific. Measurable. Attainable. Results-oriented. Time-limited.)

SOP – Standard Operating Procedure

An SOP is a written procedure that promotes uniformity in operations and provides individuals with the information necessary to perform a task properly and facilitates consistency in the quality and integrity of the end result.

SRF - State Revolving Fund

The Rhode Island Infrastructure Bank program which offers low cost financing to eligible qualified borrowers.

TMDL - Total Maximum Daily Load

A calculation of the maximum amount of a pollutant that a body of water can receive and still meet water quality standards as established by the Clean Water Act, Section 303.

TSS - Total Suspended Solids

The ratio of solid matter in the effluent in parts per million.

URI – University of Rhode Island**USEPA – United States Environmental Protection Agency**

The agency of the federal government designated to oversee environmental protection in the United States.

UV – Ultraviolet

Of or relating to a light bulb that emits ultraviolet radiation

VFD – Variable Frequency Drive

A device that adjusts the speed of a pump in response to the amount of flow entering the pump station.

VRDB – Variable Rate Demand Bonds

NBC's long-term revenue bond that is multi-modal and currently is in weekly mode and backed with a direct pay letter of credit.

VRDO – Variable Rate Demand Obligation

A variable rate demand obligation (VRDO) is a municipal security for which the interest rate resets on a periodic basis and holders are able to liquidate their security through a "put" or "tender" feature, at par.

WIFIA – Water Infrastructure Finance and Innovation Act

The WIFIA program accelerates investment in our nation's water infrastructure by providing long-term, low-cost supplemental loans for regionally and nationally significant projects.

WED – Wind Energy Development

Wind turbines that convert wind energy into electricity.

WEFTEC – Water Environment Federation Technical Exhibition and Conference

An annual conference providing extensive education opportunities and unparalleled access to the field's most cutting-edge technologies and services.

WQS Building – Water Quality Science Building**WWTF - Wastewater Treatment Facility**

A facility used to treat wastewater, so that the release of effluent poses no adverse impact on public health or the ecology.

Narragansett Bay Commission

Glossary of Terms

Abatement - A user charge credit for customers who can demonstrate that more than 15% of their measured water usage does not enter NBC's sewer system.

Abatement Fee - The fee charged as part of the Sewer User Fee Abatement Application.

Abbreviated Rate Filing - A simplified filing process with the Public Utilities Commission for a revenue increase available to non-investor owned utilities under certain circumstances.

Accounting System - A system of financial recordkeeping that records, classifies, and reports information on the financial status and operation of an organization.

Accrual Basis of Accounting- A method of accounting that recognizes the financial effect of transactions when they occur, regardless of the timing of related cash flows.

Adopted Budget - The operating budget approved by the NBC's Board of Commissioners.

Allocation - The distribution of available funds, personnel, buildings and equipment among various Commission divisions and/or cost centers.

Amortization - The allocation of the cost of an asset over its useful life.

Anaerobic Biosolids Digestion - A process by which microorganisms break down organic matter, producing various gases and a reduced volume of semi-solid residue. The gases produced, called "biogas" or "digester gas," include a high percentage of methane, which can be burned to produce heat and/or electricity.

Annual Budget - An estimate of expense to be used for specific purposes during the fiscal year (July 1 - June 30) along with the proposed means (estimated revenues) for financing those activities.

Approved Budget - The budget that has been approved by the NBC's Board of Commissioners.

Arbitrage - The investment of tax-exempt bond proceeds in higher yielding taxable securities, resulting in a profit.

Asset Management Program - A technical plan for managing infrastructure and other assets to provide continuous, effective service.

Audit - An independent systematic examination of the financial records to obtain reasonable assurance about whether the financial statements are free of material misstatement.

Balanced Budget - A budget in which revenue equal expense.

Baynet - NBC's internal webpage.

Biosolids (also referred to as Sludge) - The solids (heavy organic waste matter) resulting from the wastewater treatment process. This material is separated from the effluent, treated and appropriately discarded.

Bioassay - A method for the quantification of the effects on a biological system by its exposure to a substance.

Biogas - A renewal energy source comprised from a mixture of different gases produced by the breakdown of organic matter in the absence of oxygen, produced from sewage.

Bisulfite - Chemical used to adjust the alkalinity of wastewater.

Board of Commissioners (Board) - NBC's 19 member governing board comprised of nine representatives of the municipalities in the service area and ten gubernatorial appointments.

Bond - A certificate of debt containing a promise to pay a specified sum of money (face value or principal) on specified date/dates in the future (maturity date) together with periodic interest at a specified rate.

Budget - A financial operating plan of all expected revenue and expense for a fiscal year.

Budget Message - A general discussion of the submitted budget presented in writing by the Executive Director as part of the budget document.

Capital Budget - A plan for the investment in long-term assets and the means of financing those acquisitions during the current fiscal period.

Capital Expenditures - Expense related to the Capital Improvement Program (CIP) projects and Operating Capital Program (OCP) assets.

Capital Improvement Program (CIP) - A plan that identifies programmed investments necessary to comply with current and future regulatory requirements, take advantage of technological advancements, and ensure the integrity of NBC's infrastructure. Capital needs are identified by project and fiscal year over a five-year period.

Capital Reimbursements - Labor and other expense related to capital improvement projects paid from NBC's Operating Fund and later reimbursed from the Project Fund.

Carbon Feed - A substance added to the treatment process to reduce total nitrogen.

Cash Basis - Basis of accounting that recognizes transactions or events when related cash amounts are received or disbursed.

Catch Basin - A structure designed to collect and retain solid runoff matter from streets to allow unobstructed flow of surface water into a storm sewer.

Clarifiers - The components of the wastewater treatment plant that separates sludge and scum from wastewater flows, also called sedimentation tanks.

Clean Room - A controlled laboratory testing environment that has a low level of pollutants such as dust, airborne microbes, aerosol particles, and chemical vapors.

Collection System - System of NBC owned wastewater collection and conveyance facilities that ties into NBC's wastewater treatment system including interceptors, pipes, tide gates, pumping stations, manholes, regulators, and catch basins.

Combined Sewage - A mixture of stormwater and wastewater.

Combined Sewers - Sewer systems in which stormwater and sanitary waste from industrial, commercial or residential sources are combined.

Consent Agreement - An agreement between the Rhode Island Department of Environmental Management and NBC, which identifies specific compliance issues and stipulates corrective measures to resolve such issues.

Consumption Revenue – Revenue derived from sewer user fees based upon water usage.

Debt Service – Principal and interest payments on outstanding bonds.

Debt Service Coverage - Requirement of NBC’s Trust Indenture that provides that net annual revenue available to pay debt service must exceed annual debt service by 25%.

Debt Service Coverage Ratio - A ratio that expresses the relationship of net revenue to debt service.

Deionized Water Purification System - Removes any impurities in the water, forming pure water (H₂O).

Depreciation - Allocation of the expense of an asset over its useful life in a systematic or rational manner.

Digester - A component of the wastewater treatment facility where organic matter is broken down as part of the treatment process.

Discharge Permit - A permit issued by NBC’s Pretreatment Program to regulate the users discharging into NBC’s collection system. The permits ensure compliance with all EPA and State mandates and the protection of the treatment facilities and receiving waters.

Dissolved Oxygen - The level of oxygen dissolved in the water which is an important indicator of the health of the ecosystem.

Diversion Chamber - A chamber or box, which contains a device for diverting or drawing off all or part of a flow or for discharging portions of the total flow to various outlets.

Effluent - The “cleaned” wastewater, or final liquid by-product of the wastewater treatment process, that flows out of a treatment facility.

Enterprise Fund - A fund established to account for operations that are financed and operated in a manner similar to private business enterprises. The intent is that the full expense of providing the goods or services be financed primarily through user charges and fees.

Expense – Costs incurred for goods and services received.

Facilities Plan - An improvement plan that integrates new facilities, major rehabilitation, ongoing repairs, or the renewal of existing facilities.

Financing Plan - The estimate of revenues and their sources that will pay for the service programs outlined in the annual budget.

Fiscal Sustainability Plan (FSP) - A fiscal sustainability plan is a living document that is regularly reviewed, revised, expanded, and implemented as an integral part of the operation and management of the system. A plan for maintaining, repairing, and, as necessary, replacing the treatment works and a plan for funding such activities.

Flat Fee Revenue - Revenue derived from sewer user charges based on the number of dwelling units for residential customers and the meter size for non-residential customers.

Flow Meter - A meter used to measure the flow of water.

Force Main - A sewer line fed by a lift station which carries pumped wastewater to a point where additional pumps or gravity can continue to convey the flow.

Fringe Benefit - A component of personnel costs other than salaries that include health insurance, retirement, payroll taxes and other employee benefits.

Fund Accounting - Governmental accounting systems are organized and operated on a fund basis. A fund is defined as a fiscal and accounting entity with a self-balancing set of accounts recording cash and other financial resources, together with all related liabilities and residual equities or balances, and changes therein, which are segregated for the purpose of carrying on specific activities or attaining certain objectives in accordance with special regulations, restrictions, or limitations.

GASB 67 - Government Auditing Standards Board Statement 67 – Financial Reporting for Pension Plans which replaces the requirements of Statement 25 as they relate to pension plans that are administered through trusts or similar arrangements meeting certain criteria.

GASB 68 - Government Auditing Standards Board Statement 68 – Accounting and Financial Reporting for Pensions which replaces Statement 27 and requires governments providing defined benefit pensions to recognize their long-term obligation for pension benefits as a liability for the first time, and to more comprehensively and comparably measure the annual expense of pension benefits. The Statement also enhances accountability and transparency through revised and new note disclosures and required supplementary information.

GASB 82 - Government Auditing Standards Board Statement 82 - an amendment of GASB Statements No. 67, No. 68, and No. 73 (GASB 82), providing guidance on three practice issues raised during the implementation period of the new pension standards issued in 2012. The presentation of payroll-related measures in required supplementary information (RSI), the selection of assumptions and treatment of deviations from the guidance in Actuarial Standards of Practice (ASP) issued by the Actuarial Standards Board (ASB), and the classification of payments made by employers to satisfy employee contribution requirements.

Grant - Financial contributions received from the state and federal government.

Grit Chambers - Grit chambers are part of the wastewater treatment process where flows are slowed long enough for the grit, gravel and sand to fall to the bottom. This is one of the primary treatment steps to physically remove large particles before biological treatment begins.

Hypochlorite - A disinfectant, commonly known as bleach, used to treat effluent and control bacteria and odors.

Hypoxia - A condition in which there is inadequate dissolved oxygen in the water. This condition has a negative impact on the health of the ecosystem.

Infiltration - The seepage of groundwater into a sewer system which may occur through defective or cracked pipes, pipe joints and connections, interceptor access risers and covers, or manhole walls.

Inflow - Water discharged into a sewer system and service connections from sources other than regular connections. This includes flow from yard drains, foundation drains and around manhole covers. Inflow differs from infiltration in that it is a direct discharge into the sewer rather than a leak in the sewer itself.

Influent - Water that flows into the treatment plant.

Interceptor - A large sewer that receives flow from several smaller sewers and conveys flow to a sewage treatment plant.

Late Charge - Compounded interest of 1% per month assessed on unpaid sewer user fee balances 30 days after the billing date.

Line-Item Budget - A format of budgeting which organizes expense by type, such as supplies, equipment, maintenance or salaries.

Mission Statement - Summation of NBC's purpose and goals.

Modified Accrual Basis - Basis of accounting that focuses on current financial resources. Revenues are recognized when they become measurable and available to finance expenditures of the fiscal period. Debt service expenditures and other accrued liabilities that are not normally liquidated with expendable available financial resources are not recognized until due. In addition, inventories and prepayments may be recognized when incurred rather than when used or during the period benefited by the prepayment.

Net Metering - A policy by which certain renewable energy electricity generators may deduct energy outflows from metered energy inflows.

Net Metering Credit - A reduction in electricity expense due to renewable electricity energy produced off-site resulting in credits applied to National Grid invoices.

Net Revenue - Total revenue less total operation and maintenance expense.

Nitrogen Removal - The removal of nitrogen from effluent of a wastewater treatment facility prior to discharge into receiving waters.

Nutrient - An organic or inorganic compound essential for the growth of organisms.

Operating Capital Expenditure - An expense in excess of \$5,000 for the acquisition or replacement of long-term assets that does not include repairs (unless extending the life of the asset by at least 3 years), land or CIP projects.

Operating Capital Program (OCP) - A plan for programmed asset purchases for the current budget year and subsequent four years. The OCP is based primarily on information from NBC's Asset Management Program and includes new assets, asset replacements, asset renovations and betterments.

Operating Reserve for Revenue Stability Fund - Reserve Fund established at a level of \$4,500,000 to support Operations & Maintenance expense in the event that actual revenue is less than the PUC authorized levels.

Outfall - A discrete location where quantities of water and/or wastewater are discharged into receiving waters generally through a pipe.

Overflow - Sewage flow that discharges directly from a sewer into receiving water because the total sewage flow exceeds the capacity of the sewer.

Performance Budget - A budget that bases expense primarily upon measurable performance of activities and work programs. A performance budget may also incorporate other bases of expense classifications, such as character and object class, but these are secondary to activity performance.

Permit Fees - Charges for NBC permits to connect to NBC's sewer system.

Pipeline - NBC's monthly publication designed to keep Narragansett Bay Commission staff up to date on internal current affairs.

Planning - The management function of preparing a set of objectives for future action.

Policy - A definite course of action adopted after a review of information, and directed at the realization of goals.

Power Purchase Agreement - A contract between two parties, one who generates electricity for the purchase (the seller) and one who is looking to purchase electricity (the buyer).

Pretreatment - Reduction or elimination of pollutants from regulated wastewater dischargers prior to discharge into the sewer system.

Priority - A value that ranks goals and objectives in order of importance relative to one another.

Procedure - A method used in carrying out a policy or plan of action.

Program - Group activities, operations or organizational units directed to attaining specific purposes or objectives.

Program Measures - Variables measuring the degree of goal fulfillment achieved by programs.

Projected Expense - Estimate of what will be expensed, based on year-to-date performance.

Pump Station - An installation of pumps used to lift wastewater to a higher elevation in places where flat land would require excessively deep sewer trenches or to raise wastewater from areas too low to drain into available collection lines. These stations may be equipped with air operated ejectors or centrifugal pumps.

Purchase Order - A document issued to authorize a vendor or vendors to deliver specified merchandise or render a specified service for a stated or estimated price.

Rate Filing - An application filed with the Public Utilities Commission to request approval of adjustments to NBC's rates.

Ratepayer - NBC customer who pays a user fee for wastewater treatment and collection services.

Rating Agencies - This term refers to the major agencies which issue credit ratings on municipal bonds.

Receiving Water - A body of water such as a stream, river, or ocean which receives stormwater and/or wastewater.

Regulator Structures - An underground structure which regulates the amount of flow entering interceptors.

Renewable Energy Credit – Credits obtained due to energy being produced from renewable sources such as wind and solar energy resulting in lower electricity expenses.

Restricted Accounts - Accounts that are restricted by the Public Utilities Commission for a specific purpose and are not available to directly fund operations and maintenance.

Revenue - An increase in financial resources and included as income to NBC.

Sampling - The act of taking water samples in order to determine water quality.

Section - NBC's lowest hierarchical level of allocating monies.

Septage - Waste that is disposed into a septage tank, and ultimately transported to a wastewater treatment facility center for treatment.

Settling Tanks - A holding area in the wastewater treatment process where heavier particles sink to the bottom for removal and disposal.

Sewer User Fee - Fees assessed to NBC customers for wastewater treatment collection and treatment services.

Sludge - See Biosolids.

Soda Ash (Sodium Carbonate) - A chemical used in the wastewater treatment process to adjust the alkalinity levels, as part of the nitrogen removal process.

Sodium Hydroxide - A chemical used in the wastewater treatment process to adjust the alkalinity levels, as part of the nitrogen removal process.

Sodium Hypochlorite - A chemical compound used for water purification.

Sondes - A collection of instruments that are used to profile and monitor water conditions in wastewater effluents and receiving waters.

Special Master - A PUC restricted cash account originally designated to be used to fund the hiring of a "Special Master" or overseer of the CSO Phase I Facilities by the PUC. NBC was not required to hire the overseer and the project has long been completed.

Stormwater Runoff - The portion of rainfall, melted snow or other precipitation that flows across the ground surface to a drain, sewer, lake, or river.

Strategic Plan - A plan created to outline the long-term goals and objectives of NBC.

Supplemental Indenture – A supplemental indenture is executed in connection with the issuance of one or more series of additional bonds under the master or bond contract. In some cases, a supplemental indenture amends terms of the master or bond contract without providing for the issuance of additional bonds.

Therm - A unit of measurement for natural gas used to monitor usage and determine usage related charges.

Tide-gate - A gate which opens and closes with tidal height to prohibit river water from entering the sewer system.

Tertiary treatment - The final cleaning process that improves wastewater quality before it is reused, recycled or discharged to the environment. The treatment removes remaining inorganic compounds, and substances, such as the nitrogen and phosphorus.

Trust Indenture - A contract between an issuer and a bond trustee for the benefit of bondholders.

Ultraviolet Disinfection - A wastewater disinfection method in which final effluent is exposed to ultraviolet light to kill pathogens and microorganisms.

Wastewater - The liquid-borne waste products of domestic, commercial and industrial activities.

Wet Weather Flow - The untreated discharges from wastewater treatment plants that occur during storm events.

Wetland - Any area in which the water table stands near, at, or above the land surface for at least part of the year. Such areas are characterized by plants that are adapted to wet soil conditions.