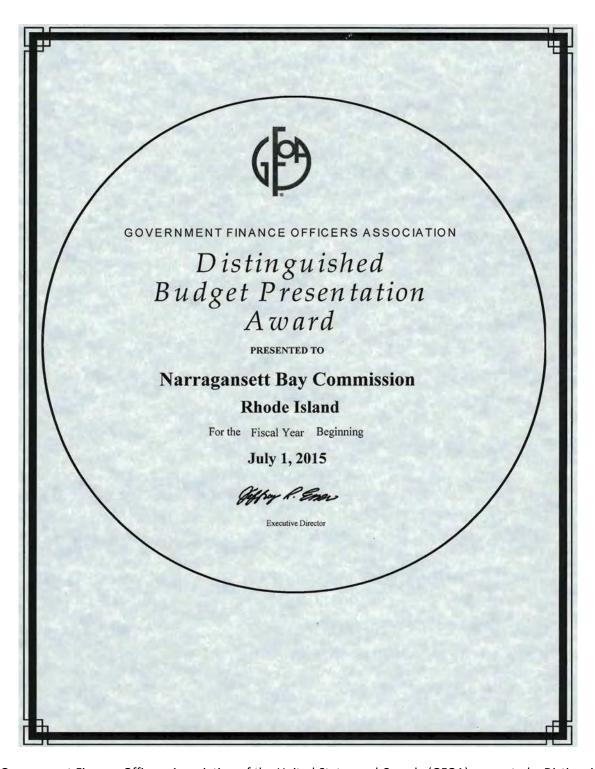


Fiscal Year 2017

OPERATING BUDGET





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, 2015. The GFOA also awarded NBC Special Performance Measures Recognition and Special Capital 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. In order to obtain Special Capital Recognition the governmental unit must receive outstanding ratings in Capital Expenditures and Debt by all three reviewers. To obtain Special Performance Measure Recognition the three reviewers must find the 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.

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

Narragansett Bay Commission Fiscal Year 2017 Budget

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. Richard Burroughs
Dr. Bruce Campbell
Mario G. Carlino
Michelle R. DeRoche
Michael DiChiro, Esq.
Jonathan K. Farnum
Seth K. Handy, Esq.

Joseph Kimball
Paul E. Lemont, Esq.
Ronald Leone
John MacQueen
Joan P. Milas
Alessandro Montanari
Alan Nathan
Richard D. Worrell

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



Photo: South Water Street Landing access to the Woonasquatucket and Providence Rivers.

Narragansett Bay Commission Fiscal Year 2017 Budget

CITIZENS ADVISORY COMMITTEE

The Narragansett Bay Commission's Citizens Advisory Committee (CAC) is a diverse group of dedicated individuals, representing municipalities throughout the Commission'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 Schacter, Chairman

Lou Blais Ames Colt Harold Gadon Christopher Hamblett Chris Hannifan Phillip Holmes Jean Lynch Chandrasekhar Mohanty Nilesh Patel Michael Quinn Howard Schachter Jane Sherman Dick Wendt



Photo: Seekonk River

Narragansett Bay Commission Table of Contents

		Page No.
I.	Budget Message	
	Executive Director's Message	1
	NBC Outlook	2
	Fiscal Year 2016 in Review	9
II.	About the Narragansett Bay Commission	
	NBC Organization	15
	Demographics	22
	Strategic Plan	28
III.	Budget Process and Policies	
	Philosophy, Basis of Accounting, Basis of Budgeting	35
	The Budget Process	36
	Budget Monitoring and Amendment Procedures	38
	FY 2017 Budget Calendar	39
	The Rate Setting Process	40
	Financial Policies	41
	Fund Definitions and Financial Data	45
IV.	Budget Summary Information	
	Budget Overview	49
	Historical Overview	51
	FY 2017 Budget – Key Assumptions	52
	Revenue Profile	54
	Expense Profile	60
٧.	CIP Impact and Long-Term Plan	
	CIP Impact on Operating Budget	71
	CIP Debt Service Impact	76
	Projected Revenue and Expense	84
	Sewer User Fee Rate Projections	85
VI.	CIP	
	Capital Improvement Program	87
	Capital Projects Summary by Fiscal Year	97
	Capital Projects Detail	98
VII	. Division Summaries	
	Executive Affairs and Construction Services Divisions	137
	Administration and Finance Division	151
	Operations and Engineering Division	179
	Planning, Policy and Regulation Division	197
VIII	. Supporting Schedules	
	Budget Resolution and Attachment 1	221
	Budgeted Benefits and Positions Comparisons	228
	FY 2017 & Five-Year Operating Capital Plan	230
	Fund Organization Matrix	241
	Acronyms Glossary	243
	Glossary of Terms	251
	Operating Budget Detail for FV 2017	258



Executive Director's Message

Fiscal Year 2017 Budget Summary

The Narragansett Bay Commission's FY 2017 Operating Budget demonstrates NBC's continued commitment to provide excellent service at the lowest possible cost. Overall, the FY 2017 Operating Budget is 2.5% higher than the prior year due to increased operation and maintenance expense, debt service coverage and operating capital. The FY 2017 Operating Budget also incorporates a number of significant revenue, savings, and expense impacts related to NBC's Capital Improvement Program (CIP).

The FY 2017 budget reflects an increase in Operating Revenue of 2.0% due to a 1.53% increase in sewer user fee rates effective July 1, 2016 as well as higher consumption revenue. Non-Operating Revenue is 8.8% higher on a year-to-year basis primarily as a result of an increase in the transfer from Operating Capital.

With respect to expense, budgeted Operation and Maintenance Expense is 2.4% or \$956,593 greater than the prior year. Of this increase, 66.5% is related to personnel services. Budgeted debt service is 0.1% higher than the prior year and NBC does not plan on issuing any debt in FY 2017. Budgeted Debt Service Coverage is 5.8% higher on a year-to-year basis. Operating Capital has the most significant increase at 18.1% over the prior year. The net effect of these changes is a 2.5% increase in total expense compared to FY 2016.

Year-to-Year Operating Budget Comparison

	FY 2016 Budget	FY 2017 Budget	Percent Change
Revenue			
Operating Revenue	\$ 96,487,944	\$ 98,449,643	2.0%
Non-Operating Revenue	7,056,060	7,676,228	8.8%
Total Revenue	103,544,004	106,125,871	2.5%
Expense			
Operation and Maintenance	40,646,635	41,603,228	2.4%
Debt Service	45,111,364	45,137,622	0.1%
Debt Service Coverage	13,144,945	13,905,521	5.8%
Operating Capital	4,641,060	5,479,500	18.1%
Total Expense	\$ 103,544,004	\$ 106,125,871	2.5%

"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: Spider Crab and Algae in the Upper Bay

Introduction

The Narragansett Bay Commission (NBC) is pleased to present its FY 2017 operating budget. This budget reflects NBC's dedication to water quality improvement through continued investment in capital improvements, the effective operation of its collection and wastewater treatment 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 2017 budget to the relationship between each program's short-term service level objectives and NBC's long-term strategic goals.

Core Business

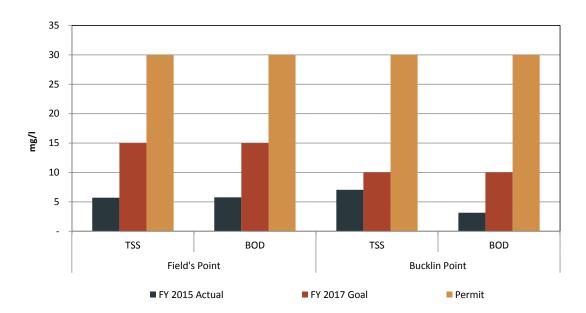
NBC's core business goal in FY 2017 and beyond is the successful operation and maintenance of the treatment and collection systems to ensure that federal and state requirements are met or surpassed. NBC's Rhode Island Pollution Discharge Elimination System (RIPDES) permits contain limits of 30 milligrams per liter



Photo: Aerial view of Narragansett Bay

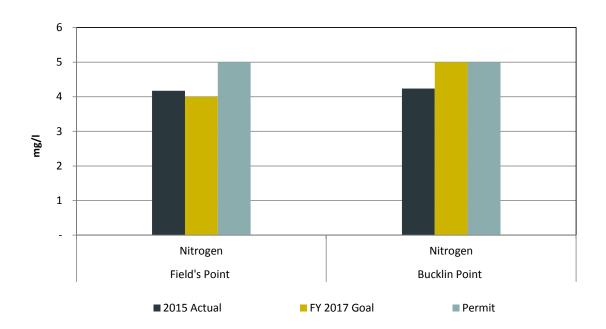
(mg/l) for both Biological Oxygen Demand (BOD) and Total Suspended Solids (TSS). BOD and TSS levels are wastewater industry standards for measuring the effectiveness of wastewater treatment and the quality of effluent discharged into the receiving waters. The chart on the following page documents NBC's FY 2017 clean water goals of achieving treatment levels superior to the permitted levels at both the Field's Point WWTF and Bucklin Point WWTF.

BOD and TSS Levels

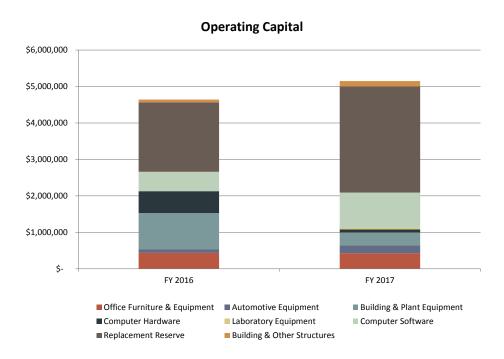


NBC is required to attain a seasonal total nitrogen permit limit of 5 mg/l from May to October at both the Field's Point and Bucklin Point WWTFs in accordance with the RIDEM seasonal permit limits that became effective in July 2014. Biological Nutrient Removal (BNR) facilities became operational in May 2013 at Field's Point and in August 2014 at Bucklin Point. NBC is achieving excellent treatment results at both facilities and Operations staff has worked to optimize the wastewater treatment process. The BNR process has stabilized and biosolids production is significantly lower at Field's Point. As a result, the FY 2017 budget for biosolids expense is \$256,559 or 5.3% lower than the prior year. In FY 2017, NBC has programmed investments of \$2.6 million towards the replacement of the aeration blowers and improvements to the final clarifiers at Field's Point to ensure treatment goals are achieved.

Seasonal Nitrogen Levels



The FY 2017 budget reflects the increased allocation of resources to protect NBC's investments through programmed funding for operating capital. Overall, there is an increase of 18.1% in budgeted operating capital over the prior fiscal year. The operating capital investments have been identified through NBC's asset management program, to take advantage of technology changes, or are other identified needs. The chart below shows a 53% increase in the budget for replacement reserve items, which are required to support the maintenance and operation of the collection system and wastewater treatment facilities.



This year's budget also reflects NBC's continued investment in capital projects required to meet current and future federal and state mandates as well as energy efficiency and sustainability projects. This year's Capital Improvement Program (CIP) included programmed expense of \$313.8 million during FY 2018-2022, with additional expense of \$40.3 million in FY 2017 for a total of \$354.1 million. For additional information on the CIP and detailed project descriptions, please refer to the CIP section of this budget. The following table summarizes NBC's CIP by fiscal year.

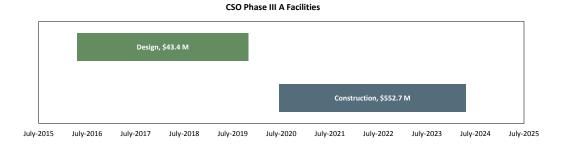
FY 2018-2022 Capital Improvement Program (In Thousands)

Project	F۱	/ 2017	F	Y 2018	F	Y 2019	F	Y 2020	F	Y 2021	F	Y 2022	tal Costs 018 - 2022
CSO Phase III Facilities	\$	7,545	\$	10,865	\$	13,148	\$	9,605	\$	79,410	\$	156,720	\$ 269,748
Interceptor Restoration & Construction		10,878		12,312		1,896		1,500		1,500		1,500	18,708
WWTF Improvements		12,618		5,241		2,174		6,024		4,460		1,274	19,173
Other		9,315		2,502		1,174		1,163		794		500	6,132
Total	\$	40,356	\$	30,920	\$	18,392	\$	18,292	\$	86,164	\$	159,994	\$ 313,761

The majority of the expenditures relate to the third and final phase of the Combined Sewer Overflow (CSO) Abatement Facilities. NBC's 18 month reevaluation of the CSO Phase III Facilities as set forth in the RIDEM approved 1998 Conceptual Design Report Amendment concluded in June 2015. This resulted in the selection of an alternative that NBC's Board determined to 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 is incorporating RIDEM's comments into a revised conceptual design

report which will be submitted to RIDEM for approval and NBC's Consent Agreement must be renegotiated based upon the approved plan.

Based upon the reevaluation, the CSO Phase III Program was subdivided into four phases to be completed over a period of 22 years. The total pre-design estimate for the four phases is \$833 million in 2018 dollars, with expenditures of approximately \$7.5 million in FY 2017 and \$269.7 in the five year period of FY 2018-2022. 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. As is shown in the chart below, NBC has initiated design and has programmed \$7.5 million for the CSO Phase III A Facilities design in FY 2017. The major capital expenditures related to construction are projected to begin in FY 2021.



NBC's core business commitment is also evident in NBC's collection system with the programmed spending of approximately \$10.8 million in FY 2017. The largest project is the Providence River Siphon and Interceptor at \$6.1 million. Other interceptor projects include the Moshassuck Valley Interceptor Project which is the replacement of the existing sewer pipe and the Louisquisset Pike Interceptor Project which involves the construction of a larger interceptor pipe. Funds are also included for the design of Johnston Sewer Improvements which will accommodate future development in the Town of Johnston in accordance with the RIDEM approved Facilities Plan.

This budget also includes resources allocated to the completion of NBC's Water Quality Science (WQS) Building. The building will house the Environmental Monitoring and Data Analysis and Laboratory sections of NBC, includes a "State-of-the-Art" laboratory, and will unify NBC's environmental sampling and analysis efforts. This project is estimated to cost \$21.3 million with \$1.4 million programmed in FY 2017. Construction is scheduled for completion in the summer of 2016.



Photo: The Water Quality Science Building

Environmental Performance

The FY 2017 budget also supports NBC's goal of minimizing environmental impacts with investments in energy efficiency and sustainability initiatives. The budget includes funding for the Wind Energy Development (WED) Turbines Project which involves the purchase of three 1.5 MW wind turbines that will convert wind energy into electricity at an off-site location. The turbines are projected to generate 9.3 million kWh of clean renewable energy annually that will be net-metered to offset usage at NBC's two wastewater treatment facilities, significantly reducing NBC's electricity expense and simultaneously generating revenue through the sale of Renewable Energy Credits (RECs). This project is assumed to be operational for 10 months in the upcoming fiscal year.



Funding for NBC Energy Efficiency Upgrades is also included in FY 2017 at a cost of \$1.0 million. This project evolved from the completion of an energy efficiency audit. Through the study, several energy saving opportunities were identified such as installation of Light Emitting Diode (LED) lighting systems. This project has secondary benefits such as a reduction in greenhouse gas emissions associated with electricity production as well as lower maintenance expense.

NBC has also programmed resources for a Greenhouse Gas Study which involves the measurement of gas emissions from the wastewater collection and treatment process. This proactive project will position NBC advantageously should new emissions requirements be imposed. The capital program also includes resources to identify and assess potential impacts resulting from climate change including the flooding of NBC facilities in low-lying areas and mitigation activities.

The FY 2017 budget continues to support 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 achieves this goal through its sampling and data analysis efforts, and this budget continues to include support for those programs. NBC is required by its Rhode Island Pollutant Discharge Elimination System (RIPDES) permits to perform sampling at both of the wastewater treatment plants daily, monitor industrial pretreatment, significant industrial users (SIU's), interceptor system, manholes, and river and bay bacteria levels. NBC's Environmental Monitoring for Public Access and Community Tracking (EMPACT) provides water quality information to the public from various fixed stations and buoys in the receiving waters as well as further downstream.

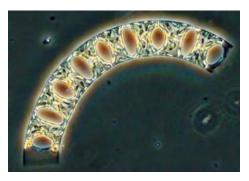


Photo: Eucampia phytoplankton, a pathway for the transfer of carbon to fish

The FY 2017 budget includes approximately \$65,000 for maintenance contracts for robotic media dispensers, water systems, and spectrophotometers and other critical laboratory equipment in order to ensure analyses are performed in a timely manner in accordance with regulatory requirements. The budget also supports the purchase of a salt water nutrient analyzer, spectrometers and biological temperature monitoring systems, refrigeration units, and incubators at total cost of \$295,000. In addition, this budget supports the sampling efforts with \$109,000 for a data collection platform, auto samplers and a water profiler. Lastly, the budget includes \$400,000 for a new Laboratory Information Management System.

Financial Management



The most significant financial challenge facing NBC continues to be the financing of the CIP. NBC has increased rates five times in the last five years to support the capital program. This year's budget includes a 1.53% increase in user fee rates effective July 1, 2016 for debt service and debt service coverage required to fund additional improvements. Non-operating revenue is budgeted 8.8% higher than last year primarily as a result of increased transfers from operating capital of \$838,440 over the prior year.

In addition to the financing cost impacts of the CIP, this year's operating budget includes detailed schedules that identify the impact of the capital improvements on the operating budget including increased revenue, savings and increased expense. In FY 2017, certain capital improvements meet core business, environmental

performance as well as financial management goals and a detailed discussion of the CIP impact is included in the CIP Impact and Long-Term Plan section of the budget.

With respect to revenue, this year's budget includes an increase of \$588,528 in miscellaneous revenue resulting from capital projects to be completed in FY 2017. This includes a \$201,195 financial incentive for energy efficiency upgrades and \$387,333 from the sale of RECs generated by the WED Turbines.

CIP Impact		
Increased Revenue	ı	FY 2017
WED Turbine RECs	\$	387,333
NBC Energy Efficiency Upgrades Incentive		201,195
Subtotal	\$	588,528

With respect to expense, budgeted Operation and Maintenance (O&M) Expense is 2.4% greater than the prior year. Personnel expense represents 60.6% of total O&M expense and is 6.7% higher on a year-to-year basis. The increase is primarily driven by contracted step and cost of living increases (2.75%) for union employees and comparable level merit increases (3.5%) for non-union employees. In addition, the budget includes \$110,000 plus fringe benefits for two new positions needed to meet Bucklin Point operational needs. Budgeted employer contributions to the non-union retirement plan are 20.6% or \$226,878 higher than last year, consistent with NBC's pension funding goals. NBC's contribution rate on behalf of union employees to the State of Rhode Island Retirement System is 6.9% higher and union retirement health is unchanged on a year-to-year basis. The budgeted premiums for health and dental insurance are 13.0% and 6.0% higher, respectively. The vision premium remains unchanged from the prior year.

The FY 2017 budget for Operating Supplies and Expense is 4.4% or \$690,538 lower than the prior year. Budgeted biosolids expense is \$256,559 lower on a year-to-year basis. This reflects significantly lower dry ton production at Field's Point which offsets the slightly higher production at Bucklin Point and a 0.3% increase in the contracted rate per dry ton. The electricity budget is \$1.0 million lower in FY 2017 and reflects the net metering of the electricity anticipated to be produced from the WED turbines, reduced usage from the installation of LED energy efficiency lighting and a 6.2% decrease in the supply rate. These savings more than offset the increased usage for the new WQS Building. The FY 2017 budget for natural gas is 2.4% higher than the prior year and reflects the net impact of increased usage for the WQS Building and a 12% decline in the rate per therm. Overall, the savings resulting from the programmed capital projects mitigates the Operating Supplies and Expense budget line items that have increased over the prior year. A summary of the CIP impact on the budget for Operating Supplies and Expense in FY 2017 is below.

CIP Impact			
Savings			FY 2017
WED Turbines		\$	(736,977)
NBC Energy Efficiency Upgrades			(190,411)
WQS Building	-		(137,227)
	Subtotal	\$(1,064,615)
Increased Expense			FY 2017
WED Turbines			334,250
WQS Building			233,380
	Subtotal	\$	567,630
Net Impact on Operating Supplies & E	Expense		FY 2017

Professional Services comprise 5.7% of the total O&M expense and the FY 2017 budget is \$54,450 or 4.6% more than the FY 2016 budget. This increase includes funding for regulatory expense, a study of non-union job specifications and compensation, legal services, audit fees, and other services. The following chart shows a year-to-year comparison of the large operating supply and expense accounts. Note that this year's budget includes a new expense line item titled Ultra Violet (UV) Disinfection for expense related to the operation and maintenance of the UV system at Bucklin Point.

Professional Services Other O&M Insurance/Workers Comp. Ins. **UV** Disinfection Repairs Building, Structure Service Agreements Maintenance Contracts Chemicals Natural Gas Electricity Biosolids \$3,000,000 \$4,000,000 \$-\$5,000,000 \$1,000,000 \$2,000,000 \$6,000,000 FY 2017 Budget FY 2016 Budget

Large Operating Supply and Expense Accounts

Budgeted debt service in FY 2017 is 0.1% or \$26,258 higher than the prior year and no debt issuance is anticipated in this year's budget. Overall, the budgeted amount for debt service and debt service coverage is \$786,834 or 5.8% higher on a year-to-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. NBC has worked diligently to maintain a positive relationship with its employees and FY 2017 is the final year of the three-year union contract. In FY 2017, NBC will continue to offer a strong benefits package including a High Deductible Health Plan (HDHP) in tandem with partial funding of a Health Savings Account (HSA) or Health Retirement Account (HRA). 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. Employees may also participate in physical activity challenges throughout the year to improve wellness. In addition to Workplace Wellness, NBC places a high importance on worker safety.

NBC's FY 2017 budget also reflects organizational changes necessary to meet operational needs. NBC assumed the management of the Bucklin Point WWTF from a private contractor in FY 2016. Based on NBC's operation of the facility during the past year it was determined that two new positions are required. The two new union positions include a Mechanic II and a Senior Electronics & Instrumentation (E&I) Technician. In addition, to meet staffing requirements the budget reflects the upgrade of four Operator II positions to Process Monitor positions. The budget also reflects position changes and other actions approved by NBC's Personnel Committee approved during FY 2016. Budgeted turnover remains at four positions and the cumulative effect of these changes on a year-to-year basis is 270 funded positions, an increase of two FTEs.

Customer Service and Communication

The FY 2017 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 83,650 customer accounts. NBC has also programmed \$250,000 for a new customer service application that will streamline processes, enhance functionality and better serve customers. Also included in this year's budget is \$250,000 for a user fee rate study that will focus on cost recovery and allocation in anticipation of financing construction of the CSO Phase III A Facilities. In terms of communication, the FY 2017 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 2016 in Review

In FY 2016, the NBC organization achieved a remarkable 135 accomplishments. Approximately 42% or 56 accomplishments focused on NBC's Core Business, ensuring that all state and federal mandates were met or surpassed. In addition, 25% of the FY 2016 accomplishments related to Financial Management and ensured that ratepayer impacts were minimized. Furthermore, 14% of the accomplishments related to the maintenance of a Customer Focus attitude throughout the organization. The following table outlines the percentage of accomplishments by goal and also the totals by division.

FY 2016 Major Accomplishments

Strategic Plan Goals	Executive	Administration & Finance	Operations & Engineering	Planning, Policy & Regulation	Total	Percentage of Goals
Core Business	11	19	14	12	56	42%
Financial Management	6	27	0	1	34	25%
Customer Focus	1	9	1	8	19	14%
Staffing	3	-	5	1	9	7%
Environmental	-	-	1	5	6	4%
Communication	3	1	0	2	6	4%
Organizational	3	2	-	-	5	4%
	27	58	21	29	135	100%

In FY 2016, NBC received numerous awards acknowledging environmental performance and treatment facility management achievements. The National Association of Clean Water Agencies (NACWA) presented Bucklin Point with the Peak Performance Gold Award for zero permit violation compliance and presented Field's Point with the Peak Performance Silver Award for Permit Compliance for consistent permit compliance. These are significant accomplishments as it involves the evaluation of a utility's performance on more than 4,000 parameters during the year. Additionally, NBC received the EPA Region 1 Environmental Merit Award for clean water contributions to Narragansett Bay from the Environmental Protective Agency (EPA).

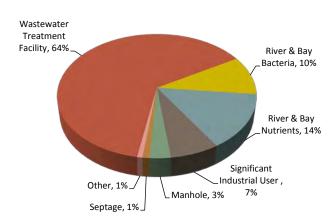


A NBC laboratory staff member also received the New England Water Environment Association (NEWEA) Alfred E. Peloquin Award. This annual award recognizes an individual that has made a significant contribution to excellence in wastewater operations and related activities. NBC also received the 2016 George W. Burke, Jr. Facility Safety Award for recognition of excellence and effectiveness in safety programming and was also awarded first place in the "Wastewater Olympics" operations challenge from NEWEA.

During FY 2016, NBC's Interceptor Maintenance (IM) section inspected an estimated six miles of interceptors, numerous catch basins and connector pipes throughout the service area. NBC's IM section also provided approximately 50 hours of assistance to its member communities in the service area.

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 29,703 samples, with the majority or 64% related to WWTF monitoring. In addition, in order to assess water quality, 14% of the samples collected were for river and bay nutrients, while 10% sampled for river and bay bacteria. The following chart shows the percentage of samples collected by type.

Sampling Activity



FY 2016 marked the seventh year of operation of the CSO Phase I Facilities and since the project's completion, more than seven billion gallons of combined stormwater and wastewater have been captured and treated. In addition, large amount of debris continue to be removed from the overflows each year. The annual amount of debris removed is projected to reach more than 665 tons in FY 2016.

In FY 2016, NBC completed 16 capital projects totaling \$182.3 million. The majority or 92% of the expenditures were for contracts related to the CSO Phase II Facilities. The completed projects are summarized in the following table.

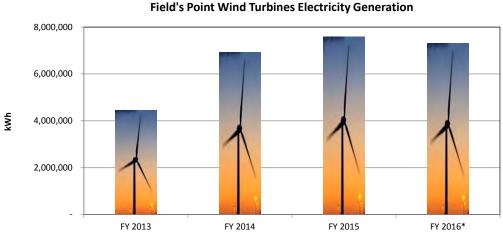
Project	Cost
CSO Phase II Facilities (8 Contracts)	\$ 168,533,000
FPWWTF - Blower Improvements	2,804,000
FPWWTF Tunnel Pump Station Improvements	963,000
FPWWTF Electrical Substation No. 1	1,669,000
Providence and Lincoln Interceptor Cleaning & Inspection	220,000
Lockbridge Easement & Valley St. Cleaning & Inspection	385,000
Providence River Siphon Replacement	6,433,000
Improvements to Interceptors FY 2015	1,218,000
Omega Pump Station Improvements	84,000
Total	\$ 182,309,000

From a financial perspective, FY 2016 was a strong year for NBC. NBC projects that FY 2016 will be the first year that actual user fee revenue will not be lower than PUC approved revenue in many years. Although NBC

continues to experience a shortfall in non-residential flat fees due to meter downsizing, consumption revenue is higher primarily the result of two new industrial customers with significant billable consumption.

With respect to operation and maintenance expense, NBC anticipates finishing FY 2016 well under budget. This is primarily the result of turnover which caused personnel expense to be 5.9% or \$1.4 million below budget. In addition, NBC's expense for biosolids is \$390 thousand or 8.1% lower than the budget due to lower dry ton production at Field's Point. Natural gas and chemical expense was also lower than budgeted levels due to the mild winter and wastewater treatment needs, respectively.

During FY 2016, NBC benefited from the operation of the Field's Point Wind Turbines which are projected to generate 7.3 million kWh of electricity and \$531 thousand in revenue from the sale of RECs. The following graph shows the kWh of electricity generated by fiscal year.



*Includes estimated reimbursement per Turbine manufacturer

In FY 2016, NBC developed and adopted a Fiscal Sustainability Policy and Plan (FSP) to maintain eligibility for low-interest loans through the Rhode Island Infrastructure Bank (RIIB). The FSP incorporates NBC's asset management activities and other best practices to ensure that NBC protects its infrastructure investments. The FSP was promulgated based upon final guidance from the Environmental Protection Agency (EPA) as part of the Amendments in the Water Resources Reform and Development Act to the Federal Water Pollution Control Act (Regulations). NBC executed two borrowings through the RIIB in FY 2016 including the 2015 Series B \$41.7535 million loan in July 2015 and the 2016 Series A \$23 million loan in June 2016.

NBC continued to benefit from historic low short-term interest rates and is projected to realize interest savings of more than \$1.6 million on the Variable Rate Demand Bonds (VRDBs). NBC also replaced its Letter of Credit (LOC) at a favorable rate for a five-year term. This will save NBC ratepayers over the term of the contract and will ensure continuity.

The FY 2016 Operating budget was awarded the GFOA Distinguished Budget Presentation Award for the fourteenth consecutive year. The Operating Budget was also recognized by GFOA as Outstanding as a Financial Plan, Outstanding as an Operations Guide, Outstanding as a Communications Device along with Special Capital Recognition and Special Performance Measures Recognition. NBC also received the Certificate of Achievement for Excellence in Financial Reporting for Fiscal year 2015 for the fourteenth consecutive year. NBC's consistent sound financial performance is evident with 24 consecutive years of operating surpluses.

In FY 2016, the NBC's Customer Service department completed timely and accurate billings of NBC's 83,650 accounts, billing more than \$95 million in user fees. The section also received and responded to an average of 4,500 customer calls each month and collected approximately \$400,000 per month through the Water Shut-off Program. The section's collection activity has been effective, with accounts receivable at June 30th projected to be less than the prior year.

NBC continued to protect its investments in technology with enhanced security firewalls, replacement of anti-virus software and the establishment of redundant connectivity. A new time and attendance system was selected and the corporate-wide fax server was installed. Additionally, direct dial telephone lines and handsets were replaced. Significant system and software upgrades were made to the Pretreatment application, virtual servers were upgraded at Bucklin Point and a campus-wide display signage system installed. Lastly, Thin-Client technology continues to be employed to various departments to enhance security and performance, as well as reduce cost.

From a human resources standpoint, NBC received the 2015 Best Places to Work in Rhode Island Award, which involved the completion of a workplace assessment process including employee surveys and an inventory of company benefits, policies and offerings. NBC consolidated and organized retirement plan documents including the Qualified Domestic Relations Order (QDRO) procedures and uploaded them to NBC's benefits page for employee accessibility. Additionally, the life insurance, disability and dental insurance policies were evaluated and renewed. NBC also received an experience modification of less than 1.0 for its Workers Compensation experience, a testament to the safety practices and priorities of NBC.

In FY 2016, NBC issued 216 new sewer connection permits and administered the NBC Earth Day River Cleanup Grant program to support initiatives involving 15 non-profit organizations throughout the NBC service area. NBC's technical staff also encouraged developers to use Low Impact Design (LID) techniques for storm water disposal as part of the storm water mitigation program and reviewed three Projects that employed LID techniques.

In addition, NBC performed a number of public outreach events and conducted numerous watershed education programs through the NBC's Watershed Explorers program and delivered water quality education to high school students. Through this program, more than 500 students from nine elementary schools in NBC's service area received monthly lessons and learned about the health of their school's watershed. The students presented their macro invertebrate data projects and student essays at the May 20, 2016 annual NBC environmental conference held at Goddard Park.



Photo: Student presentations at NBC's Watershed Explorers Conference

NBC was also proud to host the FY 2016 NACWA Summer Conference. The well attended conference included NACWA members from across the country facing challenges similar to those of NBC. The conference participants are industry leaders and it was an honor to be chosen as the host agency here in Rhode Island.

In FY 2016, NBC smoothly transitioned the management of the Bucklin Point WWTF from a private contractor to NBC. In addition, significant efforts for renewable energy were initiated with the goal of becoming energy neutral by 2020. The NBC website was updated to include a module for renewable energy projects which displays the Field's Point wind turbine information. Resources were dedicated to the third and final phase of the CSO Program and NBC submitted its reevaluation report to RIDEM.

Summary

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.

NBC's reputation in the environmental community continues to grow both regionally and nationally. I serve as the Rhode Island wastewater industry representative for the Narragansett Bay Estuary Program (NBEP) Management Committee. This committee forms partnerships with those that conserve and restore natural resources and enhance water quality through community involvement. In addition, I am looking forward to my term as the 2017 President of the National Association of Clean Water Agencies (NACWA), the leading advocate of the clean water industry on a national basis.

In conclusion, during FY 2017, NBC will continue to work to protect its community, ratepayers and all Rhode Islanders through the enhancement of water quality in Narragansett Bay.

Raymond J. Marshall, P.E.

Executive Director



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.

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. In this budget document, after the following two pages, the Construction Services Division is combined with the Executive Affairs Division for financial planning purposes. An organizational chart of NBC, located on the following page, depicts the relative budgetary size of each Division. The next page contains a brief description of the Divisions and the responsibilities of each program or section level.

NBC Organization

Executive Director/
Secretary of the Board

ADMINISTRATION & OPERATIONS & PLANNING, POLICY & CONSTRUCTION **EXECUTIVE AFFAIRS** ENGINEERING 13 Positions **S**ERVICES **FINANCE REGULATION** 133 Positions 11 Positions 60 Positions 57 Positions **Director Director** Director Director Director Operations & Planning, Policy Executive Construction Administration Engineering Affairs Services & Finance & Regulation Construction **Executive Affairs** Human Interceptor **Planning** 3 Positions Services Resources 5 Positions Maintenance 11 Positions 4 Positions 20 Positions Pretreatment **Public Affairs Finance** 3 Positions 14 Positions **Engineering** 5 Positions 9 Positions Government Laboratory Accounting **Affairs** 17 Positions 10 Positions 1 Position **Field's Point** Information 59 Positions Enviro. Safety & **Labor Relations Technology** Tech. Assistance 1 Position 12 Positions 4 Positions **Bucklin Point** Legal 45 Positions 5 Positions **Customer Service Enviro. Monitoring** 25 Positions & Data Analysis 17 Positions **Purchasing** 4 Positions

FY 2017 Operating Budget by Division

General Admin. 0 Positions



Program Level Operational Responsibilities Overview

EXECUTIVE DIVISION

Oversees all aspects of policy development, strategic planning and agency management responsibilities.

<u>Executive Affairs</u>: Oversees all aspects of policy development, strategic planning, labor relations and agency management responsibilities.

<u>Legal:</u> Provides legal advice to staff regarding issues that may arise in the course of NBC's business activities.

CONSTRUCTION SERVICES DIVISION

Oversees the construction of capital improvements to NBC's system of interceptors, pump stations and wastewater treatment facilities.

ADMINISTRATION AND FINANCE DIVISION

Provides administrative and support functions, including the finance, customer service, purchasing, information technology, human resources, accounting, and general administration functions.

<u>Human Resources</u>: Administers and processes employee records, recruitment & retention, workers' compensation, employee benefits and collective bargaining agreements.

<u>Finance</u>: Ensures overall sound financial management including the operating budget, CIP, debt management, rate setting, NBC retirement plans, cash management, and compliance.

Accounting: Maintains NBC financial records, issues monthly financial statements in accordance with GAAP, payroll and payment processing, IRS reporting and preparation of monthly trust and restricted funds transfers.

Information Technology: Maintains all aspects of networks, telecommunications, hardware, software and databases for the entire enterprise.

<u>Customer Service</u>: Provides accurate and timely billing and collection of approximately 83,650 accounts in the NBC service area and is responsible for all other aspects of providing excellent customer service.

<u>Purchasing</u>: Ensures the legal, timely and cost-effective purchasing of goods and services.

<u>General Administration</u>: Overhead section containing expense such as debt service, insurance, workers' compensation and expense for the corporate office building.

OPERATIONS & ENGINEERING DIVISION

Responsible for planning and designing capital improvements to the NBC's system of interceptors, pump stations and wastewater treatment facilities, as well as operating and maintaining NBC's infrastructure.

Interceptor Maintenance: Maintains interceptors and facilities which collect and transport wastewater to the NBC wastewater treatment plants within the Bucklin Point and Field's Point district.

Engineering: Plans and designs facilities needed for the collection and treatment of wastewater within the NBC's service area.

Field's Point: Operates and maintains the Field's Point facilities in a way that will produce the highest quality effluent in the most efficient manner.

<u>Bucklin Point</u>: Operates and maintains the Bucklin Point facilities that treat one fifth of the state's wastewater flow.

PLANNING, POLICY & REGULATION DIVISION

Responsible for long-range agency planning, issuance of sewer connection permits, pretreatment, environmental monitoring and analysis, safety and technical assistance and the laboratory.

<u>Planning</u>: Issues sewer connection, storm water and sewer alteration permits.

<u>Pretreatment</u>: Maintains the federally mandated pretreatment program and protects the NBC's wastewater treatment plants from toxins and pollutants.

<u>Laboratory</u>: Ensures the production of high quality analytical data through the use of diagnostic measurements in order to comply with federal and state regulations.

<u>Environmental Safety & Technical Assistance:</u> Assists industrial and commercial customers in minimizing or eliminating the creation of waste and pollutants at the source.

Environmental Monitoring & Data Analysis: Monitors water quality throughout NBC's service district, at the two wastewater treatment facilities, throughout the collection system, at commercial and industrial facilities, and upper Narragansett Bay and its urban rivers.

Governmental Regulation

In addition to Public Utilities Commission (PUC) oversight, NBC is regulated by the Rhode Island Department of Environmental Management (RIDEM) and the U.S. Environmental Protection Agency (USEPA) to ensure compliance with State and Federal Clean Air and Clean Water Acts. NBC has been issued Rhode Island Pollutant Discharge Elimination System (RIPDES) permits for each of its wastewater treatment plants.

State and Federal Compliance Issues

NBC executed a Consent Agreement with RIDEM to implement a federally mandated Combined Sewer Overflow (CSO) Abatement Program. The first phase and second phases were completed in 2008 and 2012, respectively. 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 Board determined to 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 is incorporating RIDEM's comments into a revised conceptual design report which will be submitted to RIDEM for approval. NBC's Consent Agreement must be renegotiated based upon the approved plan.

NBC has a second Consent Agreement with RIDEM for nitrogen limits at both the FPWWTF and BPWWTF. The Consent Agreement requires that NBC achieve a total seasonal nitrogen limit of 5 mg/l from May to October at both facilities. In order to achieve this, NBC constructed new facilities at Field's Point which were completed in May 2013 and at Bucklin Point which were completed in August 2014.

Financial Obligations

As part of NBC's long-term debt issuance, the NBC must comply with Continuous Disclosure requirements including the timely filing of certain financial information, operating data, and certain material events. NBC is also subject to other post-issuance compliance requirements associated with its issuance of tax-exempt debt. NBC must also undergo an annual credit review with Standard & Poor's as part of the Variable Rate Demand Bonds and prior to the issuance of new debt.

Facilities

NBC owns and operates Rhode Island's two largest Wastewater Treatment Facilities (WWTF) along with an extensive infrastructure of interceptors, pump stations, tide-gates and combined sewer overflows. The location of the two wastewater treatment facilities is shown on the map below.



Field's Point Service Area Facilities and Technology

The Field's Point WWTF provides secondary treatment and nitrogen removal for dry weather flow of up to 65 million gallons per day (MGD) and sustained wet weather flow of 77 MGD. The wet weather facilities at the plant provide primary treatment and disinfection for an additional 123 MGD of wet weather flows. Total wet weather treatment capacity at Field's Point is 200 MGD.



Photo: Aeration Tanks at the Fields Point Wastewater Treatment Facility

NBC also owns, operates and maintains three outlying pump stations in the Field's Point Service Area; the

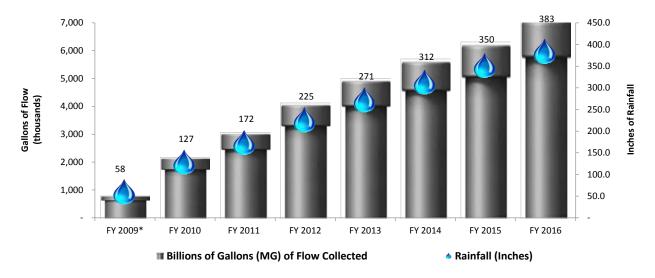
Washington Park and Reservoir Avenue Pump Stations located within the City of Providence and the Central Avenue Pump Station in Johnston. The Ernest Street Pump Station is located adjacent to the Field's Point WWTF and handles 98% of the flow to Field's Point. The Tunnel Pump Station, also adjacent to the Field's Point WWTF, pumps flow stored in the Phase I CSO Tunnel to the Field's Point WWTF.

NBC maintains 19 permanent flow metering stations that are used to measure flows at various points in the sewer system. In addition, NBC owns and is responsible for the maintenance and correction of 35 CSO's, 32 tide gates and 80 miles of interceptors in the Field's Point Service Area.

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 7 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

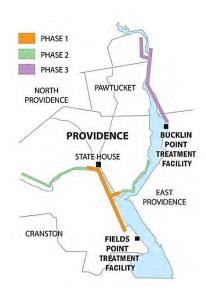
CSO Phase II Facilities

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. The constructed wetlands treatment facility consists of a storage tank and created wetlands will provide pretreatment for one outfall. For small storms, the combined sewer flows will be stored in the tank until after the storm when they will be pumped to the collection system. For larger storms, treatment will be 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. As a result of a reevaluation process, the Phase III CSO Program was subdivided into four phases to be completed over a period of 22 years. 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. The program also incorporates Green Stormwater Infrastructure (GSI) facilities to be constructed in each of the four phases to reduce stormwater inflow to the existing CSO system by implementing ground stormwater infiltration projects, with expenditures of \$10 million on GSI in each phase.

The total pre-design estimate for the four phases of the CSO Phase III Facilities is \$833 million in 2018 dollars, with expenditures of approximately \$7.5 million in FY 2017 and \$269.7 million in the five year

period of FY 2018-2022 in this year's CIP window. 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 of the Operating Budget.

Field's Point Wind Turbines

In October 2012, the Commission began operation of three 1.5 MW wind turbines located at the Field's Point campus. The turbines use wind energy to produce sustainable electricity. The electricity generated is used on-site to support facility operations and any excess is net metered back to the grid to offset billable usage. In addition to \$1.2 million in REC revenue, the turbines have generated more than 24 million kWh of clean renewable energy since becoming operational.



Photo: Field's Point Wind Turbines

Bucklin Point Service Area Facilities and Technology

The former Blackstone Valley District Commission (BVDC) was established by the Rhode Island General Assembly in 1947 to service the Blackstone Valley area. legislation effectuated the merger of BVDC into NBC on January 1, 1992. Upgrades of the Bucklin Point WWTF were completed in 2006 and 2013 provide nitrogen removal and other improvements. The facility provides secondarytreatment with nitrogen removal for flows up to 46 MGD and primary treatment for flows up to 116 MGD.



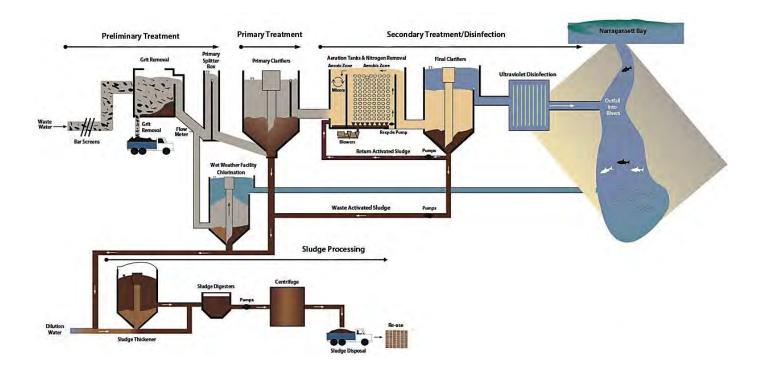
Photo: Bucklin Point Wastewater Treatment Facility

NBC also owns and operates the Omega Pump Station in East Providence and the Saylesville Pump Station and the Washington Highway Pump Station in Lincoln. NBC is responsible for 26 Combined Sewer Overflows in the Bucklin Point service area and 30 miles of interceptors.

Wastewater Treatment Process

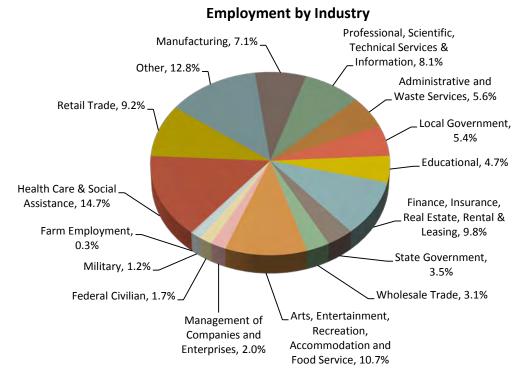
NBC works hard to protect the water quality of Narragansett Bay and its tributaries. NBC's task is to protect public health by taking billions of gallons of dirty water every year and making it clean. This is accomplished by operating 24 hours per day and 365 days per year.

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



Rhode Island Economy

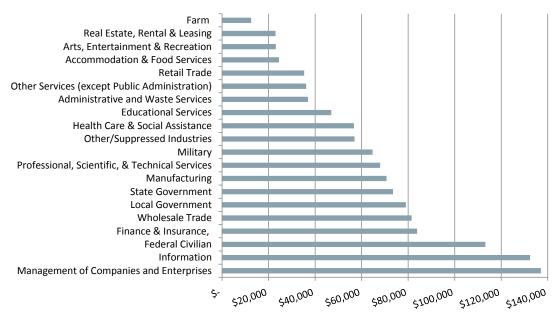
According to the Rhode Island Department of Economic Development, the economic base of Rhode Island continues to shift from manufacturing and goods to service industries over the last decade. The chart below shows employment by industry for the calendar year 2014.



^{*}Source: United States Regional Economic Analysis Project Industries by State 2014

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 2014.

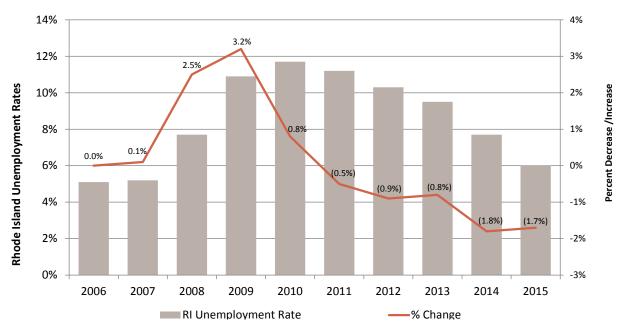
Rhode Island Average Annual Earnings per Employee by Major Industry



^{*}Source: United States Regional Economic Analysis Project Industries by State 2014

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 each year of the last five years from a peak rate of 11.7% in 2010 to 6.0% in 2015.

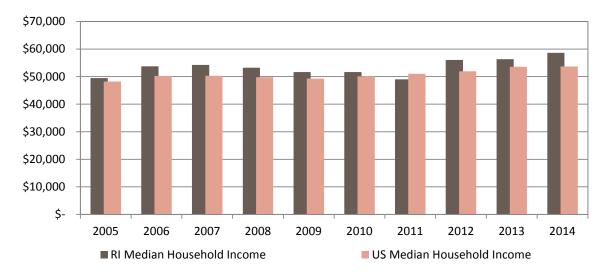
Rhode Island Unemployment Rates



^{*}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 2005-2014 compared to national statistics. Rhode Island's median household income remained above the national figure from 2005-2010, and then dropped to approximately 2% below the national level in 2011. Since that time, the Rhode Island median household income has remained above the national median by approximately 9% or \$4,976 in 2014, with median household income of \$58,633.

Median Household Income - Rhode Island vs. United States



^{*}Source: United States Census Bureau – Median Household Income by State 2014

NBC Service Area

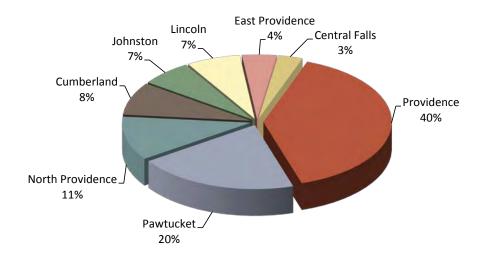
NBC provides reliable, cost-effective wastewater collection and treatment services to over 360,000 residents and approximately 7,800 businesses in the metropolitan Providence and Blackstone Valley areas. These communities include: Providence, North Providence, Johnston, Pawtucket, Central Falls, Cumberland, 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.

Percentage of Accounts by Community



The residential customer class has approximately 76,000 accounts, while the non-residential customer class has approximately 7,750 accounts. The largest NBC customers have are primarily service and education providers. The ten largest customers based on FY 2016 projected billings also are listed in the table below:

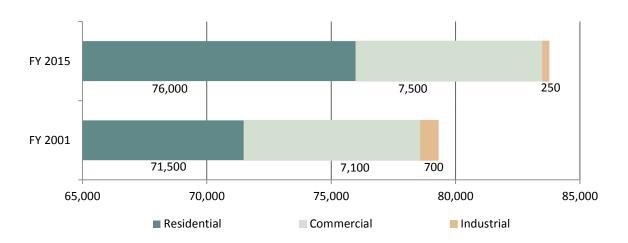
	Top Ten NBC Customers										
	Customer	Total Billing FY 2016*	Percentage of Total Annual User Charges								
1	Providence Housing Authority	\$ 1,572,622	1.64%								
2	Rhode Island Hospital	1,549,289	1.62%								
3	Brown University	1,430,640	1.49%								
4	City of Providence	698,475	0.73%								
5	City of Pawtucket	686,109	0.72%								
6	Providence School Department	486,748	0.51%								
7	Providence College	467,248	0.49%								
8	Rhode Island Resource Recovery	461,110	0.48%								
9	Johnson & Wales University	445,179	0.46%								
10	Conopco, Inc. dba Unilever	428,073	0.45%								

^{*} Based on projected FY 2016 Billings

Source: NBC's billing records

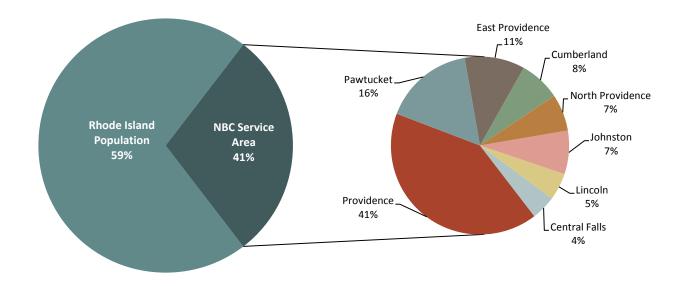
Over the last fifteen years there has been a 5.6% increase in the number of customer accounts. This is the net effect of a 64.3% decrease in the number of industrial accounts from 700 to 250 which has been offset by a 6.3% increase in the number of residential accounts and a 5.6% increase in the number of commercial accounts.

Number of Accounts by Customer Class

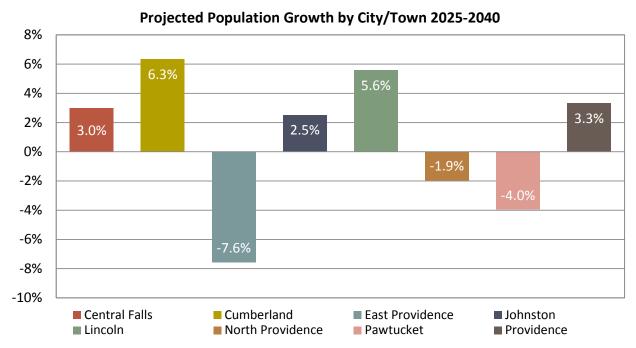


NBC Service Area Population and Statistical Information

The total population for Rhode Island based on the 2014 Estimated US Census is 1,055,173. 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 at 41% followed by the City of Pawtucket at 16%.



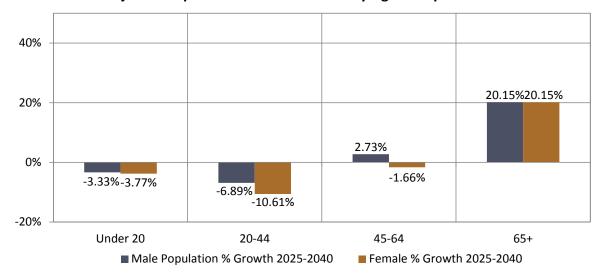
The Rhode Island Office of Statewide Planning projects the state population by city and town. The graph below displays the projected population growth for NBC's service area for the years 2025 to 2040. The most significant percentage increase in population over the fifteen years is projected to be in 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.



*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

The Strategic Plan and the FY 2016 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 operating 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 an operating 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 Goal

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 user charges are minimized.

Customer Focus

Maintain a customer-focused attitude throughout the organization.

Staffing

Attract, develop and retain highly qualified employees.

Communication

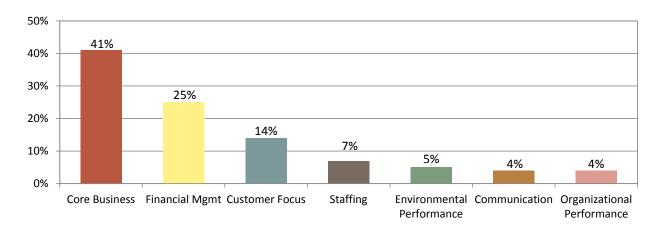
Improve and enhance internal and external communication to increase understanding of "who we are" and "what we do".

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 66% of the Actions for Achievement were aligned to Core Business and Financial Management goals. In addition, 14% of the Actions for Achievement relate to Customer Focus and 7% to Staffing. 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.

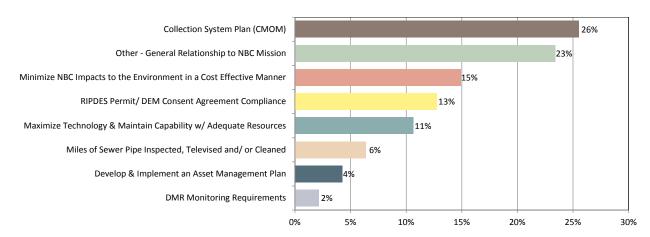
Percentage of Actions for Achievement by Strategic Objective



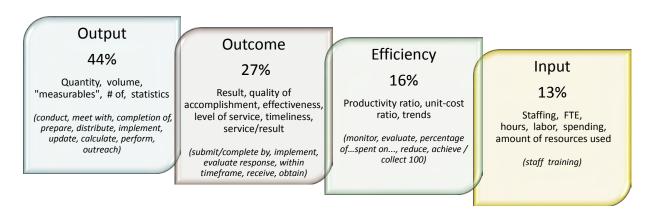
The Strategic Plan is also integrated into the Capital Improvement Program. Due to the increasing complexity of the CIP and NBC's funding constraints, NBC evaluated proposed capital investments in light of their strategic value. NBC's Strategic Plan ensures the ability to meet water quality objectives within the constraints of regulatory requirements through short term and long term objectives. As part of the CIP development process, project managers determine the specific strategic goal or goals that the project will address.

Of the 37 CIP projects, 26% are related to the Collection System Plan and 23% have a General Relationship to NBC's Mission. In addition, 15% of the projects are to Minimize NBC's Impacts to the Environment in a Cost Effective Manner. Projects may be aligned with more than one objective as the project may be intended for multiple purposes, as illustrated in the following chart.

Percentage of Capital for Achievement by Strategic Objective

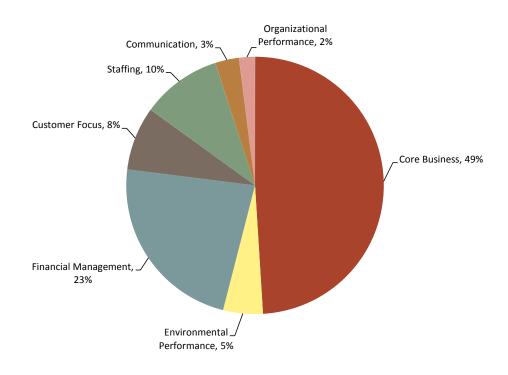


Actions for Achievement are then linked to each Programs target measures by one of four types of performance indicators. The four types of performance indicators are input, output, efficiency, and outcome as identified in the following matrix. Each quarter of the matrix represents the percentage of the target measures by indicator for the entire NBC Organization. Of the 187 target measures, the majority or 44% are Output or quantifiable measures whereas 27% of the measures are Outcome or result related. 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 2017 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 66 priorities for FY 2017 for the NBC, 33 or 50% are categorized under Core Business followed by Financial Management at 23% or 15 priorites. The following graph shows the percentage of NBC's section's priorites by goal action for achievement.

Fiscal Year 2017 Priorities



Goal Actions for Target Measures by Key Code

Core Business

- **CB 1** Complete projects on schedule, within budget, in the most cost-effective manner and in compliance with regulatory requirements
- CB 2 Provide prosecutorial function to ensure compliance with NBC requirements
- CB 3 Continue the level of network stability with the highest level of service up time
- CB 4 Maximize productive use of automation and computerization throughout the agency
- **CB 5** Ensure IT maintains and improves security systems and applications
- **CB 6** Provide an adequate level of training opportunities to ensure user comfort with systems and processes
- CB 7 Ensure all facility inspections are completed on time and deficiencies corrected in a timely manner
- CB 8 Maintain on-going inspections and maintenance of NBC's building, plant, equipment and property
- CB 9 Comply with all State and Federal reporting requirements on reporting bypass events
- **CB 10** Maintain an asset management program for NBC's infrastructure and invest in capital investments as needed
- CB 11 Achieve 100% compliance on RIPDES permits, consent agreements and stormwater permits
- CB 12 Ensure safe and reliable wastewater processing through effective asset management and maximize effluent treatment performance for TSS and BOD at a level that is more than required by the permit limit of 30 mg/l.
- CB 13 Maintain NBC Laboratory quality and resources necessary to meet State and Federal certifications, mandated environmental requirements and ensure proper WWTF operations
- CB 14 Ensure full compliance with regulations such as the Clean Air Act, Clean Water Act, Occupational Safety Health Act (OSHA), Resource Conservation Recovery Act (RCRA), Emergency Planning and Community Right-to-Know Act (EPCRA), the Environmental Protection Agency (EPA), Department of Health (DOH) and regulations for calibration of instruments, etc.
- CB 15 Sample, collect and analyze all data of NBC's collection systems, treatment systems, receiving waters and SIU's to ensure all State/RIPDES/Federal requirements are met or exceeded
- CB 16 Provide safe and cost effective administration and maintenance of NBC facilities

Environmental Performance

- **EP 1** Take an active role in initiating an effective sampling and modeling effort that has the support of various stakeholders in the environmental community
- **EP 2** Minimize environmental pollution
- **EP 3** Evaluate the NBC Program and report the data to the public
- **EP 4** Provide quality and expedient analytical service for all special studies and samples collected to evaluate impacts from nutrients and fecal matter in NBC's effluent to the Bay
- **EP 5** Provide NBC facilities technical assistance to evaluate energy conservation and renewable energy opportunities
- **EP 6** Document water quality data and improvements
- **EP 7** Provide quality and expedient sample collection service for all studies undertaken to evaluate NBC impacts from nutrients and fecal coliform to the Bay

Financial Management

- **FM 1** Strengthen liason with the Congressional Delegation
- FM 2 Conduct lien sales to reduce accounts receivable
- FM 3 Maximize the efficiency and effectiveness of the billing and collection process
- FM 4 Manage employee retirement plans and benefits to maximize benefits and minimize expense
- FM 5 Ensure sufficient operating budget and capital budget funding with least ratepayer impact
- **FM 6** Ensure NBC receives the lowest cost of borrowing
- FM 7 Develop and administer a high quality annual operating budget and CIP
- FM 8 Process and evaluate all capital invoices for ongoing projects and weekly payroll
- FM 9 Ensure audited financial statements are in compliance with the "Generally Accepted Accounting Principles"
- FM 10 Comply with flow of funds restrictions as set forth in the Trust Indenture
- FM 11 Comply with IRS rules and regulations
- FM 12 Comply with State of RI rules and regulations
- FM 13 Increase efficiency and accuracy of user charge billing
- FM 14 Ensure timely collection of accounts
- FM 15 Ensure goods are purchased in a timely, efficient and cost effective manner
- FM 16 Evaluate utility and chemical contracts
- FM 17 Minimize unplanned capital expenditures
- FM 18 Reduce the number of Workers' Compensation claims
- FM 19 Optimize chemical additions to the effluent by monitoring and adjusting processes as needed
- FM 20 Administer the connection fee structure in a fair and accurate manner
- FM 21 Explore the development of new grant/funding sources for various projects
- FM 22 Monitor NBC energy use and evaluate energy savings opportunities
- FM 23 Optimize the efficiency of the solids handling area
- FM 24 Plan and schedule maintenance work on a weekly basis to improve efficiency of staff time
- FM 25 Minimize service contracts by providing preventative maintenance (PM) training to in-house staff
- FM 26 Reduce emergency maintenance expenditures and devise cost-saving initiatives

Customer Focus

- **CF 1** Maintain programs and conduct projects that give back to the community
- **CF 2** Provide prompt and efficient legal services
- **CF 3** Enhance internal communications to ensure consistency, reliability and satisfaction
- **CF 4** Review customer accounts and develop relationships with large users
- **CF 5** Maximize customer focus attitude
- **CF 6** Ensure compliance with Federal and State purchasing laws
- **CF 7** Provide prompt, courteous responses to all customer requests
- CF 8 Create a customer focused attitude to enhance the efficiency of the permitting program
- **CF 9** Provide excellent customer service and educate NBC permitted users regarding NBC regulations and requirements
- **CF 10** Maintain training and technical assistance efforts provided by NBC's programs
- **CF 11** Provide accurate routine and comprehensive data reporting to all relevent NBC sections and staff to allow them to optimize their activities and operations

Staffing

- **S 1** Foster a positive working environment through effective communication
- **S 2** Ensure compliance with Federal and State labor laws
- **S 3** Provide ongoing technical training to optimize team performance and provide equipment to ensure safe and environmentally sound management practices are followed
- **S 4** Provide a healthy and safe working environment
- S 5 Develop mechanisms and establish opportunities for continued growth and professional development

Communication

- **C1** Expand public outreach regarding NBC programs
- C 2 Conduct the successful watershed education programs for students
- C 3 Proactively manage the public and legislative affairs related to NBC's ongoing activities
- C 4 Effectively communicate status of capital projects to NBC staff and Board members
- **C 5** Enhance operating budget, CIP and compliance reports as a communication device
- **C 6** Maintain internal communication for the permit program process
- **C 7** Educate NBC's internal and external customers on NBC initiatives
- C 8 Strengthen and expand NBC's base of support for its initiatives through continued positive relationships with key stakeholders (customers, Board, elected officials, regulatory officials and the public) to ensure NBC's mission and actions are well understood
- **C 9** Enhance relations with RIDEM officials

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 requirements
- **OP 4** Ensure compliance with regulatory agenda filing requirements
- **OP 5** Ensure compliance with requirements for disclosure of consultants
- **OP 6** Provide end-user technology and systems to meet NBC's strategic goals



Budget Philosophy, Process and Policies

Philosophy

NBC is committed to protecting Narragansett Bay and its surrounding rivers and to providing a high level of service at a reasonable cost. To this end, NBC strives to identify all potential impacts to revenue and expense for the upcoming fiscal year when developing the annual Operating Budget.

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 2017 budget year begins July 1, 2016 and ends June 30, 2017. The prior fiscal year or FY 2016 is the 12 month period that ends June 30, 2016.

Basis of Accounting

The accounting policies of NBC conform to Generally Accepted Accounting Principles 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 Generally Accepted Accounting Principles. The major difference is how debt service and capital expenditures are reflected.

Basis of Budgeting

The NBC prepares its operating 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, bad debt expense is included in the financial statements but it is not budgeted or expensed. See the table below for a summary of the differences.

Basis of Accounting	Basis of Budget
Full Accrual	Modified Accrual
When earned	When measurable and available
When liability incurred	When liability incurred
Depreciated	Budgeted as expense
•	Budgeted as expense Not budgeted as expense
	Full Accrual When earned When liability incurred

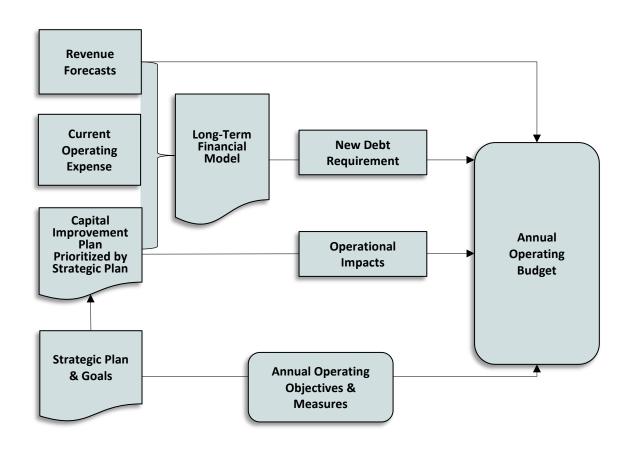
The Budget Process

As a regulated agency, it is important that NBC analyze financial and operational needs throughout the year. The formal review for the operating 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), which is developed in conjunction with the annual operating budget. Both the CIP and the annual operating budget are developed within the context of the Strategic Plan's long-term goals. The CIP identifies projects on a five-year basis. This plan, as well as known operating expense parameters and revenue projections, are integrated into the Long-Term Financial Planning model in order to assess new debt requirements. The model identifies available funding sources and funding needs (see CIP Impact and Long-Term Plan for more details) for the next decade. The model details the existing and new debt service requirements which are included in the annual operating budget. Operational impacts of the CIP are also included in the operating budget.

Revenue for the upcoming fiscal year is determined by the projected user rates and factors affecting non-operating revenue, such as grants, collection rates and the expected rate of return on cash balances. If it is determined that user fee revenue will not be sufficient to meet NBC's future 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



BUDGET PROCESS AND POLICIES NBC FY 2017 BUDGET

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

- Budget Calendar
- Summary expense budget worksheet
- Program Overview Worksheet, which includes prior fiscal years Major Accomplishments, budgeted priorities by key code and Program Objectives and Performance Measures
- Program changes justification forms
- Operating Capital Plan for the budget year and four out-years (5 year plan)
- Fringe benefit rates and other budget guidelines
- Account Justification forms

In mid-November, Program Managers are asked to develop their Program objectives and provide performance data for their section. The Program Managers provide their prior year major accomplishments and submit the program's 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 five-year Operating Capital Plan also begins in November.

Beginning in January, Program Managers prepare their proposed budgets and the Finance section provides support throughout this timeframe. 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 their proposed budgets. After a preliminary review of the draft operating budgets with Administration and Finance staff, the Division Directors and Program Managers present their proposed budgets to the Administration and Finance Director and the Executive Director in February.

Development of the CIP also takes place during February and March. Project Managers prepare capital budgets by project to identify both new and completed projects as well as update the costs and schedules of ongoing capital projects. As part of this process, Project Managers submit monthly cash flow and operating expense impact projections. Finance staff analyze the information and subsequent to review by the Executive Director and capital project managers, the CIP document is drafted.

In March and April, the Finance section assesses year-to-date budget performance and analyzes funding requests. The draft Operating Budget undergoes a line-by-line examination by Finance staff and feedback obtained through the rate case process is used to update revenue and expense projections.

In May, the CIP is presented to the Long Range Planning (LRP) Committee and the Board of Commissioners for approval. The Long-Term Financial Model is also updated in May based upon the CIP inputs and an analysis of capital funds available. The outputs from the Long-Term Financial Model are used to identify the CIP funding sources and uses. These outputs, along with the CIP operating expense impacts are then incorporated into NBC's rate model to develop five-year rate projections.

In order to arrive at a balanced budget, revenue projections are finalized in May and Finance staff prepares recommended budget adjustments for the Executive Director's review. Once approved by the Executive Director, the draft operating budget is submitted to NBC's Board of Commissioner's Finance Committee for review in late May.

Additional fine-tuning of the Operating Budget figures takes place in early June. Drafting of the formal budget document is also completed and it is printed in early June. The final budget and authorizing resolution are submitted to the Finance Committee and Board of Commissioners for review and approval at the June Board meeting.

Budget Monitoring and Amendment Procedures

General

- A line item budget is maintained for each individual cost center. Budget transfers are required to prevent any significant expense overrun on any line item.
- 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 to actual status are submitted and presented to the Finance Committee.
- Expense accruals are made at the close of every accounting period in order to reflect the most accurate portrait of the current financial status.

Budget Amendments

- NBC exercises strong financial controls to ensure total expense does not exceed the amount approved in the current year's operating 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. The Executive Director must notify the Finance Committee of such adjustments on a monthly basis.
- No budget transfers shall be made from capital to operating expense under normal circumstances.
- All budget transfers are reported to the Finance Committee monthly.
- Changes to Budgeted Operating Capital in excess of \$50,000 must be approved by the Finance Committee.
- All budget transfers are reviewed by Finance and tracked on NBC's computerized financial system.

FY 2017 Budget Calendar

July - August

• Finance completes analysis of upcoming fiscal year information and assesses need to file for rate relief with the PUC

November

• Presentation of Fiscal Year 2017 Budget Overview to Division Directors and Program Managers

November

- •All programs will develop and refine the following to align with the Strategic Plan and submit to Administration & Finance by November 18th
- Performance Service Level Objectives
- •Target Measures and Top Priorities
- Program Overview

December

•All programs will develop the Five Year Operating Capital Plan and submit to Administration & Finance by December 2nd

January

•Mid-Year FY 2017 Budget reviews take place on January 27th & 28th, February 1st

February - March

- All divisions required to electronically submit budget work files by February 13th
- Division Directors present budget requirements to Executive Director on March 2nd & 3rd
- •FY 2018-2022 Capital Improvement Program development:
- Capital Cash Flows updated and analyzed, Basis for Capital Budgets completed, CIP major project changes, CIP impact on operating budget and CIP incorporated in the Long-Term Financing Model

April

•CIP Review Committee review the FY 2018-2022 Capital Improvement Program on April 18th

May

- •LRP Committee and Board of Commissioners Adoption of FY 2018-2022 CIP on May 24th
- Finance Committee Review of Proposed Operating Budget on May 24th

June

•Finance Committee Review and Board of Commissioners adoption of Fiscal Year 2017 Operating Budget on June 21st

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 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 and this 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 typically 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 twice, most recently for FY 2013 through FY 2017. 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.

Rate History					
Effective Date	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 2016 Goal	FY 2017 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 2016 Goal	FY 2017 Goal
File with PUC to maintain sufficient operating and capital funding	10/1/2015	10/1/2016
Update capital cash flows	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 2016 Goal	FY 2017 Goal
Purchase requisitions completed within two weeks	97%	97%
Complete bid specifications within 30 days	30 days	30 days
Review utility and chemical contracts three months prior to expiration	100%	100%
Put out to bid non sole-source, non-emergency purchase requisitions over \$2,500	100%	100%
List non sole-source, non-emergency purchase requisitions over \$2,500 on the State of Rhode Island Vendor Program website	100%	100%
Train purchasing system users for maximum customer satisfaction	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 2016 Goal	FY 2017 Goal
Receive the GFOA Certificate of Achievement for Excellence in Financial Reporting	15 Years	16 Years
Complete audit by September 30th	30-Sep-16	30-Sep-17
Complete audit with clean opinion and no management letter	Yes	Yes
Prepare monthly financial statements within five business days of month-end	Monthly	Monthly

Budget Policy

- NBC shall prepare a balanced operating 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 operating budget to ensure that sufficient resources are available to safely and effectively provide wastewater treatment.

Measure of Compliance	FY 2016 Goal	FY 2017 Goal
Prepare and transmit monthly financial report to NBC's Finance Committee	Monthly	Monthly
Notification of budget Issues within 5 days of month-end report	5 Days	5 Days
Develop and administer a high quality annual Operating Budget and CIP	Yes	Yes
Receive GFOA Distinguished Budget Presentation Award	14 Years	15 Years
Operating Budget receives a proficient or better rating as a communication device	Yes	Yes

Capital Budget Policy

- NBC will adopt and maintain a five-year Capital Improvement Program and update it on an annual basis.
- The projects in the Capital Improvement Program will be prioritized based upon their strategic importance.
- NBC will adopt and maintain a five-year operating capital plan and update it on an annual basis.

Measure of Compliance	FY 2016 Goal	FY 2017 Goal
Revise capital cash flow projected draw	2 Updates	2 Updates
Develop and administer a high quality annual Operating Budget and CIP	Yes	Yes

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 2016 Goal	FY 2017 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%
Perform Post Issuance Compliance monthly reporting	Monthly	Monthly
File with PUC to maintain sufficient operating and capital funding	10/1/2015	10/1/2016

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 will all Federal, State and other legal requirements.

Measure of Compliance	FY 2016 Goal	FY 2017 Goal
Ensure compliance with federal tax laws and regulations	100%	100%
to maintain tax exempt status of NBC's bond issues	100%	100%

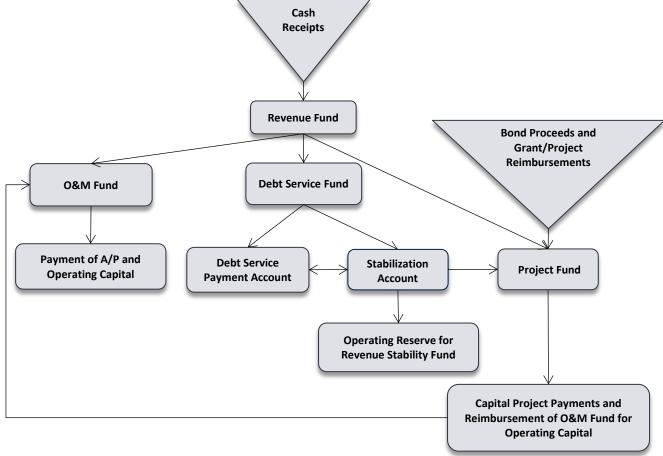
Fund Definitions and Financial Data

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 limitation. NBC operates as an Enterprise Fund on its Financial Statements. On April 15, 2004 the Trust Indenture and the First Supplemental Indenture was executed by and between NBC and the Trustee, followed by these additional Supplemental Indentures:

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 20, 2015
12	February 12, 2010	24	June 2, 2016
13	June 24, 2010		

Collectively, these are referred to as the "Trust Indenture". The schematic below provides a general overview of the flow of funds as directed by the Trust Indenture. These are the only funds that are funded. The schematic is not meant to be a complete representation of the Trust Indenture.

Flow of Funds



BUDGET PROCESS AND POLICIES NBC FY 2017 BUDGET

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. Also included in the Revenue Fund is the NBC Environmental Enforcement Fund.

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, and operating capital.

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 Improvement Plan. Funds are transferred from the Project Fund to reimburse the O&M Fund for operating capital.

Operating Reserve for Revenue Stability Fund

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

Renewal and Replacement Fund

This 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 has funded a \$3.5M Reserve for the 2013 Series C Wastewater System Revenue Bonds.

Operation and Maintenance Reserve Fund

This Fund is designed 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 reasonable 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 (EEF) Fund 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 operating 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 2017 monthly transfers for operating expense in accordance with Section 504(2) (i) of the Trust Indenture. The table below shows the FY 2017 monthly transfers. The amounts are based on the actual operating expense in FY 2016 multiplied by the percentage increase in the FY 2017 operating budget over the actual FY 2016 expense, or 2.77%.

O&M Monthly	Certified Trust Transfer
Month	Amount
Jul-16	\$ 5,429,838
Aug-16	3,524,850
Sep-16	3,621,354
Oct-16	2,991,567
Nov-16	3,224,119
Dec-16	4,193,397
Jan-17	3,249,829
Feb-17	3,097,866
Mar-17	3,128,932
Apr-17	2,656,332
May-17	2,973,035
Jun-17	3,512,109
Total	\$ 41,603,228

The data in this budget has been used to project year-end fund balances for FY 2017, as shown in the table below.

	Fund Balance June 30, 2015	Net Change	Projected Fund Balance June 30, 2016	Net Change	Projected Fund Balance June 30, 2017	
Revenue Fund	\$ 22,780,671	\$ 6,456,885	\$ 29,237,556	\$ (422,984)	\$ 28,814,572	
Operation and Maintenance Fund	(16,470,038)	(5,318,904)	(21,788,942)	765,456	(21,023,486)	
Project Fund	374,691,823	26,862,414	401,554,237	26,849,560	428,403,797	
Debt Service Fund	34,655,124	1,460,833	36,115,957	1,401,627	37,517,584	
Debt Service Reserve Fund	4,500,023	-	4,500,023	-	4,500,023	
Revenue Stability Fund	3,497,335	-	3,497,335	-	3,497,335	
EEF	54,405	36,000	90,405	(14,000)	76,405	
Net Assets	\$ 423,709,343	\$ 29,497,228	\$ 453,206,571	\$ 28,579,659	\$ 481,786,230	

Significant changes in the fund balances are as follows:

Revenue Fund: The Revenue Fund is expected to increase by \$6.0 million or 26.5% from FY 2015 to FY 2017. This fund is the initial depository for all NBC receipts except those into the EEF. In accordance with Section 505 of the Trust Indenture, NBC plans to transfer \$7.0 million in from the O&M Fund to the Revenue Fund in FY 2016. FY 2017 decrease of \$423 thousand is based on historical experience.

Operation & Maintenance Fund: The FY 2015 balance reflects the net pension liability recorded as a result of the implementation of GASB Statement 68. From FY 2015 to FY 2016 the O&M Fund is expected to decrease by 32.3% or \$5.3 million due to a transfer of \$7.0 million to the Revenue Fund pursuant to Section 505 of the Trust Indenture. The O&M Fund is projected to increase by \$765 thousand in FY 2017 based on historical experience.

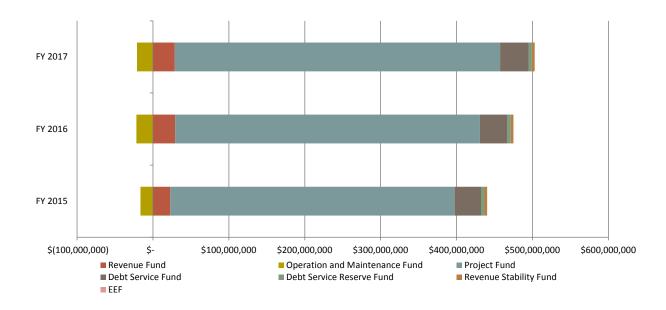
Project Fund: In FY 2016 the Project Fund is expected to increase by 7.2% or \$26.9 million and in FY 2017 it is projected to increase by 6.7% or \$26.9 million, reflecting transfers from the Stabilization Account in the Debt Service Fund. This is prior year debt service coverage that can be used for pay-as-you-go capital and should increase each year as debt service coverage increases. In addition, the Project Fund will increase as NBC acquires assets through investment in the CIP.

Debt Service Fund: The Debt Service Fund is expected to increase 4.2% in FY 2016 and in FY 2017 by \$1.4 million to reflect higher deposits into the debt service payment accounts related to debt service.

Debt Service Reserve Fund: NBC funded a Debt Service Reserve Fund related to the 2013 Series C \$37.31 million revenue bonds in the amount of \$3.5 million.

Environmental Enforcement Fund: This fund is projected to increase by 66% from FY 2015 to FY 2016 as the net result of a \$50,000 receipt offset by historical level expense. The balance is projected to decrease by 15.5% in FY 2017 based upon historical expense levels.

The year-end projected fund balances for FY 2015 through FY 2017 are shown in the chart below.



For an overview showing the relationship between major funds and Divisions / Sections please see the Fund – Organization Matrix in the Supporting Schedules section of this budget.

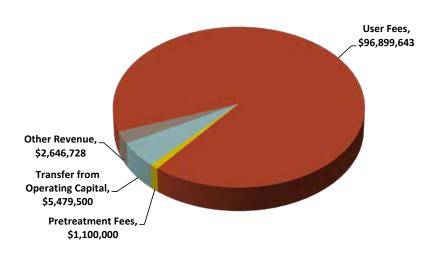
Budget Summary Information

Budget Overview

	FY 2015	FY 2016	FY 2017	Budgeted
	Actual	Budget	Budget	Difference
Revenue				
Operating Revenue:				
User Fees	\$ 92,007,299	\$ 94,967,944	\$ 96,899,643	\$1,931,699
Pretreatment Fees	1,076,481	1,100,000	1,100,000	-
Septage	336,037	320,000	325,000	5,000
Connection Permit Fees	100,906	100,000	125,000	25,000
Total Operating Revenue	93,520,723	96,487,944	98,449,643	1,961,699
Non-Operating Revenue:				
Investment Income	5,839	5,000	5,000	-
Late Charges	999,867	1,100,000	930,000	(170,000)
Transfer from Operating Capital	2,831,086	4,641,060	5,479,500	838,440
Revenue Fund Balance/Special Master	-	660,000	-	(660,000)
Miscellaneous	652,914	650,000	1,261,728	611,728
Total Non-Operating Revenue	4,489,706	7,056,060	7,676,228	620,168
Total Revenue	\$ 98,010,429	\$ 103,544,004	\$ 106,125,871	\$2,581,867
Fynense				
Expense Operation and Maintenance Expense:				
Expense Operation and Maintenance Expense: Personnel	\$ 21,766,376	\$ 23,632,850	\$ 25,225,531	\$1,592,681
Operation and Maintenance Expense: Personnel	\$ 21,766,376 8,745,189	\$ 23,632,850 15,831,085	\$ 25,225,531 15,140,547	\$1,592,681 (690,538)
Operation and Maintenance Expense:				
Operation and Maintenance Expense: Personnel Operating Supplies/Expense	8,745,189	15,831,085	15,140,547	(690,538)
Operation and Maintenance Expense: Personnel Operating Supplies/Expense Professional Services	8,745,189 7,469,034	15,831,085 1,182,700	15,140,547 1,237,150	(690,538) 54,450
Operation and Maintenance Expense: Personnel Operating Supplies/Expense Professional Services Total O & M	8,745,189 7,469,034	15,831,085 1,182,700	15,140,547 1,237,150	(690,538) 54,450
Operation and Maintenance Expense: Personnel Operating Supplies/Expense Professional Services Total O & M Debt Service:	8,745,189 7,469,034 37,980,599	15,831,085 1,182,700 40,646,635	15,140,547 1,237,150 41,603,228	(690,538) 54,450 956,593
Operation and Maintenance Expense: Personnel Operating Supplies/Expense Professional Services Total O & M Debt Service: Debt Service	8,745,189 7,469,034 37,980,599	15,831,085 1,182,700 40,646,635 44,105,118	15,140,547 1,237,150 41,603,228	(690,538) 54,450 956,593 1,032,504
Operation and Maintenance Expense: Personnel Operating Supplies/Expense Professional Services Total O & M Debt Service: Debt Service Programmed New Debt	8,745,189 7,469,034 37,980,599 39,503,789	15,831,085 1,182,700 40,646,635 44,105,118 1,006,246	15,140,547 1,237,150 41,603,228 45,137,622	(690,538) 54,450 956,593 1,032,504 (1,006,246)
Operation and Maintenance Expense: Personnel Operating Supplies/Expense Professional Services Total O & M Debt Service: Debt Service Programmed New Debt Total Debt Service	8,745,189 7,469,034 37,980,599 39,503,789 - 39,503,789	15,831,085 1,182,700 40,646,635 44,105,118 1,006,246 45,111,364	15,140,547 1,237,150 41,603,228 45,137,622 - 45,137,622	(690,538) 54,450 956,593 1,032,504 (1,006,246) 26,258
Operation and Maintenance Expense: Personnel Operating Supplies/Expense Professional Services Total O & M Debt Service: Debt Service Programmed New Debt Total Debt Service Debt Service	8,745,189 7,469,034 37,980,599 39,503,789 - 39,503,789 17,694,955 2,831,086	15,831,085 1,182,700 40,646,635 44,105,118 1,006,246 45,111,364 13,144,945 4,641,060	15,140,547 1,237,150 41,603,228 45,137,622 - 45,137,622 13,905,521	(690,538) 54,450 956,593 1,032,504 (1,006,246) 26,258 760,576 838,440

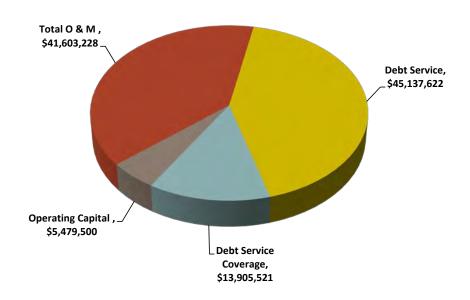
The Budget Overview table on the previous page shows that budgeted operating revenue is \$2.6 million or 2.5% higher than last year's budget. Total projected revenue for FY 2017 is approximately \$106.1 million and user fees are the most significant source of revenue, representing \$96.9 million or 91% of total revenue. The chart below illustrates the sources of FY 2017 budgeted revenue.

Sources of Revenue



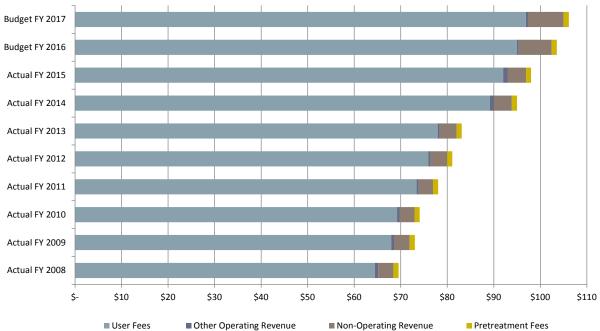
The largest category of expense in FY 2017 is Debt Service, which is approximately \$45.1 million and represents 42.5% of total uses of revenue; however, no programmed new debt is budgeted in FY 2017. Budgeted Operation and Maintenance expense is \$41.6 million or 39.2%. The budget also includes debt service coverage of \$13.9 million and operating capital of \$5.5 million. The debt service coverage ratio is 1.31 which is greater than the rate covenant of 1.25 set forth in NBC's Trust Indenture. The chart below illustrates FY 2017 budgeted uses of revenue.

Uses of Revenue

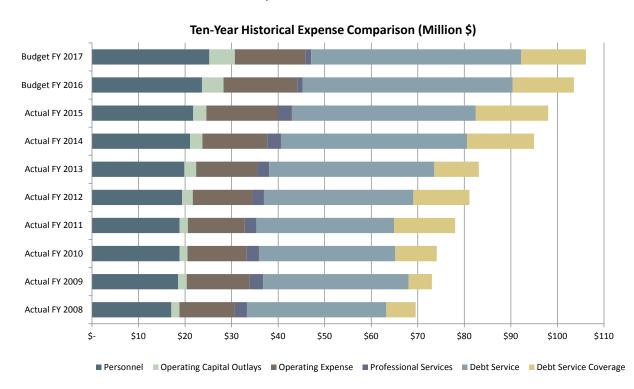


Historical Overview





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.



FY 2017 Budget – Key Assumptions

The development of the FY 2017 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 CIP.
- The operating capital policy defines operating capital items as those with cost 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 plan.

* Key short-term guidelines:

- User fee revenue reflects the PUC approved 1.53% rate increase effective July 1, 2016.
- Revenue available for operation and maintenance expense is calculated in accordance with the Trust Indenture as total revenue less debt service, debt service coverage, and operating capital.
- The budget includes contracted step increases and a 2.75% Cost of Living Adjustment (COLA) for union employees and comparable merit increases (3.5%) for non-union employees.
- A 13% increase in the budgeted employer contribution to the non-union retirement plans.
- NBC's FY 2017 contribution rate to the Rhode Island State Retirement System on behalf of participating union employees increased from 24.64% to 26.34% in FY 2017.
- NBC's contribution rate to the State Retirement Health Benefit for participating union employees has decreased from 6.75% in FY 2016 to 5.97% in FY 2017.
- Fringe benefit rates reflect a 13.0% increase in the High Deductible Health Plan (HDHP) along with NBC partial funding of a Health Savings Account (HSA) and/or Health Reimbursement Arrangement (HRA). Dental insurance premiums increased by 6.0% and vision insurance premiums remained at the prior year level. (See Budgeted Benefits Comparison schedule in Supporting Schedules for more information).
- The budget includes funding for a net increase of two FTEs resulting from additional positions at Bucklin Point and budgeted turnover remains unchanged from FY 2016 levels at 4.0 FTEs.
- Budgeted retirement payouts and related benefits of \$116,000.
- Fringe benefits are budgeted based on actual enrollment and a weighted average for unfilled positions.
- Consumer Price Index (CPI) projected increase of 0.3% in the prorated contracted biosolids disposal rate and a net decrease of 625 budgeted dry tons as a result of decreased production at Field's Point and increased production at Bucklin Point.

- Electricity supply rate of \$0.0601 per kWh effective through June 30, 2017.
- Electricity use based on FY 16 levels adjusted for 1) a net increase of 0.7 million kWh related to the Water Quality Science Building 2) reduced electricity consumption of 1.1 million kWh at Field's Point and 0.5 million kWh at Bucklin Point resulting from the installation of LED lighting 3) Field's Point wind turbine production of 7.3 million kWh and 4) WED turbine production of 7.7 million kWh.
- Decrease of 11.9% in the budgeted natural gas supply rate and net decrease in the number of therms budgeted of 1.2% from the prior year.
- Chemical rate decrease for sodium bisulfite of 4% from \$1.0733 to \$1.0300 and a rate increase for sodium hypochlorite of 8% from \$0.4719 to \$0.5107 per gallon effective July 1, 2016.
- The chemicals used for the nitrogen removal process at Field's Point include carbon feed at rate of \$2.15 per gallon and sodium hydroxide at \$1.3240 per gallon.
- The chemicals used for the nitrogen removal process at Bucklin Point include carbon feed at a rate of \$2.500 per gallon, polymer liquid at \$1.0920 per gallon, polymer powder at \$2.2500 per pound and soda ash at \$0.2244 per pound.

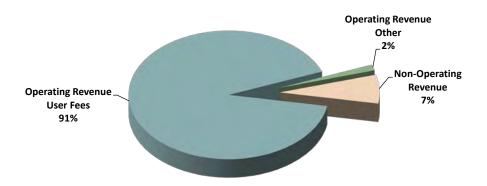
Other Assumptions:

- FY 2017 Programmed New Debt is based on the Long-Term Financial Planning model that reflects the cash flow requirements in the FY 2018-2022 CIP.
- The FY 2021 interest rate assumption for debt issuance through the RIIB is 2.6%.
- The budget is consistent with the percent of user fees restricted for debt service and debt service coverage that are transferred from the Revenue Fund into the Debt Service Fund monthly. Principal and interest payments are made from the Debt Service Payment Accounts and the debt service coverage is deposited into the Stabilization Account. The PUC has authorized the transfer of the funds in the Stabilization Account to the Project Fund for funding operating capital and direct funding of capital projects, as well as funding of the Operating Reserve for Revenue Stability Fund. Upon the completion of the fiscal year, a calculation is made to determine the amount that can be transferred from the Stabilization Account to the Project Fund for the PUC approved uses. In FY 2017, \$5.5 million is available in the Project Fund to fund FY 2017 operating capital.
- The budget is consistent with the flow of funds set forth in the Trust Indenture and Twenty-Four Supplemental Trust Indentures (see Fund Definitions in the Budget Process and Policies section).

^{*} Impacts discussed in Expense Profile section of budget

Revenue Profile

Revenue by Category



Budgeted revenue in FY 2017 is approximately \$106.1 million or 2.5% more than FY 2016. This reflects higher user fee revenue resulting from a 1.53% rate increase effective July 1, 2016 for debt service and debt service coverage and an 8.8% increase in non-operating revenue. Historical and budgeted revenue is shown in the table below.

Revenue	FY 2014 FY 2015 FY 2016 Actual Actual Budget		FY 2017 Budget	Percent Change	
Operating Revenue					
User Fees	\$89,182,519	\$ 92,007,299	\$ 94,967,944	\$ 96,899,643	2.0%
Pretreatment Fees	1,095,551	1,076,481	1,100,000	1,100,000	0.0%
Septage	310,136	336,037	320,000	325,000	1.6%
Connection Permit Fees	112,773	100,906	100,000	125,000	25.0%
Total Operating Revenue	\$90,700,979	\$ 93,520,723	\$ 96,487,944	\$ 98,449,643	2.0%
Non-Operating Revenue					
Investment Income	5,433	5,839	5,000	5,000	0.0%
Late Charges	1,013,240	999,867	1,100,000	930,000	(15.5%)
Transfer from Operating Capital	2,654,589	2,831,086	4,641,060	5,479,500	18.1%
Revenue Fund Balance/Special Master	-	-	660,000	-	(100.0%)
Miscellaneous	615,880	658,886	650,000	1,261,728	94.1%
Total Non-Operating Revenue	4,289,142	4,495,678	7,056,060	7,676,228	8.8%
Total Revenue	\$94,990,121	\$ 98,016,401	\$103,544,004	\$106,125,871	2.5%

Of the \$106.1 million in total revenue, approximately \$96.9 million is from user fees, \$1.6 million is from other operating revenue and \$7.7 million is from non-operating revenue. Looking at a four-year trend, NBC's largest source of revenue, user fees, has increased by 8.7% since FY 2014. This has been primarily for debt service and debt service coverage to finance NBC's Capital Improvement Program.

NBC has raised rates five times in the last five years. In addition to supporting debt service, these rate increases have been required to adjust for changes in NBC's rate base. The rate base was adjusted for declining consumption, the "downsizing" of non-residential meters and the decline in the number of non-

residential meters. A portion of two rate increases also supported higher operating expense. The chart below shows NBC's rate increase history since January 1, 2013.

Rate History								
Effective Date	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			

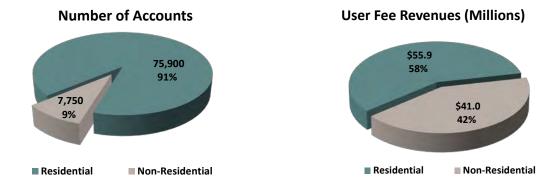
On a year-to-year basis, budgeted user fees have increased by 2.0% over last year's budget, slightly more than the projected 1.53% rate increase. This is due to two new industrial customers with significant consumption. Septage and Connection Permit Fee revenue is budgeted at 1.6% and 25% higher than last year. Budgeted late charge revenue is \$170,000 or 15.5% lower than the prior year as receivables are declining. The budgeted transfer from Operating Capital is \$838,440 or 18.1% higher than FY 2016. Lastly, miscellaneous revenue is \$611,728 or 94.1% higher in this year's budget as a result of the impact of two capital projects. These changes are discussed in more detail in the following sections on Operating and Non-Operating Revenue.

Operating Revenue

In FY 2017, user fees represent 98% of the projected operating revenue and 91% of total revenue. Revenue projections are calculated based upon projected user fees for residential and non-residential user classifications. Residential customers include residential structures up to and including six dwelling units, and all condominiums, regardless of the number of dwelling units. NBC projects that in FY 2017 residential user fees will be billed to approximately 76,000 accounts with approximately 118,200 dwelling units within the service area. Non-residential accounts include residential structures containing more than six dwelling units, commercial, mixed-use and industrial properties. There are approximately 7,750 non-residential accounts with approximately 8,200 billable meters. In the FY 2017 budget, NBC does not anticipate an increase in the number of residential dwelling units or non-residential billable accounts.

Residential customers make up 91% of NBC's sewer user accounts and generate 58% of total user fees. On the other hand, non-residential customers comprise 9% of total sewer user accounts and generate 42% of total user fees. The revenue recovery allocation between the residential and non-residential accounts is in closer alignment with the relative billable consumption which is 61% and 39%, respectively. The charts below show the residential versus non-residential split between the number of accounts and user fees billed.

Residential and Non-Residential Accounts



NBC's sewer user charges consist of a flat fee and a consumption fee. The flat fee is based on the number of dwelling units for residential customers and billable meters by meter size for non-residential customers. With respect to flat fees, the revenue is based on projected FY 2016 billed revenue adjusted for the July 1, 2016 rate increase of 1.53%. Although NBC's flat fee rate base has been adjusted in prior PUC rate cases, non-residential flat fee revenue continues to be less than the authorized level due to a decline in both the size and number of meters, while residential flat fee revenue is higher.

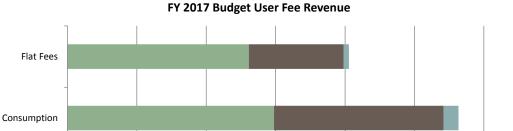
Residential Commerical Industrial Total

\$10,000,000

■ Residential

\$20,000,000

FY 2017 Budgeted User Fee Revenue							
Consumption Flat Fees					Total		
\$	29,771,497	\$	26,131,649	\$	55,903,146		
	24,427,869		13,675,368		38,103,237		
	2,140,807		752,453		2,893,260		
\$	56,340,173	\$	40,559,470	\$	96,899,643		



\$30,000,000

■ Commerical

\$40,000,000

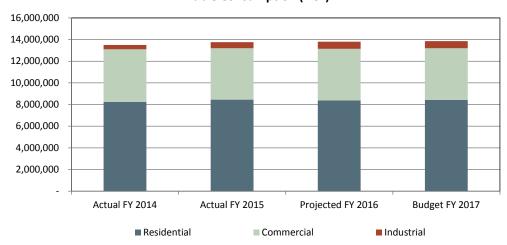
\$50,000,000

■ Industrial

\$60,000,000

With respect to consumption fees, this revenue is calculated based upon water usage. The total billable consumption rate base appears to have stabilized and it is noteworthy that the industrial customer class is projected to generate approximately 53% more revenue due to the higher billable consumption of two customers. Given the variability of consumption billings, NBC is conservatively budgeting FY 2017 consumption for the residential and commercial user classes based on the two year average billable consumption for FY 2015 and FY 2016, which is slightly below the approved rate base level. Because the anticipated billable consumption of the two new industrial customers is stable, the FY 2017 projected revenue from the Industrial user class is based on the FY 2016 billable consumption level.

Billable Consumption (HCF)

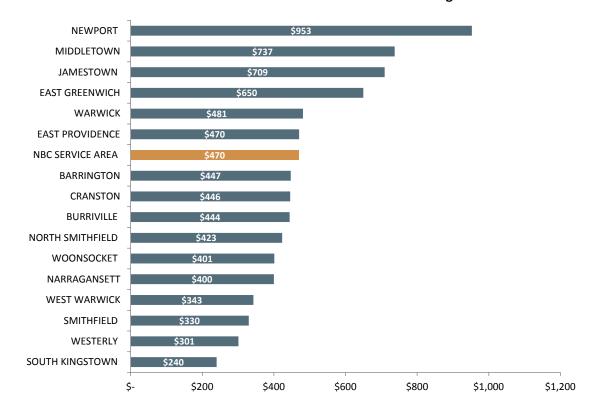


The PUC approved an across-the-board rate increase of 1.53% effective July 1, 2016. The table below shows NBC's FY 2017 user rates for residential and non-residential users. At these rates, NBC's estimated average annual residential sewer user charge based on annual usage of 150 gallons per day is \$477.

NBC User Fe	es Effective 7/1/2016		
Residential:		Non- Residential Meter Size	Customer Charge
Customer Charge	\$218.80 /dwelling unit	5/8"	\$523
Consumption Charge	\$3.531 /hcf	3/4"	\$782
Total Annual Average Residential Rate	\$477	1"	\$1,300
(Based on 73.2 hcf* or 150 gallons per day)		1 1/2"	\$2,607
		2"	\$4,164
Non-Residential:		3"	\$7,802
Customer Charge - Based on Meter Size		4"	\$13,000
Commercial Consumption Charge	\$5.120 /hcf	6"	\$26,010
Industrial Consumption Charge	\$3.292 /hcf	8"	\$41,615
*hcf = hundred cubic feet		10"	\$59,824

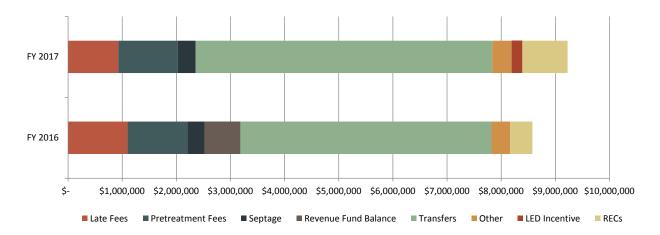
In FY 2016, NBC began to calculate the average annual residential user charge based on consumption of 150 gallons per day, the updated actual average consumption per dwelling unit. The table below shows the results of NBC's 2015 sewer rate survey based upon usage of 150 gallons per day. It shows that despite NBC's large operations and significant capital improvements, NBC's average residential user rate of \$470 is below the State average of \$485.

2015 Annual Rhode Island Residential Sewer Charges



Other Revenue

The chart below shows that the largest source of other revenue is the operating capital transfer, followed by pretreatment fees, late fees and miscellaneous revenue. Overall, budgeted other revenue is \$620,168 or 8.8% higher in FY 2017 than the prior year.



Other Operating Revenue

While the primary source of operating revenue is user fees, NBC has other operating revenue such as pretreatment fees, septage fees, and sewer connection permits, which represent approximately 1.6% of total budgeted 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 2017 budgeted Pretreatment fee revenue is the same as the prior year.

Septage fees are paid by permitted haulers based upon the amount of septage that they discharge at NBC's Septage Receiving Station. In FY 2017 septage revenue is projected to increase by 1.6% or \$5,000 from the FY 2016 budgeted level.

NBC's connection permit fees, for new sewer connections to NBC facilities are budgeted 25% higher in the FY 2017 budget year based upon FY 2016 activity.

Non-Operating Revenue

Non-Operating revenue includes investment income, late charges and other miscellaneous revenue. It also includes the transfer from operating capital which is a funding mechanism approved by the PUC that allows a portion of the prior year's debt service coverage to be used to fund operating capital. Total Non-Operating revenue is projected to increase \$620,168 in FY 2017, an increase of approximately 8.8% over the FY 2016 budget.

In FY 2017, investment income revenue remains unchanged from the FY 2016 budgeted level. Late charge revenue is projected to decrease by 15.5% or \$170,000 from the prior year due to effective collection activity which has reduced receivables. Late fees are assessed at the rate of 1% per month on any unpaid balance 30 days after the billing date, including any outstanding late fees. 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.

\$100,000,000 2.5% \$90,000,000 \$80,000,000 2.0% \$70,000,000 \$60,000,000 1.5% \$50,000,000 \$40,000,000 1.0% \$30,000,000 \$20,000,000 0.5% \$10,000,000 FY 1999 FY 2000 FY 2001 FY 2002 FY 2003 FY 2004 FY 2005 FY 2006 FY 2007 FY 2008 FY 2009 FY 2010 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 User Fees Late Charge %

Late Fees as a Percentage of User Fee Revenue

This year's budget reflects an increase for the Transfer from Operating Capital of approximately \$838,440, or 18.1% over the FY 2016 budget. This is a pass-through and matches the amount budgeted for operating capital.

This year's budget does not include a budgeted revenue fund balance. The FY 2017 budget does not include \$160,000 for the transfer from the PUC restricted cash account that was included in the prior year since that was a single year revenue source.

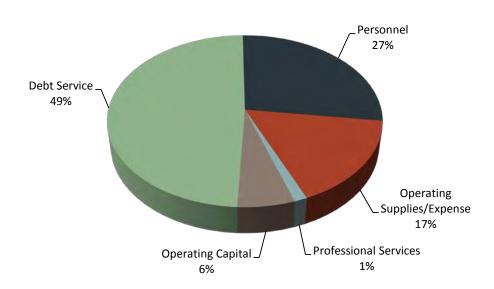
Miscellaneous non-operating revenue are projected to increase by \$611,728 or 94.1% over the FY 2016 budgeted level primarily due to higher revenue associated with two capital improvement projects projected for completion in FY 2017. First, NBC has budgeted \$201,195 to be realized as a financial incentive from National Grid for the installation of LED fixtures as part of Project 13100. Second, NBC is projecting revenue of \$387,333 from the sale of RECs generated as a result of the wind turbines production under Project 50500. The budget figures are based upon the assumption that the wind turbines will be operational for ten months in FY 2017.

Expense Profile

Expense by Element

The chart below shows the fiscal year 2017 operating expense by element. Debt Service accounts for nearly half of the total budget, at 49%, with the next largest expense category being Personnel, at 27% of the budget.

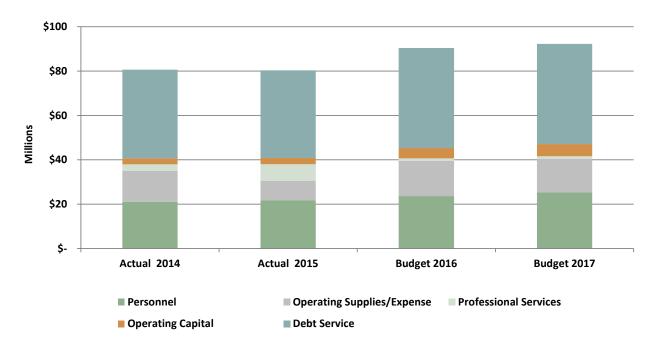




NBC's total Operating Budget for FY 2017 is \$92,220,350 excluding Debt Service Coverage. This is an increase of approximately \$1.8 million, or 2.0% from the approved FY 2016 budget. The table below and chart on the following page show historical and budgeted expense over a four-year period.

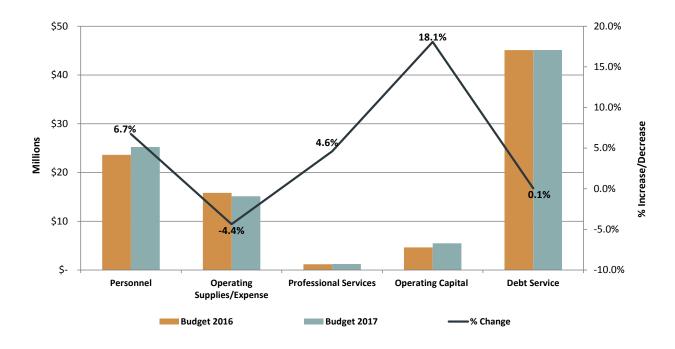
	Actual 2014	Actual 2015	Budget 2016	Budget 2017	FY 16 - FY 17 % Change	FY 2017 % Budget
Personnel	\$21,090,749	\$21,766,376	\$23,632,850	\$ 25,225,531	6.7%	27.4%
Operating Supplies/Expense	13,900,670	8,745,189	15,831,085	15,140,547	(4.4%)	16.4%
Professional Services	2,959,426	7,469,034	1,182,700	1,237,150	4.6%	1.3%
Total Operation & Maintenance	37,950,845	37,980,599	40,646,635	41,603,228	2.4%	45.1%
Operating Capital Debt Service	2,654,589 39,996,099	2,831,086 39,503,789	4,641,060 45,111,364	5,479,500 45,137,622	18.1% 0.1%	5.9% 49.0%
Total	\$80,601,533	\$80,315,474	\$90,399,059	\$ 92,220,350	2.0%	100.0%

Budget by Element of Expense



The graph below compares budgeted expense in fiscal year 2016 to 2017 and illustrates the increases and decreases for each element of expense. Expense has increased in four of the five categories over the prior year's budget. Personnel Expense increased by 6.7% or \$1.6 million; Professional Services increased by 4.6%, or approximately \$54,450; Operating Capital increased by 18.1% or \$838,440; and Debt Service increased by 0.1% or \$26,258. Operating Supplies/Expense decreased by 4.4%, or \$690,538 from last year's budget.

FY 2016/2017 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 2017 budgeted personnel expense is \$25.2 million, which represents a net increase of approximately \$1.6 million or 6.7% 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. This budget marks the final year of NBC's 3-year negotiated Collective Bargaining Agreement (CBA).

With respect to salaries and wages, this year's budget includes contracted step increases and the negotiated COLA (2.75%) for union employees in accordance with the CBA contract. Salaries for non-union employees reflect comparable merit increases (3.5%).

The FY 2017 budget includes two new positions necessary to meet changing operational needs at Bucklin Point. These positions are a Mechanic II and a Senior E&I Technician. On a year-to-year basis, there is no change in the number of budgeted union positions and non-union positions reflect the addition of two FTEs. The positions are identified in the following table:

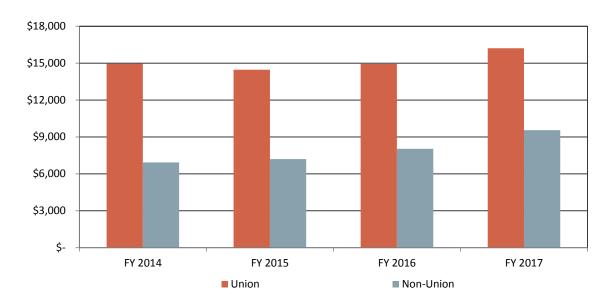
Section	New Positions
Bucklin Point	Mechanic II
Bucklin Point	Senior E&I Technician

Excluding turnover, the total number of FTE's funded in the FY 2017 budget is 274 positions, an increase of two FTEs from the prior year. Budgeted turnover remains unchanged from the prior year level of 4.0 FTEs. The net effect of these changes on a year-to-year basis is 270 positions, or an increase of 2.0 FTEs as shown in the following table and historical budgeted staffing levels are shown in the supporting schedules section of this document.

Number of	FY 2016	FY 2017	Change
FTE's	Budget	Budget	2016/2017
Union	135.0	135.0	-
Non-Union	137.0	139.0	2.0
Total	272.0	274.0	2.0
Less: Turnover	(4.0)	(4.0)	-
Net Positions	268.0	270.0	2.0

NBC's 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 2017 budget for the union pension increased \$195,262 or 12.7% from the prior year budget. This is the result of an increase in the employer contribution to the Union Pension benefit from 24.64% to 26.34%. NBC's non-union employees also participate in both a defined contribution and defined benefit plan. The budget includes \$226,878 more in the non-union retirement expense line item, a function of the increase in the number of non-union positions and NBC's pension funding goals. 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 Expense per FTE



In FY 2017, NBC will offer a HDHP with partial employer funding of a HSA and/or HRA. This budget reflects a net increase of 13.0% to the health insurance budgeted line item as a result of an increase in the insurance premium. Dental premiums increased by 6.0% and vision premiums remained unchanged from the prior year. The following table shows the change in budgeted family, health, dental and vision premiums.

Family Coverage	FY 2014		FY 2015*		FY 2016*		FY 2017*		FY16 - FY17 % Change	
Health (net of co-pay)*	\$	17,673	\$	13,156	\$	13,576	\$	15,342	13%	
Dental		1,228		1,335		1,435		1,515	6%	
Vision		195		195		195		195	0%	
Total	\$	19,096	\$	14,686	\$	15,207	\$	17,052	12%	

^{*}Does not include \$3,600 NBC HSA Contribution/Employee

Operating Supplies and Expense

Operating Supplies and Expense (OSE) represent 14.3% of the total FY 2017 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. Overall, the FY 2017 OSE budget decreased 4.4% or \$690,538 from the FY 2016 budget.

CIP Operating Expense Impacts

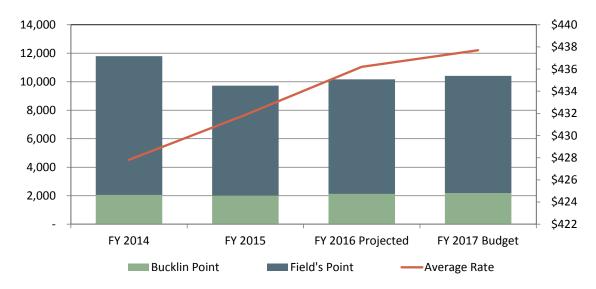
The FY 2017 budget includes additional information regarding the operating expense impact, identified on a project by project basis. NBC recognizes the importance of financial planning and certain capital improvements will directly impact operating expense. The impact is shown as either an increase in expense or savings (a reduction in expense). The Water Quality Science (WQS) Building, the Wind Energy Development (WED) Turbines and NBC's Energy Efficiency Upgrades capital projects are projected to increase expense by \$567,630 and generate savings of \$1,064,615. The net impact on expense in FY 2017 is estimated to be a reduction in expense of \$496,985 as shown in the following table.

		creased expense	Savings		Net Impact on Expense	
WQS Building						
HVAC Repairs		\$ -	\$	(50,000)	\$	(50,000)
Electricity		148,104		(57,441)		90,663
Natural Gas		43,391		(9,786)		33,605
Water		3,900		(3,500)		400
Maintenance		37,985		(16,500)		21,485
	Subtotal	\$ 233,380	\$	(137,227)	\$	96,153
Wind Energy Development Turbines						
Property Maintenance and Monitoring		\$ 41,250	\$	-	\$	41,250
O&M Service Agreement		87,500		-		87,500
Insurance		60,000		-		60,000
Land Lease		135,000		-		135,000
REC Monitoring and Certification		10,500		-		10,500
Purchased Electricity Savings		-		(736,977)		(736,977)
	Subtotal	\$ 334,250	\$	(736,977)	\$	(402,727)
NBC Energy Efficiency Upgrades	,					
Electricity		\$ -	\$	(190,411)	\$	(190,411)
	Subtotal	\$ -	\$	(190,411)	\$	(190,411)
	Total	\$ 567,630	\$(1,064,615)	\$	(496,985)

The expense impacts are discussed in the pages to follow and an in-depth overview of the operating impacts by project is provided in the CIP Impact and Long-Term Plan section of this document.

Approximately 30.1% of NBC's FY 2017 budgeted OSE is for biosolids disposal at the WWTFs. The FY 2017 budget reflects a projected increase in the contracted biosolids rate of 0.3% or approximately \$1.50 per dry ton which is offset by lower budgeted dry ton production. The budget reflects 761 fewer dry tons produced at Field's Point and 136 more dry tons produced at Bucklin Point. Overall, the biosolids disposal expense is \$256,559 or 5.3% lower than the FY 2016 budgeted level. The following chart illustrates the historical and budget data for biosolids dry ton production and average disposal rates.

Biosolids Dry Tons and Disposal Rate



The FY 2017 electricity usage is based upon the prior year budgeted usage and a supply rate of \$0.0601 per kWh, effective through June 30, 2017. Adjustments were made to the FY 2016 levels to reflect 1) the budgeted kWh to be purchased was reduced by 7.7 million kWh as result of the net metered electricity from the WED Turbine project 2) the kWh was reduced by 1.7 million kWh to show the conservation impact of the LED lighting systems to be installed as part of the NBC Energy Efficiency Upgrade project 3) net increase in usage for the new WQS Building of 0.8 million kWh and 4) 0.2 million kWh lower production from the FP Wind Turbines based on projected FY 2016 levels.

For budgeting purposes, the WED Turbine net metering electricity reduction was allocated equally to Field's Point and Bucklin Point. FY 2017 Field's Point usage shows a total decrease of 5.0 million kWh, Bucklin Point reflects a total decrease of 4.4 million kWh. The year-to-year budgeted electricity usage is shown in the following table.

Budgeted Electricity (kWh)

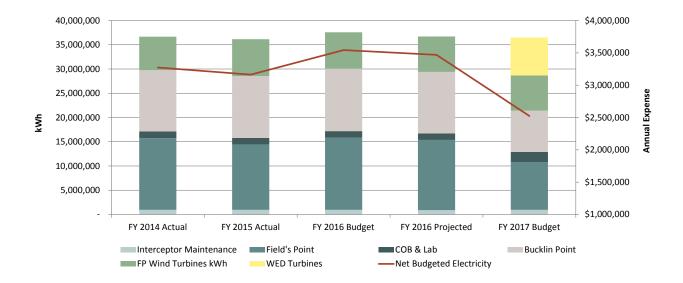
	FY 2016 Budget	LED	WED Net-	Net Impact of	FP Wind	FY 2017
	FT 2010 Buuget	Efficiencies Metered Su		WQS Building	Turbines	Budget
Interceptor Maintenance	970,301	-	-	-	-	970,301
Field's Point	14,852,648	(1,139,379)	(3,873,333)	-	-	9,839,936
Bucklin Point	12,888,691	(545,710)	(3,873,333)	-	-	8,469,648
COB & Lab	1,358,998	-	-	760,299	-	2,119,297
kWh	30,070,638	(1,685,089)	(7,746,667)	760,299	-	21,399,181
FP Wind Turbines kWh	7,500,000	-	-	-	(192,421)	7,307,579
WED Turbines	-	-	7,746,667	-	-	7,746,667
	7,500,000	-	7,746,667	-	(192,421)	15,054,246
Total kWh	37,570,638	(1,685,089)	-	760,299	(192,421)	36,453,427

Approximately 16.7% of NBC's FY 2017 OSE budget is for electricity required to operate the pumps, aeration blowers, BNR facilities and other necessary equipment at the wastewater treatment facilities and throughout the collection system. The FY 2017 electricity budget reflects a decrease of approximately \$1.0 million or 28.7% compared to last year due to the factors detailed above. The following table shows the budgeted expense by facility on a year-to-year basis.

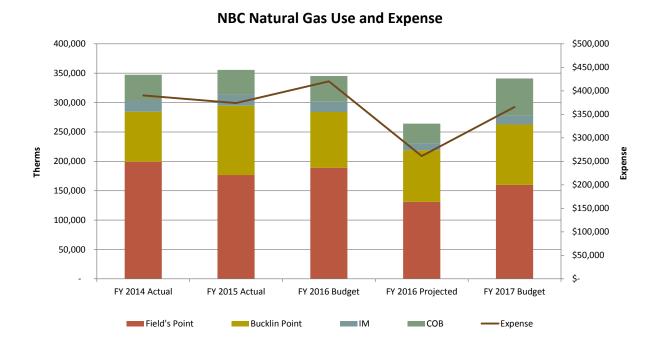
Electricity Expense

Facility	FY 2016 Budget	FY 2017 Budget	D	ifference
Bucklin Point	\$ 1,440,784	\$ 936,466	\$	(504,318)
Field's Point	1,782,261	1,184,771		(597,490)
IM	164,789	158,818		(5,971)
COB & WQSB	 155,275	244,723		89,449
Total Expense	\$ 3,543,108	\$ 2,524,778	\$ ((1,018,330)

A comparison of the year-to-year electricity usage is shown in the chart below.



The FY 2017 budgeted natural gas expense represents approximately 2.4% of the OSE budget. The budgeted amount of \$365,655 is based on projected use of 341,052 therms at a supply rate of \$1.072 per therm, 11.9% lower than the prior year's rate. Overall budgeted therms have decreased by 1.2% from the prior year and represent a 24-month average usage for existing facilities and includes usage for the new WQS Building. The year-to-year budgeted gas use and expense is shown in the following chart.



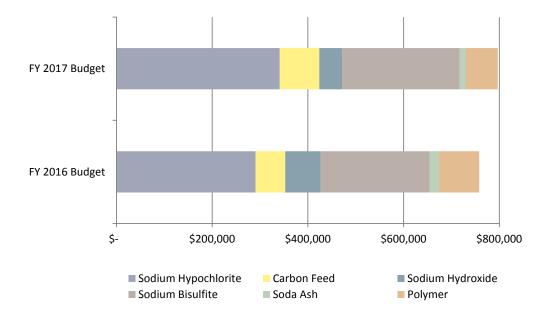
The chemical expense for both the Bucklin Point and Field's Point Wastewater Treatment Facilities represents approximately 5.3% of the FY 2017 OSE budget. Budgeted chemical expense is \$796,739 in FY 2017. Overall, chemical use is projected to be lower for three of the six chemicals, while the prices for some chemicals are

higher and others are lower than the prior year. As a result, the budget is \$38,812 or 5.1% higher than the prior year. The table below shows the change in budgeted chemicals compared to the prior year.

NBC Chemical Use and Expense

Chemicals	FY 2016 Budget	FY 2017 Budget	Budgeted Difference
Sodium Hypochlorite	\$290,690	\$ 341,221	\$ 50,531
Carbon Feed	62,000	82,493	20,493
Sodium Hydroxide	74,000	47,664	(26,336)
Sodium Bisulfite	227,437	245,487	18,050
Soda Ash	19,800	13,464	(6,336)
Polymer	84,000	66,410	(17,590)
Total	\$757,927	\$ 796,739	\$ 38,812

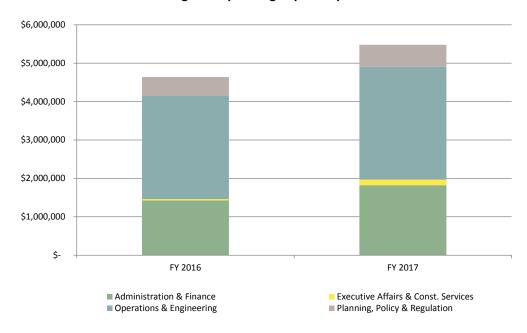
A comparison of the year-to-year chemical expense is shown in the chart below.



Operating Capital

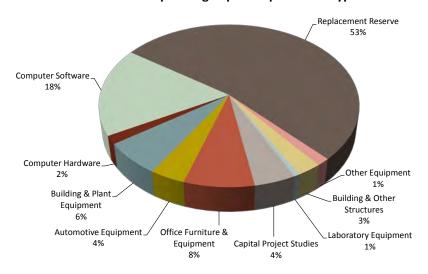
Operating capital makes up 5.2% of the FY 2017 operating budget. The operating capital budget funds the needs identified through NBC's asset management system such as fleet vehicles, laboratory equipment, and pumps necessary for the collection and treatment of wastewater as well as building and IT investments. On a year-to-year basis, this element of expense shows an increase of 18.1%, rising from approximately \$4.6 million in FY 2016 to approximately \$5.5 million in FY 2017 as shown in the graph on the following page.

Budgeted Operating Capital Expense



The single largest item included in the operating capital budget is for the Laboratory Information System Application for the Laboratory at a cost \$400,000. Other major items include a large specialized vehicle needed by the Interceptor Maintenance section, a Customer Service Application and a User Fee Rate Study. The two WWTFs account for the majority or 54% of the total FY 2017 operating capital budget. The allocation of NBC's FY 2017 Operating Capital budget by type of expenditure is illustrated in the chart below.

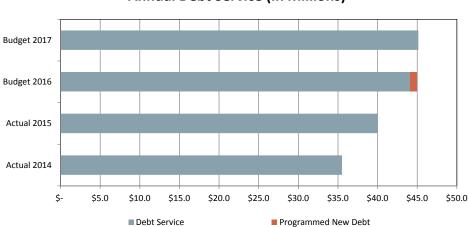
FY 2016 Operating Capital Expenditure Type



As noted previously in this budget document, Operating Capital is funded from the prior year debt service coverage. For a complete list of the actual items budgeted in this category see the FY 2017 Operating Capital and the Five-Year Operating Capital schedules in the supporting schedules section.

Debt Service

Debt service is the largest element of expense in NBC's FY 2017 budget, representing 42.5% of the total budget. NBC's budgeted debt service for FY 2017 is 0.1% greater than last year's budget and no new debt is anticipated to be issued in FY 2017. Total debt service budgeted in FY 2017 is approximately \$45.1 million. The graph below shows actual and budgeted existing and programmed new debt for the four-year period beginning FY 2014.

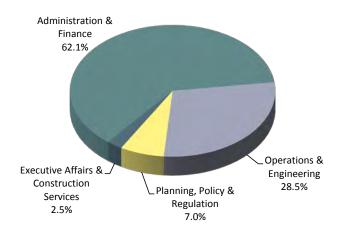


Annual Debt Service (In Millions)

For more on the capital projects and related financing, 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 2017 budget that the Divisions represent (Executive Affairs Division and Construction Services are grouped together).



FY 2017 Operating Budget by Division

The Executive Affairs Division and Construction Services Division comprise 2.5% of the total budget. The Division includes the Executive Affairs, Legal and Construction Services sections. The FY 2017 budget is \$342,324 or 17.7% higher than the FY 2016 budget. Personnel increased by \$214,274, which reflects a reduced level of budgeted capital reimbursements due to reduced construction activity. Operating supplies

and expense and professional services increased by \$18,050 compared to FY 2016 and operating capital increased by \$110,000 for asset replacement.

The Administration and Finance Division represents 62.1% of the total FY 2017 operating budget, reflecting the fact that debt service is contained in this division's budget. The Division includes Human Resources, Finance, Accounting, Information Technology, Customer Service, Purchasing and the General Administration sections. The FY 2017 budget is \$1.3 million or 2.3% greater than the FY 2016 budget. Personnel expense increased by \$304,316 and includes retirement payments and additional funding for NBC's Non-Union Pension. Operating supplies and expense and professional services increased by \$561,593 and includes the maintenance and expense for NBC's new WED turbines and WQS Building. Operating capital increased by \$398,000 for Information Technology investments and debt service increased by \$26,258 from the prior year.

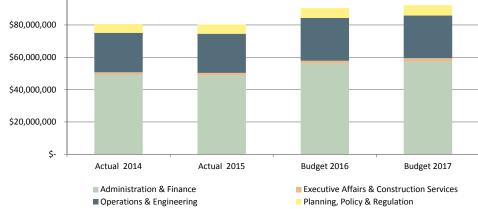
The Operations and Engineering Division represents approximately 28.5% of the total operating budget. This Division includes the Field's Point and Bucklin Point WWTFs, as well as the Engineering and the Interceptor Maintenance sections. The budget for the Operations and Engineering Division decreased by 0.9% or \$238,064 from the FY 2016 budget. Personnel expense increased by \$778,076 or 6% and includes two additional FTEs. Operating supplies and expense and professional services have decreased by approximately \$1.3 million, due to decreased biosolids disposal and electricity expense. Operating Capital increased by \$256,540.

The Planning, Policy and Regulation (PP&R) Division consists of the Planning, Environmental Monitoring and Data Analysis (EMDA), Pretreatment, Environmental Safety and Technical Assistance (ESTA) and Laboratory sections. This Division represents 7.0% of the total budget and increased by 7.1% or \$426,863 from the prior year. Personnel expense increased by \$296,015 or 6%. Operating supplies and expense and professional services have increased from the prior year budget by \$56,948. Operating Capital increased by \$73,900 and includes investments in critical laboratory and monitoring equipment.

	Actual	Actual	Budget	Budget	FY 16 - FY 17	FY 2017 %
	2014	2015	2016	2017	% Change	of Budget
Executive Affairs & Construction Services	\$ 1,650,796	\$ 1,813,910	\$ 1,935,456	\$ 2,277,780	17.7%	2.5%
Administration & Finance	49,067,672	48,540,541	55,950,138	57,240,306	2.3%	62.1%
Operations & Engineering	24,398,459	24,201,568	26,526,655	26,288,591	(0.9%)	28.5%
Planning, Policy & Regulation	5,484,607	5,759,455	5,986,810	6,413,673	7.1%	7.0%
Total	\$ 80,601,534	\$80,315,474	\$90,399,059	\$92,220,350	2.0%	100.0%



\$100,000,000



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

CIP Impact and Long-Term Plan

This year's CIP identifies a total of 37 projects that are either in progress, to be initiated or to be completed during FY 2018-2022 (see the CIP section for the complete CIP). The estimated costs for this year's CIP window are \$313.8 million, with additional expenditures of \$40.4 million in FY 2017 for a total of \$354.1 million. NBC recognizes the importance of planning for capital expenditures and is committed to minimizing ratepayer impact through an assessment of both operating expense and financing impacts. This year's budget includes an expanded analysis and presentation of these impacts, with specific emphasis on FY 2017.

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. It is particularly important this year as many of NBC's planned capital projects are projected to have significant impact on NBC's operating budget. 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 expense resulting from no longer operating facilities, reduced energy consumption, and/or the purchase of electricity	Shown as a reduction in Operating Expense
Increased Expense	An increase in operating expense resulting from new facilities becoming operational	Shown as an increase in Operating Expense
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 2017 CIP Impact

With respect to FY 2017, NBC has identified the operating and expense impacts related to the seven capital projects that are anticipated to be completed during the fiscal year. As is shown in the table below, four of the projects are inspections or studies and are not anticipated to have any operating impacts or start-up costs. Three projects, including the Water Quality Science Building, the Wind Energy Development Turbines and the NBC Energy Efficiency Upgrades are projected to have operating impacts with the combined impact of these projects resulting in a \$567,630 increase in expense which is offset by a \$588,528 increase in revenue and \$1,064,615 in savings.

Estimated Operating Impact of Projects to Be Completed in Fiscal Year 2017								
Capital Project	Savings		creased xpense	Increase Revenue				
Lockbridge & Valley St. Inspection & Cleaning	\$ -	\$	-	\$	-			
BVI Inspection & Cleaning	-		-		-			
FP WWTF Facility Electrical Improvements	-		-		-			
Municipal Later Sewer Acquisition Impact Study	-		-		-			
Water Quality Science Building*	(137,227)		233,380		-			
Wind Energy Development Turbines	(736,977)		334,250		387,333			
NBC Energy Efficiency Upgrades	(190,411)		-		201,195			
Total	\$(1,064,615)	\$	567,630	\$	588,528			
* Start-up costs carried in project cost								

Projects with savings, expense or revenue impacts are discussed in the following section.

Water Quality Science Building

The Water Quality Science Building Project (11900) consists of a new 36,790 square foot facility that will house the EMDA and Laboratory staff and equipment. This building will consolidate the environmental monitoring and analysis functions. There are start-up costs estimated at \$80,000 with the relocation of staff and support equipment which are programmed to be paid through the project. The old laboratory facility will be unoccupied in FY 2017 and other than utility expense no ongoing operational expense will be incurred resulting in savings of \$137,227. The anticipated annual operating expense is \$233,380.

Water Quality Science Building								
		Savings	Increased	Increased				
		Saviligs	Expense	Revenue				
HVAC Repairs		\$ (50,000)	\$ -	\$ -				
Electricity		(57,441)	148,104	-				
Natural Gas		(9,786)	43,391	-				
Water		(3,500)	3,900	-				
Maintenance		(16,500)	37,985	-				
	Total	\$(137,227)	\$233,380	\$ -				

Wind Energy Development Turbines

The Wind Energy Development Turbines Project (50500) consists of the purchase of three 1.5 MW wind turbines that convert wind energy to electricity. These turbines will be located on a remote site and the electricity will be net metered. These turbines are projected to generate approximately 9.3 million kWh of clean renewable wind energy. NBC will not incur any start-up costs for this project which is programmed to be operational in August 2016. Annual ongoing operating expense includes property maintenance and monitoring, a service agreement, insurance and a land lease payment. The expense is off-set by the projected annual electricity savings of \$736,977 as well as annual revenues of \$387,333 from the sale of Renewable Energy Credits. The figures in the table reflect 10 months of operation.

Wind Energy Development Turbines									
	Savings	Increased	Increased						
	Javiligs	Expense	Revenue						
Property Maintenance and Monitoring	\$ -	\$ 41,250	\$ -						
O&M Service Agreement	-	87,500	-						
Insurance	-	60,000	-						
Land Lease	-	135,000	-						
REC Monitoring and Certification	-	10,500	-						
Purchased Electricity Savings	(736,977)	-	-						
Sale of Renewable Energy Credits	-	-	387,333						
Total	\$ (736,977)	\$334,250	\$ 387,333						

NBC Energy Efficiency Upgrades

NBC Energy Efficiency Upgrades Project (13100) resulted from the completion of an energy efficiency audit. Through the study, several energy saving opportunities were identified such as installation of LED lighting systems. This project has secondary benefits such as a reduction in greenhouse gas emissions associated with electricity production as well as lower maintenance costs. NBC is eligible for a financial incentive from National Grid of \$201,195 if all of the proposed energy conservation measures are implemented. The projected electricity savings in FY 2017 is \$190,411 for ten months.

NBC Energy Efficiency Upgrades								
		Savings	Savings Increased Expense		Incre Reve			
Electricity		\$ (190,411)	\$	-	\$	-		
Financial Incentive		-		-	20:	1,195		
	Total	\$(190,411)	\$	-	\$ 203	1,195		

FY 2018-2022 CIP Impact

The table below summarizes the projected impact of the projects that are to be completed in FY 2017 along with additional capital projects scheduled to become operational in FY 2018-2022. Projects that involve inspection, studies, cleaning and rehabilitation generally do not have operating expense impacts. The estimated impact on the operating budget over the five-year period is increased revenue of \$5.6 million and increased expense of \$9.0 million. These projects are also projected to result in savings of \$14.4 million. The overall projected net impact over FY 2018-2022 is an increase in resources of \$11.0 million. Projects with savings, expense or revenue impacts are discussed in the following section.

	Ongoin	g CIP Impacts				
	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Increased Revenue						
WED Turbine RECs	\$ 464,800	\$ 464,800	\$ 464,800	\$ 464,800	\$ 464,800	\$ 2,324,000
NBC Energy Efficiency Upgrades	-	-	-	-	-	-
Johnston Sewer Improvements	517,500	517,500	517,500	517,500	517,500	2,587,500
Louisquisset Pike Interceptor Replacement	-	-	240,000	240,000	240,000	720,000
Subtotal	982,300	982,300	1,222,300	1,222,300	1,222,300	5,631,500
Savings						
WED Turbine Savings	(1,061,247)	(1,061,247)	(1,061,247)	(1,061,247)	(1,061,247)	(5,306,233)
NBC Energy Efficiency Upgrades	(228,493)	(228,493)	(228,493)	(228,493)	(228,493)	(1,142,466)
WQS Building	(137,227)	(137,227)	(137,227)	(137,227)	(137,227)	(686,135)
BPWWTF Biogas Reuse	(543,771)	(543,771)	(543,771)	(543,771)	(543,771)	(2,718,855)
FPWWTF - Blower Improvements Phase II	-	(1,145,500)	(1,145,500)	(1,145,500)	(1,145,500)	(4,582,000)
Subtotal	(1,970,738)	(3,116,238)	(3,116,238)	(3,116,238)	(3,116,238)	(14,435,690)
Increased Expense						
WED Turbines	396,600	396,600	396,600	396,600	396,600	1,983,000
WQS Building	233,380	233,380	233,380	233,380	233,380	1,166,902
BPWWTF Biogas Reuse	170,000	170,000	170,000	170,000	170,000	850,000
Johnston Sewer Improvements	10,000	10,000	10,000	10,000	10,000	50,000
FPWWTF - Blower Improvements Phase II	-	1,145,500	1,145,500	1,145,500	1,145,500	4,582,000
Louisquisset Pike Interceptor Replacement	-	-	10,000	10,000	10,000	30,000
New IM Facilities	-	-	-	-	97,288	97,288
Collection System Imp./Easement Restoration	-	10,000	-	10,000	-	20,000
FPWWTF - Operations and Lab Building Reuse	-	-	-	-	245,756	245,756
Subtotal	809,980	1,965,480	1,965,480	1,975,480	2,308,524	9,024,946
Net Impact	\$(2,143,058)	\$(2,133,058)	\$(2,373,058)	\$ (2,363,058)	\$(2,030,014)	\$(11,042,244)

BPWWTF - Biogas Reuse

The BPWWTF Biogas Reuse Project (12000) is anticipated to become operational in FY 2018. This project consists of the installation of a combined heat and power system that will burn the biogas generated from the anaerobic biosolids digestion process. This system is projected to generate approximately 4.5 million kWh of electricity annually to be used on-site. As a result NBC will not need to purchase as much electricity which will save NBC \$543,771 annually. These savings are offset by projected annual maintenance expense of \$170,000. All start-up costs are included in the project.

BPWWTF Biogas Reuse								
		Savings		creased	Inc	reased		
				Expense		evenue		
Electricity	\$	(543,771)	\$	-	\$	-		
Maintenance		-		170,000		-		
Total	\$	(543,771)	\$	170,000	\$	-		

Johnston Sewer Improvements

The Johnston Sewer Improvements Project (30460) includes the design and construction of improvements to expand sewers and accommodate future development in the Town of Johnston in accordance with the RIDEM approved facilities plan. The estimated ongoing operation expense is \$10,000 every five years to maintain the interceptor. Annual revenues generated as a result of new customers connecting to NBC's system are estimated to be \$517,500 in FY 2018.

Johnston Sewer Improvements								
	Con		Inc	Increased		creased		
	Sav	Savings		Expense		evenue		
User Fees	\$	-	\$	-	\$	517,500		
Maintenance		-		10,000				
Total	\$	-	\$	10,000	\$	517,500		

FPWWTF Blower Improvements Phase II

The FPWWTF Blower Improvements Phase II Project (10908) involves the replacement of the Field's Point aeration blowers to provide a reliable air source for heating and cooling in the aeration treatment process. The estimated ongoing operation expense for the blowers is \$1,145,500. Since these blowers are replacing existing equipment, the projected savings is \$1,145,500 and the net impact is zero. The new blowers are scheduled to become operational in FY 2019 and the start-up costs are carried in the project.

FPWWTF Blower Improvements Phase II								
		Savings	Increased	Increased				
		Javiligs	Expense	Revenue				
Electricity	\$	(1,135,000)	\$1,135,000	\$ -				
Water		(500)	500	-				
Maintenance		(10,000)	10,000	-				
Total	\$	(1,145,500)	\$1,145,500	\$ -				

Louisquisset Pike Interceptor Replacement

Louisquisset Pike Interceptor Replacement Project (30421) is scheduled to be complete in FY 2020. The project consists of the construction of a larger replacement interceptor in the northern section of the Town of Lincoln to accommodate the additional flow resulting from expected development. Preliminary projections indicate that the flow will generate additional sewer user fee revenue of \$240,000 annually. There is no start-up costs associated with the construction of this interceptor. Operating expense is \$10,000 every five years to maintain the interceptor.

Louisquisset Pike Interceptor								
		Savings		In	creased	Increased		
				Expense		Revenue		
User Fees		\$	-	\$	-	\$	240,000	
Maintenance	_		-		10,000			
Total		\$	-	\$	10,000	\$	240,000	

New IM Facilities

The new IM Facilities Project (12400) is scheduled for completion in FY 2022. This project involves the construction of a new building that will be required 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 additional operating expense associated with the new building is approximately \$97,288. All project startup costs, such as staff and equipment relocation, are included in the project cost.

New IM Facilities							
	Say	<i>i</i> ings	Increased		Increased		
	Ja	Savings		kpense	Revenue		
Electricity	\$	-	\$	23,180	\$	-	
Natural Gas		-		39,072		-	
Water		-		3,000		-	
Maintenance		-		32,036		-	
Total	\$	-	\$	97,288	\$	-	

FPWWTF Operations and Lab Building Reuse

The FPWWTF Operations and Lab Building Reuse Project (12900) consists of the evaluation and development of options for reuse of the space in the laboratory and operations buildings that will become available once staff is relocated to the new Water Quality Science Building. In addition, this project involves the replacement of the Maintenance building. The annual increase in operating expense associated with the new buildings is \$245,756 in FY 2022. The relocation and startup costs are included in the project.

FPWWTF- Operations and Lab Building Reuse						
	Say	Savings		creased	Incr	eased
	Sat			kpense	Revenue	
Electricity	\$	-	\$	69,540	\$	-
Natural Gas		-		117,216		-
Water		-		9,000		-
Maintenance		-		50,000		-
Total	\$	-	\$	245,756	\$	-

Collection System Improvements and Easement Restoration

NBC anticipates that it will need to expend approximately \$10,000 every two years for ongoing maintenance of the collection system and easement restoration projects to be completed during the five-year window of the CIP. Interceptors must be cleaned of grit and other debris, while the brush and undergrowth must be cleared to ensure easement access. Programmed maintenance expense for these projects is shown below.

Collection System Improvements and Easement Restoration						
	Sav	Savings		Increased Expense		reased venue
Maintenance	\$	-	\$	10,000	\$	-
Total	\$	-	\$	10,000	\$	-

CSO Phase III Facilities

No operating expense impacts related to the CSO Phase III Facilities are anticipated to occur until FY 2025. For planning purposes, however the CIP identifies estimated annual operating expense for the first phase of the CSO Phase III A Facilities based upon pre-design estimates. This expense includes electricity to pump flow from the Pawtucket tunnel pump station and to provide dehumidification, natural gas for heat in the pump station, screening and grit disposal, biosolids disposal, water, treatment chemicals, and maintenance. Additional labor expense is anticipated to operate the facilities. The start-up costs are included in the project. The operating expense for the remaining three phases will be determined once the design plans are available.

	CSO Phase III Fac	cilities		
Capital Project	Projected Year Facilities Online	Savings	Increased Expense	Increased Revenue
Phase III CSO Facilities - Phase A				
Electricity	FY 2025	\$ -	\$ 646,950	\$ -
Natural Gas	FY 2025	-	64,240	-
Screening & Grit Disposal	FY 2025	-	49,660	-
Biosolids	FY 2025	-	194,866	-
Water	FY 2025	-	968	-
Hypochlorite	FY 2025	-	12,110	-
Sodium Bisulfite	FY 2025	-	4,942	-
Maintenance	FY 2025	-	29,033	-
Personnel	FY 2025	-	9,811	-
		\$ -	\$ 1,012,580	\$ -
Phase III CSO Facilities - Phase B	FY 2031	None	TBD	None
Phase III CSO Facilities - Phase C	FY 2036	None	TBD	None
Phase III CSO Facilities - Phase D	FY 2041	None	TBD	None

CIP Debt Service Impact

In addition to direct savings, expense and revenue impacts, financing the CIP also impacts the operating budget through the payment of principal and interest. NBC must ensure that resources are allocated to its covenanted debt service coverage. NBC uses a long-term financial model to identify capital funding needs and sources, and to project future debt issuance. The debt service and user fee projections associated with financing the CIP are discussed later in this section. Traditionally NBC has financed the capital improvement program through the issuance of debt.

In order to determine the appropriate funding mechanism for a capital project, a number of factors are taken into consideration. NBC's objective is to manage capital financing such that ratepayer impacts are minimized and compliance with regulatory constraints is ensured. In general, NBC will maximize borrowings from the Rhode Island Infrastructure Bank (RIIB), formerly known as the Rhode Island Clean Water Finance Agency, to the extent that there is funding available. The RIIB, through the State Revolving Fund (SRF) Program subsidizes the interest rate on loans, resulting in a 1/3 or greater interest rate subsidy. If SRF funds are not available, NBC may issue short or long-term debt in fixed or variable mode. NBC may also fund projects through the Restricted Account which is funded through transfers from the Stabilization Account from prior year debt coverage.

NBC has three significant sources of capital funding as follows:

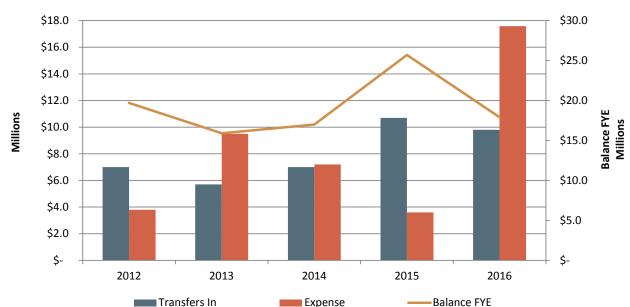
Funding Source	Description
Restricted Account	Transfers from Stabilization Account - Prior Year Debt Coverage
State Revolving Fund Loans through RIIB	Traditionally subsidized at 1/3 of NBC's market rate
Revenue Bonds	NBC tax-exempt debt issuance

When identifying funding sources, NBC also takes into consideration Internal Revenue Service (IRS) expenditure requirements. In addition, due to timing considerations and/or eligibility criteria, not all projects may be funded through the SRF. Lastly, NBC must also expend and manage its resources in accordance with the Trust Indenture and Twenty-Four Supplemental Indentures.

Restricted Account

The NBC is regulated by the Rhode Island Public Utilities Commission (PUC) and the PUC has permitted the use of prior year debt service coverage to finance "pay as you go" capital. NBC typically programs these funds for interceptor cleaning and inspection, studies, land and other projects that may not be eligible or reachable for SRF funding from the RIIB. NBC may also fund initial project costs from the Restricted Account until SRF funds become available. NBC plans on funding two large projects, the WED Turbines and the Johnston Sewer Improvements with Restricted Account funds. The chart below shows the transfers into the Restricted Account and expense by fiscal year.





State Revolving Fund Loans - RIIB

The NBC's least cost source 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 the NBC submits a loan application in April for a loan that will be executed in the next fiscal year. In order for a project to be eligible for SRF funding, it must be included in the application and on the RIDEM's Project Priority List. NBC must also 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 outstanding loans with the RIIB including interest rates and final maturities.

Debt Service Fiscal Year 2017

		··· = ·	
	RIIB SRF Loans	5	
Bond Issue	Interest Rate*	Outstanding	Final Maturity
1997 Series - \$8.150M	3.14473%	\$ 2,129,247	September 1, 2020
1999 Series - \$23.955M	3.03200%	8,839,999	September 1, 2021
2001 Series - \$57M	2.67100%	16,280,000	September 1, 2022
2002 Series - \$57M	1.07850%	23,421,360	September 1, 2023
2003 Series - \$40M	1.34900%	19,849,000	September 1, 2025
2004 Series B - \$40M	1.40400%	25,125,000	September 1, 2025
2005 Series B - \$30M	1.39700%	16,402,000	September 1, 2026
2006 Series A - \$30M	1.27000%	17,781,000	September 1, 2027
2007 Series B - \$25M	1.47500%	18,798,000	September 1, 2029
2009 Series A - \$55M	0.87700%	43,301,677	September 1, 2031
2010 Series A - \$2M	0.52200%	1,280,371	September 1, 2030
2010 Series B - \$20M	2.41300%	15,890,000	September 1, 2031
2011 Series A - \$30M	2.25900%	23,629,263	September 1, 2032
2012 Series A - \$25.75M	2.08800%	22,175,818	September 1, 2033
2013 Series B - \$25M	2.09200%	22,801,946	September 1, 2034
2014 Series A - \$45M	2.46700%	43,143,000	September 1, 2035
2015 Series B - \$41.7535M	2.54900%	41,241,430	September 1, 2045
2016 Series A - \$23.0M	1.96700%	23,000,000	September 1, 2037
		\$ 385,089,111	

^{*} RIIB loans have a 0.5% service fee

Revenue Bonds

Because the statewide demand for SRF loans exceeds RIIB's lending capacity, NBC issues revenue bonds to the extent that SRF funds are not available. The table below shows NBC's outstanding revenue bonds including interest rates and final maturities.

Revenue Bonds							
Bond Issue	Interest Rate	ate Outstanding		Final Maturity			
2008 Series A - \$66.0M	Variable	\$	56,465,000	August 1, 2035			
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	September 1, 2037			
		\$	242,820,000				

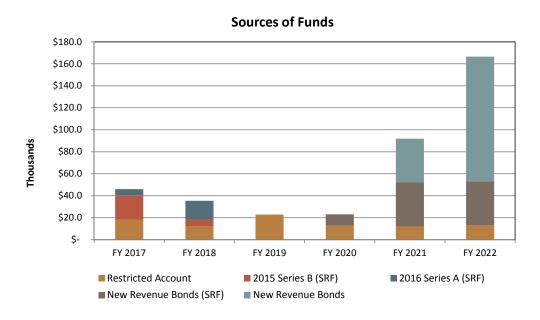
With respect to this year's CIP, a number of funding sources have been identified as part of the Long-Term Financial Plan and they are listed in the following table.

Funding Source	Description
Restricted Account	Transfers from Stabilization Account - Prior Year Debt Coverage
2015 Series B (SRF)	Unspent Proceeds from 2015 Series B
2016 Series A (SRF)	Unspent Proceeds from 2016 Series A
New Revenue Bonds	New NBC tax-exempt revenue bond issues
New Revenue Bonds (SRF)	New borrowings from the RIIB backed by NBC revenue bonds

In FY 2017, NBC plans to fund its capital improvement program with approximately \$18.5 million in restricted funds and \$27.5 million in unspent SRF proceeds. During the CIP period of FY 2018-2022, the long-term model reflects the use of \$73.1 million in restricted funds or "pay-as-you-go" capital, \$23.3 million in unspent SRF proceeds, \$90.2 million in new borrowings through the RIIB, and \$153.4 million in revenue bonds. The long-term model does not include any new borrowings from RIIB during FY 2017-2019 or the issuance of any revenue bonds during fiscal years 2017 through 2020. The table below shows the projected sources of funds in fiscal years 2017-2022.

Sources of Funds (Thousands)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total FY 2017-2022		otal FY 18-2022
Restricted Account	\$ 18,450	\$ 12,135	\$ 22,892	\$ 12,894	\$ 12,038	\$ 13,100	\$	91,509	\$ 73,059
2015 Series B (SRF)	21,963	6,186	-	-	-	-		28,149	6,186
2016 Series A (SRF)	5,543	17,100	-	-	-	-		22,643	17,100
New Revenue Bonds (SRF)	-	-	-	10,202	40,000	40,000		90,202	90,202
New Revenue Bonds	-	-	-	-	39,926	113,429		153,355	153,355
Total	\$ 45,956	\$ 35,421	\$ 22,892	\$ 23,096	\$ 91,964	\$ 166,529	\$:	385,858	\$ 339,902

The actual timing and type of debt issuance will be determined based upon cash flows, market conditions, RIIB loan availability and other factors. The graph below illustrates the projected sources of funds from FY 2017 through FY 2022. NBC does not plan on executing any new loans from RIIB until FY 2020 in anticipation of construction of the CSO Phase III A Facilities.



NBC must also take into consideration the appropriate uses of capital funds as part of the planning process. The following table lists the individual funding uses along with their descriptions. In addition to payments for capital projects, the table identifies operating capital expense and incremental increase to the debt service payment account. The cost of issuance expense is also shown and is financed from bond proceeds.

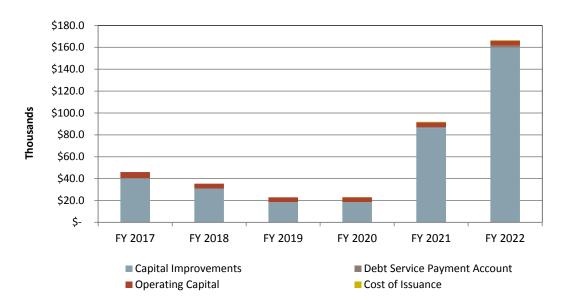
Funding Use	Description			
Operating Capital	Annual Operating Capital Purchases			
Capital Improvements	Projects Identified in the Capital Improvement Program			
Debt Service Payment Account	Incremental increase in monthly trust deposits due to debt issuance			
Cost of Issuance	Expense for RIIB origination fee (if applicable), underwriting, bond counsel, financial advisor, etc.			

The following table shows that the largest use of capital funds is for Capital Improvements at 89% of the total uses for the FY 2017-2022 CIP window.

Uses of Funds							Total FY	Total FY
(Thousands)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	2017-2022	2018-2022
Operating Capital	\$ 5,600	\$ 4,500	\$ 4,500	\$ 4,500	\$ 4,500	\$ 4,500	\$ 28,100	\$ 22,500
Capital Improvements	40,356	30,921	18,392	18,292	86,164	159,994	354,119	313,763
Debt Service Payment Account	-	-	-	102	800	1,535	2,437	2,437
Cost of Issuance	-	-	-	202	500	500	1,202	1,202
Total	\$ 45,956	\$ 35,421	\$ 22,892	\$ 23,096	\$ 91,964	\$ 166,529	\$ 385,858	\$ 339,902

The chart below shows the uses of capital funds by fiscal year. Expenditures on capital improvements are \$40.4 million in FY 2017 and will decline in each of the three following fiscal years. FY 2021 shows higher programmed costs that reflect the construction of Phase A of the CSO Phase III Facilities. NBC plans on spending \$236.1 million or 43% of the total estimated Phase A construction costs in FY 2021 and FY 2022.

Uses of Funds

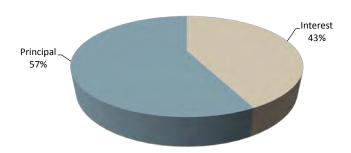


Since the CIP is financed primarily through the issuance of long-term debt, the capital program's primary impact on the operating budget is through the payment of principal and interest. Budgeted debt service in FY 2017 is \$45.1 million, which is \$26,258 higher than the prior year. The following table shows debt service expense in Fiscal Year 2017.

Debt Service Fiscal Year 2017

Debt :	Service Fiscal Yea	ar 2017	
Issue	Interest	Principal	Total
RIIB SRF Loans			
1997 Series - \$8.150M	62,299	503,940	566,239
1999 Series - \$23.955M	238,057	2,520,000	2,758,057
2001 Series - \$57M	446,213	2,650,000	3,096,213
2002 Series - \$57M	329,079	3,088,526	3,417,605
2003 Series - \$40M	384,245	2,029,000	2,413,245
2004 Series B - \$40M	442,962	2,895,000	3,337,962
2005 Series B - \$30M	305,057	1,499,000	1,804,057
2006 Series A - \$30M	301,213	1,476,000	1,777,213
2007 Series B - \$25M	363,505	1,281,000	1,644,505
2009 Series A - \$55M	1,216,571	1,698,105	2,914,676
2010 Series A - \$2M	34,082	74,717	108,798
2010 Series B - \$20M	483,157	862,000	1,345,157
2011 Series A - \$30M	772,929	1,175,926	1,948,855
2012 Series A - \$25.75M	560,418	1,089,391	1,649,809
2013 Series B - \$25M	537,681	1,070,545	1,608,227
2014 Series A - \$45M	1,128,915	1,870,000	2,998,915
2015 Series B - \$41.7535M	1,014,811	-	1,014,811
2016 Series A - \$23.0M	50,927	-	50,927
Subtotal RIIB SRF Loans	8,672,121	25,783,150	34,455,271
Revenue Bonds			
2008 Series A - \$66.0M	1,972,651	-	1,972,651
2013 Series A - \$71.48M	3,136,650	-	3,136,650
2013 Series C - \$34.97M	1,656,550	-	1,656,550
2014 Series B - \$39.82M	1,944,400	-	1,944,400
2015 Series A - \$40.085M	1,972,100		1,972,100
Subtotal Revenue Bonds	10,682,351	-	10,682,351
Total	\$ 19,354,472	\$ 25,783,150	\$ 45,137,622

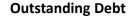
FY 2017 Debt Service

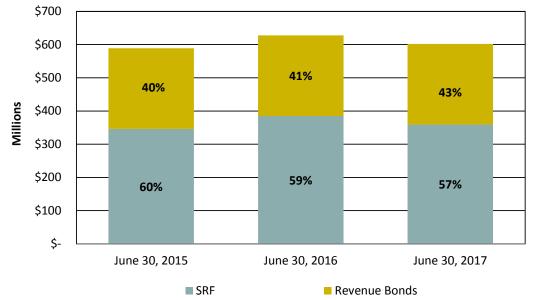


The table below shows the changes in outstanding debt at fiscal year-end for 2015, 2016 and 2017. The Additions/Principal Payments column reflects the net effect of principal payments and new SRF bond issuance. Outstanding debt is projected to increase 6.6% from FY 2015 to \$627.9 million in FY 2016. Since there is no planned debt issuance in FY 2017, outstanding debt is projected to decrease 4.1% from FY 2016 to \$602.1 million in FY 2017.

Issuance	Outstanding Debt as of June 30, 2015			Additions/ Principal Payments		tstanding Debt as of June 30, 2016	Additions/ Principal Payments		Outstanding Debt as of June 30, 2017	
SRF Loans										
SRF Loans	\$	346,132,052	\$	(25,284,371)	\$	320,847,681	\$	(25,783,150)	\$	295,064,531
2015 Series B		-		41,241,430		41,241,430				41,241,430
2016 Series A		-		23,000,000		23,000,000				23,000,000
Subtotal SRF		346,132,052		38,957,059		385,089,111		(25,783,150)		359,305,961
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
Subtotal Revenue Bonds		242,820,000		-		242,820,000		-		242,820,000
Total	\$	588,952,052	\$	38,957,059	\$	627,909,111	\$	(25,783,150)	\$	602,125,961

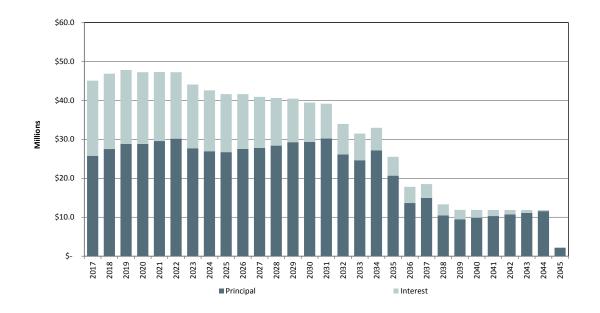
The chart below reflects the actual outstanding debt for fiscal years 2015 and 2016 and the projected outstanding debt for fiscal year 2017. The majority of NBC's outstanding debt will continue to be related to SRF borrowings through the RIIB.





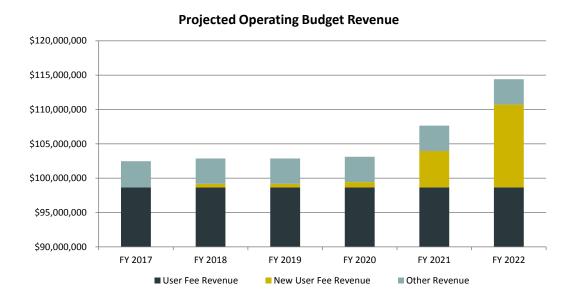
Debt Service Payments through Maturity

		ice i ayinents timoagii watarity							
Fiscal Year	Debt		Principal		Interest	To	tal Payment		
2017	\$ 899,194,715	\$	25,783,150	\$	19,298,948	\$	45,082,098		
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		
1	Total	\$	627,909,112	\$	271,285,603	\$	899,194,715		

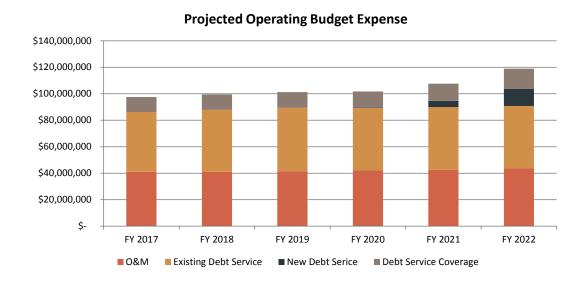


Projected Revenue and Expense

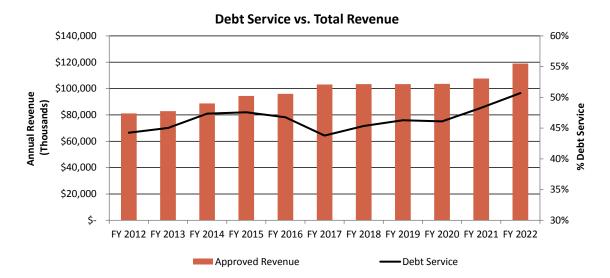
NBC has projected operating budget revenue and expense taking into consideration the capital program and other anticipated needs. During the FY 2017 to FY 2022 period, Other Revenue is anticipated to remain constant assuming REC generation and pricing does not change. New user fees associated with system expansion are reflected in FY 2018, and revenue from projected rate increases is included in the new user fee revenue portion of the chart beginning in FY 2021. From a rate setting perspective, NBC's rate covenants require NBC to demonstrate that rates will generate sufficient revenue to meet debt service and debt service coverage requirements during the three years subsequent to new debt issuance. As a result, NBC's rates in FY 2017 are projected to generate revenue that will support debt service of \$47.8 million or the maximum annual debt service during the next three fiscal years.



With respect to projected operating budget expense, a moderate net increase in O&M is anticipated due to the savings identified in the CIP Impact discussion earlier in this section. NBC is projecting new debt service and debt service coverage related to the financing of the CSO Phase III A Facilities will first appear in FY 2021.

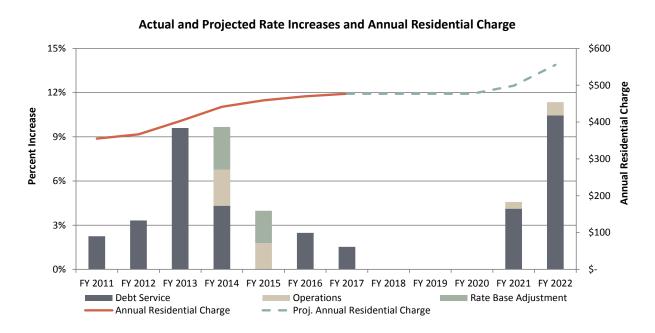


The chart below shows that debt service is anticipated to increase from approximately 44% of total revenue in FY 2017 to 50.7% of total revenue in FY 2022. All debt service projections are based on a number of assumptions including the cash flow estimates outlined in the CIP.



Sewer User Fee Rate Projections

The following chart shows the long-term projected financial impact of financing NBC's CIP along with the savings, expense and revenue impacts of the CIP and other factors. NBC uses a model to estimate the impact on NBC's total revenue requirement and user fees. Based on these inputs, it is anticipated that the 1.53% rate increase effective July 1, 2016 is sufficient to support NBC's operations, debt service and debt service coverage through FY 2020. Once NBC begins construction of the CSO Phase III A Facilities, new debt issuance and rate increases will be required to support the debt. The NBC average annual residential user charge is projected to increase from \$477 in FY 2017 to \$555 in FY 2022. The largest projected rate increase over the five-year period is in FY 2022 at 11.4%; however these impacts will change if NBC must begin construction of the CSO Phase III Facilities earlier than what is programmed in the CIP, actual CIP operating budget impacts vary significantly from the projections, NBC faces unforeseen operating expense, or NBC's rate base changes.



Even with these increases, NBC's sewer rates remain competitive. As can be seen in the following table, when NBC's 2015 rate is calculated based on consumption of 120 HCF, it is approximately 8% below the national average of \$686 for major U.S. Cities. Survey results for the State of Rhode Island are shown in the Budget Summary section of this document.

2015 Annual Resider	ntial Sewer	Charges for Major	U.S. Cities
			<u> </u>
Seattle, WA	\$ 1,421	Houston, TX	\$ 612
San Francisco, CA	1,288	Saint Louis, MO	604
Honolulu, HI	1,171	New Orleans, LA	596
Portland, ME	1,164	Dallas, TX	523
Austin, TX	897	Columbus, OH	515
MWRA Service Area	894	Los Angeles, CA	459
Boston, MA	771	Saint Paul, MN	452
New York, NY	727	Fort Worth, TX	442
Washington, DC	721	Newark, NJ	431
Jacksonville, FL	687	Philadelphia, PA	415
Detroit, MI	674	San Jose, CA	405
Indianapolis, IN	640	San Antonio, TX	395
Providence, RI	633	Milwaukee, WI	380
San Diego, CA	616		

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 also incorporates the needs identified through NBC's asset management program. These capital improvements represent projects for construction of new facilities, repair and replacement of existing infrastructure as well as energy efficiency and sustainability. The CIP shows programmed expenditures for the current Fiscal Year (FY) 2017 as well as the following five-year period of FY 2018-2022, 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 37 projects that are either in progress, to be initiated or to be completed during FY 2018-2022. The estimated costs for this year's CIP window are \$313.8 million, with additional expenditures of \$40.4 million in FY 2017 for a total of \$354.1 million. The majority of the expenditures, more than 86%, 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 14% or \$44.0 million and include the Moshassuck Valley Interceptor Replacement, the Louisquisset Pike Interceptor Replacement, the Field's Point Wastewater Treatment Facility (FPWWTF) Blower Improvements Phase II and "green" projects.

FY 2017-2022 CIP Costs

(In thousands)

Category	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2018-2022
Administrative	\$ 2,407	\$ 2,530	\$ 490	\$ 1,003	\$ 693	\$ 886	\$ 5,601
Land	71	-	50	4,050	-	-	4,100
A/E Professional	8,838	11,814	13,999	5,303	37	6	31,159
Construction	25,836	12,870	991	7,650	84,442	158,361	264,314
Contingency	2,490	3,268	1,940	150	820	650	6,828
Other	714	438	922	136	172	91	1,759
Total	\$ 40,356	\$30,920	\$18,392	\$18,292	\$86,164	\$159,994	\$ 313,761

Capital Improvement Program Changes

In a departure from prior CIP's, this year's document considers all phases of a construction project, including planning and design to be 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 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 96.

The project priority classifications are also refined in this year's CIP and include four different groups A, B, C and D. In addition, the CIP Impact and Long-Term Plan section of the budget includes additional information

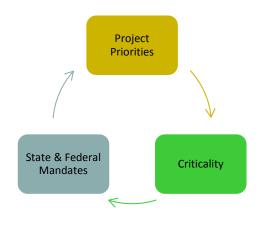
regarding the operating revenue, expense and savings impact of each project as well as more information related to the funding of the CIP and the projected rate impacts associated with the CIP.

This year's CIP shows the separation of the CSO Phase III Abatement Facilities into four distinct phases. As a result of the Phase III revaluation process completed last year, NBC plans on completing the program over a longer time frame of approximately 22 years. Separating the Phase III Facilities into these phases is consistent with the planning documents submitted to RIDEM for review and approval and will help NBC to plan for the funding of this expensive project. Additional discussion of the CSO Phase III Abatement Facilities begins on page 92 of this document.

Capital Improvement Program Development

NBC's comprehensive capital improvement planning process 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 of 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 timeline. A timeline with all of



the detailed project schedules can be found on page 100. 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 Assumptions

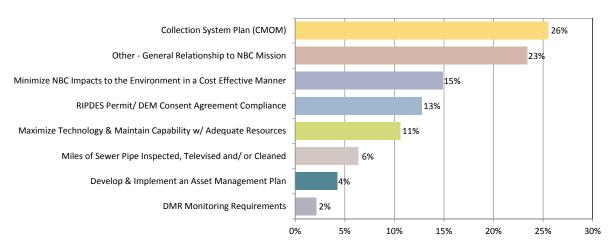
The costs and schedules included in the CIP reflect NBC's best estimates and are based on a number of assumptions as follows:

- Costs and cash flows are based on planning or design estimates and/or bids once available.
- The majority of construction projects include a 12% 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 projects include a 7% allowance for NBC staff salary and fringe associated with project management, based on historical data.
- 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 operating budget.
- The CIP does not include the acquisition or replacement of certain assets that are identified in NBC's annual operating budget and are outlined in the five-year Operating Capital Outlay Plan.

Capital Projects by Strategic Objective

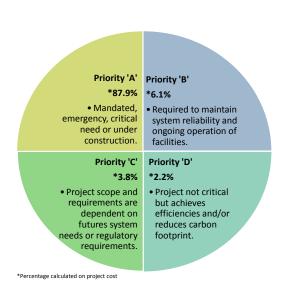
NBC's Strategic Plan ensures NBC's ability to meet water quality objectives set forth by regulatory requirements through achieving short-term and long-term objectives at a reasonable cost. As part of the CIP development process, Project Managers identify the one or more strategic goals that a project will address. The following chart below illustrates the percentage of capital projects in this year's CIP aligned with each Strategic Objective.

Percentage of Capital Projects by Strategic Objective



Of the 37 CIP projects, 26% are related to NBC's Collection System Plan and include capacity management, interceptor easement construction and facilities planning. In addition, 23% of the interceptor restoration and construction projects and wastewater treatment facility improvement projects such as the Water Quality Science Building have a general relationship to NBC's Mission. NBC's regulatory studies and energy sustainability projects represent 15% of efforts to Minimize Impacts to the Environment in a Cost Effective Manner. The remainder of the projects relate to the RIPDES Permit and RIDEM Consent Agreements such as the CSO Phase III Facilities, Asset Management, Interceptor Inspection and Cleaning and Construction.

Project Priorities

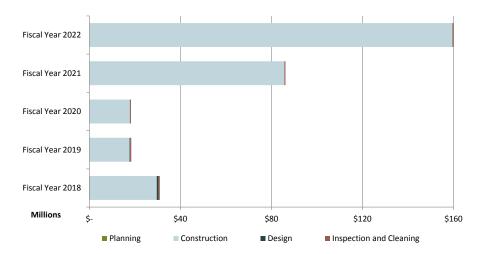


As part of the CIP program development, the criticality of each project is assessed and a priority ranking is assigned based on that assessment. Projects with a ranking of "A", represent a critical need and are either mandated, emergency or currently under construction. Approximately 87.9% of the projects identified in the window are prioritized with an "A" ranking and total \$275.8 million.

In addition, 6.1% or \$19.2 million of projects are identified with a "B" ranking, which includes projects that are required to maintain system reliability and ongoing operations of NBC's facilities. Projects with a rank of "C" are dependent on future system needs or regulatory requirements and represent 3.8% or \$12.0 million. The remaining 2.2% or \$6.8 million is ranked as "D" and includes projects that are not critical but achieve efficiencies and/or reduce NBC's carbon footprint.

Capital Expenditure by Phase

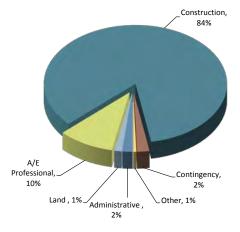
NBC's construction projects are generally comprised of three phases including planning, design, and construction. Planning consists of tasks such as feasibility studies and determination of the technology to be implemented. The design phase includes the development of all plans and specifications, acquisition 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 miles of interceptors, or other one-time special studies. As is evident in the chart below, nearly all of the programmed expenditures during the five-year CIP window relate to the construction phase at 98.8% or \$310 million.



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 expenses. 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 \$264.3 million, or approximately 84% of the total costs within the FY 2018-2022. Architectural and Engineering services represent approximately \$31.2 million or 10% 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 five functional areas, according to the scope and tasks involved within each capital project. The functional areas are described below.

Functional Area	Project Examples
Wastewater Treatment Facility (WWTF)	Blower Improvements, Water Quality Science Building, Final Clarifiers, Floor Protection and Other WWTF Improvements
Infrastructure Management (IM)	Special Studies, Energy Sustainability, Easement Restoration and System Improvements
CSO Phase III Facilities	CSO Phase III Phases A, B, C and D
Interceptor Inspection and Cleaning (IIC)	Remote Television Inspection and Grit/Debris Removal and Disposal
Interceptor Repair 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 result of the shift in the window so that one additional year of CSO Phase III construction costs are captured. On a year-to-year basis, there is a 158.6% increase in CSO Phase III costs compared to last year's CIP. Interceptor Restoration and Construction shows increased expenditures of 20.5% which is related to two large interceptor projects. The Wastewater Treatment Facility Improvements and Infrastructure Management areas show a decrease of 32% and 26% respectively from the prior year. Overall, programmed expenditures are 102.1% higher in the current CIP window compared to last year's CIP.

Functional Area (In thousands)	Prior Year CIP (FY 2017-2021)		Curre (FY 2	% Change	
Wastewater Treatment Facility	\$	28,048	\$	19,173	(32%)
Infrastructure Management		4,884		3,633	(26%)
CSO Phase III Facilities		104,312		269,748	158.6%
Interceptor Inspection and Cleaning		2,500		2,500	0.0%
Interceptor Restoration and Construction		15,522		18,708	20.5%
Total	\$	155,267	\$	313,762	102.1%

Significant Capital Improvement Projects

The most significant project included in this year's CIP relates to the CSO Phase III Facilities which accounts for \$269.8 million or 86% of the CIP's programmed costs. Expenditures on this project will increase significantly in FY 2021 as NBC progresses from design to construction. Other projects account for the remaining 14% of the CIP. The following table and graph show the programmed expenditures for the CSO Phase III Facilities and other projects included in the current CIP window.

Expenditures by Major Project

(In thousands)

Project	FY	2017	F	Y 2018	F	Y 2019	F	Y 2020	F	Y 2021	ı	Y 2022	-	otal Costs 2018 - 2022	% of Five Year Window
CSO Phase III Facilities	\$	7,545	\$	10,865	\$	13,148	\$	9,605	\$	79,410	\$	156,720	\$	269,748	86%
Interceptor Restoration & Construction		10,878		12,312		1,896		1,500		1,500		1,500		18,708	6%
WWTF Improvements		12,618		5,241		2,174		6,024		4,460		1,274		19,173	6%
Other		9,315		2,502		1,174		1,163		794		500		6,132	2%
Total	\$	40,356	\$	30,920	\$	18,392	\$	18,292	\$	86,164	\$	159,994	\$	313,761	100%

NBC's Interceptor Restoration and Construction Projects include the Moshassuck Valley Interceptor at \$ \$4.7 million, the Louisquisset Pike Interceptor Improvements at \$4.0 million and Johnston Sewer Improvements at \$4.0 million. Projects related to WWTF Improvements include Phase II of the FPWWTF Blower Improvements estimated to cost \$4.2 million and \$6.6 million is programmed for new Interceptor Maintenance Facilities which may be required if the State enacts legislation mandating NBC to assume responsibility of sewers from communities in NBC's service area within its district. The remaining projects relate to Renewable Energy, Energy Sustainability and Infrastructure Management projects at a cost of \$6.1 million.

Expenditures by Major Project

(In Millions)



CSO Abatement Program

In accordance with the terms and schedule set forth in the Consent Agreement between NBC and RIDEM, this CIP includes NBC's design and construction of the third and final phase of the federally mandated CSO Abatement Program.

CSO Phase III Facilities (Project 308)

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. NBC is legally required to proceed with Phase III in order to comply with federal law.

NBC's 18 month reevaluation of the RIDEM approved 1998 Conceptual Design Report Amendment concluded in June 2015 and resulted in the selection of an alternative that the Board determined to 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 is incorporating RIDEM's comments into a revised conceptual design report which will be submitted to RIDEM for approval. NBC's Consent Agreement must also be renegotiated based upon the approved plan.

As a result of the reevaluation process, the Phase III CSO Program was subdivided into four phases to be completed over a period of 22 years. The program also incorporates Green Stormwater Infrastructure (GSI) facilities to be constructed in each of the four phases to reduce stormwater inflow to the existing CSO system

by implementing ground stormwater infiltration projects, with expenditures of \$10 million on GSI in each phase. NBC has commenced preliminary design of the Phase III A Facilities and in response to RIDEM's comments has initiated the simultaneous performance of an environmental assessment. Construction of this first phase is expected to begin in 2020.

The total pre-design estimate for the four phases of the CSO Phase III Facilities is \$833 million in 2018 dollars, with expenditures of approximately \$7.5 million in FY 2017 and \$269.7 in the five year period of FY 2018-2022 in this year's CIP window. A description of the facilities to be constructed in each of the four phases, as well as estimated costs and schedules is described below.

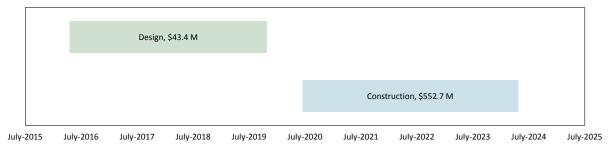


Photo: Highlighted route of CSO Phase III

Phase III A

This is the first Phase of the Phase III facilities and 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. The predesign estimated cost for design and construction of these facilities in 2018 dollars is \$596.1 million. Design work commenced in FY 2016 and NBC has engaged an engineering firm to simultaneously conduct an environmental assessment. The following chart outlines the estimated schedule and costs for design and construction of this phase.

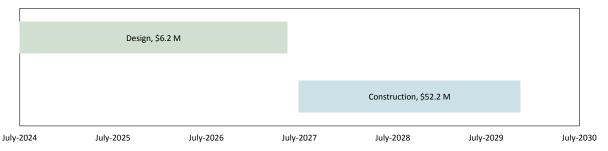
CSO Phase III A Facilities



Phase III B

This phase includes the design and construction of two interceptors at High and Cross Street which will be approximately 4,200 feet in length and one interceptor at Middle Street approximately 2,000 feet in length. In addition, this phase contemplates some sewer separation work. The pre-design estimated cost for design and construction of this phase in 2018 dollars is \$58.3 million. The following chart outlines the schedule and cost for design and construction of this phase.

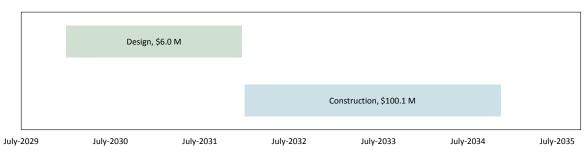
CSO Phase III B Facilities



Phase III C

This phase involves the design and construction of a stub tunnel at a pre-design estimated cost in 2018 dollars of \$106.1 million. The following chart outlines the schedule and cost for design and construction of this phase.

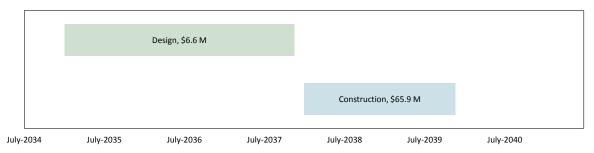
CSO Phase III C Facilities



Phase III D

This is the last phase of the CSO Abatement program and entails 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. The pre-design estimated cost in 2018 dollars is \$72.5 million. The following chart outlines the schedule and cost for both design and construction of this phase.

CSO Phase III D Facilities



Climate Change and Sustainability



In accordance with NBC's environmental performance goals of minimizing environmental impact, NBC has programmed a number of projects in the CIP. The Green House Gas Study involves quantifying NBC's overall carbon footprint by measuring the gas emissions from the wastewater collection and treatment process. The results of this study will enable NBC to quickly respond to new requirements related to emissions as they are enacted. In addition, NBC may conduct an evaluation of its facilities

for Climate Resiliency to identify and assess potential impacts resulting from climate change, depending on the outcome of a similar study currently being conducted by RIDEM. This includes flooding of NBC facilities which are located in areas prone to flooding and possible mitigation activities to mitigate potential damage from flooding. NBC also plans to maximize energy efficiencies and renewable resources through its Energy Sustainability program that involves the identification and implementation of conservation methods, improved efficiency options, and the use of sustainable renewable energy resources. In addition, the CIP includes funding for two renewable energy projects.

Bucklin Point Biogas Reuse

This year's CIP includes the Bucklin Point Biogas Reuse project which includes the installation of a biogas cogeneration system that will burn the biogas generated from the anaerobic biosolids digestion process and simultaneously generate electricity and heat for reuse in the treatment facility.

This process will reduce NBC's dependency on fossil fuel and generate approximately 4.5 million kWh of electricity annually. The estimated construction cost for Project (120) is \$8.3 million and includes \$512 thousand in principal forgiveness, administered



Photo: Bucklin Point Digester Building

through the Rhode Island Infrastructure Bank (RIIB). Currently, this project is 7% complete and on schedule. An air permit is required for this project and the application has been submitted to RIDEM. Facilities are expected to be complete in the Spring of FY 2018.

Wind Energy Development Turbines

This year's CIP also includes the Wind Energy Development Turbine Project (505) with a cost of \$19.0 million which is anticipated to begin in the summer of 2016. This project involves the purchase and installation of three 1.5 MW wind turbines that will convert wind energy into electricity at an off-site location. The energy will be net-metered and projected to generate 9.3 million kWh of electricity needs through renewable resources. This project is also projected to generate revenue through the sale of the Renewable Energy Credits or RECs.

NBC Energy Efficiency Upgrades

NBC has also included funding for NBC Energy Efficiency Upgrades (13100) at a cost of \$1.0 million for the installation of new LED lighting systems and sensors. NBC is eligible for a financial incentive as part of the energy conservation measures that will be implemented through this project.

Collection System Infrastructure

This CIP includes several collection system infrastructure projects totaling \$14.2 million. The largest project is the Johnston Sewer Improvements (30460) and includes design and construction of improvements to expand and accommodate future development in the Town of Johnston in accordance with the RIDEM approved facilities plan. Other interceptor projects include the Moshassuck Valley Interceptor (30444) to replace the existing sewer pipe and the Louisquisset Pike Interceptor (30421) which involves the construction of a larger interceptor pipe.

In addition, the East Providence Interceptor Improvements and Improvements to Interceptors FY 2017



Photo: Inverted manhole cover

consist of the correction of various deficiencies throughout NBC's service area and include sewer lining, point repairs, outfall pipes, hydraulic gate operation and manhole rehabilitation.

Lastly, NBC is committed to maintaining its infrastructure and collection system by programming an allocation of \$1.5 million for interceptor restoration and construction and \$500 thousand for interceptor inspection and cleaning annually in years that do not have specific projects identified.

Completed and New Capital Projects

Completed Projects

In FY 2016, NBC completed sixteen capital projects at a cost of \$182.3 million. These projects have been determined to be substantially complete with only retainage outstanding. Approximately 92% of the completed projects were part of the CSO Phase II Abatement Facilities. The following table shows the completed projects and estimated costs.

Project Number	Project Name		Cost (In thousands)
10907	FPWWTF - Blower Improvements	\$	2,804
11602	FPWWTF Tunnel Pump Station Improvements		963
12700	FPWWTF Electrical Substation No. 1		1,669
30301D	Phase II CSO Facilities Design		18,820
30301RS	Program and Construction Management		19,932
30302	OF 106 Facilities		5,518
30303*	WCSOI Main		77,171
30304	SCSOI Main		20,906
30306	OF 037 West		9,806
30307	OF 037 South Sewer Separation		9,093
30308	OF 037 North Sewer Separation		7,287
30472	Providence and Lincoln IIC		220
30473	Lockbridge Easement & Valley St. Cleaning & Inspection		385
30457	Providence River Siphon Replacement		6,433
30459	Improvements to Interceptors FY 2015		1,218
70800	Omega Pump Station Improvements		84
		Total \$	182,309

^{*}Complete, contract remains open pending litigation

New Projects

This year's CIP includes eight new capital projects totaling \$27.6 million. Five of these projects relate to climate change and sustainability. Project 13100 consists of installation of new LED lighting systems throughout the NBC facilities that will use less energy and last longer. Project 1140400 involves the evaluation of NBC Facilities for Climate Resiliency and Project 1140500 is the evaluation of NBC's operations for conservation and energy efficiency opportunities. Project 40101 involves the evaluation and upgrade of the emergency generators at Field's Point to ensure their reliability. In addition, Project 50500 involves the purchase and installation of three 1.5 MW wind turbines to generate renewable energy for NBC.

The CIP also includes three new projects related to the NBC's collection system infrastructure. These projects include the inspection and cleaning of interceptors as part of Project 30474, the construction of a new interceptor in the Town of Johnston Project 30460 and the interceptor restoration throughout NBC's service area under Project 30463. The new projects and their estimated costs are summarized in the table on the following page.

Project Number	Project Name		 ed Cost usands)
13100	NBC Energy Efficiency Upgrades		\$ 1,001
1140400	Evaluate NBC Facilities for Climate Resiliency		153
1140500	NBC Energy Sustainability		70
40101	FPWWTF Facility Electrical Improvements		125
50500	Wind Energy Development Turbines		19,000
30474	BVI Inspection & Cleaning		175
30460	Johnston Sewer Improvements		4,366
30463	Improvements to Interceptors FY 2017	_	2,683
		Estimated Total	\$ 27,573

			Priority	Year 2017	2017	2018-2022	Year 2022	Project Cost
Wastewa	ter Treatment Facility Improvements							
10908	FPWWTF Blower Improvements Phase II		Α	\$ 6	\$ 1,187	\$ 4,202	\$ -	\$ 5,395
11900	Water Quality Science Building		Α	19,752	1,419	93	-	21,26
12000	BPWWTF Biogas Reuse		Α	1,698	6,373	201	-	8,27
12400	New IM Facilities		С	-	-	6,607	-	6,60
12900	FPWWTF Operations and Lab Building Reuse		D	-	25	6,734	-	6,75
13000	FPWWTF Final Clarifier Improvements		В	28	1,458	1,286	-	2,77
13100	NBC Energy Efficiency Upgrades		D	-	1,010	-	-	1,01
81300	BPWWTF Flood Protection		Α	83	1,146	51	-	1,280
		Subtotal		21,567	12,618	19,173	-	53,358
nfrastruc	cture Management							
1100000	Site Specific Study		С	211	-	245	-	457
1140100	River Model Development		С	354	72	99	-	525
1140200	Upper Bay Dissolved Oxygen Evaluation		С	-	150	150	-	300
1140300	Greenhouse Gas Study		D	73	332	-	-	40
1140400	Evaluate NBC Facilities for Climate Resiliency		С	3	56	94	-	153
1140500	NBC Energy Sustainability		D	22	32	16	-	70
30438	NBC Interceptor Easement Restoration, AVI		Α	130	621	5	-	75
30500	NBC Interceptor Easements Restoration, Various Locations		В	-	1	1,353	-	1,35
30501	NBC Interceptor Easements Restoration, BVI		В	274	194	725	-	1,194
30700	NBC System-wide Facilities Planning		С	-	51	459	-	509
40100	NBC Facility Electrical Improvements		В	-	3	127	-	130
40101	FPWWTF Facility Electrical Improvements		В	17	108	-	-	12:
40200	NBC System-wide Inflow Reduction		С	-	-	360	-	360
40300	Municipal Lateral Sewer Acquisition Impact		С	_	296	_	_	296
50500	Wind Energy Development Turbines		A	12,100	6,900	-	-	19,000
		Subtotal		13,185	8,815	3,633	-	25,633
Phase III (CSO Facilities							
30800	CSO Phase III A Easilities		۸	າ 201	7 5 4 5	260 749	216 475	E06 140
30810	CSO Phase III A Facilities CSO Phase III B Facilities		A A	2,382	7,545	269,748	316,475	596,149
			A	-	-	-	58,310	58,310
30820	CSO Phase III C Facilities			-	-	-	106,110	106,110
30830	CSO Phase III D Facilities	Subtotal	Α	2,382	7,545	269,748	72,510 553,405	72,510 833,079
Intercept	or Inspection & Cleaning							
-	•		В	_	83	2,500	500	3,08
30473	Interceptor Inspection and Cleaning			328	258	2,300	-	58
30473	Lockbridge and Valley Street Inspection & Cleaning BVI Inspection & Cleaning		A B	16	159	-	-	
30474		Subtotal	ь	344	500	2,500	500	175 3,844
ntercept	or Restoration & Construction							
30400C	Interceptor Restoration and Construction		В	_	_	4,500	1,500	6,000
30421	Louisquisset Pike Interceptor Improvements		C	-	24	4,021	1,300	4,04
30444	Moshassuck Valley Interceptor		В	-	1,851	4,680	_	6,53
30444	Providence River Siphon		A	- 247	6,186	4,000	-	6,43
30460	Johnston Sewer Improvements		В	9	356	4,002	-	4,36
20400	NBC East Providence Interceptor Improvements		В	36	1,255	4,002		1,34
30/162			U	50	1,233	31	-	1,34
30462 30463	·		Δ	21	1 207	1 //55	_	2 683
30462 30463	Improvements to Interceptors FY 2017	Subtotal	Α	21 313	1,207 10,878	1,455 18,708	1,500	2,683 31,399

Priority	Description
Α	Mandated, emergency, critical need or under construction.
В	Required to maintain system reliability and ongoing operation of facilities.
С	Project scope and requirements are dependent on futures system needs or regulatory requirements.
D	Project not critical but achieves efficiencies and/orreduces carbon footprint.

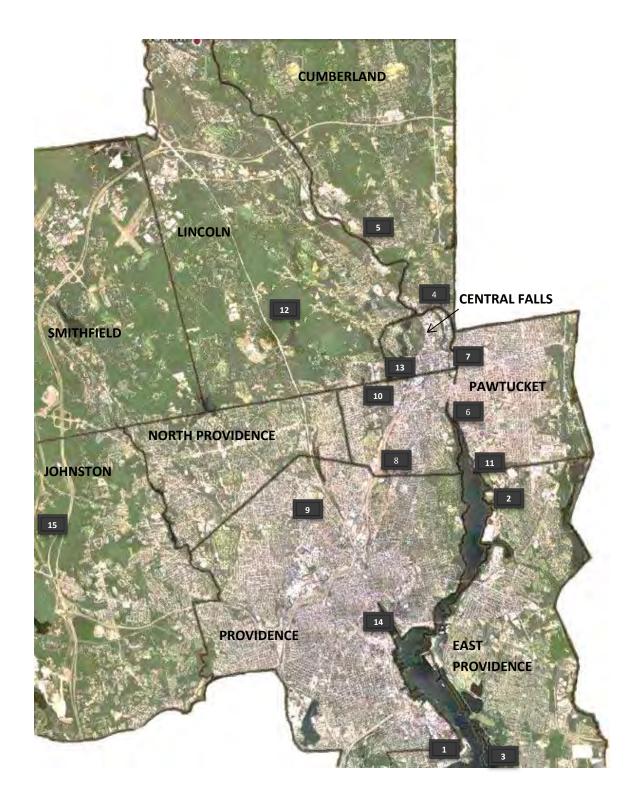
CIP NBC FY 2017 BUDGET 97

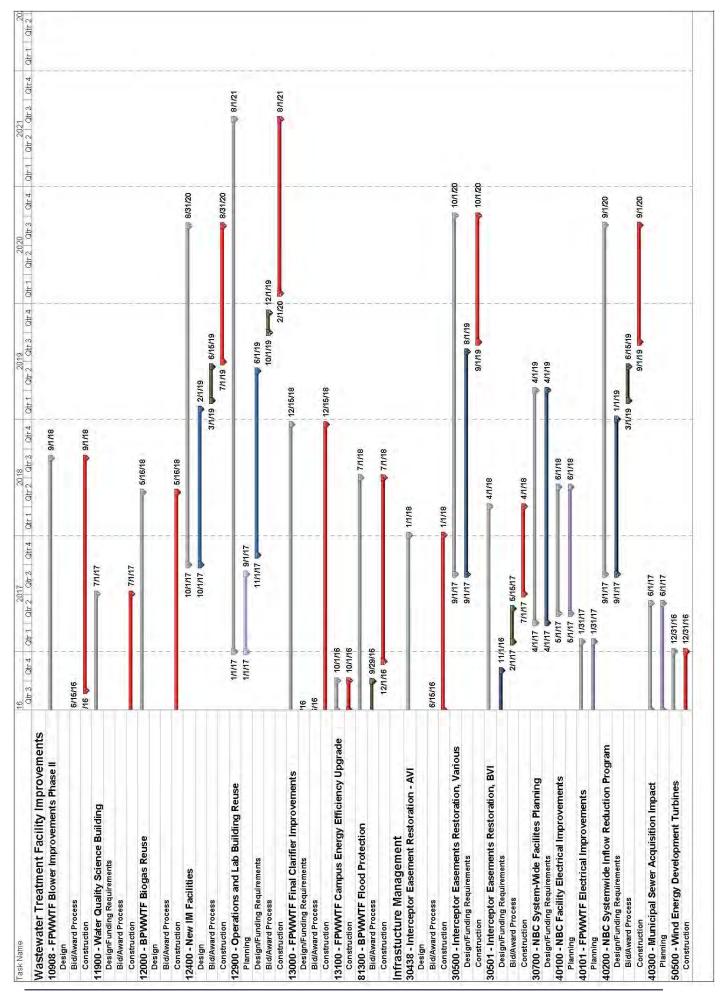
Capital Improvement Program Project Locations

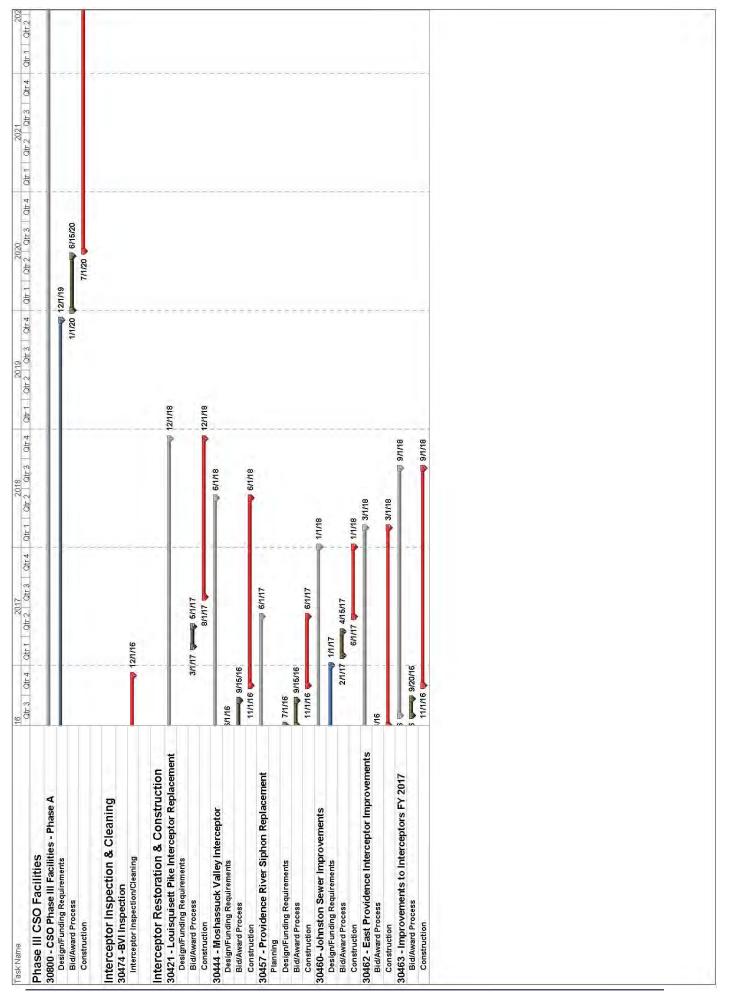
The capital projects identified in this year's CIP are shown on the map on the following page. The map highlights 15 project locations as identified below. Some projects are System-Wide and noted as SW.

Legend Key	Project Number	Project Name		
	Wastewater Treatment Facility Improvements			
1	10908	FPWWTF Blower Improvements Phase II		
1	11900	Regulatory Compliance Building		
2	12000	BPWWTF - Biogas Reuse		
1	12400	New IM Facilities		
1	12900	FPWWTF- Operations and Lab Building Reuse		
1	13000	FPWWTF Final Clarifier Improvements		
1	13100	NBC Energy Efficiency Upgrades		
2	81300	BPWWTF Flood Protection		
	Infrastructure Man	agement		
3	1100000	Site Specific Study		
3	1140100	River Model Development		
3	1140200	Receiving Water Compliance Study		
1, 2	1140300	Green House Gas Study		
1, 2	1140400	Evaluate NBC Facilities for Climate Resiliency		
SW	1140500	NBC Energy Sustainability		
4	30438	NBC Interceptor Easement Restoration - AVI		
SW	30500	NBC Interceptor Easements Restoration - Various Locations		
5.00	30501	NBC Interceptor Easements Restoration - BVI		
SW	30700	NBC System-wide Facilities Planning		
1, 2	40100	NBC Facility Electrical Improvements		
1	40101	FPWWTF Facility Electrical Improvements		
SW	40200	NBC System-Wide Inflow Reduction		
SW	40300	Municipal Lateral Sewer Acquisition Impact		
	Phase III CSO Facilit	ies		
6	30800	CSO Phase III A Facilities		
7	30810	CSO Phase III B Facilities		
8	30820	CSO Phase III C Facilities		
9	30830	CSO Phase III D Facilities		
	Interceptor Inspect	ion & Cleaning and Restoration and Construction		
10	30473	Lockbridge and Valley Street Inspection & Cleaning		
11	30474	BVI Inspection and Cleaning		
12	30421	Louisquisset Pike Interceptor		
13	30444	Moshassuck Valley Interceptor		
14	30457	Providence River Siphon		
15	30460	Johnson Sewer Improvements		
SW	30462	NBC East Providence Interceptor Improvements		
SW	30463	Improvements to Interceptors FY 2017		

CAPITAL IMPROVEMENT PROGRAM PROJECT LOCATIONS







FPWWTF Blower Improvements Phase II

Project Manager: Thomas Brueckner, P.E. Contractor(s): CDM Smith

Location: Field's Point WWTF (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	\$655
Construction	April-16	September-18	29 Months	5,395
Total Proiect	February-15	September-18	44 Months	\$6.050



This project is to replace the existing blowers at Field's Point with new blowers to provide a reliable source of air for the aeration treatment process.

Photo: Aeration tanks at Field's Point

CIP Window	Pre F۱	17	FY 17	FY 18	FY 19	FY 20	F	Y 21	F	Y 22	Post	FY 22	Т	Total	
Summary	\$	6	\$ 1,187	\$ 3,112	\$ 1,090	\$ -	\$	-	\$	-	\$	-	\$	5,395	

Projected Expenditures - Planning

Cost Category	Pre	FY 17	F	/ 17	F	Y 18	F١	/ 19	F	Y 20	1	FY 21	F	Y 22	Post	FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
A/E Professional		-		-		-		-		-		-		-		-	-
Other		-		-		-		-		-		-		-		-	-
Total	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$

Projected Expenditures - Design

Cost Category	Pre	FY 17	FY 17	F	Y 18	F	Y 19	FY 20	FY 21	-	FY 22	Post	t FY 22	Total
Administrative	\$	60	\$	\$	-	\$	-	\$ -	\$ -	\$	-	\$	-	\$ 60
Land		-	-		-		-	-	-		-		-	-
A/E Professional		580	-		-		-	-	-		-		-	580
Other		15	-		-		-	-	-		-		-	15
Total	\$	655	\$	\$	-	\$	-	\$ -	\$ -	\$	-	\$	-	\$ 655

Projected Expenditures - Construction

Cost Category	Pre	FY 17	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Post	FY 22	Total
Administrative	\$	6	\$ 42	\$ 58	\$ 12	\$ -	\$ -	\$ -	\$	-	\$ 118
A/E Professional		-	45	54	8	-	-	-		-	107
Construction		-	1,100	3,000	600	-	-	-		-	4,700
Contingency		-	-	-	470	-	-	-		-	470
Other		-	-	-	-	-	-	-		-	-
Total	\$	6	\$ 1,187	\$ 3,112	\$ 1,090	\$ -	\$ -	\$	\$	-	\$ 5,395

Water Quality Science Building

Project Manager: Rich Bernier, P.E.
Contractor(s): Calson Construction Corp.

Location: Service Road (Providence, RI)

Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	September-08	June-09	9 Months	\$415
Design	September-10	June-14	46 Months	3,000
Construction	June-13	July-17	49 Months	21,264
Total Proiect	September-08	July-17	108 Months	\$24.679



Photo: Water Quality Science Building

This project is to construct the new Water Quality Science Building which will house the EMDA and Laboratory sections of the NBC. This building will unify NBC's efforts for environmental sampling and related analysis by including the necessary laboratory equipment and monitoring capability required by the RIPDES permit and EPA.

CIP Window	Pre FY 17	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Post FY 22	Total
Summary	\$ 19,752	\$ 1,419	\$ 93	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 21,264

Projected Expenditures - Planning

Cost Category	Pre F	Y 17	FY 17	F	Y 18	F	Y 19	F	Y 20	FY 21	F	Y 22	Post	FY 22	Total
Administrative	\$	206	\$	\$	-	\$,	\$	-	\$ -	\$	-	\$	-	\$ 206
A/E Professional		209	-		-		-		-	-		-		-	209
Other		-	-		-		-		-	-		-		-	-
Total	\$	415	\$ -	\$	-	\$	-	\$	-	\$ -	\$	-	\$	-	\$ 415

Projected Expenditures - Design

Cost Category	Pre FY	17	F١	/ 17	F	Y 18	F	Y 19	ı	Y 20	FY 21	FY 22	Post	FY 22	Total
Administrative	\$	230	\$	-	\$	-	\$		\$	-	\$ -	\$ -	\$	-	\$ 230
Land	1,	247		-		-		-		-	-	-		-	1,247
A/E Professional	1,	464		-		-		-		-	-	-		-	1,464
Other		59		-		-		-		-	-	-		-	59
Total	\$ 3,	000	\$	-	\$	•	\$		\$	-	\$ -	\$ -	\$	-	\$ 3,000

Projected Expenditures - Construction

Cost Category	Pr	e FY 17	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Po	st FY 22	Total
Administrative	\$	717	\$ 53	\$ 3	\$	\$	\$ -	\$ -	\$		\$ 773
A/E Professional		1,531	145	-	-	-	-	-		-	1,676
Construction		17,182	1,221	90	-	-	-	-		-	18,493
Contingency		-	-	-	-	-	-	-		-	-
Other		322	-	-	-	-	-	-		-	322
Total	\$	19,752	\$ 1,419	\$ 93	\$ -	\$	\$ -	\$ -	\$		\$ 21,264

BPWWTF Biogas Reuse

Project Manager: Rich Bernier, P.E. Contractor(s): Daniel O'Connell's Sons Brown & Caldwell 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	June-07	December-09	31 Months	\$47
Design	April-10	June-14	52 Months	473
Construction	May-14	May-18	49 Months	8,272
Total Project	lung_07	May-19	122 Months	\$9.702



Photo: Bucklin Point Boiler Stacks

This project is to install a biogas cogeneration, or combined heat and power system, to burn the biogas generated within the biosolids anaerobic digesters at the Bucklin Point WWTF as a fuel to generate electricity and heat for reuse in the treatment facility.

 CIP Window
 Pre FY 17
 FY 17
 FY 18
 FY 19
 FY 20
 FY 21
 FY 22
 Post FY 22
 Total

 Summary
 \$ 1,698
 \$ 6,373
 \$ 201
 \$ \$ \$ \$ \$ \$ 8,272

Projected Expenditures - Planning

Cost Category	Pre	FY 17	FY 17	F	Y 18	F	Y 19	FY 20	FY 21	F	Y 22	Post	FY 22	Total
Administrative	\$	22	\$ -	\$	-	\$	-	\$ -	\$ -	\$	-	\$	-	\$ 22
A/E Professional		25	-		-		-	-	-		-		-	25
Other		-	-		-		-	-	-		-		-	-
Total	\$	47	\$ -	\$	-	\$	-	\$ -	\$ -	\$	-	\$	-	\$ 47

Projected Expenditures - Design

Cost Category	Pre FY 17	FY 17	F	Y 18	F'	Y 19	F	Y 20	FY 21	F	Y 22	Post	FY 22	•	Total
Administrative	\$ 123	\$ -	\$	-	\$	-	\$	-	\$ -	\$	-	\$	-	\$	123
Land	-	-		-		-		-	-		-		-		-
A/E Professional	323	-		-		-		-	-		-		-		323
Other	27	-		-		-		-	-		-		-		27
Total	\$ 473	\$ -	\$	-	\$	-	\$	-	\$ -	\$	-	\$	-	\$	473

Projected Expenditures - Construction

Cost Category Pre FY 17 FY 17 FY 18 FY 19 FY 20 FY 21 FY 22 Post FY 22 Administrative \$ 171 \$ 120 \$ 41 \$ -	8,272
Administrative \$ 171 \$ 120 \$ 41 \$ - \$ - \$ - \$ - \$ \$ - \$ - \$ - \$ \$ - \$ - \$ - \$ - \$ A/E Professional Construction 1,330 5,485 155	50
Administrative \$ 171 \$ 120 \$ 41 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	600
Administrative \$ 171 \$ 120 \$ 41 \$ - \$ - \$ - \$ - \$	6,970
	320
Cost Category Pre FY 17 FY 17 FY 18 FY 19 FY 20 FY 21 FY 22 Post FY 22	332
	Total

New 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	February-19	48 Months	\$555
Construction	March-19	August-20	18 Months	6,052
Total Project	March-15	August-20	67 Months	\$6.607



This project is to design and construct 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 area and storage yard.

Photo: Proposed Site for New IM Building

CIP Window	Pre	FY 17	F	Y 17	FY 18	FY 19	FY 20	FY 21	- 1	FY 22	Post	FY 22	Total
Summary	\$	-	\$	-	\$ 201	\$ 376	\$ 5,191	\$ 839	\$	-	\$	-	\$ 6,607

Projected Expenditures - Planning

Cost Category	Pre	FY 17	F'	Y 17	F١	/ 18	FY	19	F'	Y 20	F	Y 21	F۱	Y 22	Post	FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
A/E Professional		-		-		-		-		-		-		-		-	-
Other		-		-		-		-		-		-		-		-	-
Total	\$	-	\$	-	\$	-	\$	•	\$	-	\$	-	\$	-	\$	-	\$ -

Projected Expenditures - Design

Cost Category	Pre	FY 17	F	Y 17	F	Y 18	FY 19	FY 20	FY 21	FY 22	Pos	t FY 22	Total
Administrative	\$	-	\$	-	\$	17	\$ 18	\$ -	\$ -	\$ -	\$	-	\$ 35
Land		-		-		-	-	-	-	-		-	-
A/E Professional		-		-		164	336	-	-	-		-	500
Other		-		-		20	-	-	-	-		-	20
Total	\$	-	\$	-	\$	201	\$ 354	\$ -	\$ -	\$ -	\$	-	\$ 555

Projected Expenditures - Construction

Cost Category	Pre	FY 17	F	Y 17	ı	FY 18	FY 19	FY 20	FY 21	FY 22	Pos	st FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$ 12	\$ 305	\$ 35	\$ -	\$	-	\$ 352
A/E Professional		-		-		-	10	36	4	-		-	50
Construction		-		-		-	-	4,850	150	-		-	5,000
Contingency		-		-		-	-	-	600	-		-	600
Other		-		-		-	-	-	50	-		-	50
Total	\$	-	\$	-	\$	-	\$ 22	\$ 5,191	\$ 839	\$ -	\$	-	\$ 6,052

FPWWTF Operations and Laboratory Building Reuse

Project Manager: Thomas Brueckner, P.E. Contractor(s): N/A

Location: Field's Point WWTF (Providence, RI)

Project Priority: D

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)	
Planning	January-17	September-17	8 Months	\$146	
Design	November-17	June-19	19 Months	885	
Construction	October-19	August-21	22 Months	5,728	
Total Project	lanuary-17	Διισιιst-21	56 Months	\$6.759	-



Photo: Existing Laboratory Building

The existing Laboratory Building and vacated space in the old FPWWTF Operations Building are to be evaluated for the best use of space and to design modifications to those buildings to accommodate the intended use. In addition, a new maintenance building is to be designed and constructed.

CIP Window	Pre FY 1	L7	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Pos	t FY 22	Total
Summary	\$ -		\$ 2!	310	\$ 696	\$ 833	\$ 3,621	\$ 1,274	\$	-	\$ 6,759

Projected Expenditures - Planning

Cost Category	Pre	e FY 17	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Pos	st FY 22	Total
Administrative	\$	-	\$ 25	\$ 16	\$ -	\$ -	\$ -	\$ -	\$	-	\$ 41
A/E Professional		-	-	30	75	-	-	-		-	105
Other		-	-	-	-	-	-	-		-	-
Total	\$	-	\$ 25	\$ 46	\$ 75	\$ -	\$ -	\$ -	\$	-	\$ 146

Projected Expenditures - Design

Cost Category	Pre	FY 17	F	Y 17	F	Y 18	FY 19	FY 20	FY 21	FY 22	Pos	st FY 22	Total
Administrative	\$	-	\$	-	\$	24	\$ 36	\$ -	\$ -	\$ -	\$	-	\$ 60
Land		-		-		-	-	-	-	-		-	-
A/E Professional		-		-		240	510	-	-	-		-	750
Other		-		-		-	75	-	-	-		-	75
Total	\$	-	\$	-	\$	264	\$ 621	\$ -	\$ -	\$ -	\$	-	\$ 885

Projected Expenditures - Construction

Cost Category	Pre	FY 17	F	Y 17	F	Y 18	F	Y 19	FY 20	FY 21	FY 22	Pos	t FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$ 44	\$ 72	\$ 18	\$	-	\$ 134
A/E Professional		-		-		-		-	14	24	6		-	44
Construction		-		-		-		-	750	3,500	750		-	5,000
Contingency		-		-		-		-	-	-	500		-	500
Other		-		-		-		-	25	25	-		-	50
Total	\$	-	\$	-	\$	-	\$	-	\$ 833	\$ 3,621	\$ 1,274	\$	-	\$ 5,728

FPWWTF Final Clarifier Improvements

Project Manager: Rich Bernier, 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	April-15	May-16	13 Months	\$75
Construction	March-16	December-18	34 Months	2,772
Total Project	April-15	December-18	45 Months	\$2.847



This project involves replacement of the internal drive and scraper mechanisms and new launder covers on final clarifiers 1, 2 and 3 and new launder covers on final clarifiers 4-9 at the Field's Point WWTF. There will also be a new Grit Pad, RSPS #2 HVAC unit replacement and installation of rip rap on the slope along New York Ave.

Photo: Final Clarifier at FPWWTF

CIP Window	Pre F	Y 17	- 1	FY 17	FY 18	FY 1	19	F	Y 20	F١	/ 21	F.	Y 22	Post	FY 22	Total
Summary	\$	28	\$	1,458	\$ 1,274	\$	12	\$	-	\$	-	\$	-	\$	-	\$ 2,772

Projected Expenditures - Planning

Cost Category	Pre	FY 17	F۱	/ 17	F١	/ 18	F۱	/ 19	F	Y 20	F	Y 21	F	Y 22	Post	FY 22	1	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
A/E Professional		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-
Total	\$	-	\$	•	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-

Projected Expenditures - Design

Cost Category	Pre	FY 17	FY 17	FY 18	FY 19	FY 20	FY 21	F	Y 22	Post	t FY 22	Total
Administrative	\$	50	\$ -	\$ -	\$ -	\$ -	\$ -	\$	-	\$	-	\$ 50
Land		-	-	-	-	-	-		-		-	-
A/E Professional		15	-	-	-	-	-		-		-	15
Other		10	-	-	-	-	-		-		-	10
Total	\$	75	\$ -	\$ -	\$ -	\$ -	\$ -	\$	-	\$	-	\$ 75

Projected Expenditures - Construction

Cost Category	Pre FY 17		FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Pos	t FY 22	Total
Administrative	\$ 28	3 \$	48	\$ 20	\$ -	\$ -	\$ -	\$ -	\$	-	\$ 96
A/E Professional	-		40	-	-	-	-	-		-	40
Construction	-		1,340	1,008	12	-	-	-		-	2,360
Contingency	-		-	236	-	-	-	-		-	236
Other	-		30	10	-	-	-	-		-	40
Total	\$ 28	\$ \$	1,458	\$ 1,274	\$ 12	\$ -	\$ -	\$ -	\$	-	\$ 2,772

NBC Energy Efficiency Upgrades

Project Manager: James McCaughey, P.E. Contractor(s): N/A

Location: Field's Point WWTF Campus (Providence, RI)

Project Priority: D

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	July-16	October-16	3 Months	\$1,010
Total Project	July-16	October-16	3 Months	\$1,010



Photo: LED Lighting

The NBC Energy Efficiency Upgrades Program, will install new LED lighting systems that use less energy, last longer and require less maintenance.

CIP Window	Pre F	Y 17	F	Y 17	F	Y 18	F	Y 19	F	Y 20	F١	′ 21	F'	Y 22	Post	FY 22	Total
Summary	\$	-	\$	1,010	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ 1,010

Projected Expenditures - Planning

Cost Category	Pre	FY 17	F	Y 17	F	Y 18	F	Y 19	FY 20	FY 21	F	Y 22	Post	t FY 22	-	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$ -	\$ -	\$	-	\$	-	\$	-
A/E Professional		-		-		-		-	-	-		-		-		-
Other		-		-		-		-	-	-		-		-		-
Total	\$	-	\$	-	\$	-	\$	-	\$ -	\$ -	\$	-	\$	-	\$	-

Projected Expenditures - Design

Cost Category	Pre	FY 17	F'	Y 17	F۱	/ 18	FY	' 19	F	Y 20	F	Y 21	F	Y 22	Post	FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
Land		-		-		-		-		-		-		-		-	-
A/E Professional		-		-		-		-		-		-		-		-	-
Other		-		-		-		-		-		-		-		-	-
Total	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -

Projected Expenditures - Construction

	_			=1/40	=1.40	=14.00		=>/ 00			
Cost Category	Pre	FY 17	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Post	FY 22	Total
Administrative	\$	-	\$ 10	\$ -	\$ -	\$ -	\$ -	\$ -	\$	-	\$ 10
A/E Professional		-	-	-	-	-	-	-		-	-
Construction		-	1,000	-	-	-	-	-		-	1,000
Contingency		-	-	-	-	-	-	-		-	-
Other		-	-	-	-	-	-	-		-	-
Total	\$	-	\$ 1,010	\$ -	\$ -	\$ -	\$ -	\$ -	\$	-	\$ 1,010

BPWWTF Flood Protection

Project Manager: Rich Bernier, P.E. Contractor(s): D'Ambra Construction 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	N/A	N/A	N/A	N/A
Construction	April-16	July-18	27 Months	\$1,280
Total Project	April-16	July-18	27 Months	\$1.280



This project consists of raising the walls in the Dry Weather PS channel, installation of a sluice gate in the Wet Weather PS channel and installation of a drain manhole with a sluice gate to protect the Bucklin Point WWTF from flooding the Seekonk River.

Photo: Bucklin Point WWTF Outfall

CIP Window	Pre FY	17	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Post FY 22	Total
Summary	Ś	83	\$ 1.146	S 51	\$ -	S -	\$ -	\$ -	\$ -	\$ 1,280

Projected Expenditures - Planning

Cost Category	Pre	FY 17	F	Y 17	F	Y 18	F	Y 19	1	FY 20	FY 21	F	Y 22	Post	t FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -	\$	-	\$	-	\$ -
A/E Professional		-		-		-		-		-	-		-		-	-
Other		-		-		-		-		-	-		-		-	-
Total	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -	\$	-	\$	-	\$ -

Projected Expenditures - Design

•		_															
Cost Category	Pre	FY 17	F	Y 17	F	Y 18	F١	/ 19	F	Y 20	F	Y 21	F	Y 22	Post	FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
Land		-		-		-		-		-		-		-		-	-
A/E Professional		-		-		-		-		-		-		-		-	-
Other		-		-		-		-		-		-		-		-	-
Total	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -

Projected Expenditures - Construction

Cost Category	Pre	FY 17	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Pos	t FY 22	Total
Administrative	\$	31	\$ 30	\$ 1	\$ -	\$ -	\$ -	\$ -	\$	-	\$ 62
A/E Professional		-	-	-	-	-	-	-		-	-
Construction		50	900	50	-	-	-	-		-	1,000
Contingency		-	120	-	-	-	-	-		-	120
Other		2	96	-	-	-	-	-		-	98
Total	\$	83	\$ 1,146	\$ 51	\$ -	\$ -	\$ -	\$ -	\$	-	\$ 1,280

Site Specific Study

Project Manager: John Motta Contractor(s): N/A 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	November-01	June-18	203 Months	\$457	
Construction	N/A	N/A	N/A	N/A	
Total Project	November-01	June-18	203 Months	\$457	



Photo: NBC Staff Collecting Samples

The Site Specific Study required by NBC's RIPDES permit was completed in FY 2003 and final results were submitted to RIDEM in FY 2004. This study characterized the level of dissolved and total metals in the receiving waters at both Field's Point and Bucklin Point. The data obtained from this study was used for project 1140100, as well as by NBC and RIDEM in the joint development of new discharge permits and consent agreements for both plants. RIDEM is currently developing new RIPDES permits for each WWTF. As a result, new studies may be required as part of the re-permitting process.

CIP Window	Pre	FY 17	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Pos	t FY 22	1	otal	
Summary	\$	211	\$ -	\$ 245	\$ -	\$ -	\$ -	\$ -	\$	-	\$	457	

Projected Expenditures - Planning

Cost Category	Pre	FY 17	F	Y 17	F١	/ 18	F۱	Y 19	F	Y 20	F	Y 21	F	Y 22	Post	FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
A/E Professional		-		-		-		-		-		-		-		-	-
Other		-		-		-		-		-		-		-		-	-
Total	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -

Projected Expenditures - Design

Cost Category	Pre FY	17	FY 17	7	F	Y 18	FY 19	FY 20	FY 21	FY 22	Post	FY 22	Total
Administrative	\$	16	\$	-	\$	234	\$ -	\$ -	\$ -	\$ -	\$	-	\$ 250
Land		-		-		-	-	-	-	-		-	-
A/E Professional		163		-		6	-	-	-	-		-	169
Other		33		-		5	-	-	-	-		-	38
Total	\$	211	\$	-	\$	245	\$ -	\$ -	\$ -	\$ -	\$	-	\$ 457

Projected Expenditures - Construction

Cost Category	Pre	FY 17	F	Y 17	F	Y 18	F'	Y 19	F	Y 20	F	Y 21	F	Y 22	Post	FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
A/E Professional		-		-		-		-		-		-		-		-	-
Construction		-		-		-		-		-		-		-		-	-
Contingency		-		-		-		-		-		-		-		-	-
Other		-		-		-		-		-		-		-		-	-
Total	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -

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	July-18	162 Months	\$525
Construction	N/A	N/A	N/A	N/A
Total Project	March-05	luly_18	162 Months	\$525

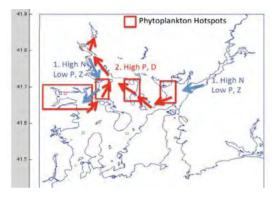


Photo: Map of phytoplankton flow dynamics seen in the ROMS biological model.

NBC has partnered with the University of Rhode Island (URI) Graduate School of Oceanography (GSO) and Kincaid Consulting to develop the Regional Ocean Modeling System (ROMS) for the Providence and Seekonk Rivers and Narragansett Bay. The Modeling System tracks the circulation and transport of nutrients in the Bay and determines how changing nitrogen loads effect the biology of the Bay, which therefore effect water quality. Future work includes improving the physical and biological models based on initial stakeholder feedback, as well as external review of the model to further validate the model progress.

CIP Window	Pre	FY 17	FY 17	FY 18	FY 19	FY 20	F	Y 21	FY 22	Po	st FY 22	Total
Summary	\$	354	\$ 72	\$ 50	\$ 49	\$ -	\$	-	\$ -	\$	-	\$ 525

Projected Expenditures - Planning

Cost Category	Pre	FY 17	F	Y 17	F	Y 18	F	Y 19	FY 20	FY 21	F	Y 22	Pos	t FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$ -	\$ -	\$	-	\$	-	\$
A/E Professional		-		-		-		-	-	-		-		-	-
Other		-		-		-		-	-	-		-		-	-
Total	\$	-	\$	-	\$	-	\$	-	\$ -	\$ -	\$	-	\$	-	\$

Projected Expenditures - Design

Cost Category	Pre F	Y 17	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Pos	t FY 22	Total
Administrative	\$	56	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$	-	\$ 56
Land		-	-	-	-	-	-	-		-	-
A/E Professional		260	22	-	-	-	-	-		-	282
Other		38	50	50	49	-	-	-		-	187
Total	\$	354	\$ 72	\$ 50	\$ 49	\$ -	\$ -	\$ -	\$	-	\$ 525

Projected Expenditures - Construction

Cost Category	Pre	FY 17	F	Y 17	F	Y 18	F'	Y 19	F	Y 20	F	Y 21	F	FY 22	Pos	t FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
A/E Professional		-		-		-		-		-		-		-		-	-
Construction		-		-		-		-		-		-		-		-	-
Contingency		-		-		-		-		-		-		-		-	-
Other		-		-		-		-		-		-		-		-	-
Total	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -

Upper Bay Dissolved Oxygen Evaluation

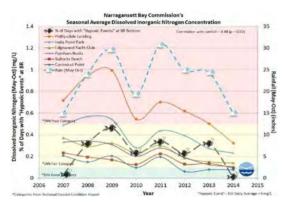
Project Manager: Thomas Uva

Location: NBC Receiving Waters
Contractor(s): N/A

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	July-17	June-18	11 Months	\$300	
Construction	N/A	N/A	N/A	N/A	
Total Project	July-17	lune-18	11 Months	\$300	-



Project 1140200 is to evaluate the effect of nitrogen reductions on dissolved oxygen levels in upper Narragansett Bay. The project involves the collection of data and the development of a comprehensive report that will assist NBC with information relative to potential permit requirements. This project also entails the engagement of consultants and legal counsel related to permit requirements that would mandate NBC to make additional capital investments.

Photo: Dissolved inorganic nitrogen concentration in the upper bay in relation to amount of low dissolved oxygen events at Bullock's Reach.

CIP Window	Pre l	FY 17	FY 17	FY 18	FY 19	F	Y 20	F	Y 21	FY 22	Pos	t FY 22	7	Γotal
Summary	\$	-	\$ 150	\$ 150	\$ -	\$	-	\$		\$ -	\$	-	\$	300

Projected Expenditures - Planning

Cost Category	Pre	FY 17	F	Y 17	F	Y 18	F	Y 19	FY 20	FY 21	F	Y 22	Post	FY 22	Т	otal
Administrative	\$	-	\$	-	\$	-	\$	-	\$ -	\$ -	\$	-	\$	-		-
A/E Professional		-		-		-		-	-	-		-		-		-
Other		-		-		-		-	-	-		-		-		-
Total	\$	-	\$	-	\$	-	\$	-	\$ -	\$ -	\$	-	\$	-	\$	-

Projected Expenditures - Design

Cost Category	Pre	FY 17	- 1	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Pos	t FY 22	Total
Administrative	\$	-	\$	75	\$ 75	\$ -	\$ -	\$ -	\$ -	\$	-	\$ 150
Land		-		-	-	-	-	-	-		-	-
A/E Professional		-		75	75	-	-	-	-		-	150
Other		-		-	-	-	-	-	-		-	-
Total	\$	-	\$	150	\$ 150	\$ -	\$ -	\$ -	\$ -	\$	-	\$ 300

Projected Expenditures - Construction

Cost Category	Pre	FY 17	F'	Y 17	F١	/ 18	F	Y 19	F	Y 20	F'	Y 21	F	Y 22	Post	FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
A/E Professional		-		-		-		-		-		-		-		-	-
Construction		-		-		-		-		-		-		-		-	-
Contingency		-		-		-		-		-		-		-		-	-
Other		-		-		-		-		-		-		-		-	-
Total	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -

Greenhouse Gas Study

Project Manager: James McCaughey, P.E. Contractor(s): University of Rhode Island

Location: NBC Service Area Project Priority: D

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	May-17	32 Months	\$405
Construction	N/A	N/A	N/A	N/A
Total Project	October-14	May-17	32 Months	\$405



Photo: Measuring Greenhouse Gases at Field's Point

This project is to quantify NBC's overall carbon footprint by measuring green house gas emissions from wastewater collection and treatment operations. NBC's Green House Gas Study will position NBC favorably if NBC is subject to additional regulatory requirements related to green house gas emissions.

CIP Window	Pre F	Y 17	FY 17	FY 18	F	Y 19	F	Y 20	F	Y 21	FY 22	Pos	t FY 22	Total
Summary	\$	73	\$ 332	\$	\$	-	\$	-	\$		\$ -	\$	-	\$ 405

Projected Expenditures - Planning

Cost Category	Pre	FY 17	F	Y 17	F	Y 18	F	Y 19	F	Y 20	- 1	FY 21	F	Y 22	Post	FY 22	T	otal
Administrative	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-		-
A/E Professional		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-
Total	\$	-	\$	-	\$		\$	-	\$	-	\$	-	\$	-	\$	-	\$	

Projected Expenditures - Design

Cost Category	Pre FY 17	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Post FY 22	Total
Administrative	\$ 33	\$ 72	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 105
Land	-	-	-	-	-	-	-	-	-
A/E Professional	40	81	-	-	-	-	-	-	121
Other	-	179	-	-	-	-	-	-	179
Total	\$ 73	\$ 332	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 405

Projected Expenditures - Construction

Cost Category	Pre	FY 17	F	Y 17	F	Y 18	F'	Y 19	F	Y 20	F	Y 21	F	Y 22	Pos	t FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
A/E Professional		-		-		-		-		-		-		-		-	-
Construction		-		-		-		-		-		-		-		-	-
Contingency		-		-		-		-		-		-		-		-	-
Other		-		-		-		-		-		-		-		-	-
Total	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -

1140400

Evaluate NBC Facilities for Climate Resiliency

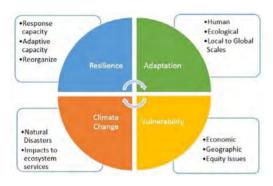
Project Manager: Thomas Brueckner, P.E.

Locaiton: NBC Service Area
Contractor(s): N/A

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-17	January-18	12 Months	\$153
Construction	N/A	N/A	N/A	N/A
Total Project	lanuary-17	lanuary-18	12 Months	\$153



This project is to determine the effect of climate change and flooding potential at NBC facilities and possible improvements that may be required to comply with new regulatory requirements to mitigate potential damage from flooding.

Photo: Evaluate NBC Facilities for Climate Resiliency

CIP Window	Pre F	Y 17	FY 17	FY 18	- 1	Y 19	F'	Y 20	F	Y 21	F	FY 22	Pos	t FY 22	Total
Summary	\$	3	\$ 56	\$ 94	\$	-	\$		\$	-	\$	-	\$	-	\$ 153

Projected Expenditures - Planning

Cost Category	Pre	FY 17	F	Y 17	F	Y 18	F	Y 19	1	FY 20	FY 21	F	Y 22	Post	t FY 22	Т	otal
Administrative	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -	\$	-	\$	-		-
A/E Professional		-		-		-		-		-	-		-		-		-
Other		-		-		-		-		-	-		-		-		-
Total	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -	\$	-	\$	-	\$	-

Projected Expenditures - Design

Cost Category	Pre	FY 17	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Pos	st FY 22	Total
Administrative	\$	3	\$ 16	\$ 14	\$ -	\$	\$ -	\$ -	\$	-	\$ 33
Land		-	-	-	-	-	-	-		-	-
A/E Professional		-	40	60	-	-	-	-		-	100
Other		-	-	20	-	-	-	-		-	20
Total	\$	3	\$ 56	\$ 94	\$ -	\$	\$ -	\$ -	\$	-	\$ 153

Projected Expenditures - Construction

Cost Category	Pre	FY 17	F	Y 17	F'	Y 18	F	Y 19	F	Y 20	F'	Y 21	F	Y 22	Post	FY 22	Γotal
Administrative	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
A/E Professional		-		-		-		-		-		-		-		-	-
Construction		-		-		-		-		-		-		-		-	-
Contingency		-		-		-		-		-		-		-		-	-
Other		-		-		-		-		-		-		-		-	-
Total	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$		\$ -

1140500

NBC Energy Sustainability

Project Manager: James McCaughey, P.E. Contractor(s): N/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-16	June-18	29 Months	\$70
Construction	N/A	N/A	N/A	N/A
Total Project	January-16	June-18	29 Months	\$70



Photo: Methods of generating energy

NBC's Energy Sustainability Program is to identify, measure, and implement ways of obtaining and using energy such that NBC's energy needs of today are met while assuring NBC's future energy needs. NBC will maximize its use of conservation, efficiency, and sustainable renewable energy resources in an economically viable and sound manner.

Location: NBC Service Area

Project Priority: D

 CIP Window
 Pre FY 17
 FY 18
 FY 19
 FY 20
 FY 21
 FY 22
 Post FY 22
 Total

 Summary
 \$ 22
 \$ 32
 \$ 16
 \$ \$ \$ \$ \$ \$ 70

Projected Expenditures - Planning

Cost Category	Pre	FY 17	F	Y 17	F۱	/ 18	F'	Y 19	F	Y 20	F	Y 21	F	Y 22	Post	FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
A/E Professional		-		-		-		-		-		-		-		-	-
Other		-		-		-		-		-		-		-		-	-
Total	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -

Projected Expenditures - Design

Cost Category	Pre	FY 17	1	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Pos	t FY 22	Total
Administrative	\$	16	\$	28	\$ 16	\$ -	\$ -	\$ -	\$ -	\$	-	\$ 60
Land		-		-	-	-	-	-	-		-	-
A/E Professional		-		-	-	-	-	-	-		-	-
Other		6		4	-	-	-	-	-		-	10
Total	\$	22	\$	32	\$ 16	\$ -	\$ -	\$ -	\$ -	\$	-	\$ 70

Projected Expenditures - Construction

Cost Category	Pre	FY 17	F	Y 17	F	Y 18	- 1	FY 19	ı	FY 20	F	Y 21	F	Y 22	Pos	t FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$		\$	-	\$	-	\$	-	\$ -
Land		-		-		-		-		-		-		-		-	-
A/E Professional		-		-		-		-		-		-		-		-	-
Construction		-		-		-		-		-		-		-		-	-
Contingency		-		-		-		-		-		-		-		-	-
Other		-		-		-		-		-		-		-		-	-
Total	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -

NBC Interceptor Easement Restoration, AVI

Project Manager: Rich Bernier, P.E.

Contractor(s): VHB

Location: Cumberland, 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	October-05	April-16	128 Months	\$803
Construction	March-16	January-18	22 Months	756
Total Project	October-05	January-18	148 Months	\$1.558



Photo: Cumberland sewer system easement locations

Much of the NBC sewer system in Cumberland is located in easements that cross private property. NBC is evaluating these easements, as to whether the access to the easements is sufficient in order to maintain the integrity of the collection system. This project is to evaluate the Abbott Valley Interceptor easements and clear the easements to provide necessary access under the construction phase of this project.

CIP Window	Pre	FY 17	FY 17	FY 18	FY 19	FY 20	FY	21	F	Y 22	Post	FY 22	Total
Summary	\$	130	\$ 621	\$ 5	\$ -	\$ -	\$	-	\$	-	\$	-	\$ 756

Projected Expenditures - Planning

Cost Category	Pre	FY 17	F١	/ 17	F١	/ 18	FY	′ 19	F	Y 20	F	Y 21	F۱	Y 22	Post	FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
A/E Professional		-		-		-		-		-		-		-		-	-
Other		-		-		-		-		-		-		-		-	-
Total	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -

Projected Expenditures - Design

Cost Category	Pre FY	17	FY	17	F	Y 18	F۱	/ 19	F	Y 20	FY 21	F	Y 22	Post	FY 22	1	Γotal
Administrative	\$	276	\$	-	\$	-	\$		\$	-	\$ -	\$	-	\$	-	\$	276
Land		84		-		-		-		-	-		-		-		84
A/E Professional		428		-		-		-		-	-		-		-		428
Other		14		-		-		-		-	-		-		-		14
Total	\$	803	\$	-	\$	-	\$	-	\$	-	\$ -	\$	-	\$	-	\$	803

Projected Expenditures - Construction

Cost Category	Pre FY 17	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Post FY 22	Total
Administrative	\$ 48	\$ 40	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 88
A/E Professional	17	26	-	-	-	-	-	-	43
Construction	-	495	5	-	-	-	-	-	500
Contingency	-	50	-	-	-	-	-	-	50
Other	65	10	-	-	-	-	-	-	75
Total	\$ 130	\$ 621	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 756

NBC Interceptor Easements Restoration, Various Locations

Project Manager: Thomas Brueckner, P.E.

Location: NBC Service Area
Contractor(s): N/A

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-17	August-19	23 Months	\$722
Construction	September-19	October-20	13 Months	632
Total Project	September-17	October-20	36 Months	\$1.354



Photo: Proposed area for the East Providence easement investigation

This project is to verify easement locations and to provide access to the easement by removing overgrowth.

CIP Window	Pre l	FY 17	F'	Y 17	FY 18	FY 19	FY 20	FY 21	FY 22	Pos	t FY 22	Total
Summary	\$	-	\$	1	\$ 275	\$ 365	\$ 480	\$ 233	\$ -	\$	-	\$ 1,354

Projected Expenditures - Planning

Cost Category	Pre	FY 17	F١	/ 17	F١	/ 18	FY	′ 19	F	Y 20	F	Y 21	F۱	Y 22	Post	FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
A/E Professional		-		-		-		-		-		-		-		-	-
Other		-		-		-		-		-		-		-		-	-
Total	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -

Projected Expenditures - Design

Cost Category	Pre	FY 17	F	Y 17	FY 18	FY 19	FY 20	FY 21	FY 22	Pos	t FY 22	Total
Administrative	\$	-	\$	1	\$ 25	\$ 63	\$ 11	\$	\$ -	\$	-	\$ 100
Land		-		-	-	50	50	-	-		-	100
A/E Professional		-		-	240	240	20	-	-		-	500
Other		-		-	10	12	-	-	-		-	22
Total	\$	-	\$	1	\$ 275	\$ 365	\$ 81	\$ -	\$ -	\$	-	\$ 722

Projected Expenditures - Construction

Cost Category	Pre	FY 17	F	Y 17	F	Y 18	FY 19	FY 20	FY 21	FY 22	Pos	t FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$ -	\$ 40	\$ 16	\$ -	\$	-	\$ 56
A/E Professional		-		-		-	-	-	-	-		-	-
Construction		-		-		-	-	349	151	-		-	500
Contingency		-		-		-	-	-	60	-		-	60
Other		-		-		-	-	10	6	-		-	16
Total	\$	-	\$	-	\$	-	\$ -	\$ 399	\$ 233	\$ -	\$	-	\$ 632

NBC Interceptor Easements Restoration, BVI

Project Manager: Thomas Brueckner, P.E. Contractor(s): VHB

Location: Cumberland & 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	July-09	November-16	89 Months	\$448
Construction	February-17	April-18	14 Months	746
Total Project	July_09	Anril-18	107 Months	\$1 194



Photo: Blackstone Valley Interceptor in Lincoln

This project is to locate manholes and easements on the Blackstone Valley Interceptor in Lincoln and Cumberland and clear the easement of vegetation to allow access to maintain the sewer.

CIP Window	Pre FY 17	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Post FY 22	Total
Summary	\$ 274	\$ 194	\$ 725	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,194

Projected Expenditures - Planning

Cost Category	Pre	FY 17	F	Y 17	F'	/ 18	F۱	Y 19	F	Y 20	FY 21	F	Y 22	Post	FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -	\$	-	\$	-	\$ -
A/E Professional		-		-		-		-		-	-		-		-	-
Other		-		-		-		-		-	-		-		-	-
Total	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -	\$	-	\$	-	\$ -

Projected Expenditures - Design

Cost Category	Pre FY 17	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Post FY 22	Total
Administrative	\$ 41	\$ 65	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 106
Land	-	50	-	-	-	-	-	-	50
A/E Professional	221	26	-	-	-	-	-	-	247
Other	12	33	-	-	-	-	-	-	45
Total	\$ 274	\$ 173	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 448

Projected Expenditures - Construction

Cost Category	Pre	FY 17	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Pos	t FY 22	Total
Administrative	\$	-	\$ 14	\$ 33	\$ -	\$ -	\$ -	\$ -	\$	-	\$ 47
A/E Professional		-	7	20	-	-	-	-		-	27
Construction		-	-	600	-	-	-	-		-	600
Contingency		-	-	72	-	-	-	-		-	72
Other		-	-	-	-	-	-	-		-	-
Total	\$	-	\$ 21	\$ 725	\$ -	\$ -	\$ -	\$ -	\$	-	\$ 746

NBC System-wide Facilities Planning

Project Manager: Thomas Brueckner, P.E.

Location: NBC Service Area
Contractor(s): N/A

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	April-17	April-19	24 Months	\$509
Construction	N/A	N/A	N/A	N/A
Total Project	April-17	April-19	24 Months	\$509



Photo: Proposed area for the East Providence capacity analysis

Project 30700 is to continue NBC's studies to determine if there is adequate capacity for the next twenty years and if there is any excess infiltration/inflow in NBC's interceptors. As the evaluations begin for each city and town, they will be given a unique project number and draw funding from project 30700.

CIP Window	Pre FY 17	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Post FY 22	Total
Summary	\$ -	\$ 51	\$ 271	\$ 188	\$ -	\$ -	\$ -	\$ -	\$ 509

Projected Expenditures - Planning

Cost Category	Pre	FY 17	F	Y 17	F	Y 18	F	Y 19	ı	FY 20	FY 21	F	Y 22	Post	t FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -	\$	-	\$	-	\$ -
A/E Professional		-		-		-		-		-	-		-		-	-
Other		-		-		-		-		-	-		-		-	-
Total	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -	\$	-	\$	-	\$ -

Projected Expenditures - Design

Cost Category	Pre	FY 17	F	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Po	st FY 22	Total
Administrative	\$	-	\$	19	\$ 65	\$ 26	\$ -	\$ -	\$ -	\$	-	\$ 109
Land		-		-	-	-	-	-	-		-	-
A/E Professional		-		32	206	162	-	-	-		-	400
Other		-		-	-	-	-	-	-		-	-
Total	\$	-	\$	51	\$ 271	\$ 188	\$ -	\$ -	\$ -	\$	-	\$ 509

Projected Expenditures - Construction

Cost Category	Pre	FY 17	F	Y 17	F	Y 18	FY 19	F	Y 20	F	Y 21	F	Y 22	Post	t FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$ -	\$	-	\$	-	\$	-	\$	-	\$ -
A/E Professional		-		-		-	-		-		-		-		-	-
Construction		-		-		-	-		-		-		-		-	-
Contingency		-		-		-	-		-		-		-		-	-
Other		-		-		-	-		-		-		-		-	-
Total	\$	-	\$	-	\$	-	\$ -	\$	-	\$	-	\$	-	\$	-	\$ -

NBC Facility Electrical Improvements

Project Manager: Thomas Brueckner, P.E. Contractor(s): N/A

Location: NBC Systemwide Facilities

Project Priority: B

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	May-17	June-18	13 Months	\$130
Design	N/A	N/A	N/A	N/A
Construction	N/A	N/A	N/A	N/A
Total Project	May-17	lune-18	13 Months	\$130



Photo: NBC Facility Electrical Improvements

This project is for improvements to electrical equipment at NBC facilities. Projects to be undertaken are power studies, arc flash studies and upgrades to electrical equipment including standby power generators.

CIP Window	Pre FY	17	FY 1	7	F	Y 18	FY 19	F	Y 20	F	Y 21	F	Y 22	Post	FY 22	Total
Summary	\$	-	\$	3	\$	127	\$ -	\$	-	\$	-	\$	-	\$	-	\$ 130

Projected Expenditures - Planning

Cost Category	Pre	e FY 17	- 1	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Pos	st FY 22	Total
Administrative	\$	-	\$	3	\$ 17	\$ -	\$	\$ -	\$ -	\$	-	\$ 20
A/E Professional		-		-	100	-	-	-	-		-	100
Other		-		-	10	-	-	-	-		-	10
Total	\$	-	\$	3	\$ 127	\$ -	\$	\$ -	\$ -	\$	-	\$ 130

Projected Expenditures - Design

Cost Category	Pre	FY 17	F	Y 17	F	/ 18	FY	19	F	Y 20	F	FY 21	F	Y 22	Post	FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
Land		-		-		-		-		-		-		-		-	-
A/E Professional		-		-		-		-		-		-		-		-	-
Other		-		-		-		-		-		-		-		-	-
Total	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -

Projected Expenditures - Construction

Cost Category	Pre	FY 17	F	Y 17	F	Y 18	F	Y 19	F	Y 20	F	Y 21	F	Y 22	Pos	t FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
A/E Professional		-		-		-		-		-		-		-		-	-
Construction		-		-		-		-		-		-		-		-	-
Contingency		-		-		-		-		-		-		-		-	-
Other		-		-		-		-		-		-		-		-	-
Total	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -

FPWWTF Facility Electrical Improvements

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	January-16	January-17	12 Months	\$125
Design	N/A	N/A	N/A	N/A
Construction	N/A	N/A	N/A	N/A
Total Project	January-16	January-17	12 Months	\$125



Photo: Field's Point Electrical Panel

This project is to evaluate the current emergency generators at the Field's Point WWTF and determine the upgrades necessary in order to maintain reliable operation in the event of a power failure.

CIP Window	Pre FY 17	FY 17	FY 18	FY 19	FY 20	F۱	Y 21	FY 22	Post	FY 22	Total
Summary	\$ 17	\$ 108	\$ -	\$ -	\$	\$	-	\$ -	\$		\$ 125

Projected Expenditures - Planning

Cost Category	Pre	FY 17	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Pos	t FY 22	Total
Administrative	\$	17	\$ 33	\$ -	\$ -	\$ -	\$ -	\$ -	\$	-	\$ 50
A/E Professional		-	75	-	-	-	-	-		-	75
Other		-	-	-	-	-	-	-		-	-
Total	\$	17	\$ 108	\$ -	\$ -	\$ -	\$ -	\$ -	\$	-	\$ 125

Projected Expenditures - Design

Cost Category	Pre	FY 17	F	Y 17	F	Y 18	F۱	Y 19	F	Y 20	F	Y 21	F	Y 22	Post	t FY 22	-	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Land		-		-		-		-		-		-		-		-		-
A/E Professional		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-
Total	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-

Projected Expenditures - Construction

Cost Category	Pre	FY 17	F	Y 17	F	Y 18	FY 19	F	Y 20	F	Y 21	F	Y 22	Post	t FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$ -	\$	-	\$	-	\$	-	\$	-	\$ -
A/E Professional		-		-		-	-		-		-		-		-	-
Construction		-		-		-	-		-		-		-		-	-
Contingency		-		-		-	-		-		-		-		-	-
Other		-		-		-	-		-		-		-		-	-
Total	\$	-	\$	-	\$	-	\$ -	\$	-	\$	-	\$	-	\$	-	\$ -

NBC System-wide Inflow Reduction Program-Design

Project Manager: Thomas Brueckner, P.E.
Contractor(s): N/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	September-17	January-19	16 Months	\$116
Construction	March-19	September-20	18 Months	244
Total Project	September-17	September-20	37 Months	\$360



Photo: Downspouts at the NBC COB

This project is to reduce inflow by disconnecting downspouts and catch basins from sanitary sewers in communities throughout the NBC district.

Location: NBC Service Area

Project Priority: C

CIP Window	Pre	FY 17	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Po	st FY 22	Total
Summary	\$	-	\$ -	\$ 44	\$ 72	\$ 183	\$ 61	\$ -	\$	-	\$ 360

Projected Expenditures - Planning

Cost Category	Pre	FY 17	F	Y 17	F	Y 18	F	Y 19	ı	FY 20	-	FY 21	F	Y 22	Pos	t FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
A/E Professional		-		-		-		-		-		-		-		-	-
Other		-		-		-		-		-		-		-		-	-
Total	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -

Projected Expenditures - Design

Cost Category	Pre	FY 17	F	Y 17	F	Y 18	FY 19	FY 20	FY 21	FY 22	Pos	t FY 22	Total
Administrative	\$	-	\$	-	\$	20	\$ 14	\$ -	\$ -	\$ -	\$	-	\$ 34
Land		-		-		-	-	-	-	-		-	-
A/E Professional		-		-		24	58	-	-	-		-	82
Other		-		-		-	-	-	-	-		-	-
Total	\$	-	\$	-	\$	44	\$ 72	\$ -	\$ -	\$ -	\$	-	\$ 116

Projected Expenditures - Construction

Cost Category	Pre	FY 17	F	Y 17	F	Y 18	F	Y 19	-	FY 20	FY 21	FY 22	Pos	t FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$	50	\$ 12	\$ -	\$	-	\$ 62
A/E Professional		-		-		-		-		33	9	-		-	42
Construction		-		-		-		-		90	30	-		-	120
Contingency		-		-		-		-		-	10	-		-	10
Other		-		-		-		-		10	-	-		-	10
Total	\$	-	\$	-	\$	-	\$	-	\$	183	\$ 61	\$ -	\$	-	\$ 244

Municipal 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	July-16	June-17	11 Months	\$296
Design	N/A	N/A	N/A	N/A
Construction	N/A	N/A	N/A	N/A
Total Project	July-16	lune-17	11 Months	\$296



Photo: Municipal Sewer Manhole Cover

Legislation has been introduced in the General Assembly that would require NBC to study the feasibility of assuming ownership of sewers currently owned and maintained by communities within NBC's district. This project is to determine the feasibility, cost, regulatory requirements and other impacts on NBC and the municipalities. Upon completion of the study, a report will be prepared recommending whether NBC should acquire local sewers in any of the municipalities. This study will not be undertaken until the legislation passes the General Assembly.

CIP Window	Pre F	Y 17	- 1	FY 17	FY 18	I	Y 19	F	Y 20	F'	Y 21	F	Y 22	Pos	t FY 22	Total
Summary	\$	-	\$	296	\$ -	\$	-	\$	-	\$	-	\$	-	\$	-	\$ 296

Projected Expenditures - Planning

Cost Category	Pre	FY 17	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Pos	t FY 22	Total
Administrative	\$	-	\$ 36	\$	\$ -	\$ -	\$ -	\$ -	\$	-	\$ 36
A/E Professional		-	250	-	-	-	-	-		-	250
Other		-	10	-	-	-	-	-		-	10
Total	\$	-	\$ 296	\$ -	\$ -	\$ -	\$ -	\$ -	\$	-	\$ 296

Projected Expenditures - Design

Cost Category	Pre	FY 17	F	Y 17	F	/ 18	FY	19	F	Y 20	F	FY 21	F	Y 22	Post	FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
Land		-		-		-		-		-		-		-		-	-
A/E Professional		-		-		-		-		-		-		-		-	-
Other		-		-		-		-		-		-		-		-	-
Total	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -

Projected Expenditures - Construction

Cost Category	Pre	FY 17	F	Y 17	F	Y 18	FY 19	F	Y 20	F	Y 21	F	Y 22	Post	t FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$ -	\$	-	\$	-	\$	-	\$	-	\$ -
A/E Professional		-		-		-	-		-		-		-		-	-
Construction		-		-		-	-		-		-		-		-	-
Contingency		-		-		-	-		-		-		-		-	-
Other		-		-		-	-		-		-		-		-	-
Total	\$	-	\$	-	\$	-	\$ -	\$	-	\$	-	\$	-	\$	-	\$ -

Wind Energy Development Turbines

Project Manager: Rich Bernier, P.E.
Contractor(s): Wind Energy Development

Location: Coventry, 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	May-16	December-16	7 Months	\$19,000
Total Project	May-16	December-16	7 Months	\$19,000



Photo: Wind Turbines

This project is to construct three 1.5 MW wind turbines that convert wind energy to electricity at a remote site. NBC's Off-Site Wind Energy Project will supply NBC facilities with clean renewable wind energy. This project will bring NBC closer to meeting a goal of obtaining all required electrical energy from locally derived renewable resources.

CIP Window	Pre FY 17	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Post FY 22	Total
Summary	\$ 12,100	\$ 6,900	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 19,000

Projected Expenditures - Planning

Cost Category	Pre	FY 17	F	Y 17	F	Y 18	F'	Y 19	1	Y 20	FY 21	F	Y 22	Post	FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -	\$	-	\$	-	\$ -
A/E Professional		-		-		-		-		-	-		-		-	-
Other		-		-		-		-		-	-		-		-	-
Total	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -	\$	-	\$	-	\$ -

Projected Expenditures - Design

Cost Category	Pre	FY 17	F	Y 17	F	Y 18	F	/ 19	F	Y 20	F	Y 21	F	Y 22	Pos	t FY 22	-	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Land		-		-		-		-		-		-		-		-		-
A/E Professional		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-
Total	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-

Projected Expenditures - Construction

Cost Category	Р	re FY 17	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Pos	t FY 22	Total
Administrative	\$	75	\$ 75	\$ -	\$ -	\$ -	\$	\$	\$	-	\$ 150
A/E Professional		-	-	-	-	-	-	-		-	-
Construction		12,000	5,800	-	-	-	-	-		-	17,800
Contingency		-	1,000	-	-	-	-	-		-	1,000
Other		25	25	-	-	-	-	-		-	50
Total	\$	12,100	\$ 6,900	\$	\$ -	\$ -	\$	\$	\$	-	\$ 19,000

CSO Phase III A Facilities

Project Manager: Thomas Brueckner, P.E. Contractor(s): MWH

Location: Pawtucket & 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	August-13	December-19	77 Months	\$43,419
Construction	January-20	June-24	54 Months	552,730
Total Project	Διισιιςτ-13	lune-24	132 Months	\$596 149



Phase III A is to design and construct 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. In addition, GSI facilities will be constructed to reduce storm water inflow by infiltration of storm water into the ground.

Photo: Proposed alignment for the Pawtucket CSO Tunnel

CIP Window	Pr	e FY 17	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Post FY 22	Total
Summary	\$	2,382	\$ 7,545	\$ 10,865	\$ 13,148	\$ 9,605	\$ 79,410	\$ 156,720	\$ 316,475	\$ 596,149

Projected Expenditures - Planning

Cost Category	Pre	FY 17	F	Y 17	F	Y 18	F	Y 19	FY 20	FY 21	F	Y 22	Pos	t FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$ -	\$ -	\$	-	\$	-	\$ -
A/E Professional		-		-		-		-	-	-		-		-	-
Other		-		-		-		-	-	-		-		-	-
Total	\$	-	\$	-	\$	-	\$	-	\$ -	\$ -	\$	-	\$	-	\$ -

Projected Expenditures - Design

*	•								_
Cost Category	Pre FY 17	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Post FY 22	Total
Administrative	\$ 422	\$ 84	\$ 72	\$ 178	\$ 280	\$ -	\$ -	\$ -	\$ 1,036
Land	-	-	-	-	4,000	-	-	-	4,000
A/E Professional	1,913	7,450	10,550	12,600	5,200	-	-	-	37,713
Other	46	11	243	370	-	-	-	-	670
Total	\$ 2,382	\$ 7,545	\$ 10,865	\$ 13,148	\$ 9,480	\$ -	\$ -	\$ -	\$ 43,419

Projected Expenditures - Construction

Cost Category	Pre	FY 17	F	Y 17	F	Y 18	F	Y 19	FY 20	FY 21	FY 22	Post FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$ 125	\$ 410	\$ 720	\$ 1,475	\$ 2,730
A/E Professional		-		-		-		-	-	-	-	-	-
Construction		-		-		-		-	-	79,000	156,000	315,000	550,000
Contingency		-		-		-		-	-	-	-	-	-
Other		-		-		-		-	-	-	-	-	-
Total	\$	-	\$	-	\$	-	\$	-	\$ 125	\$ 79,410	\$ 156,720	\$ 316,475	\$ 552,730

CSO Phase III B Facilities

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	July-24	December-26	30 Months	\$6,160
Construction	July-27	December-29	30 Months	52,150
Total Project	July-24	December-29	60 Months	\$58.310



Phase III B is to design and construct two interceptors at High and Cross Street which will be approximately 4,200 feet in length and one at Middle Street approximately 2,000 feet in length. These interceptors will convey flow to the tunnel to be built in Phase III A. In addition, GSI facilities will be constructed to reduce storm inflow to the combined sewer system, and one sewer separation project will be included as part of Phase III B.

Photo: Proposed alignment for the Pawtucket CSO Tunnel

CIP Window	Pre	FY 17	1	FY 17	FY 18	F	Y 19	F	Y 20	F	Y 21	F	Y 22	Pc	ost FY 22	Total
Summary	\$	-	\$	-	\$ -	\$	-	\$	-	\$	-	\$	-	\$	58,310	\$ 58,310

Projected Expenditures - Planning

Cost Category	Pre	FY 17	F	Y 17	F	Y 18	F	Y 19	FY 20	FY 21	F	Y 22	Pos	t FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$ -	\$ -	\$	-	\$	-	\$ -
A/E Professional		-		-		-		-	-	-		-		-	-
Other		-		-		-		-	-	-		-		-	-
Total	\$	-	\$	-	\$	-	\$	-	\$ -	\$ -	\$	-	\$	-	\$ -

Projected Expenditures - Design

Cost Category	Pre	FY 17	F	Y 17	F	Y 18	F	Y 19	FY 20	FY 21	FY 22	Pos	st FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$ -	\$ -	\$ -	\$	500	\$ 500
Land		-		-		-		-	-	-	-		1,000	1,000
A/E Professional		-		-		-		-	-	-	-		4,300	4,300
Other		-		-		-		-	-	-	-		360	360
Total	\$	-	\$	-	\$	-	\$	-	\$ -	\$ -	\$ -	\$	6,160	\$ 6,160

Projected Expenditures - Construction

Cost Category	Pre	FY 17	F	Y 17	F	Y 18	1	FY 19	FY 20	FY 21	FY 22	Po	ost FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$ -	\$ -	\$ -	\$	1,650	\$ 1,650
A/E Professional		-		-		-		-	-	-	-		-	-
Construction		-		-		-		-	-	-	-		50,500	50,500
Contingency		-		-		-		-	-	-	-		-	-
Other		-		-		-		-	-	-	-		-	-
Total	\$	-	\$	-	\$	-	\$	-	\$ -	\$ -	\$ -	\$	52,150	\$ 52,150

CSO Phase III C Facilities

Project Manager: Thomas Brueckner, 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	January-30	June-32	30 Months	\$6,010
Construction	January-32	December-34	36 Months	100,100
Total Project	January-30	December-34	61 Months	\$106.110



Phase III C is to design and construct 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 storm water inflow to the combined sewers.

Photo: Proposed alignment for the Pawtucket CSO Tunnel

CIP Window	Pre FY	17	F'	Y 17	F	Y 18	F	Y 19	F	Y 20	FY	21	F,	Y 22	Post FY 22	Total
Summary	\$	-	\$	-	\$	-	\$	-	\$		\$	-	\$	-	\$ 106,110	\$ 106,110

Projected Expenditures - Planning

Cost Category	Pre l	FY 17	F۱	17	F۱	/ 18	F١	/ 19	F	Y 20	F	Y 21	F'	Y 22	Post	FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
A/E Professional		-		-		-		-		-		-		-		-	-
Other		-		-		-		-		-		-		-		-	-
Total	\$	-	\$	-	\$	•	\$	•	\$	-	\$	-	\$	-	\$	-	\$ -

Projected Expenditures - Design

Cost Category	Pre	FY 17	F	Y 17	F	Y 18	F	Y 19	F	Y 20	F	FY 21	F	Y 22	Pos	st FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	450	\$ 450
Land		-		-		-		-		-		-		-		500	500
A/E Professional		-		-		-		-		-		-		-		4,700	4,700
Other		-		-		-		-		-		-		-		360	360
Total	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	6,010	\$ 6,010

Projected Expenditures - Construction

Cost Category	Pre	FY 17	F	Y 17	F'	Y 18	F	Y 19	F	Y 20	F	Y 21	FY 22	Post FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	\$ 1,100	\$ 1,100
A/E Professional		-		-		-		-		-		-	-	-	-
Construction		-		-		-		-		-		-	-	99,000	99,000
Contingency		-		-		-		-		-		-	-	-	-
Other		-		-		-		-		-		-	-	-	-
Total	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ •	\$ 100,100	\$ 100,100

CSO Phase III D Facilities

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	January-35	June-37	30 Months	\$6,610	
Construction	January-38	December-39	24 Months	65,900	
Total Project	January-35	December-39	61 Months	\$72.510	٠



Phase III D is to design and construct an interceptor that will store flow during a storm and later release the flow into the system as capacity allows. In addition, GSI facilities will be constructed to reduce storm water inflow to the combined sewer system.

Photo: Proposed alignment for the Pawtucket CSO Tunnel

CIP Window	Pre	FY 17	FY 17	FY 18	F	Y 19	F	Y 20	F	Y 21	F	Y 22	Po	ost FY 22	Total
Summary	\$	-	\$ -	\$ -	\$	-	\$	-	\$	-	\$	-	\$	72,510	\$ 72,510

Projected Expenditures - Planning

Cost Category	Pre	FY 17	F	Y 17	F	Y 18	F	Y 19	FY 20	FY 21	F	Y 22	Post	FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$ -	\$ -	\$	-	\$	-	\$ -
A/E Professional		-		-		-		-	-	-		-		-	-
Other		-		-		-		-	-	-		-		-	-
Total	\$	-	\$	-	\$	-	\$	-	\$ -	\$ -	\$	-	\$	-	\$ -

Projected Expenditures - Design

Cost Category	Pre	FY 17	F	Y 17	F	Y 18	F	Y 19	FY 20	FY 21	FY 22	Pos	st FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$ -	\$ -	\$ -	\$	700	\$ 700
Land		-		-		-		-	-	-	-		1,000	1,000
A/E Professional		-		-		-		-	-	-	-		4,300	4,300
Other		-		-		-		-	-	-	-		610	610
Total	\$	-	\$	-	\$	-	\$	-	\$ -	\$ -	\$ -	\$	6,610	\$ 6,610

Projected Expenditures - Construction

Cost Category	Pre	FY 17	F	Y 17	F	Y 18	F	Y 19	FY 20	F	Y 21	FY 22	Po	st FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$ -	\$	-	\$ -	\$	1,900	\$ 1,900
A/E Professional		-		-		-		-	-		-	-		-	-
Construction		-		-		-		-	-		-	-		64,000	64,000
Contingency		-		-		-		-	-		-	-		-	
Other		-		-		-		-	-		-	-		-	-
Total	\$	-	\$	-	\$	-	\$	-	\$ -	\$	-	\$ -	\$	65,900	\$ 65,900

304 M Summary

Interceptor Inspection and Cleaning

Project Manager: Meg Goulet, P.E. Contractor(s): Various

Location: NBC Service Area Project Priority: Dependent Upon Project

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
Inspection and Cleaning	July-09	Ongoing	Ongoing	\$3,844
Total Project	July-09	Ongoing	Ongoing	\$3,844



The 304 M projects continue NBC's program to clean and inspect NBC interceptors as needed. The TV inspections assist in determining pipe conditions and developing solutions to any problems which may be identified. Based on completed inspections to date, the cleaning is needed to remove accumulated grit. As new inspection and cleaning projects are identified, they will be given a unique project number and draw funding from the funds available in Project 30400M.

Photo: Interceptor grit removal

CIP Window Summary	Pre F	Y 17	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Po	st FY 22	Total
CIP WINDOW Summary	\$	344	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$	500	\$ 3,844

Projected Expenditures - Planning

Cost Category	Pre F	Y 17	FY	17	F۱	′ 18	F	Y 19	FY	′ 20	FY	21	F۱	Y 22	Post	FY 22	1	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
A/E Professional		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-
Total	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-

Projected Expenditures - Design

Cost Category	Pre	FY 17	F	Y 17	F	Y 18	F	Y 19	F	Y 20	F	Y 21	F	Y 22	Pos	t FY 22	Т	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Land		-		-		-		-		-		-		-		-		-
A/E Professional		-		-		-		-		-		-		-		-		-
Other		-		-		-		-		-		-		-		-		-
Total	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-

Projected Expenditures - Construction

Cost Category	Pre	FY 17	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Pos	t FY 22	Total
Administrative	\$	104	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$	73	\$ 615
A/E Professional		-	-	-	-	-	-	-		-	-
Construction		210	361	361	361	361	361	361		361	2,737
Contingency		-	-	-	-	-	-	-		-	-
Other		30	66	66	66	66	66	66		66	492
Total	\$	344	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$	500	\$ 3,844

30400C

Interceptor Restoration and Construction

Project Manager: Rich Bernier, P.E.

Location: NBC Service Area
Contractor(s): Various

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	N/A	N/A	N/A	N/A
Construction	July-01	Ongoing	Ongoing	\$6,000
Total Project	July-01	Ongoing	Ongoing	\$6.000



Project 30400C estimates the unknown costs of interceptor repair and construction resulting from NBC's inspection and cleaning projects and emergency situations. Interceptor repair and construction projects result from such issues as root intrusion, structural damage, odor control, aging infrastructure, inaccessible structures, pipe damage and emergency situations. As new repair and construction projects are identified, they are given a unique project number and draw funding from the funds available in Project 30400C.

Photo: Proposed portion of Lincoln Interceptor Replacement

CIP Window	Pre	FY 17	F	FY 17	ſ	FY 18	F	Y 19	1	FY 20	1	FY 21	- 1	FY 22	Pos	t FY 22		Total
Summary	Ś	-	Ś	-	Ś	-	Ś	-	Ś	1,500	Ś	1,500	Ś	1,500	Ś	1,500	Ś	6.000

Projected Expenditures - Planning

Cost Category	Pre	FY 17	F	Y 17	F	Y 18	F	Y 19	ı	FY 20	FY 21	F	Y 22	Post	t FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -	\$	-	\$	-	\$ -
A/E Professional		-		-		-		-		-	-		-		-	-
Other		-		-		-		-		-	-		-		-	-
Total	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -	\$	-	\$	-	\$ -

Projected Expenditures - Design

Cost Category	Pre	FY 17	F	Y 17	F	Y 18	F'	Y 19	FY 20	FY 21	F	Y 22	Pos	t FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$ -	\$ -	\$	-	\$	-	\$
Land		-		-		-		-	-	-		-		-	-
A/E Professional		-		-		-		-	-	-		-		-	-
Other		-		-		-		-	-	-		-		-	-
Total	\$	-	\$	-	\$	-	\$	-	\$ -	\$ -	\$	-	\$	-	\$

Projected Expenditures - Construction

Cost Category	Pre	FY 17	F	Y 17	F	Y 18	F	Y 19	FY 20	FY 21		FY 22	Post	FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$ 75	\$ 7	5	\$ 75	\$	75	\$ 300
A/E Professional		-		-		-		-	-	-		-		-	-
Construction		-		-		-		-	1,250	1,25	0	1,250		1,250	5,000
Contingency		-		-		-		-	150	15	0	150		150	600
Other		-		-		-		-	25	2	5	25		25	100
Total	\$	-	\$	-	\$	-	\$	-	\$ 1,500	\$ 1,50	0	\$ 1,500	\$	1,500	\$ 6,000

30421

Louisquisset Pike Interceptor Improvements

Project Manager: Rich Bernier, P.E. Location: Lincoln, RI Contractor(s): N/A 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	July-09	26 Months	\$178
Construction	March-17	December-18	21 Months	4,044
Total Project	May-07	December-18	141 Months	\$4.222



This project to design and construct a larger replacement interceptor in the Northern section of the Town of Lincoln to accommodate the additional flow resulting from expected development.

Photo: Lincoln Interceptor Replacement Location

CIP Window	Pre	FY 17		FY 17		FY 18		FY 19	F	Y 20	F۱	Y 21	F١	/ 22	Post	FY 22		Total
Summary	Ś	-	Ś	24	Ś	2.135	Ś	1,886	Ś	-	Ś	-	Ś	-	Ś	-	Ś	4.044

Projected Expenditures - Planning

Cost Category	Pre	FY 17	F	Y 17	F	Y 18	F'	Y 19	1	Y 20	FY 21	F	Y 22	Post	FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -	\$	-	\$	-	\$ -
A/E Professional		-		-		-		-		-	-		-		-	-
Other		-		-		-		-		-	-		-		-	-
Total	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -	\$	-	\$	-	\$ -

Projected Expenditures - Design

Cost Category	Pre	FY 17	FY 17	-	FY 18	FY 19	FY 20	FY 21	F	Y 22	Pos	t FY 22	Total
Administrative	\$	23	\$ -	\$	-	\$ -	\$ -	\$ -	\$	-	\$	-	\$ 23
Land		-	-		-	-	-	-		-		-	-
A/E Professional		155	-		-	-	-	-		-		-	155
Other		-	-		-	-	-	-		-		-	-
Total	\$	178	\$ -	\$	-	\$ -	\$ -	\$ -	\$	-	\$	-	\$ 178

Projected Expenditures - Construction

Cost Category	Pre	FY 17	FY	17	FY 18	FY 19	FY 20	FY 21	FY 22	Pos	st FY 22	Total
Administrative	\$	-	\$	15	\$ 79	\$ 48	\$ -	\$ -	\$ -	\$	-	\$ 141
Land		-		-	-	-	-	-	-		-	-
A/E Professional		-		9	26	18	-	-	-		-	53
Construction		-		-	2,030	1,470	-	-	-		-	3,500
Contingency		-		-	-	350	-	-	-		-	350
Other		-		-	-	-	-	-	-		-	-
Total	\$	-	\$	24	\$ 2,135	\$ 1,886	\$ -	\$ -	\$ -	\$	-	\$ 4,044

Mosshassuck Valley Interceptor

Project Manager: Thomas Brueckner, P.E. Contractor(s): Louis Berger Group

Location: Central Falls and Lincoln

Project Priority: B

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	May-06	October-06	6 Months	\$22
Design	January-12	June-16	54 Months	411
Construction	September-16	June-18	21 Months	6,531
Total Project	May-06	June-18	147 Months	\$6.964



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 is to design and construction a new sewer to replace the existing sewer.

Photo: Portion of the Moshassuck Valley Interceptor to be replaced

CIP Window	Pre FY 17	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Post FY 22	Total
Summary	\$ -	\$ 1,851	\$ 4,680	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,531

Projected Expenditures - Planning

Cost Category	Pre	FY 17	FY 17	-	FY 18	FY 19	FY 20	FY 21	F	Y 22	Pos	t FY 22	Total
Administrative	\$	2	\$ -	\$	-	\$	\$ -	\$ -	\$	-	\$	-	\$ 2
A/E Professional		20	-		-	-	-	-		-		-	20
Other		-	-		-	-	-	-		-		-	-
Total	\$	22	\$ -	\$	-	\$	\$ -	\$ -	\$	-	\$	-	\$ 22

Projected Expenditures - Design

Cost Category	Pre FY 17	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Post FY 22	Total
Administrative	\$ 78	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 78
Land	61	-	-	-	-	-	-	-	61
A/E Professional	265	-	-	-	-	-	-	-	265
Other	7	-	-	-	-	-	-	-	7
Total	\$ 411	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 411

Projected Expenditures - Construction

Cost Category	Pre	FY 17	1	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Pos	st FY 22	Total
Administrative	\$	-	\$	48	\$ 51	\$ -	\$ -	\$	\$	\$	-	\$ 99
A/E Professional		-		18	24	-	-	-	-		-	42
Construction		-		1,775	4,025	-	-	-	-		-	5,800
Contingency		-		-	580	-	-	-	-		-	580
Other		-		10	-	-	-	-	-		-	10
Total	\$	-	\$	1,851	\$ 4,680	\$	\$ -	\$	\$	\$	-	\$ 6,531

30457

Providence River Siphon

Project Manager: Thomas Brueckner, P.E. Contractor: 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	\$228
Design	July-15	July-16	12 Months	307
Construction	July-16	June-17	11 Months	6,126
Total Project	March-13	June-17	52 Months	\$6.662



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.

Photo: Siphon Trail Chamber

CIP Window	Pre	FY 17	FY 17	FY 18	- 1	FY 19	F	Y 20	F'	Y 21	F	Y 22	Pos	t FY 22	Total
Summary	\$	247	\$ 6,186	\$ -	\$	-	\$	-	\$	-	\$	-	\$	-	\$ 6,433

Projected Expenditures - Planning

Cost Category	Pre FY	17	FY 17	FY 18	1	FY 19	FY 20	FY 21	FY 22	Pos	t FY 22	Total
Administrative	\$	100	\$ -	\$ -	\$	-	\$ -	\$ -	\$ -	\$	-	\$ 100
A/E Professional		123	-	-		-	-	-	-		-	123
Other		5	-	-		-	-	-	-		-	5
Total	\$	228	\$ -	\$ -	\$	-	\$ -	\$ -	\$ -	\$	-	\$ 228

Projected Expenditures - Design

Cost Category	Pre F	Y 17	F	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Pos	t FY 22	Total
Administrative	\$	42	\$	3	\$	\$ -	\$ -	\$ -	\$ -	\$	-	\$ 45
Land		-		21	-	-	-	-	-		-	21
A/E Professional		175		41	-	-	-	-	-		-	216
Other		25		-	-	-	-	-	-		-	25
Total	\$	242	\$	65	\$	\$ -	\$ -	\$ -	\$ -	\$	-	\$ 307

Projected Expenditures - Construction

Cost Category	Pre	FY 17	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Pos	t FY 22	Total
Administrative	\$	2	\$ 42	\$	\$ -	\$ -	\$	\$ -	\$	-	\$ 44
A/E Professional		3	29	-	-	-	-	-		-	32
Construction		-	5,400	-	-	-	-	-		-	5,400
Contingency		-	600	-	-	-	-	-		-	600
Other		-	50	-	-	-	-	-		-	50
Total	\$	5	\$ 6,121	\$ -	\$ -	\$ -	\$	\$ -	\$	-	\$ 6,126

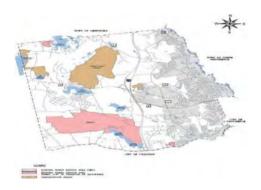
Johnston Sewer Improvements

Project Manager: Thomas Brueckner, P.E. Contractor(s): N/A

Location: Johnston, 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	May-16	January-17	8 Months	\$336
Construction	January-17	January-18	12 Months	4,030
Total Project	May 16	January 19	20 Months	¢4 266



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 the Town. This project is to design and construct the first of these proposed improvements.

Photo: Plans for Johnston Sewer Improvements

CIP Window	Pre FY 17	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Post FY 22	Total
Summary	\$ 9	\$ 356	\$ 4,002	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,366

Projected Expenditures - Planning

Cost Category	Pre	FY 17	F'	17	FY	18	F	Y 19	FY 20	F	Y 21	F	Y 22	Post	FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$ -	\$	-	\$	-	\$	-	\$ -
A/E Professional		-		-		-		-	-		-		-		-	-
Other		-		-		-		-	-		-		-		-	-
Total	\$	-	\$	-	\$	-	\$	-	\$ -	\$	-	\$	-	\$	-	\$ -

Projected Expenditures - Design

Cost Category	Pre	FY 17	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Pos	st FY 22	Total
Administrative	\$	9	\$ 27	\$ -	\$ -	\$ -	\$ -	\$ -	\$	-	\$ 36
Land		-	-	-	-	-	-	-		-	-
A/E Professional		-	300	-	-	-	-	-		-	300
Other		-	-	-	-	-	-	-		-	-
Total	\$	9	\$ 327	\$ -	\$ -	\$ -	\$ -	\$ -	\$	-	\$ 336

Projected Expenditures - Construction

Cost Category	Pre	FY 17	F	Y 17	FY 18	FY 19	FY 20	FY 21	FY 22	Pos	FY 22	Total
Administrative	\$	-	\$	20	\$ 131	\$ -	\$ -	\$ -	\$ -	\$	-	\$ 150
A/E Professional		-		9	21	-	-	-	-		-	30
Construction		-		-	3,500	-	-	-	-		-	3,500
Contingency		-		-	350	-	-	-	-		-	350
Other		-		-	-	-	-	-	-		-	-
Total	\$	-	\$	29	\$ 4,002	\$ -	\$ -	\$ -	\$ -	\$	-	\$ 4,030

NBC East Providence Interceptor Improvements

Project Manager: Rich Bernier, P.E.

Location: East Providence, RI
Contractor(s): N/A

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	N/A	N/A	N/A	N/A
Construction	August-15	March-18	31 Months	\$1,342
Total Project	Διισιιετ-15	March-18	31 Months	\$1 342



This project consists of the lining of 4,100 linear feet of sewer pipe for the East Providence Interceptor from Bourne Ave. to the BPWWTF in East Providence.

Photo: Manhole along river

CIP Window	Pre	FY 17		FY 17		FY 18		FY 19	F	Y 20	F	Y 21	F	Y 22	Post	t FY 22		Total	
Summary	Ś	36	Ś	1.255	Ś	51	Ś	-	Ś	-	Ś	-	Ś	-	Ś	-	Ś	1.342	

Projected Expenditures - Planning

Cost Category	Pre	FY 17	F	Y 17	F	Y 18	F	Y 19	F	Y 20	FY 21	F	Y 22	Pos	t FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$		\$	-	\$ -	\$	-	\$	-	\$ -
A/E Professional		-		-		-		-		-	-		-		-	-
Other		-		-		-		-		-	-		-		-	-
Total	\$	-	\$	-	\$	-	\$		\$	-	\$ -	\$	-	\$	-	\$ -

Projected Expenditures - Design

Cost Category	Pre	FY 17	F	Y 17	F	Y 18	F'	Y 19	FY 20	FY 21	F	Y 22	Pos	t FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$ -	\$ -	\$	-	\$	-	\$
Land		-		-		-		-	-	-		-		-	-
A/E Professional		-		-		-		-	-	-		-		-	-
Other		-		-		-		-	-	-		-		-	-
Total	\$	-	\$	-	\$	-	\$	-	\$ -	\$ -	\$	-	\$	-	\$

Projected Expenditures - Construction

Total	\$	36	\$ 1,255	\$ 51	\$ -	\$ -	\$ -	\$ -	\$	-	\$	1,342
Other		-	100	-	-	-	-	-		-		100
Contingency		-	120	-	-	-	-	-		-		120
Construction		-	950	50	-	-	-	-		-		1,000
A/E Professional		-	-	-	-	-	-	-		-		-
Administrative	\$	36	\$ 85	\$ 1	\$ -	\$ -	\$ -	\$ -	\$	-	\$	122
Cost Category	Pre	FY 17	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Post	FY 22	-	Гotal

Improvements to Interceptors FY 2017

Project Manager: Rich Bernier, P.E.

Contractor(s): N/A

Location: NBC Service Area

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	August-16	September-18	25 Months	\$2,683
Total Proiect	August-16	September-18	25 Months	\$2.683



This project is to correct various deficiencies throughout the sewer system such as sewer lining, point repairs to sewers, install hatches for better access to structures, abandonment of an outfall pipe, repair the hydraulic gate operator to the Allens Ave. Hurricane Gate and rehabilitation to leaking manholes.

Photo: Conducting Sewer System Repairs

CIP Window	Pre FY 17		FY 17	FY 18		FY 19	FY 20	Y 21	FY 22	Pos	st FY 22	Total			
Summary	\$	21	\$ 1,207	\$	1,445	\$ 10	\$ -	\$	-	\$ -	\$	-	\$	2,683	ı

Projected Expenditures - Planning

Cost Category	Pre	FY 17	FY 17		FY 18		FY 19		FY 20		FY 21		FY 22		Post FY 22		Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
A/E Professional		-		-		-		-		-		-		-		-	-
Other		-		-		-		-		-		-		-		-	-
Total	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$

Projected Expenditures - Design

Cost Category	Pre	FY 17	FY 17		FY 18		FY 19		FY 20		FY 21		FY 22		Post	FY 22	Total
Administrative	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$
Land		-		-		-		-		-		-		-		-	-
A/E Professional		-		-		-		-		-		-		-		-	-
Other		-		-		-		-		-		-		-		-	-
Total	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -

Projected Expenditures - Construction

Cost Category	Pre	FY 17	FY 17		FY 18		FY 19		FY 20		FY 21		FY 22		Pos	st FY 22	Total
Administrative	\$	21	\$	187	\$	55	\$	-	\$	-	\$	-	\$	-	\$	-	\$ 263
A/E Professional		-		120		-		-		-		-		-		-	120
Construction		-		900		1,090		10		-		-		-		-	2,000
Contingency		-		-		200		-		-		-		-		-	200
Other		-		-		100		-		-		-		-		-	100
Total	\$	21	\$	1,207	\$	1,445	\$	10	\$	-	\$		\$		\$	-	\$ 2,683

Executive Affairs & Construction Services Division

Division Summary

EXECUTIVE AFFAIRS

LEGAL

CONSTRUCTION SERVICES

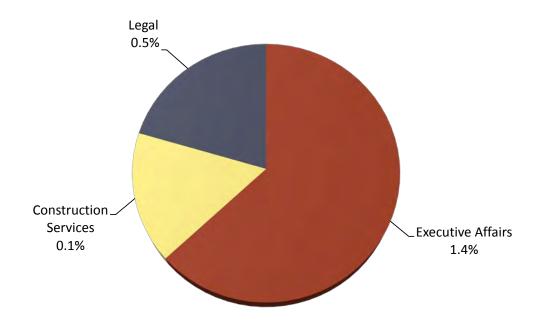
NBC Division Budgets

Finance & Administration 62%

Operations & Engineering 29%

PP&R 7%

Executive
Affairs &
Construction
2%

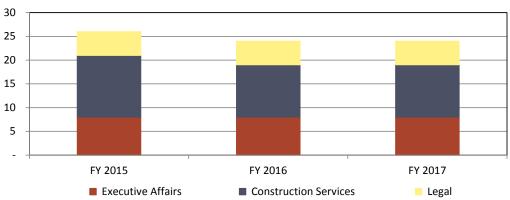


EXECUTIVE AFFAIRS & CONSTRUCTION SERVICES DIVISION - The Program Division Summary

Purpose and Overview:

The Executive Affairs Division is responsible for Public Relations, Government Affairs, Labor/Employee Relations and Legal Services. The Construction Services Division is responsible for overseeing the construction of capital improvement projects.





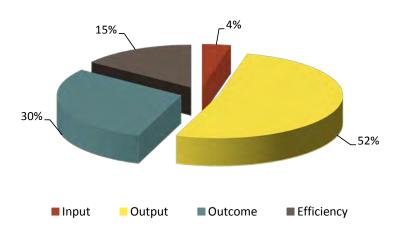
Significant Budget Modifications:

The FY 2017 Executive Affairs and Constructions Services budgets are a total of \$342,324 or 18% higher than the FY 2016 budget. Operating Capital increased by \$110,000 for asset replacements. Operating supplies and expense and professional services increased by \$18,050 compared to FY 2016. Due to a reduction in construction activity, the budgeted level of capital reimbursements has been reduced resulting in a net increase of \$214,274 in personnel.

Executive Affairs and Construction Services Divisions Performance Data Summary:

The chart below illustrates the Executive Affairs and Construction Services Divisions' Performance Data by type of measure. The measures can be found in the individual sections following this division summary. In these two Divisions, Outcome and Efficiency make up 45% of the performance measures.

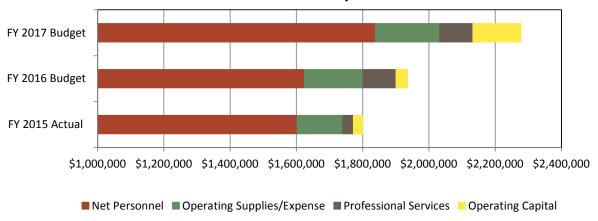
Percentage of Performance Measurement Types EXECUTIVE AFFAIRS AND CONSTRUCTION SERVICES DIVISIONS



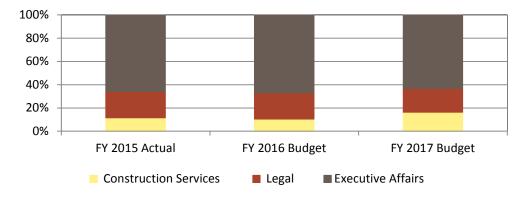
EXECUTIVE AFFAIRS & CONSTRUCTION SERVICES DIVISION - The Budget Division Summary

		FY 2	2015 Actual	FY	2016 Budget	FY 20	17 Budget
Expenditures by Element of Ex	pense						
Personnel		\$	2,836,832	\$	2,841,696	\$	2,913,177
Less Capital Reimbursements	_		(1,234,669)		(1,217,990)		(1,075,197)
	Net Personnel		1,602,163		1,623,706		1,837,980
Operating Supplies/Expense			138,043		177,250		194,300
Professional Services			,		,		,
			31,621		99,500		100,500
Operating Capital			27,865		35,000		145,000
Debt Service			-		-		-
	Total Expenditures	\$	1,799,692	\$	1,935,456	\$	2,277,780
Expenditures by Funding Source	ce						
Revenue		\$	1,771,827	\$	1,900,456	\$	2,132,780
Operating Capital Transfer			27,865		35,000		145,000
Grant			-		-		<u> </u>
Total Exp	enditures by Source	\$	1,799,692	\$	1,935,456	\$	2,277,780

Division's Cost By Element



Percent of Division's Budget By Section



EXECUTIVE AFFAIRS - The Program

Mission and Overview:

The Executive Affairs section includes the Executive Director, Director of Executive Affairs, Public Affairs, Labor/Employee Relations and Government Affairs. The Executive Affairs 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.

All of the agency divisions: Executive Affairs; Construction Services; Administration and Finance; Operations and Engineering and Planning, Policy and Regulation report directly to the Executive Director.

Major Accomplishments FY 2016 by Key Code:

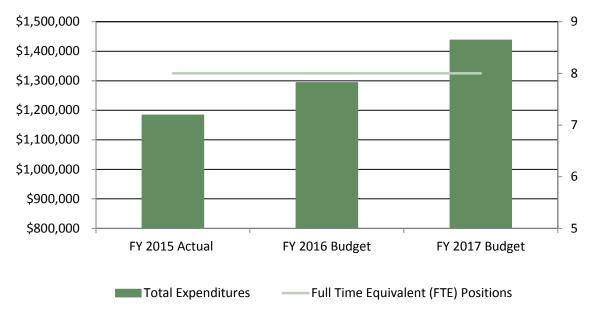
- CB 1 Completion of CSO Phase II Construction contracts, including mitigation of outstanding claims
- **CB 1** Submitted CSO Phase III Facilities Re-evaluation report
- CB 11 Completed nitrogen permit year ending October 31, 2015 with 100% compliance at both BP and FP plants
- **CB 13** Completed construction of Water Quality Science Building
- **CB 16** Oversaw transition to NBC management of Bucklin Point WWTF operations
- EP 2 Initiated additional renewable energy projects with goal of becoming energy neutral by 2020
- **OP 2** Met all hiring goals of the 2016 Affirmative Action Plan
- FM 5 Enhanced customer base through expansion of service to Rhode Island Resource Recovery
- FM 14 Secured payment from new large customer that was in dispute with NBC
- C 3 Hosted 2015 NACWA summer conference
- C 7 Updated NBC website with module for wind turbine information, establishing model for future renewable energy projects at NBC

- CB 1 Negotiate CSO Phase III Facilities Consent Agreements with RIDEM
- CB 1 Obtain approval from RIDEM on the revised CSO Phase III Facilities Plan Conceptual Design Report and continue with design
- CB 11 Negotiate RIPDES permits for both Field's Point and Bucklin Point
- **S 5** Initiate succession planning agency-wide
- C 1 Develop and implement educational event at new Water Quality Science building for high-school science students
- **OP 2** Meet 2017 Affirmative Action Goals

EXECUTIVE AFFAIRS - The Budget

		FY 2	2015 Actual	FY 2	2016 Budget	FY 20	17 Budget
Expenditures by Element of Exp	ense						
Personnel		\$	1,131,824	\$	1,120,566	\$	1,134,120
Less Capital Reimbursements			(89,731)		(61,690)		(60,703)
	Net Personnel		1,042,093		1,058,876		1,073,417
Operating Supplies/Expense			107,025		137,150		155,650
Professional Services			34,786		93,000		94,000
Operating Capital			-		5,000		115,000
Debt Service			-		-		-
	Total Expenditures	\$	1,183,904	\$	1,294,026	\$	1,438,067
- "							
Expenditures by Funding Source	2		4 400 004		4 200 026		4 000 057
Revenue		\$	1,183,904	\$	1,289,026	\$	1,323,067
Operating Capital Transfer Grant			-		5,000 -		115,000
Total Expe	enditures by Source	\$	1,183,904	\$	1,294,026	\$	1,438,067

EXECUTIVE AFFAIRS - Historical Data



Program Staffing (Budgeted)					
Executive Director	1.0	Government Affairs Manager	1.0		
Director of Executive Affairs	1.0	Labor & 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					

EXECUTIVE AFFAIRS - Performance Data

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:

Complete projects on schedule, within budget, in the most cost-effective manner and in compliance with regulatory requirements • CB 1

Target Measure:

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

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of Meetings	9	9	9	9

Provide safe and cost effective administration of NBC facilities • CB 16

Target Measure:

Operations Management at Bucklin Point

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Hire management staff	6/30/2015	6/30/2015	N/A	N/A

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:

Strengthen liaison with Congressional Delegation • FM 1

Target Measure:

Contacts with Rhode Island's Congressional Delegation

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of Meetings/correspondence	4	7	4	4

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

Goal Action for Achievement by Key Code:

Maintain programs that give back to the community • CF 1

Target Measure:

Give awards/ scholarships

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of awards/ scholarships distributed	40	49	40	40

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:

Meet with union and non-union staff

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of meetings	2	1	2	2

Target Measure:

Apply for and receive the Best Places to Work in RI Award

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Due Date	6/30/2015	6/30/2015	6/30/2016	6/30/2017

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 relations with RIDEM Officials • C 9

Target Measure:

Meet with RIDEM Officials

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of meetings	4	4	4	4

Continue and expand NBC public outreach programs • C 1

Target Measure:

Update website to provide current information on NBC activity

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Frequency	Weekly	Weekly	Weekly	Weekly

Target Measure:

Present water quality finding from student participants of NBC's Watershed Explorers Education Program to the Board of Directors

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of Presentations	1	0	1	1

Goal Action for Achievement by Key Code:

Conduct successful watershed education programs for students • C 2

Target Measure:

Visit local schools

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of Visits	100	110	100	100

Goal Action for Achievement by Key Code:

Proactively manage public and legislative affairs related to NBC's ongoing activities • C 3

Target Measure:

Provide the annual report to members of the General Assembly by due date

O	nae the annual report to members of the General Assembly by ade date								
	Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal				
	Due Date	1/31/2015	1/31/2015	1/31/2016	1/31/2017				

Target Measure:

Send quarterly reports to the Economic Development Committee relative to the processing time of wastewater discharge permits and sewer connection permits issued by the NBC

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal				
Number of Reports	4	3	N/A*	N/A*				
*In May, 2015 NBC was notified by EDC that they would no longer require this report.								

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 all meetings as required and file meeting minutes with the Secretary of State

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Completion within required time limit	100%	100%	100%	100%

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 September 15th deadline

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Due Date	9/15/2015	9/15/2015	9/15/2016	9/15/2017

CONSTRUCTION SERVICES - The Program

Mission and Overview:

The NBC Construction Services Division is responsible for overseeing construction of capital improvement projects related to the NBC's system of interceptors, pump stations and wastewater treatment facilities. These improvements to the sewer system's infrastructure are necessary to ensure proper collection and treatment of wastewater and storm water flows that enter the NBC system.

Major Accomplishments FY 2016 by Key Code:

- CB 1 Managed the emergency contract for installation of backup blowers for aeration system at FPWWTF
- **CB 1** Completed the in-house design, bidding and award of the following projects:

FPWWTF Final Clarifier Improvements (Project 13000)

NBC Interceptor Easement Restoration, Abbott Valley Interceptor (Project 30438)

Moshassuck Valley Interceptor (Project 30444)

Providence River Siphon (Project 30457)

NBC East Providence Interceptor Improvements (Project 30462)

BPWWTF Flood Protection (Project 81300)

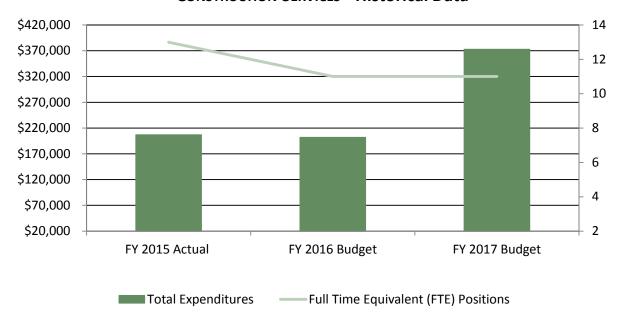
- **CB 1** Closed out the CSO Phase II Facilities construction contracts
- **CB 1** Completed the construction of the Water Quality Science Building

- CB 1 Put out to bid and begin construction for Phase II of the FP Blower Improvements
- **CB 1** Assist with design of the CSO Phase III Facilities

CONSTRUCTION SERVICES - The Budget

	FY	2015 Actual	FY	2016 Budget	FY	2017 Budget
Expenditures by Element of Expense						
Personnel	\$	1,270,880	\$	1,285,962	\$	1,325,704
Less Capital Reimbursements		(1,112,242)		(1,139,250)		(1,005,969)
Net Personnel		158,638		146,712		319,735
Operating Supplies/Expense		20,544		25,225		23,225
Professional Services		-		-		-
Operating Capital		27,865		30,000		30,000
Debt Service		-		-		-
Total Expenditures	\$	207,047	\$	201,937	\$	372,960
Expenditures by Funding Source						
Revenue	\$	179,182	\$	171,937	\$	342,960
Operating Capital Transfer		27,865		30,000		30,000
Grant		-		-		-
Total Expenditures by Source	\$	207,047	\$	201,937	\$	372,960

CONSTRUCTION SERVICES - Historical Data



Program Staffing (Budgeted)					
Chief Environmental Engineer	1.0	Mechanical Inspector	1.0		
Construction Manager	1.0	Resident Representative	3.0		
Construction Office Coordinator	1.0	Senior Construction Coordinator	1.0		
Director of Construction Services	1.0	Senior Resident Representative	1.0		
Engineering Construction Coordinator	1.0				
11.0 FTEs					

CONSTRUCTION SERVICES - Performance Data

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:

Complete projects on schedule, within the budget and in the most cost-effective manner and in compliance with regulatory requirements • CB 1

Target Measure:

Resident engineering cost as a percentage of construction cost (non-CSO contracts)

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percentage	15%	9%	15%	15%

Target Measure:

Percent of contract cost over original bid amount on a yearly basis

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal			
Percentage	8%	6%	8%	8%			

Target Measure:

Percent of CIP contract completed within six months of master schedule

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal	
Percentage	85%	50%	85%	85%	

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:

Provide ongoing construction updates to the NBC staff, Board Members and public

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of meetings	4	8	4	0

LEGAL - The Program

Mission and Overview:

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

Major Accomplishments FY 2016 by Key Code:

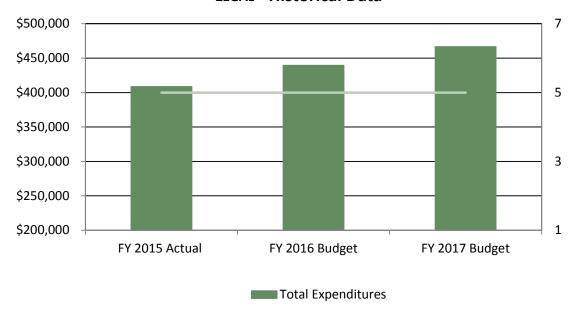
- **CB 1** Assisted Construction and Engineering with legal aspects of Field's Point Biological Nutrient Removal and CSO Phase II Facilities projects
- CB 1 Assisted Engineering with legal and regulatory aspects of CSO Phase III Facilities projects
- **CB 11** Assisted Pretreatment with all legal aspects related to the Pretreatment Program including compliance inspection
- FM 2 Conducted two lien sales which reduced accounts receivable by approximately \$1.0 million
- **CF 8** Responded to all public records request within statutory timeframe to the appropriate agencies in Rhode Island
- **C 3** Reviewed, analyzed and opined on pending legislation
- **OP 4** Filed all compliance filings (ethics, disclosure of government consultants, regulatory agenda, and public records training compliance) within the required timeframe

- **CB 1** Continue to assist Construction and Engineering with legal aspects of Field's Point, Bucklin Point and continue to provide support with the CSO Projects
- FM 2 Continue collection efforts through the Lien Sale process
- FM 3 Monitor customer accounts subject to the US Bankruptcy Code/RI Receivership Petitions, including filing proof of claims within the required timeframes

LEGAL – The Budget

	FY 20	15 Actual	FY 20	16 Budget	FY 2	2017 Budget
Expenditures by Element of Expense						
Personnel	\$	434,129	\$	435,170	\$	453,353
Less Capital Reimbursements		(32,696)		(17,050)		(8,525)
Net Personnel		401,433		418,120		444,828
Operating Supplies/Expense		10,474		14,875		15,425
Professional Services		(3,165)		6,500		6,500
Operating Capital		-		-		-
Debt Service		-		-		
Total Expenditures	\$	408,742	\$	439,495	\$	466,753
For an difference by Fore diag Course						
Expenditures by Funding Source		100 712		420 405		466 752
Revenue	\$	408,742	\$	439,495	\$	466,753
Operating Capital Transfer		-		-		-
Grant		-		-		
Total Expenditures by Source	\$	408,742	\$	439,495	\$	466,753

LEGAL - Historical Data



Program Staffing (Budgeted)					
Chief Legal Counsel	1.0	Executive Paralegal II	1.0		
Executive Paralegal	1.0	Legal Counsel	2.0		
5.0 FTEs					

LEGAL - Performance Data

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:

Provide prosecutorial function to ensure compliance with NBC requirements • CB 2

Target Measure:

Issue Enforcement Actions within two weeks of request submittal

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percentage issued	100%	100% (2/2)	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:

Conduct lien sales to reduce accounts receivable • FM 2

Target Measure:

Conduct lien sales

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of lien sales per year	2	2	2	2

Target Measure:

Accounts paid and removed prior to lien sale

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percentage paid/removed prior to lien sale	65%	88%	65%	65%

Goal Action for Achievement by Key Code:

Maximize the efficiency and effectiveness of the billing and collection process • FM 3

Target Measure:

Prepare and file proof claims within 30 days of receipt notice

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percentage of proof claims filed	100%	100% (103/103)	100%	100%

Maintain a customer-focused attitude throughout the organization.

Goal Action for Achievement by Key Code:

Provide prompt and efficient legal services • CF 2

Target Measure:

CUSTOMER FOCUS:

Respond to all public records requests within legal timeframe

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Legal timeframe	Within 10 days	7 days	Within 10 days	Within 10 days

STAFFING: Attract, develop and retain highly qualified employees.

Goal Action for Achievement by Key Code:

Provide ongoing technical training to optimize team performance and provide equipment to ensure safe and environmentally sound management practices are followed \bullet S 3

Target Measure:

Ensure staff member training

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of training hours	30	40	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:

Educate NBC's internal and external customers on NBC initiatives • C 7

Target Measure:

Conduct/coordinate presentations

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of presentation conducted	2	3	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 requirements • OP 3

Target Measure:

Prepare and file all of NBC staff/Board of Commissioners executed conflict of interest forms

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percentage prepared and filed	100%	100% (3/3)	100%	100%

Goal Action for Achievement by Key Code:

Ensure compliance with regulatory agenda filing requirements • OP 4

Target Measure:

Prepare and file regulatory agenda at required intervals

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Frequency	Bi-Annually	Bi-Annually	Bi-Annually	Bi-Annually

Goal Action for Achievement by Key Code:

Ensure compliance with requirements for disclosure of consultants • OP 5

Target Measure:

File regulatory agenda at required intervals

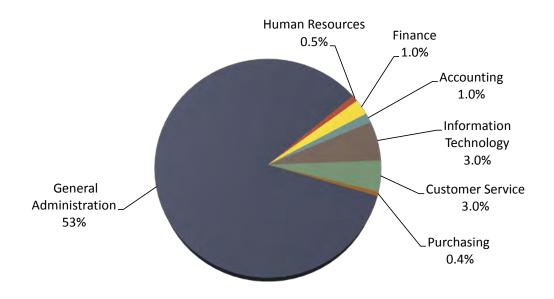
Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Frequency	Quarterly	Annually	Annually	Annually

Division Summary



NBC Division Budgets

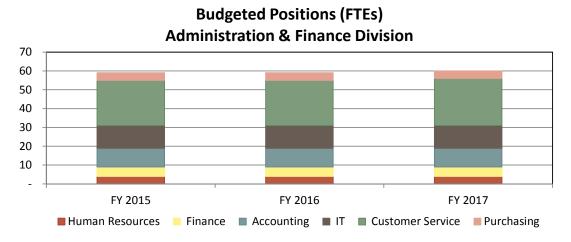




Administration & Finance Division - The Program Division Summary

Purpose and Overview:

The Administration and Finance Division is responsible for the Finance, Cash Management, Payroll, Employee Benefits, Accounting, Customer Service, Purchasing, Human Resources and Information Technology (IT) 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.

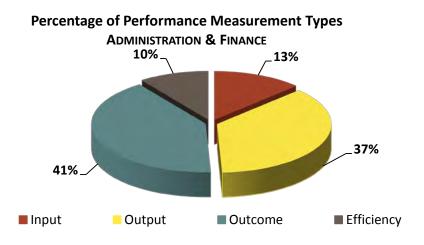


Significant Budget Modifications:

The FY 2017 Administration and Finance budget is approximately \$1.3 million or 2% higher than the FY 2016 budget. Personnel has increased by \$304,316 and includes retirement payments and additional funding for NBC's Non-Union Pension. Operating supplies and expense and professional services have increased by \$561,593 and includes the property maintenance and expense for NBC's WED turbines as well as \$96,153 for the new WQS Building. Operating Capital, which include Information Technology investments, increased by \$398,000 and debt service increased by \$26,258 from the prior year budget.

Administration & Finance Divisions Performance Data Summary:

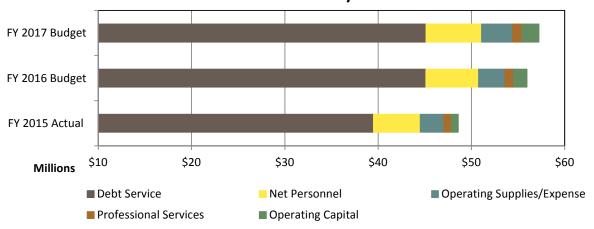
The chart below illustrates the Administration and Finance Divisions' Performance Data by type of measure. The measures can be found in the individual sections following this division summary. In this Division, Outcome and Efficiency make up 51% of the performance measures.

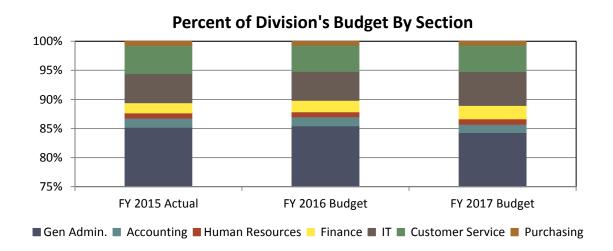


Administration & Finance Division - The Budget Division Summary

	FY 2015 Actual		FY 2016 Budget		FY 2017 Budget	
Expenditures by Element of Expense						
Personnel	\$	5,126,282	\$	5,766,241	\$	6,070,557
Less Capital Reimbursements		(118,217)		(116,250)		(116,250)
Net Personnel		5,008,065		5,649,991		5,954,307
Operating Supplies/Expense		2,527,170		2,829,433		3,321,377
Professional Services		803,576		932,350		1,002,000
Operating Capital		747,261		1,427,000		1,825,000
Debt Service		39,503,789		45,111,364		45,137,622
Total Expenditures	\$	48,589,861	\$	55,950,138	\$	57,240,306
Expenditures by Funding Source						
Revenue	\$	47,842,600	\$	54,523,138	\$	55,415,306
Operating Capital Transfer		747,261		1,427,000		1,825,000
Grant		-		-		-
Total Expenditures by Source	\$	48,589,861	\$	55,590,138	\$	57,240,306

Division's Cost by Element





FINANCE - The Program

Mission and Overview:

The Finance section ensures NBC has sufficient resources to carry out its mission and employs sound fiscal policies and practices to enable NBC 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 5-year Capital Improvement Plan, 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, Continuous Disclosure, Post-Issuance Compliance and other regulatory requirements. This section is also responsible for cash management and NBC's retirement plans.

Major Accomplishments FY 2016 by Key Code:

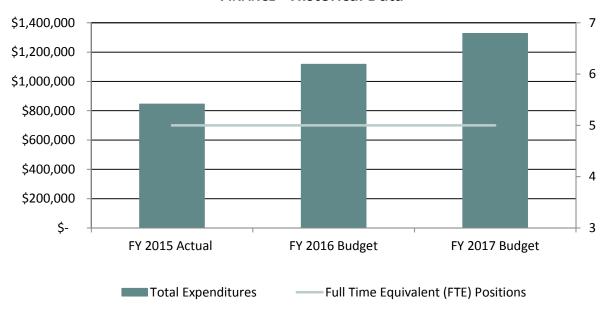
- FM 4 Prepared the Amendment and Restatement of the NBC Non-Union Defined Contribution Plan and associated Summary of Plan Provisions
- FM 5 Received RIPUC approval of Debt Service compliance filing to support SRF 19 loan from RIIB
- FM 5 Filed tariff advice to change sewer user charge abatement calculation and implemented change
- FM 5 Developed and administered the operating budget, finishing under budget for the 24th year
- **FM 6** Developed the Fiscal Sustainability Policy and Plan for Board adoption
- **FM 6** Executed RIIB loans in the amounts of \$41.75M and \$34.5M and participated in RIIB Refunding, receiving 50% of the refunding savings attributable to NBC loans.
- FM 6 Replaced the Direct Pay Letter of Credit supporting NBC's 2008 Series A Revenue Refunding Bonds
- FM 7 Developed the five-year Capital Improvement Program and managed capital funding
- **FM 9** Assisted with the preparation of the NBC's Non-Union Defined Benefit Plan Financial Reports for FY 2014 and 2015 in conformance with GASB 67 and GASB 68
- **S 1** Formalized and posted the QDRO (Qualified Domestic Relations Order) procedures.
- **C 5** Received the Government Finance Officers' Association (GFOA) Distinguished Budget Presentation Award and received both Special Capital Recognition and Special Performance Measures Recognition
- **OP 4** Prepared and submitted information required per Continuous Disclosure, Post-Issuance Compliance, Trust Indenture, Letter of Credit, RIPUC Orders, IRS and other commitments

- FM 5 Ensure sufficient operating and capital funding with least ratepayer impact
- FM 6 Maintain AA- and AAA/A-1+ credit ratings from Standard and Poor's
- **FM 10** Ensure compliance with the Trust Indenture and Supplemental Indentures **FM 11** The IRS, **FM 12** The RIPUC and all applicable laws, rules and regulations including Continuous Disclosure

FINANCE – The Budget

	FY 20	015 Actual	FY 2	2016 Budget	FY 20	017 Budget
Expenditures by Element of Expense Personnel Less Capital Reimbursements	\$	386,581 -	\$	499,482 -	\$	536,124 -
Net Personnel		386,581		499,482		536,124
Operating Supplies/Expense Professional Services Operating Capital Debt Service Total Expenditures	\$	14,003 444,945 - - 845,529	\$	26,400 515,550 75,000 - 1,116,432	\$	31,030 500,000 260,000 - 1,327,154
Expenditures by Funding Source Revenue Operating Capital Transfer Grant Total Expenditures by Source	\$	845,529 - - - 845,529	\$ \$	1,041,432 75,000 - 1,116,432	\$ \$	1,067,154 260,000 - 1,327,154
Total Expellultures by Source	7	073,323	٧	1,110,432	۲	1,327,134

FINANCE - Historical Data



Program Staffing (Budgeted)					
Compliance Analyst	1.0	Rate Analyst	1.0		
Director of Administration and Finance	1.0	Senior Financial Analyst	1.0		
Financial Analyst	1.0				
5.0 FTEs					

FINANCE - Performance Data

FINANCIAL MANAGEMENT: MO

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 operating budget and capital budget funding with least ratepayer impact • FM 5

Target Measure:

File with PUC to maintain sufficient operating and capital funding by due date

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
General Rate Filing	10/1/2014	12/23/2013	10/1/2015	10/1/2016
Debt Service Filing	3/1/2015	4/21/2015	3/1/2016	3/1/2017

Target Measure:

Spend .5% or Less of Revenue Increase on Outside Rate Case Assistance

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percentage	0.5%	0.13% / \$5,630,752 Revenue Increase	0.5%	0.5%

Goal Action for Achievement by Key Code:

Ensure NBC receives the lowest cost of borrowing • FM 6

Target Measure:

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

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Unenhanced Credit Rating S&P	AA-	AA- (9/12/2014)	AA-	AA-
Long Term	AAA/A-1+	AAA/A-1+ (9/12/2014)	AAA/A-1+	AAA/A-1+

Target Measure:

Update Long-Term Financial Plan

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Frequency	Semi-Annually	Semi-Annually	Semi-Annually	Semi-Annually

Target Measure:

File Continuous Disclosure Annually

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Annual Operating Data and CAFR on EMMA	3/31/2016	12/23/2015	3/31/2017	3/31/2018
Annual Operating Data and CAFR with RIIB	3/31/2016	12/23/2015	3/31/2017	3/31/2018
Material Events within 10 days of Occurrence	< 10 days	N/A	<10 days	<10 days

Target Measure:

Ensure compliance with federal tax laws and regulations to maintain tax exempt status of NBC's bond issues

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Complete Tax Due Diligence prior to Issuance	100%	100% (2/2)	100%	100%

Target Measure:

Perform Post-Issuance Compliance monthly reporting

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Actual/Projected Draw Analysis	Monthly	Monthly	100%	100%
Determine Arbitrage Liability within 62 days of FYE	8/31/2014	8/31/2014	8/31/2015	8/31/2016
Submit Arbitrage Calculation Information to FSW	Monthly	Monthly	Monthly	Monthly

Target Measure:

Revise Capital Cash Flow Projected Draw

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Frequency	2 Updates	6 Updates	2 Updates	2 Updates

Goal Action for Achievement by Key Code:

Develop and administer a high quality annual Operating Budget and CIP • FM 7

Target Measure:

Receive GFOA Distinguished Budget Presentation Award

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Consecutive Years	13 Years	13 Years w/Special Capital Recognition & Performance Measures	14 Years	15 Years

Target Measure:

Notification of budget issues within five business days of month-end

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Days	5 Days	6 Days	5 Days	5 Days

Target Measure:

Prepare and transmit monthly finance report to Finance Committee

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Frequency	Monthly	Monthly	Monthly	Monthly

Goal Action for Achievement by Key Code:

Effectively manage employee retirement plans to maximize benefits and minimize expense • FM 4

Target Measure:

Properly manage the non-union defined benefit plan

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Complete Actuarial Study	3/31/2015	3/31/2015	3/31/2016	3/31/2017
Percent Funded Minimum ARC	100%	109%	100%	100%
PYE 12-31 Portfolio Return	6.0%	11.06%	6.0%	6.0%

Target Measure:

Review retirement plan fund options and plan health

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Investment Committee Meetings	4/year	4 reviews	4/year	4/year

STAFFING:

Attract, develop and retain highly qualified employees.

Goal Action for Achievement by Key Code:

Provide ongoing technical training to optimize team performance and provide equipment to ensure safe and environmentally sound management practices are followed • S 3

Target Measure:

Number of Hours of Training/ Seminars Attended

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Hours	30 hours	49 hours	30 hours	30 hours

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 Operating Budget, CIP and Compliance Reports and a communication device • C 5

Target Measure:

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

P	perating badget necesses at removement of better mating as a communication better by creating					
	Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal	
	Received	Yes	Proficient/Outstanding	Yes	Yes	

Target Measure:

Complete Annual Sewer User Fee Survey

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
MWRA	Yes	Yes	Yes	Yes
NACWA	Yes	Yes	Yes	Yes
NBC Statewide	Yes	Yes	Yes	Yes

Target Measure:

Transmit compliance reports on to the Public Utilities Commission

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Capital Projects	2	2	2	2
Restricted Accounts	4	4	4	4
Non-Union Retirement Plans	1	1	1	1

HUMAN RESOURCES - The Program

Mission and Overview:

The Human Resources section 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. This section is also responsible for the evaluation and administration of employee benefits and for administering provisions of the two collective bargaining agreements.

Major Accomplishments FY 2016 by Key Code:

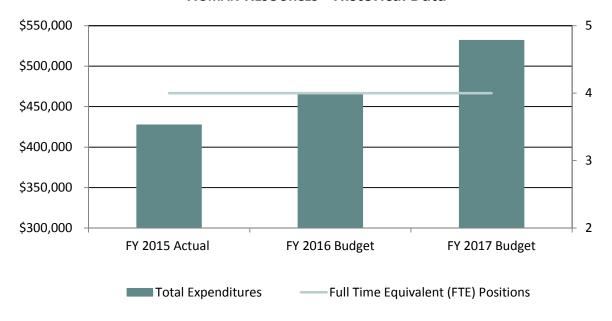
- FM 4 Evaluated and renewed Group Life, Long-Term Disability and Dental Insurance
- FM 4 Provided daily administration of the non-union retirement plans
- FM 11 Assisted with the first year ACA IRS reporting for CY 2015
- **S 1** Received Best Places to Work in RI Award
- **S 2** Completed timely reporting of all state and federal required disclosures to staff and government agencies
- **S 2** Submitted the EEO report by the due date
- \$ 4 Provided workplace wellness and training programs to staff
- **S 4** Achieved workers' compensation experience modification below the industry average of 1.0
- **OP 6** Assisted with the implementation of a new Time and Attendance application

- **FM 4** Effectively manage NBC's employee benefits programs
- **S 2** Ensure timely administration of NBC hiring procedures in accordance with Federal & State labor laws
- **S 4** Continue the workplace wellness initiative

HUMAN RESOURCES - The Budget

	FY 2	015 Actual	FY 20)16 Budget	FY 20	17 Budget
Expenditures by Element of Expense						
Personnel	\$	386,543	\$	380,218	\$	402,833
Less Capital Reimbursements		-				
Net Personnel		386,543		380,218		402,833
Operating Supplies/Expense		16,943		24,700		22,000
Professional Services		23,930		10,500		57,000
Operating Capital		-		50,000		50,000
Debt Service		-		-		
Total Expenditures	\$	427,416	\$	465,418	\$	531,833
Former distance has From diver Comme						
Expenditures by Funding Source		407 446		445 440		404 000
Revenue	\$	427,416	\$	415,418	\$	481,833
Operating Capital Transfer		-		50,000		50,000
Grant		-		-		
Total Expenditures by Source	\$	427,416	\$	465,418	\$	531,833

HUMAN RESOURCES - Historical Data



Program Staffing (Budgeted)						
Human Resources Clerk	1.0	Human Resources Representative/Benefits Coordinator	1.0			
Human Resources Manager	1.0	Senior Human Resources Representative	1.0			
		4.0 FTEs				

HUMAN RESOURCES - Performance Data

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:

Effectively manage employee benefits to maximize benefits and minimize expense • FM 4

Target Measure:

Evaluate alternative comparative benefit solutions within six months of renewal, as necessary

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percentage	100%	100%	100%	100%

Target Measure:

Complete year-end Retirement Plan Census

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Defined Benefit Due Date	2/28/15	2/28/15	2/28/16	2/28/17
Defined Compensation Due date	7/30/14	7/30/14	7/30/15	7/30/16

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:

Update benefits information on Baynet

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Frequency	Semi-annually	Semi-annually	Semi-annually	Semi-annually

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 exit interviews and gather data regarding employee experiences and perceptions

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percent of terminated employees	100%	100%	100%	100%
given exit interviews	100%	100%	100%	100%

Target Measure:

Prepare and distribute employment postings within forty-eight hours of approval

pare arra area reaction of comp.			are or approvar	
Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percentage of	100%	100%	100%	100%
employment posting	gs 100%	10070	10070	10076

Target Measure:

Implement "Good Health" programs

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of programs	2	4	2	2

Target Measure:

Implement employee training programs

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of programs	1	1	1	1

Target Measure:

Apply for and receive the Best Places to Work in RI Award

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Due date	6/30/15	6/30/15	6/30/16	6/30/17

Goal Action for Achievement by Key Code:

Ensure compliance with the Federal and State labor laws • S 2

Target Measure:

Submit annual EEO report by due date

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Due date	8/1/2014	8/1/2014	8/1/2015	8/1/2016

Goal Action for Achievement by Key Code:

Provide ongoing technical training to optimize team performance and provide equipment to ensure safe and environmentally sound management practices are followed • S 3

Target Measure:

Attend outside HR related seminars

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal	
Completion	100%	100%	100%	100%	

Target Measure:

Provide financial planning workshops or individual meetings with NBC's investment planner to assist NBC employees in building a secure retirement

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of workshops	2	2	2	2

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 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of investigations	3	33	3	3

Target Measure:

Implement a Wellness Incentive Program for employees to receive incentives for preventative care

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percentage of employees participating	50%	57%	50%	50%
Percentage of employees who reach the wellness maximum	30%	33%	30%	30%
Number of Programs offered	2	2	2	2

Target Measure:

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

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Rating	<u>≤</u> 1.00	<u><</u> 1.00	<u><</u> 1.00	<u><</u> 1.00

ACCOUNTING - The Program

Mission and Overview:

The Accounting section is responsible for preparing and issuing monthly financial statements in accordance with "Generally Accepted Accounting Principles". Accounting also 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, maintaining the general ledger, assisting in securing financing, rate filings and processing capital project expenditures.

Major Accomplishments FY 2016 by Key Code:

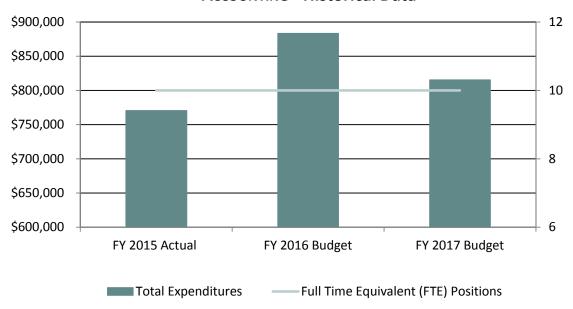
- FM 8 Processed and submitted approximately \$28.6 million in capital invoices to NBC's Trustee and the RIIB
- FM 8 Processed all operating invoices and bi-weekly payrolls in a timely manner and received \$3,572 in discounts for prompt payment
- FM 9 Completed the FY 2015 audit by the statutory September 30th deadline
- FM 9 Completed the FY 2015 Single Audit by the March 31st deadline
- FM 9 Received a clean audit opinion and no management letter for the 17th consecutive year
- FM 9 Received the GFOA Certificate of Achievement for Excellence in Financial Reporting for the 13th consecutive year
- **FM 9** Implemented GASB 67 and GASB 68 which changed the Statement of Net Position to include the total net pension liability and modified the presentation in the Notes to the Financial Statements and the Required Supplementary Information
- **FM 9** Assisted with the preparation of the FY 2014 and FY 2015 Financial Reports for the NBC's Non-Union Defined Benefit Plan in conformance with GASB 67 and GASB 68
- FM 10 Accurately calculated and submitted the monthly transfers as required by the Trust Indenture
- FM 11 Prepared and distributed first year ACA IRS reporting for CY 2015
- FM 12 Accurately completed the PUC's monthly restricted account reporting
- **OP 6** Assisted with implementation of new Time and Attendance application

- FM 8 Process all operating invoices, capital invoices, and the bi-weekly payroll in a timely manner
- FM 9 Complete the FY 2016 audit in a timely basis and receive a clean audit opinion and no management letter
- FM 10 Ensure proper calculation and processing of the monthly transfers as required by the Trust Indenture

ACCOUNTING - The Budget

	FY 2	015 Actual	FY 2	2016 Budget	FY 20	17 Budget
Expenditures by Element of Expense						
Personnel	\$	851,652	\$	882,536	\$	881,564
Less Capital Reimbursements		(118,217)		(116,250)		(116,250)
Net Personnel		733,435		766,286		765,314
Operating Supplies/Expense		9,283		10,125		10,125
Professional Services		27,900		32,000		35,000
Operating Capital		-		75,000		5,000
Debt Service		-		-		
Total Expenditures	\$	770,618	\$	883,411	\$	815,439
Expenditures by Funding Source						
Revenue	\$	770,618	\$	808,411	\$	810,439
Operating Capital Transfer		-		75,000		5,000
Grant						
Total Expenditures by Source	\$	770,618	\$	883,411	\$	815,439

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				

ACCOUNTING - Performance Data

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 audited financial statements are in compliance with "Generally Accepted Accounting Principles" • FM 9

Target Measure:

Receive the GFOA Certificate of Achievement for Excellence in Financial Reporting

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of consecutive years	14	14	15	16

Target Measure:

Timely completion of audits

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Completion of CAFR	9/30/2015	9/30/2015	9/30/2016	9/30/2017
Completion of Single Audit	3/31/2016	N/A	3/31/2017	3/31/2018

Target Measure:

Complete audit with clean opinion and no management letter

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Completion	Yes	Yes	Yes	Yes

Target Measure:

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

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Frequency	Monthly	Monthly	Monthly	Monthly

Target Measure:

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

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Completion	100%	100%	100%	100%

Goal Action for Achievement by Key Code:

Comply with flow of funds restrictions as set forth in the Trust Indenture • FM 10

Target Measure:

Prepare the restricted account reporting on a monthly basis

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Completion	100%	100%	100%	100%

Target Measure:

Complete trust transfers on the fourth business day before close of the month

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Completion	100%	100%	100%	100%

Target Measure:

Perform monthly fund reconciliation

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Completion	100%	100%	100%	100%

Goal Action for Achievement by Key Code:

Comply with IRS rules and regulations • FM 11

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 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Completion of W-2s	100%	100%	100%	100%
Completion of 1099s	100%	100%	100%	100%
Completion of 941s	100%	100%	100%	100%

Goal Action for Achievement by Key Code:

Comply with State of RI rules and regulations • FM 12

Target Measure:

Prepare on an annual basis the consultant report for the RI Secretary of State, post quarterly financial statements on NBC's web-site and submit the quarterly surcharge reports to RIDEM

	.	, , ,		
Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Completion of Consultant Report	100%	100%	100%	100%
Completion of Posting of Financials	100%	100%	100%	100%
Completion of Surcharge Report	100%	100%	100%	100%

STAFFING:

Attract, develop and retain highly qualified employees.

Goal Action for Achievement by Key Code:

Provide ongoing technical training to optimize team performance and provide equipment to ensure safe and environmentally sound management practices are followed • S 3

Target Measure:

Ensure each accountant and payroll administrator staff attends outside accounting/payroll seminar

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal	
Percentage of staff members attending seminar	100%	100%	100%	100%	

INFORMATION TECHNOLOGY - The Program

Mission and Overview:

The IT section of NBC is responsible for all aspects of networks, telecommunications, hardware, software and databases for the entire enterprise. As a group, IT provides the infrastructure to enable NBC to have a cohesive, productive workforce. IT is responsible for ensuring the agency has the technology to perform at the expected level of 99% uptime.

Major Accomplishments FY 2016 by Key Code:

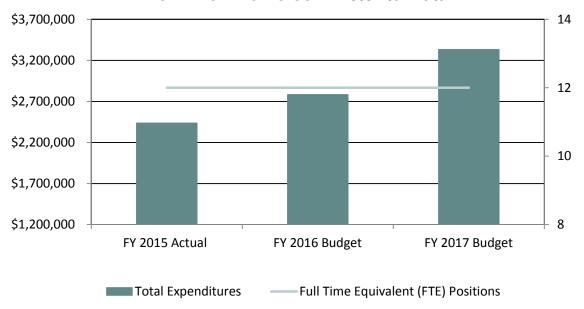
- CB 4 Upgraded Bucklin Point Virtual Servers
- **CB 4** Initiated the implementation of a new Time and Attendance System
- **CB 4** Replaced NBC's telephone handsets
- CB 4 Installed a Corporate-wide FAX Server and added additional direct dial lines to support it
- **CB 4** Completed the Pretreatment system rewrite
- **CB 4** Installed a Campus-wide Display Signage system
- **CB 4** Continued the rollout of Thin-Clients to various departments
- **CB 4** Completed significant system and software upgrades to the Customer Service Application
- CB 5 Added Enhanced Security Firewalls and established redundant connectivity
- **CB 5** Completed removal and replacement of the Anti-virus Software

- **CB 4** Replace critical Server Infrastructure at the Corporate Office Building
- **CB 4** Replace the Laboratory Information Management System
- CB 4 Expand Wireless Mesh System at Bucklin Point
- CB 4 Expand Thin-Clients throughout NBC campus
- **CB 4** Rewrite Customer Service Application

Information Technology – The Budget

	FY 2	2015 Actual	FY 2	2016 Budget	FY 20	017 Budget
Expenditures by Element of Expense Personnel Less Capital Reimbursements	\$	1,292,013	\$	1,304,933	\$	1,370,533 -
Net Personnel		1,292,013		1,304,933		1,370,533
Operating Supplies/Expense Professional Services		548,827 -		586,369		628,236
Operating Capital		596,101		892,000		1,335,000
Debt Service		-		, -		-
Total Expenditures	\$	2,436,941	\$	2,783,302	\$	3,333,769
Expenditures by Funding Source Revenue Operating Capital Transfer	\$	1,840,840 596,101	\$	1,891,302 892,000	\$	1,998,769 1,335,000
Grant		-		-		-
Total Expenditures by Source	\$	2,436,941	\$	2,783,302	\$	3,333,769

INFORMATION TECHNOLOGY - Historical Data



Program Staffing (Budgeted)						
Applications System Supervisor	1.0	Senior Systems Administrator	1.0			
Computer Training Applications Specialist	1.0	Senior Systems Development Programmer	1.0			
Information Technology Manager	1.0	Senior Systems Programmer/Systems Admin.	1.0			
Network and Communications Administrator	1.0	Solutions Architect	1.0			
PC/Phone Support/Systems Admin. Specialist	1.0	Systems Design Programmer	1.0			
Senior Database Administrator	2.0					
12.0 FTEs						

INFORMATION TECHNOLOGY - Performance Data

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:

Continue the level of network stability with the highest level of service up time • CB 3

Target Measure:

Level of system availability

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percentage	100%	98%	100%	100%

Goal Action for Achievement by Key Code:

Maximize productive use of automation and computerization throughout the agency • CB 4

Target Measure:

Migrate systems to latest installed operating systems and applications

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percentage of systems migrated	79%	82%	85%	85%

Goal Action for Achievement by Key Code:

Ensure IT maintains and improves security systems and applications • CB 5

Target Measure:

Prevent security breaches into NBC servers and applications

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of breaches	0	0	0	0

Target Measure:

Complete IT budgeted projects

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of completed projects	4	4	5	4

Goal Action for Achievement by Key Code:

Provide an adequate level of training opportunities to ensure user comfort with systems and processes • CB 6

Target Measure:

Provide user training sessions

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of sessions	185	180	185	180

Target Measure:

Respond to help desk requests within two hours

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percentage	100%	100%	100%	100%

STAFFING:

Attract, develop and retain highly qualified employees.

Goal Action for Achievement by Key Code:

Provide ongoing technical training to optimize team performance and provide equipment to ensure safe and environmentally sound management practices are followed • S 3

Target Measure:

Staff participation in training sessions

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Participation percentage	65%	50%	65%	65%

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 6

Target Measure:

Renew and upgrade all NBC systems in accordance with lease expirations

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Frequency	Annually	Annually	Annually	Annually

Target Measure:

Maintain current systems and applications

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percent of current	95%	95%	95%	95%

CUSTOMER SERVICE - The Program

Mission and Overview:

The Customer Service is responsible for accurate and timely billing of approximately 83,000 accounts in the NBC service area. Water consumption based billings comprise more than half of the annually billed user charges and the NBC receives water consumption data from seven different water supply boards. Customers are billed on a monthly basis. The billing section also 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.

Major Accomplishments FY 2016 by Key Code:

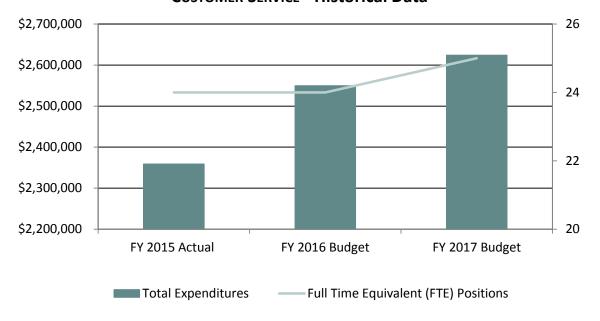
- FM 3 Completed timely and accurate monthly billings of NBC's 83,000 accounts
- FM 13 Billed more than \$95 million in user fee revenue
- FM 14 Collected approximately \$400,000 per month through the Water Shut-off program
- **CF 3** Refined and expanded Customer Service Application to more efficiently service NBC customers
- **CF 5** Obtained site readings for more than 450 customers per month on average
- **CF 5** Received and responded to an average of 4,500 customer calls per month

- **CB 4** Assist with implementation of new Customer Service Application
- FM 13 Ensure complete and accurate billings and streamline collection strategies to maximize results
- **CF 9** Provide excellent customer service
- S 3 Continue to provide training on the Customer Service Application

CUSTOMER SERVICE - The Budget

	FY 2	015 Actual	FY 2	016 Budget	FY 20	017 Budget
Expenditures by Element of Expense Personnel Less Capital Reimbursements	\$	1,784,817 -	\$	1,913,396 -	\$	2,001,488
Net Personnel		1,784,817		1,913,396		2,001,488
Operating Supplies/Expense Professional Services Operating Capital Debt Service		520,734 26,753 26,647		571,928 34,300 30,000		554,793 38,000 30,000
Total Expenditures	\$	2,358,951	\$	2,549,624	\$	2,624,281
Expenditures by Funding Source Revenue Operating Capital Transfer Grant	\$	2,332,304 26,647 -	\$	2,519,624 30,000 -	\$	2,594,281 30,000
Total Expenditures by Source	\$	2,358,951	\$	2,549,624	\$	2,624,281

CUSTOMER SERVICE - Historical Data



Program Staffing (Budgeted)						
Assistant Billing Supervisor 1.0 Customer Service Representative						
Assistant Collections Supervisor	1.0	Customer Service Rep-Fiscal Clerk	2.0			
Billing Supervisor	1.0	Customer Service Support Supervisor	1.0			
Collections Supervisor	1.0	Field Investigator	3.0			
Customer Research Supervisor	1.0	Fiscal Clerk	1.0			
Customer Service Analyst	2.0	Senior Fiscal Clerk	1.0			
Customer Service Manager 1.0						
	25.0 FTEs					

CUSTOMER SERVICE - Performance Data

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:

Increase efficiency and accuracy of user charge billing • FM 13

Target Measure:

Ensure accounts have an actual meter reading within prior 12 months

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percentage of accounts with actual reading	98%	98%	98%	98%

Goal Action for Achievement by Key Code:

Ensure timely collection of accounts • FM 14

Target Measure:

Calls to accounts with over 30-day balances

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percentage called	90%	90%	90%	90%

Target Measure:

Select accounts for Water Shut Off

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of accounts selected	5,000	5,000	5,000	5,000

Target Measure:

Late fees as a percentage of billing

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percentage	<1.5%	<1.5%	<1.5%	<1.5%

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

Goal Action for Achievement by Key Code:

Review customer accounts and develop relationships with large users • CF 4

Target Measure:

Review large user accounts and obtain quarterly meter reads

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of large user accounts reviewed	15	15	15	15
Number of meter reads	500	500	500	500

Goal Action for Achievement by Key Code:

Maximize customer focus attitude • CF 5

Target Measure:

Provide customer service focus training sessions

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of sessions	8	8	8	8

Target Measure:

Calls abandoned

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percentage abandoned	<4%	<4%	<4%	<4%

Target Measure:

Investigate new sewer connection permits

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percentage investigated	100%	100%	100%	100%

Target Measure:

Resolution of disputes within 30 days

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percentage resolved	96%	96%	96%	96%

PURCHASING - The Program

Mission and Overview:

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.

Major Accomplishments FY 2016 by Key Code:

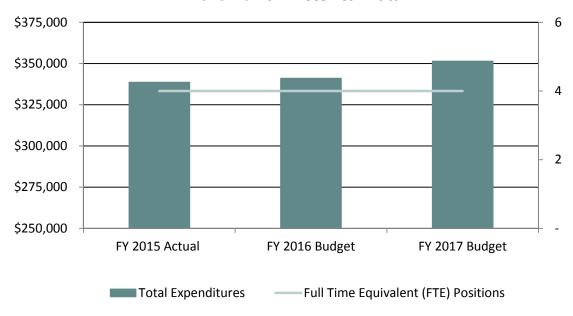
- **CB 4** Added bid specifications and sole source documentation to SharePoint
- **FM 12** Ensured that all purchases were in conformance with State of RI Purchasing Regulations and NBC Purchasing Regulations
- FM 15 Prepared 18 bid proposals and specifications within 30 days
- **FM 15** Assisted with emergency purchases
- **FM 16** Administered the net metering contract and renegotiated the contract for the sale of RECs generated by the wind turbines at Field's Point
- **CF 4** Provided assistance to NBC staff to ensure compliance with State of RI Purchasing Regulations
- **CF 6** Posted bid requests and awards on-line
- CF 6 Reviewed new legislation with NBC's Legal department to ensure compliance
- **CF 11** Ensured new employees were trained in the Oracle purchasing system

- FM 15 Review and maintain proper preparation of purchasing specifications to ensure competitive bids
- FM 15 Ensure the timely, efficient and cost effective purchase of goods and services needed to operate, maintain and improve NBC's Facilities
- **CF 3** Ensure compliance with Federal and State purchasing laws

Purchasing - The Budget

	FY 20	15 Actual	FY 201	.6 Budget	FY 201	.7 Budget
Expenditures by Element of Expense Personnel Less Capital Reimbursements		336,130	\$	337,247	\$	347,847
Net Personnel		336,130		337,247		347,847
Operating Supplies/Expense Professional Services Operating Capital Debt Service		2,550 - - -		3,800 - - -		3,600 - - -
Total Expenditures	\$	338,680	\$	341,047	\$	351,447
Expenditures by Funding Source Revenue Operating Capital Transfer Grant	\$	338,680 - -	\$	341,047 - -	\$	351,447 - -
Total Expenditures by Source	\$	338,680	\$	341,047	\$	351,447

PURCHASING - Historical Data



Program Staffing (Budgeted)					
Fiscal Clerk 1.0 Purchasing Coordinator 1.0					
Office Administrator	1.0 Purchasing Manager		1.0		
4.0 FTEs					

Purchasing - Performance Data

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 are purchased in a timely, efficient and cost effective manner • FM 15

Target Measure:

Purchase requisitions completed within two weeks

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percentage	97%	97%	97%	97%

Target Measure:

Complete bid specifications within 30 days

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of days	30	30	30	30

Goal Action for Achievement by Key Code:

Evaluate utility and chemical contracts • FM 16

Target Measure:

Review contracts three months prior to expiration

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percentage reviewed	100%	100%	100%	100%

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

Goal Action for Achievement by Key Code:

Ensure compliance with Federal and State purchasing laws • CF 6

Target Measure:

Put out to bid non-sole source, non-emergency purchase requisitions over \$2,500

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percentage out to bid	100%	100%	100%	100%

Target Measure:

List non-sole source, non-emergency purchase requisitions over \$2,500 on the State of Rhode Island Vendor Information Program (Website)

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percentage listed	100%	100%	100%	100%

Goal Action for Achievement by Key Code:

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

Target Measure:

Train purchasing system users

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percentage trained	100%	100%	100%	100%

STAFFING: Attract, develop and retain highly qualified employees.

Goal Action for Achievement by Key Code

Provide ongoing technical training to optimize team performance and provide equipment to ensure safe and environmentally sound management practices are followed • S 3

Target Measure:

Maintain employee training

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of hours/employee	12/employee	12/employee	12/employee	12/employee

GENERAL ADMINISTRATION - The Program

Mission and Overview:

The General Administration section includes overhead items such as insurance, unemployment, workers' compensation, and property management activities related to the Corporate Office Building, telephones and debt service payments. Debt service represents the most significant element of the General Administration budget.

Major Accomplishments FY 2016 by Key Code:

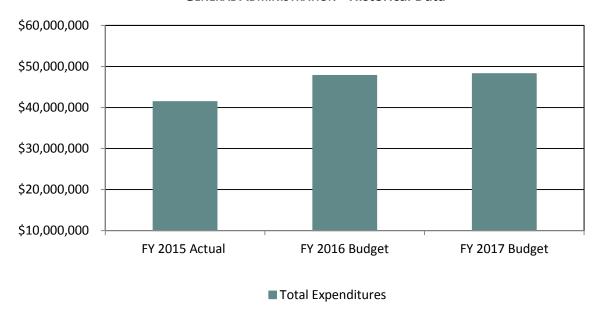
- CB 7 Coordinated with other NBC sections to ensure the continuous update and enhancement of security
- CB 8 Completed proper preventive and corrective maintenance at the COB
- CB 10 Maintained and tracked the inventory associated with HVAC parts and components
- **CB 16** Completed the reconfiguration of the IT area
- **CB 16** Oversaw the installation of a new roof for the Corporate Office Building
- **CB 16** Completed monthly analysis of COB maintenance expense
- **CF 7** Managed service request logs and ensured timely responses

- **CB 7** Ensure all necessary security enhancements are completed
- CB 16 Provide cost-effective property management of the Corporate Office Building
- **CF 7** Ensure timely completion of service requests

GENERAL ADMINISTRATION - The Budget

	FY	2015 Actual	FY	2016 Budget	FY 2	2017 Budget
Expenditures by Element of Expense						
Personnel	\$	88,547	\$	448,429	\$	530,168
Less Capital Reimbursements		-		-		
Net Personnel		88,547		448,429		530,168
Operating Supplies/Expense		1,414,830		1,606,111		2,071,593
Professional Services		280,048		340,000		372,000
Operating Capital		124,513		305,000		145,000
Debt Service		39,503,789		45,111,364		45,137,622
Total Expenditures	\$	41,411,727	\$	47,810,904	\$	48,256,383
						_
Expenditures by Funding Source						
Revenue	\$	41,287,214	\$	47,505,904	\$	48,111,383
Operating Capital Transfer		124,513		305,000		145,000
Grant		-		-		-
Total Expenditures by Source	\$	41,411,727	\$	47,810,904	\$	48,256,383

GENERAL ADMINISTRATION - Historical Data



PROGRAM STAFFING (BUDGETED)

Responsibilities are executed by Purchase Staff

GENERAL ADMINISTRATION - Performance Data

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 all facility inspections are completed on time and deficiencies corrected in a timely manner • CB 7

Target Measure:

Perform facility inspections

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of inspections	9	9	9	9

Goal Action for Achievement by Key Code:

Maintain an asset management program for NBC's infrastructure and invest in capital investments as needed • CB 10 Target Measure:

Complete budgeted operating capital projects

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percentage completed	100%	100%	100%	100%

Goal Action for Achievement by Key Code:

Provide safe and cost-effective administration and maintenance of NBC Facilities • CB 16

Target Measure:

Complete building maintenance requests within two weeks

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percentage completed	85%	85%	85%	85%

Target Measure:

Cost per square foot maintained

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Dollars/square foot	\$18.00	\$11.29	\$15.00	\$15.00

OPERATIONS & ENGINEERING

Division Summary

Interceptor Maintenance

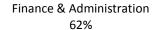
Engineering

Field's Point WWFT

Bucklin Point WWTF

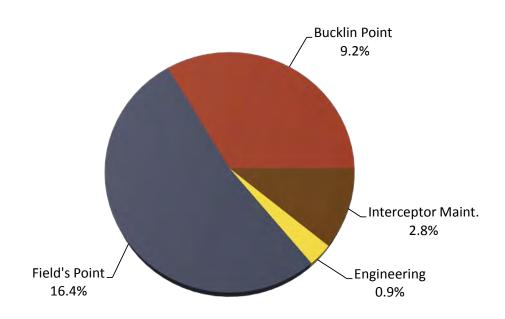
NBC Division Budgets





PP&R 7%

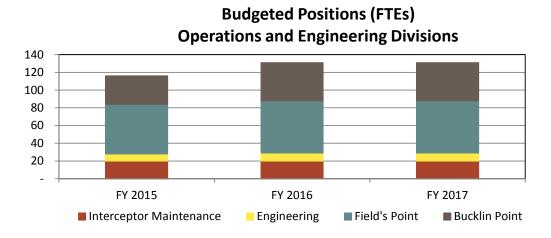




OPERATIONS & ENGINEERING DIVISION - The Program Divison Summary

Purpose and Overview:

The Operations and Engineering Division is responsible for operating and maintaining the treatment plants and the collection system. In addition, the Division is responsible for planning and designing capital improvements to NBC's system of interceptors, pump stations and wastewater treatment facilities. These improvements to the sewer system's infrastructure are necessary to ensure proper collection and treatment of the wastewater and stormwater flows.

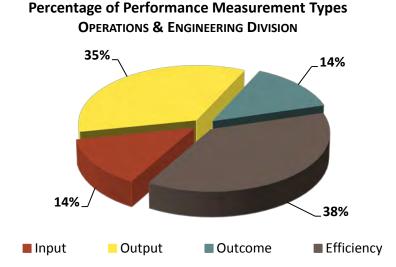


Significant Budget Modifications:

The FY 2017 Operations and Engineering Division's budget decreased by approximately 1% or \$238,064 from the FY 2016 budget. Personnel has increased by \$778,076 or 6% and includes two additional FTEs. Operating supplies and expense and professional services decreased by approximately \$1.3 million, due to decreased biosolids disposal and electricity expense. Operating Capital has increased \$256,540.

Operations and Engineering Divisions Performance Data Summary:

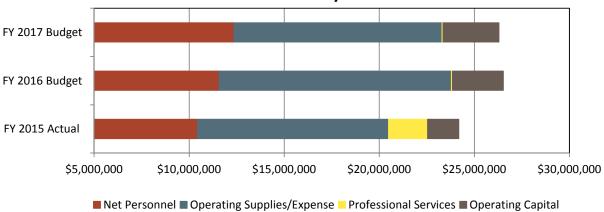
The chart below illustrates the Operations and Engineering Divisions' Performance Data by type of measure. The measures can be found in the individual sections following the division summary. In this Division, Outcome and Efficiency make up 52% of the performance measures.



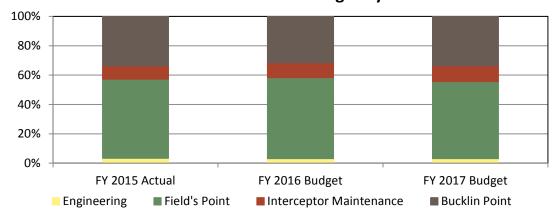
OPERATIONS & ENGINEERING DIVISION - The Budget Division Summary

	FY	2015 Actual	FY	2016 Budget	FY 2	2017 Budget
Expenditures by Element of Expense						
Personnel	\$	10,778,930	\$	11,949,946	\$	12,709,983
Less Capital Reimbursements		(341,982)		(374,284)		(356,245)
Net Personnel		10,436,948		11,575,662		12,353,738
Operating Supplies/Expense		10,049,033		12,218,033		10,943,053
Professional Services		2,054,111		50,000		52,300
Operating Capital		1,636,915		2,682,960		2,939,500
Debt Service		-		-		
Total Expenditures	\$	24,177,007	\$	26,526,655	\$	26,288,591
Expenditures by Funding Source						
Revenue	\$	22,540,092	\$	23,843,695	\$	23,349,091
Operating Capital Transfer		1,636,915		2,682,960		2,939,500
Grant		-		-		_
Total Expenditures by Source	\$	24,177,007	\$	26,526,655	\$	26,288,591

Division's Cost By Element



Percent of Division's Budget By Section



INTERCEPTOR MAINTENANCE - The Program

Mission and Overview:

The Interceptor Maintenance (IM) section is responsible for maintaining the sewage collection system in order to collect and transport wastewater to the NBC wastewater treatment facilities. The section performs proper maintenance, inspections and repairs on collection system assets throughout the District to ensure sufficient capacity and transport is provided to comply with State and Federal requirements.

Major Accomplishments FY 2016 by Key Code:

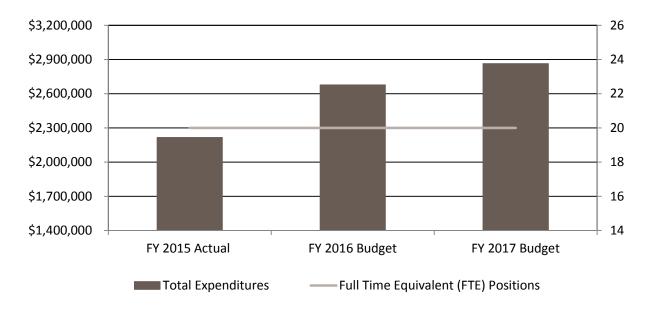
- **CB 8** Completed the inspection of an estimated six miles of interceptors throughout the service area
- **CB 9** Complied with all State and Federal reporting requirements for 100% of any bypass events within the collection system
- **EP 2** Removed an estimated 40 tons of material in CSOs from reaching the waterbody by maintaining netting facilities
- **CF 1** Provided an estimated 50 hours of assistance to NBC member communities
- CF 7 Responded to all service connection review requests within five days

- CB 8 Review inspection schedule of NBC assets and comply with 100% of the recommended inspection schedules
- CB 11 Comply with 100% of RIPDES permit requirements for the collection system
- **S 3** Encourage staff to attend various training programs with a goal of completing 250 total training hours

INTERCEPTOR MAINTENANCE - The Budget

	FY 20	15 Actual	FY 2	016 Budget	FY 20	17 Budget
Expenditures by Element of Expense						
Personnel	\$	1,644,813	\$	1,656,738	\$	1,761,773
Less Capital Reimbursements		(23,133)		(16,543)		(5,518)
Net Personnel		1,621,680		1,640,195		1,756,255
Operating Supplies/Expense		519,319		558,068		600,638
Professional Services		7,488		10,800		15,800
Operating Capital		63,955		468,760		492,000
Debt Service		-		-		
Total Expenditures	\$	2,212,442	\$	2,677,822	\$	2,864,692
Expenditures by Funding Source						
Revenue	\$	2,148,487	\$	2,209,062	\$	2,372,692
Operating Capital Transfer		63,955		468,760		492,000
Grant						
Total Expenditures by Source	\$	2,212,442	\$	2,677,822	\$	2,864,692

INTERCEPTOR MAINTENANCE - Historical Data



Program Staffing (Budgeted)					
Assistant IM Manager	1.0	Mechanic	1.0		
Environmental Engineer	1.0	Operator	11.0		
Clerk	1.0	Operator/Heavy Equipment Operator	1.0		
IM Manager	1.0	Supervisor	1.0		
Inspector	1.0	Senior Technical Assistant	1.0		
20.0 FTEs					

INTERCEPTOR MAINTENANCE - Performance Data

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 on-going inspections and maintenance of NBC's building, plant, equipment and property • CB 8

Target Measure:

Provide training on standard operating procedures within the collection system assets

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Hours/Employee	2/employee	13/employee	5/employee	5/employee

Target Measure:

Address emergency situations within 24 hours of notification

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number addressed within 24	100%	100% (2/2)	100%	100%

Goal Action for Achievement by Key Code:

Comply with all State and Federal reporting requirements on reporting bypass events • CB 9

Target Measure:

Report all bypass events verbally within 24 hours and send a written report within 5 days

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percentage of events reported	100%	100% (2/2)	100%	100%

Goal Action for Achievement by Key Code:

Maintain an asset management program for NBC's infrastructure and invest in capital investments as needed • CB 10 Target Measure:

Comply with DEM Best Management Practices (BMP) reporting and requirements (Semi-Annually)

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Frequency	Semi-Annually	Semi-Annually	Semi-Annually	Semi-Annually

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 pollution • EP 2

Target Measure:

Minimize the length of time required to alleviate dry weather bypass events between initial notification and the end of bypass

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Hours	6 hours or less	.75 hour	6 hours or less	6 hours or less

Target Measure:

Remove material from full trash nets within 72 hours in order to prevent pollution from entering receiving waters

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Tons of material removed	50 tons	39 tons	100 tons	40 tons

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:

Minimize unplanned capital expenditures • FM 17

Target Measure:

Expenditures spent on planned capital items

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percentage	100%	50%	100%	100%

Goal Action for Achievement by Key Code:

Reduce the number of Workers' Compensation claims • FM 18

Target Measure:

Schedule quarterly safety committee meetings with staff and post minutes

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Meetings/year	4/year	9 meetings	4/year	4/year

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

Goal Action for Achievement by Key Code:

Provide prompt courteous responses to all customer requests • CF 7

Target Measure:

Review sewer connection permits in a timely manner

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Business days	3 business days	2.5 business days	3 business days	3 business days

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 on helping with collection system maintenance

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Hours of assistance provided	100 hours	32 hours	75 hours	40 hours

STAFFING: Attract, develop and retain highly qualified employees.

Goal Action for Achievement by Key Code:

Provide ongoing technical training to optimize team performance and provide equipment to ensure safe and environmentally sound management practices are followed • S 3

Target Measure:

Provide technical training to staff on various equipment and techniques for proper collection system operation and maintenance

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Hours of training	250 hours	194 hours	250 hours	175 hours

ENGINEERING - The Program

Mission and Overview:

The primary responsibility of the Engineering section is the planning and design of facilities needed for the collection and treatment of wastewater within NBC's service area. Projects are identified in the NBC's five-year Capital Improvement Plan. The types of capital projects designed by the Engineering section 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 FPWWTF.

Major Accomplishments FY 2016 by Key Code:

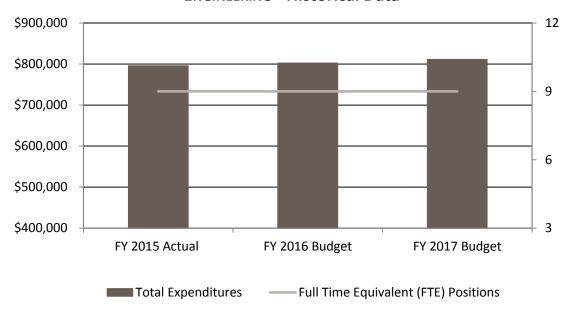
- **CB 1** Completed the reevaluation of the CSO Phase III Facilities Program
- **CB 1** Completed the design phase for the Omega Pump Station (Project 70800)
- **CB 1** Completed the evaluation of Lab Building reuse options (Project 12900)
- **CB 1** Completed the design of the Moshassuck Valley Interceptor (Project 30444)
- **CB 1** Completed design of the Interceptor Easement Restoration AVI (Project 30438)
- **CB 1** Completed design for the Providence River Siphon (Project 30457)
- **CB 1** Bid the Bucklin Point Biogas Reuse Project (Project 12000)

- **CB 1** Begin Design of Phase A of the CSO Phase III Program
- **CB 1** Complete design of the interceptor easements at BVI
- **CB 1** Initiate design of the system-wide inflow reduction initiative

ENGINEERING - The Budget

	FY 2	015 Actual	FY 20	16 Budget	FY 20	17 Budget
Expenditures by Element of Expense						
Personnel	\$	1,032,812	\$	997,734	\$	1,042,039
Less Capital Reimbursements		(302,790)		(338,529)		(350,727)
Net Personnel		730,022		659,205		691,312
Operating Supplies/Expense		57,367		70,150		42,100
Professional Services		8,210		13,000		8,000
Operating Capital		-		60,000		70,000
Debt Service		-		-		-
Total Expenditures	\$	795,599	\$	802,355		\$ 811,412
For and thousand the Foundtine Course						
Expenditures by Funding Source	_				_	
Revenue	\$	795,599	\$	742,355	\$	741,412
Operating Capital Transfer		-		60,000		70,000
Grant		-		-		
Total Expenditures by Source	\$	795,599	\$	802,355	\$	811,412

ENGINEERING - Historical Data



Program Staffing (Budgeted)					
Director of Operations & Engineering	1.0	Facilities Engineer	1.0		
Engineering & Operations Fiscal Administrator	2.0	Instrumentation Engineer	1.0		
Engineering Manager	1.0	Principal Environmental Engineer	2.0		
Environmental Engineer	1.0				
9.0 FTEs					

ENGINEERING - Performance Data

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:

Complete projects on schedule, within budget, in the most cost-effective manner and in compliance with regulatory requirements • CB 1

Target Measure:

Complete project tasks related to nutrient removal and other improvements at the wastewater treatment facilities

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of tasks completed	1	1	N/A	1

Target Measure:

Complete project tasks related to the sewer collection system

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of tasks completed	1	2	4	2

Target Measure:

Complete project tasks related to the development of GIS/Hansen sewer maintenance applications

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of tasks completed	1	1	2	2

Target Measure:

Complete project tasks related to Phase III Combined Sewer Overflow control in accordance with permit and consent order requirements

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of tasks completed	6	6	1	1

Target Measure:

Complete project tasks related to Wastewater Treatment Facilities

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of tasks completed	N/A	N/A	1	3

Target Measure:

Ensure completed planning and design contract expense is within 10% of board approved contract amounts

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percentage	75%	85%	75%	75%

FIELD'S POINT - The Program

Mission and Overview:

The Field's Point WWTF is the largest wastewater treatment facility in Rhode Island and treats an average of 41 MGD. The facility provides secondary treatment for dry weather flows up to 65 MGD or 77 MGD of wet weather flow. Primary treatment and disinfection for flows greater than 77 MGD up to 123 MGD are treated in the Wet Weather Treatment Facilities, for a total treatment capacity of 200 MGD. The Operations Staff efficiently and effectively operates the facility to produce the highest quality effluent to meet or exceed RIPDES permit requirements. In FY 2016, the RIPDES permit limit of 5 mg/l (from May through October) was in effect. Operations must ensure that all process functions are constantly optimized in order to meet each of the permit requirements. The Operations staff is also responsible for the CSO Phase I Facilities, Tunnel Pump Station and the Ernest Street Pump Station.

Major Accomplishments FY 2016 by Key Code:

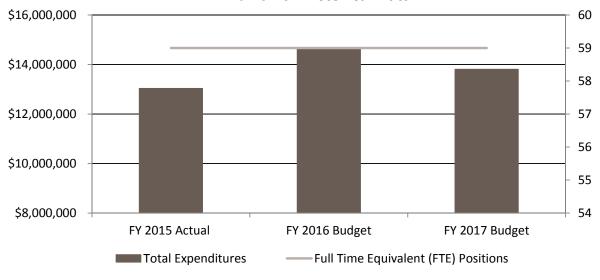
- CB 5 Integrated two turbo blowers and two Copco multi-stage blowers into the Field's Point blower control strategy
- CB 9 Implemented dual hypochlorite feeds to the east and west chlorine contact tanks
- CB 10 Developed the 2015 Asset Condition Report for NBC's Fiscal Sustainability Plan
- CB 11 Met the seasonal permit for total nitrogen (5 mg/l) in May 2015 through October 2015
- **S 5** Successfully implemented a succession plan for Operations and Maintenance

- **CB 8** Continue maintenance efforts to protect infrastructure at the CSO facilities, gate and screenings structures, remote pumping stations and flow monitoring stations
- **CB 11** Optimize the IFAS process to ensure compliance with the total seasonal nitrogen permit limits, RIPDES permits and consent agreements and optimize the facilities to allow additional gallons of leachate flow into the system
- S 3 Develop basic training assessment tools checklist for all areas of the plant to determine employee competency and deficiency and provide new and/or remedial instruction for all Operations' employees as needed
- S 4 Implement improved confined space entry method by purchasing OSHA compliant fall protection and retrieval equipment

FIELD'S POINT - The Budget

	FY	2015 Actual	FY	2016 Budget	FY 2	2017 Budget
Expenditures by Element of Expense						
Personnel	\$	5,045,106	\$	5,395,896	\$	5,486,611
Less Capital Reimbursements		(16,059)		(19,212)		-
Net Personnel		5,029,047		5,376,684		5,486,611
Operating Supplies/Expense		6,971,223		8,082,715		7,036,547
Professional Services		10,969		15,200		14,500
Operating Capital		1,014,493		1,190,000		1,269,000
Debt Service		-		-		
Total Expenditures	\$	13,025,732	\$	14,664,600	\$	13,806,658
Expenditures by Funding Source						
Revenue	\$	12,011,239	\$	13,474,600	\$	12,537,658
Operating Capital Transfer		1,014,493		1,190,000		1,269,000
Grant		-		-		
Total Expenditures by Source	\$	13,025,732	\$	14,664,600	\$	13,806,658

FIELD'S POINT - Historical Data



Program Staffing (Budgeted)				
Asset Management Administrator	1.0	Lead Electrician	1.0	
Assistant Control System Administrator	1.0	Maintenance Manager	1.0	
Assistant Operations Manager	1.0	Maintenance Supervisor	2.0	
Carpenter	1.0	Mechanic	11.0	
Clerk	1.0	O & M Coordinator	1.0	
Control Systems Administrator	1.0	O & M Technician	1.0	
Control Systems Associate	1.0	Operations Manager	1.0	
E & I Technician	2.0	Operations Supervisor	5.0	
Electrician	3.0	Operator	11.0	
Fleet Mechanic	1.0	Process Monitor	8.0	
Inventory Control Clerk	2.0	Senior E & I Technician	1.0	
		Senior Process Monitor	1.0	
	59.0	FTEs		

FIELD'S POINT - Performance Data

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:

Provide an adequate level of training opportunities to ensure user comfort with systems and processes • CB 6

Target Measure:

Train all operators and process monitors on the proper use of the DR 2800 Hach meter

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percentage of operators trained	100%	100%	N/A	100%

Goal Action for Achievement by Key Code:

Achieve 100% compliance on RIPDES permit, consent agreements and stormwater permits • CB 11

Target Measure:

Eliminate daily maximum, weekly average and monthly average violations for TSS, BOD, fecal coliforms and chlorine residuals (potentially 1,716 violations)

``	• •	,		
Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of violations	0	3	0	0

Target Measure:

Achieve total seasonal nitrogen permit limit of 5 mg/l

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
mg/l	<5 mg/l	3.8 mg/l	<4 mg/l	<4 mg/l

Goal Action for Achievement by Key Code:

Ensure safe and reliable wastewater processing through effective asset management and maximizing effluent treatment performance for TSS and BOD than is required by the permit limit of 30 mg/l • CB 12

Target Measure:

Yearly average

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
TSS - mg/l	4 mg/l	5.72 mg/l	4 mg/l	6 mg/l
Fecal Coliforms - MPN/100mls	2 MPN	2.23 MPN	2.5 MPN	3 MPN
BOD - mg/l	4 mg/l	5.77 mg/l	4 mg/l	6 mg/l

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:

Minimize unplanned capital expenditures • FM 17

Target Measure:

Capital expenditures spent on planned items

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percentage	100%	95%	95%	95%

Goal Action for Achievement by Key Code:

Optimize chemical additions to the effluent by monitoring and adjusting processes as needed • FM 19 Target Measure:

Hypochlorite gallons added to the chlorine contact tank

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Gallons/day (GPD)	1,000 GPD	1,215 GPD	1,200 GPD	1,200 GPD

Goal Action for Achievement by Key Code:

Optimize efficiency of the solids handling area • FM 23

Target Measure:

Optimize sludge production to minimize waste impact on Narragansett Bay

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
DT/day	< 25 DT/day	21.08 DT/day	25 DT/day	25 DT/day

Goal Action for Achievement by Key Code:

Plan and schedule maintenance work on a weekly basis to improve efficiency of staff time • FM 24 Target Measure:

Planned/scheduled work completed per week

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percentage completed	90%	86%	90%	90%

STAFFING:

Attract, develop and retain highly qualified employees.

Goal Action for Achievement by Key Code:

Develop mechanisms and establish opportunities for continued growth and professional development • S 5

Target Measure:

Offer NBC computer courses and/or incentive credit training

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of courses taken	30	4	N/A	N/A

Target Measure:

Offer outside courses/seminars for training/safety

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of training hours	N/A	N/A	300	300

BUCKLIN POINT - The Program

Mission and Overview:

The Bucklin Point WWTF 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. In FY 2015 the daily average influent flow equaled 19 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. Operations and Maintenance staff strive to optimize treatment efficiency so as to produce a high quality effluent that exceeds national secondary treatment standards.

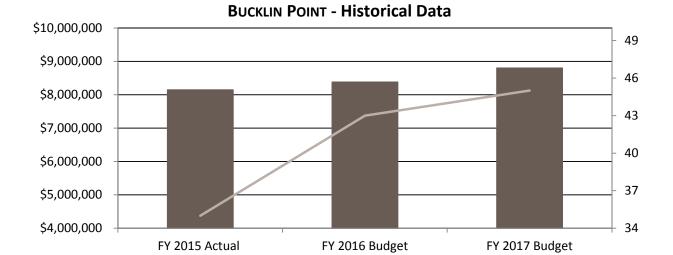
Major Accomplishments FY 2016 by Key Code:

- CB 11 Met the seasonal permit for total nitrogen (5 mg/l) in May 2015 through October 2015
- S 2 Completed the transition of the management of the Bucklin Point Facility from a private contractor to NBC including the hiring of an Operations Manager, Assistant Operations Manager, Maintenance Manager and four Operations Supervisors
- 5.3 Increased staff enrollment in DEM certification testing to increase license grades
- Seven employees in the Operator I passed the Grade II license exam and upgraded to Operator II positions
- **S 3** Conducted employee training programs to improve mechanical abilities of maintenance staff

- **CB 8** Continue to optimize inventory control procedures, ensure proper inventory and improve preventive and corrective work order efficiency
- **CB 11** Continue to optimize treatment processes to produce high quality effluent
- **CB 16** Continue to operate within the budget

BUCKLIN POINT - The Budget

	FY 2	2015 Actual	FY 2	016 Budget	FY 20	17 Budget
Expenditures by Element of Expense Personnel Less Capital Reimbursements	\$	3,056,199 -	\$	3,899,578 -	\$	4,419,560 -
Net Personnel		3,056,199		3,899,578		4,419,560
Operating Supplies/Expense		2,501,124		3,507,100		3,263,768
Professional Services		2,027,444		11,000		14,000
Operating Capital		558,467		964,200		1,108,500
Debt Service						
Total Expenditures	\$	8,143,234	\$	8,381,877	\$	8,805,828
Expenditures by Funding Source						
Revenue	\$	7,584,767	\$	7,417,677	\$	7,697,328
Operating Capital Transfer Grant		558,467 -		964,200 -		1,108,500 -
Total Expenditures by Source	\$	8,143,234	\$	8,381,877	\$	8,805,828



Total Expenditures

Program Staffing (Budgeted)					
Asset Management Foreman	1.0	Maintenance Foreman	1.0		
Assistant E & I Technician	1.0	Maintenance Manager	1.0		
Assistant Maintenance Planner/Scheduler	1.0	Maintenance Planner/Scheduler	1.0		
Assistant Operations Manager	1.0	Mechanic	6.0		
Clerk	1.0	Operations Foreman	1.0		
E & I Technician	1.0	Operations Manager	1.0		
Electrical Foreman	1.0	Operations Supervisor	4.0		
Electrician	2.0	Operator	8.0		
Heavy Equipment Operator	1.0	Process Monitor	9.0		
Inventory Control Clerk	1.0	Senior E & I Technician	1.0		
		Utility Crew Foreman	1.0		
	45.	O FTEs			

Full Time Equivalent (FTE) Positions

BUCKLIN POINT - Performance Data

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:

Achieve 100% compliance on RIPDES permit, consent agreements and stormwater permits • CB 11 Target Measure:

Achieve total seasonal nitrogen permit limit of 5 mg/l

Unit of Measur	e FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
mg/l	5.0 mg/l	3.85 mg/l	5.0 mg/l	5.0 mg/l

Goal Action for Achievement by Key Code:

Ensure safe and reliable wastewater processing through effective asset management and maximizing effluent treatment performance for TSS and BOD than is required by the permit limit of 30 mg/l • CB 12

Target Measure:

Yearly average

, ,				
Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
TSS - mg/l	10 mg/l	7.03 mg/l	10 mg/l	7.5 mg/l
Fecal Coliforms - MPN/100mls	3 MPN	4.52 MPN	<10 MPN	<5 MPN
BOD - mg/l	10 mg/l	3.14 mg/l	10 mg/l	5 mg/l

Goal Action for Achievement by Key Code:

Provide safe and cost effective administration and maintenance of NBC facilities • CB 16

Target Measure:

Purchase budgeted operating capital items

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Projects completed	100%	76%	90%	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:

Plan and schedule maintenance work on a weekly basis to improve efficiency of staff time • FM 24 Target Measure:

Planned/scheduled work completed per week

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percent Complete	N/A	N/A	N/A	85%

Goal Action for Achievement by Key Code:

Reduce emergency maintenance expenditures and devise cost-saving initiatives • FM 26

Target Measure:

Perform Preventative Maintenance based on total work orders completed

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percent Complete	N/A	N/A	N/A	90%



PLANNING, POLICY & REGULATION

Division Summary

PLANNING

PRETREATMENT

LABORATORY

ENVIRONMENTAL
SAFETY & TECHNIAL
ASSISTANCE

ENVIRONMENTAL MONITORING & DATA ANALYSIS

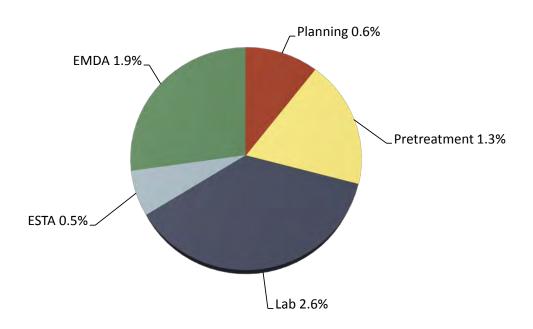
NBC Division Budgets

Executive Affairs & Construction 2%

Finance & Administration 62%

Operations & Engineering 29%

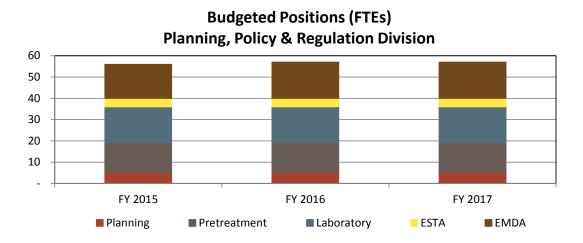
PP&R 7%



PLANNING, POLICY & REGULATION DIVISION - The Program Division Summary

Purpose and Overview:

The Planning, Policy and Regulation Division is responsible for long-range agency planning and the issuance of new sewer connection permits. The Division includes the Pretreatment program, Environmental Monitoring and Data Analysis, Environmental Safety and Technical Assistance and the Laboratory. The Division provides technical support to the operating sections and performs a variety of special studies.



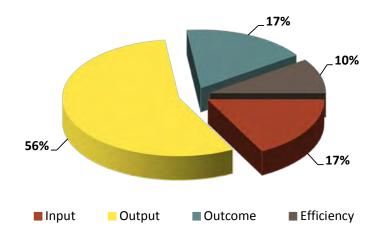
Significant Budget Modifications:

The FY 2017 Planning, Policy & Regulation Division's budget has increased by approximately 7% or \$426,863 from the FY 2016 budget. Personnel has increased by \$296,015 or 6%. Operating supplies and expense and professional services have increased from the prior year budget by \$56,948. Operating Capital has also increased by \$73,900 and includes investments in critical laboratory and monitoring equipment.

Planning, Policy and Regulation Divisions Performance Data Summary:

The chart below illustrates the Planning, Policy & Regulation Divisions' 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 27% of the performance measures.

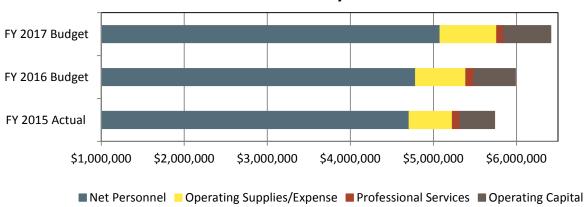
Percentage of Performance Measurement Types PLANNING, POLICY & REGULATION



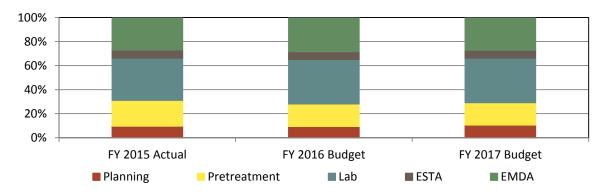
PLANNING, POLICY & REGULATION DIVISION - The Budget Division Summary

	FY 2	015 Actual	FY 2	016 Budget	FY 20	17 Budget
Expenditures by Element of Expense						
Personnel	\$	4,714,964	\$	4,788,446	\$	5,081,831
Less Capital Reimbursements		(7,844)		(4,955)		(2,325)
Net Personnel		4,707,120		4,783,491		5,079,506
Operating Supplies/Expense		521,435		606,369		681,817
Professional Services		89,234		100,850		82,350
Operating Capital		419,045		496,100		570,000
Debt Service		-		-		-
Total Expenditures	\$	5,736,834	\$	5,986,810	\$	6,413,673
Expenditures by Funding Source						
Revenue	\$	5,317,789	\$	5,490,710	\$	5,843,673
Operating Capital Transfer Grant		419,045 -		496,100		570,000 -
Total Expenditures by Source	\$	5,736,834	\$	5,986,810	\$	6,413,673

Divisions' Cost By Element



Percent of Divisions' Budget By Section



PLANNING - The Program

Mission and Overview:

The Planning and Permits section issues sewer connection, stormwater and sewer alteration permits. It is also responsible for the issuance and maintenance of NBC policies. This section provides assistance with the enforcement of NBC Rules and Regulations, protection of NBC sewer easements, public outreach projects, water use audits and provides technical assistance to the sewer abatement program. Permit section staff maintain the RIPDES storm water permits for both the Field's Point and Bucklin Point Wastewater Treatment Facilities. This section is responsible for the NBC Planning activities, including the NBC Strategic Plan, negotiating RIPDES Permit issues with RIDEM and dealing with stakeholders and regulatory agencies on all types of environmental issues involving the NBC.

Major Accomplishments FY 2016 by Key Code:

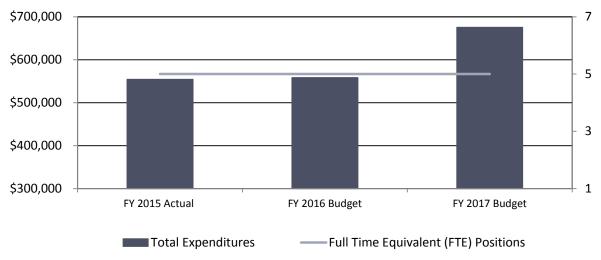
- **CF 1** Administered the NBC Earth Day River Cleanup Grant Program involving 15 non-profit organizations to support various river cleanups throughout the NBC service area
- CF 8 Issued 216 sewer connection permits
- **CF 9** Encouraged developers to use Low Impact Design (LID) techniques for stormwater disposal as part of the Stormwater Mitigation Program and reviewed 8 Projects that employed LID techniques

- CB 4 Continue to improve the on-line sewer permit file process for sewer connection and stormwater permits
- **CF 1** Continue the Grant Program for local organizations as part of the Chairman's River Restoration Initiative
- **CF 9** Develop informational fact sheets, case studies and Best Management Practices (BMP) documents detailing LID methods, LID technologies and other permit information documents

PLANNING - The Budget

	FY 2	015 Actual	FY 20	16 Budget	FY 2	2017 Budget
Expenditures by Element of Expense						
Personnel	\$	532,917	\$	534,265	\$	556,233
Less Capital Reimbursements		-		-		
Net Personnel		532,917		534,265		556,233
Operating Supplies/Expense		12,120		14,125		14,125
Professional Services		6,326		10,000		10,000
Operating Capital		-		-		95,000
Debt Service		-		-		
Total Expenditures	\$	551,363	\$	558,390	\$	675,358
Expenditures by Funding Source						
Revenue	\$	551,363	\$	558,390	\$	580,358
Operating Capital Transfer	Y	551,505	Y	550,550	Y	95,000
Grant		_		_		-
Total Expenditures by Source	\$	551,363	\$	558,390	\$	675,358

PLANNING - Historical Data



Program Staffing (Budgeted)					
Administrative Assistant	1.0	Permits & Planning Manager	1.0		
Director of Planning, Policy & Regulation	1.0	Permits Coordinator	1.0		
Environmental Scientist	1.0				
5.0 FTEs					

PLANNING - Performance Data

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:

Achieve 100% compliance on RIPDES permit, consent agreements and stormwater permits • CB 11 Target Measure:

Prepare annual stormwater inspection report for each WWTF

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Due Date Fields Point	12/30/2014	9/17/2014	12/30/2015	12/30/2016
Due Date Bucklin Point	12/30/2014	10/1/2014	12/30/2015	12/30/2016

Target Measure:

Renewal of RIPDES stormwater permits per RIDEM requirements within 30 days of notice

		•		
Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of days	Within 30 days	No action needed	Within 30 days	Within 30 days

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:

Administer the connection fee structure in a fair and accurate manner • FM 20

Target Measure:

Collect 100% of Permit Fees

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percentage of Permit Fees Collected	100%	100% (\$102,588)	100%	100%

Target Measure:

Review and Update of Strategic Plan

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal		
Frequency	Annually	12/10/2015	Annually	Annually		

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

Goal Action for Achievement by Key Code:

Create a customer-focused attitude to enhance the efficiency of the permitting program \bullet CF 8

Target Measure:

Meet the time limits for issuance of Sewer and Storm Connection Permits

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Business Days	8 business days	3 business days	8 business days	5 business days

Target Measure:

Meet the time limits for issuance of Sewer Alteration Permits

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Business Days	8 business days	7 business days	8 business days	5 business days

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 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Date held	4/30/2015	4/9/2015	4/30/2016	4/30/2017

STAFFING: Attract, develop and retain highly qualified employees

Goal Action for Achievement by Key Code:

Develop mechanisms and establish opportunities for continued growth and professional development • S 5

Target Measure:

Conduct biannual review meetings with staff to discuss professional development opportunities

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Meetings/Year	2/Year	2 meetings	2/Year	2/Year

Target Measure:

Provide staff with professional training

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Hours/Employee	4/Employee	6/Employee	4/Employee	4/Employee

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:

Maintain internal communication for the permit program process • C 6

Target Measure:

Provide customer service with all new permit data in order to facilitate billing of new accounts

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percentage (of new accounts)	100%	100%	100%	100%

PRETREATMENT - The Program

Mission and Overview:

The Pretreatment section is responsible for the federally mandated pretreatment program. The primary purpose of the pretreatment program is to protect the NBC wastewater treatment plants and the infrastructure from toxic chemicals that could disrupt and interfere with plant operations, as well as to protect the receiving waters, rivers and ultimately 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 the NBC districts and tracks toxic discharges through the sewer system to determine the source.

Major Accomplishments FY 2016 by Key Code:

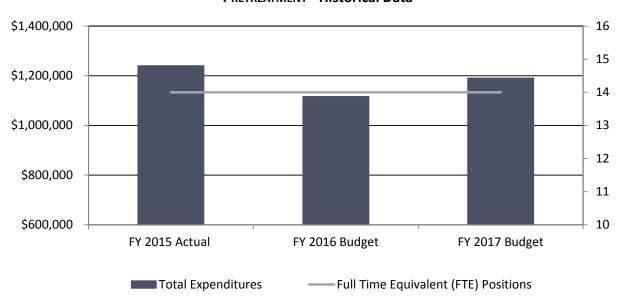
- **CB 7** Issued 9 educational form letters to users
- CB 11 Issued 1,805 Notices of Violation for each incident of non-compliance
- CB 11 Submitted the Pretreatment Annual Report to DEM by 3/15/16 as required by the RIPDES permit
- CB 11 Inspected all Significant Industrial Users (SIU) multiple times within the 12 month period
- **CB 11** All SIUs were continuously permitted in accordance with federal regulations
- **C 7** Participated in 8 public presentations and workshops

- **CB 11** Complete and submit the Pretreatment Annual Report by March 15th in accordance with the RIPDES permit
- CB 14 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 15** Ensure all SIUs are continuously permitted and inspected in accordance with State and Federal requirements as well as goals established by the NBC

PRETREATMENT - The Budget

	FY 2	2015 Actual	FY 2	016 Budget	FY 20	17 Budget
Expenditures by Element of Expense Personnel Less Capital Reimbursements	\$	1,063,764 -	\$	1,058,741	\$	1,122,685 -
Net Personnel		1,063,764		1,058,741		1,122,685
Operating Supplies/Expense Professional Services		22,738		38,120		38,320 -
Operating Capital		146,719		20,000		30,000
Debt Service		_		-		
Total Expenditures	<u>\$</u>	1,233,221	\$	1,116,861	\$	1,191,005
Expenditures by Funding Source						
Revenue	\$	1,086,502	\$	1,096,861	\$	1,161,005
Operating Capital Transfer Grant		146,719 -		20,000		30,000 -
Total Expenditures by Source	\$	1,233,221	\$	1,116,861	\$	1,191,005

PRETREATMENT - Historical Data



Program Staffing (Budgeted)						
Assistant Pretreatment Manager	1.0	Pretreatment Technician	5.0			
Pretreatment Clerk	3.0	Principal Pretreatment Engineer	1.0			
Pretreatment Engineer	2.0	Senior Pretreatment Technician	1.0			
Pretreatment Manager	1.0					
	14.0 FTEs					

PRETREATMENT - Performance Data

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:

Sample, collect and analyze all data of NBC's collection systems, treatment systems, receiving waters and SIU's to ensure all State/RIPDES/Federal requirements are met or exceeded • CB 15

Target Measure:

Conduct non-sampling inspections of 100% Significant Industrial Users (SIUs) within the required 12 month period

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percentage of inspections conducted	100%	100% (73)	100%	100%

Target Measure:

Complete and submit Annual Pretreatment Report to DEM

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Completion date	3/15/2015	3/13/2015	3/15/2016	3/15/2017

Target Measure:

Issue Notices of Violations (NOVs) for 100% of incidents of non-compliance

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percentage of NOV's issued	100%	100% (1.805)	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 3

Target Measure:

Present findings to the Citizen's Advisory Committee

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Presentation date	6/30/2015	5/20/2015	6/30/2016	6/30/2017

Target Measure:

Compile the list of companies in significant non-compliance to be published in newspaper

ı	Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
	Date	2/28/2015	2/25/2015	2/28/2016	2/28/2017

Customer Focus: Maintain a customer-focused attitude throughout the organization.

Goal Action for Achievement by Key Code:

Provide excellent customer service and educate NBC permitted users regarding NBC regulations and requirements • CF 9

Target Measure:

Issue educational form letter

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of letters issued	8	9	8	8

Target Measure:

Participate in public presentations/workshops

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of presentations/workshops	3	8	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:

Educate NBC's internal and external customers on NBC initiatives • C 7

Target Measure:

Upload pretreatment annual report to the internet

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Date uploaded	4/15/2015	3/18/2015	4/15/2016	4/15/2017

LABORATORY - The Program

Mission and Overview:

The Laboratory section is responsible for producing 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 section performs all RIPDES required analyses for the Field's Point and Bucklin Point WWTFs, the Pretreatment programs and monitoring activities, IM's fecal Best Management Practices of the urban rivers, receiving water evaluations of upper Narragansett Bay and supports the Engineering department with special studies at the WWTFs.

Major Accomplishments FY 2016 by Key Code:

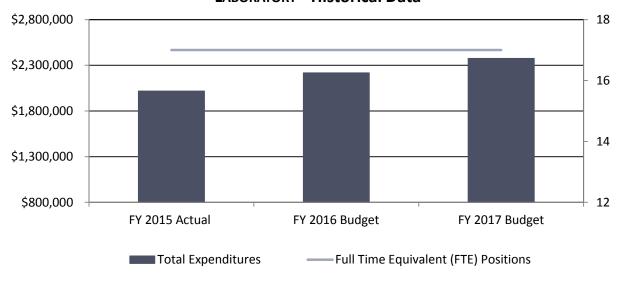
- CB 15 Obtained 100% accuracy for the lab's analytical proficiency on required testing for the RI State Licensing and EPAs DMR reporting
- **EP 4** Provided quality analytical analyses for all NBC studies and samples collected to evaluate the impact of Nutrients, Enterococci, and Fecal Coliform on the Bay
- **CF 1** Staff participated in the Woon Watershed Educational Program
- Staff averaged 40 hours of chemistry training and 51 hours of cross-training with other NBC departments

- **CB 14** Perform high quality analyses of samples to ensure proper operation of the NBC's wastewater treatment facilities
- CB 14 Meet the State and Federal requirements for Rhode Island State Licensing and EPA permit reporting
- **EP 4** Provide quality and expedient analytical service for all studies and samples collected to evaluate the impacts of nutrients and fecal coliform in NBC's effluent

LABORATORY - The Budget

	FY 2	2015 Actual	FY 2	016 Budget	FY 20	17 Budget
Expenditures by Element of Expense						
Personnel	\$	1,462,934	\$	1,492,104	\$	1,608,943
Less Capital Reimbursements		-		-		-
Net Personnel		1,462,934		1,492,104		1,608,943
Operating Supplies/Expense		346,773		382,519		430,007
Professional Services		61,326		46,850		41,850
Operating Capital		141,621		295,500		295,000
Debt Service		-		-		
Total Expenditures	\$	2,012,654	\$	2,216,973	\$	2,375,800
Expenditures by Funding Source						
Revenue	\$	1,871,033	\$	1,921,473	\$	2,080,800
Operating Capital Transfer		141,621		295,500		295,000
Grant		-		-		-
Total Expenditures by Source	\$	2,012,654	\$	2,216,973	\$	2,375,800

LABORATORY - Historical Data



Program Staffing (Budgeted)					
Assistant Laboratory Manager	1.0	Quality Chemist	1.0		
Biologist	1.0	Sample Compliance Coordinator	1.0		
Chemist	2.0	Senior Environmental Chemist	1.0		
Clerk	1.0	Senior Organic Chemist	1.0		
Environmental Chemist	2.0	Technician	5.0		
Laboratory Manager	1.0				
17.0 FTEs					

LABORATORY - Performance Data

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 Laboratory quality and resources necessary to meet State and Federal certifications, mandated environmental requirements and ensure proper WWTF operations • CB 13

Target Measure:

Achieve 100% accuracy on EPA's discharge monitoring report (DMR), other reporting and state licensing

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Accuracy percentage	100%	100%	100%	100%

Target Measure:

Monthly audits of at least two procedures per month

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of audits/year	24	24	24	24

Target Measure:

Complete and submit the Department of Health renewal application to ensure the laboratory license is received

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Date submitted	12/1/2014	11/25/2014	12/1/2015	12/1/2016

Goal Action for Achievement by Key Code:

Ensure full compliance with regulations such as the Clean Air Act, Clean Water Act, Occupational Safety Health Act (OSHA), Resource Conservation Recovery Act (RCRA), Emergency Planning and Community Right-to-Know Act (EPCRA), Environmental Protection Agency (EPA), Department of Health (DOH) and regulations for calibration of instruments, etc. • CB 14

Target Measure:

Yearly calibration for all fume hoods and small instruments for the Lab, Bucklin Point, EMDA and Field's Point

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of fume hoods calibrated	100%	100%	100%	100%
Number of small instruments calibrated	100%	100%	100%	100%

Goal Action for Achievement by Key Code:

Achieve 100% compliance on RIPDES permits, consent agreements and stormwater permits • CB 11

Target Measure:

Analyze all RIPDES required parameters

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percentage of parameters analyzed	100%	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:

Provide quality and expedient analytical service for all special studies and samples collected to evaluate impacts from nutrients and fecal matter in NBC's effluent to the Bay • EP 4

Target Measure:

Analyze all fecal, enterococci and nutrient analyses on bay and river sampled

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of analyses	100%	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:

Minimize service contracts by providing preventative maintenance (PM) training to in-house staff • FM 25 Target Measure:

Provide preventative maintenance training on 2 instruments for several laboratory staff

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of instruments	2	2	2	2

STAFFING:

Attract, develop and retain highly qualified employees.

Goal Action for Achievement by Key Code:

Develop mechanisms and establish opportunities for continued growth and professional development • S 5

Target Measure:

Provide a minimum 15 training hours to meet certification requirements by the National Registry of Environmental Professionals

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Hours/Employee	15/Employee	15	15/Employee	15/Employee

Target Measure:

Provide a minimum of 10 hours of training, cross-training for each employee

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Hours/Employee	10/Employee	10	10/Employee	10/Employee

ENVIRONMENTAL SAFETY & TECHNICAL ASSISTANCE - The Program

Mission and Overview:

The Environmental Safety and Technical Assistance (ESTA) section provides environmental, health and safety and technical assistance to NBC staff, customers, environmental organizations and the general public. The 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 the safest manner possible. The ESTA section provides pollution prevention, energy efficiency, conservation, environmental compliance, sustainability and health and safety assistance through research activities, written publications, workshops, on-site technical assistance and public outreach.

Major Accomplishments FY 2016 by Key Code:

- **CB 1** Monitored and maintained osprey camera at Bucklin Point
- CB 4 Launched the BayNet Training Central website to improve and simplify employee safety training records
- CB 16 Conducted 23 NBC employee safety training sessions. Developed and implemented the NBC Safety Committee Policy, G-S-5, updated the NBC Employee Environmental Health and Safety Policy: G-S-2
- EP 1 Coordinated an on-going Greenhouse Gas Measurement Study at Field's Point with URI
- **EP 2** Documented and tracked coal dust impacts on Field's Point operations
- **EP 3** Monitored and tracked wind turbine avian impact for RIDEM reporting and updated meter readings and utility bills for all NBC properties in Portfolio Manager
- **EP 5** Reviewed and assessed RFQP responses for virtual net metered renewable energy
- FM 21 Investigated grant funding opportunities and alternative methods to help finance various energy improvement and efficiency projects
- **CF 10** Offered timely and effective pollution prevention technical assistance to NBC's Industrial and Commercial customers
- **CF 11** Conducted a Confined Space Emergency Rescue Drill at Field's Point with the Providence Fire Department, coordinated a full-day Emergency Response Seminar with EPA, participated in the RIWARN Tabletop Exercise at the Providence Water Treatment Plant and completed 10 Renewable Energy Assessments for water and wastewater facilities
- C 7 Initiated a Safety Awareness and Recognition Program. Developed the NBC Energy Management Report. Identified and educated NBC staff on potential new EPA regulatory requirements

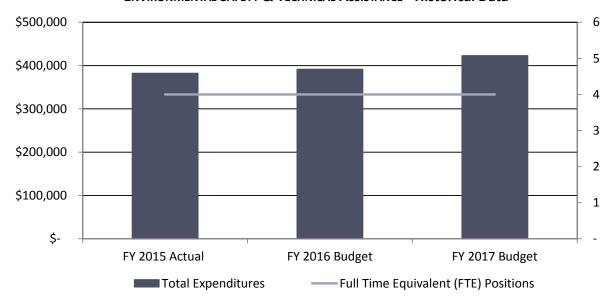
Top Priorities for FY 2017 and How They Relate to the Strategic Plan/Goals and by Key Code:

- CB 16 Conduct/Coordinate and track all OSHA required training sessions for NBC employees assuring full demonstrated compliance with all applicable OSHA requirements
- EP 5 Conduct energy efficiency assessments of NBC processes, conduct assessments of Food Processing Establishments and investigate feasibility of establishing residential grease collection program
- **FM 21** Research and apply for new grant funding opportunities

ENVIRONMENTAL SAFETY & TECHNICAL ASSISTANCE - The Budget

	FY 2	015 Actual	FY 20	16 Budget	FY 201	.7 Budget
Expenditures by Element of Expense						
Personnel	\$	363,325	\$	359,671	\$	388,662
Less Capital Reimbursements		(6,049)		(4,955)		(2,325)
Net Personnel		357,276		354,716		386,338
Operating Supplies/Expense		22,354		36,815		36,815
Professional Services		-		-		-
Operating Capital		-		-		-
Debt Service		-		-		-
Total Expenditures	\$	379,630	\$	391,531	\$	423,153
Expenditures by Funding Source						
Revenue	\$	379,630	\$	391,531	\$	423,153
Operating Capital Transfer		-		-		-
Grant				-		-
Total Expenditures by Source	\$	379,630	\$	391,531	\$	423,153

ENVIRONMENTAL SAFETY & TECHNICAL ASSISTANCE - Historical Data



Program Staffing (Budgeted)						
Environmental Compliance Technical Assistant	1.0	Pollution Prevention Engineer	1.0			
Environmental Safety & Technical Assistant Manager	1.0	Safety Compliance Coordinator	1.0			
4.0 FTEs						

ENVIRONMENTAL SAFETY & TECHNICAL ASSISTANCE - Performance Data

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 full compliance with regulations - Clean Air Act, Clean Water Act, Occupational Safety Health Act (OSHA), Resource Conservation Recovery Act (RCRA), Emergency Planning and Community Right-to-Know Act (EPCRA), the Environmental Protection Agency (EPA), the Department of Health (DOH) and regulations for calibration of instruments, etc. • CB 14

Target Measure:

Compile and process annual OSHA 300 logs and Tier II reports two weeks prior to respective due dates

P P	0				
Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal	
Date of completion OSHA 300 logs	1/24/2015	1/21/2015	1/24/2016	1/24/2017	
Tier II reports	2/21/2015	2/25/2015	2/21/2016	2/21/2017	

Target Measure:

Perform internal environmental health & safety audits

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of audits performed	8	14	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 NBC facilities technical assistance to evaluate energy conservation and renewable energy opportunities • EP 5

Target Measure:

Complete energy conservation and renewable energy assessment recommendation reports

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of completed reports	3	3	3	3

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:

Explore the development of new grant/funding sources for various projects • FM 21

Target Measure:

Submit grant applications for grant funds

0 11				
Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Applications submitted	1	1	1	1
Amount received	\$13,200	\$25,000	\$13,200	\$13,200

Goal Action for Achievement by Key Code:

Monitor NBC energy use and evaluate energy savings opportunities • FM 22

Target Measure:

Update utility meters on NBC's Energy Start Portfolio Manager

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal	
Percentage of meters updated	100%	100% (20)	100%	100%	

Target Measure:

Conduct energy assessments/follow-up activities

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number conducted	3	3	3	3

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

Goal Action for Achievement by Key Code:

Maintain training and technical assistance efforts provided by the NBC's programs • CF 10

Target Measure:

Respond to pollution prevention technical assistance site-visits

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percentage of site-visits conducted	100%	100% (8)	100%	100%

Target Measure:

Issue food service establishments (FSE) fats oils and grease (FOG) Best Management Practices Assessments

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of assessments issued	5	0	5	5

Target Measure:

Hold presentations at colleges/schools/and or public/business/trade association meetings

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of presentations	2	2	2	2

Target Measure:

Offer and train employees in accordance with OSHA requirements

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Percentage of employees trained annually	100%	100%	100%	100%
Number of training sessions offered	36-48	41	36-48	36-48

STAFFING:

Attract, develop and retain highly qualified employees.

Goal Action for Achievement by Key Code:

Provide ongoing technical training to optimize team performance and provide equipment to ensure safe and environmentally sound management practices are followed • S 3

Target Measure:

Conduct Annual CPR/defibrillator training and Certify employees

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal	
Number of classes	2	1	2	2	
Number of employees	25	16	25	25	

Goal Action for Achievement by Key Code:

Develop mechanisms and establish opportunities for continued growth and professional development • S 5

Target Measure:

Conduct quarterly staff meetings to identify and provide professional educational opportunities for training classes/seminars

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of meetings	4	4	4	4
Number of hours per employee	10	20	10	10

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 base of support for its initiatives through continued positive relationships with key stakeholders (customers, Board, elected officials, regulatory officials and the public) to ensure NBC's mission and actions are well understood • C 8

Target Measure:

Coordinate NBC's environmental merit awards program and present awards

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Date of presentation	6/30/2015	04/09/2015	6/30/2016	6/30/201

Target Measure:

Submit technical papers/abstracts for publication and articles for publication in the 'NBC Pipeline'

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of papers submitted	4	4	4	4
Number of articles submitted	8	12	8	8

ENVIRONMENTAL MONITORING & DATA ANALYSIS - The Program

Mission and Overview:

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, 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 water. EMDA conducts significant industrial user and manhole sampling to ensure compliance with discharge permits and conducts daily wastewater treatment facility sampling. The section provides routine analysis of the data obtained from monitoring projects in a timely manner to sections of the NBC, the 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 al RIPDES permit required monitoring.

Major Accomplishments FY 2016 by Key Code:

- CB 15 Collected 29,703 samples and ensured compliance with all Federal and State mandates
- **CB 15** Collected samples from all Significant Industrial Users that discharge process wastewater
- **CB 15** Sampled the Bucklin Point and Field's Point Wastewater Treatment Facilities daily to ensure compliance with RIPDES permit requirements
- **CF 3** Conducted monthly informational 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 at an NBC hosted workshop at Johnson & Wales University entitled, "Just Another Day on the Upper-Upper Bay; Update of NBC's Environmental Monitoring, Modeling, Construction Initiatives & Water Quality Results"

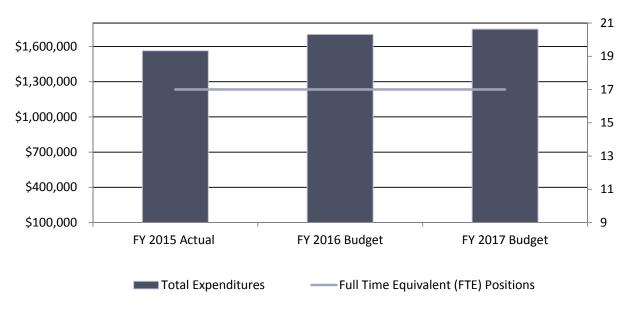
Top Priorities for FY 2017 and How They Relate to the Strategic Plan/Goals and by Key Code:

- **CB 11** 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 15 Sample all discharging Significant Industrial Users twice to meet established Pretreatment goals
- **EP 7** 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

ENVIRONMENTAL MONITORING & DATA ANALYSIS - The Budget

	FY	2015 Actual	FY 2	016 Budget	FY 20	17 Budget
Expenditures by Element of Expense						
Personnel	\$	1,292,024	\$	1,343,665	\$	1,405,307
Less Capital Reimbursements		(1,795)		-		
Net Personnel		1,290,229		1,343,665		1,405,307
On anation of Counciling / Four ages		117.450		124 700		462.550
Operating Supplies/Expense		117,450		134,790		162,550
Professional Services		21,582		44,000		30,500
Operating Capital		130,705		180,600		150,000
Debt Service		-		-		
Total Expenditures	\$	1,559,966	\$	1,703,055	\$	1,748,357
Expenditures by Funding Source						
Revenue	\$	1,429,261	\$	1,522,455	\$	1,598,357
Operating Capital Transfer		130,705		180,600		150,000
Grant		-		-		
Total Expenditures by Source	\$	1,559,966	\$	1,703,055	\$	1,748,357

ENVIRONMENTAL MONITORING & DATA ANALYSIS - Historical Data



Program Staffing (Budgeted)				
Assistant Environmental Monitoring Manager	1.0	Environmental Monitoring Manager	1.0	
Clerk	1.0	Environmental Scientist	2.0	
Environmental Data Analyst	1.0	Monitoring Field Supervisor	3.0	
Environmental Monitor	8.0			
17.0 FTEs				

ENVIRONMENTAL MONITORING & DATA ANALYSIS - Performance Data

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:

Sample, collect and analyze all data of NBC's collections systems, treatment systems, receiving waters and SIU's to ensure all State/RIPDES/Federal requirements are met or exceeded • CB 15

Target Measure:

Sample all SIU's annually

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of samples/year	100%	100% (73/73)	100%	100%

Target Measure:

Sample treatment plant daily

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Number of samples/year	100%	100% (365/365)	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:

Document water quality data and improvements • EP 6

Target Measure:

Publish monitoring activities and resultant data analyses for prior year

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Published date	4/30/2015	4/30/2015	4/30/2016	4/30/2017

Goal Action for Achievement by Key Code:

Provide quality and expedient sample collection service for all studies undertaken to evaluate NBC impacts from nutrients and fecal coliform to the Bay • EP 7

Target Measure:

Collect all bacteria and nutrient samples needed for regulatory compliance and receiving water quality procedures (all bay and river work)

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Samples collected	100%	100% (7,588/7,588)	100%	100%

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

Goal Action for Achievement by Key Code

Provide accurate routine and comprehensive data reporting to all relevant NBC sections and staff to allow them to optimize their activities and operations • CF 11

Target Measure:

Conduct monthly data meetings to disseminate data to allow other sections to optimize operations

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal	
Number of meetings	12	12	12	12	

STAFFING:

Attract, develop and retain highly qualified employees.

Goal Action for Achievement by Key Code:

Develop mechanisms and establish opportunities for continued growth and professional development • S 5

Target Measure:

Meet with staff to encourage training and use of tuition reimbursement program

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Meetings/Year	2/Year	2	2/Year	2/Year

Target Measure:

Ensure at least 8 hours of training and use of tuition reimbursement program

Unit of Measure	FY 2015 Goal	FY 2015 Actual	FY 2016 Goal	FY 2017 Goal
Hours/Employee	8/Employee	17.4/Employee	8/Employee	8/Employee



RESOLUTION 2016:19

FISCAL YEAR 2017 OPERATING BUDGET

1. The Board of Commissioners adopts this budget based upon the following schedule of projected revenue:

Revenue	
Operating Revenue:	
User Fees	\$ 96,899,643
Pretreatment Fees	1,100,000
Septage	325,000
Connection Permit Fees	125,000
Total Operating Revenue	98,449,643
Non-Operating Revenue:	
Investment Income	\$ 5,000
Late Charges	930,000
Transfer from Operating Capital	5,479,500
Miscellaneous	1,261,728
Total Non-Operating Revenue	7,676,228
Total Revenue	\$ 106,125,871

2. The Board of Commissioners adopts this budget based upon the following schedule of projected expense.

Expense	
Operation and Maintenance Expense:	
Personnel	\$ 25,225,531
Operating Supplies/Expense	15,140,547
Professional Services	1,237,150
Total O & M Expense	41,603,228
Debt Service:	
Debt Service	\$ 45,137,622
Programmed New Debt	-
Total Debt Service	45,137,622
Debt Service Coverage	13,905,521
Operating Capital	5,479,500
Total Expense	\$ 106,125,871
	 ·

- 3. The number of full-time equivalent positions funded in this budget is 274. A list of the funded positions is included as part of this Resolution as Attachment 1.
- 4. The Finance Committee and the Executive Director shall at all times seek to ensure that total operating expenses, including debt service and operating capital outlays, do not exceed \$92,220,350 for the period July 1, 2016 to June 30, 2017.
- 5. 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.
- 6. The Executive Director shall administer this budget consistent with the Trust Indenture and all Supplemental Trust Indentures.
- 7. The Executive Director and Director of Administration and Finance are hereby authorized to finance FY 2017 Operating Capital and capital projects included in the NBC's 2018 2022 Capital Improvement Program from the Operating Capital Account of the Project Fund. The Director of Administration and Finance may authorize changes in Budgeted Operating Capital as long as the total expenditures do not exceed the total amount approved for Operating Capital. Any changes to the Budgeted Operating Capital in excess of \$50,000 shall also be approved by the Finance Committee.
- 8. 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.
- 9. For the period of July 1, 2016 to June 30, 2017:
 - a. The Executive Director shall provide a report to the Finance Committee of all purchase requisitions greater than \$10,000 for items included in this budget. The Executive Director will present all purchase requisitions greater than \$50,000 not included in the budget for approval by the Finance Committee.
 - b. 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. The Executive Director may post and fill vacancies of existing positions, modified positions or newly created positions included in this budget as well as changes as outlined in this item 9b.
 - c. The Finance Committee will review and approve the monthly financial statements, including the status of the budget versus expenses, prior to presentation at the monthly Board Meeting.

- d. This budget shall include a 5% 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 preclude NBC from meeting its coverage requirements.
- 10. The Director of Administration & Finance may make adjustments between line items within categories, adjustments between categories and adjustments between cost centers. The Executive Director shall notify the Finance Committee on a monthly basis of all such adjustments.

ADOPTED ON:	
SIGNED:	

SECTION	TITLE	FTE's	UNION/NON-UNION
21	DIRECTOR OF EXECUTIVE AFFAIRS	1	NON-UNION
21	ENVIRONMENTAL EDUCATION COORDINATOR	1	NON-UNION
21	EXECUTIVE ASSISTANT	1	NON-UNION
21	EXECUTIVE DIRECTOR	1	NON-UNION
21	GOVERNMENT AFFAIRS MANAGER	1	NON-UNION
21	LABOR AND EMPLOYEE RELATIONS MANAGER	1	NON-UNION
21	PUBLIC AFFAIRS MANAGER	1	NON-UNION
21	PUBLIC AFFAIRS SPECIALIST	1	NON-UNION
		8	•
22	CHIEF ENVIRONMENTAL ENGINEER	1	NON-UNION
22	CONSTRUCTION MANAGER	1	NON-UNION
22	CONSTRUCTION OFFICE COORDINATOR	1	NON-UNION
22	DIRECTOR OF CONSTRUCTION SERVICES	1	NON-UNION
22	ENGINEERING CONSTRUCTION COORDINATOR	1	NON-UNION
22	MECHANICAL INSPECTOR	1	NON-UNION
22	RESIDENT REPRESENTATIVE	3	NON-UNION
22	SENIOR CONSTRUCTION COORDINATOR	1	NON-UNION
22	SENIOR RESIDENT REPRESENTATIVE	1	NON-UNION
		11	-
23	HUMAN RESOURCES CLERK	1	UNION
23	HUMAN RESOURCES MANAGER	1	NON-UNION
23	HUMAN RESOURCES REPRESENTATIVE/BENEFITS COORDINATOR	1	NON-UNION
23	SENIOR HUMAN RESOURCES REPRESENTATIVE	1	NON-UNION
		4	-
24	CHIEF LEGAL COUNSEL	1	NON-UNION
24	EXECUTIVE PARALEGAL	1	NON-UNION
24	EXECUTIVE PARALEGAL II	1	NON-UNION
24	LEGAL COUNSEL	2	NON-UNION
		5	-
31	COMPLIANCE ANALYST	1	NON-UNION
31	DIRECTOR OF ADMINISTRATION AND FINANCE	1	NON-UNION
31	FINANCIAL ANALYST	1	NON-UNION
31	RATE ANALYST	1	NON-UNION
31	SENIOR FINANCIAL ANALYST	1	NON-UNION
		5	•
32	ACCOUNTING MANAGER	1	NON-UNION
32	CAPITAL ACCOUNTING ASSISTANT	1	NON-UNION
32	CAPITAL PRINCIPAL ACCOUNTANT	1	NON-UNION
32	FISCAL CLERK	1	UNION
32	PAYROLL ADMINISTRATOR	1	NON-UNION
32	PAYROLL SUPERVISOR	1	NON-UNION
32	PRINCIPAL ACCOUNTANT	1	NON-UNION
32	SENIOR FISCAL CLERK	1	UNION
32	STAFF ACCOUNTANT	2	NON-UNION
		10	

SUPPORTING SCHEDULES 224 NBC FY 2017 BUDGET

SECTION	TITLE	FTE's	UNION/NON-UNION
33	APPLICATIONS SYSTEM SUPERVISOR	1	NON-UNION
33	COMPUTER TRAINING APPLICATIONS SPECIALIST	1	NON-UNION
33	IT MANAGER	1	NON-UNION
33	NETWORK AND COMMUNICATIONS ADMINISTRATOR	1	NON-UNION
33	PC/PHONE SUPPORT/SYSTEMS ADMIN. SPECIALIST	1	NON-UNION
33	SENIOR DATABASE ADMINISTRATOR	2	NON-UNION
33	SENIOR SYSTEMS ADMINISTRATOR	1	NON-UNION
33	SENIOR SYSTEMS DEVELOPMENT PROGRAMMER	1	NON-UNION
33	SENIOR SYSTEMS PROGRAMMER/SYSTEMS ADMINISTRATOR	1	NON-UNION
33	SOLUTIONS ARCHITECT	1	NON-UNION
33	SYSTEMS DESIGN PROGRAMMER	1	NON-UNION
		12	•
34	ASSISTANT BILLING SUPERVISOR	1	NON-UNION
34	ASSISTANT COLLECTIONS SUPERVISOR	1	NON-UNION
34	BILLING SUPERVISOR	1	NON-UNION
34	COLLECTIONS SUPERVISOR	1	NON-UNION
34	CUSTOMER RESEARCH SUPERVISOR	1	NON-UNION
34	CUSTOMER SERVICE ANALYST	2	NON-UNION
34	CUSTOMER SERVICE MANAGER	1	NON-UNION
34	CUSTOMER SERVICE REPRESENTATIVE	9	UNION
34	CUSTOMER SERVICE REPRESENTATIVE - FISCAL CLERK	2	UNION
34	CUSTOMER SERVICE SUPPORT SUPERVISOR	1	NON-UNION
34	FIELD INVESTIGATOR	3	UNION
34	FISCAL CLERK	1	UNION
34	SENIOR FISCAL CLERK	1	UNION
		25	-
36	FISCAL CLERK	1	UNION
36	OFFICE ADMINISTRATOR	1	NON-UNION
36	PURCHASING COORDINATOR	1	NON-UNION
36	PURCHASING MANAGER	1	NON-UNION
		4	
43	ASSISTANT IM MANAGER	1	NON-UNION
43	ENVIRONMENTAL ENGINEER	1	NON-UNION
43	CLERK	1	UNION
43	IM MANAGER	1	NON-UNION
43	INSPECTOR	1	NON-UNION
43	MECHANIC	1	UNION
43	OPERATOR	11	UNION
43	OPERATOR/HEO	1	UNION
43	SUPERVISOR	1	NON-UNION
43	SENIOR TECHNICAL ASSISTANT	1	NON-UNION
		20	
44	DIRECTOR OF OPERATIONS AND ENGINEERING	1	NON-UNION
44	ENGINEERING AND OPERATIONS FISCAL ADMINISTRATOR	2	NON-UNION
44	ENGINEERING MANAGER	1	NON-UNION
44	ENVIRONMENTAL ENGINEER	1	NON-UNION
44	FACILITIES ENGINEER	1	NON-UNION
44	INSTRUMENTATION ENGINEER	1	NON-UNION
44	PRINCIPAL ENVIRONMENTAL ENGINEER	2	NON-UNION
		9	

SECTION	TITLE	FTE's	UNION/NON-UNION
46	ASSET MANAGEMENT ADMINISTRATOR	1	NON-UNION
46	ASSISTANT CONTROL SYSTEM ADMINISTRATOR	1	NON-UNION
46	ASSISTANT OPERATIONS MANAGER	1	NON-UNION
46	CARPENTER	1	UNION
46	CLERK	1	UNION
46	CONTROL SYSTEMS ADMINISTRATOR	1	NON-UNION
46	CONTROL SYSTEMS ASSOCIATE	1	NON-UNION
46	E & I TECHNICIAN	2	UNION
46	ELECTRICIAN	3	UNION
46	FLEET MECHANIC	1	UNION
46	INVENTORY CONTROL CLERK	2	UNION
46	LEAD ELECTRICIAN	1	UNION
46	MAINTENANCE MANAGER	1	NON-UNION
46	MAINTENANCE SUPERVISOR	2	NON-UNION
46	MECHANIC	11	UNION
46	O & M COORDINATOR	1	NON-UNION
46	O & M TECHNICIAN	1	NON-UNION
46	OPERATIONS MANAGER	1	NON-UNION
46	OPERATIONS SUPERVISOR	5	NON-UNION
46	OPERATOR	11	UNION
46	PROCESS MONITOR	8	UNION
46	SENIOR E & I TECHNICIAN	1	UNION
46	SENIOR PROCESS MONITOR	1	UNION
		59	•
47	ASSET MANAGEMENT FOREMAN	1	UNION
47	ASSISTANT E & I TECHNICIAN	1	UNION
47	ASSISTANT MAINTENANCE PLANNER/SCHEDULER	1	UNION
47	ASSISTANT OPERATIONS MANAGER	1	NON-UNION
47	CLERK	1	UNION
47	E & I TECHNICIAN	1	UNION
47	ELECTRICAL FOREMAN	1	UNION
47	ELECTRICIAN	2	UNION
47	HEAVY EQUIPMENT OPERATOR	1	UNION
47	INVENTORY CONTROL CLERK	1	UNION
47	MAINTENANCE FOREMAN	1	UNION
47	MAINTENANCE MANAGER	1	NON-UNION
47	MAINTENANCE PLANNER/SCHEDULER	1	UNION
47	MECHANIC	6	UNION
47	OPERATIONS FOREMAN	1	UNION
47	OPERATIONS MANAGER	1	NON-UNION
47	OPERATIONS SUPERVISOR	4	NON-UNION
47	OPERATOR	8	UNION
47	PROCESS MONITOR	9	UNION
47	SENIOR E & I TECH	1	UNION
47	UTILITY CREW FOREMAN	1	UNION
		45	

SECTION	TITLE	FTE's	UNION/NON-UNION
51	ADMINISTRATIVE ASSISTANT	1	NON-UNION
51	DIRECTOR OF PLANNING, POLICY AND REGULATION	1	NON-UNION
51	ENVIRONMENTAL SCIENTIST	1	NON-UNION
51	PERMITS AND PLANNING MANAGER	1	NON-UNION
51	PERMITS COORDINATOR	1	NON-UNION
		5	•
52	ASSISTANT PRETREATMENT MANAGER	1	NON-UNION
52	PRETREATMENT CLERK	3	UNION
52	PRETREATMENT ENGINEER	2	NON-UNION
52	PRETREATMENT MANAGER	1	NON-UNION
52	PRETREATMENT TECHNICIAN	5	NON-UNION
52	PRINCIPAL PRETREATMENT ENGINEER	1	NON-UNION
52	SENIOR PRETREATMENT TECHNICIAN	1	NON-UNION
		14	•
53	ASSISTANT LABORATORY MANAGER	1	NON-UNION
53	BIOLOGIST	1	UNION
53	CHEMIST	2	UNION
53	CLERK	1	UNION
53	ENVIRONMENTAL CHEMIST	2	NON-UNION
53	LABORATORY MANAGER	1	NON-UNION
53	SAMPLE COMPLIANCE COORDINATOR	1	NON-UNION
53	QUALITY CHEMIST	1	NON-UNION
53	SENIOR ENVIRONMENTAL CHEMIST	1	NON-UNION
53	SENIOR ORGANIC CHEMIST	1	NON-UNION
53	TECHNICIAN	5	UNION
		17	-
54	ENVIRONMENTAL COMPLIANCE TECHNICAL ASSISTANT	1	NON-UNION
54	ENVIRONMENTAL SAFETY & TECHNICAL ASSISTANT MANAGER	1	NON-UNION
54	POLLUTION PREVENTION ENGINEER	1	NON-UNION
54	SAFETY COMPLIANCE COORDINATOR	1	NON-UNION
		4	•
55	ASSISTANT ENVIRONMENTAL MONITORING MANAGER	1	NON-UNION
55	CLERK	1	UNION
55	ENVIRONMENTAL DATA ANALYST	1	UNION
55	ENVIRONMENTAL MONITOR	8	UNION
55	ENVIRONMENTAL MONITORING MANAGER	1	NON-UNION
55	ENVIRONMENTAL SCIENTIST	2	NON-UNION
55	MONITORING FIELD SUPERVISOR	3	NON-UNION
		17	-
	TOTAL FTEs	274	<u>.</u>

SUPPORTING SCHEDULES 227 NBC FY 2017 BUDGET

Budgeted Benefits Comparison

The FY 2017 budget reflects an increase in health insurance premiums in the High Deductible Health Plan (HDHP) of 13% with partial employer funding of a Health Savings Account (HSA) or Health Reimbursement Arrangement (HRA). The average budgeted co-pay is 20%. Dental premiums increased by 6% and vision premiums remained unchanged from the prior year. The table below shows the budgeted family health, dental and visions premiums.

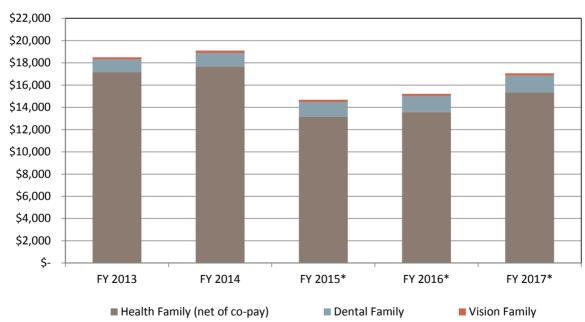
Expense Category	FY 2013	FY 2014	FY 2015*	FY 2016*	FY 2017*
Health Family (net of co-pay)	\$17,149	\$17,673	\$13,156	\$ 13,576	\$ 15,342
Dental Family	1,159	1,228	1,335	1,435	1,515
Vision Family	181	195	195	195	195
	Total \$18,489	\$19,096	\$ 14,686	\$ 15,206	\$ 17,052

^{*}Does not include \$3,600 NBC HSA Contribution/Employee

Other Benefits:					
State Retirement (Union)	22.18%	24.33%	24.33%	24.64%	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)	6.86%	7.80%	6.75%	6.75%	5.97%

^{**}FICA is 6.2% on wages up to \$118,500

Budgeted Benefits

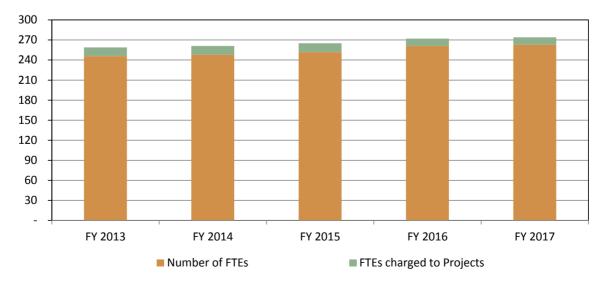


Budgeted Positions Comparison

The total number of FTEs funded in FY 2017 is 274.0 positions, which is two more than the prior year. NBC's FY 2017 budget includes two new positions necessary to meet changing operational needs at the Bucklin Point WWTF beginning July 1, 2016 and include a Mechanic II and a Senior E&I Technician. On a year-to-year basis, there is no change in the number of budgeted union positions and non-union positions reflect the addition of two FTEs.

Program	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Executive Affairs	8	8	8	8	8
Construction Services	13	13	13	11	11
Human Resources	4	4	4	4	4
Legal	5	5	5	5	5
Finance	5	5	5	5	5
Accounting	10	10	10	10	10
Information Technology	12	12	12	12	12
Customer Service	24	24	24	25	25
Purchasing	4	4	4	4	4
Interceptor Maintenance	20	20	20	20	20
Engineering	8	9	9	9	9
Field's Point	57	57	59	59	59
Bucklin Point	33	34	35	43	45
Planning	5	5	5	5	5
Pretreatment	14	14	14	14	14
Laboratory	16	16	17	17	17
ESTA	4	4	4	4	4
EMDA	17	17	17	17	17
Total	259	261	265	272	274

Budgeted Positions (FTEs)



FY 2017 Operating Capital

Section	Budget Account	Asset	Cost
XECUTIVE AFFAIRS			
Executive Affairs	16600	Replace Vehicle - V362 \$	40,000
	16580	Office Reconfiguration	75,000
		Subtotal Executive Affairs	115,000
		Subtotal Executive Affairs	115,000
CONSTRUCTION SERVICES			
Construction Services	16600	Replace Vehicle - V424	30,000
		Subtotal Construction Services	30,000
		Subtotal Construction Services	30,000
ADMINISTRATION & FINANCE			
Human Resources	16580	Office Reconfiguration	50,000
	10000	Subtotal Human Resources	50,000
			•
Finance	16620	NBC User Fee Rate Study	250,000
Finance	16580	Office Reconfiguration	10,000
		Subtotal Finance	260,000
Accounting	16580	Hands Free Shredder	5,00
, tecounting	10300	Subtotal Accounting	5,00
Information Tachnology	16583	Laboratory Information Management System (LIMS) Application	400,00
Information Technology Information Technology	16583	Laboratory Information Management System (LIMS) Application Customer Service Application	250,000
Information Technology	16600	Server Infrastructure Replacement	210,00
Information Technology	16583	SharePoint Upgrade	80,00
Information Technology	16600	Annual PC Refresh Program Replacement	75,00
Information Technology	16600	Disaster Recovery Infrastructure Replacement	65,00
Information Technology	16583	Oracle ERP/Database Enhancements	50,00
Information Technology	16600	Bucklin Point Wi-Fi Antenna Replacement	50,00
Information Technology	16583	Software Licensing Updates	40,00
Information Technology	16600	Network Infrastructure Replacement	40,00
Information Technology	16585	Computer Room Enhancements	25,00
Information Technology	16585	TV Presentation Enhancements	25,00
Information Technology	16583	Project Tracking Software	25,00
		Subtotal Information Technology	1,335,00
Customer Service	16600	Replace Vehicle - V385	25,00
Customer Service	16580	Office Reconfiguration	5,00
		Subtotal Customer Service	30,00
General Administration	16580	Office Reconfiguration	50,00
General Administration	16580	Boardroom Furniture	50,00
General Administration	16600	HVAC Component Replacement	15,00
General Administration	16520	HVAC Components	10,00
General Administration	16600	Replace Copier	10,00
General Administration	16520	Phone System Enhancements	10,00
		Subtotal General Administration	145,000
		Subtotal Administration & Finance	1,825,000

SUPPORTING SCHEDULES NBC FY 2017 BUDGET

Section	Budget Account	Asset	Cost
PERATIONS & ENGINEERING			
Interceptor Maintenance	- 16600	Replace Vehicle - V420	350,000
Interceptor Maintenance	16600	Replace Vehicle - V493	70,000
Interceptor Maintenance	16600	Replace Vehicle - V471	40,000
Interceptor Maintenance	16580	Office Reconfiguration	10,000
Interceptor Maintenance	16510	Plow & Frame for V455	8,000
Interceptor Maintenance	16520	Portable Pressure Washer	6,000
Interceptor Maintenance	16600	Replace Pressure Washers	8,000
		Subtotal Interceptor Maintenance	492,000
Engineering	16600	Replace GPS Satellite Equipment	30,000
Engineering	16600	Replace Vehicle - V434	30,000
Engineering	16600	Replace Survey Equipment	10,000
		Subtotal Engineering	70,000
Field's Point	16510	Mechanical Crane Truck	120,000
Field's Point	16590	Leading Edge Tape on Wind Turbine Blades	75,000
Field's Point	16600	Replace Grit Tank Gearbox	70,000
Field's Point	16600	Replace Flow Meters	65,000
Field's Point	16600	Server Infrastructure Replacement	55,000
Field's Point	16600	Replace Hydraulic Gate Manifolds/Cylinders	50,000
Field's Point	16583	VMWare software and licensing for Virtual Servers	50,000
Field's Point	16520	TPS Blower and Motor	50,000
Field's Point	16520	Insulated Overhead Doors	45,000
Field's Point	16600	Replace Generator - E0005	40,000
Field's Point	16583	Pi Licenses	40,000
Field's Point	16600	Replace Scum Pumps and Flushing Lines	40,000
Field's Point	16520	IFAS Tank Pump	35,000
Field's Point	16510	Vehicle Lift	35,000
Field's Point	16600	Replace RAS Motor Pumps 5, 6, 8, 9	30,000
Field's Point	16600	Replace Aeration Dewatering Pump 1-3	30,000
Field's Point	16600	Replace G7 and G8 Gearbox	30,000
Field's Point	16600	Replace Isolation Valves	25,000
Field's Point	16600	Replace Vehicle - V477	25,000
Field's Point	16600	Replace Cornell Pump 1-3	25,000
Field's Point	16600	Replacement of Variable Frequency Drives	21,000
Field's Point	16600	Replace EMU Pump and Motor	20,000
Field's Point	16600	Replace Dewatering Pump	20,000
Field's Point	16600	Replace Flow Meters	20,000
Field's Point	16600	Fire Alarm System Replacement	20,000
Field's Point	16520	New Fire Alarm System	20,000
Field's Point	16520	Limitorque Actuators	20,000
Field's Point	16600	Replace Air Conditioner Unit	20,000
Field's Point	16600	Replace and Relocate TPS Sprinkler Standpipe	18,000
Field's Point	16600	Replace Bar Rack Chain & Flight Mechanism	17,000
Field's Point	16600	Replace Sludge Pump Cartridge	17,000
Field's Point	16600	Replace 15 2-way Radios	15,000
Field's Point	16583	Wonderware Licenses	15,000
Field's Point	16520	Confined Space Unit	15,000
Field's Point	16600	Replace Cylinders	15,00
Field's Point	16600	Replace DO Probes	12,00
Field's Point	16600	Replace #1 Dewatering Pump & Motor	10,000
Field's Point	16510	New Vacuum Pump and PTO - V485	10,000
Field's Point	16600	Replace Overhead Door	10,000

SUPPORTING SCHEDULES NBC FY 2017 BUDGET

Section	Budget Account	Asset		Cost
Field's Point	16520	EMU Pump and Motor		8,000
Field's Point	16510	Pickup - Plow Package		6,000
Field's Point	16520	Conex Box		5,000
			Subtotal Field's Point	1,269,000
Bucklin Point	16610	BP Rehabilitation and Improvements		145,000
Bucklin Point	16600	Replace One Bar Rack		60,000
Bucklin Point	16600	Replace Seepex Pumps		60,000
Bucklin Point	16580	Office Reconfiguration		50,000
Bucklin Point	16600	Replace EIM Actuators		47,000
Bucklin Point	16600	Replace Pump Gearbox		45,000
Bucklin Point	16600	Gas System Replacement		40,000
Bucklin Point	16600	Replace Air Handler and Air Handling Unit Coils		38,000
Bucklin Point	16510	Pickup Truck with Plow		32,000
Bucklin Point	16600	Replace Programmable Logic Computer		30,000
Bucklin Point	16600	Replace Vehicle - V496		30,000
Bucklin Point	16600	Rehabilitation of Bar Rack Screening Conveyor		25,000
Bucklin Point	16520	Storage Trailer Container		25,000
Bucklin Point	16600	Rebuild Screenings Grinder		25,000
Bucklin Point	16600	Replace Crit Dump		25,000
Bucklin Point Bucklin Point	16600	Replace Grit Pump		25,000
	16600	Camera Replacement		25,000
Bucklin Point Bucklin Point	16580 16600	Lunchroom Reconfiguration Replace Plunger Pump		25,000 25,000
Bucklin Point	16600	Replace Flushing Water Pump		27,000
Bucklin Point	16520	Chopper Pump for PSPS Dewatering Pump		20,000
Bucklin Point	16520	UV Hydraulic Gate System		20,000
Bucklin Point	16585	Server Infrastructure		20,000
Bucklin Point	16585	Servers		20,000
Bucklin Point	16600	Replace Level Sensor System		20,000
Bucklin Point	16583	Wonderware Licenses		20,000
Bucklin Point	16520	Perimeter Limiter Counterweight System		20,000
Bucklin Point	16600	Replace UPS Unit		17,000
Bucklin Point	16600	Replace Plant Isolation Valves		15,000
Bucklin Point	16520	Screw Pump 70 HP Motor		15,000
Bucklin Point	16600	Replace PLC Generator		15,000
Bucklin Point	16600	Replace 15 2-way Radios		15,000
Bucklin Point	16520	Emergency Spill Trailer		15,000
Bucklin Point	16600	Replace Polymer Feed Pumps		15,000
Bucklin Point	16520	Welder		10,000
Bucklin Point	16600	Replace Flow Meters		15,000
Bucklin Point	16520	Stacking Forklift		10,000
Bucklin Point	16600	Replace Copier		9,000
Bucklin Point	16600	Replace Brush Cutter for Bobcat Tractor		7,500
Bucklin Point	16590	Thermography Camera		6,000
			Subtotal Bucklin Point	1,108,500
		Subtotal C	Operations and Engineering	2,939,500
PLANNING, POLICY & REGULATION				
Planning	16580	Office Reconfiguration		95,000
			Subtotal Pretreatment	95,000
Pretreatment	16600	Replace Vehicle - V492		30,000
		-p === - =====	Subtotal Pretreatment	30,000
				-0,000

SUPPORTING SCHEDULES NBC FY 2017 BUDGET

Section	Budget Account	Asset	Cost
Laboratory	16600	Replace Gas Chromatograph Mass Spectrometer	147,000
Laboratory	16600	Replace Salt Water Nutrient Analyzer	93,000
Laboratory	16570	Micro Biological Temperature Monitoring System	35,000
Laboratory	16600	Replace Enterococci Sealers	8,000
Laboratory	16600	Replace Refrigerators	6,000
Laboratory	16600	Replace KN Digester Block Unit	6,000
		Subtotal Laboratory	295,000
EMDA	16600	Data Collection Platform Replacement	65,000
EMDA	16600	Replace Vehicle - V413	34,000
EMDA	16600	Replace Refrigerated Auto Samplers	26,000
EMDA	16600	Replace Water Column Profiler	18,000
EMDA	16600	Replace Copier	7,000
		Subtotal EMDA	150,000
		Subtotal Planning, Policy & Regulation	570,000

Five-Year Operating Capital

Section	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total Cost
EXECUTIVE AFFAIRS						
Executive Affairs						
Replace Vehicle - V632	\$ 40,000	\$ -	\$ -	\$ -	\$ -	\$ 40,000
Office Reconfiguration	75,000	-	-	-	-	75,000
Subtotal Executive Affairs	115,000	-	-	-	-	115,000
Construction Services						
Replace Vehicle - V427	30,000	-	-	-	-	30,000
Replace Vehicle - V479	-	30,000	-	-	-	30,000
Replace Vehicle - V388	-	-	30,000	-	-	30,000
Subtotal Construction Services	30,000	30,000	30,000	-	-	90,000
ADMINISTRATION & FINANCE						
Human Resources						
Office Reconfiguration	50,000	-	-	-	-	50,000
Subtotal Human Resources	50,000	-	-	-	-	50,000
Finance						
	350,000					250,000
NBC User Fee Rate Study Office Reconfiguration	250,000 10,000	-	-	-	-	250,000
Office Reconfiguration Subtotal Finance	260,000					10,000 260,000
Subtotal I mance	200,000					200,000
Accounting						
Hands Free Shredder	5,000	-	-	-	-	5,000
Subtotal Accounting	5,000	-	-	-	-	5,000
Information Technology						
Information Technology Laboratory Information Management System (LIMS) Application	400,000	_	_	_	_	400,000
Customer Service Application	250,000	250,000	25,000	_	25,000	550,000
Server Infrastructure Replacement	210,000	250,000	50,000	_	50,000	310,000
SharePoint Upgrade	80,000	_	-	75,000	-	155,000
Annual PC Refresh Program Replacement	75,000	75,000	75,000	75,000	75,000	375,000
Disaster Recovery Infrastructure Replacement	65,000	-	75,000	-	90,000	230,000
Oracle ERP/Database Enhancements	50,000	40,000	-	40,000	-	130,000
Bucklin Point Wi-Fi Antenna Replacement	50,000	-	50,000	, -	50,000	150,000
Software Licensing Updates	40,000	40,000	40,000	40,000	40,000	200,000
Network Infrastructure Replacement	40,000	-	50,000	-	50,000	140,000
Computer Room Enhancements	25,000	25,000	25,000	25,000	25,000	125,000
TV Presentation Enhancements	25,000	-	20,000	-	25,000	70,000
Project Tracking Software	25,000	-	25,000	-	25,000	75,000
Security Assessment	-	75,000	-	75,000	-	150,000
Remote Site Network Upgrades	-	50,000	-	50,000	-	100,000
Hansen Upgrades	-	20,000	-	20,000	-	40,000
MS Office 2013 Upgrade	-	-	125,000	-	-	125,000
MS Exchange 2013 Upgrade	-	-	50,000	-	50,000	100,000
Replace Large Form Scanner/Printer	-	-	-	35,000	-	35,000
Storage Area Network Replacement	-	230,000	-	-	-	230,000
Backup Solution Enhancements	-	75,000	-	100,000	-	175,000
Data Warehousing	-	45,000	-	40,000	-	85,000
LIMS Upgrades	-	35,000	-	50,000	-	85,000
Document Imaging Upgrades	-	25,000	-	25,000	-	50,000
Antivirus Upgrades	4 225 000	10,000	10,000	10,000	10,000	40,000
Subtotal Information Technology	1,335,000	995,000	620,000	660,000	515,000	4,125,000

Section	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total Cost
Customer Service						
Replace Vehicle - V385	25,000	_	_	_	_	25,000
Office Reconfiguration	5,000	5,000	5,000	-	-	15,000
Replace Vehicle - V377	-	25,000	-	-	-	25,000
Replace Vehicle - V404	-	-	25,000	-	-	25,000
Subtotal Customer Service	30,000	30,000	30,000	-	-	90,000
General Administration						
Office Reconfiguration	50,000	_	_	_	_	50,000
Boardroom Furniture	50,000	_	_	_	_	50,000
HVAC Component Replacement	15,000					15,000
HVAC Components	10,000	_	_	_	_	10,000
Replace Copier	10,000	10,000	10,000	_	_	30,000
Phone System Enhancements	10,000	10,000	10,000	_	_	30,000
Subtotal General Administration	145,000	20,000	20,000	-	-	185,000
OPERATIONS & ENGINEERING						
Interceptor Maintenance						
Replace Vehicle - V420	350,000	-	-	_	_	350.000
Replace Vehicle - V493	70,000	_	-	-	_	70,000
Replace Vehicle - V471	40,000	-	-	-	-	40,000
Office Reconfiguration	10,000	-	-	-	-	10,000
Plow & Frame for V455	8,000	-	-	-	-	8,000
Portable Pressure Washer	6,000	-	-	-	-	6,000
Replace Pressure Washers	8,000	-	-	-	-	8,000
Replace Vehicle - V412	-	110,000	-	-	-	110,000
Replace Vehicle - V411	-	35,000	-	-	-	35,000
Replace Vehicle - V455	-	-	70,000	-	-	70,000
HVAC Upgrades	-	-	40,000	-	-	40,000
Replace Vehicle - V376	-	-	-	140,000	-	140,000
Replace Trailer	-	-	-	6,000	-	6,000
Replace Equipment - E0006	-	-	-	4,000	-	4,000
Replace Vehicle - V472	-	-	-	-	130,000	130,000
Replace Vehicle - V387	-	-	-	-	35,000	35,000
Replace Pneumatic Pipe Plugs	-	- 445,000	-	450,000	6,000	6,000
Subtotal Interceptor Maintenance	492,000	145,000	110,000	150,000	171,000	1,068,000
Engineering						
Replace GPS Satellite Equipment	30,000	-	-	-	-	30,000
Replace Vehicle - V434	30,000	-	-	-	-	30,000
Replace Survey Equipment	10,000	-	-	-	-	10,000
Replace Vehicle - V479	-	30,000	-	-	-	30,000
Subtotal Engineering	70,000	30,000	-	-	-	100,000
Field's Point						
Mechanical Crane Truck	120,000	_	_	_	_	120,000
Leading Edge Tape on Wind Turbine Blades	75,000	-	-	-	-	75,000
Replace Grit Tank Gearbox & Clutch Assemblies	70,000	-	_	75,000	-	145,000
Replace Flow Meters	65,000	70,000	50,000	25,000	25,000	235,000
Server Infrastructure Replacement	55,000	20,000	45,000	-	-	120,000
Replace Hydraulic Gate Manifolds/Cylinders	50,000	50,000	52,000	54,000	-	206,000
VMWare Software and Licensing for Virtual Servers	50,000	70,000	80,000	-	-	200,000
TPS Blower and Motor	50,000	-	-	-	-	50,000
Insulated Overhead Doors	45,000	-	-	-	-	45,000
Replace Generator - E0005	40,000	-	-	-	-	40,000
Pi Licenses	40,000	-	-	-	-	40,000
						40.000
Replace Scum Pumps and Flushing Lines	40,000	-	-	-	-	40,000
Replace Scum Pumps and Flushing Lines IFAS Tank Pump	40,000 35,000	-	-	-	-	40,000 35,000

Section	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total Cost
Replace RAS Motor Pumps 5, 6, 8, 9	30,000	35,000	75,000	-	-	140,000
Replace Aeration Dewatering Pump 1-3	30,000	-	-	-	-	30,000
Replace G7 and G8 Gearbox	30,000	-	-	-	-	30,000
Replace Isolation Valves	25,000	25,000	25,000	-	-	75,000
Replace Vehicle - V477	25,000	-	-	-	-	25,000
Replace Cornell Pump 1-3	25,000	-	-	-	-	25,000
Replacement of Variable Frequency Drives	21,000	-	-	-	-	21,000
Replace EMU Pump and Motor	20,000	20,000	-	-	-	40,000
Replace Dewater Pump	20,000	-	-	-	-	20,000
Replace Flow Meters	20,000	-	-	-	-	20,000
Fire Alarm System Replacement	20,000	-	-	-	-	20,000
New Fire Alarm System	20,000	-	-	-	-	20,000
Limitorque Actuators	20,000	-	-	-	-	20,000
Replace Air Conditioner Unit	20,000	-	-	-	-	20,000
Replace and Relocate TPS Sprinkler Standpipe	18,000	-	-	-	-	18,000
Replace Bar Rack Chain & Flight Mechanism	17,000	17,000	17,000	-	-	51,000
Replace Sludge Pump Cartridge	17,000	-	19,000	22,000	-	58,000
Replace 15 2-way Radios	15,000	15,000	-	20,000	-	50,000
Wonderware Licenses	15,000	-	-	-	-	15,000
Confined Space Unit	15,000	-	-	-	-	15,000
Replace Cylinders	15,000	50,000	-	-	-	65,000
Replace DO Probes	12,000	-	-	-	-	12,000
Replace #1 Dewatering Pump & Motor	10,000	-	-	-	-	10,000
New Vacuum Pump and PTO - V485	10,000	-	-	-	-	10,000
Replace Overhead Door	10,000	-	-	-	-	10,000
EMU Pump and Motor	8,000	-	-	-	-	8,000
Pickup - Plow Package	6,000	-	-	-	-	6,000
Conex Box	5,000	-	-	-	-	5,000
Replace Sewage Pump 6, 40 MGD, Lg. Cartridge	-	150,000	-	-	-	150,000
Replace Sewage Pump 8, 40 MGD, Lg. Cartridge	-	150,000	- 3F 000	-	-	150,000
Replace Sodium Bisulfite Tanks	-	35,000	35,000	-	-	70,000
Replace Copier Replace RAS1 Pump Cartridge	-	35,000		- 27 E00	20,000	35,000
Dechlorination-Metering Pumps	_	27,500 25,000	54,000	27,500	30,000	85,000 79,000
Replace Turbo Blower VFD 1-9	_	25,000	54,000	_	_	25,000
Replace EZ Go-cart - E0045	_	16,000	_	_	_	16,000
Replace EZ Go-cart - E0015	_	15,000	_	_	_	15,000
Replace EZ Go-cart - E0016	_	15,000	_	_	_	15,000
Nitratax Probe, Sensors	_	15,000	_	_	_	15,000
Replace Pump Cartridge	_	13,000	_	_	_	13,000
FC1 Influent BF Valve	_	12,000	_	_	_	12,000
FC2 Influent BF Valve	_	12,000	_	_	_	12,000
FC3 Influent BF Valve	_	12,000	_	_	-	12,000
Combustible Gas Meters	-	12,000	-	_	-	12,000
Reline Hypo Tank	-	12,000	-	-	-	12,000
Chlorine & Sodium Bisulfite Analyzers	-	12,000	-	8,000	-	20,000
Differential PH Analyzers, Sensors	-	11,000	-	_	-	11,000
Laser Distance System	-	10,000	-	_	-	10,000
DO Probes Sensors	-	8,000	-	-	14,000	22,000
Nitrate Probes, Sensors	-	8,000	-	-	-	8,000
Nitrate Meter	-	-	-	-	20,000	20,000
Ammonia Probes, Sensors	-	8,000	-	-	-	8,000
Replace Sewage Pump 1, 40 MGD, Lg. Cartridge	-	-	160,000	-	-	160,000
Replace Forklift	-	-	50,000	-	-	50,000
Replace Vehicle - V447	-	-	40,000	-	-	40,000
Replace Vehicle - V379			35,000	_	_	35,000
	-	-	33,000			33,000
Replace Vehicle - V446	-	-	35,000	-	-	35,000
·	- -			-		

Grit Aeration Blower	Section		FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total Cost
Replace Cemerator	Grit Aeration Blower		-	-	25,000	-	28,000	53,000
Replace Welnick - W87 25,000 - 25,000 Replace Welnick - W42 25,000 - 25,000 Dewatering Pump and Motor 48,000 - 25,000 Dewatering Pump and Motor 17,000 10,000 10,000 Pump Set Rotating Assembly - 25,000 10,000 150,000 Replace Senier German and Cartridge - 150,000 150,000 150,000 Butterly Valve 1 - 50,000 - 250,000 Replace Seniege Pump and Cartridge - 50,000 - 50,000 Butterly Valve 1 - 50,000 - 50,000 Replace Seniege Pumps - 50,000 - 50,000 Replace Seniege Pumps - 50,000 - 50,000 Tumed St Carse Receating - 50,000 - 50,000 Tumed St Carse Receating - 40,000 - 50,000 Tumed St Carse Receating - 20,000 - 50,000 Tumed St Carse Receating			_	_		_	-	
Repbace Verifice: V422 25,000 - 25,000 Disinfection: V470 1-7 48,000 - 25,000 Devaleting Pump and Motor 17,000 - 10,000 Repbace Senise Vertical Platform 17,000 - 10,000 Pump Set floating Assembly 25,000 - 25,000 Replace Servinge Pump and Cartridge - 16,000 - 25,000 Butterfly Valve I - 5,000 - 25,000 Replace Servinge Pump and Cartridge - 5,000 - 5,000 Butterfly Valve I - 5,000 - 5,000 Dume, Parinting - - 5,000 - 5,000 Replace Verlicie - V485 - - - 5,000 - 5,000 - 5,000 -	·		-	-		-	-	
Replace Vehicle - V442	·		_	_		_	_	
Dishifection - VPID 1-7 Power Sewage Pump and Motor 17,000 17,000 10,000	·		_	_		_	_	•
Devalering Pump and Motor 17,000 17,000 10,000			_	_		_	_	•
Replace Senite Vertical Platform			_	_		_	_	
Pump Set Rolating Assembly			_	_	17,000	_	10 000	
Replace Sewage Pump and Carridge 160,000 160,000 9,000 9,000 9,000 8,000 9,000 9,000 8,000 9,000 9,000 8,000 9,000 8,000 9,000 8,000 8,000 8,000 1,000 8,000 1,000			_	_	_	250 000	10,000	
Butterfly Valve 1							_	
Replace Vehicle - V475 50,000 50,			_	_			_	
Replace Sewage Pumps			-	-			-	
bomes, Painting - 50,000 50,000 Tunnel St Crane Recoating - 50,000 50,000 Replace Vehicle - V448 - 40,000 40,000 Uninterruptible Power Supply (UPS) - 20,000 35,000 30,000 65,000 Disinfection-Hump and motor - 20,000 25,000 25,000 25,000 Scissor Lift - 20,000 - 20,000 10,000 10,000 Probes - 20,000 - 10,000 10,000 10,000 Replace Air Compressor - 10,000 - 12,000 - 12,000 Meters - 10,000 - 12,000 - 12,000 Meters - 10,000 - - 12,000 Sensors - 10,000 - - 10,000 Replace Welder - 10,000 - 10,000 Replace Welder - 10,000 - 10,000			-	-			-	
Tunnel SI Craine Recorating - 5,0,000 - 50,000 Replace Vehicle - V448 - 4,000 40,000 40,000 Disinfection-Pump and motor - 2,500 - 25,000 - 25,000 Scissor Lift - - - 2,000 - 25,000 Replace Vehicle - V495 - - 20,000 - 20,000 Probes - 20,000 - - 20,000 Ammonia Meter - - - 10,000 - 12,000 Agrable Frequency Drive (VFD) 1-3 - - 1,000 - - 20,000 Meters - 1,000 - - 10,000 Sensors - 1,000 - - 10,000 Replace Trailer - 1,000 - - 10,000 Replace Eval Froil Furm - - 1,000 - - 10,000 Replace Eval Froil Furm - <td></td> <td></td> <td>-</td> <td>-</td> <td></td> <td></td> <td>-</td> <td></td>			-	-			-	
Replace Vehicle - V448	_		-	-			-	
Uniterruptible Power Supply (UPS) - - 35,000 55,000 55,000 55,000 25,000	_		-	-			-	
bisinettion-Pump and motor 25,000 - 52,000 25,000	·		-	-			-	•
Scisor Lift - - - 25,000 25,000 Replace Vehicle - V495 - - 20,000 - 20,000 Ammonia Meter - - 20,000 - - 20,000 Replace Air Compressor - - - 14,000 - 14,000 Pump Cartridge - - 15,000 - - 20,000 Meters - 10,000 - - 10,000 Sensors - 10,000 - - 10,000 Replace Trailer - - 10,000 - - 10,000 Replace WFD Grit Pump - - - 10,000 - - 10,000 Replace WFD Grit Pump - <td></td> <td></td> <td>-</td> <td>-</td> <td></td> <td></td> <td>30,000</td> <td>•</td>			-	-			30,000	•
Replace Vehicle - V495 2,000 2,000 2,000 2,000 2,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 12,000			-	-			35.000	
Probes 20,000 - 20,000 - 10,000 10,000 Ammonia Meter - 2 - 2 - 14,000 - 10,000 10,000 Keplace Air Compressor - 2 - 12,000 - 14,000 - 12,000 Variable Frequency Drive (VFD) 1-3 - 2 - 15,000 17,000 - 2 - 20,000 Dump Cartridge - 10,000 - 10,000 - 2 - 10,000 - 10,000 Sensors - 10,000 - 10,000 - 10,000 - 10,000 Replace Trailer - 2 - 10,000 - 10,000 - 10,000 Replace Trailer - 2 - 2 - 10,000 - 10,000 - 10,000 Replace VFD Grit Pump - 2 - 2 - 10,000 - 2,000 - 7,000 - 7,000 Bridge Crane Drive Unit - 2 - 2 - 6,000 - 7,000 - 6,000 - 6,000 - 6,000 Bridge Crane Trulley Drive Unit - 2 - 2 - 6,000 - 6,000 - 6,000 - 6,000 - 6,000 - 6,000 - 6,000 - 6,000 - 6,000 - 6,000 - 6,000 - 6,000 - 6,000 - 6,000 - 6,000 - 6,000 - 6,000 - 6,000 - 6			-	-	-		25,000	
Ammonia Meter - - - 10,000 10,000 Replace Air Compressor - - - 12,000 - 12,000 Variable Frequency Drive (VFD) 1-3 - - 12,000 - 12,000 Meters - - 10,000 - - 10,000 Sensors - - 10,000 - - 10,000 Replace Trailer - - - 10,000 - - 10,000 Crane Monitor Panel -	•		-	-	-	23,000	-	
Replace Air Compressor - - 14,000 - 14,000 Variable Frequency Drive (VFD) 1-3 - - 15,000 17,000 - 12,000 Deump Cartridge - 15,000 17,000 - - 10,000 Sensors - 10,000 - - 10,000 Replace Trailer - - 10,000 - 10,000 Replace Welder - - - 10,000 - 10,000 Bridge Crane Drive Unit -			-	-	20,000	-	-	
Variable Frequency Drive (VFD) 1-3 - 12,000 - 12,000 Pump Cartridge - 15,000 17,000 - 32,000 Meters - 10,000 - - 10,000 Sensors - 10,000 - - 10,000 Replace Trailer - 10,000 - 10,000 Replace VFD Grit Pump - - 7,000 - 7,000 Beplace Welder - - - 7,000 - 7,000 Bridge Crane Drive Unit - - - 6,000 - 6,000 Bridge Crane Drive Unit - - - 6,000 - 6,000 Bridge Crane Drive Unit - - - 6,000 - 6,000 Bridge Crane Drive Unit - - - 6,000 - 6,000 Bridge Crane Drive Unit - - - - 6,000 - 6,000 Bridge			-	-	-		10,000	
Pump Cartridge - 15,000 17,000 - - 32,000 Meters - 10,000 - - 10,000 Sensors - 10,000 - - 10,000 Replace Trailer - 10,000 - 10,000 Cran Monitor Panel - - 10,000 - 10,000 Replace VFD Grit Pump - - - 10,000 - 10,000 Replace Welder -	·		-	-		•	-	
Meters - 10,000 - - 10,000 Sensors - 0,000 - - 10,000 Replace Trailer - - 0,000 - 10,000 Crane Monitor Panel - - 0,000 24,000 32,000 Replace VFD Grit Pump - - 0,000 24,000 32,000 Bridge Crane Drive Unit - - 0,000 - 6,000 Bridge Crane Drive Unit - - 0,000 - 6,000 Bridge Crane Drive Unit - - - 6,000 - 6,000 Bridge Crane Drive Unit - - - 6,000 - 6,000 Bridge Crane Drive Unit - - - 6,000 - 6,000 Bridge Crane Drive Unit - - - - - 6,000 Bridge Crane Drive Unit - - - - - - - -			-	-			-	
Sensors 10,000 10,000 10,000 Replace Trailer 1 10,000 10,000 Crane Monitor Panel 1 1 10,000 Replace VFD Grit Pump 1 2 3 8,000 24,000 32,000 Replace Welder 2 2 7,000 2 7,000 Bridge Crane Drive Unit 2 3 6,000 6,000 Bridge Crane Troilley Drive Unit 2 3 6,000 6,000 Breplace Sewage Pump Motor 300 HP 3 6,000 165,000 Replace Sewage Pump Motor 200 HP 3 7 155,000 155,000 Replace Sewage Pump Motor 200 HP 3 7 75,000 155,000 Replace Sewage Pump Motor 200 HP 3 7 75,000 155,000 Replace Sewage Pump And Large Cartridge 3 7 75,000 150,000 Replace Sewage Pump And Large Cartridge 3 3 5 5,000 Replace Sewage Pump And Large Cartridge 3 3 6			-	-		17,000	-	
Replace Trailer - - 10,000 - 10,000 Crane Monitor Panel - - 10,000 - 10,000 Replace VPD Grit Pump - - - 8,000 24,000 32,000 Replace Welder - - - 7,000 - 7,000 Bridge Crane Drive Unit - - - 6,000 - 6,000 Bridge Crane Drum Hoist - - - 6,000 - 6,000 Replace Sewage Pump Motor 300 HP - - - - - 165,000 165,000 Replace Sewage Pump Motor 200 HP - - - - - 165,000 165,000 Replace Sewage Pump Motor 200 HP - - - - - - 150,000 125,000 125,000 Replace Sewage Pump Motor 200 HP - - - - - - - - 150,000 125,000 Wet Weather Turntable <td></td> <td></td> <td>-</td> <td>-</td> <td>•</td> <td>-</td> <td>-</td> <td></td>			-	-	•	-	-	
Crane Monitor Panel - - 1,0000 - 10,000 Replace VFD Grit Pump - - - 8,000 24,000 32,000 Replace Welder - - - 7,000 - 7,000 Bridge Crane Drive Unit - - - 6,000 - - 6,000 Bridge Crane Drum Hoist - - - - 6,000 - - 6,000 Breplace Sewage Pump Motor 300 HP - - - - - - 0,000 125,000 165,000 Replace Sewage Pump Motor 200 HP - - - - - - - 165,000 155,000 Replace Sewage Pump Motor 200 HP -			-	-	10,000	-	-	
Replace VFD Grit Pump - - - 8,000 24,000 32,000 Replace Welder - - - 7,000 - 7,000 Bridge Crane Drive Unit - - 6,000 - 6,000 Bridge Crane Drum Hoist - - - 6,000 - 6,000 Replace Sewage Pump Motor 300 HP - - - - - 165,000 165,000 Replace Sewage Pump Motor 200 HP - - - - - - 155,000 165,000 Replace Sewage Pump and Large Cartridge - <t< td=""><td>•</td><td></td><td>-</td><td>-</td><td>-</td><td></td><td>-</td><td>•</td></t<>	•		-	-	-		-	•
Replace Welder - 7,000 - 7,000 Bridge Crane Drive Unit - - 6,000 - 6,000 Bridge Crane Drive Unit - - 6,000 - 6,000 Bridge Crane Drive Unit - - 6,000 - 6,000 Bridge Crane Drive Unit - - 6,000 - 6,000 Bridge Crane Drive Unit - - 6,000 - 6,000 Bridge Crane Drive Unit - - 6,000 - 6,000 Bridge Crane Drive Unit - - 6,000 - 6,000 Bridge Crane Drive Unit - - - 6,000 - 6,000 Bridge Crane Drive Unit -			-	-	-		-	
Bridge Crane Drive Unit - 6,000 - 6,000 Bridge Crane Trolley Drive Unit - - 6,000 - 6,000 Bridge Crane Drum Hoist - - 6,000 - 6,000 Replace Sewage Pump Motor 300 HP - - - - 165,000 165,000 Replace Sewage Pump Motor 200 HP - - - - - 165,000 165,000 Replace Sewage Pump and Large Cartridge - - - - - 165,000 165,000 Wet Weather Turntable -<			-	-	-		24,000	
Bridge Crane Trolley Drive Unit - - 6,000 - 6,000 Bridge Crane Drum Hoist - - 6,000 - 6,000 Replace Sewage Pump Motor 300 HP - - - - 165,000 125,000 Replace Sewage Pump Motor 200 HP - - - - 125,000 125,000 Replace Sewage Pump and Large Cartridge - - - - - 165,000 165,000 Wet Weather Turntable - - - - 55,000 75,000 150,000 Replace Bobcat Loader - - - - 55,000 55,000 50,000 Replace Bobcat Loader - - - - - 55,000 55,000 50,000 Replace Bobcat Loader - - - - - - 50,000 50,000 50,000 60,000 60,000 60,000 60,000 60,000 60,000 60,000 60,000 60,000 <td< td=""><td></td><td></td><td>-</td><td>-</td><td>-</td><td></td><td>-</td><td></td></td<>			-	-	-		-	
Bridge Crane Drum Hoist - - 6,000 - 6,000 Replace Sewage Pump Motor 300 HP - - - - 165,000 165,000 Replace Sewage Pump Motor 200 HP - - - - 125,000 125,000 Replace Sewage Pump and Large Cartridge - - - - 165,000 150,000 Wet Weather Turntable - - - 75,000 75,000 150,000 Wet Weather Turntable - - - 75,000 75,000 150,000 Replace Bobcat Loader - - - - 50,000 50,000 Replace Whicle - V375 - - - - - 50,000 35,000 Replace Vehicle - V3464 - - - - - 50,000 40,000 Replace Eval Radars - - - - - - - 18,000 33,000 Replace Forklift - E0050 - -			-	-	-		-	
Replace Sewage Pump Motor 300 HP - - - - 165,000 165,000 Replace Sewage Pump Motor 200 HP - - - - 125,000 125,000 Replace Sewage Pump and Large Cartridge - - - - 165,000 165,000 Wet Weather Turntable - - - 75,000 75,000 150,000 Replace Bobcat Loader - - - - 55,000 55,000 Pump Set Motor - - - - - 55,000 55,000 Replace Vehicle - V375 - - - - - - 55,000 55,000 Replace Vehicle - V364 - - - - - - - - 55,000 55,000 Replace Vehicle - V464 - - - - - - - - - - - - - - - - - - - <td>Bridge Crane Trolley Drive Unit</td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td>6,000</td> <td>-</td> <td>6,000</td>	Bridge Crane Trolley Drive Unit		-	-	-	6,000	-	6,000
Replace Sewage Pump Motor 200 HP - - - - 125,000 125,000 Replace Sewage Pump and Large Cartridge - - - - 165,000 165,000 Wet Weather Turntable - - - 75,000 75,000 150,000 Replace Bobcat Loader - - - - 55,000 55,000 Pump Set Motor - - - - 50,000 50,000 Replace Vehicle - V375 - - - - - - 50,000 35,000 35,000 35,000 35,000 35,000 35,000 35,000 35,000 35,000 35,000 35,000 40,000	Bridge Crane Drum Hoist		-	-	-	6,000	-	6,000
Replace Sewage Pump and Large Cartridge - - - - 165,000 165,000 Wet Weather Turntable - - - 75,000 75,000 150,000 Replace Bobcat Loader - - - - 55,000 55,000 Pump Set Motor - - - - 55,000 50,000 Replace Vehicle - V375 - - - - 55,000 35,000 Flexim Flow Meters - - - - - 55,000 55,000 Replace Vehicle - V364 - - - - - - - 5,000 40,000 Replace Level Radars -	Replace Sewage Pump Motor 300 HP		-	-	-	-	165,000	165,000
Wet Weather Turntable - - 75,000 75,000 150,000 Replace Bobcat Loader - - - - 55,000 55,000 Pump Set Motor - - - - 55,000 55,000 Replace Vehicle - V375 - - - - - 55,000 35,000 Flexim Flow Meters - - - - - 55,000 35,000 Replace Vehicle - V364 - - - - - - 55,000 40,000 Replace Level Radars - - - - - - - - 40,000 40,000 Replace EZ Go-cart - E0040 - <td></td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td></td> <td></td>			-	-	-	-		
Replace Bobcat Loader - - - 55,000 55,000 Pump Set Motor - - - 50,000 50,000 Replace Vehicle - V375 - - - - 35,000 35,000 Flexim Flow Meters - - - - 55,000 55,000 Replace Vehicle - V464 - - - - 40,000 40,000 Replace Level Radars - - - - 40,000 18,000 Replace EZ Go-cart - E0040 - - - - 18,000 18,000 Replace Forklift - E0050 - - - - - 14,000 14,000 Replace Yard Sweeper - E0009 - - - - - 33,000 33,000 Metering Pump - - - - - - - - - - - - - - - - - - -	Replace Sewage Pump and Large Cartridge		-	-	-	-	165,000	165,000
Pump Set Motor - - - - 50,000 50,000 Replace Vehicle - V375 - - - - - 35,000 35,000 Flexim Flow Meters - - - - - 55,000 55,000 Replace Vehicle - V464 - - - - - 40,000 40,000 Replace Level Radars - - - - - - 18,000 18,000 Replace EZ Go-cart - E0040 - - - - - - - 14,000 14,000 Replace Forklift - E0050 - - - - - - 33,000 33,000 33,000 30,000 Replace Yard Sweeper - E0009 - - - - - - - 20,000 20,000 Rake Drum Motor - - - - - 6,000 6,000 Trolley Motor - - - <td>Wet Weather Turntable</td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td>75,000</td> <td>75,000</td> <td>150,000</td>	Wet Weather Turntable		-	-	-	75,000	75,000	150,000
Replace Vehicle - V375 - - - - - - 55,000 35,000 55,000 55,000 55,000 55,000 55,000 55,000 55,000 55,000 55,000 40,000 40,000 40,000 40,000 40,000 40,000 40,000 40,000 40,000 40,000 40,000 40,000 40,000 40,000 40,000 18,00	Replace Bobcat Loader		-	-	-	-	55,000	55,000
Flexim Flow Meters	Pump Set Motor		-	-	-	-	50,000	50,000
Replace Vehicle - V464 - - - - 40,000 40,000 Replace Level Radars - - - - 18,000 18,000 Replace EZ Go-cart - E0040 - - - - - 14,000 14,000 Replace Forklift - E0050 - - - - - 33,000 33,000 Replace Yard Sweeper - E0009 - - - - - 30,000 30,000 Metering Pump - - - - - 20,000 20,000 Rake Drum Motor - - - - - 6,000 6,000 Clam Shell Motor - - - - - 6,000 6,000 Trolley Motor - - - - - 6,000 6,000 Mag Meter - - - - 5,000 5,000 Variable Frequency Drive - - - 8,000 - 8,000 Blower - - - -	Replace Vehicle - V375		-	-	-	-	35,000	35,000
Replace Level Radars - - - - 18,000 18,000 Replace EZ Go-cart - E0040 - - - - 14,000 14,000 Replace Forklift - E0050 - - - - - 33,000 33,000 Replace Yard Sweeper - E0009 - - - - - - 30,000 30,000 Metering Pump - - - - - 20,000 20,000 Rake Drum Motor - - - - - 6,000 6,000 Clam Shell Motor - - - - - 6,000 6,000 Trolley Motor - - - - - 6,000 6,000 Mag Meter - - - - - 5,000 5,000 Variable Frequency Drive - - - - 8,000 - 8,000 Level Indicating Equipment - - - - 5,000 - 5,000	Flexim Flow Meters		-	-	-	-	55,000	55,000
Replace EZ Go-cart - E0040 - - - - 14,000 14,000 Replace Forklift - E0050 - - - - 33,000 33,000 Replace Yard Sweeper - E0009 - - - - - 30,000 30,000 Metering Pump - - - - - 20,000 20,000 Rake Drum Motor - - - - - 6,000 6,000 Clam Shell Motor - - - - - 6,000 6,000 Trolley Motor - - - - - - 6,000 6,000 Mag Meter - - - - - 5,000 5,000 Variable Frequency Drive - - - - - 5,000 5,000 Blower - - - - - 5,000 - 5,000 Level Indicating Equipment - - - - 5,000 - 5,000	Replace Vehicle - V464		-	-	-	-	40,000	40,000
Replace Forklift - E0050 - - - - - 33,000 33,000 Replace Yard Sweeper - E0009 - - - - - 30,000 30,000 Metering Pump - - - - - 20,000 20,000 Rake Drum Motor - - - - - 6,000 6,000 Clam Shell Motor - - - - - 6,000 6,000 Trolley Motor - - - - - 6,000 6,000 Mag Meter - - - - - 5,000 5,000 Variable Frequency Drive - - - - - 5,000 5,000 Blower - - - - 8,000 - 8,000 Level Indicating Equipment - - - 5,000 - 5,000	Replace Level Radars		-	-	-	-	18,000	18,000
Replace Yard Sweeper - E0009 - - - - - - 30,000 30,000 Metering Pump - - - - - 20,000 20,000 Rake Drum Motor - - - - - 6,000 6,000 Clam Shell Motor - - - - - 6,000 6,000 Trolley Motor - - - - - 6,000 6,000 Mag Meter - - - - - 5,000 5,000 Variable Frequency Drive - - - - 5,000 5,000 Blower - - - 8,000 - 8,000 Level Indicating Equipment - - - 5,000 - 5,000	Replace EZ Go-cart - E0040		-	-	-	-	14,000	14,000
Metering Pump - - - - - 20,000 20,000 Rake Drum Motor - - - - - - 6,000 6,000 Clam Shell Motor - - - - - - 6,000 6,000 Trolley Motor - - - - - 6,000 6,000 Mag Meter - - - - - 5,000 5,000 Variable Frequency Drive - - - - - 5,000 5,000 Blower - - - - 8,000 - 8,000 Level Indicating Equipment - - - 5,000 - 5,000	Replace Forklift - E0050		-	-	-	-	33,000	33,000
Rake Drum Motor - - - - - 6,000 6,000 Clam Shell Motor - - - - - - 6,000 6,000 Trolley Motor - - - - - 6,000 6,000 Mag Meter - - - - - 5,000 5,000 Variable Frequency Drive - - - - - 5,000 - 5,000 Blower - - - - - 5,000 - 8,000 Level Indicating Equipment - - - - 5,000 - 5,000	Replace Yard Sweeper - E0009		-	-	-	-	30,000	30,000
Rake Drum Motor - - - - - 6,000 6,000 Clam Shell Motor - - - - - - 6,000 6,000 Trolley Motor - - - - - 6,000 6,000 Mag Meter - - - - - 5,000 5,000 Variable Frequency Drive - - - - - 5,000 5,000 Blower - - - - 8,000 - 8,000 Level Indicating Equipment - - - - 5,000 - 5,000	Metering Pump		-	-	-	-	20,000	20,000
Clam Shell Motor - - - - - 6,000 6,000 Trolley Motor - - - - - - 6,000 6,000 Mag Meter - - - - - 5,000 5,000 Variable Frequency Drive - - - - 5,000 5,000 Blower - - - - 8,000 - 8,000 Level Indicating Equipment - - - - 5,000 - 5,000			-	-	-	-		
Trolley Motor - - - - - 6,000 6,000 Mag Meter - - - - - 5,000 5,000 Variable Frequency Drive - - - - - 5,000 5,000 Blower - - - - 8,000 - 8,000 Level Indicating Equipment - - - 5,000 - 5,000	Clam Shell Motor		-	-	-	-		
Mag Meter - - - - 5,000 5,000 Variable Frequency Drive - - - - 5,000 5,000 Blower - - - 8,000 - 8,000 Level Indicating Equipment - - - 5,000 - 5,000			-	-	-	-		
Variable Frequency Drive - - - - 5,000 5,000 Blower - - - 8,000 - 8,000 Level Indicating Equipment - - - 5,000 - 5,000			-	-	-	-		
Blower - - - 8,000 - 8,000 Level Indicating Equipment - - - 5,000 - 5,000	_		-	-	-	-		
Level Indicating Equipment 5,000 - 5,000			-	-	-	8,000	-	
			-	-	-		-	
	· · · · · · · · · · · · · · · · · · ·	Subtotal Field's Point	1,269,000	1,010,500	1,102,000	1,213,500	1,124,000	5,719,000

Section	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total Cost
Bucklin Point						
BP Rehabilitation and Improvements	145,000	_	_	_	_	145,000
Replace One Bar Rack	60,000	70,000	75,000	_	_	205,000
Replace Seepex Pumps	60,000	16,000	-	27,000	27,000	130,000
Office Reconfiguration	50,000	-	_	-	-	50,000
Replace EIM Actuators	47,000	40,000	_	_	_	87,000
Replace Pump Gearbox & Coupling	45,000	-	_	_	_	45,000
Gas System Replacement	40,000	_	_	_	_	40,000
Pickup Truck with Plow	32,000	_	_	_	_	32,000
Replace Programmable Logic Computer	30,000	_	_	_	_	30,000
Replace Vehicle - V496	30,000	_	_	_	_	30,000
Replace Flushing Water Pump	27,000	_	_	_	_	27,000
Rehab of Bar Rack Screening Conveyor	25,000	_	_	_	_	25,000
Storage Trailer Container	25,000	_	_	_	_	25,000
Rebuild Screenings Grinder	25,000	_	_	_	_	25,000
Replace Auger	25,000	_	_	_	_	25,000
Replace Grit Pump	25,000	_	_	_	_	25,000
Camera Replacement	25,000	_	_	_	_	25,000
Lunchroom Reconfiguration	25,000	_	_	_	_	25,000
Replace Plunger Pump	25,000	_	_	_	_	25,000
Replace Air Handler and Air Handling Unit Coils	38,000	_	_	_	_	38,000
Chopper Pump for PSPS Dewatering Pump	20,000	_	_	_	_	20,000
UV Hydraulic Gate System	20,000	_	_	_	_	20,000
Server Infrastructure	20,000	_	_	20,000	_	40,000
Servers	20,000	_	_	-	_	20,000
Replace Level Sensor System	20,000	_	_	_	_	20,000
Wonderware Licenses	20,000	20,000	_	_	_	40,000
Perimeter Limiter Counterweight System	20,000	-	_	_	_	20,000
Replace UPS Unit	17,000	_	_	20,000	_	37,000
Replace Plant Isolation Valves	15,000	_	_	20,000	_	35,000
Screw Pump 70 HP Motor	15,000	_	_	-	_	15,000
Replace PLC Generator	15,000	_	_	_	_	15,000
Replace 15 2-way Radios	15,000	15,000	_	_	_	30,000
Emergency Spill Trailer	15,000	-	_	_	_	15,000
Replace Polymer Feed Pumps	15,000	_	_	_	_	15,000
Welder	10,000	_	_	_	_	10,000
Replace Flow Meters	15,000	10,000	10,000	20,000	5,000	60,000
Stacking Forklift	10,000	-	-	-	-	10,000
Replace Copier	9,000	_	_	_	_	9,000
Replace Brush Cutter for Bobcat Tractor	7,500	_	_	_	_	7,500
Thermography Camera	6,000	_	_	_	_	6,000
Wireless Network	-	60,000	60,000	_	_	120,000
Overhaul 3 Grit Pumps	_	12,000	14,000	_	_	26,000
Methane Gas Spencer Booster Pump	_	38,000	,000	_	_	38,000
6" Pump Set	_	32,000	_	_	_	32,000
Grit Pumps	_	30,000	35,000	_	_	65,000
Gas Control Building Piping & Valves	-	25,000	-	_	_	25,000
Rebuild Digester Recirculation Pump	_	22,000	_	25,000	_	47,000
Bisulfite Pump	_	5,000	8,000	-	_	13,000
Hypochlorite Pumps	_	5,000	8,000	_	_	13,000
Replace Vehicle - V399	_	15,000	-	_	_	15,000
Replace Digester Gas Trap	_	10,000	15,000	18,000	_	43,000
Gate & Controller	- -	10,000	-	-	_	10,000
Replace Siphon Fan	=	10,000	-	_	-	10,000
BP Phone Lines	-	10,000	10,000	_	_	20,000
Replace Truck Mounted Salt/Sander - E0100A	-	10,000	10,000	-	-	10,000
Replace Truck Mounted Salt/Sander - E0100A	-	8,000	-	-	-	8,000
Confined Space Hoist Equipment	-		5,000	-	-	5,000
	-		3,000	-	-	
Incoming Transformer	-	400,000	-	-	-	400,000

Section		FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total Cost
Replace Vehicle - V382		_	40,000	_	_	_	40,000
Rebuild Effluent Pump		_	-	_	60,000	60,000	120,000
Rebuild Dewater Pumps		_	_	45,000	45,000	48,000	138,000
Replace Vehicle - V418		-	_	-	-	40,000	40,000
Screw Assembly		_	_	_	_	40,000	40,000
Grit Collector		-	_	_	_	40,000	40,000
Replace Vehicle - V356		-	-	-	-	35,000	35,000
Scum Pump & Mixers		-	-	-	-	30,000	30,000
UV Hydraulic Assemblies		-	25,000	-	-	25,000	50,000
Replace Golf Cart - E0049		-	12,000	-	-	-	12,000
Rebuild Digester #1		-	, =	200,000	200,000	200,000	600,000
DBS Drive		-	-	-	-	80,000	80,000
Screening & Grit Equipment		-	-	-	-	75,000	75,000
Cabinet Servers		-	-	-	70,000	-	70,000
Replace Booster Pumps		-	-	-	30,000	30,000	60,000
Blower Building Cartridge		-	-	-	30,000	-	30,000
Replace Vehicle - V378		-	-	-	28,000	-	28,000
Replace Vehicle - V486		-	25,000	-	-	-	25,000
Upper Bearing for Screw Pump		-	35,000	-	-	-	35,000
Replace Vehicle - V444		-	32,000	-	-	-	32,000
Replace Hypo Piping & Valves		-	-	120,000	-	-	120,000
Replace Vehicle - V368		-	-	85,000	-	-	85,000
DO Sensors		-	-	75,000	-	-	75,000
Differential Pressure Gauges		-	-	45,000	-	-	45,000
Replace Pumps		-	-	40,000	40,000	-	80,000
Replace HVAC		-	-	40,000	60,000	-	100,000
Replace Dewater Pump		-	-	35,000	35,000	-	70,000
Bubbler System/Flow Meters		-	-	-	24,000	-	24,000
Vortex Collector		-	-	-	20,000	20,000	40,000
Grit Classifier		-	-	-	-	20,000	20,000
Replace Golf Cart - E0060		-	-	-	-	14,000	14,000
Replace Golf Cart - E0061		-	-	-	-	14,000	14,000
Replace Golf Cart - E0062		-	-	-	-	14,000	14,000
Replace Mower - E0063		-	-	-	-	9,000	9,000
Replace Mower - E0064		-	-	-	-	9,000	9,000
Replace Mower - E0065		-	-	-	-	9,000	9,000
Bar Rack at Omega		-	-	-	20,000	-	20,000
Replace Golf Cart - E0057		-	-	14,000	-	-	14,000
Gas Detection Meter System		-	-	-	15,000	-	15,000
Replace Golf Cart - E0051		-	-	-	14,000	-	14,000
Replace Golf Cart - E0052		-	-	-	14,000	-	14,000
Replace Golf Cart - E0066A		-	-	-	14,000	-	14,000
Replace Golf Cart - E0067A		-	-	-	14,000	-	14,000
Replace Golf Cart - E0068A		-	-	-	14,000	-	14,000
Sump Pumps		-	-	-	10,000	-	10,000
Methane Gas Media Filter Assembly		-	-	15,000	-	-	15,000
Hoist		-	-	15,000	25,000	-	40,000
Replace Limitorque Actuator	_	-	-	20,000	-	-	20,000
	Subtotal Bucklin Point _	1,108,500	1,042,000	989,000	932,000	844,000	4,915,500
PLANNING, POLICY & REGULATION							
Planning							
Office Reconfiguration		95,000	_	-	_	-	95,000
2se nesomigaration	Subtotal Planning	95,000	-	_	_	-	95,000
		*					•
Pretreatment							
Pretreatment Replace Vehicle - V492		30,000	-	-	-	-	30,000
	Subtotal Pretreatment	30,000	- -	30,000 30,000	- -	- -	30,000 30,000 60,000

Section	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total Cost
Laboratory						
Replace Gas Chromatograph Mass Spectrometer	147,000	-	-	-	-	147,000
Replace Salt Water Nutrient Analyzer	93,000	-	-	-	-	93,000
Micro Biological Temperature Monitoring System	35,000	-	-	-	-	35,000
Replace Enterococci Sealers	8,000	-	-	-	-	8,000
Replace Refrigerators	6,000	-	-	-	-	6,000
Replace KN Digester Block Unit	6,000	-	-	-	-	6,000
Replace ICP	-	80,000	-	-	-	80,000
Replace Cyanide Analyzer	-	79,000	-	-	-	79,000
Replace Autoclave (A)	-	60,000	-	-	-	60,000
Replace Auto Digestion Systems	-	66,000	-	-	_	66,000
TKN Digester Block	-	13,000	-	-	-	13,000
Replace ICP-Trace	-	-	80,000	-	-	80,000
Replace Nutrient Analyzer	-	-	65,000	-	_	65,000
Replace Mercury Analyzer	-	-	50,000	-	_	50,000
Replace Oil and Grease Analyzer	-	-	45,000	-	-	45,000
Replace DI Unit	-	-	-	84,000	_	84,000
Replace BOD Chemical Analyzer	-	-	-	59,000	_	59,000
Replace Back up Mercury Analyzer	-	-	-	50,000	-	50,000
Replace Auto Titration System	-	-	-	40,000	-	40,000
Replace Refrigerators	-	-	-	25,500	_	25,500
Replace Incubators	-	-	-	24,000	_	24,000
Replace Hach Spectrophotometer	-	-	-	8,000	_	8,000
Subtotal Laboratory	295,000	298,000	240,000	290,500	-	1,123,500
EMDA						
Data Collection Platform Replacement	65,000	-	-	_	-	65,000
Replace Vehicle - V413	34,000	-	-	-	-	34,000
Replace Water Column Profiler	18,000	-	-	-	-	18,000
Replace Copier	7,000	-	-	-	-	7,000
Replace Fixed Site Sondes	, -	50,000	50,000	50,000	52,000	202,000
Replace Vehicle - V32	-	34,000	-	-	-	34,000
Replace Fixed Site Probes, 650 Handheld Meter, Solutions	-	30,000	32,000	32,000	32,000	126,000
Replace Vehicle - V383	-	-	34,000	-	-	34,000
Replace Refrigerated Auto Samplers	26,000	19,500	13,000	19,500	14,000	92,000
Replace Vehicle - V369	-				34,000	34,000
Subtotal EMDA	150,000	133,500	129,000	101,500	132,000	646,000

Total \$ 5,479,500 \$ 3,734,000 \$ 3,300,000 \$ 3,347,500 \$ 2,786,000 \$ 18,647,000

Fund - Organization Matrix	Matrix												
Division / Section	Revenue Fund	Operation & Maintenance Fund	Project Fund	Debt Service d Fund	Renewal & Replacement Reserve Fund	Debt Service Reserve Fund	Operation & Maintenance Reserve Fund	Redemption Fund	Insurance Reserve 1 Fund	Operating Reserve for Revenue Stability Fund	Rebate 1 Fund	Unrestricted Fund	TOTAL
Executive Affairs: Executive Affairs	٠	\$ 1,323,067	\$ 115,000	\$ (<.	٠ •	•	₩.			٠ ٠	\$·	1,438,067
											•	•	
Subtotal		1,789,820	115,000		'		'			1			1,904,820
Construction Services: Construction Services	ı	342,960	30,000		1	,	•	,	,	•	1	ı	372,960
Subtotal	,	342,960	30,000	-	'	•	•			1			372,960
Admistration & Finance:		181 833	000 05	_	,	,	•		•	•			531 833
Finance	•	1,067,154	260,000		•	•	•	•		•			1,327,154
Accounting	•	810,439	5,000		1	1	ı	ı	٠	1	•	1	815,439
	1	1,998,769	1,335,000	-	•	•	•	•	'	•	1	•	3,333,769
Customer Service	•	2,594,281	30,000	-	1	1	1	1	•	•	•	1	2,624,281
Purchasing	•	351,447	•		1	1	ı	1	•	•	•	1	351,447
Administration	'	2,973,761	145,000	45,137,622	1	1	1	1	•	•	-	-	48,256,383
Subtotal	•	10,277,684	1,825,000	45,137,622	•	•	1	•	•	•	•	•	57,240,306
Operations / Engineering:													
Σ	•	2,372,692	492,000	-	1	1	1	•	•	•	•	٠	2,864,692
Engineering	•	741,412	70,000	-	1	•	1	1	•	•	•	•	811,412
Fields Point	•	12,537,658	1,269,000	-	1	1	1	1	•	1	•	1	13,806,658
Bucklin Point	١	7,697,328	1,108,500		1	1	1	1	'	'	1	ı	8,805,828
Subtotal	1	23,349,091	2,939,500		'	•	•	ı	•	•	•	•	26,288,591
Planning, Policy & Regulation:													
Planning	•	580,358	95,000	-	'	•	1	1	•	•	•	ı	675,358
Pretreatment	•	1,161,005	30,000	-	'	•	1	1	•	•	•	1	1,191,005
Lab	•	2,080,800	295,000	-	1	1	1	1	•	•	•	1	2,375,800
ESTA	•	423,153			1	1	1	1	•	•	•	1	423,153
EMDA	٠	1,598,357	150,000		1	1	1	1	'	'	1	ı	1,748,357
Subtotal	1	5,843,673	570,000	-	'	•	•	1	1	1	1	•	6,413,673
Non-Departmental													
Direct CIP Funding	1	1	18,450,000		1	1	1	1	•	•	1	ı	18,450,000
Debt Service Coverage	•					•	•	•		•		1	13,905,521
Subtotal	1	1	18,450,000	13,905,521	1	1	1	•	•	1	1	•	32,355,521
TOTAL	· \$	\$ 41,603,228	\$ 23,929,500	\$ 59,043,143		\$	\$	\$	\$	·	\$	\$ -	124,575,871



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

AMS - Asset Management System

The computer system that incorporates all the processes, tools, data and policies needed to effectively manage assets.

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.

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.

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.

COB - The NBC's Corporate Office Building.

COLA - Cost of Living Adjustment

An annual adjustment made to salary of union employees 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.

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

The ability of a government to sustain its current spending, tax and other policies in the long run without threatening government solvency or defaulting on some of its liabilities or promised expenditures.

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.

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 buildings certification program created by the US 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 with key features that support 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

MRI – Moshassuck River Interceptor

MW - Megawatt

A megawatt is a unit of measure of electricity and one MW is equal to one million (10⁶) watts.

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.

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.

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.

PUC - Public Utilities Commission

In accordance with RIGL, this state agency regulates certain public utilities in the State of Rhode Island, including the NBC.

QDRO – Qualified Domestic Relations Order

A QDRO is a judgment, decree or order for a retirement plan to pay child support, alimony or marital property rights to a spouse, former spouse, child or other dependent of a participant.

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).

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

Administers waste and garbage disposal and recycling services.

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

An American stock market index based on the market capitalizations of 500 large companies having common stock listed on the NYSE or NASDAQ.

SIUs - Significant Industrial Users

NBC's largest industrial customers.

SOP – Standard Operating Procedure

A written procedure that promotes uniformity in operations, SOP provides individuals with the information necessary to perform a task properly and facilitates consistency in the quality and integrity of 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.

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.

WED – Wind Energy Development

Wind turbines that convert wind energy into electricity.

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.

Annual Budget - An estimate of expenses 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 – Computerized management program used to ensure the proper maintenance, repair and replacement of NBC's assets.

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 revenues equal expenses.

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.

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 (Operating) – A financial operating plan of all expected revenue and expenses 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 Expenses - Expenses for contractor or other expenses related to the Capital Improvement Program (CIP) projects.

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 expenses 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 tie 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 the 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 or 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.

Expenses – Payments 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.

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 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.

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 expenses 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 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 Budget - See Budget (Operating)

Operating Capital Expenditure - An expense in excess of \$5000 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 Plan - A detailed plan of proposed operating capital expenditures.

Operating Reserve for Revenue Stability Fund – Reserve Fund established at a level of \$4,500,000 to support Operations & Maintenance expenses 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 expenses 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.

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.

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.

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 and used to pay expenses.

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 - Charges 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.

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.

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.

						- O							
ACCT. BUDGET	FY 2016	FY 2017 (Σ	₹	EXECUTIVE AFFAIRS SS CONSTR. SERV.	LEGAL	H/R	FINANCE	ADMINISTRAT ACCT.	ADMINISTRATION & FINANCE ACCT. IT CU	CE CUST SVC	PURCH.	GEN. ADM.
NOIMBER ACCOUNT	BODGE	rkorosep	FT 2010	17.77	77	47	27.7	16.77	76 77	56.33	# H	25.73	7, 90
PERSONNEL SERVICES													
52100 UNION - REGULAR	\$ 6,282,572	\$ 6,627,630	\$ 345,058	\$ -	\$ '	\$	45,569 \$	1	\$ 92,474	\$		\$ 50,414 \$	26,000
52150 UNION OVERTIME	475,400	500,400	25,000		•	•	•	1	1	•	2,000	1	1
52300 NON-UNION REGULAR	10,017,290	10,171,015	153,725	842,286	931,660	335,230	227,344	403,083	509,715	993,143	598,320	199,887	20,000
52350 NON-UNION OVERTIME	106,900	107,900	1,000		000'6	•	•	1	100	•	2,000	•	1
52400 NON-UNION LIMITED	32,100	30,600	(1,500)		2,000	•	•	1	2,000	•	•	•	1
52800 UNION PENSION	1,535,706	1,730,968	195,262			•	12,003	1	24,358		169,709	13,279	1
52810 FICA	1,296,238	1,333,971	37,734	64,435	72,343	25,645	20,878	30,836	46,228	75,975	95,596	19,148	8,109
52820 UNEMPLOYMENT	45,000	40,000	(2,000)		1	1	•	1	1	1	1	1	40,000
52920 NON UNION PENSION	1,101,012	1,327,890	226,878	84,229	94,066	33,523	22,734	40,308	50,982	99,314	60,032	19,989	305,000
52940 UNION RETIREMENT HEALTH	420,698	392,326	(28,372)	•	•	•	2,720	1	5,521	•	38,465	3,010	1
52950 HEALTHINSURANCE	3,617,872	4,062,213	444,341	131,679	195,916	51,499	65,840	53,862	136,679	181,575	353,956	37,471	18,000
52970 DENTAL INSURANCE	318,816	350,269	31,453	10,136	15,673	6,583	5,068	7,103	11,761	18,180	29,869	4,076	
	45,716	47,306	1,590	1,355	2,046	873	677	932	1,746	2,346	4,238	573	1
	41.009	43.059	2.050	'	· '	'	'	'	· '	! '	, '	, '	43.059
	1	1	ì		,	,	٠	,	,	,	,	,	1
	10,000	10.000	,	,	1	1		ı	1	,		1	10.000
ä	200,01	76 775 547	1 430 310	0017011	1 225 704	452 252	200 COV	AC1 2C3	001 EEA	1 270 E22	2 001 400	TNO TNC	E20.169
I O I AL PENSONNEL SENVICES	23,340,323	(4,000,040)	1,429,210	1,134,120	1,523,704	433,333	402,033	330,124	901,304	1,370,333	2,001,400	247,047	001,000
59000 SALARY REIMBURSEMENT	(1,105,4/1)	(1,000,010)	105,461	(39,163)	(849,012)	(3,500)			(75,000)				
ั	72 627 950	35 225 521	1 502 601	1 072 417	310,331)	(3,023)	200 COV	106 174	765 214	1 270 E22	2 004 400 6		500 160
	23,032,830	100,022,02	1,004,001	1,0,0,1	00,700	070'	102,204	120,000	t10,007	2,0,0,0	2,001,100	, to ', to	200,100
OPERATING SUPPLIES/EXPENSES													
52610 MEDICAL SVCS.	14,390	14,390	•		125	•	10,000	1	1	•	•	•	1
53210 POSTAGE	437,827	427,303	(10,524)	•	100	•	•	1	20	35	397,068	1	30,000
53240 DUES & SUBSCRIPTIONS	62,980	65,100	2,120	30,000	1,200	6,500	3,500	2,800	1,000	5,900	200	909	200
53250 FREIGHT	44,050	49,610	2,560	009	200	200	400	230	100	1,200	200	100	11,000
53310 PRINTING & BINDING	162,740	162,700	(40)	7,500	100	100	20	8,000	20	1	128,000	1,000	3,000
53320 ADVERTISING	19,900	18,100	(1,800)	2,500	2,000	1,500		2,000	1	2,500	1	100	3,000
53330 RENTAL- EQUIPMENT	44,500	45,000	200	8,000		•	•	1		1	•	٠	6,000
53340 RENTAL- CLOTHING	34,100	33,800	(300)			,	•	1	1	1	1	,	1
53350 RENTAL-OUTSIDE PROPERTY	7,700	342,950	335,250	2,000		•		•	1	1	1		334,250
	3,600	3,600	'		009	•	3,000	1		1	•	٠	
	23,000	26,000	3,000	26,000	,	,		1	1	1	1	1	ı
53410 LOCAL TRAVEL	4,600	5,400	800	200	100	350	100	300	100	200	1	100	1
	68,200	97,700	29,500	35,000	1,500	3,500	•	8,500	•	25,000	•		1
53470 BLDG. & GRND. MAINT.	181,800	275,175	93,375				•		٠				89,468
53480 BIOSOLIDS DISPOSAL	4,814,370	4,557,811	(256,559)			,	•	1	1	1	1	,	1
53490 SCREENING & GRIT DISPOSAL	151,000	136,000	(15,000)			•	•	1	٠	ı		•	1
53510 VEHICLE FUEL & MAINTENANCE	245,350	224,600	(20,750)	3,000	6,500	•	•	1	1	1	7,000	•	1
53610 REPAIRS BLDG, STRUCT, EQUIP.	751,765	835,669	83,904	250	•	•	100	1	1	315	•	1	65,000
53620 REPAIR-HIGHWAY & WALKS	22,000	20,000	(2,000)			•	•	1	٠	1	•	٠	10,000
53630 MAINTENANCE CONTRACTS	1,105,374	1,041,191	(64,183)		1	1	•	1	1	435,886	1	1	1
53650 MAINT. CONTRACTS - OFFICE EQUIP	•	118,723	118,723	100		75	100	1	75	1	5,375	100	986'59
53640 SERVICE AGREEMENTS	441,264	234,997	(206,267)		1	1	•	1		22,000	•	•	1
53650 HIGHWAY & LANDSCAPE	21,000	24,500	3,500			•	•	1	1	1	1	1	1
53660 INSURANCE	620,000	613,133	(6,867)	•		1		•	1	•	1	1	613,133
53680 WORK. COMP. INSURANCE	418,200	422,035	3,835		•	•		1	ı	•	•	1	422,035
53900 CENTRAL PHONE SVCS.	5,000	5,000	,		•	•		1	1	•	•	1	5,000
54000 TELEPHONE	191,320	187,820	(3,500)	1,500	4,000	•	1	1		900'09	8,000	400	25,000
54020 FUEL OIL #2 - DIESEL	23,000	23,000	•		•	•		1		•	•	•	1
54060 FUEL-GAS	420,145	365,655	(54,490)		1	•		1	•	•	•		64,548
54090 ELECTRICITY	3,543,108	2,524,778	(1,018,330)		1	•			•	•	•	•	244,723

Supporting Schedules NBC FY 2017 Budget

				EVEC	EXECUTIVE A SEALES				ADMINISTRA	ADMINISTRATION & FINANCE	J.		
ACCT. BUDGET	FY 2016 BUDGET	FY 2017 PROPOSED	CHANGE FROM	EXEC. AFFAIRS C	CONSTR. SERV.	LEGAL 24	H/R	FINANCE CC31	ACCT.	± 55	CUST SVC	PURCH.	GEN. ADM.
54110 WATER	56.500		13.655										5.000
	37,700		4,400	2,000	2,000	,	,	•	•	•	2,100		<u>'</u>
54332 CHLORINE/HYPOCHLORITE	290,690	(1)	50,531	•	1	1	•	1	•	1	1		ı
54333 CARBON FEED	62,000		20,493		1	1	•	ı	•	1	1	•	1
	84,000		(17,590)		•	1	1	•					•
	74,000		(26,336)		•	•	1	•	•	•	•		•
	227,437	7	18,050		1	1		ı	•	1	1		1
54338 SOUA ASH	19,800		(6,336)		•	1		•					•
	000 700	150,000	20,000	'	,	'	•	•	,	,	,	'	1
	327,640		23,636	, 00,	' 00			' '	' C	' CX	' C		000 01
	37.2,430		7 300	7 500	000	2 400	1 750	000 3	2 20	12 000	1 500	, 00	25,000
	113 750		7,300		900	2,400	1,,30	000,'r	2,300	22,000	1,300	2002	000,52
	113,730	02,230	(006,16)		1,000	130	•	•	700	60,000	'	700	000,5
54430 OTHER OF SUPPLIES & EXP.	21,950		, 1	300	' 00	1		1		1,500	, 60		3,000
	54,950	•	500	100	200	ı (' 00 c	' 00	' 0	' 6	1,000	' 0	1,000
54500 OFFICE EXPENSE	104,985	110,825	5,840	25,000	2,600	059	3,000	4,200	6,000	009	4,000	800	15,000
- 7	12,000	12,000	1002	1 777	10000	1 42 7 4	000 00	000 10	10,101	200		000 0	000,61
יכואר טיבוא וואסטטידי א באד.	13,631,003	13,140,347	(050,050)	059,651	677'67	13,423	22,000	31,030	10,123	050,230	554,793	000,6	2,071,393
PROFESSIONAL SERVICES													
52600 REGULATORY EXPENSE	452,850	447,850	(2,000)	•	•	1	1	430,000	•	•	•	•	1
52620 ARCHITECT/ENG. SERVICES	•	•	•	•	•	1	•	1	1	•	•	1	1
52630 LECTURES/ED./PROF. SVCS.	1	1	1		1	1	•	1	1	1	1	ı	ı
52650 SECURITY SERVICES	42,100	44,300	2,200	2,500	•	1	•	•	•	•	000'6	1	5,000
52660 LEGAL SERVICES	196,000	196,000	,	35,000	•	5,000	•	35,000		•	1,000	1	120,000
	262,050		32,950	20,000	1		38,000	35,000	35,000	1			137,000
	16,000		17,000	000'9	•	1,500			,	•	2,500	,	10,000
	213,700	.,	7,300	200	1	,	19,000	1	٠	1	25,500	٠	100,000
≈	1,182,700	1,237,150	54,450	94,000	1	005'9	22,000	200,000	35,000	1	38,000	•	372,000
TOTAL OBERATIONS & MAINTENANCE	40 646 635	41 603 228	956 593	1 323 067	342 960	466 753	481 833	1 067 154	810.439	1 998 769	2 594 281	351 447	2 973 761
	0000000	7,000,1		100,000,00	000/210	55,001	00010	tot (100 t	CC+ (210	0010001	102/106/2	17.00	10110101
CAPITAL OUTLAYS													
16510 AUTOMOTIVE FOUIP	91.000	211.000	120.000	•	•	,		1	,	,	,	1	1
	1,000,200		(641,200)		•	1	•	•	•	•	•	,	20,000
	'			•	•	,		1	,	,	,	1	'
	,	35,000	35.000	,	,	1			,	,	,		1
	437,000	425.000	(12,000)	75.000		1	20.000	10.000	5.000	,	2.000	1	100.000
	532,000	970,000	438,000		•	1	'	'		845,000	'		'
	000'009		(510,000)			1	1		1	20,000	1	1	ı
			81,000		1	1	ı	1	•		•	٠	
	1,905,860	2,913,500	1,007,640	40,000	30,000	1	•	•	•	440,000	25,000	1	25,000
16610 BUILDING & OTHER STRUCT.	75,000	145,000	70,000		ı	1	ı	ı	•			•	1
16620 CAPITAL PROJECT STUDIES		250,000	250,000	٠	•	•	•	250,000	1	•	•	•	1
TOTAL CAPITAL OUTLAYS	4,641,060	5,479,500	838,440	115,000	30,000	•	20,000	260,000	2,000	1,335,000	30,000		145,000
DEBT SERVICE													
PROGRAMMED NEW DEBT	1,006,246	1	(1,006,246)			1	ı	1	•	1	1		ı
PRINCIPAL	25,284,371	25,783,150	498,779	•	•	1	•	•	•	•	•	1	25,783,150
INTEREST	18,820,746	19,354,472	533,726	•	•	1	•	•	•	•	•		19,354,472
TOTAL DEBT SERVICE	45,111,364	45,137,622	26,258			1	1	1	•	1	1	1	45,137,622
LOTAL	\$ 90 399 059	92 220 350	1821.291	\$ 1,438,067 \$	3 77 960	466 753 \$	531 833	\$ 1377154	\$ 815.439	815 439 \$ 3 3 3 3 769	\$ 2 624 281	\$ 351 447 \$	\$ 48.256.383
!				>	\$2,277,780		200						

SUPPORTING SCHEDULES NBC FY 2017 BUDGET

					OI/Op	erdung D	2017 Operating budget Detail	IBI				
ACCT. BUDGET	FY 2016	FY 2017	CHANGE FROM	_	PERATIONS & FNG.	OPERATIONS & ENGINEERING FIELDS PT.	BUCK, PT,	ICd & N Id	PLANNING, POLICY, & REGULATION PT LAB. E	/, & REGULATI LAB.	STA	FNV, MON.
~	BUDGET	PROPOSED	FY 2016	CC 43	CC 44	CC 46	CC 47	CC 51	CC 52	CC 53		CC 55
PERSONNEL SERVICES												
52100 UNION - REGULAR \$	\$ 6,282,572	\$ 6,627,630	\$ 345,058	\$ 621,346	\$	\$ 2,145,582 \$	2,012,738	\$	\$ 125,858 \$	\$ 451,032 \$	\$·	382,314
52150 UNION OVERTIME	475,400	500,400	25,000	32,000	1	200,000	200,000		400	25,000	•	35,000
	10,017,290	10,171,015	153,725	397,782	763,654	1,094,302	504,732	404,870	613,101	548,094	261,894	491,918
	106,900	107,900	1,000	8,000	1	40,000	40,000	200	009	4,000	1,000	3,000
	32,100	30,600	(1,500)		2,000	' :	' !	2,000	2,000	6,000		2,600
	1,535,706	1,730,968	195,262	163,663	'	565,146	530,155	'	33,151	118,802	1	100,702
	1,296,238	1,333,971	37,734	81,253	58,802	266,211	210,946	31,370	26,760	79,111	20,111	70,214
	45,000	40,000	(2,000)				1	•	•		1	•
52920 NON UNION PENSION	1,101,012	1,327,890	226,878	40,578	76,365	113,430	54,473	40,507	61,370	55,209	26,289	49,492
	420,698	392,326	(28,372)	37,094	1	128,091	120,160	•	7,514	26,927	1	22,824
52950 HEALTHINSURANCE	3,617,872	4,062,213	444,341	344,719	124,283	845,188	684,618	68,340	203,984	271,172	72,785	220,647
52970 DENTALINSURANCE	318,816	350,269	31,453	28,600	12,407	78,285	54,158	5,178	15,778	20,795	5,824	20,795
52980 VISION INSURANCE	45,716	47,306	1,590	3,738	1,528	10,376	7,580	768	2,169	2,801	759	2,801
52990 DISABILITY INSURANCE	41,009	43,059	2,050	•	•	•	•	•	•	•	٠	•
53000 SUPP PENSION RETIREES	1	•	•	1	•	٠	1		•	•	•	•
53690 WORK. COMP OLD CLAIMS	10,000	10,000		•	•	٠	,	•	•		1	1
TOTAL PERSONNEL SERVICES	25,346,329	26,775,547	1,429,218	1,761,773	1,042,039	5,486,611	4,419,560	556,233	1,122,685	1,608,943	388,662	1,405,307
59000 SALARY REIMBURSEMENT	(1,105,471)	(1,000,010)	105,461	(3,560)	(226,275)	•	1		•	•	(1,500)	•
59001 FRINGE REIMBURSEMENT	(608,008)	(550,006)	58,002	(1,958)	(124,452)	•	,			•	(825)	•
NET PERSONNEL SERVICES	23,632,850	25,225,531	1,592,681	1,756,255	691,312	5,486,611	4,419,560	556,233	1,122,685	1,608,943	386,338	1,405,307
organization of the contraction												
OPERALING SOPPLIES/EAPENSES	7000	000 71									320	
	437 827	427 303	(10 524)		. 0.7						,4,200	
	62 980	65 100	7 120	1 000	2,100	3 500	2 500	009	003	600	1 500	300
	02,380 44 0E0	00,100	2,120		200,200	2,200	2,300	999	900	000	1,300	2000
	162 740	162 700	(40)		100	13,000	1,000	100	004	0,300	00	2,000
	10,000	18,100	(40)		001		1,000	201	, t, t		1,000	200,
533ZU ADVEKIISING	19,900	18,100	(1,800)	300	1	2,000	12 500		T,000	1		
	34,300	43,000	006		•	14 300	15,300	•	•		•	•
	34,100	33,800	(300)		'	14,300	000,61	, 00,	•	'	, 00,1	•
53350 RENIAL-OUISIDE PROPERIY	9 600	342,950	333,230		1	1	1	1,200		1	7,500	
53300 MISCELLAINEOUS EAPENSE	3,600	36,000	' 6	•	'	'	•			'	,	
	7,600	20,000	000,5	- 007	' 007	- 002	250	י טטי	י ט	' 00	750	' 0
	68 200	007,79	29 500	3,000	000 9	200	1 000	3 000	2000 2	4 500	2 500	000
	181.800	275.175	93.375	7,100)	100.422	40.000		200	37,985	·	'
	4,814,370	4,557,811	(256,559)		1	3,603,756	954,055	•				•
53490 SCREENING & GRIT DISPOSAL	151,000	136,000	(15,000)	34,000	•	000'09	42,000	•	•	•		•
53510 VEHICLE FUEL & MAINTENANCE	245,350	224,600	(20,750)	80,000	3,500	65,000	30,000	•	8,000	1	1,600	20,000
53610 REPAIRS BLDG, STRUCT,EQUIP.	751,765	835,669	83,904	45,000	1,000	375,000	281,804	•	200	27,000	٠	40,000
53620 REPAIR-HIGHWAY & WALKS	22,000	20,000	(2,000)	10,000	1		1	1		1		•
53630 MAINTENANCE CONTRACTS	1,105,374	1,041,191	(64,183)	30,800	20,950	325,292	163,314			64,949	•	•
	1	118,723	118,723	4,050	200	29,762	5,150	20	1,000	5,300	•	1,450
53640 SERVICE AGREEMENTS	441,264	234,997	(206,267)	41,400	•	52,597	119,000	•	•		1	•
	21,000	24,500	3,500	2,000		7,500	10,000			1		•
53660 INSURANCE	620,000	613,133	(6,867)	•			•	•				•
53680 WORK. COMP. INSURANCE	418,200	422,035	3,835	•	•	•	•	•	•	1	1	•
_	5,000	2,000			•	•	1	•		1		•
	191,320	187,820	(3,500)	40,000	3,000	18,000	10,000	200	7,220	1,300	800	2,900
	23,000	23,000		'	•	18,000	2,000	•	•	•		1
	420,145	365,655	(54,490)	19,970	1	170,960	110,177		1	ı		•
54090 ELECTRICITY	3,543,108	2,524,778	(1,018,330)	158,818		1,184,771	936,466					•

SUPPORTING SCHEDULES NBC FY 2017 BUDGET

ACCT RIIDGET	FV 2016	EV 2017	CHANGE EROM	ō <u>≥</u>	OPERATIONS & ENGINEERIN	ENGINEERING FIELDS PT	RIICK PT		PLANNING, POLICY, & REGULATION PT IAR F	CY, & REGULATI	ΔTA	FNV MON
~	BUDGET	۵	FY 2016	CC 43	CC 44	CC 46	CC 47	CC 51	 CC 52	CC 53		CC 55
54110 WATER	26,500	70,155	13,655	3,000		25,000	22,000		•	15,155	•	•
54200 CLOTHING	37,700	42,100	4,400	5,500	300	8,500	10,000	300	1,000	3,900	200	6,000
54332 CHLORINE/HYPOCHLORITE	290,690	341,221	50,531	•		321,741	19,480		1	1	1	•
54333 CARBON FEED	62,000	82,493	20,493	•	•	77,993	4,500	•	•	1	1	•
54335 POLYMER	84,000	66,410	(17,590)	•			66,410		•	•	•	•
54336 SODIUM HYDROXIDE	74,000	47,664	(56,336)	•		47,664	•	•	•			•
54337 SODIUM BISULFITE	227,437	245,487	18,050	•	•	233,089	12,398		•	1	•	•
54338 SODA ASH	19,800	13,464	(9)82(9)	•			13,464		•	•		•
54339 UV DISINFECTION	•	150,000	150,000				150,000	•	•	•	•	1
54340 LAB SUPPLIES	327,840	357,738	29,898	•	•	24,000	23,000	•	3,000	249,238	200	28,000
54370 SUPPLIES BUILDING & MAINT.	372,450	443,550	71,100	75,000	200	190,000	160,000	100	200	550	2,400	3,000
54410 EDUCATIONAL SUPP. & EXP.	85,750	93,050	7,300	1,500	2,000	4,000	4,000	1,800	2,500	006'9	8,500	3,500
54420 COMPUTER SUPPLIES	113,750	82,250	(31,500)	1,000	200	6,000	2,000	20	1,200	200	850	400
54430 OTHER OP. SUPPLIES & EXP.	21,950	21,950	•	12,000	٠	1,000	1,500	2,200	20	•		200
54440 SAFETY EQUIPMENT	54,950	55,450	200	5,500	•	20,000	11,800	100	1,000	2,250	5,500	7,000
	104,985	110,825	5,840	2,000	1,500	15,000	000'6	3,225	4,000	3,100	3,550	4,600
	15,000	15,000	. '									
TOTAL OPERATING SUPP. & EXP.	15,831,085	15,140,547	(860,538)	600,638	42,100	7,036,547	3,263,768	14,125	38,320	430,007	36,815	162,550
DBOEFSCIONAL SERVICES												
TROTESSIONAL SERVICES		1 4 4	000	000		0	000			C L		
	452,850	447,850	(2,000)	300		8,000	000′6	•	•	550		•
	1		,	•			•		•			•
	'		. ;	' !		' ;	' ;	•	•	1		1
	42,100	44,300	2,200	15,000		6,500	2,000		•	1,300		1
	196,000	196,000	,	•	•		•		•	•		•
52670 MGMT/AUDIT SERVICES	262,050	295,000	32,950	•			1	•	•		•	1
52680 CLERICAL SERVICES	16,000	33,000	17,000	•	3,000		•	10,000	•	•		•
52690 OTHER SERVICES	213,700	221,000	7,300	200	2,000		•	•	•	40,000	•	30,500
TOTAL PROFESSIONAL SERVICES	1,182,700	1,237,150	54,450	15,800	8,000	14,500	14,000	10,000		41,850		30,500
TOTAL OPERATIONS & MAINTENANCE	40,646,635	41,603,228	956,593	2,372,692	741,412	12,537,658	7,697,328	580,358	1,161,005	2,080,800	423,153	1,598,357
SVA ITIO INTIGAO												
16510 ALITOMOTIVE EQUID	000 000	211 000	120 000	000 8	,	171 000	32 000	,	,	,	,	
	1.000.200	359.000	(641,200)	000'9	,	198.000	135.000		٠	,		,
	'			'	•	<u>'</u>	'		•	•	•	,
	•	35,000	35,000	•			,		•	35,000		1
16580 OFFICE FURN&EQUIP.	437,000	425,000	(12,000)	10,000	•		75,000	000'56	•			,
16583 COMPUTER SOFTWARE	532,000	970,000	438,000	•	•	105,000	20,000		•	•		•
16585 COMPUTER HARDWARE	000'009	90,000	(210,000)	•	•	•	40,000	•	•	•	•	
16590 OTHER EQUIPMENT	•	81,000	81,000	•	•	75,000	9000'9	•	•	•	•	•
16600 REPLACEMENT RESERVE	1,905,860	2,913,500	1,007,640	468,000	70,000	720,000	655,500		30,000	260,000	•	150,000
	75,000	145,000	20,000	1	•	•	145,000	•	1	•	•	•
16620 CAPITAL PROJECT STUDIES		250,000	250,000	•			•	•	•			
TOTAL CAPITAL OUTLAYS	4,641,060	5,479,500	838,440	492,000	20,000	1,269,000	1,108,500	95,000	30,000	295,000		150,000
DEBT SERVICE												
PROGRAMMED NEW DEBT	1,006,246	•	(1,006,246)	•	•	•	1	•	•	1	1	•
PRINCIPAL	25,284,371	25,783,150	498,779	•			•	•	•	•		•
INTEREST	18,820,746	19,354,472	533,726				•		•			•
TOTAL DEBT SERVICE	45,111,364	45,137,622	26,258	1	•	1	ı	1	1	•		1
TOTAL	\$ 90,399,059	92,220,350	1,821,291	2,864,692	\$ 811,412 \$	13,806,658 \$	8,805,828	\$ 858'329	1,191,005	\$ 2,375,800 \$	\$ 423,153 \$	\$ 1,748,357
					\$26.288	1 591			\$6.47	13 673		

Supporting Schedules NBC FY 2017 BUDGET

