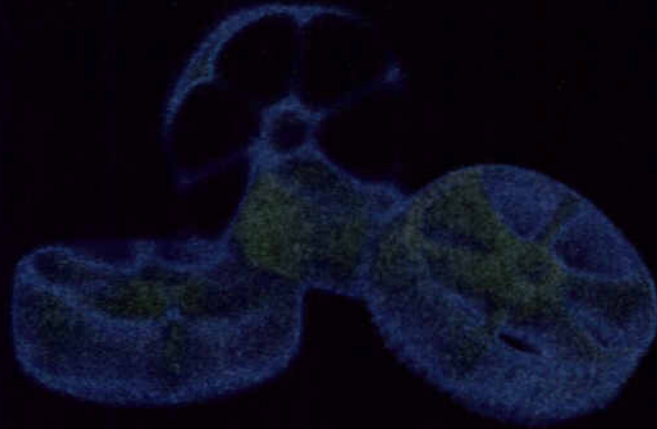
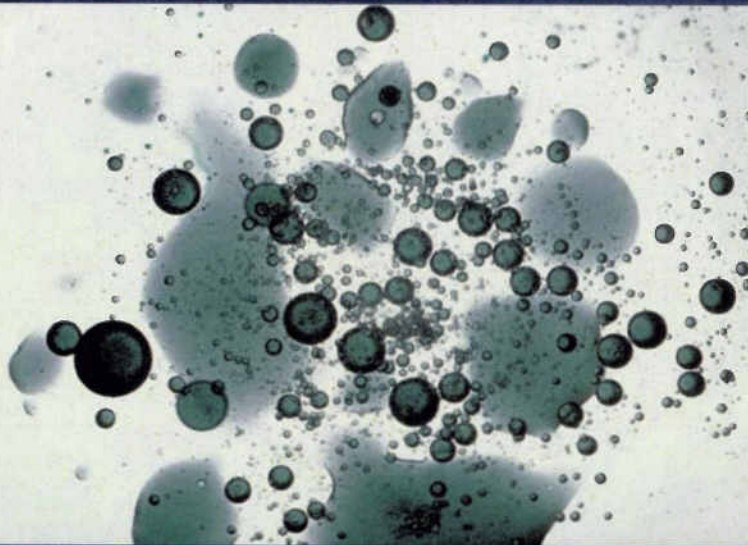


NARRAGANSETT BAY COMMISSION



CAPITAL IMPROVEMENT PROGRAM



Vincent J. Mesolella  
Chairman

Raymond J. Marshall, P.E.  
Executive Director

FISCAL YEARS 2011-2015

# Capital Project Cost Summary

(Capital Projects with costs in Fiscal Years 2011-2015)

Page Number	Project Number	Project Name	Fiscal Years 2011 - 2015 (In Thousands)
<b><u>Wastewater Treatment Facility Improvements</u></b>			
25	10901C	FPWWTF - Nitrogen Removal Facilities - Construction	\$ 70,700
27	11900C	Regulatory Compliance Building - Construction	20,980
28	12000C	BPWWTF - Biogas Microturbines - Construction	358
29	12100C	FPWWTF - Wind Turbine - Construction	4,083
30	12200C	FPWWTF - Flow Control Efficiencies	24
31	80900D	BPWWTF - Nitrogen Removal Facilities - Design	683
31	80900C	BPWWTF - Nitrogen Removal Facilities - Construction	35,012
		<b>Subtotal - Wastewater Treatment Facility Improvements</b>	<b>131,839</b>
<b><u>Infrastructure Management</u></b>			
35	1100000	Site Specific Study	246
39	30221P	Hydraulic Systems Modeling	48
40	30700	NBC System-wide Facilities Planning	1,421
43	30500D	NBC Interceptor Easements - Design	4,745
43	30500C	NBC Interceptor Easements - Construction	2,996
44	30438D	Interceptor Easements - Design	369
44	30438C	Interceptor Easements - Construction	730
		<b>Subtotal - Infrastructure Management</b>	<b>10,554</b>
<b><u>Phase II CSO Facilities</u></b>			
50	30301D	Phase II CSO Facilities - Design	4,075
50	30301C	Phase II CSO Facilities - Construction	251,826
		<b>Subtotal - Phase II CSO Facilities</b>	<b>255,901</b>
<b><u>Sewer System Improvements</u></b>			
53	70500C	Central Avenue Pump Station - Construction	374
54	70600C	Omega Pump Station Rack Room - Construction	178
55	70700C	Lincoln Septage Station - Lakeside Unit Replacement	6
		<b>Subtotal - Sewer System Improvements</b>	<b>558</b>
<b><u>Floatables Control Facilities</u></b>			
59	30600D	Floatables Control Facilities - Design	1,245
59	30600C	Floatables Control Facilities - Construction	6,568
		<b>Subtotal - Floatables Control Facilities</b>	<b>7,813</b>
<b><u>CSO Interceptor Inspection and Cleaning</u></b>			
63	30400M	Inspection & Cleaning of CSO Interceptors	10,000
		<b>Subtotal - CSO Interceptor Inspection and Cleaning</b>	<b>10,000</b>
<b><u>CSO Interceptor Repair and Construction</u></b>			
64	30400C	Repair and Construction of CSO Interceptors	9,670
67	30444D	Moshassuck Valley Interceptor - Design	523
67	30444C	Moshassuck Valley Interceptor - Construction	4,772
69	30452C	Improvements to NBC Interceptors FY 2009	35
		<b>Subtotal - CSO Interceptor Repair and Construction</b>	<b>15,000</b>
<b><u>Total Capital Improvement Program</u></b>			<b>\$ 431,665</b>

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# Capital Improvement Program (CIP)

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## The Capital Improvement Program

The Narragansett Bay Commission's CIP identifies programmed capital investments necessary to comply with current and future regulatory requirements, take advantage of technological advancements, and ensure the integrity of NBC's infrastructure. The projects, schedules, and costs that are included in the CIP have been developed through a planning process involving NBC's engineering and construction staff, which also incorporates the needs identified through NBC's asset management program. These capital improvements represent expenditures of more than \$250,000 and are for new facilities as well as the repair and replacement of existing infrastructure. The CIP is a planning document and in addition to the depiction of costs for fiscal year 2010, the CIP shows programmed expenditures for fiscal years 2011-2015.

## Capital Improvement Program Overview

This year's CIP identifies a total of 47 projects totaling approximately \$486 million that are either in progress, to be initiated, or to be completed during the fiscal years of 2010-2015. Of that total, approximately \$55 million of the programmed expenditures are in FY 2010 and approximately \$432 million are to be spent over the five-year period of FY 2011-2015.

The following table summarizes the CIP expenditures by cost category. At \$105 million, fiscal year 2012 has the largest amount of programmed expenditures during the six-year period. These costs are primarily related to the construction of Nitrogen Removal Facilities at the Field's Point Wastewater Treatment Facility (Field's Point) and construction of the CSO Phase II Facilities.

### **FY 2010-2015 CIP Costs by Category (In thousands)**

Cost Category	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Total FY 2011-2015	Total Costs 2010-2015
Administrative	\$ 2,944	\$ 3,496	\$ 3,953	\$ 3,766	\$ 3,558	\$ 1,286	\$ 16,058	\$ 19,002
Land	4,043	4,247	880	600	-	500	6,227	10,269
A/E Professional	9,847	5,169	5,645	6,282	6,266	1,867	25,230	35,077
Construction	31,672	84,115	91,690	89,093	51,411	18,040	334,350	366,022
Contingency	3,380	1,021	2,469	191	9,661	28,095	41,437	44,817
Other	2,682	323	241	2,686	4,875	238	8,363	11,045
<b>Total Project Costs</b>	<b>\$ 54,567</b>	<b>\$ 98,371</b>	<b>\$ 104,878</b>	<b>\$ 102,618</b>	<b>\$ 75,771</b>	<b>\$ 50,027</b>	<b>\$ 431,665</b>	<b>\$ 486,232</b>

## Capital Improvement Program Assumptions

The CIP is a planning document and NBC's project managers have limited information upon which to base their cost estimates prior to completion of design and receipt of bids. Accordingly, NBC has based the figures in this CIP on a number of financial assumptions as follows:

- Costs and cash flows are based on engineering estimates as well as bid amounts, once they become available.
- The CIP does not include the operating capital outlay expenses such as plant and equipment replacement required on an annual basis. These expenses are identified in NBC's annual operating budget and are outlined in the five-year Operating Capital Outlay Plan.
- Construction projects currently underway include a 10% contingency. The contingency for future construction projects is 12%, which reflects recent industry experience related to construction cost factors. The cost estimates for future design projects includes a 7% allowance for salary and fringe associated with project management, based on historical data.
- Financing costs and debt service associated with new debt for the CIP Program 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.

## Capital Improvement Program Development

Over the years, NBC has developed a comprehensive capital improvement planning process that incorporates program priorities, the permitting process, construction management availability, seasonal considerations, 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 capital expenditures are expected to remain high over the next five years. The funding levels are primarily due to investments required to meet state and federal mandates for CSO abatement and biological nutrient reduction (BNR).

NBC's Project Managers begin the annual CIP process with the development of detailed justifications for each capital project including the project scope, the basis of the cost estimate, and the key factors impacting costs and schedules. The Project Managers also explain modifications from the prior year's CIP and the overall project timeline. A chart illustrating the detailed project scheduling can be found in the appendix at the end of this CIP document. A CIP Review Committee reviews the proposed capital project expenditures. 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 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 an "A" ranking indicate the highest criticality. Approximately 86% of the projects identified in fiscal years 2010-2015 are prioritized with an "A" ranking. These projects are primarily mandated or currently under construction and represent approximately \$420 million. In addition, 11% or approximately \$53 million of projects are identified with a "B" ranking, which includes projects imperative to

ongoing NBC operations. Finally, 3%, or approximately \$13 million of the capital expenditures, are ranked as “C”, for projects which are important but not critical to ongoing operations. The following table outlines the programmed expenditures according to each one of the three priority rankings.

### Estimated Costs by Project Priority (In thousands)

Project Priority	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Total Costs FY 2010-2015	Ranking Percentage
A	\$ 40,950	\$ 72,768	\$ 93,698	\$ 96,966	\$ 70,771	\$ 45,027	\$ 420,179	86%
B	10,291	21,031	10,787	3,320	2,563	5,000	52,991	11%
C	3,326	4,572	394	2,333	2,437	-	13,062	3%
<b>Total Project Costs</b>	<b>\$ 54,567</b>	<b>\$ 98,371</b>	<b>\$ 104,878</b>	<b>\$ 102,618</b>	<b>\$ 75,771</b>	<b>\$ 50,027</b>	<b>\$ 486,232</b>	<b>100%</b>

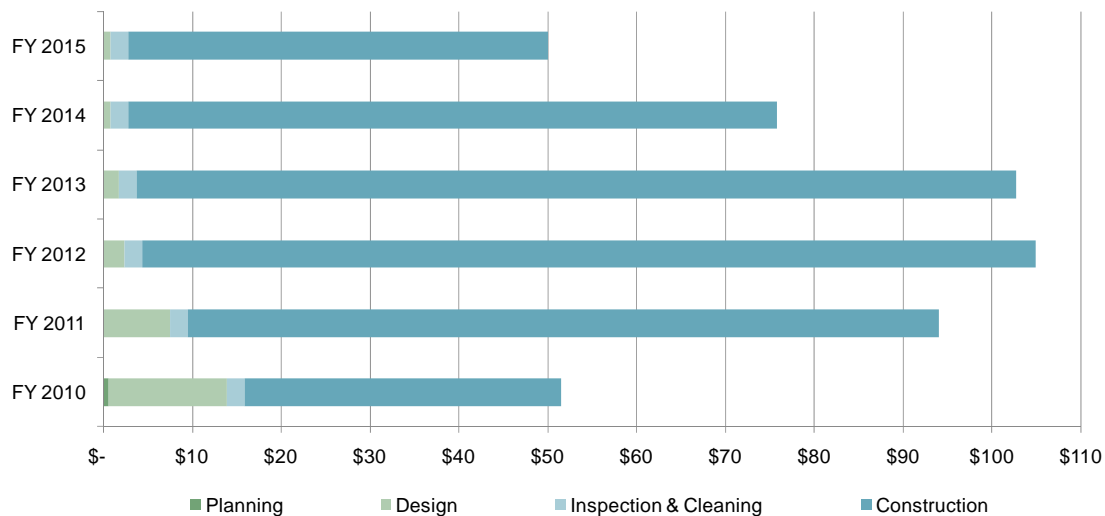
### Capital Expenditure by Phase

To facilitate project management, NBC’s large construction projects are delineated by phases, beginning with planning, followed by design, and finally construction. Planning consists of feasibility studies, mapping, and completion of compliance items. Design incorporates the intended technology as well as the development of all plans and specifications, acquisition of easements and permits. Construction is the phase when facility improvements and infrastructure rehabilitation are actually completed. The CIP also includes programmed capital projects which are not broken down into phases, since they deal with the non-routine inspection, cleaning, and repair of NBC’s miles of interceptors, and other special studies.

The following graph illustrates the programmed capital expenditures according to the project phase. The construction phase has the largest amount of expenditures during FY 2010-2015, with approximately 92% or \$447 million of the total expenditures. Design is the second largest phase with \$27 million or 5% of the capital expenditures. Finally, the inspection and cleaning and planning phase expenditures are approximately 3%.

### Expenditures by Project Phase

**Project Cost by Year and Phase  
(in millions)**



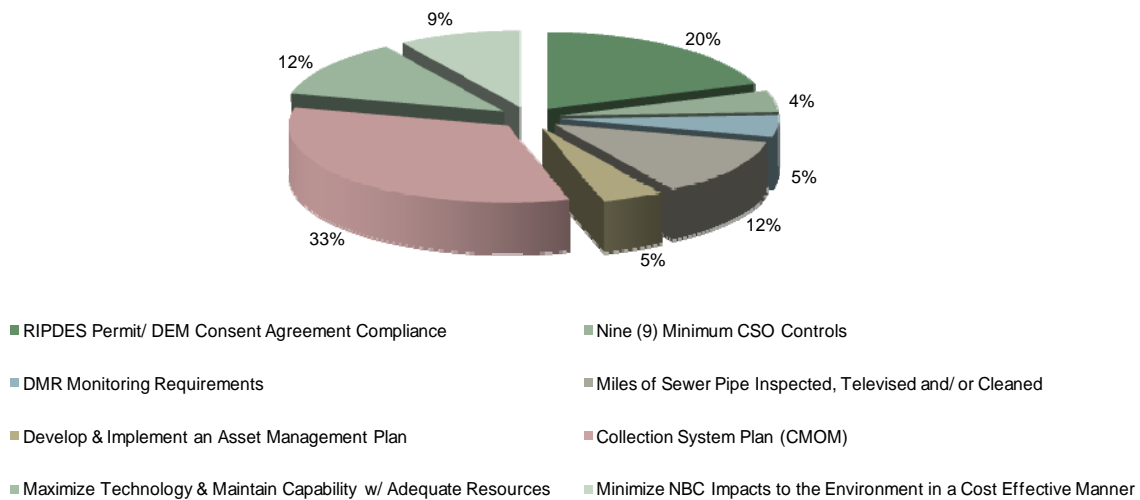


## Capital Projects by Strategic Objective

NBC evaluates capital expenditures according to their strategic importance. As part of the CIP development process, Project Managers align each project with the specific strategic goal or goals that the project will address. Projects may be aligned with more than one objective as the project may be intended for multiple purposes.

Of the total number of CIP projects, 33% are related to the Collection System Objective which relates to capacity management as well as the operation and maintenance of NBC's collection and treatment system. In addition, 20% of the projects are aligned with the RIPDES Permit/ DEM Consent Agreement Compliance Objective, which includes projects needed to meet legal requirements, and 12% of the projects are aligned to the Miles of Sewer Pipe Inspected, Televised and/or Cleaned Objective. The following chart illustrates the percentage of projects aligned with each Strategic Objective.

### Number of Capital Projects by Strategic Objective



## Capital Improvement Program Project Cost Allocation

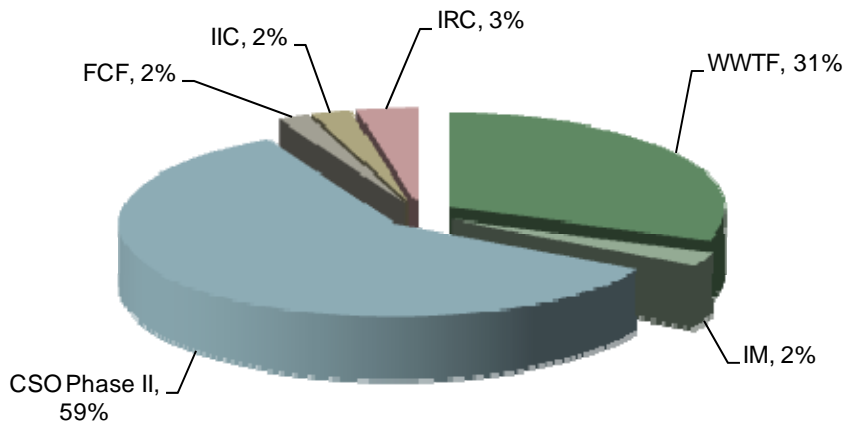
NBC classifies the capital expenditures by categorizing each capital project into one of eight functional areas, according to the scope and tasks involved within each capital project. The eight functional areas are described in the table on the following page.

## Allocation of Projects by Functional Area

Functional Area	Definition
Wastewater Treatment Facility Improvements (WWTF)	Projects related to improvements at the NBC's Wastewater Treatment Facilities, including the Nitrogen Removal Facilities.
Infrastructure Management (IM)	This area includes Asset Management, Water Quality Monitoring, System-wide Facilities Planning, and Interceptor Easements.
Combined Sewer Overflow Phase II (CSO Phase II)	Projects related to the CSO Abatement Phase II Facilities.
Sewer System Improvements (SSI)	Projects related to pump station improvements, and other sewer system related improvements.
Floatables Control Facilities (FCF)	This functional area includes all CSO Floatables Control Facilities projects.
CSO Interceptor Inspection and Cleaning (IIC)	This area includes projects related to interceptor inspection and cleaning.
CSO Interceptor Repair and Construction (IRC)	This area includes projects related to interceptor repair and maintenance.

The following graph shows the allocation of capital expenditures according to the functional area classification. Of the approximately \$432 million in capital expenditures scheduled over the five-year period of FY 2011-2015, \$256 million, or 59%, is for Phase II of the CSO Abatement Project. In addition, 31% or \$132 million is for Wastewater Treatment Facility Improvements, of which \$106 million will be spent on the nitrogen removal facilities at both Field's Point and Bucklin Point. Finally, 3% or \$15 million is for Interceptor Repair and Construction.

### CIP Costs by Functional Area



The following table shows a comparison of the capital expenditure costs by functional area on a year-to-year basis. It should be noted that much of the change from year-to-year is due to the revised timeframe of the five year program. The programmed expenditures for the CSO Phase II Facilities are 56% or \$92 million higher than last year's CIP based on the



completion of preliminary design. The remaining functional areas show decreases from the prior year CIP, with the most significant decline reflecting the completion of the CSO Phase I Facilities. Overall, there is an increase of 21% in programmed expenditures for the current five-year period of FY 2011-2015 as compared to last year's five year CIP window.

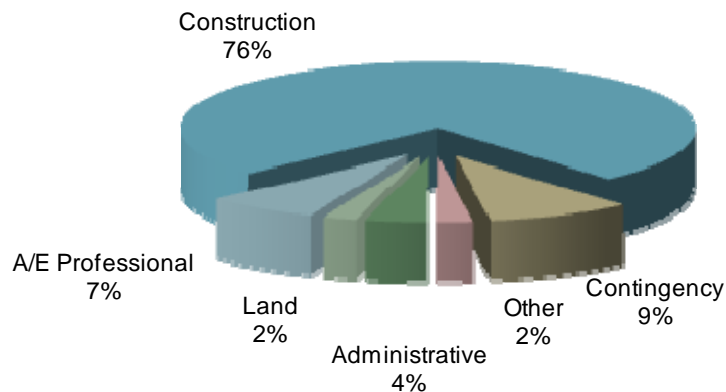
### Change by Functional Area

(In thousands)

Functional Area	Prior Year CIP (FY 2010-2014)	Current Year CIP (FY 2011-2015)	% Change
Wastewater Treatment Facility Improvements	\$ 138,141	\$ 131,839	-5%
Infrastructure Management	12,231	10,554	-14%
CSO Phase I Facilities	5,420	-	-100%
CSO Phase II Facilities	163,918	255,901	56%
Sewer System Improvements	3,178	558	-82%
Floatables Control Facilities	7,816	7,813	0%
CSO Interceptor Inspection and Cleaning	10,000	10,000	0%
CSO Interceptor Repair and Construction	15,000	15,000	0%
<b>Total</b>	<b>\$ 355,704</b>	<b>\$ 431,665</b>	<b>21%</b>

For planning purposes, the programmed expenditures within each project are classified into cost categories. Cost categories include the Administrative category, which includes NBC labor 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 is comprised of the architectural and engineering services generally related to planning or design. The Construction cost category reflects contractor and 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 is shown in the following chart, construction costs, including contingency, represents \$366 million, or approximately 76% of the total costs. Architectural and Engineering services represent approximately 7% or \$35 million of the costs during this same period.

### CIP Costs by Type of Activity



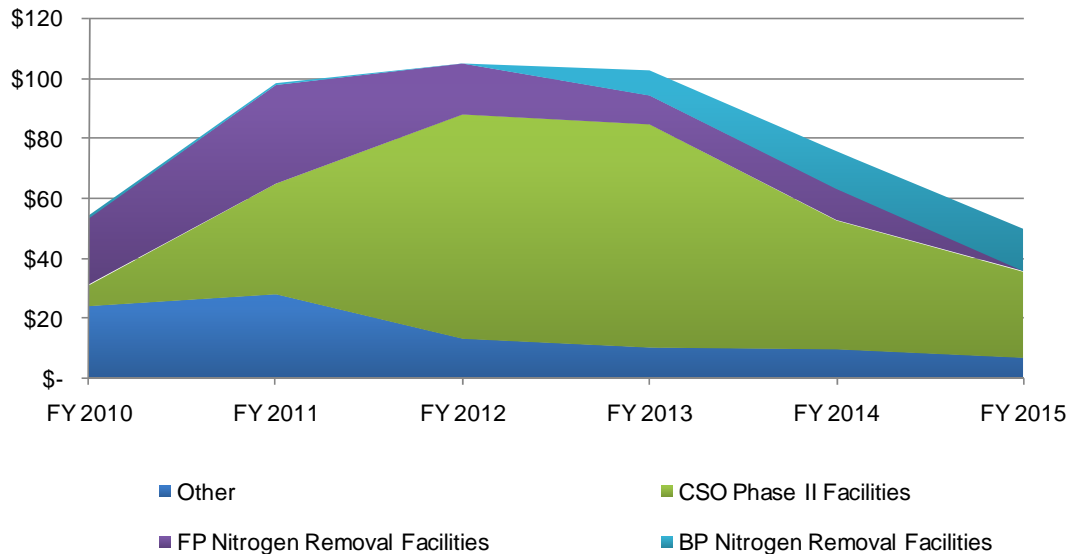
## Significant Capital Improvement Projects

This year's CIP reflects costs for three major initiatives: the design and construction of the CSO Phase II Facilities and the nutrient removal facilities at both Field's Point and Bucklin Point. Costs for these three projects during the six-year period total \$393 million, or more than 80% of the CIP. Construction of the Field's Point nutrient removal facilities is scheduled to begin in FY 2010, the CSO Phase II Facilities in FY 2011 and the Bucklin Point nutrient removal facilities in FY 2013. NBC's investment in its other infrastructure projects is anticipated to remain fairly level in the near future as part of NBC's commitment to maintain infrastructure. The following table and graph show the programmed expenditures for NBC's major initiatives and other smaller projects included in this CIP over the next six years.

### Expenditures by Major Initiative (In thousands)

Project	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Total Costs FY 2010 - 2015	Percentage of Five-Year Costs
CSO Phase II Facilities	\$ 6,941	\$ 36,585	\$ 74,305	\$ 73,930	\$ 42,648	\$ 28,433	\$ 262,841	54%
FP Nitrogen Removal Facilities	22,311	32,921	17,050	9,726	10,629	375	93,011	19%
BP Nitrogen Removal Facilities	1,047	673	47	8,411	12,522	14,042	36,742	8%
Other	24,268	28,192	13,476	10,551	9,972	7,178	93,638	19%
<b>Total</b>	<b>\$ 54,567</b>	<b>\$ 98,371</b>	<b>\$ 104,878</b>	<b>\$ 102,618</b>	<b>\$ 75,771</b>	<b>\$ 50,027</b>	<b>\$ 486,232</b>	<b>100%</b>

### Expenditures by Major Initiative (Millions of \$)



## Project 303: CSO Phase II Facilities

The CSO Phase II Facilities are the second phase of the three phase federally mandated CSO Abatement Program. To comply with the Consent Agreement between NBC and the Rhode Island Department of Environmental Management (RIDEM), NBC completed preliminary design and submitted the plans to RIDEM for review and approval on August 29, 2008. Concurrently, NBC initiated final design to ensure compliance with the submittal deadline for final design. NBC is required to submit the final design within one year of preliminary design approval by RIDEM. The current project schedule is consistent with the schedule set forth in the Consent Agreement.

The CSO Phase II Facilities consist of the construction of two interceptors to be located along the Seekonk and Woonasquatucket Rivers. These two interceptors will eliminate the discharge from the CSOs during wet weather events for most storms, and convey the flows to the CSO Tunnel constructed as part of Phase I.

*Right: A photograph of India Point Park in Providence. The Seekonk Combined Sewer Overflow Interceptor (SCSOI) will run through the park beside the Providence River, and divert flows now discharged from CSOs to the CSO Tunnel built under Phase I.*



The Woonasquatucket Interceptor will be 19,150 feet long and the Seekonk Interceptor will be approximately 8,000 feet long. This project also includes two sewer separation projects in Providence; each of these systems will separate the sanitary flow from the stormwater flow. Also included is a constructed wetlands treatment facility in Central Falls. This facility will hold rainfall from small storms in a tank, which will be subsequently released into the constructed wetland.

Design of the CSO Phase II Facilities is approximately 60% complete. The estimated costs for Phase II are approximately \$256 million, or 59% of the total costs included in the five-year window of FY 2011-2015. The project cost was updated based on construction cost estimates prepared by the design engineers upon completion of preliminary design. These estimates are based on the Engineering News Record Cost Construction Index (CCI).

## Nitrogen Removal at Field's Point and Bucklin Point

In accordance with terms of the Consent Agreement between NBC and RIDEM, NBC submitted the final design for the facilities at Field's Point on November 5, 2008. NBC received the Order of Approval from RIDEM in April 2009, to proceed with the construction of these facilities at Field's Point. At Bucklin Point, additional facilities and modifications are necessary for BNR compliance with the nitrogen limit of 5 mg/l as set forth in the Consent Agreement. NBC submitted the draft Facility Plan Amendment for these modifications to RIDEM on April 1, 2009.

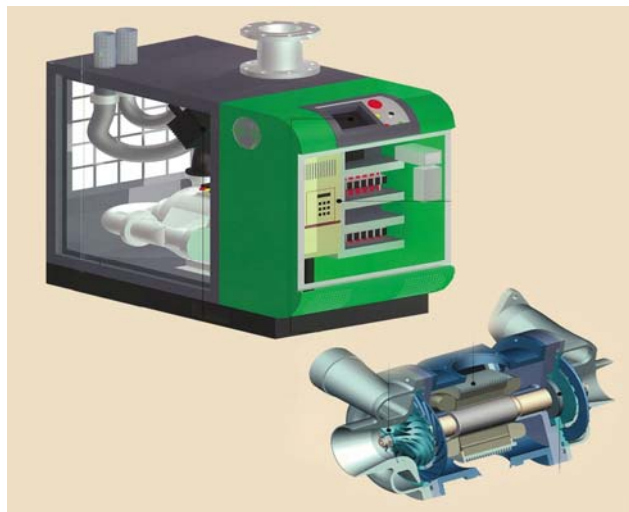
### Field's Point

The construction cost estimate for the nitrogen removal facilities and related upgrades, is \$92 million, which is an increase of \$8.6 million over last year's CIP. The increase is a result of the completion of the final design for these facilities. These costs are reflected under Project 109.

As part of this project, significant structural and mechanical changes must be made to the existing aeration basins. Each aeration basin will be subdivided into a series of aerated and anoxic reactors with suspended plastic media in the aerated portion of each tank, a process known as Integrated Fixed Film Activated Sludge (IFAS). Biofilm growth on the media effectively increases the aeration tank volume. An intermediate wastewater screening process is required to protect the media.

Several major additions and modifications are required in order to support the IFAS process, and attain the mandated nitrification / denitrification limits. The addition of turbo blowers will provide the necessary aeration into the aerobic zones. The existing screw pumps will be replaced and new piping will be installed to improve the distribution of the return activated sludge (RAS). Installation of a chemical pumping system will provide the supplemental chemicals necessary for the nitrification / denitrification process. In addition, upgrades will be made to the current electrical service to provide additional power.

*Right: A schematic of the new turbo blowers. The blowers use an energy efficient jet engine technology which will provide the fresh air necessary for the nitrification process to occur.*



A new Operations Building will be constructed at Field's Point and will house the new computer control systems for BNR, the Tunnel Pump Station, the Ernest Street Pumping Station and wastewater operations at the Field's Point Treatment Plant. A new Human

Machine Interface (HMI) application will be provided to facilitate the monitoring and automatic control of the instrumentation and equipment for the continuous treatment processes. These facilities operate 24 hours per day, 7 days per week, and 365 days per year. The new software will maximize NBC's efficiency.

*Right: An architectural drawing of the proposed Operations Building at Field's Point, to be constructed under the nitrogen removal project.*



## Bucklin Point

NBC has worked diligently to maximize the efficiency of the current nitrogen removal facilities at Bucklin Point. NBC has made considerable progress in reducing effluent nitrogen loading; however, the current facilities are designed to achieve a limit of 8 mg/l. The current permit limit effective August 1, 2005, sets a seasonal total nitrogen limit of 5mg/l from May to October. Additional facilities and modifications are required to achieve compliance with the limit as set forth in the Consent Agreement.

Project 809 reflects the \$35 million pre-design construction estimate for new and upgraded facilities at Bucklin Point. The scope of the project includes further portioning of the existing tanks, which will provide the area for one additional anoxic zone and one additional aerobic zone. A number of existing process operations will also be upgraded. Improvements will also be made to existing tanks to accommodate the volume of excess flow prior to diverting it to the plant for treatment. In addition, a chemical pumping system will be added, for the additional chemical requirements.

## Other Capital Projects

### Project 115: Asset Management

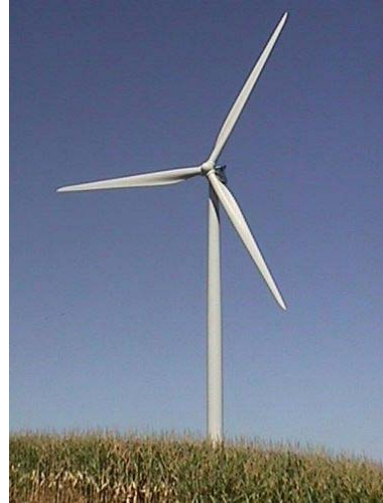
NBC is in the final stage of development of Phase IV of its Asset Management Program. This program has provided NBC with the pertinent data to manage its infrastructure and assist in the planning of capital expenditures. NBC is committed to maximizing the operational life of its collection and treatment facilities through proper maintenance.

This phase completes the asset management registry for NBC's Field's Point, Bucklin Point and Interceptor Maintenance Sections. This phase also includes the final integration of both NBC's Geographic Information System and the web based maintenance management computer software. In addition, program training and procedural manuals will be finalized. The estimated project costs are \$2.3 million.

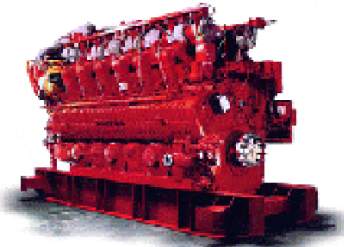
## Renewable Energy / Green Technologies

A renewable energy source may be considered a green technology or “green” if no greenhouse gasses are produced or if it does not otherwise adversely impact the environment or compromise the ability for future generations to meet their own needs. NBC currently has three projects that meet this criterion.

NBC’s Wind Turbine energy project at Field’s Point will convert wind energy into electricity using two Mega-Watt (MW) turbines. This project is expected to generate clean sustainable energy for use on site within the facility wastewater treatment operations. In addition to reducing greenhouse gas emissions, the wind turbines will help to stabilize energy related operating costs. The project is expected to cost approximately \$5.7 million.



At Bucklin Point, NBC will convert the methane biogas generated within the biosolids anaerobic digestion tanks, as seen in the photo to the left, using a reciprocating engine, shown right, to generate electricity. While the use of bio-fuel does emit green-house gas, it is an environmentally superior alternative than the burning the biogas to generate electricity. Estimated project costs are approximately \$2.2 million.



Finally, Flow Control efficiencies will be employed to control the rate of the flow entering the Field’s Point WWTF and maxime energy efficiency. Four variable frequency drives will be installed on existing pumps to coordinate the flows from both the Ernest Street Pump Station and the Tunnel Pump Station. In addition, the generator at the Ernest Street Pump Station will be connected to Field’s Point, in order to provide the treatment power capabilities during a power outage, ensuring NBC maintains the necessary processes to treat incoming flow. The generator will also provide the electricity to pump flow from the pump station when the electrical demand becomes greater than the supply. The system is projected to cost approximately \$1.7 million.



## Capital Improvement Program Changes

### Completed Projects

NBC's CSO Phase I Facilities became fully operational on October 31, 2008. The Phase I Facilities represent a historical achievement in improving water quality in and around the greater Providence metropolitan area and the upper Narragansett Bay. These facilities were designed to reduce the discharge of sewage from the combined sewer overflows during and after wet weather events. In the first six months of operation, these facilities captured and pumped approximately 600 million gallons of flow to Field's Point for treatment. The following chart illustrates the costs associated with the CSO Phase I project, including those awaiting final payment.



This CIP also shows NBC's continued commitment to annually clean and inspect NBC's interceptors. Through this initiative, NBC is able to program its maintenance expenditures in an efficient manner. NBC allocates \$3 million a year to interceptor construction and repairs and \$2 million a year to interceptor inspection and cleaning. As projects are identified through the inspection process they are funded from the annual allocation. Of the 14 projects completed last year, the majority was for interceptor inspection, cleaning, and repair. These projects allow NBC to protect its infrastructure, as well as the health and safety of residents, with minimal or no impact on the environment.

NBC also completed the rehabilitation of its Washington Highway and Omega Pump Stations. These facilities were at the end of their useful life, and since they transfer the wastewater to the plant for treatment, are imperative to ongoing operations. The following table summarizes the completed projects and their total costs.



## Completed Projects

Project #	Project Description	Total Cost (In thousands)
<u>Wastewater Treatment Facility Improvements</u>		
11600C	Field's Point WWTF Air Piping Improvements	\$ 1,299
11900P	Regulatory Compliance Building - Planning	391
12000P	BPWWTF - Biogas Microturbines - Planning	50
12100P	FPWWTF - Wind Turbine - Planning	39
9070000	Lab Building Repairs	180
<b>Subtotal - Wastewater Treatment Facility Improvements</b>		<b>1,959</b>
<u>Infrastructure Management</u>		
30410D	NBC System-Wide Facilities Plan - Design	224
<b>Subtotal - Infrastructure Management</b>		<b>224</b>
<u>Phase I CSO Facilities</u>		
30213C	Phase I CSO Facilities - Regulator Modifications	2,084
<b>Subtotal - Phase I CSO Facilities</b>		<b>2,084</b>
<u>Sewer System Improvement</u>		
70400D	Rehab. of Washington Highway and Omega Pump Stations - D	958
70400C	Rehab. of Washington Highway and Omega Pump Stations - C	6,120
<b>Subtotal - Sewer System Improvement</b>		<b>7,078</b>
<u>CSO Interceptor Inspection and Cleaning</u>		
30431M	Allens Ave. Interceptor and Siphons Inspection and Cleaning	135
30434M	Seekonk River Interceptor Inspection and Cleaning	379
30445M	Blackstone Valley Interceptor Inspection and Cleaning	81
<b>Subtotal - CSO Interceptor Inspection and Cleaning</b>		<b>595</b>
<u>CSO Interceptor Repair and Construction</u>		
30409C	Burrington Street and Grotto Brook Sewer Repairs Construction	3,135
30449C	NBC Sewer Repair Project No. 1	563
<b>Subtotal - CSO Interceptor Repair and Construction</b>		<b>3,698</b>
<b><u>Total Completed Projects</u></b>		<b><u>\$ 15,637</u></b>



*Above: The OF 023 tidegate repair located on Pitman Street, in Providence. The existing tidegate was replaced to prevent the flow from the Seekonk River from entering the sewer system, shown left. As can be seen on the right, a new screening structure was installed to prevent floatables from entering the river during CSO events.*

## Program Changes

During the past year, NBC has completed a number of interceptor easement studies and facilities planning capacity analyses within NBC's service area. As a result, NBC has made some changes to the project numbering in this year's CIP which will enhance NBC's ability to track costs by area. Project 30500 is a placeholder for the easement projects and Project 30700 is a placeholder for facilities planning. When a new study or analysis is conducted in the service area, a unique project number will be identified and the funds will be reallocated from the placeholder.

## New Projects

The FY 2011-2015 CIP identifies four new projects. NBC's engineers have identified a new project to increase efficiencies through the regulation of flows from the Ernest Street Pump Station. Two other new projects are the Johnston Facilities Plan and the System-Wide Facilities Plan for North Providence. Finally, a new interceptor lining and repair project has been identified for various areas in South Providence. The projects and estimated costs are outlined in the following table.

<u>Project #</u>	<u>Project Description</u>	<u>Estimated Cost (In thousands)</u>
New Projects:		
12200C	FPWWTF - Flow Control Efficiencies	\$ 1,740
30460P	Johnston Facilities Plan	600
30461P	System Wide Facilities Plan - North Providence	346
30452C	Improvements to NBC Interceptors FY 2009	4,307
<b>Total New Projects</b>		<b>\$ 6,993</b>

## Capital Improvement Program Funding

NBC recognizes the importance of programming capital expenditures in the context of overall financial management. NBC is committed to obtaining the lowest cost of financing in order to minimize ratepayer impact, while ensuring compliance with regulatory constraints. NBC is authorized to issue debt to finance its CIP and uses a Long-Term Financial Model to identify capital funding needs and sources and to project debt issuance.

NBC maximizes its borrowing from the Rhode Island Clean Water Finance Agency (RICWFA) to the extent that there are loans available. The RICWFA, through the State Revolving Fund Program (SRF) provides interest rate subsidies on loans for eligible projects. Other factors that must be considered include:

- NBC is regulated by the Rhode Island Public Utilities Commission (PUC) and the PUC has restricted the use of the prior year debt service coverage allowance to fund only operating capital and capital projects, as well as the Revenue Stability Fund.
- NBC must take into consideration arbitrage expenditure requirements to avoid financial penalties.

- There are restrictions on the types of expenditures that may be financed through SRF. For example, land may not be financed through SRF, and only projects that have been approved by RIDEM and are reachable on the RIDEM's project priority list are eligible for SRF funding.
- NBC must also expend and manage its resources in accordance with NBC's Trust Indenture and Eight Supplemental Indentures.

## Impact of the CIP on the Operating Budget

The primary impact of the CIP on the Operating Budget is the payment of the debt service in the form of principal and interest. The debt service and user fee projections associated with financing this CIP are identified in the Long-Term Debt Overview section of the Operating Budget.

Although the CIP's primary impact on the Operating Budget is debt service, certain capital improvements will also directly impact operating costs. These expenditures relate to the operation of the completed capital improvements and will be ongoing. For example, the operation of the CSO Phase I Facilities resulted in increased costs for electricity related to pumps, dehumidifying equipment as well as increased flow requiring treatment. In this CIP NBC's engineers have identified four capital projects that will impact NBC's operating budget once they become operational.

### **CIP Impact on Operations & Maintenance (O&M) Budget (In thousands)**

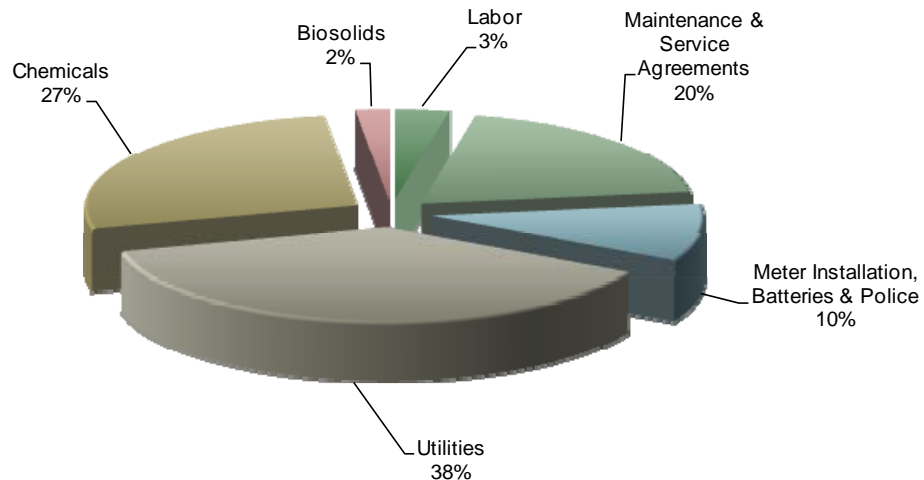
CIP Project Name	FY 2015	Percentage of Impact on Projected O&M Budget*
CSO Flow and Water Quality Monitoring	\$ 494	1.33%
FPWWTF Nitrogen Removal Facilities	1,760	4.74%
BPWWTF Nitrogen Removal Facilities	300	0.81%
CSO Phase II Facilities	155	0.42%
<b>Total</b>	<b>\$ 2,709</b>	<b>7.30%</b>

\* Based on FY 2010 Draft Operating Budget

The new facilities to be constructed as part of the Field's Point Nitrogen Removal Project will increase electricity and chemical usage and are projected to have the highest annual operating impact of the four projects, with \$1.7 million. Beginning in FY 2011, the continuing expenditures for the CSO Flow and Water Quality Monitoring project will be incorporated into the operating budget. These annual expenses are for meter installations, upkeep, and maintenance and service agreements and are projected at nearly \$0.5 million. At Bucklin Point, operation of the nitrogen removal improvements will result in increased utility and chemical costs. Operation of the CSO Phase II Facilities will result in higher utility and biosolids disposal costs.

The following chart and table provide additional detail related to the operational costs of the CIP projects.

### CIP Impact by Operating Expense (In thousands)



### CIP Impact on Operating Budget (In thousands)

Project Name	Expenditure Type	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
CSO Flow and Water Quality Monitoring						
	Labor	\$ 40	\$ 42	\$ 44	\$ 46	\$ 49
	Maintenance & Service Agreements	250	260	270	280	300
	Meter Installation, Batteries & Police	125	130	135	140	145
	<b>Subtotal</b>	<b>415</b>	<b>432</b>	<b>449</b>	<b>466</b>	<b>494</b>
FPWWTF Nitrogen Removal Facilities*						
	Utilities	-	-	330	1,000	1,050
	Chemicals	-	-	220	676	710
	<b>Subtotal</b>	<b>-</b>	<b>-</b>	<b>550</b>	<b>1,676</b>	<b>1,760</b>
BPWWTF Nitrogen Removal Facilities						
	Utilities	-	-	-	50	100
	Chemicals	-	-	-	60	200
	<b>Subtotal</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>110</b>	<b>300</b>
CSO Phase II Facilities						
	Biosolids	-	-	-	45	90
	Utilities	-	-	-	38	65
	<b>Subtotal</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>83</b>	<b>155</b>
<b>Total Impact on Operating Budget</b>		<b>\$ 415</b>	<b>\$ 432</b>	<b>\$ 999</b>	<b>\$ 2,335</b>	<b>\$ 2,709</b>

\* FP Nitrogen impact in FY 2013 represents costs for 4 months, as this is the first year of operation.

## Capital Project Cost Summary

# Capital Project Cost Summary

Project Number	Project Name	Project Priority	Pre-Fiscal Year 2010	Fiscal Year 2010	Fiscal Years 2011 - 2015	Post-Fiscal Year 2015	Total Estimated Project Cost
<b><u>Wastewater Treatment Facility Improvements</u></b>							
10901D	FPWWTF - Nitrogen Removal Facilities - Design	A	\$ 4,573	\$ 1,891	\$ -	\$ -	\$ 6,464
10901C	FPWWTF - Nitrogen Removal Facilities - Construction BP Code Upgrades, NBC Disaster Recovery and FP Security	A	391	20,421	70,700	-	91,512
11700BP	Regulatory Compliance Building - Design	A	2,997	50	-	-	3,047
11900D	Regulatory Compliance Building - Construction	B	403	2,029	-	-	2,432
11900C	Regulatory Compliance Building - Construction	B	-	132	20,980	-	21,112
12000D	BPWWTF - Biogas Microturbines - Design	C	15	175	-	-	190
12000C	BPWWTF - Biogas Microturbines - Construction	C	-	1,567	358	-	1,925
12100C	BPWWTF - Wind Turbine - Construction	C	31	1,584	4,083	-	5,698
12200C	FPWWTF - Flow Control Efficiencies	B	13	1,704	24	-	1,740
80900P	BPWWTF - Nitrogen Removal Facilities - Planning	A	255	10	-	-	265
80900D	BPWWTF - Nitrogen Removal Facilities - Design	A	-	1,037	683	-	1,720
80900C	BPWWTF - Nitrogen Removal Facilities - Construction	A	-	-	35,012	-	35,012
<b>Subtotal - Wastewater Treatment Facility Improvements</b>			<b>\$ 8,679</b>	<b>\$ 30,598</b>	<b>\$ 131,839</b>	<b>\$ -</b>	<b>\$ 171,117</b>
<b><u>Infrastructure Management</u></b>							
1100000	Site Specific Study	A	\$ 211	\$ -	\$ 246	\$ -	\$ 457
1140100	River Model Development	B	230	148	-	-	378
11500D	Asset Management	A	1,734	625	-	-	2,359
3022100	CSO Flow and Water Quality Monitoring	A	1,973	518	-	-	2,491
30221P	Hydraulic Systems Modeling	B	75	94	48	-	217
30700	NBC System-wide Facilities Planning	B	-	6	1,421	-	1,427
30460P	Johnston Facilities Plan	A	433	167	-	-	600
30461P	System Wide Facilities Plan - North Providence	A	7	339	-	-	346
30500D	NBC Interceptor Easements - Design	A	-	1	4,745	-	4,746
30500C	NBC Interceptor Easements - Construction	A	-	-	2,996	674	3,670
30438D	Interceptor Easements - Design	A	713	305	369	-	1,386
30438C	Interceptor Easements - Construction	A	-	612	730	-	1,342
<b>Subtotal - Infrastructure Management</b>			<b>\$ 5,376</b>	<b>\$ 2,815</b>	<b>\$ 10,554</b>	<b>\$ 674</b>	<b>\$ 19,419</b>
<b><u>Phase I CSO Facilities</u></b>							
30203RS	Phase I CSO Facilities - Program and Construction Management	A	\$ 35,467	\$ 503	\$ -	\$ -	\$ 35,970
30214C	Phase I CSO Facilities - Tunnel Pump Station Fitout and Startup & Overflow 067	A	55,910	2,935	-	-	58,846
CSO Admin	CSO Construction Staff/Police Detail/Legal Costs	A	3,929	53	-	-	3,982
<b>Subtotal - Phase I CSO Facilities</b>			<b>\$ 95,306</b>	<b>\$ 3,491</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 98,797</b>
<b><u>Phase II CSO Facilities</u></b>							
30301D	Phase II CSO Facilities - Design	A	\$ 6,548	\$ 6,529	\$ 4,075	\$ -	\$ 17,152
30301C	Phase II CSO Facilities - Construction	A	-	412	251,826	-	252,238
<b>Subtotal - Phase II CSO Facilities</b>			<b>\$ 6,548</b>	<b>\$ 6,941</b>	<b>\$ 255,901</b>	<b>\$ -</b>	<b>\$ 269,390</b>

# Capital Project Cost Summary

Project Number	Project Name	Project Priority	Pre-Fiscal Year 2010	Fiscal Year 2010	Fiscal Years 2011 - 2015	Post-Fiscal Year 2015	Total Estimated Project Cost
<b><u>Sewer System Improvements</u></b>							
70500D	Central Avenue Pump Station - Design	B	\$ 164	\$ 9	\$ -	\$ -	\$ 174
70500C	Central Avenue Pump Station - Construction	B	6	607	374	-	987
70600C	Omega Pump Station Rack Room - Construction	B	2	588	178	-	768
70700C	Lincoln Septage Station - Lakeside Unit Replacement	B	18	588	6	-	612
<b>Subtotal - Sewer System Improvements</b>			<b>\$ 190</b>	<b>\$ 1,793</b>	<b>\$ 558</b>	<b>\$ -</b>	<b>\$ 2,541</b>
<b><u>Floatables Control Facilities</u></b>							
30600D	Floatables Control Facilities - Design	A	\$ 5	\$ -	\$ 1,245	\$ -	\$ 1,250
30600C	Floatables Control Facilities - Construction	A	-	-	6,568	-	6,568
<b>Subtotal - Floatables Control Facilities</b>			<b>\$ 5</b>	<b>\$ -</b>	<b>\$ 7,813</b>	<b>\$ -</b>	<b>\$ 7,818</b>
<b><u>CSO Interceptor Inspection and Cleaning</u></b>							
30400M	Inspection & Cleaning of CSO Interceptors Pleasant Valley Parkway Interceptor Inspection and Cleaning	B	\$ 1,882	\$ 1,234	\$ 10,000	\$ 2,000	\$ 15,116
30419M	Woonasquatucket Interceptor along Route 10 Inspection and Cleaning	B	41	241	-	-	282
30430M	Woonasquatucket Interceptor Inspection and Cleaning	B	-	310	-	-	310
30433M	Woonasquatucket Interceptor Inspection and Cleaning	B	77	50	-	-	127
30435M	East Providence Interceptor Inspection and Cleaning	B	-	165	-	-	165
<b>Subtotal - CSO Interceptor Inspection and Cleaning</b>			<b>\$ 2,000</b>	<b>\$ 2,000</b>	<b>\$ 10,000</b>	<b>\$ 2,000</b>	<b>\$ 16,000</b>
<b><u>CSO Interceptor Repair and Construction</u></b>							
30400C	Repair and Construction of CSO Interceptors	B	\$ -	\$ -	\$ 9,670	\$ 3,000	\$ 12,670
30417C	Construction	A	951	24	-	-	975
30421D	Louisquissett Pike Interceptor Replacement- Design	B	238	3	-	-	241
30421C	Louisquissett Pike Interceptor Replacement- Construction	B	-	2,382	-	-	2,382
30444D	Moshassuck Valley Interceptor - Design	C	-	-	523	-	523
30444C	Moshassuck Valley Interceptor - Construction	C	-	-	4,772	-	4,772
30451C	Improvements to NBC Interceptors FY 2008	A	1,943	289	-	-	2,232
30452C	Improvements to NBC Interceptors FY 2009	A	41	4,231	35	-	4,307
<b>Subtotal - CSO Interceptor Repair and Construction</b>			<b>\$ 3,173</b>	<b>\$ 6,929</b>	<b>\$ 15,000</b>	<b>\$ 3,000</b>	<b>\$ 28,102</b>
<b>Total Capital Improvement Program</b>			<b>\$ 121,277</b>	<b>\$ 54,567</b>	<b>\$ 431,665</b>	<b>\$ 5,674</b>	<b>\$ 613,183</b>

Category	Project Priority
A	Mandated, emergency, or under construction, etc.
B	Not mandated but project is imperative to ongoing operation of facilities
C	Project is important but not critical to ongoing operations



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# Wastewater Treatment Facility Improvements

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## 10901 FPWWTF - Nitrogen Removal Facilities

The RIPDES permit for Field's Point requires a nitrogen limit of 5mg/l, from May to October. This project will modify the existing aeration basins to accommodate an Integrated Fixed Film Media process. The construction cost estimate has been revised from last year's CIP based on the costs developed in final design. The estimate for the increase in utility, chemical and maintenance costs associated with the operation of the new nitrogen removal facilities is approximately \$1.7 million for the first full year of operation. The subsequent years have a projected 5% increase in operating costs.



Photo: Aerial view of the FPWWTF

### Project Overview:

Location: Field's Point WWTF (Providence, RI)  
 Contractor(s): SEA Consultants  
 Project Manager: Rich Bernier, P.E.  
 Project Priority: A

### Total Project Duration/Cost

Project Phase	Actual/Projected Start Date	Actual/Projected Completion Date	Project Duration	Cost (in Thousands)
Planning	April-01	May-07	75 Months	\$872
Design	February-07	October-09	33 Months	6,464
Construction	March-09	August-14	65 Months	91,512
<b>Total Project</b>	<b>April-01</b>	<b>August-14</b>	<b>162 Months</b>	<b>\$98,847</b>

### Projected Expenditures - 10901P

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ 392	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 392
A/E Professional	413	-	-	-	-	-	-	-	413
Other	67	-	-	-	-	-	-	-	67
<b>Total Project Costs</b>	<b>\$ 872</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 872</b>

### Projected Expenditures - 10901D

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ 488	\$ 60	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 548
Land	20	1,381	-	-	-	-	-	-	1,400
A/E Professional	3,994	450	-	-	-	-	-	-	4,444
Other	72	-	-	-	-	-	-	-	72
<b>Total Project Costs</b>	<b>\$ 4,573</b>	<b>\$ 1,891</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 6,464</b>

### Projected Expenditures - 10901C

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ 166	\$ 604	\$ 624	\$ 624	\$ 528	\$ 82	\$ -	\$ -	\$ 2,627
Land	-	-	-	-	-	-	-	-	-
A/E Professional	200	1,103	922	900	591	484	-	-	4,200
Construction	-	18,108	31,321	15,526	8,607	1,063	375	-	75,000
Contingency	-	-	-	-	-	9,000	-	-	9,000
Other	25	606	54	-	-	-	-	-	685
<b>Total Project Costs</b>	<b>\$ 391</b>	<b>\$ 20,421</b>	<b>\$ 32,921</b>	<b>\$ 17,050</b>	<b>\$ 9,726</b>	<b>\$ 10,629</b>	<b>\$ 375</b>	<b>\$ -</b>	<b>\$ 91,512</b>

## 11700BP BP Code Upgrades, NBC Disaster Recovery and FP Security

Project 11700BP included improvements at both the Bucklin Point and Field's Point Wastewater Treatment Facilities. The Administration Building at Bucklin Point which was built in the 1950s, was in need of improvements to satisfy code requirements, remove asbestos, provide critical computer back-up for the Commission to remain operational in the event of a disaster to the primary facilities, as well as other general renovations. Additionally, the roofs at the Service Building were well over 20 years old and needed replacement. At Field's Point, a card admittance security system was installed in the remote buildings.



Photo: Bucklin Point Laboratory renovation

### Project Overview:

Location: Bucklin Point & Field's Point (East Providence & Providence, RI)  
 Contractor(s): JJ Cardosi  
 Project Manager: Mark Thomas, P.E.  
 Project Priority: A

### Total Project Duration/Cost

Project Phase	Actual/Projected Start Date	Actual/Projected Completion Date	Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	August-07	October-09	26 Months	\$3,047
<b>Total Project</b>	<b>August-07</b>	<b>October-09</b>	<b>26 Months</b>	<b>\$3,047</b>

### Projected Expenditures - Planning

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

### Projected Expenditures - Design

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

### Projected Expenditures - 11700BP

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ 242	\$ 1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 243
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	2,735	49	-	-	-	-	-	-	2,785
Contingency	5	-	-	-	-	-	-	-	5
Other	15	-	-	-	-	-	-	-	15
<b>Total Project Costs</b>	<b>\$ 2,997</b>	<b>\$ 50</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 3,047</b>

## 11900

# NBC Regulatory Compliance Building and Related Upgrades

This project will plan, design, and construct a Regulatory Compliance Building, which will house the Pretreatment, EMDA, and Laboratory sections of the NBC. This building will unify NBC's efforts for environmental sampling and related analysis. The building is anticipated to be approximately 35,000 square feet and will be located on Service Road in Providence. This project also includes related site demolition, site access and security.



Photo: An architect's rendering of the Regulatory Compliance Building

### Project Overview:

Location: Service Road (Providence, RI)  
 Contractor(s): N/A  
 Project Manager: Mark Thomas, P.E.  
 Project Priority: B

### Total Project Duration/Cost

Project Phase	Actual/Projected Start Date	Actual/Projected Completion Date	Duration	Cost (in Thousands)
Planning	September-08	June-09	9 Months	391
Design	May-09	February-10	9 Months	\$2,432
Construction	March-10	July-12	28 Months	\$21,112
<b>Total Project</b>	<b>September-08</b>	<b>July-12</b>	<b>47 Months</b>	<b>\$23,934</b>

### Projected Expenditures - 11900P

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ 189	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 189
A/E Professional	199	-	-	-	-	-	-	-	199
Other	3	-	-	-	-	-	-	-	3
<b>Total Project Costs</b>	<b>\$ 391</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 391</b>

### Projected Expenditures - 11900D

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ 21	\$ 101	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 122
Land	250	1,250	-	-	-	-	-	-	1,500
A/E Professional	130	670	-	-	-	-	-	-	800
Other	2	8	-	-	-	-	-	-	10
<b>Total Project Costs</b>	<b>\$ 403</b>	<b>\$ 2,029</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 2,432</b>

### Projected Expenditures - 11900C

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ 102	\$ 470	\$ 69	\$ 1	\$ -	\$ -	\$ -	\$ 642
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	25	275	-	-	-	-	-	300
Construction	-	-	14,300	3,500	200	-	-	-	18,000
Contingency	-	-	-	2,160	-	-	-	-	2,160
Other	-	5	5	-	-	-	-	-	10
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ 132</b>	<b>\$ 15,050</b>	<b>\$ 5,729</b>	<b>\$ 201</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 21,112</b>

## 12000 BPWWTF Biogas Microturbines

NBC is investigating the feasibility of converting methane biogas generated within the biosolids anaerobic digestion tanks at the Bucklin Point WWTF into electricity, using a reciprocating engine. Preliminary studies anticipate that this system could produce significant electrical cost savings at Bucklin Point.



Photo: A Caterpillar reciprocating engine

### Project Overview:

Location: Bucklin Point WWTF (East Providence, RI)  
 Contractor(s): SCS Engineering  
 Project Manager: James McCaughey, P.E.  
 Project Priority: C

### Total Project Duration/Cost

Project Phase	Actual/Projected Start Date	Actual/Projected Completion Date	Duration	Cost (in Thousands)
Planning	June-07	March-09	22 Months	50
Design	April-09	January-10	10 Months	\$190
Construction	February-10	November-10	10 Months	\$1,925
<b>Total Project</b>	<b>June-07</b>	<b>November-10</b>	<b>43 Months</b>	<b>\$2,165</b>

### Projected Expenditures - 12000P

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ 25	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25
A/E Professional	25	-	-	-	-	-	-	-	25
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ 50</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 50</b>

### Projected Expenditures - 12000D

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ 9	\$ 21	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 30
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	150	-	-	-	-	-	-	150
Other	6	4	-	-	-	-	-	-	10
<b>Total Project Costs</b>	<b>\$ 15</b>	<b>\$ 175</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 190</b>

### Projected Expenditures - 12000C

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ 28	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 28
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	50	-	-	-	-	-	-	50
Construction	-	75	358	-	-	-	-	-	433
Contingency	-	198	-	-	-	-	-	-	198
Other	-	1,216	-	-	-	-	-	-	1,216
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ 1,567</b>	<b>\$ 358</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,925</b>



## 12100 FPWWTF Wind Turbine

NBC has investigated the feasibility of converting wind energy into electricity using two Mega-Watt (MW) Class Wind Turbines at the Field's Point WWTF. Preliminary studies indicated that the turbine would result in decreased electricity costs. Currently NBC is determining the scale and number of turbines. Once this information is evaluated, NBC will be able to estimate the electricity savings. The design phase has been incorporated into the construction phase, since the wind turbines will be pre-built and then assembled on site.



Photo: A rendering of the wind turbines from across Narragansett Bay

### Project Overview:

Location: Field's Point WWTF (Providence, RI)  
 Contractor(s): N/A  
 Project Manager: Rich Bernier, P.E.  
 Project Priority: C

### Total Project Duration/Cost

Project Phase	Actual/Projected Start Date	Actual/Projected Completion Date	Duration	Cost (in Thousands)
Planning	December-06	June-09	31 Months	39
Design	N/A	N/A	N/A	N/A
Construction	April-09	August-11	16 Months	\$5,698
<b>Total Project</b>	<b>December-06</b>	<b>August-11</b>	<b>45 Months</b>	<b>\$5,737</b>

### Projected Expenditures - 12100P

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ 13	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13
A/E Professional	-	-	-	-	-	-	-	-	-
Other	26	-	-	-	-	-	-	-	26
<b>Total Project Costs</b>	<b>\$ 39</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 39</b>

### Projected Expenditures - Design

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

### Projected Expenditures - 12100C

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ 31	\$ 28	\$ 19	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 78
Land	-	1	-	-	-	-	-	-	1
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	1,555	3,437	25	-	-	-	-	5,017
Contingency	-	-	602	-	-	-	-	-	602
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ 31</b>	<b>\$ 1,584</b>	<b>\$ 4,058</b>	<b>\$ 25</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 5,698</b>

## 12200C FPWWTF Flow Control Efficiencies

This project will add four Variable Frequency Drives (VFD) to existing constant speed pumps at the Ernest Street Pump Station. These VFDs will control the rate of flow entering the Field's Point WWTF and therefore maximize energy efficiency. This project will connect the existing Ernest Street Pump Station generator to the FPWWTF, in order to provide the treatment powering capabilities during power outages, ensuring NBC maintains the necessary processes to treat the incoming flow.



Photo: A schematic of a variable frequency drive unit

### Project Overview:

Location: Providence, RI  
 Contractor(s): N/A  
 Project Manager: Rich Bernier, P.E.  
 Project Priority: B

### Total Project Duration/Cost

Project Phase	Actual/Projected Start Date	Actual/Projected Completion Date	Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	June-09	November-10	17 Months	\$1,740
<b>Total Project</b>	<b>June-09</b>	<b>November-10</b>	<b>17 Months</b>	<b>\$1,740</b>

### Projected Expenditures - Planning

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

### Projected Expenditures - Design

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

### Projected Expenditures - 12200C

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ 11	\$ 39	\$ 4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 54
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	1,480	20	-	-	-	-	-	1,500
Contingency	-	180	-	-	-	-	-	-	180
Other	2	5	-	-	-	-	-	-	6
<b>Total Project Costs</b>	<b>\$ 13</b>	<b>\$ 1,704</b>	<b>\$ 24</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,740</b>

## 80900 BPWWTF Nitrogen Removal Facilities

Although NBC's facilities at Bucklin Point were designed to reach a nitrogen loading level of 8mg/l, NBC has made considerable progress reducing the loading below that level. However, the current RIDEM nitrogen limit for Bucklin Point is 5 mg/l. NBC's Draft Facilities Plan Amendment recommended upgrading the existing Biological Nutrient Removal (BNR) processes, as well as constructing additional facilities and modifications in order to achieve compliance with the Consent Agreement limit. This project is for the planning, design, and construction of these facilities.



Photo: Aerial view of the BPWWTF

### Project Overview:

Location: Bucklin Point WWTF (East Providence, RI)  
 Contractor(s): Camp Dresser & McKee  
 Project Manager: Terry Cote, P.E.  
 Project Priority: A

### Total Project Duration/Cost

Project Phase	Actual/Projected Start Date	Actual/Projected Completion Date	Duration	Cost (in Thousands)
Planning	July-07	September-09	26 Months	265
Design	October-09	November-11	25 Months	\$1,720
Construction	December-11	June-15	43 Months	\$35,012
<b>Total Project</b>	<b>July-07</b>	<b>June-15</b>	<b>96 Months</b>	<b>\$36,997</b>

### Projected Expenditures - 80900P

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ 54	\$ 3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 57
A/E Professional	197	7	-	-	-	-	-	-	204
Other	4	-	-	-	-	-	-	-	4
<b>Total Project Costs</b>	<b>\$ 255</b>	<b>\$ 10</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 265</b>

### Projected Expenditures - 80900D

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ 58	\$ 42	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	979	621	-	-	-	-	-	1,600
Other	-	-	10	10	-	-	-	-	20
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ 1,037</b>	<b>\$ 673</b>	<b>\$ 10</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,720</b>

### Projected Expenditures - 80900C

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ 37	\$ 315	\$ 378	\$ 322	\$ -	\$ 1,052
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	96	144	120	-	360
Construction	-	-	-	-	8,000	12,000	10,000	-	30,000
Contingency	-	-	-	-	-	-	3,600	-	3,600
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 37</b>	<b>\$ 8,411</b>	<b>\$ 12,522</b>	<b>\$ 14,042</b>	<b>\$ -</b>	<b>\$ 35,012</b>

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# Infrastructure Management

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## 1100000 Site Specific Study

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.



Photo: The RV Monitor, NBC's sampling vessel

### Project Overview:

Location: Field's Point WWTF (Providence, RI)  
 Contractor(s): Microinorganics, Inc.  
 Project Manager: John Motta  
 Project Priority: A

### Total Project Duration/Cost

Project Phase	Actual/Projected Start Date	Actual/Projected Completion Date	Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	November-01	June-11	118 Months	\$457
Construction	N/A	N/A	N/A	N/A
<b>Total Project</b>	<b>November-01</b>	<b>June-11</b>	<b>118 Months</b>	<b>\$457</b>

### Projected Expenditures - Planning

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

### Projected Expenditures - 1100000

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ 16	\$ -	\$ 234	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 250
Land	-	-	-	-	-	-	-	-	-
A/E Professional	163	-	6	-	-	-	-	-	169
Other	33	-	5	-	-	-	-	-	38
<b>Total Project Costs</b>	<b>\$ 211</b>	<b>\$ -</b>	<b>\$ 246</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 457</b>

### Projected Expenditures - Construction

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>



## 1140100 River Model Development

NBC has partnered with the University of Rhode Island (URI) Graduate School of Oceanography (GSO) to develop a Regional Ocean Management System (ROMS) model of circulation and transport within the Providence and Seekonk Rivers and Upper Narragansett Bay. The first phase of the model development is nearly complete. The second phase will run the model under varying conditions and loadings to determine the impact of nitrogen loads on the receiving waters. This analysis will assist in determining the Total Maximum Daily Load (TMDL) for nitrogen that can be discharged from NBC's two wastewater treatment facilities without violating water quality standards.



Photo: The Providence River, the northern most part of Narragansett Bay

### Project Overview:

Location: Field's Point WWTF (Providence, RI)  
 Contractor(s): University of RI, Graduate School of Oceanography  
 Project Manager: Tom Brueckner, P.E.  
 Project Priority: B

### Total Project Duration/Cost

Project Phase	Actual/Projected Start Date	Actual/Projected Completion Date	Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	March-05	January-10	60 Months	\$378
Construction	N/A	N/A	N/A	N/A
<b>Total Project</b>	<b>March-05</b>	<b>January-10</b>	<b>60 Months</b>	<b>\$378</b>

### Projected Expenditures - Planning

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

### Projected Expenditures - 1140100

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ 23	\$ 18	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 41
Land	-	-	-	-	-	-	-	-	-
A/E Professional	161	20	-	-	-	-	-	-	181
Other	46	109	-	-	-	-	-	-	156
<b>Total Project Costs</b>	<b>\$ 230</b>	<b>\$ 148</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 378</b>

### Projected Expenditures - Construction

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

## 11500 Asset Management System

Asset Management Systems provide a means of managing infrastructure to minimize the cost of owning and operating wastewater collection treatment facilities while delivering the service levels customers expect. The Asset Management System (AMS) will evaluate all of NBC's collection and treatment facilities. It will provide the pertinent data to establish methods of accounting for and linking inventory, and providing the conditions, service levels, useful life, and repair costs for planned capital improvements.



Photo: Replacing of final clarifier splitter box gates, built in the 1980's

### Project Overview:

Location: N/A  
 Contractor(s): Camp Dresser & McKee  
 Project Manager: Paul Nordstrom, P.E.  
 Project Priority: A

### Total Project Duration/Cost

Project Phase	Actual/Projected Start Date	Actual/Projected Completion Date	Duration	Cost (in Thousands)
Planning	June-04	June-05	13 Months	200
Design	July-05	June-10	61 Months	\$2,359
Construction	N/A	N/A	N/A	N/A
<b>Total Project</b>	<b>June-04</b>	<b>June-10</b>	<b>74 Months</b>	<b>\$2,559</b>

### Projected Expenditures - 11500P

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ 36	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 36
A/E Professional	164	-	-	-	-	-	-	-	164
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ 200</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 200</b>

### Projected Expenditures - 11500D

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ 406	\$ 194	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 600
Land	-	-	-	-	-	-	-	-	-
A/E Professional	946	223	-	-	-	-	-	-	1,168
Other	383	208	-	-	-	-	-	-	591
<b>Total Project Costs</b>	<b>\$ 1,734</b>	<b>\$ 625</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 2,359</b>

### Projected Expenditures - Construction

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

## 3022100 CSO Flow & Water Quality Monitoring

This project includes the installation and maintenance of flow meters at CSO outfalls used to determine the frequency and volume of CSO discharges. It also includes installation of monitoring devices to provide an alarm in the event of a dry weather overflow. In addition, water quality monitoring will be conducted to determine the occurrence of dry weather overflows and establish baseline water quality conditions in order to determine the effectiveness of the CSO control program. Flow monitoring data will be used for design of the floatables control facilities, and the Phase II and Phase III CSO facilities. NBC will continue installing wireless communications at each flow meter location.



Photo: The Smith Street Permanent Meter Enclosure

### Project Overview:

Location: Narragansett Bay Commission Service Area  
 Contractor(s): Environmental Sampling Technology, Hach Company  
 Project Manager: Kathryn Kelly, P.E.  
 Project Priority: A

### Total Project Duration/Cost

Project Phase	Actual/Projected Start Date	Actual/Projected Completion Date	Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	August-01	June-10	109 Months	\$2,491
Construction	N/A	N/A	N/A	N/A
<b>Total Project</b>	<b>August-01</b>	<b>June-10</b>	<b>109 Months</b>	<b>\$2,491</b>

### Projected Expenditures - Planning

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

### Projected Expenditures - 3022100

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ 475	\$ 54	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 530
Land	-	-	-	-	-	-	-	-	-
A/E Professional	1,159	294	-	-	-	-	-	-	1,454
Other	338	169	-	-	-	-	-	-	508
<b>Total Project Costs</b>	<b>\$ 1,973</b>	<b>\$ 518</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 2,491</b>

### Projected Expenditures - Construction

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

## 30221P Hydraulic Systems Modeling

This project involves the updating of a sewer system model that will allow NBC to determine the impact of future development and other changes to the sewer system flows. This information can then be used to determine where there is insufficient capacity, in accordance with the CMOM requirements established by the EPA.

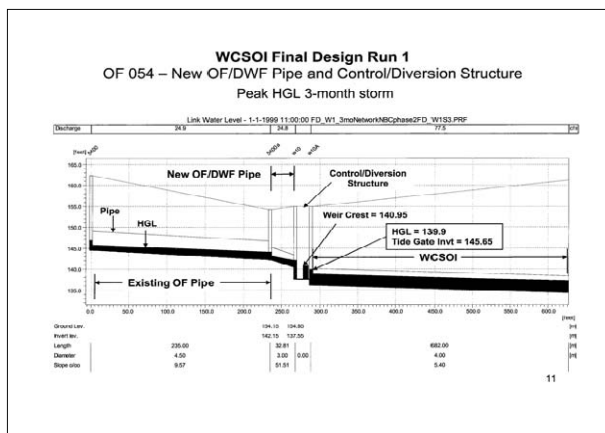


Photo: A graphic depicting the output from the WCSOI model

### Project Overview:

Location: Narragansett Bay Commission Service Area  
 Contractor(s): CH2M Hill  
 Project Manager: Kathryn Kelly, P.E.  
 Project Priority: B

### Total Project Duration/Cost

Project Phase	Actual/Projected Start Date	Actual/Projected Completion Date	Duration	Cost (in Thousands)
Planning	June-06	October-10	53 Months	217
Design	N/A	N/A	N/A	N/A
Construction	N/A	N/A	N/A	N/A
<b>Total Project</b>	<b>June-06</b>	<b>October-10</b>	<b>53 Months</b>	<b>\$217</b>

### Projected Expenditures - 30221P

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ 13	\$ 21	\$ 12	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 46
A/E Professional	59	71	36	-	-	-	-	-	166
Other	2	3	-	-	-	-	-	-	5
<b>Total Project Costs</b>	<b>\$ 75</b>	<b>\$ 94</b>	<b>\$ 48</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 217</b>

### Projected Expenditures - Design

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

### Projected Expenditures - Construction

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

## 30700 NBC System-wide Facilities Planning

NBC's interceptor sewers convey flow from local sewers in the district's eight cities and towns to the two NBC wastewater treatment facilities. Project 30700 will continue NBC's studies to determine if there is adequate capacity for the next twenty years and if there is any excessive infiltration/inflow (I/I) in NBC's interceptors. As the evaluations begin for the remaining cities and towns, each will be given a unique project number and draw funding from Project 30700.

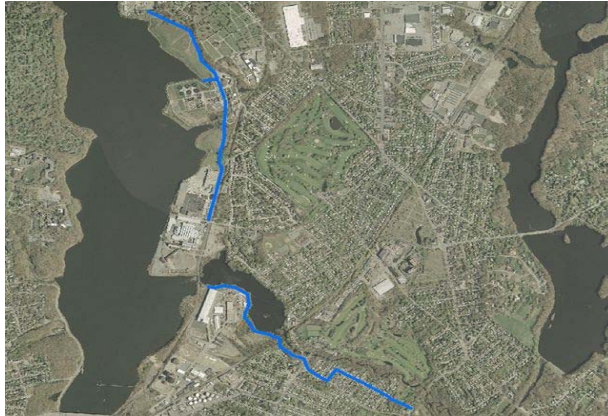


Photo: Proposed area for the East Providence capacity analysis

### Project Overview:

Location: Narragansett Bay Commission Service Area  
 Contractor(s): N/A  
 Project Manager: Terry Cote, P.E.  
 Project Priority: B

### Total Project Duration/Cost

Project Phase	Actual/Projected Start Date	Actual/Projected Completion Date	Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	June-10	February-13	33 Months	\$1,427
Construction	N/A	N/A	N/A	N/A
<b>Total Project</b>	<b>June-10</b>	<b>February-13</b>	<b>33 Months</b>	<b>\$1,427</b>

### Projected Expenditures - Planning

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

### Projected Expenditures - 30700

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ 6	\$ 93	\$ 77	\$ 52	\$ -	\$ -	\$ -	\$ 228
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	450	349	400	-	-	-	1,199
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ 6</b>	<b>\$ 543</b>	<b>\$ 427</b>	<b>\$ 452</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,427</b>

### Projected Expenditures - Construction

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>



## 30460P Johnston Facilities Plan

This project is a continuation of the NBC's efforts to determine if there is adequate capacity, and if there is any excessive infiltration/ inflow (I/I) in its interceptors. The Johnston Facilities Plan study will determine if any improvements are needed to NBC's interceptors in order to accommodate future development and expansion in the town of Johnston's collection system. This project was funded from the allocation formerly within project 30438.

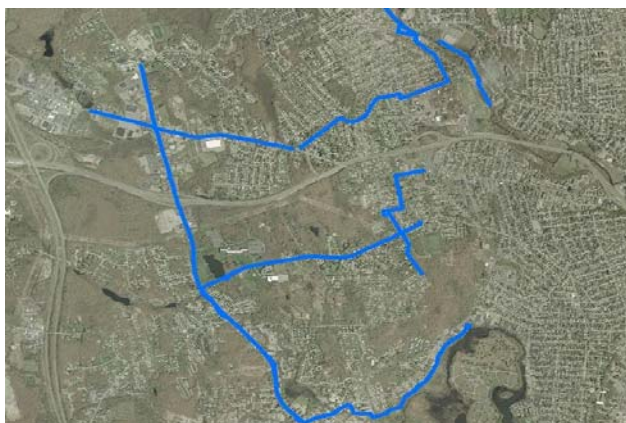


Photo: Portions of NBC's collection system in Johnston being studied

### Project Overview:

Location: Johnston, RI  
 Contractor(s): Pare Engineering Corp.  
 Project Manager: Tom Brueckner, P.E.  
 Project Priority: A

### Total Project Duration/Cost

Project Phase	Actual/Projected Start Date	Actual/Projected Completion Date	Duration	Cost (in Thousands)
Planning	August-08	October-09	15 Months	600
Design	N/A	N/A	N/A	N/A
Construction	N/A	N/A	N/A	N/A
<b>Total Project</b>	<b>August-08</b>	<b>October-09</b>	<b>15 Months</b>	<b>\$600</b>

### Projected Expenditures - 30460P

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ 92	\$ 38	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 130
A/E Professional	326	124	-	-	-	-	-	-	450
Other	15	5	-	-	-	-	-	-	20
<b>Total Project Costs</b>	<b>\$ 433</b>	<b>\$ 167</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 600</b>

### Projected Expenditures - Design

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

### Projected Expenditures - Construction

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

## 30461P System Wide Facilities Plan - North Providence

This project is a continuation of NBC's efforts to determine if there is adequate capacity, and if there is any excessive infiltration/ inflow (I/I) in its interceptors. The EPA recently issued an Administrative Order (AO) for the cause of Sanitary System Overflows (SSO's) in its system to the town of North Providence. NBC will study and investigate the sources of the wet weather inflow into the North Providence Sewer System, as it then flows into the NBC's interceptors.

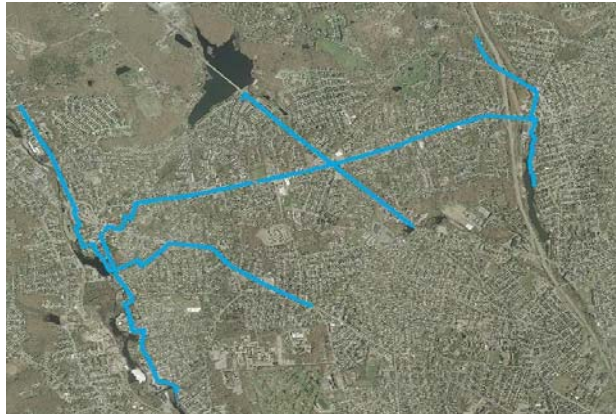


Photo: Portions of NBC's interceptors in N. Providence being studied

### Project Overview:

Location: North Providence, RI  
 Contractor(s): Dewberry Goodkind  
 Project Manager: Kathryn Kelly, P.E.  
 Project Priority: A

### Total Project Duration/Cost

Project Phase	Actual/Projected Start Date	Actual/Projected Completion Date	Duration	Cost (in Thousands)
Planning	February-09	January-10	12 Months	346
Design	N/A	N/A	N/A	N/A
Construction	N/A	N/A	N/A	N/A
<b>Total Project</b>	<b>February-09</b>	<b>January-10</b>	<b>12 Months</b>	<b>\$346</b>

### Projected Expenditures - 30461P

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ 7	\$ 66	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 73
A/E Professional	-	203	-	-	-	-	-	-	203
Other	-	70	-	-	-	-	-	-	70
<b>Total Project Costs</b>	<b>\$ 7</b>	<b>\$ 339</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 346</b>

### Projected Expenditures - Design

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

### Projected Expenditures - Construction

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>



## 30500 NBC Interceptor Easements

Many of NBC's interceptors are located in overland areas that run through private property. It is difficult to access these easements due to the terrain and vegetative growth. Many areas have become overgrown and the sewer is difficult to locate. The easements will be located through field survey and then cleared sufficiently to provide access for maintenance crews and equipment. Project 30500 will continue NBC's efforts to locate the interceptors and easements in each of the communities within the NBC service area. As the field surveys begin for the remaining cities and towns, each will be given a unique project number and draw funding from Project 30500.

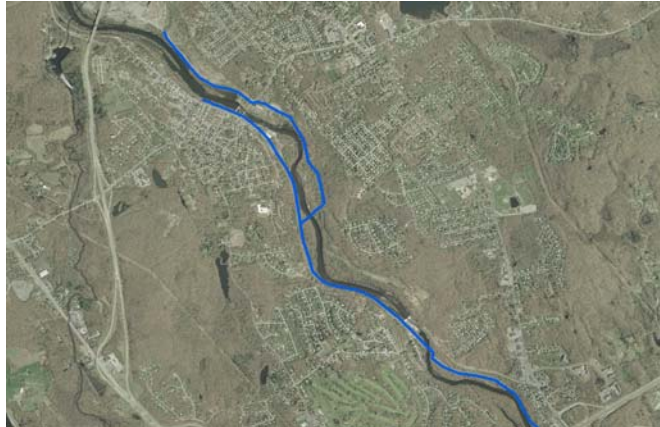


Photo: Blackstone Valley Interceptor in Lincoln

### Project Overview:

Location: Narragansett Bay Commission Service Area  
Contractor(s): N/A  
Project Manager: Thomas Grala, P.E.  
Project Priority: A

### Total Project Duration/Cost

Project Phase	Actual/Projected Start Date	Actual/Projected Completion Date	Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	July-07	August-14	86 Months	\$4,746
Construction	October-11	November-15	50 Months	3,670
<b>Total Project</b>	<b>July-07</b>	<b>November-15</b>	<b>102 Months</b>	<b>\$8,416</b>

### Projected Expenditures - Planning

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

### Projected Expenditures - 30500D

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ 1	\$ 188	\$ 120	\$ 207	\$ 192	\$ 69	\$ -	\$ 777
Land	-	-	-	500	600	-	500	-	1,600
A/E Professional	-	-	540	360	540	673	237	-	2,350
Other	-	-	-	6	6	-	7	-	19
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ 1</b>	<b>\$ 728</b>	<b>\$ 986</b>	<b>\$ 1,353</b>	<b>\$ 865</b>	<b>\$ 813</b>	<b>\$ -</b>	<b>\$ 4,746</b>

### Projected Expenditures - 30500C

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ 37	\$ 32	\$ 63	\$ 36	\$ 30	\$ 198
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	510	510	1,040	520	520	3,100
Contingency	-	-	-	-	124	124	-	124	372
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 547</b>	<b>\$ 666</b>	<b>\$ 1,227</b>	<b>\$ 556</b>	<b>\$ 674</b>	<b>\$ 3,670</b>

## 30438 Interceptor Easements

Much of the NBC sewer system in Cumberland is located in easements that cross private property. Current EPA guidelines call for sewer systems to be accessible for the purpose of routine inspection and maintenance. NBC is presently evaluating these easements, as to whether the access to the easements is sufficient for maintenance purposes, and where necessary, will be make improvements to ensure access is available.

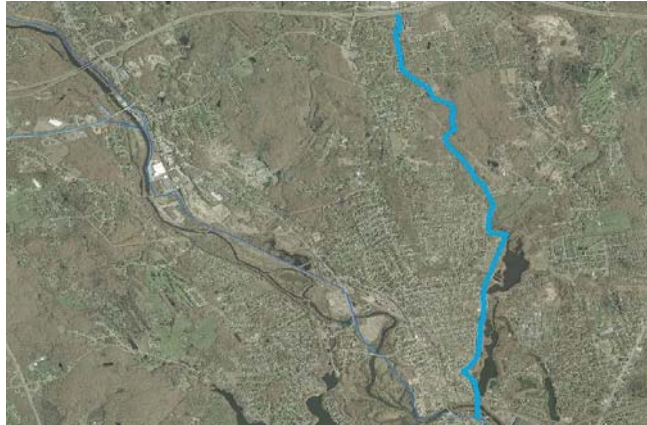


Photo: Cumberland sewer system easement locations

### Project Overview:

Location: Cumberland, RI  
 Contractor(s): VHB  
 Project Manager: Thomas Grala, P.E.  
 Project Priority: A

### Total Project Duration/Cost

Project Phase	Actual/Projected Start Date	Actual/Projected Completion Date	Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	October-05	December-10	63 Months	\$1,386
Construction	July-09	July-11	24 Months	1,342
<b>Total Project</b>	<b>October-05</b>	<b>July-11</b>	<b>70 Months</b>	<b>\$2,728</b>

### Projected Expenditures - Planning

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

### Projected Expenditures - 30438D

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ 150	\$ 98	\$ 79	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 327
Land	153	-	247	-	-	-	-	-	400
A/E Professional	409	200	41	-	-	-	-	-	650
Other	0	7	2	-	-	-	-	-	9
<b>Total Project Costs</b>	<b>\$ 713</b>	<b>\$ 305</b>	<b>\$ 369</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,386</b>

### Projected Expenditures - 30438C

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ 32	\$ 35	\$ 3	\$ -	\$ -	\$ -	\$ -	\$ 70
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	500	500	100	-	-	-	-	1,100
Contingency	-	60	-	72	-	-	-	-	132
Other	-	20	20	-	-	-	-	-	40
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ 612</b>	<b>\$ 555</b>	<b>\$ 175</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,342</b>

## CSO Phase I and CSO Phase II Facilities

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## 30203RS

### Phase I CSO Facilities - Program Management & Construction Management

Project 30203RS provides Program Management and Construction Management of the Phase I CSO Facilities construction program, which consists of eleven separate projects. This project is underway and will continue until Phase I of the CSO Program is complete.

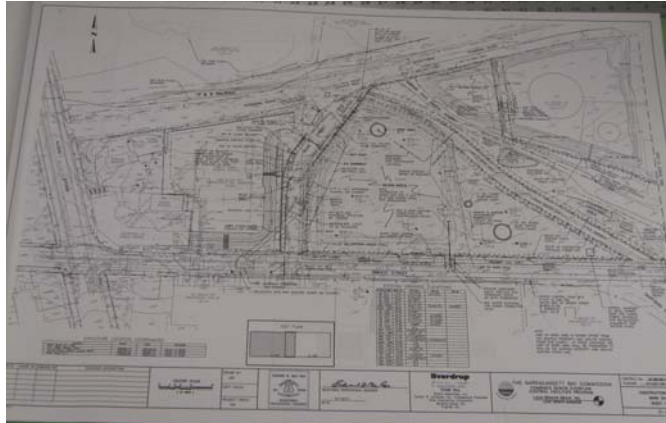


Photo: Plans of the CSO Phase I work shaft construction site

#### Project Overview:

Location: N/A  
 Contractor(s): Louis Berger Group  
 Project Manager: Rich Bernier, P.E.  
 Project Priority: A

#### Total Project Duration/Cost

Project Phase	Actual/Projected Start Date	Actual/Projected Completion Date	Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	August-01	December-09	102 Months	35,970
<b>Total Project</b>	<b>August-01</b>	<b>December-09</b>	<b>102 Months</b>	<b>\$35,970</b>

#### Projected Expenditures - Planning

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

#### Projected Expenditures - Design

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

#### Projected Expenditures - 30203RS

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	35,467	503	-	-	-	-	-	-	35,970
Construction	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ 35,467</b>	<b>\$ 503</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 35,970</b>

## 30214C

### Phase I CSO Facilities - Tunnel Pump Station Fitout, Startup & Overflow o67

Project 30214C constructed the tunnel pump station, gate and screening structures, a screening building and force-main. Also included was the installation of pumps, piping and the instrumentation and controls for all of the Phase I Facilities. The startup of the Phase I Facilities was also completed under this project.



Photo: Tunnel Pump Station, located near Ernest and Ellis Streets

#### Project Overview:

Location: Providence, RI  
 Contractor(s): Hart Engineering  
 Project Manager: Rich Bernier, P.E.  
 Project Priority: A

#### Total Project Duration/Cost

Project Phase	Actual/Projected Start Date	Actual/Projected Completion Date	Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	July-05	December-09	55 Months	58,846
<b>Total Project</b>	<b>July-05</b>	<b>December-09</b>	<b>55 Months</b>	<b>\$58,846</b>

#### Projected Expenditures - Planning

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

#### Projected Expenditures - Design

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

#### Projected Expenditures - 30214C

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	55,910	824	-	-	-	-	-	-	56,734
Contingency	-	2,112	-	-	-	-	-	-	2,112
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ 55,910</b>	<b>\$ 2,935</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 58,846</b>

## CSO Admin

### CSO Construction Staff / Police Detail / Legal Costs

This project represents the annual cost estimates for administrative expenses incurred by NBC staff who work on the various CSO construction projects. Administration costs include salary and benefits, police detail, legal and reimbursement costs. CSO Administration will continue until Phase I is complete.



Photo: Police diverting traffic through construction near Atwells Ave.

#### Project Overview:

Location: N/A  
 Contractor(s): N/A  
 Project Manager: N/A  
 Project Priority: A

#### Total Project Duration/Cost

Project Phase	Actual/Projected Start Date	Actual/Projected Completion Date	Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	June-01	December-09	105 Months	3,982
<b>Total Project</b>	<b>June-01</b>	<b>December-09</b>	<b>105 Months</b>	<b>\$3,982</b>

#### Projected Expenditures - Planning

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

#### Projected Expenditures - Design

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

#### Projected Expenditures - CSO Admin

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ 3,929	\$ 53	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,982
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ 3,929</b>	<b>\$ 53</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 3,982</b>



## 30301 CSO Phase II Facilities

CSO Phase II is the second phase of NBC's CSO Abatement Program. It consists of the construction of two interceptors to convey flows from combined sewer overflows in Providence along the Seekonk and Woonasquatucket Rivers to the Main Tunnel constructed in Phase I. The proposed length of the Woonasquatucket Interceptor is 19,150 feet and the Seekonk Interceptor will be approximately 8,000 feet. Phase II also includes two sewer separation projects in Providence, and a constructed wetlands treatment facility in Central Falls. Total cost estimates for CSO Phase II are updated in this year's CIP based on the construction cost estimates prepared by the design engineers, upon completion of preliminary design.

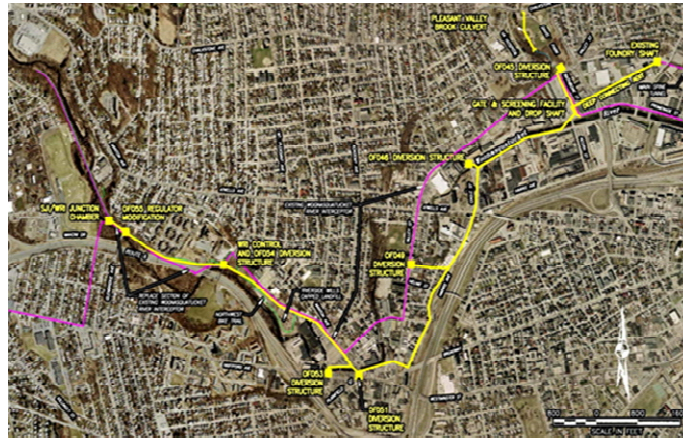


Photo: Proposed Woonasquatucket CSO Interceptor alignment

### Project Overview:

Location: Providence, RI; Central Falls, RI  
 Contractor(s): Louis Berger Group  
 Project Manager: Tom Brueckner, P.E.  
 Project Priority: A

### Total Project Duration/Cost

Project Phase	Actual/Projected Start Date	Actual/Projected Completion Date	Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	January-07	July-10	42 Months	\$17,152
Construction	April-10	September-14	54 Months	252,238
<b>Total Project</b>	<b>January-07</b>	<b>September-14</b>	<b>93 Months</b>	<b>\$269,390</b>

### Projected Expenditures - Planning

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

### Projected Expenditures - 30301D

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ 249	\$ 421	\$ 75	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 745
Land	-	1,411	4,000	-	-	-	-	-	5,411
A/E Professional	6,239	4,657	-	-	-	-	-	-	10,895
Other	60	40	-	-	-	-	-	-	100
<b>Total Project Costs</b>	<b>\$ 6,548</b>	<b>\$ 6,529</b>	<b>\$ 4,075</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 17,152</b>

### Projected Expenditures - 30301C

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ 12	\$ 890	\$ 2,300	\$ 2,195	\$ 2,440	\$ 563	\$ -	\$ 8,400
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	1,620	3,600	4,480	4,800	1,500	-	16,000
Construction	-	400	30,000	68,405	64,755	30,710	2,730	-	197,000
Contingency	-	-	-	-	-	-	23,640	-	23,640
Other	-	-	-	-	2,500	4,698	-	-	7,198
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ 412</b>	<b>\$ 32,510</b>	<b>\$ 74,305</b>	<b>\$ 73,930</b>	<b>\$ 42,648</b>	<b>\$ 28,433</b>	<b>\$ -</b>	<b>\$ 252,238</b>

## Sewer System Improvements

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## 70500 Central Avenue Pump Station

Project 70500 involves installation of a new force main to redirect flow from the Central Avenue Pump Station to the Atwood Avenue interceptor, which is closer to the station. The Atwood Avenue interceptor did not have sufficient capacity to handle flows from the pump station when the pump station was first built, but, because of an upgrade to the Atwood Avenue interceptor it is now able to accommodate the pump station flows. The pumps will also be replaced to match the new force main design. Redirecting the flow will result in lower pumping costs.



Photo: The Central Avenue Pump Station

### Project Overview:

Location: Providence, RI  
 Contractor(s): Pare Engineering  
 Project Manager: Rich Bernier, P.E.  
 Project Priority: B

### Total Project Duration/Cost

Project Phase	Actual/Projected Start Date	Actual/Projected Completion Date	Duration	Cost (in Thousands)
Planning	January-07	June-08	17 Months	45
Design	June-08	July-09	13 Months	\$174
Construction	July-09	November-10	16 Months	987
<b>Total Project</b>	<b>January-07</b>	<b>November-10</b>	<b>47 Months</b>	<b>\$1,206</b>

### Projected Expenditures - 70500P

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ 12	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12
A/E Professional	33	-	-	-	-	-	-	-	33
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ 45</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 45</b>

### Projected Expenditures - 70500D

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ 21	\$ 3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 24
Land	-	-	-	-	-	-	-	-	-
A/E Professional	137	2	-	-	-	-	-	-	140
Other	6	4	-	-	-	-	-	-	10
<b>Total Project Costs</b>	<b>\$ 164</b>	<b>\$ 9</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 174</b>

### Projected Expenditures - 70500C

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ 6	\$ 71	\$ 20	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 97
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	36	14	-	-	-	-	-	50
Construction	-	500	250	-	-	-	-	-	750
Contingency	-	-	90	-	-	-	-	-	90
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ 6</b>	<b>\$ 607</b>	<b>\$ 374</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 987</b>

## 70600C Omega Pump Station Rack Room - Construction

The Omega Pump Station Rack Room provides screening facilities for the Omega Pump Station, which is located in the Bucklin Point service area. The self-cleaning screen has reached the end of its useful life and must be replaced. Further, the electrical, heating, and ventilation systems must be replaced, and fire code updates along with minor structural repairs need to be made to the building. Project 70600C will facilitate these improvements.



Photo: Bar screen in the Omega rack room

### Project Overview:

Location: East Providence, RI  
 Contractor(s): Beta Engineering  
 Project Manager: Mark Thomas, P.E.  
 Project Priority: B

### Total Project Duration/Cost

Project Phase	Actual/Projected Start Date	Actual/Projected Completion Date	Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	August-09	October-10	14 Months	768
<b>Total Project</b>	<b>August-09</b>	<b>October-10</b>	<b>14 Months</b>	<b>\$768</b>

### Projected Expenditures - Planning

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

### Projected Expenditures - Design

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

### Projected Expenditures - 70600C

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ 2	\$ 53	\$ 6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 61
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	30	-	-	-	-	-	-	30
Construction	-	500	100	-	-	-	-	-	600
Contingency	-	-	72	-	-	-	-	-	72
Other	-	5	-	-	-	-	-	-	5
<b>Total Project Costs</b>	<b>\$ 2</b>	<b>\$ 588</b>	<b>\$ 178</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 768</b>

## 70700C Lincoln Septage Station - Lakeside Unit Replacement

The grit removal unit at the Lincoln Septage Station removes stone and sand from septage before it is discharged to the Bucklin Point sewer system. Removal of the grit at the septage station prevents buildup of grit in the downstream sewer, which could become a maintenance problem. The existing unit has reached the end of its useful life and needs to be replaced. This project involves the purchase and installation of the new unit.



Photo: Lakeside Grit Removal Unit

### Project Overview:

Location: Lincoln, RI  
 Contractor(s): N/A  
 Project Manager: Rich Bernier, P.E.  
 Project Priority: B

### Total Project Duration/Cost

Project Phase	Actual/Projected Start Date	Actual/Projected Completion Date	Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	March-09	July-10	15 Months	612
<b>Total Project</b>	<b>March-09</b>	<b>July-10</b>	<b>15 Months</b>	<b>\$612</b>

### Projected Expenditures - Planning

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

### Projected Expenditures - Design

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

### Projected Expenditures - 70700C

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ 18	\$ 33	\$ 1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 52
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	495	5	-	-	-	-	-	500
Contingency	-	60	-	-	-	-	-	-	60
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ 18</b>	<b>\$ 588</b>	<b>\$ 6</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 612</b>

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## Floatables Control Facilities

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## 30600 Floatables Control Facilities

As part of the nine minimum controls required under EPA's CSO Control Policy, floatables control is to be provided at the Phase III CSO overflows. NBC completed the evaluation of a trash net floatables control facility and has submitted a plan for addressing floatables control for Phase III overflows to RIDEM. This project is for design and construction of floatables control facilities at approximately twenty-six outfalls.



Photo: Floatables Control Facilities at Bucklin Brook

### Project Overview:

Location: Providence, RI; Pawtucket, RI; Central Falls, RI  
 Contractor(s): N/A  
 Project Manager: Kathryn Kelly, P.E.  
 Project Priority: A

### Total Project Duration/Cost

Project Phase	Actual/Projected Start Date	Actual/Projected Completion Date	Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	January-10	June-12	29 Months	\$1,250
Construction	January-12	June-14	30 Months	6,568
<b>Total Project</b>	<b>January-10</b>	<b>June-12</b>	<b>29 Months</b>	<b>\$7,818</b>

### Projected Expenditures - Planning

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

### Projected Expenditures - 30600D

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ 5	\$ -	\$ 145	\$ 70	\$ -	\$ -	\$ -	\$ -	\$ 220
Land	-	-	-	350	-	-	-	-	350
A/E Professional	-	-	512	168	-	-	-	-	680
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ 5</b>	<b>\$ -</b>	<b>\$ 657</b>	<b>\$ 588</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,250</b>

### Projected Expenditures - 30600C

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ 120	\$ 120	\$ 10	\$ -	\$ 250
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	120	120	10	-	250
Construction	-	-	-	-	2,640	2,640	236	-	5,516
Contingency	-	-	-	-	-	-	552	-	552
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 2,880</b>	<b>\$ 2,880</b>	<b>\$ 808</b>	<b>\$ -</b>	<b>\$ 6,568</b>

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# Interceptor Inspection and Cleaning & Interceptor Repair and Construction

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## Projects 304 M Summary CSO Interceptor and Cleaning Projects

The 304 M projects continue NBC's program to clean and inspect all NBC interceptors. This program includes TV inspection of all interceptor sewers in the NBC's service area to determine their condition and to develop 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 from the TV inspections, they will be given a unique project number and draw funding from the funds available in Project 30400M.



Photo: Granite curbing removal from Ocean Street Interceptor

### Project Overview:

Location: Narragansett Bay Commission Service Area  
 Contractor(s): Various  
 Project Manager: Meg Goulet, P.E.  
 Project Priority: B

### Total Project Duration/Cost

Project Phase	Actual/Projected Start Date	Actual/Projected Completion Date	Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Maintenance	July-09	Ongoing	Ongoing	16,000
<b>Total Project</b>	<b>July-09</b>	<b>Ongoing</b>	<b>Ongoing</b>	<b>\$16,000</b>

### Projected Expenditures - Planning

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

### Projected Expenditures - Design

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

### Projected Expenditures - Projects 304 M Summary

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ 228	\$ 307	\$ 183	\$ 183	\$ 183	\$ 183	\$ 183	\$ 183	\$ 1,636
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Maintenance	1,627	1,526	1,651	1,651	1,651	1,651	1,651	1,651	13,061
Contingency	-	-	-	-	-	-	-	-	-
Other	145	167	165	165	165	165	165	165	1,303
<b>Total Project Costs</b>	<b>\$ 2,000</b>	<b>\$ 2,000</b>	<b>\$ 2,000</b>	<b>\$ 2,000</b>	<b>\$ 2,000</b>	<b>\$ 2,000</b>	<b>\$ 2,000</b>	<b>\$ 2,000</b>	<b>\$ 16,000</b>



## 30400C Repair and Construction Of CSO Interceptors

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: Removal of abandoned pipe at Atwells Ave. and Valley Street

### Project Overview:

Location: Narragansett Bay Commission Service Area  
 Contractor(s): Various  
 Project Manager: Rich Bernier, P.E.  
 Project Priority: B

### Total Project Duration/Cost

Project Phase	Actual/Projected Start Date	Actual/Projected Completion Date	Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	July-09	Ongoing	Ongoing	12,670
<b>Total Project</b>	<b>July-09</b>	<b>Ongoing</b>	<b>Ongoing</b>	<b>\$12,670</b>

### Projected Expenditures - Planning

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

### Projected Expenditures - Design

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

### Projected Expenditures - 30400C

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ 353	\$ 364	\$ 23	\$ 19	\$ 103	\$ 103	\$ 965
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	2,138	1,973	562	474	2,528	2,528	10,204
Contingency	-	-	257	237	67	57	303	303	1,224
Other	-	-	62	58	15	12	66	66	277
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 2,809</b>	<b>\$ 2,631</b>	<b>\$ 667</b>	<b>\$ 563</b>	<b>\$ 3,000</b>	<b>\$ 3,000</b>	<b>\$ 12,670</b>

## 30417 India Street Siphon Gate House Replacement

Project 30417 is for the construction associated with the India Street Siphon Gate House and seawall replacement. The India Street Siphon Gate House was rebuilt to architecturally match the original structure built one hundred years ago, and the seawall was rebuilt to match the original wall. This project also provides an addition to the structure to house an emergency generator for the CSO Phase I drop shaft gate.



Photo: The Siphon Gate House

### Project Overview:

Location: Providence, RI  
 Contractor(s): Rosciti Construction Company  
 Project Manager: Mark Thomas, P.E.  
 Project Priority: A

### Total Project Duration/Cost

Project Phase	Actual/Projected Start Date	Actual/Projected Completion Date	Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	July-04	August-07	38 Months	\$179
Construction	September-07	September-09	24 Months	975
<b>Total Project</b>	<b>July-04</b>	<b>September-09</b>	<b>63 Months</b>	<b>\$1,154</b>

### Projected Expenditures - Planning

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

### Projected Expenditures - 30417D

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ 37	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 37
Land	-	-	-	-	-	-	-	-	-
A/E Professional	139	-	-	-	-	-	-	-	139
Other	3	-	-	-	-	-	-	-	3
<b>Total Project Costs</b>	<b>\$ 179</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 179</b>

### Projected Expenditures - 30417C

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ 123	\$ 6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 129
Land	-	-	-	-	-	-	-	-	-
A/E Professional	49	-	-	-	-	-	-	-	49
Construction	778	8	-	-	-	-	-	-	785
Contingency	-	10	-	-	-	-	-	-	10
Other	2	-	-	-	-	-	-	-	2
<b>Total Project Costs</b>	<b>\$ 951</b>	<b>\$ 24</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 975</b>

## 30421 Louisquisset Pike Interceptor Replacement

The Facilities Plan for project 30421 identified wet weather capacity problems with the Louisquisset Interceptor and recommended that the southern half of the interceptor in Lincoln be replaced with a larger pipe to accommodate present and projected flows.

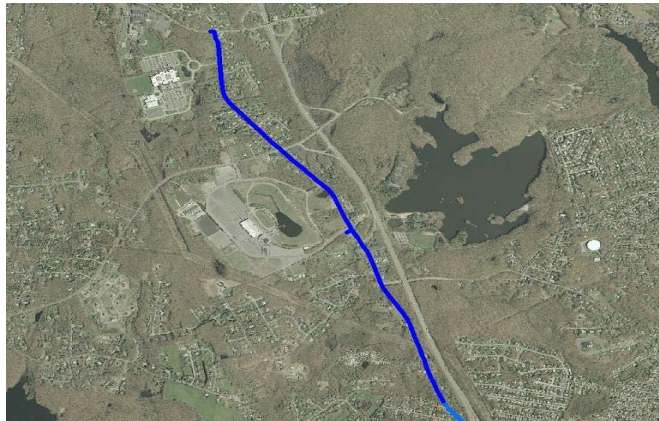


Photo: Proposed portion of Lincoln interceptor replacement

### Project Overview:

Location: Lincoln, RI  
 Contractor(s): Beta Engineering  
 Project Manager: Terry Cote, P.E.  
 Project Priority: B

### Total Project Duration/Cost

Project Phase	Actual/Projected Start Date	Actual/Projected Completion Date	Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	May-07	July-09	26 Months	\$241
Construction	August-09	June-10	10 Months	2,382
<b>Total Project</b>	<b>May-07</b>	<b>June-10</b>	<b>37 Months</b>	<b>\$2,623</b>

### Projected Expenditures - Planning

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

### Projected Expenditures - 30421D

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ 37	\$ 3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 40
Land	-	-	-	-	-	-	-	-	-
A/E Professional	155	-	-	-	-	-	-	-	155
Other	46	-	-	-	-	-	-	-	46
<b>Total Project Costs</b>	<b>\$ 238</b>	<b>\$ 3</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 241</b>

### Projected Expenditures - 30421C

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ 92	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 92
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	50	-	-	-	-	-	-	50
Construction	-	2,000	-	-	-	-	-	-	2,000
Contingency	-	240	-	-	-	-	-	-	240
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ 2,382</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 2,382</b>

## 30444 Moshassuck Valley Interceptor

Recent inspection of 2,600 feet of the Moshassuck Valley Interceptor from Higginson Street in Central Falls to Lockbridge Street in Providence revealed that this line has sunk from its original grade at numerous points, by as much as 2.5 feet. This settling is causing maintenance problems, and accumulation of grease and may result in structural problems as well. This project would replace this line in the public right of way.



Photo: Portion of the sinking Moshassuck Valley Interceptor

### Project Overview:

Location: Providence, RI  
 Contractor(s): N/A  
 Project Manager: Tom Brueckner, P.E.  
 Project Priority: C

### Total Project Duration/Cost

Project Phase	Actual/Projected Start Date	Actual/Projected Completion Date	Duration	Cost (in Thousands)
Planning	May-06	October-06	6 Months	22
Design	September-10	March-12	18 Months	\$523
Construction	July-12	November-13	16 Months	4,772
<b>Total Project</b>	<b>May-06</b>	<b>November-13</b>	<b>91 Months</b>	<b>\$5,317</b>

### Projected Expenditures - 30444P

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ 2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2
A/E Professional	20	-	-	-	-	-	-	-	20
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ 22</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 22</b>

### Projected Expenditures - 30444D

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ 24	\$ 67	\$ -	\$ -	\$ -	\$ -	\$ 91
Land	-	-	-	30	-	-	-	-	30
A/E Professional	-	-	132	268	-	-	-	-	400
Other	-	-	-	2	-	-	-	-	2
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 156</b>	<b>\$ 367</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 523</b>

### Projected Expenditures - 30444C

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ 2	\$ 110	\$ 80	\$ -	\$ -	\$ 192
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	55	45	-	-	100
Construction	-	-	-	-	2,168	1,832	-	-	4,000
Contingency	-	-	-	-	-	480	-	-	480
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 2</b>	<b>\$ 2,333</b>	<b>\$ 2,437</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 4,772</b>

## 30451C Improvements to NBC Interceptors FY 2008

Locations and work scope in Providence include Pitman Street - remove existing tidegates and weir walls and construct a new weir wall; Narragansett Avenue at Ardoene Avenue - complete two interceptor pipe spot repairs; Atwells Avenue at Valley Street - replace one manhole and approximately 25 ft. of pipe; Ocean Street Regulator - remove the weir wall and plug the interceptor end of 10' pipe; Point Street - reline approximately 570 ft. of pipe. Locations and work scope in Johnston include Borden Street - replace approximately 105 ft. of pipe; Teresa Street - line approximately 450 ft. of 36" pipe in the south interceptor; Glenbridge Street - construct a new diversion structure and manhole, and modify the regulator to connect to the Woonasquatucket River Interceptor (WRI).



Photo: New diversion structure, awaiting a roof cap

### Project Overview:

Location: Providence, RI; Johnston, RI  
Contractor(s): Rosciti Construction Company  
Project Manager: Mark Thomas, P.E.  
Project Priority: A

### Total Project Duration/Cost

Project Phase	Actual/Projected Start Date	Actual/Projected Completion Date	Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	April-08	February-10	22 Months	2,232
<b>Total Project</b>	<b>April-08</b>	<b>February-10</b>	<b>22 Months</b>	<b>\$2,232</b>

### Projected Expenditures - Planning

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

### Projected Expenditures - Design

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

### Projected Expenditures - 30451C

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ 302	\$ 1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 303
Land	15	-	-	-	-	-	-	-	15
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	1,601	187	-	-	-	-	-	-	1,788
Contingency	-	101	-	-	-	-	-	-	101
Other	25	-	-	-	-	-	-	-	25
<b>Total Project Costs</b>	<b>\$ 1,943</b>	<b>\$ 289</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 2,232</b>



## 30452C Improvements to NBC Interceptors FY 2009

Project 304.52C will line approximately 9,800 linear feet of various size interceptors, both sanitary and CSO, to eliminate infiltration problems. Locations in South Providence include Hamilton Street, Sumter Avenue, Melrose Street and Longfellow Street.

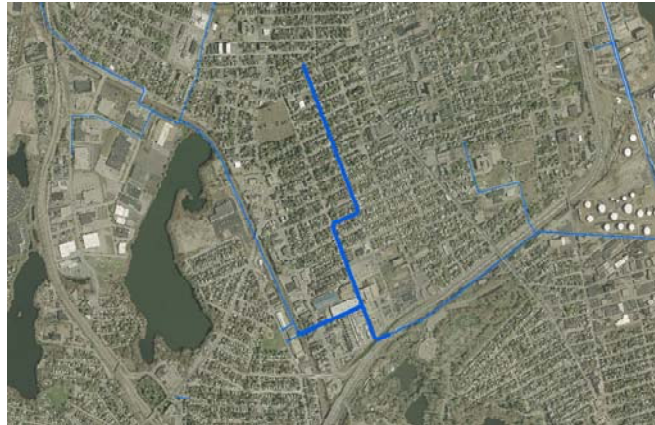


Photo: South Providence Interceptor repair locations

### Project Overview:

Location: Providence, RI  
 Contractor(s): N/A  
 Project Manager: Mark Thomas, P.E.  
 Project Priority: A

### Total Project Duration/Cost

Project Phase	Actual/Projected Start Date	Actual/Projected Completion Date	Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	March-09	January-11	22 Months	4,307
<b>Total Project</b>	<b>March-09</b>	<b>January-11</b>	<b>22 Months</b>	<b>\$4,307</b>

### Projected Expenditures - Planning

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

### Projected Expenditures - Design

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Project Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

### Projected Expenditures - 30452C

Cost Category	Pre-FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Post-FY 2015	Total
Administrative	\$ 38	\$ 314	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 352
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	3,465	35	-	-	-	-	-	3,500
Contingency	-	420	-	-	-	-	-	-	420
Other	3	32	-	-	-	-	-	-	35
<b>Total Project Costs</b>	<b>\$ 41</b>	<b>\$ 4,231</b>	<b>\$ 35</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 4,307</b>

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# Appendix

