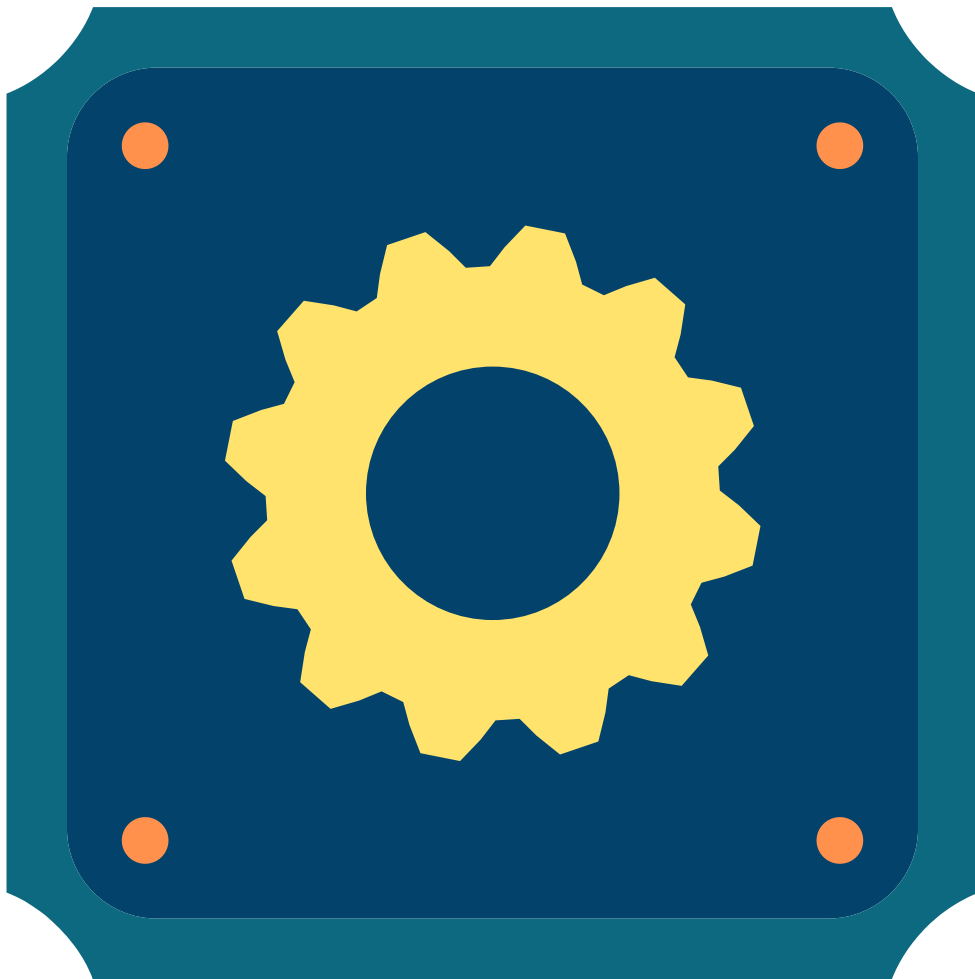


# Narragansett Bay Commission

CAPITAL IMPROVEMENT PROGRAM



FY 2022-2026

Vincent J. Mesolella  
Chairman



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Executive Director



# Capital Improvement Program

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## Capital Projects Summary for Fiscal Years 2022-2026

(In Thousands)

Project Number	Project Name	Fiscal Years 2022-2026
<b>Wastewater Treatment Facility Improvements</b>		
13200	FPWWTF Maintenance Facilities	\$ 10,882
20000	WWTF Improvements	1,000
20200	FY 2019 WWTF Improvements	2,173
20300	FY 2020 WWTF Improvements	4,076
40100	NBC Facility Electrical Improvements	16
40101	FPWWTF Electrical Improvements	2,147
81000	BPWWTF UV Disinfection Improvements	11,503
81600	BPWWTF Improvements	4,137
81700	BPWWTF Operations & Maintenance Buildings	19,446
90900	COB Facilities Improvements	19
	<i>Subtotal</i>	55,399
<b>Infrastructure Management</b>		
1140100	River Model Development	68
1140300	Greenhouse Gas Study	35
1140500	NBC Energy Sustainability	183
1140600	RIPDES Compliance Improvements	255
1140700	NBC Long Range Residual Solids Management Study	77
30700	NBC System-wide Facilities Planning	218
40200	NBC System-wide Inflow Reduction	702
40300	Municipal Lateral Sewer Acquisition Impact	300
40400	FPWWTF Facilities Plan Update	38
	<i>Subtotal</i>	1,875
<b>CSO Phase III Facilities</b>		
30800	CSO Phase III A Facilities	8,443
30801	CSO Phase III A Facilities - Pawtucket Tunnel & Pump Station	329,624
30802	CSO Phase III A Facilities - Tunnel Pump Station Fit-out	82,193
30803	CSO Phase III A Facilities - OF 205	6,231
30804	CSO Phase III A Facilities - OF 210, 213, 214	12,309
30805	CSO Phase III A Facilities - OF 217	18,909
30806	CSO Phase III A Facilities - OF 218	8,422
30807	CSO Phase III A Facilities - Regulator Modifications	1,360
30809	CSO Phase III A - GSI Projects	26
30810	CSO Phase III A Facilities - BPWWTF Clarifiers and Flow Splitters	45,901
	<i>Subtotal</i>	513,418
<b>Sewer System Improvements</b>		
12400	IM Facilities	6,895
12450	IM Storage Building	3,351
30500	NBC Interceptor Easements Restoration, Various Locations	1,071
30610	NBC System-wide Regulator Modifications	2,589
70900	Omega Pump Station Upgrade	1,972
71000	Lincoln Septage Station Replacement	3,417
	<i>Subtotal</i>	19,295
<b>Interceptor Cleaning/Restoration and Construction</b>		
30400M	Interceptor Inspection and Cleaning	2,500
30400C	Interceptor Restoration and Construction	6,000
30315	CSO Phase II - WCSOI OF 046	2,720
30421	Louisquisset Pike Interceptor Improvements	4,765
	<i>Subtotal</i>	15,985
<b>Total Capital Improvement Program Window</b>		<b>\$ 605,972</b>

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# Capital Improvement Program

The Narragansett Bay Commission’s (NBC) Capital Improvement Program (CIP) is a planning document which identifies programmed capital investments necessary to comply with current and future regulatory requirements, take advantage of technological advancements, ensure the integrity of NBC’s infrastructure and achieve operational efficiencies. The projects, schedules and costs that are included in the CIP have been developed through a planning process that involves NBC’s Engineering and Construction staff and incorporates needs identified through NBC’s asset management program. These capital improvements include construction of new facilities and rehabilitation and replacement of existing infrastructure, as well as energy efficiency and sustainability projects. The CIP shows programmed expenditures for the current Fiscal Year (FY) 2021 as well as the following five-year period of FY 2022-2026, which is referred to in this document as the “window”. Structuring the CIP this way enables NBC’s program to be easily incorporated into the State of Rhode Island’s capital budget.



*Photo: Seekonk River*

## Capital Improvement Program Overview

This year’s CIP identifies a total of 51 projects that are either in progress, to be initiated, or to be completed during FY 2021-2026. The estimated costs for this year’s CIP window are \$606.0 million, with additional expenditures of \$52.7 million in FY 2021 for a total of \$658.7 million. The majority or 85% of the expenditures are related to the third and final phase of the Combined Sewer Overflow (CSO) Abatement Facilities. Other projects account for the remaining 15% of the CIP and reflect the continued investment in NBC’s wastewater treatment and collection system infrastructure.

### FY 2021-2026 CIP Costs (In thousands)

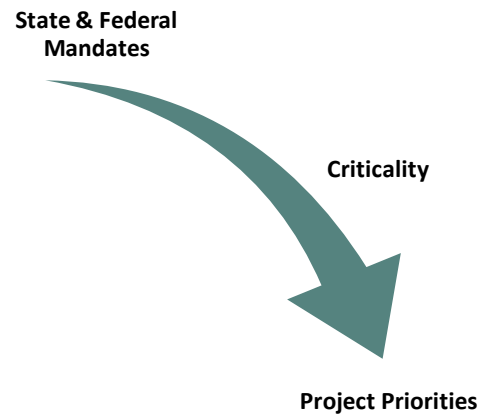
Category	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2022-2026	Total
<b>Administrative</b>	\$ 3,573	\$ 4,364	\$ 4,490	\$ 3,229	\$ 2,371	\$ 1,055	\$ 15,508	\$ 19,082
<b>Land</b>	175	25	-	-	-	-	25	200
<b>A/E Professional</b>	19,657	19,328	13,985	12,692	10,108	2,364	58,476	78,133
<b>Construction</b>	26,640	111,556	135,491	115,708	103,713	28,473	494,941	521,581
<b>Contingency</b>	1,273	6,294	4,536	3,724	3,049	2,406	20,008	21,281
<b>Other</b>	1,413	3,450	5,187	4,962	3,265	150	17,014	18,427
<b>Total</b>	<b>\$ 52,732</b>	<b>\$ 145,016</b>	<b>\$ 163,687</b>	<b>\$ 140,315</b>	<b>\$ 122,506</b>	<b>\$ 34,447</b>	<b>\$ 605,972</b>	<b>\$ 658,703</b>

The CIP document reflects all phases of a construction project, including planning and design, as a single project. In addition, for planning purposes, projects that are substantially complete with only retainage and/or “punch-list” items remaining are considered complete and are not carried in the CIP summary or detailed project listing. These projects are, however, discussed in the completed projects section of the CIP that begins on page 10. The CIP projects are also identified by classifications which rank them in terms of priority. The CIP includes additional information regarding changes in the CIP from the prior year, new projects and the projected operating budget impact of each project.

## Capital Improvement Program Development

NBC’s comprehensive capital improvement planning process takes into consideration the project’s relationship to the strategic plan, program priorities, the permitting process, project readiness, scheduling and other factors. The CIP drives NBC’s long-term financing requirements, and therefore the particulars of each project are an essential component of NBC’s financial plan.

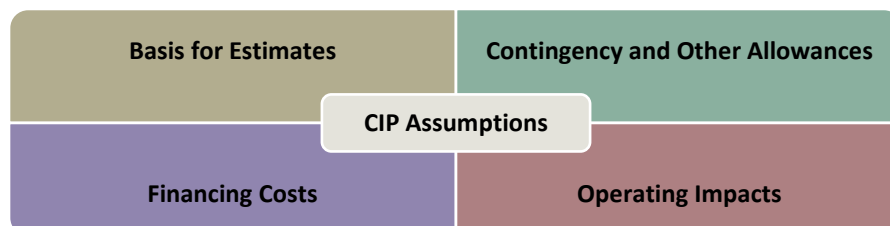
NBC’s Project Managers begin the annual CIP process with the development of detailed justifications for each capital project including project scope, basis for the cost estimate and key factors impacting costs and schedules. The Project Managers also explain modifications from the prior year’s CIP and provide the overall project schedule. A timeline with all the detailed project schedules can be found in the Appendix. The CIP Review Committee reviews the proposed capital projects including the assignment of priorities and schedules. Projects approved for inclusion in the CIP are subsequently analyzed to assess major program changes, overall capital funding needs, the strength of the project’s connection to the objectives in NBC’s Strategic Plan, as well as financing and operating cost impacts.



## Capital Improvement Program Assumptions

The costs and schedules included in this year’s CIP reflect NBC’s best estimates and are based on several assumptions as follows:

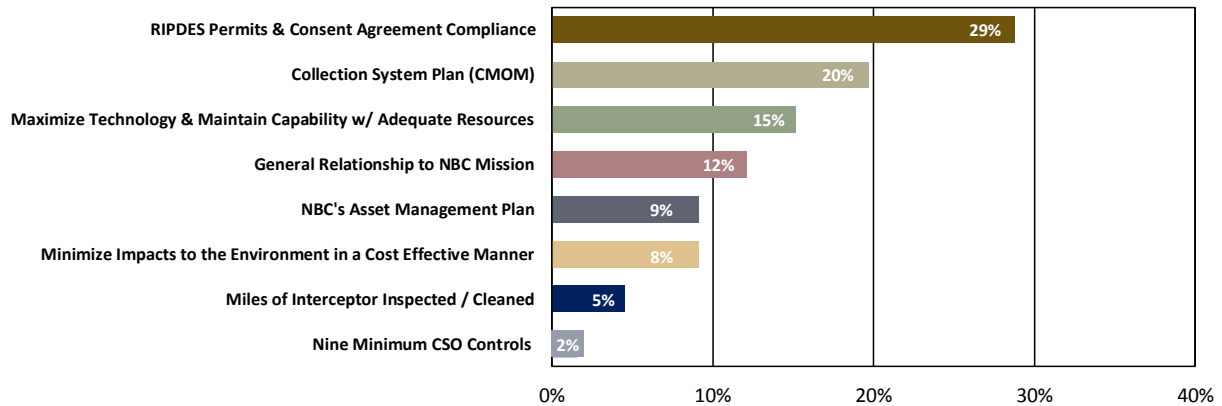
- Costs and cash flows are based on planning or design estimates and/or bids once available.
- The majority of construction projects include a 10% contingency based on the original construction cost estimate, which reflects recent industry experience. CSO Phase III A cost estimates include a 15% contingency based on the recommendation of the design engineer and the complexity of the project. Project contingencies may be subsequently modified based upon the bids. Cost estimates for new design and construction projects include a 7% allowance for NBC staff salary and fringe associated with project management, based on historical experience.
- Financing costs and debt service associated with the CIP are not included in the CIP expenditures or the project cash flows. Financing costs are capitalized and amortized over the length of the debt payment schedule and debt service is included as an expense in the annual operating budget.
- The CIP does not include the acquisition or replacement of certain assets included in the five-year Operating Capital Program as part of the Capital Budget.
- Impacts of CIP projects on the Operating Budget are estimated based on prior experience and engineering estimates.





## Capital Projects by Strategic Objective

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

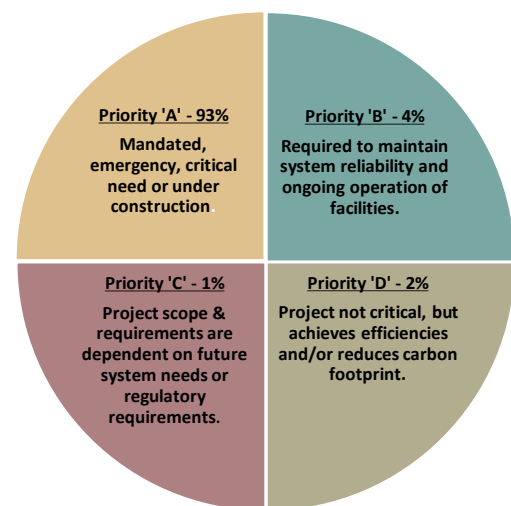


Of the 51 CIP projects, the highest percentage, or 29%, are aligned with the RIPDES Permit/RIDEM Consent Agreement strategic objective. NBC’s Collection System Plan strategic objective, which includes interceptor restoration and construction projects, comprises 20% of the projects in the CIP while 15% of the projects are aligned with Maximizing Technology & Maintaining Capability with Adequate Resources objective. The remaining projects are aligned with General Relationship to NBC Mission, NBC’s Asset Management Plan, Minimize Impacts to the Environment in a Cost-Effective Manner, Miles of Interceptor Inspected/Cleaned and CSO Controls objectives.

## Capital Project by Priority

As part of the CIP program development, a priority ranking is assigned based on an assessment of the project’s criticality. Projects with a priority ranking of “A” represent a critical need and are either mandated, an emergency or currently under construction. Approximately 93% of the project costs identified in the window are prioritized with an “A” ranking with a total estimated cost of \$565.0 million.

In addition, 4% or \$25.0 million are identified with a “B” priority ranking, which includes projects that are required to maintain systems reliability and ongoing operations of facilities. Projects with a priority ranking of “C” are dependent on future system needs or regulatory requirements and represent 1% or \$7.1 million. The remaining 2% or \$9.3 million are ranked as priority “D” and include projects that are not critical but achieve efficiencies and/or reduce NBC’s carbon footprint.



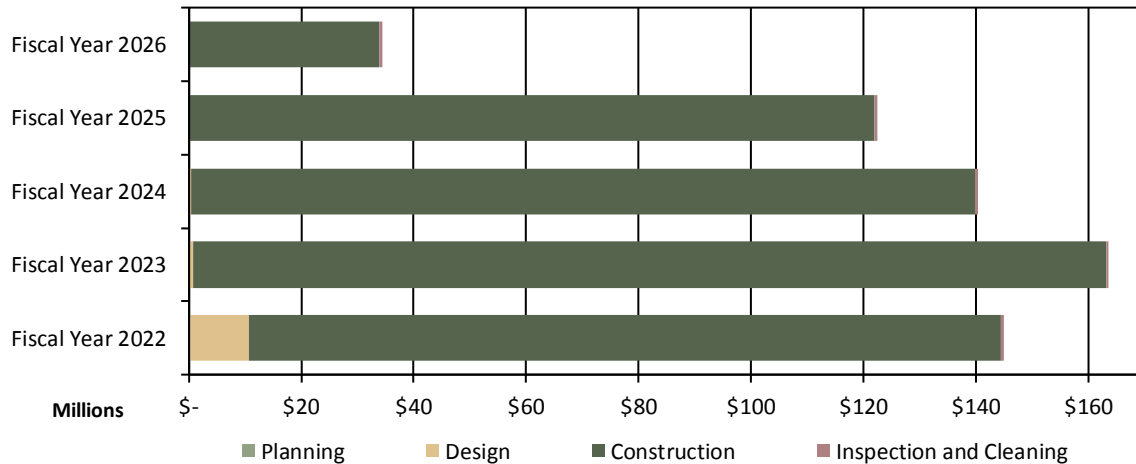
\*Percentage calculated on project cost

## Capital Expenditure by Phase

NBC’s construction projects are generally comprised of three phases including planning, design, and construction. Planning consists of tasks such as feasibility studies and determination of the technology to be implemented. The design phase includes the development of plans and specifications and the acquisition of

easements and permits. During the construction phase, facility improvements and infrastructure are constructed. The CIP also includes some programmed capital projects which are not broken down into phases, such as the inspection, cleaning, and repair of NBC’s interceptors, or other one-time special studies. As is evident in the chart below, the majority, or 98% of the programmed expenditures during the five-year CIP window, relate to the construction phase at \$591.7 million.

### Capital Expenditure by Phase

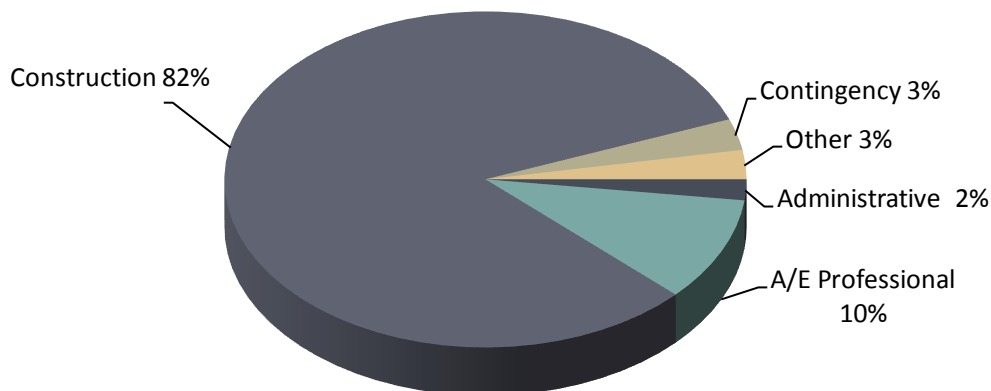


### Capital Expenditure by Cost Category

For planning purposes, the project costs are shown by categories including the Administrative category, which includes NBC’s project management costs as well as police, legal and advertising expense. The Architectural/Engineering (A/E) Professional cost category includes costs for professional planning or design services. The Construction cost category reflects contractor and outside construction management costs. Lastly, the Contingency cost category includes an allowance for construction cost increases based upon industry experience related to construction cost factors.

As shown in the chart below, Construction costs represent \$495.0 million or approximately 82% of the total costs within the FY 2022-2026 window. A/E Professional services represent approximately \$58.5 million or 10% of the costs during this same period.

### CIP Costs by Type of Activity



## Capital Expenditures by Functional Area

For planning purposes, NBC also groups capital projects into functional areas, according to the scope and tasks involved with the capital project. The functional areas are described below.

Functional Area	Project Examples
Wastewater Treatment Facilities (WWTF)	UV Disinfection, Maintenance and Storage Facilities, WWTF Improvements
Infrastructure Management (IM)	Special Studies, Energy Sustainability, Flow Monitoring, RIPDES Compliance Improvements
CSO Phase III Facilities	CSO Phase III A, B, C and D
Sewer System Improvements	Easement Restoration, Sewer System and Pump Station Improvements
Interceptor Inspection & Cleaning (IIC)	Remote Television Inspections, Grit/Debris Removal and Disposal
Interceptor Repair & Construction (IRC)	Expansion, Improvements, and Lining of Interceptors and Manhole Rehabilitation

The following table shows how the CIP costs have shifted by functional area on a year-to-year basis. It is important to note that subsequent to the Board's approval of last year's CIP, costs for the CSO Phase III A Facilities and Bucklin Point Resiliency Improvements were adjusted to reflect changes made during the development of an application for funding through the United States Environmental Protection Agency (EPA) Water Infrastructure Finance Innovation Act (WIFIA) program. In particular, the CSO Phase III A costs were inflated from 2018 dollars to the construction start date of each sub-project for an increase of \$44.4 million. In addition, smaller projects and newly identified needs at Bucklin Point were consolidated into a single Bucklin Point Resiliency project, increasing the costs by \$7.5 million. As a result of these two changes, last year's CIP increased from \$507.1 million to \$558.9 million.

### Expenditures by Functional Area (In Thousands)

Functional Area (In thousands)	2021-2025 CIP	WIFIA Adjustment	2021-2025 Adjusted CIP	2022-2026 CIP	Change	% Change
Wastewater Treatment Facility	\$ 39,138	\$ 7,453	\$ 46,591	\$ 55,399	\$ 8,808	19%
Infrastructure Management	1,999	-	1,999	1,875	(124)	(6%)
CSO Phase III A Facilities	446,303	44,357	490,660	513,418	22,757	5%
Sewer System Improvements	4,974	-	4,974	19,295	14,321	288%
Interceptor Inspection and Cleaning	2,500	-	2,500	2,500	-	0%
Interceptor Restoration and Construction	12,204	-	12,204	13,485	1,281	10%
<b>Total</b>	<b>\$ 507,118</b>	<b>\$ 51,810</b>	<b>\$ 558,928</b>	<b>\$ 605,972</b>	<b>\$ 47,043</b>	<b>8%</b>

On a year-to-year basis, the most significant percentage change is a 288% increase in the Sewer System Improvements category. This is due to the new Interceptor Maintenance (IM) Storage Building and Systemwide Regulator Modifications projects and the recategorization of the IM Facilities project from the Wastewater Treatment Facility category. The Wastewater Treatment Facility category increased 19% due to the new FY 2020 WWTF Improvements project and scope changes to existing projects. The Interceptor Restoration and Construction category shows a 10% increase over the prior year due additional programmed expenditures in FY 2023. In terms of total dollars, the CSO Phase III A Facilities are \$22.8 million higher than the adjusted CIP due to a change in scope of contract 30810, Clarifiers and Flow Splitters. Lastly, the Infrastructure Management functional area shows a decrease of 6% from the prior year. Overall, programmed expenditures are \$47.0 million or 8% higher than the prior year adjusted CIP.

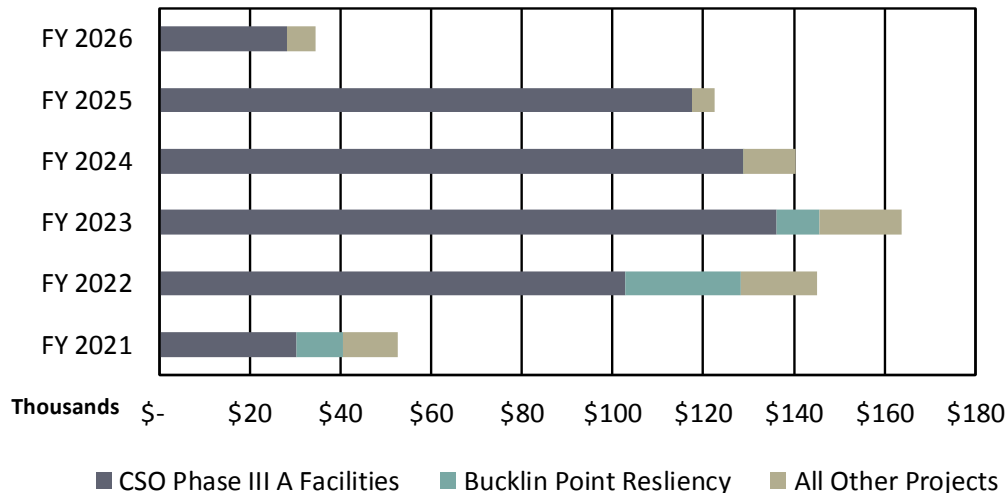
## Significant Capital Improvement Projects

The most significant project included in this year's CIP is the CSO Phase III A Facilities which comprise \$513.4 million or 85% of the CIP's programmed costs. Expenditures on this project are expected to significantly increase when construction begins in FY 2022. The Bucklin Point Resiliency Project at \$35.1 million or 6% is the second largest project in the CIP. Other projects account for the remaining 9% of the CIP programmed costs. These projects include several new projects such as an IM Storage Building, Maintenance Facilities at Field's Point, Septage Receiving Station and Interceptor Improvements. The following table and graph show the programmed expenditures for the major projects included in the CIP window.

### Expenditures by Major Project

(In Thousands)

Project	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2022- 2026	Percent
CSO Phase III A Facilities	\$ 30,320	\$ 102,920	\$ 136,059	\$ 128,855	\$ 117,431	\$ 28,153	\$ 513,418	85%
Bucklin Point Resiliency	10,165	25,486	9,505	95	-	-	35,087	6%
All Other Projects	12,247	16,610	18,123	11,365	5,075	6,295	57,467	9%
<b>Total</b>	<b>\$ 52,732</b>	<b>\$ 145,016</b>	<b>\$ 163,687</b>	<b>\$ 140,315</b>	<b>\$ 122,506</b>	<b>\$ 34,447</b>	<b>\$ 605,972</b>	



Overall, the total programmed expenditures for non-CSO projects has increased by \$47.9 million compared to the prior year's CIP, as shown in the table below.

### Year-over-Year Difference in the Non-CSO Capital Improvement Program by Major Project

(in Thousands)

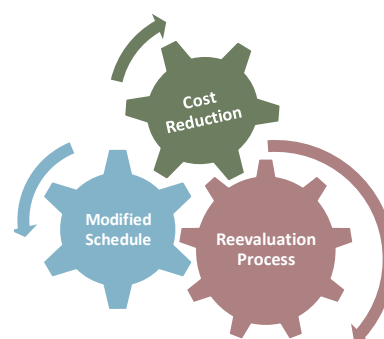
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
Bucklin Point Resiliency	\$ 5,471	\$ 10,184	\$ 6,380	\$ 95	\$ -	\$ 22,130
All other Projects	3,017	6,774	10,564	5,278	94	25,727
<b>Total Change Non-CSO Projects</b>	<b>\$ 8,488</b>	<b>\$ 16,958</b>	<b>\$ 16,944</b>	<b>\$ 5,373</b>	<b>\$ 94</b>	<b>\$ 47,857</b>
<b>Percentage Change in Non-CSO Projects</b>	<b>61%</b>	<b>67%</b>	<b>159%</b>	<b>88%</b>	<b>2%</b>	<b>79%</b>

## CSO Phase III Facilities (Project 308)

NBC is under a Consent Agreement with RIDEM to implement a federally mandated CSO Program that will address the Commission’s 65 CSOs in both the Field’s Point and Bucklin Point service areas. The CSO Program will be completed in three phases. The first phase was the construction of the Phase I facilities (the Main Spine tunnel, drop shafts, and pump station) at a cost of approximately \$360 million. Construction of the Phase I facilities began in June 2001 and became operational in October 2008. The Commission completed design of the CSO Phase II Facilities in 2010. Construction began in September 2011 and the facilities were placed in service by December 31, 2015.

NBC initiated the reevaluation of the Phase III Facilities in January 2014 with a focus on affordability issues, an evaluation of the significant improvements in water quality achieved through the first two phases, use of an integrated approach and an investigation of “green” technologies to determine if the third phase facilities, as originally developed, remained the most cost effective approach.

Several alternatives were developed through this reevaluation process and a series of Stakeholder meetings were held to evaluate the alternatives and financial impacts. The affordability analysis based upon EPA criteria was thoroughly conducted to evaluate ratepayer impact on the various communities and census tracts in NBC’s service area. The Commission selected an alternative on April 28, 2015 and the final revaluation report was approved by RIDEM in December 2017. The Environmental Assessment (“EA”) which was part of the Phase III evaluation was also approved in December 2017. NBC’s Consent Agreement has been renegotiated based upon the approved plan.



As a result of the reevaluation process, the Phase III CSO Program was subdivided into four phases to be completed by 2041. The program also incorporates Green Stormwater Infrastructure (GSI) facilities to be constructed in each of the four phases to reduce stormwater inflow to the existing CSO system by implementing stormwater infiltration projects, with expenditures of \$10 million on GSI in each phase

The latest total pre-design estimate, which includes “other” costs (NBC labor, police, etc.), for the four phases of the CSO Phase III Facilities is \$855.7 million. A description of the facilities, estimated cost, start and completion dates for each of the four phases are as follows.

### CSO Phase III Program

Phase	Scope	Amount *	Start	Completion
<b>Phase III A</b>	Design and construction of a 11,700 foot long deep rock tunnel in Pawtucket, a tunnel pump station to convey flow to the Bucklin Point WWTF, drop shafts and consolidation conduits and improvements to the Bucklin Point WWTF. Also included is design of the Phase III B facilities.	\$ 579.0	4/1/2013	1/31/2027
<b>Phase III B</b>	Construction of two interceptors approximately 4,200 feet and 2,000 feet in Central Falls to convey flow to the tunnel constructed in Phase III A, GSI facilities to reduce storm inflow to the CSO, and a sewer separation project.	\$ 28.5	12/1/2027	12/1/2030
<b>Phase III C</b>	Design and construction of a stub tunnel that will convey flow from CSO OF 220 to the Pawtucket tunnel constructed in Phase III A.	\$ 164.7	5/1/2032	6/30/2037
<b>Phase III D</b>	Design and construction of an interceptor to store flow from OF 039 and OF 056 and release flow as capacity allows.	\$ 83.5	4/1/2037	12/1/2041
<b>Total</b>		\$ 855.7		

\* Excludes costs incurred prior to FY 2020

## Phase III A Facilities

The Phase III A Facilities (the “Program”) consist of thirteen separate construction projects that are at different stages of completion. The following table shows the CSO Phase III A construction projects, their estimated cost, construction start and end dates, as well as the percent complete.

### CSO Phase III A Facilities by Project

(in Thousands)

Project Number	Project Name	Estimated Cost	Construction Start Date	Construction End Date	% Complete
30801	CSO Phase III A Pawtucket Tunnel & Pump Station	335,766	Dec-20	Feb-25	0%
30802	CSO Phase III A Tunnel Pump Station Fit-out	82,704	Feb-23	Apr-26	0%
30803	CSO Phase III A OF 205	6,230	May-23	Jan-25	0%
30804	CSO Phase III A OF 210,213,214	12,309	Jan-24	Dec-25	0%
30805	CSO Phase III A OF 217	18,910	Oct-21	Jul-23	0%
30806	CSO Phase III A OF 218	8,423	Mar-24	Dec-25	0%
30807	CSO Phase III A Regulator Modifications	1,988	Jan-21	Jun-22	0%
30808	CSO Phase III A GSI Demonstration	1,834	Sep-19	Apr-21	38%
30809	CSO Phase III A GSI Projects	5,703	Nov-19	Jul-21	20%
30810	CSO Phase III A BPWWTF Clarifiers & Flow Splitters	46,333	Apr-21	Aug-23	0%
30811	CSO Phase III A High Street Demo	199	Nov-18	Dec-19	100%
30812	CSO Phase III A Dexter St. Stormwater Infrastructure	1,481	Oct-20	Jun-21	0%
30813	CSO Phase III A Site Demolition	4,779	May-20	Nov-20	0%
<b>Total</b>		<b>\$ 526,659</b>			

The single largest project is the Pawtucket Tunnel and Pump Station Project (30801) at a pre-design estimated cost of \$335.8 million. Due to the technical complexity of the project, NBC is using a design-build approach as opposed to the traditional design-bid-build process. The Program Manager is assisting NBC with this process. NBC issued a Request for Qualifications in August 2019 and short-listed three firms in December 2019. These three firms were invited to participate in a Request for Proposals due in June 2020. In February 2020, one of the short-listed firms notified NBC that they were not going to participate in that process. The Board of Commissioners (the “Board”) plans to award the contract to one of the two remaining pre-qualified firms in September 2020. The current schedule projects that selected firm will be given the Notice to Proceed near the end of calendar year 2020.

Design of all other construction projects as well as Program Management, and land acquisition is reflected separately in Project 30800. Two of the projects are under construction including the GSI Demonstration Project (30808) and the GSI Project (30809). The High Street Demolition (30811) is complete. The remaining projects are in the design phase.

NBC applied for and received a loan from the United States Environmental Protection Agency through the Water Infrastructure Financing Innovation Act (WIFIA) program for the CSO Phase III A Facilities. NBC closed on the loan in August 2019, in an original principal amount for 49% of the total project costs or \$268.7 million at a rate of 1.89%. NBC must finance the remaining 51% through other sources. The current estimated construction cost is \$24.3 million higher than the costs reflected in NBC’s WIFIA application. The most significant change is due to design work that resulted in the modification of the scope of the Bucklin Point Wastewater Treatment Facilities Clarifiers and Flow Splitters Project (30810). The change in scope increased the estimated cost for that project by \$24.2 million. These costs were offset by slightly lower costs for those projects in construction or completed construction.



## Bucklin Point Resiliency Improvements

Bucklin Point Resiliency Improvements have been identified as part of NBC’s resiliency planning process. NBC has submitted a Letter of Interest with United States Environmental Protection Agency (EPA) for Water Infrastructure Finance and Innovation (WIFIA) funding and was invited to apply for WIFIA funding. The Bucklin Point Resiliency Improvements consists of three projects as is shown in the following table.

### Bucklin Point Resiliency Improvements

Project Number	Project Name	Costs (in Thousands)
81000	BPWWTF UV Disinfection Improvements	\$ 12,973
81600	BPWWTF Improvements	5,380
81700	BPWWTF Operations and Maintenance Buildings	28,274
		<b>\$ 46,627</b>



*Photo: Bucklin Point WWTF*

Project (81700) consists of both a new Operations Building and a new Maintenance Building. The current facilities are more than 70 years old and are inadequate. This project involves the relocation of the critical Supervisory Control and Data Acquisition (SCADA) computer system to an environmentally controlled space at a higher elevation to ensure the reliable operation of critical process streams. In addition, the new Operations building will contain office space, a training area and locker rooms. A new Maintenance Building is also needed as the existing building is too small for the growing needs of BPWWTF. The new building will provide storage and include a repair workshop for heavy equipment. It will also include new electrical,

welding and instrumentation rooms along with offices and a briefing room for the maintenance staff. The Ultraviolet (UV) Disinfection Improvements Project (81000) includes replacement of the UV disinfection equipment with an energy efficient system along with the construction of a new building to house the system. Lastly, the BPWWTF Improvements Project (81600) involves the installation of a redundant power system, as well as the repair or replacement of boilers, hydronic piping systems, and isolation gates. Other improvements include modifications to HVAC systems and various electrical manhole dewatering sump pump systems.

## Wastewater Treatment Facility Improvements

This year’s CIP includes \$29.8 million in programmed funding for other projects related to NBC’s wastewater treatment facilities. In particular, the FPWWTF Maintenance Building Project (13200) at an estimated cost of \$11.1 million is needed to improve efficiency in maintenance support since the existing building was originally built in 1900 and is insufficient to meet the needs of operations. The FY 2020 WWTF Improvements Project (20300) focuses on improvements and upgrades to the Field’s Point WWTF and Ernest Street Pump Station (ESPS). These include the evaluation and design of improvements to the disinfection and dichlorination systems at the ESPS, a new transformer south of the Pretreatment Building and replacement of the 30-year old plant water automatic. This project also includes handrail installation on the Blower/Screw Lift and Primary Pump Station buildings and the replacement of the HVAC unit at the Gravity Thickener Pump Station.



*Photo: Water Automatic Strainer*



*Photo: Field's Point Electrical Facility*

This year's CIP also includes two projects to ensure the integrity of electrical equipment and facilities. The NBC Facilities Electrical Improvements Project (40100) at a cost of \$265 thousand involves the evaluation of existing electrical equipment and facilities along with the identification and implementation of improvements needed to ensure reliable, continuous operation. The FPWWTF Electrical Improvements Project (40101) at a cost of \$2.4 million consist of the assessment and installation of standby power capabilities for critical facilities and the upgrade or replacement of the electrical and control systems at Field's Point.

This year's CIP also includes the Corporate Office Building (COB) Improvements Project (90900) at a cost of \$5.0 million which encompasses improvements, renovation and reconfiguration of the COB to address aging facilities and organizational needs. This project also includes minor modifications to the Water Quality Science Building to accommodate the relocation of staff.

On a systemwide basis, NBC continues to program \$500 thousand annually for wastewater treatment facility improvements. This is to ensure resources are available in years to maintain the integrity of the treatment facilities even if specific projects are not identified.

The following table shows the total cost for the other wastewater treatment facility improvement projects.

Project Number	Project Name	Costs (in Thousands)
13200	FPWWTF Maintenance Facilities	\$ 11,060
20000	WWTF Improvements	1,500
20200	FY 2019 WWTF Improvements	5,260
20300	FY 2020 WWTF Improvements	4,384
40100	NBC Facility Electrical Improvements	265
40101	FPWWTF Electrical Improvements	2,387
90900	COB Facilities Improvements	4,991
<i>Total</i>		<u>\$ 29,847</u>

### Collection System Infrastructure

This CIP includes several collection system infrastructure projects totaling \$37.6 million. The major projects include the replacement of the Moshassuck Valley Interceptor Project (30444) at a cost of \$13.3 million and increasing the capacity of the Louisquisset Pike Interceptor Project (30421) at a cost of \$4.9 million. Also included is CSO Phase II – WCSOI OF 046 Project (30315) at \$3.9 million, which is required to eliminate surcharging from the Woonasquatucket CSO Interceptor during extreme wet weather events.



*Photo: Collection System Infrastructure Repair*

With respect to overall collection system infrastructure, Improvements to Interceptors FY 2019 Project (30467), at a cost of \$3.6 million, involves the lining of interceptors ranging in size from 8" to 42" as well as the rehabilitation of manholes throughout the NBC service area. The CIP also includes programmed allocations of \$500 thousand for interceptor inspection and cleaning and \$1.5 million for interceptor restoration and construction annually in years that do not have specific projects identified to accommodate new needs that may be identified as part of asset management and inspection.



This year's CIP also includes two projects related to NBC facilities that are required to maintain the collection system. The IM Storage Building Project (12450) at a cost of \$3.7 million is required to address aging infrastructure concerns. The IM Storage Building serves as storage for the IM department's vehicles, equipment and materials such as construction and safety equipment. This building also stores pumps, hoses, sewer plugs, confined space blowers and plant equipment for FPWWTF. The current building has water issues which is causing the facility to deteriorate. The existing structure also has dated electric, fire and security systems and issues with the overhead doors and it has been determined that construction of a new facility is the most appropriate long-term solution. The CIP also has funding programmed for the construction of a new IM Facilities Project (12400) at a cost of \$6.9 million that would be needed should NBC be required by legislation to assume ownership of lateral sewers currently owned by local municipalities within its district.

## Sewer System Improvements



*Lincoln Septage Station*

The CIP also includes funding for the Lincoln Septage Station Replacement Project (71000) at a cost of \$3.7 million to replace the existing 30 year old facility that is well beyond its useful life. The new facility will be design for automatic operation and provide preliminary treatment of septage prior to being discharged into our nearby collection system. There have been numerous technology changes over the years with regards to septage receiving and NBC intends to take advantage of the new advancements in the field and utilize an efficient state-of-the-art

packaged Septage Receiving System, complete with appropriate instrumentation and monitoring devices. The NBC Systemwide Regulator Modifications Project (30610) at \$3.0 million involves the planning, design and construction of various regulator structure modifications to address known hydraulic capacity limitations within NBC collection system and eliminate surcharging at various locations throughout the century old combined sewer system. The CIP also continues to support NBC's Easement Management program with the NBC Easement Restoration Project (30500) at a cost of \$1.3 million. This project involves verifying and clearing easements to ensure sufficient access for NBC to maintain the integrity of the collection system.

## Regulatory Compliance and Planning

Safe and cost-effective biosolids disposal is critical to NBC and this year's CIP includes the Long-Range Residual Solids Management Project (1140700) for the planning and development of a long-term biosolids management solution in anticipation of the termination date of NBC's current contract for biosolids disposal in FY 2026. This will involve the exploration of alternatives and various industry standard residual solids disposal and management practices. This study will also investigate polyfluoroalkyl substances (PFAS) concerns.

This year's CIP includes a RIPDES Compliance Improvements Project (1140600) at a cost of \$1.6 million which includes a study to address metals and an upper bay dissolved oxygen evaluation related to potential nitrogen permit reductions. This project also incorporates the development of a climate resiliency plan that may be required to protect critical functions as part of the RIPDES permit issued by RIDEM.

As part of NBC's environmental performance goals of minimizing environmental impact, NBC has programmed a Green House Gas Study which involves quantifying NBC's overall carbon footprint by measuring the gas emissions from the wastewater collection and treatment process. The results will enable NBC to respond quickly to new emissions regulatory requirements. NBC also plans to maximize energy efficiencies and renewable resources through the Energy Sustainability Program which involves the identification and implementation of conservation methods, improved efficiency and sustainable renewable energy resources.

Project (14000) NBC Solar Carport is another project which will contribute to NBC achieving 100% renewable energy resources. This involves the construction of solar carport in the Water Quality Science Building parking lot. It is estimated to generate \$3,500 from the sale of Renewable Energy Credits and generate approximately 218,282 kWh of electricity.

## Completed and New Capital Projects

### Completed Projects

NBC considers a project complete when the project has been deemed substantially complete and has only retainage and/or “punch list” items remaining. In FY 2020, NBC completed six capital projects at a cost of \$17.3 million shown in the following table:

Project Number	Project Name	Cost (in Thousands)
10908	FPWWTF Blower Improvements Phase II	\$ 8,198
30457	Providence River Siphon	7,733
30503	NBC Interceptor Easements Restoration BVI Wetlands	655
30477	Cleaning & Inspection of Selected Siphons, Various Locations	439
30811	CSO Phase III A - High Street Demolition	199
40500	RIPDES Flow Monitoring System	120
<b>Total</b>		<b>\$ 17,343</b>

The largest project completed last year was the FPWWTF Blower Improvements Phase II Project (10908). This project included the purchase and installation of four new blowers and construction of new blower building completed at a cost of \$8.2 million. The Providence River Siphon Project (30457), which involved replacement of a portion of the 78” interceptor, and repair of the inlet and outlet siphon chambers, was also completed at a cost of \$7.7 million. Several smaller projects were completed including: NBC’s Interceptor Easements Restoration, BVI Wetlands Project (30503) at a cost of \$655 thousand; Cleaning and Inspection of Selected Siphons (30477) at a cost of \$439 thousand; the CSO Phase III A High Street Demolition Project (30811) at a cost of \$199 thousand; and the RIPDES Flow Monitoring Project (40500) was also completed at a cost of \$120 thousand.

### New Projects

This year’s CIP includes eight new capital projects totaling \$13.9 million. The new projects and their estimated costs are summarized in the following table and are discussed below.

Project Number	Project Name	Estimated Cost (in Thousands)
20300	FY 2020 WWTF Improvements	\$ 4,384
12450	IM Storage Building	3,657
30610	NBC System-wide Regulator Modifications	3,021
14000	NBC Solar Carport	1,064
30478	Large Diameter Interceptors Inspection and Cleaning	727
30479	Siphon Inspection and Cleaning	108
40550	RIPDES Flow Monitoring System Implementation	594
1140700	NBC Long Range Residual Solids Management Study	326
<b>Estimated Total</b>		<b>\$ 13,881</b>



**Field's Point**

The FY 2020 WWTF Improvements Project (20300) at a cost of \$4.4 is the largest new project included in the CIP. This project includes replacement of the Gravity Thickener Building odor control unit, improvements to the disinfection and dechlorination systems, new variable frequency drive sludge pumps, the installation of handrails, a new transformer, and other improvements. The need for these improvements was identified through NBC's Asset Management Program and inspection. Construction is expected to begin May 2022.

Another newly identified project is the IM Storage Building Project (12450) at a cost of \$3.7 million. As discussed in the Collection System section of this document, this project involves the construction of a new IM Storage Building to protect the department's vehicles, equipment and material storage needs and plant equipment for Field's Point WWTF. Project (30610), NBC Systemwide Regulator Modifications involves various regulator structure modifications to address known hydraulic capacity limitations within the NBC collection system at an estimated cost of \$3.0 million. The \$1.1 million Solar Carport Project (14000) involves the installation of a solar powered charging station for electric vehicles at the Field's Point campus as part of NBC's sustainability goals. NBC's IM staff continuously performs inspections on NBC's infrastructure and collection system to evaluate pipe condition and identify infrastructure issues. As a result of these inspections, NBC has programmed \$835 thousand for a new Cleaning and Inspection of Large Diameter Interceptors Project (30478) and a Siphon and Inspection Project (30479). This year's CIP includes \$594 thousand for the RIPDES Flow Monitoring System Implementation Project (40550) which involves the replacement of flow monitoring equipment required to accurately monitor and measure systemwide flow conditions. Lastly, the CIP includes funding for Long-Range Residual Solids Management Study at a cost of \$326 thousand and involves the evaluation, planning and development of a reliable long-term sludge management strategy for sludge generated at NBC's WWTFs. The study will explore requirements and relative benefits of various industry standard residual solids disposal and management practices to address NBC's needs.

## Financial Impact

NBC recognizes the importance of planning for capital expenditures and is committed to minimizing ratepayer impact through an assessment of both operating costs and financing impacts. NBC has incorporated an expanded analysis and presentation of these impacts in the CIP. The project specific information is included in the following discussion rather than on the individual project sheets. Certain capital improvements will directly impact the operating budget either through increased revenue, increased expense, or cost savings. NBC has identified these impacts on a project by project basis. The following table describes the impact categories and should be used to interpret the figures in the detailed operating impact tables in this section of the CIP.

Impact	Description	Reflection in Tables
Savings	A reduction in operating costs resulting from no longer operating facilities, reduced energy consumption, and/or the purchase of electricity	Shown as a reduction in Operating Costs
Increased Expense	An increase in operating costs resulting from new facilities becoming operational	Shown as an increase in Operating Costs
Increased Revenue	An increase in revenue through new user charges, incentives, and/or the sale of Renewable Energy Credits	Shown as an increase in Operating Revenue or Non-Operating Revenue

## FY 2022-2026 Revenue and Expense Impacts

The following table summarizes the projected impact of new capital projects scheduled to become operational in FY 2021-2026. Projects that involve inspection, studies, cleaning and rehabilitation generally do not have operating cost impacts and are excluded from this list. In FY 2026, the estimated impact as a result of these projects is increased annual revenue of \$272,110, savings of \$224,333 and increase in expense of \$275,186. Projects with revenue, savings or expense impacts are discussed in the following section.

	Incremental CIP Impacts					
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
<b>Increased Revenue</b>						
NBC Solar Carport	\$ 3,500	\$ 3,500	\$ 3,500	\$ 3,500	\$ 3,500	\$ 3,500
Louisquisset Pike Interceptor Replacement	-	22,384	268,610	268,610	268,610	268,610
<b>Revenue Impact</b>	<b>\$ 3,500</b>	<b>\$ 25,884</b>	<b>\$ 272,110</b>	<b>\$ 272,110</b>	<b>\$ 272,110</b>	<b>\$ 272,110</b>
<b>Savings</b>						
BPWWTF UV Disinfection Improvements	\$ -	\$ -	\$ -	\$ (197,048)	\$ (197,048)	\$ (197,048)
NBC Solar Carport	(27,285)	(27,285)	(27,285)	(27,285)	(27,285)	(27,285)
<i>Subtotal</i>	<i>\$ (27,285)</i>	<i>\$ (27,285)</i>	<i>\$ (27,285)</i>	<i>\$ (224,333)</i>	<i>\$ (224,333)</i>	<i>\$ (224,333)</i>
<b>Increased Expense</b>						
NBC Solar Carport	2,990	2,990	2,990	2,990	2,990	2,990
New IM Facilities	-	-	-	-	-	10,859
FPWWTF Maintenance Facilities	-	-	-	10,949	65,694	65,694
BPWWTF UV Disinfection Improvements	-	-	-	8,548	8,548	8,548
BPWWTF Improvements	-	-	-	2,498	3,330	3,330
BPWWTF Operations and Maintenance Buildings	-	-	122,510	183,765	183,765	183,765
<i>Subtotal</i>	<i>2,990</i>	<i>2,990</i>	<i>125,500</i>	<i>208,750</i>	<i>264,327</i>	<i>275,186</i>
<b>Net O&amp;M Impact</b>	<b>\$ (24,295)</b>	<b>\$ (24,295)</b>	<b>\$ 98,215</b>	<b>\$ (15,583)</b>	<b>\$ 39,994</b>	<b>\$ 50,853</b>

### Louisquisset Pike Interceptor Replacement

The Louisquisset Pike Interceptor Replacement Project (30421) is scheduled to be completed in FY 2022. The project involves construction of a larger replacement interceptor in the northern section of the Town of Lincoln to accommodate additional flow. Preliminary estimates indicate that the flow will generate additional sewer user fee revenue of \$268,610 annually. The estimated operating expense is \$10,000 every 5 years for ongoing maintenance of the collection system estimated to begin in FY 2027. There are no start-up costs associated with the construction of this interceptor.

Louisquisset Pike Interceptor Replacement			
	Savings	Increased Expense	Increased Revenue
User Fees	\$ -	\$ -	\$ 268,610
Maintenance	-	10,000	-
<b>Total</b>	<b>\$ -</b>	<b>\$ 10,000</b>	<b>\$ 268,610</b>

## BPWWTF UV Disinfection Improvements

The BPWWTF UV Disinfection Improvements Project (81000) involves replacement of the aging UV disinfection system with new and more efficient technology along with the design and construction of a new building to contain the system. It is estimated that the new technology will use 1.7 million kWh less per year and will also require less maintenance, resulting in estimated savings of \$197,048 annually. The estimated operating expense to heat the new building will be approximately \$8,548 annually. Completion of this project is scheduled for FY 2024.

BPWWTF UV Disinfection Improvements				
	Savings	Increased Expense	Increased Revenue	
Electricity	\$ (191,648)	\$ -	\$ -	
Natural Gas	-	8,548	-	
Maintenance	(5,400)	-	-	
<b>Total</b>	<b>\$ (197,048)</b>	<b>\$ 8,548</b>	<b>\$ -</b>	

## NBC Solar Carport

The NBC Solar Carport Project (14000) involves the construction of a solar carport in the Water Quality Science Building parking lot. This project would serve as an additional renewable energy source to help NBC achieve its goal of 100% renewable energy resources for NBC. It is estimated the solar carport will produce approximately 218,282 kWh of electricity annually resulting in approximately \$27,285 in electricity savings, revenue of \$3,500 from the sale of Renewable Energy Credits, and annual maintenance costs of \$2,990. Completion of this project is scheduled for FY 2021.

NBC Solar Carport				
	Savings	Increased Expense	Increased Revenue	
RECs Solar	\$ -	\$ -	\$ 3,500	
Electricity	(27,285)	-	-	
Maintenance	-	2,990	-	
<b>Total</b>	<b>\$ (27,285)</b>	<b>\$ 2,990</b>	<b>\$ 3,500</b>	

## IM Facilities

The IM Facilities Project (12400) is scheduled for completion in FY 2026. This project includes the construction of a new building that will be necessary if NBC is required by legislation to assume ownership of lateral sewers currently owned by local municipalities within the service area. The new building will include an administrative area, garage area and storage yard. The increased expense associated with the new building is approximately \$130,307 annually for utilities and maintenance costs. All project startup costs, such as staff and equipment relocation are included in the project cost.

New IM Facilities				
	Savings	Increased Expense	Increased Revenue	
Electricity	\$ -	\$ 27,750	\$ -	
Natural Gas	-	60,022	-	
Water	-	10,500	-	
Maintenance	-	32,036	-	
<b>Total</b>	<b>\$ -</b>	<b>\$ 130,307</b>	<b>\$ -</b>	

### FPWWTF Maintenance Facilities

The FPWWTF Maintenance Facilities Project (13200) involves the construction of a new maintenance building at Field’s Point. While not required to meet immediate plant operation needs, it will enhance preventive and reactive maintenance capabilities, with the replacement of the current structure originally built in 1900. The new facilities are scheduled for completion in FY 2024 and estimated to result in increased expense of \$65,694 for utilities.

FPWWTF Maintenance Facilities					
	Savings		Increased Expense		Increased Revenue
Electricity	\$	-	\$	19,821	\$ -
Natural Gas		-		42,873	-
Water		-		3,000	-
<b>Total</b>	<b>\$</b>	<b>-</b>	<b>\$</b>	<b>65,694</b>	<b>\$ -</b>

### BPWWTF Operations and Maintenance Buildings

The BPWWTF Operations Building and Maintenance Buildings Project (81700) involves the construction of a new Operations Building and a Maintenance Building at Bucklin Point. The Operations Building will contain additional office space, training and locker rooms, and the SCADA Control Room. The Maintenance Building will include a repair workshop, electrical, welding and instrumentation rooms along with offices and storage space. This new building will improve the efficiency of the plant maintenance services necessary to ensure the reliable operation and performance of critical infrastructure systems. The increased expense associated with the new building is approximately \$183,765 annually for utilities and maintenance costs. All project startup costs, such as staff and equipment relocation are included in the project cost.

BPWWTF Operations and Maintenance Buildings					
	Savings		Increased Expense		Increased Revenue
Electricity	\$	-	\$	47,571	\$ -
Natural Gas		-		102,894	-
Water		-		6,000	-
Maintenance		-		27,300	-
<b>Total</b>	<b>\$</b>	<b>-</b>	<b>\$</b>	<b>183,765</b>	<b>\$ -</b>

### BPWWTF Improvements

The BPWWTF Improvements Project (81600) involves miscellaneous improvements and upgrades to the Bucklin Point WWTF and will include the installation of a new redundant standby power generator. The increased expense is approximately \$3,300 annually for maintenance of the new generator.

BPWWTF Improvements					
	Savings		Increased Expense		Increased Revenue
Maintenance	\$	-	\$	3,330	\$ -
<b>Total</b>	<b>\$</b>	<b>-</b>	<b>\$</b>	<b>3,330</b>	<b>\$ -</b>

## CSO Phase III Facilities

CSO Phase III A operating impacts are estimated to commence in FY 2027. Increased expense of \$1.2 million includes electricity to pump flow and provide dehumidification in the tunnel pump station, natural gas for heating, screening and grit disposal, biosolids disposal, water, treatment chemicals, maintenance and labor costs. The start-up costs are included in this project phase. The operating impacts of the remaining three phases will be determined once the design plans are available.

CSO Phase III Facilities					
Capital Project	Facilities Online	Savings	Increased Expense	Increased Revenue	
<b>CSO Phase III A Facilities</b>					
Electricity	FY 2027	\$ -	\$ 821,370	\$ -	-
Natural Gas	FY 2027	-	69,229	-	-
Screening & Grit	FY 2027	-	57,300	-	-
Biosolids	FY 2027	-	219,465	-	-
Water	FY 2027	-	968	-	-
Hypochlorite	FY 2027	-	12,110	-	-
Sodium Bisulfite	FY 2027	-	4,942	-	-
Maintenance	FY 2027	-	29,033	-	-
Personnel	FY 2027	-	9,811	-	-
	<b>Total</b>	<b>\$ -</b>	<b>\$ 1,224,227</b>	<b>\$ -</b>	<b>-</b>
<b>CSO Phase III B Facilities</b>	FY 2031	None	TBD	None	
<b>CSO Phase III C Facilities</b>	FY 2037	None	TBD	None	
<b>CSO Phase III D Facilities</b>	FY 2042	None	TBD	None	

## Project Financing

In addition to operating cost impacts, the debt service related to financing NBC's CIP also impacts the operating budget. NBC's Operating Budget includes principal and interest payments as well as a debt service coverage line item. NBC uses a long-term financial model to identify capital funding needs and sources and to project debt issuance. The debt service and user fee projections associated with financing the CIP are identified in the Long-Term Plan section of the Operating Budget. Traditionally, NBC has financed the CIP through the issuance of debt.

The EPA's WIFIA program provides long-term, low-cost credit assistance for up to 49% of eligible project's costs. In August 2019, NBC closed on a \$268.7 million WIFIA loan, with an interest rate of 1.89%. The WIFIA loan is for construction of CSO Phase III A and will help mitigate the financial impact of the project cost on NBC ratepayers. In July 2019 the NBC submitted a Letter of Interest (LOI) for a second WIFIA loan to finance the Bucklin Point Resiliency Improvements. In October 2019, EPA informed NBC that it was invited to apply for this second WIFIA loan for up to 49% of the project cost or \$22 million. NBC also plans to include an additional \$12 million in funding, which represents 49% of the CSO Phase III A costs incurred prior to the execution of the first WIFIA loan. NBC is completing the loan application for submittal in April 2020.

## Incentives and Reimbursements

It is anticipated that NBC will receive approximately \$1.2 million in energy efficiency incentives related to the BPWWTF Biogas Reuse Project and reimbursements for portions of the CSO Phase III A GSI Projects. The funds will be deposited into the Grants and Projects Reimbursement Account in the Project Fund to be used for capital improvements. The potential incentives and reimbursements are outlined in the following table.

Capital Investment Incentives			
Contract	Project	Source	Amount
12000C	BPWWTF - Biogas Reuse	National Grid (balance of incentive)	\$ 211,000
12000C	BPWWTF - Biogas Reuse	Regional Greenhouse Gas Initiative	200,000
12000C	BPWWTF - Biogas Reuse	RI Renewable Energy Fund	80,000
30808C	CSO Phase III - 1304 High Street	Bay Watershed Restoration Fund	400,000
30809C	CSO Phase III - Macomber Field	RIDEM Recreation Grant via Central Falls	300,000
			<b>\$ 1,191,000</b>



**Capital Project Summary Fiscal Year**  
(In Thousands)

Project Number	Project Name	Project Priority	Pre-Fiscal Year 2021	Fiscal Year 2021	Fiscal Years 2022-2026	Post-Fiscal Year 2026	Total Estimated Project Cost
<b>Wastewater Treatment Facility Improvements</b>							
13200	FPWWTF Maintenance Facilities	A	\$ -	\$ 178	\$ 10,882	\$ -	\$ 11,060
20000	WWTF Improvements	B	-	-	1,000	500	1,500
20200	FY 2019 WWTF Improvements	A	871	2,216	2,173	-	5,260
20300	FY 2020 WWTF Improvements	B	6	302	4,076	-	4,384
40100	NBC Facility Electrical Improvements	B	11	238	16	-	265
40101	FPWWTF Electrical Improvements	B	23	217	2,147	-	2,387
81000	BPWWTF UV Disinfection Improvements	A	732	738	11,503	-	12,973
81600	BPWWTF Improvements	A	154	1,089	4,137	-	5,380
81700	BPWWTF Operations & Maintenance Buildings	A	490	8,338	19,446	-	28,274
90900	COB Facilities Improvements	A	3,563	1,409	19	-	4,991
	<i>Subtotal</i>		5,850	14,725	55,399	500	76,474
<b>Infrastructure Management</b>							
1140100	River Model Development	A	465	47	68	-	580
1140300	Greenhouse Gas Study	C	35	102	35	-	172
1140500	NBC Energy Sustainability	C	271	183	183	-	637
1140600	RIPDES Compliance Improvements	A	793	504	255	-	1,552
1140700	NBC Long Range Residual Solids Management Study	A	5	245	77	-	326
14000	NBC Solar Carport	D	14	1,050	-	-	1,064
30700	NBC System-wide Facilities Planning	D	-	231	218	-	448
40200	NBC System-wide Inflow Reduction	D	-	-	702	-	702
40300	Municipal Lateral Sewer Acquisition Impact	D	-	1	300	-	301
40400	FPWWTF Facilities Plan Update	B	250	142	38	-	430
40550	RIPDES Flow Monitoring System Implementation	A	4	590	-	-	594
	<i>Subtotal</i>		1,837	3,094	1,875	-	6,806
<b>CSO Phase III Facilities</b>							
30800	CSO Phase III A Facilities	A	49,255	16,457	8,443	-	74,154
30801	CSO Phase III A Facilities - Pawtucket Tunnel & Pump Station	A	-	6,140	329,624	-	335,764
30802	CSO Phase III A Facilities - Tunnel Pump Station Fit-out	A	-	-	82,193	510	82,703
30803	CSO Phase III A Facilities - OF 205	A	-	-	6,231	-	6,231
30804	CSO Phase III A Facilities - OF 210, 213, 214	A	-	-	12,309	-	12,309
30805	CSO Phase III A Facilities - OF 217	A	-	1	18,909	-	18,910
30806	CSO Phase III A Facilities - OF 218	A	-	-	8,422	-	8,422
30807	CSO Phase III A Facilities - Regulator Modifications	A	-	631	1,360	-	1,991
30808	CSO Phase III A Facilities - GSI Demonstration	A	1,733	101	-	-	1,834
30809	CSO Phase III A - GSI Projects	C	4,143	1,534	26	-	5,703
30810	CSO Phase III A Facilities - BPWWTF Clarifiers and Flow Splitters	A	-	431	45,901	-	46,332
30812	CSO Phase III A Facilities - Dexter Street Stormwater Infrastructure	A	-	1,480	-	-	1,480
30813	CSO Phase III A Facilities - Site Demolition	A	1,234	3,545	-	-	4,779
	<i>CSO Phase III A Facilities Subtotal</i>		56,365	30,320	513,418	510	600,612
30830	CSO Phase III B Facilities	A	-	-	-	28,484	28,484
30850	CSO Phase III C Facilities	A	-	-	-	164,660	164,660
30870	CSO Phase III D Facilities	A	-	-	-	83,500	83,500
	<i>CSO Phase III Facilities Subtotal</i>		56,365	30,320	513,418	277,154	877,257
<b>Sewer System Improvements</b>							
12400	IM Facilities	C	-	-	6,895	-	6,895
12450	IM Storage Building	D	8	298	3,351	-	3,657
30500	NBC Interceptor Easements Restoration, Various Locations	B	-	267	1,071	-	1,338
30610	NBC System-wide Regulator Modifications	A	13	419	2,589	-	3,021
70900	Omega Pump Station Upgrade	B	8	220	1,972	-	2,200
71000	Lincoln Septage Station Replacement	B	4	273	3,417	-	3,694
	<i>Subtotal</i>		33	1,477	19,295	-	20,805
<b>Interceptor Cleaning &amp; Restoration</b>							
30400M	Interceptor Inspection and Cleaning	B	-	-	2,500	500	3,000
30478	Large Diameter Interceptors Inspection and Cleaning	B	468	259	-	-	727
30479	Siphon Inspection and Cleaning	B	108	453	-	-	561
	<i>Subtotal</i>		576	712	2,500	500	4,288
<b>Interceptor Restoration &amp; Construction</b>							
30400C	Interceptor Restoration and Construction	B	-	-	6,000	1,500	7,500
30315	CSO Phase II - WCSOI OF 046	B	317	878	2,720	-	3,915
30421	Louisquisset Pike Interceptor Improvements	D	178	29	4,765	-	4,972
30444	Moshassuck Valley Interceptor	A	12,279	1,023	-	-	13,302
30467	Improvements to Interceptors FY 2019	A	3,133	474	-	-	3,607
	<i>Subtotal</i>		15,907	2,404	13,485	1,500	33,296
<b>Total</b>			\$ 80,568	\$ 52,732	\$ 605,972	\$ 279,654	\$ 1,018,925

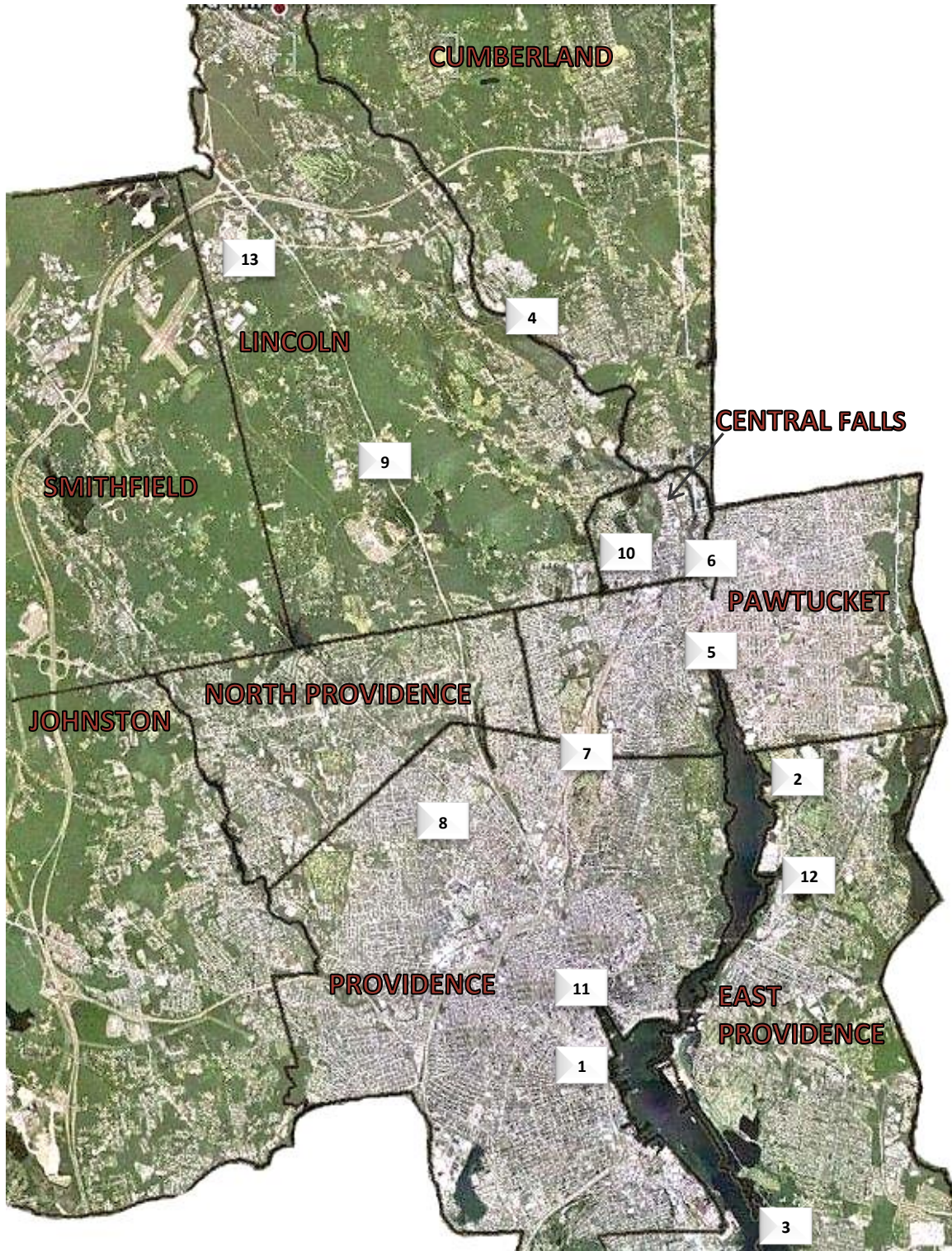
Priority	Description
A	Mandated, emergency, critical need or under construction.
B	Required to maintain system reliability and ongoing operation of facilities.
C	Project scope and requirements are dependent on futures system needs or regulatory requirements.
D	Project not critical but achieves efficiencies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

## Capital Improvement Program Project Locations

The capital projects identified in this year's CIP are shown on the map on the following page. The map highlights 13 project locations as identified below. Some projects are System-wide and noted as SW.

Legend Key	Project Number	Project Name
<b>Wastewater Treatment Facility Improvements</b>		
1	13200	FPWWTF Maintenance Facilities
1	20000	WWTF Improvements
1	20200	FY 2019 WWTF Improvements
1	20300	FY 2020 WWTF Improvements
1, 2	40100	NBC Facility Electrical Improvements
1	40101	FPWWTF Electrical Improvements
2	81000	BPWWTF UV Disinfection Improvements
2	81600	BPWWTF Improvements
2	81700	BPWWTF Operations & Maintenance Buildings
1	90900	COB Facilities Improvements
<b>Infrastructure Management</b>		
3	1140100	River Model Development
1, 2	1140300	Greenhouse Gas Study
SW	1140500	NBC Energy Sustainability
SW	1140600	RIPDES Compliance Improvements
SW	1140700	NBC Long Range Residual Solids Management Study
1	14000	NBC Solar Carport
SW	30700	NBC System-wide Facilities Planning
SW	40200	NBC System-wide Inflow Reduction
SW	40300	Municipal Lateral Sewer Acquisition Impact
1	40400	FPWWTF Facilities Plan Update
SW	40550	RIPDES Flow Monitoring System Implementation
<b>CSO Phase III Facilities</b>		
5	30800	CSO Phase III A Facilities
5	30801	CSO Phase III A Facilities - Pawtucket Tunnel & Pump Station
5	30802	CSO Phase III A Facilities - Tunnel Pump Station Fit-out
5	30803	CSO Phase III A Facilities - OF 205
5	30804	CSO Phase III A Facilities - OF 210, 213, 214
5	30805	CSO Phase III A Facilities - OF 217
5	30806	CSO Phase III A Facilities - OF 218
5	30807	CSO Phase III A Facilities - Regulator Modifications
5	30808	CSO Phase III A Facilities - GSI Demonstration
5	30809	CSO Phase III A - GSI Projects
5	30810	CSO Phase III A Facilities - BPWWTF Clarifiers and Flow Splitters
5	30812	CSO Phase III A Facilities - Dexter Street Stormwater Infrastructure
5	30813	CSO Phase III A Facilities - Site Demolition
6	30830	CSO Phase III B Facilities
7	30850	CSO Phase III C Facilities
8	30870	CSO Phase III D Facilities
<b>Sewer System Improvements</b>		
1	12400	IM Facilities
1	12450	IM Storage Building
SW	30500	NBC Interceptor Easements Restoration, Various Locations
SW	30610	NBC System-wide Regulator Modifications
12	70900	Omega Pump Station Upgrade
13	71000	Lincoln Septage Station Replacement
<b>Interceptor Cleaning/Restoration and Construction</b>		
SW	30478	Large Diameter Interceptors Inspection and Cleaning
SW	30479	Siphon Inspection and Cleaning
11	30315	CSO Phase II - WCSOI OF 046
9	30421	Louisquisset Pike Interceptor Improvements
10	30444	Moshassuck Valley Interceptor
SW	30467	Improvements to Interceptors FY 2019

# Capital Improvement Program Project Locations



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# 13200

## FPWWTF Maintenance Facilities

Project Manager: David Bowen, P.E.  
 Contractor(s): N/A

Location: 2 Ernest Street, Providence, RI  
 Project Priority: A

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	August-20	July-22	23 Months	\$767
Construction	June-22	May-24	22 Months	10,293
<b>Total Project</b>	<b>August-20</b>	<b>May-24</b>	<b>44 Months</b>	<b>\$11,060</b>



Photo: Interior photo of the Existing Maintenance Building

This project involves the planning, design and construction of a new Maintenance Building and support facilities at the FPWWTF. Construction of a new and efficient Maintenance Building at the FPWWTF is in-line with NBC's long-range planning goals to address known resiliency concerns at the Field's Point campus and will help the Commission best manage the risk of inefficient maintenance of its critical infrastructure systems, which could result in compromised process operations and potential water quality violations. While not critical to plant operations, it will improve efficiency in maintenance support since the existing maintenance building was originally built in 1900 and is insufficient to meet the needs of operations.

### CIP Window Summary

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ -	\$ 178	\$ 547	\$ 3,617	\$ 6,718	\$ -	\$ -	\$ -	\$ 11,060

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ 61	\$ 56	\$ 3	\$ -	\$ -	\$ -	\$ -	\$ 120
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	117	468	39	-	-	-	-	624
Other	-	-	23	-	-	-	-	-	23
<b>Total</b>	<b>\$ -</b>	<b>\$ 178</b>	<b>\$ 547</b>	<b>\$ 42</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 767</b>

### Projected Expenditures - Construction

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ 182	\$ 175	\$ -	\$ -	\$ -	\$ 357
A/E Professional	-	-	-	48	33	-	-	-	81
Construction	-	-	-	3,300	5,200	-	-	-	8,500
Contingency	-	-	-	-	1,275	-	-	-	1,275
Other	-	-	-	45	35	-	-	-	80
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 3,575</b>	<b>\$ 6,718</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 10,293</b>

Note: Cash Flow Basis in Thousands

## 20000

### WWTF Improvements

Project Manager: David Bowen, P.E.  
Contractor(s): N/A

Location: Field's Point & Bucklin Point WWTF's  
Project Priority: B

#### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	March-18	Ongoing	Ongoing	1,500
<b>Total Project</b>	<b>March-18</b>	<b>Ongoing</b>	<b>Ongoing</b>	<b>\$1,500</b>



Photo: Aeration Tank Pumps

This project is a placeholder for facility improvements at NBC's WWTF's to comply with current and future regulatory requirements and ensure uninterrupted wastewater treatment processing, 24 hours per day and 365 days per year. NBC programs \$500 thousand annually for improvements to ensure resources are available in years that do not have specific projects identified. As new projects are identified, they will be given a unique project number.

#### CIP Window Summary

	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 500	\$ 500	\$ 500	\$ 1,500

#### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 58	\$ 58	\$ 58	\$ 174
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	422	422	422	1,266
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	20	20	20	60
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 500</b>	<b>\$ 500</b>	<b>\$ 500</b>	<b>\$ 1,500</b>

Note: Cash Flow Basis in Thousands

# 20200

## FY 2019 WWTF Improvements

Project Manager: David Bowen, P.E.  
 Contractor(s): Wright Pierce

Location: Field's Point (Providence, RI)  
 Project Priority: A

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	July-18	May-20	22 Months	\$860
Construction	April-20	March-22	24 Months	\$4,400
<b>Total Project</b>	<b>July-18</b>	<b>March-22</b>	<b>44 Months</b>	<b>\$5,260</b>



Photo: CSO Tunnel Odor Control Facility

This project involves improvements and upgrades to the Field's Point WWTF, Ernest Street Pump Station and the Tunnel Pump Station including the rehabilitation of various isolation gates and actuators, air handling units, biological nutrient removal system switchgear and froth spray line. Other improvements include modifications to the aeration tank, screw lift pumping station, blower building. This project also addresses enhancements to the CSO tunnel odor control facility at the tunnel pump station adjacent to the WWTF.

### CIP Window Summary

	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
	\$ 871	\$ 2,216	\$ 2,173	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,260

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ 135	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 135
Land	-	-	-	-	-	-	-	-	-
A/E Professional	704	-	-	-	-	-	-	-	704
Other	21	-	-	-	-	-	-	-	21
<b>Total</b>	<b>\$ 860</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 860</b>

### Projected Expenditures - Construction

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ 11	\$ 58	\$ 46	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 115
A/E Professional	-	77	38	-	-	-	-	-	115
Construction	-	2,041	1,555	-	-	-	-	-	3,596
Contingency	-	-	524	-	-	-	-	-	524
Other	-	40	10	-	-	-	-	-	50
<b>Total</b>	<b>\$ 11</b>	<b>\$ 2,216</b>	<b>\$ 2,173</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 4,400</b>

Note: Cash Flow Basis in Thousands

## 20300

### FY 2020 WWTF Improvements

Project Manager: David Bowen, P.E.  
Contractor(s): TBD

Location: Fields Point WWTF  
Project Priority: B

#### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	June-20	April-22	22 Months	\$571
Construction	May-22	March-24	22 Months	3,813
<b>Total Project</b>	<b>June-20</b>	<b>March-24</b>	<b>45 Months</b>	<b>\$4,384</b>



Photo: RAS Pumps

This project includes improvements and upgrades to the Field's Point WWTF and Ernest Street Pump Station including the replacement of the Pepcon unit at the Gravity Thickener Building, evaluation and design of miscellaneous improvements to the WWTF's Disinfection and Dechlorination systems, a new transformer south of the Pretreatment Building and replacement of the plant water automatic strainer. Other improvements include the purchase of three individual dedicated VFD's to allow simultaneous operation of RAS Pumps #7, 8 & 9 rather than one pump at a time, handrail installation at the Blower/Screw Lift Building & the Primary Pump Station to comply with OSHA safety regulations and replacement of the HVAC unit at the Gravity Thickener Pump Station. This project also addresses the paved area south of the O&M building which should have a stormwater collection installed and may need regrading of the asphalt pavement. The retaining wall at the ESPS is leaning towards the building and needs to be remediated.

#### CIP Window Summary

	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
	\$ 6	\$ 302	\$ 263	\$ 2,067	\$ 1,746	\$ -	\$ -	\$ -	\$ 4,384

#### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ 6	\$ 65	\$ 56	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 127
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	197	197	-	-	-	-	-	394
Other	-	40	10	-	-	-	-	-	50
<b>Total</b>	<b>\$ 6</b>	<b>\$ 302</b>	<b>\$ 263</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 571</b>

#### Projected Expenditures - Construction

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ 71	\$ 56	\$ -	\$ -	\$ -	\$ 127
A/E Professional	-	-	-	114	96	-	-	-	210
Construction	-	-	-	1,822	804	-	-	-	2,626
Contingency	-	-	-	-	750	-	-	-	750
Other	-	-	-	60	40	-	-	-	100
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 2,067</b>	<b>\$ 1,746</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 3,813</b>

Note: Cash Flow Basis in Thousands



# 40100

## NBC Facility Electrical Improvements

Project Manager: David Bowen, P.E.  
 Contractor(s): N/A

Location: NBC Service Area  
 Project Priority: B

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	May-20	August-21	15 Months	\$265
Design	N/A	N/A	N/A	N/A
Construction	N/A	N/A	N/A	N/A
<b>Total Project</b>	<b>May-20</b>	<b>August-21</b>	<b>15 Months</b>	<b>\$265</b>



Photo: Field's Point Electrical Facility

This project involves the evaluation of NBC's existing electrical equipment and facilities. Upon completion of the evaluation, improvements will be performed as necessary to ensure reliable and continuous operation of facilities throughout the NBC's service area.

### CIP Window Summary

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ 11	\$ 238	\$ 16	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 265

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ 11	\$ 86	\$ 3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100
A/E Professional	-	127	13	-	-	-	-	-	140
Other	-	25	-	-	-	-	-	-	25
<b>Total</b>	<b>\$ 11</b>	<b>\$ 238</b>	<b>\$ 16</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 265</b>

### Projected Expenditures - Design

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

Note: Cash Flow Basis in Thousands

# 40101

## FPWWTF Facility Electrical Improvements

Project Manager: David Bowen, P.E.  
 Contractor(s): Various

Location: Providence, RI  
 Project Priority: B

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	January-16	May-20	52 Months	\$18
Design	May-20	June-21	14 Months	\$217
Construction	June-21	December-22	18 Months	2,152
<b>Total Project</b>	<b>January-16</b>	<b>December-22</b>	<b>84 Months</b>	<b>\$2,387</b>



Photo: Field's Point Electrical Facility

This project involves the evaluation and installation of standby power capabilities for critical facilities at the FPWWTF in order to maintain uninterrupted operation of treatment processes.

### CIP Window Summary

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ 23	\$ 217	\$ 1,160	\$ 987	\$ -	\$ -	\$ -	\$ -	\$ 2,387

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ 8	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8
A/E Professional	10	-	-	-	-	-	-	-	10
Other	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>\$ 18</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 18</b>

### Projected Expenditures - Design

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ 5	\$ 27	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 32
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	175	-	-	-	-	-	-	175
Other	-	10	-	-	-	-	-	-	10
<b>Total</b>	<b>\$ 5</b>	<b>\$ 212</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 217</b>

### Projected Expenditures - Construction

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ 5	\$ 53	\$ 23	\$ -	\$ -	\$ -	\$ -	\$ 81
A/E Professional	-	-	56	40	-	-	-	-	96
Construction	-	-	1,021	729	-	-	-	-	1,750
Contingency	-	-	-	175	-	-	-	-	175
Other	-	-	30	20	-	-	-	-	50
<b>Total</b>	<b>\$ -</b>	<b>\$ 5</b>	<b>\$ 1,160</b>	<b>\$ 987</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 2,152</b>

Note: Cash Flow Basis in Thousands

# 81000

## BPWWTF UV Disinfection Improvements

Project Manager: David Bowen, P.E.  
 Contractor(s): TBD

Location: Bucklin Point WWTF (East Providence, RI)  
 Project Priority: A

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	January-18	November-20	34 Months	\$1,355
Construction	February-21	July-23	29 Months	11,618
<b>Total Project</b>	<b>January-18</b>	<b>July-23</b>	<b>66 Months</b>	<b>\$12,973</b>



Photo: Bucklin Point UV Disinfection System

This project involves the evaluation of the current Ultraviolet (UV) Disinfection system at the Bucklin Point WWTF and implementation of a system replacement/upgrade along with the design and construction of a new building to contain the system. In order to prevent potential damage and best manage the risk of water quality violations that may arise from extreme weather events, NBC needs to address various resiliency needs including its UV disinfection system. The current UV equipment is nearing the end of its useful life and the medium pressure, high intensity lamps are expensive and less efficient than newer technologies.

### CIP Window Summary

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ 732	\$ 738	\$ 5,030	\$ 6,378	\$ 95	\$ -	\$ -	\$ -	\$ 12,973

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ 101	\$ 54	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 155
Land	-	-	-	-	-	-	-	-	-
A/E Professional	566	484	-	-	-	-	-	-	1,050
Other	65	85	-	-	-	-	-	-	150
<b>Total</b>	<b>\$ 732</b>	<b>\$ 623</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,355</b>

### Projected Expenditures - Construction

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ 30	\$ 90	\$ 73	\$ 5	\$ -	\$ -	\$ -	\$ 198
A/E Professional	-	60	410	335	15	-	-	-	820
Construction	-	-	4,450	4,975	75	-	-	-	9,500
Contingency	-	-	-	950	-	-	-	-	950
Other	-	25	80	45	-	-	-	-	150
<b>Total</b>	<b>\$ -</b>	<b>\$ 115</b>	<b>\$ 5,030</b>	<b>\$ 6,378</b>	<b>\$ 95</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 11,618</b>

Note: Cash Flow Basis in Thousands

# 81600

## BPWWTF Improvements

Project Manager: David Bowen, P.E.  
 Contractor(s): TBD

Location: BPWWTF  
 Project Priority: A

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	July-19	December-21	29 Months	\$476
Construction	September-19	October-22	36 Months	4,904
<b>Total Project</b>	<b>July-19</b>	<b>October-22</b>	<b>39 Months</b>	<b>\$5,380</b>



Photo: Screening and Grit Boilers

In order to mitigate and best manage the risk of potential water quality violations that may arise from extreme weather events and aging infrastructure concerns NBC must address various resiliency needs. This project involves miscellaneous improvements and upgrades to the Bucklin Point WWTF including the repair or replacement of boilers, hydronic piping systems, and isolation gates. Other improvements include modifications to HVAC systems and the installation of a redundant standby power system and various electrical manhole dewatering sump pump systems.

### CIP Window Summary

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ 154	\$ 1,089	\$ 3,090	\$ 1,047	\$ -	\$ -	\$ -	\$ -	\$ 5,380

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ 45	\$ 55	\$ 27	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 127
Land	-	-	-	-	-	-	-	-	-
A/E Professional	61	210	61	-	-	-	-	-	332
Other	7	10	-	-	-	-	-	-	17
<b>Total</b>	<b>\$ 113</b>	<b>\$ 275</b>	<b>\$ 88</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 476</b>

### Projected Expenditures - Construction

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ 44	\$ 63	\$ 20	\$ -	\$ -	\$ -	\$ -	\$ 127
A/E Professional	-	60	264	73	-	-	-	-	397
Construction	41	700	2,665	559	-	-	-	-	3,965
Contingency	-	-	-	397	-	-	-	-	397
Other	-	10	10	-	-	-	-	-	20
<b>Total</b>	<b>\$ 41</b>	<b>\$ 814</b>	<b>\$ 3,002</b>	<b>\$ 1,047</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 4,904</b>

Note: Cash Flow Basis in Thousands

# 81700

## BPWWTF Operations & Maintenance Building

Project Manager: David Bowen, P.E.  
 Contractor(s): TBD

Location: Bucklin Point WWTF  
 Project Priority: A

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	May-19	March-20	11 Months	\$482
Construction	June-20	November-22	29 Months	27,792
<b>Total Project</b>	<b>May-19</b>	<b>November-22</b>	<b>42 Months</b>	<b>\$28,274</b>



Photo: Current Operations Building

Due to aging infrastructure, climate resiliency concerns and the need for more efficient facilities there is an urgent need to design and construct a new Operations Building and a Maintenance/Storage Building at the Bucklin Point campus. The Operations Building will contain additional office space, training and locker rooms, and the WWTF's SCADA Control Room which is necessary to maintain system reliability and efficient operations. The Maintenance/Storage Building(s) will improve the efficiency of plant maintenance services necessary to ensure the reliable operation and performance of critical infrastructure systems and address various storage needs at the BPWWTF.

### CIP Window Summary

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ 490	\$ 8,338	\$ 17,366	\$ 2,080	\$ -	\$ -	\$ -	\$ -	\$ 28,274

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ 102	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 102
Land	-	-	-	-	-	-	-	-	-
A/E Professional	353	-	-	-	-	-	-	-	353
Other	27	-	-	-	-	-	-	-	27
<b>Total</b>	<b>\$ 482</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 482</b>

### Projected Expenditures - Construction

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ 8	\$ 93	\$ 94	\$ 20	\$ -	\$ -	\$ -	\$ -	\$ 215
A/E Professional	-	490	560	210	-	-	-	-	1,260
Construction	-	7,600	13,300	1,850	-	-	-	-	22,750
Contingency	-	-	3,413	-	-	-	-	-	3,413
Other	-	155	-	-	-	-	-	-	155
<b>Total</b>	<b>\$ 8</b>	<b>\$ 8,338</b>	<b>\$ 17,366</b>	<b>\$ 2,080</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 27,792</b>

Note: Cash Flow Basis in Thousands

# 90900

## COB Facilities Improvements

Project Manager: Rich Bernier, P.E.  
 Contractor(s): Mill City

Location: COB and Lab  
 Project Priority: A

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	January-19	April-19	3 Months	\$87
Construction	March-19	November-21	32 Months	4,904
<b>Total Project</b>	<b>January-19</b>	<b>November-21</b>	<b>34 Months</b>	<b>\$4,991</b>



Photo: HVAC Units at COB

Replacement of carpeting, office furniture, painting and office reconfigurations for the 1st, 2nd and 3rd floors of the corporate office building which has not been updated since 2002. The office space at the Water Quality Science building will be reconfigured to accommodate the reorganization of NBC's staff. Replacement of HVAC units and sections of the roof will also be assessed and completed as part of this project.

### CIP Window Summary

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ 3,563	\$ 1,409	\$ 19	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,991

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ 22	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 22
Land	-	-	-	-	-	-	-	-	-
A/E Professional	65	-	-	-	-	-	-	-	65
Other	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>\$ 87</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 87</b>

### Projected Expenditures - Construction

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ 127	\$ 55	\$ 1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 183
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	2,447	1,204	18	-	-	-	-	-	3,669
Contingency	900	150	-	-	-	-	-	-	1,050
Other	2	-	-	-	-	-	-	-	2
<b>Total</b>	<b>\$ 3,476</b>	<b>\$ 1,409</b>	<b>\$ 19</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 4,904</b>

Note: Cash Flow Basis in Thousands

# 1140100

## River Model Development

Project Manager: Thomas Uva  
 Contractor(s): Kincaid Consulting

Location: NBC Receiving Waters  
 Project Priority: A

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	March-05	April-22	206 Months	\$580
Construction	N/A	N/A	N/A	N/A
<b>Total Project</b>	<b>March-05</b>	<b>April-22</b>	<b>206 Months</b>	<b>\$580</b>

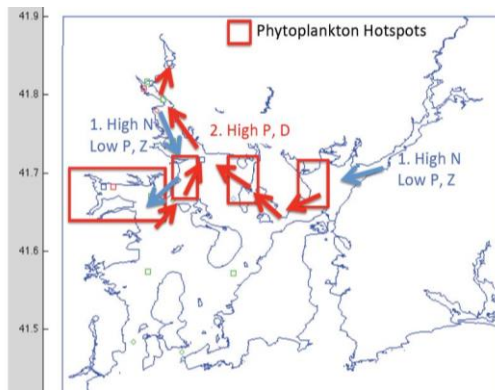


Photo: Map of phytoplankton flow dynamics seen in the ROMS biological model.

The Regional Ocean Modeling System (ROMS) for the Providence and Seekonk Rivers and Narragansett Bay tracks the circulation and transport of nutrients and determines how changing nitrogen loads affect the biology and water quality of the receiving waters. This project is for continued work on the model to improve predictions, validate accuracy, to prepare for regulatory issues and to evaluate if mandated capital expenditures are necessary to improve water quality.

### CIP Window Summary

	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
	\$ 465	\$ 47	\$ 68	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 580

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ 70	\$ 12	10	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 92
Land	-	-	-	-	-	-	-	-	-
A/E Professional	329	35	38	-	-	-	-	-	402
Other	66	-	20	-	-	-	-	-	86
<b>Total</b>	<b>\$ 465</b>	<b>\$ 47</b>	<b>\$ 68</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 580</b>

### Projected Expenditures - Construction

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

Note: Cash Flow Basis in Thousands



# 1140300

## Green House Gas Study

Project Manager: James Kelly  
 Contractor(s): University of Rhode Island

Location: Field's Point (Providence, RI)  
 Project Priority: C

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	October-14	September-21	84 Months	\$172
Construction	N/A	N/A	N/A	N/A
<b>Total Project</b>	<b>October-14</b>	<b>September-21</b>	<b>84 Months</b>	<b>\$172</b>



Photo: Measuring Greehouse Gases at Field's Point

The Greenhouse Gas Study is designed to quantify NBC's overall carbon footprint by measuring greenhouse gas emissions from wastewater collection and treatment operations. The study will ensure NBC can quickly address future regulatory requirements related to greenhouse gas emissions.

### CIP Window Summary

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ 35	\$ 102	\$ 35	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 172

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ 15	\$ 16	\$ 6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 37
Land	-	-	-	-	-	-	-	-	-
A/E Professional	20	86	29	-	-	-	-	-	135
Other	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>\$ 35</b>	<b>\$ 102</b>	<b>\$ 35</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 172</b>

### Projected Expenditures - Construction

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

Note: Cash Flow Basis in Thousands



# 1140500

## NBC Energy Sustainability

Project Manager: James Kelly  
 Contractor(s): Various

Location: Various Locations  
 Project Priority: C

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	January-16	June-22	78 Months	\$637
Construction	N/A	N/A	N/A	N/A
<b>Total Project</b>	<b>January-16</b>	<b>June-22</b>	<b>78 Months</b>	<b>\$637</b>



Photo: WED Turbines

The Energy Sustainability Program is designed to identify, measure, and implement ways of obtaining and using energy so that energy needs are met while minimizing environmental impacts and assuring sufficient energy sources are available to meet future needs. The Energy Sustainability Program will perform feasibility studies and evaluate methods to maximize conservation, efficiencies and employment of sustainable renewable energy resources in an economically viable and reliable manner with the ultimate goal of achieving 100% renewable energy resources for NBC.

### CIP Window Summary

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ 271	\$ 183	\$ 183	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 637

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ 244	\$ 176	\$ 176	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 596
Land	-	-	-	-	-	-	-	-	-
A/E Professional	10	3	3	-	-	-	-	-	16
Other	17	4	4	-	-	-	-	-	25
<b>Total</b>	<b>\$ 271</b>	<b>\$ 183</b>	<b>\$ 183</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 637</b>

### Projected Expenditures - Construction

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

Note: Cash Flow Basis in Thousands

# 1140600

## RIPDES Compliance Improvements

Project Manager: David Bowen, P.E.  
 Contractor(s): TBD

Location: NBC District  
 Project Priority: A

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	March-18	September-21	43 Months	\$1,567
Construction	N/A	N/A	N/A	N/A
<b>Total Project</b>	<b>March-18</b>	<b>September-21</b>	<b>43 Months</b>	<b>\$1,567</b>



Photo: Aerial of the FPWWTF and the Providence River

This project includes improvements to the wastewater treatment and collections system that may be required to comply with new permit limits and mandates. Specific improvements shall be identified through a metals translator study, a technically based Local Limits Evaluation study, a site specific study, an upper bay dissolved oxygen evaluation, and the development of a climate resiliency plan.

### CIP Window Summary

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ 793	\$ 504	\$ 255	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,552

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ 492	\$ 384	\$ 195	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,071
Land	-	-	-	-	-	-	-	-	-
A/E Professional	269	75	60	-	-	-	-	-	404
Other	32	45	-	-	-	-	-	-	77
<b>Total</b>	<b>\$ 793</b>	<b>\$ 504</b>	<b>\$ 255</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,552</b>

### Projected Expenditures - Construction

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

Note: Cash Flow Basis in Thousands

# 1140700

## NBC Long Range Residual Solids Management Study

Project Manager: David Bowen, P.E.  
 Contractor(s): TBD

Location: Fields Point and Bucklin Point WWTFs  
 Project Priority: A

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	March-20	September-21	19 Months	\$326
Construction	N/A	N/A	N/A	N/A
<b>Total Project</b>	<b>March-20</b>	<b>September-21</b>	<b>19 Months</b>	<b>\$326</b>



Photo: Sludge Dewatering & Handling Facility

This project involves the evaluation, planning and development of a reliable long-term sludge management strategy for sludge generated at NBC's Field's Point and Bucklin Point WWTFs. The study will explore the requirements and relative benefits of various appropriate industry standard residual solids disposal and management practices to address NBC's needs. The study will evaluate the relative benefits of continuing with similar disposal practices on a long-term basis for both WWTFs, as well as more capital-intensive options such as constructing new sludge processing facilities.

### CIP Window Summary

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ 5	\$ 245	\$ 77	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 326

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ 3	\$ 52	\$ 14	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 69
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	163	63	-	-	-	-	-	225
Other	2	30	-	-	-	-	-	-	32
<b>Total</b>	<b>\$ 5</b>	<b>\$ 245</b>	<b>\$ 77</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 326</b>

### Projected Expenditures - Construction

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

Note: Cash Flow Basis in Thousands

# 14000

## NBC Solar Carport

Project Manager: Jim Kelly  
 Contractor(s): Various

Location: WQSB  
 Project Priority: D

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	January-20	June-20	6 Months	N/A
Design	July-20	December-20	6 Months	N/A
Construction	January-21	June-21	6 Months	\$1,064
<b>Total Project</b>	<b>January-20</b>	<b>June-21</b>	<b>18 Months</b>	<b>\$1,064</b>



Photo: Solar Carport

This project will evaluate, design, and build a solar carport in the Water Quality Science Building parking lot. Constructing the carport would serve as an additional renewable energy source to help NBC achieve its goal of 100% renewable energy resources for NBC. It would also protect vehicles and staff from ice shed from the wind turbines. This project may be eligible for up to \$200,000 in grant funding through the Rhode Island Renewable Energy Fund (REF) Commercial-Scale Program.

### CIP Window Summary

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ 14	\$ 1,050	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,064

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ 14	\$ 45	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 59
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	1,005	-	-	-	-	-	-	1,005
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>\$ 14</b>	<b>\$ 1,050</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,064</b>

Note: Cash Flow Basis in Thousands

# 30700

## NBC System-wide Facilities Planning

Project Manager: David Bowen, P.E.  
 Contractor(s): N/A

Location: NBC Service Area  
 Project Priority: D

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	July-20	May-22	23 Months	\$448
Construction	N/A	N/A	N/A	N/A
<b>Total Project</b>	<b>July-20</b>	<b>May-22</b>	<b>23 Months</b>	<b>\$448</b>

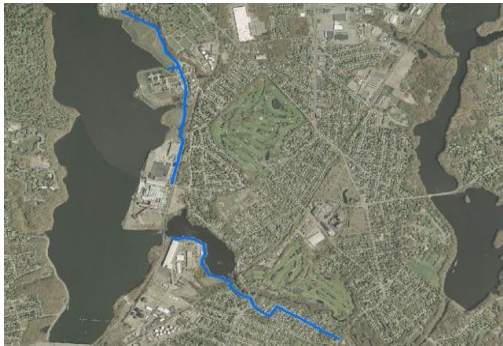


Photo: Proposed area for the East Providence Capacity Analysis

Project 30700 consists of planning activities that will determine if there is adequate system capacity for the next twenty years and will also determine if there is any excess infiltration/inflow in NBC's interceptors. As the evaluations begin for specific cities and towns, each will be given a unique project number.

### CIP Window Summary

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ -	\$ 231	\$ 218	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 448

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ 57	\$ 38	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 94
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	134	140	-	-	-	-	-	274
Other	-	40	40	-	-	-	-	-	80
<b>Total</b>	<b>\$ -</b>	<b>\$ 231</b>	<b>\$ 218</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 448</b>

### Projected Expenditures - Construction

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

Note: Cash Flow Basis in Thousands

# 40200

## NBC System-wide Inflow Reduction

Project Manager: David Bowen, P.E.  
 Contractor(s): N/A

Location: NBC Service Area  
 Project Priority: D

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	September-21	February-23	17 Months	\$247
Construction	May-23	August-24	16 Months	455
<b>Total Project</b>	<b>September-21</b>	<b>August-24</b>	<b>36 Months</b>	<b>\$702</b>



Photo: Downspouts at NBC's Corporate Office Building

This project involves the development and implementation of an inflow reduction program to remove stormwater from sanitary sewers in the NBC's service area. This project is imperative to prevent surcharging of sewers that could cause illegal sanitary sewer overflows during wet weather events.

### CIP Window Summary

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ -	\$ -	\$ 160	\$ 105	\$ 353	\$ 84	\$ -	\$ -	\$ 702

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ 40	\$ 32	\$ -	\$ -	\$ -	\$ -	\$ 72
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	120	45	-	-	-	-	165
Other	-	-	-	10	-	-	-	-	10
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 160</b>	<b>\$ 87</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 247</b>

### Projected Expenditures - Construction

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ 6	\$ 71	\$ 7	\$ -	\$ -	\$ 84
A/E Professional	-	-	-	12	72	6	-	-	90
Construction	-	-	-	-	200	19	-	-	219
Contingency	-	-	-	-	-	22	-	-	22
Other	-	-	-	-	10	30	-	-	40
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 18</b>	<b>\$ 353</b>	<b>\$ 84</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 455</b>

Note: Cash Flow Basis in Thousands

# 40300

## Municipal Lateral Sewer Acquisition Impact

Project Manager: David Bowen, P.E.  
 Contractor(s): N/A

Location: NBC Service Area  
 Project Priority: D

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	June-21	June-23	24 Months	\$301
Design	N/A	N/A	N/A	N/A
Construction	N/A	N/A	N/A	N/A
<b>Total Project</b>	<b>June-21</b>	<b>June-23</b>	<b>24 Months</b>	<b>\$301</b>



Photo: Municipal Sewer Manhole Cover

This project involves the evaluation of the impact of NBC assuming ownership of lateral sewers that are currently owned by municipalities within the NBC service area. This project will be required should legislation be passed by the General Assembly requiring NBC to take over ownership and maintenance of local sewers within the NBC district.

### CIP Window Summary

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ -	\$ 1	\$ 173	\$ 127	\$ -	\$ -	\$ -	\$ -	\$ 301

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ 1	\$ 18	\$ 22	\$ -	\$ -	\$ -	\$ -	\$ 41
A/E Professional	-	-	150	100	-	-	-	-	250
Other	-	-	5	5	-	-	-	-	10
<b>Total</b>	<b>\$ -</b>	<b>\$ 1</b>	<b>\$ 173</b>	<b>\$ 127</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 301</b>

### Projected Expenditures - Design

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

Note: Cash Flow Basis in Thousands



# 40400

## FPWWTF Facilities Plan Update

Project Manager: David Bowen, P.E.  
 Contractor(s): CH2M Hill

Location: Providence, RI  
 Project Priority: B

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	January-17	December-21	60 Months	\$430
Design	N/A	N/A	N/A	N/A
Construction	N/A	N/A	N/A	N/A
<b>Total Project</b>	<b>January-17</b>	<b>December-21</b>	<b>60 Months</b>	<b>\$430</b>



Photo: Aeration Tanks at Field's Point WWTF

This project involves the update of the FPWWTF Plan and determining the maximum nitrogen and biochemical oxygen demand loads that can be accepted at the facilities while meeting RIPDES permit limits as well as resources required to review and ensure compliance with the RIPDES permit recently issued by RIDEM.

### CIP Window Summary

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ 250	\$ 142	\$ 38	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 430

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ 210	\$ 132	\$ 33	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 375
A/E Professional	35	-	-	-	-	-	-	-	35
Other	5	10	5	-	-	-	-	-	20
<b>Total</b>	<b>\$ 250</b>	<b>\$ 142</b>	<b>\$ 38</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 430</b>

### Projected Expenditures - Design

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

Note: Cash Flow Basis in Thousands

# 40550

## RIPDES Flow Monitoring System Implementation

Project Manager: Michael Caruolo, P.E.  
 Contractor(s): ADS Environmental Services

Location: NBC Service Area  
 Project Priority: A

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	March-20	January-21	10 Months	N/A
Construction	N/A	N/A	N/A	594
<b>Total Project</b>	<b>March-20</b>	<b>January-21</b>	<b>10 Months</b>	<b>\$594</b>



Photo: Flow Monitor

This project involves the replacement of existing flow monitoring equipment located throughout NBC's collection system. An evaluation of the entire flow monitoring system has been completed and recommendations documented. This project will involve purchasing, installing and maintaining all equipment in order to accurately monitor flow conditions and measurements in accordance with the RIPDES permit. In addition, for an initial one year period, all flow data shall be monitored and reported to the NBC.

### CIP Window Summary

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ 4	\$ 590	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 594

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ 4	\$ 106	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 110
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	480	-	-	-	-	-	-	480
Contingency	-	-	-	-	-	-	-	-	-
Other	-	4	-	-	-	-	-	-	4
<b>Total</b>	<b>\$ 4</b>	<b>\$ 590</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 594</b>

Note: Cash Flow Basis in Thousands

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# 30800

## CSO Phase III A Facilities

Project Manager: Kathryn Kelly, P.E.  
 Contractor(s): Stantec Consulting Services

Location: Pawtucket, RI  
 Project Priority: A

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	April-13	December-22	117 Months	\$74
Construction	N/A	N/A	N/A	N/A
<b>Total Project</b>	<b>April-13</b>	<b>December-22</b>	<b>117 Months</b>	<b>\$74,154</b>



Photo: Proposed alignment for the Pawtucket CSO Tunnel

The purpose Phase III A is to design and construct a deep rock tunnel in Pawtucket approximately 13,000 feet in length along the Seekonk and Blackstone Rivers, a pump station to convey flow to the Bucklin Point WWTF in East Providence, drop shafts and consolidation conduits, and improvements to the Bucklin Point WWTF. In addition, GSI facilities will be constructed to reduce stormwater inflow by infiltration of stormwater into the ground.

### CIP Window Summary

Pre FY21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ 49,255	\$ 16,457	\$ 8,142	\$ 301	\$ -	\$ -	\$ -	\$ -	\$ 74,154

### Projected Expenditures - Planning

Cost Category	Pre FY21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 FY21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ 3,004	\$ 893	\$ 600	\$ 301	\$ -	\$ -	\$ -	\$ -	\$ 4,798
Land	10,374	-	-	-	-	-	-	-	10,374
A/E Professional	35,478	15,302	7,505	-	-	-	-	-	58,286
Other	398	261	37	-	-	-	-	-	696
<b>Total</b>	<b>\$ 49,255</b>	<b>\$ 16,457</b>	<b>\$ 8,142</b>	<b>\$ 301</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 74,154</b>

### Projected Expenditures - Construction

Cost Category	Pre FY21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

Note: Cash Flow Basis in Thousands

# 30801

## CSO Phase III A Facilities - Pawtucket Tunnel & Pump Station

Project Manager: Kathryn Kelly, P.E.  
 Contractor(s): TBD

Location: Pawtucket  
 Project Priority: A

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	January-20	March-26	74 Months	\$335,764
<b>Total Project</b>	<b>January-20</b>	<b>March-26</b>	<b>74 Months</b>	<b>\$335,764</b>

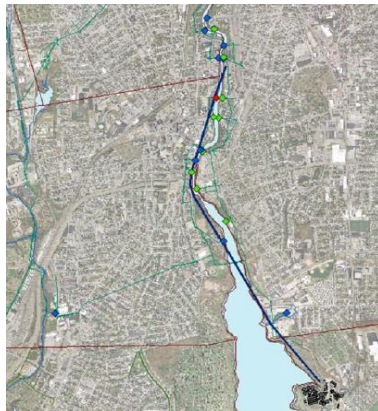


Photo: Pawtucket Tunnel - CDRA Route

This project includes the construction of a deep rock storage tunnel, launch and drop shafts, and adits. After construction of the tunnel, tunnel pump station, and associated near surface facilities, CSO flow which currently discharges to the Seekonk and Blackstone Rivers shall be diverted to the tunnel during storms smaller than or equal to a three-month design storm. The diverted CSO flow will be stored in the tunnel and will be pumped to the plant for full treatment when capacity becomes available.

### CIP Window Summary

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ -	\$ 6,140	\$ 62,782	\$ 100,521	\$ 100,314	\$ 66,007	\$ -	\$ -	\$ 335,764

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ 492	\$ 1,341	\$ 2,091	\$ 1,894	\$ 1,073	\$ -	\$ -	\$ 6,891
A/E Professional	-	531	5,793	9,281	9,281	5,637	-	-	30,523
Construction	-	4,825	52,666	84,377	84,377	56,252	-	-	282,497
Contingency	-	-	-	-	-	-	-	-	-
Other	-	292	2,982	4,772	4,762	3,045	-	-	15,853
<b>Total</b>	<b>\$ -</b>	<b>\$ 6,140</b>	<b>\$ 62,782</b>	<b>\$ 100,521</b>	<b>\$ 100,314</b>	<b>\$ 66,007</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 335,764</b>

Note: Cash Flow Basis in Thousands

# 30802

## CSO Phase III A Facilities - Tunnel Pump Station Fit-out

Project Manager: Kathryn Kelly, P.E.  
 Contractor(s): TBD

Location: Pawtucket  
 Project Priority: A

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	June-22	May-27	59 Months	\$82,703
<b>Total Project</b>	<b>June-22</b>	<b>May-27</b>	<b>59 Months</b>	<b>\$82,703</b>



Photo: Inside Ernest St. Tunnel Pump Station

This project includes construction of the CSO Tunnel Pump Station. The TPS shall be constructed on a site in Pawtucket near the Bucklin Point Wastewater Treatment Facility.

### CIP Window Summary

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ -	\$ -	\$ -	\$ 1,541	\$ 19,264	\$ 38,603	\$ 22,785	\$ 510	\$ 82,703

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ 255	\$ 612	\$ 612	\$ 561	\$ 158	\$ 2,198
A/E Professional	-	-	-	227	1,702	3,147	1,895	284	7,255
Construction	-	-	-	1,018	15,886	32,659	19,119	-	68,682
Contingency	-	-	-	41	1,064	2,185	1,210	68	4,568
Other	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,541</b>	<b>\$ 19,264</b>	<b>\$ 38,603</b>	<b>\$ 22,785</b>	<b>\$ 510</b>	<b>\$ 82,703</b>

Note: Cash Flow Basis in Thousands

**CSO Phase III A Facilities - OF 205**

Project Manager: Kathryn Kelly, P.E.  
 Contractor(s): TBD

Location: Pawtucket  
 Project Priority: A

**Total Project Duration/Cost**

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	November-22	January-26	39 Months	\$6,231
<b>Total Project</b>	<b>November-22</b>	<b>January-26</b>	<b>39 Months</b>	<b>\$6,231</b>



*Photo: Outfall 205 Location*

This project includes the construction of a deep rock storage tunnel, launch and drop shafts, and adits. After construction of the tunnel, tunnel pump station, and associated near surface facilities, CSO flow which currently discharges to the Seekonk and Blackstone Rivers shall be diverted to the tunnel during storms smaller than or equal to a three-month design storm. The diverted CSO flow will be stored in the tunnel and will be pumped to the plant for full treatment when capacity becomes available.

**CIP Window Summary**

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ -	\$ -	\$ -	\$ 595	\$ 3,560	\$ 2,076	\$ -	\$ -	\$ 6,231

**Projected Expenditures - Planning**

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ 15	\$ 85	\$ 50	\$ -	\$ -	\$ 150
A/E Professional	-	-	-	117	700	408	-	-	1,225
Construction	-	-	-	434	2,601	1,517	-	-	4,552
Contingency	-	-	-	29	174	101	-	-	304
Other	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 595</b>	<b>\$ 3,560</b>	<b>\$ 2,076</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 6,231</b>

Note: Cash Flow Basis in Thousands



# 30804

## CSO Phase III A Facilities - OF 210, 213, 214

Project Manager: Kathryn Kelly, P.E.  
 Contractor(s): TBD

Location: Pawtucket  
 Project Priority: A

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	August-23	December-25	28 Months	\$12,309
<b>Total Project</b>	<b>August-23</b>	<b>December-25</b>	<b>28 Months</b>	<b>\$12,309</b>



Photo: Outfall Locations

This project includes the construction of consolidation conduits to direct flow to the tunnel via Drop Shaft 213 from CSO outfalls 210, 211, 213, and 214. Wet weather flow from the OF-210, OF-211, and OF-213 will be diverted to a new 48-inch consolidation conduit that will direct flow to Drop Shaft 213. Wet weather flow from OF-214 will be directed through a new 48-inch consolidation conduit to a new 60-inch consolidation conduit.

### CIP Window Summary

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ -	\$ -	\$ -	\$ -	\$ 3,078	\$ 6,154	\$ 3,077	\$ -	\$ 12,309

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ 76	\$ 150	\$ 75	\$ -	\$ 301
A/E Professional	-	-	-	-	242	483	242	-	967
Construction	-	-	-	-	2,591	5,183	2,591	-	10,365
Contingency	-	-	-	-	169	338	169	-	676
Other	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 3,078</b>	<b>\$ 6,154</b>	<b>\$ 3,077</b>	<b>\$ -</b>	<b>\$ 12,309</b>

Note: Cash Flow Basis in Thousands

# 30805

## CSO Phase III A Facilities - OF 217

Project Manager: Kathryn Kelly, P.E.  
 Contractor(s): TBD

Location: Pawtucket  
 Project Priority: A

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	May-21	July-23	27 Months	\$18,910
<b>Total Project</b>	<b>May-21</b>	<b>July-23</b>	<b>27 Months</b>	<b>\$18,910</b>



Photo: Outfall 217

This project includes the construction of a consolidation conduit to direct flow to the tunnel via Drop Shaft 213 from CSO outfalls 217. Wet weather flow will be diverted from OF-217 to a new 48-inch consolidation conduit that will ultimately direct flow to Drop Shaft 213.

### CIP Window Summary

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ -	\$ 1	\$ 7,735	\$ 10,313	\$ 861	\$ -	\$ -	\$ -	\$ 18,910

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ 1	\$ 195	\$ 260	\$ 22	\$ -	\$ -	\$ -	\$ 478
A/E Professional	-	-	599	799	67	-	-	-	1,465
Construction	-	-	6,525	8,700	725	-	-	-	15,950
Contingency	-	-	416	554	47	-	-	-	1,017
Other	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>\$ -</b>	<b>\$ 1</b>	<b>\$ 7,735</b>	<b>\$ 10,313</b>	<b>\$ 861</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 18,910</b>

Note: Cash Flow Basis in Thousands

# 30806

## CSO Phase III A Facilities - OF 218

Project Manager: Kathryn Kelly, P.E.  
 Contractor(s): TBD

Location: Pawtucket  
 Project Priority: A

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	October-23	December-25	27 Months	\$8,422
<b>Total Project</b>	<b>October-23</b>	<b>December-25</b>	<b>27 Months</b>	<b>\$8,422</b>



Photo: Outfall 218 Location

This project includes the construction of a consolidation conduit to direct flow to the tunnel via Drop Shaft 218 from CSO outfall 218.

### CIP Window Summary

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ -	\$ -	\$ -	\$ -	\$ 1,540	\$ 4,591	\$ 2,291	\$ -	\$ 8,422

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ 47	\$ 111	\$ 51	\$ -	\$ 208
A/E Professional	-	-	-	-	129	386	193	-	708
Construction	-	-	-	-	1,280	3,841	1,921	-	7,042
Contingency	-	-	-	-	84	253	127	-	464
Other	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,540</b>	<b>\$ 4,591</b>	<b>\$ 2,291</b>	<b>\$ -</b>	<b>\$ 8,422</b>

Note: Cash Flow Basis in Thousands

# 30807

## CSO Phase III A Facilities - Regulator Modifications

Project Manager: Kathryn Kelly, P.E.  
 Contractor(s): TBD

Location: Pawtucket  
 Project Priority: A

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	July-20	June-22	23 Months	\$1,991
<b>Total Project</b>	<b>July-20</b>	<b>June-22</b>	<b>23 Months</b>	<b>\$1,991</b>



Photo: Outfall Locations

This project includes modifications at regulators for CSOs 203, 204, 207, 208, 209, 212, 215, and 216. Modifications are required in order to direct flow to the tunnel through consolidation conduits constructed in other Phase III projects.

### CIP Window Summary

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ -	\$ 631	\$ 1,360	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,991

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ 18	\$ 31	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 49
A/E Professional	-	46	99	-	-	-	-	-	145
Construction	-	526	1,142	-	-	-	-	-	1,668
Contingency	-	41	88	-	-	-	-	-	129
Other	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>\$ -</b>	<b>\$ 631</b>	<b>\$ 1,360</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,991</b>

Note: Cash Flow Basis in Thousands

**CSO Phase III A Facilities - Green Stormwater Infrastructure Demonstration**

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

Location: Central Falls  
 Project Priority: A

**Total Project Duration/Cost**

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	May-19	May-21	24 Months	\$1,834
<b>Total Project</b>	<b>May-19</b>	<b>May-21</b>	<b>24 Months</b>	<b>\$1,834</b>



*Photo: Dry wells used to promote infiltration of stormwater runoff*

This project entails construction of green stormwater infrastructure at 1304 High Street in Central Falls. Catch basins and storm pipes shall be installed to convey stormwater to bioretention basins where stormwater will infiltrate to the groundwater table rather than be conveyed to the combined sewer.

**CIP Window Summary**

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ 1,733	\$ 101	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,834

**Projected Expenditures - Planning**

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ 113	\$ 6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 119
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	1,619	95	-	-	-	-	-	-	1,714
Contingency	-	-	-	-	-	-	-	-	-
Other	1	-	-	-	-	-	-	-	1
<b>Total</b>	<b>\$ 1,733</b>	<b>\$ 101</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,834</b>

Note: Cash Flow Basis in Thousands

# 30809

## CSO Phase III A - GSI Projects

Project Manager: Rich Bernier, P.E.  
 Contractor(s): J. H. Lynch & Sons

Location: Central Falls  
 Project Priority: C

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	September-19	July-21	21 Months	\$5,703
<b>Total Project</b>	<b>September-19</b>	<b>July-21</b>	<b>21 Months</b>	<b>\$5,703</b>



Photo: Example of Green Stormwater Infrastructure

This project entails the construction of green stormwater infrastructure in the City of Central Falls. GSI will be constructed in the CSO 101 and 103 sewersheds and will include tree box filters, bio-retention basins, infiltration chambers, and other facilities to promote infiltration of stormwater runoff to the groundwater table.

### CIP Window Summary

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ 4,143	\$ 1,534	\$ 26	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,703

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ 135	\$ 68	\$ 1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 204
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	3,804	1,166	25	-	-	-	-	-	4,995
Contingency	200	300	-	-	-	-	-	-	500
Other	4	-	-	-	-	-	-	-	4
<b>Total</b>	<b>\$ 4,143</b>	<b>\$ 1,534</b>	<b>\$ 26</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 5,703</b>

Note: Cash Flow Basis in Thousands

# 30810

## CSO Phase III A Facilities - BPWWTF Clarifiers and Flow Splitters

Project Manager: Kathryn Kelly, P.E.  
 Contractor(s): TBD

Location: East Providence  
 Project Priority: A

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	November-20	August-24	46 Months	\$46,332
<b>Total Project</b>	<b>November-20</b>	<b>August-24</b>	<b>46 Months</b>	<b>\$46,332</b>



Photo: Existing Clarifiers at Bucklin Point

This project entails the construction of two new final clarifiers, modifications to the flow splitting operation, construction of a new RAS pump station for the new final clarifiers, and improvements to the RAS piping system and influent pump station.

### CIP Window Summary

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ -	\$ 431	\$ 22,875	\$ 22,788	\$ 238	\$ -	\$ -	\$ -	\$ 46,332

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ 13	\$ 577	\$ 571	\$ 6	\$ -	\$ -	\$ -	\$ 1,167
A/E Professional	-	40	2,134	2,111	22	-	-	-	4,307
Construction	-	358	19,221	19,021	199	-	-	-	38,799
Contingency	-	20	943	1,085	11	-	-	-	2,059
Other	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>\$ -</b>	<b>\$ 431</b>	<b>\$ 22,875</b>	<b>\$ 22,788</b>	<b>\$ 238</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 46,332</b>

Note: Cash Flow Basis in Thousands



# 30812

## CSO Phase III A Facilities - Dexter Street Stormwater Infrastructure

Project Manager: Kathryn Kelly, P.E.  
 Contractor(s): TBD

Location: Pawtucket, RI  
 Project Priority: A

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	July-20	June-21	12 Months	\$1,480
<b>Total Project</b>	<b>July-20</b>	<b>June-21</b>	<b>12 Months</b>	<b>\$1,480</b>



Photo: Permeable pavement

This project entails construction of green stormwater infrastructure at the Dexter Street parking lot in Pawtucket. Impervious pavement in the parking lot will be removed and replaced with porous pavement. Catch basins and storm pipes will be installed to convey stormwater to bio-retention basins where stormwater will infiltrate to the groundwater table rather than be conveyed to the combined sewer.

### CIP Window Summary

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ -	\$ 1,480	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,480

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ 40	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 40
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	1,357	-	-	-	-	-	-	1,357
Contingency	-	83	-	-	-	-	-	-	83
Other	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>\$ -</b>	<b>\$ 1,480</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,480</b>

Note: Cash Flow Basis in Thousands

# 30813

## CSO Phase III A Facilities - Site Demolition

Project Manager: Kathryn Kelly, P.E.  
 Contractor(s): TBD

Location: Pawtucket  
 Project Priority: A

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	February-20	November-20	9 Months	\$4,779
<b>Total Project</b>	<b>February-20</b>	<b>November-20</b>	<b>9 Months</b>	<b>\$4,779</b>



Photo: Demolition Sites

This project entails the demolition of existing buildings to prepare sites for construction of the tunnel launch shaft, pump station shaft and drop shafts.

### CIP Window Summary

	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
	\$ 1,234	\$ 3,545	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,779

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ 25	\$ 65	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 90
A/E Professional	42	85	-	-	-	-	-	-	127
Construction	1,061	3,183	-	-	-	-	-	-	4,244
Contingency	106	212	-	-	-	-	-	-	318
Other	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>\$ 1,234</b>	<b>\$ 3,545</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 4,779</b>

Note: Cash Flow Basis in Thousands

# 30830

## CSO Phase III B Facilities

Project Manager: Kathryn Kelly, P.E.  
 Contractor(s): N/A

Location: Central Falls, RI  
 Project Priority: A

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	December-27	December-30	37 Months	28,484
<b>Total Project</b>	<b>December-27</b>	<b>December-30</b>	<b>156 Months</b>	<b>\$28,484</b>



Photo: Proposed CSO Phase III B Facilities

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

### CIP Window Summary

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 28,484	\$ 28,484

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 615	\$ 615
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	26,433	26,433
Contingency	-	-	-	-	-	-	-	1,356	1,356
Other	-	-	-	-	-	-	-	80	80
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 28,484</b>	<b>\$ 28,484</b>

Note: Cash Flow Basis in Thousands

# 30850

## CSO Phase III C Facilities

Project Manager: Kathryn Kelly, P.E.  
 Contractor(s): N/A

Location: Pawtucket, RI  
 Project Priority: A

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	May-32	June-34	26 Months	\$23,120
Construction	April-34	June-37	39 Months	141,540
<b>Total Project</b>	<b>May-32</b>	<b>June-37</b>	<b>62 Months</b>	<b>\$164,660</b>



Photo: Proposed CSO Phase III C Facilities

Phase III C is to design and construct a stub tunnel that will convey flow from CSO 220 to the tunnel to be constructed in Phase III A. In addition, GSI facilities will be constructed to reduce storm water inflow to the combined sewers.

### CIP Window Summary

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 164,660	\$ 164,660

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 968	\$ 968
Land	-	-	-	-	-	-	-	2,500	2,500
A/E Professional	-	-	-	-	-	-	-	14,440	14,440
Other	-	-	-	-	-	-	-	5,212	5,212
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 23,120</b>	<b>\$ 23,120</b>

### Projected Expenditures - Construction

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,160	\$ 2,160
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	135,040	135,040
Contingency	-	-	-	-	-	-	-	3,360	3,360
Other	-	-	-	-	-	-	-	980	980
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 141,540</b>	<b>\$ 141,540</b>

Note: Cash Flow Basis in Thousands

**CSO Phase III D Facilities**

Project Manager: Kathryn Kelly, P.E.  
 Contractor(s): N/A

Location: Providence, RI  
 Project Priority: A

**Total Project Duration/Cost**

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	April-37	September-39	29 Months	\$13,180
Construction	August-39	December-41	28 Months	70,320
<b>Total Project</b>	<b>April-37</b>	<b>December-41</b>	<b>57 Months</b>	<b>\$83,500</b>



*Photo: Proposed CSO Phase III D Facilities*

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

**CIP Window Summary**

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 83,500	\$ 83,500

**Projected Expenditures - Planning**

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,110	\$ 1,110
Land	-	-	-	-	-	-	-	1,000	1,000
A/E Professional	-	-	-	-	-	-	-	8,000	8,000
Other	-	-	-	-	-	-	-	3,070	3,070
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 13,180</b>	<b>\$ 13,180</b>

**Projected Expenditures - Construction**

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,010	\$ 1,010
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	67,760	67,760
Contingency	-	-	-	-	-	-	-	1,320	1,320
Other	-	-	-	-	-	-	-	230	230
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 70,320</b>	<b>\$ 70,320</b>

Note: Cash Flow Basis in Thousands

# 12400

## IM Facilities

Project Manager: David Bowen, P.E.  
 Contractor(s): N/A

Location: Field's Point (Providence, RI)  
 Project Priority: C

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	July-22	May-24	22 Months	\$608
Construction	April-24	June-26	26 Months	6,287
<b>Total Project</b>	<b>July-22</b>	<b>June-26</b>	<b>47 Months</b>	<b>\$6,895</b>



*Photo: Interceptor Maintenance Building*

This project involves the design and construction of a new building that would be needed if NBC is required by legislation to assume ownership of lateral sewers currently owned by local communities within its district. The building will include an administrative area as well as a garage and storage yard.

### CIP Window Summary

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ -	\$ -	\$ -	\$ 226	\$ 384	\$ 2,491	\$ 3,794	\$ -	\$ 6,895

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ 51	\$ 37	\$ -	\$ -	\$ -	\$ 88
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	175	325	-	-	-	500
Other	-	-	-	-	20	-	-	-	20
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 226</b>	<b>\$ 382</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 608</b>

### Projected Expenditures - Construction

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ 2	\$ 180	\$ 180	\$ -	\$ 362
A/E Professional	-	-	-	-	-	36	29	-	65
Construction	-	-	-	-	-	2,200	2,800	-	5,000
Contingency	-	-	-	-	-	-	750	-	750
Other	-	-	-	-	-	75	35	-	110
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 2</b>	<b>\$ 2,491</b>	<b>\$ 3,794</b>	<b>\$ -</b>	<b>\$ 6,287</b>

Note: Cash Flow Basis in Thousands



# 12450

## IM Storage Building

Project Manager: David Bowen, P.E.  
 Contractor(s): TBD

Location: Fields Point WWTF  
 Project Priority: D

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	March-20	September-21	18 Months	\$354
Construction	October-21	March-23	17 Months	3,303
<b>Total Project</b>	<b>March-20</b>	<b>March-23</b>	<b>37 Months</b>	<b>\$3,657</b>



Photo: IM Storage Building

This project involves the planning, design and construction of a new IM Storage Building and related support systems at the Field's Point campus, due to aging infrastructure concerns and inefficient storage facilities for the IM department's vehicles, equipment and material storage needs. While not critical to FPWWTF operations, the new facility will improve efficiency of required collection system and pumping station maintenance support services and IM Department storage needs.

### CIP Window Summary

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ 8	\$ 298	\$ 723	\$ 2,628	\$ -	\$ -	\$ -	\$ -	\$ 3,657

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ 8	\$ 36	\$ 8	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 52
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	210	40	-	-	-	-	-	250
Other	-	52	-	-	-	-	-	-	52
<b>Total</b>	<b>\$ 8</b>	<b>\$ 298</b>	<b>\$ 48</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 354</b>

### Projected Expenditures - Construction

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ 77	\$ 113	\$ -	\$ -	\$ -	\$ -	\$ 190
A/E Professional	-	-	73	90	-	-	-	-	163
Construction	-	-	500	2,000	-	-	-	-	2,500
Contingency	-	-	-	375	-	-	-	-	375
Other	-	-	25	50	-	-	-	-	75
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 675</b>	<b>\$ 2,628</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 3,303</b>

Note: Cash Flow Basis in Thousands



# 30500

## NBC Interceptor Easements Restoration, Various Locations

Project Manager: David Bowen, P.E.  
 Contractor(s): N/A

Location: NBC Service Area  
 Project Priority: B

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	September-20	November-21	14 Months	\$439
Construction	November-21	March-23	15 Months	899
<b>Total Project</b>	<b>September-20</b>	<b>March-23</b>	<b>30 Months</b>	<b>\$1,338</b>



*Photo: Easement clearing*

This project involves verification of easement locations and clearing the easements in overland areas to ensure sufficient access and enable NBC to maintain the integrity of the collection system.

### CIP Window Summary

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ -	\$ 267	\$ 494	\$ 577	\$ -	\$ -	\$ -	\$ -	\$ 1,338

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ 47	\$ 27	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 74
Land	-	25	25	-	-	-	-	-	50
A/E Professional	-	185	115	-	-	-	-	-	300
Other	-	10	5	-	-	-	-	-	15
<b>Total</b>	<b>\$ -</b>	<b>\$ 267</b>	<b>\$ 172</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 439</b>

### Projected Expenditures - Construction

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ 34	\$ 41	\$ -	\$ -	\$ -	\$ -	\$ 75
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	266	436	-	-	-	-	702
Contingency	-	-	-	75	-	-	-	-	75
Other	-	-	22	25	-	-	-	-	47
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 322</b>	<b>\$ 577</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 899</b>

Note: Cash Flow Basis in Thousands

# 30610

## NBC System-wide Regulator Modifications

Project Manager: David Bowen, P.E.  
 Contractor(s): TBD

Location: Fields Point WWTF  
 Project Priority: A

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	March-20	July-21	16 Months	\$449
Construction	August-21	June-23	22 Months	2,572
<b>Total Project</b>	<b>March-20</b>	<b>June-23</b>	<b>39 Months</b>	<b>\$3,021</b>



Photo: OF 056 Regulator on Vandewater Street

This project involves the planning, design and construction of various regulator structure modifications to address known hydraulic capacity limitations within the NBC collection system. Regulator structure and gravity piping system modifications are needed to eliminate surcharging at Pitman Street, Silver Spring, Vandewater and other miscellaneous locations throughout the century old combined sewer system.

### CIP Window Summary

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ 13	\$ 419	\$ 641	\$ 1,948	\$ -	\$ -	\$ -	\$ -	\$ 3,021

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ 11	\$ 34	\$ 2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 47
Land	-	150	-	-	-	-	-	-	150
A/E Professional	-	185	15	-	-	-	-	-	200
Other	2	50	-	-	-	-	-	-	52
<b>Total</b>	<b>\$ 13</b>	<b>\$ 419</b>	<b>\$ 17</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 449</b>

### Projected Expenditures - Construction

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ 89	\$ 103	\$ -	\$ -	\$ -	\$ -	\$ 192
A/E Professional	-	-	55	75	-	-	-	-	130
Construction	-	-	450	1,550	-	-	-	-	2,000
Contingency	-	-	-	200	-	-	-	-	200
Other	-	-	30	20	-	-	-	-	50
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 624</b>	<b>\$ 1,948</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 2,572</b>

Note: Cash Flow Basis in Thousands

# 70900

## Omega Pump Station Upgrade

Project Manager: David Bowen, P.E.  
 Contractor(s): TBD

Location: Omega Pump Station, East Providence, RI  
 Project Priority: B

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	March-20	October-21	19 Months	\$267
Construction	October-21	July-23	21 Months	1,933
<b>Total Project</b>	<b>March-20</b>	<b>July-23</b>	<b>40 Months</b>	<b>\$2,200</b>



Photo: Omega Pump Station

This project involves the evaluation, design and replacement of pumps, piping and valves at the Omega Pump Station, which were originally built in the 1950's and are nearing the end of their useful life. New screening and grit technology will shred and reduce the size of coarse solid materials of the wastewater and facilitate transport to the wastewater treatment facility. Additionally, the new technology will provide for the upgrade of the pump station to improve reliability of the motor control center and streamline operations.

### CIP Window Summary

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ 8	\$ 220	\$ 635	\$ 1,334	\$ 3	\$ -	\$ -	\$ -	\$ 2,200

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ 8	\$ 40	\$ 14	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 62
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	150	25	-	-	-	-	-	175
Other	-	30	-	-	-	-	-	-	30
<b>Total</b>	<b>\$ 8</b>	<b>\$ 220</b>	<b>\$ 39</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 267</b>

### Projected Expenditures - Construction

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ 40	\$ 38	\$ -	\$ -	\$ -	\$ -	\$ 78
A/E Professional	-	-	46	51	3	-	-	-	100
Construction	-	-	500	1,000	-	-	-	-	1,500
Contingency	-	-	-	225	-	-	-	-	225
Other	-	-	10	20	-	-	-	-	30
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 596</b>	<b>\$ 1,334</b>	<b>\$ 3</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,933</b>

Note: Cash Flow Basis in Thousands

# 71000

## Lincoln Septage Station Replacement

Project Manager: David Bowen, P.E.  
 Contractor(s): TBD

Location: Lincoln, RI  
 Project Priority: B

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	May-20	October-21	17 Months	\$377
Construction	September-21	August-23	23 Months	3,317
<b>Total Project</b>	<b>May-20</b>	<b>August-23</b>	<b>39 Months</b>	<b>\$3,694</b>



Photo: Septage Receiving Station

The existing Lincoln Septage Receiving Station has reached the end of its useful life and needs to be replaced. This project includes design and construction of a new septage receiving station equipped with a screening mechanism and sample collection capabilities in accordance with NBC's Standard Operating Procedures for monitoring septage.

### CIP Window Summary

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ 4	\$ 273	\$ 749	\$ 2,507	\$ 161	\$ -	\$ -	\$ -	\$ 3,694

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ 4	\$ 40	\$ 9	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 53
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	188	73	-	-	-	-	-	261
Other	-	45	18	-	-	-	-	-	63
<b>Total</b>	<b>\$ 4</b>	<b>\$ 273</b>	<b>\$ 100</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 377</b>

### Projected Expenditures - Construction

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ 47	\$ 69	\$ 11	\$ -	\$ -	\$ -	\$ 127
A/E Professional	-	-	42	38	-	-	-	-	80
Construction	-	-	550	2,100	150	-	-	-	2,800
Contingency	-	-	-	280	-	-	-	-	280
Other	-	-	10	20	-	-	-	-	30
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 649</b>	<b>\$ 2,507</b>	<b>\$ 161</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 3,317</b>

Note: Cash Flow Basis in Thousands

## 304 M Summary

### Interceptor Inspection and Cleaning

Project Manager: Mike Caruolo, P.E.  
Contractor(s): Various

Location: NBC Service Area  
Project Priority: B

#### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Inspection and Cleaning	July-09	Ongoing	Ongoing	4,288
<b>Total Project</b>	<b>July-09</b>	<b>Ongoing</b>	<b>Ongoing</b>	<b>\$4,288</b>



Photo: Interceptor Grit Removal

The 304 M project includes the inspection and cleaning of interceptors in order to maintain NBC's infrastructure and collection system. The inspections determine pipe condition and identify infrastructure issues. NBC allocates \$500 thousand annually for inspections and cleaning in years that do not have specific projects identified to ensure resources are available. As new inspection and cleaning projects are identified, they will be given a unique project number.

CIP Window Summary	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
	\$ 576	\$ 712	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 4,288

#### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ 35	\$ 49	\$ 55	\$ 55	\$ 55	\$ 55	\$ 55	\$ 55	\$ 414
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	468	542	370	370	370	370	370	370	3,230
Contingency	-	51	-	-	-	-	-	-	51
Other	73	70	75	75	75	75	75	75	593
<b>Total</b>	<b>\$ 576</b>	<b>\$ 712</b>	<b>\$ 500</b>	<b>\$ 500</b>	<b>\$ 500</b>	<b>\$ 500</b>	<b>\$ 500</b>	<b>\$ 500</b>	<b>\$ 4,288</b>

Note: Cash Flow Basis in Thousands

# 30400C

## Interceptor Restoration and Construction

Project Manager: Rich Bernier, P.E.  
 Contractor(s): Various

Location: NBC Service Area  
 Project Priority: B

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	July-01	Ongoing	Ongoing	7,500
<b>Total Project</b>	<b>July-01</b>	<b>Ongoing</b>	<b>Ongoing</b>	<b>\$7,500</b>



Photo: Proposed portion of Lincoln Interceptor Replacement

Project 30400C consists of funding programmed for potential restoration and construction to correct issues such as structural damage, aging or inaccessible infrastructure, odor control and emergency situations. NBC allocates \$1.5 million annually for interceptor restoration and construction, in years that do not have specific projects identified to ensure resources are available. As new projects are identified, they will be given a unique project number.

### CIP Window Summary

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ -	\$ -	\$ -	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 7,500

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 375
A/E Professional	-	-	-	5	5	5	5	5	25
Construction	-	-	-	1,250	1,250	1,250	1,250	1,250	6,250
Contingency	-	-	-	150	150	150	150	150	750
Other	-	-	-	20	20	20	20	20	100
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,500</b>	<b>\$ 1,500</b>	<b>\$ 1,500</b>	<b>\$ 1,500</b>	<b>\$ 1,500</b>	<b>\$ 7,500</b>

Note: Cash Flow Basis in Thousands



# 30315

## CSO Phase II - WCSOI OF 046

Project Manager: Kathryn Kelly, P.E.  
 Contractor(s): TBD

Location: Providence  
 Project Priority: B

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	April-18	April-22	49 Months	\$3,915
<b>Total Project</b>	<b>April-18</b>	<b>April-22</b>	<b>49 Months</b>	<b>\$3,915</b>



Photo: Surcharge area at Kinsley Ave, Providence

This project includes construction of facilities to eliminate surcharging from the Woonasquatucket CSO Interceptor during extreme wet weather events.

### CIP Window Summary

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ 317	\$ 878	\$ 2,720	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,915

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ 37	\$ 47	\$ 78	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 162
A/E Professional	251	233	-	-	-	-	-	-	484
Construction	15	466	2,332	-	-	-	-	-	2,813
Contingency	-	62	310	-	-	-	-	-	372
Other	14	70	-	-	-	-	-	-	84
<b>Total</b>	<b>\$ 317</b>	<b>\$ 878</b>	<b>\$ 2,720</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 3,915</b>

Note: Cash Flow Basis in Thousands



# 30421

## Louisquisset Pike Interceptor Improvements

Project Manager: David Bowen, P.E.  
 Contractor(s): N/A

Location: Lincoln, RI  
 Project Priority: D

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	May-07	May-09	24 Months	\$178
Construction	February-21	June-22	16 Months	4,794
<b>Total Project</b>	<b>May-07</b>	<b>June-22</b>	<b>181 Months</b>	<b>\$4,972</b>



Photo: Louisquisset Pike in Lincoln

This project involves the construction of a larger diameter interceptor in the northern section of the Town of Lincoln. The larger capacity pipe will accommodate the additional flow resulting from expected development.

### CIP Window Summary

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ 178	\$ 29	\$ 4,765	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,972

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ 23	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 23
Land	-	-	-	-	-	-	-	-	-
A/E Professional	155	-	-	-	-	-	-	-	155
Other	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>\$ 178</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 178</b>

### Projected Expenditures - Construction

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ 20	\$ 121	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 141
A/E Professional	-	9	44	-	-	-	-	-	53
Construction	-	-	4,000	-	-	-	-	-	4,000
Contingency	-	-	600	-	-	-	-	-	600
Other	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>\$ -</b>	<b>\$ 29</b>	<b>\$ 4,765</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 4,794</b>

Note: Cash Flow Basis in Thousands

30444

# Moshassuck Valley Interceptor

Project Manager: Rich Bernier, P.E.  
 Contractor(s): N/A

Location: Central Falls, RI  
 Project Priority: A

## Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	January-12	January-18	73 Months	\$504
Construction	February-18	October-20	32 Months	12,798
<b>Total Project</b>	<b>January-12</b>	<b>October-20</b>	<b>105 Months</b>	<b>\$13,302</b>



Photo: Construction on the Moshassuck Valley Interceptor

An inspection of the Moshassuck Valley Interceptor from Higginson Street in Central Falls to Lockbridge Street in Pawtucket revealed that this line has sunk from its original grade at numerous points by as much as 2.5 feet. This project involves the design and construction of a new sewer to replace the existing sewer and replace approximately 1,300 linear feet of 48" defective pipe, line approximately 1,400 linear feet of 48" pipe and replace approximately 1,800 linear feet of 48" drain pipe (along with site restoration).

### CIP Window Summary

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ 12,279	\$ 1,023	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13,302

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ 79	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 79
Land	95	-	-	-	-	-	-	-	95
A/E Professional	324	-	-	-	-	-	-	-	324
Other	6	-	-	-	-	-	-	-	6
<b>Total</b>	<b>\$ 504</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 504</b>

### Projected Expenditures - Construction

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ 484	\$ 31	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 515
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	11,180	992	-	-	-	-	-	-	12,172
Contingency	109	-	-	-	-	-	-	-	109
Other	2	-	-	-	-	-	-	-	2
<b>Total</b>	<b>\$ 11,775</b>	<b>\$ 1,023</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 12,798</b>

Note: Cash Flow Basis in Thousands

# 30467

## Improvements to Interceptors FY 2019

Project Manager: Rich Bernier, P.E.  
 Contractor(s): Insituform

Location: Providence, East Providence and Johnston  
 Project Priority: A

### Total Project Duration/Cost

<u>Project Phase</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Project Duration</u>	<u>Cost (in Thousands)</u>
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	January-19	April-21	27 Months	\$3,607
<b>Total Project</b>	<b>January-19</b>	<b>April-21</b>	<b>27 Months</b>	<b>\$3,607</b>



Photo: Rehabilitation of Interceptors

This project consists of lining various diameter interceptors ranging from 8" to 42" and the rehabilitation of various manholes throughout the NBC service area.

### CIP Window Summary

Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
\$ 3,133	\$ 474	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,607

### Projected Expenditures - Planning

Cost Category	Pre FY 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total</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 21	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Post FY 26	Total
Administrative	\$ 277	\$ 20	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 297
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	2,850	100	-	-	-	-	-	-	2,950
Contingency	-	354	-	-	-	-	-	-	354
Other	6	-	-	-	-	-	-	-	6
<b>Total</b>	<b>\$ 3,133</b>	<b>\$ 474</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 3,607</b>

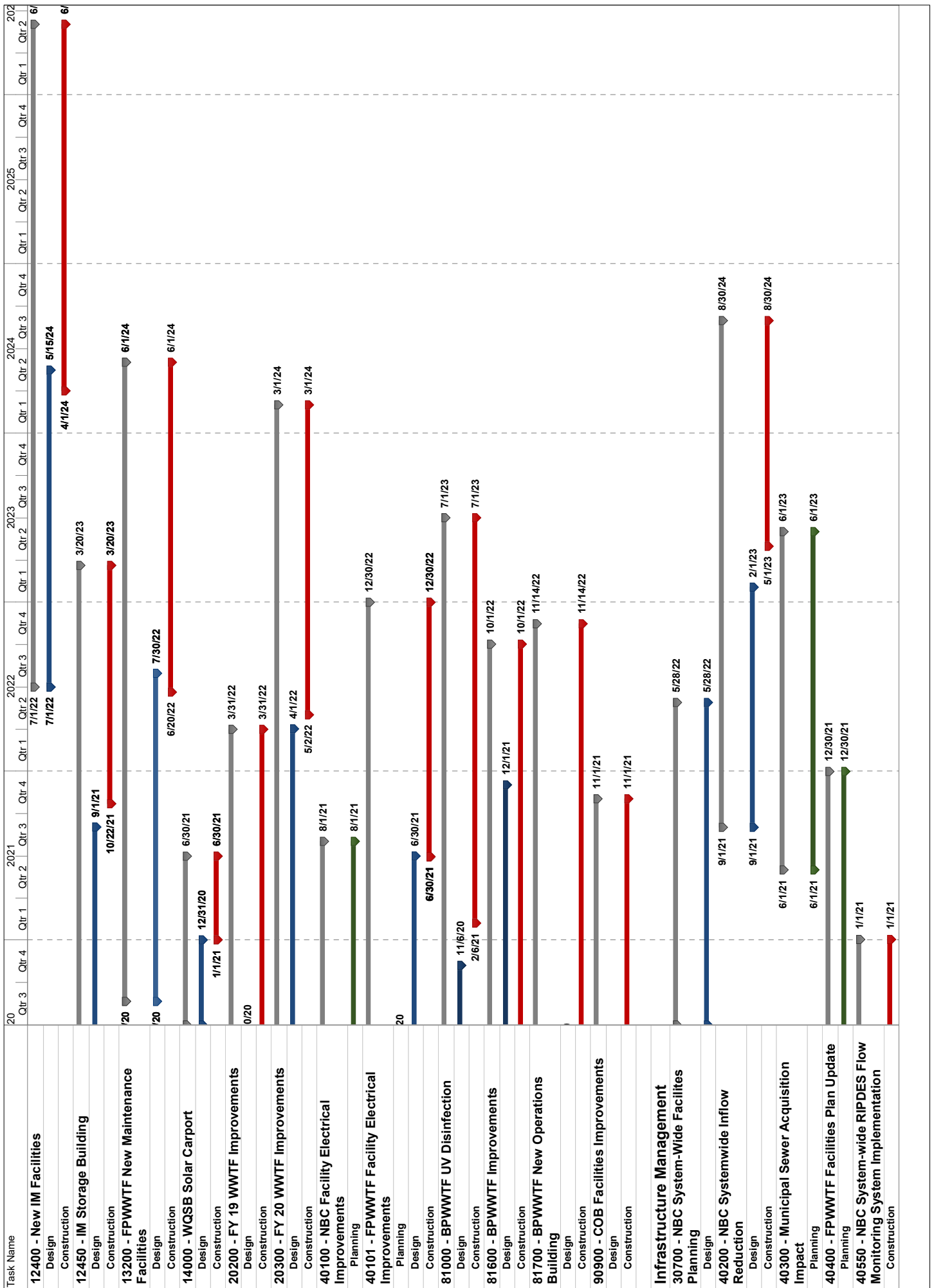
Note: Cash Flow Basis in Thousands

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***Capital Improvement Program Timeline***

***Fiscal Years 2022 - 2026***

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