

# **New Jersey Environmental Infrastructure**

# **FINANCING PROGRAM**

STATE FISCAL YEAR 2017 PRIORITY SYSTEM AND PROJECT PRIORITY LIST

DISASTER RELIEF EMERGENCY FINANCING PROGRAM PROJECT ELIGIBILITY LIST

Submitted to the State Legislature by

- The New Jersey Environmental Infrastructure Trust
- The New Jersey Department of Environmental Protection

# **JANUARY 2016**

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# Report to the Legislature Pursuant to

P.L. 1985, Chapter 334 New Jersey Wastewater Treatment Trust Act of 1985 as amended by P.L. 1997, Chapter 224

**Presented by** 

## Bob Martin, Commissioner

New Jersey Department of Environmental Protection

## Robert A. Briant, Jr., Vice-Chairman

New Jersey Environmental Infrastructure Trust

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New Jersey Department of Environmental Protection

January 13, 2016

TO:	Honorable Members of the New Jersey State Legislature
FROM:	Bob Martin, Commissioner, New Jersey Department of Environmental Protection, and
	Robert A. Briant, Jr., Vice-Chairman, New Jersey Environmental Infrastructure Trust
SUBJECT:	State Fiscal Year 2017 New Jersey Environmental Infrastructure Financing Program

#### Introduction

In accordance with N.J.S.A. 58:11B-9(d) 20 and 20.1, the NJ Department of Environmental Protection (Department or DEP) and the NJ Environmental Infrastructure Trust (Trust or NJEIT), are pleased to present the NJ Legislature (Legislature) with this report (January Report) which summarizes (i) the initial funding applications in the State Fiscal Year (SFY) 2017 New Jersey Environmental Infrastructure Financing Program (NJEIFP or Financing Program), (ii) projects eligible to participate in the Disaster Relief Emergency Financing Program (SAIL), and (iii) projects funded in the SFY2015 Financing Program.

#### Background

Through the Financing Program, the DEP and the Trust ensure that the State's water infrastructure (which is critical in protecting public health, water quality, and the State's natural resources and supporting economic growth) is properly constructed to meet State and Federal standards. For the past 30 years, the DEP and the Trust have focused on both cost and operational efficiencies by leveraging State and Federal funds with publicly issued tax-exempt bonds. To date:

- NJEIFP has issued over \$6.5 billion in low-interest loans;
- New Jersey's ratepayers have saved more than **\$2.3 billion** in interest costs due to the Trust's AAA bond rating, the State's Principal Forgiveness grants and 0% interest rate loans; and
- The Financing Program's total loan spending has generated approximately 130,000 direct construction-related jobs throughout the State.<sup>1</sup>

#### SFY2017 - Initial Project List

#### 124 projects / \$1.054 billion

The January Report identifies an initial pool for the SFY2017 Financing Program consisting of **124 new projects** with an estimated value of **\$1.054 billion**, continuing to demonstrate the Financing Program's importance and commitment to meeting the State's environmental infrastructure needs. When combined with existing SFY2016 projects, the total number of projects contained in this January Report equals 402 totaling \$2.85 billion.

<sup>&</sup>lt;sup>1</sup> Based on the US GSA's estimate of 20 jobs per \$1 million prior to 2012 and 12 jobs per \$1 million thereafter

Projects eligible for funding through the Financing Program involve a wide variety of drinking water, wastewater and stormwater systems. As the environmental and engineering review of these projects by DEP's staff progresses, the DEP and the Trust will be able to offer a clearer picture as to project eligibility by source of funds. The Financing Program typically funds 30% – 50% of the projects on the Project Priority List to begin construction in any given Program Financing Year. The reasons why more projects do not proceed to construction include the level of Borrower commitment, project readiness, and at times significant technical issues that need to be addressed. In an effort to increase the number of environmental projects funded each year, the Department and NJEIT have implemented a number of initiatives; including the installation of enterprise software for more efficient functionality and project tracking, more focused follow-up with non-responsive Program applicants by DEP staff, and the procurement of consulting engineers to supplement the reviews performed by the DEP. The Program fully expects a noticeable improvement in the ratio of funded projects with these efforts. *See Appendices A through D for a complete list of identified projects*.

#### SFY2017 Financing Program

The Financing Program is transitioning to fund all projects with multi-year, short-term loans through to the completion of construction, only charging interest on disbursed funds. These favorable loan terms allow borrowers to begin work when their projects are ready and with the most efficient costs of financing.

As in the recent past, the Financing Program will offer loans funded 75% with DEP funds at 0% and 25% with Trust AAA market rate funds for the majority of projects. On average, participants save over \$400,000 in interest costs per \$1 million lent over 30 years compared to independent financing. *Priority projects will receive additional incentives, including principal forgiveness and 100% interest free financing, as described below.* 

All loan Programs are aggregated under one program-wide brand and technology initiative, H<sub>2</sub>LOans. By aggregating all information onto a single web-based platform, borrowers, as well as Department and Trust staff benefit from time and cost efficiencies, funding more projects with reduced effort, errors and costs.

#### SFY2017 - Project Priority System

**Base SRF Program - The Clean Water Base SRF Program** includes specific set-asides for; (i) *Barnegat Bay Watershed* projects (approximately \$3 million of Principal Forgiveness funds), (ii) Combined Sewer *Overflow Abatement* (CSO) projects (approximately \$3 million of Principal Forgiveness funds), and (iii) *Brownfield Reserve* (up to \$60 million of Financing Program Ioans).

**The Drinking Water Base SRF Program** includes specific set-asides for; **(i)** *Small-system-DW* projects - i.e. serving populations not greater than 10,000 (NANO - up to \$5 million of Principal Forgiveness funds), and **(ii)** *Municipally owned-DW projects exceeding a primary drinking water standard* (residual Principal Forgiveness according to rank on a first come/first served basis).

**Sandy SRF** - The State was awarded \$229.3 million of special SRF appropriations from the federal government for Sandy impacted water treatment and distribution systems. Borrowers receive funding with a 25% Trust Loan, 56% DEP 0% Loan and 19% Principal Forgiveness Loan. The Financing Program began awarding these loan funds in SFY2015.

**DEP & Trust-Only Loans** - Borrowers receiving a CSO loan or a CSO Planning & Design loan are eligible for 100% interest-free financing from the DEP. In the event Borrower costs are ineligible to be jointly funded through the SRF Program, the Trust may fund 100% of these expenses.

#### SFY2017 – New Features

In addition to the Construction Loan Program, several changes were introduced by the Financing Program in an effort to be more Borrower-centric, relevant, and accessible and cheaper to use. These include:

- Longer Loan Maturities The Financing Program is offering loan terms up to 30 years for qualified projects, lowering the annual repayment obligation for municipalities and systems;
- **CSO Initiatives** Communities in CSO sewer-sheds may access short-term funds for planning & design work for up to 10 years to develop long-term control plans and 30 years for project loans;
- More Frequent Bond Issuance The Trust will issue long-term bonds multiple times per year allowing participants to regularly roll construction loans into long-term;
- **Supplemental Assistance** The Department will be employing outside engineering services when conditions exceed the resources of the Department;
- Asset Management The Program, in compliance with new Federal requirements enacted under the Water Resources Reform and Development Act (WRRDA), is implementing an Asset Management Program (AMP) to maximize the return on investment of public funds.

#### <u>SFY2015 – ReCap</u>

#### 57 Projects / \$185.7 million

**Projects** - A total of fifty-seven (57) projects received NJEIFP long-term financing totaling \$185,742,717. The majority of loans were issued at interest rates equivalent to 25% of the Trust's AAA/Aaa market rate.

**IFP Loans -** Twenty-nine (29) projects received short-term financing totaling \$119,355,200. Of these, ten (10) projects totaling \$46,061,055 received long-term financing by June 30, 2015.

**SAIL** - The Program issued \$3.5 million in two SAIL Disaster Relief loans, both to the South Monmouth Regional Sewerage Authority (SMRSA) for the rebuild and/or relocation of two pump stations. With the oversight assistance offered by the Program, SMRSA's requisitions to FEMA have been reimbursed, on average, within 22 days and SMRSA was reimbursed 100% of their eligible expenses, an enviable record.

**Refundings** - Seven (7) communities in the State saved an estimated \$1.6 in total lower annual debt service payments through September 2025 as the Trust took advantage of historically low interest rates again in February 2015 to refund outstanding NJEIT bond issues.

Within the next few months the Trust will present the Legislature with the May Report, which sets forth the plan by which those projects participating in the FY2017 Financing and SAIL Programs will be funded.

We look forward to meeting with you, the Legislature, to discuss the upcoming year's Financing Program. We and our staff remain available to answer any questions you may have regarding the NJEIFP's initial SFY2017 Project Priority List, the SFY2017 Emergency Eligibility List, and any of the Financing Program's initiatives contained within this Report. Thank you for your time and continued support.

Bob Martin Commissioner, JJ Department of Environmental Protection

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Robert A. Briant, Jr. Vice-Chairman, NJ Environmental Infrastructure Trust

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## TABLE OF CONTENTS

FINANCING PROGRAM BACKGROUND	1
INTRODUCTION	1
GOALS	1
SFY2017 H <sub>2</sub> LOans	2
NEW INITIATIVES	2
FINANCING PROGRAM OFFERINGS	3
ELIGIBLE PROJECTS / BORROWERS	6
BORROWER BENEFITS	6
DOLLAR SAVINGS	6
CASH FLOW FLEXIBILITY	7
ADMINISTRATIVE	8
SFY2015 NJEIFP SUMMARY	8
PROJECTS	8
LONG TERM FINANCING	8
IFP LOAN PROJECTS	8
SAIL LOANS	8
TOTAL SFY15 PROJECTS	8
H2LOans FINANCING PROGRAM STRATEGY	9
PRIORITY SYSTEM, INTENDED USE PLAN, AND PROJECT PRIORITY LIST	9
ELIGIBLE / INELIGIBLE PROJECT ACTIVITIES	11
CLEAN WATER	11
DRINKING WATER	19
PROJECT RANKING METHODOLOGY	24
CLEAN WATER RANKING CRITERIA (BASE SFY2017 NJEIFP AND SANDY NJEIFP)	24
DRINKING WATER RANKING CRITERIA	
SFY2017 PROJECT PRIORITY LISTS	
PROGRAM LOAN TERMS AND CONDITIONS	
APPENDICES INDEX	

### **JANUARY REPORT**

### FOR STATE FISCAL YEAR 2017 PRIORITY SYSTEM AND PROJECT PRIORITY LIST

#### FINANCING PROGRAM BACKGROUND

#### INTRODUCTION

This January Report (Report) is submitted to the New Jersey State Legislature (Legislature) pursuant to N.J.S.A. 58:11B-1 et seq., specifically, N.J.S.A. 58:11B-9(d), 20 and 20.1. It has been prepared by the New Jersey Environmental Infrastructure Trust (NJEIT or Trust) and the New Jersey Department of Environmental Protection (Department or DEP), which together fund and manage H<sub>2</sub>LOans, a suite of short and long term financing options offered through the New Jersey Environmental Infrastructure Financing Program (NJEIFP or Financing Program).

This Report summarizes the method employed to prioritize projects and establish project rankings for the State Fiscal Year (SFY), beginning July 1, 2016 (SFY2017). In addition, this Report includes the NJEIFP's project priority list identifying projects to be considered for funding in SFY2017. In addition, in an effort to improve program transparency, this Report summarizes projects financed in the most recently completed fiscal year, SFY2015, including the project name, project description, loan type, and loan amount. In May, the Trust and the Department will jointly publish the Financial Plan (also known as the "May Report"). The May Report will summarize the NJEIFP's available loan programs, loan terms, and the loan closing process for projects to be funded in SFY2017 under H<sub>2</sub>LOans.

Federal requirements regarding funds appropriated under the Clean Water Act (CWA) and Safe Drinking Water Act (SDWA) necessitate the NJEIFP's development of an annual Clean Water Priority System, Intended Use Plan, and Project Priority List (together the CW Plan) and a Drinking Water Priority System, Intended Use Plan, and Project Priority List (together the DW Plan). In August of 2015, the DEP issued the proposed CW Plan and DW Plan for projects to be financed in SFY2017 pursuant to its obligations under the CWA and SDWA. Those publications are largely summarized in this January Report.

#### GOALS

The main objectives of H<sub>2</sub>LOans is to:

- Provide capital for water and wastewater infrastructure renewal to protect public health and the environment for multiple generations of New Jersey citizens;
- Continue serving as the Garden State's premier source of environmental infrastructure financing through self-sustaining, efficient and transparent programs;
- Establish and efficiently manage a permanent source of funding for clean water and drinking water infrastructure projects;
- Provide project financing at a cost much lower than program participants could achieve individually thereby passing substantial savings onto New Jersey taxpayers and rate payers; and

• Improve access to capital markets for those participants that find it difficult or expensive on their own, due to lower credit ratings or a lack of familiarity with debt financing.

#### SFY2017 H<sub>2</sub>LOans

#### NEW INITIATIVES

The NJEIFP is implementing a number of initiatives for SFY2017 as a result of recent amendments to the Trust's Enabling Act as well as H.R. 3080, the Water Resources Reform and Development Act of 2014 (WRRDA).

Fiscal Sustainability Plan (Asset Management): WRRDA requires all SRF loan recipients, receiving funds for the repair, replacement, or expansion of a treatment works, to develop and implement a Fiscal Sustainability Plan (FSP) or certify that they have developed and implemented such a plan. An FSP requires a Borrower to:

 inventory critical assets that are part of the treatment works; 2) evaluate the condition and performance of inventoried assets or asset groupings; 3) certify that the recipient has evaluated and will be implementing water and energy conservation efforts as part of the plan; and 4) present a plan for maintaining, repairing as necessary, replacing the treatment works and funding such activities.

The categorization of system assets along with a financial plan that lays out the methods, scheduling and financing of the strategic upkeep and replacement of such assets describes an Asset Management Plan (AMP). The Department and the Trust are working jointly to develop a State-wide AMP Program that is intended to ensure local communities proactively operate and maintain the technical components of their water systems in a cost-effective manner by assisting local systems in the development and implementation of effective AMPs. The Program also aims to identify the human and capital resources necessary to achieve and maintain effective operations, assist owners and operators with clearly defined metrics, and provide technical assistance to owners and operators. Included within the AMP Program will be a description of what is required of the systems as well as the corresponding implementation time table, the retainage by the Department and/or Trust of any necessary professional services to assist the Financing Program in implementing and monitoring such an AMP, and the development of sample templates and standardized planning tools to assist water systems with the creation of the AMP. Both the Department and the Trust are currently working on a baseline survey to assess the status of current asset management in the State. The Department will make public, additional information regarding AMP requirements, as these requirements are developed and as appropriate.

- ii. Combined Sewer Overflow Abatement Project Planning and Design Loans. In an effort to further incentivize communities in a CSO sewer-shed beyond the Principal Forgiveness funds being made available, the Financing Program is offering these communities short-term planning and design (P&D) loans for up to 10 years to develop long-term control plans (LTCPs) with the expectation that such plans will result in a capital improvement project financed with NJEIFP funds. In addition, the Financing Program is offering long-term 100% interest free loans through the DEP for up to 30 years for capital improvement projects that reduce or eliminate excessive infiltration/inflow or extraneous flows in CSO areas.
- iii. Continued Transition to Short-Term Loans for Project Construction: In SFY2015, the Financing Program issued its first short-term loans for the term of construction, not to exceed 3 full fiscal years. Financing projects with short-term loans initially and then with long-term loans once the projects are at or close to construction completion provides greater certainty as to costs incurred, thereby reducing the frequency of both (i)

committing Borrowers to unneeded long-term funds and (ii) supplemental loans for project overruns. The NJEIT received statutory authorization in 2015 to use commercial paper or similar private capital as a source of short-term funding thereby ensuring adequate funds are available to finance all short-term loans. The NJEIT now also offers variable rate short-term loans directly reducing municipal borrowing costs by charging interest only on funds disbursed (as opposed to the entirety of the project loan at loan closing) at extremely favorable short-term loan market rates. With the growth of the construction loan program and statutory amendments, all qualified projects will have the opportunity to convert their short-term construction loans into long-term financing every six to eight months. These projects will have to satisfy the Term Financing Criteria established by the Trust requiring a certain percentage of construction completion and be on the Project Eligibility List reported to the state legislature.

- iv. Increased Loan Maturities of Long-Term Loans. Since the Program's first loan in 1987, the maximum term of CW loans has been limited by both State statute and federal law to the shorter of 20 years or an asset's average useful life. However, the Water Resources Reform and Development Act (WRRDA) of 2014 (the 2014 amendments to the Clean Water Act), provides, in part, that States may issue State Revolving Fund (SRF) Programs, such as the NJEIFP, to lend Clean Water SRF loans for terms as long as 30 years. Recent amendments to the NJEIT's enabling Act increase the NJEIT's bonding authority from 20 years to 30 years. These changes position the NJEIFP to issue CW loans and certain DW loans with final maturities more consistent with the maturity limits of municipal entities (up to 35 years).
- v. Disaster Relief Emergency Loan Financing Program (aka SAIL): Authorized in SFY2014, the Trust developed and implemented the Statewide Assistance Infrastructure Loan (SAIL) Program. SAIL assists those communities in counties impacted by a declared disaster in financing environmental infrastructure projects to repair adversely impacted systems or improve the resiliency of such systems or similar systems that reasonably would have been impacted by such a disaster. With the establishment of well documented and refined program parameters, procurement of technical assistance, successful funding of SAIL projects, and amassing strong working knowledge of reimbursement programs under the Federal Emergency Management Act, the Program is well positioned to provide immediate assistance to adversely impacted environmental infrastructure systems in the next disaster.
- vi. Conduit Redevelopment Projects: For projects with significant private involvement utilizing a local government unit as a conduit to access the Financing Program, the program now offers an interest-free loan from the Department for up to 50% of the allowable project costs (not to exceed \$25 million) and a market rate loan from the Trust for the remaining allowable project costs for conduit/redevelopment projects.

#### FINANCING PROGRAM OFFERINGS

H<sub>2</sub>LOans consists of two loan formats, short-term and long-term loans, that together provide funding for all aspects, phases and components of designing and building environmental infrastructure projects. NJEIFP Loans are issued for costs incurred for designing and constructing projects (and land preservation) that enhance and protect ground and surface water resources, ensure the safety of drinking water, and facilitate responsible, sustainable economic development upon approval of applicable NJEIFP program requirements (Environmental Infrastructure Project).

Each loan is funded from one or more of the following sources: 1) United States Environmental Protection Agency (USEPA) capitalization grants issued pursuant to the Water Pollution Control Act Amendments of 1972 (CWA) and Safe Drinking Water Act Amendments of 1996 (SDWA); 2) various state bond issues; 3) loan repayments; 4) interest

earnings; (5) Trust bond proceeds; (6) Trust operating revenues; and (7) Trust Commercial Paper or Line of Credit. In addition, special appropriations through the Disaster Relief Emergency Appropriations Act of 2013 (PL 2013-2) are utilized for Superstorm Sandy Loans.

#### SHORT-TERM FINANCING

Short-term loans are available to finance the cost of (i) environmental planning and engineering design activities incurred in preparing a construction loan application, and (ii) project construction upon application approval. In some cases, borrowers may be able to include the 1% DEP administrative fee (50% of the total) in their short-term loan. Short-term loans are only issued for activities likely to lead to, or the construction of, an Environmental Infrastructure Project. While the basis of the financing are established at the time of the Short Term loan, the terms, including Principal Forgiveness, are contingent upon a project receiving long-term financing. These terms vary primarily with the nature of the project activities or populations served as detailed below.

Short-Term Loans are issued for the project's construction period with a maximum of up to three fiscal years. Financings related to (i) and (ii) in the previous paragraph are funded 25% from the Trust at the Trust's AAA-rated market interest rate and 75% from the DEP at 0% interest rate, resulting in the equivalent of a 25% market rate loan. Whereas financing related to (iii) in the previous paragraph is funded 100% from the Trust at a market interest rate. The market rate is established at the time of each disbursement based upon the MMD TM3 © Thompson rate for the Trust's cash on hand or a pass through of the rate of any short term borrowings from private sources by the Trust. As an example, funds disbursed for construction costs in October of 2015 had an effective interest rate of (0.07%). Furthermore, the Borrower is not obligated to repay principal or interest during the term of the short-term loan. These totals are rolled into the Borrower's long-term Financing Program loan.

An exception to the above are Short Term Loans for Combined Sewer Overflow Long-Term Control Plans recognized by the NJEIFP. These CW loans are for terms of up to ten (10) years and funded 100% from DEP funds at an interest rate of 0%. Consistent with local finance law, Borrowers commence principal repayments in year 4, in an amount not less than 1/30<sup>th</sup> of the loan amount annually.

#### LONG-TERM FINANCING

Long-Term Loans are issued upon completion of a percentage of project construction (demonstrated through submitted requisitions). Due to modifications to the Financing Program, Long-Term loans are largely mechanisms to refinance previously issued short-term loans for construction (together with any short-term loans for P&D activities). With limited exception, all relevant Program terms and conditions are established at the time of issuance of short-term loans. For example, the Trust to Fund loan ratio (e.g., 25% Trust / 75% Fund); credit worthiness approval; Division of Local Government Services approval; the State's commitment of long-term funding at the time of certification of each operable project segment; and the applicability of all program benefits (e.g., principal forgiveness). Long-Term Loans provide certainty as to the interest rate which is fixed for periods of up to 30 years.

#### SPECIFIC PROGRAMS

• Base. The general loan program financing all Environmental Infrastructure Projects not categorized below. These loans have an effective interest rate of 25% of the market rate. (for CW & DW);

- SAIL. Environmental Infrastructure Projects for the repair to systems adversely impacted during natural disasters and/or improve the resiliency of systems. These loans have an effective interest rate of 25% of the market rate. (for CW & DW);
- Non-Sail Emergencies. Environmental Infrastructure Projects necessary to respond immediately to emergencies (other than SAIL) that endanger public health and welfare that are likely to result in substantial environmental damage. These loans have an effective interest rate of 25% of the market rate. (for CW & DW);
- Supplemental/Excess Costs. Environmental Infrastructure Projects whose costs exceed the amount financed in a prior Long-Term Loan due to differing site conditions or when the low bid building cost exceeds original State or local authorizations. These loans have a Trust to Fund loan ratio equivalent to that of the original project and their need will subside as the Financing Program transitions fully to funding through construction loans. (for CW & DW);
- Superstorm Sandy. Environmental Infrastructure Projects to improve the resiliency of environmental infrastructure systems adversely impacted during Superstorm Sandy. The majority of these loans have a Trust to Fund loan ratio as follows: 19% of eligible project costs funded with principal forgiveness, 56% funded with a DEP 0% interest rate loan and 25% funded with a Trust AAA-rated, market interest loan. It is anticipated that the large majority of such funds will be committed to projects in SFY2016. (for CW & DW);
- CSO Abatement. CSO abatement projects utilizing green practices (green roofs, blue roofs, rain gardens, porous pavement, and other activities that maintain and restore natural hydrology by infiltrating, evapotranspiring, harvesting and using stormwater) are eligible for principal forgiveness loans. These loans have a Trust to Fund loan ratio as follows: up to 50% of eligible project costs are subject to principal forgiveness and the remaining loan is at an interest rate equivalent to between 0% and 50% of the market rate. Up to \$3 million of principal forgiveness is available for all such loans and a project sponsor limited of \$1 million of principal forgiveness. (for CW only);
- Barnegat Bay Projects. Stormwater and non-point source pollution management projects in the Barnegat Bay Watershed are eligible for principal forgiveness loans. These loans have a Trust to Fund loan ratio as follows: up to 50% of eligible project costs are subject to principal forgiveness and the remaining loan is at an interest rate equivalent to between 0% and 50% of the market rate. Approximately \$3 million of principal forgiveness is available for all such loans and each project sponsor is limited to \$1 million of principal forgiveness. (CW only);
- Small and Very Small Drinking Water Systems.
  - <u>Very Small Drinking Water Systems</u> (NANO-Lite). Drinking Water Projects for systems serving populations of 500 persons or less provided the project is a discrete project that can be completed with the funds allocated. These loans have a loan cap of \$500,000 and the project sponsor must supply at least 15% of the total project cost. As a result, 85% of eligible project costs, up to \$500,000, qualify for principal forgiveness.
  - <u>Small Drinking Water Systems</u> (NANO).\_Drinking Water Projects to existing publicly-owned and privately-owned community water systems and non-profit, non-community water systems with

populations of 10,000 persons or less. These loans have a loan cap of \$1 million and a Trust to Fund loan ratio as follows: up to 50% (\$500,000) of eligible project costs are subject to principal forgiveness; 25% of funds are provided by the DEP at 0% and 25% of funds are provided by the Trust at the Trust's AAA-rated market rate.

A Borrower is capped at \$500,000 total in principal forgiveness in any three year period. Construction costs in excess of \$500,000 may be funded at the general Financing Program Trust to Fund loan ratio of 25% Trust / 75% DEP (DW only).<sup>2</sup>

Private and public utilities who serve more than 10,000 residents statewide can utilize the NANO-Lite and NANO Programs to make infrastructure improvements to small water systems that they have recently acquired (since 2015).

#### ELIGIBLE PROJECTS / BORROWERS

H<sub>2</sub>LOans provides funding for environmental infrastructure projects with a primary focus on clean water and drinking water construction, rehabilitation and repair of systems which are owned and or operated by local government units and certain types of public water utilities.

Projects eligible to receive Clean Water funding are wastewater management, storm water management and nonpoint source pollution control projects, landfill closures, open space land acquisition, brownfield remediation and well sealing.

Projects eligible to receive Drinking Water funds are utilized for rehabilitation or development of sources to replace contaminated water sources, treatment and storage facilities transmission/distribution pipes and appurtenances to prevent contamination or improve water pressure to safe levels, and upgrades to security measures. Detailed information regarding eligible projects is set forth below.

Loans may be made only to local government units (LGUs), and certain types of public water utilities and private water systems. Applicants must demonstrate an ability to meet repayment obligations and satisfy the Program's credit worthiness standards, which typically requires an investment grade credit rating or a suitable credit enhancement. Approximately 91% of the Financing Program's current Borrowers provide a municipal general obligation pledge.

#### BORROWER BENEFITS

In addition to the significant interest cost savings described above, Program participants realize significant cost-saving measures through the following program features:

#### DOLLAR SAVINGS

• Interest on Utilized funds – During the short term loan period, Borrowers only pay interest on funds utilized;

<sup>&</sup>lt;sup>2</sup> Funding of Small Drinking Water System projects is prioritized as follows (1 being the highest): 1) Water systems serving 500 residents or less, 2) Water systems serving 501 to 3,300 residents and 3) Water systems serving 3,301 to 10,000 residents.

- Earnings Credits Investment earnings from all bond funds, such as the project fund, revenue fund and, when applicable, debt service reserve funds, are distributed to Borrowers as credits toward their debt service payments;
- No bond insurance required The Trust's financial structure produces the highest possible credit rating without the expense or requirement for Borrowers of purchasing costly bond insurance;
- No reserve Borrowers in the Financing Program are exempted from the Division of Local Government Services requirement of posting a 5% reserve prior to bond issuance;
- Minimized financing costs Borrowers are charged a 10 basis point fee for cost-of-issuance of Trust bonds on the Trust portion of their total project loan. The remainder of the cost-of-issuance of the bonds is paid by the Trust;
- No front-loading requirement LGUs issuing their own general obligation debt are required to "front load" their repayment schedule. This ensures that debt service payments are larger in the early years of the loan, and decline over time. The Financing Program provides for level debt service throughout the life of the loan normalizing annual payments for rate payers;
- Net Funding Each Borrower submits a loan drawdown schedule. Funds may be invested by the Trust and may accrue earnings that are used to reduce a Borrower's loan obligation;
- Refunding The Trust continually monitors market conditions to assess when interest rates meet the State's savings threshold for refunding prior bonds. All savings realized from prior bond refundings (a total of \$120 million since the Financing Program's inception), are passed on to Borrowers, further lowering their loan costs; and
- Debt service reserve fund Investment grade rated Borrowers are relieved of their obligation to commit a portion of loan funds to debt service reserve due to the Program's Master Program Trust collateralization structure.

#### CASH FLOW FLEXIBILITY

- Upfront Cash The disbursement of funds is expedited based on a rapid requisition approval process thereby relieving Borrowers from utilizing cash-on-hand to pay contractors and vendors up front;
- Capitalized interest During the short term loan period no interest payments are due. Interest is capitalized and rolled into the project's long-term loan at or near construction completion. Additionally, Borrowers may capitalize interest on the long term loan as allowable by the IRS guidelines;
- Deferred Principal Repayment During the Short Term loan period no principal repayments are due. Additionally, to better align a project's cash flow dynamics, Borrowers may defer principal repayment as allowable by the IRS guidelines;
- Generous allowable costs Associated project costs, including planning and design, engineering, local financing and curb-to-curb right-of-way restoration may be financed through the program. An eligible project's reserve capacity costs such as excess project capacity may be financed through a Trust-only loan; and

• Flexible Term - Shorter term financing is available for Borrowers who wish to avoid a 30-year obligation or minimize the repayment period of their loan.

#### ADMINISTRATIVE

- No Arbitrage Worries The Trust manages federal IRS arbitrage rebate requirements, relieving Borrowers of the cost and administration of this obligation;
- No Secondary Disclosure Requirements Due to the size of the Financing Program, presently no single Borrower is a Material Obligated entity. As a result, Financing Program Borrowers are not required to fulfill secondary disclosure requirements for the S.E.C.; and
- Timely Decisions The Department prioritizes Financing Program project reviews.

#### SFY2015 NJEIFP SUMMARY

#### PROJECTS

#### LONG TERM FINANCING

A total of fifty-six (56) clean water and drinking water projects received long-term NJEIFP financing in the amount of \$188,952,601 in SFY2015.

- i. Bond Pool Projects: Fifty-three (53) projects totaling \$187,583,868 were funded through a combination of bond proceeds and State and federal funding sources. The large majority of loans received an interest rate equivalent to 25% of the market rate. Four of the 53 projects, received supplement loans in the amount of \$14,298,422 for cost overruns. Each supplemental loan was issued at a funding ratio consistent with that of the original loan.
- ii. Direct Loan Projects: The remaining three (3) projects totaling \$1,368,733 were funded through a combination of Trust cash-on-hand and State and federal sources.

#### IFP LOAN PROJECTS

In the SFY2015 Financing Program, twenty-nine (29) clean water and drinking water projects received IFP loans in the amount of \$119,655,200. Ten of these twenty-nine projects received long-term financing by June 30, 2015.

#### SAIL LOANS

The Trust issued two (2) disaster emergency SAIL Program loans in SFY2015, one to the South Monmouth Regional Sewerage Authority for the replacement of the Pitney Avenue Pump Station pump station in an amount of \$1,532,224, and the second to Bayshore Regional Sewage Authority for restoration and repair work in the treatment plant and collection system in the amount of \$28,113,117. These SAIL loans allowed the undertaking of construction months in advance of when such projects might have otherwise begun, thereby allowing the disaster-impacted system to return to more normal conditions sooner and with less strain to their financial condition.

In SFY2015, 78 projects received funding through short-term and/or long-term loans totaling approximately \$292 million.

See Appendix H for a Summary of these projects.

#### $\textbf{H}_{2}\textbf{LOans} \text{ FINANCING PROGRAM STRATEGY}$

#### PRIORITY SYSTEM, INTENDED USE PLAN, AND PROJECT PRIORITY LIST

#### BASE SFY2017 NJEIFP AND SANDY NJEIFP PROGRAM LOANS

The CW Plan and DW Plan detail the State's proposal to expend federal capitalization grants to finance the NJEIFP's Clean Water and Drinking Water project loans in the ensuing SFY. The proposed CW Plan for SFY2017 was published on August 28, 2015. The proposed DW Plan for SFY2017 was published on August 28, 2015. This Report, in part, reflects the contents of the proposed CW and DW Plans for both the SFY2017 Base and Sandy Financing Programs.

Sources of funding for Superstorm Sandy projects for FFY2016/SFY2017 will come from the unused portion of FFY2015 Disaster Relief Appropriations Act ("DRAA"), and authorized funds from the DEP and the Trust. Although the Department is working to award all of the Sandy CWSRF and DWSRF funds in the SFY2016 Program, there is the possibility that not all of the available Sandy CWSRF and DWSRF funds will be utilized by a sufficient amount approved projects in the SFY16 program. Therefore, the Department will continue to accept submittals under the Sandy CWSRF and DWSRF Program, which generally includes a principal forgiveness component of approximately 19% of the allowable costs. If all of the Sandy CWSRF and DWSRF funds are awarded in SFY2016, new submittals will still continue to be eligible for financing under the 75% DEP and 25% Trust loan structure.

The total amount of Superstorm Sandy Drinking Water loans issued to any project sponsor shall not exceed \$15 million and no more than a total of \$4,500,000 may be a principal forgiveness loan. This loan cap was established to ensure that all project sponsors have access to Superstorm Sandy funding and the Principal Forgiveness dollars associated with the funding. If a project sponsor submits multiple drinking water project loan applications that are eligible for Superstorm Sandy DW loans and exceed the \$15 million Superstorm Sandy DW loan cap, the project sponsor has the option to select which projects to finance through the Superstorm Sandy DW loan program and which projects it will seek funding pursuant to a NJEIFP DW Base financing loan. The amount of principal forgiveness available through Sandy DW loans may be increased to ensure full utilization of Superstorm Sandy DWSRF funding for drinking water projects. Note however, that based on Sandy DW loan applications received in March of 2015, it appears the availability of Sandy DW loans will be limited in SFY2017.

Consistent with the SFY2016 Intended Use Plan, the DEP is reserving 4% of the Sandy capitalization grants for program administration expenses and reserving an amount equal to the 20% State Match to ensure that the source funding for the State Match is used in a manner compatible with its origination.

#### PRIORITY SYSTEM

Placement of any project on the Project Priority List is a prerequisite for being considered eligible for financial assistance through NJEIFP. A single priority system is utilized for both the CW-Base SFY2017 and CW-Sandy Financing Programs. However, two separate priority systems are utilized for each the DW-Base SFY2017 and DW-Sandy Financing Programs. The CW Plan and DW Plans each include a priority system that identifies the project activities that are eligible to be financed in each year's Financing Program. *Eligible project activities are summarized in Section III-B below.* 

The CW Plan and DW Plans priority systems also set forth the methodology utilized to rank projects. The principal elements of the CW proposed priority system are local environmental enhancement planning activities, project discharge category, water use/water quality, smart growth approvals and population. Highest ranking systems are those that address discharges of raw, diluted or inadequately treated sewage to the State's waters during wet weather. In addition, the SFY2017 Priority System broadens the existing smart growth categories to include projects in growth areas that have been endorsed by the State Planning Commission or any development project that is consistent with the "Garden State Values" contained in the State Strategic Plan.

The DW proposed priority systems describe the ranking methodology for eligible drinking water projects. Project ranking within the DW SFY2017 Base NJEIFP priority system is based on criteria pertaining to compliance, public health, approved water supply plan/studies, state designations, affordability, and population. Project ranking within the DW Sandy NJEIFP priority system is based on criteria pertaining to projects relating to Superstorm Sandy resiliency affordability, and population. The current priority system ranking methodology used for ranking CW and DW projects is *set forth in Section II-B below.* 

#### PROJECT PRIORITY LISTS

The CW Plan and DW Plans include priority lists which identify projects targeted for financial assistance pursuant to the CWA and SDWA and identify the estimated total eligible building costs under the appropriate project category. Placement on a project priority list is a prerequisite to receiving a Short-Term or Long-Term Loan. Statutory changes may require identification of projects on a second project list, "Project Eligibility List," as a condition precedent to securing Long-Term funding in SFY2017.

The Department ranks all eligible projects according to the total number of points each project receives and will subsequently place the projects on the Project Priority Master List according to their ranking. The projects eligible to participate in the SFY2017 Financing Program and their relative rank are set forth in the SFY2017 Project Priority List, reflecting projects identified in SFY2017 Letters of Intent (Application Part I) and environmental planning documents, which were submitted on or before October 9, 2015, as well as outstanding projects from the SFY2016 Project Priority List.

The combined CW and DW projects in the SFY2017 Base NJEIFP and Sandy NJEIFP include a pool of four hundred and two (402) Clean Water and Drinking Water projects at a total estimated cost of \$2.85 billion. The SFY2017 Clean Water Project Priority List set forth in *Appendix A* includes environmental infrastructure projects eligible for financing pursuant to the Clean Water SFY17 NJEIFP and Superstorm Sandy financing programs, and consists of two hundred thirty four (234) Clean Water projects at a total estimated cost of \$2,037,703,351. The SFY2017 Drinking Water Project Priority List *set forth in Appendix B* includes projects eligible for financing pursuant to the SFY2017 Drinking Water Water NJEIFP and Superstorm Sandy financing programs, and consists of one hundred and sixty eight (168) Drinking Water at a total estimated cost of \$810,207,961.

In addition to the submission of Letters of Intent and environmental planning documents, eligibility to participate in the SFY2017 NJEIFP and Sandy financing program also requires the submission of Part II of the Applications, engineering design documents, and contract specifications on or before March 4, 2016 (March Application Documents). Projects for which March Application Documents are not submitted will be removed from the Project Priority List. Note also that pursuant to the Track II Program, a project will be added to the Project Priority Lists if all application related submissions are received on or before March 4, 2016.

Again, this estimate of the total number and cost of projects to receive financing in SFY2017 is subject to wide fluctuations due to the fact that the Project Priority Lists are not final, and certain project applications will be (i)

withdrawn by the applicants pursuant to independent business decisions; (ii) deemed ineligible for funding; (iii) revised to reflect actual project costs; and (iv) subject to continued review pending receipt of relevant approvals.

#### ELIGIBLE / INELIGIBLE PROJECT ACTIVITIES

#### CLEAN WATER

Base SFY2017 NJEIFP Loans are available for all traditional project activities fundable under the NJEIFP as set forth below, such as improvements to wastewater and stormwater systems. Pursuant to USEPA requirements, Sandy NJEIFP loans are limited to a subset of the traditional project activities that improve the resiliency of a system adversely impacted during Superstorm Sandy. SFY2017 and Sandy NJEIFP Loans are also subject to the availability of funds.

#### CLEAN WATER BASE SFY2017 NJEIFP PROJECTS

The State Strategic Plan focuses the Department (and all other agencies of New Jersey State Government) on four goals:

- Targeted Economic Growth
- Effective Planning for Vibrant Regions
- Preservation and Enhancement of Critical State Resources
- Tactical Alignment of Government

To advance efforts that incorporate these goals into State policies and financing programs, the NJEIFP continues to prioritize and provide low-cost financing for the following project types, locations and/or designations:

#### 1. Urban Centers and Urban Complexes

Wastewater treatment and stormwater management projects that serve Urban Centers and Urban Complexes designated by the State Planning Commission are considered Smart Growth. To date, the State Planning Commission has designated Asbury Park, Atlantic City, Camden, Elizabeth, Jersey City, New Brunswick, Newark, Paterson and Trenton as Urban Centers and one Urban Complex, the Hudson County Urban Complex, which includes the following municipalities: Bayonne, East Newark, Guttenberg, Harrison, Hoboken, Jersey City, Kearny, North Bergen, Secaucus, Union, Weehawken, and West New York.

#### 2. Combined Sewer Overflow Abatement

Combined sewer systems (CSSs) are wastewater collection systems designed to carry sanitary sewage, industrial and commercial wastewater, and storm water runoff in a single system of pipes to a publicly owned treatment works (POTW). During dry weather, all flow (composed primarily of sanitary sewage and industrial/commercial wastewater) is conveyed to the POTW. However, during periods of rainfall or snow melt, the total wastewater flows entering the collection system can exceed the capacity of the system or the treatment facility. Under such conditions, CSSs are designed to overflow at predetermined CSO points and result in discharges excess wastewater flows directly to surface water bodies such as rivers, estuaries, and coastal waters.

Because CSO discharges include raw sewage, they contain a combination of untreated human waste and pollutants discharged by commercial and industrial establishments. CSOs also have a significant storm water

component that includes pollutants from urban and rural runoff. These pathogens, solids, and toxic pollutants may be discharged directly to the waters of the state during wet weather events.

Combined sewer overflows are a human health concern because they can create the potential for exposure to disease-causing pathogens, including protozoa, bacteria, and viruses. Exposure to CSO contaminants through swimming or other contact can lead to infectious diseases such as hepatitis, gastrointestinal disorders, dysentery, and swimmer's ear infection. Other forms of bacteria can cause typhoid, cholera, and dysentery. Human health also can be impacted from ingesting fish or shellfish contaminated by CSO discharges. All projects that contribute to the correction of combined sewer systems and discharge points including elimination, relocation or consolidation of discharge points and construction of facilities or purchase of equipment to remove solids and floatables are eligible.

#### 3. On-Site Rehabilitation of Septic Systems

Under the Financing Program, a local government unit may apply for funding to upgrade or replace failing on-site systems. The nature and extent of failures would be documented during planning and a Septic Management District (SMD) would have to be established in order to assure on-going operation and maintenance (typically, this involves implementing a system to assure regular, usually once every three years, pump out and/or inspection of the on-site systems). While some SMDs have formed in New Jersey (so there is institutional precedent on which to advance this option), none have tackled the costly job of system rehabilitation as yet.

#### 4. Designated Brownfields Development Areas

These are areas that have applied for and have received formal designation by the Department under the BDA Initiative. Wastewater treatment and stormwater management projects that are located in DEP designated BDAs are eligible. The sites within the BDA will be handled by a single project manager, who will coordinate with partnering State agencies to direct targeted technical and financial assistance to sites within the BDA neighborhoods.

Currently, there are twenty-four BDAs (http://www.nj.gov/dep/srp/brownfields/bda/sites/index.html) in New Jersey and they are as follows: Cramer Hill BDA in Camden, Camden County; North Camden BDA in Camden, Camden County; Monument/Magic Marker BDA in Trenton, Mercer County; Elizabethport BDA in Elizabeth, Union County; Ford Avenue BDA in Milltown Borough, Middlesex County; Route 73 South BDA in Palmyra Borough, Burlington County; Lister Avenue BDA in Newark, Essex County; Harrison Waterfront BDA in Harrison, Hudson County; Assunpink Greenway BDA in Trenton, Mercer County; Keyport Waterfront BDA in Keyport Borough, Monmouth County; Great Falls Historic District BDA in Paterson, Passaic County; West Lake Avenue in Neptune Township; Central Valley in Orange/West Orange; Salem Industrial Green way in Salem City; Bellmawr Landfills in Bellmawr; Chrome Waterfront in Carteret; Grand Jersey in Jersey City; North Outerbridge Crossing in Perth Amboy; Southport, Gloucester City; Springfield Avenue, Asbury Park; Passaic Avenue Waterfront, Kearny; Downtown District Lodi; Central Business District Plainfield; Landfill and Station Area Somerville; and Keasbey Redevelopment Woodbridge.

It is anticipated that the municipality will most often serve as the loan recipient under this option to effect remediation at multiple sites in the designated BDA, although county improvement authorities or similar entities could also participate and provide assistance in this environmental improvement effort.

#### 5. Designated Transit Villages

The New Jersey Department of Transportation (NJDOT) and NJ TRANSIT spearhead a multi-agency Smart Growth partnership known as the Transit Village Initiative. The Transit Village Initiative helps to redevelop and revitalize communities around transit facilities to make them an appealing choice for people to live, work and play, thereby reducing reliance on the automobile. The Transit Village Initiative is an excellent model for Smart Growth because it encourages growth in New Jersey where infrastructure and public transit already exist. Wastewater treatment and stormwater infrastructure needed to address improvements in eligible Transit Village areas.

Studies have shown that an increase in residential housing options within walking distance of a transit facility, typically a one quarter to one half mile radius, does more to increase transit ridership than any other type of development. Therefore, it is a goal of the Transit Village Initiative to bring more housing, more businesses and more people into communities with transit facilities. Municipalities that have been designated a Transit Village by the inter-agency Transit Village Task Force must have an adopted land-use strategy for achieving compact, transit-supportive, mixed-use development within walking distance of transit facilities. This can be in the form of a redevelopment plan, zoning ordinance, master plan or overlay zone. There are currently 30 designated Transit Villages. They are Pleasantville (1999), Morristown (1999), Rutherford (1999), South Amboy (1999), South Orange (1999), Riverside (2001), Rahway (2002), Metuchen (2003), Belmar (2003), Bloomfield (2003), Bound Brook (2003), Collingswood (2003), Cranford (2003). Matawan (2003), New Brunswick (2005), Journal Square/Jersey City (2005), Netcong (2005), Elizabeth/Midtown (2007), Burlington City (2007), City of Orange Township (2009), Montclair (2010), Somerville (2010), Linden (2010), West Windsor (2012), East Orange (2012), Dunellen (2012), Summit (2013), Plainfield (2014), Borough of Park Ridge (2015) and Irvington Township (2015).

#### 6. Transfer of Development Rights (TDR) Receiving Areas

The transfer of development rights is a realty transfer system where development potential in a specified preservation area can be purchased by private investors for use in a targeted growth area. In exchange for a cash payment, landowners in the preservation area place a restrictive easement on the property that will maintain the resource in perpetuity. The land in the designated receiving area can then be developed at a higher density than allowed under the baseline zoning. This process reduces the consumption of our critical resources, while still accommodating growth, and eliminates "windfalls and wipeouts" in property values normally associated with zoning changes. The transfer of development rights is only allowed where a municipality has implemented a TDR program. Sponsors of projects that serve areas designated as TDR Receiving Areas under the State TDR Act (P.L. 2004, c.2), by the Highlands Council, by the Pinelands Commission or by Burlington County pursuant to the Burlington County Transfer of Development Rights Demonstration Act (P.L. 1989, c. 86) are considered Smart Growth. The participating municipality (or municipalities in a regional program) designates sending and receiving areas based on their preservation and growth goals, respectively. Planning and implementation documents are created by the municipality that governs where and how development rights can be transferred. Implementing a transfer of development rights program requires a major planning initiative on the part of the participating municipality. Before any credits can transfer from landowner to developer, certain planning and implementation documents must be adopted. The State TDR Act requires several items including a Development Transfer Plan Element, a Capital Improvement Plan, a Utility Service Plan, Transfer Ordinance, Plan Endorsement and other approvals.

In addition, the Department is broadening the existing smart growth categories to include projects in growth areas that have been endorsed by the State Planning Commission or any development project that is consistent with the "Garden State Values" contained in the State Strategic Plan. A "Priority Growth Investment Area" means: "an area where more significant development and redevelopment is preferred and where public and private investment to support such development and redevelopment will be prioritized. Areas that meet one or more of the criteria identified in the State Planning Rules will meet this definition (unless requested to be removed by a municipality on technical grounds) along with areas identified by counties that meet conditions through an application approved by the Commission."

For those project types that have the potential to facilitate growth or cause significant adverse environmental impacts, the Department will continue to thoroughly evaluate the planning submitted by the project sponsor. Such evaluation will include, but will not be limited to the water quality/quantity impacts, location in the State, impacts to riparian corridors, the existing pollution control needs, assessment of the resulting environment, detailed assessment of proposed alternatives and cost-effectiveness of the proposal. The Department's funding decisions will take into account the project's growth potential, its location and the project's aggregate impacts as determined through such evaluations. Collectively, these initiatives will enhance the Department's and the Trust's ability to promote smart growth, support the State Strategic Plan and will also allow the Environmental Infrastructure Financing Program to provide the funds needed to make it a reality.

#### 7. Stormwater / Nonpoint Source (NPS) Management Projects

#### a. Introduction

Because of the need to address water quality concerns related to stormwater runoff, the Department and the Trust have expanded the scope of the Financing Program to include construction costs for a wide variety of stormwater/NPS management projects. If the project will impact the capacity, hydrology, or hydraulics of existing stormwater management facilities, systems, or downstream waterbodies, a watershed-based implementation plan appropriate to the project's location should be prepared. Watershed-based planning assesses the overall needs of an area to ensure that proposed projects will improve/maintain water quality, water quantity and ecosystem health in a cost-effective manner. Watershed-based planning differs from the individual project planning which is site-specific and which is a routine requirement of funding under the NJEIFP. Although the NJEIFP does not fund watershed-based planning, the NJEIFP does provide an allowance for a project's site-specific planning and design. The allowance is based on a percentage of the building costs. Stormwater/NPS management projects must support efforts to achieve and/or maintain water quality, compatible with designated uses of the water body.

#### b. Storm Water

Implementation of USEPA's Phase II Municipal Stormwater Program requires municipalities, counties and other public entities to control stormwater discharges from new and existing developments. In New Jersey, the program is being implemented through the issuance of NJPDES general permits. Program implementation requires capital expenditures for equipment acquisition, additional personnel to implement best management practices, and expenses for public education (an innovative component, to change the behavior of people to reduce environmental impacts). Low-cost funding for the equipment

procurement and construction of needed facilities is available through the NJEIFP, and is described in more detail below.

The stormwater/NPS management projects that are eligible for NJEIFP loans include both new or modifications of stormwater management systems, facilities, basins, or other stormwater/NPS management facilities (including land acquisition to site the eligible facilities). Stormwater/NPS management projects also include, but are not limited to: green roofs, green streets, tree filters, rain gardens, rain barrels, porous pavement, installation of packed media filters, replacement of existing storm drains with newer designs that incorporate features to remove solids, floatables, oil and grease, and/or other pollutants; purchase or replacement of equipment to reduce solids and/or floatables, such as netting on outfalls and skimmer boats; purchase of maintenance equipment, such as street sweepers, leaf collection equipment, beach cleaning equipment, and aquatic weed harvesters; rehabilitation of tide gates and existing basins or other stormwater systems, including pump stations; extension and/or stabilization of outfall points; implementation/construction of systems that will result in water quality benefits, such as salt storage structures/runoff control systems, feedlot manure/runoff control systems, and streambank/lake stabilization/restoration projects which are consistent with habitat protection.

#### c. Farmland Preservation

In the SFY2017 Priority System, the Financing Program is highlighting its ability to finance eligible farmland preservation activities. The Department recognizes that farming and farm activities are identified as a nonpoint source of pollution in the State's Stormwater and NPS Program Plan developed under Section 319 of the Clean Water Act. Through farmland preservation, woodlands, stream corridors, floodplains and wetlands areas located on farms can be permanently protected to filter runoff and reduce nutrient flows into water bodies via a perpetual easement recorded against the farm. Landowners are compensated for these provisions through the purchase of a conservation easement by the county or other local government unit. Other eligible farmland preservation activities – including implementation of agricultural best management practices that help to protect, maintain or improve water quality, such items as livestock fencing, feedlot and manure runoff control systems, can also be implemented in conjunction with farmland preservation.

#### d. Landfill Closure and Construction

The Financing Program also includes landfill closure and landfill construction projects (including new landfill cells) under eligible NPS projects. The Department recognizes that landfills are a major pollution concern and are identified as a nonpoint source of pollution in the State's Stormwater and NPS Program Plan developed under Section 319 of the Clean Water Act. Eligible landfill closure activities include such items as landfill capping systems, leachate collection, storage and treatment systems, side slope seepage prevention and controls, gas condensate systems and other activities. Financing for landfill construction projects is generally limited to those project elements that prevent, reduce, or control the generation of leachate or are required for the collection, storage and treatment of leachate. Elements of a landfill construction project that may be financed include landfill liner systems, leachate removal or collection systems, and related maintenance equipment, toe-drains and cut-off walls, leachate sampling facilities and equipment, leachate storage facilities (lagoons, tanks, tank covers and aeration systems), leachate evaporation systems, and others. In addition to leachate controls, other eligible elements include barge shelters, containment booms, litter fences, and other means to prevent municipal solid waste from blowing off the landfill site and polluting surface waters. Before any landfill closure or construction

project is approved under the Financing Program, the project sponsor must submit and receive all applicable permits and approvals from the Department's Division of Solid and Hazardous Waste.

#### e. Open Space Land Acquisition and Conservation

The NJEIFP provides loans to municipal and county applicants for the preservation of open space land as a means to provide an overall water quality benefit to the project area. A conservation restriction (easement) is applied, which ensures that the water quality is protected in perpetuity. Passive recreational uses such as hiking, cross country skiing, horseback riding and birding are allowed on the portion of the parcels that are purchased with loans from the NJEIFP. Development is not allowed on the properties that are acquired through the NJEIFP, since this encourages the use of impervious surfaces and causes land alterations which can adversely affect the hydrology of an area as well as other nonpoint source impacts. Surface runoff can increase and groundwater filtration can decrease. Since most of New Jersey consists of sole source aquifers, which "are those aquifers that contribute more than 50% of the drinking water to a specific area and the water would be impossible to replace if the aquifer were contaminated" (NJ Geological Survey), the protection of these resources is an environmental priority. When the land remains as open space with no development pressures, the water recharge to these vital aquifer systems is maintained. In addition, other environmental resources (i.e., endangered species, wetlands, stream corridors, floodplains, etc.) that may be present will also benefit from the preservation of the open space.

#### f. Remedial Action Activities

The clean-up of hazardous waste sites and other contaminated sites is critical to preventing further contamination of groundwaters in the State. The water-quality related components of projects for spill cleanups, brownfields restoration and hazardous waste site cleanups are some examples of the activities that are eligible through the Financing Program. Treatment of contaminated groundwater also qualifies for financing if the treated water is returned to the environment. While treatment solely to provide a safe, potable drinking water supply is ineligible for CWSRF financing, it is eligible for DWSRF financing.

#### g. Well Sealing

The proper sealing and monitoring of unused water supply wells is also important to protect the State's groundwater. Municipalities and other public entities can sponsor projects through the Financing Program to properly fill and seal abandoned wells in accordance with N.J.A.C. 7:9-9.

#### 8. Water Resources Reform and Development Act

The Water Resources Reform and Development Act of 2014 (WRRDA) introduced new requirements for CWSRF applicants and recipients. The major changes that project sponsors should be aware of are as follows:

#### a. Procurement of Architectural and Engineering Services pursuant to 40 U.S.C. 1101 et seq.

WRRDA established procurement requirements for Architectural and Engineering (A/E) services (i.e., feasibility studies, preliminary engineering, design services, surveying, mapping, construction management, legal and accounting services, etc.) as identified in 40 U.S.C. 1101 et. seq., which must be followed if the costs are reimbursed through a federal capitalization grant. For any project funded with CW capitalization grants received by the State on or after October 1, 2014, the NJEIFP will finance those

costs with SRF loan repayments that are not subject to the WRRDA procurement requirements. Moreover, this requirement will not jeopardize a project's eligibility for NJEIFP funding.

Project sponsors subject to the requirements must follow the procurement requirements identified below for A/E services:

- Public announcement of the solicitation (e.g. a Request for Qualifications);
- Evaluation and ranking of the submitted qualifications statements based on established publicly available criteria (e.g. identified in the solicitation):
- Evaluation criteria should be based on demonstrated competence and qualification for the type of professional services required (e.g. past performance, specialized experience, and technical competence in the type of work required);
- Discussion with at least three firms to consider anticipated concepts and compare alternative methods for furnishing services;
- Selection of at least three firms considered to be the most highly qualified to provide the services required; and
- Contract negotiation with the most highly qualified firm to determine compensation that is fair and reasonable based on a clear understanding of the project scope, complexity, professional nature, and the estimated value of the services to be rendered;
- In the event that a contract cannot be negotiated with the most highly qualified firm, negotiation continues in order of qualification.

This requirement applies to new solicitations, significant contractual amendments, and contract renewals initiated on or after the effective date of October 1, 2014.

# b. Requirement that Treatment Work Projects Receiving Assistance (i) Develop and Implement a Fiscal Sustainability Plan (FSP) and (ii) Certify that it has been Implemented Prior to Receiving Assistance

WRRDA requires a recipient of a loan for a project for repair, replacement, or expansion of a treatment works to develop and implement a fiscal sustainability plan (FSP) or certify that it has developed and implemented such a plan.

WRRDA requires that FSPs include, at a minimum:

- An inventory of critical assets that are part of the treatment works;
- An evaluation of the condition and performance of inventoried assets or asset groupings;
- A certification that the assistance recipient has evaluated and will be implementing water and energy conservation efforts as part of the plan; and
- A plan for maintaining, repairing, and, as necessary, replacing the treatment works and a plan for funding such activities

NJ CWSRF loan recipients must certify that an FSP has been developed and is being implemented. This provision applies to all new loan applications submitted for the SFY2017 Program.

#### c. Codifies American Iron & Steel (AIS) requirement

WRRDA codifies a provision that had recently been included in EPA's SRF appropriations that requires assistance recipients, absent a waiver, to use iron and steel products that are produced in the United States for projects for the construction, alteration, maintenance, and repair of treatment works. This provision applies to all CWSRF projects in New Jersey.

#### d. Codifies Davis-Bacon requirement

WRRDA permanently applies the prevailing wage (Davis-Bacon) provision to any projects for treatment works that are funded by a CWSRF. This provision applies to all CWSRF projects in New Jersey.

#### e. Cost/Benefit Analysis

Each participating Borrower in SFY2017 must certify that it has studied cost-effectiveness, and has selected a project with the greatest potential for water reuse, water conservation, and energy conservation.

#### f. Additional WRRDA requirements are discussed in the Proposal document.

#### 9. Equipment Purchases Program

The DEP is proposing to reserve up to \$5 million for equipment purchases under the Clean Water program. For the purposes of the equipment purchase reserve, equipment is limited to portable generators and other equipment where construction services (such as the installation of a pad to support a generator) are not needed to effectuate the project.

#### 10. Green Project Reserve (GPR)

The Department will reserve funds in a Green Project Reserve (GPR) equal to a minimum of 10 percent of the State's FFY2016 allocation, subject to federal requirements. If the Department determines that there are insufficient applications or there are deficiencies in the application for projects eligible to be financed through the GPR, the Department may use the funds allocated to the GPR to finance other clean water projects in the SFY2017 Program. Projects that implement green infrastructure, water or energy efficiency improvements (including projects that are designed to reduce greenhouse gas emissions) will receive an additional 50 priority points. Green infrastructure includes such practices as replacing existing pavement with porous pavement, bio-retention, green roofs, blue roofs and other practices that mimic natural hydrology and reduce effective imperviousness. Water and energy efficiency activities that can qualify for the additional points include the installation of digester or landfill gas recovery/reuse systems, photovoltaic cells, wind turbines, wastewater reuse, etc. Projects that are a mix of traditional and green technologies are only assigned the points if the green components represent a significant amount of the overall project activities. GPR Projects are defined by USEPA as projects that address green infrastructure, water or energy efficiency improvements, or other environmentally innovative activities. Green design principles include green building practices that increase energy and water efficiency; use renewable energy; use environmentally friendly building materials that are made with recycled materials, are durable, sustainability harvested or produced

locally; improve indoor air quality; and makes appropriate site selection and minimizes site disturbance to reduce environmental impacts.

Further clarification on GPR is available at: <u>www.epa.gov/reg3wapd /infrastructure/gpr.htm</u>.

#### CLEAN WATER SANDY SFY2017 NJEIFP PROJECTS

Although NJEIFP staff is working to award all of the Sandy CWSRF funds in the SFY16 Program, there is the possibility that not all Sandy Funds will be committed in the current fiscal year. Given this possibility, H<sub>2</sub>LOans will continue to accept submittals under the Sandy CWSRF Program for SFY2017, which includes a principal forgiveness component of approximately 19% of the allowable costs.

Clean Water Projects may qualify for Sandy NJEIFP funding if they fall within one of the following categories:

- i. Projects that prevent interruption of collection system operation in the event of a flood or natural disaster;
- ii. Projects that prevent floodwaters from entering a treatment works;
- iii. Projects that maintain the operation of a treatment works and the integrity of the treatment train in the event of a flood or natural disaster;
- iv. Projects that preserve and protect treatment works equipment in the event of a flood or natural disaster; and
- v. Planning projects that assess a treatment works' vulnerability to flood damage or that analyze the best approach to integrate system and community sustainability/resiliency priorities in the face of a variety of uncertain futures including natural disasters and more frequent and intense extreme weather events, provided the planning work is reasonably expected to result in a capital project.

Additional details regarding Sandy NJEIFP project eligibility criteria are set forth in Appendices E and F.

#### DRINKING WATER

#### DRINKING WATER BASE SFY2017 NJEIFP PROJECTS

Public community water systems (as defined by the National Primary Drinking Water Regulations), both privately and publicly owned, and nonprofit non-community water systems are eligible for NJEIFP Loans. Eligibility is limited to these types of water systems that are required to comply with the New Jersey State primary drinking water regulations. Facilities that are defined as water systems but are exempt from regulation under the SDWA are not eligible. The main objective of DWSRF funding is to protect the public health in conformance with the objectives of the SDWA. Federally owned systems and State owned systems (State agencies, such as state police, parks and forestry, and corrections) are not eligible to receive NJEIFP Loans. However, State authorized systems (water commissions, water supply authorities, and water districts) are eligible to receive NJEIFP Loans.

NJEIFP drinking water projects may qualify for funding based on the following criteria:

#### 1. Compliance and Public Health

#### a. General Guidelines

NJEIFP Drinking Water Loans are only available for projects (not including monitoring, operation, and maintenance expenditures) that will facilitate compliance with National Primary Drinking Water Regulations and applicable USEPA guidance, so that water systems may further achieve the heal

protection objectives of the SDWA. These include projects to maintain compliance with existing regulations for contaminants with acute health effects (e.g., the Surface Water Treatment Rule, the Total Coliform Rule, Ground Water Rule and nitrate standard) and existing regulations for contaminants with chronic health effects (e.g., Lead and Copper Rule, regulated inorganics, volatile organics and synthetic organics, disinfection by-products, and radiological contaminants). In addition, projects that address the exceedance of a recommended upper limit for a secondary contaminant are DWSRF eligible. Certain types of projects that address water supply issues related to public health protection are also eligible.

#### b. Projects to Replace Aging Infrastructure

Replacement projects are also eligible if they are needed to maintain compliance or further the public health protection goals of the SDWA. Examples of these include projects to:

- Rehabilitate or develop sources (excluding reservoirs, dams, dam rehabilitation, and water rights) to replace contaminated sources;
- Install or upgrade treatment facilities, if the project would improve the quality of drinking water to comply with primary or secondary drinking water standards;
- Install or upgrade storage facilities, including finished water reservoirs, to meet minimum system storage requirements or prevent the introduction of microbiological contaminants to the water system;
- Install or replace transmission and distribution pipes to prevent contamination caused by leaks or breaks in the pipe, or improve water pressure to safe levels; and
- Install and enhance security at drinking water systems, including fencing, lighting, motion detectors, cameras, and alternative auxiliary power sources.

#### c. Projects to Consolidate Water Supplies

Consolidation projects are eligible for NJEIFP Loans, as follows: 1) extension of water mains by a community water supply system to individual homes with contaminated wells; or 2) purchase or consolidation (i.e., restructure) of a water system that is unable to maintain compliance for technical, financial, or managerial reasons only if the financial assistance will ensure that the system returns to and maintains compliance with SDWA requirements and the owner or operator of the water system agrees to undertake feasible and appropriate changes in operations necessary to ensure the system has the technical, managerial, and financial capability to maintain long term viability and compliance with SDWA requirements.

#### 2. Multi-Year Projects / New Wells

The construction of a new well presents challenges due to the extended length of time required to satisfy all permit requirements and obtain permit approvals. In order to provide a greater number of financing options and to get funds to water systems earlier in the well construction process, the NJEIFP offers more than one loan for new well projects.

A Short-Term loan is available for the **installation** of a well. Under this process, a project sponsor will apply for a loan to drill a well (new or replacement). The project sponsor would be eligible for loan award after

DWSRF programmatic requirements are met and a Bureau of Water System Engineering (BWSE) permit to construct is issued and appropriate well permitting conditions are met. In the case of a test well, a well drilling permit is required only. In this scenario, the well could be constructed but not operated until a final permit is issued. If in the event of unforeseen conditions in which the well could not be utilized or re-designated from a test well to a production well, the project sponsor would be eligible for an additional Short-Term loan to construct a second well. However, the project sponsor will be required to submit documentation describing the failure of the first well and adequate technical analysis supporting the construction of the second well. The project sponsor would remain liable for both loans for both wells. The intent of this program is to ensure that the project sponsor has a usable well that will perform as intended over the life of the loan(s) and to provide the project sponsor with viable financing alternatives.

After a major modification for the Water Allocation diversion permit is issued, if applicable, the project sponsor could apply for an additional Short-Term loan to construct the necessary **appurtenances**, such as a well house, pump, associated treatment, etc. If the project sponsor does not pursue an additional loan for the construction of well appurtenances, the project sponsor must still commit to finalizing the project such that the result is a fully functioning, permitted production well.

An overview that details the process and duration of the new well funding process, such as the steps to obtain the Bureau of Water System Engineering and Bureau of Water Allocation and Well Permitting permits, obtain loan approvals, and submit all required DWSRF loan documents is summarized in a timetable, a copy of which is available by contacting the DWSRF staff at (609) 292-5550.

#### 3. Green Project Reserve (GPR)

GPR Projects are defined by USEPA as projects that address green infrastructure, water or energy efficiency improvements, or other environmentally innovative activities. Projects meeting this definition will follow the same process as all other NJEIFP drinking water projects. Certain projects, associated with the drinking water system improvements, are considered by USEPA as categorically eligible projects; such as solar power, wind turbines, geothermal or hydroelectric power, green roofs, bio-retention, porous pavements, grey water use, US Building Code LEED certified facilities, installing water efficient devices, new meter for an unmetered area, replacing existing meters with an automated meter reading system and pressure reducing valves. Certain projects may be eligible but need extra justification under a business case review; such as cleaning and lining of water mains, replacing water meters with traditional meters, replacement of water mains or storage tanks to reduce water losses, energy efficient upgrades to pump stations or treatment plants and installation of SCADA systems.

The DEP provides fifteen (15) additional priority points to any drinking water project that is a categorically eligible project, in accordance with Section I of the Intended Use Plan.

Further clarification on GPR is available at: <u>www.epa.gov/reg3wapd /infrastructure/gpr.htm</u>.

#### 4. Equipment Purchases Program

The DEP is proposing to reserve up to \$1 million for equipment purchases under the drinking water program. For the purposes of the equipment purchase reserve, equipment is limited to portable generators and other equipment where construction services (such as the installation of a pad to support a generator) are not needed to effectuate the project.

#### 5. Legacy Projects

The Legacy Project designation has been created for those projects that did not meet the current SFY financing deadlines but did receive all necessary approvals, and were awarded Interim Financing Loans on or before June 30 of that fiscal year and rolled into the following fiscal year. The new class of legacy projects from the current year program will be prioritized over any new projects seeking loans in the next SFY program (including second chance projects, if applicable). Projects that were not able to be funded through the DRAA DWSRF Program may also qualify as Legacy Projects if these projects are for an activity consistent with the DWSRF base program. Legacy priority status is not extended to the Small System and Very Small System funding programs.

#### 6. Small System Loan Projects and Very Small System Loan Projects

The Small Systems loan program is designed to facilitate small system access to DWSRF financing. Qualified Borrowers are existing publicly-owned and privately-owned community water systems and non-profit, non-community water systems serving populations of 10,000 persons or less. At the loan cap amount of \$1 million, 50% (\$500,000) is available as principal forgiveness; 25% of the total project costs (up to \$250,000) is funded by the DEP at 0% interest and 25 % of the total project cost is funded by the Trust at the Trust's AAA-rated market rate. This program prioritizes small systems in three tiers as follows: 1) those systems serving a population of 500 persons or less, 2) those systems serving a population of 501 to 3,300 persons and 3) those systems serving a population of 3,301 to 10,000 persons.

A subset of \$500,000 of the \$4 million small system set aside may be utilized for 100% Department principal forgiveness loans under a Very Small Water System (VSWS) finance program provided the project sponsor serves a population of 500 persons or less and supplies at least 15% of the total project cost. Note that an individual water system cannot receive more than \$500,000 total in principal forgiveness from either of these small system loan programs in any three year funding cycle. A project sponsor can finance any project costs that exceed the limits of the Small System/Very Small Water System programs through the DWSRF base financing program. While VSWS and SWS loans are unavailable to private and public utilities who serve more than 10,000 residents statewide, larger public and private systems may utilize the VSWS and SWS to make infrastructure improvements to small water systems that they have recently acquired (since 2015).

#### 7. Ineligible Activities

The DWSRF cannot provide funding assistance for the following projects and activities:

- Dams, or rehabilitation of dams;
- Water rights, except if the water rights are owned by a system that is being purchased through consolidation as part of a capacity development strategy;
- Reservoirs, except for finished water reservoirs and those reservoirs that are part of the treatment process and are located on the property where the treatment facility is located;
- Laboratory fees for monitoring;
- Operation and maintenance expenses;

- Projects needed mainly for fire protection;
- Projects for systems that lack adequate technical, managerial, and financial capability, unless assistance will ensure compliance;
- Projects for systems that have a USEPA Enforcement Targeting Tool score greater than or equal to 11, unless funding will ensure compliance

(www.epa.gov/compliance/resources/policies /civil/sdwa/drinking\_water\_erp\_2009.pdf);

- Projects primarily intended to serve future growth;
- Lack of technical, managerial, and financial capability. The DWSRF may not provide any type of assistance to a system that lacks the technical, managerial, or financial capability to maintain SDWA compliance, unless the owner or operator of the system agrees to undertake feasible and appropriate changes in operation or if the use of the financial assistance from the DWSRF will ensure compliance over the long term. A capacity development program was created to evaluate each system to be funded to ensure each meets the capacity development requirements (go to the DEP Division of Geosciences Website); and
- Compliance with Enforcement Targeting Tool. The DWSRF may not provide assistance to any system that has an Enforcement Targeting Tool (ETT) score of 11 or greater unless the DEP determines that the project will enable the system to return to compliance and the system will maintain an adequate level of technical, managerial and financial capability to maintain compliance.

#### DRINKING WATER SANDY SFY2017 NJEIFP PROJECTS

Superstorm Sandy NJEIFP Loans are only available to facilities that were adversely impacted by the storm, including physical damage, loss of power, loss/interruption of mission essential services, etc. for projects that:

- Reduce the likelihood of physical damage to a treatment works or drinking water system;
- Reduce a treatment works' or water system's susceptibility to physical damage or ancillary impacts caused by floods;
- Facilitate preparation for, adaptation to, or recovery from a sudden, unplanned change in the amount of and movement of water in proximity to a treatment works or water system; or,
- Facilitate preparation for, adaptation to, or recovery from climate change or any other type of natural disaster.

**Note:** An Asset Management Plan is now a requirement for a project sponsor seeking a DWSRF loan.

In addition, Executive Order 11988 (President Ford) on floodplain management requires that federal agencies use the best available flood data to determine the location of projects and activities. Project sponsors will be required to use the best available flood hazard data identified by the Federal Emergency Management Agency (FEMA), where applicable, to guide decision-making.

#### CLEAN WATER RANKING CRITERIA (BASE SFY2017 NJEIFP AND SANDY NJEIFP)

The Department ranks all projects on the basis of the total number of ranking points each project receives and places the projects on the Priority List according to their ranking. The ranking system gives highest priority to projects that address discharges of raw, diluted, or inadequately treated sewage to the State's waters during wet weather, including projects to abate combined sewer overflows (CSOs) and projects to address sanitary sewer systems that overflow. CSO abatement projects are expensive and are usually located in financially distressed urban areas, making cost a serious concern. Discharges from combined sewer systems and sanitary sewer overflows impair water uses, and can lead to the closing of beaches and shellfish beds. Lower-ranked projects can also qualify for financing since projects are certified/approved based on the project's rank, the amount of available funds, and compliance with the Program's requirements and deadlines for planning, design and application submittal.

In addition, the FFY2016 Priority System broadens the existing smart growth categories to include projects in growth areas that have been endorsed by the State Planning Commission or any development project that is consistent with the "Garden State Values" contained in the State Strategic Plan. This provision is being added to maximize the program's ability to move forward and promote the goals and objectives included in the State Strategic Plan before it is finalized.

The Department encourages project sponsors that do not have an existing Asset Management Plan to develop and implement one. Asset management is actively managing infrastructure capital assets to minimize the total cost of owning and operating them, while delivering the service levels customer's desire. Each utility is responsible for making sure that its system stays in good working order-regardless of the age of components or the availability of additional funds. Asset management programs with long-range planning, life-cycle costing, proactive operations and maintenance, and capital replacement plans based on cost-benefit analyses can be the most efficient method of meeting this challenge.

The Department's Vision Statement and Priorities List provide a strategic foundation for structural changes and include objectives to implement projects that will help to protect, maintain and improve water quality in and around the Barnegat Bay while determining the best long-term approach for restoring the ecological health of Barnegat Bay. To support these efforts to improve the water quality of the Bay, the project ranking methodology for the SFY2017 Financing Program provides an additional 300 priority points to nonpoint source and stormwater runoff control projects that are intended to benefit the Barnegat Bay. The additional 300 points will also be assigned to wastewater reuse projects that are intended to offset the loss of freshwater flows caused by the regionalization of sewage treatment plants and the use of ocean outfalls.

In addition to Barnegat Bay projects, projects receive points under five categories. These are (1) Local Environmental Enhancement Planning Activities, (2) Project Discharge Category, (3) Water Use/Water Quality, (4) Smart Growth Approvals, and (5) Population.

#### 1. Local Environmental Enhancement Planning Activities

The purpose of the provisions in this section is to encourage and facilitate implementation of environmentally sustainable practices at the local government level. Prudent environmental planning that incorporates sustainability measures is necessary to achieve cost-effective and environmentally sound water quality improvement within the watershed. Additional priority points will be awarded to projects located in or

benefiting municipalities that have implemented programs and actions that go beyond compliance with existing regulatory requirements and incorporate the following environmental enhancement planning strategies.

Watershed-Based Implementation Plans: Watershed-Based Implementation Plans address impairment(s) found on Subsists 4 or 5 of the New Jersey Integrated Water Quality Monitoring and Assessment Report. Prudent watershed planning is necessary to achieve cost-effective and environmentally sound water quality improvement within the watershed. To provide an incentive for project sponsors to complete watershed-based plans that promote the implementation of point and nonpoint source pollution control projects that are consistent with Department goals, projects located in or benefiting municipalities that demonstrate implementation of watershed-based plans will be given an additional 50 priority points.

Implementation of Regional Stormwater Management Plans: Regional stormwater management plans are voluntary local analyses that provide targeted protection to a specific area based on local issues and conditions. Regional stormwater management plans are adopted into Water Quality Management Plans and may include specific implementation projects that address existing impacts of stormwater runoff. Projects located in or benefiting municipalities with adopted regional stormwater management plans will be provided an additional 50 priority points.

Sustainable Community Planning: Sustainable communities develop and adopt master plans and ordinances that improve the overall quality of life for citizens of today as well as generations of tomorrow by planning within natural resource capacity constraints and providing for a healthy economy, environment and society. Projects located in or benefiting municipalities where sustainable community strategies have been developed and master plans and/or ordinances adopted will be awarded an additional 100 priority points. These strategies/ordinances must include but are not limited to the following:

- A plan to reduce water consumption and increase water efficiency and re-use.
- Policies that require consideration of green design in municipal construction projects and redevelopment projects, such as green roofs, green streets, tree filters, rain gardens, rain barrels, porous pavements, etc.

The SFY2017 Priority System reflects the Department's priorities to encourage sustainable growth in communities by incorporating consistent criteria for the protection of natural resources and implementation of smart growth and green design principles.

Green design principles include green building practices that increase energy and water efficiency; use renewable energy; use environmentally friendly building materials that are made with recycled materials, are durable, sustainability harvested or produced locally; improve indoor air quality; and makes appropriate site selection and minimizes site disturbance to reduce environmental impacts.

#### 2. Project Discharge Category Points

All projects receive ranking points based on the project discharge category. In case of multiple purpose proposals, projects qualify for the discharge category that represents the major scope of the project. If a project has aspects that can be described by more than one category, the project may be broken into separate projects. Tables IA and IB show the project discharge categories and their corresponding ranking points.

Table IA. Ranking Points Related to Project Discharge Category For Wastewater Treatment Facilities Project Discharge Category	Description	Points
Combined Sewer Overflow (CSO) & Sanitary Sewer Overflow (SSO)	This category includes projects that involve combined sewer system (CSS) rehabilitation/repair, the construction of treatment and/or storage facilities within CSS, at discharge locations or at STPs that reduce or eliminate CSOs, or the separation of combined sewer systems by the consolidation and elimination or sealing of CSO discharge points. Also included are projects that implement corrective measures to fix overloaded conveyance systems that experience chronic overflows.	600
Sewage Treatment Plant (STP) Improvements	<ul> <li>STP improvements include upgrades or other improvements to a treatment process or the elimination of an existing STP and the connection to an alternative treatment facility to meet applicable treatment levels.</li> <li>This category also includes the purchase and installation of security and energy efficiency measures at the STP.</li> </ul>	500
Sanitary Sewer System Rehabilitation	This category includes a wide variety of corrective measures to sanitary sewer collection and conveyance systems that do not experience chronic overflows, such as the rehabilitation, repair, or replacement of sanitary sewers, pump stations, interceptors, or the purchase of equipment to properly maintain the sanitary sewer system.	450
Sludge Treatment/Disposal Facilities	Included in this category are projects involving the construction of facilities to manage sludge from STPs or from potable water treatment activities, such as the installation of dewatering equipment, or the implementation of land application or composting activities. Also included in this category of projects are improvements or repairs to sludge incinerators.	350
Wastewater Reuse	Wastewater reuse includes the construction of facilities that promote the reclamation of water for beneficial reuse such as the use of treated effluent for agricultural or other purposes. This category includes the construction of conveyance and distribution systems to allow for reuse activities.	300
Septic System Repair/Replacement	Under this category are projects that involve repairs, improvements, and/or replacement of individual or small community, on-site septic systems.	275
New Systems	This category includes projects that involve the expansion of a STPs' treatment capacity, and the construction of new facilities to provide collection, conveyance or treatment of sanitary sewage.	250

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Table IA Ranking Points

In addition to the point assignments above, projects that implement green infrastructure, water or energy efficiency improvements (including projects that are designed to reduce greenhouse gas emissions) will receive an additional 50 priority points. Green infrastructure includes such practices as replacing existing pavement with porous pavement, bio-retention, green roofs, blue roofs and other practices that mimic natural hydrology and reduce effective imperviousness. Water and energy efficiency activities that can qualify for the additional points include the installation of digester or landfill gas recovery/reuse systems, photovoltaic cells, wind turbines, wastewater reuse, etc. Projects that are a mix of traditional and green technologies are only assigned the points if the green components represent a significant amount of the overall project activities.

Table IB. Ranking Points Related to Project Categories for Stormwater and Nonpoint Source Pollution Management Facilities		
Project Category	Description	Points
Stormwater Management and Other NPS activities	This category includes the construction or rehabilitation of stormwater basins, sewer systems or storm drains, the extension of outfall pipes, green roofs, green streets, tree filters, rain gardens, rain barrels, porous pavement or the purchase of maintenance equipment (such as street sweepers, aquatic weed harvesters and skimmer boats). Also included in this category are projects that stabilize streambanks, restore lakes or address runoff from salt storage facilities and the implementation of measures to address pollution concerns from agricultural cropland activities and manure runoff management and feedlot operations.	225
Landfill Closure, Open Space Land Acquisition and Conservation and Well Sealing	Included in this category is the implementation of measures to prevent and control pollutants from entering groundwater at non-operating landfill sites that are publicly owned and at abandoned well locations. The category also includes open space land acquisition and conservation projects that help to protect or maintain water quality.	150
Landfill Construction and Remedial Action Activities	This category includes the construction of facilities to collect, convey and/or treat leachate and runoff from new publicly-owned landfill cells or from publicly-owned contaminated sites.	75
Projects sponsored by Conduit Borrowers/ Private Activity	This category generally includes environmental infrastructure projects where a developer, LLC, partnership or other private party is involved in the project. Also included in this category are landfill closure measures and remedial action activities where the project site is privately owned. If a local government unit that sponsors a project on behalf of a private entity commits to providing a general obligation pledge (including its unlimited taxing power or municipal guarantee) as security for the DEP and Trust loans, the project is considered exempt from the conduit financing classification and corresponding funding limitations.	50

# 3. Water Use/Water Quality Points

Points are awarded based on the designated water uses of the receiving water as well as the existing water quality conditions in comparison to the ambient water quality standards. The assignment of points for "public nuisance" is given to on-site system projects where failures have been identified. Table II below shows the breakdown of the ranking points for water use; in general, the highest values are given for projects that discharge to water bodies with potable, recreational, and fishing uses.

Table II. Ranking Points Related to Water Use (Existing and Potential)				
Water Use	Water Use Basis/Description			
Public Potable	Wastewater treatment plant discharges likely to have adverse impacts on an			
Water Supply	existing downstream potable surface water supply intake. Projects are evaluated	200		

		based on relative distance between STP discharge and public potable water intake locations.	
Recreation ("Primary Contact")		Waters with bathing areas monitored routinely as public beaches as well as the Delaware River upstream of Trenton (north of East Bridge Street at the Lower Trenton Bridge).	125
Fishing	Shellfish	State water bodies that are designated as shellfish growing waters by <i>N.J.A.C.</i> 7:12.	125
	Trout	State freshwater bodies designated for trout production or maintenance by the NJ Water Quality Standards ( <i>N.J.A.C.</i> 7:9B).	75
	Non-trout	State freshwater classifications not designated trout production or maintenance by <i>N.J.A.C.</i> 7:9B (see Trout description above), including all Delaware River freshwater zones above mile-point 85 as defined by the Delaware River Basin Commission.	25
Public Nuisance		Indirect water use impacts; applies to areas with identified on-site wastewater treatment system failures.	50
Ag	riculture	Surface water for agricultural use, such as irrigation and farm ponds, based on Department diversion permit (permits required for >70 gal/min diversion).	25
Industry		Surface water known to be used for industrial use such as cooling.	25

Table III shows the points for not meeting or marginally meeting certain water quality parameters. The points reflect the impact the parameters have on meeting the State's goal to protect and enhance surface water resources, quality criteria, and designated water uses. The magnitude of the contribution that municipal sewerage facilities have on each of the conditions is reflected in the points awarded under these categories. Dissolved oxygen and fecal coliform have the highest points because of their immediate and direct impact on the fishable/swimmable water use, coupled with the fact that inadequate municipal treatment facilities can be a major cause of contravening water quality standards.

Nutrients reflect the presence of phosphorus/phosphates and nitrates/nitrites in a water body. Excessive nutrient levels in freshwater streams and lakes may result in impacts on water uses, including algal blooms; depleted oxygen levels; odor, taste and increased treatment costs for purveyors; impacts on aquatic populations, and esthetic concerns. Points are given for nutrients only if the surface waters involved significantly impact existing potable water reservoirs, surface water impoundments or lakes, public bathing areas, or shellfish growing waters. Since there are no nutrient standards for coastal and estuarine waters, no points were assigned for discharges to those water bodies.

Points for toxics address the relative magnitude of ammonia, metals, pesticides, and organic chemicals in the water body. Toxics were also given lower points since in most cases the significant contributions of toxic substances come from industrial sources that are better controlled through pretreatment and are only incidentally abated by municipal treatment facilities. In the case of the toxicity of ammonia, municipal facilities are usually the main source, but the most significant impact is associated with streams designated for trout production/maintenance, which already receive a high number of points under the water use category.

	Table III. Ranking Points Related to Water Quality					
		Points for Water Quality that				
	Water Quality		Marginally Meet	Do Not Meet		
		The Water Quality Standard*				
Parameter	Dissolved Oxygen	0	50	100		
	Fecal Coliform	0	50	100		
Parameter	Nutrients	0	25	50		
Category	Toxics	0	25	50		

\*The Surface Water Quality Standard for the applicable parameter or category.

#### 4. Smart Growth Approvals

The Department seeks to coordinate and enhance the efforts to encourage smart growth through the implementation of the State Development and Redevelopment Plan. The Department assigns ranking points to projects that serve municipalities that have been approved under the Center Designation or Plan Endorsement Process.

For a project serving more than one municipality, the points were included for ranking purposes if the designated center or the endorsed plan is a significant component of the overall project. For further information regarding the State Development and Redevelopment Plan, contact the Office of Planning Advocacy in the NJ Department of State at (609) 292-7156.

Table IV. Ranking Points Related to State Planning Commission Approvals		
Community Type	Points	
Urban Centers and Complexes	50	
Regional Centers	25	
Existing Designated Towns	15	
Existing Villages	10	
Hamlets	5	

In addition, projects located in or benefiting areas designated as Brownfield Development Areas, TDR receiving areas or Transit Villages also receive 10 points, so that these projects will rank higher than similar projects that are not located in, or provide benefit to, these smart growth areas.

## 5. Population Points

Projects are also assigned points based on the population of the area served by the project. One point is given for every million people living in the project area on a year-round basis. Thus, if projects have the same number of ranking points after having received all eligible points, population points become the tiebreaker, with higher priority given to the project serving the higher population.

## 6. Emergency Repair Projects

The Department recognizes that environmental infrastructure emergencies may occur that endanger public health and welfare and can result in substantial environmental damage. Such circumstances require an immediate response for which a complete technical and environmental review in advance of construction to address the emergency situation is not necessary or feasible. The Department has developed a process to respond expeditiously when emergencies occur, obtain basic project information, make an eligibility determination and issue a pre-award approval so that owners/operators can expeditiously undertake the needed repairs and maintain eligibility for those expenditures through the NJEIFP.

Qualifying emergency conditions would be limited to those where failure has occurred or where failure is imminent and unless corrected, will result in substantial pollution of the environment (such as collapse of a wastewater line) and/or substantial curtailment of the functions of the infrastructure.

## 7. CW Order of Priority

The SFY2017 CW program continues the project prioritization methodology first utilized in SFY2015. CW projects are prioritized for funding based on the following criteria. Funds available at the time of project approval (authorization to award a final construction contract), will be allocated to the approved project.

#### a. Emergency Projects

Emergency projects are considered a public health hazard and will receive funding priority over other new projects on the Project Priority List both for interim as well as long term financing.

#### b. Supplemental Loans

Projects which have received loans to date which require additional funds due to the award of all project related contracts or for increased costs due to differing site conditions. Priority between projects that are eligible to receive Supplemental Loans and that received their original loans in the same funding cycle will be determined according to each project's ranking on the respective funding year's priority list.

## c. Legacy Projects

Projects that were not able to meet the previous financing cycle deadlines for the Trust Bond sale but are awarded an interim loan before June 30<sup>th</sup> each year. Projects that are not able to be funded through the DRAA DWSRF Program may also qualify as legacy projects if these projects are for an activity consistent with the DWSRF base program.

- d. Current Year Project submissions
- e. Track 2 Projects

## DRINKING WATER RANKING CRITERIA

#### BASE SFY2017 NJEIFP

DEP assigns points to each project using the Project Priority System and ranks all eligible projects according to the total number of points each project receives. All projects are subsequently placed on the Project Priority Comprehensive List (see *Appendix B*) according to their ranking. The annual addition of new projects to the Project Priority Comprehensive List, periodic revisions to the Priority System, or the identification of new information regarding a project, may result in annual changes to an individual project ranking.

The principal elements of the Priority System are: A) Compliance and Public Health Criteria, B) Water Supply Plans/Studies, C) State Designations, D) Affordability, and E) Population. Points are assigned for each of the five priority categories and are discussed in more detail below.

Projects that include multiple elements, as listed in priority Category A, are separately listed by the elements involved and priority points assigned for each element.

Priority points are assigned only if the project scope includes actual repair, rehabilitation, or correction of a problem or improvement clearly related to priority Category A. A project must be assigned points from Category A to be eligible for ranking; points assigned from the remaining categories are in addition to the points received in Category A.

The prospective applicant must notify DEP of any changes to project scope or any other circumstance that may affect the calculation of priority points. DEP recalculates, if appropriate, the prospective applicant's ranking utilizing the new information submitted and revises the priority ranking accordingly. Points are assigned for each of the five priority categories discussed below, as applicable:

# 1. Category A. Compliance with the SDWA and Protection of Public Health

DWSRF funds are utilized to address contamination problems and to ensure compliance with the SDWA requirements. Priority is given to water systems in non-compliance with the surface water treatment requirements and those incurring acute primary maximum contaminant level (MCL) violations, or action level exceedances as defined in the National Primary Drinking Water Regulations and the New Jersey Safe Drinking Water Regulations (N.J.A.C. 7:10). Table 1 describes the project elements that are eligible for DWSRF funds:

	TABLE 1 Project Elements Eligible for Project Priority Ranking in the	
	Drinking Water State Revolving Fund Program <sup>3</sup>	
1.	Systems that utilize surface water, that are not in compliance with the surface water	
	treatment requirements or have had any acute violations (either fecal coliform or nitrates)	
	and have been issued an administrative order or directive by DEP requiring the correction of	500 Points
	any noncompliance of its treatment facilities to address an immediate public health threat.	5001 01113
2.	Systems which utilize groundwater under the direct influence of surface water, that are not	
	in compliance with the surface water treatment requirements or have had any acute	
	violations (either fecal coliform or nitrates) and have been issued an administrative order or	350 Points
	directive by DEP requiring the correction of any noncompliance of its treatment facilities to	5561 61115
	address an immediate public health threat.	
3.	Systems that utilize groundwater that have had any acute violation (either fecal coliform or	300 Points
	nitrates).	00010
4.	Systems that have had, or DEP reasonably expects to have, any maximum contaminant level	250 Points
	violations (except acute violations) or exceedance of action levels (lead and copper rule).	
5.	Systems that were classified as vulnerable, as a result of a 2007 DEP Interconnection Study	200 Points
6.	Systems that have been issued a notice of noncompliance by DEP for reasons other than	175 Points
	water quality; i.e. inadequate storage, inadequate source, lack of emergency power, etc.	27010
7.	Purchase and/or consolidation of a water system to comply with the SDWA for capacity	170 Points
	development.	
8.	Systems that are proposing improvements for drought or other related water supply	160 Points
	management initiatives, as identified or designated by the State.	
9.	Systems that have lost well capacity due to saltwater intrusion and a solution is needed to	150 Points
	preserve the aquifer as a viable aquifer.	
10.	Extension of water mains, including associated appurtenances and water system facilities,	
	to private wells that have had any maximum contaminant level violations or exceeded lead	125 Points
	and copper action levels.	

<sup>&</sup>lt;sup>3</sup> A project must be assigned points from Category A to be eligible for Project Priority List ranking; points assigned from Categories B through E supplement the points received in Category A.

11.	Existing treatment facilities that need to be rehabilitated, replaced, or repaired to ensure compliance with the SDWA.	100 Points
12.	Existing transmission or distribution mains with appurtenances that need to be rehabilitated, replaced, repaired or looped to prevent contamination caused by leaks or breaks in the pipe or improve water pressures to maintain safe levels or to ensure compliance with the SDWA.	75 Points
13.	Existing pump stations or finished water storage facilities that need to be rehabilitated or replaced to maintain compliance with the SDWA.	60 Points
14.	New finished water storage facilities or pump stations that are needed to maintain pressure in the system and/or prevent contamination.	50 Points
15.	Addition or enhancement of security measures at drinking water facilities, including but not limited to fencing, lighting, motion detectors, cameras, secure doors and locks, and auxiliary power sources.	45 Points
16.	Green Infrastructure renewable energy generation such as solar panels, hydroelectric geothermal or wind turbines or infrastructure built at the water system facilities such as green roofs, porous pavement, bio-retention or gray water reuse	45 Points
17.	Systems which have had any exceedance of any secondary drinking water regulations that have received notification issued by DEP that exceedance of a secondary drinking water regulation causes adverse effects on the public welfare, and for which the system has received a directive issued by the DEP requiring correction of the exceedance.	40 Points
18.	Installation of new water meters and/or other water conservation devices, including but not limited to retrofit plumbing fixtures.	35 Points
19.	Construction of new or rehabilitation of existing interconnections between water systems to improve water pressures to maintain safe levels, promote availability of alternative source of supply, or to ensure compliance with the SDWA.	30 Points
20.	Replacement of water meters.	25 Points
21.	Redevelop wells, construct new wells, or construct or rehabilitate surface water sources with associated treatment facilities to meet the New Jersey SDWA rules for required pumping capacity.	15 Points
22.	Other project elements, not including items 1 through 21 above, that ensure compliance with the SDWA and protect public health, as approved by DEP.	1 Point

# 2. Category B. Water Supply Plans/Studies

Planning water system improvements that advance comprehensive water supply concepts can facilitate cost effective drinking water system rehabilitation. To provide an incentive for appropriate planning, 50 points are given if the project is clearly identified in other appropriate plans (i.e. five year master plan, five year capital improvement plan, rate setting study or comprehensive water supply plan for a particular region or watershed) approved by a municipal or State agency (such as the New Jersey Department of Environmental Protection, the New Jersey Department of Community Affairs or the New Jersey Board of Public Utilities) within the last five years.

Thirty five (35) points are given to each project that demonstrates that its water system structurally inspects its finished storage facilities every five (5) years. Also, twenty five (25) points are given for a system that has a valve exercise program. Documentation must be provided to receive the above mentioned points.

# \* Please note that having an Asset Management plan is now a requirement for project sponsors seeking a DWSRF loan.

## 3. Category C. State Designations

#### a. State Plan

DEP assigns points to projects in municipalities that the State Planning Commission has approved under the Plan Endorsement or Center Designation Process. Please note that if a local entity has not received designation by the State Planning Commission, projects within that entity would receive zero (0) points for this element.

- Projects located predominantly within or designed to provide service to a designated growth area that lies within a municipality that has received Plan Endorsement of its Master Plan from the New Jersey State Planning Commission or is an Urban Center or Urban Complex are eligible for twenty (20) points.
- Projects located predominantly within or designed to provide service to a designated growth area that lies within a municipality that are identified in the Master Plan currently recognized as endorsed by the New Jersey State Planning Commission as a designated center other than an Urban Center (Regional Center, Town, Village, Hamlet) are eligible for fifteen (15) points.

For a current list of those local governments that have gained Plan Endorsement from the New Jersey State Planning Commission, please check the Office for Planning Advocacy at the Department of State website at http://www.nj.gov/state/planning/plan.html and then refer to the current State Plan Policy Map to determine if the project area lies within a designated growth area. Contact the Office for Planning Advocacy, Department of State, P.O. Box 820, Trenton, N.J. 08625-0204 or call (609) 292-7156 for further information on the State Development and Redevelopment Plan.

## b. Transit Village Initiative

The NJDOT participated in a multi-agency Smart Growth partnership known as the Transit Village Initiative. The Transit Village Initiative helps to redevelop and revitalize communities around transit facilities to make them an appealing choice for people to live, work and play, thereby reducing reliance on the automobile. The Transit Village Initiative is an excellent model for Smart Growth because it encourages investment in portions of New Jersey where infrastructure and public transit already exist. Aside from Smart Growth community revitalization, two other goals of the Transit Village Initiative are to reduce traffic congestion and improve air quality by increasing transit riders. Therefore the DEP will provide five (5) additional priority points to any project sponsored by a Transit Village community or to any project that is constructed within a Transit Village community.

For more information about Transit Villages, please see: <a href="http://www.nj.gov/transportation/community/village/">http://www.nj.gov/transportation/community/village/</a> and

For a list of Transit Villages, please see: <a href="http://www.nj.gov/transportation/community/village/faq.shtm">http://www.nj.gov/transportation/community/village/faq.shtm</a>.

#### c. Brownfield Development Area (BDA)

The DEP sponsors a program to promote the re-use of formerly contaminated sites. The DEP's Brownfield Program, spearheaded by the Office of Brownfield Reuse, serves as a vital component of the state's Smart Growth efforts to stem the tide of sprawl and channel new development into cities and towns. Under the

innovative Brownfield Development Area (BDA) approach, DEP works with selected communities affected by multiple brownfield sites to design and implement plans for these properties simultaneously, so remediation and reuse can occur in a coordinated fashion. The DWSRF supports this initiative by providing five (5) additional priority points to any project serving a BDA. For more information about Brownfield Development Area Initiative, please see <a href="http://www.nj.gov/dep/srp/brownfields/bda">http://www.nj.gov/dep/srp/brownfields/bda</a>

# d. Green Project Reserve (GPR)

DEP promotes green infrastructure, water and energy efficiency, and environmental innovation in its water improvement projects. Therefore the DEP provides fifteen (15) additional priority points to any project that is a categorically eligible project, in accordance with Section I of this Intended Use Plan.

Please note that the points from these four items of Category C can be cumulative. Please note for water systems that service more than one municipality; the municipality that has the highest population served will be counted for this category.

# 4. Category D. Affordability

The purpose of the affordability criteria is to determine which project sponsors' water systems are eligible for additional points under the Affordability Category.

Affordability is the degree of need for financial assistance based upon the New Jersey median household income compared to the municipal median household income (MHI). Affordability is determined by the following formula:

# (Municipal MHI / Statewide MHI) x 100 = Affordability Factor

Points are assigned as shown in Table 2.

TABLE 2. Point values assigned based on Affordability Factor calculation			
1. Affordability factor of 100 or greater 0 Points			
2. Affordability factor from 85 through 99	15 Points		
3. Affordability factor from 66 through 84	30 Points		
4. Affordability factor less than or equal to 65	80 Points		

The median household income of the municipality which the water system serves and the statewide median household income will be determined from income data in the most recent United States census, which is currently the 2010 census.

The DEP determined that for the purposes of the DWSRF Program, a municipality whose median household income is 35 % or more below the State's MHI is considered a Disadvantaged Community, and receives 80 priority points which is proportionately greater than the other affordability factor points. (New Jersey's MHI is \$68,444 from the 2010 Census.)

A weighted MHI is calculated for a project sponsor whose water system serves more than one municipality, as shown in the example below.

Example:

Municipalities Served	MHI	Populations Served	Fraction of total population served	Weighted municipal MHI
Lancaster	30,000	5,000	0.167	5,000
Mayberry	20,000	10,000	0.333	6,660
Holmeville	25,000	15,000	0.500	12,500
TOTAL		30,000	1.00	24,160

Please note for water systems that service more than ten municipalities, the ten municipalities that have the highest populations served will be considered in the above table for the affordability factor.

# 5. Category E. Population

As a tiebreaker, projects are assigned points based on the permanent population of the water system service area. For a resort community where the summer and winter populations vary greatly, the permanent population will be calculated by taking the sum of twice the winter population and once the summer population and dividing by three (see below). For water systems that service more than one municipality, a total of all the permanent population served in the multiple service areas is used. Priority points are calculated as the permanent population served by the water system divided by 100,000, expressed as a decimal. In the event that projects remain tied, the project which serves a greater proportionate population in the water system's area is given higher priority.

Population served for resort communities will be calculated by the following equation:

[(2 x Winter Population) + Summer Population] / 3 = Weighted Permanent Population

# 6. Other Ranking Considerations

The following factors are also considered in project ranking: Emergency projects, projects in Small Water Systems, Supplemental Loan projects, and Legacy projects:

## **Emergency Projects**

Given the limited response time to emergency projects, the following procedure has been developed to ensure rapid response while also maintaining funding eligibility:

Drinking Water Emergency Repair Projects will be defined as, and limited to, projects that replace, in kind, the failure of an essential portion of a public water system that will disrupt water service to any number of the public water system's customers for a minimum of 24 hours total and/or poses a substantial threat to the public health, safety, and welfare. The DWSRF only funds the portion of any repair that is necessary to restore lost service to the affected population under the emergency loan provisions. A water purveyor may only receive emergency funding for a specific Emergency Repair Project ONCE. Any long term solutions, modifications, and/or upgrades to prevent future emergency occurrences must be addressed in future financing cycles as a project and published on the Project Priority List.

Emergency Repair Projects are not ranked on the current Priority List in accordance with the DWSRF Interim final rule, 40 CFR Parts 9 and 35, Section 35.3555. However, the project will need to be identified in the following IUP and the Annual Report to USEPA. Emergency Repair Projects receive priority funding over other projects on the Project Priority List.

The DEP recognizes that environmental infrastructure emergencies may occur that endanger public health and welfare and can result in substantial environmental damage. Such circumstances require an immediate response for which a complete technical and environmental review in advance of construction is not possible. On July 15, 2005, the DEP issued a generic Environmental Decision Document (EDD) for environmental emergency response projects and on January 3, 2006, amendments to the program's rules at N.J.A.C. 7:22 were adopted to allow the EIFP to fund certain emergency projects. The generic EDD and the rule changes identify the specific types of projects and conditions that must exist to qualify under the emergency project provisions of the Financing Program. With the EDD and the rules as guidelines, the DEP has developed a process to respond rapidly when emergencies occur, obtain basic project information, make an eligibility determination and issue a pre-award approval so that owners/operators can undertake the needed repairs and maintain eligibility for those expenditures through the NJEIFP. For ranking purposes, projects that qualify as emergency projects will receive funding priority over all other projects on the Project Priority List. All program requirements must be met to the DEP's satisfaction prior to the water system being reimbursed for the emergency repair.

## 7. DW Project Priority Order

# 1. Emergency Projects

Emergency projects are considered a public health hazard and will receive funding over other projects on the Priority List;

# 2. Very Small Systems

15 % of the FFY2016 DWSRF capital grant is reserved to provide financing for publicly owned and privately owned community water systems and non-profit, non-community water systems serving populations of 500 or less;

## 3. Supplemental Loan Projects

Projects which have received loans to date which require additional funds, either because the low bid building cost is higher than the original loan amount or because of differing site conditions, the project sponsor may request a supplemental loan. A supplemental loan agreement may only be executed after passage of a subsequent legislative appropriations act providing monies for the specific project. In either instance, the project sponsor is responsible for other costs. The DEP will give supplemental loans funding priority over projects on a current Priority List. The supplemental loan application must be submitted to DEP by the March deadline for the funding cycle in which the supplemental loan is requested;

## 4. Legacy Projects

Projects that were not able to meet the previous financing cycle deadlines for the Trust Bond sale but are awarded an interim loan before June. Projects that are not able to be funded through the DRAA DWSRF Program may also qualify as legacy projects if these projects are for an activity consistent with the DWSRF base program;

# 5. Current Year's Projects

6. Track 2 Projects

Projects that will be submitted after the October 9, 2015 deadline but before the March 4, 2016 deadline.

# DW SANDY SFY2017 NJEIFP RANKING CRITERIA

The Letters of Intent and accompanying documentation were used by the Department to assign points to each project using the Project Priority System and the Department ranked all eligible projects according to the total number of points each project received. All projects were subsequently placed on the Project Priority Comprehensive List according to their ranking. Projects with more points were ranked above those with fewer points. The Department intends to follow this procedure for Sandy drinking water projects meeting the October 2015 deadline

The principal elements of the Priority System are: A) Superstorm Sandy resiliency related projects, B) Affordability, and C) Population. Points were assigned for each of the three priority categories in the FFY2016 IUP; this IUP only has three categories, and Asset Management Plans are now a requirement for project submittal.

A project must be assigned points from Category A to be eligible for ranking; points assigned from the remaining categories are added to the points received in Category A.

The prospective applicant must notify the Department of any changes to project scope or any other circumstance that may affect the calculation of priority points. The Department shall then recalculate, if appropriate, the prospective applicant's ranking utilizing the new information submitted and revise the priority ranking accordingly.

Points will be assigned for each of the three priority categories discussed below, as applicable:

# 1. Category A. Superstorm Sandy DWSRF-related Project Needs

Table 1 describes the project elements that are eligible for funds:

Table 1. Project Elements Eligible for Project Priority Ranking in the Drinking Water State Revolving Fund DRAA Program				
1.	Projects for water supply systems, which the State classified as vulnerable, as a result of a 2007 DEP Interconnection Study	300 points		
2.	Projects for water supply systems that prevent floodwaters from entering a treatment plant or well house, including but not limited to relocating facilities to less flood prone areas and installation of physical barriers around a facility.	250 points		
3.	Projects for other interconnections that increase water systems resiliency during time of emergency	200 points		
4.	Projects for water supply systems with inadequate primary and secondary source capacity	150 points		
5.	Projects for water systems with auxiliary power projects	125 points		
6.	Projects for cleaning and lining water mains and other distribution system improvements for those municipally owned coastal water systems experiencing post Sandy water quality problems	110 points		
7.	Projects for water supply systems with inadequate storage to meet those requirements of the New Jersey Water Supply Management Act (7:19-6.8).	100 points		
8.	Other projects elements, not including in the above items that can be Superstorm Sandy related	50 points		

# 2. Category B. Affordability

The Affordability criteria utilized in ranking Sandy NJEIFP projects relative are identical to the Affordability criteria utilized in ranking Base SFY2017 NJEIFP projects, which are set forth in Section II(C)(b) above.

# 3. Category C. Population

The Population criteria utilized in ranking Sandy NJEIFP projects are identical to the Population criteria utilized in ranking Base SFY2017 NJEIFP projects, which are set forth in Section II(C)(b) above.

# SFY2017 PROJECT PRIORITY LISTS

The preliminary Project Priority Lists for the Clean Water and Drinking Water Programs reflects information provided by the individual project sponsors and the Department's project ranking. The details of a project can change as the plans and designs are finalized. Any such change will not impact the intended end result for which the project was proposed. Moreover, the project cost is based on preliminary engineering estimates (as opposed to actual construction bids). As such, the project type descriptions and loan amounts should be relied upon only for general information.

# PROGRAM LOAN TERMS AND CONDITIONS

## A. LOAN PRODUCTS

Structure: H<sub>2</sub>LOans consists of two loan formats, short-term and long-term loans, that together provide funding for all aspects, phases and components of designing and building environmental infrastructure projects.

## 1. SFY2017 NJEIFP Long Term Loans and Program Set-asides

- a. <u>Base CW NJEIFP</u> Loans are issued at interest rates equivalent to 25% of the market rate. The loan structures also vary based on project types as set forth in the following set asides and reserves for Base SFY2017 NJEIFP:
  - Equipment Purchases Open enrollment The Department will reserve a maximum of \$5 million for equipment purchases in support of the Trust's establishment of an open application process for certain equipment purchase projects. For the purposes of this reserve, equipment is limited to street sweepers, Jet-Vac trucks, portable generators and other equipment where construction services (such as the installation of a pad to support a generator) are not needed to effectuate the project. Funding priority for equipment purchases will be based exclusively on the order of approval.
  - CSO LTCP and P&D Loans The Department will reserve up to \$20 million to provide interest free planning loans through the Trust's Planning and Design Loan Program to help CSO permittees develop long-term control plans for the CSO sewer-shed (with loan terms up to 10 years). Eligibility for LTCP financing is limited to CSO communities. The planning loan will be converted to a long-term loan at the time of the completion of the LTCP and coupled with a construction loan that finances the implementation of a capital project. If there is no capital project to be implemented before the 10-year planning term expires, full loan repayment would be due.

- Combined Sewer Overflow Abatement The Department is proposing to reserve 50% of the available principal forgiveness funds and provide principal forgiveness loans for Combined Sewer Overflow (CSO) abatement projects utilizing green practices (such as green roofs, blue roofs, rain gardens, porous pavement, and other activities that maintain and restore natural hydrology by infiltrating, evapotranspiring and harvesting and using stormwater) with a \$1 million per project sponsor limit.
- **Barnegat Bay Watershed** The remaining 50% of the available principal forgiveness funds would be reserved for stormwater and non-point source pollution management projects in the Barnegat Bay Watershed with a \$1 million per project sponsor limit.
- Brownfield Set-Aside An amount equal to \$30 million of State funds is being continued for the SFY2017 Financing Program which will be allocated to brownfield remediation projects in order of their ranking. In cases where the available DEP Fund loan does not cover 50 % of the allowable project costs, the Trust may finance the remaining allowable costs. Financing above and beyond the amount set-aside for such projects will be considered if monies are available after the need for funding of higher ranking projects during the funding cycle has been satisfied. Conversely, if any set-aside funds are not used up because of reduced demand for brownfield remediation loans, the leftover funds may be used to finance projects listed on the Priority List that may otherwise not receive financing in the SFY2017 Program.
- Green Project Reserve (GPR) An amount equal to a minimum of 10 % of the State's CWSRF SFY2017 allocation will be established if the FFY2016 federal appropriation to the CWSRF Program includes language requiring such action. GPR loans will be issued at interest rates equivalent to 25% of the market rate. If the Department determines that there are insufficient applications or there are deficiencies in the application for projects eligible to be financed through the GPR, the Department may use the funds allocated to the GPR to finance other clean water projects in the SFY2017 Program.

The FFY2016 Priority System maintains the requirement for projects involving publicly-owned brownfields projects. Project sponsors must pledge that the site on which the improvements occur will remain in public ownership for the term of the loan (typically 20-23 years). While the Financing Program will allow the public sponsor to sell the improved land to a private entity and use it for private purposes, the loans provided by the Department and the Trust to finance the improvements must be repaid in full upon the transfer of ownership. This requirement does not apply to conduit Borrowers' projects, which by their nature, involve private developer(s) and private ownership interests.

• **Conduit Borrowers/Private Activity:** For all new conduit/redevelopment projects, the SFY2017 Redevelopment Financing Package consists of an interest-free loan from the Department for up to 50% of the allowable project costs (not to exceed \$25 million) and a market rate loan from the Trust for the remaining allowable project costs. Previously-financed conduit Borrowers will not be eligible for supplemental loans from the Department to cover unanticipated cost increases due to bid receipt, differing site conditions, change orders or other circumstances.

- <u>Base DW NJEIFP</u> Base DW NJEIFP loans consist at an interest rate equivalent to 25% of the market rate. Projected amounts of principal forgiveness funds must be less than 40% of the capitalization grant. The loan structures also vary based on project types as set forth in the following set asides and reserves for Base SFY2017 NJEIFP:
  - Green Project Reserve (GPR) An amount equal to a minimum of 20 % of the State's FFY2016 DWSRF allocation may be used for projects that meet the requirements of the program. Green infrastructure projects, such as solar panels or wind turbines, are not required but will be given priority for GPR funding in ranked order. Additionally, the GPR can be provided for categorically eligible projects or other projects for water efficiency, energy efficiency or other environmentally innovative activities, as needed to reach the optional 20 % goal. These projects are ranked along with other DWSRF projects and are subject to the same base loan terms.

For the Base SFY2017 NJEIFP, principal forgiveness money will be allocated in priority order to 1) Very Small Systems; 2) Small Systems; 3) Municipally-owned systems needing treatment for a National Primary Drinking Water Contaminant, or State-regulated primary contaminant (N.J.A.C. 7:10-5).

- Small System Loans. One of DEP's short-term goals is to provide loan assistance to systems serving 10,000 persons or less, subject to the availability of funds. The Federal SDWA amendments of 1996 set a goal for states to provide at least 15 % of each annual federal SRF capital grant credited to the DWSRF project account to provide loan assistance to systems serving 10,000 persons or less. Therefore, 15 % of the DWSRF fund is reserved to provide financing for small systems serving 10,000 residents or less that are eligible for the 15 % reserve, then these funds will be utilized for eligible projects, in priority order, that have met program requirements.
  - i. <u>Small Water Systems Loan Program</u> (NANO) Commencing in SFY2014, the DWSRF created the Small Water Systems Loan Program to improve small system's access to financing. Qualified Borrowers are currently active publicly-owned and privately-owned community water systems and nonprofit non-community water systems serving 10,000 persons or less.

\$4 million is allocated to this Small System Loan program. Each eligible loan under the program is capped at \$1 million per loan. At the loan cap amount of \$1 million, 50 % (\$500,000) is available as principal forgiveness; 25 % of the total project costs (up to \$250,000) is available as zero interest from the Department and 25 % of the balance of the total project cost (up to \$250,000) is available at the Trust market rate. This program will prioritize small systems in three tiers as follows: 1) those systems serving 500 residents or less, 2) those systems serving 501 to 3,300 residents and 3) those systems serving 3,301 to 10,000 residents. At this time, the financing program is discussing other advantages to small systems; such as waiving administrative fees, direct loans, getting the lowest costs for bond counsel, etc.

 ii. <u>Very Small Water System Loan Program</u> (NANO-Lite) - As a subset of the Small System Loan Program, VSWS loans will be available to current existing public water systems serving 500 persons or less to address a discrete project that can be completed in-full with the funds allocated. A VSWS may receive a principal forgiveness loan up to \$500,000, using DEP-only funds as long as the system supplies at least 15% of the project cost.

The program terms are that loans for 85% of eligible project costs will be given out as 100% principal forgiveness with a principal forgiveness cap of \$500,000. The VSWS will be required to contribute the remaining 15% to the project cost. The system contribution shall be exhausted prior to expending State monies. The project must be a discrete project that can be completed in full with the funds allocated, but can be part of a project that is completed in phases. There is no guarantee that the other phases would be funded under the DWSRF program.

There is no cap on the amount of funding for each project up to the program cap of \$500,000. If any project needs more than the available funds under this program, then the system must furnish the remaining balance of the project. If the system satisfies the credit worthiness criteria of the NJEIFP, the NJEIFP may fund the remaining amount out of the base program. If the system does not meet the credit worthiness criteria, the system must find an alternative source of funding to provide money for the remaining portions of the project or the system must reduce the scope of the project.

Any funds not expended under this program will be made available to fund projects in the small system or base DWSRF program. Any projects not selected during any year's program can reapply for the next funding cycle. There is no legacy status under this program. In addition, no one project sponsor is eligible for more than \$500,000 in principal forgiveness under the Small System loan program, the Very Small Water System loan program or any combination thereof in any one fiscal loan cycle year.

In SFY2017, the DEP will also provide VSWS and SWS loans to larger, more viable water systems which are willing to take ownership of small water systems in calendar year 2015 or later, and make needed capital improvements. As a result, larger water systems would be eligible for the same enhanced loan terms as the otherwise eligible small water system.

## 2. SFY2017 NJEIFP Short Term Loans

H<sub>2</sub>LOans offers a number of short-term loan programs to provide funds for the construction of a variety of environmental infrastructure situations. Short-term loans are available to finance the cost of (i) environmental planning and engineering design activities incurred in preparing a construction loan application, (ii) project construction upon application approval, and (iii) a 1% DEP administrative fee (50% of the total). Short-term loans are only issued for activities likely to lead to, or the construction of, an Environmental Infrastructure Project. While the basis of the financing are established at the time of the Short Term loan, the terms, including Principal Forgiveness, are contingent upon a project receiving long-term financing. These terms vary primarily with the nature of the project activities or populations served as detailed below.

Short-Term Loans are issued for the project's construction period with a maximum of up to three fiscal years. Financings related to (i) and (ii) in the previous paragraph are funded 25% from the Trust at the Trust's AAA-rated market interest rate and 75% from the DEP at 0% interest rate, resulting in the equivalent of a 25% market rate loan. Whereas financing related to (iii) in the previous paragraph is funded 100% from the Trust at the Trust's AAA-rated market interest rate. If Trust cash-on-hand is the source of funding, the market

rate is established at the time of each disbursement based upon the MMD TM3 © Thompson rate, otherwise, the market rate is the rate of any short term borrowings from private sources by the Trust. As a further benefit, the borrower is not obligated to repay principal or interest accrued during the term of the short-term loan. These totals are rolled into the borrower's long-term Financing Program loan. *The SFY2017 Construction Loan Program Clean Water Eligibility List and the SFY2017 Drinking Water Eligibility List, set forth in Appendices C and D respectively, identify environmental infrastructure projects eligible for short term financing pursuant to N.J.S.A. 58:11B-9.* 

One exception to the above are Short Term Loans for the Planning and Design of Combined Sewer Overflow Abatement Projects recognized by the NJEIFP. These CW loans are for terms of up to <u>ten</u> (10) years and funded 100% from DEP funds at an <u>interest rate of 0%</u>. Consistent with local finance law, borrowers commence principal repayments in year 4, in the amount no less than 1/30th of the loan balance.

The second exception to the above short-term loans is the financing of disaster-related projects through the Statewide Assistance Infrastructure Loan Program.

- a. <u>SAIL Financing</u>. Disaster-related projects eligible for financing through the SAIL Program include a wide variety of waste water treatment, stormwater management and nonpoint source pollution abatement projects that were impacted by Superstorm Sandy. The SAIL Program provides short-term loans to address the immediate cash flow needs of municipalities and authorities for:
  - their project's local match requirement and/or in anticipation of reimbursement through federal grant programs including but not limited to FEMA 406 and 404 grant programs, HUD-CDBG and NJEIFP to pay for construction costs related to the repair of infrastructure damaged during Sandy; and
  - Projects to improve infrastructure resiliency in future disasters.

Eligible applicants include local government units, including municipalities, counties, sewerage authorities, municipal utilities authorities, county improvement authorities and other subdivisions of government. SAIL significantly broadens the options available for financing such projects by providing funding opportunities to projects otherwise unable to secure financing and expanding funding sources through low interest loans for terms up to 3 fiscal years. It is anticipated that SAIL Loans made in SFY2016 will be at an interest rate equivalent to 25% of the market rate to be determined at the time of SAIL loan closing.

Projects financed through the SAIL Program are on a first-approved, first-funded basis provided the project satisfies the requirements of the SAIL legislation and the Trust Board Resolution originally approved June 13, 2013 and amended and restated on December 13, 2013, which includes:

- Submission of a Letter of Intent and environmental planning documents;
- Project permits;
- Construction design documents and State and Trust loan applications;
- If an applicant seeks SAIL financing for short-term cash flow needs in anticipation of federal reimbursement (e.g. FEMA), the application review also requires satisfaction of the requirements of the federal program from which reimbursement is or will be sought;

- A certification by the Commissioner of the DEP that the Project is necessary and appropriate to repair damage to a wastewater treatment system or water supply facility directly arising from an act of terrorism, seismic activity or weather conditions that occurred within the prior three State Fiscal Years and that gave rise to a declaration by the Governor of the State (the "Governor") of a state of emergency, provided that such wastewater treatment system or water supply facility is located in a county included in the Governor's state of emergency declaration, or
- Mitigate the risk of future damage to a wastewater treatment system or water supply facility
  from an act of terrorism, seismic activity or weather conditions comparable in scope and severity
  to an act of terrorism, seismic activity or weather conditions that occurred within the prior three
  State Fiscal Years and that gave rise to a declaration by the Governor of a state of emergency,
  provided that such wastewater treatment system or water supply facility is located in a county
  included in the Governor's state of emergency declaration;
- The Project is listed on the SAIL Disaster Relief Emergency Financing Program Eligibility List for funding in the forthcoming State Fiscal Year submitted to the Legislature in a form provided by the Commissioner of the DEP;
- The proposed Borrower has submitted a complete application for the Project to the Trust; and
- The Board of Directors of the Trust has certified the Project.

The majority of SAIL loan applicants have confirmed interest in long-term NJEIFP financing for a portion of project costs and as such, such SAIL projects will be certified for compliance with SAIL and NJEIFP program requirements as well as program requirements of the applicable federal program from which reimbursement is sought. Given the potential risks to FEMA funding eligibility if EPA capitalization grants are utilized for any portion of long-term loans, significant resources are being committed to ensure consistency of funding sources.

Given the necessity that project expenses meet FEMA/HUD requirements as a condition of reimbursement and the need to have such applications approved expeditiously, the program has retained an outside engineering consulting firm to assist in the review of construction design and eligible costs, conduct site visits and review disbursements. Although it is anticipated that the majority of such costs will be reimbursed by federal funding sources, in-eligible/unreimbursed amounts are the responsibility of the will be financed by NJEIFP paid for by SAIL program Borrowers. Such costs will typically be incorporated into the long-term financing program package.

A particularly successful Program, fifteen (15) SAIL projects, with an estimated cost of \$449 million, have expressed interest in SAIL financing, all of which are projects to improve the resiliency of waste water facilities adversely impacted during Superstorm Sandy. As of January 2016, two (2) have completed construction at an estimated cost of \$4.5 million, three (3) are under construction at a total estimated cost of \$38 million, and it is anticipated that the remaining three (3) projects will award construction before the end of June, 2016.

SAIL participants also enjoy a number of unique benefits. Applicants enjoy an abbreviated application review period. Borrowers enjoy a streamlined FEMA reimbursement process: (1) the Trust provides funds to Borrowers to pay construction costs within an average of eight (8) days of receipt of requests

for reimbursement, a marked improvement relative to project sponsors seeking reimbursement individually; and (2) SAIL staff possesses an expertise in FEMA regulations and compliance matters and guide Borrowers in the proper structuring of reimbursement requests to reduce the frequency of rejected or unreimbursed cost submissions.

The SFY2017 Disaster Relief Emergency Financing Program Eligibility List set forth in Appendix I identifies environmental infrastructure projects eligible for SAIL financing pursuant to N.J.S.A. 58:11B-9.5.

# B. **PROGRAM FEES**

The following is a summary of the Department and NJEIT <u>fees</u> for Long-Term loans:

 <u>Department Loan Origination Fee.</u> Commencing in 2002, budget cuts have necessitated the imposition of a fee to offset the costs of the DEP's administration of the Financing Program (Department Loan Origination Fee). Appropriations Acts require the Department to collect the fee from the Borrowers of each Financing Program amounting to 2% of the entire loan amount (combined Trust and DEP loan). Policy is to assess Borrowers 1% (half) of the fee at the time of the closing of financing (either short-term or permanent). The remaining 1% is paid in full through the initial repayments of the long-term loan as quickly as is allowable, within IRS rules.

Any fees collected above the amount necessary to fund the program are held by the Trust in a separate account. Interest earned on this account will be applied toward Financing Program administrative costs. If the fees collected are insufficient to fund the program, the Department will request that the shortfall amount be appropriated from the special account. (Note: monies collected through the Department Fee can only be used for Financing Program administrative costs).

- 2. <u>Trust Bond Origination Fee.</u> The Trust Origination fee is 0.1% of the Trust loan. The Trust's costs of issuance associated with the bond sale are captured in this fee. This fee is financed through the bond sale and payable over the life of the loan.
- 3. <u>Trust Loan Administration Fee.</u> The Trust administration fee is 0.3% assessed annually on the original Trust loan amount and is utilized to defray the Trust's annual costs of operation and loan administration (origination, disbursement and repayment processing). This fee is not financed through the bond sale and is payable bi-annually for the life of the loan.

# C. PROGRAM REQUIREMENTS: PROJECT CERTIFICATION / LOAN CLOSING

- Introduction. There are eight (8) prerequisites to receiving a loan<sup>4</sup>: (1) submission of a Letter of Intent and environmental planning documents (typically October); (2) project permits; (3) construction design documents and State Loan Application/ Trust loan application; (4) submission of Financial Addendum Form; (5) credit worthiness review; (6) construction bid package review; (7) DEP / Trust project certification; and (8) satisfaction of the Program's financial aligibility requirements. Certification is issued upon approval of
  - (8) satisfaction of the Program's financial eligibility requirements. Certification is issued upon approval of

<sup>&</sup>lt;sup>4</sup> Planning and Design Loans require an abbreviated submission package given the preliminary nature of the work limited to a Project Description and a Short Term-Loan Financial Addendum Form. Similarly, significantly abbreviated submissions are required for emergency loans given the necessity to respond to emergencies quickly. *Additional information including funding prerequisites is set forth in the Emergency Loan Program Guidance Document, Appendix G.* 

design, environmental planning, contract documents (prevailing wage and small and disadvantaged business provisions), and permits. This section discusses those requirements in detail.

- 2. <u>Project Certification</u>. The documents to be submitted and the approvals necessary to secure DEP Certification are as follows:
  - a. Letter of Intent / Planning Documents. The program maintains a strict point of entry for new projects (in the Fall of each year). Under certain circumstances the program will reopen the process creating Track II projects. Project sponsors interested in securing an NJEIFP loan are required to submit a Letter of Intent including an agreement to meet the submittal schedules of the annual priority system, a brief project description, water supply deficiency or need and estimated project cost, and a project contact list. (See N.J.A.C. 7:22-3.7). Project sponsors must also submit environmental planning documents. An acceptable planning submittal must consist of a complete project report, the appropriate environmental planning documentation for the level of environmental review determined applicable by DEP, cultural resources information, documentation of completed public participation activities, a detailed map, and the results of preliminary coordination activities with lead agencies regarding environmental and permit reviews. (See N.J.A.C. 7:22-10.1 et seq.).
  - b. <u>Permits</u>. Projects requiring numerous or complex permits should assume that unless the permits are in hand by January, the project will not receive funding during the program year. All other projects should expect to have all major permits in hand by the application deadline (March 6, 2015) to receive financing in the current Financing Program.
  - c. <u>Application / Construction Design Documents</u>. A State Loan Application and construction design documents must be completed and submitted by March –6, 2015. The State Loan application requires, among other things, a written authorization for the filing of the application, a project report and full facilities plan, detailed project costs, assurance of compliance with the Civil Right Act of 1964 and the New Jersey Law against Discrimination, and assurance that all requisite state and federal permits and approvals for construction have been received. (See, N.J.A.C. 7:22-3.11).
  - d. <u>Socially and Economically Disadvantaged (SED) Business Participation</u>. Project sponsors are required to set a goal of awarding at least ten (10) % of a project's costs for construction, materials, or services to small business concerns owned and controlled by SED individuals as defined in the Small Business Act (15 U.S.C. 637(a) and (d)) and any rules promulgated pursuant thereto. (See N.J.A.C. 7:22-9). The Department and the Trust have adopted the SED rules (at N.J.A.C. 7:22-9), that identify the SED requirements that project sponsors will have to meet.
  - e. <u>Construction Documents</u>. The applicant must submit the draft construction bidding documents including the following provisions: (1) that the successful bidder must comply with the Program SED requirements (See N.J.A.C. 7:22-9.7); and (2) workers employed in the performance of any contract for a project financed with NJEIFP Loan proceeds are required to receive wages not less than the prevailing wage, in accordance with the rate determined by the Commissioner of the New Jersey Department of Labor, and other requirements of the local public contracts law.
  - f. <u>Public Notice and Public Hearing</u>. The NJEIFP requires each applicant to issue public notice of SED opportunities prior to commencement of construction. (See N.J.A.C. 7:22-9.6). The NJEIFP requires the applicants of certain projects to provide public notice (30 day) and conduct a public hearing to receive comment regarding the environmental impacts. (See N.J.A.C. 10.10). Upon the Department's issuance of

an environmental decision document for the project, public comment is accepted for 30 days subsequent to the publication of the decision.

- g. <u>Department Approval/Certification</u>. Project certification will be granted by the Department upon an applicant's submission of the requisite documents and the Department's determination that the applicant has secured all permits and complied with the Department's construction design, environmental planning, construction bidding document, and SED requirements.
- 3. <u>Loan Closing Requirements</u>. The following is a summary of documents to be submitted and decisions to be made as conditions precedent to loan closing. A detailed discussion of the loan requirements will be set forth in the May Report.
  - a. <u>Financial Addendum Form (FAF)</u>. Each project sponsor is required to complete a Financial Addendum form to demonstrate its commitment to proceed with project financing for a Short-term Loan or Long-Term Loan. A single Financial Addendum is required to request financing for either a clean water or drinking water project. Two financial addenda must be submitted if both clean water and drinking water project loans are sought. The FAF submission deadline is typically the 2nd week of November. Applicants shall provide, among other things, authorization to finance the project through issuance of bonds, copy of the Local Finance Board (LFB) or New Jersey Board of Public Utilities (NJBPU) application (as applicable), a "no merit" legal opinion, assurance that applicant will pay for the relevant costs incurred by the Trust regardless of whether or not the loan is closed, and copy of reimbursement resolution. Note: applicants seeking Interim Financing are required to submit both an FAF as well as an interim financing FAF.
  - b. <u>LFB / NJBPU Approval</u>. Recent amendments to both N.J.S.A. 58:11B-9 of the Environmental Infrastructure Trust Act requires that the bonds to be issued by a LGU to the Trust now be approved by the Director of the Division of Local Government Services, Department of Community Affairs. As such, NJEIFP applications for municipalities, counties and local authorities (notwithstanding the Fiscal Control Law) no longer come before the Board unless another law requires Local Finance Board approval (e.g. a municipality exceeding its statutory debt limit). Relevant information from NJEIFP Loan applications are organized by NJEIFP staff and forwarded to the DLGS for a decision. NJBPU approval must be secured by public water utility applicants.
  - c. <u>Non-Conforming Maturity Schedules</u>. Section 12 of P.L. 2015, c.95 amends N.J.S.A. 40A:2-26 to eliminate the requirement that the Local Finance Board approve non-conforming maturity schedules for loans made by the NJEIT, or the State acting by and through the DEP, for environmental infrastructure projects as defined by N.J.S.A. 58:11B-3. The fact that the maturity schedule is approved by the Trust is now sufficient in and of itself.
  - d. <u>Automatic Waiver of the 5% Down-Payment Requirements</u>. Section 33 of P.L. 2015, c.95 amends N.J.S.A. 40A:2-11 to create an automatic waiver of the 5% down payment requirement where a bond ordinance is enacted for environmental infrastructure projects funded by loans made by the Trust, or the State acting by and through the DEP. No Local Finance Board approval is required to waive the 5% down payment otherwise generally required for municipal and county bond ordinances if the bond ordinance exclusively funds NJEIFP projects.
  - e. <u>Applicant Ordinances, Certifications and Covenants</u>. The following provides a brief overview of some of the actions required of applicants to secure Long-Term and Interim Loans:

- Ordinances and resolutions of the governing body must be in place to establish that the Borrower has the legal right and authority to undertake the specific project, and own, efficiently operate and appropriately maintain an environmental infrastructure system;
- Certifications that no undisclosed fact or event, and no pending litigation, will materially adversely affect the environmental infrastructure system;
- For a general obligation Borrower, a pledge of full faith and credit and for a revenue Borrower, a pledge of water system revenues;
- The establishment of levies, fees or rates sufficient to meet operating and maintenance expenses. Demonstration of compliance with the Trust's Credit Policy;
- Agreement to provide secondary market disclosure information; a limitation on the use of loan proceeds and the sale, lease, abandonment or other disposition of the project assignment of the loan obligations and prior written approval of the Trust/State; and a prohibition on actions that may jeopardize the tax status of the bonds issued by the Trust and, where appropriate, the State.
- f. <u>Escrow Closing</u>. Upon issuance of project certification, and when the Borrower has all the necessary ordinances, resolutions, authorizations and necessary financial covenants in place, the Trust conducts an escrow closing for each participant. Each Borrower enters into two loan agreements to secure a Long-Term Loan or Direct Loan: one agreement with the Trust and one with the State, acting by and through the Department, for the Fund or the Pinelands Program. These loan agreements have been drafted to reflect the differences between the security features for general obligation Borrowers, revenue Borrowers and private water system Borrowers. The principal terms and conditions are conformed among the versions and permit a generic description of the terms and conditions. Upon issuance of project certification, and when the Borrower has all the necessary ordinances, resolutions, authorizations and necessary financial covenants in place, the Trust conducts an escrow closing for each participant.
- g. <u>Bond Sale, Loan Closing</u>. Subsequent to escrow closing, the Trust will schedule its bond sale. Both the Trust's enabling legislation and the Annual Debt Management Plan require that the Trust's bonds be sold on a competitive basis. Typically within two weeks of bond sale, the Trust will conduct loan closings with the Borrowers to finalize and memorialize the transfer of funds.

# 4. Other Financing Considerations.

- a. <u>Debt Service Reserve</u>. Prior to 2007, the Trust's Debt Service Reserve Fund was generally funded from a portion of the required state match (20% of the federal grant), General Obligation Bond proceeds and project loan repayments. Since 2007, the NJEIFP has been able to secure a natural AAA credit rating for its bond issues without providing a debt service reserve. The Trust will continue this practice in SFY2017. Amendments to both the Trust legislation and the federal Drinking Water SRF legislation permit loans to be issued to private water purveyors.
- b. <u>Cross Collateralization</u>. The NJEIFP has received USEPA's approval to utilize cross-collateralization in its financing structure for both the Drinking Water and Clean Water SRF Programs. This has a direct benefit to the interest rates for Drinking water projects. The interest available to NJEIFP projects are directly influenced by the pool of repayments upon which the program can draw in the event of default. The pool of loan repayments available for DW projects is less than that for CW projects. Under the cross

collateralization option, repayments of loans from either fund may be used to cover any default in loan repayments and as a result the ratings agencies look to the combined pool of loan repayments as security in establishing a rating for the bond issue.

- c. <u>Transfer of Project Funds between Programs</u>. The USEPA permits states to transfer up to 33 % of the capitalization grant from either program to the other. The Department fully supports efforts to enact legislation to continue to allow the transfer of funds and the transfer provision has been extended by the USEPA. If approved, the Department reserves the right to transfer funds from the CWSRF to the DWSRF (or vice-versa) each fiscal year to the extent allowed by law. To date, approximately \$100 million has been transferred between the programs.
- d. <u>Calendar Year 2016 Refunding</u>. The current low interest rate environment may provide the Trust with the opportunity to refinance a number of series of Prior Bonds to achieve debt service savings. This refunding could include a portion or all of various existing Series issues. The debt service savings realized through the refunding of each series of Prior Bonds will be passed directly through to the Participating Borrowers in each respective series of Prior Bonds. The Trust anticipates the sale of one or more series of refunding bonds the net present value savings of which will be identified at the time of bond sale which will exceed 3.00% of the par amount of the Prior Bonds pursuant to the Trust's enabling legislation (58:11B-6(g)).
- e. <u>Tax Regulations</u>. The Trust will continue to evaluate the Tax Reform Act of 1986 and any amendments, as well as the various Internal Revenue Service (IRS) regulations and their cost impacts to program participants. The Trust may suggest modifications in its SFY2017 financial structure to reflect any changes in the tax law, or its interpretation, to increase the program's flexibility.

# APPENDICES INDEX

Appendix A: Clean Water Combined Base SFY2017 / Superstorm Sandy Project Priority List

Appendix B: Drinking Water Combined Base SFY2017 / Superstorm Sandy Project Priority List

Appendix C: Construction Loan Program Clean Water Eligibility List

Appendix D: Construction Loan Program Drinking Water Eligibility List

Appendix E: Project Eligibility Guidelines for Sandy Clean Water NJEIFP Loans

Appendix F: Project Eligibility Guidelines for Sandy Drinking Water NJEIFP Loans

Appendix G: Project Eligibility Guidelines for Sandy Drinking Water NJEIFP Loans

**Appendix H:** Projects Financed in SFY2015

**Appendix I:** Statewide Assistance Infrastructure Loan Program (Disaster Relief Emergency Financing Program) Project Eligibility List

# Appendix A-1

# Clean Water Combined Base SFY2017 / Superstorm Sandy Project Priority List Alphabetical Order

Rank	Sponsor	Project Number	Project Name	Estin	nated Cost
619	Aberdeen Township	S340869-02	New sanitary sewage collection system	\$	8,413,107
			in the Woodfield area		
178	Allentown Borough	S340567-05	Sewer Plant Modifications	\$	5,661,196
571	Atlantic City	S340439-01	Fisherman's Park Flood Gates.	\$	18,830,939
			Bungalow Park flood wall, pump		
			station, and two inlets.		
571	Atlantic City	S340439-03	This project will include the installation	\$	2,488,662
			of flood gates at the Atlantis Avenue		
			terminus of the Baltic Avenue canal.		
62	Atlantic County Util. Auth.	S340809-27	New automated bar screens in the	\$	3,094,238
62	Atlantic County Util. Auth.	S340809-26	headworks facility. STP Mitigation Projects	\$	13,442,855
62	Atlantic County Util. Auth.		Seawall Construction Project	\$	
		S340809-25	-	<u>ې</u> \$	13,641,136
62	Atlantic County Util. Auth.	S340809-23	ACUA Treatment Plant Resiliency Project - Emergency Power	Ş	8,610,164
283	Atlantic County Util. Auth.	S340809-29	Brigantine force main rehabilitation	\$	2,718,518
283	Atlantic County Util. Auth.	S340809-24	ACUA Pump Station Resiliency Project	\$	998,208
485	Atlantic County Util. Auth.	S340809-24 S340809-28	Sewer Sludge Incinerator	\$	2,049,114
219	Bay Head Borough	S340809-28	Street Sweeper	\$	250,886
60	Bayshore Reg. Sewer Auth.	S340697-06	Phase II Restor/Mitig.of Blower Bldgs	<u>ې</u> \$	
00	Bayshore Reg. Sewer Auth.	3540097-00	and restoration of plants power distrib.	Ş	7,916,433
			system		
60	Bayshore Reg. Sewer Auth.	S340697-05	Restoration and Flood Mitigation	\$	58,072,111
797	Bellmawr Borough	S342011-02	Waterfront Development Remediation	\$	66,350,623
148	Bergen County Util. Auth.	S340386-17	CHP Cogen Project	\$	8,621,779
151	Bergen County Util. Auth.	S340386-09	Reduce rainfall-induced I/I & eliminate	\$	31,783,125
	,		sanitary sewer overflows		
151	Bergen County Util. Auth.	S340386-18	Pump Station Resiliency Project	\$	2,491,339
151	Bergen County Util. Auth.	S340386-16	Numerous Waste Water Treatment	\$	19,537,263
			Upgrades		
151	Bergen County Util. Auth.	S340386-15	Restore plant wide anaerobic	\$	42,094,280
			digesters, switch gear, substation gen		
			& co-generation components.		
151	Bergen County Util. Auth.	S340386-14	various improvements for plant wide	\$	54,172,587
			resiliency		
151	Bergen County Util. Auth.	S340386-11	Sludge Digester System Improvements	\$	15,439,092
237	Caldwell Borough	S340523-04-1	(Carryover) - Completion of the	\$	894,000
			Caldwell Wastewater Treatment Plant		
			upgrade		
151	Bergen County Utilities Authority	S340386-12	Edgewater Outfall Extension	\$	13,000,360
187	Bergen County Utilities	S340386-13	Consolidation of Edgewater/Little Ferry	\$	31,660,502
	Authority		Service Area		
439	Bradley Beach Borough	S340472-01	Sewer Main Installation and Repairs - Phase I	\$	2,623,450
759	Bradley Beach Borough	S340472-02	Bradley Boulevard Stormwater	\$	537,008
172	Diadley Deach Dolough	JJ40472-02	Bradley Boulevalu Storniwater	ې	557,008

405	Brigantine City	S340827-04	Emergency Generators	\$ 3,014,413
725	Brigantine City	S340827-07	Floodwalls at Nine Streetends	\$ 999,476
481	Camden County Municipal	\$340640-06-2/09-	Sludge Drying Facility (Supplemental	\$ 2,160,000
	Utilities Authority	2/11-2	Loan #2)	
673	Camden County Municipal	S340640-14-1	Track II - Camden City Green and Grey	\$ 1,620,000
	Utilities Authority		Infrastructure, Phase 1 (Supplemental)	
725	Brigantine City	S340827-05	Flood Control and Pump Station Improvements	\$ 4,420,173
888	Cape May County Municipal Utilities Authority	S342017-04	(Carryover) - Sanitary Landfill	\$ 5,617,822
725	Brigantine City	S340827-06	Municipal System Improvements	\$ 873,263
793	Buena Vista Township	S342023-01	Landfill Closure	\$ 23,530,000
666	Burlington County	\$340818-07	Rehab existing stormwater sewer pipe & purch Portable Water Sedim. Treatment Tank	\$ 2,183,362
353	Burlington Township	S340712-14	Rehabilitation of sanitary sewer mains	\$ 1,259,960
365	Burlington Township	S340712-13	Emergency Generators for Various	\$ 639,645
778	Califon Borough	\$340431-01	Railroad Avenue/Main Street Stormwater Improvements	\$ 1,584,586
18	Camden City	\$340366-07	Rehab &Reconstruct sewers, install/replace manholes/inlets, reconn of sewer laterals, jetting/vacuuming sewers	\$ 6,614,815
2	Camden County Municipal Utilities Authority	S340640-17	Reduce Potential for CSOs within City	\$ 6,614,815
3	Camden County Municipal Utilities Authority	S340640-15	Green Infrastructure	\$ 6,614,815
328	Egg Harbor Township Municipal Utilities Authority	S340753-04	(Carryover SFY2015) - Washington Ave interceptor rehabilitation project	\$ 1,322,416
12	Camden County Municipal Utilities Authority	S340640-16	Wastewater Treatment Plant Improvements	\$ 13,000,360
24	Camden County Municipal Utilities Authority	S340640-18	Phase I Waste Water Treatment upgrades / Construct sludge digester	\$ 50,664,200
1	Camden County Municipal Utilities Authority	S340640-19	Camden City Green and Grey Infrastructure Project, Phase 4	\$ 10,690,000
291	Cape May County Municipal Utilities Authority	S340661-22	Repair Concrete wet wells at var	\$ 3,997,392
700	Carteret Borough	S340939-09	Noe Street Stormwater Pump Station Construction	\$ 4,653,327
880	Carteret Borough	\$340939-07	Sediment dredging & construct bulkhead, wetlands mudflats enhancements	\$ 23,882,313
160	Cinnaminson Sewerage Authority	\$340170-07	Surface aerators, dissolve oxygen control logic, anoxic zone, and odor control improv.	\$ 5,356,597
77	Cliffside Park Borough	S340847-04	Combined Sewer Separation	\$ 4,915,537
655	Cranford Township	S340858-04	Stormwater control project.	\$ 11,795,031
800	Cumberland County Improvement Authority	\$342015-03	Landfill Expansion (Phase VI development & Leachate pump station improvements)	\$ 18,954,010
112	Cumberland County Utilities Authority	\$340550-07	Sewage Treatment Plant Upgrades	\$ 1,054,062

239	Cumberland County Utilities	S340550-08	Pump Station Rehab; WWTP	\$	1,122,734
	Authority		Improvements to include energy		
			efficient equp & processes		
120	Delran Township	S340794-08	Replace existing sand filter @ WWTP & rehab Twps Fifth St Pump Station	\$	1,874,782
809	Edison Township	\$342020-01	Edison Landfill Closure	\$	11,714,265
328	Egg Harbor Township	\$340753-06	FAA Pump Station Reconstruction	\$	620,184
	Municipal Utilities Authority		Project	Ŧ	
22	Elizabeth City	S340942-19	Trumbull Street Flood Control Project	\$	3,688,239
42	Elizabeth City	S340942-13	Western Interceptor Modifications	\$	12,357,700
42	Elizabeth City	S340942-17	South Street Flood Control Project	\$	5,308,104
71	Hoboken City	S340635-04	(Carryover SFY2015) - Hoboken Wet	\$	15,227,976
			Weather Pump Station H5		
42	Elizabeth City	S340942-18	Progress Street Flood Control Project	\$	4,423,429
42	Elizabeth City	S345070-01	City of Elizabeth CSO LTCP	\$	4,000,001
149	Gloucester City	S340958-06	Sanitary Sewer Phase 2	\$	566,905
583	Gloucester City	S340958-07	Various Water System Improvements,	\$	112,292
			Phase II		
149	Gloucester City	S340958-08	Various Sewer Projects	\$	1,784,806
169	Gloucester County Utilities Authority	S340902-14	CHP project for the bio-solids handling facility	\$	37,750,220
173	Gloucester County Utilities Authority	S340902-15	Combined Heat & Power	\$	7,180,000
678	Gloucester Township	S340364-14	Rehabilitation of portions of existing	\$	1,400,973
			stormwate collection system		
678	Gloucester Township	S340364-11	Flood Mitigation	\$	1,470,871
31	Jersey City Municipal Utilities	S340928-13	(Carryover SFY2015) - Duncan St	\$	9,771,083
	Authority		Outfall Replacement		
678	Gloucester Township	S340364-15	Gloucester Township Stormwater Improvements	\$	1,369,058
312	Gloucester Township	S340364-13	Supply & delivery new vac truck, PS	\$	1,122,734
	Municipal Utilities Authority		communication system, sanitary sewer		
			rehab utilizing slip lining technologies.		
588	Greenwich Township	S340359-02	Installation of a collector sewer in	\$	2,140,000
			vicinity of the Village of Stewartsville		
192	Hammonton Town	S340927-07	Boyer Avenue Drip Irrigation	\$	3,866,213
708	Hammonton Town	S340927-09	Stormwater Improvements to portions	\$	1,773,507
			of Central Ave, Rte #542 and Bellevue		
			Ave and Broadway	-	
776	Hampton Borough	S340481-01	Leaf Vacuum Equipment Purchase	\$	97,500
749	Highlands Borough	S340901-03	Stormwater System Improvements	\$	4,299,487
200	Llighteteurs Deveugh	524001F 0F	(Current Project)	ć	1 200 500
200	Hightstown Borough	S340915-05	UV disinfection system upgrades	\$	1,369,569
606	Hillsborough Township	S340099-02	Sanitary Sewer Extension	\$ \$	1,536,339
71	Hoboken City	S340635-05	Southwest Park infrastruct. design & underground retention system /	Ş	4,260,119
			Stormwater improv.		
71	Hoboken City	S340635-06	Acquisition, remed, design, plan &	\$	25,607,620
/ 1	HODOREH City	5540055-00	construction on 6 acre park @ NW	<i>چ</i>	20,007,020
			Hoboken. Outfall @ Weehawken Cove		
71	Hoboken City	S340635-07	Track II - Resilient Green Infrastructure	\$	1,460,102
· <b>-</b>			for CSO Reduction	Ŷ	1,100,102
189	Howell Township	S344040-02	Freewood Acres & Route 9 Sanitary	\$	14,258,859
-	i. i.		Sewer Extension		,,

210	Jackson Township	S344050-02	Purchase of a Jet-Vac/Street Sweeper	\$ 998,980
31	Jersey City Municipal Utilities Authority	S340928-14	Grant Street Sewer Cleaning	\$ 2,290,548
31	Jersey City Municipal Utilities Authority	\$340928-15	Phase 3 & 4 Sewer Improvements	\$ 38,467,004
31	Jersey City Municipal Utilities Authority	S340928-16	Sixth Street Combined Sewer Outfall	\$ 8,987,500
31	Jersey City Municipal Utilities Authority	S340928-17	Regulator, Outfall and Solid_Flo	\$ 1,396,910
31	Jersey City Municipal Utilities Authority	S340928-18	Claremount_ Carteret outfall rep	\$ 5,308,104
31	Jersey City Municipal Utilities Authority	\$340928-19	East Side Plant repairs, improve	\$ 6,614,815
31	Jersey City Municipal Utilities Authority	\$340928-20	Outfall Chambers	\$ 6,361,818
83	Jersey City Municipal Utilities Authority	\$340928-22	Jersey Clty Green Infrastructure	\$ 624,357
147	Jersey City Municipal Utilities Authority	S340928-21	Sewer pipeline replacement project, Phase V of Combined Sewer & Conditions Assessment Study	\$ 6,832,571
109	Jersey City Municipal Utilities Authority	\$340928-23	Three Pump Station Resiliency Projects	\$ 1,846,000
109	Jersey City Municipal Utilities Authority	\$340928-24	Phase 1 and 2 Sewer Rehabilitation	\$ 17,050,000
794	Jersey City Municipal Utilities Authority	S340928-25	Jersey Aveneue Park Redevelopment Plan Phases 1 and 2	\$ 5,647,345
794	Jersey City Municipal Utilities Authority	S340928-26	Jersey Aveneue Park Redevelopment Plan Phases 1 and 2	\$ 12,326,308
230	Kearny Municipal Utilities Authority	S340259-07	Pump Station Rehabilitation	\$ 8,918,476
50	Kearny Town	S340259-11	New stormwater pump station @ Dukes Street	\$ 8,518,521
868	Kearny Town	S340259-12	Remediation and stormwater mgt for the redevelopment of recreational complex	\$ 961,810
868	Kearny Town	S340259-13	Demolish substandard infrstructure, replace water facilities, ground improvement program	\$ 107,557,474
444	Lambertville Municipal Utilities Authority	S340882-08	Swan creek flood gate/swan street force main replacement	\$ 10,218,000
254	Little Egg Harbor Municipal Utilities Authority	S340579-02	Twin Lakes Blvd Sewer Main Replacment to main constructed in the 60s.	\$ 1,930,210
254	Little Egg Harbor Municipal Utilities Authority	S340579-03	Mystic Island Sewer Main Replacement - Phases I - VI	\$ 7,638,655
198	Little Egg Harbor Township	\$344060-02	Twin Lakes Blvd. Drainage Improvements	\$ 3,958,000
450	Long Beach Township	\$340023-06	Remove & Replace approx 12,000 LF of sanitary sewer main with PVC incl laterals, cleanouts & manholes.	\$ 3,524,481
450	Long Beach Township	S340023-07	Sewer Main Replacement Project	\$ 4,486,000
653	Manasquan Borough	S340450-01	Pump Station elec syst & control rehabilitation	\$ 5,069,400

442	Medford Lakes Borough	S340319-03	Collection System Lining Improvements	\$ 10,610,800
238	Mendham Township	S340477-01	Mendham East Wastewater Treatment Facility Conversion	\$ 2,242,000
23	Middlesex County Utilities Authority	S340699-15	Rehabilitation & Upgrades to the Central WWTP	\$ 29,194,275
272	Middlesex County Utilities Authority	S340699-14	Main Truck Sewer Rehab Phase II	\$ 16,968,376
272	Middlesex County Utilities Authority	S340699-12	Restoration and Flood Mitigation	\$ 111,313,758
272	Middlesex County Utilities Authority	S340699-13	Restoration and Flood Mitigation	\$ 40,894,712
675	Middletown Township	S340097-01	Shadow Lake Restoration Project	\$ 3,997,392
69	Middletown Township Sewer Authority	S340097-04	TOMSA Mitigation Project	\$ 19,834,947
260	Milltown Borough	S340102-03	Electric Utility Mitigation Project	\$ 15,439,092
894	Milltown Borough	S340102-01	Milltown Ford Ave Redevelopment	\$ 19,440,809
894	Milltown Borough	S340102-04	Avenue Redevelopment	\$ 5,190,428
117	Millville City	S340921-07	Wastewater Treatment Plant Upgrade Phase II	\$ 10,491,204
333	Montclair Township	S340837-03	Sanitary Sewer Collection System Rehabilitation-SFY 2016	\$ 1,395,161
9	Newark City	S340815-25	Green Infrstructure for the Sewer System	\$ 388,383
15	Newark City	S340815-24	Rehabilitation of 350 miles of sanitary sewers	\$ 19,257,315
15	Newark City	S340815-22	Queen Ditch Restoration	\$ 4,522,375
15	Newark City	S340815-26	Imrpveoements to the Peddie Combined Sewer Outfall	\$ 3,092,080
26	North Bergen Municipal Utilities Authority	S340652-14	Woodcliff Additional Improvements	\$ 16,657,750
84	North Hudson Sewer Authority	S340952-24	Rehab sewers @ Hamilton Ave & JFK Blvd. Replace undersized w/ larger pipe to prevent need to upgrade again	\$ 2,330,694
84	North Hudson Sewer Authority	\$340952-23	Phase II improvements with upgrades to physical systems @ some common systems	\$ 3,032,199
84	North Hudson Sewer Authority	S340952-19	Combined Sewer Improvements	\$ 7,480,253
84	North Hudson Sewer Authority	S340952-21	Facility Improvements	\$ 2,718,518
84	North Hudson Sewer Authority	S340952-22	W1234 Solids/Floatables (CSO) project	\$ 15,451,847
84	North Hudson Sewer Authority	S340952-26	River Road Wastewater Treatment Plant Improvements	\$ 681,251
84	North Hudson Sewer Authority	S340952-27	Sanitary sewer Improvements	\$ 500,308
94	North Hudson Sewer Authority	S340952-29	River Road Wastewater Treatment Plant Improvements	\$ 1,199,640
94	North Hudson Sewer Authority	S340952-30	Adams Street Wastwater Treatment Plant Improvements	\$ 2,454,000
94	North Hudson Sewer Authority	S340952-28	Collection System Improvements	\$ 1,200,000

94	North Hudson Sewer Authority	S345190-01	Combined Sewer Long Term Control Plan	\$ 3,000,001
248	North Wildwood City	S340663-06	2014 Street & Utility Reconstruction	\$ 13,090,964
141	Northwest Bergen County Utilities Authority	\$340700-13	Waste activated sludge & aeration system improv, new gravity belt thickener bldg	\$ 5,177,348
141	Northwest Bergen County Utilities Authority	S340700-16	Wastewater Treatment Plant Improvements	\$ 3,753,040
226	Northwest Bergen County Utilities Authority	S340700-17	Security System Upgrades	\$ 443,500
303	Northwest Bergen County Utilities Authority	S340700-15	Wastewater Pump Station Improvements	\$ 4,733,200
303	Northwest Bergen County Utilities Authority	S340700-14	Midland Park Force Main Installation	\$ 3,089,200
204	Ocean County	S344080-04	Track I - Manufactured Treatment Devices	\$ 3,217,620
208	Ocean County	S344080-09	Barnegat Bay Storm Water Improvements - Manufactured Treatment Devices	\$ 1,123,750
59	Ocean County Utilities Authority	\$340372-56	Rehabilitate primary and final Clarifiers	\$ 6,223,655
277	Ocean County Utilities Authority	S340372-57	Rehabilitate the Pleasant Beach Interceptor and sanitary sewer manholes.	\$ 2,969,927
277	Ocean County Utilities Authority	\$340372-53	Area Wide Pump Station Generator Improvements	\$ 3,340,073
277	Ocean County Utilities Authority	\$340372-54	NSA Pump Station Improvements	\$ 4,452,933
264	Tuckerton Borough	\$340034-02	(Carryover SFY2015) - Sewer Main Replacement	\$ 1,820,883
217	Ocean Gate Borough	S344180-01	Storm Sewer MTD	\$ 2,303,933
411	Ocean Township	S340112-07	Sanitary sewer main replacement, drainage improvements various locations	\$ 2,290,548
341	Ocean Township Sewer Authority	S340750-11	Collection System Upgrades	\$ 4,522,375
341	Ocean Township Sewer Authority	\$340750-12	Interlaken Pump Station reconstruction	\$ 3,340,073
338	Ocean Township Sewer Authority	S340750-14	Asbury Avenue and Longview Pump Stations Rehabilitation	\$ 2,374,000
338	Ocean Township Sewer Authority	S340750-13	Collection System Improvements	\$ 507,500
227	Old Bridge Municipal Utilities Authority	\$340945-08-1	Crossroads Regional Interceptor	\$ 1,200,000
309	Old Bridge Municipal Utilities Authority	S340945-13	Laurence Harbor Bulkhead	\$ 4,915,537
309	Old Bridge Municipal Utilities Authority	\$340945-14	Sewage Pump Station Upgrades	\$ 2,110,000
409	Oradell Borough	\$340835-04	Phase IV sanitary sewer improvements; including replacement of 435 LF of sewer pipe & 3290 LF of sewer lining	\$ 1,136,488
891	Orange City	S340859-02	Sanitary Sewer and redevelopment improvements for the Harvard addordable housing project	\$ 6,039,749

100	Passaic Valley Sew. Comm.	\$340689-35	Administration Building Green	\$ 327,401
			Infrastructure Entry Plaza	
100	Passaic Valley Sew. Comm.	S340689-36	Green Car Wash	\$ 210,429
128	Passaic Valley Sew. Comm.	S340689-30	Sump pump relocations to prevent flooding during storms; stand-by generator	\$ 1,733,643
128	Passaic Valley Sew. Comm.	S340689-31	Sodium Hypochlorite Storage & Feed Tanks improvements	\$ 1,780,655
128	Passaic Valley Sew. Comm.	S340689-32	Wet weather trtment capacityimrpovements to reduce CSOs	\$ 1,804,876
128	Passaic Valley Sew. Comm.	S340689-33	Watertight doors and HVAC improvements to plant wide tunnels	\$ 5,921,310
128	Passaic Valley Sew. Comm.	S340689-34	Purchase & Install new pumps, valves, piping, flow meters, process control sampling & monitoring equipment	\$ 2,844,687
128	Passaic Valley Sew. Comm.	S340689-22	Contract A781 Yantacaw Pumping Station Rehabilitation	\$ 2,731,177
128	Passaic Valley Sew. Comm.	S340689-25	Administration Building Rehabilitation	\$ 9,070,281
122	Passaic Valley Sew. Comm.	S345200-01	Combined Sewer Overflow Long Term Control Planning	\$ 7,551,288
122	Passaic Valley Sew. Comm.	S340689-39	Heat Treatment Plant Supernantant Return (HTPSR) Pipe Lining Project	\$ 4,222,000
122	Passaic Valley Sew. Comm.	S345200-02	Asset Management Plan	\$ 2,000,000
122	Passaic Valley Sew. Comm.	S340689-37	Substation "M" Replacement	\$ 10,501,600
122	Passaic Valley Sew. Comm.	S340689-40	Plantwide Replacement & Relocation of Electrical Switchgear and MCCs	\$ 122,842,891
122	Passaic Valley Sew. Comm.	S340689-38	Final Clarifier Concrete Rehabilitation Project	\$ 18,974,800
56	Paterson City	S345210-01	Investigation of Tributary Sewers from Adjacent Municipalities	\$ 100,000
742	Paulsboro Borough	S340164-01	Replace malfuncting storm sewer along Thomson & Wood Aves., existing mains undersized & incorrectly built using saw-tooth fashion.	\$ 2,236,978
80	Perth Amboy City	S340435-13	Paving of Parking Lots C and RDH (GI)	\$ 813,482
103	Perth Amboy City	\$340435-11	Minimum replacement 3 pumps w/ dry pit submersible pumps, relocate electr equip, reduce flood risk & enhance resiliency	\$ 6,459,351
103	Perth Amboy City	S340435-12	Replacement of Various Catch Basin	\$ 430,399
103	Perth Amboy City	S340435-14	CSO Separatation Pulaski, Parket and State Streets	\$ 2,500,000
103	Perth Amboy City	S345220-01	CSO Permit Development of Long Term Control Plan	\$ 920,504
401	Pine Hill Municipal Utilities Authority	S340274-05	greenwood ave. pump station rehab; new wet well; new FM connection	\$ 1,286,028
502	Plumsted Township	\$340607-03	Construct new advanced WW treatment & coll system to repl aged, failing undersized septic & cesspool systems.	\$ 16,789,494
216	Point Pleasant Beach Borough	S344190-02	Little Silver Lake Drainage Improvement Project	\$ 8,944,264
121	Pompton Lakes Municipal Utilities Authority	S340636-08	Contract 131; Replace 6 circular clarifiers been in operation since 1960;	\$ 985,189

			internal mechanisms have deteriorated.	
242	Princeton Borough	\$340656-08	System-wide Sanitary Sewer Rehabilitation	\$ 3,862,596
4	Rahway Valley Sewerage Authority	S340547-14	Replace existing digester tank covers & mixers; replacing gas flares	\$ 9,460,275
7	Rahway Valley Sewerage Authority	S340547-15	Trucked-in Waste Receiving Station	\$ 2,588,518
165	Raritan Township Municipal Utilities Authority	S340485-09	Main Treatment Plant Motor Control Center Replacement	\$ 2,718,518
354	Raritan Township Municipal Utilities Authority	S340485-11	HCRHS Sewer Relocation Project	\$ 500,308
166	Raritan Township Municipal Utilities Authority	S340485-12	Main Treatment Plant Improvements 2016	\$ 4,709,999
295	Rockaway Valley Regional Sewer Authority	S340821-06	Washout of Jersey Truck Sewer Crossing of the Rockaway River	\$ 6,543,350
220	Roosevelt Borough	S340761-04	Roosevelt Secondary Treatment improvement	\$ 1,714,000
220	Roosevelt Borough	S340761-03	Controls for WWTP	\$ 161,675
363	Roselle Borough	S340332-02	Cleaning & lining of 3 miles of sanitary sewer pipe.	\$ 3,471,822
164	Roxbury Township	S340381-07	Treatment Plant & Pump Station Improvements	\$ 8,050,000
410	Runnemede Borough	\$340363-06	Sanitary Sewer Sliplining to improve sewer conveyance at various locations throughout Boro.	\$ 1,553,702
881	Salem County Improvement Authority	S342022-01	Cell 11 Construction	\$ 8,840,401
774	Sea Girt Borough	S340468-01	Upgrading of pipe sizes & the extension of Baltimore Blvd & Neptune Place outfall pipes	\$ 4,823,809
575	Secaucus Town	S340029-04	Born street pump station improvements	\$ 2,359,234
788	Secaucus Town	S342021-01	Malanka Landfill Closure	\$ 21,189,858
469	Ship Bottom Borough	S340311-03	Sewer Main Replacement Project	\$ 3,760,000
718	Somers Point City	S340618-02	Stormwater Improvements	\$ 5,203,507
113	Somerset Raritan Valley Sewer Authority	S340801-07	Sanitary Sewer Overflow Project / Stormwater Control Facility	\$ 14,834,451
489	Somerset Raritan Valley Sewer Authority	S340801-08	Rehabilitation of sludge incinerator #2	\$ 12,997,791
906	Somerville Borough	S342013-01	Green Seam Restoration	\$ 10,684,529
322	South Monmouth Regional Sewer Authority	S340377-05	Belmar Pump Station improvements	\$ 2,718,518
322	South Monmouth Regional Sewer Authority	S340377-03	Lake Como Pump Station Improvements (Superstorm Sandy)	\$ 9,137,611
322	South Monmouth Regional Sewer Authority	S340377-04A	Pitney Ave. Pump Station Improvements (Superstorm Sandy)	\$ 6,981,600
174	Stafford Township	S344100-02	Purchase of Jet Vac Truck and Street Cleaning Equipment	\$ 5,935,359
174	Stafford Township	\$344100-03	Neptune Basin Expansion	\$ 3,046,458
179	Stony Brook Regional Sewer Authority	S340400-10	Dewatered Sludge Handling Pump Replacement Project	\$ 4,700,000
461	Sussex Borough	S340155-02	Sewer Force Main	\$ 522,000

806	Sussex County Municipal Utilities Authority	S342008-04	Leachate Pump Station/Force Main Project	\$	7,258,000
886	Sussex County Municipal Utilities Authority	S342008-05	Landfill Life Extension Project	\$	12,406,000
67	Two Rivers Water Reclamation Authority	S340117-07	Contract 148 Belt Filter Press Upgrades	\$	3,612,556
722	Ventnor City	S340667-02	Stormwater Management	\$	9,466,743
722	Ventnor City	S340667-03	Flood Walls in Various Locations	\$	1,396,554
163	Wanaque Valley Regional Sewer Authority	S340780-04	2013 Proposed Improvements	\$	4,072,635
14	Warren Township Sewer Authority	S340964-01	Stage IV WWTP Oxidation Ditch	\$	2,949,113
257	Warren Township Sewer Authority	S340964-02	Contract 54 - Fox Hill West Pump Station	\$	675,018
325	Washington Township Municipal Utilities Authority	S340930-03	Pump Station and sewer main rehabilitations	\$	2,270,465
325	Washington Township Municipal Utilities Authority	S340930-04	Forrest Drive Pump Station Replacement	\$	1,040,303
359	West Deptford Township	S340947-05	Pump stations 4 and 6 rehabilitation	\$	1,232,500
107	West Milford Municipal Utilities Authority	S340701-12	Emergency Power Generator Install	\$	301,823
209	Western Monmouth Utilities Authority	S340128-06	Pine Brook Sewage Treatment Plant Improvements	\$	12,010,000
307	Western Monmouth Utilities Authority	S340128-07	Pine Brook Interceptor	\$	2,027,500
307	Western Monmouth Utilities Authority	S340128-05	Route 79 Pump Station and Force Main Replacement	\$	4,156,000
251	Willingboro Municipal Utilities Authority	S340132-08	Collection System Resiliency	\$	1,575,337
196	Willingboro Municipal Utilities Authority	\$340132-09	Water Pollution Control Plant- Installation of Screening and Grit Removal Equipment	\$	4,550,000
			Number of Projects: 234	\$ 2	2,037,703,351

# Appendix A-2

# Clean Water Combined Base SFY2017 / Superstorm Sandy Project Priority List Ranked Order

Rank	Sponsor	Project Number	Project Name	Estim	ated Cost
1	Camden County Municipal	S340640-19	Camden City Green and Grey	\$	10,690,000
	Utilities Authority		Infrastructure Project, Phase 4		
2	Camden County Municipal Utilities Authority	S340640-17	Reduce Potential for CSOs within City	\$	6,614,815
3	Camden County Municipal Utilities Authority	S340640-15	Green Infrastructure	\$	6,614,815
4	Rahway Valley Sewerage Authority	S340547-14	Replace existing digester tank covers & mixers; replacing gas flares	\$	9,460,275
7	Rahway Valley Sewerage Authority	S340547-15	Trucked-in Waste Receiving Station	\$	2,588,518
9	Newark City	S340815-25	Green Infrstructure for the Sewer System	\$	388,383
12	Camden County Municipal Utilities Authority	S340640-16	Wastewater Treatment Plant Improvements	\$	13,000,360
14	Warren Township Sewer Authority	S340964-01	Stage IV WWTP Oxidation Ditch	\$	2,949,113
15	Newark City	S340815-24	Rehabilitation of 350 miles of sanitary sewers	\$	19,257,315
15	Newark City	S340815-22	Queen Ditch Restoration	\$	4,522,375
15	Newark City	S340815-26	Imrpveoements to the Peddie Combined Sewer Outfall	\$	3,092,080
18	Camden City	\$340366-07	Rehab &Reconstruct sewers, install/replace manholes/inlets, reconn of sewer laterals, jetting/vacuuming sewers	\$	6,614,815
22	Elizabeth City	S340942-19	Trumbull Street Flood Control Project	\$	3,688,239
23	Middlesex County Utilities Authority	S340699-15	Rehabilitation & Upgrades to the Central WWTP	\$	29,194,275
24	Camden County Municipal Utilities Authority	S340640-18	Phase I Waste Water Treatment upgrades / Construct sludge digester	\$	50,664,200
26	North Bergen Municipal Utilities Authority	S340652-14	Woodcliff Additional Improvements	\$	16,657,750
31	Jersey City Municipal Utilities Authority	S340928-13	(Carryover SFY2015) - Duncan St Outfall Replacement	\$	9,771,083
31	Jersey City Municipal Utilities Authority	S340928-14	Grant Street Sewer Cleaning	\$	2,290,548
31	Jersey City Municipal Utilities Authority	S340928-15	Phase 3 & 4 Sewer Improvements	\$	38,467,004
31	Jersey City Municipal Utilities Authority	S340928-16	Sixth Street Combined Sewer Outfall	\$	8,987,500
31	Jersey City Municipal Utilities Authority	S340928-17	Regulator, Outfall and Solid_Flo	\$	1,396,910
31	Jersey City Municipal Utilities Authority	S340928-18	Claremount_ Carteret outfall rep	\$	5,308,104
31	Jersey City Municipal Utilities Authority	S340928-19	East Side Plant repairs, improve	\$	6,614,815

31	Jersey City Municipal Utilities Authority	S340928-20	Outfall Chambers	\$ 6,361,818
42	Elizabeth City	S340942-13	Western Interceptor Modifications	\$ 12,357,700
42	Elizabeth City	S340942-17	South Street Flood Control Project	\$ 5,308,104
42	Elizabeth City	S340942-18	Progress Street Flood Control Project	\$ 4,423,429
42	Elizabeth City	S345070-01	City of Elizabeth CSO LTCP	\$ 4,000,001
50	Kearny Town	S340259-11	New stormwater pump station @ Dukes Street	\$ 8,518,521
56	Paterson City	S345210-01	Investigation of Tributary Sewers from Adjacent Municipalities	\$ 100,000
59	Ocean County Utilities Authority	S340372-56	Rehabilitate primary and final Clarifiers	\$ 6,223,655
60	Bayshore Reg. Sewer Auth.	S340697-06	Phase II Restor/Mitig.of Blower Bldgs and restoration of plants power distrib. system	\$ 7,916,433
60	Bayshore Reg. Sewer Auth.	S340697-05	Restoration and Flood Mitigation	\$ 58,072,111
62	Atlantic County Util. Auth.	S340809-27	New automated bar screens in the headworks facility.	\$ 3,094,238
62	Atlantic County Util. Auth.	S340809-26	STP Mitigation Projects	\$ 13,442,855
62	Atlantic County Util. Auth.	S340809-25	Seawall Construction Project	\$ 13,641,136
62	Atlantic County Util. Auth.	S340809-23	ACUA Treatment Plant Resiliency Project - Emergency Power	\$ 8,610,164
67	Two Rivers Water Reclamation Authority	S340117-07	Contract 148 Belt Filter Press Upgrades	\$ 3,612,556
69	Middletown Township Sewer Authority	S340097-04	TOMSA Mitigation Project	\$ 19,834,947
71	Hoboken City	\$340635-04	(Carryover SFY2015) - Hoboken Wet Weather Pump Station H5	\$ 15,227,976
71	Hoboken City	\$340635-05	Southwest Park infrastruct. design & underground retention system / Stormwater improv.	\$ 4,260,119
71	Hoboken City	\$340635-06	Acquisition, remed, design, plan & construction on 6 acre park @ NW Hoboken. Outfall @ Weehawken Cove	\$ 25,607,620
71	Hoboken City	S340635-07	Track II - Resilient Green Infrastructure for CSO Reduction	\$ 1,460,102
77	Cliffside Park Borough	S340847-04	Combined Sewer Separation	\$ 4,915,537
80	Perth Amboy City	S340435-13	Paving of Parking Lots C and RDH (GI)	\$ 813,482
83	Jersey City Municipal Utilities Authority	S340928-22	Jersey Clty Green Infrastructure	\$ 624,357
84	North Hudson Sewer Authority	\$340952-24	Rehab sewers @ Hamilton Ave & JFK Blvd. Replace undersized w/ larger pipe to prevent need to upgrade again	\$ 2,330,694
84	North Hudson Sewer Authority	\$340952-23	Phase II improvements with upgrades to physical systems @ some common systems	\$ 3,032,199
84	North Hudson Sewer Authority	S340952-19	Combined Sewer Improvements	\$ 7,480,253
84	North Hudson Sewer Authority	S340952-21	Facility Improvements	\$ 2,718,518
84	North Hudson Sewer Authority	S340952-22	W1234 Solids/Floatables (CSO) project	\$ 15,451,847
84	North Hudson Sewer Authority	S340952-26	River Road Wastewater Treatment Plant Improvements	\$ 681,251

84	North Hudson Sewer Authority	S340952-27	Sanitary sewer Improvements	\$ 500,308
94	North Hudson Sewer Authority	S340952-29	River Road Wastewater Treatment Plant Improvements	\$ 1,199,640
94	North Hudson Sewer Authority	S340952-30	Adams Street Wastwater Treatment Plant Improvements	\$ 2,454,000
94	North Hudson Sewer Authority	S340952-28	Collection System Improvements	\$ 1,200,000
94	North Hudson Sewer Authority	\$345190-01	Combined Sewer Long Term Control Plan	\$ 3,000,001
100	Passaic Valley Sew. Comm.	\$340689-35	Administration Building Green Infrastructure Entry Plaza	\$ 327,401
100	Passaic Valley Sew. Comm.	S340689-36	Green Car Wash	\$ 210,429
103	Perth Amboy City	S340435-11	Minimum replacement 3 pumps w/ dry pit submersible pumps, relocate electr equip, reduce flood risk & enhance resiliency	\$ 6,459,351
103	Perth Amboy City	S340435-12	Replacement of Various Catch Basin	\$ 430,399
103	Perth Amboy City	S340435-14	CSO Separatation Pulaski, Parket and State Streets	\$ 2,500,000
103	Perth Amboy City	\$345220-01	CSO Permit Development of Long Term Control Plan	\$ 920,504
107	West Milford Municipal Utilities Authority	S340701-12	Emergency Power Generator Install	\$ 301,823
109	Jersey City Municipal Utilities Authority	\$340928-23	Three Pump Station Resiliency Projects	\$ 1,846,000
109	Jersey City Municipal Utilities Authority	S340928-24	Phase 1 and 2 Sewer Rehabilitation	\$ 17,050,000
112	Cumberland County Utilities Authority	S340550-07	Sewage Treatment Plant Upgrades	\$ 1,054,062
113	Somerset Raritan Valley Sewer Authority	S340801-07	Sanitary Sewer Overflow Project / Stormwater Control Facility	\$ 14,834,451
117	Millville City	\$340921-07	Wastewater Treatment Plant Upgrade Phase II	\$ 10,491,204
120	Delran Township	S340794-08	Replace existing sand filter @ WWTP & rehab Twps Fifth St Pump Station	\$ 1,874,782
121	Pompton Lakes Municipal Utilities Authority	\$340636-08	Contract 131; Replace 6 circular clarifiers been in operation since 1960; internal mechanisms have deteriorated.	\$ 985,189
122	Passaic Valley Sew. Comm.	S345200-01	Combined Sewer Overflow Long Term Control Planning	\$ 7,551,288
122	Passaic Valley Sew. Comm.	S340689-39	Heat Treatment Plant Supernantant Return (HTPSR) Pipe Lining Project	\$ 4,222,000
122	Passaic Valley Sew. Comm.	S345200-02	Asset Management Plan	\$ 2,000,000
122	Passaic Valley Sew. Comm.	S340689-37	Substation "M" Replacement	\$ 10,501,600
122	Passaic Valley Sew. Comm.	S340689-40	Plantwide Replacement & Relocation of Electrical Switchgear and MCCs	\$ 122,842,891
122	Passaic Valley Sew. Comm.	S340689-38	Final Clarifier Concrete Rehabilitation Project	\$ 18,974,800
128	Passaic Valley Sew. Comm.	S340689-30	Sump pump relocations to prevent flooding during storms; stand-by generator	\$ 1,733,643
128	Passaic Valley Sew. Comm.	S340689-31	Sodium Hypochlorite Storage & Feed Tanks improvements	\$ 1,780,655

128	Passaic Valley Sew. Comm.	S340689-32	Wet weather trtment	\$ 1,804,876
128	Passaic Valley Sew. Comm.	S340689-33	capacityimrpovements to reduce CSOs Watertight doors and HVAC	\$ 5,921,310
128	Passaic Valley Sew. Comm.	S340689-34	improvements to plant wide tunnels Purchase & Install new pumps, valves,	\$ 2,844,687
			piping, flow meters, process control sampling & monitoring equipment	
128	Passaic Valley Sew. Comm.	S340689-22	Contract A781 Yantacaw Pumping Station Rehabilitation	\$ 2,731,177
128	Passaic Valley Sew. Comm.	S340689-25	Administration Building Rehabilitation	\$ 9,070,281
141	Northwest Bergen County Utilities Authority	S340700-13	Waste activated sludge & aeration system improv, new gravity belt thickener bldg	\$ 5,177,348
141	Northwest Bergen County Utilities Authority	\$340700-16	Wastewater Treatment Plant Improvements	\$ 3,753,040
147	Jersey City Municipal Utilities Authority	S340928-21	Sewer pipeline replacement project, Phase V of Combined Sewer & Conditions Assessment Study	\$ 6,832,571
148	Bergen County Util. Auth.	S340386-17	CHP Cogen Project	\$ 8,621,779
149	Gloucester City	\$340958-06	Sanitary Sewer Phase 2	\$ 566,905
149	Gloucester City	S340958-08	Various Sewer Projects	\$ 1,784,806
151	Bergen County Util. Auth.	S340386-09	Reduce rainfall-induced I/I & eliminate sanitary sewer overflows	\$ 31,783,125
151	Bergen County Util. Auth.	S340386-18	Pump Station Resiliency Project	\$ 2,491,339
151	Bergen County Util. Auth.	S340386-16	Numerous Waste Water Treatment Upgrades	\$ 19,537,263
151	Bergen County Util. Auth.	S340386-15	Restore plant wide anaerobic digesters, switch gear, substation gen & co- generation components.	\$ 42,094,280
151	Bergen County Util. Auth.	S340386-14	various improvements for plant wide resiliency	\$ 54,172,587
151	Bergen County Util. Auth.	S340386-11	Sludge Digester System Improvements	\$ 15,439,092
151	Bergen County Utilities Authority	S340386-12	Edgewater Outfall Extension	\$ 13,000,360
160	Cinnaminson Sewerage Authority	S340170-07	Surface aerators, dissolve oxygen control logic, anoxic zone, and odor control improv.	\$ 5,356,597
163	Wanaque Valley Regional Sewer Authority	S340780-04	2013 Proposed Improvements	\$ 4,072,635
164	Roxbury Township	S340381-07	Treatment Plant & Pump Station Improvements	\$ 8,050,000
165	Raritan Township Municipal Utilities Authority	S340485-09	Main Treatment Plant Motor Control Center Replacement	\$ 2,718,518
166	Raritan Township Municipal Utilities Authority	S340485-12	Main Treatment Plant Improvements 2016	\$ 4,709,999
169	Gloucester County Utilities Authority	S340902-14	CHP project for the bio-solids handling facility	\$ 37,750,220
173	Gloucester County Utilities Authority	S340902-15	Combined Heat & Power	\$ 7,180,000
174	Stafford Township	S344100-02	Purchase of Jet Vac Truck and Street Cleaning Equipment	\$ 5,935,359
174	Stafford Township	S344100-03	Neptune Basin Expansion	\$ 3,046,458
178	Allentown Borough	S340567-05	Sewer Plant Modifications	\$ 5,661,196

179	Stony Brook Regional Sewer Authority	S340400-10	Dewatered Sludge Handling Pump Replacement Project	\$ 4,700,000
187	Bergen County Utilities Authority	S340386-13	Consolidation of Edgewater/Little Ferry Service Area	\$ 31,660,502
189	Howell Township	S344040-02	Freewood Acres & Route 9 Sanitary Sewer Extension	\$ 14,258,859
192	Hammonton Town	S340927-07	Boyer Avenue Drip Irrigation	\$ 3,866,213
196	Willingboro Municipal Utilities Authority	\$340132-09	Water Pollution Control Plant- Installation of Screening and Grit Removal Equipment	\$ 4,550,000
198	Little Egg Harbor Township	S344060-02	Twin Lakes Blvd. Drainage Improvements	\$ 3,958,000
200	Hightstown Borough	S340915-05	UV disinfection system upgrades	\$ 1,369,569
204	Ocean County	S344080-04	Track I - Manufactured Treatment Devices	\$ 3,217,620
208	Ocean County	S344080-09	Barnegat Bay Storm Water Improvements - Manufactured Treatment Devices	\$ 1,123,750
209	Western Monmouth Utilities Authority	\$340128-06	Pine Brook Sewage Treatment Plant Improvements	\$ 12,010,000
210	Jackson Township	S344050-02	Purchase of a Jet-Vac/Street Sweeper	\$ 998,980
216	Point Pleasant Beach Borough	S344190-02	Little Silver Lake Drainage Improvement Project	\$ 8,944,264
217	Ocean Gate Borough	S344180-01	Storm Sewer MTD	\$ 2,303,933
219	Bay Head Borough	S344120-01	Street Sweeper	\$ 250,886
220	Roosevelt Borough	S340761-04	Roosevelt Secondary Treatment improvement	\$ 1,714,000
220	Roosevelt Borough	S340761-03	Controls for WWTP	\$ 161,675
226	Northwest Bergen County Utilities Authority	S340700-17	Security System Upgrades	\$ 443,500
227	Old Bridge Municipal Utilities Authority	S340945-08-1	Crossroads Regional Interceptor	\$ 1,200,000
230	Kearny Municipal Utilities Authority	S340259-07	Pump Station Rehabilitation	\$ 8,918,476
237	Caldwell Borough	S340523-04-1	(Carryover) - Completion of the Caldwell Wastewater Treatment Plant upgrade	\$ 894,000
238	Mendham Township	S340477-01	Mendham East Wastewater Treatment Facility Conversion	\$ 2,242,000
239	Cumberland County Utilities Authority	S340550-08	Pump Station Rehab; WWTP Improvements to include energy efficient equp & processes	\$ 1,122,734
242	Princeton Borough	S340656-08	System-wide Sanitary Sewer Rehabilitation	\$ 3,862,596
248	North Wildwood City	S340663-06	2014 Street & Utility Reconstruction	\$ 13,090,964
251	Willingboro Municipal Utilities Authority	\$340132-08	Collection System Resiliency	\$ 1,575,337
254	Little Egg Harbor Municipal Utilities Authority	\$340579-02	Twin Lakes Blvd Sewer Main Replacment to main constructed in the 60s.	\$ 1,930,210
254	Little Egg Harbor Municipal Utilities Authority	\$340579-03	Mystic Island Sewer Main Replacement - Phases I - VI	\$ 7,638,655
257	Warren Township Sewer Authority	S340964-02	Contract 54 - Fox Hill West Pump Station	\$ 675,018

260	Milltown Borough	S340102-03	Electric Utility Mitigation Project	\$ 15,439,092
264	Tuckerton Borough	\$340034-02	(Carryover SFY2015) - Sewer Main Replacement	\$ 1,820,883
272	Middlesex County Utilities Authority	S340699-14	Main Truck Sewer Rehab Phase II	\$ 16,968,376
272	Middlesex County Utilities Authority	S340699-12	Restoration and Flood Mitigation	\$ 111,313,758
272	Middlesex County Utilities Authority	S340699-13	Restoration and Flood Mitigation	\$ 40,894,712
277	Ocean County Utilities Authority	\$340372-57	Rehabilitate the Pleasant Beach Interceptor and sanitary sewer manholes.	\$ 2,969,927
277	Ocean County Utilities Authority	S340372-53	Area Wide Pump Station Generator Improvements	\$ 3,340,073
277	Ocean County Utilities Authority	S340372-54	NSA Pump Station Improvements	\$ 4,452,933
283	Atlantic County Util. Auth.	S340809-29	Brigantine force main rehabilitation	\$ 2,718,518
283	Atlantic County Util. Auth.	S340809-24	ACUA Pump Station Resiliency Project	\$ 998,208
291	Cape May County Municipal Utilities Authority	S340661-22	Repair Concrete wet wells at var	\$ 3,997,392
295	Rockaway Valley Regional Sewer Authority	S340821-06	Washout of Jersey Truck Sewer Crossing of the Rockaway River	\$ 6,543,350
303	Northwest Bergen County Utilities Authority	S340700-15	Wastewater Pump Station Improvements	\$ 4,733,200
303	Northwest Bergen County Utilities Authority	S340700-14	Midland Park Force Main Installation	\$ 3,089,200
307	Western Monmouth Utilities Authority	S340128-07	Pine Brook Interceptor	\$ 2,027,500
307	Western Monmouth Utilities Authority	S340128-05	Route 79 Pump Station and Force Main Replacement	\$ 4,156,000
309	Old Bridge Municipal Utilities Authority	S340945-13	Laurence Harbor Bulkhead	\$ 4,915,537
309	Old Bridge Municipal Utilities Authority	S340945-14	Sewage Pump Station Upgrades	\$ 2,110,000
312	Gloucester Township Municipal Utilities Authority	\$340364-13	Supply & delivery new vac truck, PS communication system, sanitary sewer rehab utilizing slip lining technologies.	\$ 1,122,734
322	South Monmouth Regional Sewer Authority	S340377-05	Belmar Pump Station improvements	\$ 2,718,518
322	South Monmouth Regional Sewer Authority	S340377-03	Lake Como Pump Station Improvements (Superstorm Sandy)	\$ 9,137,611
322	South Monmouth Regional Sewer Authority	S340377-04A	Pitney Ave. Pump Station Improvements (Superstorm Sandy)	\$ 6,981,600
325	Washington Township Municipal Utilities Authority	S340930-03	Pump Station and sewer main rehabilitations	\$ 2,270,465
325	Washington Township Municipal Utilities Authority	S340930-04	Forrest Drive Pump Station Replacement	\$ 1,040,303
328	Egg Harbor Township Municipal Utilities Authority	S340753-04	(Carryover SFY2015) - Washington Ave interceptor rehabilitation project	\$ 1,322,416
328	Egg Harbor Township Municipal Utilities Authority	S340753-06	FAA Pump Station Reconstruction Project	\$ 620,184
333	Montclair Township	S340837-03	Sanitary Sewer Collection System Rehabilitation-SFY 2016	\$ 1,395,161

338	Ocean Township Sewer Authority	S340750-14	Asbury Avenue and Longview Pump Stations Rehabilitation	\$ 2,374,000
338	Ocean Township Sewer Authority	S340750-13	Collection System Improvements	\$ 507,500
341	Ocean Township Sewer Authority	S340750-11	Collection System Upgrades	\$ 4,522,375
341	Ocean Township Sewer Authority	S340750-12	Interlaken Pump Station reconstruction	\$ 3,340,073
353	Burlington Township	S340712-14	Rehabilitation of sanitary sewer mains	\$ 1,259,960
354	Raritan Township Municipal Utilities Authority	S340485-11	HCRHS Sewer Relocation Project	\$ 500,308
359	West Deptford Township	S340947-05	Pump stations 4 and 6 rehabilitation	\$ 1,232,500
363	Roselle Borough	S340332-02	Cleaning & lining of 3 miles of sanitary sewer pipe.	\$ 3,471,822
365	Burlington Township	S340712-13	Emergency Generators for Various	\$ 639,645
401	Pine Hill Municipal Utilities Authority	S340274-05	greenwood ave. pump station rehab; new wet well; new FM connection	\$ 1,286,028
405	Brigantine City	S340827-04	Emergency Generators	\$ 3,014,413
409	Oradell Borough	S340835-04	Phase IV sanitary sewer improvements; including replacement of 435 LF of sewer pipe & 3290 LF of sewer lining	\$ 1,136,488
410	Runnemede Borough	S340363-06	Sanitary Sewer Sliplining to improve sewer conveyance at various locations throughout Boro.	\$ 1,553,702
411	Ocean Township	\$340112-07	Sanitary sewer main replacement, drainage improvements various locations	\$ 2,290,548
439	Bradley Beach Borough	S340472-01	Sewer Main Installation and Repairs - Phase I	\$ 2,623,450
442	Medford Lakes Borough	S340319-03	Collection System Lining Improvements	\$ 10,610,800
444	Lambertville Municipal Utilities Authority	S340882-08	Swan creek flood gate/swan street force main replacement	\$ 10,218,000
450	Long Beach Township	S340023-06	Remove & Replace approx 12,000 LF of sanitary sewer main with PVC incl laterals, cleanouts & manholes.	\$ 3,524,481
450	Long Beach Township	\$340023-07	Sewer Main Replacement Project	\$ 4,486,000
461	Sussex Borough	S340155-02	Sewer Force Main	\$ 522,000
469	Ship Bottom Borough	S340311-03	Sewer Main Replacement Project	\$ 3,760,000
481	Camden County Municipal Utilities Authority	S340640-06- 2/09-2/11-2	Sludge Drying Facility (Supplemental Loan #2)	\$ 2,160,000
485	Atlantic County Util. Auth.	S340809-28	Sewer Sludge Incinerator	\$ 2,049,114
489	Somerset Raritan Valley Sewer Authority	S340801-08	Rehabilitation of sludge incinerator #2	\$ 12,997,791
502	Plumsted Township	S340607-03	Construct new advanced WW treatment & coll system to repl aged, failing undersized septic & cesspool systems.	\$ 16,789,494
571	Atlantic City	S340439-01	Fisherman's Park Flood Gates. Bungalow Park flood wall, pump station, and two inlets.	\$ 18,830,939
571	Atlantic City	S340439-03	This project will include the installation of flood gates at the Atlantis Avenue terminus of the Baltic Avenue canal.	\$ 2,488,662

575	Secaucus Town	\$340029-04	Born street pump station	\$ 2,359,234
583	Gloucester City	S340958-07	improvements Various Water System Improvements, Phase II	\$ 112,292
588	Greenwich Township	S340359-02	Installation of a collector sewer in vicinity of the Village of Stewartsville	\$ 2,140,000
606	Hillsborough Township	S340099-02	Sanitary Sewer Extension	\$ 1,536,339
619	Aberdeen Township	S340869-02	New sanitary sewage collection system in the Woodfield area	\$ 8,413,107
653	Manasquan Borough	S340450-01	Pump Station elec syst & control rehabilitation	\$ 5,069,400
655	Cranford Township	S340858-04	Stormwater control project.	\$ 11,795,031
666	Burlington County	S340818-07	Rehab existing stormwater sewer pipe & purch Portable Water Sedim. Treatment Tank	\$ 2,183,362
673	Camden County Municipal Utilities Authority	S340640-14-1	Track II - Camden City Green and Grey Infrastructure, Phase 1 (Supplemental)	\$ 1,620,000
675	Middletown Township	S340097-01	Shadow Lake Restoration Project	\$ 3,997,392
678	Gloucester Township	S340364-14	Rehabilitation of portions of existing stormwate collection system	\$ 1,400,973
678	Gloucester Township	S340364-11	Flood Mitigation	\$ 1,470,871
678	Gloucester Township	S340364-15	Gloucester Township Stormwater Improvements	\$ 1,369,058
700	Carteret Borough	S340939-09	Noe Street Stormwater Pump Station Construction	\$ 4,653,327
708	Hammonton Town	S340927-09	Stormwater Improvements to portions of Central Ave, Rte #542 and Bellevue Ave and Broadway	\$ 1,773,507
718	Somers Point City	S340618-02	Stormwater Improvements	\$ 5,203,507
722	Ventnor City	S340667-02	Stormwater Management	\$ 9,466,743
722	Ventnor City	\$340667-03	Flood Walls in Various Locations	\$ 1,396,554
725	Brigantine City	S340827-07	Floodwalls at Nine Streetends	\$ 999,476
725	Brigantine City	S340827-05	Flood Control and Pump Station Improvements	\$ 4,420,173
725	Brigantine City	S340827-06	Municipal System Improvements	\$ 873,263
742	Paulsboro Borough	S340164-01	Replace malfuncting storm sewer along Thomson & Wood Aves., existing mains undersized & incorrectly built using saw-tooth fashion.	\$ 2,236,978
749	Highlands Borough	S340901-03	Stormwater System Improvements (Current Project)	\$ 4,299,487
759	Bradley Beach Borough	S340472-02	Bradley Boulevard Stormwater	\$ 537,008
774	Sea Girt Borough	S340468-01	Upgrading of pipe sizes & the extension of Baltimore Blvd & Neptune Place outfall pipes	\$ 4,823,809
776	Hampton Borough	S340481-01	Leaf Vacuum Equipment Purchase	\$ 97,500
778	Califon Borough	S340431-01	Railroad Avenue/Main Street Stormwater Improvements	\$ 1,584,586
788	Secaucus Town	S342021-01	Malanka Landfill Closure	\$ 21,189,858
793	Buena Vista Township	S342023-01	Landfill Closure	\$ 23,530,000
794	Jersey City Municipal Utilities Authority	S340928-25	Jersey Aveneue Park Redevelopment Plan Phases 1 and 2	\$ 5,647,345
794	Jersey City Municipal Utilities Authority	S340928-26	Jersey Aveneue Park Redevelopment Plan Phases 1 and 2	\$ 12,326,308

797	Bellmawr Borough	S342011-02	Waterfront Development Remediation	\$ 66,350,623
800	Cumberland County Improvement Authority	S342015-03	Landfill Expansion (Phase VI development & Leachate pump station improvements)	\$ 18,954,010
806	Sussex County Municipal Utilities Authority	S342008-04	Leachate Pump Station/Force Main Project	\$ 7,258,000
809	Edison Township	S342020-01	Edison Landfill Closure	\$ 11,714,265
868	Kearny Town	S340259-12	Remediation and stormwater mgt for the redevelopment of recreational complex	\$ 961,810
868	Kearny Town	S340259-13	Demolish substandard infrstructure, replace water facilities, ground improvement program	\$ 107,557,474
880	Carteret Borough	S340939-07	Sediment dredging & construct bulkhead, wetlands mudflats enhancements	\$ 23,882,313
881	Salem County Improvement Authority	\$342022-01	Cell 11 Construction	\$ 8,840,401
886	Sussex County Municipal Utilities Authority	\$342008-05	Landfill Life Extension Project	\$ 12,406,000
888	Cape May County Municipal Utilities Authority	\$342017-04	(Carryover) - Sanitary Landfill	\$ 5,617,822
891	Orange City	S340859-02	Sanitary Sewer and redevelopment improvements for the Harvard addordable housing project	\$ 6,039,749
894	Milltown Borough	S340102-01	Milltown Ford Ave Redevelopment	\$ 19,440,809
894	Milltown Borough	S340102-04	Avenue Redevelopment	\$ 5,190,428
906	Somerville Borough	S342013-01	Green Seam Restoration	\$ 10,684,529
			Number of Projects: 234	\$ 2,037,703,351

# Appendix B-1

## Drinking Water Combined Base SFY2017 / Superstorm Sandy Project Priority List Alphabetical Order

Rank	Project Sponsor	Project Number	Project Name	Estim	ated Cost
316	Aberdeen Township	1330004-001	Woodfield Area Water System Rehabilitation	\$	3,822,000
45	Atlantic City Municipal Utilities Auth.	0102001-006	1MGD Storage Tank Sand Blasting	\$	2,001,363
281	Belleville Township	0701001-006	Clara Maass Hospital Water Main Extension	\$	1,099,390
202	Bellmawr Borough	0404001-006	Various Water System Improvements	\$	2,131,098
84	Berkeley Township Munic. Util. Auth.	1505004-008	Phase VI Water Main Installation	\$	3,285,921
180	Berkeley Township Munic. Util. Auth.	1505004-007	BTMUA Well #4 Phase II Production Well	\$	1,215,900
180	Berkeley Township Munic. Util. Auth.	1505004-009	Installation of new well #4 with WM to connect to WTP	\$	1,276,800
30	Bordentown City	0303001-006	Upgrade Well 2 with 2A to resolve violation	\$	1,462,388
259	Bordentown City	0303001-007	Water System Remediation Upgrades to WTP	\$	2,793,971
368	Brielle Borough	1308001-002	Water Main Replacement	\$	2,454,000
574	Brielle Borough	1308001-003	Storage Tank Demolition	\$	144,296
412	Brigantine City	0103001-501	Installation of generators @ well	\$	2,816,982
52	Buena Vista Township	0660004-001	Water Main extension due to private well contamination	\$	999,999
75	Camden City	0408001-021	New Auto Meter Reading Equip for entire City	\$	1,664,250
89	Camden City	0408001-022	Install potable wells/flr elevations @ Morris Delair WTP	\$	1,260,000
190	Cape May City	0502001-004	Well 5 Replacment for the Sands Aquifer	\$	2,077,776
232	Clementon Borough	0411001-001	Rehab of Gibbsboro Water Main (White Horse Pk & Wht Horse Rd.)	\$	456,750
473	Clementon Borough	0411001-002	Rehab of well 9 including slip lining to improve conveyance	\$	1,294,125
260	Clinton Town	1005001-008	Well 4 Water Production Facility	\$	1,364,160
355	Clinton Town	1005001-006	Lebanon Borough Water Main Replacements - Phase II through Phase V	\$	3,673,507
529	Clinton Town	1005001-007	Replace Water Meters	\$	1,014,223
549	Clinton Town	1005001-009	Well 7 Improvements & Well 14 Decommissioning	\$	1,103,813
6	East Orange City	0705001-011	Water Treatment & Supply Program	\$	13,007,736
33	East Orange City	0705001-014	Water System Improvements and Resiliency Project 2017	\$	32,930,000
67	East Orange City	0705001-013	WORPS Emergency Backup Power Generator Planning and Design	\$	5,104,000
67	East Orange City	0705001-012	WORPS SCADA Instrumentation/Controls Planning and Design	\$	4,580,000

251	Evesham Municipal Utilities Authority	0313001-001	Wells 13 & 14 Treatment Improvements	\$ 1,963,000
177	Fountainhead Properties Incorporate	1511013-001	Upgrade Improve Water System	\$ 722,000
215	Gloucester City	0414001-020	Water System Improvements, Phase II	\$ 1,259,000
203	Gloucester City	0414001-016	Replacement of 1,200 LF of 8" cast ironj main on Brown Street	\$ 882,893
215	Hammonton Town	0113001-011	2016 Utility Road Program Valley, Central & Bellevue Ave to Broadway.	\$ 1,695,942
431	Hammonton Town	0113001-007	Water Meter Replacement	\$ 936,000
503	Hammonton Town	0113001-010	SCADA System/Water Meter Replacment Proj	\$ 237,000
474	Hampton Borough	1013001-001	New back up well 5 to address firm capacity requirements	\$ 1,305,000
182	Hightstown Borough	1104001-008	Settling Tank Rehabilitation	\$ 165,300
517	Hightstown Borough	1104001-007	Rehabilitation of Deep Well 2	\$ 374,535
189	Hoboken City	0905001-001	Washington Street Water Main Replacement And Green Infrastructure Drainage Improvement Project	\$ 5,848,889
193	Jackson Township Municipal Util. Auth.	1511001-010	Demolition of Facilities, replace storage tank, well #3	\$ 5,815,925
433	Jackson Township Municipal Util. Auth.	1511001-011	Improvements to Manhattan St Complex, Garage & Admin Bldg.	\$ 1,406,181
174	Jackson Township Municipal Util. Auth.	1511001-013	Six Flags Great Adventure Water Treatment Plant Replacement	\$ 10,660,000
380	Jackson Township Municipal Util. Auth.	1511001-012	Western Water Main Extension	\$ 10,672,520
138	Jersey City Municipal Utilities Auth.	0906001-010	Journal Square North Cleaning	\$ 7,067,000
138	Jersey City Municipal Utilities Auth.	0906001-012	Water main replacement	\$ 16,643,000
138	Jersey City Municipal Utilities Auth.	0906001-011	Large Valve Replacement	\$ 6,260,867
138	Jersey City Municipal Utilities Auth.	0906001-006	Transmission Main Rehabilitation	\$ 18,005,000
173	Jersey City Municipal Utilities Auth.	0906001-014	Brookdale Gate House Improvements	\$ 1,428,480
379	Jersey City Municipal Utilities Auth.	0906001-013	Remote Meter Reading (AMI)	\$ 9,174,240
191	Kearny Town	0907001-001A	Demolish infrstructure, replace water facil, ground improvements	\$ 26,553,879
9	Lake Glenwood Village	1922010-008	Wells 1 & 2 upgrades	\$ 895,230
102	Little Egg Harbor Municipal Util. Auth.	1516001-004	Twin Lakes Water Main Replacment	\$ 1,701,294
501	Little Egg Harbor Municipal Util. Auth.	1516001-003	Water Treatment Plant at Highrid	\$ 4,571,999
501	Little Egg Harbor Municipal Util. Auth.	1516001-500	Radio Road Water Treatment Plant	\$ 688,475
101	Little Egg Harbor Municipal Util. Auth.	1516001-005	Mystic Island Water Main Replacement - Phases I - VI	\$ 6,322,221
255	Long Beach Township	1517001-502	Raise Well 4, reconstruct filter room & pumps	\$ 3,205,797
255	Long Beach Township	1517001-500	Beach Haven Terrace Water Plant	\$ 3,610,000
255	Long Beach Township	1517001-501	Brant Beach Water Plant	\$ 1,827,000

282	Long Beach Township	1517001-014	Water Main Replacement Project	\$	3,586,400
293	Manasquan Borough	1327001-002	Construction of 600 LF of WM on	\$	1,469,468
			Perrine Blvd & Mallard Park Area		
430	Manasquan Borough	1327001-001A	Green Infrastructure Project-Advances	\$	1,743,313
			Metering System		
100	Manchester Township	1518005-002	Repaint and repair one million gallon	\$	5,273,017
			elevated storage facility		
200	Manchester Township	1518005-003	Installation of Automated Meter	\$	2,500,581
			Reading System & Replacement of		
			Selected Meters		4 9 5 9 5 5 9
434	Manchester Utilities Authority	1603001-014	2014 Water System Improvements	\$	1,962,660
172	Maple Shade Township	0319001-006	Maple Shade Township meter upgrade	\$	2,420,000
			project	Ŧ	_,,
253	Marlboro Township	1328002-002	Harbor Road Water Treatment Plant	\$	12,514,000
149	Middlesex Water Company	1225001-016	RENEW 2015 - Edison	\$	5,681,000
329	Middlesex Water Company	1225001-023	Renew 2016, C&L of water mains,	\$	7,350,000
			replacement of non-copper services		,,
395	Middlesex Water Company	1225001-024	New Interconnection of PS, new table	\$	3,462,900
			type chlorinators		
148	Middlesex Water Company	1225001-026	RENEW 2017	\$	11,636,000
235	Middlesex Water Company	1225001-025	Western Transmission Main	\$	39,740,000
90	Milltown Borough	1214001-004	Phase II of overall plan to correct	\$	4,037,200
			water distribution system		
278	Milltown Borough	1212001-002	Ford Ave Redevelopment	\$	1,606,000
305	Milltown Borough	1212001-003	Ford Ave Redevelopment Agency	\$	1,384,000
			Borough		
367	Milltown Borough	1212001-005	Water Storage Tank Rehabilitation	\$	1,700,000
429	Montclair Township	0713001-011	New 1.0MG High Zone Tank	\$	3,479,879
535	Montclair Township	0713001-008	Nishuane Well Production &	\$	2,203,000
			Treatment Facility		
97	Netcong Borough	1428001-007	Replace WM on Rte 46, extend WM on Rte, 80, replace meters	\$	3,553,489
124	Netcong Borough	1428001-008	Rehabilitate existing storage facilities	\$	1,005,307
164	Netcong Borough	1428001-009	Replace old meters with automatic	\$	300,237
104		1428001-005	ones	Ļ	500,257
23	New Brunswick City	1214001-005	Water Treatment Plant Improvements	\$	15,234,200
24	Newark City	0714001-016	Pequannock Water Treatment Plant Rehab	\$	9,834,000
34	Newark City	0714001-015	Rehabilitation of Water Distribution	\$	11,787,000
			Mains		
34	Newark City	0714001-017	Water Distribution System Upgrades	\$	1,837,500
69	Newark City	0714001-500	Wayne & Clifton PS Generators	\$	5,045,712
83	Newark City	0714001-018	Replacement of Water Distribution Mains	\$	4,580,000
432	NJ American Water	2004002-500	RM WTP Flood Wall	\$	31,500,000
	Company, Inc.				
10	NJ American Water	1345001-017	Oak Street Treatment Plant	\$	6,364,160
	Company, Inc.		Improvements		
106	NJ American Water	1345001-016	Sunset Road Treatment Plant	\$	11,988,800
	Company, Inc.		Expansion		
106	NJ American Water	1345001-018	Oak Glenn Treatment Plant Expansion	\$	36,994,400
	Company, Inc.				

132	NJ American Water	2004002-011	Raw Water Pump Improvements	\$ 12,641,120
	Company, Inc.		(Treatment Plant)	
304	NJ American Water Company, Inc.	1345001-019	Howell-Lakewood Transmission Main	\$ 43,700,000
54	North Jersey Dist Wtr Supply Comm.	1613001-031	Purchase and Install New Dewatering System at the RTF and Upgrade ET3	\$ 3,685,500
54	North Jersey Dist Wtr Supply Comm.	1613001-032	Rehabilitation of Treatment Facility	\$ 3,553,710
54	North Jersey Dist Wtr Supply Comm.	1613001-022	Basins 5 & 6 Rehabilitation	\$ 16,768,185
54	North Jersey Dist Wtr Supply Comm.	1613001-025	Recycle Clear Phase to the head of the Treatment Plant	\$ 7,246,680
54	North Jersey Dist Wtr Supply Comm.	1613001-026	Low Lift Gas Pump	\$ 12,808,525
54	North Jersey Dist Wtr Supply Comm.	1613001-027	Expansion of Aeriation System	\$ 2,290,344
54	North Jersey Dist Wtr Supply Comm.	1613001-028	Filter Bldg Pipe Gallery Dehumid	\$ 1,863,456
54	North Jersey Dist Wtr Supply Comm.	1613001-029	Basins 1-4 Flocculator Rehabilitation	\$ 2,866,920
91	North Jersey Dist Wtr Supply Comm.	1613001-035	Rehabilitation of Pump Stations	\$ 3,690,871
112	North Jersey Dist Wtr Supply Comm.	1613001-034	Security, IT and Safety Projects	\$ 1,446,908
112	North Jersey Dist Wtr Supply Comm.	1613001-033	Security Enhancements Project - Orechio Dr Complex	\$ 3,910,725
236	North Jersey Dist Wtr Supply Comm.	1613001-030	Modify and Expand Central Receiving Building	\$ 921,113
11	North Shore Water Association	1904004-001	Existing Well Requires Replacement	\$ 475,000
11	North Shore Water Association	1904004-004	Water System Refurb	\$ 182,700
335	North Shore Water Association	1904004-002	Water System Refurb	\$ 428,000
416	Oakland Borough	0220001-004	Rehab of Iroquois Pumping Station	\$ 108,750
468	Oakland Borough	0220001-003	Diesel generator for well 9	\$ 145,000
529	Oakland Borough	0220001-002	Replace 4600 water meters	\$ 2,506,000
549	Oakland Borough	0220001-001	Construct new well 10A as backup for well 10	\$ 145,000
297	Ocean Gate Borough	1521001-001	Replace Majority of West Barnegat Ave water mains.	\$ 1,049,764
277	Ocean Township	1520001-007	Tuscarora Ave & 11st water main replacement	\$ 1,256,063
401	Old Bridge Municipal Utilities Auth.	1209002-011	The Perrine Road Water Storage Tank Rehabilitation	\$ 3,255,000
565	Old Bridge Municipal Utilities Auth.	1209002-012	Upgrade to SCADA system	\$ 1,283,000
336	Old Bridge Municipal Utilities Auth.	1209002-013	Knollcroft Water Main Rehabilitation	\$ 2,996,000
3	Passaic Valley Water Commission	1605002-025	Water Storage Improvements Phase 1 - Standby Emergency Generators	\$ 22,288,370
2	Passaic Valley Water Commission	1605002	Phase I - Levine Reservoir Water Storage Improvements	\$ 22,328,920

	South Orange Village	0719001-007	Replace Pressure Reducing Valves	\$	232,000
487	South Orange Village	0719001-004	Farrell Field (Intersection of Walton Ave & Audley St.) Interconnection Rehabilitation	\$	120,350
407		0/13001-002	Interconnection Rehabilitation		119,025
435 487	South Orange Village South Orange Village	0719001-002 0719001-003	Well 17 Emergency Power South Orange Ave and Holland Road	\$ \$	72,500 119,625
384	South Orange Village	0719001-006	Repair or Replace Newstead Shere	\$	1,700,000
381	South Orange Village	0719001-005	Crest Drive Standpipe	\$	2,770,000
201	South Orange Village	0719001-008	Well 17 Air Stripper	\$	362,500
14	South Orange Village	0719001-001	Well 17 Rehabilitation	\$	145,000
204	Company Ship Bottom Borough	1528001-001	Watermain Replacement Project	\$	2,308,000
17	Sea Village Marina LLC/New Jersey American Water	0108021-002	Water Main Extension	\$	1,202,000
32	Saddle Brook Township	0257001-002	North Fifth Street water main	\$	1,899,790
318	Roosevelt Borough	1341001-006	Replacement of water lines most susceptible to breakage	\$	1,242,062
317	Roosevelt Borough	1341001-001	Water Mains	\$	690,000
240	Roosevelt Borough	1341001-004	Cleaning & Lining of Water Mains	\$	639,975
449	Red Bank Borough	1340001-001	Water Treatment Plant Upgrades at Chester Street and Tower Hill	\$	1,772,000
442	Rahway City	2013001-008	Construction of new interconnection	\$	3,617,250
171	Rahway City	2013001-007	Water Treatment Plant Filter System Upgrade	\$	18,084,000
554	Pine Beach Borough	1522001-002	Merion Ave. Well Replacement / Townwide Water Meter Replacement Project	\$	451,080
533	Pine Beach Borough	1522001-001	Merion Ave. Well Replacement / Townwide Water Meter Replacement Project	\$	959,700
165	Perth Amboy City	1216001-009	The Replacement of Water Meters Project	\$	978,909
339	Perth Amboy City	1216001-500	Installation of a New Stand-by Generator for the Runyon Water Treatment Plant	\$	2,708,000
205	Perth Amboy City	1216001-007	The Replacement of 4 inch Water Mains	\$	2,216,000
205	Perth Amboy City	1216001-008	Replacement of Various Four Inch Mains throught the City	\$	1,724,987
144	Perth Amboy City	1216001-006	Sandblast & paint aerator, clarifiers, lime silos & dust collectors @ WTP	\$	914,000
369	Pennington Borough	1108001-002	replace & upgrade water system Rehabilitation of water distribution on East Curlis Avenue and Weidel Drive	\$	1,132,114
369	Pennington Borough	1108001-001	Upper King George Rd & Park Ave	\$	1,144,380
504	Pemberton Township	0329004-008	Various water system improvements	\$	392,000
471	Pemberton Township	0329004-005	Replacing Well #4 with Well #14	\$	415,000
294	Pemberton Township	0329004-007	Various water system improvements	\$	2,509,500
230	Pemberton Township	0329004-006	Various water system improvements	\$	623,000
14	Pemberton Township	0329004-004	Well 11 Radium Rehab	\$	1,141,875
	Paulsboro Borough	0814001-003	Water Main Repalcement (Thomson, Wood, Elizabeth and Commerce St.)	\$	1,873,861

534	South Orange Village	0719001-001	Well 17 Rehabilitation	\$ 242,500
120	Stafford Township	1530004-018	Mill Creek Road and Paul Boulevard	\$ 2,315,000
			Water Main Replacement	
271	Stafford Township	1530004-019	Mill Creek Water Main Replacement	\$ 1,805,000
			Phase II	
105	Sussex Borough	1921001-003	Water Systems Enhancements	\$ 223,200
175	Sussex Borough	1921001-004	Water Meter Replacement Project	\$ 406,620
186	Trenton City	1111001-010	Rehabilitation of distribution system by C&L of mains	\$ 22,457,700
463	Vineland City	0614003-015	Well No. 17 Installation	\$ 170,000
499	Vineland City	0614003-016	Well No. 17 Treatment Facility	\$ 8,756,000
155	Wall Township	1352003-001	Route 138 Water Main Improvements	\$ 1,718,010
155	Wall Township	1352003-002	Route 34 Water Main Improvements	\$ 3,594,971
341	Washington Twp Municipal Util. Auth.	0818004-009	Shoppers Lane Water Main extension	\$ 710,955
404	Washington Twp Municipal Util. Auth.	0818004-010	Replace well 8, pump house replace @ well 2,	\$ 1,827,420
404	Washington Twp Municipal Util. Auth.	0818004-011	Storage Tank painting (interior & exterior)	\$ 4,627,140
461	Washington Twp Municipal Util. Auth.	0818004-012	Improvments to the billing building. Security at well houses	\$ 210,525
546	Washington Twp Municipal Util. Auth.	0818004-014	Replacement Well 2A	\$ 837,375
8	Willingboro Municipal Util. Auth.	0338001-009	Track I - Well 5A Radium Treatment	\$ 6,206,903
16	Willingboro Municipal Util. Auth.	0338001-014	Well 5A Radium Treatment	\$ 7,225,224
166	Willingboro Municipal Util. Auth.	0338001-012	Well No. 1 Water Treatment Plant Upgrade	\$ 3,298,544
167	Willingboro Municipal Util. Auth.	0338001-011	Well No. 6 Water Treatment Plant Upgrade	\$ 9,260,000
496	Willingboro Municipal Util. Auth.	0338001-013	Replacement of Well No. 1	\$ 1,604,456
			Total Number of Projects: 168	\$ 810,207,961

## Appendix B-2

## Drinking Water Combined Base SFY2017 / Superstorm Sandy Project Priority List Ranked Order

Rank	Project Sponsor	Project Number	Project Name	<b>Es</b> ima	ited Cost
2	Passaic Valley Water	1605002	Phase I - Levine Reservoir Water	\$	22,328,920
	Commission		Storage Improvements		
3	Passaic Valley Water	1605002-025	Water Storage Improvements Phase 1 -	\$	22,288,370
	Commission		Standby Emergency Generators		
6	East Orange City	0705001-011	Water Treatment & Supply Program	\$	13,007,736
8	Willingboro Municipal Util. Auth.	0338001-009	Track I - Well 5A Radium Treatment	\$	6,206,903
9	Lake Glenwood Village	1922010-008	Wells 1 & 2 upgrades	\$	895,230
10	NJ American Water Company, Inc.	1345001-017	Oak Street Treatment Plant Improvements	\$	6,364,160
11	North Shore Water Association	1904004-001	Existing Well Requires Replacement	\$	475,000
11	North Shore Water Association	1904004-004	Water System Refurb	\$	182,700
14	Pemberton Township	0329004-004	Well 11 Radium Rehab	\$	1,141,875
14	South Orange Village	0719001-001	Well 17 Rehabilitation	\$	145,000
16	Willingboro Municipal Util. Auth.	0338001-014	Well 5A Radium Treatment	\$	7,225,224
17	Sea Village Marina LLC/New Jersey American Water Company	0108021-002	Water Main Extension	\$	1,202,000
23	New Brunswick City	1214001-005	Water Treatment Plant Improvements	\$	15,234,200
24	Newark City	0714001-016	Pequannock Water Treatment Plant Rehab	\$	9,834,000
30	Bordentown City	0303001-006	Upgrade Well 2 with 2A to resolve violation	\$	1,462,388
32	Saddle Brook Township	0257001-002	North Fifth Street water main	\$	1,899,790
33	East Orange City	0705001-014	Water System Improvements and Resiliency Project 2017	\$	32,930,000
34	Newark City	0714001-015	Rehabilitation of Water Distribution Mains	\$	11,787,000
34	Newark City	0714001-017	Water Distribution System Upgrades	\$	1,837,500
45	Atlantic City Municipal Utilities Auth.	0102001-006	1MGD Storage Tank Sand Blasting	\$	2,001,363
52	Buena Vista Township	0660004-001	Water Main extension due to private well contamination	\$	999,999
54	North Jersey Dist Wtr Supply Comm.	1613001-031	Purchase and Install New Dewatering System at the RTF and Upgrade ET3	\$	3,685,500
54	North Jersey Dist Wtr Supply Comm.	1613001-032	Rehabilitation of Treatment Facility	\$	3,553,710
54	North Jersey Dist Wtr Supply Comm.	1613001-022	Basins 5 & 6 Rehabilitation	\$	16,768,185
54	North Jersey Dist Wtr Supply Comm.	1613001-025	Recycle Clear Phase to the head of the Treatment Plant	\$	7,246,680
54	North Jersey Dist Wtr Supply Comm.	1613001-026	Low Lift Gas Pump	\$	12,808,525

54	North Jersey Dist Wtr Supply Comm.	1613001-027	Expansion of Aeriation System	\$ 2,290,344
54	North Jersey Dist Wtr Supply Comm.	1613001-028	Filter Bldg Pipe Gallery Dehumid	\$ 1,863,456
54	North Jersey Dist Wtr Supply Comm.	1613001-029	Basins 1-4 Flocculator Rehabilitation	\$ 2,866,920
67	East Orange City	0705001-013	WORPS Emergency Backup Power Generator Planning and Design	\$ 5,104,000
67	East Orange City	0705001-012	WORPS SCADA Instrumentation/Controls Planning and Design	\$ 4,580,000
69	Newark City	0714001-500	Wayne & Clifton PS Generators	\$ 5,045,712
75	Camden City	0408001-021	New Auto Meter Reading Equip for entire City	\$ 1,664,250
83	Newark City	0714001-018	Replacement of Water Distribution Mains	\$ 4,580,000
84	Berkeley Township Munic. Util. Auth.	1505004-008	Phase VI Water Main Installation	\$ 3,285,921
89	Camden City	0408001-022	Install potable wells/flr elevations @ Morris Delair WTP	\$ 1,260,000
90	Milltown Borough	1214001-004	Phase II of overall plan to correct water distribution system	\$ 4,037,200
91	North Jersey Dist Wtr Supply Comm.	1613001-035	Rehabilitation of Pump Stations	\$ 3,690,871
97	Netcong Borough	1428001-007	Replace WM on Rte 46, extend WM on Rte, 80, replace meters	\$ 3,553,489
100	Manchester Township	1518005-002	Repaint and repair one million gallon elevated storage facility	\$ 5,273,017
101	Little Egg Harbor Municipal Util. Auth.	1516001-005	Mystic Island Water Main Replacement - Phases I - VI	\$ 6,322,221
102	Little Egg Harbor Municipal Util. Auth.	1516001-004	Twin Lakes Water Main Replacment	\$ 1,701,294
103	Paulsboro Borough	0814001-003	Water Main Repalcement (Thomson, Wood, Elizabeth and Commerce St.)	\$ 1,873,861
105	Sussex Borough	1921001-003	Water Systems Enhancements	\$ 223,200
106	NJ American Water Company, Inc.	1345001-016	Sunset Road Treatment Plant Expansion	\$ 11,988,800
106	NJ American Water Company, Inc.	1345001-018	Oak Glenn Treatment Plant Expansion	\$ 36,994,400
112	North Jersey Dist Wtr Supply Comm.	1613001-034	Security, IT and Safety Projects	\$ 1,446,908
112	North Jersey Dist Wtr Supply Comm.	1613001-033	Security Enhancements Project - Orechio Dr Complex	\$ 3,910,725
120	Stafford Township	1530004-018	Mill Creek Road and Paul Boulevard Water Main Replacement	\$ 2,315,000
124	Netcong Borough	1428001-008	Rehabilitate existing storage facilities	\$ 1,005,307
132	NJ American Water Company, Inc.	2004002-011	Raw Water Pump Improvements (Treatment Plant)	\$ 12,641,120
138	Jersey City Municipal Utilities Auth.	0906001-010	Journal Square North Cleaning	\$ 7,067,000
138	Jersey City Municipal Utilities Auth.	0906001-012	Water main replacement	\$ 16,643,000
138	Jersey City Municipal Utilities Auth.	0906001-011	Large Valve Replacement	\$ 6,260,867

138	Jersey City Municipal Utilities Auth.	0906001-006	Transmission Main Rehabilitation	\$ 18,005,000
144	Perth Amboy City	1216001-006	Sandblast & paint aerator, clarifiers, lime silos & dust collectors @ WTP	\$ 914,000
148	Middlesex Water Company	1225001-026	RENEW 2017	\$ 11,636,000
149	Middlesex Water Company	1225001-016	RENEW 2015 - Edison	\$ 5,681,000
155	Wall Township	1352003-001	Route 138 Water Main Improvements	\$ 1,718,010
155	Wall Township	1352003-002	Route 34 Water Main Improvements	\$ 3,594,971
164	Netcong Borough	1428001-009	Replace old meters with automatic ones	\$ 300,237
165	Perth Amboy City	1216001-009	The Replacement of Water Meters Project	\$ 978,909
166	Willingboro Municipal Util. Auth.	0338001-012	Well No. 1 Water Treatment Plant Upgrade	\$ 3,298,544
167	Willingboro Municipal Util. Auth.	0338001-011	Well No. 6 Water Treatment Plant Upgrade	\$ 9,260,000
171	Rahway City	2013001-007	Water Treatment Plant Filter System Upgrade	\$ 18,084,000
172	Maple Shade Township	0319001-006	Maple Shade Township meter upgrade project	\$ 2,420,000
173	Jersey City Municipal Utilities Auth.	0906001-014	Brookdale Gate House Improvements	\$ 1,428,480
174	Jackson Township Municipal Util. Auth.	1511001-013	Six Flags Great Adventure Water Treatment Plant Replacement	\$ 10,660,000
175	Sussex Borough	1921001-004	Water Meter Replacement Project	\$ 406,620
177	Fountainhead Properties Incorporate	1511013-001	Upgrade Improve Water System	\$ 722,000
180	Berkeley Township Munic. Util. Auth.	1505004-007	BTMUA Well #4 Phase II Production Well	\$ 1,215,900
180	Berkeley Township Munic. Util. Auth.	1505004-009	Installation of new well #4 with WM to connect to WTP	\$ 1,276,800
182	Hightstown Borough	1104001-008	Settling Tank Rehabilitation	\$ 165,300
186	Trenton City	1111001-010	Rehabilitation of distribution system by C&L of mains	\$ 22,457,700
189	Hoboken City	0905001-001	Washington Street Water Main Replacement And Green Infrastructure Drainage Improvement Project	\$ 5,848,889
190	Cape May City	0502001-004	Well 5 Replacment for the Sands Aquifer	\$ 2,077,776
191	Kearny Town	0907001-001A	Demolish infrstructure, replace water facil, ground improvements	\$ 26,553,879
193	Jackson Township Municipal Util. Auth.	1511001-010	Demolition of Facilities, replace storage tank, well #3	\$ 5,815,925
200	Manchester Township	1518005-003	Installation of Automated Meter Reading System & Replacement of Selected Meters	\$ 2,500,581
201	South Orange Village	0719001-008	Well 17 Air Stripper	\$ 362,500
202	Bellmawr Borough	0404001-006	Various Water System Improvements	\$ 2,131,098
203	Gloucester City	0414001-016	Replacement of 1,200 LF of 8" cast ironj main on Brown Street	\$ 882,893
204	Ship Bottom Borough	1528001-001	Watermain Replacement Project	\$ 2,308,000
205	Perth Amboy City	1216001-008	Replacement of Various Four Inch Mains throught the City	\$ 1,724,987

205	Perth Amboy City	1216001-007	The Replacement of 4 inch Water Mains	\$ 2,216,000
215	Gloucester City	0414001-020	Water System Improvements, Phase II	\$ 1,259,000
215	Hammonton Town	0113001-011	2016 Utility Road Program Valley, Central & Bellevue Ave to Broadway.	\$ 1,695,942
230	Pemberton Township	0329004-006	Various water system improvements	\$ 623,000
232	Clementon Borough	0411001-001	Rehab of Gibbsboro Water Main (White Horse Pk & Wht Horse Rd.)	\$ 456,750
235	Middlesex Water Company	1225001-025	Western Transmission Main	\$ 39,740,000
236	North Jersey Dist Wtr Supply Comm.	1613001-030	Modify and Expand Central Receiving Building	\$ 921,113
240	Roosevelt Borough	1341001-004	Cleaning & Lining of Water Mains	\$ 639,975
251	Evesham Municipal Utilities Authority	0313001-001	Wells 13 & 14 Treatment Improvements	\$ 1,963,000
253	Marlboro Township	1328002-002	Harbor Road Water Treatment Plant	\$ 12,514,000
255	Long Beach Township	1517001-502	Raise Well 4, reconstruct filter room & pumps	\$ 3,205,797
255	Long Beach Township	1517001-500	Beach Haven Terrace Water Plant	\$ 3,610,000
255	Long Beach Township	1517001-501	Brant Beach Water Plant	\$ 1,827,000
259	Bordentown City	0303001-007	Water System Remediation Upgrades to WTP	\$ 2,793,971
260	Clinton Town	1005001-008	Well 4 Water Production Facility	\$ 1,364,160
271	Stafford Township	1530004-019	Mill Creek Water Main Replacement Phase II	\$ 1,805,000
277	Ocean Township	1520001-007	Tuscarora Ave & 11st water main replacement	\$ 1,256,063
278	Milltown Borough	1212001-002	Ford Ave Redevelopment	\$ 1,606,000
281	Belleville Township	0701001-006	Clara Maass Hospital Water Main Extension	\$ 1,099,390
282	Long Beach Township	1517001-014	Water Main Replacement Project	\$ 3,586,400
293	Manasquan Borough	1327001-002	Construction of 600 LF of WM on Perrine Blvd & Mallard Park Area	\$ 1,469,468
294	Pemberton Township	0329004-007	Various water system improvements	\$ 2,509,500
297	Ocean Gate Borough	1521001-001	Replace Majority of West Barnegat Ave water mains.	\$ 1,049,764
304	NJ American Water Company, Inc.	1345001-019	Howell-Lakewood Transmission Main	\$ 43,700,000
305	Milltown Borough	1212001-003	Ford Ave Redevelopment Agency Borough	\$ 1,384,000
316	Aberdeen Township	1330004-001	Woodfield Area Water System Rehabilitation	\$ 3,822,000
317	Roosevelt Borough	1341001-001	Water Mains	\$ 690,000
318	Roosevelt Borough	1341001-006	Replacement of water lines most susceptible to breakage	\$ 1,242,062
329	Middlesex Water Company	1225001-023	Renew 2016, C&L of water mains, replacement of non-copper services	\$ 7,350,000
335	North Shore Water Association	1904004-002	Water System Refurb	\$ 428,000
336	Old Bridge Municipal Utilities Auth.	1209002-013	Knollcroft Water Main Rehabilitation	\$ 2,996,000
339	Perth Amboy City	1216001-500	Installation of a New Stand-by Generator for the Runyon Water Treatment Plant	\$ 2,708,000

341	Washington Twp Municipal Util. Auth.	0818004-009	Shoppers Lane Water Main extension	\$ 710,955
355	Clinton Town	1005001-006	Lebanon Borough Water Main Replacements - Phase II through Phase V	\$ 3,673,507
367	Milltown Borough	1212001-005	Water Storage Tank Rehabilitation	\$ 1,700,000
368	Brielle Borough	1308001-002	Water Main Replacement	\$ 2,454,000
369	Pennington Borough	1108001-001	Upper King George Rd & Park Ave replace & upgrade water system	\$ 1,144,380
369	Pennington Borough	1108001-002	Rehabilitation of water distribution on East Curlis Avenue and Weidel Drive	\$ 1,132,114
379	Jersey City Municipal Utilities Auth.	0906001-013	Remote Meter Reading (AMI)	\$ 9,174,240
380	Jackson Township Municipal Util. Auth.	1511001-012	Western Water Main Extension	\$ 10,672,520
381	South Orange Village	0719001-005	Crest Drive Standpipe	\$ 2,770,000
384	South Orange Village	0719001-006	Repair or Replace Newstead Shere	\$ 1,700,000
395	Middlesex Water Company	1225001-024	New Interconnection of PS, new table type chlorinators	\$ 3,462,900
401	Old Bridge Municipal Utilities Auth.	1209002-011	The Perrine Road Water Storage Tank Rehabilitation	\$ 3,255,000
404	Washington Twp Municipal Util. Auth.	0818004-010	Replace well 8, pump house replace @ well 2,	\$ 1,827,420
404	Washington Twp Municipal Util. Auth.	0818004-011	Storage Tank painting (interior & exterior)	\$ 4,627,140
412	Brigantine City	0103001-501	Installation of generators @ well	\$ 2,816,982
416	Oakland Borough	0220001-004	Rehab of Iroquois Pumping Station	\$ 108,750
429	Montclair Township	0713001-011	New 1.0MG High Zone Tank	\$ 3,479,879
430	Manasquan Borough	1327001-001A	Green Infrastructure Project-Advances Metering System	\$ 1,743,313
431	Hammonton Town	0113001-007	Water Meter Replacement	\$ 936,000
432	NJ American Water Company, Inc.	2004002-500	RM WTP Flood Wall	\$ 31,500,000
433	Jackson Township Municipal Util. Auth.	1511001-011	Improvements to Manhattan St Complex, Garage & Admin Bldg.	\$ 1,406,181
434	Manchester Utilities Authority	1603001-014	2014 Water System Improvements	\$ 1,962,660
435	South Orange Village	0719001-002	Well 17 Emergency Power	\$ 72,500
442	Rahway City	2013001-008	Construction of new interconnection	\$ 3,617,250
449	Red Bank Borough	1340001-001	Water Treatment Plant Upgrades at Chester Street and Tower Hill	\$ 1,772,000
461	Washington Twp Municipal Util. Auth.	0818004-012	Improvments to the billing building. Security at well houses	\$ 210,525
463	Vineland City	0614003-015	Well No. 17 Installation	\$ 170,000
468	Oakland Borough	0220001-003	Diesel generator for well 9	\$ 145,000
471	Pemberton Township	0329004-005	Replacing Well #4 with Well #14	\$ 415,000
473	Clementon Borough	0411001-002	Rehab of well 9 including slip lining to improve conveyance	\$ 1,294,125
474	Hampton Borough	1013001-001	New back up well 5 to address firm capacity requirements	\$ 1,305,000
487	South Orange Village	0719001-003	South Orange Ave and Holland Road Interconnection Rehabilitation	\$ 119,625

	Ť		Total Number of Projects: 168	\$ 8	310,207,961
574	Brielle Borough	1308001-003	Storage Tank Demolition	\$	144,296
565	Old Bridge Municipal Utilities Auth.	1209002-012	Upgrade to SCADA system	\$	1,283,000
554	Pine Beach Borough	1522001-002	Merion Ave. Well Replacement / Townwide Water Meter Replacement Project	\$	451,080
549	Oakland Borough	0220001-001	Construct new well 10A as backup for well 10	\$	145,000
549	Clinton Town	1005001-009	Well 7 Improvements & Well 14 Decommissioning	\$	1,103,813
546	Washington Twp Municipal Util. Auth.	0818004-014	Replacement Well 2A	\$	837,375
535	Montclair Township	0713001-008	Nishuane Well Production & Treatment Facility	\$	2,203,000
534	South Orange Village	0719001-001	Well 17 Rehabilitation	\$	242,500
533	Pine Beach Borough	1522001-001	Merion Ave. Well Replacement / Townwide Water Meter Replacement Project	\$	959,700
529	Oakland Borough	0220001-002	Replace 4600 water meters	\$	2,506,000
529	Clinton Town	1005001-007	Replace Water Meters	\$	1,014,223
517	Hightstown Borough	1104001-007	Rehabilitation of Deep Well 2	\$	374,535
504	Pemberton Township	0329004-008	Various water system improvements	\$	392,000
503	Hammonton Town	0113001-010	SCADA System/Water Meter Replacment Proj	\$	237,000
501	Little Egg Harbor Municipal Util. Auth.	1516001-500	Radio Road Water Treatment Plant	\$	688,475
501	Little Egg Harbor Municipal Util. Auth.	1516001-003	Water Treatment Plant at Highrid	\$	4,571,999
499	Vineland City	0614003-016	Well No. 17 Treatment Facility	\$	8,756,000
496	Willingboro Municipal Util. Auth.	0338001-013	Replacement of Well No. 1	\$	1,604,456
487	South Orange Village	0719001-007	Replace Pressure Reducing Valves	\$	232,000
487	South Orange Village	0719001-004	Farrell Field (Intersection of Walton Ave & Audley St.) Interconnection Rehabilitation	\$	120,350

### Appendix C Construction Loan Program - Clean Water Eligibility List

Rank	Sponsor	Project Number	Project Name	Estin	nated Cost
619	Aberdeen Township	S340869-02	New sanitary sewage collection system in the Woodfield area	\$	8,413,107
178	Allentown Borough	S340567-05	Sewer Plant Modifications	\$	5,661,196
571	Atlantic City	S340439-01	Fisherman's Park Flood Gates.	\$	18,830,939
0/2			Bungalow Park flood wall, pump	Ŧ	_0,000,000
			station, and two inlets.		
571	Atlantic City	\$340439-03	This project will include the installation	\$	2,488,662
	,		of flood gates at the Atlantis Avenue		
			terminus of the Baltic Avenue canal.		
62	Atlantic County Util. Auth.	S340809-27	New automated bar screens in the	\$	3,094,238
			headworks facility.		
62	Atlantic County Util. Auth.	S340809-26	STP Mitigation Projects	\$	13,442,855
62	Atlantic County Util. Auth.	S340809-25	Seawall Construction Project	\$	13,641,136
62	Atlantic County Util. Auth.	S340809-23	ACUA Treatment Plant Resiliency	\$	8,610,164
			Project - Emergency Power		
283	Atlantic County Util. Auth.	S340809-29	Brigantine force main rehabilitation	\$	2,718,518
283	Atlantic County Util. Auth.	S340809-24	ACUA Pump Station Resiliency Project	\$	998,208
485	Atlantic County Util. Auth.	S340809-28	Sewer Sludge Incinerator	\$	2,049,114
219	Bay Head Borough	S344120-01	Street Sweeper	\$	250,886
60	Bayshore Reg. Sewer Auth.	S340697-06	Phase II Restor/Mitig.of Blower Bldgs	\$	7,916,433
			and restoration of plants power distrib.		
			system		
60	Bayshore Reg. Sewer Auth.	S340697-05	Restoration and Flood Mitigation	\$	58,072,111
797	Bellmawr Borough	S342011-02	Waterfront Development Remediation	\$	66,350,623
148	Bergen County Util. Auth.	S340386-17	CHP Cogen Project	\$	8,621,779
151	Bergen County Util. Auth.	S340386-09	Reduce rainfall-induced I/I & eliminate	\$	31,783,125
			sanitary sewer overflows		
151	Bergen County Util. Auth.	S340386-18	Pump Station Resiliency Project	\$	2,491,339
151	Bergen County Util. Auth.	S340386-16	Numerous Waste Water Treatment	\$	19,537,263
			Upgrades		
151	Bergen County Util. Auth.	S340386-15	Restore plant wide anaerobic digesters,	\$	42,094,280
			switch gear, substation gen & co-		
			generation components.		
151	Bergen County Util. Auth.	S340386-14	various improvements for plant wide resiliency	\$	54,172,587
151	Bergen County Util. Auth.	S340386-11	Sludge Digester System Improvements	\$	15,439,092
237	Caldwell Borough	S340523-04-1	(Carryover) - Completion of the	\$	894,000
237		3340323-04-1	Caldwell Wastewater Treatment Plant	Ļ	854,000
			upgrade		
151	Bergen County Utilities	S340386-12	Edgewater Outfall Extension	\$	13,000,360
191	Authority	5540500 12		Ŷ	13,000,300
187	Bergen County Utilities	\$340386-13	Consolidation of Edgewater/Little Ferry	\$	31,660,502
207	Authority	00.0000 10	Service Area	Ŧ	01,000,001
439	Bradley Beach Borough	S340472-01	Sewer Main Installation and Repairs -	\$	2,623,450
			Phase I	Ŧ	,, •
759	Bradley Beach Borough	S340472-02	Bradley Boulevard Stormwater	\$	537,008
405	Brigantine City	\$340827-04	Emergency Generators	\$	3,014,413
725	Brigantine City	S340827-07	Floodwalls at Nine Streetends	\$	999,476

481	Camden County Municipal Utilities Authority	S340640-06- 2/09-2/11-2	Sludge Drying Facility (Supplemental Loan #2)	\$ 2,160,000
673	Camden County Municipal Utilities Authority	S340640-14-1	Track II - Camden City Green and Grey Infrastructure, Phase 1 (Supplemental)	\$ 1,620,000
725	Brigantine City	\$340827-05	Flood Control and Pump Station	\$ 4,420,173
888	Cape May County Municipal Utilities Authority	S342017-04	(Carryover) - Sanitary Landfill	\$ 5,617,822
725	Brigantine City	S340827-06	Municipal System Improvements	\$ 873,263
793	Buena Vista Township	S342023-01	Landfill Closure	\$ 23,530,000
666	Burlington County	\$340818-07	Rehab existing stormwater sewer pipe & purch Portable Water Sedim. Treatment Tank	\$ 2,183,362
353	Burlington Township	S340712-14	Rehabilitation of sanitary sewer mains	\$ 1,259,960
365	Burlington Township	S340712-13	<b>Emergency Generators for Various</b>	\$ 639,645
778	Califon Borough	S340431-01	Railroad Avenue/Main Street Stormwater Improvements	\$ 1,584,586
18	Camden City	\$340366-07	Rehab & Reconstruct sewers, install/replace manholes/inlets, reconn of sewer laterals, jetting/vacuuming sewers	\$ 6,614,815
2	Camden County Municipal Utilities Authority	S340640-17	Reduce Potential for CSOs within City	\$ 6,614,815
3	Camden County Municipal Utilities Authority	S340640-15	Green Infrastructure	\$ 6,614,815
328	Egg Harbor Township Municipal Utilities Authority	\$340753-04	(Carryover SFY2015) - Washington Ave interceptor rehabilitation project	\$ 1,322,416
12	Camden County Municipal Utilities Authority	S340640-16	Wastewater Treatment Plant Improvements	\$ 13,000,360
24	Camden County Municipal Utilities Authority	S340640-18	Phase I Waste Water Treatment upgrades / Construct sludge digester	\$ 50,664,200
1	Camden County Municipal Utilities Authority	S340640-19	Camden City Green and Grey Infrastructure Project, Phase 4	\$ 10,690,000
291	Cape May County Municipal Utilities Authority	S340661-22	Repair Concrete wet wells at var	\$ 3,997,392
700	Carteret Borough	S340939-09	Noe Street Stormwater Pump Station Construction	\$ 4,653,327
880	Carteret Borough	\$340939-07	Sediment dredging & construct bulkhead, wetlands mudflats enhancements	\$ 23,882,313
160	Cinnaminson Sewerage Authority	\$340170-07	Surface aerators, dissolve oxygen control logic, anoxic zone, and odor control improv.	\$ 5,356,597
77	Cliffside Park Borough	S340847-04	Combined Sewer Separation	\$ 4,915,537
655	Cranford Township	\$340858-04	Stormwater control project.	\$ 11,795,031
800	Cumberland County Improvement Authority	\$342015-03	Landfill Expansion (Phase VI development & Leachate pump station improvements)	\$ 18,954,010
112	Cumberland County Utilities Authority	S340550-07	Sewage Treatment Plant Upgrades	\$ 1,054,062
239	Cumberland County Utilities Authority	S340550-08	Pump Station Rehab; WWTP Improvements to include energy efficient equp & processes	\$ 1,122,734

120	Delran Township	S340794-08	Replace existing sand filter @ WWTP & rehab Twps Fifth St Pump Station	\$ 1,874,782
809	Edison Township	S342020-01	Edison Landfill Closure	\$ 11,714,265
328	Egg Harbor Township Municipal Utilities Authority	S340753-06	FAA Pump Station Reconstruction Project	\$ 620,184
22	Elizabeth City	S340942-19	Trumbull Street Flood Control Project	\$ 3,688,239
42	Elizabeth City	S340942-13	Western Interceptor Modifications	\$ 12,357,700
42	Elizabeth City	S340942-17	South Street Flood Control Project	\$ 5,308,104
71	Hoboken City	S340635-04	(Carryover SFY2015) - Hoboken Wet Weather Pump Station H5	\$ 15,227,976
42	Elizabeth City	S340942-18	Progress Street Flood Control Project	\$ 4,423,429
42	Elizabeth City	S345070-01	City of Elizabeth CSO LTCP	\$ 4,000,001
149	Gloucester City	S340958-06	Sanitary Sewer Phase 2	\$ 566,905
583	Gloucester City	S340958-07	Various Water System Improvements, Phase II	\$ 112,292
149	Gloucester City	S340958-08	Various Sewer Projects	\$ 1,784,806
169	Gloucester County Utilities Authority	S340902-14	CHP project for the bio-solids handling facility	\$ 37,750,220
173	Gloucester County Utilities Authority	S340902-15	Combined Heat & Power	\$ 7,180,000
678	Gloucester Township	S340364-14	Rehabilitation of portions of existing stormwate collection system	\$ 1,400,973
678	Gloucester Township	S340364-11	Flood Mitigation	\$ 1,470,871
31	Jersey City Municipal Utilities Authority	S340928-13	(Carryover SFY2015) - Duncan St Outfall Replacement	\$ 9,771,083
678	Gloucester Township	S340364-15	Gloucester Township Stormwater Improvements	\$ 1,369,058
312	Gloucester Township Municipal Utilities Authority	\$340364-13	Supply & delivery new vac truck, PS communication system, sanitary sewer rehab utilizing slip lining technologies.	\$ 1,122,734
588	Greenwich Township	\$340359-02	Installation of a collector sewer in vicinity of the Village of Stewartsville	\$ 2,140,000
192	Hammonton Town	\$340927-07	Boyer Avenue Drip Irrigation	\$ 3,866,213
708	Hammonton Town	\$340927-09	Stormwater Improvements to portions of Central Ave, Rte #542 and Bellevue Ave and Broadway	\$ 1,773,507
776	Hampton Borough	S340481-01	Leaf Vacuum Equipment Purchase	\$ 97,500
749	Highlands Borough	S340901-03	Stormwater System Improvements (Current Project)	\$ 4,299,487
200	Hightstown Borough	S340915-05	UV disinfection system upgrades	\$ 1,369,569
606	Hillsborough Township	S340099-02	Sanitary Sewer Extension	\$ 1,536,339
71	Hoboken City	\$340635-05	Southwest Park infrastruct. design & underground retention system / Stormwater improv.	\$ 4,260,119
71	Hoboken City	\$340635-06	Acquisition, remed, design, plan & construction on 6 acre park @ NW Hoboken. Outfall @ Weehawken Cove	\$ 25,607,620
71	Hoboken City	\$340635-07	Track II - Resilient Green Infrastructure for CSO Reduction	\$ 1,460,102
189	Howell Township	S344040-02	Freewood Acres & Route 9 Sanitary Sewer Extension	\$ 14,258,859
210	Jackson Township	S344050-02	Purchase of a Jet-Vac/Street Sweeper	\$ 998,980

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31	Jersey City Municipal Utilities Authority	S340928-14	Grant Street Sewer Cleaning	\$ 2,290,548
31	Jersey City Municipal Utilities Authority	S340928-15	Phase 3 & 4 Sewer Improvements	\$ 38,467,004
31	Jersey City Municipal Utilities Authority	S340928-16	Sixth Street Combined Sewer Outfall	\$ 8,987,500
31	Jersey City Municipal Utilities Authority	S340928-17	Regulator, Outfall and Solid_Flo	\$ 1,396,910
31	Jersey City Municipal Utilities Authority	S340928-18	Claremount_ Carteret outfall rep	\$ 5,308,104
31	Jersey City Municipal Utilities Authority	S340928-19	East Side Plant repairs, improve	\$ 6,614,815
31	Jersey City Municipal Utilities Authority	S340928-20	Outfall Chambers	\$ 6,361,818
83	Jersey City Municipal Utilities Authority	S340928-22	Jersey Clty Green Infrastructure	\$ 624,357
147	Jersey City Municipal Utilities Authority	S340928-21	Sewer pipeline replacement project, Phase V of Combined Sewer & Conditions Assessment Study	\$ 6,832,571
109	Jersey City Municipal Utilities Authority	S340928-23	Three Pump Station Resiliency Projects	\$ 1,846,000
109	Jersey City Municipal Utilities Authority	S340928-24	Phase 1 and 2 Sewer Rehabilitation	\$ 17,050,000
794	Jersey City Municipal Utilities Authority	S340928-25	Jersey Aveneue Park Redevelopment Plan Phases 1 and 2	\$ 5,647,345
794	Jersey City Municipal Utilities Authority	S340928-26	Jersey Aveneue Park Redevelopment Plan Phases 1 and 2	\$ 12,326,308
230	Kearny Municipal Utilities Authority	S340259-07	Pump Station Rehabilitation	\$ 8,918,476
50	Kearny Town	S340259-11	New stormwater pump station @ Dukes Street	\$ 8,518,521
868	Kearny Town	S340259-12	Remediation and stormwater mgt for the redevelopment of recreational complex	\$ 961,810
868	Kearny Town	\$340259-13	Demolish substandard infrstructure, replace water facilities, ground improvement program	\$ 107,557,474
444	Lambertville Municipal Utilities Authority	S340882-08	Swan creek flood gate/swan street force main replacement	\$ 10,218,000
254	Little Egg Harbor Municipal Utilities Authority	S340579-02	Twin Lakes Blvd Sewer Main Replacment to main constructed in the 60s.	\$ 1,930,210
254	Little Egg Harbor Municipal Utilities Authority	S340579-03	Mystic Island Sewer Main Replacement - Phases I - VI	\$ 7,638,655
198	Little Egg Harbor Township	S344060-02	Twin Lakes Blvd. Drainage Improvements	\$ 3,958,000
450	Long Beach Township	S340023-06	Remove & Replace approx 12,000 LF of sanitary sewer main with PVC incl laterals, cleanouts & manholes.	\$ 3,524,481
450	Long Beach Township	S340023-07	Sewer Main Replacement Project	\$ 4,486,000
653	Manasquan Borough	S340450-01	Pump Station elec syst & control rehabilitation	\$ 5,069,400
442	Medford Lakes Borough	S340319-03	Collection System Lining Improvements	\$ 10,610,800

238	Mendham Township	S340477-01	Mendham East Wastewater Treatment Facility Conversion	\$ 2,242,000
23	Middlesex County Utilities Authority	S340699-15	Rehabilitation & Upgrades to the Central WWTP	\$ 29,194,275
272	Middlesex County Utilities Authority	S340699-14	Main Truck Sewer Rehab Phase II	\$ 16,968,376
272	Middlesex County Utilities Authority	S340699-12	Restoration and Flood Mitigation	\$ 111,313,758
272	Middlesex County Utilities Authority	S340699-13	Restoration and Flood Mitigation	\$ 40,894,712
675	Middletown Township	S340097-01	Shadow Lake Restoration Project	\$ 3,997,392
69	Middletown Township Sewer Authority	S340097-04	TOMSA Mitigation Project	\$ 19,834,947
260	Milltown Borough	S340102-03	Electric Utility Mitigation Project	\$ 15,439,092
894	Milltown Borough	S340102-01	Milltown Ford Ave Redevelopment	\$ 19,440,809
894	Milltown Borough	S340102-04	Avenue Redevelopment	\$ 5,190,428
117	Millville City	S340921-07	Wastewater Treatment Plant Upgrade Phase II	\$ 10,491,204
333	Montclair Township	S340837-03	Sanitary Sewer Collection System Rehabilitation-SFY 2016	\$ 1,395,161
9	Newark City	S340815-25	Green Infrstructure for the Sewer System	\$ 388,383
15	Newark City	S340815-24	Rehabilitation of 350 miles of sanitary sewers	\$ 19,257,315
15	Newark City	S340815-22	Queen Ditch Restoration	\$ 4,522,375
15	Newark City	S340815-26	Imrpveoements to the Peddie Combined Sewer Outfall	\$ 3,092,080
26	North Bergen Municipal Utilities Authority	S340652-14	Woodcliff Additional Improvements	\$ 16,657,750
84	North Hudson Sewer Authority	S340952-24	Rehab sewers @ Hamilton Ave & JFK Blvd. Replace undersized w/ larger pipe to prevent need to upgrade again	\$ 2,330,694
84	North Hudson Sewer Authority	S340952-23	Phase II improvements with upgrades to physical systems @ some common systems	\$ 3,032,199
84	North Hudson Sewer Authority	S340952-19	Combined Sewer Improvements	\$ 7,480,253
84	North Hudson Sewer Authority	S340952-21	Facility Improvements	\$ 2,718,518
84	North Hudson Sewer Authority	\$340952-22	W1234 Solids/Floatables (CSO) project	\$ 15,451,847
84	North Hudson Sewer Authority	\$340952-26	River Road Wastewater Treatment Plant Improvements	\$ 681,251
84	North Hudson Sewer Authority	S340952-27	Sanitary sewer Improvements	\$ 500,308
94	North Hudson Sewer Authority	S340952-29	River Road Wastewater Treatment Plant Improvements	\$ 1,199,640
94	North Hudson Sewer Authority	\$340952-30	Adams Street Wastwater Treatment Plant Improvements	\$ 2,454,000
94	North Hudson Sewer Authority	\$340952-28	Collection System Improvements	\$ 1,200,000
94	North Hudson Sewer Authority	S345190-01	Combined Sewer Long Term Control Plan	\$ 3,000,001
248	North Wildwood City	S340663-06	2014 Street & Utility Reconstruction	\$ 13,090,964

141	Northwest Bergen County Utilities Authority	S340700-13	Waste activated sludge & aeration system improv, new gravity belt thickener bldg	\$ 5,177,348
141	Northwest Bergen County Utilities Authority	S340700-16	Wastewater Treatment Plant	\$ 3,753,040
226	Northwest Bergen County Utilities Authority	S340700-17	Security System Upgrades	\$ 443,500
303	Northwest Bergen County Utilities Authority	S340700-15	Wastewater Pump Station Improvements	\$ 4,733,200
303	Northwest Bergen County Utilities Authority	S340700-14	Midland Park Force Main Installation	\$ 3,089,200
204	Ocean County	S344080-04	Track I - Manufactured Treatment Devices	\$ 3,217,620
208	Ocean County	S344080-09	Barnegat Bay Storm Water Improvements - Manufactured Treatment Devices	\$ 1,123,750
59	Ocean County Utilities Authority	S340372-56	Rehabilitate primary and final Clarifiers	\$ 6,223,655
277	Ocean County Utilities Authority	S340372-57	Rehabilitate the Pleasant Beach Interceptor and sanitary sewer manholes.	\$ 2,969,927
277	Ocean County Utilities Authority	S340372-53	Area Wide Pump Station Generator Improvements	\$ 3,340,073
277	Ocean County Utilities Authority	S340372-54	NSA Pump Station Improvements	\$ 4,452,933
264	Tuckerton Borough	S340034-02	(Carryover SFY2015) - Sewer Main Replacement	\$ 1,820,883
217	Ocean Gate Borough	S344180-01	Storm Sewer MTD	\$ 2,303,933
411	Ocean Township	S340112-07	Sanitary sewer main replacement, drainage improvements various locations	\$ 2,290,548
341	Ocean Township Sewer Authority	S340750-11	Collection System Upgrades	\$ 4,522,375
341	Ocean Township Sewer Authority	S340750-12	Interlaken Pump Station reconstruction	\$ 3,340,073
338	Ocean Township Sewer Authority	S340750-14	Asbury Avenue and Longview Pump Stations Rehabilitation	\$ 2,374,000
338	Ocean Township Sewer Authority	S340750-13	Collection System Improvements	\$ 507,500
227	Old Bridge Municipal Utilities Authority	S340945-08-1	Crossroads Regional Interceptor	\$ 1,200,000
309	Old Bridge Municipal Utilities Authority	S340945-13	Laurence Harbor Bulkhead	\$ 4,915,537
309	Old Bridge Municipal Utilities Authority	S340945-14	Sewage Pump Station Upgrades	\$ 2,110,000
409	Oradell Borough	S340835-04	Phase IV sanitary sewer improvements; including replacement of 435 LF of sewer pipe & 3290 LF of sewer lining	\$ 1,136,488
891	Orange City	S340859-02	Sanitary Sewer and redevelopment improvements for the Harvard addordable housing project	\$ 6,039,749
100	Passaic Valley Sew. Comm.	S340689-35	Administration Building Green Infrastructure Entry Plaza	\$ 327,401
100	Passaic Valley Sew. Comm.	S340689-36	Green Car Wash	\$ 210,429

128	Passaic Valley Sew. Comm.	S340689-30	Sump pump relocations to prevent flooding during storms; stand-by generator	\$ 1,733,643
128	Passaic Valley Sew. Comm.	S340689-31	Sodium Hypochlorite Storage & Feed Tanks improvements	\$ 1,780,655
128	Passaic Valley Sew. Comm.	S340689-32	Wet weather trtment capacityimrpovements to reduce CSOs	\$ 1,804,876
128	Passaic Valley Sew. Comm.	S340689-33	Watertight doors and HVAC improvements to plant wide tunnels	\$ 5,921,310
128	Passaic Valley Sew. Comm.	S340689-34	Purchase & Install new pumps, valves, piping, flow meters, process control sampling & monitoring equipment	\$ 2,844,687
128	Passaic Valley Sew. Comm.	S340689-22	Contract A781 Yantacaw Pumping Station Rehabilitation	\$ 2,731,177
128	Passaic Valley Sew. Comm.	S340689-25	Administration Building Rehabilitation	\$ 9,070,281
122	Passaic Valley Sew. Comm.	S345200-01	Combined Sewer Overflow Long Term Control Planning	\$ 7,551,288
122	Passaic Valley Sew. Comm.	S340689-39	Heat Treatment Plant Supernantant Return (HTPSR) Pipe Lining Project	\$ 4,222,000
122	Passaic Valley Sew. Comm.	S345200-02	Asset Management Plan	\$ 2,000,000
122	Passaic Valley Sew. Comm.	S340689-37	Substation "M" Replacement	\$ 10,501,600
122	Passaic Valley Sew. Comm.	S340689-40	Plantwide Replacement & Relocation of Electrical Switchgear and MCCs	\$ 122,842,891
122	Passaic Valley Sew. Comm.	S340689-38	Final Clarifier Concrete Rehabilitation Project	\$ 18,974,800
56	Paterson City	S345210-01	Investigation of Tributary Sewers from Adjacent Municipalities	\$ 100,000
742	Paulsboro Borough	\$340164-01	Replace malfuncting storm sewer along Thomson & Wood Aves., existing mains undersized & incorrectly built using saw-tooth fashion.	\$ 2,236,978
80	Perth Amboy City	S340435-13	Paving of Parking Lots C and RDH (GI)	\$ 813,482
103	Perth Amboy City	\$340435-11	Minimum replacement 3 pumps w/ dry pit submersible pumps, relocate electr equip, reduce flood risk & enhance resiliency	\$ 6,459,351
103	Perth Amboy City	S340435-12	Replacement of Various Catch Basin	\$ 430,399
103	Perth Amboy City	S340435-14	CSO Separatation Pulaski, Parket and State Streets	\$ 2,500,000
103	Perth Amboy City	S345220-01	CSO Permit Development of Long Term Control Plan	\$ 920,504
401	Pine Hill Municipal Utilities Authority	S340274-05	greenwood ave. pump station rehab; new wet well; new FM connection	\$ 1,286,028
502	Plumsted Township	\$340607-03	Construct new advanced WW treatment & coll system to repl aged, failing undersized septic & cesspool systems.	\$ 16,789,494
216	Point Pleasant Beach Borough	S344190-02	Little Silver Lake Drainage Improvement Project	\$ 8,944,264
121	Pompton Lakes Municipal Utilities Authority	S340636-08	Contract 131; Replace 6 circular clarifiers been in operation since 1960; internal mechanisms have deteriorated.	\$ 985,189
242	Princeton Borough	S340656-08	System-wide Sanitary Sewer Rehabilitation	\$ 3,862,596

4	Rahway Valley Sewerage Authority	S340547-14	Replace existing digester tank covers & mixers; replacing gas flares	\$ 9,460,275
7	Rahway Valley Sewerage Authority	S340547-15	Trucked-in Waste Receiving Station	\$ 2,588,518
165	Raritan Township Municipal Utilities Authority	S340485-09	Main Treatment Plant Motor Control Center Replacement	\$ 2,718,518
354	Raritan Township Municipal Utilities Authority	S340485-11	HCRHS Sewer Relocation Project	\$ 500,308
166	Raritan Township Municipal Utilities Authority	S340485-12	Main Treatment Plant Improvements 2016	\$ 4,709,999
295	Rockaway Valley Regional Sewer Authority	S340821-06	Washout of Jersey Truck Sewer Crossing of the Rockaway River	\$ 6,543,350
220	Roosevelt Borough	S340761-04	Roosevelt Secondary Treatment improvement	\$ 1,714,000
220	Roosevelt Borough	S340761-03	Controls for WWTP	\$ 161,675
363	Roselle Borough	S340332-02	Cleaning & lining of 3 miles of sanitary sewer pipe.	\$ 3,471,822
164	Roxbury Township	S340381-07	Treatment Plant & Pump Station Improvements	\$ 8,050,000
410	Runnemede Borough	\$340363-06	Sanitary Sewer Sliplining to improve sewer conveyance at various locations throughout Boro.	\$ 1,553,702
881	Salem County Improvement Authority	S342022-01	Cell 11 Construction	\$ 8,840,401
774	Sea Girt Borough	S340468-01	Upgrading of pipe sizes & the extension of Baltimore Blvd & Neptune Place outfall pipes	\$ 4,823,809
575	Secaucus Town	S340029-04	Born street pump station improvements	\$ 2,359,234
788	Secaucus Town	S342021-01	Malanka Landfill Closure	\$ 21,189,858
469	Ship Bottom Borough	S340311-03	Sewer Main Replacement Project	\$ 3,760,000
718	Somers Point City	S340618-02	Stormwater Improvements	\$ 5,203,507
113	Somerset Raritan Valley Sewer Authority	S340801-07	Sanitary Sewer Overflow Project / Stormwater Control Facility	\$ 14,834,451
489	Somerset Raritan Valley Sewer Authority	S340801-08	Rehabilitation of sludge incinerator #2	\$ 12,997,791
906	Somerville Borough	S342013-01	Green Seam Restoration	\$ 10,684,529
322	South Monmouth Regional Sewer Authority	S340377-05	Belmar Pump Station improvements	\$ 2,718,518
322	South Monmouth Regional Sewer Authority	S340377-03	Lake Como Pump Station Improvements (Superstorm Sandy)	\$ 9,137,611
322	South Monmouth Regional Sewer Authority	S340377-04A	Pitney Ave. Pump Station Improvements (Superstorm Sandy)	\$ 6,981,600
174	Stafford Township	S344100-02	Purchase of Jet Vac Truck and Street Cleaning Equipment	\$ 5,935,359
174	Stafford Township	S344100-03	Neptune Basin Expansion	\$ 3,046,458
179	Stony Brook Regional Sewer Authority	S340400-10	Dewatered Sludge Handling Pump Replacement Project	\$ 4,700,000
461	Sussex Borough	S340155-02	Sewer Force Main	\$ 522,000
806	Sussex County Municipal Utilities Authority	\$342008-04	Leachate Pump Station/Force Main Project	\$ 7,258,000
886	Sussex County Municipal Utilities Authority	S342008-05	Landfill Life Extension Project	\$ 12,406,000

		1	Number of Projects: 234	\$ 2,037,703,351
	Utilities Authority		Installation of Screening and Grit Removal Equipment	
196	Willingboro Municipal	S340132-09	Water Pollution Control Plant-	\$ 4,550,000
251	Willingboro Municipal Utilities Authority	S340132-08	Collection System Resiliency	\$ 1,575,337
307	Western Monmouth Utilities Authority	\$340128-05	Route 79 Pump Station and Force Main Replacement	\$ 4,156,000
307	Western Monmouth Utilities Authority	\$340128-07	Pine Brook Interceptor	\$ 2,027,500
209	Western Monmouth Utilities Authority	S340128-06	Pine Brook Sewage Treatment Plant Improvements	\$ 12,010,000
107	West Milford Municipal Utilities Authority	S340701-12	Emergency Power Generator Install	\$ 301,823
359	West Deptford Township	S340947-05	Pump stations 4 and 6 rehabilitation	\$ 1,232,500
325	Washington Township Municipal Utilities Authority	S340930-04	Forrest Drive Pump Station Replacement	\$ 1,040,303
325	Washington Township Municipal Utilities Authority	S340930-03	Pump Station and sewer main rehabilitations	\$ 2,270,465
257	Warren Township Sewer Authority	S340964-02	Contract 54 - Fox Hill West Pump Station	\$ 675,018
14	Warren Township Sewer Authority	S340964-01	Stage IV WWTP Oxidation Ditch	\$ 2,949,113
163	Wanaque Valley Regional Sewer Authority	S340780-04	2013 Proposed Improvements	\$ 4,072,635
722	Ventnor City	S340667-03	Flood Walls in Various Locations	\$ 1,396,554
722	Ventnor City	S340667-02	Stormwater Management	\$ 9,466,743
67	Two Rivers Water Reclamation Authority	S340117-07	Contract 148 Belt Filter Press Upgrades	\$ 3,612,556

### Appendix D Construction Loan Program - Drinking Water Eligibility List

Rank	Project Sponsor	Project Number	Project Name	Estim	ated Cost
316	Aberdeen Township	1330004-001	Woodfield Area Water System	\$	3,822,000
			Rehabilitation		
45	Atlantic City Municipal Utilities Auth.	0102001-006	1MGD Storage Tank Sand Blasting	\$	2,001,363
281	Belleville Township	0701001-006	Clara Maass Hospital Water Main Extension	\$	1,099,390
202	Bellmawr Borough	0404001-006	Various Water System Improvements	\$	2,131,098
84	Berkeley Township Munic. Util. Auth.	1505004-008	Phase VI Water Main Installation	\$	3,285,921
180	Berkeley Township Munic. Util. Auth.	1505004-007	BTMUA Well #4 Phase II Production Well	\$	1,215,900
180	Berkeley Township Munic. Util. Auth.	1505004-009	Installation of new well #4 with WM to connect to WTP	\$	1,276,800
30	Bordentown City	0303001-006	Upgrade Well 2 with 2A to resolve violation	\$	1,462,388
259	Bordentown City	0303001-007	Water System Remediation Upgrades to WTP	\$	2,793,971
368	Brielle Borough	1308001-002	Water Main Replacement	\$	2,454,000
574	Brielle Borough	1308001-003	Storage Tank Demolition	\$	144,296
412	Brigantine City	0103001-501	Installation of generators @ well	\$	2,816,982
52	Buena Vista Township	0660004-001	Water Main extension due to private well contamination	\$	999,999
75	Camden City	0408001-021	New Auto Meter Reading Equip for entire City	\$	1,664,250
89	Camden City	0408001-022	Install potable wells/flr elevations @ Morris Delair WTP	\$	1,260,000
190	Cape May City	0502001-004	Well 5 Replacment for the Sands Aquifer	\$	2,077,776
232	Clementon Borough	0411001-001	Rehab of Gibbsboro Water Main (White Horse Pk & Wht Horse Rd.)	\$	456,750
473	Clementon Borough	0411001-002	Rehab of well 9 including slip lining to improve conveyance	\$	1,294,125
260	Clinton Town	1005001-008	Well 4 Water Production Facility	\$	1,364,160
355	Clinton Town	1005001-006	Lebanon Borough Water Main Replacements - Phase II through Phase V	\$	3,673,507
529	Clinton Town	1005001-007	Replace Water Meters	\$	1,014,223
549	Clinton Town	1005001-009	Well 7 Improvements & Well 14 Decommissioning	\$	1,103,813
6	East Orange City	0705001-011	Water Treatment & Supply Program	\$	13,007,736
33	East Orange City	0705001-014	Water System Improvements and	\$	32,930,000
			Resiliency Project 2017		
67	East Orange City	0705001-013	WORPS Emergency Backup Power Generator Planning and Design	\$	5,104,000
67	East Orange City	0705001-012	WORPS SCADA Instrumentation/Controls Planning and Design	\$	4,580,000
251	Evesham Municipal Utilities Authority	0313001-001	Wells 13 & 14 Treatment Improvements	\$	1,963,000

177	Fountainhead Properties Incorporate	1511013-001	Upgrade Improve Water System	\$ 722,000
215	Gloucester City	0414001-020	Water System Improvements, Phase II	\$ 1,259,000
203	Gloucester City	0414001-016	Replacement of 1,200 LF of 8" cast ironj main on Brown Street	\$ 882,893
215	Hammonton Town	0113001-011	2016 Utility Road Program Valley, Central & Bellevue Ave to Broadway.	\$ 1,695,942
431	Hammonton Town	0113001-007	Water Meter Replacement	\$ 936,000
503	Hammonton Town	0113001-010	SCADA System/Water Meter Replacment Proj	\$ 237,000
474	Hampton Borough	1013001-001	New back up well 5 to address firm capacity requirements	\$ 1,305,000
182	Hightstown Borough	1104001-008	Settling Tank Rehabilitation	\$ 165,300
517	Hightstown Borough	1104001-007	Rehabilitation of Deep Well 2	\$ 374,535
189	Hoboken City	0905001-001	Washington Street Water Main Replacement And Green Infrastructure Drainage Improvement Project	\$ 5,848,889
193	Jackson Township Municipal Util. Auth.	1511001-010	Demolition of Facilities, replace storage tank, well #3	\$ 5,815,925
433	Jackson Township Municipal Util. Auth.	1511001-011	Improvements to Manhattan St Complex, Garage & Admin Bldg.	\$ 1,406,181
174	Jackson Township Municipal Util. Auth.	1511001-013	Six Flags Great Adventure Water Treatment Plant Replacement	\$ 10,660,000
380	Jackson Township Municipal Util. Auth.	1511001-012	Western Water Main Extension	\$ 10,672,520
138	Jersey City Municipal Utilities Auth.	0906001-010	Journal Square North Cleaning	\$ 7,067,000
138	Jersey City Municipal Utilities Auth.	0906001-012	Water main replacement	\$ 16,643,000
138	Jersey City Municipal Utilities Auth.	0906001-011	Large Valve Replacement	\$ 6,260,867
138	Jersey City Municipal Utilities Auth.	0906001-006	Transmission Main Rehabilitation	\$ 18,005,000
173	Jersey City Municipal Utilities Auth.	0906001-014	Brookdale Gate House Improvements	\$ 1,428,480
379	Jersey City Municipal Utilities Auth.	0906001-013	Remote Meter Reading (AMI)	\$ 9,174,240
191	Kearny Town	0907001-001A	Demolish infrstructure, replace water facil, ground improvements	\$ 26,553,879
9	Lake Glenwood Village	1922010-008	Wells 1 & 2 upgrades	\$ 895,230
102	Little Egg Harbor Municipal Util. Auth.	1516001-004	Twin Lakes Water Main Replacment	\$ 1,701,294
501	Little Egg Harbor Municipal Util. Auth.	1516001-003	Water Treatment Plant at Highrid	\$ 4,571,999
501	Little Egg Harbor Municipal Util. Auth.	1516001-500	Radio Road Water Treatment Plant	\$ 688,475
101	Little Egg Harbor Municipal Util. Auth.	1516001-005	Mystic Island Water Main Replacement - Phases I - VI	\$ 6,322,221
255	Long Beach Township	1517001-502	Raise Well 4, reconstruct filter room & pumps	\$ 3,205,797
255	Long Beach Township	1517001-500	Beach Haven Terrace Water Plant	\$ 3,610,000
255	Long Beach Township	1517001-501	Brant Beach Water Plant	\$ 1,827,000
282	Long Beach Township	1517001-014	Water Main Replacement Project	\$ 3,586,400

293	Manasquan Borough	1327001-002	Construction of 600 LF of WM on Perrine Blvd & Mallard Park Area	\$ 1,469,468
430	Manasquan Borough	1327001-001A	Green Infrastructure Project-Advances Metering System	\$ 1,743,313
100	Manchester Township	1518005-002	Repaint and repair one million gallon elevated storage facility	\$ 5,273,017
200	Manchester Township	1518005-003	Installation of Automated Meter Reading System & Replacement of Selected Meters	\$ 2,500,581
434	Manchester Utilities Authority	1603001-014	2014 Water System Improvements	\$ 1,962,660
172	Maple Shade Township	0319001-006	Maple Shade Township meter upgrade project	\$ 2,420,000
253	Marlboro Township	1328002-002	Harbor Road Water Treatment Plant	\$ 12,514,000
149	Middlesex Water Company	1225001-016	RENEW 2015 - Edison	\$ 5,681,000
329	Middlesex Water Company	1225001-023	Renew 2016, C&L of water mains, replacement of non-copper services	\$ 7,350,000
395	Middlesex Water Company	1225001-024	New Interconnection of PS, new table type chlorinators	\$ 3,462,900
148	Middlesex Water Company	1225001-026	RENEW 2017	\$ 11,636,000
235	Middlesex Water Company	1225001-025	Western Transmission Main	\$ 39,740,000
90	Milltown Borough	1214001-004	Phase II of overall plan to correct water distribution system	\$ 4,037,200
278	Milltown Borough	1212001-002	Ford Ave Redevelopment	\$ 1,606,000
305	Milltown Borough	1212001-003	Ford Ave Redevelopment Agency Borough	\$ 1,384,000
367	Milltown Borough	1212001-005	Water Storage Tank Rehabilitation	\$ 1,700,000
429	Montclair Township	0713001-011	New 1.0MG High Zone Tank	\$ 3,479,879
535	Montclair Township	0713001-008	Nishuane Well Production & Treatment Facility	\$ 2,203,000
97	Netcong Borough	1428001-007	Replace WM on Rte 46, extend WM on Rte, 80, replace meters	\$ 3,553,489
124	Netcong Borough	1428001-008	Rehabilitate existing storage facilities	\$ 1,005,307
164	Netcong Borough	1428001-009	Replace old meters with automatic ones	\$ 300,237
23	New Brunswick City	1214001-005	Water Treatment Plant Improvements	\$ 15,234,200
24	Newark City	0714001-016	Pequannock Water Treatment Plant Rehab	\$ 9,834,000
34	Newark City	0714001-015	Rehabilitation of Water Distribution Mains	\$ 11,787,000
34	Newark City	0714001-017	Water Distribution System Upgrades	\$ 1,837,500
69	Newark City	0714001-500	Wayne & Clifton PS Generators	\$ 5,045,712
83	Newark City	0714001-018	Replacement of Water Distribution Mains	\$ 4,580,000
432	NJ American Water Company, Inc.	2004002-500	RM WTP Flood Wall	\$ 31,500,000
10	NJ American Water Company, Inc.	1345001-017	Oak Street Treatment Plant Improvements	\$ 6,364,160
106	NJ American Water Company, Inc.	1345001-016	Sunset Road Treatment Plant Expansion	\$ 11,988,800
106	NJ American Water Company, Inc.	1345001-018	Oak Glenn Treatment Plant Expansion	\$ 36,994,400

132	NJ American Water	2004002-011	Raw Water Pump Improvements	\$ 12,641,120
	Company, Inc.		(Treatment Plant)	
304	NJ American Water Company, Inc.	1345001-019	Howell-Lakewood Transmission Main	\$ 43,700,000
54	North Jersey Dist Wtr	1613001-031	Purchase and Install New Dewatering	\$ 3,685,500
	Supply Comm.		System at the RTF and Upgrade ET3	
54	North Jersey Dist Wtr Supply Comm.	1613001-032	Rehabilitation of Treatment Facility	\$ 3,553,710
54	North Jersey Dist Wtr Supply Comm.	1613001-022	Basins 5 & 6 Rehabilitation	\$ 16,768,185
54	North Jersey Dist Wtr Supply Comm.	1613001-025	Recycle Clear Phase to the head of the Treatment Plant	\$ 7,246,680
54	North Jersey Dist Wtr Supply Comm.	1613001-026	Low Lift Gas Pump	\$ 12,808,525
54	North Jersey Dist Wtr Supply Comm.	1613001-027	Expansion of Aeriation System	\$ 2,290,344
54	North Jersey Dist Wtr Supply Comm.	1613001-028	Filter Bldg Pipe Gallery Dehumid	\$ 1,863,456
54	North Jersey Dist Wtr Supply Comm.	1613001-029	Basins 1-4 Flocculator Rehabilitation	\$ 2,866,920
91	North Jersey Dist Wtr Supply Comm.	1613001-035	Rehabilitation of Pump Stations	\$ 3,690,871
112	North Jersey Dist Wtr Supply Comm.	1613001-034	Security, IT and Safety Projects	\$ 1,446,908
112	North Jersey Dist Wtr Supply Comm.	1613001-033	Security Enhancements Project - Orechio Dr Complex	\$ 3,910,725
236	North Jersey Dist Wtr Supply Comm.	1613001-030	Modify and Expand Central Receiving Building	\$ 921,113
11	North Shore Water Association	1904004-001	Existing Well Requires Replacement	\$ 475,000
11	North Shore Water Association	1904004-004	Water System Refurb	\$ 182,700
335	North Shore Water Association	1904004-002	Water System Refurb	\$ 428,000
416	Oakland Borough	0220001-004	Rehab of Iroquois Pumping Station	\$ 108,750
468	Oakland Borough	0220001-003	Diesel generator for well 9	\$ 145,000
529	Oakland Borough	0220001-002	Replace 4600 water meters	\$ 2,506,000
549	Oakland Borough	0220001-001	Construct new well 10A as backup for well 10	\$ 145,000
297	Ocean Gate Borough	1521001-001	Replace Majority of West Barnegat Ave water mains.	\$ 1,049,764
277	Ocean Township	1520001-007	Tuscarora Ave & 11st water main replacement	\$ 1,256,063
401	Old Bridge Municipal Utilities Auth.	1209002-011	The Perrine Road Water Storage Tank Rehabilitation	\$ 3,255,000
565	Old Bridge Municipal Utilities Auth.	1209002-012	Upgrade to SCADA system	\$ 1,283,000
336	Old Bridge Municipal Utilities Auth.	1209002-013	Knollcroft Water Main Rehabilitation	\$ 2,996,000
3	Passaic Valley Water Commission	1605002-025	Water Storage Improvements Phase 1 - Standby Emergency Generators	\$ 22,288,370
2	Passaic Valley Water Commission	1605002	Phase I - Levine Reservoir Water Storage Improvements	\$ 22,328,920

	South Orange Village	0719001-007	Replace Pressure Reducing Valves	\$ 232,000
487	South Orange Village	0719001-004	Farrell Field (Intersection of Walton Ave & Audley St.) Interconnection Rehabilitation	\$ 120,350
487	South Orange Village	0719001-003	South Orange Ave and Holland Road Interconnection Rehabilitation	\$ 119,625
435	South Orange Village	0719001-002	Well 17 Emergency Power	\$ 72,500
384	South Orange Village	0719001-006	Repair or Replace Newstead Shere	\$ 1,700,000
381	South Orange Village	0719001-005	Crest Drive Standpipe	\$ 2,770,000
201	South Orange Village	0719001-008	Well 17 Air Stripper	\$ 362,500
14	South Orange Village	0719001-001	Well 17 Rehabilitation	\$ 145,000
204	Ship Bottom Borough	1528001-001	Watermain Replacement Project	\$ 2,308,000
17	Sea Village Marina LLC/New Jersey American Water Company	0108021-002	Water Main Extension	\$ 1,202,000
32	Saddle Brook Township	0257001-002	North Fifth Street water main	\$ 1,899,790
318	Roosevelt Borough	1341001-006	Replacement of water lines most susceptible to breakage	\$ 1,242,062
317	Roosevelt Borough	1341001-001	Water Mains	\$ 690,000
240	Roosevelt Borough	1341001-004	Cleaning & Lining of Water Mains	\$ 639,975
449	Red Bank Borough	1340001-001	Water Treatment Plant Upgrades at Chester Street and Tower Hill	\$ 1,772,000
442	Rahway City	2013001-008	Construction of new interconnection	\$ 3,617,250
	, ,		Upgrade	. , ,
171	Rahway City	2013001-007	Project Water Treatment Plant Filter System	\$ 18,084,000
554	Pine Beach Borough	1522001-002	Project Merion Ave. Well Replacement / Townwide Water Meter Replacement	\$ 451,080
533	Pine Beach Borough	1522001-001	Merion Ave. Well Replacement / Townwide Water Meter Replacement	\$ 959,700
165	Perth Amboy City	1216001-009	Treatment Plant The Replacement of Water Meters Project	\$ 978,909
339	Perth Amboy City	1216001-500	Installation of a New Stand-by Generator for the Runyon Water	\$ 2,708,000
205	Perth Amboy City	1216001-007	The Replacement of 4 inch Water Mains	\$ 2,216,000
205	Perth Amboy City	1216001-008	Replacement of Various Four Inch Mains throught the City	\$ 1,724,987
144	Perth Amboy City	1216001-006	Sandblast & paint aerator, clarifiers, lime silos & dust collectors @ WTP	\$ 914,000
369	Pennington Borough	1108001-002	replace & upgrade water system Rehabilitation of water distribution on East Curlis Avenue and Weidel Drive	\$ 1,132,114
369	Pennington Borough	1108001-001	Upper King George Rd & Park Ave	\$ 1,144,380
504	Pemberton Township	0329004-008	Various water system improvements	\$ 392,000
471	Pemberton Township	0329004-005	Replacing Well #4 with Well #14	\$ 415,000
294	Pemberton Township	0329004-007	Various water system improvements	\$ 2,509,500
230	Pemberton Township	0329004-006	Various water system improvements	\$ 623,000
14	Pemberton Township	0329004-004	Well 11 Radium Rehab	\$ 1,141,875
	Paulsboro Borough	0814001-003	Water Main Repalcement (Thomson, Wood, Elizabeth and Commerce St.)	\$ 1,873,861

534	South Orange Village	0719001-001	Well 17 Rehabilitation	\$ 242,500
120	Stafford Township	1530004-018	Mill Creek Road and Paul Boulevard	\$ 2,315,000
			Water Main Replacement	
271	Stafford Township	1530004-019	Mill Creek Water Main Replacement	\$ 1,805,000
			Phase II	
105	Sussex Borough	1921001-003	Water Systems Enhancements	\$ 223,200
175	Sussex Borough	1921001-004	Water Meter Replacement Project	\$ 406,620
186	Trenton City	1111001-010	Rehabilitation of distribution system by C&L of mains	\$ 22,457,700
463	Vineland City	0614003-015	Well No. 17 Installation	\$ 170,000
499	Vineland City	0614003-016	Well No. 17 Treatment Facility	\$ 8,756,000
155	Wall Township	1352003-001	Route 138 Water Main Improvements	\$ 1,718,010
155	Wall Township	1352003-002	Route 34 Water Main Improvements	\$ 3,594,971
341	Washington Twp Municipal Util. Auth.	0818004-009	Shoppers Lane Water Main extension	\$ 710,955
404	Washington Twp Municipal Util. Auth.	0818004-010	Replace well 8, pump house replace @ well 2,	\$ 1,827,420
404	Washington Twp Municipal Util. Auth.	0818004-011	Storage Tank painting (interior & exterior)	\$ 4,627,140
461	Washington Twp Municipal Util. Auth.	0818004-012	Improvments to the billing building. Security at well houses	\$ 210,525
546	Washington Twp Municipal Util. Auth.	0818004-014	Replacement Well 2A	\$ 837,375
8	Willingboro Municipal Util. Auth.	0338001-009	Track I - Well 5A Radium Treatment	\$ 6,206,903
16	Willingboro Municipal Util. Auth.	0338001-014	Well 5A Radium Treatment	\$ 7,225,224
166	Willingboro Municipal Util. Auth.	0338001-012	Well No. 1 Water Treatment Plant Upgrade	\$ 3,298,544
167	Willingboro Municipal Util. Auth.	0338001-011	Well No. 6 Water Treatment Plant Upgrade	\$ 9,260,000
496	Willingboro Municipal Util. Auth.	0338001-013	Replacement of Well No. 1	\$ 1,604,456
			Total Number of Projects 168	\$ 810,207,961

#### Appendix E

#### Project Eligibility Guidelines for Sandy Clean Water NJEIFP Loans

- 1. Projects that prevent interruption of collection system operation in the event of a flood or natural disaster, including but not limited to:
  - a. Physical "hardening" or waterproofing of pumps and electrical equipment at pump stations and other components of collection systems (including storage facilities and associated equipment) through upgrade or replacement, including:
    - Installation of submersible pumps
    - Waterproofing electrical components (e.g. pump motors)
    - Waterproofing circuitry
    - Dry flood proofing/sealing of structure to prevent floodwater penetration
    - Installation/construction of wind resistant features (e.g. wind resistant roofing materials, winddamage resistant windows, storm shutters)
  - b. Relocation of pump stations or other collection system facilities to less flood prone areas
  - c. Installation of physical barriers around pump stations or other collection system facilities (e.g. levies or dykes)
  - d. Installation of back-up generators or alternative energy sources (including switch boxes) that service pump stations or other collection system facilities
  - e. Correction of significant infiltration and inflow problems that increase the likelihood of sewer backups or flooding of a treatment works
  - f. Separation of combined sewers that will result in a reduced risk of flooding of the collections system and/or treatment works
  - g. Installation/construction of redundant collection system components and equipment
  - h. Regionalization project that enables diversion of wastewater flows to an alternate system for emergency wastewater collection and treatment services
  - i. SCADA system projects to allow remote or multiple system operation locations
  - j. Replacement of damaged equipment with more energy efficient equipment
  - k. Construction or installation of flood attenuation, diversion, and retention infrastructure within or beyond the boundaries of a treatment works that protects the collection system
    - Green infrastructure that reduces flood risk by reducing stormwater runoff, including permeable pavement, green roofs and walls, bio-retention infrastructure (e.g. constructed wetlands, detention basins, riparian buffers, or stormwater tree trenches/pits/boxes), stream daylighting, and downspout disconnection
    - Natural systems, and features thereof, capable of mitigating a storm surge, such as barrier beach and dune systems, tidal wetlands, living shorelines, and natural berms/levees
    - Flood water pumping systems
    - Flood water channels/culverts, physical barriers, and retention infrastructure

### 2. Projects that prevent floodwaters from entering a treatment works, including but not limited to:

- a. Installation of physical barriers around a facility (e.g. levies or dykes around the facility to prevent flooding)
- b. Relocation of facilities to less flood prone areas

- c. Construction or installation of flood attenuation, diversion, and retention in infrastructure within or beyond the boundaries of a treatment works that protects the treatment works
  - Green infrastructure that reduces the risk of flooding by reducing stormwater runoff, including permeable pavement, green roofs and walls, bio-retention infrastructure (e.g. constructed wetlands, detention basins, riparian buffers, or stormwater tree trenches/pits/boxes), stream daylighting, and downspout disconnection
  - Natural systems, and features thereof, capable of mitigating a storm surge, such as barrier beach and dune systems, tidal wetlands, living shorelines, and natural berms/levees
  - Floodwater pumping systems
  - Flood water channels/culverts, physical barriers, and retention infrastructure
- 3. Projects that maintain the operation of a treatment works and the integrity of the treatment train in the event of a flood or natural disaster, including but not limited to:
  - a. Physical "hardening" or waterproofing of pumps and electrical equipment at treatment works through upgrade or replacement, including:
    - Installation of submersible pumps
    - Waterproofing electrical components (e.g. pump motors)
    - Waterproofing circuitry
    - Dry flood proofing/sealing of structure to prevent floodwater penetration
    - Installation/construction of wind resistant features (e.g. wind resistant roofing materials, winddamage resistant windows, storm shutters)
  - b. Relocation of critical equipment to less flood prone areas of a facility and/or elevation of critical structures
  - c. Installation of physical barriers around individual treatment processes
    - Flood walls around treatment tanks
    - Elevated walls or capping of treatment tanks
  - d. Installation of larger capacity storage tanks
    - Installation of larger capacity chemical storage tanks for continued treatment in absence of delivery service
    - Installation of larger capacity fuel storage tanks for back-up generators
    - Construction of storage tanks at treatment works to store overflows for future treatment
  - e. Installation of back-up energy supply or alternative energy sources and/or hardening of existing connections to the power grid
  - f. Installation/construction of redundant components and equipment
  - g. Replacement of damaged equipment with more energy efficient equipment
  - h. SCADA system projects to allow remote or multiple system operation locations
- 4. Projects that preserve and protect treatment works equipment in the event of a flood or natural disaster, including but not limited to:
  - a. Relocation of critical equipment to less flood prone areas of a facility and/or elevation of critical structures
  - b. Prevention of saltwater damage to materials and equipment
    - Installation of salt water resistant chemical storage tanks

- Installation of salt water resistant fuel storage tanks
- Installation of salt water resistant equipment and appurtenances
- 5. Planning projects that assess a treatment works' vulnerability to flood damage or that analyze the best approach to integrate system and community sustainability/resiliency priorities in the face of a variety of uncertain futures including natural disasters and more frequent and intense extreme weather events, provided the planning work is reasonably expected to result in a capital project, including but not limited to:
  - a. Risk/vulnerability assessments considering recent floodplain maps and projected sea level rise
  - b. Alternatives analysis
  - c. Asset Management Plans
  - d. Emergency Preparedness, Response, and Recovery Plans

#### Appendix F

#### Project Eligibility Guidelines for Sandy Drinking Water NJEIFP Loans

- 1. Projects that prevent interruption of water distribution system operation in the event of a flood or natural disaster, including but not limited to:
  - a. Physical "hardening" or waterproofing of pumps and electrical equipment at pump stations and other components of distribution systems (including storage facilities and associated equipment) through upgrade or replacement including:
    - Waterproofing electrical components (e.g. pump motors)
    - Waterproofing circuitry
    - Dry flood proofing/sealing of structure to prevent floodwater penetration
    - Installation/construction of wind resistant features (e.g. wind resistant roofing materials, winddamage-resistant windows, storm shutters)
  - b. Relocation of pump stations or other distribution system facilities to less flood prone areas
  - c. Installation of physical barriers around pump stations or other distribution system facilities (e.g. levies or dykes)
  - d. Installation of back-up generators or alternative energy sources (including switch boxes) that service pump stations or other distribution system facilities
  - e. Installation/construction of redundant distribution system components and equipment
  - f. Construction of interconnections with neighboring water systems which could provide an emergency water supply
  - g. SCADA system projects to allow remote or multiple system operation locations
  - h. Replacement of damaged equipment with more energy efficient equipment
  - i. Construction or installation of flood attenuation, diversion, and retention infrastructure associated with an otherwise eligible drinking water project that protects the distribution system
    - Green infrastructure that reduces the risk of flooding by reducing stormwater runoff including permeable pavement, green roofs and walls, bio-retention infrastructure (e.g. constructed wetlands, detention basins, riparian buffers, or stormwater tree trenches/pits/boxes), stream daylighting, and downspout disconnection
    - Natural systems, and features thereof, capable of mitigating a storm surge, such as barrier beach and dune systems, tidal wetlands, living shorelines, and natural berms/ levees
    - Floodwater pumping systems
    - Flood water channels/culverts, physical barriers, and retention
    - infrastructure
  - j. Rehabilitation of water mains and valves needed to maintain integrity of water quality and quantity during storm events

- 2. Projects that prevent floodwaters from entering a treatment plant or well house, including but not limited to:
  - a. Installation of physical barriers around a facility (e.g. levies or dykes around the facility to prevent flooding)
  - b. Relocation of facilities to less flood prone areas
  - c. Construction or installation of flood attenuation, diversion, and retention infrastructure associated with an otherwise eligible drinking water project that protects the treatment plant
    - Green infrastructure that reduces the risk of flooding by reducing stormwater runoff, Including permeable pavement, green roofs and walls, bio-retention infrastructure (e.g. constructed wetlands, detention basins, riparian buffers, or stormwater tree trenches/pits/boxes), stream daylighting, and downspout disconnection
    - Natural systems, and features thereof, capable of mitigating a storm surge, such as barrier beach and dune systems, tidal wetlands, living shorelines, and natural berms/levees
    - Floodwater pumping systems
    - Flood water channels/culverts, physical barriers, and retention infrastructure

## 3. Projects that maintain the operation of a drinking water treatment plant, intake or well in the event of a flood or natural disaster, including but not limited to:

- a. Physical "hardening" or waterproofing of pumps and electrical equipment at pump stations and other components of distribution systems (including storage facilities and associated equipment) through upgrade or replacement, including:
  - Waterproofing electrical components (e.g. pump motors)
  - Waterproofing circuitry
  - Dry flood proofing/sealing of structure to prevent floodwater penetration
  - Installation/construction of wind resistant features (e.g. wind resistant roofing materials, winddamage-resistant window storm shutters)
- b. Relocation of critical equipment to less flood prone areas of a facility and/or elevation of critical structures
- c. Installation of physical barriers around individual treatment processes
  - Flood walls around treatment tanks
  - Elevated walls or capping of treatment tanks (e.g. tanks, vaults)
- d. Installation of larger capacity storage tanks
  - Installation of larger capacity chemical storage tanks for continued
  - treatment in absence of delivery service
  - Installation of larger capacity fuel storage tanks for back-up generators
  - Installation of larger capacity water storage facilities (e.g. raw water reservoirs, backwash tanks, contact basins)

- e. Installation of back-up energy supply or alternative energy sources and/or hardening of existing connections to the power grid
- f. Installation/construction of redundant distribution system components and equipment
- g. Replacement of damaged equipment with more energy efficient equipment
- h. SCADA system projects to allow remote or multiple system operation locations
- 4. Projects that preserve and protect water system equipment in the event of a flood or natural disaster, including but not limited to:
  - a. Relocation of critical equipment to less flood prone areas of a facility and/or elevation of critical structure
  - b. Prevention of saltwater damage to materials and equipment
    - Installation of salt water resistant chemical storage tanks
    - Installation of salt water resistant fuel storage tanks
    - Installation of salt water resistant equipment and appurtenances
- 5. Planning projects that assess a treatment works' vulnerability to flood damage or that analyze the best approach to integrate system and community sustainability/resiliency priorities in the face of a variety of uncertain futures including natural disasters and more frequent and intense extreme weather events, provided the planning work is reasonably expected to result in a capital project, including but not limited to:
  - a. Risk/vulnerability assessments considering recent floodplain maps and projected sea level rise
  - b. Alternatives analysis
  - c. Asset Management Plans
  - d. Emergency Preparedness, Response, and Recovery Plans

#### Appendix G

#### Project Eligibility Guidelines for Sandy Drinking Water NJEIFP Loans

#### **Emergency Loan Program Guidance Document**

**Introduction.** This Appendix provides guidance as to Emergency Loan Program eligibility and application requirements for the Clean Water and Drinking Water Programs. Note: this guidance does not address the Disaster Relief Emergency Loan Financing Program (a.k.a. the "Statewide Assistance Loan Program" or "SAIL").

The DEP recognizes that environmental infrastructure emergencies may occur that endanger public health and welfare and can result in substantial environmental damage. Such circumstances require an immediate response for which a complete technical and environmental review in advance of construction is not possible. On July 15, 2005, the DEP issued a generic Environmental Decision Document (EDD) for environmental emergency response projects and on January 3, 2006, amendments to the program's rules at N.J.A.C. 7:22 were adopted to allow the EIFP to fund certain emergency projects. The generic EDD and the rule changes identify the specific types of projects and conditions that must exist to qualify under the emergency project provisions of the Financing Program.

With the EDD and the rules as guidelines, the DEP has developed a process to respond rapidly when emergencies occur, obtain basic project information, make an eligibility determination and issue a pre-award approval so that owners/operators can undertake the needed repairs and maintain eligibility for those expenditures through the EIFP. For ranking purposes, projects that qualify as emergency projects will receive funding priority over all other projects on the Project Priority List.

Project Notification Procedure. The affected system must notify:

- <u>Drinking Water Projects</u>: The Chief of the Bureau of Safe Drinking Water Technical Assistance, Water Supply Operations Element in the Division of Water Supply at (609) 292-5550;
- <u>Clean Water Projects</u>: The Assistant Director of the Municipal Finance and Construction Element in the Division of Water Quality, at (609) 633-1170 by close of business on the day of the emergency or by 12:00 PM of the next business day. For example, if an emergency occurs on a Friday morning, the DEP must be notified by the end of the Friday business day or if an emergency occurs on a Saturday or Sunday, the DEP must be notified by 12:00PM on the following Monday.

The DEP will confirm notification of the possible emergency project with a fax describing what information is to be submitted to DEP. Within 30 days of the emergency occurrence, the affected system must submit to the DWSRF a comprehensive report including the following: nature/location of the emergency, need for repair and description of the initial efforts to repair the damage, detailed description of the repair needed with costs, list any required permits, and a description of the long term solution. In addition, a Certification signed by the water superintendent, chief engineer or director must be provided by the water system stating that there was an emergency situation and that the repairs are required.

The NJEIFP will only fund the portion of any repair that is necessary to restore lost service to the affected population and will only fund a specific Emergency Repair Project for a specific entity once. Any long term solutions, modifications, and/or upgrades to prevent future emergency occurrences must be addressed in future financing cycles as a project and published on the Project Priority List. Specific types of projects and conditions must exist to qualify under the emergency project provisions of the Financing Program. Drinking Water Emergency Repair Projects will be defined as, and limited to, projects that replace, in kind, the failure of an essential portion of a public water system that is expected to disrupt water service to any number of the public water system's customers for a minimum of 24 hours total and/or poses a substantial threat to the public health, safety, and welfare.

#### **Appendix H** Projects Financed in SFY2015

			New J	ersey Enviro	nmental Infi	rastructure Trust
			Fiscal	Year 2015 Fi	inancing Pro	gram Summary*
	Source	of Funds Key:				
A = Trust Opera	ating Funds	C = DEP CW SR	F Fun	ds		
B = Trust Bond	Revenues	D = DEP DW SF	RF Fur	nds		
		Loan Program	n		-	
Borrower	Short	-Term Loan		ong-Term	Source	Project Description
	Planning & Design	Construction / SAIL		Loan	of Funds	
Barnegat Twp			\$	204,662	A/D	W1533001-500 - Install an emergency generator for Well No. 4 including a 200 kW generator and automatic transfer switch.
Bayshore Regional Sewerage Authority		\$ 28,113,117			A/C	S340697-05 - The restoration of mechanical, HVAC and electrical equipment, instrumentation and control equipment and building repairs for various structures and components within the Treatment plant and collection system. The project also includes mitigation measure including dry flood-proofing and elevating of equipment and components to prevent damage from future flood events
Beach Haven Borough			\$	593,000	B/D	W1503001-500 - Demolition of the existing water pump building including providing all necessary temporary pumps and temporary electrical service for the pumps and installation of temporary service and back-up generators for the police station prior to demolition of water pump building. Construction of a new pump station building and installation of three (3) 1000 GPM high service horizontal pumps with automatic priming system. This project includes all motors, pipe, fittings, valves, appurtenances, gauges, meters, electrical controls, pump testing, and all site restoration.
Beachwood, Borough of			\$	837,045	B/C	S340208-02 - Remove and replace two existing corrugated metal outfalls with a new elliptical reinforced concrete (RC) pipe. The two original outfalls will be re-routed to a single outfall in an existing bulkhead which will be reconstructed to accommodate the proposed outfall. The existing outfalls to be removed are approximately 40 linear feet (LF) and 80 LF in length. Additional stormwater pipes and inlets will be constructed to divert the stormwater flow that currently drains through the existing parking lot stormwater pipes and through the Beachwood Borough outfall pipe.
Bergen County Utility Authority		\$ 7,952,494			A/C	S340386-17 - Construction of a third combined heat and power cogeneration engine to be housed in the existing blower building at the Little Ferry Wastewater Treatment Plant (WTP). This unit, in conjunction with the two existing units, will minimize the amount of wastewater from the WTP containing FOG. The third unit will allow BCUA to take one unit down for service, and, in the event of power failure, the BCUA can utilize the additional unit to keep the WTP in operation, minimizing the potential discharge of untreated wastewater to the Hackensack River. As the proposed unit generates both heat and electricity, the dependency of the existing boilers at the WTP to provide heat will be reduced,

				resulting in a reduction in boiler blow down water and chemicals required to treat this water.
Berkeley Township Sewerage Authority		\$ 3,170,000	B/C	S340969-13 - Deteriorating sanitary sewer piping in the Pelican Island section and Berkeley Shores section (Archer Avenue South & Ronald Avenue South) is causing blockages and creating the need for continued maintenance of the sewer systems. Replace the existing sanitary sewer piping and associated manholes, and replace the existing service laterals from the new sewer main up to the area just behind the curb line. The existing sewer mains will be abandoned in place or removed as needed to allow for the new construction. On Pelican Island, the Authority will install 8-inch ductile iron pipe (DIP) and 8-inch PVC pipe next to the existing sanitary sewer pipe and connect into the existing sanitary sewer system. In Archer Avenue South and Ronald Avenue South, the Authority will replace the existing 8-inch piping with approximately 8-inch DIP piping and 8-inch PVC piping next to the existing piping which will connect into the existing sanitary sewer system at the appropriate manholes. The Authority will install new manholes. Existing laterals and/or deep house connections will be replaced from the proposed new sanitary sewer main up to a new cleanout to be located behind the curb line.
Berkeley Twp Municipal Utilities Authority	\$ 618,887		A/D	W1505004-007 - Well #4 Phase II Production Well: Installation of a water supply well and approximately 1,100 linear feet of water main to the existing water treatment plant, well building, and associated work.
Bloomingdale Borough		\$ 516,255	A/D	W1601001-004 (Nano) - Replace approximately 2,090 linear feet of 2-inch and 4-inch galvanized steel and cast iron water pipes with 8-inch ductile iron pipes. Water mains will be replaced in Poplar Street, Birch Street, Chestnut Street, Oak Street and First Street.
Brigantine, City of	\$ 300,000	\$ 1,873,333	B/D	W0103001-500 - The City of Brigantine is replacing the existing aged and outdated Well No. 4 with Well No. 9 to address well casing standards. To that end, Well No. 9 will be drilled within 100 feet of Well No. 4 to approximately the same depth of 788 feet and pumped at an equal diversion rate of 1,000 gallons per minute. A permanent well pump and motor will be furnished and installed and an elevated well house with treatment facilities to treat the water from Well No. 9 will be constructed. Well No. 4 will be abandoned and sealed and Well House No. 4 will be demolished.
Camden County Municipal Utilities Authority	\$ 5,657,000	\$ 5,657,000	B/C	S340640-14 - Five contracts to prevent flooding within the combined sewer system and to improve water quality by removing contaminants at the former American Minerals industrial site through remediation. 1) <u>Von Neida Park Improvement Project</u> will route storm water flow from park through new storm water system connecting to discharge pipe to be constructed under Harrison Avenue and ultimately discharging into Baldwin's Run. Work includes installation of new reinforced concrete storm sewer pipes, detention basin, construct two storm water depressions and replacement of reinforced concrete combined sewers. 2) Baldwin's Run <u>Tributary Trail Project</u> restoration including a boardwalk path and an asphalt multi-use trail. The stormwater flow from Von Neida Park to Baldwin's Run will flow to Delaware River Back Channel allowing waterway. 3) <u>20 Green Infrastructure Projects</u> in 17 individual sites throughout Camden such as rain gardens, planter boxes, cistern tanks, porous concrete

				sidewalks, porous pavement in an effort to manage runoff from impervious areas reducing pressure on CSO. 4) <u>Sewer</u> <u>Reconstruction Phase IV</u> replaces and lines existing deteriorated sections of combined sewer pipes to alleviate hydraulic constraints from clogged or collapsed combined sewer pipes causing overflows, backups and flooding in streets, parks and homes. 5) <u>Phoenix Park</u> rehabilitation of abandoned factory into new park from Jefferson Avenue towards Delaware River.
Camden County Municipal Utilities Authority		\$ 1,319,740	B/C	S340640-10-2 - Construction of the Atlantic Basin Interceptor Extension. Project includes the construction of: 1) force main extension from Waterford Pump Station to Cross Keys Road Pump Station; 2) force main from proposed Sicklerville Pump Station to proposed gravity sewer; and 3) force main extension from Cross Keys Pump Station to Chews Landing Clementon Road and Gravity Main Extension. In addition, upgrade work at Waterford, Chesilhurst and Cedarbrook pumping stations and the construction of 1) Sicklerville Pump Station (allowing the abandonment of the Sicklerville wastewater treatment plant which is at capacity and under a sewer ban); and 2) the Cross Keys Road Pump Station to pump wastewater flow from the proposed Sicklerville conveyance system and future flows from Waterford Pump Station, Borough of Pinehill and the Camden County Vocational and Training School to the Clementon Interceptor. Finally, the Clementon Interceptor will be replaced and rehabilitated.
Camden, City of	\$ 10,000,000	\$ 10,606,666	B/C	S340366-09 - Rehabilitation of eight existing wastewater pump stations (Arch Street, Fairview Avenue, Ferry Avenue, Baird Boulevard, Federal Street, Mount Ephraim Avenue, Pine Street and State Street) and replacement of ejector station with new modular package system.
Camden, City of		\$ 4,636,910	B/D	W0408001-018 - The project involves repair and painting of both the interior and exterior surfaces of the 5 million gallon North Camden standpipe, 2 million gallon Kaighn Avenue and 2 million gallon Whitman Park elevated tanks.
Cape May County Municipal Utilities Authority	\$ 5,500,000		A/C	S342017-04 - The continuation (phase 2) of a double composite lined landfill cell 2G, including the construction of new access roads and leachate management systems, and all associated work, materials and expenses.
Chatham, Township of		\$ 1,061,333	B/C	S340715-05 A - Repair and replace components within the Molitor Water Pollution Control Facility. The improvements consist of rehabilitation of Primary Clarifiers No. 1 and 2, and Final Clarifiers 1, 2, 3 and 4. In addition, replace the cover of the Secondary Digester, installing density current baffles, and installing an algae brush cleaning system to the final clarifier scum skimming mechanism.
East Orange City (WC)	\$ 9,629,723		A/D	W0705001-011 - Construction of an Air Stripping Treatment Facility to remove volatile organic compounds from existing groundwater supply wells. Well Rehabilitation project to restore capacity of the water supply system and to upgrade components in order to meet future hydraulic conditions. Work includes replacement of existing public wells at Dickinson 1 and Dickinson 2, rehabilitation to restore capacity at Braidburn 2 & 3, Canoe Brook 2, 3 & 4, Dickinson 3 and Slough Brook 2 and mechanical and electrical upgrade to Dickinson 4, Canor Brook 5, Braidburn 1 & 4.

East Orange, City of		\$ 428,292	B/C	S340686-07A - Repair and upgrade secondary treatment and solids handling equipment of the JMEUC wastewater treatment plant.
Egg Harbor Twp Municipal Utilities Authority	\$ 1,050,683		A/C	S340753-04 - The lining and replacement of two portions of an existing RCP gravity interceptor main that originates in Egg Harbor Township and terminates in the adjacent municipality of the City of Pleasantville. A portion of the interceptor located along Washington Avenue will be lined due to the deterioration of the existing RCP from hydrogen sulfide gases. A second portion of the interceptor located within the City of Pleasantville will be abandoned and replaced with the construction of a new PVC gravity main.
Elizabeth, City of		\$ 5,200,677	B/C	S340942-16 - The manmade earthen levee and storm water conveyance ditch portion of the Elizabeth River Flood Control Project (FCP) is approximately 9,200 feet long and runs parallel to the Elizabeth River. Storm water drainage structures traverse the levee at 90-degree angles and connect the storm water drainage ditches and basin to the river. Storm water gathers in the detention basins at the drainage structures behind the levees until river levels recede at which time storm water is discharged through drainage structures back to the river. Drainage Structures No. 8, 9, 10, 13, 14, 16, 18, 21 and 23 are deteriorating, in danger of imminent failure, and must be repaired and/or replaced. The project includes removing trees and filling burrow holes that are impacting the drainage structures along the left and right banks of the Elizabeth River.
Elizabeth, City of		\$ 5,297,356	B/C	S340686-07B - Repair and/or upgrade to secondary treatment and solids handling equipment of the Joint Meeting of Essex & Union Counties wastewater treatment plant including upgrades to aeration equipment and dewatering facility as well as digester cleaning and modifications.
Ewing- Lawrence Sewerage Authority	\$ 1,537,000	\$ 4,986,666	B/C	S340391-11 - Resiliency work including 1) the construction of a new preliminary treatment building to house the influent screens and related equipment; 2) installation of a grit removal system; 3) retrofit the existing chlorine contact tank with an ultraviolet disinfection system and increasing height of the perimeter walls of existing chlorine contact tank to allow system to operate during flooding conditions of Assunpink Creek; 4) installation of new precast concrete valve vault for new effluent pumping system adjacent to chorine contact tank to be sued during flooding conditions; 5) installation of new submersible vertical turbine type service water pumps; 6) improvements to correct hydraulic bottlenecks within the treatment plant; 7) installation of effluent algae screening system; 8) purchase of backup commutator; 9) rerouting force mains from Ewing and Lawrence collection system to new preliminary treatment building, relocation of the Ewing Township influent flow meter chamber; 10) mechanical equipment, structural, electrical, lighting, HVAC and plant piping improvements.
Gloucester County Utilities Authority		\$ 4,375,974	B/C	S340902-12 - Rehabilitation of the Porches Branch Interceptor between Greentree Road and East Holly Drive. The project includes approximately 4,532 LF of 27 inch diameter reinforced concrete pipe using a cured-in-place pipe liner and the rehabilitation of nine existing manholes.

Gloucester, Township of		\$	701,758	B/C	S340364-12 - Rehabilitation of existing basins and stormwater piping, (including relining and/or replacement) by cleaning out accumulated sediment from the bottom of the basin(s), and soften the side slopes at some locations to facilitate future maintenance, at various locations in Gloucester Township.
Hackensack, City of		\$ 3	3,279,533	B/C	S340923-10 - Separate the existing combined sewer system within an area slated for redevelopment. This new stormwater pipe will run parallel to the existing sewer pipes located under the approximate centerline of these streets, and will carry dedicated sanitary sewer water. This project will allow the existing sanitary sewer flow to continue to flow into the Anderson Street trunk line, while the stormwater would be directly discharged into the Hackensack River. In addition, the existing combined sewer line within the project limits will be rehabilitated. The portions of pipe to be rehabilitated with this in-place pipe liner.
Hamilton Township Municipal Utilities Authority		\$	721,375	B/C	S340903-05 - Rehabilitation of approximately 4,398 LF of 8- inch, 12-inch, 21-inch, 24-inch, and 30-inch sanitary sewers utilizing cured-in-place structural liners and associated manholes.
Hanover Sewerage Authority		\$ 2	2,216,000	B/C	S340388-06 - Expansion of plant's capability of maintaining adequate performance that could otherwise be degraded as a result of future fuel source disruption by installing a 6-inch diameter natural gas supply line and one 150 KW combined heat and power generation unit, as well as retrofit the boiler system to accept natural gas as an additional fuel source. This work expands the existing capacity to use No. 2 fuel oil and/or biogas produced by on-site sludge digesters.
Hillsborough Twp	\$ 1,532,710			A/C	S340099-02 - Construction of 3,430 linear feet of 8-inch diameter sanitary sewer, approximately 750 linear feet of 1.5 inch high density polyethylene low pressure force main, 16 manholes, 11 stormwater inlets, and 39 laterals to serve existing homes. The wastewater will be collected and conveyed to the Somerset Raritan Valley Sewerage Authority for treatment.
Hillside, Township of		\$	695,251	B/C	S340686-07C - Repair and/or upgrade of secondary treatment and solids handling equipment of the Joint Meeting of Essex & Union Counties wastewater treatment plant. The project consists of three contracts: 1) aeration equipment upgrades; 2) digester #1 cleaning and modifications; and 3) dewatering facilities upgrades.
Hoboken City	\$ 5,300,000			A/C	S340635-04 - Construction of a below grade wet weather pump station, an electrical vault and an above grade natural gas emergency generator to the H5 Pump Station. The City Hall Sustainable Stormwater project consists of capturing rainwater runoff from the roof of the building and installing four 1,200 gallon above ground rainwater tanks and constructing rain gardens in the northwest and southwest corners of the building near the intersection of Bloomfield and Newark Streets.
Hopatcong, Borough of	\$ 11,589,405	\$ 1:	1,589,406	B/C	S340488-04-1 - Phase I of the sewer installation was funded in 2001 and construction was completed in late 2006. The original loan for this project (Phase II) was issued in 2003. Phase II consists of the procurement and installation of approximately 456 grinder pumps, the construction of two (2) pumping stations, the installation of approximately 39,027

				linear feet of gravity sewers ranging in size from 8-inch to 15- inch diameter, the installation of approximately 23,225 linear feet of low pressure sewers ranging in size from 1-1/2-inch to 3-inch diameter and the installation of approximately 8,377 linear feet of force mains ranging in size from 6- inch to 10- inch diameter. The anticipated daily average flow is approximately 0.2 million gallons per day. All construction is now complete and the new facilities are in operation.
Irvington, Township of		\$ 1,720,460	B/C	S340686-07D - Repair and/or upgrade of secondary treatment and solids handling equipment of the Joint Meeting of Essex & Union Counties wastewater treatment plant. The project consists of three contracts: 1) aeration equipment upgrades; 2) digester #1 cleaning and modifications; and 3) dewatering facilities upgrades.
Jefferson Twp/Mtn Shores POA		\$ 647,816	A/D	W1414009-001 (Nano) - Replacement of existing water system and connection to Jefferson Municipal water supply.
Jersey City Municipal Utilities Authority		\$ 1,424,564	B/D	W0906001-008-1 - Install 1400 linear feet of 84 inch diameter pipe, a traveling screen and rapid mix chamber, chemical feed system, monitoring system and modifications to the raw water pump station at the Boonton water treatment plant in Parsippany Township.
Jersey City Municipal Utilities Authority		\$ 4,683,000	B/C	S340928-11 - Replace sections of combined sewers along sections of Brown Place, Linden Avenue & Princeton Avenue. The approximate total length of the replacement project is approximately three thousand three hundred linear feet of twelve inch to sixty inch round pipe and from 24" x 38" to 38" x 60" diameter elliptical pipe.
Madison, Borough of		\$ 1,723,587	B/C	S340715-05B - Repair and/or replace components within the Molitor Water Pollution Control Facility. The improvement consist of rehabilitation of Primary Clarifiers No. 1 and 2, and Final Clarifiers 1, 2, 3 and 4. In addition, the MCJM proposes to replace the cover of the Secondary Digester, install density current baffles, and install an algae brush cleaning system to the final clarifier scum skimming mechanism.
Maple Shade, Township of		\$ 1,966,666	B/C	S340710-09 - Equipment upgrades and implementation of energy efficient measures at the Maple Shade Wastewater Treatment Plant (WWTP), located off of Park Avenue in Maple Shade, on Block 1.13, Lots 3, 3.01 and 32. The improvements will include upgrading the Orbal system equipment, the Orbal system instrumentation and the WWTP's Supervisory Control and Data Acquisition (SCADA).
Merchantville , Borough of		\$ 515,844	B/C	S340367-02-1 - Sewer line and manhole rehabilitation project consisting of the rehabilitation of approximately 55,517 LF of 8, 10, & 12 inch existing gravity sanitary sewer lines & 345 LFD of manhole rehab within the Borough's system. The system was found to have many issues that contribute to pipe failure & infiltration of ground water into the system & the Borough has experienced multiple collapses each year in various sections of the sewer main. The cure in place pipe lining ("CIPP") provide structural integrity and help to minimize the amount of infiltration & Inflow throughout the town.
Milltown Borough	\$ 10,000,000		A/C	S340102-03 - The substation, located in the Lawrence Brook Flood Plain, was flooded twice in the past five years causing power to the entire Borough to be shut down for an extended period. During the Flood of August 2011, the substation building had approximately 2ft of flood water inside the building. The power was shut down for approximately five

				days while the switchgears was cleaned, dried and repaired due to the flooding. The improvements consist of reconstructing the electrical substation at a location that is outside of the flood plain. The new electrical substation will be installed on an adjacent property to minimize the extension of the feeder cables from PSE&G and to the Borough circuitry and reduce the overall project cost.
Newark, City of		\$ 1,029,724	B/C	S340686-07E - Repair and/or upgrade secondary treatment and solids handling equipment of the Joint Meeting of Essex & Union Counties wastewater treatment plant. The project consists of three contracts: 1) aeration equipment upgrades; 2) digester #1 cleaning and modifications; and 3) dewatering facilities upgrades.
North Hudson Sewerage Authority		\$ 4,434,000	B/C	S340952-20 - Replacement of the electrical switchgear (includes electrical feeder, and emergency generator's automatic transfer switch) at two separate locations: The River Road and Adams Street Wastewater Treatment Plants. The project also consists of instrumental and control upgrades to the PURAC system at the Adams Street Wastewater Treatment Plant.
North Hudson Sewerage Authority	\$ 4,166,395		A/C	S340952-19 - Repair and/or upgrade of ten combined sewer regulators in Weehawken, Hoboken and West New York including siphon improvements to isolate, dewater, clean and line the 12 inch barrel along Park Avenue to ensure service area has a reliable and efficient wastewater collection system.
Northwest Bergen County Utilities Authority		\$ 7,882,600	B/C	S340700-12 - Upgrade the primary and standby incinerator units and repair standby incinerator unit. Modifications include installation of building addition, a new Mercury Absorber system, a caustic injection and recycling system for additional removal of acid gases, new duct work and dampers, a recycle system vent line to the main exhaust stack, an induced draft fan, recycle fan, a compressed air line, and interconnecting piping as well as replacement of existing primary heat exchanger bottom plenum, ductwork connecting the primary heat exchanger to secondary heat exchanger, standby heat exchanger bottom plenum, and ductwork connecting the standby incinerator to the primary heat.
Ocean County		\$ 670,872	B/C	S344080-03,07,08 - 080-03: Installation of one manufactured treatment device (MTD) at the site of an existing outfall within the Township of Berkeley at the Berkeley Shores waterfront residential development. 080-07: Purchase of Portable Water Treatment System motor vehicle. 080-08: Purchase of a Camera Pipeline Inspection Truck System motor vehicle. The equipment will be used to inspect the storm water conveyance throughout Ocean County and the Barnegat Bay Watershed.
Ocean Township (Ocean County)	\$ 139,500		A/C	S340112-05 - Purchase two trailer mounted and towable generators to be used as a backup source at various wastewater pumping stations. One of the generators will be used and stored at Dock Avenue pump station and the other stored at Municipal Complex and used for the remaining wastewater pump stations. Also, the reconfiguration of electrical service connections for the emergency generator receptacle at the Bayshore Pumping Station will be included. The receptacle will be raised above the 500 year flood elevation.

Ocean Township (Ocean County)		\$ 4,186,166	B/C	S340112-06 - Replace existing ACP sewer mains in the Skipper's Cove development and in the Pebble Beach development. In the Skipper's Cove development, approximately 5,700 LF of existing 8-inch diameter ACP sewer mains will be replaced with 8-inch diameter PVC pipe. Approximately 2,100 LF of existing 10-inch diameter ACP sewer main on 11th Street will be replaced with 10-inch diameter PVC and approximately 900 LF of existing 8-inch diameter ACP sewer main on East Seneca Boulevard will be replaced with 8-inch diameter PVC. In addition, replacement of approximately 1,914 LF of existing storm water infrastructure, to replace deteriorating pipes, and the construction of approximately 121 LF of new storm water infrastructure, to provide drainage to areas experiencing localized flooding during storm events.
Ocean Township (Ocean County)	\$ 564,296	\$ 564,296	B/D	W1520001-500 - Purchase and install of a new emergency generator at the Municipal Complex Water Treatment Plant, Pebble Beach Water Treatment Plant, and Well No. 5.
Ocean Township (Ocean County)		\$ 2,326,482	B/D	W1520001-006 - Replace an existing ACP water mains in the Skipper's Cove development and on East Seneca Boulevard and 11th Street in the Pebble Beach development. In the Skipper's Cove development, approximately 5,770 LF of existing 4-inch diameter ACP water mains will be replaced with 6-inch diameter polyethylene encased cement lined ductile iron pipe (DIP). Water main replacement will occur on Peg Leg Way, Long John Silver Way, One Eye Way, Davy Jones Way, Cutlass Way, Jolly Roger Way, Hawkins Way, and Cove Drive. On East Seneca Boulevard and 11th Street in the Pebble Beach development, approximately 2,870 LF of existing 4-inch diameter ACP water mains will be replaced with 8-inch diameter DIP to improve system pressure and reliability.
Old Bridge Municipal Utilities Authority		\$ 1,376,416	B/D	W1209002-500 - Construct an emergency fuel storage facility at the Authority's Maintenance garage located off of County Route 516. The project includes two 10,000 gallon fuel storage tanks, fuel pumps, and a shed for housing monitoring and safety equipment.
Oradell, Borough of	\$ 1,555,942	\$ 1,555,942	B/C	S340835-03 - The Borough continues a multi-phased approach of televising, sanitary sewer replacement, and sanitary sewer lining. Phase 3 improvements will consist of the rehabilitation required as a result of the completed video inspection. Approximately 1,550 linear feet of existing 8-inch diameter asbestos concrete pipe and existing 8-inch vitrified clay pipe will be replaced with PVC and ductile iron (DIP) piping. The project also includes the relining of 11,960 linear feet of existing 8-inch sewer pipe and chemical root control treatment of 13,300 linear feet of 8-inch sewer pipe.
Pequannock River Basin Regional Sewerage Authority		\$ 1,633,568	B/C	S340459-05 - Repair several sewer lines including 1) replacement of approximately, 550' of 8", 10" and 12" PVC and 55' of 10" steel gravity sewer and 2) relining 4,600'of 8", 10" and 12" gravity sewers.
Pequannock, Lincoln Park and Fairfield Sewerage Authority		\$ 26,910,788	B/C	S340880-04,05 - Repair and upgrade several pieces of equipment at the treatment plant located in Lincoln Park including demolition of the grit building superstructure and grit removal equipment, removal of the existing generator and underground fuel tank. Replace channel covers and control gates between the former Grit Building and the First

				Stage Aeration Basins. Construction of a new head works building containing new wastewater screens, with washer compactors, new grit washer classifiers, and an odor control system. Tie existing force mains from the Central, Southside and Plant Sewer Pumping Stations and grit channel into the new building. All building openings below the 500 year flood elevation will be protected by flood barriers.
Perth Amboy City	\$ 567,697		A/C	S340435-12 - Cleaning and lining of various sewer main made from bricks and clay pipe in the sanitary sewer system. All manholes within the length of the sewer main will be lined and rehabilitated, various catch basins which are in poor condition and deteriorating will be placed, and any sidewalks, curbs or roadways disturbed during the work will be replaced.
Phillipsburg, Town of		\$ 1,490,568	B/C	S340874-07 - Upgrade of sewage treatment plant including the installation of an ultraviolet disinfection system to replace the chlorination system, and replacement of aeration diffusers and ancillary electrical upgrades.
Rahway City	\$ 12,137,592		A/D	W2013001-007 - Improvements to Rahway City's water treatment plant including the replacement of existing gravity filters with a membrane treatment system. The system requires a new treatment building, four skids of pressurized membranes, partial demolition of onsite residual holding pond, a SCADA system upgrade and all associated site work.
Rahway City	\$ 2,442,835		A/D	W2013001-008 - Construct an interconnection with Middlesex Water Company with ductile iron pipe terminating at the water treatment plant on Valley Road. The interconnection will commence at the existing 20 inch diameter water main located at a meter pit at the intersection of West Lake and Jensen Avenues, will continue east on West Lake Avenue to the intersection of Madison Avenue, to Old Lake Avenue northeast to Maple Avenue and back to Madison Avenue, north on Madison Avenue across the intersection with Westfield Avenue.
Rahway Valley Regional Sewerage Authority		\$ 2,105,156	B/C	S340547-12 - Demolish and install a digester gas treatment system, modify chemical feed system and other associated work. The new digester gas cleaning system consists of a digester gas treatment equipment skid, four interior 30-inch diameter, 8-foot tall carbon vessels to remove siloxane, two exterior 7-foot diameter, 8-foot tall, carbon vessels to remove hydrogen sulfide, and an internal repurposed chemical feed system to clean the digester gas that is used to fuel process boilers and the Cogeneration Engines at the Rahway Valley Sewerage Authority wastewater treatment plant. Construct high density polyethylene pipes for the digester gas system. Demolish an existing odor control scrubber, skid, high pressure siloxane vessels and associated appurtenances.
Raritan Township Municipal Utilities Authority		\$ 1,045,732	B/C	S340485-10 - Update the existing water, electric, telephone services and emergency lighting at the Woodside Farms Pump Station including replacement of the original onsite generator and the submersible pumps. The existing wet well will be rehabilitated and fitted with a pump guide rail system/lifting chain and will house the new submersible pumps and a new sewage grinder for the combination of screened material. Construction of a new below grade valve chamber to house the new check valves, gate valves, emergency by-pass piping and pressure gauges along the force main. Remove and replace approximately 46 linear feet of the 4-inch diameter ductile iron force main in order to connect the new valve and meter chambers to the existing ductile iron force main.

					Construct a single story masonry building to house the generator, controls and alarm equipment. Install new fence as a security measure. Refurbish the existing paved driveway.
Roosevelt Borough	\$	558,000		A/D	W1341001-004 - Improvements to the drinking water treatment plant including replacement of the filter tanks and piping and replacement of the aerator and sedimentation pump.
South Monmouth Regional Sewerage Authority	\$	1,532,224		A/C	S340377-04 - Mechanical, structural and electrical improvements to multiple existing sanitary sewer pump stations that were damaged by Superstorm Sandy including replacement and/or relocation of Pitney Ave. Pump Station control building, replacement or mechanical and electrical equipment/emergency generators, pumps, piping and other ancillary equipment, modifications to existing gravity sewer and force main connections and storm proofing.
South Orange, Township of			\$ 475,333	B/C	S340686-07F - The repair/upgrades of secondary treatment and solids handling equipment of the Joint Meeting of Essex and Union Counties wastewater treatment plant. The project consists of three contracts: 1) aeration equipment upgrades; 2) digester #1 cleaning and modifications; and 3) dewatering facilities upgrades.
Stone Harbor, Borough of			\$ 4,492,024	B/C	S340722-05 - Installation of approximately 1,950 linear feet of sanitary sewers and lateral services, approximately 9,700 linear feet of storm drainage pipes, and all associated appurtenances. Three (3) beach outfalls located at 84th, 86th and 88th streets will be removed and the affected areas will be restored.
Stone Harbor, Borough of			\$ 709,185	B/D	W0510001-005A - Replacement of approximately 3,700 LF of 4-inch cement water mains with 8-inch PVC pipe and 200 water services and appurtenances. The proposed water mains will be constructed in the same trenches as the existing mains. Replacements will take place in the following streets: First Avenue from 81st Street to 89th Street, Beach Blocks/Street Ends (First Avenue to the Oceanside bulkheads) from 83rd Street to 89th Street, 82nd Street from Second Avenue to Third Avenue.
Stony Brook Regional Sewerage Authority			\$ 4,599,335	B/C	S340400-07 River Road WWTP: In order to supply back-up power to both the wastewater and sludge processing equipment, while providing resiliency to back-up power at the River Road WWTP, the proposed project involves the installation of a 1,500 kilowatt natural gas emergency generator at the site. In addition, it is proposed to install one 6-inch diameter polyethylene natural gas pipes at the River Road WWTP. The pipes will be installed to convey natural gas from the existing Operations Building to the existing Generator Room in the Chemical Storage and Sludge Pumping Building. There will also be a short section of new electrical duct bank required between the Generator Room and the existing on-site electrical sub-station.
Trenton, City of			\$ 11,289,564	B/D	W1111001-008 - Cleaning and cement mortar lining of approximately 65,100 linear feet of existing 4-inch through 12-inch water mains and replacement of 400 linear feet of 4- inch water main in the Ewington North Area of the Trenton Distribution System. Ewington North Area is located in the Township of Ewing. Also, proposed is the replacement of all inline valves and fittings on the unlined mains as well as fire hydrants within the system. Dead ends will be eliminated by construction of approximately 5,200 linear feet of cement

				lined ductile iron water main extensions to create loops in the
Tuckerton Borough	\$ 1,985,000		A/C	distribution system. S340034-02 - Replacement-in-kind for existing ACP deteriorated sanitary sewer mains, including 127 laterals, cleanouts, and 21 manholes. Street locations proposed for replacement are Marlin Road, Dolphin Road, South Green Street, Parker Road, and Little Egg Harbor Boulevard. In addition, replacement-in-kind of existing 8-inch ACP pipe with PVC pipe will occur in Little Egg Harbor Township at the location of Great Bay Boulevard and North Boom Way. The sewer force main replacement-in-kind between the Borough and Little Egg Harbor will commence beneath the Tuckerton Creek. The replacement of this line will be completed via directional drilling (500 linear feet) and will connect to the sewer service line on Great Bay Boulevard.
Tuckerton Borough	\$ 1,260,000		A/D	W1532002-005 (Nano) - Replacement in kind for existing ACP deteriorated water mains, including water valves and 133 existing water service laterals. The replacement in kind of the water main street locations are Marlin Road, Dolphin Road, South Green Street, Little Egg Harbor Blvd., and Parker Road. Replacement in kind of existing ACP pipe with PVC pipe will occur in Little Egg Harbor Township at Great Bay Boulevard and North Boom Way. Replace and install eight existing old, rusted and leaking fire hydrants.
Tuckerton Borough	\$ 873,652		A/D	W1532002-003/005 - Remove and replace exterior and interior paint systems of the existing standpipe water storage tank. Upgrades include a new ladder cage, ladder gate, roof access hatch, new screens on take overflow pipes and new mechanical photovoltaic mixing system. Paint outside surfaces of three horizontal pressure filters at the water treatment facility located within the same fenced area as water storage tank.
Union, Township of (Union)		\$ 1,747,006	B/C	S340686-07G - Repair and/or upgrade of secondary treatment and solids handling equipment of the Joint Meeting of Essex & Union Counties wastewater treatment plant. The project consists of three contracts: 1) aeration equipment upgrades; 2) digester #1 cleaning and modifications; and 3) dewatering facilities upgrades.
Wanaque Valley Regional Sewerage Authority	\$ 4,072,635		A/C	S340780-04 - Replace generators at wastewater treatment facility and at Haskell Pumping Station. Install mechanical aerators and drives. Other project work include: upgrade three existing influent pumps; replace rotary drum sludge thickener system; replace two non-potable water pumps and drives; replace two dilution water pumps and drives; replace mixers on sludge holding tanks, replace microgreen grid screens and backwash pumps, upgrade the discharge channel ultraviolet disinfection system; install new Motor Control Center; install necessary hardware, equipment and associated electrical work for SCADA system; add odor control system; modify existing grit building silo to accommodate controls for new equipment; install pinch valve; install 15 new electric unit heaters to replace existing hot water heaters; and install ductile iron force main bypass piping.
Warren Twp Sewerage Authority	\$ 3,128,561		A/C	S340964-01 - Repair two existing Stage IV oxidation ditch/final clarifier process tanks and replace existing aged equipment in-kind. One process will be taken out of service to ensure no stoppage of wastewater treatment. While out of service, concrete surfaces will be examined for damage or

				deterioration so repairs can be made. Repaint existing structural steel bridges, bridge decking will be renovated and main bridge walkways extended to improve access within the tanks. Remove and replace two brush aerators and accessories in oxidation ditch section. Install new adjustable weir control assembly to regulate brush aerator submergence and discharge from oxidation ditch. Replace and upgrade all process equipment in final clarifier section. Repair sludge collection system and install new scum collection system and algae system. Electrical and communication and data collection systems will be reconditioned and upgraded within existing generator and operation buildings.
Warren Twp Sewerage Authority	\$ 517,277		A/C	S340964-02 - Convert the Fox Hill Drive West wet pit/dry pit type pump station to a submersible type pump station. Construction of a new valve chamber at the Heather Lane Pump Station to replace the existing defunct valve chamber which will be properly abandoned.
West Orange, Township of		\$ 1,216,645	B/C	S340686-07H - Repair and/or upgrades of secondary treatment and solids handling equipment of the Joint Meeting of Essex & Union Counties wastewater treatment plant. The project consists of three contracts: 1) aeration equipment upgrades; 2) digester #1 cleaning and modifications; and 3) dewatering facilities upgrades.
Western Monmouth Utilities Authority		\$ 5,418,666	B/C	S340128-04 - Construction of wastewater pump station improvements at five pump station locations. These pump stations are designated as the Brunswick Drive Pump Station, Greenwood Road Pump Station, Lloyd Road Pump Station, Prince William Pump Station and the Texas Road Pump Station. These pump stations are located in the Township of Marlboro with the exception of the Texas Road facility with is located in Aberdeen Township.
Wildwood Crest, Borough of	\$ 12,517,912	\$ 12,517,912	B/C	S340719-03,04 - Replace existing deteriorated sanitary sewer mains along New Jersey Avenue and side streets. Replacement of existing sanitary sewer pumping station at Topeka Avenue along New Jersey Avenue and decommissioning the existing sanitary sewer pumping station at Stanton Road. Upgrade storm sewer system by replacing existing siphon system with storm sewer system that will tie directly into outfall location to reduce storm water flood conditions and eliminate flood water overburdening sanitary sewer system causing sanitary sewage spillage and discharge into coastal waters.
Wildwood, City of	\$ 2,500,000	\$ 2,540,000	B/D	W0514001-002 - Replace existing deteriorating and/or undersized concrete water mains, water services, accessory components such as fire hydrants and installation of all associated appurtenances in existing streets with no water mains for looping purposes to address flow, circulation, and water quality issues to improve system efficiency, reliability and integrity while maintaining drinking water quality in compliance with State and Federal Safe Drinking Water Act requirements.
Willingboro Municipal Utilities Authority		\$ 2,100,322	B/C	S340132-06/07 - Replace Water Pollution Control Plant Generator and Windsor Pump Station Generator Replacement. The generator and automatic switch transfer switch are nearing the end of the useful life. The improvements include buying two trailer mounted pumps with engine drives that can be used for resiliency purposes in case of power failure at the plant.

Financing in Fiscal Year 2015:		\$ 114,974,687	\$ 188,952,601	Total Financing in State Fiscal Year 2015: \$ 291,473,586	
Financing in SFY2015 Financing Program:	\$-	\$ 149,300,541	\$ 188,952,601	Total Financing for the SFY 2015 Financing Program: \$ 292,031,586	
Winslow, Township of			\$ 741,887	B/C	S340895-09 - Replacement of the dialer telemetry system, which monitors existing sanitary sewer system pumping stations (SSPS). A computerized Supervisory Control and Data Acquisition (SCADA) system capable of providing specific alarms of malfunction will be installed at all nineteen of the Township's existing SSPS. The project will provide all electrical and control equipment, antennas, and any and all appurtenances and incidental items necessary for the installation of the new SSPS SCADA system. The installation of the SCADA control equipment will occur within existing control panels within existing SSPS structures. Construction of new antennas for the SCADA system will occur on the previously disturbed SSPS sites adjacent to the existing buildings and will entail excavation for a foundation for the system antenna.
Willingboro Municipal Utilities Authority			\$ 1,242,243	B/D	W0338001-500A/B - Electrical upgrades to wells 9, 10 and 11 and Well No. 6 Water Treatment Plant Electrical Upgrades. Install natural gas emergency generators at Wells No. 9, 10 and 11 due to frequent breakdowns in the electrical supply and distribution equipment. Replace the obsolete electrical supply and distribution equipment and install a natural gas emergency generator at Well No. 6 located on Medallion Lane near the South Branch of Mill Creek.

\* This table summarizes projects funded in SFY2015 (July 1, 2014 - June 30, 2015) as well as projects funded in the SFY2015 Financing Program (Projects receiving short-term loans pursuant to the terms of SFY2015 financing program between January 2015 and June 30, 2014). SFY2015 Financing Program projects that closed prior to July 1, 2015, are identified with an asterisk.

#### Appendix I

#### Statewide Assistance Infrastructure Loan Program (Disaster Relief Emergency Financing Program) Project Eligibility List

Sponsor	Project No.	Summary	Est. Amount
Bayshore Regional Sewer Authority	S340697-06	Permanent restoration and mitigation of the existing Blower Building No. 1 and existing Blower Building No. 2 at the Bayshore Regional Sewerage Authority's (BRSA) Water Pollution Control Plant as well as the permanent restoration and mitigation of the treatment plant's power distribution system.	\$10,698,422
Bergen County Utilities Authority	S340386-14	Restoration and mitigation measures of plant-wide treatment components as a result of Superstorm Sandy.	\$18,080,800
Bergen County Utilities Authority	S340386-15	Restoration and mitigation measures for the plant-wide anaerobic digesters, switch gear, substation, generators and co-generation components as a result of Superstorm Sandy.	\$38,560,900
Bergen County Utilities Authority	S340386-16	Restoration of plant-wide treatment components as a result of Superstorm Sandy.	\$49,510,600
Bergen County Utilities Authority	S340386-18	Restoration and mitigation of metering station and pump station associated with the collection systems as a result of Superstorm Sandy.	\$2,326,000
Highlands Borough	S340901-03	5340901-03 Proposed improvements include construction of a new stormwater pump station in Jones Creek, replacement of the existing outfall from the Valley Street Pump Station, the replacement/upgrade of portions of the existing stormwater infrastructure and the installation of additional drainage infrastructure in various portions of the Borough.	
Kearny Municipal Utilities Authority	S340259-07	Project is for the Kearny Point & Harrison Avenue Pump Stations owned by Kearny MUA and includes repairs to the facilities due to the damages incurred during Superstorm Sandy, provide mitigation measures to increase the resiliency of the pump station for the future and replace some of the equipment that are at the end of their useful life.	\$6,441,376
Middlesex County Municipal Utilities Authority	Utilities for mitigation and restoration purposes at the Sayreville		\$88,930,000
Middlesex County Municipal Utilities Authority	S340699-13	Project's scope of work includes the restoration of the MCUA's Edison Pump Station process equipment, controls, power distribution equipment, building contents, and building elements that were damaged by the Hurricane Sandy event; the replacement of an existing temporary	\$32,231,847

		bypass pumping system with the installation of a	
		permanent bypass pumping system with the installation of a permanent bypass pumping system capable of handling 50-MGD wastewater flows; and the construction of flood hazard mitigation measures including flood-proofing of the Pump Station buildings & northwest tunnel access shaft to the 100-year flood elevation.	
Passaic Valley Sewerage Commission	S340689-25	Rehabilitation of the PVSC Administration Building which was flood damaged due to Superstorm Sandy.	\$9,840,000
Passaic Valley Sewerage Commission	S340689-30	Plant Sump Pump Relocation and Generator Provisions. In order to ensure that the sump pumps and dewatering pumps located throughout the utility tunnels, galleries and basements at the PVSC Wastewater Treatment Plant will be capable of continued operation should flooding conditions occur again (as they did with Superstorm Sandy), this project proposes to provide a stand-by power electrical system setup where a roll-in stand-by generator system (brought to certain locations) can be tied into temporary stand-by power electrical distribution to power sump pumps and de-watering pumps located in tunnels, basements, and galleries throughout the PVSC facility. The stand-by generator systems' equipment (generators, automatic transfer switches, electrical panel boards, controls, etc.) will be located above elevation 13 in order to install them above the flood plain. To accomplish this, electrical equipment will be located outside of building walls or indoor electrical room at or above elevation 13.	\$2,102,080
Passaic Valley Sewerage Commission	S340689-33	Plant-wide Replacement of Electrical Cables and Utility Tunnel Bulkheads. Furnish all labor, materials and equipment and other facilities required to segment the utility tunnel system by the installation of watertight doors in bulkhead walls at various locations within the tunnel and to install watertight doors at access locations to process areas. The scope also includes HVAC work to provide ventilation to the segmented areas and associated electrical and above grade site work.	\$49,618,000
Passaic Valley Sewerage Commission	S340689-37	Sub "M" Replacement	\$10,501,600
Passaic Valley Sewerage Commission	S340689-40	Plant wide Replacement & Relocation of Electrical Switchgear & MCC's	\$122,842,891
Perth Amboy City	S340435-11	The replacement of 3 existing pumps with dry pit submersible pumps, relocate essential electrical equipment, protect bar screens/wet well room from external flood waters and sewer system surcharging, install flood walls to protect boiler system and stand-by generator to reduce flood damage risk and vulnerability and enhance the resiliency to a future natural disaster.	\$1,466,549
No. of Projects: 15		Total Estimated Cost:	\$449,137,265

### **Trust Meeting Dates**

January 14, 2016

February 11, 2016

March 10, 2016

April 14, 2016

May 12, 2016

June 9, 2016

July 14, 2016

August 11, 2016

September 8, 2016

October 13, 2016

November 10, 2016

December 8, 2016

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