

NEW JERSEY ENVIRONMENTAL INFRASTRUCTURE FINANCING PROGRAM

**STATE FISCAL YEAR 2018
PRIORITY SYSTEM AND
PROJECT PRIORITY LIST**

**STATE FISCAL YEAR 2017
SECOND AMENDED
PROJECT PRIORITY LIST**

**DISASTER RELIEF EMERGENCY
FINANCING PROGRAM REPORT
AND PROJECT ELIGIBILITY LIST**

Submitted to the State Legislature by

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

JANUARY 2017

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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

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New Jersey
Environmental
Infrastructure Trust



New Jersey
Department of
Environmental
Protection

January 15, 2017

TO: Honorable Members of the New Jersey State Legislature

FROM: Bob Martin, *Commissioner, New Jersey Department of Environmental Protection*,
Robert A. Briant, Jr., *Vice-Chairman, New Jersey Environmental Infrastructure Trust*

SUBJECT: State Fiscal Year 2018 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 ranking system and funding policies (priority system) for projects to be funded in the State Fiscal Year (SFY) 2018 New Jersey Environmental Infrastructure Financing Program ("NJEIFP" or "Financing Program");
- (ii) The initial SFY2018 project priority list;
- (iii) The second supplemental SFY2017 project priority list;
- (iv) A comprehensive report on projects funded in the SFY2016 Financing Program;
- (v) The Disaster Relief Emergency Financing Program (Statewide Assistance Infrastructure Loan Program, or SAIL) project priority list; and
- (vi) A comprehensive report on SAIL funded projects in the SFY2016 Financing Program.

Background

Through the Financing Program, the DEP and the Trust provide monies to Local Government Units and water systems to ensure that the State's water infrastructure, which is critical in protecting public health, water quality, and the State's natural resources as well as supporting economic growth, is funded and properly constructed to State and Federal standards. For the past 30 years, the DEP and Trust have leveraged State and Federal funds with publicly issued tax-exempt bonds maximizing the number of projects funded simultaneously focusing on both cost and operational efficiencies. To date:

- The NJEIFP has issued over **\$6.6 billion** in low-interest loans;
- New Jersey's ratepayers have saved more than **\$2.3 billion** in interest costs assuming independent financing at a AAA market rate as a result of NJEITP's Principal Forgiveness grants and 0% interest rate loans; and
- The Financing Program's total loan spending has generated approximately 79,000 direct construction-related jobs throughout the State.¹

¹ Based on the US GSA's estimate of 20 jobs per \$1 million prior to 2012 and 12 jobs per \$1 million thereafter.

The January Report identifies a pool for the SFY2018 Financing Program consisting of 372 projects with an estimated value of \$3.43 billion, continuing to demonstrate the Financing Program's importance and commitment to meeting the State's environmental infrastructure needs.

Projects eligible for funding through the Financing Program involve a wide variety of drinking water, wastewater and stormwater systems. In the past, the Financing Program typically funded construction of 30% – 50% of the projects on the Project Priority List in any given Financing Year. It is anticipated that SFY2018 will have a higher proportion of projects on the priority list proceeding to funding during the fiscal year due to positive impacts from changes in the Trust's enabling legislation in 2016 that provide greater flexibility in financing and greater transparency in reporting. The Trust and Department have continued to develop new initiatives to increase the number of environmental projects funded each year; specifically, the installation of enterprise software for more efficient functionality and project tracking, more focused follow-up with non-responsive Program applicants by DEP staff, the development of application review metrics, and the procurement of consulting engineers to supplement the reviews performed by the DEP.

Through changes to legislation, the Trust and Department have also implemented measures to simplify the application process; specifically, introducing a rolling application process, which allows Program borrowers to apply for project financing anytime throughout the year, and improvements to the multi-year short-term construction loan financing program. The Trust Enabling Act now authorizes the Trust to amend the short-term loan priority list multiple times throughout the fiscal year to fund projects approved pursuant to the rolling application process. The Enabling Act also now authorizes the DEP and the Trust to seek legislative appropriations to issue long-term project loans twice each fiscal year. Going forward, the Trust will limit its appropriations requests to long-term financing to projects which are nearing construction completion as opposed to requesting approval for all projects under application review. This will significantly improve the percentage of appropriated projects receiving long-term funding in a given year. *See:*

- ***Appendix A for the Clean Water projects identified on the SFY2018 Clean Water Interim Financing Program Project Priority List (SFY2018 CW Priority List), and the Second Amended SFY2017 Clean Water Interim Financing Program Project Priority List (SFY2017 CW Priority List),***
- ***Appendix B for the Drinking Water projects identified on the SFY2018 Drinking Water Interim Financing Program Project Priority Lists (SFY2018 DW Project Priority List) and, the Second Amended SFY2017 Drinking Water Interim Financing Program Project Priority Lists (SFY2017 DW Project Priority List).***

SFY2018 Financing Program

The Financing Program is now funding most projects through its short-term loan program which currently offers zero percent financing. These favorable loan terms allow borrowers to begin work when their projects are ready with the most efficient costs of financing.

Upon transitioning to long-term financing, the majority of these projects will receive long-term loans funded 75% with DEP funds at 0% interest and 25% with Trust AAA market rate funds, consistent with recent financing programs. On average, participants save over \$400,000 in interest costs per \$1 million lent over 30 years compared to independent financing (assuming they were to borrow their funds at the

Trust's AAA rate). *Priority projects will receive additional incentives, including principal forgiveness and 100% interest free financing, as described below.*

SFY2018 - Project Priority System

Base SRF Program - The Clean Water Base SRF Program includes specific set-asides for; **(i) Barnegat Bay Watershed** projects (approximately \$6 million of Principal Forgiveness funds), **(ii) Combined Sewer Overflow Abatement (CSO)** projects, **(iii) Brownfield Reserve** (up to \$60 million of Financing Program loans), **(iv) Coastal Community Water Quality Restoration** (\$5.4 million in principal forgiveness funds), and **(v) Asset Management for Small Systems**.

The Drinking Water Base SRF Program includes specific set-asides for; **(i) NANO - for Small-system-DW** projects, i.e.) serving populations not greater than 10,000 (up to \$4 million of Principal Forgiveness funds), **(ii) Replacement of Lead Service Line Program** - (up to \$30 million in Principal Forgiveness funds), **(iii) Small Water System Engineering Program** - (up to \$2.8 million in Principal Forgiveness funds for reimbursement of Engineering costs), and **(iv) Asset Management** - for Small Systems.

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 financing with loans consisting of **(i)** 56% funds at 0% interest rate and 19% Principal Forgiveness from the DEP, and **(ii)** 25% Trust funds from the Trust at AAA interest rate. This Financing Program offering began in SFY2015.

DEP & Trust-Only Loans - Borrowers receiving a CSO loan in excess of \$10 million 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.

SFY2018 – Highlights

In SFY2018, the Financing Program will continue many features introduced in recent years and begin to address the pressing need for abating lead in water systems of publicly owned facilities. Highlights of the program include:

- **Short-Term Funding Readily Available** – Rolling application and award process for short-term loans throughout the year regardless of the time of their application or need;
- **Attractive borrowing terms and rates** – the Financing Program is offering up to 100% interest free short-term financing during construction of the project;
- **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;
- **More Frequent Bond Issuance** - The Trust now issues long-term bonds multiple times per year allowing participants to regularly roll short-term construction loans into long-term financing;
- **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;
- **Supplemental Assistance** - The Department employs outside engineering services when conditions exceed the resources of the Department;
- **Asset Management** - The Financing 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;

Lead Abatement - The Financing Program will provide loans for the abatement of lead in the water systems of public community and non-profit, non-community water systems. Up to approximately \$33.33 million will be made available for an NJEIFP Lead Service Line Replacement Program for communities having a median household income less than the median household income for the county in which they are located. Financing is being offered for “complete projects”, which means projects targeted to alleviate lead in drinking water through abatement of lead in all affected system components: the public water system maintained by the service provider, the portion of the service line (lateral) owned by the property owner, internal plumbing, and delivery fixtures (e.g., water fountains). Note: given the fact that funding sources and funding terms vary by system component, and the system components to be improved vary among projects, the funding package will vary somewhat among projects. Water systems serving communities having a median household income less than the median household income for the county in which they are located are eligible for 90% principal forgiveness and 10% DEP interest free loan for the replacement of lead pipes and lead components, including mains, and service lines, are eligible for funding terms with a \$1 million cap per project. Eligible borrowers must be able to document the presence of lead pipes and components and provide documentation through historic records that the lines to be replaced are lead.

SFY2016 – ReCap

64 Loans / 73 Projects / \$309.9 million

Long-Term Loans - A total of thirty-six (36) borrowers received NJEIFP long-term financing for project costs totaling \$146,065,704. The majority of loans were issued at interest rates equivalent to 25% of the Trust’s AAA/Aaa market rate.

IFP Loans – Thirty-two (32) borrowers received short-term financing totaling \$107,523,105. Of these, eight (8) borrowers totaling \$25,571,128 received long-term financing by June 30, 2016.

SAIL - The Program issued \$56.35 million in four SAIL Disaster Relief loans. With the oversight assistance offered by the Program, requisitions have been reimbursed by FEMA at the full FEMA rate of 90% of their eligible expenses, on average, within 22 days - an enviable record.

Refundings – The Trust continued to take advantage of historically low interest rates in both November of 2015 and May of 2016 to refund four outstanding NJEIT bond issues saving one hundred seventy-one (171) communities in the State an estimated \$42 million in lower annual debt service payments over the life of the outstanding bonds.

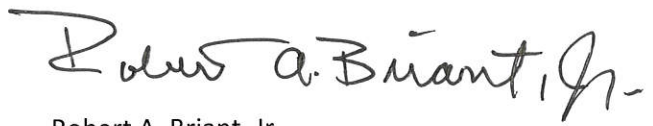
Within the next few months the Trust will present the Legislature with the May Report, which sets forth the Project Eligibility List of those projects eligible for long-term funding in SFY2018 and the plan by which those projects participating in the FY2018 Financing and SAIL Programs will be funded.

We look forward to meeting with you 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 SFY2018 Project Priority List, the NJEIFP's Second Amended SFY2017 Project Priority List, the SFY2018 Disaster Relief Emergency Financing Program Priority List, and any of the Financing Program's initiatives contained within this Report.

Thank you for your time and continued support.



Bob Martin
Commissioner,
NJ Department of Environmental Protection



Robert A. Briant, Jr.

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Vice-Chairman,
NJ Environmental Infrastructure Trust

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JANUARY REPORT

FOR STATE FISCAL YEAR 2018

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 administer the New Jersey Environmental Infrastructure Financing Program (“NJEIFP” or “Financing Program”) to provide short and long-term loans for the planning and construction of environmental infrastructure projects.

This Report summarizes the method employed to prioritize projects and establish project rankings for the State Fiscal Year (SFY), beginning July 1, 2017 (SFY2018). This Report includes the NJEIFP’s initial SFY2018 Interim Financing Program Project Priority List (Project Priority List) identifying projects to be considered for funding in SFY2018 and a second Supplemental SFY2017 Project Priority List to amend and the list of 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, SFY2016, 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 SFY2018 under [H₂LOans](#).

This Report also includes a list of project applications under review for short-term loans pursuant to the Disaster Relief Emergency Financing Program (SAIL) for projects to improve resiliency in future natural disasters; and a comprehensive report on SAIL funded projects financed in SFY2016.

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 December of 2016, the DEP issued the proposed CW Plan and DW Plan for projects to be financed in SFY2018 pursuant to its obligations under the CWA and SDWA. Those publications are largely summarized in this January Report.

GOALS

The main objectives of the NJEIFP 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 much lower cost than program participants could achieve individually thereby passing substantial savings on to New Jersey taxpayers and rate payers; and
- Increase 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.

SFY2018 NJEIFP

NEW INITIATIVES

The NJEIFP is implementing a number of recent initiatives for SFY2018 as a result of recent amendments to the Trust's Enabling Act.

- Rolling application and funding process:** Legislative amendments to the Trust's enabling act permit changes to the IFP list to be submitted to the legislature three times during the fiscal year enabling the Program to more readily offer borrowers short-term loans more in line with their time frames, particularly when their projects are ready for construction. Now, the IFP list can be updated periodically as project applications are received and ranked by the Department as generally meeting SRF parameters. This change is an important component of a rolling application process improving responsiveness to individual borrowers' construction schedules as opposed to mandating compliance with annual financing or legislative deadlines.
- Long-Term Funding Opportunities Twice in Fiscal Year:** The Trust's enabling act was recently amended to authorize the DEP and the Trust to secure a second legislative appropriation of projects for long-term financing during a fiscal year. This change enables the DEP and Trust to seek appropriations, for projects whose construction is substantially complete, in the spring and again in the fall. Going forward, the requests for appropriations will be limited to projects at or near completion of construction as opposed to seeking appropriations for all projects under application review. This will significantly improve the percentage of appropriated projects receiving long-term funding in a given year and increase the clarity and transparency of project status.

- iii. **Fiscal Sustainability Plan (Asset Management):** H.R. 3080, the Water Resources Reform and Development Act of 2014 (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 for the funded project. An FSP requires a Borrower to: 1) 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, and 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 Asset Management Program that is intended to increase the responsible management of drinking water and wastewater systems by assisting such 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. The Asset Management Program will include AMP compliance standards as well as a corresponding implementation time table, the Department and/or Trust retaining 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 their AMP. The Department has launched an asset management webpage (www.nj.gov/dep/assetmanagement/) that sets forth information pertaining to Asset Management, the State Asset Management Program, publications, and financing. It also includes resources such as EPA's interpretative guidance on FSP's and the DEP's Asset Management Guidance & Best Practices document. <http://www.nj.gov/dep/watersupply/pdf/guidance-amp.pdf>.

- iv. **Lead Abatement:** The existence of lead service lines in aging drinking water infrastructure poses potential risk to public health which can be significantly reduced through the replacement of lead service lines. The NJEIFP offers funding for the replacement of lead pipes and lead components, including mains and service lines. Up to \$33.33 million is available for the Lead Service Line Replacement Program for communities having a median household income less than the median household income for the county in which they are located. Lead service line replacement is eligible for financing at 90% principal forgiveness and the remaining 10% loan at zero interest. There is a \$1 million cap per project. The following criteria must be met in order for the project to be eligible:
- Be able to document the presence of lead pipes and components
 - Provide documentation through historic records that the lines to be replaced are lead. Acceptable records include information on the age of the houses and the high probability of lead lines and components being present, line installation records, etc.

- Partial lead line replacements are not allowable.
- v. **Continued Transition to Short-Term Loans for Project Planning and Construction:** In SFY2015, the Financing Program commenced its multi-year short-term loan program wherein short-term loans are issued for planning and construction, with maturity terms not to exceed three full fiscal years. Such loans are then refunded and converted into long-term loans when the projects are at or near construction completion. Sizing long-term loans based on actual construction cost as opposed to engineering estimates provides greater certainty as to costs and significantly reduces the incidence of de-obligation of unexpended capital or supplemental loans for project overruns, actions which used to require additional work and costs on behalf of the Borrowers and their consultants. The EIT will be utilizing commercial paper or similar private capital as a potential source of funds for short-term loans to ensure sufficient capital is available for short-term loans. Short-term loans are issued at interest rates between 0% and 25% of the market rate, depending upon the funding source, which directly reduces the cost of borrowing. The NJEIFP anticipates conversion of certain short-term construction loans semi-annually due to the growth of the construction loan program and as provided for in the statutory amendments. Eligibility for long-term financing includes legislative appropriation of the project, and satisfaction of the Term Financing Criteria established by the Trust requiring a certain percentage of construction completion.
 - vi. **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 with 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. 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 has positioned the Program to provide immediate assistance to adversely impacted environmental infrastructure systems in the next disaster.
 - vii. **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

The **NJEIFP** consists of two loan formats, short-term and long-term loans. Together, they provide funding for all aspects, phases and components of designing and building environmental infrastructure projects. NJEIFP Loans are issued, upon approval of applicable NJEIFP program requirements, 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 (Environmental Infrastructure Project).

Each loan is funded from one or more of the following sources: (1) federal appropriation of 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 for up to 3 full fiscal years to finance the cost of (i) environmental planning and engineering design activities incurred, and (ii) project construction upon application approval. Short-Term Loans for Combined Sewer Overflow Long-Term Control Plans, recognized by the NJEIFP, offer terms of up to ten (10) years. Borrowers are able to include the 1% DEP loan origination fee (50% of the total DEP loan origination fee) 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 terms of the financing, including Principal Forgiveness, are established at the time of the Short-Term loan, they 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 also available under the SAIL Program for environmental infrastructure projects for the repair to systems adversely impacted during natural disasters and/or to improve the resiliency of systems. In addition, Short-Term Loans are available for 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.

In an effort to reduce transaction costs, each project's Short-Term loan will be for the entire estimated cost of the project, but the commitment of funds is limited to the approved planning and design costs. The agreement is then amended to reflect subsequently approved costs, e.g., construction contract at the time of authorization to award. Short-Term loans are typically for terms of up to three full fiscal years. Note, the Borrower is not obligated to repay principal or interest (if any) during the term of the short-term loans. Instead, the Borrower's long-term loan is utilized to "payoff" the Short-Term Loan, which includes any accrued interest and fees. These totals are rolled into the Borrower's long-term Financing Program loan.

Short-Term Loans for Combined Sewer Overflow Long-Term Control Plans recognized by the NJEIFP offer terms of up to ten (10) years and also may be issued at interest rates as low as 0% and up to 25% of the market rate. All Short-Term loans are funded with DEP funds. Loans are currently 100% interest free, provided DEP funds are available. If the Trust uses private funds to finance a portion of the short-term loans, the Program will pass the cost of those funds through to Program borrowers. *The SFY2018 Interim Financing Program Clean Water Project Priority List and the SFY2018 Interim Financing Program Drinking*

Water Project Priority List, set forth in Appendices A and B respectively, identify environmental infrastructure projects eligible for short-term financing pursuant to N.J.S.A. 58:11B-9.

LONG-TERM FINANCING

Long-Term Loans are issued upon completion of a percentage of project construction (demonstrated through submitted requisitions). Due to the enhancements to the Short-Term Financing Program, Long-Term loans are largely mechanisms to refinance previously issued short-term loans for construction and 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, 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. Consistent with local finance law, Borrowers having short-term loans in excess of three years commence principal repayments in year 3, in an amount not less than 1/30th of the loan amount annually.

SPECIFIC PROGRAMS

- i. **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 (CW & DW);
- ii. **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. (CW & DW);
- iii. **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 SFY2017. (CW & DW);
- iv. **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 for these projects receive 50% principal forgiveness, 25% DEP interest free loan and 25% NJEIT AAA market rate financing. (CW only);
- v. **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

up to \$2 million. The remaining loan is financed at 25% DEP interest free and 25% NJEIT market rate financing. (CW only);

- vi. **Small Drinking Water Systems (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 qualify for this program offering a 50% principal forgiveness loan. These loans are capped at \$1 million and feature a Trust to Fund loan ratio as follows: up to 50% (\$500,000) of eligible project costs are subject to principal forgiveness with monies provided by the DEP; 25% of funds are provided by the DEP at 0% interest and 25% of funds are provided by the Trust at the Trust's AAA-rated market rate. Any project costs in excess of \$1,000,000 may be loaned under the terms of the base financing program (25% market rate).

Small water system loans are available to larger, more viable water systems, which are willing to take ownership of small water systems in the calendar year 2016 or later, and make the corresponding, required capital improvements. Therefore, the larger water systems would be eligible for the same enhanced loan terms as the otherwise eligible small water system. (DW only);

- vii. **Lead Abatement Projects:** Up to \$30 million is available for Lead Service Line Replacement Program for communities having a median household income less than the median household income for the county in which they are located. This set aside will be offered as principal forgiveness to finance the cost of replacement of lead pipes and lead components in these communities with terms of 90% principal forgiveness and 10% DEP interest free loans up to a \$1 million cap per project. (DW only);
- viii. **Asset Management for Small Systems:** NJEIFP provides 100% principal forgiveness to small drinking water and wastewater systems, those that serve 10,000 or fewer people, to develop and implement asset management programs. Loans are capped at \$100,000 per applicant. A capital improvement project is expected from the creation of the asset management program. (DW only);
- ix. **Small Water System Engineering Program:** DEP is partnering with the Community Engineering Corps to identify water systems that serve fewer than 500 persons and need assistance to come into compliance. \$2.8 million is being made available for this program. 100% principal forgiveness loans will be available to those systems that are assisted by the Community Engineering Corps with a cap of \$500,000 per project. (DW only).

DISASTER RELIEF EMERGENCY FINANCING PROGRAM (SAIL)

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, generally in advance of federal disaster reimbursement grants, 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 full fiscal years. Currently SAIL Loans are funded at 0% interest rate.

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 Priority List for funding in the forthcoming State Fiscal Year submitted to the Legislature in a form provided by the Commissioner of the DEP and within 3 fiscal years of the declared disaster;
- 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, ineligible/unreimbursed amounts are the responsibility of the applicant. Qualifying SRF amounts will be financed by NJEIFP and paid for by the SAIL program Borrower. Such costs will typically be incorporated into the long-term financing program package.

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 who would otherwise be seeking reimbursement from FEMA 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 as well as the probability of non-compliance with FEMA's requirements.

The SFY2018 Disaster Relief Emergency Financing Program Project Priority List set forth in Appendix A identifies environmental infrastructure projects eligible for SAIL financing pursuant to N.J.S.A. 58:11B-9.5. Projects having received SAIL financing are set forth in Appendix C.

ELIGIBLE PROJECTS / BORROWERS

The NJEIFP 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 public water systems (entities possessing a permit for the delivery of Safe Drinking Water).

Projects eligible for Clean Water funding include wastewater management, storm water management and non-point source pollution control projects, landfill closures, open space land acquisition, brownfield remediation and well sealing.

Projects eligible for Drinking Water funds include are utilized for rehabilitation or development of sources to replace contaminated drinking 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 public water systems. Applicants must demonstrate an ability to meet repayment obligations and satisfy the Program's credit worthiness standards, which requires an investment grade credit rating or a suitable credit enhancement with exceptions provided for very small loans. 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, Program participants realize significant cost-saving measures through the following program features:

DOLLAR SAVINGS

- Funds Provided Interest Free during Construction – Currently, during the short-term loan period, Borrowers pay no interest on funds utilized;
- Interest Cost Savings – In SFY2017, Program borrowers receive 75% of their long-term financing from the DEP at 0% and the remaining 25% of funds from the Trust at the Trust's AAA market rate, creating a "blended" loan rate of 25% of the AAA market rate. This lower cost of funds results in interest savings of as much as 40% of the total loan amount over 30 years when compared to the cost of these borrowers financing their projects on their own.
- 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 Program'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 flat 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;

- 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 relieving Borrowers from utilizing cash-on-hand to pay contractors and vendors up front;
- Capitalized interest –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 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.

PROJECTS

LONG-TERM FINANCING

Bond Pool Projects: A total of **thirty-six (36)** borrowers representing **forty-five (45)** clean water and drinking water projects received long-term NJEIFP financing in the amount of **\$146,065,704** in SFY2016. These projects were funded as part of bond pools 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. Three of the 36 borrowers received supplemental loans in the amount of \$2,449,364 for cost overruns. Each supplemental loan was issued at a funding ratio consistent with that of the original loan.

IFP LOAN PROJECTS

In the SFY2016 Financing Program, thirty-two (32) borrowers representing thirty-four (34) clean water and drinking water projects received IFP loans in the amount of \$107,523,105. Eight of these thirty-two borrowers received long-term financing by June 30, 2016.

SAIL LOANS

The Trust issued **four (4)** disaster emergency SAIL Program loans in SFY2016 to finance Superstorm Sandy-related rebuild and resiliency projects in an amount equal to **\$56,352,182**:

- **South Monmouth Regional Sewerage Authority** for improvements to the Belmar Pump Station pump station in an amount of \$3,468,842;
- **Kearny MUA** for repairs to the Kearny Point and Harrison Avenue pumping stations in the amount of \$6,441,376;
- **Bayshore Regional Sewage Authority** for restoration and repair work in the treatment plant and collection system in the amount of \$11,233,343; and
- **Middlesex County Utilities Authority** for restoration work on the Edison Pump Station in the amount of \$35,208,623.

By providing construction funds to the above communities, these SAIL loans allowed the undertaking of the physical construction months in advance of when such projects might have otherwise begun, allowing the disaster-impacted system to build resiliency and return to more normal conditions sooner and with less financial strain on the communities.

TOTAL SFY16 PROJECTS

In SFY2016, 72 projects received funding through short-term and/or long-term loans totaling approximately \$309.9 million.

See Appendix G for a Summary of these projects.

BASE SFY2018 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 combined CW and DW Plan for SFY2018 was published on December 14, 2016. This Report, in part, reflects the contents of the proposed CW and DW Plans for both the SFY2018 Base and Sandy Financing Programs.

Sources of funding for Superstorm Sandy projects for FFY2017/SFY2018 will come from the unused portion of FFY2016 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 SFY2017 Program, there is the possibility that not all of the available funds will be utilized by the end of the fiscal year. Therefore, the Department will continue to accept application 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 SFY2017, new application submittals will still be eligible for financing under the Base Loan Program's 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. Based on Sandy DW loan applications received, it appears the availability of Sandy DW loans will be limited in SFY2018.

Consistent with the SFY2017 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

A single priority system is utilized for both the CW-Base SFY2018 and CW-Sandy Financing Programs. However, two separate priority systems are utilized for each the DW-Base SFY2018 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 below.*

The CW Plan and DW Plans priority systems 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. The 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 SFY2018 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 system describes the ranking methodology for eligible drinking water projects. Project ranking within the DW SFY2018 Base NJEIP 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 NJEIP 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 below*.

PROJECT PRIORITY LISTS

Upon receipt of a project sponsor's project information page through H2LOans, the Department makes a determination of project eligibility, ranks the project pursuant to the CWA or SDWA priority system, and places the project in ranked order on a Project Priority List. Identification of a project on a Project Priority List is a prerequisite to NJEIP loan eligibility.²

A Project is then eligible for a short-term loan upon the publication of the Project Priority List with the legislature, the applicant's satisfaction of program application requirements and DEP's approval of a project contract (initially for engineering planning and design and later construction). Upon completion of a percentage of construction (as determined by the program, eventually increasing to 100%), a Project on a Project Priority List will be designated eligible for long-term funding and placed, with other like projects, onto a sub-list referred to as the "Project Eligibility List." Upon enactment of the appropriations law identifying such project for long-term financing, and subsequent long-term loan closing, a project is removed from the Project Priority List. The projects eligible to participate in the SFY2018 Financing Program and their relative rank are set forth in the SFY2018 Project Priority List.

The combined CW and DW projects on the Project Priority List for the SFY2018 Base NJEIP and Sandy NJEIP include a pool of three hundred and seventy-two (372) Clean Water and Drinking Water projects at a total estimated cost of \$3.43 billion. The SFY2018 Clean Water Interim Financing Program Project Priority List set forth in *Appendix A* includes environmental infrastructure projects eligible for financing pursuant to the Clean Water SFY18 NJEIP and Superstorm Sandy financing programs, and consists of two

² A Project Priority List is an inaccurate indicator of projects to be funded in a given Fiscal Year. Projects are included with little effort by the project sponsor (submission of project information). Moreover, project cost information is generally inaccurate due to its calculation prior to project design and frequent revisions during the application process to reflect changes in scope and other circumstances. Finally, applicants routinely defer or withdraw projects from funding for myriad business reasons.

hundred and twenty-six (226) Clean Water projects at a total estimated cost of \$2,551,062,104. The SFY2018 Drinking Water Interim Financing Program Project Priority List *set forth in Appendix B* includes projects eligible for financing pursuant to the SFY2018 Drinking Water NJEIFP and Superstorm Sandy financing programs, and consists of one hundred and forty-six (146) Drinking Water projects at a total estimated cost of \$878,499,050.

Also, included in this Report is the second amended SFY2017 Clean Water Interim Financing Program Project Priority List, and the second amended SFY2017 Drinking Water Interim Financing Program Project Priority List pursuant to N.J.S.A. 58:11B-9(d) which are set forth in Appendices A and B respectively. The first supplemental SFY2017 Project Priority list was submitted to the legislature on September 15, 2016.

ELIGIBLE / INELIGIBLE PROJECT ACTIVITIES

CLEAN WATER

Base SFY2018 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. SFY2018 and Sandy NJEIFP Loans are also subject to the availability of funds.

CLEAN WATER BASE SFY2018 NJEIFP PROJECTS

i. **Wastewater:**

Most projects associated with sewage collection, treatment, or disposal are eligible for financing, including correction of inflow/infiltration problems, sludge management and combined sewer overflows. Eligible projects include:

- Secondary and advanced wastewater treatment
- Well sealing
- Flood resiliency
- Sludge handling facilities
- Infiltration and inflow (I/I) correction
- Interceptors, pumping stations and force mains
- Sewer system rehabilitation
- New collection systems
- Correction of Combined Sewer Overflows (CSOs)
- Solutions for malfunctioning septic systems
- Wastewater reuse and conservation projects
- Emergency Repair Projects to replace, in kind, the failure of an essential portion of a wastewater system that will disrupt service for a minimum of 24 hours total and/or poses a substantial threat to the public health, safety and welfare

ii. **Stormwater:**

Eligible projects include construction, expansion or replacement of stormwater management systems, including the following:

- Non-point Source Pollution/Stormwater management
- Construction of regional basins
- Major stormwater system rehabilitation
- Replacement of existing storm drains
- Rehabilitation of tide gates
- Extension of outfall points
- Runoff control (manure/feedlots and stream bank stabilization/ restoration)
- Stream/lake embankment restoration
- Salt dome construction

iii. **Equipment:**

Equipment that provides a water quality benefit can be financed under the NJEIFP including, but not limited to:

- street sweepers
- generators
- sewer flushing and cleaning equipment
- dump trucks
- crawler loaders
- skimmer boats
- aquatic weed harvesters
- outfall netting

iv. **Security Monitoring:**

Projects designed to improve security at otherwise funding eligible wastewater and drinking water facilities are eligible for funding, including but not limited to fencing, lighting, motion detectors, cameras, secure doors, and alternative auxiliary power sources.

v. **Green:**

Green projects are those clean water and drinking water projects that incorporate green infrastructure and water or energy efficiency improvements (those that reduce greenhouse gas emissions, for example). Green infrastructure includes such practices as replacing existing pavement with porous pavement, utilizing bioretention, renewable energy, constructing green roofs, creating rain gardens, and other practices that mimic natural hydrology and increase effective perviousness.

vi. **Brownfields:**

The cleanup of abandoned and contaminated industrial sites is eligible for financing provided a local or county government assumes the repayment obligation for the loan. The NJEIFP will finance the removal of contaminated soil, site-capping and the installation of stormwater controls.

Returning Brownfield sites to productive use protects the environment and preserves open space. Every acre of Brownfield redevelopment spares 4.5 acres of pristine land from development. Brownfield redevelopment also boosts local tax revenue, creates jobs, revitalizes New Jersey's cities and towns, and improves the quality of life for area residents.

The NJEIFP provides loans to municipalities, counties and public authorities to support a wide range of cleanup and remediation activities necessary to restore the Brownfield site for re-use.

vii. **Landfills:**

Landfill construction activities having a water quality benefit are eligible for NJEIFP financing. Examples include:

- New Landfills (Water quality/protection aspects)
- Capping systems
- Liners
- Leachate collection systems
- Treatment systems
- Sewer connections
- Barge shelters
- Containment booms
- Litter fences
- Gas collection and treatment systems
- Monitoring wells
- Reclamation or reduction activities

viii. **Land Preservation:**

NJEIFP provides financing for the preservation of open space and farmland given the water quality benefit achieved through such acquisitions. The Program funds preservation with regard to properties protecting stream headwaters and corridors, wetlands, and aquifer recharge areas. Financing for land is compatible with the Green Acres Program, the Garden State Preservation Trust, and Open Space programs financed by local and county Open Space taxes.

While lands purchased through the NJEIFP for preservation as part of Open Space cannot be developed, they may be used for passive recreational activities, such as hiking, fishing and horseback riding. Placement of conservation easements on funded parcels is a requirement which

assures that the water quality benefits are preserved in perpetuity. Farmland preservation and best management practices are also eligible.

The NJEIFP will coordinate with the Green Acres Program, when appropriate, to maximize a community's limited open space funds for land acquisition. Through this partnership, municipalities can receive the additional resources to facilitate the purchase of larger and/or more expensive parcels.

ix. **Allowable Ancillary Costs:**

Additional costs that are eligible within a project include:

- Road repaving
- Utility relocation
- Site grading
- Purchasing land for stormwater use

x. **Highlighted Planning and Design Costs:**

Projects to develop and implement asset management plans, CSO long-term control plans, and water loss prevention plans are eligible for financing and possible principal forgiveness. The loans must be rolled into an NJEIFP capital improvement project or repaid within three years. CSO long-term control plans can receive loans for up to ten (10) years.

xi. **Continued Typical Planning and Design:**

Costs incurred in the planning and design phase of a water infrastructure project such as engineering fees, surveys, environmental or geological studies and other costs related to project plan preparation are eligible for funding under the Short-Term Loan program. The loans must be rolled into an NJEIFP capital improvement project or repaid within three years.

CLEAN WATER SANDY SFY2018 NJEIFP PROJECTS

Although NJEIFP staff is working to award all of the Sandy CWSRF funds in the SFY17 Program, there is the possibility that not all Sandy Funds will be committed in the current fiscal year. Given this possibility, the Program will continue to accept application submittals under the Sandy CWSRF Program for SFY2018, 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:

- Projects that prevent interruption of collection system operation in the event of a flood or natural disaster;
- Projects that prevent floodwaters from entering a treatment works;

- 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;
- Projects that preserve and protect treatment works equipment in the event of a flood or natural disaster; and
- 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.

See Appendices C and D for additional details regarding Sandy NJEIFP project eligibility criteria.

DRINKING WATER

DRINKING WATER BASE SFY2018 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:

i. **Compliance and Public Health:**

- 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 health 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.

- 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.

- 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.

ii. **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.

iii. **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.

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

iv. **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 from the DEP 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.

v. **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 SFY2018 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.

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.

PROJECT RANKING METHODOLOGY

CLEAN WATER RANKING CRITERIA (BASE SFY2018 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.

The Department encourages project sponsors that do not have an existing Asset Management Plan to develop and implement one. Asset management requires 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 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 SFY2018 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 (i) Sustainable Community Planning Activities, (ii) Project Discharge Category, (iii) Water Use/Water Quality, (iv) Smart Growth Approvals, and (v) Population.

i. **Sustainable Community 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.

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 SFY2018 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.

ii. **Project Discharge Category 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	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. This category also includes the purchase and installation of security and energy efficiency measures at the STP.	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

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.

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

iii. **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		Basis/Description	Points
Public Potable Water Supply		Wastewater treatment plant discharges likely to have adverse impacts on an existing downstream potable surface water supply intake. Projects are evaluated based on relative distance between STP discharge and public potable water intake locations.	200
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. 7:12</i> .	125
	Trout	State freshwater bodies designated for trout production or maintenance by the NJ Water Quality Standards (<i>N.J.A.C. 7:9B</i>).	75
	Non-trout	State freshwater classifications not designated trout production or maintenance by <i>N.J.A.C. 7:9B</i> (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
Agriculture		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				
Water Quality		Points for Water Quality that		
		Meet	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.

iv. 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.

v. **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.

- **Priority Growth Investment Areas:**

Core criteria for a Priority Growth Investment Area includes being within one or more of the areas identified in **Table I** and within the regional planning entity areas described below.

Table I

Growth Areas:

- Former State Plan Policy Map Metropolitan Planning Areas (PA 1) and Nodes
- Unexpired Commission Approved Centers, Urban Complexes and other areas designated for development or redevelopment as the result of the Commission formally endorsing municipal or county plans
- Municipally Designated Transfer of Development Rights "Receiving Areas"
- Municipally Designated "Urban Enterprise Zones"
- Municipally Designated "Areas in Need of Redevelopment" or "Areas in Need of Rehabilitation"
- Approved "Foreign Trade Zones"
- Land within Higher Education Campuses suitable for development / redevelopment
- NJDOT Certified Transit Villages
- "Urban Transit Hubs" as defined by EDA's Urban Transit Hub Tax Credit Program
- Land owned by the New Jersey Sports and Exposition Authority
- Commission approved requests for additions areas, for example, sites that have been historically utilized for large-scale commercial, research or industrial uses, that meet Commission requirements may be submitted for inclusion by a county with the support of relevant municipalities and if relevant, the advice and consent of a regional planning entity. If a county declines to serve this role, requests will be accepted by a municipality or other appropriate entity.

Regional Planning Entities:

As the Act requires, this Plan must treat land within the jurisdiction of a regional planning entity based on the adopted plans and regulations of that entity. As such, the following areas are recognized as Priority Growth Investment Areas:

- *New Jersey Sports and Exposition Authority (formerly Meadowlands Commission):*
Lands identified for development and/or redevelopment within the "Land Use Map and Map of the Meadowlands District Master Plan" and the "Hackensack Meadowlands District Official Zoning Map" as amended and supplemented
- *Pinelands Commission:*
Lands identified by the Comprehensive Management Plan (CMP) as amended and supplemented as a "Regional Growth Area," a "Town" and developed sections of a "Military and Federal Installation Area"
- *Highlands Council:*
Planning Area / Areas Not Conformed - Default to **Table I**; and
Planning Area / Areas in Conformance – Highlands Council Designated Centers and Redevelopment Areas
- *Fort Monmouth Economic Revitalization Planning Authority or its successor:*
Lands identified for development and/or redevelopment within the "Fort Monmouth Reuse and Redevelopment Plan" as amended and supplemented

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.

CW Order of Priority:

The SFY2018 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. Current Year Project Submissions

DRINKING WATER RANKING CRITERIA

BASE SFY2018 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. Projects with more points are ranked above those with fewer points. The 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.

Projects receive points under five principal elements of the Priority System: (i) Compliance and Public Health Criteria, (ii) Water Supply Plans/Studies, (iii) State Designations, (iv) Affordability, and (v) 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 (i), are separately listed by the elements involved and priority points assigned for each element.

Table I of Category (i) lists the types of projects eligible for DWSRF funding. A project must be assigned points from Category (i) to be eligible for ranking; points assigned from the remaining categories are in addition to the points received in Category (i). 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 (i). Projects that include multiple elements, as listed in priority Category (i), are separately listed by the elements involved and priority points assigned for each element.

The order of project priority for funding is as follows:

1. Emergency Projects are considered a public health hazard and receive funding over other projects on the Comprehensive Priority List
2. Small Systems serving less than 10,000 persons, up to 15 percent of DWSRF Funds
3. Lead service line replacement projects: and
4. Other projects currently on the comprehensive list

The Department is proposing to establish a rolling application process and will update and post the Priority List several times during the fiscal year.

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:

i. **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 I. Project Elements Eligible for Project Priority Ranking in the Drinking Water State Revolving Fund Program ³		
Priority Order	Project Description	Points
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 any noncompliance of its treatment facilities to address an immediate public health threat.	500
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 directive by DEP requiring the correction of any noncompliance of its treatment facilities to address an immediate public health threat.	350

³ A project must be assigned points from Category (i) to be eligible for Project Priority List ranking; points assigned from Categories (ii) through (v) supplement the points received in Category (i).

3.	Systems that utilize groundwater that have had any acute violation (either fecal coliform or nitrates).	300
4.	Systems that have had, or DEP reasonably expects to have, any maximum contaminant level violations (except acute violations) or exceedance of action levels (lead and copper rule).	250
5.	Systems that were classified as vulnerable, as a result of a 2007 DEP Interconnection Study	200
6.	Systems that have been issued a notice of noncompliance by DEP for reasons other than water quality; i.e. inadequate storage, inadequate source, lack of emergency power, etc.	175
7.	Purchase and/or consolidation of a water system to comply with the SDWA for capacity development.	170
8.	Systems that are proposing improvements for drought or other related water supply management initiatives, as identified or designated by the State.	160
9.	Systems that have lost well capacity due to saltwater intrusion and a solution is needed to preserve the aquifer as a viable aquifer.	150
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 and copper action levels.	125
11.	Existing treatment facilities that need to be rehabilitated, replaced, or repaired to ensure compliance with the SDWA.	100
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
13.	Existing pump stations or finished water storage facilities that need to be rehabilitated or replaced to maintain compliance with the SDWA.	60
14.	New finished water storage facilities or pump stations that are needed to maintain pressure in the system and/or prevent contamination.	50
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
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
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
18.	Installation of new water meters and/or other water conservation devices, including but not limited to retrofit plumbing fixtures.	35
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
20.	Replacement of water meters.	25
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
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

ii. **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.**

iii. **State Designations:**

- 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.

- 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:

<http://www.nj.gov/transportation/community/village/> and

For a list of Transit Villages, please see:

<http://www.nj.gov/transportation/community/village/faq.shtm>.

- 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: <http://www.nj.gov/dep/srp/brownfields/bda>.

- 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 the Intended Use Plan.

Please note that the points from these four items of Category (iii) 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.

iv. **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:

$$(Municipal\ MHI / Statewide\ MHI) \times 100 = Affordability\ Factor$$

Points are assigned as shown in Table 2.

Table II. 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 will receive 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 of Weighted Avg. MHI				
<i>Municipalities Served</i>	<i>MHI</i>	<i>Populations Served</i>	<i>Fraction of total population served</i>	<i>Weighted municipal MHI</i>
<i>Lancaster</i>	<i>30,000</i>	<i>5,000</i>	<i>0.167</i>	<i>5,000</i>
<i>Mayberry</i>	<i>20,000</i>	<i>10,000</i>	<i>0.333</i>	<i>6,660</i>
<i>Holmeville</i>	<i>25,000</i>	<i>15,000</i>	<i>0.500</i>	<i>12,500</i>
<i>TOTAL</i>		<i>30,000</i>	<i>1.00</i>	<i>24,160</i>

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.

v. **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:

$$[(2 \times \text{Winter Population}) + \text{Summer Population}] / 3 = \text{Weighted Permanent Population}$$

vi. **Other Ranking Considerations:**

The following factors are also considered in project ranking: (i) Emergency projects, (ii) Projects in Small Water Systems, (iii) Lead service line replacement projects, and (iv) Other projects currently on the comprehensive list:

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.

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.

vii. **DW Project Priority Order:**

- Emergency Projects - Emergency projects are considered a public health hazard and will receive funding over other projects on the Comprehensive Priority List;
- Small Systems - Up to 15% of the FFY2017 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 less than 10,000 persons;
- Lead Service Line Projects - For the replacement of lead service lines for drinking water systems in communities serving customers with less than median household income than the median household income for the county in which they are located.;
- Other Projects currently on the Comprehensive List

DW SANDY SFY2018 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.

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 FFY2017 IUP; Asset Management Plans are now a requirement for project submittal.

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

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:

i. **Category (i). Superstorm Sandy DWSRF-related Project Needs:**

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

Table I. Project Elements Eligible for Project Priority Ranking in the Drinking Water State Revolving Fund DRAA Program		
Priority Order	Project Description	Points
1.	Projects for water supply systems, which the State classified as vulnerable, as a result of a 2007 DEP Interconnection Study	300
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
3.	Projects for other interconnections that increase water systems resiliency during time of emergency	200
4.	Projects for water supply systems with inadequate primary and secondary source capacity	150
5.	Projects for water systems with auxiliary power projects	125
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
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
8.	Other projects elements, not including in the above items that can be Superstorm Sandy related	50

ii. **Category (ii). Affordability:**

The Affordability criteria utilized in ranking Sandy NJEIFP projects relative are identical to the Affordability criteria utilized in ranking Base SFY2018 NJEIFP projects, which are set forth in Section II(C)(b) above.

iii. **Category (iii). Population:**

The Population criteria utilized in ranking Sandy NJEIFP projects are identical to the Population criteria utilized in ranking Base SFY2018 NJEIFP projects.

SFY2018 PROJECT PRIORITY LISTS

The preliminary Project Priority Lists for the Clean Water and Drinking Water Programs reflect 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

LOAN PRODUCTS

Structure: The NJEIFP consists of two loan programs, short-term and long-term loans, that together provide funding for all aspects, phases and components of designing and building environmental infrastructure projects.

i. **SFY2018 NJEIFP Long-Term Loans and Program Set-asides:**

- **Base CW NJEIFP**

Loans are issued at effective 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 SFY2018 NJEIFP:

- **CSO LTCP and P&D Loans** - The Program offers interest free planning loans 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 NJEIFP is offering 50% principal forgiveness, 25% DEP interest-free financing and 25% NJEIT AAA market rate loan to communities in a CSO sewershed sponsoring construction projects that reduce or eliminate excessive infiltration/inflow or extraneous flows. There is a \$5 million cap of principal forgiveness per applicant. For projects in excess of \$10 million, the balance of the loan is offered at 100% interest free DEP funds. The DEP is proposing to reserve 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). The \$1 million cap on principal forgiveness per applicant has been

removed. The entire project amount of these “green” CSO projects will receive 50% principal forgiveness, 25% DEP interest free, and 25% NJEIT market rate financing.

- **Barnegat Bay Watershed** - The principal forgiveness funds will be reserved for stormwater and non-point source pollution management projects in the Barnegat Bay Watershed. 50% principal forgiveness will be offered with a \$2 million limit on principal forgiveness per applicant and awarded on a first come basis. The remaining project amount is financed 25% DEP interest free, and 25% NJEIT market rate financing.
- **Brownfield Set-Aside** – \$60 million is proposed to be reserved for brownfield redevelopment projects in SFY18. Brownfield redevelopment by private entities is eligible for a funding package of 50% DEP and 50% Trust financing. Private entities are required to partner with public conduits that sponsor the 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 SFY2018 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.
- **Coastal Community Water Quality Restoration:** Offering 50% principal forgiveness for capital improvement projects that will eliminate, prevent or reduce occurrences of shellfish bed or beach closings due to the presence of pathogens. Projects would eliminate potential sources such as failing on-site wastewater systems and cross-connections between storm sewers and sanitary sewers. Project costs up to \$5 million would receive 50% principal forgiveness, 25% DEP interest free, and 25% NJEIT market rate financing. Project costs exceeding \$5 million are eligible for the Base CWSRF structure. \$2.5 million in principal forgiveness has been committed towards Cumberland County Improvement Authority to resolve failing septic systems and prevent shellfish bed closures in Downe Township, limited to Fortescue and Gandys Beach.

- **Asset Management:** NJEIFP will provide 100% principal forgiveness to small water wastewater systems, those that serve 10,000 or less people, to develop and implement asset management programs. The department expects to make CBT-diesel funds available in principal forgiveness through the NJEIFP and cap the amount at \$100,000 per applicant. A capital improvement project is expected from the creation of the asset management program. The Department reserves the right to utilize these funds to hire a contractor to provide technical services to small communities for asset management. Larger systems are eligible for the 100% DEP interest-free loan, with a capital improvement project.
- **Base DW NJEIFP**

Base DW NJEIFP loans consist of 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 SFY2018 NJEIFP:

- **Lead Abatement Program:** Up to \$30 million in principal forgiveness will be made available for public community and nonprofit non-community water systems for the NJEIFP Lead Service Line Replacement Program. Water systems for communities having a median household income less than the median household income for the county in which they are located are eligible for 90% principal forgiveness and 10% funding from the DEP at 0% interest for the replacement of lead pipes and lead components including mains and service lines. Project applicants are capped at \$1 million. Lead pipes and components are defined as containing at least 90% or more lead by weight. The following criteria must be met in order for the project to be eligible:
 - Be able to document the presence of lead pipes and components
 - Provide documentation through historic records that the lines to be replaced are lead. Acceptable records include information on the age of the houses and high probability of lead lines and components being present, line installation records, etc.
 - Partial lead line replacements are not allowable.
- **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. However, if there are not enough 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.

- Small Water Systems Loan Program (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 from the DEP as principal forgiveness; 25 % of the total project costs (up to \$250,000) is available as zero interest from the DEP and the 25 % 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, etc.

In SFY2018, 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 2016 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.

SMALL WATER SYSTEM ENGINEERING PROGRAM

The Department is offering 100% principal forgiveness loans up to \$500,000 per project to small water systems that serve less than 500 persons who need assistance from the Community Engineering Corps to come into compliance.

PROGRAM FEES

- i. The following is a summary of the Department and NJEIT fees for Long-Term loans:

- Department Loan Origination Fee.

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 project 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).

- Trust Bond Origination Fee.

The Trust Origination fee is currently 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.

- Trust Loan Administration Fee.

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.

ii. Program Requirements: Project Certification / Loan Closing

- Requirements.

The loan requirements are substantially simplified for SFY2018. The Program encourages all applicants to seek short-term financing immediately upon their award of the contract for engineering planning/design. Eligibility for this early stage short-term loan is as follows:

1. Submission of a project information page;
2. Submission of the engineering contract; and
3. Submission of a Short-Term Financial Addendum Form (STFAF).

Typically, loans are closed within thirty days of submission of the STFAF upon DEP's certification of the project for engineering costs and EIT's approval of borrower credit worthiness. The Short-Term Loan is for the total estimated project cost, and as each contract is certified, the Program funds are committed and available for disbursement.

The specific requirements for securing a loan for construction activities is as follows:

- 1 – 3. See above for items;
4. Submission of a Letter of Intent (environmental planning documents);
5. Project permits;
6. Construction design documents and State Loan Application;

7. DEP approval of design, environmental planning, contract documents (prevailing wage and small and disadvantaged business provisions), and permits;
 8. Construction bid package review;
 9. DEP issuance of an authorization to award the construction contract;
 10. EIT's approval of borrower credit worthiness (in the absence of a previously executed short-term loan); and
 11. Department Certification. The program operates on a rolling application basis removing deadlines for fulfillment of these requirements.
- DEP Project Certification. The documents to be submitted and the approvals necessary to secure DEP Certification are as follows:
 - Letter of Intent / Planning Documents. Project sponsors interested in securing an NJEIPF loan are required to submit a Letter of Intent including 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.).
 - Permits. Projects will not receive financing until all major permits are secured
 - Application / Construction Design Documents. 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).
 - Socially and Economically Disadvantaged (SED) Business Participation. 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.
 - Construction Documents. 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,

- Public Notice and Public Hearing. 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.
- Department Approval/Certification. 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.

iii. Loan Closing Requirements.

- 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.
 - Financial Addendum Form (FAF). 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. 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 a Long-Term FAF ("LTFAF") as well as a short-term financing FAF ("STFAF").
 - LFB / NJBPU Approval. N.J.S.A. 58:11B-9 of the Environmental Infrastructure Trust Act requires that the bonds to be issued by a local government unit to the Trust be approved by the Director of the Division of Local Government Services, Department of Community Affairs, rather than the Local Finance Board. 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.

- No Local Finance Board Approval Needed for NJEIT Loans with Non-Conforming Maturity Schedules. 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.
- No Local Finance Board Approval Required to Waive the 5% Down-Payment Requirement. There is an automatic waiver of the 5% down payment requirement for municipal and county bond ordinances 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 provided the bond ordinance exclusively funds NJEIFP projects.
- Applicant Ordinances, Certifications and Covenants. 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.
- Escrow Closing. 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.

- Bond Sale, Loan Closing. 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.

iv. 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 requirements that project sponsors should be aware of are as follows:
 - 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.

- 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 SFY2018 Program. As noted above, the Program is developing a state-wide AMP program intended to assist local communities to develop and implement effective AMPs.

- 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.

- 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.

- Cost/Benefit Analysis

Each participating Borrower in SFY2018 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.

v. **Other Financing Considerations.**

- **Debt Service Reserve.** 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 SFY2018. Amendments to both the Trust legislation and the federal Drinking Water SRF legislation permit loans to be issued to private water purveyors.
- **Cross Collateralization.** 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 rate available to NJEIFP projects is 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.
- **Transfer of Project Funds between Programs.** 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.
- **Calendar Year 2017 Refunding.** Certain interest rate environments 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 will continue to monitor the market to determine opportunities which provide net present value savings at the time of bond sale exceeding 3.00% of the par amount of the Prior Bonds pursuant to the Trust's enabling legislation (58:11B-6(g)).

- Tax Regulations. 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 SFY2018 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 SFY2018 / Superstorm Sandy Interim Financing Program Project Priority List, Updated Statewide Assistance Infrastructure Loan Program (Disaster Relief Emergency Financing Program) Project Priority List and Second Amended SFY2017 Clean Water Interim Financing Program Project Priority List
- Appendix B:** Drinking Water Combined Base SFY2018 / Superstorm Sandy Interim Financing Program Project Priority List and Second Amended SFY2017 Drinking Water Interim Financing Program Project Priority List
- Appendix C:** Projects financed through the Statewide Assistance Infrastructure Loan Program (Disaster Relief Emergency Financing Program)
- Appendix D:** Project Eligibility Guidelines for Sandy Clean Water NJEIFP Loans
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**Appendix A-1
Clean Water**

Combined Base SFY2018/Superstorm Sandy Project Interim Financing Program Priority List
Updated Statewide Assistance Infrastructure Loan Program (Disaster Relief Emergency Financing
Program) Project Priority List

Second Amended SFY2017 Interim Financing Program Project Priority List

Alphabetical Order

KEY: **Red/italics** = SAIL – Disaster Relief projects

Green = New projects or increases in project costs since the First Amended SFY2017 Interim Financing Program Project Priority List are identified

Supplemental Funding				
Rank	Sponsor	Project No.	Project Name	Estimated Cost
S_389	Burlington Township	S340712-14-1	Sewer Rehabilitation	\$ 200,000
S_171	Ewing Lawrence Sewer Authority	S340391-10-1	Wastewater Treat Plant Upgrade	\$ 4,900,000
S_97	North Hudson Sewer Authority	S340952-19-1	Combined Sewer Improv.	\$ 200,000
S_186	Wanaque Valley Reg. Sewer Authority	S340780-04-1	2013 Proposed Improv.s	\$ 1,500,000
S_21	Warren Township Sewer Authority	S340964-01-1	Stage IV Oxidation Ditch/Final Clarifier & UV Disinfection Syst	\$ 100,000
S_285	Warren Township Sewer Authority	S340964-02-1	Fox Hill West & Heather Lane Pump Station	\$ 350,000
SUPPLEMENTAL TOTAL:				\$ 7,250,000
Base Program Projects				
Rank	Sponsor	Project No.	Project Name	Estimated Cost
660	Aberdeen Township	S340869-02	San. Sewer and Pump Sta. upgrades to Freneau / Woodfield Area.	\$ 9,000,000
924	Asbury Park City	S340883-08	Sewer Plant	\$ 63,000,000
75	Atlantic County Utilities Authority	S340809-23	ACUA Treatment Plant Resiliency Project - Emergency Power	\$ 9,200,000
75	Atlantic County Utilities Authority	S340809-25	Seawall	\$ 14,600,000
75	Atlantic County Utilities Authority	S340809-26	STP Mitigation Projects	\$ 1,500,000
75	Atlantic County Utilities Authority	S340809-27	Automated Bar Screens	\$ 3,200,000
315	Atlantic County Utilities Authority	S340809-24	ACUA Pump Station Resiliency Project	\$ 800,000

Rank	Sponsor	Project No.	Project Name	Estimated Cost
315	Atlantic County Utilities Authority	S340809-29	Replace a portion of Brigantine Force Main	\$ 4,300,000
523	Atlantic County Utilities Authority	S340809-28	Incinerator Construction to meet EPA requirements	\$ 2,400,000
223	Barnegat Township	S344130-01	Jet-Vac Truck for Sanitary Sewer / Stormwater Cleaning/Maintenance	\$ 600,000
72	Bayshore Regional Sewer Authority	S340697-05	Restoration and Flood Mitigation	\$ 58,072,111
72	<i>Bayshore Regional Sewer Authority</i>	<i>S340697-06</i>	<i>Phase II Perm. Restor/Mitigation of Blower Bldg & Pwr Dist. System</i>	<i>\$ 19,000,000</i>
843	Bellmawr Borough	S342011-02	Waterfront Development Remediation	\$ 68,400,000
476	Bradley Beach Borough	S340472-01	Sewer Main Installation and Repairs - Phase I	\$ 2,700,000
804	Bradley Beach Borough	S340472-02	Bradley Boulevard Stormwater	\$ 2,590,050
333	Brick Township Municipal Utilities Authority	S340448-11	Wastewater Pump Station Rehabilitation - Phase II	\$ 5,278,297
442	Brigantine City	S340827-04	Emergency Generators	\$ 3,300,000
770	Brigantine City	S340827-05	Flood Control and Pump Station Improv.s	\$ 4,600,000
770	Brigantine City	S340827-06	Mun. System Improv.s	\$ 1,001,066
694	Burlington City	S340140-01	Stormwater pump upgrades	\$ 1,000,000
389	Burlington Township	S340712-15	Sanitary Sewer Rehabilitation in Various Locations	\$ 1,100,000
29	Camden City	S340366-07	2014 Sanitary/Combined Sewer Rehab / Replacement Project	\$ 59,000,000
29	Camden City	S340366-12	Cooper Street Pump Station	\$ 2,300,000
4	Camden County Municipal Utilities Authority	S345040-01	Camden City and Gloucester City Long-Term CSO Control Plan	\$ 1,049,636
2	Camden County Municipal Utilities Authority	S340640-20	Camden City Green Infrastructure	\$ 6,500,000
4	Camden County Municipal Utilities Authority	S340640-24	Upgrade of Camden County Wastewater Treatment Plant to Increase Wet Weather Capacity	\$ 6,500,000
11	Camden County Municipal Utilities Authority	S340640-21	Camden City Waterfront Stormwater Pumping Station	\$ 32,500,000
11	Camden County Municipal Utilities Authority	S340640-22	Upgrades to Camden City's Combined Sewer Overflow System	\$ 13,000,000

Rank	Sponsor	Project No.	Project Name	Estimated Cost
11	Camden County Municipal Utilities Authority	S340640-23	Dredging of Camden City's Combined Sewer Overflows to Reduce Combined Sewage Flooding	\$ 13,000,000
1	Camden County Municipal Utilities Authority	S340640-19	Camden City Green and Grey Infrastructure Project, Phase 4	\$ 11,500,000
3	Camden County Municipal Utilities Authority	S340640-17	Reduce Potential for CSOs within City	\$ 6,650,000
6	Camden County Municipal Utilities Authority	S340640-15	CSO Green Infrastructure	\$ 9,100,000
19	Camden County Municipal Utilities Authority	S340640-16	Wastewater Treatment Plant Improv.s	\$ 13,300,000
33	Camden County Municipal Utilities Authority	S340640-18	Phase I upgrades, improve/sustain optimal wastewater performance	\$ 50,664,200
936	Cape May County Municipal Utilities Authority	S342017-04	Sanitary Landfill	\$ 5,800,000
744	Carteret Borough	S340939-09	Noe Street Stormwater Pump Station Construction	\$ 10,600,000
927	Carteret Borough	S340939-07	Dredge sediment & construct bulkhead / slope stabilization	\$ 23,900,000
183	Cinnaminson Sewerage Authority	S340170-07	Aerators, Dissolve ox. controls, anoxic zone, odor control equip	\$ 9,000,000
623	Cinnaminson Sewerage Authority	S340170-08	Taylor's Lane Sewer Extension	\$ 1,160,000
90	Cliffside Park Borough	S340847-04	Combined Sewer Separation	\$ 5,300,000
700	Cranford Township	S340858-04	Stormwater constr. various locations to improve drainage/prevent flooding	\$ 12,000,000
628	Cumberland County	S340438-01	Downe Wastewater Infrastructure	\$ 16,000,000
846	Cumberland County Improv. Authority	S342015-03	Landfill Expansion (Phase VI development & Leachate Pump Station improv)	\$ 19,000,000
130	Cumberland County Utilities Authority	S340550-07	Sewage Treatment Plant Upgrades	\$ 1,300,000
267	Cumberland County Utilities Authority	S340550-08	Replace Pump stations / Plant Improv.s for increased energy efficiency	\$ 1,300,000
138	Delran Township	S340794-08	Replace existing sand filter @ WWTP & rehab Twps Fifth St Pump Station	\$ 2,000,000
855	Edison Township	S342020-01	Edison Landfill Closure	\$ 13,000,000

Rank	Sponsor	Project No.	Project Name	Estimated Cost
363	Egg Harbor Township Municipal Utilities Authority	S340753-06	FAA Pump Station Reconstruction Project	\$ 700,000
31	Elizabeth City	S340942-19	Trumbull Street Flood Control Project	\$ 6,900,000
52	Elizabeth City	S340942-13	Western Interceptor Modifications	\$ 13,146,000
52	Elizabeth City	S340942-17	South Street Flood Control Project	\$ 5,500,000
52	Elizabeth City	S340942-18	Progress Street Flood Control Project	\$ 8,200,000
52	Elizabeth City	S345070-01	City of Elizabeth CSO LTCP	\$ 4,000,001
347	Franklin Township Sewerage Authority	S340839-06	Rodney Ave. Pump Station	\$ 17,100,000
172	Gloucester City	S340958-08	Various Sewer Projects	\$ 2,100,000
624	Gloucester City	S340958-07	Various Water System Improv.s, Phase II	\$ 1,200,000
930	Gloucester County Improv. Authority	S342024-01	Cell Construction	\$ 8,000,000
193	Gloucester County Utilities Authority	S340902-14	Replace bio-solids handling facility to combined heat & pwr generation	\$ 45,000,000
197	Gloucester County Utilities Authority	S340902-15	Combined Heat & Power	\$ 7,250,000
214	Gloucester County Utilities Authority	S340902-16	Primary Clarifier Equipment Replacement	\$ 2,000,000
513	Gloucester County Utilities Authority	S340902-17	Sludge Drying System	\$ 10,000,000
518	Gloucester County Utilities Authority	S340902-13	Incinerator #2 Upgrades	\$ 14,040,000
724	Gloucester Township	S340364-11	Flood Mitigation	\$ 1,700,000
724	Gloucester Township	S340364-15	Gloucester Township Stormwater Improv.s	\$ 1,450,000
346	Gloucester Township Municipal Utilities Authority	S340364-13	New vac truck, PS communication system, sanitary sewer rehab.	\$ 1,400,000
629	Greenwich Township	S340359-02	Installation of a collector sewer in vicinity of the Village of Stewartsville	\$ 2,200,000
128	Hackensack City	S340923-12	Combined Sewer Separation, Phase 2	\$ 6,000,000
752	Hammonton Town	S340927-09	Stormwater Improv.s	\$ 4,600,000
794	Highlands Borough	S340901-03	Stormwater System Improv.s (Current Project)	\$ 6,250,000
226	Hightstown Borough	S340915-05	UV Disinfection System	\$ 1,400,000
37	Hoboken City	S340635-08	Southwest Resiliency Park - Acquisition, Rehabilitation	\$ 6,600,000
84	Hoboken City	S340635-05	Southwest Park design & underground retention system	\$ 5,300,000

Rank	Sponsor	Project No.	Project Name	Estimated Cost
84	Hoboken City	S340635-06	Acquisition, remediation, & construction on 6- acre park & outfall	\$ 33,000,000
84	Hoboken City	S340635-07	Resilient Green Infrastructure for CSO Reduction	\$ 3,000,000
215	Howell Township	S344040-02	Freewood Acres & Route 9 Sanitary Sewer Extension	\$ 14,500,000
238	Jackson Township	S344050-02	Purchase of a Jet-Vac/Street Sweeper	\$ 1,300,000
41	Jersey City Municipal Utilities Authority	S340928-15	Phase 3 & 4 Sewer Improv.s	\$ 44,000,000
41	Jersey City Municipal Utilities Authority	S340928-16	Sixth Street Combined Sewer Outfall	\$ 9,500,000
41	Jersey City Municipal Utilities Authority	S340928-17	Regulator, Outfall and Solid_Flo	\$ 14,160,000
41	Jersey City Municipal Utilities Authority	S340928-18	Claremount Carteret outfall rep	\$ 5,600,000
41	Jersey City Municipal Utilities Authority	S340928-19	East Side Plant repairs, improve	\$ 7,500,000
41	Jersey City Municipal Utilities Authority	S340928-20	Outfall Chambers	\$ 7,200,000
96	Jersey City Municipal Utilities Authority	S340928-22	Jersey City Green Infrastructure	\$ 750,000
125	Jersey City Municipal Utilities Authority	S340928-24	Phase 1/2 Sewer Rehabilitation	\$ 22,200,000
125	Jersey City Municipal Utilities Authority	S340928-27	Green Infrastructure- Martin Luther King Drive Tree Trenches	\$ 500,000
168	Jersey City Municipal Utilities Authority	S340928-21	Sewer Pipe Replacement / Phase V CSO Study	\$ 11,031,040
168	Jersey City Municipal Utilities Authority	S340928-28	Van Winkle Ave. San. Sewer Rehab.	\$ 2,300,000
840	Jersey City Redevelopment Agency	S340928-25	Jersey Avenue Park Redevelopment Plan - Phase 1/2	\$ 14,069,063
840	Jersey City Redevelopment Agency	S340928-26	Jersey Avenue Park Redevelopment Plan - Phase 2	\$ 12,600,000
258	Kearny Municipal Utilities Authority	S340259-07	Pump Station Rehabilitation	\$ 8,918,476
60	Kearny Town	S340259-11	Dukes St Stormwater Pump Station	\$ 17,000,000
914	Kearny Town	S340259-12	Redev of recreational complex as a modern artificial turf complex	\$ 18,200,000
282	Little Egg Harbor Municipal Utilities Authority	S340579-02	Twin Lakes Blvd Sewer Main Replacement	\$ 2,700,000

Rank	Sponsor	Project No.	Project Name	Estimated Cost
282	Little Egg Harbor Municipal Utilities Authority	S340579-03	Little Egg Harbor Sewer Main Replacement	\$ 7,700,000
690	Little Egg Harbor Township	S340579-04	Mystic Island Drainage Improvements - Phase 2	\$ 1,714,000
690	Little Egg Harbor Township	S340579-04	Mystic Island Drainage Improvements - Phase 2	\$ 1,714,000
224	Little Egg Harbor Township	S344060-02	Twin Lakes Blvd. Drainage Improv.s	\$ 4,200,000
676	Logan Township Municipal Utilities Authority	S340123-01	0.50 MGD Water Reclamation Facility Expansion	\$ 8,100,000
487	Long Beach Township	S340023-06	Replace sanitary sewer main, laterals, cleanouts & manholes	\$ 5,000,000
487	Long Beach Township	S340023-07	Sewer Main Replacement Project	\$ 4,600,000
290	Manasquan Borough	S340450-02	Track I - PS, elec syst & controls, bulkheads & stormwater improvement.	\$ 2,110,000
479	Medford Lakes Borough	S340319-03	Collection System Lining Improvements	\$ 11,000,000
266	Mendham Township	S340477-01	Mendham East Wastewater Treatment Facility Conversion	\$ 2,400,000
304	Middlesex County Utilities Authority	S340699-12	Restoration and Flood Mitigation	\$ 112,000,000
304	Middlesex County Utilities Authority	S340699-13	Restoration and Flood Mitigation	\$ 44,000,000
304	Middlesex County Utilities Authority	S340699-14	Main Truck Sewer Rehab Phase II	\$ 18,250,000
721	Middletown Township	S340097-01	Shadow Lake Restoration Project	\$ 4,500,000
82	Middletown Township Sewer Authority	S340097-04	TOMSA Mitigation Project	\$ 23,000,000
942	Milltown Borough	S340102-01	Milltown Ford Ave Redevelopment	\$ 21,000,000
942	Milltown Borough	S340102-04	Ford Avenue Redevelopment	\$ 5,500,000
135	Millville City	S340921-07	Wastewater Treatment Plant Upgrade Phase II	\$ 12,000,000
297	Montclair Township	S340837-04	Sanitary Sewers refurbishment 2017	\$ 1,700,000
368	Montclair Township	S340837-03	Sanitary Sewer Collection System Rehabilitation-SFY 2016	\$ 1,700,000
706	New Jersey Water Supply Authority	S340421-01	D&R Canal Dredging	\$ 56,800,000
958	New Jersey Water Supply Authority	S340421-02	Round Valley Struct. Refurb/Res. Preserv.	\$ 50,000,000

Rank	Sponsor	Project No.	Project Name	Estimated Cost
15	Newark City	S340815-25	Green Infrastructure for the Sewer System	\$ 400,000
15	Newark City	S340815-27	Greenstreet Projects for the City of Newark	\$ 3,800,000
23	Newark City	S340815-22	Queen Ditch Restoration	\$ 5,500,000
23	Newark City	S340815-24	Structural eval & rehab of 350 miles of small diameter sewers	\$ 21,000,000
23	Newark City	S340815-26	Improv.s to the Peddie CSO	\$ 3,300,000
35	North Bergen Municipal Utilities Authority	S340652-14	Woodcliff Additional Improv.s	\$ 20,399,230
97	North Hudson Sewer Authority	S340952-22	W1234 Solids/Floatables (CSO)	\$ 18,000,000
97	North Hudson Sewer Authority	S340952-23	Phase II sanitary sewer system upgrades	\$ 3,100,000
97	North Hudson Sewer Authority	S340952-24	Rehabilitate sewers @ Hamilton Ave & JFK Blvd	\$ 3,000,000
107	North Hudson Sewer Authority	S340952-28	Collection System Improv.s	\$ 1,200,000
107	North Hudson Sewer Authority	S340952-29	2017 River Road Wastewater Treatment Plant Improv.s	\$ 1,300,000
107	North Hudson Sewer Authority	S340952-30	2017 Adams Street Wastewater Treatment Plant Improv.s	\$ 16,800,000
107	North Hudson Sewer Authority	S345190-01	Combined Sewer Long-Term Control Plan	\$ 6,000,000
208	North Wildwood City	S340663-07	2016 Street and Utility Reconstruction - Sewer	\$ 32,872,570
276	North Wildwood City	S340663-06	2014 Street & Utility Reconstruction	\$ 18,100,000
533	North Wildwood City	S340663-08	2016 Street and Utility Reconstruction - Stormwater	\$ 32,872,570
162	Northwest Bergen County Utilities Authority	S340700-13	Sludge aeration syst, replace blower, sludge pumps, thickener building	\$ 5,200,000
162	Northwest Bergen County Utilities Authority	S340700-16	Wastewater Treatment Plant Improv.s	\$ 3,900,000
254	Northwest Bergen County Utilities Authority	S340700-17	Security System Upgrades	\$ 800,000
336	Northwest Bergen County Utilities Authority	S340700-14	Midland Park Force Main Installation	\$ 3,694,000

Rank	Sponsor	Project No.	Project Name	Estimated Cost
336	Northwest Bergen County Utilities Authority	S340700-15	Wastewater Pump Station Improv.s	\$ 5,000,000
230	Ocean County	S344080-04	Manufactured Treatment Devices	\$ 1,100,000
232	Ocean County	S344080-10	Camera Pipe Line Inspection Truck System - Equipment	\$ 240,000
232	Ocean County	S344080-11	Mechanical Street Sweeper - Equipment	\$ 336,000
236	Ocean County	S344080-09	Barnegat Bay Storm Water - Manufactured Treat. Devices	\$ 1,300,000
74	Ocean County Utilities Authority	S340372-59	AW1611 Area Wide Clarifier Rehabilitation	\$ 6,956,586
385	Ocean County Utilities Authority	S340372-58	AW1610 South Island Beach Interceptor (CI-1A) and South Island Interceptor (SI-11) Rehabilitation	\$ 3,997,392
71	Ocean County Utilities Authority	S340372-56	Rehab various primary clarifiers	\$ 8,000,000
309	Ocean County Utilities Authority	S340372-57	Rehab Point Pleasant Beach Interceptor and manholes	\$ 3,100,000
245	Ocean Gate Borough	S344180-01	Storm Sewer MTD	\$ 2,600,000
448	Ocean Township	S340112-07	Replace san. Sewer. main, drainage Improv.s various locations	\$ 3,000,000
373	Ocean Township Sewer Authority	S340750-13	2016 Collection System Improv.s	\$ 550,000
373	Ocean Township Sewer Authority	S340750-14	Asbury Avenue and Longview Pump Stations Rehabilitation	\$ 2,500,000
376	Ocean Township Sewer Authority	S340750-11	Collection System Upgrades 2013	\$ 5,500,000
376	Ocean Township Sewer Authority	S340750-12	Interlaken Pump Station reconstruction	\$ 4,100,000
343	Old Bridge Municipal Utilities Authority	S340945-14	2015 Sewage Pump Station Upgrades	\$ 2,300,000
446	Oradell Borough	S340835-04	Phase IV sanitary sewer Improv.s	\$ 1,400,000
114	Passaic Valley Sewerage Commission	S340689-35	Administration Building Green Infrastructure Entry Plaza	\$ 400,000
114	Passaic Valley Sewerage Commission	S340689-36	Green Car Wash	\$ 250,000
140	Passaic Valley Sewerage Commission	S340689-23	Standby Power Generating Facility	\$ 150,000,000
140	Passaic Valley Sewerage Commission	S340689-37	Substation "M" Replacement	\$ 13,400,000

Rank	Sponsor	Project No.	Project Name	Estimated Cost
140	Passaic Valley Sewerage Commission	S340689-38	Final Clarifier Concrete Rehabilitation Project	\$ 21,000,000
140	Passaic Valley Sewerage Commission	S340689-39	Heat Treatment Plant Supernatant Return (HTPSR) Pipe Lining Project	\$ 4,816,000
140	<i>Passaic Valley Sewerage Commission</i>	<i>S340689-40</i>	<i>Plant wide Replacement & Relocation of Electrical Switchgear and MCCs</i>	<i>\$ 123,300,000</i>
140	<i>Passaic Valley Sewerage Commission</i>	<i>S340689-42</i>	<i>Storm Water Collection Systems</i>	<i>\$ 21,500,000</i>
140	<i>Passaic Valley Sewerage Commission</i>	<i>S340689-43</i>	<i>Storm Water Pumping Stations</i>	<i>\$ 43,600,000</i>
140	Passaic Valley Sewerage Commission	S345200-01	Combined Sewer Overflow Long-Term Control Planning	\$ 8,000,000
140	Passaic Valley Sewerage Commission	S345200-02	Asset Management Plan	\$ 2,000,000
149	<i>Passaic Valley Sewerage Commission</i>	<i>S340689-41</i>	<i>Perimeter Flood Wall</i>	<i>\$ 97,000,000</i>
150	Passaic Valley Sewerage Commission	S340689-25	Administration Building Rehabilitation	\$ 9,840,000
150	<i>Passaic Valley Sewerage Commission</i>	<i>S340689-30</i>	<i>Relocate sump pumps to prevent flooding / new stand-by generator</i>	<i>\$ 2,500,000</i>
150	Passaic Valley Sewerage Commission	S340689-31	Replace existing Sod Hypochlorite Storage & Feed Tanks	\$ 4,000,000
150	Passaic Valley Sewerage Commission	S340689-32	Plant wide improv. to increase wet weather treatment capacity	\$ 4,000,000
150	<i>Passaic Valley Sewerage Commission</i>	<i>S340689-33</i>	<i>Weatherproof tunnel locations incl HVAC for ventilation</i>	<i>\$ 50,000,000</i>
150	Passaic Valley Sewerage Commission	S340689-34	New pumps, valves, piping, meters, process control monitoring equip.	\$ 2,900,000
67	Paterson City	S345210-01	Investigation of Tributary Sewers from Adjacent Municipalities	\$ 200,000
787	Paulsboro Borough	S340164-01	Replace storm sewer along Thomson & Wood Aves.	\$ 2,750,000
68	Perth Amboy City	S340435-17	Second Street Corridor Project	\$ 4,418,400
93	Perth Amboy City	S340435-13	The Paving of Parking Lots C and RDH (GI)	\$ 850,000
117	<i>Perth Amboy City</i>	<i>S340435-11</i>	<i>Replace pumps, relocate elect equip, to improve resiliency</i>	<i>\$ 6,459,351</i>
117	Perth Amboy City	S340435-14	CSO Reparation (Pulaski Ave / Parker St. / State Street)	\$ 2,608,000
117	Perth Amboy City	S345220-01	CSO Permit Development of Long-Term Control Plan	\$ 1,000,000

Rank	Sponsor	Project No.	Project Name	Estimated Cost
438	Pine Hill Municipal Utilities Authority	S340274-05	Rehab. Greenwood Ave. Pump Station, new Madison Ave. force main	\$ 1,800,000
299	Pleasantville City	S340752-03	Pleasantville Various Projects	\$ 3,135,562
541	Plumsted Township	S340607-03	advanced WW treatment & collection system	\$ 16,789,494
244	Point Pleasant Beach Borough	S344190-02	Little Silver Lake Drainage Improv. Project	\$ 9,600,000
270	Princeton Borough	S340656-08	System-wide Sanitary Sewer Rehabilitation	\$ 4,300,000
7	Rahway Valley Sewerage Authority	S340547-14	Replace existing digester tank covers & mixers; replacing gas flares	\$ 9,500,000
190	Raritan Township Municipal Utilities Authority	S340485-12	Main Treatment Plant Improv.s 2016	\$ 4,900,000
393	Raritan Township Municipal Utilities Authority	S340485-11	HCRHS Sewer Relocation Project	\$ 500,308
64	Ridgefield Park Village	S345230-01	Planning for Long-Term Control Plan CSO	\$ 800,002
113	Riverside Sewerage Authority	S340490-01	Riverside Sewerage Authority Primary Digester Mixing System	\$ 450,000
234	Rockaway Valley Regional Sewer Authority	S340821-07	Rehab & enhancement of four existing final clarifiers	\$ 8,200,000
327	Rockaway Valley Regional Sewer Authority	S340821-06	Washout of old Jersey Truck Sewer Crossing of the Rockaway River	\$ 7,000,000
338	Rockaway Valley Regional Sewer Authority	S340821-09	West Main Street Sewer Repair	\$ 1,500,000
402	Roselle Borough	S340332-02	Cleaning & lining of sanitary sewer	\$ 3,800,000
188	Roxbury Township	S340381-07	Treatment Plant & Pump Station Improv.s	\$ 8,500,000
447	Runnemede Borough	S340363-06	Sanitary Sewer slip-lining at various locations	\$ 1,800,000
928	Salem County Improv. Authority	S342022-01	Cell 11 Construction	\$ 9,000,000
819	Sea Girt Borough	S340468-01	Upgrade Pipes and Baltimore Blvd & Neptune Place outfall	\$ 4,900,000
838	Seaside Park Borough	S340083-03	Decommissioning of Well #7	\$ 103,000
209	Seaside Park Borough	S344200-02	Barneget Bay Watershed. Green Infra. Reconstruction of Parking Lots 1-3	\$ 2,800,000
615	Secaucus Town	S340029-04	born street pump station Improv.s	\$ 2,600,000

Rank	Sponsor	Project No.	Project Name	Estimated Cost
833	Secaucus Town	S342021-01	Malanka Landfill Closure	\$ 22,600,000
506	Ship Bottom Borough	S340311-03	Sewer Main Replacement Project	\$ 4,000,000
762	Somers Point City	S340618-02	Stormwater Improv.s	\$ 5,500,000
131	Somerset Raritan Valley Sewer Authority	S340801-07	Stormwater control facility to eliminate sewage discharge	\$ 20,134,080
527	Somerset Raritan Valley Sewer Authority	S340801-08	Rehab of sludge incin. #2 to meet Federal air emission req.	\$ 13,500,000
954	Somerville Borough	S342013-02	Green Seam Phase II Ground Water Treatment	\$ 677,878
954	Somerville Borough	S342013-01	Green Seam Restoration	\$ 10,684,529
357	South Monmouth Regional Sewer Authority	S340377-03	Pump Station Improv.s (Superstorm Sandy)	\$ 9,137,611
357	South Monmouth Regional Sewer Authority	S340377-04A	Pump Station Improv.s Superstorm Sandy	\$ 6,981,600
357	South Monmouth Regional Sewer Authority	S340377-05	Various Belmar Pump Station Improv.s	\$ 3,500,000
198	Stafford Township	S344100-03	Neptune Basin Expansion	\$ 5,600,000
202	Stony Brook Regional Sewer Authority	S340400-10	Dewatered Sludge Handling Pump Replacement Project	\$ 5,100,000
498	Sussex Borough	S340155-02	Sewer Force Main	\$ 550,000
934	Sussex County Municipal Utilities Authority	S342008-05	SCMUA Landfill Life Extension Project	\$ 13,000,000
766	Ventnor City	S340667-03	Flood Walls in Various Locations	\$ 1,600,000
398	West Deptford Township	S340947-05	Replacement of Pump Stations 4 and 6	\$ 1,300,000
123	West Milford Municipal Utilities Authority	S340701-12	Emergency Power Generator Install	\$ 350,000
699	West Wildwood Borough	S340626-05	Storm Sewer Improv.s to Avenues P, Q, R, S & Mueller Avenue	\$ 1,890,000
237	Western Monmouth Utilities Authority	S340128-06	Pine Brook Sewage Treatment Plant Improv.s	\$ 12,100,000
341	Western Monmouth Utilities Authority	S340128-05	Route 79 Pump Station and Force Main Replacement	\$ 4,300,000
698	Wildwood City	S340664-05	Stormwater Remediation of Pacific Avenue	\$ 15,300,000
279	Willingboro Municipal Utilities Authority	S340132-08	Collection System Resiliency	\$ 1,900,000
BASE TOTAL:				\$ 2,543,812,104
TOTAL CLEAN WATER – SUPPLEMENTAL + BASE PROGRAMS:				\$ 2,551,062,104

**Appendix A-2
Clean Water**

Combined Base SFY2018/Superstorm Sandy Project Interim Financing Program Priority List
Updated Statewide Assistance Infrastructure Loan Program (Disaster Relief Emergency Financing
Program) Project Priority List
Second Amended SFY2017 Interim Financing Program Project Priority List

Ranked Order

KEY: **Red/italics** = SAIL – Disaster Relief projects

Green = New projects or increases in project costs since the First Amended SFY2017 Interim Financing Program Project Priority List are identified

Supplemental Funding				
Rank	Sponsor	Project No.	Project Name	Estimated Cost
S_21	Warren Township Sewer Authority	S340964-01-1	Stage IV Oxidation Ditch/Final Clarifier & UV Disinfection Syst	\$ 100,000
S_97	North Hudson Sewer Authority	S340952-19-1	Combined Sewer Improv.	\$ 200,000
S_171	Ewing Lawrence Sewer Authority	S340391-10-1	Wastewater Treat Plant Upgrade	\$ 4,900,000
S_186	Wanaque Valley Reg. Sewer Authority	S340780-04-1	2013 Proposed Improv.s	\$ 1,500,000
S_285	Warren Township Sewer Authority	S340964-02-1	Fox Hill West & Heather Lane Pump Station	\$ 350,000
S_389	Burlington Township	S340712-14-1	Sewer Rehabilitation	\$ 200,000
SUPPLEMENTAL TOTAL:				\$ 7,250,000
Base Program Projects				
Rank	Sponsor	Project No.	Project Name	Estimated Cost
1	Camden County Municipal Utilities Authority	S340640-19	Camden City Green and Grey Infrastructure Project, Phase 4	\$ 11,500,000
2	Camden County Municipal Utilities Authority	S340640-20	Camden City Green Infrastructure	\$ 6,500,000
3	Camden County Municipal Utilities Authority	S340640-17	Reduce Potential for CSOs within City	\$ 6,650,000
4	Camden County Municipal Utilities Authority	S345040-01	Camden City and Gloucester City Long-Term CSO Control Plan	\$ 1,049,636
4	Camden County Municipal Utilities Authority	S340640-24	Upgrade of Camden County Wastewater Treatment Plant to Increase Wet Weather Capacity	\$ 6,500,000

Rank	Sponsor	Project No.	Project Name	Estimated Cost
6	Camden County Municipal Utilities Authority	S340640-15	CSO Green Infrastructure	\$ 9,100,000
7	Rahway Valley Sewerage Authority	S340547-14	Replace existing digester tank covers & mixers; replacing gas flares	\$ 9,500,000
11	Camden County Municipal Utilities Authority	S340640-21	Camden City Waterfront Stormwater Pumping Station	\$ 32,500,000
11	Camden County Municipal Utilities Authority	S340640-22	Upgrades to Camden City's Combined Sewer Overflow System	\$ 13,000,000
11	Camden County Municipal Utilities Authority	S340640-23	Dredging of Camden City's Combined Sewer Overflows to Reduce Combined Sewage Flooding	\$ 13,000,000
15	Newark City	S340815-25	Green Infrastructure for the Sewer System	\$ 400,000
15	Newark City	S340815-27	Greenstreet Projects for the City of Newark	\$ 3,800,000
19	Camden County Municipal Utilities Authority	S340640-16	Wastewater Treatment Plant Improv.s	\$ 13,300,000
23	Newark City	S340815-22	Queen Ditch Restoration	\$ 5,500,000
23	Newark City	S340815-24	Structural eval & rehab of 350 miles of small diameter sewers	\$ 21,000,000
23	Newark City	S340815-26	Improv.s to the Peddie CSO	\$ 3,300,000
29	Camden City	S340366-07	2014 Sanitary/Combined Sewer Rehab / Replacement Project	\$ 59,000,000
29	Camden City	S340366-12	Cooper Street Pump Station	\$ 2,300,000
31	Elizabeth City	S340942-19	Trumbull Street Flood Control Project	\$ 6,900,000
33	Camden County Municipal Utilities Authority	S340640-18	Phase I upgrades, improve/sustain optimal wastewater performance	\$ 50,664,200
35	North Bergen Municipal Utilities Authority	S340652-14	Woodcliff Additional Improv.s	\$ 20,399,230
37	Hoboken City	S340635-08	Southwest Resiliency Park - Acquisition, Rehabilitation	\$ 6,600,000
41	Jersey City Municipal Utilities Authority	S340928-15	Phase 3 & 4 Sewer Improv.s	\$ 44,000,000
41	Jersey City Municipal Utilities Authority	S340928-16	Sixth Street Combined Sewer Outfall	\$ 9,500,000
41	Jersey City Municipal Utilities Authority	S340928-17	Regulator, Outfall and Solid_Flo	\$ 14,160,000
41	Jersey City Municipal Utilities Authority	S340928-18	Claremount Carteret outfall rep	\$ 5,600,000

Rank	Sponsor	Project No.	Project Name	Estimated Cost
41	Jersey City Municipal Utilities Authority	S340928-19	East Side Plant repairs, improve	\$ 7,500,000
41	Jersey City Municipal Utilities Authority	S340928-20	Outfall Chambers	\$ 7,200,000
52	Elizabeth City	S340942-13	Western Interceptor Modifications	\$ 13,146,000
52	Elizabeth City	S340942-17	South Street Flood Control Project	\$ 5,500,000
52	Elizabeth City	S340942-18	Progress Street Flood Control Project	\$ 8,200,000
52	Elizabeth City	S345070-01	City of Elizabeth CSO LTCP	\$ 4,000,001
60	Kearny Town	S340259-11	Dukes St Stormwater Pump Station	\$ 17,000,000
64	Ridgefield Park Village	S345230-01	Planning for Long-Term Control Plan CSO	\$ 800,002
67	Paterson City	S345210-01	Investigation of Tributary Sewers from Adjacent Municipalities	\$ 200,000
68	Perth Amboy City	S340435-17	Second Street Corridor Project	\$ 4,418,400
71	Ocean County Utilities Authority	S340372-56	Rehab various primary clarifiers	\$ 8,000,000
72	Bayshore Regional Sewer Authority	S340697-05	Restoration and Flood Mitigation	\$ 58,072,111
72	Bayshore Regional Sewer Authority	S340697-06	Phase II Perm. Restor/Mitigation of Blower Bldg & Pwr Dist. System	\$ 19,000,000
74	Ocean County Utilities Authority	S340372-59	AW1611 Area Wide Clarifier Rehabilitation	\$ 6,956,586
75	Atlantic County Utilities Authority	S340809-23	ACUA Treatment Plant Resiliency Project - Emergency Power	\$ 9,200,000
75	Atlantic County Utilities Authority	S340809-25	Seawall	\$ 14,600,000
75	Atlantic County Utilities Authority	S340809-26	STP Mitigation Projects	\$ 1,500,000
75	Atlantic County Utilities Authority	S340809-27	Automated Bar Screens	\$ 3,200,000
82	Middletown Township Sewer Authority	S340097-04	TOMSA Mitigation Project	\$ 23,000,000
84	Hoboken City	S340635-05	Southwest Park design & underground retention system	\$ 5,300,000
84	Hoboken City	S340635-06	Acquisition, remediation, & construction on 6- acre park & outfall	\$ 33,000,000
84	Hoboken City	S340635-07	Resilient Green Infrastructure for CSO Reduction	\$ 3,000,000
90	Cliffside Park Borough	S340847-04	Combined Sewer Separation	\$ 5,300,000
93	Perth Amboy City	S340435-13	The Paving of Parking Lots C and RDH (GI)	\$ 850,000
96	Jersey City Municipal Utilities Authority	S340928-22	Jersey City Green Infrastructure	\$ 750,000

Rank	Sponsor	Project No.	Project Name	Estimated Cost
97	North Hudson Sewer Authority	S340952-22	W1234 Solids/Floatables (CSO)	\$ 18,000,000
97	North Hudson Sewer Authority	S340952-23	Phase II sanitary sewer system upgrades	\$ 3,100,000
97	North Hudson Sewer Authority	S340952-24	Rehabilitate sewers @ Hamilton Ave & JFK Blvd	\$ 3,000,000
107	North Hudson Sewer Authority	S340952-28	Collection System Improv.s	\$ 1,200,000
107	North Hudson Sewer Authority	S340952-29	2017 River Road Wastewater Treatment Plant Improv.s	\$ 1,300,000
107	North Hudson Sewer Authority	S340952-30	2017 Adams Street Wastewater Treatment Plant Improv.s	\$ 16,800,000
107	North Hudson Sewer Authority	S345190-01	Combined Sewer Long-Term Control Plan	\$ 6,000,000
113	Riverside Sewerage Authority	S340490-01	Riverside Sewerage Authority Primary Digester Mixing System	\$ 450,000
114	Passaic Valley Sewerage Commission	S340689-35	Administration Building Green Infrastructure Entry Plaza	\$ 400,000
114	Passaic Valley Sewerage Commission	S340689-36	Green Car Wash	\$ 250,000
117	Perth Amboy City	S340435-11	Replace pumps, relocate elect equip, to improve resiliency	\$ 6,459,351
117	Perth Amboy City	S340435-14	CSO Reparation (Pulaski Ave / Parker St. / State Street)	\$ 2,608,000
117	Perth Amboy City	S345220-01	CSO Permit Development of Long-Term Control Plan	\$ 1,000,000
123	West Milford Municipal Utilities Authority	S340701-12	Emergency Power Generator Install	\$ 350,000
125	Jersey City Municipal Utilities Authority	S340928-24	Phase 1/2 Sewer Rehabilitation	\$ 22,200,000
125	Jersey City Municipal Utilities Authority	S340928-27	Green Infrastructure- Martin Luther King Drive Tree Trenches	\$ 500,000
128	Hackensack City	S340923-12	Combined Sewer Separation, Phase 2	\$ 6,000,000
130	Cumberland County Utilities Authority	S340550-07	Sewage Treatment Plant Upgrades	\$ 1,300,000
131	Somerset Raritan Valley Sewer Authority	S340801-07	Stormwater control facility to eliminate sewage discharge	\$ 20,134,080
135	Millville City	S340921-07	Wastewater Treatment Plant Upgrade Phase II	\$ 12,000,000
138	Delran Township	S340794-08	Replace existing sand filter @ WWTP & rehab Twps Fifth St Pump Station	\$ 2,000,000
140	Passaic Valley Sewerage Commission	S340689-23	Standby Power Generating Facility	\$ 150,000,000

Rank	Sponsor	Project No.	Project Name	Estimated Cost
140	Passaic Valley Sewerage Commission	S340689-37	Substation "M" Replacement	\$ 13,400,000
140	Passaic Valley Sewerage Commission	S340689-38	Final Clarifier Concrete Rehabilitation Project	\$ 21,000,000
140	Passaic Valley Sewerage Commission	S340689-39	Heat Treatment Plant Supernatant Return (HTPSR) Pipe Lining Project	\$ 4,816,000
140	Passaic Valley Sewerage Commission	S340689-40	Plant wide Replacement & Relocation of Electrical Switchgear and MCCs	\$ 123,300,000
140	Passaic Valley Sewerage Commission	S340689-42	Storm Water Collection Systems	\$ 21,500,000
140	Passaic Valley Sewerage Commission	S340689-43	Storm Water Pumping Stations	\$ 43,600,000
140	Passaic Valley Sewerage Commission	S345200-01	Combined Sewer Overflow Long-Term Control Planning	\$ 8,000,000
140	Passaic Valley Sewerage Commission	S345200-02	Asset Management Plan	\$ 2,000,000
149	Passaic Valley Sewerage Commission	S340689-41	Perimeter Flood Wall	\$ 97,000,000
150	Passaic Valley Sewerage Commission	S340689-25	Administration Building Rehabilitation	\$ 9,840,000
150	Passaic Valley Sewerage Commission	S340689-30	Relocate sump pumps to prevent flooding / new stand-by generator	\$ 2,500,000
150	Passaic Valley Sewerage Commission	S340689-31	Replace existing Sod Hypochlorite Storage & Feed Tanks	\$ 4,000,000
150	Passaic Valley Sewerage Commission	S340689-32	Plant wide improv. to increase wet weather treatment capacity	\$ 4,000,000
150	Passaic Valley Sewerage Commission	S340689-33	Weatherproof tunnel locations incl HVAC for ventilation	\$ 50,000,000
150	Passaic Valley Sewerage Commission	S340689-34	New pumps, valves, piping, meters, process control monitoring equip.	\$ 2,900,000
162	Northwest Bergen County Utilities Authority	S340700-13	Sludge aeration syst, replace blower, sludge pumps, thickener building	\$ 5,200,000
162	Northwest Bergen County Utilities Authority	S340700-16	Wastewater Treatment Plant Improv.s	\$ 3,900,000
168	Jersey City Municipal Utilities Authority	S340928-21	Sewer Pipe Replacement / Phase V CSO Study	\$ 11,031,040
168	Jersey City Municipal Utilities Authority	S340928-28	Van Winkle Ave. San. Sewer Rehab.	\$ 2,300,000
172	Gloucester City	S340958-08	Various Sewer Projects	\$ 2,100,000
183	Cinnaminson Sewerage Authority	S340170-07	Aerators, Dissolve ox. controls, anoxic zone, odor control equip	\$ 9,000,000

Rank	Sponsor	Project No.	Project Name	Estimated Cost
188	Roxbury Township	S340381-07	Treatment Plant & Pump Station Improv.s	\$ 8,500,000
190	Raritan Township Municipal Utilities Authority	S340485-12	Main Treatment Plant Improv.s 2016	\$ 4,900,000
193	Gloucester County Utilities Authority	S340902-14	Replace bio-solids handling facility to combined heat & pwr generation	\$ 45,000,000
197	Gloucester County Utilities Authority	S340902-15	Combined Heat & Power	\$ 7,250,000
198	Stafford Township	S344100-03	Neptune Basin Expansion	\$ 5,600,000
202	Stony Brook Regional Sewer Authority	S340400-10	Dewatered Sludge Handling Pump Replacement Project	\$ 5,100,000
208	North Wildwood City	S340663-07	2016 Street and Utility Reconstruction - Sewer	\$ 32,872,570
209	Seaside Park Borough	S344200-02	Barnegat Bay Watershed. Green Infra. Reconstruction of Parking Lots 1-3	\$ 2,800,000
214	Gloucester County Utilities Authority	S340902-16	Primary Clarifier Equipment Replacement	\$ 2,000,000
215	Howell Township	S344040-02	Freewood Acres & Route 9 Sanitary Sewer Extension	\$ 14,500,000
223	Barnegat Township	S344130-01	Jet-Vac Truck for Sanitary Sewer / Stormwater Cleaning/Maintenance	\$ 600,000
224	Little Egg Harbor Township	S344060-02	Twin Lakes Blvd. Drainage Improv.s	\$ 4,200,000
226	Hightstown Borough	S340915-05	UV Disinfection System	\$ 1,400,000
230	Ocean County	S344080-04	Manufactured Treatment Devices	\$ 1,100,000
232	Ocean County	S344080-10	Camera Pipe Line Inspection Truck System - Equipment	\$ 240,000
232	Ocean County	S344080-11	Mechanical Street Sweeper - Equipment	\$ 336,000
234	Rockaway Valley Regional Sewer Authority	S340821-07	Rehab & enhancement of four existing final clarifiers	\$ 8,200,000
236	Ocean County	S344080-09	Barnegat Bay Storm Water - Manufactured Treat. Devices	\$ 1,300,000
237	Western Monmouth Utilities Authority	S340128-06	Pine Brook Sewage Treatment Plant Improv.s	\$ 12,100,000
238	Jackson Township	S344050-02	Purchase of a Jet-Vac/Street Sweeper	\$ 1,300,000
244	Point Pleasant Beach Borough	S344190-02	Little Silver Lake Drainage Improv. Project	\$ 9,600,000
245	Ocean Gate Borough	S344180-01	Storm Sewer MTD	\$ 2,600,000
254	Northwest Bergen County Utilities Authority	S340700-17	Security System Upgrades	\$ 800,000

Rank	Sponsor	Project No.	Project Name	Estimated Cost
258	Kearny Municipal Utilities Authority	S340259-07	Pump Station Rehabilitation	\$ 8,918,476
266	Mendham Township	S340477-01	Mendham East Wastewater Treatment Facility Conversion	\$ 2,400,000
267	Cumberland County Utilities Authority	S340550-08	Replace Pump stations / Plant Improv.s for increased energy efficiency	\$ 1,300,000
270	Princeton Borough	S340656-08	System-wide Sanitary Sewer Rehabilitation	\$ 4,300,000
276	North Wildwood City	S340663-06	2014 Street & Utility Reconstruction	\$ 18,100,000
279	Willingboro Municipal Utilities Authority	S340132-08	Collection System Resiliency	\$ 1,900,000
282	Little Egg Harbor Municipal Utilities Authority	S340579-02	Twin Lakes Blvd Sewer Main Replacement	\$ 2,700,000
282	Little Egg Harbor Municipal Utilities Authority	S340579-03	Little Egg Harbor Sewer Main Replacement	\$ 7,700,000
290	Manasquan Borough	S340450-02	Track I - PS, elec syst & controls, bulkheads & stormwater improvement.	\$ 2,110,000
297	Montclair Township	S340837-04	Sanitary Sewers refurbishment 2017	\$ 1,700,000
299	Pleasantville City	S340752-03	Pleasantville Various Projects	\$ 3,135,562
304	Middlesex County Utilities Authority	S340699-12	Restoration and Flood Mitigation	\$ 112,000,000
304	Middlesex County Utilities Authority	S340699-13	Restoration and Flood Mitigation	\$ 44,000,000
304	Middlesex County Utilities Authority	S340699-14	Main Truck Sewer Rehab Phase II	\$ 18,250,000
309	Ocean County Utilities Authority	S340372-57	Rehab Point Pleasant Beach Interceptor and manholes	\$ 3,100,000
315	Atlantic County Utilities Authority	S340809-24	ACUA Pump Station Resiliency Project	\$ 800,000
315	Atlantic County Utilities Authority	S340809-29	Replace a portion of Brigantine Force Main	\$ 4,300,000
327	Rockaway Valley Regional Sewer Authority	S340821-06	Washout of old Jersey Truck Sewer Crossing of the Rockaway River	\$ 7,000,000
333	Brick Township Municipal Utilities Authority	S340448-11	Wastewater Pump Station Rehabilitation - Phase II	\$ 5,278,297
336	Northwest Bergen County Utilities Authority	S340700-14	Midland Park Force Main Installation	\$ 3,694,000
336	Northwest Bergen County Utilities Authority	S340700-15	Wastewater Pump Station Improv.s	\$ 5,000,000

Rank	Sponsor	Project No.	Project Name	Estimated Cost
338	Rockaway Valley Regional Sewer Authority	S340821-09	West Main Street Sewer Repair	\$ 1,500,000
341	Western Monmouth Utilities Authority	S340128-05	Route 79 Pump Station and Force Main Replacement	\$ 4,300,000
343	Old Bridge Municipal Utilities Authority	S340945-14	2015 Sewage Pump Station Upgrades	\$ 2,300,000
346	Gloucester Township Municipal Utilities Authority	S340364-13	New vac truck, PS communication system, sanitary sewer rehab.	\$ 1,400,000
347	Franklin Township Sewerage Authority	S340839-06	Rodney Ave. Pump Station	\$ 17,100,000
357	South Monmouth Regional Sewer Authority	S340377-03	Pump Station Improv.s (Superstorm Sandy)	\$ 9,137,611
357	South Monmouth Regional Sewer Authority	S340377-04A	Pump Station Improv.s Superstorm Sandy	\$ 6,981,600
357	South Monmouth Regional Sewer Authority	S340377-05	Various Belmar Pump Station Improv.s	\$ 3,500,000
363	Egg Harbor Township Municipal Utilities Authority	S340753-06	FAA Pump Station Reconstruction Project	\$ 700,000
368	Montclair Township	S340837-03	Sanitary Sewer Collection System Rehabilitation-SFY 2016	\$ 1,700,000
373	Ocean Township Sewer Authority	S340750-13	2016 Collection System Improv.s	\$ 550,000
373	Ocean Township Sewer Authority	S340750-14	Asbury Avenue and Longview Pump Stations Rehabilitation	\$ 2,500,000
376	Ocean Township Sewer Authority	S340750-11	Collection System Upgrades 2013	\$ 5,500,000
376	Ocean Township Sewer Authority	S340750-12	Interlaken Pump Station reconstruction	\$ 4,100,000
385	Ocean County Utilities Authority	S340372-58	AW1610 South Island Beach Interceptor (CI-1A) and South Island Interceptor (SI-11) Rehabilitation	\$ 3,997,392
389	Burlington Township	S340712-15	Sanitary Sewer Rehabilitation in Various Locations	\$ 1,100,000
393	Raritan Township Municipal Utilities Authority	S340485-11	HCRHS Sewer Relocation Project	\$ 500,308
398	West Deptford Township	S340947-05	Replacement of Pump Stations 4 and 6	\$ 1,300,000
402	Roselle Borough	S340332-02	Cleaning & lining of sanitary sewer	\$ 3,800,000

Rank	Sponsor	Project No.	Project Name	Estimated Cost
438	Pine Hill Municipal Utilities Authority	S340274-05	Rehab. Greenwood Ave. Pump Station, new Madison Ave. force main	\$ 1,800,000
442	Brigantine City	S340827-04	Emergency Generators	\$ 3,300,000
446	Oradell Borough	S340835-04	Phase IV sanitary sewer Improv.s	\$ 1,400,000
447	Runnemede Borough	S340363-06	Sanitary Sewer slip-lining at various locations	\$ 1,800,000
448	Ocean Township	S340112-07	Replace san. Sewer. main, drainage Improv.s various locations	\$ 3,000,000
476	Bradley Beach Borough	S340472-01	Sewer Main Installation and Repairs - Phase I	\$ 2,700,000
479	Medford Lakes Borough	S340319-03	Collection System Lining Improvements	\$ 11,000,000
487	Long Beach Township	S340023-06	Replace sanitary sewer main, laterals, cleanouts & manholes	\$ 5,000,000
487	Long Beach Township	S340023-07	Sewer Main Replacement Project	\$ 4,600,000
498	Sussex Borough	S340155-02	Sewer Force Main	\$ 550,000
506	Ship Bottom Borough	S340311-03	Sewer Main Replacement Project	\$ 4,000,000
513	Gloucester County Utilities Authority	S340902-17	Sludge Drying System	\$ 10,000,000
518	Gloucester County Utilities Authority	S340902-13	Incinerator #2 Upgrades	\$ 14,040,000
523	Atlantic County Utilities Authority	S340809-28	Incinerator Construction to meet EPA requirements	\$ 2,400,000
527	Somerset Raritan Valley Sewer Authority	S340801-08	Rehab of sludge incin. #2 to meet Federal air emission req.	\$ 13,500,000
533	North Wildwood City	S340663-08	2016 Street and Utility Reconstruction - Stormwater	\$ 32,872,570
541	Plumsted Township	S340607-03	advanced WW treatment & collection system	\$ 16,789,494
615	Secaucus Town	S340029-04	born street pump station Improv.s	\$ 2,600,000
623	Cinnaminson Sewerage Authority	S340170-08	Taylor's Lane Sewer Extension	\$ 1,160,000
624	Gloucester City	S340958-07	Various Water System Improv.s, Phase II	\$ 1,200,000
628	Cumberland County	S340438-01	Downe Wastewater Infrastructure	\$ 16,000,000
629	Greenwich Township	S340359-02	Installation of a collector sewer in vicinity of the Village of Stewartsville	\$ 2,200,000
660	Aberdeen Township	S340869-02	San. Sewer and Pump Sta. upgrades to Freneau / Woodfield Area.	\$ 9,000,000
676	Logan Township Municipal Utilities Authority	S340123-01	0.50 MGD Water Reclamation Facility Expansion	\$ 8,100,000
690	Little Egg Harbor Township	S340579-04	Mystic Island Drainage Improvements - Phase 2	\$ 1,714,000

Rank	Sponsor	Project No.	Project Name	Estimated Cost
690	Little Egg Harbor Township	S340579-04	Mystic Island Drainage Improvements - Phase 2	\$ 1,714,000
694	Burlington City	S340140-01	stormwater pump upgrades	\$ 1,000,000
698	Wildwood City	S340664-05	Stormwater Remediation of Pacific Avenue	\$ 15,300,000
699	West Wildwood Borough	S340626-05	Storm Sewer Improv.s to Avenues P, Q, R, S & Mueller Avenue	\$ 1,890,000
700	Cranford Township	S340858-04	Stormwater constr. various locations to improve drainage/prevent flooding	\$ 12,000,000
706	New Jersey Water Supply Authority	S340421-01	D&R Canal Dredging	\$ 56,800,000
721	Middletown Township	S340097-01	Shadow Lake Restoration Project	\$ 4,500,000
724	Gloucester Township	S340364-11	Flood Mitigation	\$ 1,700,000
724	Gloucester Township	S340364-15	Gloucester Township Stormwater Improv.s	\$ 1,450,000
744	Carteret Borough	S340939-09	Noe Street Stormwater Pump Station Construction	\$ 10,600,000
752	Hammonton Town	S340927-09	Stormwater Improv.s	\$ 4,600,000
762	Somers Point City	S340618-02	Stormwater Improv.s	\$ 5,500,000
766	Ventnor City	S340667-03	Flood Walls in Various Locations	\$ 1,600,000
770	Brigantine City	S340827-05	Flood Control and Pump Station Improv.s	\$ 4,600,000
770	Brigantine City	S340827-06	Mun. System Improv.s	\$ 1,001,066
787	Paulsboro Borough	S340164-01	Replace storm sewer along Thomson & Wood Aves.	\$ 2,750,000
794	Highlands Borough	S340901-03	Stormwater System Improv.s (Current Project)	\$ 6,250,000
804	Bradley Beach Borough	S340472-02	Bradley Boulevard Stormwater	\$ 2,590,050
819	Sea Girt Borough	S340468-01	Upgrade Pipes and Baltimore Blvd & Neptune Place outfall	\$ 4,900,000
833	Secaucus Town	S342021-01	Malanka Landfill Closure	\$ 22,600,000
838	Seaside Park Borough	S340083-03	Decommissioning of Well #7	\$ 103,000
840	Jersey City Redevelopment Agency	S340928-25	Jersey Avenue Park Redevelopment Plan - Phase 1/2	\$ 14,069,063
840	Jersey City Redevelopment Agency	S340928-26	Jersey Avenue Park Redevelopment Plan - Phase 2	\$ 12,600,000
843	Bellmawr Borough	S342011-02	Waterfront Development Remediation	\$ 68,400,000
846	Cumberland County Improv. Authority	S342015-03	Landfill Expansion (Phase VI development & Leachate Pump Station improv)	\$ 19,000,000
855	Edison Township	S342020-01	Edison Landfill Closure	\$ 13,000,000
914	Kearny Town	S340259-12	Redev of recreational complex as a modern artificial turf complex	\$ 18,200,000

Rank	Sponsor	Project No.	Project Name	Estimated Cost
924	Asbury Park City	S340883-08	Sewer Plant	\$ 63,000,000
927	Carteret Borough	S340939-07	Dredge sediment & construct bulkhead / slope stabilization	\$ 23,900,000
928	Salem County Improv. Authority	S342022-01	Cell 11 Construction	\$ 9,000,000
930	Gloucester County Improv. Authority	S342024-01	Cell Construction	\$ 8,000,000
934	Sussex County Municipal Utilities Authority	S342008-05	SCMUA Landfill Life Extension Project	\$ 13,000,000
936	Cape May County Municipal Utilities Authority	S342017-04	Sanitary Landfill	\$ 5,800,000
942	Milltown Borough	S340102-01	Milltown Ford Ave Redevelopment	\$ 21,000,000
942	Milltown Borough	S340102-04	Ford Avenue Redevelopment	\$ 5,500,000
954	Somerville Borough	S342013-02	Green Seam Phase II Ground Water Treatment	\$ 677,878
954	Somerville Borough	S342013-01	Green Seam Restoration	\$ 10,684,529
958	New Jersey Water Supply Authority	S340421-02	Round Valley Struct. Refurb/Res. Preserv.	\$ 50,000,000
BASE TOTAL:				\$ 2,543,812,104
TOTAL CLEAN WATER – SUPPLEMENTAL + BASE PROGRAMS:				\$ 2,551,062,104

**Appendix B-1
Drinking Water**

Combined Base SFY2018/Superstorm Sandy Project Interim Financing Program Priority List
Updated Statewide Assistance Infrastructure Loan Program (Disaster Relief Emergency
Financing Program) Project Priority List
Second Amended SFY2017 Interim Financing Program Project Priority List

Alphabetical Order

KEY: **Red/italics** = SAIL – Disaster Relief projects

Green = New projects or increases in project costs since the First Amended SFY2017 Interim Financing Program Project Priority List are identified

Supplemental Funding				
Rank	Sponsor	Project No.	Project Name	Estimated Cost
S_220	Gloucester City	0414001-020-1	Water St Water Main Replacement / Loop Mains to Freedom Pier	\$ 1,300,000
S_89	North Jersey District Water Supply Commission	1613001-017-1	Wanaque South Pump Station Upgrade	\$ 3,600,000
SUPPLEMENTAL TOTAL:				\$ 4,900,000
Base Program Projects				
Rank	Sponsor	Project No.	Project Name	Estimated Cost
311	NJ American Water Company, Incorporated	1345001-019	Howell-Lakewood Transmission Main	\$ 60,000,000
385	Woodland Heights Homeowners Association	1615022-001	Well Rehabilitation/System Improvements	\$ 560,000
285	Brick Township Municipal Utilities Authority	1506001-009	Breton Woods Water Main Replacement - Phase I	\$ 5,928,760
285	Brick Township Municipal Utilities Authority	1506001-008	Undersized Water Main Replacement Cedar Park East and West	\$ 6,223,437
287	Brick Township Municipal Utilities Authority	1506001-010	Hydrant Replacement in Baywood Section	\$ 1,160,000
369	Elmer Borough	1702001-001	Repainting and Repair of the Water Storage Tower	\$ 800,000
107	Sussex Borough	1921001-005	Lake Rutherford Water Line Installation Project	\$ 1,221,600
359	Spotswood Borough	1224001-001	Cleaning and lining of approximaty 3,600 LF of water mains	\$ 3,443,914

Rank	Sponsor	Project No.	Project Name	Estimated Cost
343	Aberdeen Township	1330004-001	Woodfield Area Water System Rehabilitation	\$ 3,900,000
14	ADTI Housing Corporation	2103002-001	Chlorination system	\$ 400,000
44	Atlantic City Municipal Utilities Authority	0102001-006	1 MG Storage Tank Sand Blasting and painting	\$ 2,100,000
386	Bayonne Municipal Utilities Authority	0901001-006	Aqueduct Replacement	\$ 12,000,000
145	Bellmawr Borough	0404001-005	Improv.s to WTP	\$ 500,000
218	Bellmawr Borough	0404001-006	Various Water System Improv.	\$ 2,300,000
84	Berkeley Township Municipal Utilities Authority	1505004-008	Phase VI Water Main Installation	\$ 3,500,000
180	Berkeley Township Municipal Utilities Authority	1505004-007	BTMUA Well #4 Phase II Production Well	\$ 1,400,000
180	Berkeley Township Municipal Utilities Authority	1505004-009	Installation of new well #4 with WM to connect to WTP	\$ 1,400,000
29	Bordentown City	0303001-006	Upgrade Well 2 with 2A to resolve violation	\$ 1,600,000
254	Bordentown City	0303001-007	Water System Remediation Upgrades to WTP	\$ 2,900,000
244	Brick Township Municipal Utilities Authority	1506001-007	Chlorine Disinfection System Relocation	\$ 3,800,000
419	Brigantine City	0103001-501	Installation of generators @ well	\$ 2,900,000
74	Camden City	0408001-021	New Auto Meter Reading Equip for entire City	\$ 1,800,000
93	Camden City	0408001-022	Install potable wells/flr elevations @ Morris Delair WTP	\$ 1,400,000
191	Cape May City	0502001-004	Well 5 Replacement for the Sands Aquifer	\$ 2,200,000
238	Clementon Borough	0411001-001	Rehab of Gibbsboro Water Main (White Horse Pike & White Horse Rd.)	\$ 500,000
474	Clementon Borough	0411001-002	Rehab of well 9 including slip lining to improve conveyance	\$ 1,400,000
255	Clinton Town	1005001-008	Well 4 Water Production Facility	\$ 1,500,000
348	Clinton Town	1005001-006	Lebanon Borough Water Main Replacements - Phase II through Phase V	\$ 4,300,000
542	Clinton Town	1005001-007	Replace Water Meters	\$ 4,277,804
558	Clinton Town	1005001-009	Well 7 Improv.s & Well 14 Decommissioning	\$ 1,200,000

Rank	Sponsor	Project No.	Project Name	Estimated Cost
5	East Orange City	0705001-011	Water Treatment & Supply Program	\$ 13,100,000
32	East Orange City	0705001-014	Water System Improv.s and Resiliency Project 2017	\$ 33,000,000
247	Evesham Municipal Utilities Authority	0313001-001	Wells 13 & 14 Treatment Improv.s	\$ 2,100,000
220	Gloucester City	0414001-020	Water main replacement and looping of mains to Freedom Pier	\$ 1,259,000
231	Gloucester City	0414001-022	Replacement of 1,200 LF of 8" cast iron main on Brown Street	\$ 1,200,000
232	Hammonton Town	0113001-011	2016 Utility Road Program Valley, Central & Bellevue Ave to Broadway	\$ 1,900,000
489	Hampton Borough	1013001-001	New back up well 5 to address firm capacity requirements	\$ 1,800,000
572	Harvey Cedars Borough	1509001-001	Installation of a Water Monitoring Well	\$ 1,100,000
182	Hightstown Borough	1104001-008	Settling Tank Rehabilitation	\$ 200,000
527	Hightstown Borough	1104001-007	Rehabilitation of Deep Well 2	\$ 450,000
190	Hoboken City	0905001-001	Wash. Street Water Main / Green Infrastructure Drainage Improv.	\$ 6,000,000
177	Jackson Township Municipal Utilities Authority	1511001-013	Six Flags Great Adventure Water Treatment Plant Replacement	\$ 13,194,799
193	Jackson Township Municipal Utilities Authority	1511001-010	Demolition of Facilities, replace storage tank, well #3	\$ 8,200,000
395	Jackson Township Municipal Utilities Authority	1511001-012	Western Water Main Extension	\$ 11,000,000
446	Jackson Township Municipal Utilities Authority	1511001-011	Improv.s to Manhattan St Complex, Garage & Admin Bldg.	\$ 1,600,000
137	Jersey City Municipal Utilities Authority	0906001-006	Transmission Main Install	\$ 19,000,000
137	Jersey City Municipal Utilities Authority	0906001-010	Journal Square North Cleaning	\$ 16,900,000
137	Jersey City Municipal Utilities Authority	0906001-012	Water Main Replacement	\$ 18,000,000
390	Jersey City Municipal Utilities Authority	0906001-013	Remote Meter Reading (AMI)	\$ 9,300,000
201	Kearny Town	0907001-001A	Water Facility and ground Improv. program	\$ 29,000,000
8	Lake Glenwood Village	1922010-008	Wells 1 & 2 upgrades	\$ 1,000,000
360	Lavallette Borough	1515001-001	Repainting inside & outside of water storage tank	\$ 1,331,000

Rank	Sponsor	Project No.	Project Name	Estimated Cost
102	Little Egg Harbor Municipal Utilities Authority	1516001-004	Twin Lakes Water Main Replacement	\$ 2,000,000
103	Little Egg Harbor Municipal Utilities Authority	1516001-005	Little Egg Harbor Water Improv.s Phases I	\$ 6,609,594
514	Little Egg Harbor Municipal Utilities Authority	1516001-003	Water Treatment Plant at High Ridge Rd	\$ 4,750,000
514	Little Egg Harbor Municipal Utilities Authority	1516001-500	Radio Road Water Treatment Plant	\$ 800,000
250	Long Beach Township	1517001-500	Beach Haven Terrace Water Plant	\$ 9,200,000
250	Long Beach Township	1517001-501	Brant Beach Water Plant	\$ 1,900,000
250	Long Beach Township	1517001-502	Raise Well 4, reconstruct filter room & pumps	\$ 3,300,000
300	Long Beach Township	1517001-014	Water Main Replacement Project	\$ 4,159,201
298	Manasquan Borough	1327001-002	Construction of 600 LF of WM on Perrine Blvd & Mallard Park Area	\$ 1,469,468
101	Manchester Township	1518005-002	Repaint and repair one MG elevated storage facility	\$ 5,500,000
214	Manchester Township	1518005-003	Install automated meters	\$ 2,600,000
447	Manchester Utilities Authority	1603001-014	2014 Water System Improv.s	\$ 2,000,000
424	Mantua Township MUA	0810004-001	Water Tank Rehabilitation	\$ 1,400,000
557	Mantua Township MUA	0810004-002	Well Rehabilitation	\$ 1,800,000
174	Maple Shade Township	0319001-006	Maple Shade Township meter upgrade project	\$ 2,600,000
150	Middlesex Water Company	1225001-026	Renew 2017	\$ 13,000,000
150	Middlesex Water Company	1225001-016	Renew 2015 - Edison	\$ 5,800,000
243	Middlesex Water Company	1225001-025	Western Transmission Main	\$ 41,000,000
326	Middlesex Water Company	1225001-023	Renew 2016, C&L of water mains, replace non-copper services	\$ 8,000,000
404	Middlesex Water Company	1225001-024	New Interconnection of PS, new table type chlorinators	\$ 3,600,000
281	Milltown Borough	1212001-002	Ford Ave Redevelopment	\$ 1,606,000
323	Milltown Borough	1212001-003	Ford Ave Redevelopment Agency Borough	\$ 1,384,000
361	Milltown Borough	1212001-005	Water Storage Tank Rehabilitation	\$ 1,800,000
442	Montclair Township	0713001-011	New 1.0MG High Zone Tank	\$ 3,600,000

Rank	Sponsor	Project No.	Project Name	Estimated Cost
546	Montclair Township	0713001-008	Nishuane Well Production & Treatment Facility	\$ 2,300,000
98	Netcong Borough	1428001-007	Replace WM on Rte. 46, extend WM on Rte. 80, replace meters	\$ 3,700,000
126	Netcong Borough	1428001-008	Rehabilitate existing storage facilities	\$ 1,100,000
166	Netcong Borough	1428001-009	Replace old meters with automatic ones	\$ 400,000
22	New Brunswick City	1214001-005	Water Treatment Plant Improv.s	\$ 15,500,000
23	Newark City	0714001-016	Pequannock Water Treatment Plant Rehab	\$ 11,000,000
33	Newark City	0714001-015	Rehabilitation of Water Distribution Mains	\$ 18,200,000
33	Newark City	0714001-017	Water Distribution System Upgrades	\$ 2,000,000
66	Newark City	0714001-500	Wayne & Clifton PS Generators	\$ 5,100,000
83	Newark City	0714001-018	Replacement of Water Distribution Mains	\$ 4,800,000
9	NJ American Water Company, Incorporated	1345001-017	Oak Street Treatment Plant Improv.s	\$ 6,500,000
113	NJ American Water Company, Incorporated	1345001-016	Sunset Road Treatment Plant Expansion	\$ 13,100,000
113	NJ American Water Company, Incorporated	1345001-018	Oak Glenn Treatment Plant Expansion	\$ 36,994,400
142	NJ American Water Company, Incorporated	2004002-011	Raw Water Pump Improv.s (Treatment Plant)	\$ 12,800,000
440	NJ American Water Company, Incorporated	2004002-500	RM WTP Flood Wall	\$ 36,000,000
51	North Jersey Dist. Water Supply Comm.	1613001-022	Basins 5 & 6 Rehabilitation	\$ 17,000,000
51	North Jersey Dist. Water Supply Comm.	1613001-025	Recycle Clear Phase to the head of the Treatment Plant	\$ 7,300,000
51	North Jersey Dist. Water Supply Comm.	1613001-026	Low Lift Gas Pump	\$ 12,900,000
51	North Jersey Dist. Water Supply Comm.	1613001-027	Expansion of Aeration System	\$ 2,300,000
51	North Jersey Dist. Water Supply Comm.	1613001-028	Filter Bldg Pipe Gallery Dehumid	\$ 2,000,000
51	North Jersey Dist. Water Supply Comm.	1613001-029	Basins 1-4 Flocculator Rehabilitation	\$ 2,900,000
51	North Jersey Dist. Water Supply Comm.	1613001-031	Purchase and Install New Dewatering System	\$ 3,800,000
51	North Jersey Dist. Water Supply Comm.	1613001-032	Rehabilitation of Treatment Facility	\$ 3,600,000
89	North Jersey Dist. Water Supply Comm.	1613001-035	Rehabilitation of Pump Stations	\$ 3,800,000

Rank	Sponsor	Project No.	Project Name	Estimated Cost
109	North Jersey Dist. Water Supply Comm.	1613001-033	Security Enhancements Project - Orechio Dr Complex	\$ 4,100,000
109	North Jersey Dist. Water Supply Comm.	1613001-034	Security, IT and Safety Projects	\$ 1,600,000
202	North Jersey Dist. Water Supply Comm.	1613001-030	Modify and Expand Central Receiving Building	\$ 2,364,000
11	North Shore Water Association	1904004-001	Existing Well Requires Replacement	\$ 500,000
11	North Shore Water Association	1904004-004	Water System Refurb	\$ 200,000
384	North Shore Water Association	1904004-002	Water System Refurb	\$ 453,900
423	Oakland Borough	0220001-004	Rehab of Iroquois Pumping Station	\$ 3,133,000
468	Oakland Borough	0220001-003	diesel generator for well 9	\$ 3,133,000
541	Oakland Borough	0220001-002	Replace 4600 water meters	\$ 3,133,000
556	Oakland Borough	0220001-001	Construct new well 10A as backup for well 10	\$ 3,133,000
280	Ocean Township	1520001-007	Tuscarora Ave & 11st water main replacement	\$ 1,400,000
328	Old Bridge Municipal Utilities Authority	1209002-013	Knollcroft Water Main Rehabilitation	\$ 3,562,000
578	Old Bridge Municipal Utilities Authority	1209002-014	Perrine Road Carbon Absorber Facility	\$ 1,750,000
2	Passaic Valley Water Commission	1605002-025	Water Storage Improv.s Phase 1 - Standby Emergency Generators	\$ 36,600,000
4	Passaic Valley Water Commission	1605002-014	Phase I - Levine Reservoir Water Storage Improv.s	\$ 26,100,000
104	Paulsboro Borough	0814001-003	Water Main Replacement (Thomson, Wood, Eliz. and Commerce St.)	\$ 2,800,000
363	Pennington Borough	1108001-002	Water distribution upgrades (East Curlis Avenue and Weidel Drive)	\$ 1,250,000
167	Perth Amboy City	1216001-009	The Replacement of Water Meters Project	\$ 1,100,000
205	Perth Amboy City	1216001-008	2015 Replacement of Various Four Inch Mains throughout the City	\$ 2,100,000
331	Perth Amboy City	1216001-500	Install New Stand-by Generator for Runyon Water Treat. Plant	\$ 2,750,000
173	Rahway City	2013001-007	Water Treatment Plant Filter System Upgrade	\$ 8,200,000
450	Rahway City	2013001-008	Construction of new interconnection	\$ 2,700,000
469	Red Bank Borough	1340001-001	Water Plant Improv.s at Chestnut Street and Tower Hill	\$ 2,000,000
31	Saddle Brook Township	0257001-002	North Fifth Street water main	\$ 1,900,000

Rank	Sponsor	Project No.	Project Name	Estimated Cost
21	Sea Village Marina LLC/NJ American Water Co.	0108021-002	Water Main Extension	\$ 1,202,000
587	Seaside Park Borough	1527001-001	Well #10 Treatment Facility	\$ 900,900
239	Ship Bottom Borough	1528001-001	Water main Replacement Project	\$ 3,200,000
506	South Orange Village	0719001-003	South Orange Ave and Holland Road Interconnection Rehabilitation	\$ 150,000
506	South Orange Village	0719001-004	Farrell Field (Walton Ave & Audley St.) Interconnection Rehab.	\$ 150,000
548	South Orange Village	0719001-001	Well 17 Rehabilitation	\$ 250,000
122	Stafford Township	1530004-018	Mill Creek Road and Paul Boulevard Water Main Replacement	\$ 2,400,000
274	Stafford Township	1530004-019	Mill Creek Water Main Replacement Phase II	\$ 1,900,000
106	Sussex Borough	1921001-003	Water Systems Enhancements	\$ 250,000
185	Sussex Borough	1921001-004	Water Meter Replacement Project	\$ 450,000
188	Trenton City	1111001-010	Rehabilitation of distribution system by C&L of mains	\$ 10,500,000
210	Vineland City	0614003-017	2016 Water Distribution Rehabilitation Project	\$ 3,100,000
512	Vineland City	0614003-016	Well No. 17 Treatment Facility	\$ 9,000,000
157	Wall Township	1352003-001	Route 138 Water Main Improv.s	\$ 1,800,000
157	Wall Township	1352003-002	Route 34 Water Main Improv.s	\$ 3,700,000
410	Washington Township Municipal Utilities Authority	0818004-010	Replace well 8, pump house replace @ well 2,	\$ 1,900,000
7	Willingboro Municipal Utilities Authority	0338001-009	Well 5A Radium Treatment	\$ 20,670,173
168	Willingboro Municipal Utilities Authority	0338001-011	Well No. 6 Water Treatment Plant Upgrade	\$ 10,621,600
439	Wonder Lakes Properties, Inc.	1615017-003	Replace hydro-pneumatic tank and install new tank	\$ 30,000
78	Woodbine Municipal Utilities Authority	0516001-001	WTP Upgrade and water main extension	\$ 3,239,500
BASE TOTAL:				\$ 873,599,050
TOTAL DRINKING WATER – SUPPLEMENTAL + BASE PROGRAMS:				\$ 878,499,050

**Appendix B-2
Drinking Water**

Combined Base SFY2018/Superstorm Sandy Project Interim Financing Program Priority List
Updated Statewide Assistance Infrastructure Loan Program (Disaster Relief Emergency
Financing Program) Project Priority List
Second Amended SFY2017 Interim Financing Program Project Priority List

Ranked Order

KEY: Red/italics = SAIL – Disaster Relief projects

Green = New projects or increases in project costs since the First Amended SFY2017 Interim Financing Program Project Priority List are identified

Supplemental Funding				
Rank	Sponsor	Project No.	Project Name	Estimated Cost
S_89	North Jersey District Water Supply Commission	1613001-017-1	Wanaque South Pump Station Upgrade	\$ 3,600,000
S_220	Gloucester City	0414001-020-1	Water St Water Main Replacement / Loop Mains to Freedom Pier	\$ 1,300,000
SUPPLEMENTAL TOTAL:				\$ 4,900,000
Base Program Projects				
Rank	Sponsor	Project No.	Project Name	Estimated Cost
2	Passaic Valley Water Commission	1605002-025	Water Storage Improv.s Phase 1 - Standby Emergency Generators	\$ 36,600,000
4	Passaic Valley Water Commission	1605002-014	Phase I - Levine Reservoir Water Storage Improv.s	\$ 26,100,000
5	East Orange City	0705001-011	Water Treatment & Supply Program	\$ 13,100,000
7	Willingboro Municipal Utilities Authority	0338001-009	Well 5A Radium Treatment	\$ 20,670,173
8	Lake Glenwood Village	1922010-008	Wells 1 & 2 upgrades	\$ 1,000,000
9	NJ American Water Company, Incorporated	1345001-017	Oak Street Treatment Plant Improv.s	\$ 6,500,000
11	North Shore Water Association	1904004-001	Existing Well Requires Replacement	\$ 500,000
11	North Shore Water Association	1904004-004	Water System Refurb	\$ 200,000
14	ADTI Housing Corporation	2103002-001	Chlorination system	\$ 400,000
21	Sea Village Marina LLC/NJ American Water Co.	0108021-002	Water Main Extension	\$ 1,202,000
22	New Brunswick City	1214001-005	Water Treatment Plant Improv.s	\$ 15,500,000

Rank	Sponsor	Project No.	Project Name	Estimated Cost
23	Newark City	0714001-016	Pequannock Water Treatment Plant Rehab	\$ 11,000,000
29	Bordentown City	0303001-006	Upgrade Well 2 with 2A to resolve violation	\$ 1,600,000
31	Saddle Brook Township	0257001-002	North Fifth Street water main	\$ 1,900,000
32	East Orange City	0705001-014	Water System Improv.s and Resiliency Project 2017	\$ 33,000,000
33	Newark City	0714001-015	Rehabilitation of Water Distribution Mains	\$ 18,200,000
33	Newark City	0714001-017	Water Distribution System Upgrades	\$ 2,000,000
44	Atlantic City Municipal Utilities Authority	0102001-006	1 MG Storage Tank Sand Blasting and painting	\$ 2,100,000
51	North Jersey Dist. Water Supply Comm.	1613001-022	Basins 5 & 6 Rehabilitation	\$ 17,000,000
51	North Jersey Dist. Water Supply Comm.	1613001-025	Recycle Clear Phase to the head of the Treatment Plant	\$ 7,300,000
51	North Jersey Dist. Water Supply Comm.	1613001-026	Low Lift Gas Pump	\$ 12,900,000
51	North Jersey Dist. Water Supply Comm.	1613001-027	Expansion of Aeration System	\$ 2,300,000
51	North Jersey Dist. Water Supply Comm.	1613001-028	Filter Bldg Pipe Gallery Dehumid	\$ 2,000,000
51	North Jersey Dist. Water Supply Comm.	1613001-029	Basins 1-4 Flocculator Rehabilitation	\$ 2,900,000
51	North Jersey Dist. Water Supply Comm.	1613001-031	Purchase and Install New Dewatering System	\$ 3,800,000
51	North Jersey Dist. Water Supply Comm.	1613001-032	Rehabilitation of Treatment Facility	\$ 3,600,000
66	Newark City	0714001-500	Wayne & Clifton PS Generators	\$ 5,100,000
74	Camden City	0408001-021	New Auto Meter Reading Equip for entire City	\$ 1,800,000
78	Woodbine Municipal Utilities Authority	0516001-001	WTP Upgrade and water main extension	\$ 3,239,500
83	Newark City	0714001-018	Replacement of Water Distribution Mains	\$ 4,800,000
84	Berkeley Township Municipal Utilities Authority	1505004-008	Phase VI Water Main Installation	\$ 3,500,000
89	North Jersey Dist. Water Supply Comm.	1613001-035	Rehabilitation of Pump Stations	\$ 3,800,000
93	Camden City	0408001-022	Install potable wells/flr elevations @ Morris Delair WTP	\$ 1,400,000

Rank	Sponsor	Project No.	Project Name	Estimated Cost
98	Netcong Borough	1428001-007	Replace WM on Rte. 46, extend WM on Rte. 80, replace meters	\$ 3,700,000
101	Manchester Township	1518005-002	Repaint and repair one MG elevated storage facility	\$ 5,500,000
102	Little Egg Harbor Municipal Utilities Authority	1516001-004	Twin Lakes Water Main Replacement	\$ 2,000,000
103	Little Egg Harbor Municipal Utilities Authority	1516001-005	Little Egg Harbor Water Improv.s Phases I	\$ 6,609,594
104	Paulsboro Borough	0814001-003	Water Main Replacement (Thomson, Wood, Eliz. and Commerce St.)	\$ 2,800,000
106	Sussex Borough	1921001-003	Water Systems Enhancements	\$ 250,000
107	Sussex Borough	1921001-005	Lake Rutherford Water Line Installation Project	\$ 1,221,600
109	North Jersey Dist. Water Supply Comm.	1613001-033	Security Enhancements Project - Orechio Dr Complex	\$ 4,100,000
109	North Jersey Dist. Water Supply Comm.	1613001-034	Security, IT and Safety Projects	\$ 1,600,000
113	NJ American Water Company, Incorporated	1345001-016	Sunset Road Treatment Plant Expansion	\$ 13,100,000
113	NJ American Water Company, Incorporated	1345001-018	Oak Glenn Treatment Plant Expansion	\$ 36,994,400
122	Stafford Township	1530004-018	Mill Creek Road and Paul Boulevard Water Main Replacement	\$ 2,400,000
126	Netcong Borough	1428001-008	Rehabilitate existing storage facilities	\$ 1,100,000
137	Jersey City Municipal Utilities Authority	0906001-006	Transmission Main Install	\$ 19,000,000
137	Jersey City Municipal Utilities Authority	0906001-010	Journal Square North Cleaning	\$ 16,900,000
137	Jersey City Municipal Utilities Authority	0906001-012	Water Main Replacement	\$ 18,000,000
142	NJ American Water Company, Incorporated	2004002-011	Raw Water Pump Improv.s (Treatment Plant)	\$ 12,800,000
145	Bellmawr Borough	0404001-005	Improv.s to WTP	\$ 500,000
150	Middlesex Water Company	1225001-026	Renew 2017	\$ 13,000,000
150	Middlesex Water Company	1225001-016	Renew 2015 - Edison	\$ 5,800,000
157	Wall Township	1352003-001	Route 138 Water Main Improv.s	\$ 1,800,000
157	Wall Township	1352003-002	Route 34 Water Main Improv.s	\$ 3,700,000
166	Netcong Borough	1428001-009	Replace old meters with automatic ones	\$ 400,000

Rank	Sponsor	Project No.	Project Name	Estimated Cost
167	Perth Amboy City	1216001-009	The Replacement of Water Meters Project	\$ 1,100,000
168	Willingboro Municipal Utilities Authority	0338001-011	Well No. 6 Water Treatment Plant Upgrade	\$ 10,621,600
173	Rahway City	2013001-007	Water Treatment Plant Filter System Upgrade	\$ 8,200,000
174	Maple Shade Township	0319001-006	Maple Shade Township meter upgrade project	\$ 2,600,000
177	Jackson Township Municipal Utilities Authority	1511001-013	Six Flags Great Adventure Water Treatment Plant Replacement	\$ 13,194,799
180	Berkeley Township Municipal Utilities Authority	1505004-007	BTMUA Well #4 Phase II Production Well	\$ 1,400,000
180	Berkeley Township Municipal Utilities Authority	1505004-009	Installation of new well #4 with WM to connect to WTP	\$ 1,400,000
182	Hightstown Borough	1104001-008	Settling Tank Rehabilitation	\$ 200,000
185	Sussex Borough	1921001-004	Water Meter Replacement Project	\$ 450,000
188	Trenton City	1111001-010	Rehabilitation of distribution system by C&L of mains	\$ 10,500,000
190	Hoboken City	0905001-001	Wash. Street Water Main / Green Infrastructure Drainage Improv.	\$ 6,000,000
191	Cape May City	0502001-004	Well 5 Replacement for the Sands Aquifer	\$ 2,200,000
193	Jackson Township Municipal Utilities Authority	1511001-010	Demolition of Facilities, replace storage tank, well #3	\$ 8,200,000
201	Kearny Town	0907001-001A	Water Facility and ground Improv. program	\$ 29,000,000
202	North Jersey Dist. Water Supply Comm.	1613001-030	Modify and Expand Central Receiving Building	\$ 2,364,000
205	Perth Amboy City	1216001-008	2015 Replacement of Various Four Inch Mains throughout the City	\$ 2,100,000
210	Vineland City	0614003-017	2016 Water Distribution Rehabilitation Project	\$ 3,100,000
214	Manchester Township	1518005-003	Install automated meters	\$ 2,600,000
218	Bellmawr Borough	0404001-006	Various Water System Improv.	\$ 2,300,000
220	Gloucester City	0414001-020	Water main replacement and looping of mains to Freedom Pier	\$ 1,259,000
231	Gloucester City	0414001-022	Replacement of 1,200 LF of 8" cast iron main on Brown Street	\$ 1,200,000
232	Hammonton Town	0113001-011	2016 Utility Road Program Valley, Central & Bellevue Ave to Broadway	\$ 1,900,000

Rank	Sponsor	Project No.	Project Name	Estimated Cost
238	Clementon Borough	0411001-001	Rehab of Gibbsboro Water Main (White Horse Pike & White Horse Rd.)	\$ 500,000
239	Ship Bottom Borough	1528001-001	Water main Replacement Project	\$ 3,200,000
243	Middlesex Water Company	1225001-025	Western Transmission Main	\$ 41,000,000
244	Brick Township Municipal Utilities Authority	1506001-007	Chlorine Disinfection System Relocation	\$ 3,800,000
247	Evesham Municipal Utilities Authority	0313001-001	Wells 13 & 14 Treatment Improv.s	\$ 2,100,000
250	Long Beach Township	1517001-500	Beach Haven Terrace Water Plant	\$ 9,200,000
250	Long Beach Township	1517001-501	Brant Beach Water Plant	\$ 1,900,000
250	Long Beach Township	1517001-502	Raise Well 4, reconstruct filter room & pumps	\$ 3,300,000
254	Bordentown City	0303001-007	Water System Remediation Upgrades to WTP	\$ 2,900,000
255	Clinton Town	1005001-008	Well 4 Water Production Facility	\$ 1,500,000
274	Stafford Township	1530004-019	Mill Creek Water Main Replacement Phase II	\$ 1,900,000
280	Ocean Township	1520001-007	Tuscarora Ave & 11st water main replacement	\$ 1,400,000
281	Milltown Borough	1212001-002	Ford Ave Redevelopment	\$ 1,606,000
285	Brick Township Municipal Utilities Authority	1506001-009	Breton Woods Water Main Replacement - Phase I	\$ 5,928,760
285	Brick Township Municipal Utilities Authority	1506001-008	Undersized Water Main Replacement Cedar Park East and West	\$ 6,223,437
287	Brick Township Municipal Utilities Authority	1506001-010	Hydrant Replacement in Baywood Section	\$ 1,160,000
298	Manasquan Borough	1327001-002	Construction of 600 LF of WM on Perrine Blvd & Mallard Park Area	\$ 1,469,468
300	Long Beach Township	1517001-014	Water Main Replacement Project	\$ 4,159,201
311	NJ American Water Company, Incorporated	1345001-019	Howell-Lakewood Transmission Main	\$ 60,000,000
323	Milltown Borough	1212001-003	Ford Ave Redevelopment Agency Borough	\$ 1,384,000
326	Middlesex Water Company	1225001-023	Renew 2016, C&L of water mains, replace non-copper services	\$ 8,000,000
328	Old Bridge Municipal Utilities Authority	1209002-013	Knollcroft Water Main Rehabilitation	\$ 3,562,000
331	Perth Amboy City	1216001-500	Install New Stand-by Generator for Runyon Water Treat. Plant	\$ 2,750,000

Rank	Sponsor	Project No.	Project Name	Estimated Cost
343	Aberdeen Township	1330004-001	Woodfield Area Water System Rehabilitation	\$ 3,900,000
348	Clinton Town	1005001-006	Lebanon Borough Water Main Replacements - Phase II through Phase V	\$ 4,300,000
359	Spotswood Borough	1224001-001	Cleaning and lining of approximately 3,600 LF of water mains	\$ 3,443,914
360	Lavallette Borough	1515001-001	Repainting inside & outside of water storage tank	\$ 1,331,000
361	Milltown Borough	1212001-005	Water Storage Tank Rehabilitation	\$ 1,800,000
363	Pennington Borough	1108001-002	Water distribution upgrades (East Curlis Avenue and Weidel Drive)	\$ 1,250,000
369	Elmer Borough	1702001-001	Repainting and Repair of the Water Storage Tower	\$ 800,000
384	North Shore Water Association	1904004-002	Water System Refurb	\$ 453,900
385	Woodland Heights Homeowners Association	1615022-001	Well Rehabilitation/System Improvements	\$ 560,000
386	Bayonne Municipal Utilities Authority	0901001-006	Aqueduct Replacement	\$ 12,000,000
390	Jersey City Municipal Utilities Authority	0906001-013	Remote Meter Reading (AMI)	\$ 9,300,000
395	Jackson Township Municipal Utilities Authority	1511001-012	Western Water Main Extension	\$ 11,000,000
404	Middlesex Water Company	1225001-024	New Interconnection of PS, new table type chlorinators	\$ 3,600,000
410	Washington Township Municipal Utilities Authority	0818004-010	Replace well 8, pump house replace @ well 2,	\$ 1,900,000
419	Brigantine City	0103001-501	Installation of generators @ well	\$ 2,900,000
423	Oakland Borough	0220001-004	Rehab of Iroquois Pumping Station	\$ 3,133,000
424	Mantua Township MUA	0810004-001	Water Tank Rehabilitation	\$ 1,400,000
439	Wonder Lakes Properties, Inc.	1615017-003	Replace hydro-pneumatic tank and install new tank	\$ 30,000
440	NJ American Water Company, Incorporated	2004002-500	RM WTP Flood Wall	\$ 36,000,000
442	Montclair Township	0713001-011	New 1.0MG High Zone Tank	\$ 3,600,000
446	Jackson Township Municipal Utilities Authority	1511001-011	Improv.s to Manhattan St Complex, Garage & Admin Bldg.	\$ 1,600,000

Rank	Sponsor	Project No.	Project Name	Estimated Cost
447	Manchester Utilities Authority	1603001-014	2014 Water System Improv.s	\$ 2,000,000
450	Rahway City	2013001-008	Construction of new interconnection	\$ 2,700,000
468	Oakland Borough	0220001-003	diesel generator for well 9	\$ 3,133,000
469	Red Bank Borough	1340001-001	Water Plant Improv.s at Chestnut Street and Tower Hill	\$ 2,000,000
474	Clementon Borough	0411001-002	Rehab of well 9 including slip lining to improve conveyance	\$ 1,400,000
489	Hampton Borough	1013001-001	New back up well 5 to address firm capacity requirements	\$ 1,800,000
506	South Orange Village	0719001-003	South Orange Ave and Holland Road Interconnection Rehabilitation	\$ 150,000
506	South Orange Village	0719001-004	Farrell Field (Walton Ave & Audley St.) Interconnection Rehab.	\$ 150,000
512	Vineland City	0614003-016	Well No. 17 Treatment Facility	\$ 9,000,000
514	Little Egg Harbor Municipal Utilities Authority	1516001-003	Water Treatment Plant at High Ridge Rd	\$ 4,750,000
514	Little Egg Harbor Municipal Utilities Authority	1516001-500	Radio Road Water Treatment Plant	\$ 800,000
527	Hightstown Borough	1104001-007	Rehabilitation of Deep Well 2	\$ 450,000
541	Oakland Borough	0220001-002	Replace 4600 water meters	\$ 3,133,000
542	Clinton Town	1005001-007	Replace Water Meters	\$ 4,277,804
546	Montclair Township	0713001-008	Nishuane Well Production & Treatment Facility	\$ 2,300,000
548	South Orange Village	0719001-001	Well 17 Rehabilitation	\$ 250,000
556	Oakland Borough	0220001-001	Construct new well 10A as backup for well 10	\$ 3,133,000
557	Mantua Township MUA	0810004-002	Well Rehabilitation	\$ 1,800,000
558	Clinton Town	1005001-009	Well 7 Improv.s & Well 14 Decommissioning	\$ 1,200,000
572	Harvey Cedars Borough	1509001-001	Installation of a Water Monitoring Well	\$ 1,100,000
578	Old Bridge Municipal Utilities Authority	1209002-014	Perrine Road Carbon Absorber Facility	\$ 1,750,000
587	Seaside Park Borough	1527001-001	Well #10 Treatment Facility	\$ 900,900
BASE TOTAL:				\$ 873,599,050
TOTAL DRINKING WATER – SUPPLEMENTAL + BASE PROGRAMS:				\$ 878,499,050

Appendix C
SAIL

Projects financed through the Statewide Assistance Infrastructure Loan Program
(Disaster Relief Emergency Financing Program)

Through December 15, 2016

Project No.	Project Sponsor	Description	Loan Closing Date	Loan Amount
S340377-03	South Monmouth Regional Sewerage Authority	Replacement and relocation of the Lake Como Pump Station that was damaged during Superstorm Sandy to an area located outside of the flood hazard zone.	2/7/2014	\$ 2,950,391
S340377-04A	South Monmouth Regional Sewerage Authority	Replacement of the Pitney Avenue Pump Station with a mobile enclosure pumping station that will allow the Authority to relocate the main electrical components to a higher elevation during a forecasted storm event.	9/23/2014	\$ 1,532,224
S340377-05	South Monmouth Regional Sewerage Authority	Replacement of the Belmar Pump Station with a mobile enclosure pumping station that will allow the Authority to relocate the main electrical components to a higher elevation during a forecasted storm event.	10/28/2015	\$ 3,468,842
S340697-05	Bayshore Regional Sewer Authority	Phase I - restoration of damaged components of the Water Pollution Control Plant (WPCP) to pre-storm condition (restoration) and various measures to help abate future flooding impacts/improve resiliency to sea-water inundation of the WPCP (mitigation).	5/13/2015	\$ 28,113,307
S340697-06	Bayshore Regional Sewer Authority	Phase II - removal of key components from Blower Building #1 and replacement of those components into Blower Building #2 which sits at a higher elevation than Blower Building #1, as well as various measures to help abate future flooding impacts/improve resiliency to sea-water inundation to the newly combined Blower Building.	6/23/2016	\$ 11,233,343
S340699-12	Middlesex County Utilities Authority	Restoration and mitigation to the Sayreville Pump Station including the construction of a flood wall around the site perimeter, electrical system upgrades, and motor replacements.	12/8/2016	\$ 87,953,113
S340699-13	Middlesex County Utilities Authority	Restoration and mitigation to the Sayreville Pump Station including the construction of a flood wall around the site perimeter, construction of an auxiliary pumping station, and motor replacements.	6/29/2016	\$ 35,208,623

Project No.	Project Sponsor	Description	Loan Closing Date	Loan Amount
S340259-07	Kearny Municipal Utilities Authority	Repairs to the various facilities due to the damages incurred during Superstorm Sandy, provide mitigation measures to increase the resilience of the pumping stations and replace some of the equipment that are at the end of their useful life.	1/7/2016	\$ 6,441,376
S340689-25	Passaic Valley Sewerage Commission	Renovations of the Administration Building including the removal and replacement of damaged plumbing, electrical, HVAC, and fire suppression systems, and a roof top addition to contain various utilities.	10/5/2016	\$ 9,100,000
Total				\$ 186,001,219

Appendix D
Superstorm SANDY - CW
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 floodproofing/sealing of structure to prevent floodwater penetration
 - Installation/construction of wind resistant features (e.g. wind resistant roofing materials, wind-damage 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, bioretention 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, bioretention 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 floodproofing/sealing of structure to prevent floodwater penetration
 - Installation/construction of wind resistant features (e.g. wind resistant roofing materials, wind-damage 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, Emergency Preparedness, Response, and Recovery Plans

Appendix E
Superstorm SANDY - DW
Project Eligibility Guidelines for Sandy Drinking Water NJEIPF 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, wind-damage-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, wind-damage-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 F

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. Not addressed herein are the program requirements for the Disaster Relief Emergency Loan Financing Program (a.k.a. the “Statewide Assistance Loan Program” or “SAIL”).

The NJDEP 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 NJDEP 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 NJDEP has developed a process to respond rapidly when emergencies occur, obtain basic project information, make an eligibility determination and issue a preaward 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:

Drinking Water Projects:

The Chief of the Bureau of Safe Drinking Water Technical Assistance, Water Supply Operations Element in the Division of Water Supply, Sandra Krietzman, at (609) 292-5550;

Clean Water Projects:

The Assistant Director of the Municipal Finance and Construction Element in the Division of Water Quality, Gene Chebra, 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 NJDEP must be notified by the end of the Friday business day or if an emergency occurs on a Saturday or Sunday, the NJDEP must be notified by 12:00PM on the following Monday.

The NJDEP will confirm notification of the possible emergency project with a fax describing what information is to be submitted to NJDEP. 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 G
Projects Financed in SFY2016

Source of Funds Key: A = Trust Operating Funds
B = Trust Bond Proceeds
C = DEP Clean Water SRF Funds
D = DEP Drinking Water SRF Funds

Borrower	Loan Program			Source of Funds	Project Description	
	Short-Term Loan		Long-Term Loan			
	Planning & Design	Construction / SAIL				
Atlantic CUA		\$ 1,941,638	*		A & C	Project # S340 809-27. Replacement of existing mechanical bar screens which have outlived their useful life in the headworks facility. New screens will provide better removal rates, and a safer more efficient operation.
Barnegat Twp.		\$ 437,340	*		A & C	Project # S344 130-01. Purchase of a combination jet-vac truck for sanitary and stormwater sewer cleaning and maintenance.
Bayshore Regional Sewerage Authority		\$ 11,233,343			A & C	Project # S340 697-06 (SAIL). This project includes work at the Bayshore Regional Sewerage Authority’s (BRSA) Water Pollution Control Plant associated with the permanent restoration and mitigation of the existing Blower Building No. 1 and existing Blower Building No. 2, as well as the permanent restoration and mitigation of treatment plants power distribution system. Work is intended to restore and protect equipment and facilities impacted by Hurricane Sandy to enable the treatment plant to continue operations under future similar flood events.
Berkeley Twp MUA		\$ 2,192,249	*		A & D	Project # W1505004-008. New water main installation consisting of construction of cement lined ductile iron distribution mains, valves, fire hydrant assemblies, and residential service connections. The water mains will provide additional looping in the existing distribution system.

Borrower	Loan Program				Source of Funds	Project Description
	Short-Term Loan		Long-Term Loan			
	Planning & Design	Construction / SAIL				
Brielle Borough		\$ 1,489,730		\$ 1,489,730	B & D	Project # W1308001-002. Upgrade Union Lane water main system, new lateral mains, water service connections & hydrants to meet the new operational level; Project # W1308001-003. Demolition of existing 150,000-gallon multi-leg water storage tank & the tank's concrete foundation.
Burlington Township				\$ 921,240	B & C	Project # S340712-14. Relining of existing sanitary sewer mains, regROUT sanitary sewer laterals & seal/repair existing manhole covers throughout the Township.
Caldwell Borough				\$ 766,364	B & C	Project # S340 523-04-1. Supplemental loan to upgrade the Caldwell Wastewater Treatment Plant including construction of new ultra-violet disinfection facility, replacement of existing preliminary treatment facilities, demolition of primary settling tanks, modifications to existing oxidation ditches, new surface aerators with adjustable frequency drives, instrumentation/controls throughout the Plant.
Califon Boro		\$ 1,358,598		\$ 1,358,598	B & C	Project # S340-431-01. Stream corridor improvements to ease severe flooding at Railroad Avenue and Main Street primarily attributed to rapidly peaking storm flows from two primary watercourses. 1) replacement of the existing antiquated stormwater piping and open channel system extending from Main Street to the natural stream channel: 2) construction of a stormwater conveyance relief pipe along Main Street parallel to the existing system of culverts to provide additional capacity, and 3) construction of mini-diversions from existing tributary rivulets to recharge trenches within Mitigation Tract.
Camden County MUA				\$ 1,546,238	B & C	Project # S340640-06-2/11-2 & /09. Construction of a new sludge drying facility for the CCMUA's wastewater treatment plant to reduce odor potential, reduce operating costs & improve water quality.

Borrower	Loan Program			Source of Funds	Project Description	
	Short-Term Loan		Long-Term Loan			
	Planning & Design	Construction / SAIL				
Camden County MUA				\$ 423,000	B & C	Project # S340 640-14-1. Supplemental loan for project which will 1) remove contaminants at the former American Minerals Industrial Site to improve water quality, and 2) control storm water runoff in order to prevent flooding within the City of Camden's combined sewer system and improve water quality.
Cape May County MUA				\$ 3,186,004	B & C	Project # S340 661-22. Phase I involves making modifications to the existing pipes in various MUA wastewater pump stations to allow the bypassing of wastewater flows around each station's wet well for maintenance, repair & emergency purposes. Work to be done at various pump stations throughout the Authority's four (4) wastewater service regions in Cape May County.
Cape May County MUA				\$ 5,431,440	B & C	Project # S342 017-04. Reconfiguration of access road & reconfiguration of stormwater discharges from existing sedimentation basin into supplementary basin, exhumation of an existing 18-acre landfill cell, construction of a new 2G cell & enhancement of the leachate collection system plus construction of necessary electrical services, gas header, gas dripleg & gas collection system.
Cinnaminson SA	\$ 500,000				A & C	Project # S340-170-07. Planning and design activities associated with the proposed rehabilitation and upgrade of the existing Cinnaminson Sewerage Authority's wastewater treatment facility, including preliminary engineering, survey work, and design and permitting activities.
Egg Harbor Township MUA				\$ 1,050,683	B & C	Project # S340 753-04. The lining of existing RCP gravity interceptor main. A portion of the interceptor located along Washington Avenue will be lined due to deterioration of the existing RCP from hydrogen sulfide gases. Project # S340 753-06. Reconstruction of a pump station including a new wet well structure and control building. Upgrades include new force main, a cellular based remote telemetry system, a diesel-powered backup pumping unit and redundant control system.

Borrower	Loan Program			Source of Funds	Project Description
	Short-Term Loan		Long-Term Loan		
	Planning & Design	Construction / SAIL			
Elizabeth City		\$ 3,350,000		A & C	Project # S345 070-01. Project involves planning activities for the development of a Long-Term Control Plan (LTCP). Preparation of a LTCP which includes characterization of the City's combined sewer system, preparation of computer hydraulic model of the CSS, wet/dry weather sampling, preparation of alternative, evaluation of alternative, implementation of alternatives & preparation of an implementation schedule.
Ewing Lawrence SA		\$ 1,762,376	*	A & C	Project # S340 391-10-1. Supplemental funding for a portion of the costs associated with: (a) construction of a new UV disinfection facility to enable compliance with a new DCBM effluent limitation, (b) replacement various equipment and systems at or near the end of their useful service life, (c) correcting hydraulic bottlenecks that during severe wet weather conditions can cause the primary clarifiers to overflow, and (d) construction of new preliminary treatment facilities to provide screening of influent wastewater and improved grit removal.
Gloucester City 06				\$ 603,501 B & C	Project # S340 958-06. Construction of 1,450 LF of polyvinyl chloride pipe (PVC) gravity main, w/ appurtenances on the Southport Section of the City. The wastewater will be collected & conveyed to the CCMUA for treatment.
Gloucester City -20				\$ 451,169 B & D	Project # W0414001-020. Replacement of cast iron water main with ductile iron water main along Water Street. The improvement will alleviate the pressure fluctuations & improve water supply & quality.

Borrower	Loan Program			Source of Funds	Project Description	
	Short-Term Loan		Long-Term Loan			
	Planning & Design	Construction / SAIL				
Gloucester CUA		\$ 8,507,105	*		A & C	Project # S340 902-14. Bio-solids handling facility is changing from sludge incineration to anaerobic digestion w/ combined heat & power generation. Other energy efficient changes to digestion process.
Gloucester, Township of				\$ 1,227,851	B & C	Project # S340 364-14. Replacement of corrugated metal pipe & pipe arches and replacing them with a precast concrete box culvert including wing walls, doghouse manhole & 2 B inlets.
Hoboken, City of				\$ 12,599,439	B & C	Project # S340 635-04. Installation of pump station to help alleviate flooding that occurs during storm conditions and high tide to improve resiliency as well as sustainable stormwater project at Hoboken City Hall to capture roof runoff using a rainwater cistern and bio-swales.
Jersey City MUA				\$ 11,981,343	B & C	Project # S340928-13. Replacement of 60 linear feet of 48-inch outfall sewer between the existing regulator. Construction of a multiple pipe barrel siphon. Replacement of the existing 1,140 linear feet of 48 inch and 72-inch diameter existing piping located downstream of the Duncan CSO Regulator with new 84-inch pipe. Realignment the slope of the existing 1500 linear feet of 84-inch outfall to match the slope of the new 84-inch pipe to optimize design flows through the outfall. The total length being replaced and modified is 2800 linear feet. Additional work includes the following: Replacement of 2100 linear feet of sewer on 6th Street between Brunswick Street and Manila Ave., Increasing the height of the walls and roof of the 18th Street screening facility.

Borrower	Loan Program			Source of Funds	Project Description	
	Short-Term Loan		Long-Term Loan			
	Planning & Design	Construction / SAIL				
Jersey City MUA				\$ 5,720,471	B & D	Project # W0906001-011. Replacement of large valves in-kind between 16 & 36 inch in diameter. JCMUA has an on-going multi-year program to replace defective large valves that are old & consequently either do not fully close or cannot be operated.
Kearny MUA				\$ 6,441,376	A & C	Project # S340 259-07 (SAIL). Improvements to the Authority's Kearny Point Pump Station including new dry-pit submersible pumps, a new pump header system and associated work. Improvements to Harrison Ave. Pump Station including the installation of a new bar screen unit. Existing standby generators will be replaced at both pump stations. Mitigation measures to increase resiliency of the pumping stations for the future & replace some equipment that are at the end of their useful life.
Manasquan Borough -01				\$ 4,979,723	B & C	Project # S340 450-01. Repair & Replacement of 934 LF of bulkhead in various locations, involves installment of 7 inlet structures, 1 manhole & 4 tide valves at existing outfalls.
Manasquan Borough -01A				\$ 1,538,884	B & D	Project # W1327001-001A. Replacement of 3,500 residential water meters & 2 commercial meters throughout the Borough. Purchase & Install equipment & software necessary to deploy the Advanced Metering Infrastructure (AMI) which will provide the Borough with real-time data about the water system & utility usage.
Manchester UA		\$ 1,632,917	*		A & D	Project # W1603001-014. Relocate water meters which were connected to private water main extensions. Relocation of these meters will reduce non-revenue water due to peaks.

Borrower	Loan Program			Source of Funds	Project Description	
	Short-Term Loan		Long-Term Loan			
	Planning & Design	Construction / SAIL				
Marlboro Township				\$ 12,246,667	B & D	Project # W1328002-002. Construction of a new Water Treatment Plant & to reduce levels of iron, manganese, & total dissolved solids. Filtration Building will house laboratory, control rooms & electrical equipment. Construction of 2 backwash holding tanks.
Middlesex County Utilities Authority		\$ 9,795,439		\$ 20,456,148	B & C	Project # S340 699-15. Replacement of 3 existing air blowers with new high efficiency rubo channel air blower, motor control center, air inlet & exhaust piping as necessary to reconnect to the existing air diffuser system. New packaged control systems for each unit & intake filters.
Middlesex County Utilities Authority		\$ 35,208,623			A & C	Project #S340 699-13 (SAIL). Building repairs and the permanent restoration of mechanical HVAC, electrical equipment instrumentation and control equipment for the Edison Pump Station facilities damaged by flood water from the Hurricane Sandy storm surge. The pump building generator, the switchgear building and the tunnel access shaft located at the site will be flood proofed. Major mechanical and electrical components will be replaced and protected during the course of the work. The restoration and mitigation measures are designed to significantly reduce the potential for adverse impacts from a similar storm event.
Middlesex Water Company		\$ 4,778,752	*		A & D	Project # W1225001-016. Cement mortal lining of existing unlined cast iron water mains. Replacement of undersized or non-structurally sound water mains, replacement of non-copper water services, replacement of old hydrants & hydrant laterals & restoration of the site.
Middlesex Water Company		\$ 6,930,693	*		A & D	Project # W1225001-023. Cleaning & Cement Mortar Lining of approx. 20,000 LF of water main & replacement of 12,000 LF of undersized water main. Replacement of non-copper services, old hydrants, laterals & impacted line valves.

Borrower	Loan Program				Source of Funds	Project Description
	Short-Term Loan			Long-Term Loan		
	Planning & Design	Construction / SAIL				
Milltown Boro		\$ 4,000,000		\$ 16,660,000	B & C	Project # S40-102-03. The proposed project involves construction of a new electrical substation to relocate it outside of the 100-year floodplain. The proposed work includes site clearing and rough grading; retaining wall and access stairs; underground conduit, foundation for transformers, support structure for overhead electric equipment; switch gear building; electrical equipment including vacuum control breakers, transformers, switches, busway, conduit, electrical cable and utility poles; access road to allow maintenance of electrical equipment; masonry screening wall; site restoration that includes grading, landscaping, fencing and paving; and all other components necessary and incidental to the construction of a new fully functional electrical substation.
Milltown Boro		\$ 2,111,980	*		A & D	Project # W1214001-004. Repairs to 3 pumping stations including replacement of pumps, motors & control systems.
Newark City		\$ 11,881,188	*		A & D	Project # W0714001-015. Project involves the in-place rehabilitation of cast iron water distribution mains by cleaning of internal tuberculation & the application of a 1/8 " thick cement mortar interior lining.
North Wildwood City		\$ 14,356,436	*		A & C	Project # S340 663-06. Street and utility reconstruction of deteriorated sanitary sewer mains within the City, experiencing sewer breaks. Reconstruction of these sewer mains will reduce the flooding conditions that could result in the sanitary sewer system becoming overburdened.

Borrower	Loan Program				Source of Funds	Project Description
	Short-Term Loan		Long-Term Loan			
	Planning & Design	Construction / SAIL				
Ocean Gate Boro		\$ 739,754			A & D	Project # W1521001-001. Installation of approximately 1,665 linear feet of new 8 inch 52 ductile iron pipe, 1,993 linear foot of 6-inch class 52 ductile iron pipe, 21 gate valves, 55 water service connections, 1 fire service connection and 6 fire hydrants in or about the right of ways of West Arverne Avenue, West Barnegat Avenue and Redbank Avenue. Improvements will increase pipe capacity, improve system pressure and provide adequate fire protection in accordance with current regulations.
Ocean County Utilities Authority				\$ 7,709,603	B & C	Project # S340 372-53. Generator improvements to 25 pump stations to provide additional electrical power generation during periods of commercial power and domestic water outages. Project # S340 372-54. Provide flood control measures at 4 pump stations including installation of influent slide gate hydraulic operators, effluent slide gates & hydraulic operators, flood doors to prevent flood water from pump stations through influent & effluent pipes & overland. Work also includes replacement of electrical components such as wire, conduit, light fixtures & instrumentation with materials that are more resilient to salt water.
Old Bridge MUA		\$ 1,480,000		\$ 1,260,000	B & C	Project # S40-945-08-1. Construction of a 7,000-linear foot gravity interceptor sewer to serve the "Cross Roads Redevelopment Area", a residential development, several existing residential homes currently on individual septic systems and a county nursing home facility.
Old Bridge MUA		\$ 2,549,368		\$ 2,926,648	B & C	Project # S40-945-13. Storm hardening project at facility on Boulevard West in Old Bridge including the construction of a composite retaining wall with stone revetment, a floodwall that will extend along the property adjacent to Raritan Bay, an 8-foot fence with a 10-foot-wide concrete splash pad adjacent to the retaining wall, an access ramp to the beach front and drainage piping.

Borrower	Loan Program			Source of Funds	Project Description	
	Short-Term Loan		Long-Term Loan			
	Planning & Design	Construction / SAIL				
Old Bridge MUA		\$ 3,832,243		\$ 3,787,243	B & D	Project # W1209002-011/012. Improvements at the Perrine Road facility including overhaul of water storage tank, installation of cathodic protection and add supplementary man way access. In addition, replacement if SCADA system including hardware and software at its interconnection points, drinking water wells, storage tanks and at its monitoring station.
Perth Amboy, City -12				\$ 567,697	B & C	Project # S340 435-12. Cleaning and lining a portion of the sanitary sewer system made from bricks and clay pipe. All manholes will also be lined and rehabilitated. Replacement of 24 catch basins which are in poor condition and deteriorating.
Perth Amboy, City - 06,7				\$ 2,650,357	B & C	Project # 1216001-006. Installation of a new stand-by generator to supply power to water treatment plant to improve resiliency. Project # 1216001-007. Replacement of 4" drinking water mains with 8" mains
Plumsted Twp	\$ 1,250,000				A & C	Project # S40-607-03. Planning and Design activities associated with proposed construction of .6 million gallons per day wastewater collection, conveyance and treatment system to serve the New Egypt "Town Center" including preliminary engineering work, survey work and design and permitting activities.
Pompton Lakes Boro MUA		\$ 1,065,750		\$ 1,065,750	B & C	Project # S40-636-08. Replacement of six primary and secondary clarifier mechanisms along with miscellaneous concrete, structural and mechanical, electrical controls and site restoration associated thereto.

Borrower	Loan Program				Source of Funds	Project Description
	Short-Term Loan			Long-Term Loan		
	Planning & Design	Construction / SAIL				
Raritan Township MUA				\$ 1,591,600	B & C	Project # S340 485-09. Replacement of the existing Motor Control Center (MCC) & modifications to the existing operations building. Work includes but not limited to, demolition of existing motor control center equipment, furnishing & installation of new MCC, coordination with electrical utility company for installation of a new utility transformer, primary & secondary conduits & wiring to bring existing MCC connection to new equipment. Installation of a new HVAC equipment, modifications to existing SCADA system, startup & testing & restoring of all disturbed areas.
Rockaway Valley RSA				\$ 6,403,615	A & C	Project # S40-821-06. Construction of a replacement sewer on Morris Avenue, a pumping station on Monroe Street, a force main from the new pumping station on Monroe Street and Lincoln Street, a small grinder pump station and force main on Harrison Street and the rehabilitation and cured-in-place relining work of the downstream section of the Jersey City Trunk Sewer.
Roosevelt Borough - 1,4				\$ 806,117	B & D	Project # W1341001-001. Emergency replacement of failed mains. Improvements to water distribution system by cleaning & lining additional footage & to install a 6" gate valve at the water treatment plant & Well # 3. Project # W1341001-004. Improvements to the drinking water treatment plant including replacement of the filter tanks & piping, replacement of the aerator & sedimentation pump.
Saddle Brook Twp				\$ 1,739,111	A & D	Project # W0257001-002. Replacement of approximately 3,447 linear feet of water mains and 3,120 linear feet of associated service connections. Water main lengths include water main extensions to create loops in the distribution system. Portions of the township's distribution system to be replaced are located along North Fifth Street, Hillside Avenue, Grace Avenue, Fifth Street, Capitol Street, Sixth Street, Route 46, intersection of Outwater Lane and Ninth Street and Rosol Lane.

Borrower	Loan Program			Source of Funds	Project Description
	Short-Term Loan		Long-Term Loan		
	Planning & Design	Construction / SAIL			
Sea Girt Boro		\$ 3,200,000		A & C	Project # S40-468-01. Extending storm water outfalls along Baltimore Boulevard and Neptune Place into Atlantic Ocean.
Somerville Borough		\$ 3,904,182	*	A & C	Project # S342 013-01. Project includes remediation & closure of a municipal landfill & installation of stormwater management measures.
South Monmouth RSA		\$ 3,468,842		A & C	Project # S340 377-05 (SAIL). Various mechanical, structural & electrical improvements to the existing Belmar Pump Station including the replacement of the existing pumping equipment with new dry pit submersibles, construction of a new below ground grinder chamber, and demolition of the existing pump station building as well as installation of internal bracing of the below ground walls. Additionally, a mobile enclosure will be installed that would house the critical electrical and control equipment required to operate the pump station. Storm proofing improvements to ensure continued operation of the existing pump station during weather related emergencies.
Tuckerton, Borough				\$ 2,332,400 B & C	Project # S340 034-02. Replacement of existing ACP deteriorated sanitary sewer mains including laterals, cleanouts & manholes.
Tuckerton, Borough				\$ 1,121,401 B & D	Project # W1532002-005. Replacement of existing ACP deteriorated water mains including water valves, water service laterals with new PVC pipe & copper water service lines.
Tuckerton, Borough				\$ 1,000,000 A & D	Project # W1532002-003. Removal & Replacement of exterior & interior paint systems of the existing standpipe water storage tank. A new ladder cage, ladder gate, roof access hatch, screens on tank overflow pipes, installation of new mechanical photovoltaic mixing system. Painting the outside of 3 horizontal pressure filters at the water treatment facility.

Borrower	Loan Program			Source of Funds	Project Description	
	Short-Term Loan		Long-Term Loan			
	Planning & Design	Construction / SAIL				
Ventnor, City of				\$ 6,641,615	B & C	Project # S340 667-02. Improvements to the affected sanitary & stormwater systems after Superstorm Sandy to improve overall water quality.
Wanaque Valley RSA - Non-PF				\$ 2,765,756	B & C	Project # S3400780-04. Installation of mechanical aerators, drives, pinch drives, 15 new electric unit heaters, 10" ductile iron force main bypass piping. In-kind replacement of a rotary drum sludge thickener system, mixers on sludge holding tanks, microgreed grid screens & backwash pumps. Upgrade the 3 influent pumps, discharge channel ultraviolet U(V) disinfection system,
Wanaque Valley RSA - PF				\$ 1,555,186	B & C	Project # S3400780-04. Installation of mechanical aerators, drives, pinch drives, 15 new electric unit heaters, 10" ductile iron force main bypass piping. In-kind replacement of a rotary drum sludge thickener system, mixers on sludge holding tanks, microgreed grid screens & backwash pumps. Upgrade the 3 influent pumps, discharge channel ultraviolet U(V) disinfection system,
Warren Township SA - 01,2				\$ 3,645,838	B & C	Project # S340 964-01. Repair two existing Stage IV oxidation ditch/final clarifier process tanks, replace existing aged equipment in-kind. New adjustable weir control assembly will be installed to regulate bruch aerator submergence & discharge from the oxidation ditch. Repair the sludge collection system & a new scum collection system & algae system will be installed. Ancillary systems that support electrical, communication & data collection systems are being reconditioned & upgraded within the current generator & operation buildings. Project #S340 964-02. Conversion of the Fox Hill Drive West wet pit/dry type pump station to a submersible type pump station. Installation of a new wet well with 2 submersible pumps with sanitary connections, valve chamber with new check & gate valves. Emergency generator with natural gas connection and new potable water connection.

Borrower	Loan Program				Source of Funds	Project Description
	Short-Term Loan		Long-Term Loan			
	Planning & Design	Construction / SAIL				
Washington Township MUA		\$ 963,834			A & C	Project # S340 930-04. Demolition, removal and disposal of the existing Forrest Drive Sanitary Pump Station and installation of a replacement pump station. Forrest Drive Pump Station is nearing end of useful life, pumps are in need of replacement. New, more efficient submersible pumps will provide cost savings.
Washington Twp MUA		\$ 1,188,100			A & D	Project # W0818004-010. Replace the existing well houses #2 and #8 which are old and deteriorating. They are in poor condition, do not meet NJDEP Safe Drinking Water Requirements for size and design and require replacement.
Washington Twp MUA		\$ 1,578,920			A & D	Project # W0818004-011. Maintenance on existing WTMUA Five Points 3.0-million-gallon elevated water storage tank, located on Egg Harbor Road. The water tank paint system is nearing the end of its 20-year lifespan. It will be cleaned using a biodegradable detergent with a freshwater rinse, the entire exterior coating system will be removed by abrasive blast cleaning, and the interior and exterior of the water tank will be repainted.
Washington Twp MUA		\$ 151,787			A & D	Project # W0818004-012. Security enhancements at the WTMUA administration building at Whitman Drive and at various well houses located in Washington Township. Work includes installation of one new security transaction window and three security cameras at the WTMUA administration building; installation of 6 security cameras and related electrical conduit at Wells 18 and 21; installation of 5 security cameras and related electrical conduit at Wells 16, 17 and an air stripper and a high service pump building; and the installation of 6 security cameras at Wells 10, 11, 28 and the water treatment plant.

Borrower	Loan Program				Source of Funds	Project Description
	Short-Term Loan		Long-Term Loan			
	Planning & Design	Construction / <i>SAIL</i>				
Washington Twp MUA		\$ 450,000			A & D	Project # W0818004-014. Drilling of replacement well. Well 2, constructed in 1965 has been deteriorating due to age and has been pumping sand, indicating erosion of the screen area. Well has reached the end of its useful life.
Financing in SFY2016 Fiscal Year:	\$ 1,750,000	\$ 162,125,289		\$ 146,065,704	Total Financing for the SFY 2016 Fiscal Year: \$ 284,369,865	

* This table reports on project and financing information for the comprehensive scope of all projects funded within the SFY2016 Fiscal Year. Those projects funded within the SFY2016 Fiscal Year but who were funded under the terms of the SFY2017 Financing Program are identified with an asterisk.