

New York City's On-Site Water Reuse Grant Program Pilot Program

April, 2018





- Program Vision
- Available Grants and Eligibility
- Application Process and Timeline
- Design, Construction, and Operation & Maintenance
- Sources for More Information



Program Vision

Program Vision



- DEP's sustainability strategy includes:
 - optimizing the city's existing system,
 - promoting water conservation, and
 - preparing for climate change.



Program Vision





On-Site Water Reuse Grant Program:

Incentivize commercial, mixed-use, and multi-family residential sectors to install water reuse systems by covering a portion of efficiency technology capital costs.



Available Grants and Eligibility

Available Grants and Eligibility



Grant Size	Description	Target Water Savings	Funding Amount	
Building-scale	Typically 100,000 square feet or more of residential or commercial space	32,000 gallons per day	Up to \$250,000	
District-scale	Typically includes the sharing of water between two or more parcels	94,000 gallons per day	Up to \$500,000	



- The proposed project is completed by a water service customer of DEP.
- The proposed alternate water source system must be permanent and operational for a minimum of 10 years.
- The Applicant must comply with the Department of Buildings Plumbing Code, all applicable rules and regulations required by the Department of Health, and other applicable rules and regulations.



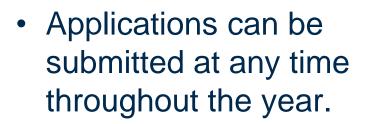
- The Applicant must provide a complete application package, including an application form, environmental compliance (CEQR) documentation, project work plan, project schedule, budget, and completed DEP Non-Potable Water Calculator workbook.
- The project must be constructed within 4 years of the Funding Agreement approval date and must offset potable water use immediately after the System Certification is issued by Department of Buildings.
- Documentation must be provided showing that the Applicant's system reliably achieves target water savings for 10 years.



Application Process and Timeline

Application Process and Timeline





- Each application will be evaluated for completeness, feasibility, and respective cost/benefit ratio.
- Number of awards may be limited based on available funding.

Application Form New York City Department of Environmental Protection On-site Water Reuse Grant Program



PROPERTY INFORMATION

Borough:	Block:		Lot:
DEP Account Number(s):			
Service Address (from DEP bill):			
Construction Type (check only one): New Construction Remodel/Major Alteration Re-plumbing			
Project Type (check one): Multi-Family Residential (4 or more units) Commercial (Non-Residential) Mixed Use (Commercial & Residential) Other.			
Residential Occupancy Square Footage:		mmercial Occ uare Footage	

PROPERTY OWNER INFORMATION

Owner Name:		
Business Address:		
Phone:	Fax:	
E-mail:		

MANAGING AGENT INFORMATION

Owner Name:		
Business Address:		
Phone:	Fax:	
E-mail:		

APPLICATION CONTACT INFORMATION If different than the Owner or Managing Agent, the Owner or Managing Agent must complete the attached Owner Authorization Letter.

Owner Name:	
Business Address:	
Phone:	Fax:
E-mail:	

Application Process and Timeline



- Grant recipients will receive a Conditional Acceptance Package, pending DOB permitted design
- Once DOB permitted design is received, Grantee signs the DEP's Grant Funding Agreement, and other paperwork.
- Disbursement of up to 50% of the total grant will be made upon approval of Funding Agreement.



ON-SITE WATER REUSE SYSTEM DESCRIPTION

Please provide a brief description of on-site water reuse system including: design for non-potable water system – description of alternate water sources to be used, description of treatment, description of non-potable applications.

CHECKLIST FOR THE APPLICATION PACKAGE

- Application Form
- Project Work Plan
- CEQR Compliance Documentation
- . Schedule
- 5. Budget
- Completed DEP Non-Potable Water Calculator (download at nyc.gov/dep/reusegrant)

MAILING ADDRESS

Attention: On-site Reuse Grant Program Manager New York City Department of Environmental Protection 59-17 Junction Boulevard, 11th Floor Flushing, NY 11373



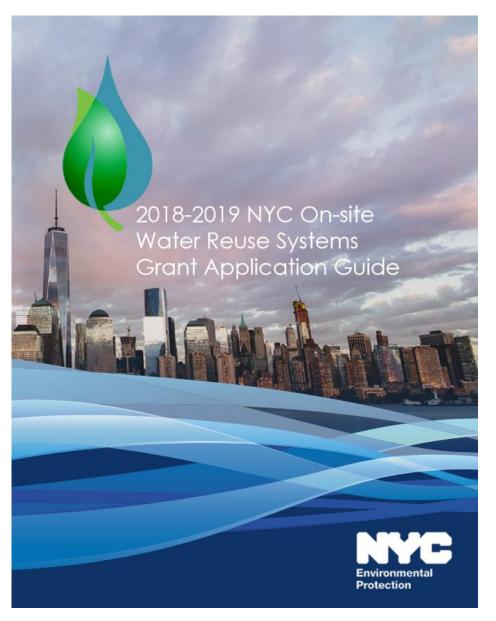
- The Grantee must commence construction within 6 months and complete construction and commissioning within 4 years of Funding Agreement approval date.
- The final disbursement of the remaining grant total will be processed once Project Completion Form and Department of Buildings System Certification are completed and submitted.



Design, Construction, and Operation & Maintenance



 A guide has been developed for property owners and building managers to navigate New York City's regulations for the design, construction and operation of on-site water reuse systems.





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Design, Construction, and O&M

- Definitions of terms related to alternative water sources and treatment
- New York City specific information on allowed treatment systems and end uses

Treatment Overview

Black Water

Black water is the most contaminated source of water available on-site; however, it is often one of the easiest to collect as it does not require a separate collection system and can typically be collected at a single location prior to discharge to the sewer. In addition to the filtration and disinfection requirements for all other alternate water sources, black water systems also require biological treatment to lower the levels of organic material in the water. This is typically achieved by introducing simple bacteria into the wastewater to digest the organic material. The bacteria are then filtered out in a downstream treatment process.

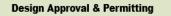
Gray Water

Gray water quality is highly variable and site- specific. Gray water contains many of the same contaminates as black water, but in much lower quantities because it has not come into contact with food or human waste. Filtration and disinfection is usually sufficient, without further treatment, to meet water quality criteria.

Rainwater

Precipitation is typically clean when if falls from the sky; however, rainwater may become contaminated during collection or from particulate matter in the atmosphere. Rainwater systems typically require the least amount of treatment. In general, debris excluders, first flush diverters, and filtration provide adequate treatment to maintain a rainwater system. **Disinfection of rainwater may be required for some uses.**





Submit DEP On-Site Water Reuse Application

Agency: DEP

Outcome: Conditional Acceptance Package pending DOB permitted design

Sign Conditional Acceptance Package

Agency: DEP

Outcome: Applicant confirms they will execute the Funding Agreement and required paperwork

Submit a Copy of Approved DOB

Permitted Design to DEP A copy of the on-site water reuse

system may require approval by the Department of Health and Mental Hygiene.

Agency: DEP, DOHMH

Outcome: DEP will send Grant Acceptance Package to Grantee

Submit Grant Acceptance

Packaae Includes the Funding Agreement and

Restrictive Covenant.

Agency: DEP

Outcome: Upon approval and execution of Grantee Aareement DEP issues initial grant reimbursement (requires copies of invoices)

Construction

Construct System

Inspections shall be conducted during construction, after construction completion and periodically based on the City's discretion.

Agency: DOB

Outcome: Inspection Reports

Reuse System Certification Requirements

Phase 1, Construction Completion Certification

Verification that system was constructed in accordance with plans. specifications and codes.

Agency: DOB, Office of Technical Certification and Research

Outcome: Construction Completion Certificate from DOB

Phase 2, Wet Testing Certification

The system shall be certified confirming the absence of leaks and the integrity of the system components.

Agency: DOB, Office of Technical Certification and Research

Outcome: Wet Testina Certificate from DOB

Phase 3. Start-up Testina Results

Start-up testing shall continue for a two-week period, demonstrating 100% compliance with the water quality requirements, with the results being submitted to DOB

Agency: DOB, Office of Technical Certification and Research

Outcome: Start-up lab results, on record with DOB demonstrating compliance with quality requirements

Phase 4, Temporary Use Testing Results

During the temporary use mode, treated water from the system shall be directed into the reuse water reservoirs and shall be utilized for applications identified in Buildings Bulletin 2010-027.

Agency: DOB, Office of Technical Certification and Research

Outcome: Monthly reports of results submitted to DOB, on a weekly basis for initial 3 months

Phase 5, Final Acceptance and System Certification

Agency: DOB, Office of Technical Certification and Research

Outcome: Certificate issued confirming compliance with the 2014 NYC Construction Codes

Submit DOB System Certification to DEP On-site Water Reuse **Program Manager**

Agency: DOB, Office of Technical Certification and Research

Outcome: Reimbursement of remaining grant value (requires copies of invoices)



Design Approval & Permitting

Submit DEP On-Site Water Reuse Application

Agency: DEP

Outcome: Conditional Acceptance Package pending DOB permitted design

Sign Conditional Acceptance Package

Agency: DEP

Outcome: Applicant confirms they will execute the Funding Agreement and required paperwork

Submit a Copy of Approved DOB Permitted Design to DEP

A copy of the on-site water reuse system may require approval by the Department of Health and Mental Hygiene.

Agency: DEP, DOHMH

Outcome: DEP will send Grant Acceptance Package to Grantee

Submit Grant Acceptance Package

Includes the Funding Agreement and Restrictive Covenant.

Agency: DEP

Outcome: Upon approval and execution of Grantee Agreement DEP issues initial grant reimbursement (requires copies of invoices) After receiving conditional acceptance, design must be permitted and approved by the Department of Buildings before receiving complete approval for the On-site Water Reuse Grant Program



Construction

Construct System

Inspections shall be conducted during construction, after construction completion and periodically based on the City's discretion.

Agency: DOB Outcome: Inspection Reports

- Inspections during construction will be at Department of Buildings' discretion
- Construction reports to DEP are required, frequency is set by the Grant Funding Agreement



Reuse System Certification Requirements

Phase 1, Construction Completion Certification

Verification that system was constructed in accordance with plans, specifications and codes.

Agency: DOB, Office of Technical Certification and Research

Outcome: Construction Completion Certificate from DOB



Phase 2, Wet Testing Certification

The system shall be certified confirming the absence of leaks and the integrity of the system components.

Agency: DOB, Office of Technical Certification and Research

Outcome: Wet Testing Certificate from DOB

Phase 3, Start-up Testing Results

Start-up testing shall continue for a two-week period, demonstrating 100% compliance with the water quality requirements, with the results being submitted to DOB

Agency: DOB, Office of Technical Certification and Research

Outcome: Start-up lab results, on record with DOB demonstrating compliance with quality requirements

Phase 4, Temporary Use Testing Results

During the temporary use mode, treated water from the system shall be directed into the reuse water reservoirs and shall be utilized for applications identified in Buildings Bulletin 2010-027.

Agency: DOB, Office of Technical Certification and Research

Outcome: Monthly reports of results submitted to DOB, on a weekly basis for initial 3 months

Phase 5, Final Acceptance and System Certification

Agency: DOB, Office of Technical Certification and Research

Outcome: Certificate issued confirming compliance with the 2014 NYC Construction Codes



Agency: DOB, Office of Technical Certification and Research

Outcome: Reimbursement of remaining grant value (requires copies of invoices)

- System certification is through Department of Buildings
- Final step in Onsite Water Reuse Grant Program is to submit
 Department of Buildings System Certification





nyc.gov/dep/reusegrant

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eBilling	Strength of the second second	tial property owners with			coolers b		
 Account Information 		incentives to install water reuse systems.			month.		
Customer Assistance		gram builds on the					
 Service Line Protection Program 	Comprehensive Water Reuse Program, which offers a 25% discount to customers who install successful water reuse systems.						
• Water Rates							
 Property Managers & Trade Professionals 	Water reuse systems, sometimes called water recycling systems, make more efficient and safe use of rainwater, black						
Water Utilities		water when properly					
Drinking Water		operated. The grant program construction of these systems	THE				
Wastewater	at both the building-scale and district-scale						
Stormwater	by covering a portion of efficiency technology capital costs. Photo Credit: Natural Systems Utilities			ems Utilities			
Harbor Water	Available (ā.					
Long Term Control Plan	Available	Statits					
The Watershed	Grant Size	Eligibility Criteria	Target Water Savings	Funding			
Watershed Protection							
Watershed Recreation	Building- scale	Typically 100,000 square feet or more of residential or commercial	32,000 gallons per	Up to \$250,000			
Citywide Initiatives		space	day				
Environmental Education	District-	Typically includes the sharing of	94,000	Up to			
 Conservation Programs Municipal Water Efficiency 	scale	water between two or more parcels	gallons per day	\$500,000	Source: Wat	er Use It Wisely	



Visit the website for general information and program updates:

- Grant Workshops
- Application Process
- Supporting Documents

Residential Water Efficiency Programs Non-Residential Water Efficiency Programs Water Distribution System Optimization Water Supply Shortage Management Water Saving Tips

Water Conservation Seminars for Building Managers

Air Pollution Control

Noise Codes & Complaints

Business and Professionals

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- Support for Businesses
- Doing Business with DEP
- Asbestos Abatement
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- A to Z Index
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Grant Workshops

Workshops and webinars that explain the eligibility requirements of the program and guide users through the online application can be arranged upon request. If you would like to receive program updates, schedule a pre-application meeting, or host a workshop for a group of 10 or more people, please email reusegrant@dep.nyc.gov.

Application Process

Interested private property owners must complete and submit an application for funding. Applications are reviewed on a rolling basis and can be submitted at any time throughout the year.

The Application Form is available in the Grant Application Guide.

- Grant Application Guide (PDF)
- Building-Scale Calculator (XLS)
- District-Scale Calculator (XLS)

Applicable Codes and Regulations

- Buildings Bulletin 2010-027 (PDF)
- Water Recycling Systems Appendix C (PDF)

Legal Agreement and Restrictive Covenant

Before submitting a grant application, grantees must review the Legal Agreement and Restrictive Covenant that are required to participate.

- Grant Funding Agreement (PDF)
- Declaration of Restrictive Covenant (PDF)

Comprehensive Water Reuse Program

Buildings with successful on-site water reuse systems are eligible for the Comprehensive Water Reuse Program (CWRP). The CWRP provides a 25% water and wastewater fee discount to DEP customers who install water reuse systems that reduce the building's water consumption by at least 25%.

Download the Comprehensive Water Reuse Program Application (PDF).



2018-2019 ON-SITE NON-POTABLE WATER REUSE FUNDING AGREEMENT

This Funding Agreement ("Agreement") is made by and between the City of New York (the "City"), acting through the Department of Environmental Protection ("DEP"), located at 59-17 Junction Boulevard, Flushing, NY 11373, and the [NAME OF GRANTEE] (the "Grantee") of the property located at [PROPERTY ADDRESS] ("Premises").

WITNESSETH

WHEREAS, pursuant to the New York City On-Site Non-Potable Water Reuse Grant Program ("WRGP"), DEP established a program to award a total amount of up to five hundred thousand dollars (\$500,000) for qualified projects which use on-site nonpotable water reuse systems on private property in New York City for the purpose of conserving potable water ("Program"); and

 Grant Funding Agreement and Declaration of Restrictive Covenant are located at the bottom of the program webpage

WHEREAS, the Grantee submitted to DEP a proposal to install and operate an on-site non-potable water reuse system within non-city owned property, and

WHEREAS, DEP has determined that the Grantee's proposal will meet the Program goals and provide significant benefit to the City and has chosen the Grantee's proposal for this purpose.

NOW THEREFORE, the parties, in consideration of the mutual agreements contained herein, agree as follows:

A. Term:

This Agreement shall be effective upon registration pursuant to Charter § 328 and shall remain in effect for a period of ten (10) years ("Term") from the date of the final distribution of the Grant Award. The Grantee shall complete all construction within four (4) years from the Notice to Proceed date at which time the maintenance period ("Maintenance Period") shall begin. This Agreement may be extended in writing upon the mutual consent of the parties.

B. Scope of Work.

- 1. Grantee shall install and operate an <u>on-site non-potable water reuse system</u> in accordance with and as more fully described in the scope of work attached as Appendix A ("Scope of Work") and with the maintenance plan ("Maintenance Plan") attached as Appendix C (collectively the "Project").
- 2. Grantee shall adhere to the timeline set forth in Appendix A. Failure to render satisfactory progress or to complete the Project to the satisfaction of DEP may be



All grant program inquiries can be directed to: reusegrant@dep.nyc.gov

2018-2019 NYC On-site Water Reuse Systems Grant Application Guide Protection