Purpose

The Gowanus and Flushing Watershed Initiative (GFWI) is a source of funding for stormwater and LID projects within the watersheds of Gowanus Canal and Flushing Bay, including but not limited to the following:

- Reduction of CSO volumes and floatable debris from stormwater runoff.
- Reduction of stormwater volumes entering sewer system through soil or other media.
- Increase of retention time to allow for greater soil infiltration.
- Improvement or addition of retention capacity.
- Improvement or addition of detention capacity.
- Improvement of stormwater runoff quality by directly removing pollutants.

Grant Size

A maximum of $1,450,000 for projects within each watershed will be established. To promote larger projects that can significantly contribute to stormwater capture and treatment, it is anticipated that NYCDEP will issue three grants with a maximum award of $450,000 each for a total of $1,350,000 for each watershed, for a total of six grants worth $2,700,000. To permit smaller environmental groups and organizations to participate, it is anticipated that the remaining funds will be distributed in five grants for each watershed with a maximum award of $20,000 each for a total of ten grants worth $200,000. If a particular project demonstrates exceptional quality, **awards over $450,000** will be considered under the program.

The Grantee will submit approvable written supporting documentation and monthly invoices for reimbursement to NYCDEP of all costs associated with the project completed pursuant to the Grant Program. NYCDEP will submit NYCDEP-approved paid invoices with all backup documentation from the Grantee within 60 days of receipt of such invoices to DEC for reimbursement from the EBP Fund, and will direct that any payments from EFC shall go directly to the Grantee. All invoices from the Grantee are subject to NYCDEP and DEC review and approval. Invoices shall include a detailed listing of the work performed and expenses incurred for each Pilot Project location. The Grantee shall submit a monthly invoice which includes, but is not limited to:

1. a. Equipment purchased and installed.
   b. Construction and monitoring progress for each project.
   c. Employee time sheets, including a summary table of personnel hours.
   d. Applicable Grantee time sheets must only show work conducted for Stormwater Best Management Practices under this Grant Program.
   e. Hourly charges.

2. An invoice form shall be developed by NYCDEP in coordination with the Grantee.

3. All costs shown on each invoice for which payment is sought shall be consistent with the budget, documented, reasonable and necessary. All equipment and materials shall be purchased at prices competitive in the industry. If NYCDEP determines that any costs are excessive, the excess shall be disallowed.

Geographic Focus

The Gowanus watershed is approximately 1,758-acres and the Flushing Bay and Creek watershed is approximately 19,560-acres. Please see the Gowanus and Flushing watershed/sewershed maps.

Are you Eligible for Funding?

Before applying, you must confirm that your project is fully located within the Gowanus watershed/sewershed or Flushing Bay and Creek watershed/sewershed. Only proposed projects fully located within these boundaries will be accepted and eligible for funding.

The nature and nexus of the original Environmental Benefit Project under the CSO Consent Order pursuant to which these grants were developed requires that projects **must** be within the specified watersheds and **must** have a **direct** relationship to the reduction of CSOs and to the quantity of stormwater runoff flowing into the sewer system of each watershed.

Eligible Applicants

Only non-profit organizations and educational institutions are eligible for funding.

Eligible Activities

Preference will be given to those projects that include (1) reducing the quantity of stormwater entering the sewer system and measurable outcomes linked to project activities that reduce pollutants, improve the quality of stormwater, (2) detailed provisions for long-term maintenance, management and protection as appropriate; and **(3) promoting and facilitating educational components,** and (4) activities consistent with the purpose of the *Gowanus Flushing Watershed Initiative (GFWI).* Additionally, projects benefiting Tier 1 outfalls in the Flushing Bay and Creek sewershed and Tier 3 outfalls in the Gowanus sewershed will receive preference.

Project types sought under the *GFWI* include but are not limited to:

> Innovative stormwater projects used to maximize infiltration, filtration, retention, detention and removal of impervious surfaces (e.g., LID projects such as rain gardens, enlarged street tree plantings with underground water storage devices, constructed wetlands, greenroofs, and bioinfiltration swales, permeable pavements, rain barrels, and cisterns).

A few examples of the types of stormwater and LID projects eligible for funding under the GFWI include the following:

- **Bioretention swales**: Create one or series of engineered and vegetated swales, practices designed to treat and attenuate stormwater runoff for a specific water quality volume.

- **Infiltration Trenches:** Create chambers to receive stormwater runoff. Stormwater runoff passes through some combination of pretreatment measures, such as a swale or sediment basin before entering the trench where it infiltrates into the soil.

- **Blue Roofs:** Rooftop detention using special roof drain devices that regulate flow from roof and allow water to drain over time.

- **Rain Barrels:** Connection of downspout to a rain barrel for watering gardens and other green spaces.

- **Permeable Pavers:** Permeable pavement that allows water to seep into underlying soils through regularly interspersed gaps.

- **Porous concrete:** A pervious concrete mixture contains little or no sand, creating a substantial void content. Using sufficient paste to coat and bind the aggregate particles together creates a system of highly permeable, interconnected voids that drains quickly.

- **Porous asphalt:** Structural properties of regular asphalt, but a gravel aggregate mixture has been substituted for the fine particles, which allows water to easily pass through.

- **Constructed Wetlands:** Constructed Wetlands use soil and drainage materials (such as pipes and gravel), water, and plant material to treat stormwater from adjacent impervious surfaces.

Source of Funds

This project was undertaken in connection with the settlement of an enforcement action taken by New York State and DEC for violations of New York State law and DEC regulations. Pursuant to this action, an Environmental Benefit Projects Fund (EBP Fund) was established with the New York State Environmental Facilities Corporation (EFC) to be held in escrow to fund EBPs completed in accordance with the approved EBP Plan. A total of $2,900,000 has been made available for stormwater projects, including Low Impact Development (LID) initiatives, to address Combined Sewer Overflow (CSO) reductions and attenuate urban stormwater runoff.

GFWI Manager

The New York City Department of Environmental Protection (NYCDEP) is the administrative manager of the Gowanus and Flushing Watershed Initiative.

A successful Grantee's proposal should include design drawings, construction plans and specifications, construction schedule, 3-year monitoring and maintenance plan, a quarterly and annual report, and a Stormwater Management Practices report. All stormwater BMP projects shall also contain any associated engineering services required to comply with any Federal, State or City regulations – under the approval of a New York State licensed Engineer or Architect. Prior to beginning work, all necessary permissions, approvals, and **permits** required, as included in the Stormwater Best Management Practice Location Plan shall be identified. Locations and designs for all Stormwater Management Practices must be reviewed and approved by NYCDEP's Bureau of Water and Sewer Operations (BWSO) and must have a fail safe connection returning stormwater back to the sewer system in the event of BMP failure or heavy rainfall. Designs for each location must be submitted to NYCDEP at least thirty (30) days in advance of the start of any work.

How Well Does Your Project Fit

Grantee shall insert here how well the project relates to and promotes the goals and objectives of other relevant planning documents.

Helpful Links for Public Information

plaNYC, Sustainable Stormwater Management Plan 2008

plaNYC, A Greener, Greater New York

Design Trust for Public Space

New York City Department of Transportation, Street Design Manual

New York City Department of Environmental Protection, Jamaica Bay Watershed Protection Plan

Finding Stormwater Designs and Ideas

Follow the link to an excellent manual about LID projects developed by the United States Department of Defense, Low Impact Development. Chapters 7-10 provide particularly useful information in terms of alternative analysis of different practices, designs and cost analysis.

Follow the link to New York State Stormwater Design Manual. This provides examples of stormwater projects and practices.

Additional Helpful Design Links

The Stormwater Manger's Resource Center

Center for Watershed Protection

International Stormwater BMP Database

The Low Impact Development Center, Inc.

United States Environmental Protection Agency, Urban Stormwater BMP Performance Monitoring

Number of Applications

Three applications per organization will be accepted for review. Universities are excluded from this limit if different departments or investigators are involved. Research projects **are not** eligible for funding.

Permitting

Grantee shall obtain all necessary permits for the implementation of the project. A list of required permits broken down by location and specific project shall be included in the *Stormwater Best Management Practice Location Plan* and any amendments thereto. All permits need to be identified and are the responsibility of the grant applicant to secure prior to construction (see below).

Time period for Project Completion

Projects must begin implementation with 45 days of receipt of the formal grant award letter and construction should be completed within 12 months. In addition to the construction of the BMPs and LIDs, each of these projects will have a three-year monitoring program to determine whether they are effective on the local level and under a variety of land use conditions. During this three-year monitoring period, water quantity and quality data including but not limited to capture volume, removal rates for nutrients and pollutants and soil infiltration rates, evapo-transpiration rates will be collected.

Restrictions and Ineligible Activities

Stand-alone education or outreach projects (educational projects that are not part of a stormwater retrofit or LID project) are not eligible for support under the GFWI.

Planning projects are not eligible for support under the GFWI.

Funds cannot be used for political advocacy, boycotts or litigation expenses.

Funds cannot be for legally mandated actions under local, state or federal law, and/or associated with administrative permit conditions or terms of settlement agreements. Grantees and projects must be in compliance with all local, state and federal law.

Proposals solely for research projects are not eligible for support under the GFWI.

Satisfactory Progress

It is imperative that the grant recipient construct the project as set forth in the grant application. Grantee is required to submit a detailed schedule of tasks, quarterly updates and partial monthly invoices with all supporting documentation of approvable costs incurred and that reflect the progress of the project. As this is a grant reimbursement program, applicants must be able to fully fund the project through design, construction and 3-year monitoring period. Monthly invoices that accurately reflect the cost proposal breakdown can be submitted as the project develops. Failure to render satisfactory progress or to complete the project to the satisfaction of NYCDEP may be deemed an abandonment of the project and may cause the termination of further grant funding. Satisfactory progress toward implementation includes, but is not limited to, executing contracts and submitting payment requests in a timely fashion, retaining consultants, completing plans, designs, permit applications, reports, and construction, or other tasks identified in the grant application within the time allocated for their completion. NYCDEP may recapture awarded funds if satisfactory progress is not demonstrated by the Grantee. Applicants should not submit applications if they do not expect to initiate the project within a reasonable time period after receiving a grant approval letter and be able to complete the project within the equivalent time period cited in the application. The contract term for construction and 3-year monitoring must be completed no later than four years from date of award.

Other Requirements

Project design and construction supervision is required to be undertaken under the supervision of an architect and/or engineer licensed to practice in the State of New York. In addition, proper certification from a licensed architect or engineer, as appropriate to the task, will be required for the preparation of designs and specifications and for the submission of as-built plans upon completion of the project. In addition to responsibility for compliance with local regulations, the grant recipient is responsible for complying with State and Federal regulations including but not limited to the following, as applicable.

- City Environmental Quality Review (CEQR)
- State Environmental Quality Review Act (SEQR)
- State Pollutant Discharge Elimination Discharge System
- State Freshwater and Tidal Wetlands Acts
- US Army Corps of Engineer Permits
- Coastal Erosion Hazards Areas Act

- Floodplain Management Criteria
- State and Federal laws and regulations pertaining to Historic Preservation
- Waterfront Revitalization Program