

# Green Infrastructure Partnership Opportunity Program

**APPLICATION FORM** 

Deadline: August 9, 2019 at 5:00 PM CDT

The Metropolitan Water Reclamation District of Greater Chicago (MWRD) is accepting project applications for partnership funding opportunities. MWRD seeks to partner with local municipalities and public agencies to install green infrastructure (GI) throughout Cook County. For more information, including program guidelines, partnership responsibilities, and eligibility requirements, visit www.mwrd.org and select Green Infrastructure Program.

# HOW TO SUBMIT THE APPLICATION

Applications and all attachments must be submitted via e-mail, U.S. Mail or other courier service.

Electronic submission through E-mail is preferred.

**E-mail:** Submit applications to **GIApps@mwrd.org**. Limit email size (including attachments) to 50MB. Submit application in one email only if possible, and include a list of all attachments in that email. Attach files using a filename that is unique to your project, referencing the organization name and/or project title.

**Mail:** It is strongly preferred that applications and all attachments be submitted electronically on a CD, DVD, or flash drive. Mailed applications shall be in a sealed envelope titled "GI PARTNERSHIP APPLICATION".

#### Address for Mailed or Hand Delivered Applications

Catherine O'Connor Director of Engineering Metropolitan Water Reclamation District of Greater Chicago 100 East Erie Street Chicago, IL 60611-3154

# **Contact for Questions**

Jim Yurik Principal Civil Engineer Metropolitan Water Reclamation District of Greater Chicago 1-708-588-3608 **james.yurik@mwrd.org** 

The following information must be received by MWRD on or before Friday, August 9, 2019 at 5:00 PM CDT. Late or partial applications will not be accepted. A representative authorized by the public partner must execute the signature page of the application in order for it to be accepted. This PDF is set up for electronic signature. If you prefer to sign a hard-copy, please print out the signature page separately and scan and email a copy of that page along with the completed electronic application.

# **Eligibility Requirements**

The following are the eligibility requirements for MWRD's Green Infrastructure Partnership Opportunity Program:

- Projects must be within the MWRD's corporate boundaries.
- Projects must be designed to manage stormwater using green infrastructure.
- Applicants must have (or be able to obtain) perpetual ownership or easement over the project site.
- Applicants will not use funding to satisfy required obligations due to the MWRD's Watershed Management Ordinance (WMO) or any other local, state, or federal regulations due to a private or public development project. Please note that some projects may require a WMO permit due to its own project disturbance, a new sewer, etc. Please refer to wmo.mwrd.org for additional information on permit requirements.
- The Applicant must be a public entity able to enter into an intergovernmental agreement (IGA) with the MWRD. Eligible public entities include municipalities, townships, county agencies, park districts, school districts, and other local government organizations.
  - Projects will be required to meet MWRD's Minority Business Enterprise (MBE), Women's Business Enterprise (WBE),and Small Business Enterprise (SBE) requirements, as well as the MWRD's Veterans Business Enterprise (VBE) goals.
  - Please see website for more information on typical IGA requirements: www.mwrd.org/irj/portal/anonymous/GI
- The Applicant must agree to maintain and operate the completed project long term.
- The Applicant should verify the capability to perform all aspects of the project by each department within their agency or community which will take part in funding, contract administration, maintenance and other requirements of the applicant.

# **APPLICANT INFORMATION**

#### Organization:

Name:		
City:	State: Zip Coo	de:
Primary Contact:		
First Name:	Last Name:	
Title:		
Phone:	Email:	

# **PROJECT INFORMATION**

The MWRD ranks all GI project applications on many different criteria, but please note that Design Retention Capacity (DRC), propensity of nearby flooding (including frequency and severity), number of benefitting flood-prone structures as a result of the project, and cost-effectiveness are the most important factors.

#### Project Title: \_

#### **Project Description:**

1) Provide a brief description of the proposed project, identify all project locations, identify all major green infrastructure components, and describe how the project will address existing drainage/flooding issues.

## **Project Location:**

#### Street Address\*: \_\_\_\_\_

or Nearest Intersection: \_\_\_\_\_\_\_ State: \_\_\_\_\_\_ Zip Code: \_\_\_\_\_\_

\* If your project is a green alley, use either of the following example formats:

- 1. the 1900 block between 57th Court & 57th Avenue
- 2. between S Homan Avenue and S Trumbull Avenue, bounded by W Columbus Avenue and W 80th Street

If your project spans multiple locations, provide a list of addresses or intersections included with the map.

# **Existing Conditions:**

2) Provide a brief description of the existing site conditions, including how the site is currently used.

3) Describe the type and impact of flooding that this project is intended to address (eg. overland or sewer backup, flooding of roadways, buildings, etc.). If possible, please estimate depth and width of flooded area. Please provide documentation (pictures, call data, etc.) as an attachment.

- 4) What type of sewer service area does this project affect?□ Combined □ Separate □ Unknown
- 5) Is the project located on property that is solely owned by the Applicant? □ yes □ no *If no, please explain how the land rights will be secured for the project:*

#### **Project Status:**

- 6) Which stage below most closely describes the project's status? Note that the MWRD will review plans ranging from conceptual to fully completed designs and provide feedback to maximize the project's benefits.
  - **CONCEPTUAL** Engineering not yet initiated. Drainage/flooding areas have been identified. Sketches, retention volume estimates, & rough costs developed.
  - □ **DESIGN** Some preliminary engineering plans, construction details, specifications, cost estimates, & retention volume estimates developed.
  - SHOVEL READY Finalized (or close to final) engineered plans, construction details, specifications, cost estimate, & retention volume calculations.
- 7) Will the design be completed in-house?  $\Box$  yes  $\Box$  no

If no, please indicate who will be designing the project: \_\_\_\_\_

8) Has this project received approval from all necessary units of your organization? For example, those responsible for maintenance and operations. □ yes □ no

## **Project Milestone Dates:**

- 9) Start Date/ Estimated Start Date for Engineering Design: \_\_\_\_\_ (mm/dd/yy)
- 10) Estimated Construction Start Date: \_\_\_\_\_ (mm/dd/yy)
- 11) Estimated Construction Duration: \_\_\_\_\_ (calendar) days

**Note:** Please submit a more detailed anticipated design and construction schedule as an attachment if available.

## **Project Metrics:**

12) Estimated Total Drainage Area: \_\_\_\_\_\_ sq. ft. or \_\_\_\_\_\_ acres

*Please estimate the amount of land area that will drain into the proposed green infrastructure installation.* 

13) Percentage Impervious Surfaces (Existing Site Conditions): \_\_\_\_\_%

*Please estimate the percentage of the total drainage area that is currently an impervious surface (eg. asphalt, concrete, building areas, etc.).* 

14) Estimated Impervious Surface Reduction: \_\_\_\_\_\_ sq. ft.

Please estimate the amount of impervious surfaces that will be converted into permeable surfaces.

15) Total Area Covered by All Proposed GI Installations: \_\_\_\_\_\_ sq. ft.

On page 10, check all GI components to be installed in the project. For each type of GI, indicate the number of individual installations and the total quantity (square feet) to be installed.

16) Estimated Design Retention Capacity (DRC) Provided by all GI Installations: \_\_\_\_\_\_ gallons

DRC is the volume of water that can be retained by a green infrastructure installation. It can be estimated utilizing MWRD's Watershed Management Ordinance Technical Guidance Manual (TGM) or a by a method consistant with the TGM. An example TGM detail and calculation template is on page 11. Please refer to page 10 to check all GI components to be installed in the project. For each type of GI, indicate the number of individual installations and the total amount of DRC (gallons) to be installed.

17) Number of Structures Benefitted Within Project Area: \_\_\_\_

Estimate the number of structures experiencing flooding issues that will be positively affected by the project. If detailed hydraulic and hydrologic modeling is not available, estimate the number of structures currently affected by basement backups and/or overland flooding located within the same drainage area of the proposed project. For a first estimate, all structures within a 0.25 mile radius from the installation may be counted. Include a map indicating the location of the benefitted structures as an attachment. Note that auxiliary buildings such as residential garages, sheds, or other uninhabited structures should not be counted in this tabulation.

# Public Outreach & Educational Opportunities:

18) Describe any proposed public education and community outreach efforts relating to this project. At a base level, signs and /or plaques with educational information and acknowledgement of the project partners will be required.

# **Project Visibility:**

19) Describe the project's visibility. How will the project promote the implementation of green infrastructure?

#### **Maintenance:**

20) Describe the resources available to provide maintenance for the green infrastructure in regards to staffing, equipment, and financial resources. Please provide previous experience in green infrastructure maintenance. Please provide an Operations and Maintenance (O&M) plan, if already available, or if not, ideas on tasks that would go into the plan. Please note that O&M will be the responsibility of the partner, and that an O&M Plan will be a requirement of the Intergovernmental Agreement (IGA). Templates for Permable Pavement and Rain Garden Bioswales can be found at www.mwrd.org/irj/portal/anonymous/GI, and the MWRD can assist in assembling template plans for other types of Green Infrastructure.

Please provide the estimated maintenance cost per year for this project. \$\_\_\_\_\_/yr

## **Project Finances:**

21) Please provide an estimate of the project's Capital costs below.

Cost Category	Amount (\$)	Notes
Engineering and Permitting		This includes contruction inspection and management
Construction		If selected and to the extent practicable, MWRDGC biosolids shall be used in any amendments performed to the soils in the proposed project area. These biosolids will be made available free of charge and more information will be provided for those selected project partners.
Land Acquisition		If applicable
Other		
<b>Total Project Cost</b> (sum of the above costs)		Maintenance costs should be excluded from this table.

22) Please indicate your planned funding sources below.

Funding Source	Funding Amount (\$)	Status of Funding (Applying/Pledged/Committed)
Applicant Funding*		
MWRD Funding Request**		N/A
Additional Funding (please use the table in question number 23 below)		
<b>Total Funding</b> *** (sum of the above amounts)		

\*Total funding by the agency. This will include funding from any other source.

\*\*Indicate the amount of funding being sought from MWRD. Note that MWRD funding for selected GI projects is in the form of reimbursement of construction related costs only. Engineering, land acquisition, operations, maintenance, and other non-construction related costs are not eligible for MWRD funding. Also note that MWRD may also consider whether applicants are in compliance with all MWRD ordinances (eg. WMO and Inflow & Infiltration Control Program) when prioritizing projects for funding assistance.

\*\*\*Total Project Cost and Total Funding should be equal.

23) Please provide the proposed funding sources for the project.

Organization Name	Funding Amount (\$)	<b>Status of Funding</b> (Applying/Pledged/Committed)

# ATTACHMENTS

Please indicate below if you have attached the following documents (not an exhaustive list):

- □\* Map of project locations, highlighting project areas. Additional project address list.
- $\square^*$  Map highlighting area/ structures that will benefit from the project.
- Documentation of drainage/flooding problems (map indicating problem locations, photos, 311 calls or similar, stormwater master plan, etc.)
- Detailed schedule for design and construction
- Photos
- Conceptual plans
- □ Engineered plans
- Green infrastructure storage volume calculations (see question #16)
- Operations and Maintenance Plan
- □ Hydraulic & hydrological modeling results

\* indicates required attachment

# **SIGNATURE PAGE**

#### **Applicant's Authorized Representative**

First Name:	Last Name:	
Title:		
Organization:		
Project Title:		
Signature of Authorized Representative*:		Date:

\* **Note:** Digital signatures are preferred, but if not comfortable digitally signing, 2 copies of the application may be submitted, a digital copy (unsigned) and a manually-signed copy (could be hard-copy or scanned)

By signing above, the Applicant acknowledges they understand the following eligibility requirements.

#### **MWRD Green Infrastructure Partnership Opportunity Eligibility Requirements:**

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## Green Infrastructure Project BMP Summary (for use in completing items 14 and 15 in

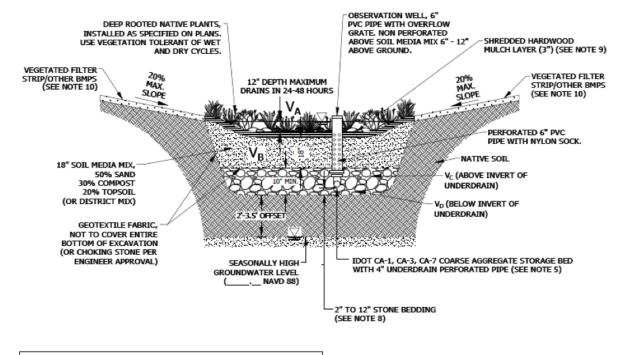
**the application):** List each type of GI installation included in this project. Add any additional BMPs not noted below to this list.

Proposed BMPs	# of Individual Installations	Total Quantity Installed	Units	Total DRC (Gallons)
Rain Gardens			Sq. Ft.	
□ Bioswales			Sq. Ft.	
Permeable Pavement (Concrete/ Asphalt)			Sq. Ft.	
Permeable Pavers			Sq. Ft.	
Native Plantings			Sq. Ft.	
□ Green Roofing			Sq. Ft.	
□ Rainwater Harvesting			Gal	
Total Area of all BMPs in Sq. Ft.				
Total DRC of all BMPs in Gallons				

**Note:** While DRC is important, MWRD also prioritizes that the new DRC volume is best utilized by collecting runoff from more drainage area than simply what falls directly over the installation. Therefore, MWRD prefers proposed projects to be located in low-lying areas and/or designed to collect off-site runoff to maximize infiltration of stormwater runoff.

## Metropolitan Water Reclamation District Watershed Management Ordinance - Technical Guidance Manual DESIGN RETENTION CAPACITY EXAMPLE

(Note: For porous pavement, please adapt the table below or see permeable pavement detail on website. Refer to **wmo.mwrd.org** for additional details, updates, and CAD files)



BOTTOM OF THE FACILITY:	ELEV.
SEASONALLY HIGH GROUNDWATER:	ELEV.
SEPARATION:	FEET

VOLUME TYPE	SURFACE AREA	Depth	POROSITY	STORAGE VOLUME	VOLUME PROVIDED
VA : SURFACE STORAGE			1.00	1.00 X V <sub>A</sub>	
V <sub>B</sub> : Soil media mix			0.25	0.50 X 0.25 X V <sub>B</sub>	
V <sub>C</sub> : COARSE AGGREGATE (ABOVE INVERT)			0.36	0.50 X 0.36 X V <sub>C</sub>	
V <sub>D</sub> : COARSE AGGREGATE (BELOW INVERT)			0.36	0.36 X V <sub>D</sub>	
				TOTAL	

NOTES:

- 1. THE PERIMETER OF THE VOLUME CONTROL FACILITY SHALL MAINTAIN THE MINIMUM HORIZONTAL SEPARATION DISTANCE OF: 10-FEET FROM FOUNDATIONS, UNLESS WATERPROOFED; 20-FEET FROM ROADWAY GRAVEL SHOULDER; AND 100-FEET FROM POTABLE WATER WELLS, SEPTIC TANKS/FIELDS, OR OTHER UNDERGROUND TANKS.
- 2. SANITARY OR COMBINED SEWERS SHALL NOT BE LOCATED WITHIN THE VOLUME CONTROL FACILITY. SANITARY OR COMBINED SEWERS SHALL NOT BE LOCATED BELOW THE FOOTPRINT OF THE VOLUME CONTROL FACILITY. WHEN LOCAL CONDITIONS PREVENT THE SEWER FROM BEING LOCATED OUTSIDE THE FOOTPRINT OF THE FACILITY THE SEWER SHALL BE CONSTRUCTED TO WATER MAIN QUALITY STANDARDS, OR IT SHALL BE ENCASED WITH A WATER MAIN QUALITY CARRIER PIPE WITH THE ENDS SEALED.
- AVOID INSTALLATION ON SLOPES GREATER THAN 3.00%. AVOID COMPACTING NATIVE SOILS. SCARIFY ANY COMPACTED SOIL.
  GEOTEXTILE FABRIC SHALL MEET REQUIREMENTS OF IUM MATERIAL SPECIFICATION 592. FOR WOVEN: APPARENT OPENING
- SIZE OF 0.50 MM (TABLE 1, CLASS I). FOR NON WOVEN: APPARENT OPENING SIZE OF 0.30 MM (TABLE 2, CLASS II). 5. STONE STORAGE OPTIONS ARE IDOT CA-1, CA-3, CA-7, DISTRICT VULCAN MIX, OR APPROVED ALTERNATE. NO RECYCLED MATERIALS
- MINIMUM DISTANCE OF 2 FEET (3.5 FEET IN COMBINED SEWER AREAS) BETWEEN BOTTOM OF BMP AND SEASONALLY HIGH GROUNDWATER LEVEL.
- 7. UNDERDRAINS ARE REQUIRED IN TYPICAL CLAYEY SOILS WHERE INFILTRATION RATES ARE LESS THAN 0.5 INCH/HOUR. NO MORE THAN 1 UNDERDRAIN EVERY 30 FEET ON CENTER. PROVIDE A SOIL REPORT DOCUMENTING NATIVE INFILTRATION RATE TO FOREGO UNDERDRAINS. NO FILTER FABRIC COVER/SOCK.
- 8. MINIMUM UNDERDRAIN BEDDING OF 2 INCHES, MAXIMUM OF 12 INCHES.
- 9. MULCH LAYER SHALL BE HARDWOOD MULCH OR OTHER NON-FLOATING GROUND COVER.
- 10. FOLLOW THE REQUIRED PRETREATMENT MEASURES LISTED ON THE VOLUME CONTROL PRETREATMENT MEASURES DETAIL.