

Request for Proposals:

Stormwater Retention baseline data collection from Green Infrastructure located in the Anacostia River watershed within Washington, District of Columbia

ANTICIPATED AWARD: Maximum total amount of proposal: \$105,000

KEY DATES/TIME LINE:

Proposal Deadline: January 31, 2017

Anticipated Award Date: March 10, 2017

Project Completion Date: December 31, 2017

ELGIBILITY LIMITATIONS/PREFERENCES: All data and derived products from this contract must be made publically available for download on a published internet site

GRANT MANAGER/CONTACT (or guidance for proposal submission): Kahlil Kettering; The Nature Conservancy MD/DC Urban Conservation Director Kahlil.Kettering@tnc.org 301-905-2531

GEOGRAPHIC FOCUS: Anacostia River watershed, within Washington, D.C.

PROJECT OVERVIEW/BACKGROUND:

In Washington, DC, stormwater runoff is a major source of pollution to the Anacostia and Potomac Rivers, and Rock Creek, and causes flooding that negatively affects local residents and businesses. DC also is ranked as one of the top five urban areas on the US East and Gulf Coasts where increased flooding is expected to impose significant risk to infrastructure due to predicted and observed climate change effects. The combination of more intense rain events and sea level rise is expected to increase the frequency and magnitude of flooding across DC and in the Anacostia River watershed. In addition, stormwater represents a major and growing source of pollution to the Chesapeake Bay watershed.

The Nature Conservancy recognizes the potential for green infrastructure to mitigate impacts of development and climate change while also improving the quality of life in urban areas. Identifying and prioritizing opportunities, however, remains a significant challenge in the face of limited resources. For these reasons, the Maryland/District of Columbia (MD/DC) Chapter of The Nature Conservancy (TNC) invites proposals for development of a map and database of existing stormwater retention projects, and a map and database of the potential for future stormwater retention projects. This report will:

- Develop a geodatabase of existing Green stormwater Infrastructure (GI) best management practices (BMPs) that are recognized in the District Department of Energy and the Environment (DOEE) Stormwater Management Guidebook, specifically limited to trees, bioretention, wetlands, and bioswales, throughout the Anacostia River watershed within Washington, DC, including: location and date of implementation, intended environmental and social benefits, businesses and population demographics around the GI prior to implementation and currently.
- Identify locations that are high priority sites needing stormwater retention because of high environmental impact from pollution levels and land use practices onsite that result in high quantities and low quality of stormwater runoff (measured in gallons and pollution loads).
- Identify locations that are currently subject to localized and tidal flooding, and locations that are projected to be impacted from flooding brought on by climate change, property damage from flooding, and population demographics and businesses around those locations.
- Recommend the type of BMP and location of green infrastructure projects that could be implemented to retain stormwater runoff from prioritized sites and abate current and projected stormwater flooding impacts.

This information will be used to map opportunities to implement new green infrastructure in Washington, DC to retain stormwater runoff and reduce flooding. This information will provide clarity on where stormwater retention services from GI exists, and the gap of services where TNC should focus efforts to implement future GI projects to have environmental and social benefits across diverse socioeconomic demographics in the watershed. This report will also be made publicly available so that others can view it and identify the best places to implement projects that will have the highest benefits for nature and people.

DELIVERABLES:

Deliverables will include estimates of the ecosystem service benefits, such as reductions in storm-based runoff volume in gallons, reduction in pollution nutrient loads, flood storage volumes, potential reduction in property damage costs in total dollars and as a percentage of average income and average property value, jobs created from GI, and if the GI creates community green space. The successful proposal will result in a report with maps, and a fully documented geospatial database including meta-data that will be completed and delivered to The Nature Conservancy no later than December 31, 2017. By the end of the contract period the following products are expected.

1. Inventory of existing, ground level stormwater GI BMPs specifically limited to trees, bioretention, wetlands, and bioswales throughout the Anacostia River watershed within Washington, DC at the greatest spatial resolution possible, based upon the DOEE Stormwater Management Guidebook list of acceptable BMPs. Block-sized features detailing where Green Infrastructure exists currently. The feature set will include the following attributes in map and database format:
 - a. Location (spatial/GIS data)
 - i. Sewershed it is in
 - ii. Tributary it serves
 - b. Type of BMP in place
 - i. Purpose/function
 - c. Pollution status (e.g., delivered excess TN, TP, and/or TSS loads)
 - d. Stormwater retention and reduction of localized flooding (e.g. drainage areas of where the water is coming from, gallons of storm water retained, areas benefitting from reduction of flooding),
 - i. Quantification of ecosystem services provided by existing GI/BMPs
 1. Environmental benefit (e.g. gallons retained, reduction in pollution loads)
 2. Social benefits (e.g. reduced damages from flooding, community green space created, jobs created in both construction and maintenance)
 - e. Population demographics in a 0.5-mile radius around the BMP. Through a spatial analysis using secondary census data examine demographic patterns of neighboring human populations most at risk from local flooding (e.g. age, race, income, home ownership, employment, human health issues). The contractor will collect and provide TNC copies of social demographic data to identify potential social benefits of each site and to see if previous GI projects are connected to any demographics changes around those sites.
 - i. Demographics before BMP was installed
 - ii. Current demographic data

- iii. The types of Socioeconomic and demographic data we are interested in include:
 1. Distance to public transportation (metro and bus)
 2. Distance to health clinic and schools
 3. Average household income
 4. Home ownership
 5. Ethnicity
 6. Race
 7. Nation of origin
 8. Language spoken in the home
 9. Educational attainment
 10. Employment
 11. Human health statistics
 12. Age mean, median, and mode.
 13. Development projects after BMP was constructed
 14. Future development proposals waiting for permitting.
- 2. Identify the areas most needing GI and opportunities for future, ground level GI retention projects, specifically limited to trees, bioretention, wetlands, and bioswales BMPs; in map and database format. Results from this initial analysis will be used to identify the areas where future newly constructed GI BMPs are most needed by:
 - a. Identifying areas where the most contaminated and largest quantity of excess runoff occurs.
 - b. Overlay runoff feeder areas and topography data with flooding reports to city government to identify areas that currently flood during heavy rain events.
 - a. Identify transportation routes and properties most at risk.
 - c. Identify areas subject to increased flooding because of climate change affecting increased rain events and tidal flooding from riparian flood-zones.
- 3. Prioritize the identified future project sites into a hierarchy that highlights projects that provide the most return on investment from an environmental impact, social benefit and financial cost/benefit analysis lens. This will include:
 - a. the kind of BMP that should be implemented at each site,
 - b. cost of the BMP,
 - c. potential for BMP to serve as a community recreational green space simultaneous to effectively retaining stormwater,
 - d. environmental benefits e.g.
 - i. volume retained,
 - ii. pollution loads reduced,
 - e. socioeconomic data and social benefits, e.g.:
 - i. reduction in flooding and damage,
 - ii. previously listed demographic data sets in a 0.5-mile radius,
 - iii. how many and the type and duration of jobs that are created by each project for both construction and maintenance,

4. Enabling conditions and limiting factors. When prioritizing project sites, the report will consider information and parameters about the enabling conditions and limiting factors that could reduce the potential to implement a project on a specific site, or conversely could potentially make a project more appealing. This includes and is not limited to factors such as;
 - a. property ownership,
 - b. utility infrastructure in the area,
 - c. future development proposals on that site,
 - d. current use of the site,
 - e. basic topography data,
 - f. square footage available for project siting.
5. Identify key uncertainties and develop recommendations for future monitoring/research needs.
6. Abbreviated assessment of the above findings to share with partners.

During the course of the project the contractor and TNC will hold regular stakeholder meetings that will provide updates, feedback and guidance for development of prioritization criteria. The frequency of these meetings will be determined upon selection of contractor.

This initial existing green infrastructure and opportunity mapping report will be created in a manner that allows for future updates and input to be easily included. This is vital because we will have the chance to revisit these data in the future to compare projected and actually provided ecosystem services of new projects.

The project geographic scale is the Anacostia River watershed in Washington, DC.

PROJECT COMPLETION

The Project is to be completed on or before December 31, 2017. During the project period, we will meet with the contractor at regular intervals. During these meetings, we will work with the contractor to discuss progress and determine pathways for decision making points.

PROPOSAL SUBMISSION

The contract will be awarded to the Vendor that provides the most cost effective proposal that meets all the objectives above.

The Nature Conservancy reserves the right to:

- Reject any or all offers and discontinue this RFP process without obligation or liability to any potential Vendor,
- Accept other than the lowest priced offer,
- Award a contract on the basis of initial offers received, without discussions or requests for best and final offers, and
- Award more than one contract.

Vendor's proposal shall be submitted in several parts as set forth below. The Vendor will confine its submission to those matters sufficient to define its proposal and to provide an adequate basis for The Nature Conservancy's evaluation of the Vendor's proposal.

DETAILED RESPONSE REQUIREMENTS

The submitted proposals must be no more than 10 pages long, Times New Roman font size 12, 1" margins on all sides, and must be in the following format:

1. Executive Summary
2. Approach and Methodology
3. Project Deliverables
4. Project Management Approach
5. Detailed and Itemized Pricing
6. Appendix: References
7. Appendix: Project Team Staffing
8. Appendix: Company Overview

EXECUTIVE SUMMARY

This section will present a high-level synopsis of the Vendor's responses to the RFP. The Executive Summary should be a brief overview of the engagement, and should identify the main features and benefits of the proposed work.

SCOPE, APPROACH, AND METHODOLOGY

Include detailed procedures and technical expertise. This section should include a description of each major type of work being requested of the vendor. All information that is provided will be held in strict confidence. Contractors should describe trade-offs in cost and rigor, focusing on establishing a low cost approach that maximizes rigor.

PROJECT MANAGEMENT APPROACH

Include the method and approach used to manage the overall project and client correspondence. The contractor should note that they will be required to furnish all labor, management, facilities, supplies, equipment, and material, and do all tasks necessary for the performance of the work specified. Additionally, the contractor shall provide adequate professional supervision and quality control to assure the accuracy, quality, completeness, and progress of the work.

Briefly describe a timeline of the work from March 1, 2017 to December 31, 2017; a Gantt-style table is acceptable.

DETAILED AND ITEMIZED PRICING

Include a fee breakdown by project phase and estimates of expenses. Use the following categories:

- Salary and Fringe
- Travel
- Meetings
- Supplies
- Telecommunications

Any indirect or “overhead” costs must be capped at 10%.

APPENDIX: REFERENCES

Provide the names and contact information of three people willing to serve as current references for which you have performed similar work.

APPENDIX: PROJECT TEAM STAFFING

Include biographies and relevant experience of key staff and management personnel. Describe the qualifications and relevant experience of the types of staff that would be assigned to this project by providing biographies for those staff members.

APPENDIX: COMPANY OVERVIEW

Provide the following for your company:

- Official registered name (Corporate, D.B.A., Partnership, etc.), Dun & Bradstreet Number, Primary and secondary SIC numbers, address, main telephone number, toll-free numbers, and facsimile numbers.
- Key contact name, title, address (if different from above address), direct telephone and fax numbers.
- Person authorized to contractually bind the organization for any proposal against this RFP.
- Brief history, including year established and number of years your company has been conducting geospatial and/or stormwater retention mapping work.

EVALUATION FACTORS FOR AWARD

CRITERIA

Any award to be made pursuant to this RFP will be based upon the proposal with appropriate consideration given to operational, technical, cost, and management requirements. Evaluation of offers will be based upon the Vendor's responsiveness to the RFP and the total price quoted for all items covered by the RFP.

The following elements will be the primary considerations in evaluating all submitted proposals and in the selection of a Vendor or Vendors:

1. Completion of all required responses in the correct format.
2. The extent to which Vendor's proposed solution fulfills The Nature Conservancy's stated requirements as set out in this RFP.
3. An assessment of the Vendor's ability to deliver the indicated service in accordance with the specifications set out in this RFP.
4. The Vendor's stability, experiences, and record of past performance in delivering such services.
5. Availability of sufficient high quality Vendor personnel with the required skills and experience for the specific approach proposed.
6. Overall cost of Vendor's proposal.

The Nature Conservancy may, at their discretion and without explanation to the prospective Vendors, at any time choose to discontinue this RFP without obligation to such prospective Vendors.