New Jersey Department of Environmental Protection
Division of Watershed Protection and Restoration

Stormwater Management Grants for Water Quality and Quantity Improvements 2022 (Stormwater Management Grant 2022) Grant Awards

Overview

The 2022 Stormwater Management Grants was for the distribution of a total of 10 million dollars of which 1 million dollars was reserved for technical assistance related to Resilience Planning in Hurricane Ida effected communities, 2 million dollars was reserved for technical assistance related to Stormwater Utility formation feasibility studies, and 7 million dollars related to demonstration projects and planning.

The Department received 92 applications requesting over $50,000,000 for $7,000,000 of available funding for stormwater planning and projects. Of these, the Department is proposing to fund 37 applications that will exhaust the available funding. All funded projects are required to monitor and report progress and level of success in achieving outlined goals.

The Stormwater Management Grant 2022 consists of four categories: Planning and Analysis of Stormwater Opportunity Studies (funding 13 out of 29 projects), Green infrastructure (GI) projects (funding 18 out of 37 projects), Improvement of Existing Stormwater Infrastructure (funding 4 out of 22 projects), and Management and Restoration (funding 2 out of 4 projects). Applications are listed by each category below:

I. Planning and Analysis of Stormwater Opportunity Studies

Funded awards under this category will identify possible stormwater management improvement or fund a qualifying entity to submit a proposal to identify locations best suited for implementation of improved stormwater management techniques in all or a portion of a municipality or county. The identified improvements must be necessary to maximize potential for flood attenuation and/or increased resilience. While the Request for Proposal (RFP) announced $500,000 for this category, the Department has determined to award the following projects totaling $953,829.44 in funding.

1. *City of Hackensack - $200,000*

SWM-2022-Hackensa-00120

The City of Hackensack applied for $200,000 to prepare a stormwater asset management plan and analyze the feasibility of implementing a stormwater utility, and sanitary sewer utility. The project will be fully funded for the requested amount. Additionally, the City is making an $800,000 cash match for a total project cost of $1,000,000. The City of Hackensack is a Combined Sewer Overflow (CSO) community, and the majority of the City is an Overburdened Community (OBC). Hackensack will be working with Suburban Consulting Engineers, Inc. to complete this project. The project includes tasks such as conducting closed circuit cleaning and televising of existing stormwater infrastructure, evaluating critical and vulnerable assets, and completing GIS mapping of storm sewer assets.

2. *City of Newark - $150,000*

SWM-2022-Newark-00087

The City of Newark applied for $150,000 to conduct Phase 2 of the City's Stormwater Utility Feasibility Study and Implementation. The Department will fully fund the project. Additionally, the City is making a $140,000 cash match for a total project cost of $290,000. The City of Newark is considered an both an OBC and a CSO community. Newark will be partnering with Black &

Veatch Management Consulting LLC, New Jersey Future, Rutgers School of Environmental and Biological Sciences, and the Victoria Foundation to complete this project. The City and its partners plan to, among other tasks, develop a stormwater rate ordinance and stormwater utility implementation plan, design a stormwater credits program, obtain and configure a data management tool, develop standard operating procedures to support potential stormwater utility fee/credit programs, and train staff to more effectively manage business processes associated with a stormwater utility fee program.

3. ***Jersey City Public Schools - $79,521***

SWM-2022-Jersey City Public School-00070
Jersey City Public Schools (JCPS) applied for $197,222 to: develop a plan to survey and retrofit 29 to 39 Jersey City schools with green infrastructure, and construct rain gardens at two City schools. As constructing rain gardens do not qualify for this category of funding, only the development of a GI retrofit plan for the Jersey City schools will be funded ($79,521). The Department will work with JCPS to amend their budget appropriately. JCPS, through its in-kind match partners, will make$23,050 in-kind match, for a total project cost of $102,571. Jersey City is both an OBC and a CSO community. Partners working with JCPS on this project include Sustainable Jersey City, the Jersey City Division of Engineering, Traffic and Transportation, the Jersey City Municipal Utilities Authority, and Rutgers, specifically the Rutgers Cooperative Extension Water Resources Program. Tasks that JCPS and its partners plan to undertake include, an assessment of GI opportunities at certain Jersey City schools, receive public input on the GI retrofit plans and conduct education and community outreach related to the project.

4. ***Township of Bloomfield - $77,535***

SWM-2022-BFTWP-00044
The Township of Bloomfield applied for $77,535 to digitize and update the Township's stormwater utility mapping. The project will be fully funded for the requested amount. Additionally, the Township is making a $77,535 cash match for a total project funding of $155,070. The majority of the Township of Bloomfield is an OBC. . Bloomfield will be working with Remington & Vernick Engineers, Inc. to complete this project, which includes such tasks as land surveying and GPS data collection of missing or incomplete information, the digitization of existing resource data and mapping of GIS utility infrastructure location data.

5. ***City of Salem - $51,900***

SWM-2022-Salem-00094
The City of Salem applied for $350,000 to conduct a study on the Town Bank watershed and pump station. Part of the proposed project included the design of a new pump station, which does not qualify under this category of funding. Therefore, that portion of the project will not be funded, bringing the grant award to a total of $51,900. The Department will work with the City to amend their budgets appropriately. The City of Salem is an OBC. Salem will be working with professional consultants, an assigned NJDEP staff person as part of the Community Collaborative Initiative, and an assigned Department of Community Affairs A auditor. The city will meet its objectives by updating the watershed stormwater study for the Town Bank pumping station, evaluating green infrastructure opportunities to reduce flow to the pump station and developing a long-term maintenance and monitoring plan.

6. ***Borough of Palmyra - $60,750***

SWM-2022-Palmyra-00034

The Borough of Palmyra applied for $60,750 for planning purposes to prepare a Stormwater Operations Study for the Borough's more than 100-year-old stormwater system that consists, in its entirety, of approximately 280 stormwater inlets and 150 manholes, and has never been surveyed. The project for this OBC municipality will be fully funded for the requested amount. While the stormwater system has been determined to be "serviceable," buried structures and subsurface conditions have been determined to obstruct stormwater passage and therefore exacerbate flooding. The project proposal is to conduct a field investigation to record locational information for stormwater assets and all structures and to determine the condition and location of all storm sewer manholes, inlets and sanitary sewer manholes within the Borough. The data will be used to prepare GIS generated Stormwater Utility Maps of all storm utilities.

7. ***Borough of Dumont - $80,000***

SWM-2022-Dumont-00106
The Borough of Dumont applied for $80,000 to develop a Stormwater Drainage Study to determine the most at-risk flood areas in the Borough by calculating the capacity of the current pipe system in place. The project will be fully funded for the requested amount. Several areas in Dumont are considered an OBC. The Borough will be working with its Department of Public Works and a consulting engineering firm to achieve improvement of data collection and land surveying, establish a municipal stormwater management plan, and prioritize state-recognized high-priority green space parcels. Recommendations of priority projects for stormwater infrastructure will be made by the consultant and Borough administrator after the completion of the stormwater drainage study which will calculate the capacity of the current pipe system.

8. ***Borough of Haledon - $50,000***

SWM-2022-Borough of Haledon-00065
The Borough of Haledon applied for $50,000 to create a Stormwater Drainage Study to develop a Green Infrastructure Opportunities Study to help prevent impacts to the community and create a sustainable path forward including green infrastructure that balances environmental and community needs. The project will be fully funded. The Borough of Haledon contains an OBC. The Borough's administration, Department of Public Works, and Office of Emergency Management will work in collaboration with a qualified planning consultant to conduct the study. The study will assess current conditions that contribute to stormwater runoff, analyze potential green infrastructure solutions (such as bioswales, rain gardens, etc.), and develop an action plan for incorporating green infrastructure within their stormwater management system, including. specific locations and methods of adding green infrastructure to municipal roadways and properties. To develop the plan, a map of municipally owned properties and buildings that are potential sites for green infrastructure will be created.

9. ***Moorestown Township - $50,000***

SWM-2022-Mooresto-00168
The Township of Moorestown applied for $50,000 to complete its stormwater mapping inventory. The project, which will be fully funded will result in a map and inventory of drainage facilities that will inform current and future planning to make prioritized improvements to mitigate flooding, increase storm resilience, upgrade drainage facilities, and track maintenance. The drainage facilities will be catalogued and assigned priority ranking to identify the most critical improvements and develop a schedule for future upgrades. Project deliverables include drainage area maps and component locations, a complete drainage facilities list, and a comprehensive analysis of the

Township's drainage system. A contractor will provide GIS mapping, assistance with field locating, development of drainage areas, investigation of problem areas, analysis, budgeting, estimating.

10. ***Town of Boonton - $46,200***

SWM-2022-Town of Boonton-00056
The Town of Boonton applied for $46,200to draft a Planning and Analysis of Stormwater Opportunity Study. The project will be fully funded. Boonton includes portions of OBC. The study will identify opportunities to incorporate improved stormwater management techniques such as green infrastructure, retrofits to existing stormwater infrastructure, and restoration through reduction or removal of impervious surfaces. The study will also include the identification and mapping of existing stormwater management improvements and the creation of maps for the purpose of assessing and improving overall stormwater management. The project deliverable will be a complete report, with mapping and inventories of the stormwater system provided in the appendices. The municipal engineer will work with Mott MacDonald on this project.

11. ***Randolph Township - $45,000***

SWM-2022-Randolph-00150
The Township of Randolph applied for $45,000 to inspect and evaluate 75 detention basins for the feasibility of green infrastructure retrofit. The project will be fully funded. A portion of Randolph is an OBC. Randolph will be working with Ferriero Engineering to complete this project. The project involves site inspection and photo documentation of basins, a review of the original design plans, identification of feasible GI retrofits, and determination of improvement costs. The Township plans to select 15 of the 75 total basins as candidates for completing a more detailed study for potential GI retrofit.

12. ***Township of River Vale - $45,000***

SWM-2022-Township of River Vale-00060
The Township of River Vale applied for $50,000 to initialize a Stormwater Asset Management Program/Plan. The project will be partially funded ($45,000). The Department will work with the Township of River Vale to amend their budget appropriately. Additionally, the Township is making a $13,250 in-kind match for a total funding of $58,250. The Township of River Vale will be working with Statile Associates as well as the Department of Public Works to create a database of current stormwater facilities, improve maintenance practices for stormwater infrastructure, and identify opportunities for improvement, such as the removal of impervious surfaces.

13. ***Borough of North Caldwell - $17,923.44***

SWM-2022-Borough of North Caldwell-00163
The Borough of North Caldwell applied for $18,000 to develop a Green Infrastructure Opportunities Study that focuses on implementing green infrastructure retrofits and recommended solutions on municipally maintained basins. The project will be funded in the amount of $17,923. The basins in the Borough were all designed and constructed prior to the Green Infrastructure rule amendments. Basins will be studied to determine current conditions, and feasibility of retrofitting. The Borough has capacity to install any retrofits identified as feasible. Project deliverables include a list of GI recommendations, cost estimates, list of permits, photos, and written reports. The Borough's engineering consultant, Ferriero Engineering will assist with the project.

II. Green infrastructure (GI) projects

Projects under this category will construct green infrastructure to manage stormwater. The RFP announced $4,500,000. $4,440,666.91 will be awarded for the following projects:

1. *Newark Housing Authority - $553,500*

SWM-2022-Newark Housing Authority-00100
The Newark Housing Authority (NHA) applied for $553,500to implement green infrastructure for the NHA Hyatt Court Housing Complex, which is located in a CSO community and is an OBC. The project will be fully funded. It involves the replacement of 6,100sf of existing asphalt with porous pavement and the construction of enhanced rooftop drainage, along with rain gardens to replace pavement in three courtyard areas. The project will help reduce stormwater flows to the combined sewer system, and the vegetation will be beneficial in reducing the heat island effect.

2. *Woodbridge Township - $98,400*

SWM-2022-WB TWP-00096
The Township of Woodbridge applied for $98,400 to implement green infrastructure for three sites, two of which are considered an OBC. The project will be fully funded. The project involves the installation of twelve rain gardens totaling 5,075sf. that will treat 24,245sf of connected impervious surfaces. This project will manage stormwater runoff, help reduce localized flooding, and provide microhabitats for birds and pollinators while adding to the aesthetics of the neighborhood.

3. *Lake Hopatcong Foundation - $228,900*

SWM-2022-LHF-00028
The Lake Hopatcong Foundation applied for $228,900to construct a green infrastructure best management practice to receive stormwater runoff from the Lakeside Fields parking lot. The project will be fully funded. The project involves the installation of a 400 ft long bioretention swale planted with native vegetation. The proposed project will reduce nutrients in stormwater runoff entering the lake and thereby reduce the proliferation of harmful algal blooms, which will, in turn, enhance the recreational opportunities for the public on Lake Hopatcong.

4. *Perth Amboy - $438,512*

SWM-2022-PA-00071
The City of Perth Amboy, which is a CSO community and OBC area, applied for $438,512 to implement six GI projects in priority sewersheds to reduce the frequency of discharge from the CSOs, sewer backups into private properties, nuisance flooding as well as decrease the surcharging of sanitary sewers in the City. The project, which will be fully funded involves the installation of GI, such as green streets, tree pits, cisterns, pervious pavement & curb extensions with stormwater planters, in areas previously identified in 2015 feasibility study.

5. *Camden County Municipal Utilities Authority - $1,200,000*

SWM-2022-CCMUA-00076
Camden County Municipal Utilities Authority applied for $1,200,000 to implement the green infrastructure portion of the "Harrison and State Stormwater and Complete Streets Project." The City of Camden is a CSO community and an OBC. The project will be fully funded. It includes the design and construction of a series of bioretention basins along the Harrison-State corridor sufficient to treat runoff from the Water Quality Design Storm, along with street tree plantings to

create a community green space that will mitigate CSO volumes and reduce nitrogen & phosphorus loads, plus capture and infiltrate stormwater in an urban setting.

6. ***Borough of Ringwood - $194,700***

SWM-2022-Ringwood-00089
The Borough of Ringwood applied for $194,700to construct a rain garden to be located at the Martin J. Ryerson Middle School to intercept runoff from the northern area of the parking lot. The project will be fully funded. Using native vegetation, the project will reduce the amount of sediment and nutrients entering Cupsaw Brook, thereby discouraging the growth of HABs in the lake downstream. Both water bodies have a TMDL for phosphorus. This project will also include an education and outreach element, through which the Borough will promote on-lot green infrastructure techniques, including such techniques as: rainwater harvesting, bioretention systems and other easy-to-implement, grassroots best management practices and low impact development techniques the surrounding community can use.

7. ***Pemberton Township - $135,000***

SWM-2022-PembTwp-00119
Pemberton Township is being awarded $135,000 to design and install four rain gardens along North Lakeshore Drive. The project will treat runoff generated by the road surface and improve water quality in Mirror Lake.

8. ***Association of New Jersey Environmental Commissions - $134,000***

SWM-2022-ANJEC-00043
The Association of New Jersey Environmental Commissions (ANJEC) applied for $267,038 to address impaired waterways through various implementation approaches, including the design and construction of five green infrastructure projects, an Impervious Cover Assessment , Reduction Action Plan and web map, and green infrastructure feasibility studies in four OBCs including Glassboro Borough, Paulsboro Borough, the City of Woodbury, and Swedesboro Borough, as well as a study in Deptford Township. The project will be partially funded ($134,000) for the design and construction of five green infrastructure projects only, primarily rain gardens, that are anticipated to capture over 450,000 gallons of stormwater runoff per year and reduce the nonpoint source pollution from Total Suspended Solids by at least 120 lbs/yr; Total Phosphorus by 1.2 lbs/yr and Total Nitrogen by 12.0 lbs/yr.

9. ***Mott Watkins Associates - $250,000***

SWM-2022-MWA-0147
On behalf of Egg Harbor Township, Mott Watkins applied for $250,000 to address drainage issues in the municipal office parking lot. The project will be fully funded. It will remove the existing impervious asphalt pavement from the parking stalls and replace it with pervious paving designed to infiltrate.

10. ***Borough of Waldwick - $32,000***

SWM-2022-Waldwick-00023
The Borough of Waldwick applied for $32,000 to design and install a 175sf rain garden in it's the municipal parking lot. The project will be fully funded and will treat runoff generated by the motor vehicle surface.

11. ***Rutgers University Institutional Planning and Operations/Planning, Development, and Design - $262,268.78***

SWM-2022-Rutgers -00082
Rutgers University applied for $262,269 to implement multiple green infrastructure best management practices) at College Hall on the Douglass College campus, which is in the area contained within an OBC. The project will be fully funded. Project elements include construction of pervious pavement to replace impervious asphalt at twelve parking spaces, disconnection of existing roof leaders and downspouts, installation of a cistern and low voltage high efficiency irrigation system, and construction of a rain garden to manage runoff that exceeds the capacity of the cistern. The project will reduce runoff volumes, reduce runoff rates, increase groundwater infiltration and recharge, improve stormwater runoff quality, improve the aesthetics and ecological function of the campus landscape, decrease urban heat island effects, and decrease ice and snow management costs and downstream impacts.

12. ***Cranford Township - $4,741.13***

SWM-2022-Cranford Township-00140
Cranford Township, which is an OBC, applied for $4,741 to design and install a rain garden at the Cranford Recreation Center. The project will be fully funded. The rain garden will detain approximately 1,500 gallons of stormwater runoff per inch of rainfall. This project will address stormwater flooding issues at the site as well as serve as a demonstration project with high public visibility.

13. ***Borough of Point Pleasant Beach - $209,750***

SWM-2022-PPB-00062
The Borough of Point Pleasant Beach has applied for $265,600 to mill and repave a parking lot at the Manasquan Inlet and construct a rain garden to receive the runoff from the parking lot prior to discharge to the water body, but the project will be funded in the amount of $209,750 for the design and construction of the rain garden portion of the project.

14. ***Eatontown - $209,000***

SWM-2022-Eatontow-00143
The Borough of Eatontown, which is an OBC, has applied for $209,000 to make improvements to Wampum Lake Park. The project, which will be fully funded, includes the construction of three raingardens to capture and treat runoff from impervious parking and roadway and from the public pedestrian walkway.

15. ***Rutgers University Institutional Planning and Operations/Planning, Development, and Design - $119,993***

SWM-2022-Rutgers -00112
Rutgers University applied for $119,900 to design and install a bioswale adjacent to Newark City Hall. The City of Newark is an OBC and a CSO community. The project will be fully funded. Approximately 2,250 sf of urban impervious cover will be treated by the vegetation and soil media in the bioswale prior to discharging to the combined sewer system.

16. ***Borough of Caldwell - $91,110***

SWM-2022-Caldwell-00069

The Borough of Caldwell applied for $91,110 to design and install three rain gardens. The project will benefit the adjacent OBCs by reducing runoff. The project will be fully funded. The rain gardens will be constructed using native vegetation in grass lawn areas to receive roof runoff.

17. ***City of Bordentown - $115,542***

SWM-2022-Btown-00095

The City of Bordentown has applied for $115,542 to design and install a bioretention system with underdrain at the Carslake Community Center. The project will be fully funded. The system will collect and treat stormwater runoff from the community center parking lot, roof drains and the internal roadway on the site.

18. ***Borough of Bernardsville - $163,250***

SWM-2022- Borough of Bernardsville-00050

The Borough of Bernardsville applied for $163,250 to construct a roadside bioswale to reduce the pollutant load entering a tributary of Mine Brook and to continue the conversion of a previously purchased private residence into a recreational area by removing impervious cover and installing a porous surface in the parking lot. The bioswale is intended, in part, to reduce the need for roadway deicing materials. The porous paving system will provide water quality treatment. In addition, the open space enhancement will increase the amount of contiguous open space.

III. Improvement of Existing Stormwater Infrastructure

Projects under this category will improve existing stormwater management infrastructure and/or restore or retrofit stormwater basins to address water quality and reduce nutrient loading or reduce stormwater velocities and/or volume. The RFP advertised $1,000,000 for this category but $1,110,600 will be awarded.

1. ***City of Elizabeth - $150,000***

SWM-2022-City of Elizabeth-00074

The City of Elizabeth applied for $150,000 to complete a CSO mitigation project. The City is making a $11,560,000 match of -funds for a total project cost of $11,710,000. The project will be fully funded. This project benefits a community that is both a CSO community and an OBC. The City will work with a consultant to construct a 1.3-million-gallon storage tank, which will temporarily store flow from the combined sewer during storm events before a proposed small pumping station dewaters the tank, returning flow to the combined sewer at a later time when the system has capacity to safely convey to the water treatment plant. The project is included in the City's CSO Long Term Control Plan to address the flooding that occurs on along Third Avenue and the intersections of Doyle Street and Atlantic Street. and aims to reduce the number of CSOs, thereby improving water quality.

2. ***Rutgers University - $151,060***

SWM-2022-Rutgers -00081

Rutgers University applied for $151,060 to implement a basin retrofit project at their Cook Campus location. The project will be fully funded. Cook Campus is located within an OBC. Rutgers will work with a consultant to design and implement the expansion and conversion of an existing detention basin into a bioretention basin. The proposed bioretention basin will receive and treat runoff from an adjacent parking lot. The bioretention basin will serve to enhance the ecological and stormwater treatment function of the existing basin and is additionally intended to be used as a teaching and learning resource.

3. ***Montgomery Township - $431,120***

SWM-2022-Mont Twp-00078
Montgomery Township applied for $431,120 to convert two existing detention basins into GIBMPs. Montgomery Township will provide $7,281 in matching funds for a total project cost of $438,404. The project will be fully funded. The project sites are located within an OBC. The Township will work with a consultant to design and implement the detention basin conversions, which will involve the removal of concrete low flow channels and the replacement of turf grass with native meadow vegetation. The project will serve to improve water quality and have the additional co-benefits of flood reduction, ecological enhancement, and habitat connectivity.

4. ***Mansfield Township - $$378,420***

SWM-2022-Mansfield Township-00093
Mansfield Township applied for $378,420 to convert two existing detention basins into GI BMPs. The project sites are located within an OBC. The Township will work with a consultant to design and implement the detention basin conversions, with the proposed BMPs to be an infiltration basin and a standard constructed wetland. The project will serve to improve water quality and have the additional co-benefit of enhancing priority community greenspace.

IV. Management and Restoration

Projects under this category will remove or reduce impervious cover for the purpose of creating natural areas and restoring or improving the water quality and quantity functions. The RFP announced $1,000,000 for this category however only $494,903 of projects scored were recommended for funding.

1. ***Rutgers, The State University of New Jersey - $209,903.65***

SWM-2022-Rutgers -00079
Rutgers University applied for $209,903 to remove approximately 10,000 sf of abandoned roadway (vestige of roadway element of the former Camp Kilmer) on the Livingston Campus and to restore that area into functioning natural forest. The new forested area will include a large tree canopy layer, understory (tree and shrub) layer, and herbaceous floor. The proposed landscape plan will consist of plant material native to the New Brunswick/Piscataway Ecoregion. The plantings will be inspected quarterly during the growing season to evaluate plant viability and to determine if modifications to the maintenance plan are required. The goal of the maintenance plan is to prevent the growth and establishment of non-native invasive plant species. A deer exclusion fence is proposed to prevent herbivory. The removal of asphalt pavement and restoration to a native forest will contribute to flooding reduction, and eventually serve as a carbon sink. The design of the green spaces will address preservation and enhancement of existing vegetation, protection and restoration of existing soils, developing linkages between disconnected green spaces and the reduction of impervious surfaces. The project is located in an OBC.

2. ***Township of Mount Holly - $285,000***

SWM-2022-MTHolly-00090
The Township of Mount Holly applied for $549,300 for removal of existing asphalt pavement and installation of porous sidewalk. The Department will fund $285,000 of this project. The Department will work with the township to amend their budget appropriately. The project involves the removal of the impervious surface currently located behind the township building along the Rancocas Creek and turn the area to green space to help reduce flooding in the area. The Township also plans on developing the area as a community spot for passive recreational activities. The project location is an OBC.