

Environment Committee

Meeting date: September 12, 2017

For the Metropolitan Council meeting of September 27, 2017

Subject: 2017 Green Infrastructure Pilot Grant Program – Allocation of Funds

District(s), Member(s): All

Policy/Legal Reference: Water Resources Policy Plan, Minnesota Statutes 473. 249 (Tax Levy) and 473.505 (Total Watershed Management)

Staff Prepared/Presented: Judy Sventek, 651-602-1156

Division/Department: MCES c/o Leisa Thompson, 651-602-8101

Proposed Action

That the Metropolitan Council authorize its Regional Administrator to award and execute four green infrastructure grants described in Attachment A in the total amount of \$1,000,000.

If detailed project budgets vary from preliminary amounts resulting in unallocated funds, staff may re-allocate those funds among recommended proposals or high ranking un-funded proposals. If unallocated funds exceed \$50,000, staff will bring proposed reallocations back for Council action.

Background

Management of water resources (water supply, wastewater, and surface water management) in the region has often been addressed by separate parts of a community or organization and often as separate issues, not tied to other urban planning issues such as land use, transit needs, parks and green space planning and opportunities to create additional green infrastructure. The integrated water approach includes all aspects of water impacting an area when determining the best solutions for the situation. Combined approaches have the potential to multiply benefits, but few examples exist to clearly quantify achieved benefits of integrated water management investments.

Rationale

The intent of the pilot grant program is to work with communities to integrate solutions directed at solving our region's water-related problems in ways that provide multiple benefits, maximize extent of positive impacts, and are technically sound. These projects support the Thrive MSP 2040 stewardship and sustainability outcomes and the water sustainability goal of the Water Resources Policy Plan. The proposed action requires Council approval.

Funding

Funding is budgeted in the 2017 operating budget from the Council's General Fund.

Known Support / Opposition

There is no known opposition.

RECOMMENDED APPLICATIONS

1. One Water Grant Program – City of South St. Paul - Grant Request Amount \$500,000 - **Recommended funding \$300,000**

Project will fund 3 types of grant program in the city: water conservation grants, stormwater runoff reduction grants, and private inflow and infiltration (I/I) reduction grants for the sanitary system. All three grant programs require a 50/50 match. The success of the water conservation grants will be measured by the overall reduction in city water demand and use. The success of the stormwater runoff reduction grants will be measured by the estimated annual reduction in runoff volume and pollutant loading using the MIDS calculator and finally the success of the I/I reduction grants will be measured by the reduction in annual I/I based on data provided by the Council and the number of properties improved.

2. Evergreen Stormwater Reuse System – City of Roseville – Grant Request Amount \$325,000 – **Recommended funding \$300,000**

Project will construct an underground detention and reuse system in or adjacent to one of the city parks. The goal of the project is to help relieve flooding along the storm sewer downstream of its location and to improve water quality by reducing sediment and phosphorus from the stormwater. It also provides the opportunity to implement a reuse system to provide water for irrigating fields and reducing the need for potable water.

3. Crystal Becker Park Infiltration Project- City of Crystal – Grant Request Amount \$400,000 – **Recommended funding \$200,000**

The proposed project is a 43,000-square foot (1 million gallon) infiltration gallery beneath a recreation area in Becker Park. This gallery will infiltrate 0.5 inches of runoff from a 147-acre watershed that includes mostly untreated residential and commercial land uses. The proposed project will reduce total phosphorus load to Upper Twin Lake by 118 pounds annually, total suspended solids annually loads by 38,400 pounds and infiltrate an estimated 108 acre-feet of runoff.

4. Northwood I/I Study – Public, Private, and Stormwater Influence to I/I – City of New Hope - Grant Request amount \$51,310 – **Recommended funding \$50,000**

The proposed project is a flow monitoring and infrastructure improvement project to understand the relationship between stormwater and sanitary sewer I/I, as well as corresponding results on the amount of I/I from public and private infrastructure.

5. Inflow and Infiltration (I/I) Private Property Compliance Program – City of West St. Paul - \$200,000 – **Recommended funding \$150,000**

Project would reduce the amount of inflow and infiltration that originates from private property sources.

ALL 2017 GREEN INFRASTRUCTURE PILOT GRANT APPLICATIONS RECEIVED

Time Square and Commercial Area Storm Water Drainage/Sanitary Sewer Disconnection - Apple Valley - \$30,000

Project would fix a drainage issue for an area that previously discharged stormwater runoff from private driveways to the wastewater system.

2018-905 Penn-American Linear Stormwater Storage Project- Bloomington - \$1,000,000

Project would significantly reduce the magnitude, frequency, and duration of temporary flooding at the low point along Knox Avenue between American Blvd and 81st Street, and the low point along American Blvd between Knox and Irving Avenues.

Crystal Becker Park Infiltration Project – Crystal - \$400,000

Project would use green infrastructure to manage flooding, recharge aquifers, and protect and improve downstream receiving water quality.

City of Eagan Water Reuse Project – Eagan - \$1,000,000

Project would reuse underdrain dewatering water for non-potable uses including irrigation, firefighting, and wash water within a pilot study area in the city.

Community Framework for Implementing Holistic Water Management – Edina - \$91,500

Project would lay the groundwork for incorporating an integrated water management framework in the City of Edina's Comprehensive Plan.

Aden Park Restoration – Edina - \$200,000

Project would support the creek restoration and stormwater management aspects of the larger project to connect people to the creek and making it more accessible.

Hugo County Road 8 Stormwater Reuse Project – Hugo - \$220,000

Project would reconnect its existing irrigation system along County Road 8 to stormwater, resulting in improved surface water quality, decreased groundwater demand, and increased stormwater storage capacity.

City Irrigation Control Replacement – Lino Lakes - \$47,500

Project is to replace the irrigation controllers at 12 city-owned irrigation systems and will provide the funding for the replacement controllers at three of the largest private irrigation users in the city.

West Shadow Lake Drive and Lamotte Neighborhood Improvement Project – Lino Lakes - \$413,870

Project would include roadway and surface water improvements as well as watermain and sanitary sewer installation and rehabilitations.

Private Property Infiltration and Inflow Mitigation Pilot -Minneapolis -\$1,000,000

Project aims to reduce sources of infiltration to connected private laterals.

Carlson Park Drainage Improvements - Mound - \$16,445

Project would installation of bioretention basin and iron enhanced sand filter within Carlson Park to treat runoff from the city storm drain before it reaches Seton Lake.

Northwood I/I Study – Public, Private, and Stormwater Influence to I/I - New Hope - \$51,310
Project is a flow monitoring and infrastructure improvement project to understand the relationship between stormwater and sanitary sewer I/I, as well as corresponding results on the amount of I/I from public and private infrastructure.

North St. Paul 2018 Sewer Service Lining and Replacement – North St. Paul - \$220,000
Project would offset costs for sewer service line replacements for areas identified by the city as having high rates of inflow and infiltration.

North St. Paul Stormwater Pond and Irrigation Project – North St. Paul - \$272,000
Project would install a stormwater pond that will be used to irrigate either Silver Lake Park or Dorothy Park.

Irrigation Water Efficiency Rebate Program - Plymouth - \$20,000
Project would help reduce the demand on aquifers during summer months by providing rebates to replace irrigation system controllers and components with US EPA WaterSense certified products.

Central Park Splash Pad Water Reuse Project - Rosemount - \$216,000
Project would install a recirculation system to reuse 97% of the water at the splash pad which currently uses approximately 10.5 million gallons of potable water per year.

Evergreen Stormwater Reuse System - Roseville - \$325,000
Project would construct an underground detention and reuse system in or adjacent to one of the city owned parks. The project goals are to relieve flooding along the storm sewer system downstream of its location and to improve water quality by reducing sediment and phosphorus from the stormwater.

Parkview Center School Subsurface Infiltration and Reuse System – Roseville - \$100,000
Project would construct an underground infiltration system at Parkview Center School. The system would capture stormwater from adjacent County and City roads and potentially reuse to irrigate athletic fields in the area.

One Water Grant Program – South St. Paul - \$500,000
Request is to use mini-grants to encourage the economically disadvantaged population to help conserve water, reduce stormwater runoff and pollutants, and reduce sanitary sewer inflow and infiltration.

Central Park Splash Pad Water Reuse Project – St. Anthony - \$84,850
Project is to modify the current splash pad to collect and route water from the splash pad to an existing water reuse system which currently collects and reuses stormwater for irrigation at St. Anthony Village's Central Park.

Irrigation Controller and Water Sensor Upgrade – St. Paul Park - \$1,281
Project would upgrade 4 of the city's irrigation sites with smart controllers that calculates evaporation and adjusts controllers based on local weather conditions.

Scheffer Community Center Green Roof – St. Paul - \$175,000
Request is for grant money to use to build a green roof at the new Scheffer Community Center at Scheffer Park in St. Paul.

West Side Flats Greenway – St. Paul - \$100,000

Project would use the grant to offset costs associated with the use of native plants within the biofiltration basins being planned for the greenway.

St. Paul JCC Stormwater Management System – St. Paul - \$205,299

Request is for funds to cover the costs of a stormwater management system and site work necessary to complete it at the Jewish Community Center.

Water Sustainability Outreach and Education 3-D Model – St. Paul - \$18,680

Project would use the funds to create an interactive 3-D display of the Green Line infrastructure system. The exhibit would be used to raise awareness about nonpoint source pollution and runoff and its effects on lakes and rivers.

SPRWS Lead Replacement Incentive Program – St. Paul Regional Water Services - \$150,000

Project would provide incentive funding for lower income residents of \$1,500 per lead water line for approximately 100 property owners to replace the private property portion of the lead service lines.

Lambert Lake Wellhead Assessment in Nutrient Removal for Vadnais Lake Water Quality Improvement and Flood Protection Sustainability Associated with Climate Change – St. Paul Regional Water Services - \$75,000

Project would assess Lambert Lake Wetland condition in removing phosphorus and nitrogen loadings, collect, and analyze sediment cores for the current phosphorus sorption capacity, develop a wetland plant profile, and determine the current state of the wetland buffering capacity for flood protection.

SPRWS Two Year System Wide Leak Survey – St. Paul Regional Water Services - \$40,000

Project would perform a 2-year leak survey to pinpoint leaks in the system as compared to the 2015/16 survey.

Inflow and Infiltration (I/I) Private Property Compliance Program – West St. Paul - \$200,000

Project would provide private property I/I assistance.

Residential Irrigation Controller Program – Woodbury - \$98,000

Project would be used to retrofit 800 in-ground irrigation systems each year for the program, 1,600 in total.