

Environment Committee

Meeting date: May 9, 2017

For the Metropolitan Council meeting of May 24, 2017

Subject: 2017 Stormwater Grants

District(s), Member(s): All

Policy/Legal Reference: Water Resources Policy Plan, Minnesota Statute 471.59 (Joint Exercise of Powers) and 473.505 (Total Watershed Management)

Staff Prepared/Presented: Joe Mulcahy, 651-602-1104

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

Proposed Action

That the Metropolitan Council authorize its Regional Administrator to award and execute the stormwater management grants described in Attachment A in the total amount of \$1million.

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.

Background

Research and monitoring has shown that nonpoint source pollution is having a detrimental effect on the water quality of lakes, streams, and rivers in the Twin Cities Metropolitan Area. Nonpoint source pollution is polluted stormwater runoff from agricultural and urban land that enters wetlands, lakes, streams, and rivers without treatment.

MCES received eleven grant applications requesting a total of \$1,743,507. Applications were reviewed and ranked by an internal panel. The rankings were reviewed by ES managers and a final recommendation for funding was produced. This recommendation is summarized in Attachment A.

Rationale

The grant applications recommended for funding are for highly visible, innovative projects that can be replicated throughout the metro region.

Thrive Lens Analysis

This action supports the Thrive MSP 2040 stewardship and sustainability outcomes and the water sustainability goal of the Water Resources Policy Plan. Innovative stormwater treatment will protect and improve water quality in the region's lakes, streams, and rivers.

Funding

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

Known Support / Opposition

No known opposition.

2017 STORMWATER GRANT FUNDING RECOMMENDATIONS

1. City of Fridley Civic Center Complex Fridley- Rice Creek WD- \$200,000.

Recommended funding \$159,000

Project would construct a 3-cell lined stormwater pond with iron enhanced pretreatment on the contaminated site of the old Columbia Heights Ice Arena to allow construction of a new city hall and public safety building.

2. Minneapolis East Side Storage and Maintenance Facility-Minneapolis- Mississippi WMO- \$200,000.

Recommended funding: \$150,000

The City of Minneapolis is reconstructing and expanding its East Side Public Works Storage and Maintenance Facility in Northeast Minneapolis. The facility will provide much-needed space for public works operations, as well as hosting areas for public art and green space with sustainable amenities such as stormwater capture systems, recycled building materials, solar panels, rain gardens and pollinator beds.

3. Seidl's Lake Water Quality Improvement Project- South St. Paul- Lower Mississippi River WMO- \$200,000.

Recommended funding: \$150,000

The City of South St. Paul would install an underground infiltration system in a city park using a combination of pre-treatment devices, tree trenches, and underground pipe galleries below park greenspace to improve the water quality of Seidl's Lake. The project will provide water quality treatment of a currently untreated 27.3-acre urban and dense residential neighborhood, and is projected to infiltrate 11.8 acre-feet of runoff, capture 3,757 pounds of total suspended solids, and 9.6 pounds of phosphorus annually.

4. Stormwater Reuse for Irrigation at New Brighton Lion's Park New Brighton- Rice Creek WD- \$200,000.

Recommended funding: \$150,000

Project would construct irrigation system from existing 14 acre stormwater pond for use on planned playground, softball field, and lacrosse/ soccer field on city property.

5. ISD #112 Kindergarten Center Educational Filtration Basin- Chaska- Carver County WMO- \$37,500.

Recommended funding: \$37,500

Project would retrofit an untreated parking lot by constructing a stormwater filtration basin in an existing curbed island in the lot and using trench grates to route stormwater to the basin. Purpose is to reduce nutrient and sediment loading to Lake Grace, educate students about stormwater issues, and demonstrate feasibility of practice for challenging sites.

6. Crystal Becker Park Infiltration Project-Crystal- Shingle Creek WMO- \$200,000.

Recommended funding: \$150,000

Project is a 43,000- square foot (1 million gallon) infiltration gallery beneath a recreation area in Becker Park in the City of Crystal that will infiltrate 0.5 inches of runoff from a 147-acre watershed that includes mostly untreated residential and commercial land uses. Project is expected to provide

85% reduction (118 pounds) in annual TP load, 94 % reduction (38,400 pounds) in annual TSS load, and 59% reduction (108 acre-feet) in annual runoff volume to Upper Twin Lake, which is impaired for excess nutrients.

7. Shoreview Rice Creek Fields Stormwater Reuse Shoreview- Rice Creek WD- \$200,000.

Recommended funding: \$150,000

Project would retrofit irrigation system to use water from a nearby stormwater pond to water 4 fast pitch softball fields saving an estimated 6 million gallons of potable/groundwater annually.

8. Biochar Enhanced Filter for Bacteria and Dissolved Pollutants Fridley-Coon Creek WD-\$53,507

Recommended funding: \$53,507

Project would retrofit an existing weir structure with two filters, (one iron enhanced sand and biochar, and one spent lime and biochar) on Springbrook Creek in Fridley, which is impaired for aquatic life and aquatic recreation. District would collect grab samples upstream and downstream of the filters every two weeks for at least two years, analyze them for TP dissolved P and E. coli, compare concentrations and calculate removal.

ALL 2017 STORMWATER GRANT APPLICATIONS RECEIVED

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Silver Lake Boat Landing Stormwater Pond Reconstruction- Columbia Heights-Rice Creek WD-\$200,000 Project would reconstruct and enlarge existing stormwater pond into 2 cell pond and bioretention area to eliminate short circuiting and improve treatment.

City of Fridley Civic Center Complex Fridley- Rice Creek WD- \$200,000. Project would construct a 3-cell lined stormwater pond with iron enhanced pretreatment on the contaminated site of the old Columbia Heights Ice Arena to allow construction of a new city hall and public safety building.

Hugo County Road 8 Stormwater Reuse Project Fridley-Rice Creek WD- \$200,000. Project would connect existing irrigation system to stormwater pond saving an estimated 4 million gallons of potable water per year.

Stormwater Reuse for Irrigation at New Brighton Lion's Park New Brighton- Rice Creek WD-\$200,000. Project would construct irrigation system from existing 14 acre stormwater pond for use on planned playground, softball field, and lacrosse/ soccer field on city property.

Shoreview Rice Creek Fields Stormwater Reuse Shoreview- Rice Creek WD- \$200,000. Project would retrofit irrigation system to use water from a nearby stormwater pond to water 4 fast pitch softball fields saving an estimated 6 million gallons of potable/groundwater annually.

Outfall Improvements to Bald Eagle Lake White Bear Township- Rice Creek WD- \$52,500. Project would construct two sumped manholes with a SAFL baffle to retrofit two existing untreated 24-inch storm sewer outfalls and capture sediment and debris from before it enters Bald Eagle Lake. Bald Eagle lake is impaired for

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