



Title: Concurrence with Staff Recommendations for Project Opportunities Reviewed Through the Pilot Responsive Program

Resolution number: 21-053

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Purpose:

At the July 22, 2021 Board of Managers Meeting, staff is seeking Board concurrence on staff's recommendations on three opportunities reviewed through the pilot phase of the Responsive Program as discussed at the July 8, 2021 Operations and Programs Committee (OPC) Meeting.

Background:

Minnehaha Creek Watershed District (MCWD or District) is focused on the protection and improvement of natural resources in ways that support thriving communities. Since what happens on the land is the primary driver of the health of our natural resources, MCWD's Balanced Urban Ecology Policy (BUE Policy) recognizes that the District can deliver the most value to its residents by working in partnership with those who change the landscape. Since adopting the BUE Policy in 2014, the District integrated these founding principles within the District's 2017 Watershed Management Plan (WMP) that articulated an implementation approach that is two-pronged:

- Focusing in areas of high need and opportunity to achieve significant, measurable resource improvement
- Remaining responsive to needs and opportunities district-wide through coordination with partners

In order to carry out the second prong of this approach, the District is developing a "Responsive Program" (AKA Responsive Model) to guide the District's process for identifying, evaluating and responding to opportunities. The purpose of the Responsive Program is to provide support for public and private projects and initiatives that are well-coordinated and align with the District's goals and priorities. The District aims to carry out this approach in a way that provides value to its communities while making efficient use of District resources to allow the District to maintain focus on its highest priority projects and initiatives.

Pilot Phase of Responsive Program

In late 2019, staff presented a draft framework for the Responsive Program to the Board of Managers, including purpose, goals, high-level process, and evaluation criteria. Since that time, staff have been operating the Responsive Program in a pilot phase while continuing to develop the internal workflows, technology tools, formal guidance documents, and outreach materials. Under this pilot phase, staff have been evaluating partnership requests using the following four criteria categories:

- **Resource Need and Priority:** Alignment with the resource needs and priorities identified in the District's Plan or through ongoing monitoring and diagnostic efforts.

- **Project Benefits:** Estimated benefits across the District’s goals of water quality, water quantity, ecological integrity, and thriving communities.
- **Cost Effectiveness:** Cost effectiveness compared to alternatives or other past/current project opportunities.
- **Partnership and Coordination:** Strength of partner’s coordination, integration of District goals, and willingness to commit resources to advance the opportunity.

Staff evaluate these opportunities by applying the four criteria categories and vetting it through a cross-departmental staff team to inform the recommended response. To date, any opportunity that has required funding and/or significant capacity of District staff has been brought to the Board of Managers (e.g., Long Lake Creek Subwatershed Partnership, 54th Street Streambank Investigation).

Summary:

At the July 8th OPC Meeting, staff reviewed the project background, staff evaluation findings, and staff recommendations for the below three active responsive opportunities:

- Private Brewery located in Spring Park – Rain Garden Project
- City of Edina – Morningside Flood Infrastructure Project
- City of Plymouth – Maple Creek Drainage Improvements

District staff are requesting Board of Managers concurrence of staff’s recommendations. These recommendations are consistent with the proposed Responsive Program Implementation Guidance that the Board will also be reviewing at the July 22, 2021 Board Meeting. Below are the three opportunities and staff evaluation as presented to the OPC on July 8th.

Private Brewery located in Spring Park – Rain Garden Project

Background

An owner of a local brewery within Spring Park has completed design and is seeking funding assistance to implement a 2,000 square-foot rain garden to treat stormwater runoff from the brewery’s 4.67-acre property. The rain garden is intended to provide treatment prior to discharge into the channel that flows to Seton Lake and provide pollinator habitat. The rain garden is intended to provide natural aesthetic benefits and may have some educational signage regarding rain gardens for brewery customers to enjoy. The estimated total project cost is \$34,134. The project was awarded \$25,000 through the 2021 Hennepin County’s Good Steward Grant. Since being awarded, the project lost partner funding and/or in-kind support to meet the required 25% grant match (~\$8,534). The owner of the brewery has requested that the District provide funding to cover the match.

Criteria and Evaluation

Staff evaluated this opportunity by applying the four criteria categories and vetting it through a cross-departmental staff team to inform the recommended response. Below is a summary of District staff’s evaluation, including ranking of criteria.

Resource Need and Priority: Ranked Low

The project is a small-scale rain garden designed to treat stormwater runoff from 90% of the brewery’s property. The property drains to Seton Lake which is not impaired for nutrients and is not identified as a resource need or priority in the District’s WMP.

Project Benefits: Ranked Low

Currently, 4.67 acres of the commercial property drains to an existing concrete swale which drains from pavement into a landscaped area prior to draining towards Seton Lake. The rain garden would be installed to treat stormwater between the pavement edge and waterbody with an estimated 2.3 pounds per year of total phosphorus (TP) removal.

Cost Effectiveness: Ranked Medium

The project was awarded \$25,000 from the Hennepin County Good Steward Grant. The total project cost is estimated at \$34,134. This proposed project’s cost/benefit is within the typical range for this type of practice.

Partnership and Coordination: Ranked Low

The project proponent has completed design and is seeking to submit permits and implement the project. There was no coordination prior to the funding request.

Staff Recommendation

At the July 22, 2021 Board meeting, District staff will also be bringing forward the Responsive Program Implementation Guidance (refer to Discussion Item 12.1). Under this draft guidance, the Program would be designed to target projects of regional significance and not intended to support small-scale best management practices (BMPs). This recommendation is based on the District's past experience with operating grant programs for small-scale BMPs and education-focused projects which were evaluated and suspended through the strategic planning process based on the determination that they did not provide sufficient return on investment or progress towards District goals and priorities.

Based on the staff's evaluation, staff recommends that the District decline the funding request.

City of Edina – Morningside Flood Infrastructure Project (Reuse System)

Background

The Morningside Neighborhood in Edina has several landlocked or low areas that are prone to flooding. The City of Edina has proactively looked to address these flood prone areas with detailed modeling, community engagement, and development of a Flood Risk Reduction Strategy. This opportunity was originally brought forward at the March 11, 2021 OPC as the City requested regulatory guidance, particularly around predictive pumping feasibility, and funding of potential water quality project elements that were not yet defined.

Since the March OPC meeting, the City requested District funding for a reuse system that would irrigate the Weber Park ballfields and potentially additional park land. The City provided estimated cost/benefit numbers in June 2021 for the reuse system. The City is committed to the proposed ~\$10M Morningside Flood Infrastructure Project to address flood reduction within the Morningside Neighborhood. The requested reuse system would be a potential project add-on that would be dependent on District funding. The entire Morning Flood Infrastructure Project is scheduled to be completed in tandem with the anticipated street reconstruction projects in the neighborhood in 2022. The District Engineer reviewed the cost/benefit estimates to verify the provided numbers and also reviewed for other potential water quality opportunities for the project.

Criteria and Evaluation

Staff evaluated the reuse system proposed by the City as a potential add-on to the overall Morningside Flood Infrastructure Project. Staff applied the four criteria categories and vetted it through a cross-departmental staff team to inform the recommended response. Below is a summary of District staff's evaluation, including ranking of criteria.

Resource Need and Priority: Ranked Low

The Morningside Flood Infrastructure Project is intended to address local drainage and flooding issues within the neighborhood. The proposed water reuse system would provide water quality benefit by reducing the volume and nutrient load of water flowing from Weber Pond to the District owned and maintained stormwater ponds at Bde Maka Ska prior to entering the lake itself. Bde Maka Ska is not impaired for nutrients, and there is existing water quality treatment provided by the District's regional stormwater ponds.

Project Benefits: Ranked Low to Medium

The City of Edina's consultant provided two irrigation reuse options:

- Option 1 included a reuse system to irrigate Weber Park ballfields (~2.2 acres of irrigated land) with an estimated 3.5 pounds of TP removal.
- Option 2 included a reuse system to irrigate approximately 6 acres covering the Weber Park ballfields and park land with an estimated 10 pounds of TP removal.

Cost Effectiveness: Ranked Low to Medium

The capital cost for the reuse system is estimated to be in the ballpark of \$290,000, based on a similar system installed in Chanhassen. The District Engineer's assessment determined the proposed reuse system may be "very" expensive compared to its estimated water quality benefit. The City's consultant provided an annualized cost estimate of \$8,400 per pound of TP removal per year for Option 1 (irrigation of only the Weber Park ballfields). The District Engineer reviewed cost/benefits if both the ballfields and park land were irrigated (Option 2) and estimated an annualized cost-benefit of \$2,000 per pound of TP removal per year, which is on the higher end of what they would consider to be a cost-effective range (\$500-2000/lbs/yr).

Partnership and Coordination: Ranked Medium

The City of Edina has a history of effective partnership and coordination with the District. The City is fully committed to implementing the larger Morningside Flood Infrastructure Project and has approved the \$10M plan to address local flooding and drainage issues. However, the City is currently in design phase and there is limited time to explore opportunities to leverage this project for downstream water quality benefit prior to the anticipated 2022 start date for this project.

Staff Recommendation

Based on the staff's evaluation, staff are seeking Board concurrence with the recommendation to decline funding the project add-on of a stormwater reuse system at Weber Park.

Staff will continue to provide regulatory guidance and support for the larger project. Staff view the City as a leader in addressing climate impacts within the District and are currently looking to collaborate with the City on climate adaptation planning efforts, including development of a pilot 2-D model within the City.

City of Plymouth – Maple Creek Drainage Improvements

Background

The City of Plymouth has several projects in its capital improvement plan (CIP) within the Gleason Lake drainage area that are focused on addressing local drainage and flooding issues. Because Gleason Lake is impaired for nutrients, the City has been exploring opportunities to incorporate water quality improvements into these projects. One project that has been identified as having potential for water quality improvement is the Maple Creek project. Proposed project elements include iron enhanced sand filtration, expanded flood storage, and stabilization and restoration efforts along Maple Creek and the Steeplechase Development Wetland area. The funding request and preliminary cost-benefit information was submitted on June 30, 2021. The proposed project is scheduled for construction in winter 2021-22.

Criteria and Evaluation

Staff evaluated this opportunity by applying the four criteria categories and vetting it through a cross-departmental staff team to inform the recommended response. Below is a summary of District staff's evaluation, including ranking of criteria.

Resource Need and Priority: Ranked Medium to High

The project is intended to address local drainage issues and reduce stormwater volume and nutrient loading to downstream Gleason Lake. Gleason Lake is impaired, and the District's CIP includes a project targeting volume and load reduction to Gleason Lake.

Project Benefits: Ranked High

Based on initial benefit information provided by the City's consultant, the project is estimated to provide 41 pounds of TP removal annually which is considered by District staff to be a significant load reduction to Gleason Lake.

Cost Effectiveness: Ranked High

The total cost for the water quality components of the project is \$405,500. The cost/benefit is estimated to be \$800 per pound of TP removal annually (over a 20-lifecycle) which is considered to be quite cost effective based on staff experience and guidance from Stantec.

Partnership and Coordination: Ranked Medium

The City has made efforts to coordinate early with the District regarding project opportunities in its CIP. However, the preliminary cost/benefit information and funding request for this particular project has been submitted quite late in the District's budget and CIP planning process to be considered for 2022 funding and would require a budget amendment.

Staff Recommendation

Based on the staff's evaluation, staff are seeking Board concurrence to proceed with consideration of the opportunity and request additional information from the City of Plymouth to further assess the feasibility and cost-effectiveness of the proposed project. Staff anticipates reporting back to the Board in September following receipt and evaluation of the additional information to provide a recommendation.

Supporting documents:

Attachment 1: Overview Map



RESOLUTION

Resolution number: 21-053

Title: Concurrence with Staff Recommendations for Project Opportunities Reviewed through Pilot Responsive Program

WHEREAS, the District’s 2017 Watershed Management Plan outlines its commitment to serving as a resource to its communities through early coordination and planning of land use and water resource matters, including technical assistance, regulatory process facilitation and shared efforts to secure funding, referred to as the Responsive Program;

WHEREAS, District staff are developing formal policy for Board adoption that will guide the implementation of the Responsive Program, and in the interim, the program is operating in a pilot phase;

WHEREAS, District staff have reviewed and evaluated three requests for funding under the pilot phase of the Responsive Program, by applying to each request the following four criteria categories: resource need and priority, project benefits, cost-effectiveness, and partnership and coordination, which criteria are being further refined for formal program implementation;

WHEREAS, at the July 8, 2021 meeting of the Operations and Programs Committee, staff reviewed and presented a recommendation for further consideration of three pilot phase projects: a private brewery rain garden project in the City of Spring Park, a reuse system to be associated with the City of Edina Morningside flood management infrastructure project, and City of Plymouth Maple Creek drainage improvements;

WHEREAS, on the basis of the four above criteria, District staff recommends not committing pilot Responsive Program resources to the rain garden project or the City of Edina project;

WHEREAS, with respect to the City of Plymouth project, District staff proposes that it coordinate with the city for additional information, and to more closely assess water quality benefits and project cost-effectiveness, before providing a recommendation to the Board of Managers on District engagement;

WHEREAS, the Board finds that the District staff evaluation is sound;

NOW, THEREFORE, BE IT RESOLVED that the Minnehaha Creek Watershed District Board of Managers concurs in the recommendations of District staff as stated above.

Resolution Number 21-053 was moved by Manager _____, seconded by Manager _____. Motion to adopt the resolution ___ ayes, ___ nays, ___ abstentions. Date: 7/22/2021

Secretary Date: _____

PILOT PHASE RESPONSIVE PROGRAM ACTIVE OPPORTUNITIES

- LEGEND**
- MCWD Legal Boundary
 - MCWD Hydrologic Boundary
 - County Boundary
 - City Boundary
 - Responsive Program Opportunity Locations

City of Plymouth - Maple Creek Project

Back Channel Brewery Co. Rain Garden

Edina - Morningside
Flood Reduction
Infrastructure Project

