

MINNEHAHA CREEK WATERSHED DISTRICT

QUALITY OF WATER

QUALITY OF LIFE

The Minnehaha Creek Watershed District is committed to a leadership role in protecting, improving and managing the surface waters and affiliated groundwater resources within the District, including their relationships to the ecosystems of which they are an integral part. We achieve our mission through regulation, capital projects, education, cooperative endeavors, and other programs based on sound science, innovative thinking, an informed and engaged constituency, and the cost effective use of public funds.

MEMORANDUM

DATE: March 2, 2015
TO: MCWD Board of Managers Operations and Programs Committee
FROM: Brett Eidem, Cost Share Grant Administrator
RE: Recommendation to Hold Public Hearing and Fund Nokomis Neighbors for Clean Water Project

PROGRAM CRITERIA

In 2011, the Minnehaha Creek Watershed District (MCWD) began implementing the Cost Share program to help meet its clean water and public participation goals. The District provides financial assistance to government units, private property owners, non-profits, academic institutions and other interested parties for projects that expand the knowledge base of water resources management, provide educational opportunities through demonstrative projects within the watershed, improve stormwater management, reduce pollution, and enhance natural resources and green infrastructure.

BUDGET UPDATE

Cost Share 2015 Budget: \$832,000.00 (Combined 3130 and 3121 Funds)
Amount Approved in 2015: \$416,290.00

Nokomis Neighbors for Clean Water

Last year, Metro Blooms and MCWD collaborated on a demonstration alleyway stormwater management improvement project as a community engagement opportunity to treat residential runoff, create wildlife habitat corridors within an urban fabric, and celebrate a neighborhood scale effort that aligns goals of government entities and the public to protect Lake Nokomis.

This initial alleyway retrofit was implemented to increase awareness of stormwater management on a residential and community scale and leverage greater opportunities within the subwatershed. Metro Blooms has collaborated with the City of Minneapolis and MCWD to apply for a BWSR Clean Water Fund Grant, which was recently awarded to the city for this project in the amount of \$399,425.

In September 2014, the MCWD Board signed a letter of support expressing the managers' intent to consider the project District cost-share financial support. The District's support for the project is conceptual and non-binding. Formal determination on whether to provide District funding to the Lake Nokomis Neighbors for Clean Water project would not be made until after further documentation is prepared and presented and all applicable necessary public procedures have been completed.

As part of its review of the project, staff applied the new cost share evaluation criteria. Staff will review this process at the March 5, 2015 Operations and Programs Committee meeting and will request a committee recommendation for project funding. Consistent with Board policy for cost share funding requests greater than \$50,000 staff will request a committee recommendation to hold

a public hearing at the Board of Managers meeting on March 26, 2015. Staff also plans to request a funding recommendation from the Citizens Advisory Committee on March 11, 2015.

The BWSR grant application, a project implementation map, and a copy of the letter of support from MCWD from September of 2014 are attached. If you have any questions on the content provided prior to the meeting, please contact me at beidem@minnehahacreek.org or 952-641-4523.



Projects and Practices Application

Grant Name - Nokomis Neighbors For Clean Water

Grant ID - C15-7778

Organization - Minneapolis, City of

Allocation	Projects and Practices 2015	Grant Contact	Lois Eberhart
Total Grant Amount Requested	\$399,425.00	County(s)	Hennepin
Grant Match Amount	\$225,000	12 Digit HUC(s)	070102060605
Required Match %	25%	Applicant Organization	Minneapolis, City of
Calculated Match %	56%	Application Submitted Date	
Other Amount			
Grant Abstract	<p>This project engages private property owners in a neighborhood scale effort to install up to 180 stormwater BMPs to protect Lake Nokomis, a water body in Minneapolis impaired for excess nutrients. Lake Nokomis is one of the most visited lakes in Minnesota. It has 206 surface acres, with 620 tributary acres in Minneapolis. Located in the lower part of the Minnehaha Creek watershed, the lake discharges into Minnehaha Creek. (A weir protects the lake from high water conditions in the creek.) The subwatershed is fully developed and dominated by residential neighborhoods, small business nodes and parkland.</p> <p>This project addresses the 103B/8410 plans of the Minnehaha Creek Watershed District (MCWD) and the City of Minneapolis (City), as well as the EPA-approved TMDL for Lake Nokomis. An analysis of the Lake Nokomis subwatershed identified priority areas for BMP installations based on drainage pattern, land uses and presence of previously constructed BMPs. We are proposing the installation of 160-180 BMPs adjacent to alleyways to disconnect residential backyards, rooftops and driveways on 15 residential blocks. WinSLAMM modeling of</p>		

potential projects demonstrates 90-92% reduction in stormwater volume, TP, and TSS from drainage areas, resulting in 15 lbs TP removal/year. Installations will be paired with education and outreach to property owners focused on long-term benefits of sustainable source control.

The City of Minneapolis is the applicant, with Minnehaha Creek Watershed District as co-applicant, nonprofit organization Metro Blooms as implementation project manager, and Hennepin County as funding partner. Other key partners include: Friends of Lake Nokomis, Nokomis East Neighborhood Association, Blue Thumb, Master Water Stewards and Master Gardeners.

Narrative

Questions & Answers

Did your organization receive CWF grant dollars in FY 2012, 2013, and/or FY 2014? If less than 50% of a FY2012, FY2013, or FY2014 grant has been spent, please explain your organization's capacity to take on additional Clean Water Fund grant dollars.

The City of Minneapolis received funding through the Minnesota Public Facilities Authority (PFA) Clean Water State Revolving and Clean Water TMDL Funds for the 37th Avenue Greenway Project. The project is complete and grant dollars have been disbursed.

Project Description: 1 (5 points). How will this Clean Water Fund project benefit the general public? Describe the benefits from a local, regional and state perspective?

This project engages neighbors and installs stormwater BMPs adjacent to alleys to capture and infiltrate runoff from impervious surfaces contributing high pollutant loads from private properties. This project utilizes neighborhood-scale stormwater BMPs to reduce eutrophication and localized flooding, improve aquatic life and recreation, and increase pollinator pathways to one of the most visited parks in MN. Nokomis-Hiawatha Regional Park was identified by the Met Council as the 6th most visited regional park with more than 1.5 mil visits in 2013. The lake offers swimming, boating and other aquatic recreation.

In the highly urbanized drainage area of Lake Nokomis, dominated by neighborhoods and parkland, neighborhood-scale efforts offer great educational value while improving water quality in the lake. Projects are selected using a multi-scaled stormwater BMP retrofit analysis to disconnect impervious surfaces and vet the most effective projects with a focus on backyards and driveways to capture and infiltrate the most polluted runoff. They promote stewardship and private investment connecting property owners to issues of source control in very personal and meaningful ways.

This project is a partnership with Metro Blooms and Minnehaha Creek WD. It aligns with the City's MS4 Permit, Stormwater Mgmt Prog/SWPPP and the MCWD Subwatershed Plan for Lake Nokomis, which recommends neighborhood efforts to educate citizens and install raingardens as

Questions & Answers

one component of a comprehensive strategy to improve water quality in the lake. It capitalizes on broad awareness and interest in such projects in the City which has led to 18 neighborhood-scale projects to install 415 raingardens, leveraging more than \$71,000 in private investment since 2009. The project defines and pilots a collaborative model among agencies serving the broader State of MN for education, implementation, inspection and maintenance of BMPs on private property.

Relationship to Plan: 2 (15 points). Identify the specific water management plan reference by plan organization, plan title, section and page number. If applicable, also identify specific supporting plans such as a TMDL Implementation Plan, a WRAPS document, or Clean Water Partnership Diagnostic Study.

In addition to the plan language, provide a brief description regarding how the activities in this application relate to the plan reference(s).

Minnehaha Creek Subwatershed Plan

p. 1: Over the next 10 years, the District's focus will be on improving water quality in [4] lakes that are currently impaired (including Lk Nokomis).

Goal 3.1 p. 46: Achieve in-lake TP concentration goals as identified in the lake TMDLs. Action D: Promote general application of BMPs across the subwatershed. Provide financial assistance to property owners...to retrofit their property with BMPs to reduce TP and TSS loading.

- Activities focused in Nokomis subwatershed to improve water quality of impaired water body. Goal is to reduce TP concentrations as part of a comprehensive watershed strategy (outlined in q. 5) to reach Nokomis' TMDL goals.

MCWD Lakes TMDL

Pp. 97, 101 The [implementation] focus for Lake Nokomis will be on redevelopment and retrofits. Projects similar to efforts in another Minneapolis watershed (Powderhorn Lake) to install 150 rain gardens could be implemented in the Lake Nokomis watershed.

Appendix A Pp. 114 presents the calculated runoff volume and loading estimates by subwatershed, under existing land use conditions. Note that the project focuses on private property retrofits. Subwatershed MC-164 to the east of Lake Nokomis is specifically targeted because it contributes the 2nd highest vol and lbs TP/year, and it drains directly to the lake. (Runoff from the other Minneapolis Nokomis Subwatersheds is treated by stormwater ponds before discharging to the lake, conditions did not allow for a pond for Subwatershed MC-164.)

Minneapolis Stormwater Mgmt Prog (SWPPP for MS4 Permit)

SMP No. 3.7 Source Control Educ and Outreach Prog, p. 45: Coordinate with other entities such as watershed organizations, Hennepin County, neighboring cities, MPCA, Met Council, MNDOT, neighborhood groups, and non-profit organizations. Foster collaborative and cost-effective efforts.

- Project is a partnership between LGUs and community organizations to implement cost-effect efforts.

Questions & Answers

Targeting: 3 (20 points). Describe the methods and results of inventory and source targeting done to date or will be completed prior to project implementation used to identify the most critical pollution sources or risks within the project area that are responsible for causing impairments or threats to surface and/or groundwater quality.

The TMDL Study for Lake Nokomis was approved by the EPA in 2011. It provides the basis for identification of pollution sources causing surface water impairment. Initial scoping for this project included an inventory and assessment of the Lake Nokomis area. While parkland around Lake Nokomis contributes surface runoff to the lake, most of the runoff enters the lake at 16 outfalls where storm drains carrying runoff discharge to the lake from pipesheds ranging from 2.2 acres to 167 acres.

Using Table 41 in the TMDL Study, we identified Subwatershed MC-164 as the most critical area of interest for this proposal. This area is to the east of Lake Nokomis and contributes the second highest volume of runoff and lbs TP/year of the Minneapolis MC-labeled Subwatersheds, modeled as 120 acre-feet volume per year and 143 lbs. Total Phosphorus per year. (Subwatershed MC-162 is the highest contributing Minneapolis MC-labeled Subwatershed, modeled as 142 acre-feet volume per year and 168 lbs. Total Phosphorus per year, however its piped runoff benefits by draining to a water quality pond before entering the lake.)

With this information and a goal to target private properties, planning started with a multi-scaled stormwater BMP retrofit analysis. In dense urban neighborhoods, even single-family residential lots have very high percentages of impervious surfaces. Our goal was to vet the most effective projects, at specific locations, with site-driven design and cost optimization, ensuring the highest value for dollar spent. A systematic incremental cost analysis identified that small-scaled BMPs such as raingardens, bioinfiltration, and permeable paver strips to disconnect residential backyards, garage roofs, and driveways from alleys would attain the best result within a specified price range.

Targeting: 4 (5 points). How does this application fit into an overall watershed strategy aimed at the long-term sustainability of soil and water resources implemented by your organization and/or your partners? Overall strategies can include other incentive programs, easements, regulatory enforcement or community engagement activities that are not directly related to this proposal.

From 2000-2001 MCWD implemented projects to reduce nutrients in Lake Nokomis such as: public education, an alum application, carp removal, installation of settling ponds, and an inflatable weir in the Creek to keep pollution and invasive species out of Lake Nokomis. From 2010-2013 MCWD implemented a biomanipulation study to reduce algae by adjusting fish populations. As part of a comprehensive effort to remove Lake Nokomis from the impaired waters list, the District is a partner on this project targeting residential property owners to control pollutants at the source.

The in-progress Nokomis Hiawatha RP Master Plan references private property improvements to incorporate private responsibility in the overall park re-development strategy which includes naturalizing 50% of parkland.

Metro Blooms has been hosting Raingarden Workshops to educate and empower citizens in the Nokomis neighborhoods since 2005. MCWD

Questions & Answers

cost share programs are re-focusing incentives to implement multi-property neighborhood projects to mitigate pollution at the source. MCWD's Cynthia Krieg Stewardship Funds support community initiatives to protect water quality and promote public awareness. The Minneapolis Citizens Environmental Advisory Committee and the MCWD Citizens Advisory Committee provide citizens an opportunity to be directly involved in protecting the Minneapolis Chain of Lakes and Minnehaha Creek.

Community engagement at a neighborhood scale is a focus of the City, Metro Blooms, and MCWD. This project leverages social capital working with neighbors to engage each other and increase project adoption, participation and long term sustainability of implementation projects. Community-driven projects change behaviors and provide accessible, meaningful options to water quality improvement.

Targeting: 5 (5 points). Describe how you will engage your local community on the need, benefits and long-term impacts of this project beyond the immediate project participants.

Immediate Project Participants: 3 Master Water Stewards (MWS) have committed to lead education campaign focused on benefits of stormwater BMPs to water quality of the lake. Block leaders engage a min. 30% of their immediate neighbors to implement a project. Block leaders and MWS invite neighbors to an Alley Get-Together to learn about project goals and benefits. Attendees are eligible for a site consultation to identify opportunities for runoff capture. Participants contribute 15% of project cost to increase adoption. This approach pilots a model and threshold for future engagement, enhances long-term adoption and sense of community.

Since projects often fail due to lack of maintenance, this project will pilot a new model for collaboration with Metro Blooms, MWS, Master Gardeners (MGs) and Blue Thumb to enhance volunteer inspections with maintenance education and support. If non-compliant, resident receive information on maintenance tips, private maintenance contractors and their payback agreement according to 10 year maintenance agreement signed with MCWD.

Beyond the immediate project participants: The entire community will be engaged in water quality benefits and long-term impacts as completed projects are publicly showcased through alley tours led by MWS, Blue Thumb, and at local events (e.g., annual Monarch Festival at Lake Nokomis w/10,000+ attendees/yr). Community projects lead to information sharing and behavior change. In regards to the demonstration "Blooming Alley" in the Nokomis subwatershed one resident stated "Although I'm not having the recommended work done this whole process has made me more aware of my runoff situation and any future work I do on my property will take that into account. I will also be talking to my neighbor about the drainage off his garage." The demonstration highlights benefits beyond this project with community-led efforts planned in two other neighborhoods (Lynnhurst and Diamond Lake) to implement similar projects.

Measureable Outcomes: What is the primary water resource of concern this application is addressing?

Lake Nokomis in Minneapolis.

Measureable Outcomes: 6 (14 points). What is the pollutant(s) of concern this project is addressing? Describe how this grant application directly addresses that pollutant(s) and what measurable water quality outcomes will be achieved.

Questions & Answers

This project addresses an EPA-approved TMDL, the Lake Nokomis impairment for aquatic recreation due to excessive phosphorus. The project engages private property owners to control pollutant sources in order to prevent polluted stormwater from entering the lake. It is modeled after Metro Blooms' Neighborhood of Raingardens approach for nearby Powderhorn Lake in Minneapolis, which has been removed from the EPA's list of impaired waters. The Lake Nokomis project will incorporate "lessons learned" to target a higher level of source control of pollutants from private properties by working along alleyways to disconnect impervious surfaces from the storm sewer system.

We propose raingardens, permeable pavement systems, and trench drains to infiltrate runoff along alleyways. Project activities are modeled using WinSLAMM and selected for cost effectiveness to capture maximum volume, TP and TSS from participating properties. Modeling of interested blocks indicates a TP reduction of 1 lb/alley/yr with minimum 10-12 properties (30-40%) planned participation in alleyway retrofits. Proposed practices demonstrate 90-92% reduction in TSS and TP in 1.25" rain event.

Selected activities take into account site conditions including topography, yard practices, pollutant sources and impervious surface connectivity. Treatment practices are designed for a minimum 1.25" rain event to capture and infiltrate rain from more than 90% of events and mitigate the impact of larger events

Measureable Outcomes: 7 (6 points). Has there been a specific water quality goal set in relation to the pollutant of concern or the water resource that is the subject of this application? If so, what is the measurable goal this project is addressing? If no TMDL, WRAPS or other water quality modeling effort has been completed, then describe the water quality trends or other management goals that have been established.

A TMDL was completed, and the EPA has approved site-specific standards for Lake Nokomis of <50 µg/L TP, <20 Chl-a, and 1.4m. Secchi. The existing load from the City of Minneapolis to Lake Nokomis is 509 lbs/TP/yr minus pre-treatment ponds, with an allowable load of 314 lbs/TP/yr as described in the TMDL. This requires a 38% reduction, or 195 lbs/TP/yr. The comprehensive plan to reach the site-specific standard of <50 µg/l includes targeting of private property to reduce pollutants at the source. The reduction goal for this project is 15 lbs/TP/yr.

Measureable Outcomes: 8 (5 points). How do you know that the proposed project addresses the root cause of the problem? Describe the analysis that has identified the root cause of the water quality issue being addressed by the application activities

Previous water quality projects for Lake Nokomis have been end-of-pipe projects, where piped runoff is treated just before discharge to the lake. Instead, this project addresses property owner behavior and aims to reduce pollutants at the source before runoff even enters the storm sewers. This is a fully built area developed long before water quality rules and standards. These single-family residential properties are often well under 5,000 square feet with high percentages of impervious surfaces, generating high stormwater runoff volumes to the lakes. Typical residential property design in the target area is such that drainage is conveyed quickly from the property via conventional grading of the landscape and connected impervious surfaces. One of the "lessons learned" from the Powderhorn Neighborhood of Raingardens Project is that areas draining to alleys are especially high in pollutants. WinSLAMM modeling indicates TP/TSS loads are noticeably higher due to yard care and waste management practices, eroded surfaces, auto/vehicle maintenance, pet waste and other behaviors.

Questions & Answers

The goal of this project is to reduce phosphorus loading to Lake Nokomis by 15 lbs/year. The proposed projects were identified through a multi-scaled land use management and stormwater BMP retrofit analysis. In-field surveys were supplemented by WinSLAMM modeling to vet the most effective projects, at specific locations, with site-driven design and cost optimization, ensuring the highest value for dollar spent. On-site consultations at 57 private properties (residential, commercial, and institutional) in the Nokomis area identified site specific risks and mitigation required for proposed projects to achieve minimum 75% reduction of TP/TSS from drainage areas. These models were verified through a demonstration installation in 2014 involving 10 properties along one alleyway draining to Lake Nokomis.

Measureable Outcomes: 9 (5 points). Describe any hydrologic benefits resulting from completing application activities such as peak flow reduction, runoff volume reductions, etc. If your project intends to keep water on the land by infiltrating runoff, describe why this activity will not be a threat to groundwater quality.

This project is designed to provide a number of hydrologic benefits to the receiving water body. It will reduce runoff volume, improve rate control, reduce pollutant loads, reduce bank erosion by reducing "bounce", and improve baseflow conditions for the lake. In close proximity to the lake, these infiltration sites will likely impact shallow groundwater, not the deep aquifer. As such, we recognize that it is important to design the BMPs to drain in not less than 24 hours, for maximum pollutant filtration through at least three feet of soil. Soils within the watersheds are predominantly unclassified urban disturbed soils. There are no known contaminated sites of concern within the subwatersheds. Sites along the demonstration alley in the Nokomis subwatershed have sandy loam soils with moderate infiltration rates. This is a desired soil with moderate infiltration rates when it is not compacted. Contaminants in the runoff, including phosphorus, are broken down by the soil, nitrates are used up by the plants, and petroleum is broken down by microbial action in the soil. By using de-compaction methods, incorporating organic matter, and using native plants in raingardens and bioswales, more water can be retained in the soil and water is infiltrated deeper, allowing it to pass through multiple layers of filtration before entering the aquifer or reaching Lake Nokomis and thence Minnehaha Creek.

Measureable Outcomes: 10 (5 points). Will the overall project have additional specific secondary benefits, including but not limited to those that enhance aquatic and terrestrial wildlife, drinking water protection, enhancement of pollinator populations, or protection of rare and/or native species? If so, please specifically describe what will those benefits will be.

In addition to hydrologic benefits and community building/behavior change, the project will also have benefits that enhance wildlife and pollinator populations. Habitat fragmentation and degradation due to development is a constantly increasing threat to pollinator biodiversity. Urban habitat corridors are a plausible mitigation. Since the mid-1990s, monarch breeding habitat in the U.S. has decreased significantly. Butterflies and moths depend predominantly on native plants as their larval host plants, and the decrease in native habitat is cited as a major cause for pollinator decline (MonarchLab). According to the North American Monarch Conservation Plan, "habitat conservation and restoration are absolutely necessary for monarch survival."

The Nokomis East Neighborhood Association (NENA) and Minneapolis Park & Recreation Board, partners on this project, host the Monarch

Questions & Answers

Festival at Lake Nokomis each year. The Festival draws tens of thousands of citizens to the lake and promotes efforts to create habitat for monarchs and other essential pollinators. The "stepping stone" corridors that alleyway plantings create provide linkages between core habitats, including Minnehaha Creek, the Nokomis Naturescape Gardens and native plantings on the western shore of Lake Nokomis. In a 2005 study by Patricia Townsend and Douglas Levey, pollen transfer by butterflies, bees, and wasps was significantly higher between connected patches of habitat than unconnected patches. Creating linkages between habitat patches maintains viable plant and pollinator populations in an urban environment. Backyard raingardens are excellent opportunities to increase biodiversity and abundance of pollinators by connecting fragmented green spaces.

Project Readiness: 11 (5 points) Describe steps and actions already taken to ensure that project implementation can begin soon after grant award such as discussions/agreements/contracts and/or contingency plans that will ensure a smooth start to the project and minimize administrative or other critical delays.

This proposal is a modification of a 2013 proposal. Although last year's proposal was not funded, our project has remained viable and ready, and we have advanced the project using other available but limited funds.

A demonstration alley has been installed. Through a tour of the demonstration alley, word of mouth, and outreach at local events we have 15 blocks in the Nokomis subwatershed with block leaders committed to engaging their neighbors in this project. One block is "shovel ready" with 8 residents committed to participating in a cost share to install practices and to maintain them for 10 yrs.

During 2013-14, Metro Blooms completed site consultations with 50 residents throughout the Nokomis subwatershed, and 121 residents have said "yes" to a Blooming Alley project. Five residents took action on their own to install raingardens along their alley. While our focus for installations is in the Keewaydin Neighborhood, our plan includes opportunities for additional blocks throughout the subwatershed where neighbors have indicated interest in participation.

In 2013, A Knowledge, Attitudes and Practices (KAP) Survey was conducted with 701 households in the Nokomis Subwatershed to gather baseline data to inform outreach. Residents reported very high knowledge (97%) of negative effects of runoff, concern (71%) for lake water quality and interest (87%) in participation. Given these results, in 2014 Metro Blooms and a MWS began engagement to install a demonstration "Blooming Alley" showcasing a variety of stormwater management practices that can be implemented along alleyways.

This project has staff support for funding (pending board/council approval) from partners, including the Minnehaha Creek Watershed District, Hennepin County, and City of Minneapolis. The project team also has the experience "hit the ground running" – for over five years, Metro Blooms has successfully engaged neighborhoods in the City to install between 50-160 raingardens annually.

Questions & Answers

Project or Practice Readiness: 12 (5 points) List and provide the status of any permits (federal, state, or local) that may be required for this project (for example, NPDES construction permit applied for on January 1, 2014, etc.). Describe any preliminary discussions with permitting authorities (if applicable)

City of Minneapolis Erosion and Sediment Control Permits are required for land disturbance greater than 500 sq. ft. or 5 cu. yd. Projects will be assessed during the design phase to determine local permit requirements.

BBR: 13 (5 points). Did your organization submit a Biennial Budget Request (BBR) to BWSR in 2012?

Yes. Minnehaha Creek Watershed District is a co-applicant on the project and participated in the Biennial Budget Request, identifying efforts to work with projects throughout the Minnehaha Creek subwatershed to reduce nutrient loading to Minnehaha Creek and thus to Lake Hiawatha; decrease peak discharge rates to reduce streambank erosion; and specifically to work with the City of Minneapolis and Minneapolis Park and Recreation Board.

The Constitutional Amendment requires that Amendment funding must not substitute traditional state funding. Briefly describe how this project will provide water quality benefits to the State of Minnesota without substituting existing funding.

This project will not substitute for traditional funding. The project proposes to supplement spending by private property owners and existing programs funded at the City, County and watershed organization level.

Is your organization interested in Clean Water Partnership grant or loan dollars? If yes, please indicate the dollar amount.

No

Application Budget

Activity Name	Activity Description	Category	State Grant \$ Requested	Activity Lifespan (yrs)
Residential Backyards & Driveways		URBAN STORMWATER MANAGEMENT PRACTICES	\$248,000.00	10
Administration and Coordination		ADMINISTRATION /COORDINATION	\$27,000.00	3
Landowner Communications and Scheduling		PROJECT DEVELOPMENT	\$34,425.00	3

Activity Name	Activity Description	Category	State Grant \$ Requested	Activity Lifespan (yrs)
Design and Construction Management		TECHNICAL/ENGINEERING ASSISTANCE	\$90,000.00	

Proposed Activity Indicators

Activity Name	Indicator Name	Value & Units	Waterbody	Calculation Tool	Comments
Residential Backyards & Driveways	VOLUME REDUCED (ACRE- FEET/YEAR)	19.2 ACRE- FEET/YR	Lake Nokomis	WINSLAMM	
Residential Backyards & Driveways	PHOSPHORUS (EST. REDUCTION)	15 LBS/YR	Lake Nokomis	WINSLAMM	includes total dissolved
Residential Backyards & Driveways	SEDIMENT (TSS)	2.4 TONS/YR	Lake Nokomis	WINSLAMM	

Activity Details

Activity Name	Question	Answer
Residential Backyards & Driveways	Dollar amount requested for Ag BMP Loan Program:	Not Entered
Landowner Communications and Scheduling	Dollar amount requested for Ag BMP Loan Program:	Not Entered
Design and Construction Management	Dollar amount requested for Ag BMP Loan Program:	Not Entered
Administration and Coordination	Dollar amount requested for Ag BMP Loan Program:	Not Entered

Application Image



Map Image

Lake Nokomis Neighbors for Clean Water

 Focus Area

Project focus is to the east of Lake Nokomis. This is part of the drainage area that discharges directly to the lake and does not benefit from draining through one of the stormwater ponds.

 Committed Blocks
n/BLOCK LEADERS

In addition to the demonstration alley, 14 block leaders have committed to engaging their neighbors on 15 blocks in this project.

 2014 Installations

Demonstration Blooming Alley installed in 2014. Ten properties participated to install 5 raingardens, 1 trench drain, 4 permeable pavement strips and 6 bioswales along the alleyway.

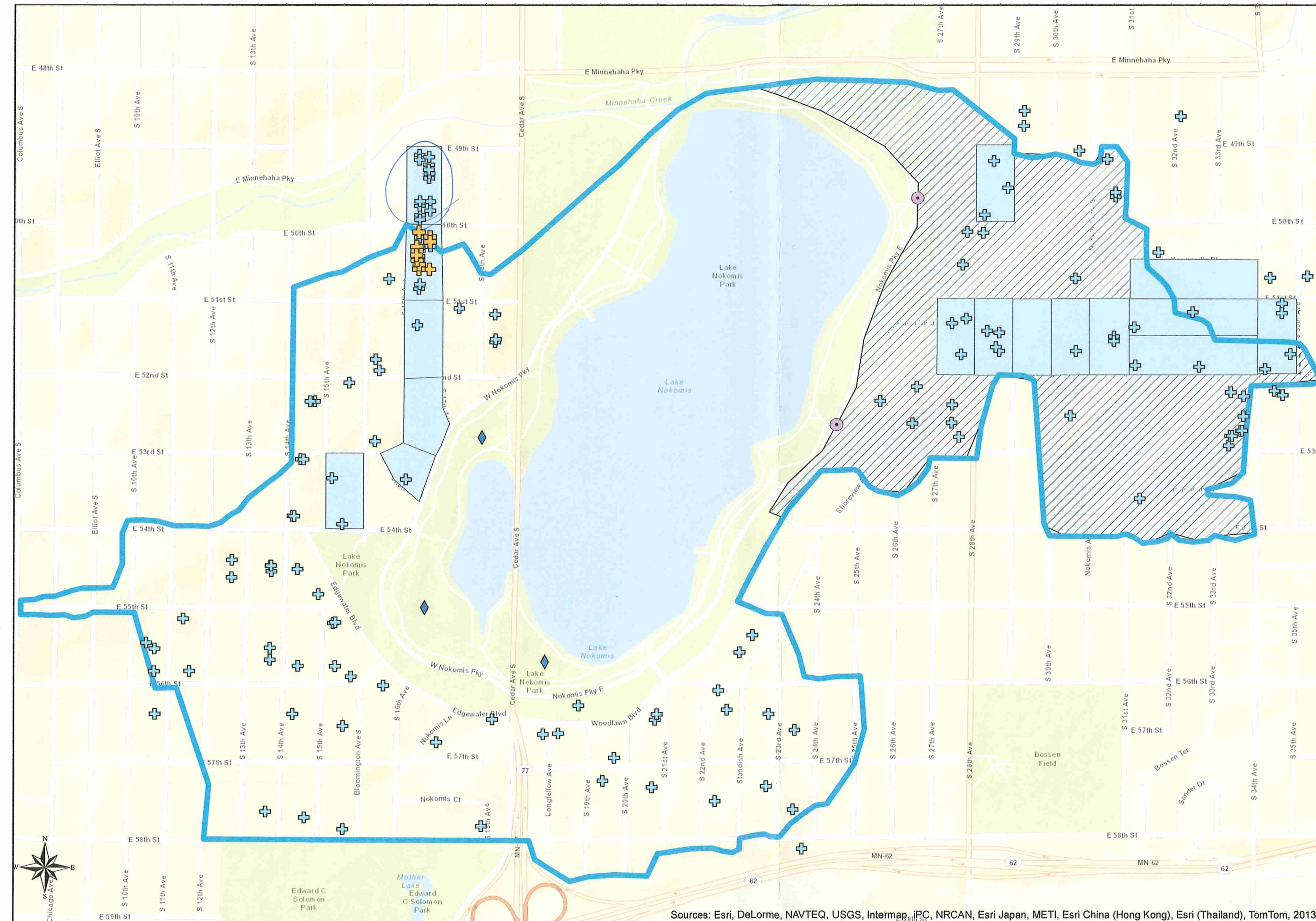
 Interested Property Owners

121 interested properties were selected for the project through site consultations, residential KAF survey, and outreach events. If block leaders are not able to fulfill their commitments, additional properties have been identified as "back-ups."

 Grit Chambers

 Ponds

 Watershed





September 25, 2014

Lois Eberhart, Water Resources Administrator
City of Minneapolis
309 South 2nd Avenue
Minneapolis, MN 55401

COPY

The Minnehaha Creek Watershed District is committed to a leadership role in protecting, improving and managing the surface waters and affiliated groundwater resources within the District, including their relationships to the ecosystems of which they are an integral part. We achieve our mission through regulation, capital projects, education, cooperative endeavors, and other programs based on sound science, innovative thinking, an informed and engaged constituency, and the cost effective use of public funds.

On behalf of the Minnehaha Creek Watershed District (MCWD) Board of Managers, I am pleased to provide this letter in support of the City of Minneapolis' Clean Water Fund grant application for the *Lake Nokomis Neighbors for Clean Water* project ('Nokomis Project'). As proposed, this project will address the 103B/8410 plans of the MCWD and the EPA-approved TMDL for Lake Nokomis through a citizen-based, neighborhood-focused process that engages local property owners in managing their stormwater.

MCWD successfully partnered with the City of Minneapolis and Metro Blooms on a previous project of this scale in 2009. The award-winning *Powderhorn Neighborhood of Raingardens* project engaged residents around Powderhorn Lake in the installation of nearly 130 residential raingardens. Targeting urban, residential property owners at the parcel level with practical stormwater management support is one of MCWD's greatest opportunities; and notably, a considerable challenge for such a sizeable, ever-developing watershed.

Similarly, MCWD supports the Nokomis Project's parallel approach to implementing stormwater best management practices on private property at the neighborhood block scale, to inspire community engagement, and build awareness and momentum around stormwater management. The District has already provided technical and financial assistance for other phases of this project. In 2013, the MCWD partnered with Metro Blooms on the demonstration phase of this project which provided a highly-visible platform for broad implementation.

While MCWD is not approving or promising any additional funding for the project at this time, MCWD will consider assisting eligible property owners through its Cost Share program if the Clean Water Fund grant application is successful.

Thank you for your leadership on this effort. It is an excellent opportunity to leverage each of our organizations' resources to improve an impaired water body within the MCWD.

Sincerely,

Sherry Davis White,
MCWD Board President