

Meeting: Policy and Planning Committee

Meeting date: 6/23/2020 Agenda Item #: 5.1 Item type: Discussion

Title: Minnehaha Parkway Project Planning

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Purpose:

At the June 23, 2020 Policy and Planning Committee (PPC) meeting, staff will provide an update on the Minneapolis Park and Recreation Board's Minnehaha Parkway Regional Trail (MPRT) Master Plan's status, including:

- Summarizing the MPRT water resource project opportunities and the total projected natural resource benefits and costs;
- Outlining preliminary ideas on how to prioritize the project opportunities; and
- Facilitating a discussion to evaluate these project opportunities and how the District might proceed with staff time, resource allocation, and risk management

Background:

In February 2017, the District, Minneapolis Park and Recreation Board (MPRB), and City of Minneapolis (City) approved a Memorandum of Understanding (MOU) which outlined shared priorities and investment strategies to improve the natural and built environments within the Minnehaha Creek subwatershed in Minneapolis.

Between July 2018 and February 2020, MPRB in coordination with the District and the City, facilitated a <u>master planning process for the MPRT</u>. As part of the master plan process, MPRB convened a Community Advisory Committee (CAC) and numerous community events to create a vision, guiding principles, review concepts and gather feedback for the MPRT. At their February 19, 2020 meeting, the MPRT CAC approved the master plan concepts for recommendation to the MPRB Park Board Commissioners. Between March 2020 - May 2020, the MPRB project team, in consultation with District and City staff, developed the master plan document. The MPRB will formally release the master plan document for a 45-day public comment period on June 19, 2020. Once the master plan documents are posted on June 19, 2020, staff will send an email to the MCWD Board of Managers to provide the link and any other relevant details.

Summary:

At the June 23, 2020 PPC meeting, staff will summarize the water resource elements in the MPRT master plan and identify the total projected natural resource benefits and their associated costs. Attachment 1 is a map of the MPRT corridor which outlines and summarizes the 35 water resource elements of the master plan and identifies the:

- Project Tag (unique project identifier)
- Project type: stormwater best management practice (BMP), creek remeander/restorations, creek access
- Natural resource benefits: length of creek restoration, acres restored, estimated total phosphorus (TP) removal, and floodplain storage
- Estimated cost

Attachments 2-5 break down the MPRT corridor wide map into segments 1, 2, 3, and 4 which aligns with how MPRB segmented the corridor for the master planning effort.

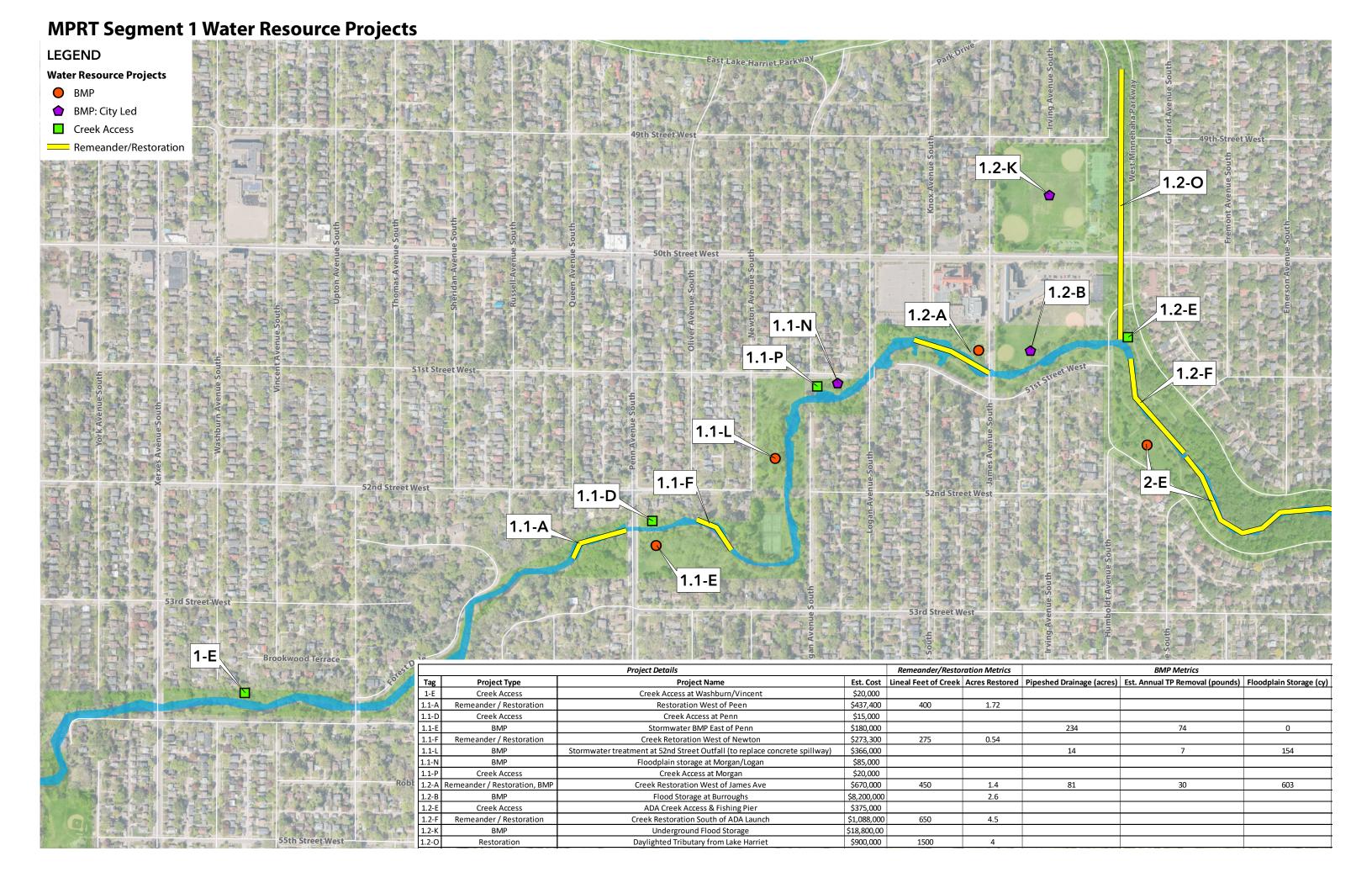
Staff will also outline preliminary ideas on how to prioritize the 35 water resource project opportunities. To assist with this project prioritization Attachments 6-10 are maps which show the current floodplain extent, the phosphorus loading,

the pipesheds that drain into the creek, the pipesheds to be treated with proposed stormwater BMPs, and the 2012 stream assessment findings.

Lastly, with a grounding in the water resource project elements and ideas on how those project elements might be prioritized, staff will facilitate a discussion with the PPC on how the District might proceed with these water resource project elements as they relate to District staff time, resource allocation, and risk management.

Supporting Documents:

- Attachment 1: Minnehaha Parkway Regional Trail Master Plan Water Resource Projects Map
- Attachment 2: MPRT Segment 1 Water Resource Projects Map
- Attachment 3: MPRT Segment 2 Water Resource Projects Map
- Attachment 4: MPRT Segment 3 Water Resource Projects Map
- Attachment 5: MPRT Segment 4 Water Resource Projects Map
- Attachment 6: Minnehaha Creek Flood Zones Map
- Attachment 7: Minnehaha Creek Phosphorus Loading Map
- Attachment 8: Minnehaha Creek Pipesheds to be Treated with Proposed BMPs
- Attachment 9: Minnehaha Creek Phosphorus Loading & Pipesheds
- Attachment 10: 2012 Stream Assessment Findings



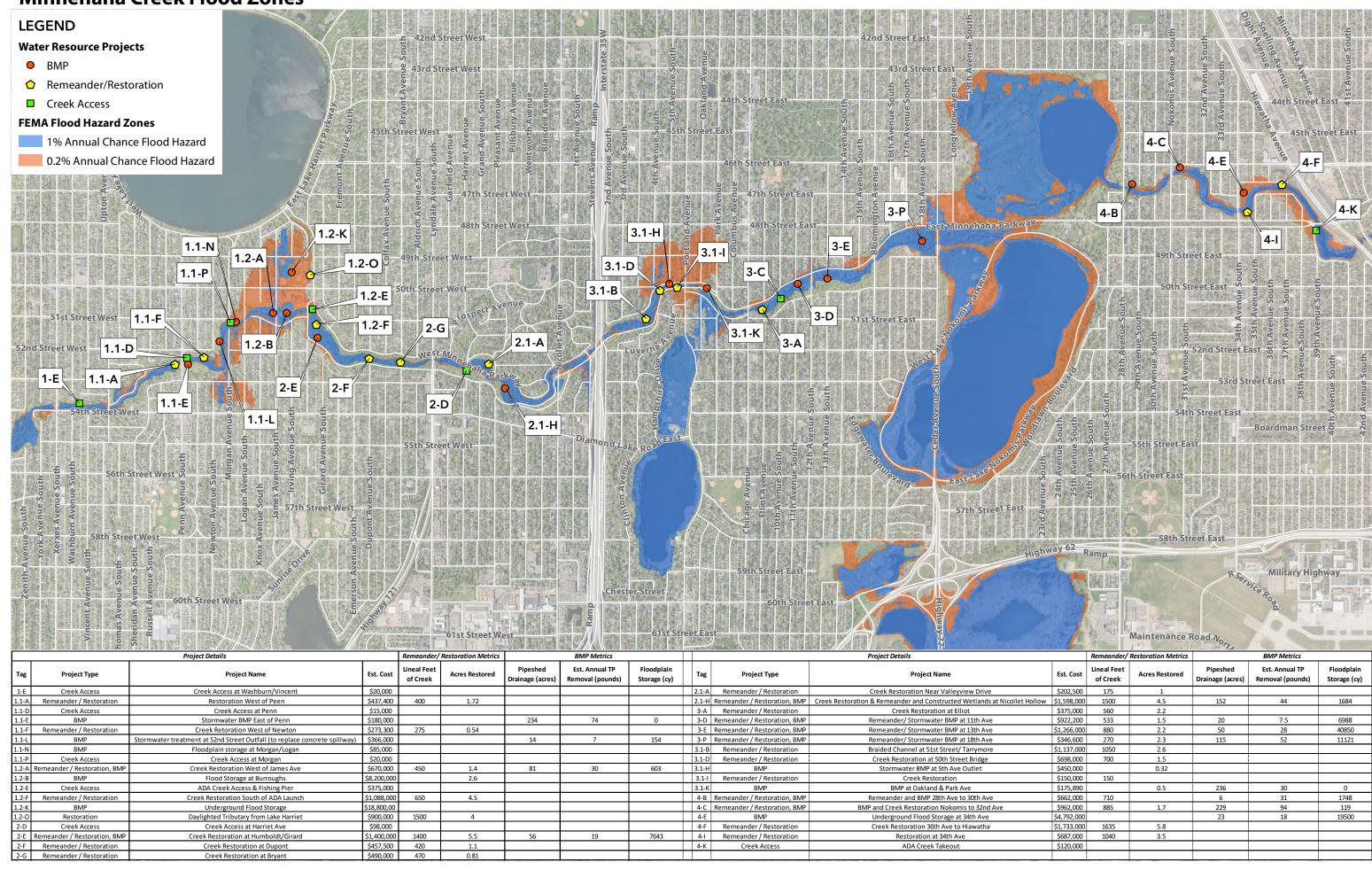
Minnehaha Parkway Regional Trail Master Plan - Water Resource Projects **LEGEND Water Resource Projects** BMP ♠ Remeander/Restoration Creek Access **45th Street East** 4-F 3-P : Minnehaha-Parkway 1.2-K 3-E 1.2-A 1.1-N 1.1-P 1.2-E 2-G 1-E 2-D 1.1-L 60th Street West Maintenance Road No. Project Details Remeander/ Restoration Metrics BMP Metrics Lineal Feet Est. Annual TP Lineal Feet Pipeshed Est. Annual TP Pipeshed Est. Cost Est. Cost **Project Type** Storage (cy) of Creek Drainage (acres Removal (pounds) of Creek Removal (pounds Storage (cv) Creek Access Creek Access at Washburn/Vincent \$20,000 2.1-A Remeander / Restoration Creek Restoration Near Valleyview Drive \$202,500 175 \$437,400 400 1.72 Remeander / Restoration Restoration West of Peen 2.1-H Remeander / Restoration, BMP Creek Restoration & Remeander and Constructed Wetlands at Nic et Hollow | \$1,598,000 | 1500 Creek Access Creek Access at Penn \$15,000 3-A Remeander / Restoration Creek Restoration at Elliot \$375,000 560 234 3-D Remeander / Restoration, BMP 533 6988 Stormwater BMP East of Penn \$180,000 Remeander/ Stormwater BMP at 11th Ave \$922,200 0.54 Remeander / Restoration Creek Retoration West of Newton \$273,300 275 3-E Remeander / Restoration, BMP Remeander/Stormwater BMP at 13th Ave \$1,266,000 880 40850 \$366,000 \$346,600 270 11121 BMP \$85,000 \$1,137,000 1050 Creek Access Creek Access at Morgan \$20,000 \$698,000 \$670,000 450 1.4 \$450,000 2.6 Flood Storage at Burroughs \$8,200,000 Creek Restoration \$150,000 \$375,000 Creek Access ADA Creek Access & Fishing Pier BMP at Oakland & Park Ave \$175,890 4.5 Remeander / Restoration Creek Restoration South of ADA Launch \$1.088.000 650 4-B Remeander / Restoration, BMP Remeander and BMP 28th Ave to 30th Ave \$662,000 710 1748 4-C Remeander / Restoration, BMP 119 BMP Underground Flood Storage \$18,800,00 BMP and Creek Restoration Nokomis to 32nd Av \$962,000 885 229 94 Restoration Daylighted Tributary from Lake Harriet \$900,000 1500 4 4-E Underground Flood Storage at 34th Ave \$4,792,000 18 19500 Creek Access Creek Access at Harriet Ave \$98,000 | 4-F | Remeander / Restoration Creek Restoration 36th Ave to Hiawatha \$1,733,000 emeander / Restoration, BMF Creek Restoration at Humboldt/Girard \$1,400,000 1400 5.5 4-I Remeander / Restoration Restoration at 34th Ave \$687,000 1040 3.5 \$457,500 420 1.1 4-K

MPRT Segment 2 Water Resource Projects LEGEND Water Resource Projects BMP Creek Access Remeander/Restoration 1.2-E 1.2-F 2-E 2-G 2-F 2-D 2.1-H Project Details **BMP Metrics** Remeander/Restoration Metrics Est. Cost Lineal Feet of Creek Acres Restored Pipeshed Drainage (acres) Est. Annual TP Removal (pounds) Floodplain Storage (cy) **Project Type Project Name** Creek Access Creek Access at Harriet Ave \$98,000 2-E Remeander / Restoration, BMP Creek Restoration at Humboldt/Girard \$1,400,000 1400 5.5 56 19 7643 Remeander / Restoration \$457,500 420 Creek Restoration at Dupont 1.1 2-G Remeander / Restoration Creek Restoration at Bryant \$490,000 470 0.81 Remeander / Restoration \$202,500 175 Creek Restoration Near Valleyview Drive 2.1-H | Remeander / Restoration, BMP | Creek Restoration & Remeander and Constructed Wetlands at Nicollet Hollow | \$1,598,000 | 1684

MPRT Segment 3 Water Resource Projects LEGEND Water Resource Projects 46th Street East BMP Creek Access Remeander/Restoration 3.1-H 3.1-I 3.1-K 3-D 3.1-B 3-C 3-A BMP Metrics Project Details Remeander/Restoration Metrics **Project Type Project Name** Est. Cost | Lineal Feet of Creek | Acres Restored | Pipeshed Drainage (acres) | Est. Annual TP Removal (pounds) | Floodplain Storage (cy) 3-A Remeander / Restoration Creek Restoration at Elliot \$375,000 2.2 3-D Remeander / Restoration, BMP Remeander/ Stormwater BMP at 11th Ave \$922,200 533 1.5 20 7.5 6988 2.2 3-E Remeander / Restoration, BMP Remeander/ Stormwater BMP at 13th Ave \$1,266,000 880 50 28 40850 3-P Remeander / Restoration, BMP Remeander/ Stormwater BMP at 18th Ave \$346,600 270 2.3 115 52 11121 Remeander / Restoration Braided Channel at 51st Street/ Tarrymore \$1,137,000 1050 2.6 Remeander / Restoration Creek Restoration at 50th Street Bridge \$698,000 700 1.5 3.1-H Stormwater BMP at 5th Ave Outlet \$450,000 0.32 3.1-I Remeander / Restoration \$150,000 150 **Creek Restoration** BMP at Oakland & Park Ave \$175,890 0.5 236 30

MPRT Segment 4 Water Resource Projects LEGEND Water Resource Projects BMP Creek Access Remeander/Restoration 4-E East-Minnehaha Parkway Project Details Remeander/Restoration Metrics BMP Metrics Est. Cost | Lineal Feet of Creek | Acres Restored | Pipeshed Drainage (acres) | Est. Annual TP Removal (pounds) | Floodplain Storage (cy) Tag **Project Type Project Name** 4-B Remeander / Restoration, BMP Remeander and BMP 28th Ave to 30th Ave \$662,000 4-C Remeander / Restoration, BMP BMP and Creek Restoration Nokomis to 32nd Ave \$962,000 885 1.7 229 119 4-E Underground Flood Storage at 34th Ave \$4,792,000 23 19500 4-F Remeander / Restoration Creek Restoration 36th Ave to Hiawatha \$1,733,000 1635 5.8 4-I \$687,000 1040 3.5 Remeander / Restoration Restoration at 34th Ave Creek Access ADA Creek Takeout \$120,000

Minnehaha Creek Flood Zones



Minnehaha Creek Phosphorus Loading LEGEND Water Resource Projects BMP ♠ Remeander/Restoration Creek Access Total Phosphorus (lbs/ac-yr) 0.01 - 0.18 4-C 0.181 - 0.26 4-F 0.261 - 0.34 **47th Street East** 0.341 - 0.45 4-K 3-P 4-B 0.451 - 0.61 East Minnehaha Parkway 1.2-K 3.1-H 1.1-N 3-E 3.1-1 49th Street East 1.2-A 3.1-D 3-C 1.1-P 3.1-B 1.2-E 1.2-F 2-G 3.1-K 2.1-A 3-A 1.2-B 1-E 2-D 1.1-L 2.1-H Maintenance Road Nort Highway 62 **Project Details** Remeander/Restoration Metrics BMP Metrics Lineal Feet of **Pipeshed Drainage** Floodplain **Project Type Project Name** Est. Cost Acres Restored Removal (pounds) Creek (acres) Storage (cy) BMP Stormwater BMP East of Penn \$180,000 234 64th Street West Stormwater treatment at 52nd Street Outfall (to replace concrete spillway) \$366,000 154 1.2-A Remeander / Restoration, BMP Creek Restoration West of James Ave \$670,000 1.4 81 30 603 2-E Remeander / Restoration, BMP Creek Restoration at Humboldt/Girard \$1,400,000 1400 5.5 7643 Remeander / Restoration, BMP Creek Restoration & Remeander and Constructed Wetlands at Nicollet Hollow \$1,598,000 4.5 152 44 1684 Remeander / Restoration, BMP Remeander/ Stormwater BMP at 11th Ave \$922,200 533 1.5 20 7.5 6988 3-E Remeander / Restoration, BMP Remeander/ Stormwater BMP at 13th Ave \$1,266,000 880 2.2 50 28 40850 Remeander / Restoration, BMP Remeander/ Stormwater BMP at 18th Ave \$346,600 270 2.3 115 52 11121 BMP at Oakland & Park Ave 0.5 236 30 \$175,890 0 4-B Remeander / Restoration, BMP Remeander and BMP 28th Ave to 30th Ave 710 1748 \$662,000 6 31 4-C Remeander / Restoration, BMP BMP and Creek Restoration Nokomis to 32nd Ave \$962,000 885 1.7 229 94 119 Underground Flood Storage at 34th Ave \$4,792,000 23 19500

Pipesheds to be Treated with Proposed BMPs LEGEND Water Resource Projects BMP ♠ Remeander/Restoration Creek Access Minneapolis Pipesheds Pipeshed Treated by Proposed BMP 1.2-K 3.1-H 3.1-I 3.1-D 1.2-E 2-G 2.1-A 2.1-H Maintenance Road North **Project Details** Remeander/Restoration Metrics BMP Metrics Lineal Feet of **Pipeshed Drainage** Floodplain **Project Type Project Name** Est. Cost Acres Restored Removal (pounds) Creek (acres) Storage (cy) Stormwater BMP East of Penn \$180,000 234 64th Street West Stormwater treatment at 52nd Street Outfall (to replace concrete spillway) \$366,000 154 1.2-A Remeander / Restoration, BMP Creek Restoration West of James Ave \$670,000 1.4 81 30 603 2-E Remeander / Restoration, BMP Creek Restoration at Humboldt/Girard \$1,400,000 5.5 7643 2.1-H Remeander / Restoration, BMP Creek Restoration & Remeander and Constructed Wetlands at Nicollet Hollow \$1,598,000 4.5 152 44 1684 Remeander / Restoration, BMP Remeander/ Stormwater BMP at 11th Ave \$922,200 533 1.5 20 7.5 6988 3-E Remeander / Restoration, BMP Remeander/ Stormwater BMP at 13th Ave \$1,266,000 880 2.2 50 28 40850 Remeander / Restoration, BMP Remeander/ Stormwater BMP at 18th Ave \$346,600 2.3 115 52 11121 BMP at Oakland & Park Ave 0.5 236 30 \$175,890 0 4-B Remeander / Restoration, BMP Remeander and BMP 28th Ave to 30th Ave 710 1748 \$662,000 6 31 4-C Remeander / Restoration, BMP BMP and Creek Restoration Nokomis to 32nd Ave \$962,000 885 1.7 229 94 119 Underground Flood Storage at 34th Ave \$4,792,000 23 19500

Minnehaha Creek Phosphorus Loading & Pipesheds LEGEND Water Resource Projects BMP ♠ Remeander/Restoration Creek Access Pipeshed Treated by Proposed BMP Minneapolis Pipesheds Total Phosphorus (lbs/ac-yr) 0.01 - 0.18 0.181 - 0.26 0.261 - 0.34 1.2-K 3.1-H 0.341 - 0.45 0.451 - 0.61 **1.2-0** 3.1-D 🄰 1.2-E **√** 2-G 2.1-A Maintenance Road Norg **Project Details** Remeander/Restoration Metrics BMP Metrics **Pipeshed Drainage** Floodplain **Project Type Project Name** Est. Cost Acres Restored Removal (pounds) (acres) Storage (cy) Stormwater BMP East of Penn \$180,000 234 64th Street West Stormwater treatment at 52nd Street Outfall (to replace concrete spillway) \$366,000 154 1.2-A Remeander / Restoration, BMP Creek Restoration West of James Ave \$670,000 1.4 81 30 603 Creek Restoration at Humboldt/Girard \$1,400,000 5.5 7643 Creek Restoration & Remeander and Constructed Wetlands at Nicollet Hollow \$1,598,000 4.5 152 44 1684 Remeander/ Stormwater BMP at 11th Ave \$922,200 533 1.5 20 7.5 6988 Remeander / Restoration, BMP Remeander/ Stormwater BMP at 13th Ave \$1,266,000 880 2.2 50 28 40850 Remeander / Restoration, BMP Remeander/ Stormwater BMP at 18th Ave \$346,600 2.3 115 52 11121 BMP at Oakland & Park Ave \$175,890 0.5 236 30 0 4-B Remeander / Restoration, BMP Remeander and BMP 28th Ave to 30th Ave 710 31 1748 \$662.000 6 Remeander / Restoration, BMP BMP and Creek Restoration Nokomis to 32nd Ave \$962,000 885 1.7 229 94 119 Underground Flood Storage at 34th Ave \$4,792,000 23 19500

2012 Stream Assessment Findings LEGEND Water Resource Projects BMP ♠ Remeander/Restoration Creek Access 2012 Stream Assessment **45th Street East** Potential Project Locations 4-F 46th Street East Potential Project Areas Infrastructure Culvert & **Bank Stabilization** 3-P 1.2-K 3.1-H 4-1 1.1-N 3-E 3.1-I 1.2-A 3.1-D 1.1-P Infrastructure & Bank **∭** 1.2-E **Bank Stabilization Stabilization** 1.2-F 2-G 2.1-A 1.2-B **Bank Stabilization** 1-E 1.1-A **Bank Stabilization** 1.1-L **Bank Stabilization** 56th Street West Maintenance Road Non 61st Street West Project Details Remeander/ Restoration Metrics Project Details Remeander/ Restoration Metrics BMP Metrics Lineal Feet Pipeshed Est. Annual TP Lineal Feet Pipeshed Est. Annual TP Est. Cost Est. Cost **Project Type Project Name** Project Type **Project Name** Storage (cy) of Creek Drainage (acres Removal (pounds) of Creek Storage (cv) Creek Access Creek Access at Washburn/Vincent \$20,000 2.1-A Remeander / Restoration Creek Restoration Near Valleyview Drive \$202,500 175 \$437,400 400 1.72 Remeander / Restoration Restoration West of Peen 2.1-H | Remeander / Restoration, BMP | Creek Restoration & Remeander and Constructed Wetlands at Nicollet Hollow | \$1,598,000 | 1500 Creek Access Creek Access at Penn \$15,000 3-A Remeander / Restoration Creek Restoration at Elliot \$375,000 560 2.2 234 3-D Remeander / Restoration, BMP 533 6988 BMP Stormwater BMP East of Penn \$180,000 Remeander/ Stormwater BMP at 11th Ave \$922,200 0.54 Remeander / Restoration Creek Retoration West of Newton \$273,300 275 3-E Remeander / Restoration, BMP Remeander/Stormwater BMP at 13th Ave \$1,266,000 880 40850 \$366,000 3-P Remeander / Restoration, BMP \$346,600 270 11121 BMP Floodplain storage at Morgan/Logan \$85,000 \$1,137,000 1050 Creek Access Creek Access at Morgan \$20,000 Creek Restoration at 50th Street Bridge \$698,000 \$670,000 450 1.4 Flood Storage at Burroughs \$8,200,000 2.6 Remeander / Restoration Creek Restoration \$150,000 \$375,000 Creek Access ADA Creek Access & Fishing Pier BMP BMP at Oakland & Park Ave \$175,890 4.5 Remeander / Restoration Creek Restoration South of ADA Launch \$1.088.000 650 4-B Remeander / Restoration, BMP Remeander and BMP 28th Ave to 30th Ave \$662,000 710 1748 4-C Remeander / Restoration, BMP 119 BMP Underground Flood Storage \$18,800,00 BMP and Creek Restoration Nokomis to 32nd Av \$962,000 885 229 94 Restoration Daylighted Tributary from Lake Harriet \$900,000 1500 4 4-E Underground Flood Storage at 34th Ave \$4,792,000 18 19500 Creek Access Creek Access at Harriet Ave \$98,000 | 4-F | Remeander / Restoration Creek Restoration 36th Ave to Hiawatha \$1,733,000 Remeander / Restoration, BMF Creek Restoration at Humboldt/Girard \$1,400,000 1400 5.5 4-I Remeander / Restoration Restoration at 34th Ave \$687,000 1040 3.5 \$457,500 420 1.1 4-K