



Stormwater Project Plan for Stormwater Facilities in Areas Tributary to the Mississippi River

Prepared for
City of Inver Grove Heights
City Project 2016-01

January 2015

Executive Summary

The portion of the Mississippi River that borders the City of Inver Grove Heights (City) is currently listed on the Minnesota Pollution Control Agency's (MPCA's) 2014 Impaired Waters List for turbidity—a measure of the water's cloudiness. High turbidity is caused by excessive concentrations of suspended solid particles in the water. One contributor to turbidity is discharge from municipal separate storm sewer systems (MS4).

The Clean Water Act of 1972 outlines a comprehensive process for assessing water quality impairments, known as the Total Maximum Daily Load (TMDL) process. In this process, surface waters identified as impaired (exceeding state standards for certain pollutants), are subject to a TMDL study. The goal of the study is to determine the maximum loads of point and nonpoint sources of pollution that can be allowed to enter a water body without exceeding water quality standards.

The City's MS4 system, which discharges to the Mississippi River, has been identified in the MPCA's *South Metro Mississippi River Total Suspended Solids Total Maximum Load* draft report as a source of pollution, contributing to turbidity. The report also assigns a corresponding wasteload allocation (WLA) to the City of 154 pounds of TSS per acre. If the TMDL study is approved by the U.S. Environmental Protection Agency, the City must meet that standard.

The assignment of a WLA by an approved TMDL would make the City eligible for funding to implement and construct stormwater best management practices (BMPs) that would reduce the amount of TSS discharged through the storm sewers into the Mississippi River. Two state sources of funding are:

- The Intended Use Plan (IUP), which provides low-interest loans for managing stormwater.
- The Point Source Implementation Grant (PSIG) program, which provides up to 50 percent grant funding for stormwater projects necessary to meet WLA requirements.

To qualify these programs, the City's engineer submitted an application for placement on the state's project priority list (PPL). The March 2015 application included a number of projects in the City's *Third Generation Water Resources Management Plan* (Third Generation WRMP, December 2014). The City has been placed on the 2016 PPL, which totals 293 projects prioritized by an application scoring system. The City's application ranks 155th overall (fourth among stormwater project applicants). Once on the list, projects remain eligible to receive funding for a 5-year period.

The City's next step toward receiving IUP or PSIG funding is to adopt a Stormwater Project Plan by resolution of the City Council and submit it to the MPCA. The plan, presented in this report, describes the proposed project in more detail, including the project area and need, estimated costs, and benefits. To apply for IUP funding, federal regulations also require the City to submit a supplementary Environmental Informational Worksheet (EIW).

This Stormwater Project Plan describes 12 potential stormwater BMP projects within the City. These proposed BMPs are listed as "subprojects," and would be completed over a 5-year period, assuming that appropriate match funding is available. The proposed subprojects are located within subwatersheds that

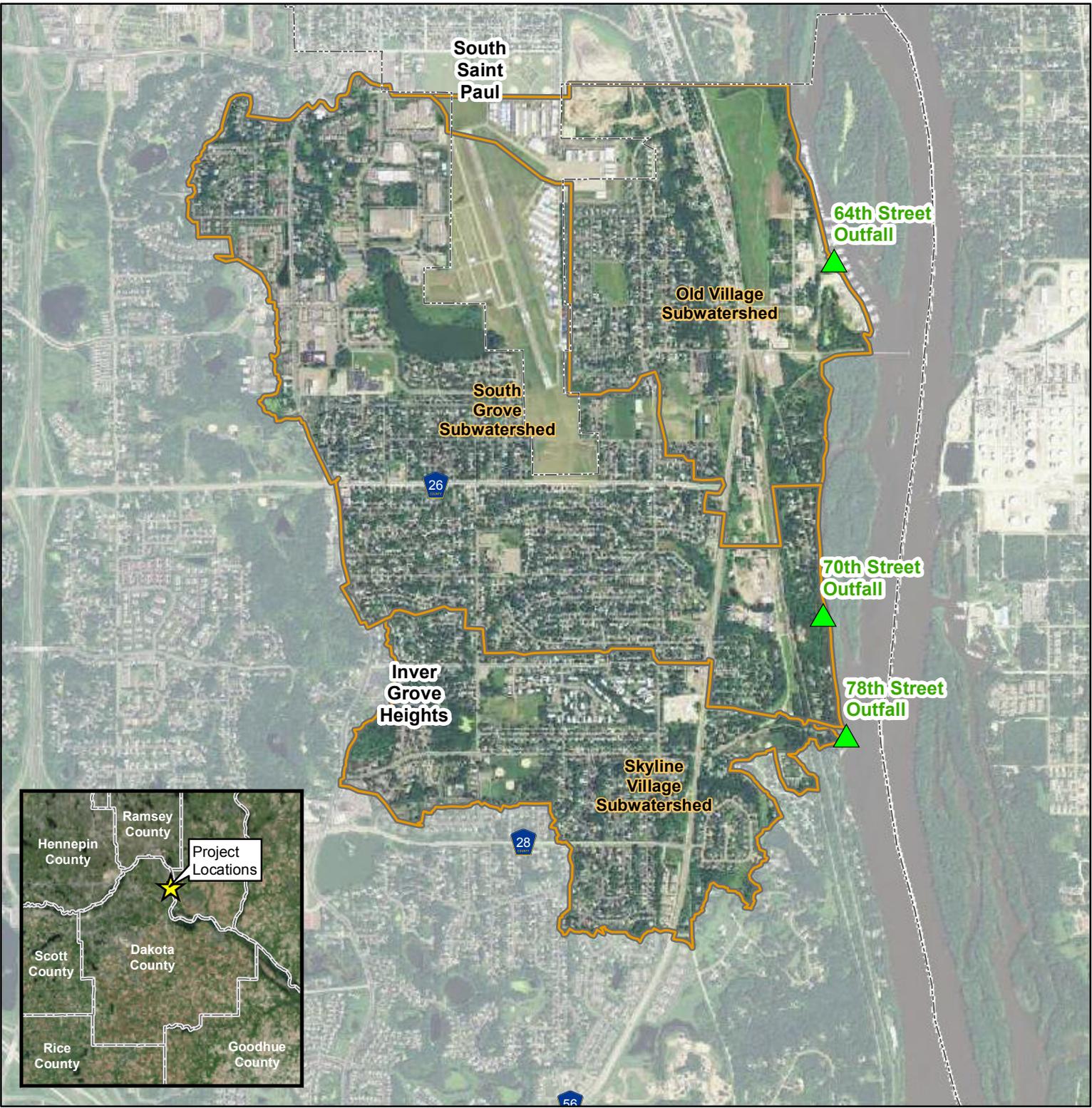
drain to Mississippi River outfalls; if constructed, they will reduce the stormwater runoff volume, pollutant loads, and peak discharge rates of the outfalls to the river. Table ES-1 lists the proposed projects and cross references them to Table 5-1 of the City's Third Generation WRMP. Figure ES-1 shows the project area, including the City's subwatersheds and the Mississippi River outfalls.

Table ES-1. Proposed Stormwater BMP Projects

Project Number	Project Name	Item Number in 3 rd Gen WRMP	TP Reduction (lbs/yr)	TSS Reduction (lbs/yr)	Estimated Construction Cost (1) (\$)
1	78 th and Concord Wet Extended Detention Basin	53	9	3,400	\$ 400,000
2	Delano Circle Rainwater Gardens	56	2	850	\$ 27,600
3	Dawn-Concord Ravine Wet Extended Detention Basin	55	10	7,050	\$ 250,000
4	Dawn-Concord Ravine Dry Extended Detention Basin	55	< 1	120	\$ 220,000
5	Dickman Trail Storm Sewer Improvements	55	< 1	120	\$ 210,000
6	River Road Wet Extended Detention Basin	39	50	36,300	\$ 900,000
7	7125 Concord Infiltration Basins	56	5	1,570	\$ 160,000
8	Dawn Way Rainwater Gardens	56	7	2,820	\$ 92,000
9	64 th and Concord Wet Extended Detention Basins	39, 54	17	10,500	\$ 380,000
10	65 th and Doffing Wet Extended Detention Basin	54	6	3,500	\$ 140,000
11	Dickman Industrial Park Wet Extended Detention Basins	52	17	8,300	\$ 240,000
12	64 th and Crosby Wet Extended Detention Basin	56	5	1,500	\$ 200,000 (2)

(1) Cost estimates do not include potential cost of contaminated soils or shallow bedrock that may be encountered at site.

(2) Construction cost will be shared between the City and the site's developer. The amount listed represents only the City's portion of the cost.



-  Outfall Discharge Location
-  Subwatersheds
-  Municipal Boundary
-  County Boundaries

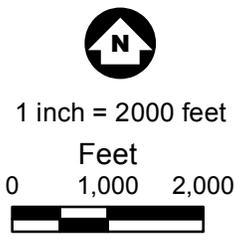


FIGURE ES-1

PROJECT AREA
Stormwater Project Plan
City of Inver Grove Heights
Dakota County, MN