

SECTION VI

VI. IMPLEMENTATION PRIORITIES/IMPLEMENTATION PROGRAM

Based on the information developed in **Sections III through V**, the City has developed a Surface Water Management Plan that reflects the needs and concerns of the City Council, City Staff, citizens, and the funding capabilities of the City. A prioritized listing of the studies, programs and capital improvements that have been identified as necessary to respond to the water resource needs within the City is outlined on the following tables. The City anticipates implementing portions of the regulatory programs or improvements identified within this plan by the year 2015.

Table VI-1 contains Surface Water Capital Improvement Projects (CIP), **Table VI-2** contains Surface Water Management Operation and Maintenance Programs (SMP), and **Table VI-3** contains Surface Water Management Studies (SMS). **Table VI-4** summarizes the information from all of these tables. The costs associated with these items reflect year 2006 costs and do not take into account inflation. These tables are for planning and budgeting purposes and are considered rough estimates. It is anticipated that these cost estimates will be reviewed annually and updated as needed. Some of the items on the following tables are taken directly from the Wetland Protection and Management Plan. Further, some of the programs are currently in-place; these have been noted on the plan.

TABLE VI-1												
SURFACE WATER CAPITAL IMPROVEMENT PROJECTS												
Capital Improvements for Surface Water Drainage												
No.	Priority	Project Description	Cost Estimate ^a	Funding Sources	2006	2007	2008	2009	2010	2011 - 2015	Comments	BMP # from SWPPP

A. Projects under construction

CIP-1	High	On-going Bush Lake Shoreline restoration	\$75,000	Storm water utility/ Watershed District	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000		\$15,000/yr (city share)	
Subtotal:			\$75,000		\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$0		

B. Projects outlined in Wetland Protection and Management Plan

CIP-2	High	<u>Brookside Drainage Area.</u> Install trap manhole at Canterbury Oaks Pond (39-01)	\$10,000	Storm water utility			\$10,000					
CIP-3	High	<u>Bush Lake Drainage Area.</u> Install trap manhole at Bogen Pond (60-05)	\$10,000	Storm water utility			\$10,000					
CIP-4	High	<u>Hampshire Hills Drainage Area.</u> Install trap manhole at Minnesota Bluffs Pond (79-06)	\$10,000	Storm water utility			\$10,000					
CIP-5	High	<u>Hyland Hills/Colorado Pond Drainage Area.</u> Install 3 trap manholes at Timberglade Pond N (75-01)	\$30,000	Storm water utility			\$30,000					
CIP-6	High	<u>Hyland Hills/Colorado Pond Drainage Area.</u> Install trap manhole at Berkshire Pond (75-02)	\$10,000	Storm water utility			\$10,000					
CIP-7	High	<u>Oxboro Lake Drainage Area.</u> Install trap manhole at Oxboro Lake (20-00)	\$10,000	Storm water utility				\$10,000				
CIP-8	High	<u>Penn Lake Drainage Area.</u> Construct forebay at Barthel's Pond (16-02)	\$35,000	Storm water utility				\$35,000				

TABLE VI-1
SURFACE WATER CAPITAL IMPROVEMENT PROJECTS
Capital Improvements for Surface Water Drainage

No.	Priority	Project Description	Cost Estimate ^a	Funding Sources	2006	2007	2008	2009	2010	2011 - 2015	Comments	BMP # from SWPPP
CIP-9	High	<u>Penn Lake Drainage Area.</u> Rebuild existing sediment basins at <u>Lower Penn Lake (17-01)</u>	\$20,000	Storm water utility		\$20,000						
CIP-10	High	<u>Riley-Purgatory-Bluff Creek Drainage Area.</u> Install trap manhole at <u>Amsden Ridge Pond (62-01)</u>	\$10,000	Storm water utility				\$10,000				
CIP-11	High	<u>Riley-Purgatory-Bluff Creek Drainage Area.</u> Install trap manhole at <u>Marce Woods Pond N (62-03)</u>	\$10,000	Storm water utility				\$10,000				
CIP-12	High	<u>Riley-Purgatory-Bluff Creek Drainage Area.</u> Install 1 trap manhole at <u>Woodbridge Marsh (69-01)</u>	\$10,000	Storm water utility				\$10,000				
CIP-13	High	<u>Riley-Purgatory-Bluff Creek Drainage Area.</u> Install 2 trap manholes and construct sediment basin at <u>Duck Pond S (69-03)</u>	\$25,000	Storm water utility					\$25,000			
CIP-14	High	<u>Riley-Purgatory-Bluff Creek Drainage Area.</u> Install trap manhole at <u>Lindstrom Pond (69-08)</u>	\$10,000	Storm water utility					\$10,000			
CIP-15	High	<u>Riley-Purgatory-Bluff Creek Drainage Area.</u> Install trap manhole at <u>Utah Pond 2 (70-05)</u>	\$10,000	Storm water utility	\$10,000							
CIP-16	High	<u>Skriebakken Drainage Area.</u> Construct <u>sediment basin</u> at <u>Girard Lake (10-01)</u>	\$93,000	Storm water utility						\$93,000		

TABLE VI-1

SURFACE WATER CAPITAL IMPROVEMENT PROJECTS

Capital Improvements for Surface Water Drainage

No.	Priority	Project Description	Cost Estimate ^a	Funding Sources	2006	2007	2008	2009	2010	2011 - 2015	Comments	BMP # from SWPPP
CIP-17	High	<u>Skriebakken Drainage Area.</u> Construct <u>sediment basin</u> at Girard Pond (10-01)	\$25,000	Storm water utility						\$25,000		
CIP-18	High	<u>Smith's Pond/Wright's Lake Drainage Area.</u> Install trap manhole at <u>Wright's Lake</u> (04-01)	\$10,000	Storm water utility					\$10,000			
CIP-19	High	<u>Ancel Glen.</u> Install trap manholes at Ancel Glen (37-04)	\$25,000	Storm water utility						\$25,000		
CIP-20	High	<u>SW Marsh Lake Drainage Area.</u> Construct trap manhole at <u>Tarnhill Park Pond</u> (36-08)	\$10,000	Storm water utility					\$10,000			
CIP-21	High	<u>Upper Nine Mile Creek Drainage Area.</u> Install 3 trap manholes at <u>Nord Myr</u> (13-02) possible	\$30,000	Storm water utility					\$30,000			
CIP-22	High	<u>Upper Nine Mile Creek Drainage Area Drainage Area.</u> Install 2 trap manholes at <u>Marsh Lake W</u> (14-04)	\$20,000	Storm water utility		\$20,000						
CIP-23	High	<u>Upper Nine Mile Creek Drainage Area Drainage Area.</u> Install 2 trap manholes at <u>Marsh Lake E</u> (16-01)	\$20,000	Storm water utility		\$20,000						
CIP-24	High	<u>Upper Nine Mile Creek Drainage Area.</u> Install 2 trap manholes at <u>Normandale Lake</u> (56-05)	\$20,000	Storm water utility		\$20,000						
CIP-25	High	<u>Upper Nine Mile Creek Drainage Area.</u> Install trap manhole at <u>Dewitt Pond</u> (60-02)	\$10,000	Storm water utility						\$10,000		
CIP-26	High	<u>Upper Nine Mile Creek Drainage Area.</u> Install trap manhole at <u>Anderson Lake SE</u> (61-08)	\$10,000	Storm water utility						\$10,000		

TABLE VI-1
SURFACE WATER CAPITAL IMPROVEMENT PROJECTS
Capital Improvements for Surface Water Drainage

No.	Priority	Project Description	Cost Estimate ^a	Funding Sources	2006	2007	2008	2009	2010	2011 - 2015	Comments	BMP # from SWPPP
CIP-27	High	<u>Upper Nine Mile Creek Drainage Area</u> . Install 2 trap manholes at Sandro Pond (63-08)	\$20,000	Storm water utility		\$20,000						
CIP-28	High	<u>Upper Nine Mile Creek Drainage Area</u> . Install trap manhole at <u>Forest Haven Pond</u> (63-13)	\$10,000	Storm water utility						\$10,000	In conjunction with possible improvements on Hyland Creek Rd.	
CIP-29	High	<u>West Marsh Lake Drainage Area</u> . Install 1 trap manhole at <u>Water Plant Pond</u> (14-01) <u>Petition?</u>	\$10,000	Storm water utility						\$10,000		
CIP-30	High	<u>West Marsh Lake Drainage Area</u> . Install 2 trap manholes at <u>Kingsdale Pond</u> (14-03)	\$20,000	Storm water utility						\$20,000		
CIP-31	High	<u>West Marsh Lake Drainage Area</u> . Install trap manhole at <u>St. Edward Pond</u> (66-02)	\$10,000	Storm water utility						\$10,000		
CIP-32	High	<u>York Nine</u> . Install 2 trap manholes at <u>Xerxes Pond</u> (40-01)	\$20,000	Storm water utility			\$20,000					
Subtotal:			\$573,000		\$10,000	\$100,000	\$90,000	\$75,000	\$85,000	\$213,000	\$0	

TABLE VI-1												
SURFACE WATER CAPITAL IMPROVEMENT PROJECTS												
Capital Improvements for Surface Water Drainage												
No.	Priority	Project Description	Cost Estimate ^a	Funding Sources	2006	2007	2008	2009	2010	2011 - 2015	Comments	BMP # from SWPPP

C. New projects identified in Surface Water Management Plan

CIP-33	High	<u>Airport South Long Meadow Outlet</u>	\$3,000,000	TIF					\$3,000,000		Eliminate direct outfall, construct new pond. Possibly in conjunction with other projects.	
CIP-34	High	<u>Airport South Pond C.</u>	\$1,400,000	TIF		\$1,400,000					On hold pending F&W Access; CWL grant \$250,000	
CIP-35	High	<u>NE Penn Area Improvements</u>	\$5,000,000	Stormwater utility					\$5,000,000			
CIP-36	High	<u>Normandale Lake Water Quality Improvement</u>	\$250,000	Storm Utility/ Watershed District				\$250,000			Curley leaf pondweed control	
CIP-37	High	<u>Other - Projects dependent on outcomes of Loading Assessment/ nondegradation report/future water quality/quantity modeling</u>	\$0	Stormwater Utility/ Other							Possible upgrades to regional storm water facilities	
Subtotal:			\$9,650,000		\$0	\$1,400,000	\$0	\$250,000	\$8,000,000	\$0		

TABLE VI-1												
SURFACE WATER CAPITAL IMPROVEMENT PROJECTS												
Capital Improvements for Surface Water Drainage												
No.	Priority	Project Description	Cost Estimate ^a	Funding Sources	2006	2007	2008	2009	2010	2011 - 2015	Comments	BMP # from SWPPP

D. Items completed

		<u>Brookside Drainage Area.</u> Construct forebay and install trap manhole at Brookside Pond	\$46,000	Storm water utility								
		<u>Oxboro Lake Drainage Area.</u> Repair and enlarge existing forebay at Upper Bryant Pond	\$76,000	Storm water utility								
		<u>Skriebakken Drainage Area.</u> Construct 3 forebays at Skriebakken Pond	\$98,000	Storm water utility								
		<u>Smith's Pond/Wright's Lake Drainage Area.</u> Construct forebay at Wright's Lake	\$73,000	Storm water utility								
		<u>Ansel Glen.</u> Construct forebay at Ansel Glen	\$17,500	Storm water utility								
		<u>South Glen Drainage Area.</u> Install 2 trap manholes at Scarborough NW	\$14,000	Storm water utility								
		<u>SW Marsh Lake Drainage Area.</u> Construct CDS Tarnhill Park Pond	\$11,500	Storm water utility								
		Construct a new salt/sand storage building that will cover the stockpiles.	\$800,000	Storm water Utility								
		<u>Upper Nine Mile Creek Drainage Area.</u> Install trap manhole at Hennepin County Park Pond #5	\$7,000	Storm water utility								

TABLE VI-1												
SURFACE WATER CAPITAL IMPROVEMENT PROJECTS												
Capital Improvements for Surface Water Drainage												
No.	Priority	Project Description	Cost Estimate ^a	Funding Sources	2006	2007	2008	2009	2010	2011 - 2015	Comments	BMP # from SWPPP
		American Blvd. Water quality Improvement	\$156,955	Storm water utility/TIF							Vortechs structure at East American Blvd.	
		Smith Pond Water quality Improvement	\$293,630	Storm water utility/TIF							2 Vortechs structures at Smith Park	
		Overlook Lake Water Quality Improvement	\$25,000	Storm water utility							Hydro-International structure installed at south inlet	
		Wanda Miller Pond Water Quality Improvement	\$25,000	Storm water utility							CDS installed at east inlet	
		Subtotal:	\$1,643,585									
Total Not Including Completed Items:			\$10,298,000		\$25,000	\$1,515,000	\$105,000	\$340,000	\$8,100,000	\$213,000		

TABLE VI-2

SURFACE WATER MANAGEMENT OPERATION AND MAINTENANCE PROGRAMS

Surface Water Management Programs

No.	Priority	Project Description	Cost Estimate ^a	Funding Sources	2006	2007	2008	2009	2010	2011-2015	BMP # from SWPPP	Comments
-----	----------	---------------------	----------------------------	-----------------	------	------	------	------	------	-----------	------------------	----------

A. In-Place Programs

SMP-1	High	Storm Sewer Mainline Inspections.	\$290,000	Storm water utility	\$25,000	\$25,000	\$30,000	\$30,000	\$30,000	\$150,000	27	Storm water maintenance plan
SMP-2	High	Annual Storm Sewer Inspections.	\$350,000	Storm water utility	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$175,000	30	Storm water maintenance plan
SMP-3	High	Storm Sewer Maintenance Projects.	\$3,000,000	Storm water utility	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$1,500,000	29	Storm water maintenance plan
SMP-4	High	Sweep streets twice annually in all areas, and early in priority areas.	\$6,500,000	Storm water utility	\$650,000	\$650,000	\$650,000	\$650,000	\$650,000	\$3,250,000	47	Storm water maintenance plan
SMP-5	High	Work cooperatively with the activities of the watershed districts & watershed management organizations	\$120,000	Storm water utility	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000		Ongoing
SMP-6	High	Provide review of all plans for new development or redevelopment of sites within the City to meet all applicable standards. Includes cost for City staff as well as any consultant review time.	\$150,000	Storm water utility	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$75,000	36	SWPPP BMP
SMP-7	High	Review certificate of surveys for each building site proposed for development.	\$40,000	Storm water utility	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$20,000	37	SWPPP
SMP-8	High	Continue the program of permitting and inspecting privately owned storm sewer connections to the City system.	\$100,000	Public Works	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$50,000	26	Illicit discharge detection & elimination
SMP-9	High	Perform Local Government Unit (LGU) Role for Wetland Conservation Act	\$80,000	Storm water utility	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$40,000		From 2000 Plan
SMP-10	High	Sponsor Curb-side-clean-up day	\$6,650,000	Solid Waste Division	\$665,000	\$665,000	\$665,000	\$665,000	\$665,000	\$3,325,000	9	Contingent upon funding source
SMP-11	High	Environment Fair/Annual Clean Water Festival	\$50,000	Storm water utility	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$25,000	3	SWPPP

TABLE VI-2

SURFACE WATER MANAGEMENT OPERATION AND MAINTENANCE PROGRAMS

Surface Water Management Programs

No.	Priority	Project Description	Cost Estimate ^a	Funding Sources	2006	2007	2008	2009	2010	2011-2015	BMP # from SWPPP	Comments
SMP-12	High	Nine Mile Creek Maintenance	\$500,000	Storm water utility	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$250,000		As needed
SMP-13	High	Engineering staff inspection & enforcement of erosion control measures required for site development activities within the City with the NPDES Erosion Control Program now being administered by the MPCA.	\$150,000	Storm water utility	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$75,000	39	Construction & post-construction site runoff control
SMP-14	High	Revisit and redefine water quality monitoring program to establish existing quality, identify concerns and/or needs for Corrective Actions. It is anticipated that the monitoring program would help determine the quality of water discharged from the City, as well as potentially monitor the effect of the City's storm water treatment basins on improving water quality.	\$100,000	Storm water utility	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$50,000	From 2000 Plan	The intent of this program is to maintain the water quality goals outlined by the Watershed Districts, this plan, WPMP, & SWPPP. The City will work with the Watershed District to implement improvements that will assist in the achievement of these goals.
SMP-15	High	Continue implementation of the Wetland Vegetation Treatment Policy	\$250,000	Storm Water Utility	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$125,000		
SMS-16	High	Update City's GIS system to show infrastructure improvements	\$50,000	Storm water utility	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$25,000	19	Illicit discharge detection/pollution prevention good housekeeping
SMP-17	High	Continue implementation of Drainage and Erosion Control Ordinance and determine if any revisions are needed.	\$10,000	Storm water utility	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$5,000	35	Construction & post-construction site runoff control
Subtotal:			\$18,390,000		\$1,843,000	\$1,843,000	\$1,848,000	\$1,848,000	\$1,848,000	\$9,160,000		

TABLE VI-2

SURFACE WATER MANAGEMENT OPERATION AND MAINTENANCE PROGRAMS

Surface Water Management Programs

No.	Priority	Project Description	Cost Estimate ^a	Funding Sources	2006	2007	2008	2009	2010	2011-2015	BMP # from SWPPP	Comments
-----	----------	---------------------	----------------------------	-----------------	------	------	------	------	------	-----------	------------------	----------

B. Programs identified in the Wetland Protection and Management Plan Also InPlace

SMP-18	High	Implementation of community education plan to increase the residents awareness concerning proper water resource management	\$150,000	Storm water utility	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$75,000	4	SWPPP Education Activity Implementation Plan. Estimate does not include individually identified BMPs or programs that may also be included in the FAIP
SMP-19	High	Adopt-a-Wetland Program	\$20,000	Park maintenance	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$10,000	12	Education/Participation
SMP-20	High	Wetland Health Evaluation Program	\$50,000	Storm water utility	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$25,000		Cooperation with Hennepin County Envl. Serv. This program proposes to assess the biological and chemical condition of specific target wetlands on a regular basis.
SMP-21	Med	Implement invasive exotic species vegetation control program	\$15,000	Park maintenance	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$7,500		
Subtotal:			\$235,000		\$23,500	\$23,500	\$23,500	\$23,500	\$23,500	\$23,500	\$117,500		

TABLE VI-2

SURFACE WATER MANAGEMENT OPERATION AND MAINTENANCE PROGRAMS

Surface Water Management Programs

No.	Priority	Project Description	Cost Estimate ^a	Funding Sources	2006	2007	2008	2009	2010	2011-2015	BMP # from SWPPP	Comments
-----	----------	---------------------	----------------------------	-----------------	------	------	------	------	------	-----------	------------------	----------

C. New programs identified in the Surface Water Management Plan

SMP-21	High	Work with Three Rivers, US Fish & Wildlife Service, and Watershed District to address water quality issues of Bush Lake, Minnesota River Valley, and Hyland Lake.	\$15,000	Storm water utility, Watershed Districts, Three Rivers Parks	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$7,500		Ongoing
SMP-22	High	The education coordinator will administer the education activity implementation plan to address each minimum control measure.	\$150,000	Public Works	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$75,000	1, 4	Education
SMP-23	High	Public notice of annual report and annual public meeting to inform the public on the status of SWPPP and annual report.	\$15,000	Storm Utility	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$7,500	2, 15	Education
SMP-24	High	Publish water resources articles in the Bloomington Briefing.	\$20,000	Storm Utility	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$10,000	8	Education
SMP-25	High	Maintain the City's website as a tool for residents to research water resources related topics.	\$25,000	Storm Utility Public Works	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$12,500	11	Education
SMP-26	High	Establish an erosion control hotline number for receiving erosion control related calls.	\$75,000	Storm Utility	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500	\$37,500	13	Erosion
SMP-27	High	Promote the use of Hennepin County Hazardous Waste Disposal Center.	\$10,000	Public Works	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$5,000	14	Education
SMP-28	High	Develop a complaint line for the public to report suspected illicit discharges, spills, or illegal dumping.	\$18,000	Storm Utility/ Envl. Health	\$0	\$2,000	\$2,000	\$2,000	\$2,000	\$10,000	16	
SMP-29	High	Implement the Zero Phosphorus Fertilizer Ordinance.	\$5,000	Public Works/ Legal	\$500	\$500	\$500	\$500	\$500	\$2,500	18	

TABLE VI-2

SURFACE WATER MANAGEMENT OPERATION AND MAINTENANCE PROGRAMS

Surface Water Management Programs												
No.	Priority	Project Description	Cost Estimate ^a	Funding Sources	2006	2007	2008	2009	2010	2011-2015	BMP # from SWPPP	Comments
SMP-30	High	Develop a map of the City's existing storm sewer system in GIS, and continually update private storm sewer systems.	\$285,000	Storm Utility	\$15,000	\$30,000	\$30,000	\$30,000	\$30,000	\$150,000	19, 25	Illicit discharge detection/ Pollution prevention/ Good housekeeping
SMP-31	High	Develop an inspection program to detect non-storm water discharges.	\$65,000	Storm Utility	\$0	\$25,000	\$5,000	\$5,000	\$5,000	\$25,000	22	Illicit discharge detection
SMP-32	High	Sanitary sewer video inspections to reduce the risk of raw sewage entering the storm sewer system..	\$600,000	Utility Div.	\$150,000	\$50,000	\$50,000	\$50,000	\$50,000	\$250,000	23	Illicit discharge detection/ Purchase of equipment in 2006
SMP-33	High	Annual sanitary sewer maintenance to reduce the risk of raw sewage entering the storm sewer system.	\$3,500,000	Utility Div.	\$350,000	\$350,000	\$350,000	\$350,000	\$350,000	\$1,750,000	24	Illicit discharge detection
SMP-34	High	Develop and implement an operations and maintenance program and training component to reduce pollutant loading from municipal operations.	\$50,000	Storm Utility Public Works	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$25,000	31	Pollution prevention Good housekeeping
SMP-35	High	Provide erosion control training for City staff responsible for erosion control inspections.	\$50,000	Storm Utility/ Engineering	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$25,000	32	Construction site runoff control/ Pollution prevention/ Good housekeeping
SMP-36	High	Continue to provide turf reestablishment/permanent erosion control plans on all City improvement projects.	\$500,000	Storm Utility/ Engineering	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$250,000	38	Post-construction runoff control
SMP-37	High	The use of inlet protection on all storm sewer inlets are required on City construction projects.	\$50,000	Storm Utility/ Engineering	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$25,000	40	Construction site runoff control
SMP-38	High	Implement the Shore Area Regulations within the City to protect shore areas and adjacent water bodies.	\$15,000	Community Development	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$7,500	41	
SMP-39	High	Implement the special zoning overlay districts for Planned Development Overlay Policy, Flood Hazard Overlay District, and Bluff Protection Overlay District.	\$50,000	Community Development	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$25,000	42	Post-construction runoff control

TABLE VI-2

SURFACE WATER MANAGEMENT OPERATION AND MAINTENANCE PROGRAMS

Surface Water Management Programs												
No.	Priority	Project Description	Cost Estimate ^a	Funding Sources	2006	2007	2008	2009	2010	2011-2015	BMP # from SWPPP	Comments
SMP-40	High	Continue routine meetings with other water resources staff from neighboring communities and agencies to discuss storm water issues and accomplishments.	\$15,000	Storm Utility	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$7,500	46	Pollution prevention Good housekeeping
SMP-41	High	Maintain records of inspection activities and results, and other pertinent information as required by SWPPP.	\$50,000	Storm Utility	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$25,000	47	Pollution prevention Good housekeeping
Subtotal:			\$5,563,000		\$624,500	\$566,500	\$546,500	\$546,500	\$546,500	\$2,732,500		
Total:			\$24,188,000		\$2,491,000	\$2,433,000	\$2,418,000	\$2,418,000	\$2,418,000	\$12,010,000		

a) Cost estimates based on year 2006 dollars. Estimates do not take inflation into account. Estimates are for planning purposes only and are not based on engineering feasibility reports.

Notes: The funding sources identified do not necessarily reflect the sources identified in the Wetland Protection and Management Plan and are subject to change.

TABLE VI-3

SURFACE WATER MANAGEMENT STUDIES

Surface Water Management Studies												
No.	Priority	Project Description	Cost Estimate ^a	Funding Sources	2006	2007	2008	2009	2010	2011-2015	BMP # from SWPPP	Comments

A. In-place Studies

SMS-1	High	Undertake a review of the City's formal agreements with bordering communities, WMO & Mn/DOT & if necessary, develop formal agreements addressing storm water conveyances.	\$10,000	Storm water utility		\$5,000	\$5,000					Review schedule pending. May be contingent on assistance from Legal Dept.
SMS-2	High	Work with US Fish & Wildlife Service to manage water bodies within the Minnesota River Valley Wildlife Refuge as per their Comprehensive Conservation Plan.	\$15,000	Storm water utility	\$5,000	\$5,000	\$5,000					Staff time included in Storm Water Utility personnel allocation; Joint with US Fish and Wildlife
Subtotal:			\$25,000		\$5,000	\$10,000	\$10,000	\$0	\$0	\$0		

B. Studies identified in the Wetland Protection and Management Plan

SMS-3	High	Implement a vegetative buffer zone policy	\$0									Implementation through plan review and education
Subtotal:			\$0									

TABLE VI-3

SURFACE WATER MANAGEMENT STUDIES

Surface Water Management Studies												
No.	Priority	Project Description	Cost Estimate ^a	Funding Sources	2006	2007	2008	2009	2010	2011-2015	BMP # from SWPPP	Comments

C. New studies identified in the Surface Water Management Plan

SMS-4	High	Develop a map of active septic systems in GIS.	\$15,000	Storm Utility		\$15,000					20	Illicit discharge detection
SMS-5	High	Implement the illicit discharge elimination regulatory mechanism.	\$21,000	Storm Utility/ Env'l. Health	\$1,000	\$10,000	\$10,000				21	Illicit discharge detection
SMS-6	High	Publish and distribute brochures or post information on City's web site about hazards of illegal discharges and improper disposal of wastes.	\$7,500	Public Works		\$7,500					6	Education/ Illicit discharge detection
SMS-7	High	Update wetland function and value inventory	\$50,000	Storm Utility		\$25,000	\$25,000					
SMS-8	High	Administer a regulatory mechanism to control the post-construction runoff rate to level equal or below pre-construction rates.	\$9,000	Storm Utility/ Engineering		\$1,000	\$1,000	\$1,000	\$1,000	\$5,000	43	Post construction runoff control
SMS-9	High	Establish a program to educate the public on the impacts of feeding of geese and waterfowl near City park ponds and wetlands.	\$5,000	Public Works	\$5,000						44	Education program established
SMS-10	High	Erosion control ordinance	\$10,000	Storm water utility/General fund	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$5,000	35	

TABLE VI-3

SURFACE WATER MANAGEMENT STUDIES

Surface Water Management Studies												
No.	Priority	Project Description	Cost Estimate ^a	Funding Sources	2006	2007	2008	2009	2010	2011-2015	BMP # from SWPPP	Comments
SMS-11	High	Complete P8, XPSWMM, & calibration of Hopkins Road, 10th Ave, and 11th Ave subwatersheds	\$60,000	Storm water utility			\$60,000					
SMS-12	High	Complete P8, XPSWMM, & calibration of Bush Lake subwatershed.	\$60,000	Storm water utility/9 Mile Creek WD			\$60,000					
SMS-13	High	Complete P8, XPSWMM, and calibration of West Marsh Lake, SW Marsh Lake, Brookside, and Third Ave subwatersheds	\$150,000				\$50,000	\$50,000	\$50,000			
SMS - 14	High	Complete P8 Model of South Glen, Penn Lake, Overlook Lake, Skriebakken, and Airport South	\$100,000	Storm Utility/ Nine Mile Creek WD			\$50,000	\$50,000				
		Subtotal:	\$487,500		\$7,000	\$59,500	\$257,000	\$102,000	\$52,000	\$10,000		

TABLE VI-3

SURFACE WATER MANAGEMENT STUDIES

Surface Water Management Studies												
No.	Priority	Project Description	Cost Estimate ^a	Funding Sources	2006	2007	2008	2009	2010	2011-2015	BMP # from SWPPP	Comments

D. Items Completed

		Update Shore Area Ordinance	\$1,200	Storm water utility/General fund								\$900 Storm water utility; \$300 General fund
		Develop fertilizer & pesticide management ordinance	\$4,000	Storm water utility/General fund								\$2800 Storm water utility; \$1200 General fund
		Complete P8, XPSWMM, & calibration of France Ave. Sump, York Nine	\$60,000	Storm water utility								
		Complete P8, XPSWMM, & calibration of Upper Nine Mile Creek, Hyland Hills-Colorado Pond, and Hampshire Pond subwatersheds.	\$75,000	Storm water utility/ Nine Mile Creek WD								
		Complete P8, XPSWMM, and calibration of Oxboro Lake	\$50,000	Storm water utility								
		Subtotal:	\$190,200									

Total Not Including Completed Items:	\$512,500		\$12,000	\$69,500	\$267,000	\$102,000	\$52,000	\$10,000				
---	-----------	--	----------	----------	-----------	-----------	----------	----------	--	--	--	--

a) Cost estimates based on year 2006 dollars. Estimates do not take inflation into account. Estimates are for planning purposes only and are not based on engineering feasibility reports.

Notes: The funding sources identified do not necessarily reflect the sources identified in the Wetland Protection and Management Plan and are subject to change.

TABLE VI-4							
SUMMARY							
Tables	Cost estimate ^a	2006	2007	2008	2009	2010	2011-2015
Table VI-1: Surface Water Capital Improvement Projects:							
A. Projects under construction	\$75,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$0
B. Projects identified in the Wetland Protection and Management Plan	\$573,000	\$10,000	\$100,000	\$90,000	\$75,000	\$85,000	\$213,000
C. New projects identified in the Surface Water Management Plan	\$9,650,000	\$0	\$1,400,000	\$0	\$250,000	\$8,000,000	\$0
Total:	\$10,298,000	\$25,000	\$1,515,000	\$105,000	\$340,000	\$8,100,000	\$213,000
Table VI-2: Surface Water Management Operation and Maintenance Programs							
A. In-place Programs	\$18,390,000	\$1,843,000	\$1,843,000	\$1,848,000	\$1,848,000	\$1,848,000	\$9,160,000
B. Programs identified in the Wetland Protection and Management Plan	\$235,000	\$23,500	\$23,500	\$23,500	\$23,500	\$23,500	\$117,500
C. New programs identified in the Surface Water Management Plan	\$5,563,000	\$624,500	\$566,500	\$546,500	\$546,500	\$546,500	\$2,732,500
Total:	\$24,188,000	\$2,491,000	\$2,433,000	\$2,418,000	\$2,418,000	\$2,418,000	\$12,010,000
Table VI-3: Surface Water Management Studies							
A. In-place Studies	\$25,000	\$5,000	\$10,000	\$10,000	\$0	\$0	\$0
B. Studies identified in the Wetland Protection and Management Plan	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C. New studies identified in the Surface Water Management Plan	\$487,500	\$7,000	\$59,500	\$257,000	\$102,000	\$52,000	\$10,000
Total:	\$512,500	\$12,000	\$69,500	\$267,000	\$102,000	\$52,000	\$10,000
Grand Total:	\$34,998,500	\$2,528,000	\$4,017,500	\$2,790,000	\$2,860,000	\$10,570,000	\$12,233,000

a) Cost estimates based on year 2006 dollars. Estimates do not take inflation into account. Estimates are for planning purposes only and are not based on engineering feasibility reports.