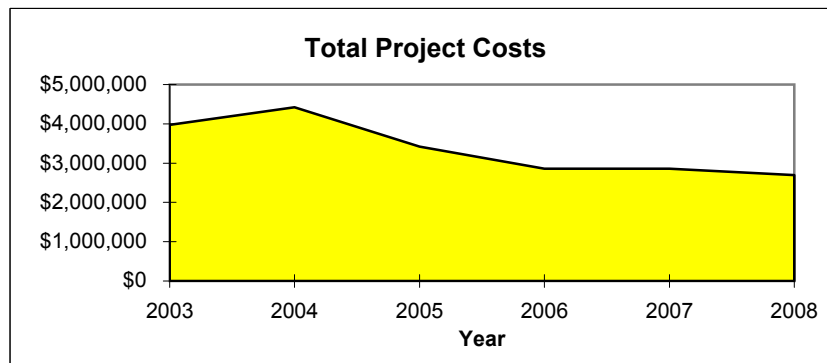


**2003
Capital Budget
Capital Improvement Program**

Agency Name: Stormwater Utility

Agency Number: 53

Project Name	Capital Budget	Future Year Estimates				
	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>
1 Accompanying Storm Sewer	\$ 770,000	\$ 770,000	\$ 770,000	\$ 770,000	\$ 770,000	\$ 770,000
2 Greenway Improvements	247,500	247,500	247,500	247,500	247,500	247,500
3 EPA / NPDES Permit	179,474	84,260	38,000	38,000	38,000	38,000
4 Stormwater Basins	280,000	280,000	280,000	280,000	280,000	280,000
5 Odana Pond Dredging	58,500	595,000	325,000	325,000	325,000	325,000
6 Inter-Municipal Storm Sewers	50,000	50,000	50,000	50,000	50,000	50,000
7 Tiedemann Pond Pump Station	85,520	85,520	85,520	0	0	0
8 Storm Box Replacement / Cleaning	100,000	100,000	100,000	100,000	100,000	100,000
9 Major Roadway Culvert Crossings	100,000	100,000	100,000	100,000	100,000	100,000
10 Assessable Drainage Improvements	225,000	225,000	225,000	225,000	225,000	225,000
11 Shorelines	402,500	275,000	275,000	275,000	275,000	292,500
12 Local Drainage Problems	100,000	100,000	100,000	100,000	100,000	100,000
13 Madison-Sun Prairie Detention Pond	88,000	66,000	0	0	0	0
14 Hoard St. (Area) Sewer Replacements	211,200	44,000	55,000	0	0	0
15 Far West Storm Water Management	980,000	578,000	310,000	0	0	0
16 Wingra Creek Corridor	35,000	175,000	175,000	175,000	175,000	0
17 Tractor/Backhoe	43,333	0	0	0	0	0
18 Large Pipe Transporter & Lighthouse	0	19,800	0	0	0	0
19 Computer Hardware & Software	16,500	0	0	0	0	0
20 GPS Fleet Management	0	8,250	0	0	0	0
21 Engineering Serv. Building Expansion	0	405,000	0	0	0	0
22 Lake Wingra Dam Rehabilitation	0	40,000	200,000	0	0	0
23 Street Cleaning Equipment	0	170,000	85,000	170,000	170,000	170,000
Total	\$ 3,972,528	\$ 4,418,330	\$ 3,421,020	\$ 2,855,500	\$ 2,855,500	\$ 2,698,000



Capital Budget

Stormwater Utility

Accompanying Storm Sewer

Project No. 1 Fund No.

GO	\$	0	This project is for the design and installation of storm sewer systems that "accompany" street projects. This is a continuing program to provide mainline storm sewer improvements, replacements, and rehabilitation in conjunction with City streets being reconstructed and resurfaced. Additionally, this project consists of installing various conduits to serve streets being improved with curb and gutter and bituminous pavement, as directed by the Common Council. This item also includes the annual "Waterway Repairs" Contract that makes several smaller drainage-related repairs on City streets throughout the City. Other funding is to be derived from special assessments (\$50,000) and revenue bonds (\$720,000).
Other		<u>770,000</u>	
	\$	<u>770,000</u>	

Greenway Improvements

Project No. 2 Fund No.

GO	\$	0	This is an annual drainage improvement program. Open channels (greenways) are used to transport stormwater runoff. This program includes acquisition, if necessary, and construction of new greenways and various types of channel improvements to existing greenways. Known areas in need of repair projects include greenways in Owen Park, Jetty Drive, Old Sauk Trails, Westmoreland Park, Sauk Creek, and the greenway of Owen Drive. This item also includes the annual Restoration / Landscaping Contract that makes miscellaneous, minor greenway-related repairs throughout the City as the need arises, as well as an annual contract for tree removals in greenways and other stormwater management areas. Another project identified is for the installation of box culvert gates and protection at Elder Place / Bordner Park. Other funding is from revenue bonds.
Other		<u>247,500</u>	
	\$	<u>247,500</u>	

EPA / NPDES Permit

Project No. 3 Fund No.

GO	\$	0	This is a continuing program and permit process to comply with the U. S. Environmental Protection Agency and NPDES regulations promulgated on November 16, 1990. It is anticipated that this funding will be needed for continuing monitoring requirements for the life of the permit. The current permit for the City will expire on January 3, 2003, at which time new monitoring requirements will be negotiated. The current monitoring study ends in Fiscal Year 2004. It is anticipated that with the issuance of a new permit (as part of a stormwater group) the monitoring costs to the City of Madison will decrease. Additionally, the Wisconsin Department of Natural Resources assesses an annual permit fee of \$10,000, which is paid through the Operating Budget. The ongoing monitoring project (ending in 2004) is determining the pollutant removal efficiency of a high efficiency street sweeper. Elgin Incorporated is participating with the City in this study, and in addition to providing two sweepers for use in the study is providing \$48,000 in funds to be provided in the form of "parts credits" to the Streets Division in 2003 (\$24,000) and 2004 (\$24,000). These credits are not reflected in the budget below. Past levels of funding for this item have generally been in the range that has been budgeted. "Other" expenditures are for I & E (Information & Education) efforts that the City will participate in as part of the proposed group permit for the City and surrounding municipalities. Other funding is in the form of USGS matching funds (\$50,161), a WDNR grant (\$20,000) and revenue bonds (\$109,313).
Other		<u>179,474</u>	
	\$	<u>179,474</u>	

Stormwater Basins

Project No. 4 Fund No.

GO	\$	0	This program provides stormwater detention / retention and stormwater quality improvements to regional basins at various locations throughout the City. Potential projects include: construction of a wet pond regional retention facility at Nelson Road near the landfill; a potential regional facility on UW property at Pleasant View and Elderberry; a potential facility in the Door Creek North Watershed; a potential basin in the Felland Neighborhood; and a potential regional facility in the Marsh / Voges neighborhood. This item would also include any major repair work or expansion within existing basins. All other funding is from the Detention Trust Fund (Fund #ESTM-78740-561000).
Other		<u>280,000</u>	
	\$	<u>280,000</u>	

Odana Pond Dredging

Project No. 5 Fund No.

GO	\$	0	Preliminary and final design, including permitting and disposal requirements associated with the proposed dredging of the retention pond at Odana Hills Golf Course. This dredging request is the highest priority dredging project among several City sites that are presently in need of dredging. It is anticipated that this will be a continuing project for the other sites, annually, on a prioritized basis. Other sites known to be in need of dredging include Strickers Pond Forebay, Acewood Retention Basin, Morningside Retention Basin, and Warner Park Lagoon outlet channel. All other City ponds are being monitored for siltation and shall be incorporated into the schedule accordingly. Future years funding beyond that needed for Odana shall be for dredge projects (other than Odana). Other funding is from revenue bonds.
Other		<u>58,500</u>	
	\$	<u>58,500</u>	

Inter-Municipal Storm Sewers

Project No. 6 Fund No.

GO	\$	0	This item is for resolving drainage problems within neighboring municipalities. Typically these problems are on the fringes of new City development and are at least partially attributable to City stormwater increases. The City Engineer attempts to resolve these problems by participating in the funding, on a 50/50 basis or as prorated based on drainage area, previous agreement, or other reasonable method of split. Potential projects could include: Rambling Acres Pipe / Greenway (Town of Blooming Grove) - \$50,000; Lake Forest Detention Basin (Town of Madison) - \$35,000, and Triangle Street Outlet (Village of McFarland) - \$50,000. Other funding is from revenue bonds.
Other		<u>50,000</u>	
	\$	<u>50,000</u>	

Tiedemann Pond Pump Station

Project No. 7 Fund No.

GO	\$	0	Stricker and Tiedemann Ponds receive runoff from the City of Madison (60%) and the City of Middleton (40%). The ponds have operated for years as "infiltration" ponds, but are no longer infiltrating in adequate capacity to prevent water levels from rising, to the point of flooding trees, parklands, and threatening some private residences in Middleton. The City of Middleton proposes installing a pump station / force main solution, with cost participation on a 60 / 40 basis. Madison's share was estimated to be \$250,000, paid over 10 years. Year 1 was to be 1999 and Year 10 was to be 2008. The agreement and final billing has been received in 2002, with the total amount at \$256,560 proposed to be paid over 3 years beginning on January 31, 2003. Other funding is from revenue bonds.
Other		<u>85,520</u>	
	\$	<u>85,520</u>	

Storm Box Replacement / Cleaning Project No. 8 Fund No.

GO \$ 0 This is a continuing program to systematically replace aged and failing storm sewer box culverts. Many areas have been identified from emergency repairs and previous problems. Other 100,000 These include: East Wilson along East Rail Bikepath (#1 Priority), the Railroad Arch at Gregory under the Southwest Bikepath (#2 Priority), East Dayton Street, Bassett Street, Speedway Road, Miller Avenue, and Railroad Street. Additionally, many storm boxes that are structurally sound are in need of maintenance in the form of cleaning. Sediment has accumulated in the storm sewers, cutting conveyance efficiencies by up to 50% or more. Many segments of storm sewer have been identified as needing this cleaning and maintenance. This item shall fund either a cleaning project or a replacement project, or a combination of both, depending on priorities and available funding. Other funding is from revenue bonds. \$ 100,000

Major Roadway Culvert Crossings Project No. 9 Fund No.

GO \$ 0 This project is for major (large size) stormwater culvert crossings under roadways in areas of new development or in areas impacted by new development. When the crossing is entirely within a newly platted street, it is proposed that the City pay only for the proportion of the total project cost that can be attributed to a culvert end area in excess of 64 square feet. The culvert crossing at Hayes Road / Portage Road was completed in 2002. No priorities currently exist, but potential known locations include two locations on Raymond Road, near Marty Road and further to the West; and County Highway "M", south of Midtown Road. Other funding is from revenue bonds. Other 100,000 \$ 100,000

Assessable Drainage Improvements Project No. 10 Fund No.

GO \$ 0 This item anticipates the need for major improvements to the stormwater management system in outlying, newly developing areas where the upstream lands are not fully developed and can justifiably be charged for these improvements as they develop. Additionally, these projects could include planning, particularly when wetlands and floodplains are involved. One anticipated project for 2003 is the greenway purchase and construction for Door Creek North, in conjunction with a sanitary sewer extension in the same location. Other known potential projects include: 1) Elderberry Neighborhood Greenway; and 2) potential Felland Neighborhood Greenway. Other funding is from special assessments. Other 225,000 \$ 225,000

Shorelines Project No. 11 Fund No.

GO \$ 0 The Shoreline Improvement Program is for large-scale improvements to the shoreline of lakes, creeks, and rivers. Funding under this item was increased in 2001 to allow for additional major repair work as a result of the flood of 2000 and the effects of deferred maintenance. In 2001, the majority of the Lake Monona Bay shoreline and a few sections along the Yahara River were repaired. In 2002, the Lake Mendota shoreline along Warner Park and the Yahara River Boat Launch will be repaired. The Lake Monona shoreline along Hudson Park and Olbrich Park and the Lake Mendota Shoreline along Marshall Park are slated for repair in 2003, The 2003 budget also includes underwater video inspection and survey of the Lake Monona Shoreline beneath the Monona Terrace Convention Center structure. Future years shall require continuing expenditures of \$275,000 per year, with priorities recommended by City Engineering and the Parks Department. Other funding is from revenue bonds. Other 402,500 \$ 402,500

Local Drainage ProblemsProject No. **12** Fund No.

GO \$ 0
 Other 100,000
\$ 100,000

In 1993, the City experienced a rainfall event that had a probability of occurring about once every 10 years. In 1996, the City experienced an even heavier flooding event on the magnitude of a 25 to 100 year recurrence interval. Both storm events revealed many local drainage problems (flooding) that both caused property damage and presented a significant safety concern. City Engineering maintains a database of the identified drainage problems and plans for solutions as time and money allows. The flood of 2000 added significantly to that database (over 200 now). This budget item would continue to implement solutions to the drainage problems on a prioritized basis, as determined by the City Engineer and the Common Council. Other funding is from revenue bonds.

Madison-Sun Prairie Detention PondProject No. **13** Fund No.

GO \$ 0
 Other 88,000
\$ 88,000

In 1996, the Cities of Madison and Sun Prairie entered into an agreement to purchase open space land separating the two municipalities in the vicinity of Hoepker Road and USH 151, and to construct a regional stormwater retention facility. A substantial portion of the facility construction was completed in 2001 under the 2000 budget. Additional work includes: 1) the planting of wetland plants in accordance with the environmental permit requirements; 2) construction of the ultimate outlet control structure. The wetland plantings shall occur in 2003 and the control structure construction shall be completed in 2004 in conjunction with the highway interchange project by the WDOT, adjacent to the stormwater facility. Other funding is from revenue bonds.

Hoard St. (Area) Sewer ReplacementsProject No. **14** Fund No.

GO \$ 0
 Other 211,200
\$ 211,200

In 1993 and again in 1996, residents in this area (several blocks centering around Hoard at Kedzie) suffered sanitary sewerage flooding into their basements. Subsequently, the City performed a detailed study to seek solutions to lessen the chance of future flooding. Implementation for this area began with the replacement of the sewer interceptor on Johnson Street in 1997. Replacement of the local storm and sanitary sewer system shall continue in phases over the next three years. Phase one was completed in 2002 and included East Johnson from Kedzie to North Lawn, North Lawn from East Johnson to Hoard, Hoard from North Lawn to Oak, and Algoma from Hoard to Street End. Phase 2 in 2003 shall include Kedzie from East Johnson to Fairfield, Fairfield from Maywood to Kedzie, and Stang from Hoard to Fairfield. Phase 3 in 2004 shall include Kedzie from East Johnson to East Washington, East Lawn from North to Kedzie, East Dayton from North to Kedzie, and East Washington from North to Kedzie. Phase 4 in 2005 shall include East Johnson from North Lawn to East Washington, East Washington from East Johnson to Oak, Oak from East Washington to Hoard, and Hoard from Oak to Street End. The budget requests under this item are only for storm sewer related costs. Street and Sanitary costs are budgeted separately. Other funding is from revenue bonds.

Far West Storm Water Management Project No. **15** Fund No.

GO \$ 0 This project includes the survey, design, permitting, acquisition of lands, and construction of a regional storm water management system consisting of greenways, retention ponds, wetlands, and environmental corridor buffer lands. Surveying has been completed in 2001. Some of the necessary lands may be dedicated or purchased in 2002. Costs incurred may be recouped from drainage connection fees levied against future developing properties. Land acquisition and permitting would continue in 2002 with construction in 2003. It is anticipated that there will be several phases of acquisition, design and construction. Estimated phasing is as follows: Work in 2002 included the design of ponds and greenway from Stratton Ridge North to Raymond Road on both branches. Work in 2003 would include construction of the designs completed in 2002, and acquisition and design would begin on lands from Raymond Road to CTH "M", as well as a new crossing of Raymond Road at Marty Road. Work in 2004 would include construction of the designs completed in 2003, and design would begin on the greenway section from CTH "M" North to Mid-Town Road - no fee for acquisition is anticipated in this phase. Work in 2005 would include construction of the phase designed in 2004. Private contributions shown in 2003 are from adjacent developers as part of their Chapter 37 MGO requirements. It is assumed the UW will provide some funds in 2005 for improvements of the greenway through its property. Some funding could come from the Stormwater (Variance) Management Fund. Other funding also includes \$110,000 from private contributions and \$435,000 from revenue bonds.

Other 980,000
\$ 980,000

Wingra Creek Corridor Project No. **16** Fund No.

GO \$ 0 The Wingra Creek Corridor is in need of shoreline and embankment work to enhance stormwater conveyance and water quality, as well as to provide a more enhanced corridor for pedestrian usage. Other funding is from revenue bonds.

Other 35,000
\$ 35,000

Tractor/Backhoe Project No. **17** Fund No.

GO \$ 0 New tractor/backhoe to replace Unit #5903 - an existing Year 1985 backhoe (67% Sanitary Sewer Utility; 33% Stormwater Utility - cost represents Storm portion only). Other funding is from revenue bonds.

Other 43,333
\$ 43,333

Large Pipe Transporter & Lighthouse Project No. **18** Fund No.

GO \$ 0 Purchase of a transporter and lighthouse to be used with existing CCTV Inspection System to inspect large diameter pipes (67% Sanitary Sewer Utility; 33% Stormwater Utility - cost represents Storm portion only). Other funding is from revenue bonds.

Other 0
\$ 0

Computer Hardware & Software Project No. **19** Fund No.

GO \$ 0 Purchase of hardware and software for Field Operations personnel. Includes rugged laptops for use in the field and upgrades to the Work Order and Asset Management System. Laptops will be equipped with touch screen and wireless ready features. Software upgrades will provide Operations staff the ability to receive work orders in field via computer, and transmit data to the office regarding personnel, time, equipment and materials used on particular job. This eliminates field personnel paperwork and re-entry of data into data bases by administrative support staff (67% Sanitary Sewer Utility; 33% Stormwater Utility - cost represents Storm portion only). Other funding is from revenue bonds.

Other 16,500
\$ 16,500

GPS Fleet ManagementProject No. **20** Fund No.

GO \$ 0 GPS (Global Positioning System) Fleet Management Hardware and Software for emergency
 Other 0 response sewer vehicles (67% Sanitary Sewer Utility; 33% Stormwater Utility - cost represents
\$ 0 Storm portion only).

Engineering Serv. Building ExpansionProject No. **21** Fund No.

GO \$ 0 Construction of a two-story addition to the existing facility providing an additional 8,500 square
 Other 0 feet of space and renovation of the adjoining 2,500 square feet of existing space to house
\$ 0 severely overcrowded staff in the Construction Inspection, Operations, Special Services and
 Mapping Sections of the Engineering Division. These personnel are presently located at two
 separate facilities. Additionally, the CCB office space vacated by Special Services and Mapping
 staff will provide space for the overcrowded Street, Sanitary and Storm sections (60% Sanitary
 Sewer Utility; 30% Stormwater Utility; 10% Landfill Remediations Fees - cost represents Storm
 portion only).

Lake Wingra Dam RehabilitationProject No. **22** Fund No.

GO \$ 0 The Wisconsin Department of Natural Resources has verbally indicated to City Staff that it will
 Other 0 be issuing orders to repair the dam as a result of unacceptable deterioration found upon its last
\$ 0 inspection of the dam. This item shall begin the process of complying with the pending orders.
 Preliminary design, feasibility, and permitting shall begin in 2003, with construction planned for
 2005. Year 2004 work may be needed for permitting and design refinements, as well as
 discussions with interested parties including the University (Arboretum) and the Town of
 Madison.

Street Cleaning EquipmentProject No. **23** Fund No.

GO \$ 0 This item is for the systematic replacement and / or upgrading of the City's fleet of street
 Other 0 cleaning equipment, including an increase of the fleet size as determined by public needs or
\$ 0 regulatory mandates. In 2003, two sweepers are to be added through a lease arrangement as
 part of a street sweeping study. These costs and this program are fully detailed in item #3 of
 this budget. No further costs are shown here for 2003. However, projections are made as to
 future needs, considering the age of present fleet, the size of present fleet, and the typical life of
 a sweeper. Sweepers are recommended for replacement on a 5 year cycle. The present fleet
 consists of 7 mechanical sweepers and 1 vacuum sweeper of varying ages. Replacement cost
 is presently approximately \$100,000, less a nominal trade-in value (approximately \$15,000).
 The projections shown allow for maintaining the present fleet with a possible modest
 expansion.

Note: Funding for Stormwater Utility projects identified as derived from revenue bonds (\$3,235,416) may be replaced with General Obligation borrowing, if such debt is determined to be a more appropriate and cost effective funding source. Regardless of the type of borrowing utilized, debt service (principal and interest) payments will be provided from Stormwater Utility sources, and will not impact the tax levy.

**2003
Capital Budget
Summary**

Agency Name: Stormwater Utility

Agency Number: 53

Project Name	Agency Request	CIRC	Executive	Executive		
				G.O. Debt	Other Funding	Total
1 Accompanying Storm Sewer	\$ 770,000	\$ 770,000	\$ 770,000	\$ 0	\$ 770,000	\$ 770,000
2 Greenway Improvements	247,500	247,500	247,500	0	247,500	247,500
3 EPA / NPDES Permit	166,000	179,474	179,474	0	179,474	179,474
4 Stormwater Basins	280,000	280,000	280,000	0	280,000	280,000
5 Odana Pond Dredging	58,500	58,500	58,500	0	58,500	58,500
6 Inter-Municipal Storm Sewers	50,000	50,000	50,000	0	50,000	50,000
7 Tiedemann Pond Pump Station	85,520	85,520	85,520	0	85,520	85,520
8 Storm Box Replacement / Cleaning	100,000	100,000	100,000	0	100,000	100,000
9 Major Roadway Culvert Crossings	100,000	100,000	100,000	0	100,000	100,000
10 Assessable Drainage Improvements	225,000	225,000	225,000	0	225,000	225,000
11 Shorelines	402,500	402,500	402,500	0	402,500	402,500
12 Local Drainage Problems	100,000	100,000	100,000	0	100,000	100,000
13 Madison-Sun Prairie Detention Pond	88,000	88,000	88,000	0	88,000	88,000
14 Hoard St. (Area) Sewer Replacements	211,200	211,200	211,200	0	211,200	211,200
15 Far West Storm Water Management	980,000	980,000	980,000	0	980,000	980,000
16 Wingra Creek Corridor	35,000	35,000	35,000	0	35,000	35,000
17 Tractor/Backhoe	43,333	43,333	43,333	0	43,333	43,333
18 Large Pipe Transporter & Lighthouse	19,800	0	0	0	0	0
19 Computer Hardware & Software	16,500	16,500	16,500	0	16,500	16,500
20 GPS Fleet Management	8,250	0	0	0	0	0
21 Engineering Serv. Building Expansion	405,000	0	0	0	0	0
22 Lake Wingra Dam Rehabilitation	30,000	0	0	0	0	0
23 Street Cleaning Equipment	0	0	0	0	0	0
Total	<u>\$ 4,422,103</u>	<u>\$ 3,972,528</u>	<u>\$ 3,972,528</u>	<u>\$ 0</u>	<u>\$ 3,972,527</u>	<u>\$ 3,972,528</u>