

**RESOLUTION NO. 15-2006**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MILWAUKIE, OREGON,  
AMENDING STORMWATER UTILITY SYSTEM DEVELOPMENT CHARGES.**

**WHEREAS**, the City adopted a new stormwater facilities master plan in 2005, which necessitates a change in the stormwater utility systems development charges (SDCs); and

**WHEREAS**, the City hired FCS Group, a consulting firm, to prepare the methodology and rates; and

**WHEREAS**, the City Council has reviewed the materials prepared by FCS Group and relies on that material; and

**WHEREAS**, while the City is required to mail notice to persons who have requested notice of proposed SDCs, no one has requested such notice, and instead the City published notice on December 30, 2005 in the Clackamas Review in order to inform the public of the proposed changes; and

**WHEREAS**, a public hearing was held on April 18, 2006, and the methodology was available for review at least 60 days prior to the hearing.

**NOW, THEREFORE, BE IT RESOLVED** that

- SECTION 1: The Milwaukie City Council adopts the stormwater utility system development charge methodology contained in Section II of the report prepared by FCS Group, and attached as Exhibit A.
- SECTION 2: The Milwaukie City Council adopts the stormwater utility Capital Improvement Plan list of projects shown in Appendix A of the report prepared by FCS Group, and attached as Exhibit A.
- SECTION 3: The Milwaukie City Council adopts a storm sewer utility system development rate in the amount of \$1,100 per E. S. U., which shall prevail over any previously established charge.
- SECTION 4: This resolution is effective upon adoption.

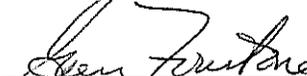
Introduced and adopted by the City Council on April 18, 2006.

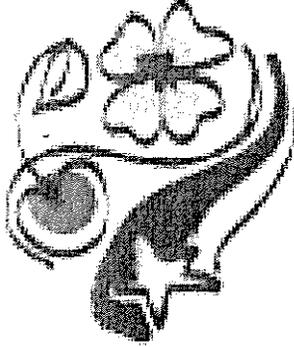
  
James Bernard, Mayor

ATTEST:

  
Pat DuVal, City Recorder

APPROVED AS TO FORM:

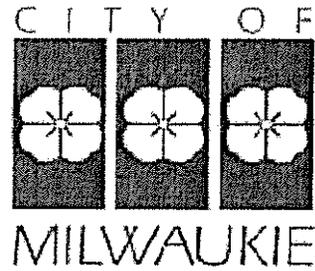
  
City Attorney



# Water & Stormwater SDC Study

City of  
Milwaukie, Oregon

April 2006



8201 164<sup>th</sup> Ave NE, Suite 300 ■ Redmond, WA 98052 ■ (425) 867-1802  
[www.fcsgroup.com](http://www.fcsgroup.com)

# City of Milwaukie

## Water & Stormwater System Development Charge Study

### Final Report Table of Contents

<b>Section</b>	<b>Description</b>	<b>Page</b>
I.	Introduction / Background	1
II.	System Development Charge Methodology	2
III.	Water	4
IV.	Stormwater	7
V.	Conclusion	9
	Technical Analysis	Appendix A

## **I. Introduction / Background**

In June of 2005, the City of Milwaukie contracted with Financial Consulting Solutions Group, Inc. (FCS GROUP) to perform a System Development Charge (SDC) update for the City's water, sanitary sewer, and stormwater. Due to uncertainty about the future of sanitary sewer treatment service provision, the sanitary sewer analysis was tabled.

### **A. Background**

Buffering the City of Portland, Milwaukie is located in Clackamas County and home to over 20,000 residents. The City experienced 9.6 percent growth from 1990 to 2000, and continues to experience moderate to low growth at or below 1 percent per year.

The City of Milwaukie initially adopted system development charges for each of the five eligible services between 1990 and 1993. Since that time, the City has updated its water and stormwater master plans. The SDC update was performed to incorporate this new information.

### **B. Scope of Services**

The following task plan was developed to meet the City's known objectives for the study.

1. **Data Analysis and Validation** – Consultants will gather and analyze data provided by staff, to include the most recent capital improvement plan for the water utility. [We have the most recent plan for stormwater.] Consultants will review recently completed master plans both all utilities.
2. **Update Fee Cost Bases** – Determine recently completed eligible capital projects for inclusion in the reimbursement fees for each service. Allocate planned project costs to growth for inclusion in the improvement fees for each service.
3. **Review with City Staff** – Consultants will meet with City staff on the same day as either of the meetings described in Task 5 to review preliminary findings and obtain needed input.
4. **Calculate new SDCs incorporating new capital plans.** Update SDC schedules for the stormwater and water utilities.
5. **Presentation** – Consultants will prepare for and present findings at one Citizen Utility Advisory Board meeting and one City Council meeting. Materials will be provided in advance of the meetings.

## II. System Development Charge Methodology

A system development charge is a one-time fee imposed on new development or some types of re-development at the time of development. The fee is intended to recover a fair share of the costs of existing and planned facilities that provide capacity to serve growth.

Oregon Revised Statute 223.297 - 223.314 defines SDCs and specifies how they shall be calculated, applied, and accounted for. By statute, an SDC is the sum of two components:

- A **reimbursement fee**, designed to recover costs associated with capital improvements *already constructed or under construction*, and
- An **improvement fee**, designed to recover costs associated with capital improvements *to be constructed in the future*.

The reimbursement fee methodology must be based on “the value of unused capacity available to future system users or the cost of the existing facilities”, and must further consider “prior contributions by existing users.” For this reason, all past contributions, including grants and developer-donated facilities, are deducted from the reimbursement fee cost basis. These costs were not incurred by the ratepayers, so no “reimbursement” is needed. The statute further specifies that the “methodology shall promote the objective of future system users contributing no more than an equitable share to the cost of existing facilities.” For this reason, we also deduct outstanding debt to be paid by rates. In general, this practice ensures that new customers will only be charged once, in rates, for debt-financed facilities. Reimbursement fee proceeds may be spent on any capital improvements related to the systems for which the SDC applied. Water SDCs must be spent on water improvements, stormwater SDCs must be spent on stormwater improvements, etc.

The improvement fee methodology must include only the cost of projected capital improvements needed to increase system capacity. In other words, the cost(s) of planned projects that correct existing deficiencies, or do not otherwise increase capacity, may not be included in the improvement fee calculation. Improvement fee proceeds may be spent only on capital improvements, or portions thereof, which increase the capacity of the systems for which they were applied.

In general, the proposed SDCs were calculated by adding the reimbursement fee to the improvement fee. Under the approach taken, each separate component was calculated by dividing the eligible cost by the appropriate measure of growth in capacity demand. The unit of capacity used became the basis of the charge. A sample calculation method is shown below.

Reimbursement Fee	Improvement Fee	SDC
Eligible cost of unused capacity in existing facilities	Eligible cost of planned capacity-increasing capital improvements	SDC (\$ / unit)
+ _____	+ _____	=
Growth in system capacity demand	Growth in system capacity demand	

The improvement fee calculations for each service were complicated by the fact that the source planning documents used different population projections as the bases for their recommendations. While this may lead to questions about the consistency of planning assumptions over time, it does not necessarily create internal inconsistencies in the fee calculations. As long as the planning

horizon used to develop the capital needs (the numerator) and the planning horizon used to estimate the growth in system capacity (the denominator) are the same, the fee is internally consistent. Care has been taken to ensure that this is the case for each service.

Oregon law (ORS 223.304) allows for the periodic indexing of system development charges for inflation, as long as the index used is

“(A) A relevant measurement of the average change in prices or costs over an identified time period for materials, labor, real property or a combination of the three;

(B) Published by a recognized organization or agency that produces the index or data source for reasons that are independent of the system development charge methodology; and

(C) Incorporated as part of the established methodology or identified and adopted in a separate ordinance, resolution or order.”

We recommend that the City of Milwaukie index its charges to the **Engineering News Record (ENR) Construction Cost Index (CCI)** for the City of Seattle, and adjust the charges annually as per that index. There is no comparable index for the Portland area.

### III. Water

It is the City's practice is to charge new water connections an SDC of \$1,095 per meter equivalent based on a 5/8 x 3/4 inch meter<sup>1</sup> - a reimbursement fee of \$476, an improvement fee of \$440, and an administrative charge of \$25.

The calculation of the proposed SDC is summarized below and provided in detail in Appendix A.

#### A. Capacity Basis

The City has a current water demand of 2.19 million gallons per day. This demand is projected to increase to 3.9 million at buildout. We have assumed that the current customer base, as expressed in meter equivalents (MEs), will grow proportionally.

Applying this approach, the utility currently serves a customer base of 9,111 water meter equivalents. At buildout, it is assumed that 16,225 MEs will be served, representing growth of 7,114 MEs.

**Table III-1  
 Water SDC Capacity Basis**

	Current Utilization			Projected Growth			Utilization at Buildout		
	Number of Meters	Meter Flow Factor	Meter Equivalents	Number of Meters	Meter Flow Factor	Meter Equivalents	Number of Meters	Meter Flow Factor	Meter Equivalents
5/8" x 3/4"	5,981	1.0	5,981	4,670	1.0	4,670	10,652	1.0	10,652
1"	253	2.5	632	197	2.5	493	450	2.5	1,125
1 1/2"	89	5.0	443	69	5.0	346	158	5.0	789
2"	151	8.0	1,208	118	8.0	943	269	8.0	2,152
3"	16	16.0	258	13	16.0	201	29	16.0	459
4"	17	25.0	428	13	25.0	334	30	25.0	762
6"	1	50.0	50	1	50.0	39	2	50.0	90
Standby Fire Meter	111	1.0	111	86	1.0	86	197	1.0	197
Deduct or No Meter	-	0.0	-	-	0.0	-	-	0.0	-
<b>Totals</b>	<b>6,619</b>		<b>9,111</b>	<b>5,168</b>		<b>7,114</b>	<b>11,787</b>		<b>16,225</b>

Current Utilization: 2,190,000 gallons per day  
 Utilization at Buildout: 3,900,000 gallons per day

#### B. Reimbursement Fee Calculation

In order to estimate the cost of unused capacity in the existing water system, the numerator in the reimbursement fee calculation, and calculate the fee, the following approach was taken.

- Using current plant-in-service asset records provided by the City, the original cost of utility plant-in-service -- land, building and improvements, machinery and equipment, utility plant and systems, transmission and distribution mains, etc. -- was compiled and adjusted as follows:
  - The original cost of the water plant-in-service totals \$12,764,645;
  - Past contributions in aid of construction, \$1,962,427, were deducted;
  - Net utility debt principal outstanding was deducted. As of 2005, \$565,000 in outstanding debt principal remained.

<sup>1</sup> One meter equivalent is equal to the flow capacity of a 5/8 x 3/4 inch meter.

- Using the previous (2003) work of Murray, Smith and Associates, the project team evaluated each functional component of the water system for available capacity to serve future development. Transmission, pump stations, other miscellaneous assets, and recently completed projects were all assumed to have capacity available to serve buildout, or 44%. No unused capacity was assumed in storage or source of supply.
- The sum of the costs of unused capacity for each functional component less a proportionate share of contributions, or \$3,501,960, became the reimbursement fee cost basis.
- Dividing the reimbursement fee cost basis by the 7,114 MEs of growth projected to buildout, the calculated reimbursement fee equated to \$492 per ME.

**C. Improvement Fee Calculation**

The following approach was taken to determine the cost of capacity-increasing capital improvements, the numerator in the improvement fee calculation, and calculate the fee.

- The project team updated a comprehensive project list compiled in 2003 using the Water System Master Plan. The sum of this list of project costs, adjusted to current dollars, was \$7,331,600.
- Using the 2003 work of MSA, the project team then allocated the capital improvement list between existing needs and capacity-increasing for growth, based on the type and use of the each project. The sum of capacity-increasing (for growth) project costs was \$2,912,500.
- Finally, the capital projects list was reduced to reflect any known future grants and anticipated developer constructed facilities. No such reductions were applicable for the water utility.
- Dividing the improvement fee cost basis of \$2,912,500 by the 7,114 MEs of growth projected to buildout resulted in an improvement fee of \$409 per ME.

**D. Recommended System Development Charge**

The recommended water SDC is the sum of the reimbursement fee and the improvement fee, adjusted by an administrative cost recovery factor of 7.66%. The administrative cost recovery factor was derived by dividing annual SDC program accounting and administrative costs, including the amortized cost of this and other recent SDC studies, by forecasted annual SDC revenues for all services. The resulting recommended SDC is provided in Table III-2 below.

**Table III-2  
 Recommended Water SDC**

Water Utility Reimbursement Fee		\$	492
Water Utility Improvement Fee		\$	409
SDC Subtotal		\$	902
Administrative Fee	7.66%	\$	69
<b>Total System Development Charge per M.E.:</b>		<b>\$</b>	<b>971</b>

The charges would be applied as follows, by meter size.

**Table III-3  
Applied Water SDC**

<b>Meter Size</b>	<b>Meter Flow Factor *</b>	<b>TOTAL</b>
5/8" x 3/4"	1.00	\$ 971
3/4" x 3/4"	1.50	1,456
1"	2.50	2,427
1.5"	5.00	4,853
2"	8.00	7,765
3"	16.00	15,531
4"	25.00	24,267
6"	50.00	48,534
8"	80.00	77,655
10"	115.00	111,629
12"	225.00	218,405

\* Assumes a base meter of 5/8 x 3/4

## IV. Stormwater

The City currently charges a Stormwater SDC of \$473 per equivalent surface unit (ESU<sup>2</sup>) of impervious surface area. Impervious surface area is an accepted, and defensible measure of contribution of runoff and associated use of the stormwater system. The proposed charge was also calculated using impervious surface area as the basis for recovery.

The calculation of the proposed SDC is summarized below and provided in detail in Appendix A.

### A. Capacity Basis

The City currently serves 13,986 equivalent surface units, and is expected to serve 15,550 ESUs at buildout – as projected in the March 2005 Surface Water Master Plan Update. This represents growth of 1,564 ESUs to buildout.

A summary of this customer information is provided in Table IV-1 below.

**Table IV-1**  
**Stormwater SDC Capacity Basis**

Description	Number
Existing Customer Base (ESUs)	13,986
Projected Growth to Buildout (ESUs)	1,564
Total Customer Base at Buildout (ESUs)	15,550

### B. Reimbursement Fee Calculation

In order to estimate the cost of unused capacity in the existing stormwater system, the numerator in the reimbursement fee calculation, and calculate the fee, the following approach was taken.

- Using current plant-in-service asset records provided by the City, the original cost of utility plant-in-service was compiled and adjusted as follows:
  - The original cost of the stormwater plant-in-service totaled \$6,073,230;
  - Past contributions in aid of construction, \$1,923,984, were deducted;
  - There was no outstanding debt, which would otherwise be a deduction against the cost basis, for the stormwater utility.
- It was assumed that the existing stormwater system has unused capacity available to meet the needs of growth to buildout, or 10.06%. A proportionate share of eligible existing system costs was assumed to represent unused capacity. The resulting total of \$417,221 was the reimbursement fee cost basis.
- Dividing the reimbursement fee cost basis by the 1,564 ESUs of growth projected to buildout yielded a reimbursement fee of \$267 per ESU.

---

<sup>2</sup> One ESU is equal to 2,706 square feet of impervious surface area.

**C. Improvement Fee Calculation**

The following approach was taken to determine the cost of capacity-increasing capital improvements, the numerator in the improvement fee calculation, and calculate the fee.

- Using the list originally compiled by City staff and URS Corporation as part of the 2005 Master Plan Update, and the current input of City staff, the project team updated the stormwater project list to account for completed projects and cost changes. This total was \$10,269,460.
- There was no grant funding or expected contributions-in-aid-of construction to be deducted from the gross improvement fee cost basis. Next, using information developed for the 2005 study, City staff and the consultant team identified the growth-related portion of each project, by projecting the area to be developed within the area to be served by each project. The result, \$1,186,224, was the improvement fee cost basis.
- The improvement fee was then calculated as the improvement fee cost basis divided by forecasted growth in ESUs (1,564). The resulting improvement fee was \$759 per ESU.

**D. Recommended System Development Charge**

The recommended stormwater SDC is the sum of the reimbursement fee and the improvement fee, adjusted by an administrative cost recovery factor of 7.66%. The administrative cost recovery factor was derived by dividing annual SDC program accounting and administrative costs, including the amortized cost of this study, by forecasted annual SDC revenues for all services. The resulting recommended SDC is provided in Table IV-2 below.

**Table IV-2  
 Recommended Stormwater SDC**

Stormwater Utility Reimbursement Fee		\$	267
Stormwater Utility Improvement Fee		\$	759
SDC Subtotal		\$	1,025
Administrative Fee	7.66%	\$	79
<b>Total System Development Charge per E.S.U.:</b>		<b>\$</b>	<b>1,104</b>

## V. Conclusion

The City of Milwaukie proposed system development charges, to be paid by new development at permitting, are shown in Table V-1 below:

**Table V-1  
Proposed SDCs**

<b>Service</b>	<b>Existing SDC</b>	<b>Proposed SDC</b>	<b>Basis</b>
<b>Water</b>	<b>\$1,095.00</b>	<b>\$971.00</b>	per Meter Equivalent
<b>Stormwater</b>	<b>\$473.00</b>	<b>\$1,104.00</b>	per Equivalent Surface Unit





**Appendix A**  
**Technical Analysis**



**City of Milwaukee**  
**Water System Development Fee Analysis**  
**SDC Calculation**

DRAFT

**"Universal" System Development Charge - applied to all customers regardless of class**

Allocation of System Capacity

Existing Customer Base (MEs)	9,111
Maximum Customer Base (MEs)	<u>16,225</u>

Growth's Share as Percentage of Buildout 44%

Allocation of System Assets (1)

	Original Cost	% Unused Capacity	Unused Capacity
Storage	\$ 2,004,975	0%	\$ -
Transmission	8,301,388	44%	3,639,839
Pump Station	198,182	44%	86,895
Source	600,881	0%	-
Other	284,657	44%	124,811
Recently Completed Projects	1,174,562	44%	515,000
<b>Total</b>	<b>\$ 12,764,646</b>	<b>34%</b>	<b>\$ 4,366,646</b>

Non-Allocable Costs

	Original Cost	% Unused Capacity	Unused Capacity
Outstanding Debt Principal (2)	\$ 565,000	34%	\$ 193,276
Cash to be Net out of Debt Principal (3)	-	34%	-
Contributions in aid of Construction (4)	1,962,427	34%	\$ 671,310
	<b>\$ 2,527,427</b>		<b>\$ 864,586</b>

Allocation of Existing Plant in Service

Cost of Available System Assets	\$ 4,366,646
less: Non-Allocable Costs	<u>(864,585)</u>

**Net Existing Plant-in-Service Allocable to Growth** **\$ 3,501,960**

Allocation of Capital Improvement Program

Capital Improvement Program	\$ 7,331,577
less: Improvements Allocable to Existing Customers	(4,419,104)
less: Expected Developer CIAC	-
less: Grants	<u>                  </u>

**Net Capital Improvement Costs Allocable to Growth** **\$ 2,912,472**

Water Utility Reimbursement Fee	\$ 492
Water Utility Improvement Fee	\$ 409
SDC Subtotal	\$ 902
Administrative Fee <span style="float: right; border: 1px solid black; padding: 2px;">7.66%</span>	<u>\$ 69</u>

**Total System Development Charge per M.E.:** **\$ 971**

(1) Fixed Asset Schedule provided by the City.  
 (2) Outstanding debt principal as of the fiscal year ending June 30, 2005  
 (3) Cash from June 30, 2005 CAFR p. 8.  
 (4) Contributed Capital from June 30, 2001 CAFR p. 34

**"Universal" Water SDC by Meter Size**

base meter size: 1

GFC to be charged to all customers regardless of class

1 = 5/8 x 3/4

2 = 3/4 x 3/4

Meter Size	Meter Flow Factor *	TOTAL
5/8" x 3/4"	1.00	\$ 971
3/4" x 3/4"	1.50	1,456
1"	2.50	2,427
1.5"	5.00	4,853
2"	8.00	7,765
3"	16.00	15,531
4"	25.00	24,267
6"	50.00	48,534
8"	80.00	77,655
10"	115.00	111,629
12"	225.00	218,405

\* Assumes a base meter of 5/8 x 3/4



**City of Milwaukee  
Water System Development Fee Analysis  
Customer Base**

DRAFT

**WATER**

	Current Utilization			Projected Growth			Utilization at Buildout		
	Number of Meters	Meter Fbw Factor	Meter Equivalents	Number of Meters	Meter Fbw Factor	Meter Equivalents	Number of Meters	Meter Fbw Factor	Meter Equivalents
1	5,981	1.0	5,981	4,670	1.0	4,670	10,652	1.0	10,652
2	253	2.5	632	197	2.5	493	450	2.5	1,125
3	89	5.0	443	69	5.0	345	158	5.0	789
4	151	8.0	1,208	118	8.0	943	269	8.0	2,152
5	16	16.0	258	13	16.0	201	29	16.0	459
6	17	25.0	428	13	25.0	334	30	25.0	762
7	1	50.0	50	1	50.0	39	2	50.0	90
8	111	1.0	111	86	1.0	86	197	1.0	197
9	-	0.0	-	-	0.0	-	-	0.0	-
Totals	6,619		9,111	5,168		7,114	11,787		16,225

Current Utilization: 2,190,000 gallons per day  
 Utilization at Buildout: 3,900,000 gallons per day



**City of Milwaukee**  
**Water System Development Fee Analysis**  
**Customer Statistics**

DRAFT

Annual Growth Rate 0.34%  
 Two Years of Cumulative Growth 0.68%

Existing System Capacity (1) 2,190,000 gallons per day MFEs 9,111  
 Buildout Demand (1) 3,900,000 gallons per day 16,225  
 (1) per MSA

Customer Data as of 2003					2005		
Meter Count Billing 1	Meter Count Billing 2	Total Meter Count	Meter Flow Factor	Meter Flow Equivalents	Meter Equivalents		
00	No meter	9	9	18	0.0	0	0
01	5/8"	2	13	15	1.0	15	15
02	5/8" x 3/4"	2,890	2,955	5,845	1.0	5,845	5,885
03	1"	194	57	251	2.5	628	632
04	1 1/2"	69	19	88	5.0	440	443
05	2"	124	26	150	8.0	1,200	1,208
06	3"	12	1	13	16.0	208	209
07	4"		2	2	25.0	50	50
08	6"		1	1	50.0	50	50
20	Low Income Rate	80	1	81	1.0	81	82
30	Deduct Meter	25	92	117	0.0	0	0
40	Accumulated 4" Cons	5	10	15	25.0	375	378
50	Dual Meter - No Charge	7	1	8	0.0	0	0
60	Accumulated 3" Cons	2	1	3	16.0	48	48
502	2" Standby (4)	6	1	7	1.0	7	7
504	4" Standby (4)	24	7	31	1.0	31	31
506	6" Standby (4)	27	4	31	1.0	31	31
508	8" Standby (4)	20	8	28	1.0	28	28
510	10" Standby (4)	10		10	1.0	10	10
512	12" Standby (4)	2	1	3	1.0	3	3
		<b>3508</b>	<b>3209</b>	<b>6717</b>		<b>9,050</b>	<b>9,111</b>

(3) Customer Data provided by the City

(4) Standby Meters are assumed to be equivalent to one 5/8" x 3/4" meter



**City of Milwaukee**  
**Water System Development Fee Analysis**  
**Outstanding Debt Service**

DRAFT

		Outstanding Debt Principal	Interest Rate	Interest	Principal	Total Debt Service	Remaining Principal
15-Oct-97	1997	\$ 1,235,000.00	3.75%	\$ 30,352.50		\$ 30,352.50	\$ 1,235,000.00
15-Apr-98	1998	1,235,000.00	3.75%	30,352.50	70,000.00	100,352.50	1,165,000.00
15-Oct-98		1,165,000.00	4.00%	29,040.00		29,040.00	1,165,000.00
15-Apr-99	1999	1,165,000.00	4.00%	29,040.00	75,000.00	104,040.00	1,090,000.00
15-Oct-99		1,090,000.00	4.25%	27,540.00		27,540.00	1,090,000.00
15-Apr-00	2000	1,090,000.00	4.25%	27,540.00	80,000.00	107,540.00	1,010,000.00
15-Oct-00		1,010,000.00	4.50%	25,840.00		25,840.00	1,010,000.00
15-Apr-01	2001	1,010,000.00	4.50%	25,840.00	80,000.00	105,840.00	930,000.00
15-Oct-01		930,000.00	4.70%	24,040.00		24,040.00	930,000.00
15-Apr-02	2002	930,000.00	4.70%	24,040.00	85,000.00	109,040.00	845,000.00
15-Oct-02		845,000.00	4.80%	22,042.50		22,042.50	845,000.00
15-Apr-03	2003	845,000.00	4.80%	22,042.50	90,000.00	112,042.50	755,000.00
15-Oct-03		755,000.00	4.90%	19,882.50		19,882.50	755,000.00
15-Apr-04	2004	755,000.00	4.90%	19,882.50	95,000.00	114,882.50	660,000.00
15-Oct-04		660,000.00	5.00%	17,555.00		17,555.00	660,000.00
15-Apr-05	2005	660,000.00	5.00%	17,555.00	95,000.00	112,555.00	565,000.00
15-Oct-05		565,000.00	5.10%	15,180.00		15,180.00	565,000.00
15-Apr-06	2006	565,000.00	5.10%	15,180.00	100,000.00	115,180.00	465,000.00
15-Oct-06		465,000.00	5.50%	12,630.00		12,630.00	465,000.00
15-Apr-07	2007	465,000.00	5.50%	12,630.00	105,000.00	117,630.00	360,000.00
15-Oct-07		360,000.00	5.50%	9,900.00		9,900.00	360,000.00
15-Apr-08	2008	360,000.00	5.50%	9,900.00	115,000.00	124,900.00	245,000.00
15-Oct-08		245,000.00	5.50%	6,737.50		6,737.50	245,000.00
15-Apr-09	2009	245,000.00	5.50%	6,737.50	120,000.00	126,737.50	125,000.00
15-Oct-09		125,000.00	5.50%	3,437.50		3,437.50	125,000.00
15-Apr-10	2010	125,000.00	5.50%	3,437.50	125,000.00	128,437.50	-
				\$ 488,355.00	\$ 1,235,000.00	\$ 1,723,355.00	

Current Year:	Total Outstanding Principal
2005	\$ 565,000



**City of Milwaukee**  
**Water System Development Fee Analysis**  
**System Assets**  
**DRAFT**

Useful Life 50  
 Current Year 2005  
 Annual Inflation 3%

Mains	Date	Original Cost	Depreciated Value	Replacement less Depreciation
Underground Water Lines	1930 1/1/1930	68,599.00	- \$	-
Underground Water Lines	1934 1/1/1934	5,250.00	- \$	-
Underground Water Lines	1936 1/1/1936	7,357.00	- \$	-
Underground Water Lines	1937 1/1/1937	12,498.00	- \$	-
Underground Water Lines	1940 1/1/1940	8,550.00	- \$	-
Underground Water Lines	1950 1/1/1950	96,073.00	- \$	-
Underground Water Lines	1952 1/1/1952	63,949.00	- \$	-
Underground Water Lines	1953 1/1/1953	21,253.00	- \$	-
Underground Water Lines	1953 1/1/1953	276,343.00	- \$	-
Underground Water Lines	1955 1/1/1955	43,632.00	- \$	-
Underground Water Lines	1956 1/1/1956	20,506.00	410.12 \$	1,745.56
Underground Water Lines	1957 1/1/1957	26,694.00	1,067.76 \$	4,412.25
Underground Water Lines	1958 1/1/1958	56,003.00	3,360.18 \$	13,480.69
Underground Water Lines	1959 1/1/1959	93,571.00	7,485.68 \$	29,157.05
Underground Water Lines	1960 1/1/1960	46,903.00	4,890.30 \$	18,493.89
Underground Water Lines	1961 1/1/1961	25,354.00	3,042.48 \$	11,170.32
Underground Water Lines	1962 1/1/1962	142,967.00	20,015.38 \$	71,345.16
Underground Water Lines	1964 1/1/1964	46,576.00	8,383.68 \$	28,168.32
Underground Water Lines	1965 1/1/1965	84,871.00	16,974.20 \$	55,370.48
Underground Water Lines	1966 1/1/1966	111,023.00	24,425.06 \$	77,354.82
Underground Water Lines	1967 1/1/1967	139,794.00	33,550.56 \$	103,160.71
Underground Water Lines	1968 1/1/1968	23,655.00	6,150.30 \$	18,360.04
Underground Water Lines	1969 1/1/1969	676,999.00	189,559.72 \$	549,396.83
Underground Water Lines	1970 1/1/1970	814,391.00	244,374.30 \$	687,635.67
Underground Water Lines	1972 1/1/1972	10,512.00	3,574.08 \$	9,479.66
Underground Water Lines	1973 1/1/1973	16,896.00	6,082.56 \$	15,663.10
Underground Water Lines	1974 1/1/1974	44,127.00	16,768.26 \$	41,922.00
Underground Water Lines	1975 1/1/1975	293,402.00	117,360.80 \$	284,865.47
Underground Water Lines	1976 1/1/1976	38,122.00	16,011.24 \$	37,731.54
Underground Water Lines	1977 1/1/1977	55,820.00	24,560.80 \$	56,193.33
Underground Water Lines	1978 1/1/1978	77,861.00	35,816.06 \$	79,557.82
Underground Water Lines	1979 1/1/1979	222,225.00	106,668.00 \$	230,039.28
Underground Water Lines	1980 1/1/1980	123,439.00	61,719.50 \$	129,226.93
Underground Water Lines	1981 1/1/1981	114,107.00	59,335.64 \$	120,617.14
Underground Water Lines	1982 1/1/1982	157,871.00	85,250.34 \$	168,248.92
Underground Water Lines	1983 1/1/1983	327,559.00	183,433.04 \$	351,476.67
Underground Water Lines	1984 1/1/1984	180,781.00	104,852.98 \$	195,057.43
Underground Water Lines	1985 1/1/1985	87,009.00	52,205.40 \$	94,288.76
Underground Water Lines	1986 1/1/1986	171,977.00	106,625.74 \$	186,968.88
Underground Water Lines	1988 1/1/1988	8,384.00	5,533.44 \$	9,145.93
Underground Water Lines	1989 1/1/1989	106,889.00	72,684.52 \$	116,637.32
Underground Water Lines	1990 1/1/1990	117,990.00	82,593.00 \$	128,611.20
Underground Water Lines	1991 1/1/1991	102,131.00	73,534.32 \$	111,227.26
Underground Water Lines	1992 1/1/1992	125,163.00	92,620.62 \$	136,016.50
Underground Water Lines	1993 1/1/1993	39,722.00	30,188.72 \$	43,041.90
Underground Water Lines	1994 1/1/1994	154,693.00	120,660.54 \$	167,072.41
Underground Water Lines	1998 1/1/1998	353,813.21	304,279.36 \$	374,225.23
Underground Water Lines	1999 1/1/1999	358,948.58	315,874.75 \$	377,170.97
Underground Water Lines	1996 1/1/1996	141,068.65	115,676.29 \$	150,931.33
Underground Water Lines	1997 1/1/1997	79,128.00	66,467.52 \$	84,199.07
Underground Water Lines	1998 1/1/1998	230,993.00	203,814.02 \$	250,665.54
Underground Water Lines	1999 1/1/1999	398,469.00	350,652.72 \$	418,697.69
Underground Water Lines	2000 1/1/2000	327,306.65	294,575.99 \$	341,494.30
Underground Water Lines	2001 1/1/2001	446,090.92	410,403.65 \$	461,912.92
Underground Water Lines	2002 1/1/2002	172,103.98	161,777.74 \$	176,778.01
<b>Total Mains</b>		<b>7,995,605.04</b>		<b>7,018,433.17</b>
<b>Other Projects</b>				
Concrete Liner for Water Reservoir #1	1996 2/2/1996	77,600.00	63,632.00 \$	83,025.33
Upgrade Water Reservoir #3	1995 11/28/1995	207,056.57	165,645.26 \$	222,613.37

<b>Total Other Projects</b>		<b>284,666.67</b>		<b>306,638.70</b>
-----------------------------	--	-------------------	--	-------------------

**Wells**

Well #2	1936	7,100.00	-	\$ -
Well #3	1946	11,900.00	-	\$ -
Well #4	1960	28,200.00	2,820.00	\$ 10,664.10
Well #5	1963	30,900.00	4,944.00	\$ 17,109.68
Well #6	1980	459,332.00	229,666.00	\$ 480,869.60
Well #7	1982	131,143.96	70,017.74	\$ 139,704.90
Well #8	1985	132,305.00	79,383.00	\$ 143,374.53

<b>Total Wells</b>		<b>800,880.96</b>		<b>791,782.84</b>
--------------------	--	-------------------	--	-------------------

**Storage**

1.5 Mill Gal Concrete Reservoir	1948	89,006.00	-	\$ -
1.5 Mill Gal Elevated Tank	1962	320,684.00	44,895.76	\$ 160,031.69
3 Mill Gal Steel Reservoir	1979	392,047.00	188,182.58	\$ 405,832.87

<b>Total Storage</b>		<b>801,737.00</b>		<b>565,864.56</b>
----------------------	--	-------------------	--	-------------------

**Pump Stations**

Lava Dr. Pump Station	1977	26,914.12	11,842.21	\$ 27,094.13
Standby 3rd Pressure Pump Station	1992	171,268.10	126,738.39	\$ 186,119.60

<b>Total Pump Stations</b>		<b>198,182.22</b>		<b>213,213.73</b>
----------------------------	--	-------------------	--	-------------------

**System Intertie**

Clackamas River Harmony Rd.	1998	133,352.00	114,682.72	\$ 141,045.28
Portland Johnson Cr. Blv & Brookside	2001	172,431.00	158,636.52	\$ 178,546.80

<b>Total System Interties</b>		<b>305,783.00</b>		<b>319,592.08</b>
-------------------------------	--	-------------------	--	-------------------

**Pack Tower**

Wells 2,3,5 40th & Harvey	1991	541,498.00	389,878.56	\$ 589,726.30
Wells 4,7 Monroe & Oak	1991	661,740.00	476,452.80	\$ 720,677.61

<b>Total Pack Tower</b>		<b>1,203,238.00</b>		<b>1,310,403.91</b>
-------------------------	--	---------------------	--	---------------------

**Projects Completed from the Previous CIP**

Sand Filter - Wells 5 & 7	2005	-	-	\$ -
Seismic Upgrade of Elevated Tank	2005	287,505.00	287,505.00	\$ 287,505.00
Logus Rd. (43rd to Stanley)	2005	289,740.00	289,740.00	\$ 289,740.00
Lake Rd. Phase 1	2005	377,354.00	377,354.00	\$ 377,354.00
Lava Drive Pump Station	2005	219,963.00	219,963.00	\$ 219,963.00
<b>Total of Completed Projects</b>		<b>1,174,562.00</b>		<b>1,174,562.00</b>

		<b>Original Cost</b>		<b>Replacement less Depreciation</b>
<b>Total Water Assets</b>		<b>\$ 12,764,645</b>		<b>\$ 11,699,491</b>

City of Milwaukie/FCS Group  
CIP/Master Plan Cost Spreadsheet

No. Listing <sup>1</sup>	Project Year	Project Number or Priority	Description <sup>1</sup>	Capacity	Oversize Capacity <sup>2</sup>	Replacing	8/00 Project Cost <sup>3</sup> (\$1000's)	6/05 Project Cost <sup>4</sup> (\$1000's)	6/05 Oversize Cost <sup>5</sup> (\$1000's)
<b>CIP:</b>									
A	CIP	2003-04	161C Harlow St. 56th to Stanley	6-inch	0-inch	4-inch		30.0	0.0
B	CIP	2003-04	118C Sand Filler - Wells 5 & 7	2.3 mgd	-	new		0.0	0.0
C	CIP	2003-04	117C Seismic Upgrade of Elevated Tank	1.5 mg	-	-		0.0	0.0
D	CIP	2003-04	161D Logans Rd. 43rd to Stanley	8-inch	2-inch	6-inch		0.0	0.0
E	CIP	2003-05	076C Well 8 Rehabilitation	0.6 mgd	-	-		172.5	0.0
F	CIP	2003-05	127C Lake Rd. (Main to Oatfield)	8-inch	2-inch	6-inch		252.0	110.3
G	CIP	2004-05	160C Clatsop St. & McLoughlin Blvd.	12-inch	6-inch	6-inch		200.0	150.0
H1	CIP	2004-06	123C Rio Vista & Waymire	6-inch	0-inch	4-inch		211.0	0.0
H2	CIP	2004-06	123C International Way	12-inch	6-inch	new		127.0	95.3
I	CIP	2004-06	129C 17th Ave. & Ochoco	6-inch	0-inch	4-inch		220.0	165.0
J	CIP	2004-06	128C 43rd Ave. (Ritodessa to King)	10-inch	4-inch	new		52.0	0.0
K	CIP	2004-06	126C 40th Ave. & Howe St. (Harvey to 43rd)	3.0 mgd	2.8 mgd	new		132.0	123.2
L	CIP	2005-06	078C CRW Intertie - Phase 1	6-inch	0-inch	4-inch		80.0	0.0
M	CIP	2005-06	119C 54th Pl. & Woodhaven St.	6-inch	0-inch	4-inch		82.0	0.0
N	CIP	2005-07	131C 38th Ave. & Drake St.	6-inch	0-inch	4-inch		87.5	0.0
O	CIP	2005-07	130C 55th Ave. (King to Montrose)	6-inch	0-inch	4-inch		160.0	0.0
P	CIP	2005-07	132C 37th Ave. (Harvey to King)	6-inch	0-inch	4-inch		41.2	0.0
Q	CIP	2006-08	156C Lewellyn St. (32nd to 34th)	6-inch	0-inch	4-inch		52.0	0.0
R	CIP	2006-08	157C Balfour St. (29th to 32nd)	6-inch	0-inch	4-inch		52.0	0.0
S	CIP	2006-08	157C Malcolm St. (29th to 32nd)	6-inch	0-inch	4-inch		52.0	0.0
T	CIP	2006-08	158C Olsen St. (28th to 32nd)	6-inch	0-inch	4-inch		38.0	0.0
U	CIP	2006-08	156C 44th Ave., Howe Ln. and 45th Ave.	1.5 mg	-	new		75.0	32.9
V	CIP	2007-08	076C Storage Tank Design	125 gpm	0 gpm	125 gpm		0.0	0.0
W	CIP	2003-04	Lava Drive Pump Station	-	-	-		30.0	6.0
X	CIP	2003-04	SDC Study	-	-	-		349.0	153.0
Y	CIP	2003-04	1004 Operations Building	-	-	-		3,000.0	1,315.4
Z	MP	2001-02	1785 Well No 8	-	-	-		50.0	26.3
AA	MP	2006-11	Storage Tank	-	-	-		5,736.9	2,292.1
<b>MP Interties:</b>									
Z	MP	2001-02	1 CRW Intertie - Phase 2	3.0 mgd	2.8 mgd	new	201.4	238.1	222.3
AA	MP	2006-11	2 Oak Lodge Emergency Intertie	3.0 mgd	1.1 mgd	new	185.0	218.8	95.9
							<b>Subtotal, Interties</b>	<b>386.4</b>	<b>318.2</b>
<b>MP Pipelines:</b>									
DD	MP	2003-04	1 P006 - Ochoco from 17th to McLoughlin	12-inch	6-inch	new	49.3	58.3	25.6
EE	MP	2003-05	2 P007 - Shel, Guilford and Jaffield from Lake	12-inch	6-inch	10-inch	299.3	353.9	155.2
FF	MP	2004-05	2 P008 - Intersection of 43th and Howe	8-inch	8-inch	new	.9	2.2	2.2
GG	MP	2004-05	2 P009 - Intersection of 44th and Howe	8-inch	8-inch	new	.1	1.3	1.3
FH	MP	2004-05	2 P011 - Intersections of 38th/Harvey and 37th/Harvey	8-inch	8-inch	new	.5	1.8	1.8
II	MP	2004-05	2 P013 - Intersection of Howe and 42nd	12-inch	12-inch	8-inch	.1	1.3	1.3
JJ	MP	2004-05	2 P014 - 42nd from Howe to Olsen	10-inch	10-inch	8-inch	63.3	77.2	77.2
KK	MP	2004-05	2 P015 - Intersection of 42nd and Covell	12-inch	12-inch	new	.1	1.3	1.3
LL	MP	2001-11	Small Diameter Pipeline Replacements, less CIP	6-inch	0-inch	4-inch	446.2	517.6	0.0
							<b>Subtotal, Pipelines</b>	<b>861.8</b>	<b>1,015.0</b>
<b>MP Miscellaneous:</b>									
MM	MP	2016-11	Master Plan Update	-	-	-		70.0	36.3
							<b>Subtotal, Miscellaneous</b>	<b>70.0</b>	<b>36.3</b>
							<b>TOTAL CIP AND MASTER PLAN CAPITAL IMPROVEMENT PROJECTS</b>	<b>1,321.2</b>	<b>7,311.6</b>
							<b>Subtotal, 6/05 Oversize</b>	<b>1,321.2</b>	<b>2,912.5</b>

Footnotes:  
 1. MP = 2001 Master Plan, CIP = 2006-2011 Capital Improvement Plan, January 2006.  
 2. All pipes over 6 inches are assumed to be oversized for growth.  
 3. September 2000 project costs from City of Milwaukie Water System Master Plan (Seattle ENR CCI of 7153).  
 4. Current Estimates or Derived from Seattle ENR CCI ratio of September 2000(7153) to December 2005 (8668.55).  
 5. Oversize costs are based on parallel oversized capacities listed, or minimum allocation of future water demand (3.9 mgd) compared to current water demand (2.5 mgd).  
 6. Pipe sized for current and future fire flow. Oversize allocation based on future water demand (3.9 mgd) compared to current water demand (2.5 mgd).  
 7. Pipe required only to accommodate growth. Oversize allocation is 100% of the project cost.



**City of Milwaukee**  
**System Development Fee Analysis**  
**Administrative Costs**

DRAFT

**Net Annual Administrative Cost Related to SDCs**

Annual Administration Cost	
Engineering/Public Works (1)	\$ 4,985
Finance (1)	<u>277</u>
 Total Administrative Cost	 \$ 5,262
 Cost of SDC Analysis Over 5 Years (2)	 <u>\$ 6,000</u>
 Net Annual SDC Administrative Cost:	 <b>\$ 11,262</b>

**Estimated Annual Proposed SDC Revenues before Admin. Costs**

Water (based on calculated charges)	\$ 47,514
Sewer (based on existing charge)	\$ 49,437
Storm Sewer (based on calculated charges)	<u>\$ 50,108</u>
 Total Annual Estimated Revenue	 <b>\$ 147,059</b>

**Administration Charge Factor**

<b>7.66%</b>
--------------

(Net Admin Cost / Annual Estimated Revenue)

- (1) Staff estimate based on 144 engineering hours @ \$ 34.62 / hour  
8 finance hours @ \$ 34.62 / hour
- (2) Study cost: \$ 30,000



**City of Milwaukee**  
**Storm Sewer System Development Fee Analysis**  
**SDC Calculation**

DRAFT

**"Universal" System Development Charge** - applied to all customers regardless of class

Allocation of Existing Plant in Service

Cost of Plant-in-Service		
Total Assets (1)	\$ 6,073,230	
less: Contributions in aid of Construction (CIAC) (2)	<u>(1,923,984)</u>	
Net Allocable Plant-in-Service	\$ 4,149,246	
Existing Customer Base (ESU)	13,986	
Maximum Customer Base (ESU) (3)	<u>15,550</u>	
Growth's Share as Percentage of Buildout	<table border="1" style="display: inline-table;"><tr><td style="text-align: center;">10.00%</td></tr></table>	10.00%
10.00%		
<hr/>		
Net Existing Plant-in-Service Allocable to Growth	<u>\$ 417,221</u>	

Allocation of Capital Improvement Program

Capital Improvement Program	\$ 10,269,460
less: Expected Developer CIAC	-
less: Grants	-
less: Non-growth related capital	<u>(9,083,235)</u>
Net Allocable CIP Costs	\$ 1,186,224
<hr/>	
Net Capital Improvement Costs Allocable to Growth	<u>\$ 1,186,224</u>

Stormwater Utility Reimbursement Fee	\$ 267	
Stormwater Utility Improvement Fee	<u>\$ 759</u>	
SDC Subtotal	\$ 1,025	
Administrative Fee <table border="1" style="display: inline-table;"><tr><td style="text-align: center;">7.66%</td></tr></table>	7.66%	<u>\$ 79</u>
7.66%		

**Total System Development Charge per E.S.U.: \$ 1,104**

(1) Fixed Asset Schedule provide by the City and updated for completed 2005 capital projects.

(2) Contributed Capital from June 30, 2001 CAFR p. 35

(3) Surface Water Master Plan Update, March 2005.



**City of Milwaukee**  
**Storm Sewer System Development Fee Analysis**  
*Customer Data*  
**DRAFT**

DRAFT

Average Annual Growth Rate ==> 0.34%

	As of 2004 Update		2005 Estimate w/ 0.34% Annual Growth Rate	
	<u>Accounts</u>	<u>Units</u>	<u>Accounts</u>	<u>Units</u>
<b>Zone 1 (Billing Cycle)</b>				
Storm Sewer No Charge	278	0	279	0
Storm - Res/Duplex	2931	3064	2941	3074
Storm - Low Income	80	80	80	80
Storm - Impervious (Commercial)	278	5853	279	5873
<b>Zone 2 (Billing Cycle)</b>				
Storm Sewer No Charge	56	0	56	0
Storm - Res/Duplex	2996	3029	3006	3039
Storm - Low Income	91	92	91	92
Storm - Impervious (Commercial)	83	1821	83	1827
<b>Grand Total</b>				
Storm Sewer No Charge	334	0	335	0
Storm - Res/Duplex	5927	6093	5947	6114
Storm - Low Income	171	172	172	173
Storm - Impervious (Commercial)	361	7674	362	7700
<b>Total</b>	<b>6793</b>	<b>13939</b>	<b>6816</b>	<b>13986</b>

Units at Build-Out (1) 15,550

(1) Surface Water Master Plan Update, March 2005.



**City of Milwaukee**  
**Storm Sewer System Development Fee Analysis**  
**System Assets**  
**DRAFT**

DRAFT

Useful Life 50  
 Current Year 2005  
 Annual Inflation 3%

Mains	Date	Original Cost	Depreciated Value	Replacement less Depreciation
Underground Storm Lines	1949	12,922.00	-	\$ -
Underground Storm Lines	1957	11,572.00	462.88	\$ 1,912.74
Underground Storm Lines	1959	5,520.00	441.60	\$ 1,720.05
Underground Storm Lines	1960	105,310.00	10,531.00	\$ 39,823.99
Underground Storm Lines	1961	38,400.00	4,608.00	\$ 16,918.05
Underground Storm Lines	1962	6,690.00	936.60	\$ 3,338.53
Underground Storm Lines	1964	19,510.00	3,511.80	\$ 11,799.29
Underground Storm Lines	1965	31,213.00	6,242.60	\$ 20,363.60
Underground Storm Lines	1966	45,242.00	9,953.24	\$ 31,522.18
Underground Storm Lines	1967	96,629.00	20,789.52	\$ 63,929.27
Underground Storm Lines	1968	44,343.00	11,529.18	\$ 34,417.22
Underground Storm Lines	1969	21,999.00	6,159.72	\$ 17,852.58
Underground Storm Lines	1970	20,821.00	6,246.30	\$ 17,576.23
Underground Storm Lines	1971	30,024.00	9,607.68	\$ 26,247.27
Underground Storm Lines	1972	20,070.00	6,823.80	\$ 18,099.01
Underground Storm Lines	1973	21,666.00	7,799.76	\$ 20,085.03
Underground Storm Lines	1974	5,820.00	2,211.60	\$ 5,529.18
Underground Storm Lines	1975	189,153.00	75,661.20	\$ 183,649.59
Underground Storm Lines	1976	109,170.00	45,851.40	\$ 108,051.83
Underground Storm Lines	1977	177,634.00	78,158.96	\$ 178,822.05
Underground Storm Lines	1978	113,050.00	52,003.00	\$ 115,513.69
Underground Storm Lines	1979	100,089.00	48,042.72	\$ 103,608.51
Underground Storm Lines	1980	470,130.00	235,065.00	\$ 492,173.91
Underground Storm Lines	1981	32,970.00	17,144.40	\$ 34,851.04
Underground Storm Lines	1984	16,825.00	9,758.50	\$ 18,153.68
Underground Storm Lines	1985	25,714.00	15,428.40	\$ 27,865.41
Underground Storm Lines	1986	278,576.00	172,717.12	\$ 302,860.52
Underground Storm Lines	1990	111,780.00	78,246.00	\$ 121,904.72
Underground Storm Lines	1991	88,266.00	63,551.52	\$ 96,127.38
Underground Storm Lines	1992	9,747.00	7,212.78	\$ 10,592.21
Underground Storm Lines	1993	288,437.00	219,212.12	\$ 312,544.07
Underground Storm Lines	1994	230,423.00	179,729.94	\$ 248,788.27
Underground Storm Lines	1995	120,075.00	96,060.00	\$ 120,096.61
Underground Storm Lines	1998	197,363.95	169,733.00	\$ 208,750.18
Underground Storm Lines	1999	300,382.70	264,336.78	\$ 315,631.93
Underground Storm Lines	1996	265,622.76	217,810.66	\$ 284,193.51
Underground Storm Lines	1997	231,407.41	194,382.22	\$ 246,237.59
Underground Storm Lines	1998	5,560.00	4,781.60	\$ 5,880.76
Underground Storm Lines	1999	5,000.00	4,400.00	\$ 5,253.83
Underground Storm Lines	2000	5,500.00	4,950.00	\$ 5,738.41
Underground Storm Lines	2001	5,398.00	4,966.16	\$ 5,589.46
Underground Storm Lines	2002	24,000.00	22,560.00	\$ 24,651.97
Underground Storm Lines	2002	8,937.00	8,400.78	\$ 9,179.76
<b>Total Mains</b>		<b>3,938,955.82</b>		<b>3,624,307.30</b>

Other Assets	Date	Original Cost	Depreciated Value	Replacement less Depreciation
General Capital Projects	2000	24,677.00	22,209.30	\$ 25,746.67
Roswell Street & Storm	2001	203,853.00	187,544.76	\$ 211,083.28
Brookside Storm Improvements	2002	74,693.00	70,211.42	\$ 76,721.91
Vector Truck	2003	95,437.50	91,620.00	\$ 97,199.66
1/4 Standby Generator	1998	10,861.50	9,340.89	\$ 11,488.12
			-	\$ -
2 Drywells 47th and Harvey Wells	1998	18,260.00	15,703.60	\$ 19,313.45
	1997	15,488.29	13,010.16	\$ 16,480.89
42nd Ave Sidewalk Improvements	2001	60,181.00	55,366.52	\$ 62,315.51
Roswell Street & Storm Improvement	2001	98,494.00	90,614.48	\$ 101,987.40
Brookside Storm Improvements	2001	61,116.00	56,226.72	\$ 63,283.67
Brookside Storm Improvements	2001	29,254.00	26,922.00	\$ 30,301.94
IMS Software/GIS Systems	1996	12,318.75	10,101.38	\$ 13,180.00
			-	\$ -
Drywell	1998	16,625.00	14,297.50	\$ 17,584.12
Drywell	1999	9,705.00	8,540.40	\$ 10,197.68
Drywell	1999	10,294.00	9,058.72	\$ 10,816.59
Drywell	2000	10,000.00	9,000.00	\$ 10,433.47
Drywell	2001	10,100.00	9,292.00	\$ 10,458.23
Drywell	2002	12,000.00	11,280.00	\$ 12,325.96
Drywell	1989-1998-1988	160,000.00	108,800.00	\$ 174,562.06
Drywell	1979-1998-1978	70,000.00	33,600.00	\$ 72,461.47
Drywell	1969-1978-1968	120,000.00	33,600.00	\$ 97,382.15
Drywell	1959-1968-1958	90,000.00	7,200.00	\$ 28,044.31
			-	\$ -
Roswell Street & Storm Impr.	2002	10,000.00	9,400.00	\$ 10,271.63
40th and 43rd Storm Project	2002	119,905.66	112,711.32	\$ 123,162.70
<b>Total Other Assets</b>		<b>1,343,273.70</b>		<b>800,918.53</b>
<b>Projects Completed in 2005 &amp; Transferred from CIP List</b>				
Brookside Storm Improvements	2005	545,200.00	545,200.00	\$ 545,200.00
Meek St. and 32nd Ave. Pipe Improvements	2005	245,800.00	245,800.00	\$ 245,800.00
<b>Total 2005 Projects</b>		<b>791,000.00</b>		<b>791,000.00</b>
		<b>Original Cost</b>		<b>Replacement less Depreciation</b>
<b>Total Storm Sewer Assets</b>		<b>\$ 6,073,230</b>		<b>\$ 5,216,226</b>

Cost in Year:	
2004	2005
8165	8459

ENR CCI for Seattle:  
**Improvement Projects (Upgrades & Expansions)**

Rank	Description	Year	2004 Costs	2005 Costs	Area Served	Area to be developed	% Repair & Replacement	% Upgrade	% Expansion
1	Brookside Storm Improvements	2005	\$ -	\$ -	1250	12.5	0%	90%	13%
	Brookside Storm Improvements	2006	-	-	1250	12.5	0%	90%	13%
	Brookside Storm Improvements	2007	293,800	304,549	1250	12.5	0%	90%	13%
	Brookside Storm Improvements	2008	522,600	541,365	1250	12.5	0%	90%	13%
	Brookside Storm Improvements	2009	274,300	284,749	1250	12.5	0%	90%	13%
	Brookside Storm Improvements	2010	139,100	144,095	1250	12.5	0%	90%	13%
2	Meek St. and 32nd Ave. Pipe Improvements (Basin# JCA41)	2005	-	-	1436	21.9	0%	85%	15%
	Meek St. and 32nd Ave. Pipe Improvements (Basin# JCA41)	2006	245,800	254,626	1436	21.9	0%	85%	15%
	Meek St. and 32nd Ave. Pipe Improvements (Basin# JCA41)	2007	245,800	254,626	1436	21.9	0%	85%	15%
	Meek St. and 32nd Ave. Pipe Improvements (Basin# JCA41)	2008	243,200	251,532	1436	21.9	0%	85%	15%
	Meek St. and 32nd Ave. Pipe Improvements (Basin# JCA41)	2009	250,300	259,287	1436	21.9	0%	85%	15%
	Meek St. and 32nd Ave. Pipe Improvements (Basin# JCA41)	2010	240,400	249,032	1436	21.9	0%	85%	15%
	Meek St. and 32nd Ave. Pipe Improvements (Basin# JCA41)	2011	211,100	218,680	1436	21.9	0%	85%	15%
	Meek St. and 32nd Ave. Pipe Improvements (Basin# JCA41)	2012	174,500	180,766	1436	21.9	0%	85%	15%
3	SE Stanley Ave. Pipe Replacement (Basin# MSA20)	2011	216,700	224,481	78.8	11.9	0%	85%	15%
	SE Stanley Ave. Pipe Replacement (Basin# MSA20)	2012	240,600	249,239	78.8	7.9	0%	85%	15%
	SE Stanley Ave. Pipe Replacement (Basin# MSA20)	2013	238,600	247,167	78.8	7.9	0%	85%	15%
	SE Stanley Ave. Pipe Replacement (Basin# MSA20)	2014	383,100	396,656	78.8	7.9	0%	85%	15%
4	Plum and Apple Storm Improvements	2013	131,100	135,807	9.6	1.0	0%	85%	15%
5	Outfall to Mt. Scott Creek	2014	345,900	358,320	42.3	4.2	0%	90%	10%
6	SE King (Pump Station)	2015	273,900	283,735	27.7	2.8	0%	90%	10%
7	SE Lake Rd. Pipe Replacement	2015	344,500	356,870	130.9	13.1	0%	90%	10%
8	Washington St. and SE Lake Rd. Pipe Replacements	2016	314,000	325,275	130.9	13.1	0%	90%	10%
	Washington St. and SE Lake Rd. Pipe Replacements	2017	251,000	260,013	130.9	13.1	0%	90%	10%
	Washington St. and SE Lake Rd. Pipe Replacements	2018	249,800	258,769	130.9	13.1	0%	90%	10%
	Washington St. and SE Lake Rd. Pipe Replacements	2019	249,800	258,769	130.9	13.1	0%	90%	10%
	Washington St. and SE Lake Rd. Pipe Replacements	2020	249,800	258,769	130.9	13.1	0%	90%	10%
	Washington St. and SE Lake Rd. Pipe Replacements	2021	249,500	258,459	130.9	13.1	0%	90%	10%
	Washington St. and SE Lake Rd. Pipe Replacements	2022	227,900	236,083	130.9	13.1	0%	90%	10%
	Washington St. and SE Lake Rd. Pipe Replacements	2023	254,300	263,481	130.9	13.1	0%	90%	10%
	Washington St. and SE Lake Rd. Pipe Replacements	2024	254,300	263,481	130.9	13.1	0%	90%	10%
9	Washington St. and SE Lake Rd. Pipe Replacements	2025	263,300	272,754	130.9	13.1	0%	90%	10%
	Winsor Dr. Pipe Replacement	2013	61,900	64,123	60.9	6.1	0%	90%	10%
10	21st Ave. and SE Monroe St. Pipe Replacement	2016	309,700	320,820	19.0	1.9	0%	90%	10%
11	Femlock St. to Harmony Rd. Pipe Replacement	2017	172,900	179,108	116.3	11.6	0%	90%	10%
	Hemlock St. to Harmony Rd. Pipe Replacement	2018	224,300	232,354	116.3	11.6	0%	90%	10%
12	Lump Sum Water Quality Facility	2019	313,900	325,171	87.2	8.7	0%	90%	10%
	Lump Sum Water Quality Facility	2020	313,900	325,171	87.2	8.7	0%	90%	10%
13	Furnberg St. Pipe Replacement (Basin# MSA90)	2021	248,300	257,216	87.2	8.7	0%	85%	15%
14	Furnberg St. Pipe Replacement (Basin# MSA90)	2022	191,200	198,055	87.2	8.7	0%	85%	15%
15	16th Ave. Pipe Replacement	2023	365,400	378,520	28.1	2.9	0%	90%	10%
	SE Milport Rd. Pipe Replacement	2024	133,000	137,776	35.2	3.5	0%	90%	10%
<b>TOTAL</b>			<b>\$ 9,913,500</b>	<b>\$ 10,269,430</b>			<b>\$ -</b>	<b>\$ 9,083,435</b>	<b>\$ 1,86,224</b>
<b>Percentage Shares</b>			<b>96.53%</b>	<b>100.00%</b>			<b>0.00%</b>	<b>88.45%</b>	<b>11.55%</b>



**City of Milwaukee**  
**System Development Fee Analysis**  
**Administrative Costs**

DRAFT

**Net Annual Administrative Cost Related to SDCs**

Annual Administration Cost	
Engineering/Public Works (1)	\$ 4,985
Finance (1)	<u>277</u>
 Total Administrative Cost	 \$ 5,262
 Cost of SDC Analysis Over 5 Years (2)	 <u>\$ 6,000</u>
 Net Annual SDC Administrative Cost:	 \$ 11,262

**Estimated Annual Proposed SDC Revenues before Admin. Costs**

Water (based on calculated charges)	\$ 47,514
Sewer (based on existing charge)	\$ 49,437
Storm Sewer (based on calculated charges)	<u>\$ 50,108</u>
 Total Annual Estimated Revenue	 \$ 147,059

**Administration Charge Factor**

7.66%
-------

(Net Admin Cost / Annual Estimated Revenue)

- (1) Staff estimate based on 144 engineering hours @ \$ 34.62 / hour  
 0 finance hours @ \$ 34.62 / hour
- (2) Study cost: \$ 30,000

