

# J. WATER WORKS

## EXECUTIVE SUMMARY

**MISSION:** Maintain the highest quality of service while providing a safe, reliable, and aesthetically pleasing supply of water.

Ensure that water service is a key contributor in sustaining the economic prosperity of the City of Milwaukee, while protecting the quality of Milwaukee's environment.

**STRATEGIC ISSUES:** Maintain the ability to respond to the presence of chemical and biological threats in Lake Michigan.

Enhance the utility's finances by adding new customers without incurring major capital expenditures.

Improve customer service and satisfaction.

**INITIATIVES FOR 2002:** Continue to negotiate agreements to provide water service to new customers.

Continue implementation of organizational changes to achieve operational efficiencies.

Continue development of water quality controls.

## BACKGROUND

The Department of Public Works Water Works is a municipally owned water utility regulated by the State of Wisconsin Public Service Commission (PSC). Water from Lake Michigan is provided to approximately 840,000 customers through the operation of two water treatment and filtration plants, various pumping stations, storage facilities, and 1,946 miles of water mains. In 2000, Water Works treated and pumped 45-billion gallons of water.

The rates at which water is sold are regulated by the PSC. From September 1994 to August 1999, Rate Order 3720-WR-102 authorized a 7.25% rate of return on investment for the Water Works. On August 30, 1999, Rate Order 3720-WR-103 became effective and authorized the Water Works' <sup>a</sup> 4.5%

Table 1

MILWAUKEE WATER WORKS RATE OF RETURN				
	1998 Actual	1999 Actual	2000 Actual	2001 Estimate
<b>GROSS REVENUE</b>	\$54,206,025	\$55,142,772	\$62,102,777	\$63,000,000
Operating Expenses				
Operating Expenses	\$33,960,589	\$33,428,698	\$33,064,663	\$34,000,000
Depreciation	7,174,642	8,591,807	8,956,247	9,000,000
Taxes	7,975,218	8,122,413	9,276,712	9,500,000
<b>TOTAL OPERATING EXPENSES</b>	\$49,110,449	\$50,142,918	\$51,297,622	\$52,500,000
<b>NET OPERATING INCOME</b>	\$5,095,576	\$4,999,854	\$10,805,155	\$10,500,000
<b>RATE BASE</b>				
Utility Plant in Service	\$417,886,510	\$447,223,008	\$459,374,170	\$467,349,000
Materials and Supplies	2,397,427	2,704,613	2,180,318	2,400,000
Accumulated Depreciation	(103,393,161)	(109,596,680)	(117,975,776)	(125,238,000)
Contributions for Construction	(70,245,011)	(71,961,410)	(71,994,889)	(72,094,000)
<b>RATE BASE - End of Year</b>	\$246,645,765	\$268,369,531	\$271,583,823	\$272,417,000
<b>RATE BASE - Average Net Investment</b>	\$217,138,557	\$257,507,647	\$269,976,677	\$272,000,412
<b>RATE OF RETURN</b>	2.35%	1.94%	4.00%	3.86%
(Net Operating Income/Rate Base)				

rate of return. This equated to a 15% rate increase for residential customers. As shown in Table 1, the 2000 actual rate of return was 4.00%. Water Works estimates a return of 3.86% for 2001.

Decreases in the rate of return are the result of several factors. Revenues are decreasing, primarily because of declining consumption. In addition, expenses are increasing due to higher depreciation, debt service payments and taxes related to extensive capital expenses for water quality improvement projects.

In June 2001, a 3.4% rate increase was implemented. This increase was enacted under the PSC's Simplified Rate Case (SRC) Program. Under this program, rates

are allowed to be increased by an amount equivalent to the previous year's rate of inflation. An additional \$900,000 of revenue is expected for 2001, \$2.1 million is estimated for 2002 and years following. Water Works is also implementing a long-term strategy of reducing operating expenses by enhancing the efficiency of its operations. Methods include upgrading technology; optimizing existing technology; cross-training staff; eliminating vacant positions; reallocating workloads across remaining staff; and conducting more preventative maintenance.

### DPW OBJECTIVE 13

Provide safe, sufficient and aesthetically pleasing water, 100% of the time, at standards equal to or more stringent than required by the Safe Drinking Water Act, thereby reducing customer complaints to an average of less than 600 per year in 2002.

#### OUTCOME HISTORY (see page 177)

The Water Works' activities are intended to ensure that customers are supplied with the highest quality drinking water. In 2002, the Water Works' budget provides \$60.3 million in operating funding and \$15.05 million in capital funding for this objective.

The Water Works received 477 water quality complaints in 2000. This is a 20% decrease from 1999, which follows a 30% decrease from 1998. Although customer complaints are not a direct indicator of water quality, the trend may represent an overall improvement in the aesthetics of the drinking water. Of these complaints, 83 or 17.4% were substantiated as actually reflecting deteriorated water quality at the customer's tap.

Customer complaints are not the only measure of water quality. In 2000, Water Works implemented a new outcome indicator to provide a more thorough and meaningful measure of this objective: percentage compliance with the Environmental Protection Agency's (EPA) Safe Drinking Water Act Standards. Full conformance with this measure indicates that Water Works follows required water treatment processes, monitoring procedures and maximum allowable contaminant levels 365 days of the year or 100% of the time. Compliance is based upon monthly reports filed with the State of Wisconsin Department of Natural Resources. Compliance will protect public health by reducing the risk of contaminants, such as

cryptosporidium, in drinking water. In 2000, Water Works achieved 100% compliance with the Safe Drinking Water Act.

### PROGRAMS AND ACTIVITIES

- Supply and pumping - optimize operation to minimize costs while ensuring proper maintenance of purification, pumping, and storage facilities
- Customer accounts:
  - Provide accurate billing and collection services;
  - Quickly repair meter damages; and
  - Handle all customer inquiries in a timely, efficient, and satisfactory manner
- Water treatment - minimize plant operating and maintenance costs while fully complying with federal and state water quality standards
- Distribution - repair main breaks within 24-hours

### PROGRAM CHANGES

**Providing Service to New Customers:** The Water Works has excess capacity. It can produce significantly more water with minimal costs, creating the potential for increasing net revenue by expanding water sales to new customers. Water Works sells water to residents of Milwaukee and 14 suburban communities. Sales to these suburbs represent 17.4% of total revenue.

The Water Works continues to look for opportunities to increase water sales and take advantage of existing treatment and pumping capacity by adding new customers. Currently, Water Works is evaluating the

sale of water to Brookfield, Elm Grove, Germantown, and New Berlin.

Water service will be extended to new customers if engineering studies indicate that it is feasible, is consistent with city goals, and does not violate the federal prohibition against inter-basin water diversion. The latter regulation prevents the utility from soliciting customers west of the "divide" in eastern Waukesha County marking the western edge of the Great Lake Basin. By law, distribution of water from the Great Lakes is limited to consumption for those within the Great Lakes basin.

**Operational Efficiencies:** The 2002 budget includes several changes which are part of a multi-year effort to achieve significant operational efficiencies in the Water Works. This effort will make the utility more competitive by implementing model operating practices from other utilities. These practices will enable Water Works to maintain and improve the high quality of its services while significantly reducing operating costs.

As improvements in technology, organization, and operational procedures are implemented, the need for positions will be reduced. The 2002 budget provides for a net reduction of 13 staff positions. The utility plans to continue consolidation of position titles and cross-training of staff, while maintaining current standards of customer service and water quality.

One of the technology improvements implemented in recent years is the Automatic Meter Reading (AMR) System. As of December 31, 2000 automatic readers were installed in 97% of all residences. The 2002 budget includes \$345,000 for AMR large meter exchanges, which will convert meters used by multi-family residential and commercial customers.

**Create Plant Manager Position:** The position of Water Plant Manager is created to oversee the

Linwood and Howard Avenue water treatment plants. This new position was offset by the deletion of a vacant managerial position in the Water Works Engineering Organization. This will improve the sharing of resources between the two plants and improve coordination in initiatives affecting both plants.

**Create Water Security Manager Position:** In light of recent international events, there is increased concern for the security of the city's water supply. A Water Security Manager position is newly created in 2002 to administer a water security program that focuses on maintaining the integrity of the city water distribution system and the safety of the water supply.

**Rate Change:** On August 3, 2001, application for a full rate review was submitted to the PSC. A rate of return of 6% was requested, which if approved, would generate approximately \$7.4 million of additional revenue and would increase the average household annual water bill by 11.5%, from a current average of \$189.28 to \$211.04. \*

In order to earn sufficient revenue to maintain its quality of services, Water Works will pursue additional rate changes after 2002 through the filing of SRCs within the program guidelines. The strategy is to seek smaller rate increases to adjust for inflation on an on-going basis. This strategy will facilitate a smooth transition to rate changes to offset inflation.

**Investigate New Customer Information System:** The current billing and customer information system used by the Water Works is limited in its ability to account for payments to multiple fees. The benefits and cost of upgrades to the existing system will be compared with selecting and implementing a new system. The 2002 budget includes \$2 million toward this effort. It is estimated that this is approximately half the cost of a new customer information system.

## CAPITAL IMPROVEMENTS

The six year capital plan was completely re-evaluated in 2001 to reflect changes in priorities as a result of the completion of the major water quality plant improvement projects. The 2002 Water Works capital improvements budget is \$15.05 million, or \$775,000 more than the 2001 capital budget. The capital

budget includes \$12.2 million for water main improvements, similar to the \$12.4 million in the 2001 budget. The 2002 mains program consists of \$11.2 million for distribution mains (16-inches in diameter and smaller), and \$1.0 million for feeder mains (20-inches in diameter and larger). The purpose of these

# NET QUARTERLY WATER BILLS

As of 1/25/02

Water Utility	County	Net Bill 25 Ccf	Net Bill 35 Ccf
1 Yorkville	R	337.50	352.50
2 Delafield	W	110.94	135.31
3 North Cape	R	108.75	137.25
4 Wisconsin Gas	O	105.25	130.15
5 Wisconsin Gas	O	94.88	110.13
6 Caddy Vista	R	86.53	105.59
7 Franklin	M	85.91	111.86
8 Mukwonago	W	76.95	99.70
9 Menomonee Falls	W	75.15	98.25
10 Port Washington	O	74.25	98.55
11 Sturtevant	R	69.56	90.79
12 Dousman	W	66.75	84.45
13 Pewaukee	W	66.19	83.06
14 Pewaukee	W	65.51	84.34
15 Muskego	W	64.79	82.64
16 Oak Creek	M	61.75	78.55
17 Crestview	R	60.42	76.92
18 Butler	W	58.88	74.63
19 Caledonia	R	58.68	76.14
20 New Berlin	W	57.94	74.21
21 Fox Point	M	57.75	75.45
22 Sussex	W	54.11	67.24
23 Saukville	O	54.00	65.56
24 Belgium	O	53.44	68.81
25 Brookfield	W	51.79	67.24
26 Brookfield	W	51.79	61.16
27 Cedarburg	O	51.38	64.13
28 Wind Point	R	51.05	67.15
29 North Park	R	48.21	63.92
30 Glendale	M	45.84	58.59
31 Milwaukee WW suburbs	M	45.40	58.70
32 Waterford	R	45.38	57.53
33 Wauwatosa	M	44.55	57.45
34 Eagle	W	43.89	55.36
35 Brown Deer	M	43.35	54.75
36 Waukesha	W	43.31	54.64
37 South Milwaukee	M	42.88	55.78
38 Hartland	W	41.88	53.13
39 Burlington	R	41.25	54.15
40 Grafton	O	39.94	51.11
41 Union Grove	R	39.31	50.04
42 Greendale	M	37.99	48.86
43 Cudahy	M	37.75	49.25
44 Milwaukee WW residential	M	36.35	47.00
45 Racine	R	35.88	45.58
46 West Allis	M	35.80	43.12
47 Shorewood	M	34.65	43.95
48 Oconomowoc	W	33.83	43.96
49 Fredonia	O	30.90	40.50
50 Whitefish Bay	M	29.52	37.92
51 West Milw.	M	27.40	33.50

Milwaukee average residential customer (1.4 dwelling units) uses 32 Ccf per quarter

Milwaukee average single family residential customer uses 23 Ccf per quarter

Milwaukee, O = Ozaukee, R = Racine, W = Waukesha

# FISCAL REVIEW SECTION – LEGISLATIVE REFERENCE BUREAU

## Executive Summary: 2002 PROPOSED BUDGET – DPW WATER WORKS

EXPENSE CATEGORY	2000 ACTUAL	2001 BUDGET	2000-2001 %CHANGE	2002 PROPOSED	2001-2002 CHANGE	2001-2002 %CHANGE
OPERATING	\$56,625,231	\$58,985,439	4.17%	\$60,232,082	\$1,246,643	2.11%
CAPITAL	\$8,496,700	\$14,275,000	68.01%	\$15,050,000	\$775,000	5.43%
O&M POSITIONS	338.14	392.3	16.02%	384.09	-8	-2.09%
TOTAL POSITIONS	412	400	-2.91%	387	-13	-3.25%
O&M (DLH)	608,652	671,610	10.34%	658,860	-12,750	-1.90%
NON O&M (DLH)	22,419	22,100	-1.42%	22,100	0	0.00%

The Water Department is a public utility that supplies water to residents and commercial enterprises within the City of Milwaukee and various suburbs and government entities. Water is provided through a system of purification plants, pumping stations, booster stations and a distribution system. The Department has a system capacity of 375 million gallons per day. Current average pumpage is about 135 million gallons a day (36% capacity).

### 2002 Budget Highlights & Issues

1. The 2002 Proposed Budget reduces the total number of positions in the department from 400 in 2001 to 387 in 2002, a decrease of 13 positions (-3.25%). (Page 5)
2. The 2002 Proposed Budget includes several reorganization/administrative shifts in the Water Department. Beginning with the 2001 Budget, the Water Works has split the north water production group from the south water production. The 2002 Proposed Budget creates a Water Plant Manager who oversees both plants. (Page 5)
3. The 2002 Proposed Budget includes a **new user fee** to recover a portion of the City's **street lighting costs**. All street light recipients will be charged a fee of roughly \$0.49 per foot of property frontage. Average residential bills will total approximately \$21. The amount for the Water Works annual payment could not be confirmed. (Pages 5 & 6)

### Rate of Return and Rate Increases

1. The 2002 Proposed Budget includes a 3.4% rate increase under the Public Service Commission's Simplified Rate Case procedure that allows the Utility to keep pace with inflationary pressures that occurred during the previous year. This rate increase began to be phased in as of June 2001, and became fully applicable to all water sales by August 2001. (Page 6)
2. On August 3, 2001, application for a full rate review was submitted to the PSC. A resulting rate order by the PSC, with new rates to be implemented, may occur as early as January 2002. A rate of return of 6% was requested. Based on the Water Works requested 6 percent rate of return, operating revenues would need to increase \$7.4 million dollars. This represents an 11.5% increase over year 2001 estimated operating revenues. **Applying an 11.5% increase to the current \$47.32 average urban residential quarterly water bill using 32 ccf of water results in a new average quarterly water bill of \$52.76. This is a quarterly increase of \$5.44.** A public hearing is anticipated in December 2001. (Page 7)





Department of Public Works  
Milwaukee Water Works

February 21, 2002

**Mariano A. Schifalacqua**  
Commissioner of Public Works

**James P. Purko**  
Director of Operations

**Carrie M. Lewis**  
Superintendent of Water Works

Public Service Commission of Wisconsin  
P.O. Box 7854  
Madison, WI 53707

Attention: Mr. Thomas McDonald

Dear Commissioners:

SUBJECT: Rate Order 3720-WR 104

We received rate order 3720-WR 104, which has a certified mailing date of February 15, 2002. We intend to make the effective date of this order February 28 2002, subject to approval of the City of Milwaukee Common Council. Please find authorized rates attached, copies of which have been posted in our offices.

Monthly Billing of Suburban Resale Customers will be as follows:

- Consumption beginning March 1, 2002 at the new rate

Monthly Billing of Business Customers will be as follows:

- Consumption beginning March 1, 2002 at the new rate

Quarterly Billing to retail customers will be prorated, beginning when we next read District III accounts. Our schedule for implementation is as follows:

District III – Consumption January 1 through March 31, 2002 apply 1/3 of the rate increase.  
District I – Consumption February 1 through April 30, 2002 apply 2/3 of the rate increase.  
District II – Consumption March 1, 2002 through May 31, 2002 apply full rate increase.

Please advise your concurrence to the above.

Very truly yours,

Carrie M. Lewis, Superintendent  
Milwaukee Water Works

RAS:pa  
Doc:ImplementWR104  
Attachment

Milwaukee Water Works Rate Schedule  
Per P.S.C. Order 3720-WR-104

1/3 Rate-District III-For Consumption January 1 through March 31, 2002

**Service Charges  
(Quarterly)**

Size of Meter	Urban- Inside City			Suburban- Outside City*	Suburban- Greenfield		Suburban- Hales Corners		Suburban- West Milwaukee	
	Service Charge	Public Fire Prot.	Total Service Charge	Service Charge	Public Fire Prot.	Total Service Charge	Public Fire Prot.	Total Service Charge	Public Fire Prot.	Total Service Charge
5/8 - 3/4 Inch	\$ 10.05	\$ 3.60	13.65	\$ 12.56	\$ 5.60	\$ 18.16	\$ 4.56	\$ 17.12	\$ 10.13	\$ 22.69
1 Inch	\$ 21.35	\$ 16.78	38.13	26.69	\$ 11.34	38.03	\$ 11.34	38.03	\$ 24.81	51.50
1 1/4 Inch	\$ 21.35	\$ 21.12	42.47	26.69	\$ 11.64	38.33	\$ 11.64	38.33	\$ 36.64	63.33
1 1/2 Inch	\$ 41.55	\$ 37.13	78.68	51.94	\$ 22.79	74.73	\$ 22.79	74.73	\$ 50.13	102.07
2 Inch	\$ 67.43	\$ 56.53	123.96	84.29	\$ 33.68	117.97	\$ 36.06	120.35	\$ 80.39	164.68
3 Inch	\$ 131.45	\$ 114.45	245.90	164.31	\$ 68.36	232.67	\$ 68.36	232.67	\$ 150.87	315.18
4 Inch	\$ 262.91	\$ 187.70	450.61	328.64	\$ 138.79	467.43	\$ 116.93	445.57	\$ 252.12	580.76
6 Inch	\$ 464.86	\$ 355.31	820.17	581.08	\$ 244.21	825.29	\$ 227.87	808.95	\$ 503.23	1,084.31
8 Inch	\$ 718.23	\$ 619.64	1,337.87	897.79	\$ 375.48	1,273.27	\$ 365.27	1,263.06	\$ 803.96	1,701.75
10 Inch	\$ 1,067.31	\$ 795.45	1,862.76	1,334.14	\$ 562.53	1,896.67	\$ 546.57	1,890.71	\$ -	1,420.00
12 Inch	\$ 1,961.61	\$ 795.45	2,757.06	2,452.01	\$ 844.49	3,296.50	\$ 728.86	3,180.87	\$ -	2,610.00

\*Public Fire Protection Charges collected by other means.

Consumption Charges for Water Used

	Urban- Inside City	Suburban Retail Service- Outside City	Suburban Retail Service- West Milwaukee
First 100 CCF at	\$ 1.103 Per CCF	\$ 1.379 Per CCF	\$ 0.630 Per CCF
Next 4900 CCF at	1.025 Per CCF	1.281 Per CCF	\$ 0.598 Per CCF
Next 15,000 CCF at	0.640 Per CCF	0.800 Per CCF	\$ 0.470 Per CCF
Over 20,000 CCF at	0.589 Per CCF	0.736 Per CCF	\$ 0.460 Per CCF
First 75,000 Gallons at	\$ 1.475 Per 1,000 Gal	\$ 1.843 Per 1,000 Gal	\$ 0.842 Per 1,000 Gal
Next 3,675,000 Gallons at	1.370 Per 1,000 Gal	1.713 Per 1,000 Gal	0.799 Per 1,000 Gal
Next 11,250,000 Gallons at	0.856 Per 1,000 Gal	1.069 Per 1,000 Gal	0.628 Per 1,000 Gal
Over 15,000,000 Gallons at	0.787 Per 1,000 Gal	0.984 Per 1,000 Gal	0.615 Per 1,000 Gal

**Milwaukee Water Works Rate Schedule**  
**Per P.S.C. Order 3720-WR-104**  
**2/3 Rate-District I-For Consumption February 1 through April 30, 2002**

**Service Charges**  
**(Quarterly)**

<b>Size of Meter</b>	<b>Urban- Inside City</b>			<b>Suburban- Outside City*</b>	<b>Suburban- Greenfield</b>		<b>Suburban- Hales Corners</b>		<b>Suburban- West Milwaukee</b>	
	<b>Service Charge</b>	<b>Public Fire Prot.</b>	<b>Total Service Charge</b>	<b>Service Charge</b>	<b>Public Fire Prot.</b>	<b>Total Service Charge</b>	<b>Public Fire Prot.</b>	<b>Total Service Charge</b>	<b>Public Fire Prot.</b>	<b>Total Service Charge</b>
5/8 - 3/4 Inch	\$ 10.37	\$ 3.67	\$ 14.04	\$ 12.96	\$ 6.02	\$ 18.98	\$ 4.98	\$ 17.94	\$ 10.46	\$ 23.42
1 Inch	\$ 22.03	\$ 17.01	\$ 39.04	\$ 27.54	\$ 12.35	\$ 39.89	\$ 12.35	\$ 39.89	\$ 25.15	\$ 52.69
1 1/4 Inch	\$ 22.03	\$ 21.56	\$ 43.59	\$ 27.54	\$ 12.95	\$ 40.49	\$ 12.95	\$ 40.49	\$ 37.07	\$ 64.61
1 1/2 Inch	\$ 42.78	\$ 38.06	\$ 80.84	\$ 53.48	\$ 24.89	\$ 78.37	\$ 24.89	\$ 78.37	\$ 51.31	\$ 104.79
2 Inch	\$ 69.71	\$ 58.27	\$ 127.98	\$ 87.14	\$ 36.34	\$ 123.48	\$ 39.03	\$ 126.47	\$ 82.50	\$ 169.64
3 Inch	\$ 135.73	\$ 117.22	\$ 252.95	\$ 169.66	\$ 74.68	\$ 244.34	\$ 74.68	\$ 244.34	\$ 154.94	\$ 324.60
4 Inch	\$ 271.45	\$ 191.35	\$ 462.80	\$ 339.31	\$ 150.39	\$ 489.70	\$ 130.47	\$ 469.78	\$ 259.56	\$ 598.87
6 Inch	\$ 479.93	\$ 362.15	\$ 842.08	\$ 599.91	\$ 266.10	\$ 866.01	\$ 248.93	\$ 848.84	\$ 517.11	\$ 1,117.02
8 Inch	\$ 741.62	\$ 632.32	\$ 1,373.94	\$ 927.03	\$ 409.74	\$ 1,336.77	\$ 398.64	\$ 1,325.67	\$ 824.98	\$ 1,752.01
10 Inch	\$ 1,101.66	\$ 810.22	\$ 1,911.88	\$ 1,377.08	\$ 614.27	\$ 1,991.35	\$ 595.78	\$ 1,972.86	\$ -	\$ 1,377.08
12 Inch	\$ 2,024.81	\$ 810.22	\$ 2,835.03	\$ 2,531.01	\$ 921.74	\$ 3,452.75	\$ 794.93	\$ 3,325.94	\$ -	\$ 2,531.01

\*Public Fire Protection Charges collected by other means.

**Consumption Charges for Water Used**

	<b>Urban- Inside City</b>	<b>Suburban Retail Service- Outside City</b>	<b>Suburban Retail Service- West Milwaukee</b>
First 100 CCF at	\$ 1.142 Per CCF	\$ 1.428 Per CCF	\$ 0.651 Per CCF
Next 4900 CCF at	1.058 Per CCF	1.323 Per CCF	0.618 Per CCF
Next 15,000 CCF at	0.660 Per CCF	0.825 Per CCF	0.486 Per CCF
Over 20,000 CCF at	0.610 Per CCF	0.763 Per CCF	0.475 Per CCF
First 75,000 Gallons at	\$ 1.527 Per 1,000 Gal	\$ 1.908 Per 1,000 Gal	\$ 0.870 Per 1,000 Gal
Next 3,675,000 Gallons at	1.414 Per 1,000 Gal	1.768 Per 1,000 Gal	0.826 Per 1,000 Gal
Next 11,250,000 Gallons at	0.882 Per 1,000 Gal	1.129 Per 1,000 Gal	0.650 Per 1,000 Gal
Over 15,000,000 Gallons at	0.815 Per 1,000 Gal	1.019 Per 1,000 Gal	0.635 Per 1,000 Gal



**Milwaukee Water Works Rate Schedule**  
**Per P.S.C. Order 3720-WR-104**  
**Full Rate-District II-For Consumption Beginning March 1, 2002**

**Service Charges**  
**(Quarterly)**

Size of Meter	Urban- Inside City			Suburban- Outside City*	Suburban- Greenfield		Suburban- Hales Corners		Suburban- West Milwaukee	
	Service Charge	Public Fire Prot.	Total Service Charge	Service Charge	Public Fire Prot.	Total Service Charge	Public Fire Prot.	Total Service Charge	Public Fire Prot.	Total Service Charge
5/8 - 3/4 Inch	\$ 10.70	\$ 3.75	\$ 14.45	\$ 13.38	\$ 6.45	\$ 19.83	\$ 5.40	\$ 18.78	\$ 10.80	\$ 24.18
1 Inch	22.70	17.25	39.95	28.38	13.35	41.73	13.35	41.73	25.50	53.88
1 1/4 Inch	22.70	22.00	44.70	28.38	14.25	42.63	14.25	42.63	37.50	65.88
1 1/2 Inch	44.00	39.00	83.00	55.00	27.00	82.00	27.00	82.00	52.50	107.50
2 Inch	72.00	60.00	132.00	90.00	39.00	129.00	42.00	132.00	84.60	174.60
3 Inch	140.00	120.00	260.00	175.00	81.00	256.00	81.00	256.00	159.00	334.00
4 Inch	280.00	195.00	475.00	350.00	162.00	512.00	144.00	494.00	267.00	617.00
6 Inch	495.00	369.00	864.00	618.75	288.00	906.75	270.00	888.75	531.00	1,149.75
8 Inch	765.00	645.00	1,410.00	956.25	444.00	1,400.25	432.00	1,388.25	846.00	1,802.25
10 Inch	1,136.00	825.00	1,961.00	1,420.00	666.00	2,086.00	645.00	2,065.00	1,245.00	2,665.00
12 Inch	2,088.00	825.00	2,913.00	2,610.00	999.00	3,609.00	861.00	3,471.00	1,692.00	4,302.00

\*Public Fire Protection Charges collected by other means.

**Consumption Charges for Water Used**

	Urban- Inside City	Suburban Retail Service- Outside City	Suburban Retail Service- West Milwaukee
First 100 CCF at	\$ 1.180 Per CCF	\$ 1.475 Per CCF	\$ 0.671 Per CCF
Next 4900 CCF at	\$ 1.090 Per CCF	1.363 Per CCF	0.637 Per CCF
Next 15,000 CCF at	\$ 0.680 Per CCF	0.850 Per CCF	0.501 Per CCF
Over 20,000 CCF at	\$ 0.630 Per CCF	0.788 Per CCF	0.490 Per CCF
First 75,000 Gallons at	\$ 1.577 Per 1,000 Gal	\$ 1.972 Per 1,000 Gal	\$ 0.897 Per 1,000 Gal
Next 3,675,000 Gallons at	1.457 Per 1,000 Gal	1.822 Per 1,000 Gal	0.852 Per 1,000 Gal
Next 11,250,000 Gallons at	0.909 Per 1,000 Gal	1.136 Per 1,000 Gal	0.670 Per 1,000 Gal
Over 15,000,000 Gallons at	0.842 Per 1,000 Gal	1.053 Per 1,000 Gal	0.655 Per 1,000 Gal

**Milwaukee Water Works Rate Schedule**  
**Per P.S.C. Order 3720-WR-104**  
**Full Rate-District II-For Consumption Beginning March 1, 2002**  
**Business Accounts**

**Service Charges**  
**(Monthly)**

Size of Meter	Urban- Inside City			Suburban- Outside City*	Suburban- Greenfield		Suburban- Hales Corners		Suburban- West Milwaukee	
	Service Charge	Public Fire Prot.	Total Service Charge	Service Charge	Public Fire Prot.	Total Service Charge	Public Fire Prot.	Total Service Charge	Public Fire Prot.	Total Service Charge
5/8 - 3/4 Inch	\$ 3.57	\$ 1.25	\$ 4.82	\$ 4.46	\$ 2.15	\$ 6.61	\$ 1.80	\$ 6.26	\$ 3.60	\$ 8.06
1 Inch	7.57	5.75	13.32	9.46	4.45	13.91	4.45	13.91	8.50	17.96
1 1/4 Inch	7.57	7.33	14.90	9.46	4.75	14.21	4.75	14.21	12.50	21.96
1 1/2 Inch	14.67	13.00	27.67	18.34	9.00	27.34	9.00	27.34	17.50	35.84
2 Inch	24.00	20.00	44.00	30.00	13.00	43.00	14.00	44.00	28.20	58.20
3 Inch	46.67	40.00	86.67	58.34	27.00	85.34	27.00	85.34	53.00	111.34
4 Inch	93.33	65.00	158.33	116.66	54.00	170.66	48.00	164.66	89.00	205.66
6 Inch	165.00	123.00	288.00	206.25	96.00	302.25	90.00	296.25	177.00	383.25
8 Inch	255.00	215.00	470.00	318.75	148.00	466.75	144.00	462.75	282.00	600.75
10 Inch	378.67	275.00	653.67	473.34	222.00	695.34	215.00	688.34	415.00	888.34
12 Inch	696.00	275.00	971.00	870.00	333.00	1,203.00	287.00	1,157.00	564.00	1,434.00

\*Public Fire Protection Charges collected by other means.

**Consumption Charges for Water Used**

	Urban- Inside City		Suburban Retail Service- Outside City		Suburban Retail Service- West Milwaukee	
First 34 CCF at	\$ 1.180	Per CCF	\$ 1.475	Per CCF	\$ 0.671	Per CCF
Next 1,633 CCF at	\$ 1.090	Per CCF	\$ 1.363	Per CCF	\$ 0.637	Per CCF
Next 5,000 CCF at	\$ 0.680	Per CCF	\$ 0.850	Per CCF	\$ 0.501	Per CCF
Over 6,667 CCF at	\$ 0.630	Per CCF	\$ 0.788	Per CCF	\$ 0.490	Per CCF
First 25,000 Gallons at	\$ 1.577	Per 1,000 Gal	\$ 1.972	Per 1,000 Gal	\$ 0.897	Per 1,000 Gal
Next 1,225,000 Gallons at	1.457	Per 1,000 Gal	1.822	Per 1,000 Gal	0.852	Per 1,000 Gal
Next 3,750,000 Gallons at	0.909	Per 1,000 Gal	1.136	Per 1,000 Gal	0.670	Per 1,000 Gal
Over 5,000,000 Gallons at	0.842	Per 1,000 Gal	1.053	Per 1,000 Gal	0.655	Per 1,000 Gal