



WATER, ELECTRIC, OR JOINT UTILITY ANNUAL REPORT

OF

CITY OF WAUKESHA WATER UTILITY

PO BOX 1648
WAUKESHA, WI 53187-1648

For the Year Ended: DECEMBER 31, 2022

TO

PUBLIC SERVICE COMMISSION OF WISCONSIN

P.O. Box 7854
Madison, WI 53707-7854
(608) 266-3766

Violation of any provision of the Public Service Commission's rules and regulations, or any provision of the statutes is a forfeiture of not less than \$25 nor more than \$5,000 for each violation. Each day subsequent to the filing date constitutes a separate and distinct violation. The filed form is available to the public and personally identifiable information may be used for purposes other than those related to public utility regulation.

Water Service Started Date: 06/01/1907

DNR Public Water System ID: 26802380

Safe Drinking Water Information System (SDWIS) Total Population Served: 70718

I **CORTNEY NAGEL**, **ADMINISTRATIVE SERVICES MANAGER** of **CITY OF WAUKESHA WATER UTILITY**, certify that I am the person responsible for accounts; that I have examined the following report and, to the best of my knowledge, information and belief, it is a correct statement of the business and affairs of said utility for the period covered by the report in respect to each and every matter set forth therein.

Date Signed: **4/28/2023**

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Identification and Ownership - Contacts

Utility employee in charge of correspondence concerning this report

Name: CORTNEY NAGEL

Title: ADMINISTRATIVE SERVICES MANAGER

Mailing Address: P.O. BOX 1648
WAUKESHA, WI 53187-1648

Phone: (262) 409-4426

Email Address: cnagel@waukesha-water.com

Accounting firm or consultant preparing this report (if applicable)

Name:

Title:

Mailing Address:

Phone:

Email Address:

Name and title of utility General Manager (or equivalent)

Name: DANIEL S. DUCHNIAK, PE

Title: GENERAL MANAGER

Mailing Address: P.O. BOX 1648
WAUKESHA, WI 53187-1648

Phone: (262) 409-4440

Email Address: dduchniak@waukesha-water.com

Outside contractor responsible for utility operations (if applicable)

Name:

Title:

Mailing Address:

Phone:

Email Address:

President, chairman, or head of utility commission/board or committee

Name: JOSEPH PIATT

Title: COMMISSION PRESIDENT

Mailing Address: 727 ROBERTA AVENUE
WAUKESHA, WI 53186

Phone: (262) 548-9991

Email Address: joseph.piatt@waukesha-wi.gov

Contact person for cybersecurity issues and events

Name: DANIEL S. DUCHNIAK, PE

Title: GENERAL MANAGER

Mailing Address: P.O. BOX 1648
WAUKESHA, WI 53187-1648

Phone: (262) 409-4440

Email Address: dduchniak@waukesha-water.com

Identification and Ownership - Contacts

Identification and Ownership - Governing Authority and Audit Information

Utility Governing Authority

Select the governing authority for this utility.

Reports to utility board/commission

Reports directly to city/village council

Audit Information

Are utility records audited by individuals or firms other than utility employees? Yes No

Date of most recent audit report: 12/31/2021

Period covered by most recent audit: JANUARY 1, 2022 - DECEMBER 31, 2022

Individual or firm, if other than utility employee, auditing utility records

Name: JODI DOBSON, CPA

Title: PARTNER

Organization Name: BAKER TILLY VIRCHOW KRAUSE, LLP

USPS Address: P.O. BOX 7398

City State Zip MADISON, WI 53707-7398

Telephone: (608) 240-2469

Email Address: jodi.dobson@bakertilly.com

Report Preparation

If an accounting firm or consultant assists with report preparation, select the type of assistance provided

Not Applicable

Identification and Ownership - Contract Operations

Do you have any contracts?

Are any of the Utility's administrative or operational functions under contract or agreement with an outside provider for the year covered by this annual report and /or current year (i.e., utility billing is done by another entity)?

NO

Workforce Diversity

- g Decimal numbers for part time employees are acceptable values for this schedule. Please enter part time employees as a decimal based on the number of hours worked/2080 hours for a fiscal year. An employee who works 30% of full time would be recorded as .30.
- g Use the Footnotes feature to provide an explanation for any variance with the number of employees listed in Schedule F-06 and information about how many staff are part-time employees.
- g Staff classification of various employment categories can vary from utility to utility. Use the Footnotes feature to provide information about how the utility defines these categories. Additional information on classifying employees can be found in the help document.

Category (a)	Employee Count			
	Total (b)	Management (c)	Executive Leadership (d)	
Total Utility Employees	27.00	1.00	4.00	* 1
Women	0.00	0.00	0.00	2
Minorities	0.00	0.00	0.00	3
Veterans	0.00	0.00	0.00	4

Workforce Diversity

- g Decimal numbers for part time employees are acceptable values for this schedule. Please enter part time employees as a decimal based on the number of hours worked/2080 hours for a fiscal year. An employee who works 30% of full time would be recorded as .30.
- g Use the Footnotes feature to provide an explanation for any variance with the number of employees listed in Schedule F-06 and information about how many staff are part-time employees.
- g Staff classification of various employment categories can vary from utility to utility. Use the Footnotes feature to provide information about how the utility defines these categories. Additional information on classifying employees can be found in the help document.

Workforce Diversity (Page xi)

General Footnote

The Utility had 27 employees on 12/31/22.
Management is defined as an Assistant Manager.
Executive Leadership is defined as a Manager or General Manager.

Income Statement

Description (a)	This Year (b)	Last Year (c)	
UTILITY OPERATING INCOME			1
Operating Revenues (400)	13,479,241	13,525,364	2
''CdYfUj]b['9I dYbgYg.			3
Operation and Maintenance Expense (401-402)	5,251,154	5,092,884	4
Depreciation Expense (403)	2,011,300	1,998,439	5
Amortization Expense (404-407)	0	0	6
Taxes (408)	2,290,212	2,270,606	7
''HcHJ' CdYfUj]b['9I dYbgYg	9,552,666	9,361,929	8
''BYhCdYfUj]b['bWta Y	3,926,575	4,163,435	9
Income from Utility Plant Leased to Others (412-413)			10
''I H]ImiCdYfUj]b['bWta Y	3,926,575	4,163,435	11
OTHER INCOME			12
Income from Merchandising, Jobbing and Contract Work (415-416)	14,552	6,193	13
Income from Nonutility Operations (417)	9,143	5,710	14
Nonoperating Rental Income (418)			15
Interest and Dividend Income (419)	717,595	53,528	16
Miscellaneous Nonoperating Income (421)	330,904	873,499	17
''HcHJ' CH Yf 'bWta Y	1,072,194	938,930	18
''HcHJ' 'bWta Y	4,998,769	5,102,365	19
MISCELLANEOUS INCOME DEDUCTIONS			20
Miscellaneous Amortization (425)	(191,106)	(191,106)	21
Other Income Deductions (426)	908,891	899,351	22
''HcHJ' A]gW' UbYci g' bWta Y8 YXi Wj]cbg	717,785	708,245	23
''bWta Y6 YZfY 'bhYfYgh7\ Uf[Yg	4,280,984	4,394,120	24
INTEREST CHARGES			25
Interest on Long-Term Debt (427)	2,133,042	1,526,252	26
Amortization of Debt Discount and Expense (428)	351,669	206,641	27
Amortization of Premium on Debt--Cr. (429)	129,656	179,724	28
Interest on Debt to Municipality (430)	0	0	29
Other Interest Expense (431)	0	82,450	30
Interest Charged to Construction--Cr. (432)			31
''HcHJ' 'bhYfYgh7\ Uf[Yg	2,355,055	1,635,619	32
''BYh'bWta Y	1,925,929	2,758,501	33
EARNED SURPLUS			34
Unappropriated Earned Surplus (Beginning of Year) (216)	71,946,291	69,187,790	35
Balance Transferred from Income (433)	1,925,929	2,758,501	36
Miscellaneous Credits to Surplus (434)			37
Miscellaneous Debits to Surplus--Debit (435)	33,907		38
Appropriations of Surplus--Debit (436)			39
Appropriations of Income to Municipal Funds--Debit (439)			40
''HcHJ' I bUddfcdf]UHx'9UfbYX'Gi fd' i g'9bX'cZMYU' fE% L	73,838,313	71,946,291	41

Income Statement Account Details

g Report each item (when individually or when like items are combined) greater than \$10,000 (class AB), \$5,000 (class C) and \$2,000 (class D) and all other lesser amounts grouped as Miscellaneous. Describe fully using other than account titles.

g Nonregulated sewer income should be reported as Miscellaneous Nonoperating Income, Account 421.

g If amount of Contributed Plant - Water (421) does not match the total Additions During Year entered on Water Utility Plant in Service - Plant Financed by Contributions, please provide a detailed explanation. Please see the help guide for more information.

Description (a)	Earnings (216.1) (b)	Contributions (216.2) (c)	Total This Year (d)	
UTILITY OPERATING INCOME				1
Operating Revenues (400)				2
Derived	13,479,241		13,479,241	3
Total (Acct. 400)	13,479,241	0	13,479,241	4
Operation and Maintenance Expense (401-402)				5
Derived	5,251,154		5,251,154	6
Total (Acct. 401-402)	5,251,154	0	5,251,154	7
Depreciation Expense (403)				8
Derived	2,011,300		2,011,300	9
Total (Acct. 403)	2,011,300	0	2,011,300	10
Amortization Expense (404-407)				11
Derived	0		0	12
Total (Acct. 404-407)	0	0	0	13
Taxes (408)				14
Derived	2,290,212		2,290,212	15
Total (Acct. 408)	2,290,212	0	2,290,212	16
TOTAL UTILITY OPERATING INCOME	3,926,575	0	3,926,575	17
OTHER INCOME				18
Income from Merchandising, Jobbing and Contract Work (415-416)				19
Derived	14,552	0	14,552	20
Total (Acct. 415-416)	14,552	0	14,552	21
Income from Nonutility Operations (417)				22
MISC NON-OPERATING REVENUE	9,143		9,143	23
Total (Acct. 417)	9,143	0	9,143	24
Interest and Dividend Income (419)				25
INTEREST INCOME	717,595		717,595	26
Total (Acct. 419)	717,595	0	717,595	27
Miscellaneous Nonoperating Income (421)				28
Contributed Plant - Water		330,904	330,904	29
Impact Fees - Water			0	30
Total (Acct. 421)	0	330,904	330,904	31
TOTAL OTHER INCOME	741,290	330,904	1,072,194	32
MISCELLANEOUS INCOME DEDUCTIONS				33
Miscellaneous Amortization (425)				34
Regulatory Liability (253) Amortization	(191,106)		(191,106)	35
Total (Acct. 425)	(191,106)	0	(191,106)	36
Other Income Deductions (426)				37
Depreciation Expense on Contributed Plant - Water		793,070	793,070	38
LOBBYING EXPENSE	112,897		112,897	39

Income Statement Account Details

- g Report each item (when individually or when like items are combined) greater than \$10,000 (class AB), \$5,000 (class C) and \$2,000 (class D) and all other lesser amounts grouped as Miscellaneous. Describe fully using other than account titles.
- g Nonregulated sewer income should be reported as Miscellaneous Nonoperating Income, Account 421.
- g If amount of Contributed Plant - Water (421) does not match the total Additions During Year entered on Water Utility Plant in Service - Plant Financed by Contributions, please provide a detailed explanation. Please see the help guide for more information.

Description (a)	Earnings (216.1) (b)	Contributions (216.2) (c)	Total This Year (d)	
MISC INTEREST EXPENSE	2,924		2,924	40
Total (Acct. 426)	115,821	793,070	908,891	41
TOTAL MISCELLANEOUS INCOME DEDUCTIONS	(75,285)	793,070	717,785	42
INTEREST CHARGES				43
Interest on Long-Term Debt (427)				44
Derived	2,133,042		2,133,042	45
Total (Acct. 427)	2,133,042	0	2,133,042	46
Amortization of Debt Discount and Expense (428)				47
AMORT OF PREPAID INTEREST EXP/LOSS	97,809		97,809	48
DEBT ISSUANCE COSTS - 2022 GORB	234,060		234,060	49
DEBT ISSUANCE COSTS - WIFIA LOAN	19,800		19,800	50
Total (Acct. 428)	351,669	0	351,669	51
Amortization of Premium on Debt--Cr. (429)				52
BONDS	129,656		129,656	53
Total (Acct. 429)	129,656	0	129,656	54
Interest on Debt to Municipality (430)				55
Derived	0		0	56
Total (Acct. 430)	0	0	0	57
Other Interest Expense (431)				58
Derived	0		0	59
Total (Acct. 431)	0	0	0	60
TOTAL INTEREST CHARGES	2,355,055	0	2,355,055	61
NET INCOME	2,388,095	(462,166)	1,925,929	62
EARNED SURPLUS				63
Unappropriated Earned Surplus (Beginning of Year) (216)				64
Derived	43,911,254	28,035,037	71,946,291	65
Total (Acct. 216)	43,911,254	28,035,037	71,946,291	66
Balance Transferred from Income (433)				67
Derived	2,388,095	(462,166)	1,925,929	68
Total (Acct. 433)	2,388,095	(462,166)	1,925,929	69
Miscellaneous Debits to Surplus--Debit (435)				70
ADJUSTMENT FOR PILOT	33,907		33,907	71
Total (Acct. 435)	33,907	0	33,907	72
UNAPPROPRIATED EARNED SURPLUS (END OF YEAR)	46,265,442	27,572,871	73,838,313	73

Income Statement Account Details

- g Report each item (when individually or when like items are combined) greater than \$10,000 (class AB), \$5,000 (class C) and \$2,000 (class D) and all other lesser amounts grouped as Miscellaneous. Describe fully using other than account titles.
- g Nonregulated sewer income should be reported as Miscellaneous Nonoperating Income, Account 421.
- g If amount of Contributed Plant . ~~Water~~ (421) does not match the total Additions During Year entered on Water Utility Plant in Service . ~~Plant~~ Financed by Contributions, please provide a detailed explanation. Please see the help guide for more information.

Income Statement Account Details (Page F-02)

Amount of Miscellaneous Debits to Surplus (Acct 435) exceeds \$10,000, please explain fully.

Miscellaneous Debits to Surplus (Acct 435): \$33,907 is a PILOT adjustment based on actual expense for 2022 and the amount allowed by Schedule W-7. The Utility and the City of Waukesha have agreed to a two-year cycle (reported in 2020, calculated in 2021, expensed in 2022) verified in a Memorandum of Understanding dated 2/24/2014. \$2,198,386 was expensed in 2022, but Schedule W-7 calculated \$2,164,479 and will not allow a higher number . ~~The~~ difference is \$33,907.

Income from Merchandising, Jobbing & Contract Work (Accts. 415-416)

Particulars (a)	Water (b)	Electric (c)	Gas (d)	Sewer (e)	Total (f)	
Revenues						1
Revenues (account 415)	30,291,019				30,291,019	2
Cost and Expenses of Merchandising, Jobbing and Contract Work (416)						3
Cost of merchandise sold	30,276,467				30,276,467	4
Payroll					0	5
Materials					0	6
Taxes					0	7
Total costs and expenses	30,276,467	0	0	0	30,276,467	8
Net Income (or loss)	14,552	0	0	0	14,552	9

Distribution of Total Payroll

- g Amounts charged to Utility Financed and to Contributed Plant accounts should be combined and reported in plant or accumulated depreciation accounts.
- g Amount originally charged to clearing accounts as shown in column (b) should be shown as finally distributed in column (c).
- g The amount for clearing accounts in column (c) is entered as a negative for account "Clearing Accounts" and the distributions to accounts on all other lines in column (c) will be positive with the total of column (c) being zero.
- g Provide additional information in the schedule footnotes when necessary.
- g Please see the help guide for examples of how to break out shared costs.

Accounts Charged (a)	Direct Payroll Distribution (b)	Allocation of Amounts Charged Clearing Accts. (c)	Total (d)	
Water operating expenses	1,351,003	448,215	1,799,218	1
Electric operating expenses			0	2
Gas operating expenses			0	3
Heating operating expenses			0	4
Sewer operating expenses			0	5
Merchandising and jobbing			0	6
Other nonutility expenses			0	7
Water utility plant accounts	246,082		246,082	8
Electric utility plant accounts			0	9
Gas utility plant accounts			0	10
Heating utility plant accounts			0	11
Sewer utility plant accounts			0	12
Accum. prov. for depreciation of water plant			0	13
Accum. prov. for depreciation of electric plant			0	14
Accum. prov. for depreciation of gas plant			0	15
Accum. prov. for depreciation of heating plant			0	16
Accum. prov. for depreciation of sewer plant			0	17
Clearing accounts	448,215	(448,215)	0	18
All other accounts	274,202		274,202	19
Total Payroll	2,319,502	0	2,319,502	20

Full-Time Employees (FTE)

g Use FTE numbers where FTE stands for Full-Time Employees or Full-Time Equivalency. FTE can be computed by using total hours worked/2080 hours for a fiscal year. Estimate to the nearest hundredth. If an employee works part time for more than one industry then determine FTE based on estimate of hours worked per industry.

g Example: An employee worked 35% of their time on electric jobs, 30% on water jobs, 20% on sewer jobs and 15% on municipal nonutility jobs. The FTE by industry would be .35 for electric, .30 for water and .20 for sewer.

Industry (a)	FTE (b)	
Water	29.0	1
Electric		2
Gas		3
Sewer		4

Balance Sheet

Assets and Othe Debits (a)	Balance End of Year (b)	Balance First of Year (c)	
ASSESTS AND OTHER DEBITS			1
UTILITY PLANT			2
Utility Plant (101)	223,074,901	185,090,859	3
Less: Accumulated Provision for Depreciation and Amortization of Utility Plant (111)	42,145,232	39,813,784	4
Utility Plant Acquisition Adjustments (117-118)	0	0	5
Other Utility Plant Adjustments (119)	0	0	6
BYhil H]mD'Ubh	180,929,669	145,277,075	7
OTHER PROPERTY AND INVESTMENTS			8
Nonutility Property (121)	0	0	9
Less: Accumulated Provision for Depreciation and Amortization of Nonutility Property (122)	0	0	10
Investment in Municipality (123)	0	0	11
Other Investments (124)	0	0	12
Sinking Funds (125)	4,845,794	3,818,448	13
Depreciation Fund (126)	13,520,413	13,267,892	14
Other Special Funds (128)	0	0	15
HcHU' CA Yf DfcdYfmiUbX' =bj Ygfa Ybtg	18,366,207	17,086,340	16
CURRENT AND ACCRUED ASSETS			17
Cash (131)	2,062,717	5,366,975	18
Special Deposits (134)	0	0	19
Working Funds (135)	1,363	1,045	20
Temporary Cash Investments (136)	16,167,870	19,626,181	21
Notes Receivable (141)	0	0	22
Customer Accounts Receivable (142)	10,263,490	9,631,703	23
Other Accounts Receivable (143)	0	0	24
Accumulated Provision for Uncollectible Accounts- -Cr. (144)	6,503	9,172	25
Receivables from Municipality (145)	473,792	541,372	26
Plant Materials and Operating Supplies (154)	396,982	377,839	27
Merchandise (155)	0	0	28
Other Materials and Supplies (156)	0	0	29
Stores Expense (163)	0	0	30
Prepayments (165)	195,235	181,441	31
Interest and Dividends Receivable (171)	0	0	32
Accrued Utility Revenues (173)	0	0	33
Miscellaneous Current and Accrued Assets (174)	1,214,438	818,011	34
HcHU' 7 i ffYbhiUbX' 5 VVfi YX' 5 ggYfg	30,769,384	36,535,395	35
DEFERRED DEBITS			36
Unamortized Debt Discount and Expense (181)	553,786	651,594	37
Extraordinary Property Losses (182)	0	0	38
Preliminary Survey and Investigation Charges (183)	1,917,285	2,875,617	39
Clearing Accounts (184)	0	0	40
Temporary Facilities (185)	0	0	41
Miscellaneous Deferred Debits (186)	3,670,395	3,401,111	42
HcHU' 8 YZffYX' 8 YV]fg	6,141,466	6,928,322	43
HCH5 @5 GG9 HG' 5 B8 'CH< 9F ' 896 #HG	236,206,726	205,827,132	44

Balance Sheet

Liabilities and Othe Credits (a)	Balance End of Year (b)	Balance First of Year (c)	
LIABILITIES AND OTHER CREDITS			1
PROPRIETARY CAPITAL			2
Capital Paid in by Municipality (200)	2,756,536	2,756,536	3
Appropriated Earned Surplus (215)	0	0	4
Unappropriated Earned Surplus (216)	73,838,313	71,946,291	5
“HcHJ” Df cdf]YUfmi7 Ud]KJ	76,594,849	74,702,827	6
LONG-TERM DEBT			7
Bonds (221)	134,167,634	104,856,100	8
Advances from Municipality (223)	0	0	9
Other Long-Term Debt (224)	0	0	10
“HcHJ” @b] !HYfa 8 YVh	134,167,634	104,856,100	11
CURRENT AND ACCRUED LIABILITIES			12
Notes Payable (231)	0	0	13
Accounts Payable (232)	6,295,908	11,424,045	14
Payables to Municipality (233)	3,188,806	2,798,651	15
Customer Deposits (235)	160,422	164,826	16
Taxes Accrued (236)	2,198,384	2,146,101	17
Interest Accrued (237)	539,707	440,879	18
Tax Collections Payable (241)	3,532	8,051	19
Miscellaneous Current and Accrued Liabilities (242)	252,427	259,088	20
“HcHJ” 7i ffYbhUbX’5 VVW! YX’ @UV]]H]Yg	12,639,186	17,241,641	21
DEFERRED CREDITS			22
Unamortized Premium on Debt (251)	1,654,900	1,179,121	23
Customer Advances for Construction (252)	0	0	24
Other Deferred Credits (253)	11,150,157	7,847,443	25
“HcHJ” 8 YZffYX’7 fYX]Jg	12,805,057	9,026,564	26
OPERATING RESERVES			27
Property Insurance Reserve (261)	0	0	28
Injuries and Damages Reserve (262)	0	0	29
Pensions and Benefits Reserve (263)	0	0	30
Miscellaneous Operating Reserves (265)	0	0	31
“HcHJ” CdYfU]b[’FYgYfj Yg	0	0	32
“HCH5 @@56 =@H9 G’5 B8 ’CH<9F ’7 F98 #HG	236,206,726	205,827,132	33

Net Utility Plant

g Report utility plant accounts and related accumulated provisions for depreciation and amortization after allocation of common plant accounts and related provisions for depreciation and amortization to utility departments as of December 31.

Particulars (a)	Water (b)	Electric (c)	Gas (d)	Sewer (e)	
First of Year					1
Total Utility Plant - First of Year	185,090,859	0	0	0	2
	185,090,859	0	0	0	3
Plant Accounts					4
Utility Plant in Service - Financed by Utility Operations or by the Municipality (101.1)	100,588,003				5
Utility Plant in Service - Contributed Plant (101.2)	42,928,147				6
Utility Plant Purchased or Sold (102)					7
Utility Plant Leased to Others (104)					8
Property Held for Future Use (105)	435,090				9
Completed Construction not Classified (106)					10
Construction Work in Progress (107)	79,123,661				11
Total Utility Plant	223,074,901	0	0	0	12
Accumulated Provision for Depreciation and Amortization					13
Accumulated Provision for Depreciation of Utility Plant in Service - Financed by Utility Operations or by the Municipality (111.1)	26,816,415				14
Accumulated Provision for Depreciation of Utility Plant in Service - Contributed Plant (111.2)	15,328,817				15
Accumulated Provision for Depreciation of Utility Plant Leased to Others (112)					16
Accumulated Provision for Depreciation of Property Held for Future Use (113)					17
Accumulated Provision for Amortization of Utility Plant in Service (114)					18
Accumulated Provision for Amortization of Utility Plant Leased to Others (115)					19
Accumulated Provision for Amortization of Property Held for Future Use (116)					20
Total Accumulated Provision	42,145,232	0	0	0	21
Accumulated Provision for Depreciation and Amortization					22
Utility Plant Acquisition Adjustments (117)					23
Accumulated Provision for Amortization of Utility Plant Acquisition Adjustments (118)					24
Other Utility Plant Adjustments (119)					25
Total Other Utility Plant Accounts	0	0	0	0	26
Net Utility Plant	180,929,669	0	0	0	27

Accumulated Provision for Depreciation of Utility Plant on Utility Plant Financed by Utility Operations or by the Municipality (Acct. 111.1)

Depreciation Accruals (Credits) during the year (111.1):

- g Report the amounts charged in the operating sections to Depreciation Expense (403).
- g If sewer operations are nonregulated, do not report sewer depreciation on this schedule.
- g Report the Depreciation Expense on Meters charged to sewer operations as an addition in the Water Column. If the sewer is also a regulated utility by the PSC, report an equal amount as a reduction in the Sewer column.
- g Report all other accruals charged to other accounts, such as to clearing accounts.

Description (a)	Water (b)	Electric (c)	Gas (d)	Sewer (e)	Total (f)	
Balance First of Year (111.1)	25,269,748	0	0	0	25,269,748	1
Credits during year						2
Charged Depreciation Expense (403)	2,011,300				2,011,300	3
Depreciation Expense on Meters Charged to Sewer	185,484				185,484	4
Salvage	22,439				22,439	5
Total credits	2,219,223	0	0	0	2,219,223	6
Debits during year						7
Book Cost of Plant Retired	601,154				601,154	8
Cost of Removal	71,402				71,402	9
Total debits	672,556	0	0	0	672,556	10
Balance end of year (111.1)	26,816,415	0	0	0	26,816,415	11

Accumulated Provision for Depreciation of Utility Plant on Contributed Plant in Service (Acct. 111.2)

Depreciation Accruals (Credits) during the year (111.2):

- g Report the amounts charged in the operating sections to Other Income Deductions (426).
- g If sewer operations are nonregulated, do not report sewer depreciation on this schedule.
- g Report the Depreciation Expense on Meters charged to sewer operations as an addition in the Water Column. If the sewer is also a regulated utility by the PSC, report an equal amount as a reduction in the Sewer column.
- g Report all other accruals charged to other accounts, such as to clearing accounts.

Description (a)	Water (b)	Electric (c)	Gas (d)	Sewer (e)	Total (f)	
Balance First of Year (111.2)	14,544,036	0	0	0	14,544,036	1
Credits during year						2
Charged Other Income Deductions (426)	793,070				793,070	3
Depreciation Expense on Meters Charged to Sewer					0	4
Salvage	0				0	5
Total credits	793,070	0	0	0	793,070	6
Debits during year						7
Book Cost of Plant Retired	8,289				8,289	8
Cost of Removal	0				0	9
Total debits	8,289	0	0	0	8,289	10
Balance end of year (111.2)	15,328,817	0	0	0	15,328,817	11

Net Nonutility Property (Accts. 121 & 122)

- g Report separately each item of property with a book cost of \$5,000 or more included in account 121.
- g Other items may be grouped by classes of property.
- g Describe in detail any investment in sewer department carried in this account.

Description (a)	Balance First of Year (b)	Additions During Year (c)	Deductions During Year (d)	Balance End of Year (e)	
Nonregulated sewer plant	0			0	1
Total Nonutility Property (121)	0	0	0	0	2
Less accum. prov. depr. & amort. (122)	0			0	3
Net Nonutility Property	0	0	0	0	4

Accumulated Provision for Uncollectible Accounts-Cr. (Acct. 144)

Description (a)	Amount (b)	
Balance first of year	9,172	1
Additions		2
Provision for uncollectibles during year	9,406	3
Collection of accounts previously written off: Utility Customers	102	4
Collection of accounts previously written off: Others	465	5
Total Additions	9,973	6
Accounts Written Off		7
Accounts written off during the year: Utility Customers	8,873	8
Accounts written off during the year: Others	3,769	9
Total Accounts Written Off	12,642	10
Balance End of Year	6,503	11

Materials and Supplies

Account (a)	Generation (b)	Transmission (d)	Distribution (d)	Other (e)	Total End of Year (f)	Amount Prior Year (g)	
Electric Utility							1
Fuel (151)					0	0	2
Fuel stock expenses (152)					0	0	3
Plant mat. & oper. sup. (154)					0	0	4
Total Electric Utility	0	0	0	0	0	0	5

Account	Total End of Year	Amount Prior Year	
Electric utility total	0	0	1
Water utility (154)	396,982	377,839	2
Sewer utility (154)			3
Heating utility (154)			4
Gas utility (154)			5
Merchandise (155)			6
Other materials & supplies (156)			7
Stores expense (163)			8
Total Material and Supplies	396,982	377,839	9

Unamortized Debt Discount & Expense & Premium on Debt (Accts. 181 and 251)

Report net discount and expense or premium separately for each security issue.

Debt Issue to Which Related (a)	Written Off During Year		Balance End of Year (d)	
	Amount (b)	Account Charged or Credited (c)		
Unamortized debt discount & expense (181)				
None				1
				2
Prepaid Interest Exp - Unamortized Loss on Adv Refunding	97,809	0	553,786	3
Total	97,809		553,786	4
Unamortized premium on debt (251)				
None				5
				6
Unamortized Premium - Bond 2013	41,000	0	30,751	7
Unamortized Premium - Bond 2014	10,257	0	17,950	8
Unamortized Premium - Bond 2015	22,177	0	273,512	9
Unamortized Premium - Bond 2016	39,871	0	531,618	10
Unamortized Premium - Bond 2021	11,306	0	200,681	11
Unamortized Premium - Bond 2022	7,568	607,956	600,388	12
Total	132,179		1,654,900	13

Capital Paid in by Municipality (Acct. 200)

Report each item (when individually or when like items are combined) greater than \$10,000 (class AB), \$5,000 (class C) and \$2,000 (class D, sewer and privates) and all other lesser amounts grouped as Miscellaneous. Describe fully using other than account titles.

	Description (a)	Amount (b)	
Balance first of year		2,756,536	1
Balance end of year		2,756,536	2

Capital Paid in by Municipality (Acct. 200)

Report each item (when individually or when like items are combined) greater than \$10,000 (class AB), \$5,000 (class C) and \$2,000 (class D, sewer and privates) and all other lesser amounts grouped as Miscellaneous. Describe fully using other than account titles.

Capital Paid in by Municipality (Acct. 200) (Page F-15)

General Footnote

There were no additions to this account in 2022.

Bonds (Acct. 221)

- g Report information required for each separate issue of bonds.
- g If there is more than one interest rate for an aggregate obligation issue, average the interest rates and report one rate.
- g Proceeds advanced by the municipality from sale of general obligation bonds, if repayable by utility, should be included in account 223.
- g Enter interest rates in decimal form. For example, enter 6.75% as 0.0675

Description of Issue (a)	Date of Issue (b)	Final Maturity Date (c)	Interest Rate (d)	Principal Amount End of Year (e)	
2013 BOND ISSUE	05/07/2013	10/01/2032	2.76%	865,000	1
2013 SDWLP	05/22/2013	05/01/2033	1.93%	668,533	2
2014 BOND ISSUE	04/08/2014	10/01/2033	3.51%	520,000	3
2015 BOND ISSUE	05/12/2015	10/01/2034	2.45%	4,340,000	4
2016 BOND ISSUE	05/10/2016	10/01/2035	2.75%	5,620,000	5
2018 BOND ISSUE (BAN)	04/02/2018	05/01/2038	0.92%	0	6
2018 SDWLP	06/27/2018	05/01/2038	1.87%	563,189	7
2019-B SDWLP	03/27/2019	05/01/2038	1.98%	7,673,676	8
2019-E SDWLP	12/11/2019	05/01/2039	1.65%	2,364,001	9
2020 - WIFIA	08/06/2020	11/01/2058	1.16%	77,258,235	10
2020 BOND ISSUE	12/03/2020	10/01/2033	1.17%	8,700,000	11
2021 BOND ISSUE	04/20/2021	10/01/2040	2.02%	8,120,000	12
2022 BOND ISSUE	10/20/2022	10/01/2042	4.13%	17,475,000	13
Total				134,167,634	14

Bonds (Acct. 221)

- g Report information required for each separate issue of bonds.
- g If there is more than one interest rate for an aggregate obligation issue, average the interest rates and report one rate.
- g Proceeds advanced by the municipality from sale of general obligation bonds, if repayable by utility, should be included in account 223.
- g Enter interest rates in decimal form. For example, enter 6.75% as 0.0675

Bonds (Acct. 221) (Page F-17)**General Footnote**

A/N 221 Bonds: Dollar amount includes current portion of long-term debt.

Notes Payable & Miscellaneous Long-Term Debt

- | |
|--|
| <ul style="list-style-type: none">g Report each class of debt included in Accounts 223, 224 and 231.g Proceeds of general obligation issues, if subject to repayment by the utility, should be included in Account 223.g If there is more than one interest rate for an aggregate obligation issue, average the interest rates and report one rate.g Enter interest rates in decimal form. For example, enter 6.75% as 0.0675 |
|--|

- - - THIS SCHEDULE NOT APPLICABLE TO THIS UTILITY- - -

Taxes Accrued (Acct. 236)

Description (a)	Amount (b)	
Balance first of year	2,146,101	1
Charged water department expense	2,290,212	2
Charged electric department expense		3
Charged gas department expense		4
Charged sewer department expense	39,498	5
Total accruals and other credits	2,329,710	6
County, state and local taxes	2,112,195 *	7
Social Security taxes	148,503	8
PSC Remainder Assessment	13,274	9
Gross Receipts Tax		10
DNR Water Use Fees	125	11
Unemployment Compensation	3,330	12
Total payments and other debits	2,277,427	13
Balance end of year	2,198,384	14

Taxes Accrued (Acct. 236)

Taxes Accrued (Acct. 236) (Page F-19)**General Footnote**

County, State, and Local taxes were adjusted for PILOT <\$33,907> due to a program error in Schedule W-7. The Lower Tax Equivalent for 2022 was actually "higher" because we use an equivalent calculated from the 2020 report. Due to timing and budgets, the Utility and the City have agreed to this two-year cycle (reported in 2020, calculated in 2021, expensed in 2022) verified in a Memorandum of Understanding dated 2/24/2014. \$2,198,386 was expensed in 2022; however, the program will not allow/save a higher number in this cell. Per the PSC in 2014, WWU will have to use the number calculated in Schedule W-7 \$2,164,479 and record the difference of \$33,907 in Schedule F-2 under Miscellaneous Debits to Surplus (Acct 435) as a PILOT adjustment. Schedule F-19 also needed to be adjusted. The actual PILOT payments made to the City in 2022 was \$2,146,102.

Interest Accrued (Acct. 237)

- g Report below interest accrued on each utility obligation.
- g Report customer deposits under account 235.

Description of Issue (a)	Interest Accrued Balance First of Year (b)	Interest Accrued During Year (c)	Interest Paid During Year (d)	Interest Accrued Balance End of Year (e)	
Bonds (221)	0	0	0	0	1
GENERAL OBLIGATION REFUNDING BONDS - 2013	131,625	192,661	276,519	47,767 *	2
GENERAL OBLIGATION REFUNDING BONDS - 2022		172,401	0	172,401	3
REVENUE BONDS - 2013 ISSUE	17,000	59,650	68,000	8,650 *	4
REVENUE BONDS - 2014 ISSUE	7,038	26,313	28,150	5,201 *	5
REVENUE BONDS - 2015 ISSUE	45,500	179,900	182,000	43,400 *	6
REVENUE BONDS - 2016 ISSUE	56,051	221,688	224,200	53,539 *	7
REVENUE BONDS - 2018 ISSUE	32,971	243,420	276,391	0	8
REVENUE BONDS - 2020 ISSUE	27,702	110,673	110,806	27,569 *	9
REVENUE BONDS - SDWLP 2013	2,318	13,216	13,390	2,144	10
REVENUE BONDS - SDWLP 2018	1,849	10,718	10,812	1,755	11
REVENUE BONDS - SDWLP 2019	33,487	194,271	195,935	31,823	12
WIFIA - 2020	85,338	708,131	648,011	145,458	13
Subtotal Bonds (221)	440,879	2,133,042	2,034,214	539,707	14
Advances from Municipality (223)	0	0	0	0	15
None				0	16
Subtotal Advances from Municipality (223)	0	0	0	0	17
Other Long-Term Debt (224)	0	0	0	0	18
None				0	19
Subtotal Other Long-Term Debt (224)	0	0	0	0	20
Notes Payable (231)	0	0	0	0	21
None				0	22
Subtotal Notes Payable (231)	0	0	0	0	23
Customer Deposits (235)	0	0	0	0	24
None				0	25
Subtotal Customer Deposits (235)	0	0	0	0	26
Total	440,879	2,133,042	2,034,214	539,707	27

Interest Accrued (Acct. 237)

- g Report below interest accrued on each utility obligation.
- g Report customer deposits under account 235.

Interest Accrued (Acct. 237) (Page F-20)

General Footnote

Bonds (221) Descriptions that cannot be changed due to prior balance derived from last year's report:

~~%~~General Obligation Refunding Bonds - ~~2013-14~~ should be listed as %2021+

"Revenue Bonds - 2013 Issue" should be listed as "General Obligation Refunding Bonds - 2013 Issue"

"Revenue Bonds - 2014 Issue" should be listed as "General Obligation Refunding Bonds - 2014 Issue"

"Revenue Bonds - 2015 Issue" should be listed as "General Obligation Refunding Bonds - 2015 Issue"

"Revenue Bonds - 2016 Issue" should be listed as "General Obligation Refunding Bonds - 2016 Issue"

"Revenue Bonds - 2020 Issue" should be listed as "General Obligation Refunding Bonds - 2020 Issue"

Balance Sheet Detail - Other Accounts

Report each item (when individually or when like items are combined) greater than \$10,000 (class AB), \$5,000 (class C) and \$2,000 (class D) and all other lesser amounts grouped as Miscellaneous. Describe fully using other than account titles.

Description (a)	Balance End of Year (b)	
Sinking Funds (125)	0	1
A/N 1250 DEBT PAYMENT FUND	2,010,907	2
A/N 1259 BOND RESERVE FUND	1	3
A/N 1287 TAX EQUIVALENT (PILOT) RESERVE	2,834,886	4
Total (Acct. 125)	4,845,794	5
Depreciation Fund (126)	0	6
A/N 1261 IMPROVEMENT FUND	156	7
A/N 1265 EQUIPMENT REPLACEMENT FUND	13,520,257	8
Total (Acct. 126)	13,520,413	9
Cash and Working Funds (131)	0	10
Cash	2,062,717	11
Total (Acct. 131)	2,062,717	12
Working Funds (135)	0	13
A/N 135 WORKING FUNDS	1,363	14
Total (Acct. 135)	1,363	15
Temporary Cash Investments (136)	0	16
A/N 1365 LGIP - GENERAL FUND	16,167,870	17
Total (Acct. 136)	16,167,870	18
Customer Accounts Receivable (142)	0	19
Water	6,135,689	20
A/N 1423 A/R RETURN FLOW CHARGES	436,322	21
A/N 1427 A/R LEASES	2,843,727	22
Sewer (Regulated)	847,752	23
Total (Acct. 142)	10,263,490	24
Other Accounts Receivable (143)	0	25
Sewer (Non-regulated)		26
Merchandising, jobbing and contract work		27
Total (Acct. 143)	0	28
Receivables from Municipality (145)	0	29
A/N 1449 A/R TAX ROLL - SEWER	5,857 *	30
A/N 1450 A/R TAX ROLL - WATER	465,301 *	31
A/N 1451 A/R TAX ROLL - RETURN FLOW	2,634 *	32

Balance Sheet Detail - Other Accounts

Report each item (when individually or when like items are combined) greater than \$10,000 (class AB), \$5,000 (class C) and \$2,000 (class D) and all other lesser amounts grouped as Miscellaneous. Describe fully using other than account titles.

Total (Acct. 145)	473,792	33
Prepayments (165)	0	34
A/N 1650 PREPAID INS - PLC & WC	45,713	35
A/N 1651 PREPAID INS - LT DISABILITY	552	36
A/N 1652 PREPAID INS - HEALTH & DENTAL	71,394	37
A/N 1653 PREPAID INS - LIFE	1,764	38
A/N 1655 PREPAID OTHER	75,812	39
Total (Acct. 165)	195,235	40
Miscellaneous Current and Accrued Assets (174)	0	41
A/N 1746 LEASE ASSET	143,284	42
A/N RESTRICTED NET PENSION ASSET	1,071,154	43
Total (Acct. 174)	1,214,438	44
Preliminary Survey and Investigation Charges (183)	0	45
A/N 1830 FUTURE WATER SUPPLY	1,917,285	46
Total (Acct. 183)	1,917,285	47
Miscellaneous Deferred Debits (186)	0	48
A/N 1875 DEFERRED OUTFLOW PENSION	2,582,760	49
A/N 1876 DEFERRED OUTFLOW - OPEB HLTH INS	968,850	50
A/N 1877 DEFERRED OUTFLOW LIFE INS.	118,785	51
Total (Acct. 186)	3,670,395	52
Accounts Payable (232)	0	53
Accounts Payable	6,295,908	54
Total (Acct. 232)	6,295,908	55
Payables to Municipality (233)	0	56
A/N 2331 SEWER USER CHARGES	2,129,690 *	57
A/N 2332 RETURN FLOW USER CHARGES	989,381 *	58
A/N 2336 SEWER CONNECTION FEES	69,735 *	59
Total (Acct. 233)	3,188,806	60
Customer Deposits (235)	0	61
A/N 2351 CUSTOMER DEPOSITS	160,422	62
Total (Acct. 235)	160,422	63
Tax Collections Payable (241)	0	64
A/N 241 TAX COLLECTIONS PAYABLE	3,532	65
Total (Acct. 241)	3,532	66

Balance Sheet Detail - Other Accounts

Report each item (when individually or when like items are combined) greater than \$10,000 (class AB), \$5,000 (class C) and \$2,000 (class D) and all other lesser amounts grouped as Miscellaneous. Describe fully using other than account titles.

Miscellaneous Current and Accrued Liabilities (242)	0	67
A/N 242 MISC CURRENT & ACCRUED LIABILITIES	252,427	68
Total (Acct. 242)	252,427	69
Other Deferred Credits (253)	0	70
Regulatory Liability	191,104	71
A/N 2175 DEFERRED INFLOW PENSION	3,028,933	72
A/N 2176 DEFERRED INFLOW HEALTH INS.	903,507	73
A/N 2177 DEFERRED INFLOW LIFE INS.	37,414	74
A/N 2178 DEFFERED INFLOW LEASES	2,843,728	75
A/N 2530-100 REGULATORY LIABILITY - PENSION	(94,277) *	76
A/N 2532 OPEB LIABILITY - HEALTH	4,128,419	77
A/N 2532-100 REGULATORY LIABILITY - OPEB (HEALTH)	(219,002) *	78
A/N 2534 OPEB LIABILITY - LIFE INS	314,303	79
A/N 2534-100 REGULATORY LIABILITY - OPEB (LIFE)	(232,932) *	80
A/N 2535 UNEARNED REVENUE - CONSERVATION	105,675	81
A/N 2536 LEASE LIABILITY	143,284	82
ROUNDING ADJUSTMENT TO TIE BALANCE SHEET	1	83
Total (Acct. 253)	11,150,157	84

Balance Sheet Detail - Other Accounts

Report each item (when individually or when like items are combined) greater than \$10,000 (class AB), \$5,000 (class C) and \$2,000 (class D) and all other lesser amounts grouped as Miscellaneous. Describe fully using other than account titles.

Balance Sheet Detail - Other Accounts (Page F-22)

Explain amounts in Accounts 143, 145 and/or 233 in excess of \$10,000. Provide a short list or detailed description, but do not use terms such as other revenues, general, miscellaneous, or repeat the account title.

A/N 1449 A/R Tax Roll . Sewer: This account represents the tax roll invoice sent to the City that remains outstanding as of 12/31/2022.

A/N 1450 A/R Tax Roll . Water: This account represents the tax roll invoice sent to the City that remains outstanding as of 12/31/2022.

A/N 1451 A/R Tax Roll . Return Flow: This account represents the tax roll invoice sent to the City that remains outstanding as of 12/31/2022.

A/N 2331 A/P Sewer User Charges: This account represents all sewer user charges payable to the City as of 12/31/2022.

A/N 2332 A/P Return Flow User Charges: This account represents all return flow user charges payable to the City as of 12/31/2022.

A/N 2336 A/P Sewer Connection Fees: This account represents all sewer connection fees payable to the City as of 12/31/2022.

General Footnote

A/N 2530-100 Regulatory Liability Pension . Includes PSC vs. GASB 68 adjustment of (\$94,277).

A/N 2532-100 Regulatory Liability OPEB (Health) . Includes PSC vs. GASB 75 adjustment of (\$219,002).

A/N 2534-100 Regulatory Liability OPEB (Life) . Includes PSC vs. GASB 75 adjustment of (\$232,932).

Return on Rate Base Computation

- g The data used in calculating rate base are averages.
- g Calculate those averages by summing the first-of-year and the end-of-year figures for each account and then dividing the sum by two.
- g For municipal utilities, do not include contributed plant in service, property held for future use, or construction work in progress with utility plant in service. These are not rate base components.
- g For private utilities, do not include property held for future use, or construction work in progress with utility plant in service. These are not rate base components.

Average Rate Base (a)	Water (b)	Electric (c)	Gas (d)	Sewer (e)	Total (f)	
Add Average						1
Utility Plant in Service (101.1)	99,211,193				99,211,193	2
Materials and Supplies	387,410				387,410	3
Less Average						4
Reserve for Depreciation (111.1)	26,043,081				26,043,081	5
Customer Advances for Construction					0	6
Regulatory Liability	286,657				286,657	7
Average Net Rate Base	73,268,865	0	0	0	73,268,865	8
Net Operating Income	3,926,575				3,926,575	9
Net Operating Income as a percent of Average Net Rate Base	5.36%	N/A	N/A	N/A	5.36%	10

Regulatory Liability - Pre-2003 Historical Accumulated Depreciation on Contributed Utility Plant (253)

Description (a)	Water (b)	Electric (c)	Gas (d)	Sewer (e)	Total (f)	
Balance First of Year	382,210	0	0	0	382,210	1
Credits During Year					0	2
None					0	3
Charges (Deductions)					0	4
Miscellaneous Amortization (425)	191,106				191,106	5
Balance End of Year	191,104	0	0	0	191,104	6

Important Changes During the Year

Report changes of any of the following types:

1. Acquisitions
None.

2. Leaseholder changes
None.

3. Extensions of service
Developers completed improvements in 2022.

4. Estimated changes in revenues due to rate changes
An overall 9% rate increase was granted by the PSC effective 9/1/2022.

5. Obligations incurred or assumed, excluding commercial paper
General Obligation Refunding Bonds for \$17,475,000 were issued to the City of Waukesha on behalf of the Utility on 10/20/2022 to refund the 2018 Revenue BAN originally issued to the City of Waukesha on behalf of the Utility. In addition, the Utility drew \$29,188,593 from the 2020 WIFIA loan in 2022.

6. Formal proceedings with the Public Service Commission
1. Docket #6240-GF-100 Great Lakes Diversion Project Application 2. Docket #6240-WR-110 Adjust Water Rates (completed in 2022) 3. Docket #6240-CW-117 Construct Water Transmission Main, a Booster Station, Reservoirs, and a Water Supply Control Building in the City of Waukesha, the City of West Allis, the City of Greenfield, the City of New Berlin, and the Town (Village) of Waukesha, Waukesha County, and in the City of Milwaukee, Milwaukee County, Wisconsin

7. Any additional matters
None.

Water Operating Revenues & Expenses

Description (a)	This Year (b)	Last Year (c)	
Operating Revenues - Sales of Water			1
Sales of Water (460-467)	12,884,573	13,316,326	2
Total Sales of Water	12,884,573	13,316,326	3
Other Operating Revenues			4
Forfeited Discounts (470)	119,546	142,304	5
Rents from Water Property (472)	275,185	269,204	6
Interdepartmental Rents (473)	0	0	7
Other Water Revenues (474)	199,937	(202,470)	8
Total Other Operating Revenues	594,668	209,038	9
Total Operating Revenues	13,479,241	13,525,364	10
Operation and Maintenance Expenses			11
Source of Supply Expense (600-617)	975,804	983,754	12
Pumping Expenses (620-633)	965,294	900,434	13
Water Treatment Expenses (640-652)	553,386	500,793	14
Transmission and Distribution Expenses (660-678)	936,364	987,117	15
Customer Accounts Expenses (901-906)	287,214	302,662	16
Sales Expenses (910)	0	0	17
Administrative and General Expenses (920-932)	1,533,092	1,418,124	18
Total Operation and Maintenance Expenses	5,251,154	5,092,884	19
Other Operating Expenses			20
Depreciation Expense (403)	2,011,300	1,998,439	21
Amortization Expense (404-407)			22
Taxes (408)	2,290,212	2,270,606	23
Total Other Operating Expenses	4,301,512	4,269,045	24
Total Operating Expenses	9,552,666	9,361,929	25
NET OPERATING INCOME	3,926,575	4,163,435	26

Water Operating Revenues - Sales of Water

- g Where customer meters record cubic feet, multiply by 7.48 to obtain number of gallons.
- g Report estimated gallons for unmetered sales.
- g Sales to multiple dwelling buildings through a single meter serving 3 or more family units should be classified multifamily residential.
- g Account 460, Unmetered Sales to General Customers - Gallons of Water Sold should not include in any way quantity of water, i.e. metered or measured by tank of pool volume. The quantity should be estimated based on size of pipe, flow, foot of frontage, etc. Bulk water sales should be Account 460 if the quantity is estimated and should be Account 461 if metered or measured by volume. Water related to construction should be a measured sale of water (Account 461).
- g **Report average number of individually-metered accounts (meters). The amount reported should be the average meter count. E.g. if a hospital has 5 meters, a total of 5 meters should be reported on this schedule in column b (Average No. of Customers).**
- g **Do not include meters or revenue billed under Schedule Am-1 (Additional Meter Rental Charge) in Account 461. Record revenues billed under Schedule Am-1 in Account 474.**

Description (a)	Average No. Customer (b)	Thousand of Gallons of Water Sold (c)	Amount (d)	
Unmetered Sales to General Customers (460)				1
Residential (460.1)				2
Commercial (460.2)				3
Industrial (460.3)				4
Public Authority (460.4)				5
Multifamily Residential (460.5)				6
Irrigation (460.6)				7
Total Unmetered Sales to General Customers (460)	0	0	0	8
Metered Sales to General Customers (461)				9
Residential (461.1)	18,033	825,159	5,590,671	10
Commercial (461.2)	1,273	307,740	1,659,681	11
Industrial (461.3)	142	132,963	599,384	12
Public Authority (461.4)	119	54,601	288,350	13
Multifamily Residential (461.5)	1,032	357,119	1,866,838	14
Irrigation (461.6)	150	6,485	66,171	15
Total Metered Sales to General Customers (461)	20,749	1,684,067	10,071,095	16
Private Fire Protection Service (462)	1		308,095	17
Public Fire Protection Service (463)	1		2,505,383	18
Other Water Sales (465)				19
Sales for Resale (466)	0	0	0	20
Interdepartmental Sales (467)				21
Total Sales of Water	20,751	1,684,067	12,884,573	22

Sales for Resale (Acct. 466)

Use a separate line for each delivery point.

- - - THIS SCHEDULE NOT APPLICABLE TO THIS UTILITY- - -

Other Operating Revenues (Water)

- g Report revenues relating to each account and fully describe each item using other than the account title.
- g Report each item (when individually or when like items are combined) greater than \$10,000 (class AB), \$5,000 (class C) and \$2,000 (class D and privates) and all other lesser amounts grouped as Miscellaneous.
- g For a combined utility which also provides sewer service that is based upon water readings, report the return on net investment in meters charged to sewer department in Other Water Revenues (474).

Description (a)	Amount (b)	
Public Fire Protection Service (463)		1
Amount billed (usually per rate schedule F-1 or Fd-1)	2,505,383	2
Wholesale fire protection billed		3
Amount billed for fighting fires outside utility's service areas (usually per rate schedule F-2 or BW-1)		4
Total Public Fire Protection Service (463)	2,505,383	5
Forfeited Discounts (470)		6
Customer late payment charges	119,546	7
Total Forfeited Discounts (470)	119,546	8
Rents from Water Property (472)		9
Rent of tower for cellular antennas	275,185	10
Total Rents from Water Property (472)	275,185	11
Interdepartmental Rents (473)		12
None		13
Total Interdepartmental Rents (473)	0	14
Other Water Revenues (474)		15
Return on net investment in meters charged to sewer department	41,647	16
A/N 474 - MISC SERVICE REVENUES	66,610 *	17
INTEREST CHARGES	91,680 *	18
Total Other Water Revenues (474)	199,937	19

Other Operating Revenues (Water)

- g Report revenues relating to each account and fully describe each item using other than the account title.
- g Report each item (when individually or when like items are combined) greater than \$10,000 (class AB), \$5,000 (class C) and \$2,000 (class D and privates) and all other lesser amounts grouped as Miscellaneous.
- g For a combined utility which also provides sewer service that is based upon water readings, report the return on net investment in meters charged to sewer department in Other Water Revenues (474).

Other Operating Revenues (Water) (Page W-04)

Explain all amounts in Account 474 in excess of \$10,000.

A/N 474 Interest Charges . Reported as \$91,680.11 because of a year-end accrual for water revenue measured, but not billed \$90,553.49.
Actual interest charges less the accrual were \$1,126.62.

General Footnote

A/N 471 Misc Service Revenues - \$66,609.86 includes fees for lateral connection administration, bill status letters, special reads, reconnection/reinstallation, fire flow tests, private well permits, and vacuum breakers.

Water Operation & Maintenance Expenses

- g Fully explain each expense account that has a difference between This Year and the previous three year average that is greater than 15 percent and \$10,000 (class AB), 15 percent and \$5,000 (class C), 15 percent and \$1,000 (class D). Include a breakdown of costs that contributed to the difference.
- g Class C and class D report all expenses in Other Expense (column c).

Description (a)	Labor Expense (b)	Other Expense (c)	Total This Year (d)	Last Year (e)	
SOURCE OF SUPPLY EXPENSES					1
Operation Supervision and Engineering (600)			0	0	2
Operation Labor and Expenses (601)			0	0	3
Purchased Water (602)			0	0	4
Miscellaneous Expenses (603)		958,332	958,332	958,374	5
Rents (604)			0	0	6
Maintenance Supervision and Engineering (610)	17,088	384	17,472	17,619	7
Maintenance of Structures and Improvements (611)			0	0	8
Maintenance of Collecting and Impounding Reservoirs (612)			0	0	9
Maintenance of Lake, River and Other Intakes (613)			0	0	10
Maintenance of Wells and Springs (614)			0	7,761	11
Maintenance of Supply Mains (616)			0	0	12
Maintenance of Miscellaneous Water Source Plant (617)			0	0	13
Total Source of Supply Expenses	17,088	958,716	975,804	983,754	14
PUMPING EXPENSES					15
Operation Supervision and Engineering (620)	12,847	289	13,136	18,371	16
Fuel for Power Production (621)			0	0	17
Power Production Labor and Expenses (622)			0	0	18
Fuel or Power Purchased for Pumping (623)		753,238	753,238	697,002	19
Pumping Labor and Expenses (624)	37,625	642	38,267	32,561	20
Expenses Transferred--Credit (625)			0	0	21
Miscellaneous Expenses (626)	2,780	27,070	29,850	31,147	22
Rents (627)			0	0	23
Maintenance Supervision and Engineering (630)	21,366	480	21,846	19,203	24
Maintenance of Structures and Improvements (631)	34,027	8,584	42,611	56,603 *	25
Maintenance of Power Production Equipment (632)			0	0	26
Maintenance of Pumping Equipment (633)	46,609	19,737	66,346	45,547 *	27
Total Pumping Expenses	155,254	810,040	965,294	900,434	28
WATER TREATMENT EXPENSES					29
Operation Supervision and Engineering (640)	9,111	204	9,315	17,190	30
Chemicals (641)		202,029	202,029	154,412 *	31
Operation Labor and Expenses (642)	113,929	192,078	306,007	299,146	32
Miscellaneous Expenses (643)		408	408	418	33
Rents (644)			0	0	34
Maintenance Supervision and Engineering (650)			0	0	35
Maintenance of Structures and Improvements (651)		2,801	2,801	129	36
Maintenance of Water Treatment Equipment (652)	13,380	19,446	32,826	29,498	37
Total Water Treatment Expenses	136,420	416,966	553,386	500,793	38
TRANSMISSION AND DISTRIBUTION EXPENSES					39
Operation Supervision and Engineering (660)	13,532	304	13,836	46,172 *	40

Water Operation & Maintenance Expenses

- g Fully explain each expense account that has a difference between This Year and the previous three year average that is greater than 15 percent and \$10,000 (class AB), 15 percent and \$5,000 (class C), 15 percent and \$1,000 (class D). Include a breakdown of costs that contributed to the difference.
- g Class C and class D report all expenses in Other Expense (column c).

Description (a)	Labor Expense (b)	Other Expense (c)	Total This Year (d)	Last Year (e)	
Storage Facilities Expenses (661)	6,770	4,730	11,500	20,770	41
Transmission and Distribution Lines Expenses (662)	85,510	24,665	110,175	108,809	42
Meter Expenses (663)	47,076	8,433	55,509	60,648	43
Customer Installations Expenses (664)	6,192	23,604	29,796	547 *	44
Miscellaneous Expenses (665)	76,375	71,572	147,947	128,295	45
Rents (666)			0	0	46
Maintenance Supervision and Engineering (670)	25,001	509	25,510	30,190	47
Maintenance of Structures and Improvements (671)			0	0	48
Maintenance of Distribution Reservoirs and Standpipes (672)		5,625	5,625	13,150	49
Maintenance of Transmission and Distribution Mains (673)	181,636	153,563	335,199	437,249 *	50
Maintenance of Services (675)	79,192	55,820	135,012	42,854 *	51
Maintenance of Meters (676)	3,256	73	3,329	6,163	52
Maintenance of Hydrants (677)	14,001	13,993	27,994	61,586 *	53
Maintenance of Miscellaneous Plant (678)	21,728	13,204	34,932	30,684	54
Total Transmission and Distribution Expenses	560,269	376,095	936,364	987,117	55
CUSTOMER ACCOUNTS EXPENSES					56
Supervision (901)	6,739	90	6,829	6,911	57
Meter Reading Expenses (902)	11,079	5,436	16,515	16,219	58
Customer Records and Collection Expenses (903)	114,359	70,962	185,321	205,104	59
Uncollectible Accounts (904)		9,407	9,407	2,006	60
Miscellaneous Customer Accounts Expenses (905)	6,664	207	6,871	10,151	61
Customer Service and Informational Expenses (906)	23,988	38,283	62,271	62,271	62
Total Customer Accounts Expenses	162,829	124,385	287,214	302,662	63
SALES EXPENSES					64
Sales Expenses (910)			0	0	65
Total Sales Expenses	0	0	0	0	66
ADMINISTRATIVE AND GENERAL EXPENSES					67
Administrative and General Salaries (920)	398,971	8,234	407,205	401,486	68
Office Supplies and Expenses (921)	34,516	367,089	401,605	362,452	69
Administrative Expenses Transferred--Credit (922)	212,640	437,519	650,159	687,045	70
Outside Services Employed (923)		34,420	34,420	31,206	71
Property Insurance (924)		88,207	88,207	80,696	72
Injuries and Damages (925)		31,215	31,215	24,304	73
Employee Pensions and Benefits (926)		940,170	940,170	938,290	74
Regulatory Commission Expenses (928)	19,953	5,943	25,896	6,558 *	75
Duplicate Charges--Credit (929)			0	0	76
Miscellaneous General Expenses (930)	24,016	40,037	64,053	41,588 *	77
Rents (931)			0	0	78
Maintenance of General Plant (932)	54,327	136,153	190,480	218,589	79
Total Administrative and General Expenses	319,143	1,213,949	1,533,092	1,418,124	80

Water Operation & Maintenance Expenses

- g Fully explain each expense account that has a difference between This Year and the previous three year average that is greater than 15 percent and \$10,000 (class AB), 15 percent and \$5,000 (class C), 15 percent and \$1,000 (class D). Include a breakdown of costs that contributed to the difference.
- g Class C and class D report all expenses in Other Expense (column c).

Description (a)	Labor Expense (b)	Other Expense (c)	Total This Year (d)	Last Year (e)	
TOTAL OPERATION AND MAINTENANCE EXPENSES	1,351,003	3,900,151	5,251,154	5,092,884	81

Water Operation & Maintenance Expenses

- g Fully explain each expense account that has a difference between This Year and the previous three year average that is greater than 15 percent and \$10,000 (class AB), 15 percent and \$5,000 (class C), 15 percent and \$1,000 (class D). Include a breakdown of costs that contributed to the difference.
- g Class C and class D report all expenses in Other Expense (column c).

Water Operation & Maintenance Expenses (Page W-05)

Explain all This Year amounts that are more than 15% and \$10,000 higher or lower than the Last Year amount. Please see the help document for examples.

a/n 631 Maintenance of Structures & Improvements - 25% Decrease - Driveways did not need sealcoating in 2022 and there was less HVAC maintenance needed in 2022.

a/n 633 Maintenance of Pumping Equipment - 46% Increase - Maintenance activities were delayed in 2021 because uni-directional flushing was performed.

a/n 641 Chemicals - 31% Increase - Chemical costs increased in 2022.

a/n 660 Operation Supervision & Engineering - 70% Decrease - A supervisor retired in 2022, and the same position was not filled.

a/n 664 Customer Installations Expenses - 5348% Increase - Commercial cross connection was postponed from January 2020 to November 2022 because of COVID. Residential cross connection was also suspended due to COVID and resumed in August 2022.

a/n 673 Maintenance of Transmission & Distribution Mains - 23% Decrease - There was a water main lining project, under the Fox River, on Madison Street in 2021.

a/n 675 Maintenance of Services - 215% Increase - The Utility focused on completing many of the remaining property service replacements in 2022. Less street service maintenance was completed in 2021 while Operations staff focused on uni-directional flushing.

a/n 677 Maintenance of Hydrants - 55% Decrease - There was less hydrant maintenance in 2022. In 2022, they focused on property service replacements in anticipation of the switch to Great Lakes Water and capital projects.

a/n 928 Regulatory Commission Expenses - 295% Increase - A rate case was submitted to the PSC in 2022.

a/n 930 Miscellaneous General Expenses - 54% Increase - Employee bonuses were received in 2022.

Taxes (Acct. 408 - Water)

When allocation of taxes is made between departments, explain method used.

Description of Tax (a)	This Year (b)	Last Year (c)	
Property Tax Equivalent	2,164,479	2,146,102	1
Less: Local and School Tax Equivalent on Meters Charged to Sewer Department	39,498	34,955	2
Net Property Tax Equivalent	2,124,981	2,111,147	3
Social Security	148,503	145,892	4
PSC Remainder Assessment	13,273	13,442	5
Unemployment Compension	3,330		6
DNR WATER USE FEE	125	125	7
Total Tax Expense	2,290,212	2,270,606	8

Water Property Tax Equivalent - Detail

- g No property tax equivalent shall be determined for sewer utilities or town sanitary district water utilities.
- g Tax rates are those issued in November (usually) of the year being reported and are available from the municipal treasurer. Report the tax rates in mills to six (6) decimal places.
- g The assessment ratio is available from the municipal treasurer. Report the ratio as a decimal to six (6) places.
- g The utility plant balance first of year should include the gross book values of plant in service (total of utility financed and contributed plant), property held for future use and construction work in progress.
- g An "other tax rate" is included in the "Net Local and School Tax Rate Calculation" to the extent that it is local. An example is a local library tax. Fully explain the rate in the Property Tax Equivalent schedule footnotes.
- g **Property Tax Equivalent - Total**
If the municipality has authorized a lower tax equivalent amount, the authorization description and date of the authorization must be included in the notes to the financial statements.

COUNTY: WAUKESHA(1)

SUMMARY OF TAX RATES

1. State Tax Rate	mills	0.000000
2. County Tax Rate	mills	1.950000
3. Local Tax Rate	mills	11.560000
4. School Tax Rate	mills	7.610000
5. Vocational School Tax Rate	mills	0.340000
6. Other Tax Rate - Local	mills	0.000000
7. Other Tax Rate - Non-Local	mills	0.000000
8. Total Tax Rate	mills	21.460000
9. Less: State Credit	mills	1.400000
11. Net Tax Rate	mills	20.060000

PROPERTY TAX EQUIVALENT CALCULATION

12. Local Tax Rate	mills	11.560000
13. Combined School Tax Rate	mills	7.950000
14. Other Tax Rate - Local	mills	0.000000
15. Total Local & School Tax Rate	mills	19.510000
16. Total Tax Rate	mills	21.460000
17. Ratio of Local and School Tax to Total	dec.	0.909133
18. Total Tax Net of State Credit	mills	20.060000
19. Net Local and School Tax Rate	mills	18.237213
20. Utility Plant, Jan 1	\$	185,090,859
21. Materials & Supplies	\$	377,839
22. Subtotal	\$	185,468,698
23. Less: Plant Outside Limits	\$	34,277,921
24. Taxable Assets	\$	151,190,777
25. Assessment Ratio	dec.	0.785000
26. Assessed Value	\$	118,684,760
27. Net Local and School Tax Rate	mills	18.237213
28. Tax Equiv. Computed for Current Year	\$	2,164,479

PROPERTY TAX EQUIVALENT - TOTAL

PROPERTY TAX EQUIVALENT CALCULATION

1. Utility Plant, Jan 1	\$	185,090,859
2. Materials & Supplies	\$	377,839
3. Subtotal	\$	185,468,698
4. Less: Plant Outside Limits	\$	34,277,921
5. Taxable Assets	\$	151,190,777
6. Assessed Value	\$	118,684,760
7. Tax Equiv. Computed for Current Year	\$	2,164,479
8. Tax Equivalent per 1994 PSC Report	\$	840,079
9. Amount of Lower Tax Equiv. as Authorized by Municipality for Current Year (see notes)	\$	
10. Tax Equivalent for Current Year (see notes)	\$	2,164,479

Water Property Tax Equivalent - Detail

- g No property tax equivalent shall be determined for sewer utilities or town sanitary district water utilities.
- g Tax rates are those issued in November (usually) of the year being reported and are available from the municipal treasurer. Report the tax rates in mills to six (6) decimal places.
- g The assessment ratio is available from the municipal treasurer. Report the ratio as a decimal to six (6) places.
- g The utility plant balance first of year should include the gross book values of plant in service (total of utility financed and contributed plant), property held for future use and construction work in progress.
- g An "other tax rate" is included in the "Net Local and School Tax Rate Calculation" to the extent that it is local. An example is a local library tax. Fully explain the rate in the Property Tax Equivalent schedule footnotes.
- g **Property Tax Equivalent - Total**
If the municipality has authorized a lower tax equivalent amount, the authorization description and date of the authorization must be

Water Property Tax Equivalent - Detail (Page W-07)

General Footnote

The Lower Tax Equivalent for 2022 was actually "higher" because we use an equivalent calculated from the 2020 report. Due to timing and budgets, the Utility and the City have agreed to this two-year cycle (reported in 2020, calculated in 2021, expensed in 2022) verified in a Memorandum of Understanding dated 2/24/2014. \$2,198,386 was expensed in 2022; however, the program will not allow/save a higher number in this cell. Per the PSC in 2014, WWU will have to use the number calculated in Schedule W-7 \$2,164,479 and record the difference of \$33,907 in Schedule F-2 under Miscellaneous Debits to Surplus (Acct 435) as a PILOT adjustment.

Water Utility Plant in Service - Plant Financed by Utility or Municipality

- g All adjustments, corrections and reclassifications (including to/from plant financed by contributions) should be reported in Column (e), Adjustments.
- g Explain fully as a footnote the nature of all entries reported in Column (e), Adjustments.
- g For each account over \$50,000 (class AB) or \$25,000 (class C) or \$10,000 (class D), explain in the footnotes section the dollar additions and retirements. If applicable, the footnotes should cite construction authorization, complete with PSC docket number.
- g Use only the account titles listed. If the utility has subaccounts other than accounts 391.1 and 397.1, combine them into one total and detail by subaccount as a schedule footnote.
- g The treatment plant accounts have changed since 2008 and that they should confirm the dollar amounts are in the right account.
- g [PSC Uniform System of Accounts](#)

Accounts (a)	Balance First of Year (b)	Additions During Year (c)	Retirements During Year (d)	Adjustments Increase or (Decrease) (e)	Balance End of Year (f)	1
INTANGIBLE PLANT						1
Organization (301)	0				0	2
Franchises and Consents (302)	0				0	3
Miscellaneous Intangible Plant (303)	0				0	4
Total Intangible Plant	0	0	0	0	0	5
SOURCE OF SUPPLY PLANT						6
Land and Land Rights (310)	204,625				204,625	7
Structures and Improvements (311)	0				0	8
Collecting and Impounding Reservoirs (312)	0				0	9
Lake, River and Other Intakes (313)	0				0	10
Wells and Springs (314)	1,507,630				1,507,630	11
Supply Mains (316)	1,084,144				1,084,144	12
Other Water Source Plant (317)	0				0	13
Total Source of Supply Plant	2,796,399	0	0	0	2,796,399	14
PUMPING PLANT						15
Land and Land Rights (320)	181,670				181,670	16
Structures and Improvements (321)	3,997,407	195,162	79,775		4,112,794 *	17
Other Power Production Equipment (323)	0				0	18
Electric Pumping Equipment (325)	4,279,126	71,028	9,864		4,340,290 *	19
Diesel Pumping Equipment (326)	0				0	20
Other Pumping Equipment (328)	0				0	21
Total Pumping Plant	8,458,203	266,190	89,639	0	8,634,754	22
WATER TREATMENT PLANT						23
Land and Land Rights (330)	0				0	24
Structures and Improvements (331)	2,147,280				2,147,280	25
Sand or Other Media Filtration Equipment (332)	371,206				371,206	26
Membrane Filtration Equipment (333)	0				0	27
Other Water Treatment Equipment (334)	1,473,714		6,699		1,467,015	28
Total Water Treatment Plant	3,992,200	0	6,699	0	3,985,501	29
TRANSMISSION AND DISTRIBUTION PLANT						30
Land and Land Rights (340)	110,083				110,083	31
Structures and Improvements (341)	0				0	32
Distribution Reservoirs and Standpipes (342)	6,435,232	54,559	16,419		6,473,372 *	33
Transmission and Distribution Mains (343)	53,615,405	2,043,412	150,670		55,508,147 *	34
Services (345)	7,419,157	368,583	36,901		7,750,839 *	35
Meters (346)	4,094,441	368,405	241,648	(98,501)	4,122,697 *	36

Water Utility Plant in Service - Plant Financed by Utility or Municipality

- g All adjustments, corrections and reclassifications (including to/from plant financed by contributions) should be reported in Column (e), Adjustments.
- g Explain fully as a footnote the nature of all entries reported in Column (e), Adjustments.
- g For each account over \$50,000 (class AB) or \$25,000 (class C) or \$10,000 (class D), explain in the footnotes section the dollar additions and retirements. If applicable, the footnotes should cite construction authorization, complete with PSC docket number.
- g Use only the account titles listed. If the utility has subaccounts other than accounts 391.1 and 397.1, combine them into one total and detail by subaccount as a schedule footnote.
- g The treatment plant accounts have changed since 2008 and that they should confirm the dollar amounts are in the right account.
- g [PSC Uniform System of Accounts](#)

Accounts (a)	Balance First of Year (b)	Additions During Year (c)	Retirements During Year (d)	Adjustments Increase or (Decrease) (e)	Balance End of Year (f)		
Hydrants (348)	4,275,155	304,479	36,929		4,542,705 *	37	
Other Transmission and Distribution Plant (349)	0				0	38	
Total Transmission and Distribution Plant	75,949,473	3,139,438	482,567	(98,501)	78,507,843	39	
GENERAL PLANT							40
Land and Land Rights (389)	69,179				69,179	41	
Structures and Improvements (390)	2,387,296	1,240			2,388,536	42	
Office Furniture and Equipment (391)	183,657	10,613	600		193,670	43	
Computer Equipment (391.1)	576,035				576,035	44	
Transportation Equipment (392)	1,051,276	25,636	14,368		1,062,544	45	
Stores Equipment (393)	9,764				9,764	46	
Tools, Shop and Garage Equipment (394)	438,188				438,188	47	
Laboratory Equipment (395)	5,842				5,842	48	
Power Operated Equipment (396)	1,024,839	10,157			1,034,996	49	
Communication Equipment (397)	64,714				64,714	50	
SCADA Equipment (397.1)	827,319		7,281		820,038	51	
Miscellaneous Equipment (398)	0				0	52	
Total General Plant	6,638,109	47,646	22,249	0	6,663,506	53	
Total utility plant in service directly assignable	97,834,384	3,453,274	601,154	(98,501)	100,588,003	54	
Common Utility Plant Allocated to Water Department	0				0	55	
TOTAL UTILITY PLANT IN SERVICE	97,834,384	3,453,274	601,154	(98,501)	100,588,003	56	

Water Utility Plant in Service - Plant Financed by Utility or Municipality

- g All adjustments, corrections and reclassifications (including to/from plant financed by contributions) should be reported in Column (e), Adjustments.
- g Explain fully as a footnote the nature of all entries reported in Column (e), Adjustments.
- g For each account over \$50,000 (class AB) or \$25,000 (class C) or \$10,000 (class D), explain in the footnotes section the dollar additions and retirements. If applicable, the footnotes should cite construction authorization, complete with PSC docket number.
- g Use only the account titles listed. If the utility has subaccounts other than accounts 391.1 and 397.1, combine them into one total and detail by subaccount as a schedule footnote.
- g The treatment plant accounts have changed since 2008 and that they should confirm the dollar amounts are in the right account.
- g [PSC Uniform System of Accounts](#)

Water Utility Plant in Service - Plant Financed by Utility or Municipality (Page W-08)

Additions for one or more accounts exceed \$50,000, please explain. If applicable, provide construction authorization and PSC docket number.

- a/n 321 Pumping Structures and Improvement: Security Cameras were purchased for many of the Utility's sites. A roof was installed at well #7.
- a/n 325 Electric Pumping Equipment: A motor control center was installed at well #7. Manual transfer switches were installed at wells 7 and 8.
- a/n 342 Transmission and Distribution Reservoirs and Standpipes: Security Cameras were purchased for many of the Utility's sites.
- a/n 343 Transmission and Distribution Mains: 8,790 feet of Utility financed main, 53 valves, and 17 valveboxes were installed or replaced in 2022.
- a/n 345 Transmission and Distribution Services: 81 Utility financed services and 1 service valve were installed or replaced in 2022.
- a/n 346 Transmission and Distribution Meters: Meters and radios are replaced and retired as part of the Utility's 20-year meter change-out program.
- a/n 348 Transmission and Distribution Hydrants: 30 Utility financed hydrants were installed or replaced in 2022.

General Footnote

- a/n 346 Transmission and Distribution Meters: Meters are held in inventory throughout the year. At year-end, they are reclassified to the asset. This entry is reversed at the beginning of the following year. The adjustment is transferring in-stock meters back to inventory for the year 2022.

Retirements for one or more accounts exceed \$50,000, please explain.

- a/n 321 Pumping Structures and Improvement: Baxter St Pump Structure was razed in 2022. A roof at well #7 was retired.
- a/n 343 Transmission and Distribution Mains: 11,110 feet of Utility financed main, 64 valves and 17 manholes were retired in 2022.
- a/n 346 Transmission and Distribution Meters: Meters and radios are replaced and retired as part of the Utility's 20-year meter change-out program.

Water Utility Plant in Service - Plant Financed by Contributions

- g All adjustments, corrections and reclassifications (including to/from plant financed by contributions) should be reported in Column (e), Adjustments.
- g Explain fully as a footnote the nature of all entries reported in Column (e), Adjustments.
- g For each account over \$50,000 (class AB) or \$25,000 (class C) or \$10,000 (class D), explain in the footnotes section the dollar additions and retirements. If applicable, the footnotes should cite construction authorization, complete with PSC docket number.
- g Use only the account titles listed. If the utility has subaccounts other than accounts 391.1 and 397.1, combine them into one total and detail by subaccount as a schedule footnote.
- g The treatment plant accounts have changed since 2008 and that they should confirm the dollar amounts are in the right account.
- g [PSC Uniform System of Accounts](#)

Accounts (a)	Balance First of Year (b)	Additions During Year (c)	Retirements During Year (d)	Adjustments Increase or (Decrease) (e)	Balance End of Year (f)	
INTANGIBLE PLANT						1
Organization (301)	0				0	2
Franchises and Consents (302)	0				0	3
Miscellaneous Intangible Plant (303)	0				0	4
Total Intangible Plant	0	0	0	0	0	5
SOURCE OF SUPPLY PLANT						6
Land and Land Rights (310)	0				0	7
Structures and Improvements (311)	0				0	8
Collecting and Impounding Reservoirs (312)	0				0	9
Lake, River and Other Intakes (313)	0				0	10
Wells and Springs (314)	0				0	11
Supply Mains (316)	0				0	12
Other Water Source Plant (317)	0				0	13
Total Source of Supply Plant	0	0	0	0	0	14
PUMPING PLANT						15
Land and Land Rights (320)	0				0	16
Structures and Improvements (321)	629,970		4,670		625,300	17
Other Power Production Equipment (323)	0				0	18
Electric Pumping Equipment (325)	1,145,986				1,145,986	19
Diesel Pumping Equipment (326)	0				0	20
Other Pumping Equipment (328)	0				0	21
Total Pumping Plant	1,775,956	0	4,670	0	1,771,286	22
WATER TREATMENT PLANT						23
Land and Land Rights (330)	0				0	24
Structures and Improvements (331)	638,453				638,453	25
Sand or Other Media Filtration Equipment (332)	613,980				613,980	26
Membrane Filtration Equipment (333)	0				0	27
Other Water Treatment Equipment (334)	0				0	28
Total Water Treatment Plant	1,252,433	0	0	0	1,252,433	29
TRANSMISSION AND DISTRIBUTION PLANT						30
Land and Land Rights (340)	217,429	5,226			222,655	31
Structures and Improvements (341)	0				0	32
Distribution Reservoirs and Standpipes (342)	8,205				8,205	33
Transmission and Distribution Mains (343)	27,360,432	78,786			27,439,218 *	34
Services (345)	8,336,280	198,865	3,619		8,531,526 *	35
Meters (346)	0				0	36

Water Utility Plant in Service - Plant Financed by Contributions

- g All adjustments, corrections and reclassifications (including to/from plant financed by contributions) should be reported in Column (e), Adjustments.
- g Explain fully as a footnote the nature of all entries reported in Column (e), Adjustments.
- g For each account over \$50,000 (class AB) or \$25,000 (class C) or \$10,000 (class D), explain in the footnotes section the dollar additions and retirements. If applicable, the footnotes should cite construction authorization, complete with PSC docket number.
- g Use only the account titles listed. If the utility has subaccounts other than accounts 391.1 and 397.1, combine them into one total and detail by subaccount as a schedule footnote.
- g The treatment plant accounts have changed since 2008 and that they should confirm the dollar amounts are in the right account.
- g [PSC Uniform System of Accounts](#)

Accounts (a)	Balance First of Year (b)	Additions During Year (c)	Retirements During Year (d)	Adjustments Increase or (Decrease) (e)	Balance End of Year (f)	
Hydrants (348)	3,654,797	48,027			3,702,824	37
Other Transmission and Distribution Plant (349)	0				0	38
Total Transmission and Distribution Plant	39,577,143	330,904	3,619	0	39,904,428	39
GENERAL PLANT						40
Land and Land Rights (389)	0				0	41
Structures and Improvements (390)	0				0	42
Office Furniture and Equipment (391)	0				0	43
Computer Equipment (391.1)	0				0	44
Transportation Equipment (392)	0				0	45
Stores Equipment (393)	0				0	46
Tools, Shop and Garage Equipment (394)	0				0	47
Laboratory Equipment (395)	0				0	48
Power Operated Equipment (396)	0				0	49
Communication Equipment (397)	0				0	50
SCADA Equipment (397.1)	0				0	51
Miscellaneous Equipment (398)	0				0	52
Total General Plant	0	0	0	0	0	53
Total utility plant in service directly assignable	42,605,532	330,904	8,289	0	42,928,147	54
Common Utility Plant Allocated to Water Department	0				0	55
TOTAL UTILITY PLANT IN SERVICE	42,605,532	330,904	8,289	0	42,928,147	56

Water Utility Plant in Service - Plant Financed by Contributions

- g All adjustments, corrections and reclassifications (including to/from plant financed by contributions) should be reported in Column (e), Adjustments.
- g Explain fully as a footnote the nature of all entries reported in Column (e), Adjustments.
- g For each account over \$50,000 (class AB) or \$25,000 (class C) or \$10,000 (class D), explain in the footnotes section the dollar additions and retirements. If applicable, the footnotes should cite construction authorization, complete with PSC docket number.
- g Use only the account titles listed. If the utility has subaccounts other than accounts 391.1 and 397.1, combine them into one total and detail by subaccount as a schedule footnote.
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- g [PSC Uniform System of Accounts](#)

Water Utility Plant in Service - Plant Financed by Contributions (Page W-09)

5 XXJhcbg Zf'cbYcf'a cfYUWti brg'YI WYX") \$B\$\$zd'YUgYI d'Ujb" ZUdd'JWU'YZdfcj JXYVcbgifi Wjcb'Ui h cfJnUjcb'UbX'DG7'XcW_Yh number.

a/n 343 Transmission and Distribution Mains: 868 feet of Contractor/Developer financed main and 3 valves were installed in 2022.

a/n 345 Transmission and Distribution Services: 36 Contractor/Developer financed services were installed in 2022.

Water Accumulated Provision for Depreciation - Plant Financed by Utility or Municipality

g Use only the account titles listed. If the utility has subaccounts other than accounts 391.1 and 397.1, combine them into one total and detail by subaccount in a schedule footnote.
 g If more than one depreciation rate is used, report the average rate in column (c).
 g Enter depreciation rates in decimal form. For example, enter 6.75% as 0.0675

Primary Plant Accounts (a)	Balance First of Year (b)	Rate % Used (c)	Accruals During Year (d)	Book Cost of Plant Retired (e)	Cost of Removal (f)	Salvage (g)	Adjustments Increase or (Decrease) (h)	Balance End of Year (i)	
SOURCE OF SUPPLY PLANT									1
Structures and Improvements (311)	0							0	2
Collecting and Impounding Reservoirs (312)	0							0	3
Lake, River and Other Intakes (313)	0							0	4
Wells and Springs (314)	1,507,630	2.90%						1,507,630	5
Supply Mains (316)	327,038	1.80%	19,515					346,553	6
Other Water Source Plant (317)	0							0	7
Total Source of Supply Plant	1,834,668		19,515	0	0	0	0	1,854,183	8
PUMPING PLANT									9
Structures and Improvements (321)	2,102,611	3.20%	129,763	79,775	28,803			2,123,796	10
Other Power Production Equipment (323)	0							0	11
Electric Pumping Equipment (325)	1,195,483	4.40%	189,627	9,864				1,375,246	12
Diesel Pumping Equipment (326)	0							0	13
Other Pumping Equipment (328)	0							0	14
Total Pumping Plant	3,298,094		319,390	89,639	28,803	0	0	3,499,042	15
WATER TREATMENT PLANT									16
Structures and Improvements (331)	1,122,700	3.20%	68,713					1,191,413	17
Sand or Other Media Filtration Equipment (332)	134,505	3.30%	12,250					146,755	18
Membrane Filtration Equipment (333)	0							0	19
Other Water Treatment Equipment (334)	1,213,788	6.00%	88,222	6,699				1,295,311	20
Total Water Treatment Plant	2,470,993		169,185	6,699	0	0	0	2,633,479	21
TRANSMISSION AND DISTRIBUTION PLANT									22
Structures and Improvements (341)	0							0	23
Distribution Reservoirs and Standpipes (342)	2,572,096	1.90%	122,632	16,419				2,678,309	24
Transmission and Distribution Mains (343)	5,677,200	1.30%	709,303	150,670	13,723	38		6,222,148	25
Services (345)	2,144,805	2.90%	219,965	36,901	9,361			2,318,508	26
Meters (346)	2,477,936	5.50%	225,971	241,648		10,551		2,472,810	27

Water Accumulated Provision for Depreciation - Plant Financed by Utility or Municipality

g Use only the account titles listed. If the utility has subaccounts other than accounts 391.1 and 397.1, combine them into one total and detail by subaccount in a schedule footnote.
 g If more than one depreciation rate is used, report the average rate in column (c).
 g Enter depreciation rates in decimal form. For example, enter 6.75% as 0.0675

Primary Plant Accounts (a)	Balance First of Year (b)	Rate % Used (c)	Accruals During Year (d)	Book Cost of Plant Retired (e)	Cost of Removal (f)	Salvage (g)	Adjustments Increase or (Decrease) (h)	Balance End of Year (i)	
Hydrants (348)	567,242	2.20%	96,996	36,929	19,515	3,475		611,269	28
Other Transmission and Distribution Plant (349)	0							0	29
Total Transmission and Distribution Plant	13,439,279		1,374,867	482,567	42,599	14,064	0	14,303,044	30
GENERAL PLANT									31
Structures and Improvements (390)	1,043,112	2.90%	69,250					1,112,362	32
Office Furniture and Equipment (391)	144,580	5.80%	2,713	600				146,693	33
Computer Equipment (391.1)	507,673	20.00%	26,438					534,111	34
Transportation Equipment (392)	826,199	13.30%	54,094	14,368		8,375		874,300	35
Stores Equipment (393)	9,764	5.80%						9,764	36
Tools, Shop and Garage Equipment (394)	359,126	5.80%	8,544					367,670	37
Laboratory Equipment (395)	5,842	5.80%						5,842	38
Power Operated Equipment (396)	513,928	7.50%	77,244					591,172	39
Communication Equipment (397)	64,714	15.00%						64,714	40
SCADA Equipment (397.1)	751,774	9.20%	75,545	7,281				820,038	41
Miscellaneous Equipment (398)	0							0	42
Total General Plant	4,226,712		313,828	22,249	0	8,375	0	4,526,666	43
Total accum. prov. directly assignable	25,269,746		2,196,785	601,154	71,402	22,439	0	26,816,414	44
Common Utility Plant Allocated to Water Department	0							0	45
TOTAL ACCUM, PROV, FOR DEPRECIATION	25,269,746		2,196,785	601,154	71,402	22,439	0	26,816,414	46

Water Accumulated Provision for Depreciation - Plant Financed by Contributions

g Use only the account titles listed. If the utility has subaccounts other than accounts 391.1 and 397.1, combine them into one total and detail by subaccount in a schedule footnote.
 g If more than one depreciation rate is used, report the average rate in column (c).
 g Enter depreciation rates in decimal form. For example, enter 6.75% as 0.0675

Primary Plant Accounts (a)	Balance First of Year (b)	Rate % Used (c)	Accruals During Year (d)	Book Cost of Plant Retired (e)	Cost of Removal (f)	Salvage (g)	Adjustments Increase or (Decrease) (h)	Balance End of Year (i)	
SOURCE OF SUPPLY PLANT									1
Structures and Improvements (311)	0							0	2
Collecting and Impounding Reservoirs (312)	0							0	3
Lake, River and Other Intakes (313)	0							0	4
Wells and Springs (314)	0							0	5
Supply Mains (316)	0							0	6
Other Water Source Plant (317)	0							0	7
Total Source of Supply Plant	0		0	0	0	0	0	0	8
PUMPING PLANT									9
Structures and Improvements (321)	259,769	3.20%	20,084	4,670				275,183	10
Other Power Production Equipment (323)	0							0	11
Electric Pumping Equipment (325)	626,709	4.40%	50,423					677,132	12
Diesel Pumping Equipment (326)	0							0	13
Other Pumping Equipment (328)	0							0	14
Total Pumping Plant	886,478		70,507	4,670	0	0	0	952,315	15
WATER TREATMENT PLANT									16
Structures and Improvements (331)	259,740	3.20%	20,431					280,171	17
Sand or Other Media Filtration Equipment (332)	236,542	3.30%	20,261					256,803	18
Membrane Filtration Equipment (333)	0							0	19
Other Water Treatment Equipment (334)	0	6.00%						0	20
Total Water Treatment Plant	496,282		40,692	0	0	0	0	536,974	21
TRANSMISSION AND DISTRIBUTION PLANT									22
Structures and Improvements (341)	0							0	23
Distribution Reservoirs and Standpipes (342)	2,104	1.90%	156					2,260	24
Transmission and Distribution Mains (343)	6,955,979	1.30%	356,198					7,312,177	25
Services (345)	4,643,105	2.90%	244,583	3,619				4,884,069	26
Meters (346)	0							0	27

Water Accumulated Provision for Depreciation - Plant Financed by Contributions

g Use only the account titles listed. If the utility has subaccounts other than accounts 391.1 and 397.1, combine them into one total and detail by subaccount in a schedule footnote.
 g If more than one depreciation rate is used, report the average rate in column (c).
 g Enter depreciation rates in decimal form. For example, enter 6.75% as 0.0675

Primary Plant Accounts (a)	Balance First of Year (b)	Rate % Used (c)	Accruals During Year (d)	Book Cost of Plant Retired (e)	Cost of Removal (f)	Salvage (g)	Adjustments Increase or (Decrease) (h)	Balance End of Year (i)	
Hydrants (348)	1,560,088	2.20%	80,934					1,641,022	28
Other Transmission and Distribution Plant (349)	0							0	29
Total Transmission and Distribution Plant	13,161,276		681,871	3,619	0	0	0	13,839,528	30
GENERAL PLANT									31
Structures and Improvements (390)	0							0	32
Office Furniture and Equipment (391)	0							0	33
Computer Equipment (391.1)	0							0	34
Transportation Equipment (392)	0							0	35
Stores Equipment (393)	0							0	36
Tools, Shop and Garage Equipment (394)	0							0	37
Laboratory Equipment (395)	0							0	38
Power Operated Equipment (396)	0							0	39
Communication Equipment (397)	0							0	40
SCADA Equipment (397.1)	0							0	41
Miscellaneous Equipment (398)	0							0	42
Total General Plant	0		0	0	0	0	0	0	43
Total accum. prov. directly assignable	14,544,036		793,070	8,289	0	0	0	15,328,817	44
Common Utility Plant Allocated to Water Department	0							0	45
TOTAL ACCUM, PROV, FOR DEPRECIATION	14,544,036		793,070	8,289	0	0	0	15,328,817	46

Age of Water Mains

g If asset management, capital improvement, or other infrastructure-related documents are not available, the utility should consult other potential sources of information: the year the utility was formed, year of initial build-out area, year in which new developments, subdivisions, etc. were added. This information can be used to develop estimated figures.

g If pipe diameter value is between those offered in the column, choose the diameter that is closest to the actual value.

g Report all pipe larger than 14" diameter in the 30" category.

Pipe Size (a)	Feet of Main											Total (m)		
	pre-1900 (b)	1901-1920 (c)	1920-1940 (d)	1941-1960 (e)	1961-1970 (f)	1971-1980 (g)	1981-1990 (h)	1991-2000 (i)	2001-2010 (j)	2011-2020 (k)	2021-2030 (l)			
2.000					184		230	8	234		8		664	1
3.000								5					5	2
4.000						5	9	1,428	1,664				3,106	3
6.000		37,161	46,473	98,990	45,384	28,686	14,790	13,505	5,044	859	362		291,254	4
8.000		6,909	1,682	53,699	115,835	151,463	106,382	195,593	130,513	63,364	5,314		830,754	5
10.000		102	635	142	160		53	1,436	22	201			2,751	6
12.000		700	1,675	18,957	53,861	56,633	35,052	79,827	88,693	66,600	9,348		411,346	7
14.000				174	282				8		168		632	8
16.000		399		133	11,598	36,332	10,088	20,891	28,498	18,147	513		126,599	9
20.000				9,263	16,459	4,663	2,803	11,877	13,045	2,583	1,566		62,259	10
24.000				1,103		2,096	6		4,297	22,980			30,482	11
30.000										186			186	12
Total	0	45,271	50,465	182,461	243,763	279,878	169,413	324,570	272,018	174,928	17,271		1,760,038	13

Describe source of information used to develop data:
Water main age was extracted from GIS

Sources of Water Supply - Statistics

- g For Raw Water Withdrawn, use metered volume of untreated water withdrawn from the source.
- g For Finished Water Pumped, use metered volume of water pumped, adjusted for known meter errors. Describe known meter errors in Notes Section.
- g If Finished Water is not metered, use Raw Water Withdrawn and subtract estimated water used in treatment.

Month (a)	Sources of Water Supply (000's gal)						Total Gallons	
	Raw Water Withdrawn		Finished Water Pumped		Purchased Water (Imported)		Entering Distribution	
	Ground Water (b)	Surface Water (c)	Ground Water (d)	Surface Water (e)	Ground Water (f)	Surface Water (g)	System (h)	
January	154,548		154,548				154,548	1
February	141,970		141,970				141,970	2
March	155,523		155,523				155,523	3
April	148,355		148,355				148,355	4
May	163,883		163,883				163,883	5
June	171,572		171,572				171,572	6
July	174,130		174,130				174,130	7
August	171,182		171,182				171,182	8
September	155,424		155,424				155,424	9
October	151,388		151,388				151,388	10
November	142,164		142,164				142,164	11
December	151,187		151,187				151,187	12
TOTAL	1,881,326	0	1,881,326	0	0	0	1,881,326	13

Water Audit and Other Statistics

- g Where possible, report actual metered values. If water uses are not metered, estimate values for each line based on best available information. For assistance, refer to AWWA M36 Manual . Water Audits and Loss Control Programs.
- g For unbilled, unmetered gallons (line 16), include water used for system operation and maintenance and water used for non-regulated sewer utility.
- g If gallons estimated due to theft, data, and billing errors is unknown, multiply net gallons entering distribution system (line 3) by .0025.

Description (a)	Value (b)	
WATER AUDIT STATISTICS		1
Finished Water pumped or purchased (000s)	1,881,326	2
Less: Gallons (000s) sold to wholesale customers (exported water)	0	3
Subtotal: Net gallons (000s) entering distribution system	1,881,326	4
Less: Gallons (000s) sold to retail customers (billed, metered)	1684067	6
Less: Gallons (000s) sold to retail customers (billed, unmetered)	0	7
Gallons (000s) of Non-Revenue Water	197,259	8
Gallons (000s) of unbilled-metered (including customer use to prevent freezing)	12,833	9
Gallons (000s) of unbilled-unmetered (including unmetered flushing, fire protection)	1,046	10
Subtotal: Unbilled Authorized Consumption	13,879	11
Total Water Loss	183,380	12
Gallons (000s) estimated due to unauthorized consumption (includes theft) default option	179903	14
Gallons (000s) estimated due to data and billing errors	1	15
Gallons (000s) estimated due to customer meter under-registration	1	16
Subtotal Apparent Losses	179,905	17
Gallons (000s) estimated due to reported leakage (mains, services, hydrants, overflows)	3,476	18
Gallons (000s) estimated due to unreported and background leakage	(1)	19
Subtotal Real Losses (leakage)	3,475	20
Non-Revenue Water as percentage of net water supplied	10%	21
Total Water Loss as percentage of net water supplied	10%	22
OTHER STATISTICS		23
Maximum gallons (000s) pumped by all methods in any one day during reporting year	7,909	24
Date of maximum	06/22/2022	25
Cause of maximum		26
Temps in high 80's, summer usage.		27
Minimum gallons (000s) pumped by all methods in any one day during reporting year	2,744	28
Date of minimum	03/06/2022	29
Total KWH used by the utility (including pumping, treatment facilities and other utility operations)	6,613,418	30
If water is purchased:		31
Vendor Name		32
Point of Delivery		33
Source of purchased water		34
Vendor Name (2)		35
Point of Delivery (2)		36
Source of purchased water (2)		37
Vendor Name (3)		38
Point of Delivery (3)		39
Source of purchased water (3)		40
Number of main breaks repaired this year	22	41
Number of service breaks repaired this year	7	42
Does the utility have an asset management plan?	Yes	43

Water Audit and Other Statistics

- g Where possible, report actual metered values. If water uses are not metered, estimate values for each line based on best available information. For assistance, refer to AWWA M36 Manual . Water Audits and Loss Control Programs.
- g For unbilled, unmetered gallons (line 16), include water used for system operation and maintenance and water used for non-regulated sewer utility.
- g If gallons estimated due to theft, data, and billing errors is unknown, multiply net gallons entering distribution system (line 3) by .0025.

Sources of Water Supply - Well Information

- g Enter characteristics for each of the utility's functional wells (regardless of whether it is in service or not).
- g Do not include abandoned wells on this schedule.
- g All abandoned wells should be retired from the plant accounts and no longer listed in the utility's annual report.
- g Abandoned wells should be permanently filled and sealed per Wisconsin Administrative codes Chapters NR811 and NR812.

Utility Name/ID for Well (a)	DNR Well ID (b)	Depth (feet) (c)	Casing Diameter (inches) (d)	Yield Per Day (gallons) (e)	In Service? (f)	
WELL #10	BH436	2,145	28	2,545,442	Yes	1
WELL #11	RL255	127	16	215,208	Yes	2
WELL #12	RL256	144	16	675,197	Yes	3
WELL #13	WK947	105	16	748,942	Yes	4
WELL #2	EQ944	1,835	14	1	No	* 5
WELL #3	BH429	1,995	14	1,020,634	Yes	6
WELL #5	BH431	2,120	19	1,637,014	Yes	7
WELL #6	BH432	2,075	20	3,175,436	Yes	8
WELL #7	BH433	1,650	20	1,012,380	Yes	9
WELL #8	BH434	2,024	20	2,680,618	Yes	10
WELL #9	BH435	1,725	20	1,934,965	Yes	11
				15,645,837		12

Sources of Water Supply - Well Information

- g Enter characteristics for each of the utility's functional wells (regardless of whether it is in service or not).
- g Do not include abandoned wells on this schedule.
- g All abandoned wells should be retired from the plant accounts and no longer listed in the utility's annual report.
- g Abandoned wells should be permanently filled and sealed per Wisconsin Administrative codes Chapters NR811 and NR812.

Sources of Water Supply - Well Information (Page W-16)

General Footnote

Well #2 is not in service; therefore, column (e) should show Yield per Day (gallons) is zero. However, the program will not save the schedule as completed without a value greater than zero in this column.

Sources of Water Supply - Intake Information

--- THIS SCHEDULE NOT APPLICABLE TO THIS UTILITY---

Pumping & Power Equipment

Identification (a)	Location (b)	Pump						Pump Motor or Standby Engine				
		DNR Well Id (c)	Primary Purpose (d)	Primary Destination (e)	Year Installed (f)	Type (g)	Actual Capacity (gpm) (h)	Year Installed (i)	Year Actual Capacity Determined (j)	Type (k)	Horsepower (l)	
#10	WELL #10	BH436	Primary	Reservoir	2019	Submersible	2,389	2019	2022	Electric	700	1
#13A	WELL #13	WK947	Primary	Reservoir	2018	Submersible	520	2019	2022	Electric	30	2
#13B	WELL #13	WK947	Booster	Distribution	2009	Centrifugal	900	2009	2021	Electric	100	3
#13C	WELL #13	WK947	Booster	Distribution	2009	Centrifugal	900	2009	2021	Electric	100	4
#3A	WELL #3	BH429	Primary	Distribution	2015	Submersible	709	2015	2022	Electric	250	5
#5A	WELL #5	BH431	Primary	Reservoir	2001	Vertical Turbine	1,137	1991	2022	Electric	250	6
#5B	WELL #5	BH431	Booster	Distribution	1956	Centrifugal	1,200	1956	2021	Electric	75	7
#5C	WELL #5	BH431	Booster	Distribution	1996	Centrifugal	1,108	1996	2021	Electric	40	8
#6A	WELL #6	BH432	Primary	Reservoir	2015	Submersible	2,205	2015	2022	Electric	400	9
#6B	WELL #6	BH432	Booster	Distribution	2004	Centrifugal	2,000	2004	2021	Electric	150	10
#6C	WELL #6	BH432	Booster	Distribution	2000	Centrifugal	2,300	2000	2021	Electric	150	11
#7	WELL #7	BH433	Primary	Distribution	2005	Submersible	703	2005	2022	Electric	200	12
#8A	WELL #8	BH434	Primary	Reservoir	2018	Submersible	1,862	2014	2022	Electric	300	13
#8B	WELL #8	BH434	Booster	Distribution	2006	Centrifugal	2,600	2006	2021	Electric	150	14
#8C	WELL #8	BH434	Booster	Distribution	2006	Centrifugal	2,600	2006	2021	Electric	150	15
#9A	WELL #9	BH435	Primary	Reservoir	2002	Submersible	1,344	2002	2022	Electric	350	16
#9B	WELL #9	BH435	Booster	Distribution	2009	Centrifugal	2,200	2009	2021	Electric	150	17
#9C	WELL #9	BH435	Booster	Distribution	2009	Centrifugal	2,200	2009	2021	Electric	150	18
#9D	WELL #9	BH435	Booster	Distribution	2009	Centrifugal	1,400	2009	2021	Electric	50	19
AIRPORT BOOSTER-A	AIRPORT BOOSTER		Booster	Distribution	2017	Centrifugal	1,100	2017	2021	Electric	125	20
HIGHLINE BOOSTER-A	HIGHLINE BOOSTER		Booster	Distribution	1998	Centrifugal	1,000	2019	2021	Electric	50	21
HIGHLINE BOOSTER-B	HIGHLINE BOOSTER		Booster	Distribution	1998	Centrifugal	1,000	2019	2021	Electric	50	22
HIGHLINE BOOSTER-C	HIGHLINE BOOSTER		Booster	Distribution	1998	Centrifugal	1,000	2019	2021	Electric	50	23

Pumping & Power Equipment

Identification (a)	Location (b)	DNR Well Id (c)	Pump					Pump Motor or Standby Engine				
			Primary Purpose (d)	Primary Destinatio n (e)	Year Installed (f)	Type (g)	Actual Capacity (gpm) (h)	Year Installed (i)	Year Actual Capacity Determined (j)	Type (k)	Horse- power (l)	
HILLCREST BOOSTER-A	HILLCREST BOOSTER		Booster	Distribution	1996	Centrifugal	250	1996	2021	Electric	15	24
HILLCREST BOOSTER-B	HILLCREST BOOSTER		Booster	Distribution	2008	Centrifugal	120	2008	2021	Electric	15	25
HILLCREST BOOSTER-C	HILLCREST BOOSTER		Booster	Distribution	1996	Centrifugal	2,000	1996	2021	Electric	75	26
HILLCREST BOOSTER-D	HILLCREST BOOSTER		Booster	Distribution	2016	Centrifugal	60	2016	2021	Electric	15	27
MADISON BOOSTER-A	MADISON BOOSTER		Booster	Distribution	2007	Centrifugal	2,100	2007	2021	Electric	125	28
MADISON BOOSTER-B	MADISON BOOSTER		Booster	Distribution	2007	Centrifugal	2,100	2007	2021	Electric	125	29
OAKMONT BOOSTER #1	OAKMONT BOOSTER		Booster	Distribution	2004	Centrifugal	150	2004	2021	Electric	8 *	30
OAKMONT BOOSTER #2	OAKMONT BOOSTER		Booster	Distribution	2004	Centrifugal	150	2004	2021	Electric	8 *	31
OAKMONT BOOSTER #3	OAKMONT BOOSTER		Booster	Distribution	2004	Centrifugal	1,000	2004	2021	Electric	40	32
OAKMONT BOOSTER #4	OAKMONT BOOSTER		Booster	Distribution	2004	Centrifugal	1,000	2004	2021	Electric	40	33
RIVER HILLS-A	RIVER PLACE		Booster	Distribution	2004	Centrifugal	175	2004	2021	Electric	5	34
RIVER HILLS-B	RIVER PLACE		Booster	Distribution	2007	Centrifugal	175	2007	2021	Electric	5	35
SOUTHEAST BOOSTER	WELL #5		Booster	Distribution	1983	Centrifugal	900	1983	2021	Electric	40	36
STARDUST BOOSTER-A	STARDUST BOOSTER		Booster	Distribution	2003	Centrifugal	700	2003	2021	Electric	15	37
STARDUST BOOSTER-B	STARDUST BOOSTER		Booster	Distribution	2015	Centrifugal	1,000	1991	2021	Electric	30	38
STARDUST BOOSTER-C	STARDUST BOOSTER		Booster	Distribution	2013	Centrifugal	2,000	2013	2021	Electric	60	39
WELL #11	2578 RIVER RD	RL255	Primary	Reservoir	2013	Submersible	149	2013	2022	Electric	40	40
WELL #12	2566 RIVER RD	RL256	Primary	Reservoir	2013	Submersible	469	2013	2022	Electric	50	41
WOODRIDGE BOOSTER-A	WOODRIDGE BOOSTER		Booster	Distribution	2015	Centrifugal	1,000	1999	2021	Electric	40	42
WOODRIDGE BOOSTER-B	WOODRIDGE BOOSTER		Booster	Distribution	2015	Centrifugal	1,000	1999	2021	Electric	40	43

Pumping & Power Equipment

Pumping & Power Equipment (Page W-18)

General Footnote

Oakmont Booster #1 & #2 actual Horsepower, column (I) should be %E-24 however, the program gives an error if whole numbers are not entered, so we rounded up to %A in order to save and complete the schedule.

Reservoirs, Standpipes and Elevated Tanks

g Enter elevation difference between highest water level in Standpipe or Elevated Tank, (or Reservoir only on an elevated site) and the water main where the connection to the storage begins branching into the distribution system.

Facility Name (a)	Facility ID Site Code (b)	Year Constructed (c)	Type (d)	Primary Material (e)	Elevation Difference in Feet (f)	Total Capacity In Gallons (g)	
#13	#13	2009	Reservoir	Concrete	0	300,000	1
#2	#2	1932	Reservoir	Concrete	0	0 *	2
#5	#5	1956	Reservoir	Concrete	0	2,000,000	3
#6	#6	1960	Reservoir	Concrete	0	2,000,000	4
#8	#8	1968	Reservoir	Concrete	0	2,000,000	5
#9	#9	1970	Reservoir	Concrete	0	1,500,000	6
EVERGREEN TOWER	EVERGREEN TOWER	1958	Elevated Tank	Steel	108	250,000 *	7
HILLCREST/WELL #10	#10	1978	Reservoir	Concrete	123	5,000,000	8
HUNTER TOWER	HUNTER TOWER	1998	Elevated Tank	Steel	185	400,000	9
MEADOWBROOK	MEADOWBROOK	1999	Elevated Tank	Steel	159	300,000	10
MORRIS TOWER	MORRIS TOWER	1998	Elevated Tank	Steel	120	100,000	11
NE AREA/DAVIDSON	NE AREA/DAVIDSON	1968	Elevated Tank	Steel	88	250,000	12
NW AREA/UWW	NW AREA/UWW	2009	Elevated Tank	Concrete	99	1,000,000	13

Reservoirs, Standpipes and Elevated Tanks

g Enter elevation difference between highest water level in Standpipe or Elevated Tank, (or Reservoir only on an elevated site) and the water main where the connection to the storage begins branching into the distribution system.

Reservoirs, Standpipes and Elevated Tanks (Page W-19)

General Footnote

Well #2 has been temporarily abandoned. The reservoir has been removed/demolished.
Evergreen Tower is out of service, but is still owned by the Utility as of 12/31/2022.

Water Treatment Plant

g Provide a generic description for (a). Do not give specific address of location.
 g Please select all that apply for (d) and (e). If Other is selected please explain in Notes (h).
 g Please identify the point of application for each treatment plant for (g). For example, please list each well or central treatment facility served by this unit.

Unit Description (a)	Year Constructed (b)	Rated Capacity (mgd) (c)	Disinfection (d)	Additional Treatment (e)	Fluoridated (f)	Point of Application (g)	Notes (h)	
#2	1932		_ Ultraviolet Light _ Liquid Chlorine _ Gas Chlorine _ Ozone _ Other x None	_ Flocculation/Sedimentation _ Sand Filtration _ Activated Carbon Filtration _ Membrane Filtration _ Ion Exchange _ Iron/Manganese _ Nitrate Removal _ Radium Removal _ Corrosion _ Other	No		Not in Service.	1
#3	1930	1	_ Ultraviolet Light x Liquid Chlorine _ Gas Chlorine _ Ozone _ Other _ None	_ Flocculation/Sedimentation _ Sand Filtration _ Activated Carbon Filtration _ Membrane Filtration _ Ion Exchange _ Iron/Manganese _ Nitrate Removal x Radium Removal x Corrosion _ Other	Yes	WELLHOUSE		2
#5	1956	1	_ Ultraviolet Light x Liquid Chlorine _ Gas Chlorine _ Ozone _ Other _ None	_ Flocculation/Sedimentation _ Sand Filtration _ Activated Carbon Filtration _ Membrane Filtration _ Ion Exchange _ Iron/Manganese _ Nitrate Removal _ Radium Removal _ Corrosion _ Other	No	WELLHOUSE		3
#6	1960	3	_ Ultraviolet Light x Liquid Chlorine _ Gas Chlorine _ Ozone _ Other _ None	_ Flocculation/Sedimentation _ Sand Filtration _ Activated Carbon Filtration _ Membrane Filtration _ Ion Exchange _ Iron/Manganese _ Nitrate Removal _ Radium Removal _ Corrosion _ Other	No	WELLHOUSE		4

Water Treatment Plant

g Provide a generic description for (a). Do not give specific address of location.
 g Please select all that apply for (d) and (e). If Other is selected please explain in Notes (h).
 g Please identify the point of application for each treatment plant for (g). For example, please list each well or central treatment facility served by this unit.

Unit Description (a)	Year Constructed (b)	Rated Capacity (mgd) (c)	Disinfection (d)	Additional Treatment (e)	Fluoridated (f)	Point of Application (g)	Notes (h)
#8	1968	2	_ Ultraviolet Light x Liquid Chlorine _ Gas Chlorine _ Ozone _ Other _ None	_ Flocculation/Sedimentation _ Sand Filtraton _ Activated Carbon Filtration _ Membrane Filtration _ Ion Exchange _ Iron/Manganese _ Nitrate Removal x Radium Removal x Corrosion _ Other	Yes	WELLHOUSE	5
#9	1970	2	_ Ultraviolet Light x Liquid Chlorine _ Gas Chlorine _ Ozone _ Other _ None	_ Flocculation/Sedimentation _ Sand Filtraton _ Activated Carbon Filtration _ Membrane Filtration _ Ion Exchange _ Iron/Manganese _ Nitrate Removal _ Radium Removal _ Corrosion _ Other	No	WELLHOUSE	6
HILLCREST/WELL #10	1978	3	_ Ultraviolet Light x Liquid Chlorine _ Gas Chlorine _ Ozone _ Other _ None	_ Flocculation/Sedimentation _ Sand Filtraton _ Activated Carbon Filtration _ Membrane Filtration _ Ion Exchange _ Iron/Manganese _ Nitrate Removal x Radium Removal x Corrosion _ Other	Yes	WELLHOUSE	7
WELL #11	2006	1	_ Ultraviolet Light x Liquid Chlorine _ Gas Chlorine _ Ozone _ Other _ None	_ Flocculation/Sedimentation _ Sand Filtraton _ Activated Carbon Filtration _ Membrane Filtration _ Ion Exchange x Iron/Manganese _ Nitrate Removal _ Radium Removal x Corrosion _ Other	Yes	WELL 8 TRMT PLANT	8

Water Treatment Plant

g Provide a generic description for (a). Do not give specific address of location.
 g Please select all that apply for (d) and (e). If Other is selected please explain in Notes (h).
 g Please identify the point of application for each treatment plant for (g). For example, please list each well or central treatment facility served by this unit.

Unit Description (a)	Year Constructed (b)	Rated Capacity (mgd) (c)	Disinfection (d)	Additional Treatment (e)	Fluoridated (f)	Point of Application (g)	Notes (h)
WELL #12	2006	1	_ Ultraviolet Light x Liquid Chlorine _ Gas Chlorine _ Ozone _ Other _ None	_ Flocculation/Sedimentation _ Sand Filtration _ Activated Carbon Filtration _ Membrane Filtration _ Ion Exchange x Iron/Manganese _ Nitrate Removal _ Radium Removal x Corrosion _ Other	Yes	WELL 8 TRMT PLANT	9
WELL #13	2009	1	_ Ultraviolet Light x Liquid Chlorine _ Gas Chlorine _ Ozone _ Other _ None	_ Flocculation/Sedimentation _ Sand Filtration _ Activated Carbon Filtration _ Membrane Filtration _ Ion Exchange _ Iron/Manganese _ Nitrate Removal _ Radium Removal x Corrosion _ Other	Yes	WELLHOUSE	10
WELL #7	1963	1	_ Ultraviolet Light x Liquid Chlorine _ Gas Chlorine _ Ozone _ Other _ None	_ Flocculation/Sedimentation _ Sand Filtration _ Activated Carbon Filtration _ Membrane Filtration _ Ion Exchange _ Iron/Manganese _ Nitrate Removal _ Radium Removal x Corrosion _ Other	No	WELLHOUSE	11

Water Mains

- g Report mains separately by pipe material, function, diameter and either within or outside the municipal boundaries.
- g Explain all reported adjustments as a schedule footnote.
- g For main additions reported in column (e), as a schedule footnote:
 Explain how the additions were funded.
 Also report the amount assessed and the feet of main recorded under this method.
 If installed by a developer, explain the basis of recording the cost of the additions, the total amount, and the feet of main recorded under this method.
- g Report all pipe larger than 16" diameter in the 16" category.

Pipe Material (a)	Main Function (b)	Diameter (inches) (c)	Number of Feet			Adjustments Increase or (Decrease) (g)	End of Year (h)	
			First of Year (d)	Added During Year (e)	Retired During Year (f)			
Other Metal	Distribution	2	664				664	1
Ductile Iron, Lined (late 1960's to present)	Distribution	3	5				5	2
Ductile Iron, Lined (late 1960's to present)	Distribution	4	1,424			(6)	1,418	3
Ductile Iron, Lined (late 1960's to present)	Transmission	4	15				15	4
PVC	Distribution	4	18				18	5
Asbestos-Cement (Transite)	Distribution	6	36			(22)	14	6
Ductile Iron, Lined (late 1960's to present)	Distribution	6	91,128	22	617	120	90,653	7
Ductile Iron, Lined (late 1960's to present)	Transmission	6	4				4	8
Lined Cast Iron (mide-1950's to early 1970)	Distribution	6	197,393		3,804	133	193,722	9
Other Metal	Distribution	6	17				17	10
PVC	Distribution	6	6,349			(6)	6,343	11
Ductile Iron, Lined (late 1960's to present)	Distribution	8	515,500	42	573	(393)	514,576	12
Ductile Iron, Lined (late 1960's to present)	Supply	8	505				505	13
Ductile Iron, Lined (late 1960's to present)	Transmission	8	124				124	14
HDPE	Distribution	8	3,025				3,025	15
Lined Cast Iron (mide-1950's to early 1970)	Distribution	8	75,123		2,737	393	72,779	16
Other Metal	Distribution	8	891				891	17
PVC	Distribution	8	225,704	3,888	38	(253)	229,301	18
Ductile Iron, Lined (late 1960's to present)	Distribution	10	204			(37)	167	19
Ductile Iron, Lined (late 1960's to present)	Transmission	10	19				19	20
HDPE	Distribution	10	201				201	21
Lined Cast Iron (mide-1950's to early 1970)	Distribution	10	927				927	22
PVC	Distribution	10	1,436				1,436	23
Ductile Iron, Lined (late 1960's to present)	Distribution	12	198,759	4	243	(71)	198,449	24
Ductile Iron, Lined (late 1960's to present)	Supply	12	1,163				1,163	25
Ductile Iron, Lined (late 1960's to present)	Transmission	12	8,554				8,554	26

Water Mains

- g Report mains separately by pipe material, function, diameter and either within or outside the municipal boundaries.
- g Explain all reported adjustments as a schedule footnote.
- g For main additions reported in column (e), as a schedule footnote:
 Explain how the additions were funded.
 Also report the amount assessed and the feet of main recorded under this method.
 If installed by a developer, explain the basis of recording the cost of the additions, the total amount, and the feet of main recorded under this method.
- g Report all pipe larger than 16" diameter in the 24" category.

Pipe Material (a)	Main Function (b)	Diameter (inches) (c)	Number of Feet				Adjustments Increase or (Decrease) (g)	End of Year (h)	
			First of Year (d)	Added During Year (e)	Retired During Year (f)				
HDPE	Distribution	12	782				782	27	
Lined Cast Iron (mide-1950's to early 1970)	Distribution	12	30,162		2,606	123	27,679	28	
Other Metal	Distribution	12	2,801				2,801	29	
PVC	Distribution	12	152,469	5,217	5	(15)	157,666	30	
PVC	Supply	12	2				2	31	
Ductile Iron, Lined (late 1960's to present)	Transmission	14	290				290	32	
HDPE	Distribution	14	169				169	33	
Lined Cast Iron (mide-1950's to early 1970)	Transmission	14	174				174	34	
Ductile Iron, Lined (late 1960's to present)	Supply	16	3,803				3,803	35	
Ductile Iron, Lined (late 1960's to present)	Transmission	16	96,653	485	7	7	97,138	36	
HDPE	Supply	16	793			(11)	782	37	
HDPE	Transmission	16	1,869				1,869	38	
Lined Cast Iron (mide-1950's to early 1970)	Transmission	16	4,041		480	(3)	3,558	39	
PVC	Transmission	16	4,337				4,337	40	
Ductile Iron, Lined (late 1960's to present)	Transmission	20	35,027			(4)	35,023	41	
Lined Cast Iron (mide-1950's to early 1970)	Transmission	20	11,959			(4)	11,955	42	
PVC	Transmission	20	2,831				2,831	43	
Ductile Iron, Lined (late 1960's to present)	Transmission	24	25,825				25,825	44	
HDPE	Transmission	24	1,306				1,306	45	
Lined Cast Iron (mide-1950's to early 1970)	Transmission	24	1,109			(1)	1,108	46	
HDPE	Transmission	30	186				186	47	
Total Within Municipality			1,705,776	9,658	11,110	(50)	1,704,274	48	
Ductile Iron, Lined (late 1960's to present)	Distribution	4	1,656				1,656	49	
Ductile Iron, Lined (late 1960's to present)	Distribution	6	501				501	50	
Ductile Iron, Lined (late 1960's to present)	Distribution	8	6,758				6,758	51	
HDPE	Distribution	8	52				52	52	
PVC	Distribution	8	2,741				2,741	53	

Water Mains

- g Report mains separately by pipe material, function, diameter and either within or outside the municipal boundaries.
- g Explain all reported adjustments as a schedule footnote.
- g For main additions reported in column (e), as a schedule footnote:
 Explain how the additions were funded.
 Also report the amount assessed and the feet of main recorded under this method.
 If installed by a developer, explain the basis of recording the cost of the additions, the total amount, and the feet of main recorded under this method.
- g Report all pipe larger than 16" diameter in the 24" category.

Pipe Material (a)	Main Function (b)	Diameter (inches) (c)	Number of Feet				Adjustments Increase or (Decrease) (g)	End of Year (h)	
			First of Year (d)	Added During Year (e)	Retired During Year (f)				
Ductile Iron, Lined (late 1960's to present)	Distribution	12	10,347				10,347		54
PVC	Distribution	12	3,904				3,904		55
Ductile Iron, Lined (late 1960's to present)	Transmission	16	9,862				9,862		56
HDPE	Transmission	16	692				692		57
Lined Cast Iron (mide-1950's to early 1970)	Transmission	16	4,474				4,474		58
PVC	Transmission	16	82				82		59
Ductile Iron, Lined (late 1960's to present)	Transmission	20	9,042				9,042		60
Lined Cast Iron (mide-1950's to early 1970)	Transmission	20	3,407				3,407		61
Ductile Iron, Lined (late 1960's to present)	Transmission	24	1,717				1,717		62
HDPE	Transmission	24	529				529		63
Total Outside Municipality			55,764						64
Total Utility			1,761,540	9,658	11,110	(50)	1,760,038		65

Water Mains

- g Report mains separately by pipe material, function, diameter and either within or outside the municipal boundaries.
- g Explain all reported adjustments as a schedule footnote.
- g For main additions reported in column (e), as a schedule footnote:
 - Explain how the additions were funded.
 - Also report the amount assessed and the feet of main recorded under this method.
 - If installed by a developer, explain the basis of recording the cost of the additions, the total amount, and the feet of main recorded under this method.
- g Report all pipe larger than 16" diameter in the 16" category.

Water Mains (Page W-21)

Added During Year total is greater than zero, please explain financing following the criteria listed in the schedule headnotes.

The number of feet added in 2022 for Developer financed projects is 868 feet, added at actual cost. There was also 8,790 feet of Utility financed main installed in 2022.

Adjustments are nonzero for one or more accounts, please explain.

Adjustments were made based on the audit between PSC records and the Utility's GIS records. These adjustments will correct the size, footage, and material of the main to actual.

Utility-Owned Water Service Lines

- g The utility's service line is the pipe from the main to and through the curb stop.
- g Explain all reported adjustments as a schedule footnote.
- g Report in column (h) the number of utility-owned service lines included in columns (g) which are temporarily shut off at the curb box or otherwise not in use at end of year.
- g For service lines added during the year in column (d), as a schedule footnote:
 - Explain how the additions were financed.
 - If assessed against property owners, explain the basis of the assessments.
 - If installed by a property owner or developer, explain the basis of recording the cost of the additions, the total amount and the number of service lines recorded under this method.
 - If any were financed by application of Cz-1, provide the total amount recorded and the number of service lines recorded under this method.
- g Report service lines separately by diameter and pipe materials.

Pipe Material (a)	Diameter (inches) (b)	First of Year (c)	Added During Year (d)	Removed or Permanently Disconnected During Year (e)	Adjustments Increase or (Decrease) (f)	End of Year (g)	NOT in Use at End of Year (h)	
Copper	0.500	4				4		1
Copper	0.750	1,406		46		1,360	2	2
Copper	1.000	13,753	1	56		13,698	13	3
Other Plastic	1.000	1,117	72	1		1,188	1	4
Copper	1.250	1,632		5		1,627	2	5
Other Plastic	1.250	521	26			547		6
Copper	1.500	504		1		503	2	7
Other Plastic	1.500	150				150		8
Copper	2.000	453	1	1		453	5	9
Other Plastic	2.000	57	2			59		10
Copper	3.000	8				8		11
Ductile Iron, Lined (late 1960's to present)	4.000	104		1		103	1	12
Lined Cast Iron (mid-1950's to early 1970)	4.000	25				25	1	13
Other Plastic	4.000	16				16	1	14
Unlined Cast Iron (pre-early 1950's)	4.000	5				5		15
Ductile Iron, Lined (late 1960's to present)	6.000	129		3		126	2	16
Lined Cast Iron (mid-1950's to early 1970)	6.000	11				11		17
Other Plastic	6.000	197	12	1		208	1	18
Unlined Cast Iron (pre-early 1950's)	6.000	2				2		19
Ductile Iron, Lined (late 1960's to present)	8.000	84	1			85		20
Lined Cast Iron (mid-1950's to early 1970)	8.000	9		1		8		21
Other Plastic	8.000	34	2			36	4	22
Unlined Cast Iron (pre-early 1950's)	8.000	1		1		0		23
Other Plastic	10.000	1				1		24
Ductile Iron, Lined (late 1960's to present)	12.000	1				1		25
Other Plastic	12.000	1				1		26
Utility Total		20,225	117	117		20,225	35	27

Utility-Owned Water Service Lines

- g The utility's service line is the pipe from the main to and through the curb stop.
- g Explain all reported adjustments as a schedule footnote.
- g Report in column (h) the number of utility-owned service lines included in columns (g) which are temporarily shut off at the curb box or otherwise not in use at end of year.
- g For service lines added during the year in column (d), as a schedule footnote:
 - Explain how the additions were financed.
 - If assessed against property owners, explain the basis of the assessments.
 - If installed by a property owner or developer, explain the basis of recording the cost of the additions, the total amount and the number of service lines recorded under this method.
 - If any were financed by application of Cz-1, provide the total amount recorded and the number of service lines recorded under this method.
- g Report service lines separately by diameter and pipe materials.

Utility-Owned Water Service Lines (Page W-22)

Additions are greater than zero, please explain financing by following criteria listed in the schedule headnotes.

In 2022, 36 services were developer/contractor installed and accounted for based on actual costs. 115 services were replaced or installed and funded by the Utility. Services installed by a homeowner are contracted by that homeowner.

Meters

- g Include in Columns (b-f) meters in stock as well as those in service.
- g Report in Column (c) all meters purchased during the year and in Column (d) all meters junked, sold or otherwise permanently retired during the year.
- g Use Column (e) to show correction to previously reported meter count because of inventory or property record corrections
- g Totals by size in Column (f) should equal same size totals in Column (s).
- g Explain all reported adjustments as schedule footnote.
- g Do not include station meters in the meter inventory used to complete these tables.

Number of Utility-Owned Meters

Classification of All Meters at End of Year by Customers

Size of Meter (a)	First of Year (b)	Added During Year (c)	Retired During Year (d)	Adjust. Increase or Decrease (e)	End of Year (f)	Tested During Year (g)	Residential (h)	Commercial (i)	Industrial (j)	Public Authority (k)	Multifamily Residential (l)	Irrigation (m)	Wholesale (n)	Inter-Departmental (o)	Utility Use (p)	Additional Meters (q)	In Stock (r)	Total (s)	
5/8	17,361	1,200	1,004	(33)	17,524	121	16,659	502	40	6	36	125					156	17,524	1
3/4	1,721	60	56	1	1,726	5	1,309	231	16	4	117	14					35	1,726	2
1	937	40	40	(2)	935	4	52	254	31	28	539	4					27	935	3
1 1/2	374	6		(7)	373	80		125	13	10	202	1					22	373	4
2	374			(7)	367	85		134	28	47	120	2					36	367	5
3	48	2			50	21		16	3	12	16						3	50	6
4	16		1		15	5		3	6	3	1						2	15	7
6	11			(1)	10	9		2	5	1							2	10	8 *
Total	20,842	1,308	1,101	(49)	21,000	330	18,020	1,267	142	111	1,031	146					283	21,000	9

1. Indicate your residential meter replacement schedule:

Meters tested once every 10 years and replaced as needed

All meters replaced within 20 years of installation

Other schedule as approved by PSC

2. Indicate the method(s) used to read customer meters

Manually - inside the premises or remote register

Automatic meter reading (AMR), drive or walk by technology, wand or touchpad (# of meter: 20759)

Advanced Metering Infrastructure (AMI) - fixed network

Other

Meters

- g Include in Columns (b-f) meters in stock as well as those in service.
- g Report in Column (c) all meters purchased during the year and in Column (d) all meters junked, sold or otherwise permanently retired during the year.
- g Use Column (e) to show correction to previously reported meter count because of inventory or property record corrections
- g Totals by size in Column (f) should equal same size totals in Column (s).
- g Explain all reported adjustments as schedule footnote.
- g Do not include station meters in the meter inventory used to complete these tables.

Meters

- g Include in Columns (b-f) meters in stock as well as those in service.
- g Report in Column (c) all meters purchased during the year and in Column (d) all meters junked, sold or otherwise permanently retired during the year.
- g Use Column (e) to show correction to previously reported meter count because of inventory or property record corrections
- g Totals by size in Column (f) should equal same size totals in Column (s).
- g Explain all reported adjustments as schedule footnote.
- g Do not include station meters in the meter inventory used to complete these tables.

Meters (Page W-23)

Adjustments are nonzero for one or more meter sizes, please explain.

Adjustments are a result of the reconciliation between the end of the year report and a physical inventory of all in-stock meters.

Explain Public Authority (column K) that are more than 5% higher or lower than W-02 Sales of Water - Average No. Customers (column b).

The variance relates to school concessions and city parks that pull meters during winter months. They reconnect every year within a couple months, so the Utility continues to bill for service charges only so we don't have to back bill when it's guaranteed that they will reconnect.

Wisconsin Administrative Code requires that meters 1 1/2 and 2 inches be tested or replaced every 4 years. You did not meet these requirements. Please explain your program for testing and replacing meters.

1.5 and 2" meters are tested once every four years.

Wisconsin Administrative Code requires that meters 3 and 4 inches be tested or replaced every 2 years. You did not meet these requirements. Please explain your program for testing and replacing meters.

3 and 4" meters are tested every two years. In 2021, twenty-six 3" meters were tested. In 2022, twenty-one 3" meters were tested. The balance of 3 are in stock meters. In 2021, nine 4" meters were tested. In 2022, five were tested. One 4" meter was tested in both years and the balance of 2 are in stock meters.

Wisconsin Administrative Code requires that meters 6 inches and larger be tested or replaced every year. You did not meet these requirements. Please explain your program for testing and replacing meters.

We have 10 6" meters, but only 9 were tested in 2022. The 10th meter is in-stock, which is why it was not tested.

Hydrants and Distribution System Valves

- g Distinguish between fire and flushing hydrants by lead size.
 Fire hydrants normally have a lead size of 6 inches or greater.
 Record as a flushing hydrant where the lead size is less than 6 inches or if pressure is inadequate to provide fire flow.
- g Explain all reported adjustments in the schedule footnotes.
- g Report fire hydrants as within or outside the municipal boundaries.
- g Number of hydrants operated during year means: opened and water withdrawn.
- g Number of distribution valves operated during year means: fully opened and closed (exercised).

Hydrant Type (a)	Number In Service First of Year (b)	Added During Year (c)	Removed During Year (d)	Adjustments Increase or (Decrease) (e)	Number In Service End of Year (f)	
Fire - Outside Municipality	74				74	1
Fire - Within Municipality	3,435	36	36	(3)	3,432	2
Total Fire Hydrants	3,509	36	36	(3)	3,506	3
Flushing Hydrants	0				0	4

NR810.13(2)(a) recommends that a schedule shall be adopted and followed for operating each system valve and hydrant at least once each two years. Please provide the number operated during the year.

Number of Hydrants operated during year	950
Number of Distribution System Valves end of year	8,265
Number of Distribution Valves operated during Year	1,332

Hydrants and Distribution System Valves

- g Distinguish between fire and flushing hydrants by lead size.
 - Fire hydrants normally have a lead size of 6 inches or greater.
 - Record as a flushing hydrant where the lead size is less than 6 inches or if pressure is inadequate to provide fire flow.
- g Explain all reported adjustments in the schedule footnotes.
- g Report fire hydrants as within or outside the municipal boundaries.
- g Number of hydrants operated during year means: opened and water withdrawn.
- g Number of distribution valves operated during year means: fully opened and closed (exercised).

Hydrants and Distribution System Valves (Page W-25)

Adjustments are nonzero for one or more accounts, please explain.

An adjustment has been made to hydrants based on an audit between PSC records and the Utility's GIS records. The adjustment will correct the number of hydrants listed to actual.

General Footnote

WWU continues to test and operate distribution valves and hydrants following DNR code NR810.

List of All Station and Wholesale Meters

- g Definition of Station Meter is any meter in service not used to measure customer consumption.
- g Definition of Wholesale Meter is any meter used to measure sales to other utilities.
- g Retail customer meters should not be included in this inventory.

Purpose (a)	Meter Size (inches) (b)	Location or Description (c)	Type (d)	Date of Last Meter Test (e)	
Station Meter	6	Well #11	Magnetic	03/10/2021	1
Station Meter	8	Well #12	Magnetic	03/10/2021	2
Station Meter	8	Well #3	Magnetic	03/10/2021	3
Station Meter	8	Well #7	Magnetic	03/10/2021	4
Station Meter	12	Well #13-1	Magnetic	03/10/2021	5
Station Meter	12	Well #13-2	Magnetic	03/10/2021	6
Station Meter	12	Well #5	Magnetic	03/10/2021	7
Station Meter	12	Well #6	Magnetic	03/10/2021	8
Station Meter	12	Well #8-1	Magnetic	03/10/2021	9
Station Meter	12	Well #8-2	Magnetic	03/10/2021	10
Station Meter	16	Well #10	Magnetic	03/10/2021	11
Station Meter	16	Well #9	Magnetic	03/10/2021	12

List of All Station and Wholesale Meters

- | |
|---|
| <ul style="list-style-type: none">g Definition of Station Meter is any meter in service not used to measure customer consumption.g Definition of Wholesale Meter is any meter used to measure sales to other utilities.g Retail customer meters should not be included in this inventory. |
|---|

List of All Station and Wholesale Meters (Page W-26)

General Footnote

Waukesha Water Utility supply meter testing is on a two-year cycle and is scheduled for testing again in 2023. The meters were tested on 3/10/2021 and prior to that, they were tested on 4/19/2019.

Water Conservation Programs

- g List all water conservation-related expenditures for the reporting year. Include administrative costs, customer outreach and education, other program costs, and payments for rebates and other customer incentives. Do not include leak detection, other water loss program costs.
- g If the Commission has approved conservation program expenses, these should be charged to Account 186. Otherwise, these expenses are reported in Account 906 on Schedule W-05 (Account 691 for class D utilities).

Item Description (a)	Expenditures (b)	Number of Rebates (c)	Water Savings Gallons (d)	
Administrative and General Expenses				1
Program Administration	9,714	0	0	2
Customer Outreach & Education	14,880	0	0	3
Other Program Costs	58,265	0	0	4
Total Administrative and General Expenses	82,859	0	0	5
Customer Incentives				6
Residential Toilets	4,767	48	487,056	7
Multifamily/Commercial Toilets	14,130	144	2,028,816	8
Faucets	0	0	0	9
Showerheads	25	1	7,008	10
Clothes Washers	0	0	0	11
Dishwashers	0	0	0	12
Smart Irrigation Controller	0	0	0	13
Commercial Pre-Rinse Spray Valves	0	0	0	14
Cost Sharing Projects (Nonresidential Customers)	5,971	1	1,900,000	15
Customer Water Audits	0	0	0	16
Other Incentives	140	7	4,344 *	17
Total Customer Incentives	25,033	201	4,427,224	18
TOTAL CONSERVATION	107,892	201	4,427,224	19

Water Conservation Programs

- | |
|---|
| <ul style="list-style-type: none">g List all water conservation-related expenditures for the reporting year. Include administrative costs, customer outreach and education, other program costs, and payments for rebates and other customer incentives. Do not include leak detection, other water loss program costs.g If the Commission has approved conservation program expenses, these should be charged to Account 186. Otherwise, these expenses are reported in Account 906 on Schedule W-05 (Account 691 for class D utilities). |
|---|

Water Conservation Programs (Page W-27)**Expenditures for Other Incentives are non-zero, please explain.**

Other program costs include advertising for the sprinkling program, the Conservation Plan Update, and other incentive programs offered.

Please explain all values in Other Program Costs.

Seven rain barrel incentives were reimbursed in 2022 for a total of \$140.00 and a water savings of 4,344 gallons.

Water Customers Served

- g List the number of customer accounts in each municipality for which your utility provides retail general service. Do not include wholesale customers or fire protection accounts.
- g Per Wisconsin state statute, a city, village, town or sanitary district owning water plant or equipment may serve customers outside its corporate limits, including adjoining municipalities. For purposes of this schedule, customers located ~~within Muni Boundary~~ refers to those located inside the jurisdiction that owns the water utility.

Municipality (a)	Customers End of Year (b)	
Pewaukee (City)	56	1
Waukesha (City) **	20,564	2
Waukesha (Town)	129	3
Total - Waukesha County	20,749	4
Total - Customers Served	20,749	5
Total - Outside Muni Boundary	185	6
Total - Within Muni Boundary **	20,564	7

** = *Within municipal boundary*

Privately-Owned Water Service Lines

- g The privately owned service line is the pipe from the curb stop to the meter.
- g Explain all reported adjustments in columns(f) as a schedule footnote.
- g Report in column (h) the number of privately-owned service lines included in column (g) which are temporarily shut off at the curb box or otherwise not in use at end of year.
- g Separate reporting of service lines by diameter and pipe material.

Pipe Material (a)	Diameter (inches) (b)	First of Year (c)	Added During Year (d)	Removed or Permanently Disconnected During Year (e)	Adjustments Increase or (Decrease) (f)	End of Year (g)	Customer Owned Service Laterals Not in Use at End of Year (h)	Replaced During Year Using Financial Assistance from Utility (i)	
Copper	0.500	4				4			1
Galvanized	0.750	43		34		9			2
Copper	0.750	1,362		46		1,316	2		3
Copper	1.000	13,753	1	56		13,698	13		4
Other Plastic	1.000	1,118	106	1		1,223	1		5
Copper	1.250	1,632		5		1,627	2		6
Other Plastic	1.250	521	27			548			7
Galvanized	1.500	1		1		0			8
Copper	1.500	503		1		502	2		9
Other Plastic	1.500	150				150			10
Copper	2.000	453	1	1		453	5		11
Other Plastic	2.000	57	2			59			12
Copper	3.000	8				8			13
Ductile Iron, Lined (late 1960's to present)	4.000	104		1		103	1		14
Lined Cast Iron (mide-1950's to early 1970)	4.000	25				25	1		15
Other Plastic	4.000	16				16	1		16
Unlined Cast Iron (pre-early 1950's)	4.000	5				5			17
Ductile Iron, Lined (late 1960's to present)	6.000	129		3		126	2		18
Lined Cast Iron (mide-1950's to early 1970)	6.000	11				11			19
Other Plastic	6.000	197	12	1		208	1		20
Unlined Cast Iron (pre-early 1950's)	6.000	2				2			21
Ductile Iron, Lined (late 1960's to present)	8.000	84	1			85			22
Lined Cast Iron (mide-1950's to early 1970)	8.000	9		1		8			23
Other Plastic	8.000	34	2			36	4		24
Unlined Cast Iron (pre-early 1950's)	8.000	1		1		0			25
Other Plastic	10.000	1				1			26
Ductile Iron, Lined (late 1960's to present)	12.000	1				1			27
Other Plastic	12.000	1				1			28
Utility Total		20,225	152	152		20,225	35		29

Privately-Owned Water Service Lines

- g The privately owned service line is the pipe from the curb stop to the meter.
- g Explain all reported adjustments in columns(f) as a schedule footnote.
- g Report in column (h) the number of privately-owned service lines included in column (g) which are temporarily shut off at the curb box or otherwise not in use at end of year.
- g Separate reporting of service lines by diameter and pipe material.

Privately-Owned Water Service Lines (Page W-29)

General Footnote

This information is based on the data that the Utility has for street services. The Utility will continue to work with GIS and other known information to update property service line data. The Utility is not aware of any lead property services remaining in the system. Adjustments were made to update known property services in the system.

Water Residential Customer Data – Disconnection, Arrears, and Tax Roll

- g For disconnection notices sent to residential customers for non-payment, report only the 10-day disconnection notice (e.g., printed on bill, separate mailed notice, etc.) for residential customers, and do not count subsequent reminders, such as 5-day notices, door tags or other personal contact attempts.
- g For residential customers, include any account that includes a service being used primarily for residential living, including multifamily residential.
- g For residential arrears, include billed amounts past due and unpaid.

	Description (a)	Amount (b)
Disconnections		
1.	Total number of disconnection notices sent to residential customers for non-payment during the year	0
2.	Total number of residential disconnections of service performed for non-payment during the year	0
Arrears		
1.	Total number of residential customers with arrears as of March 31	1,895
2.	Total dollar amount of residential customer arrears as of March 31	652,735
3.	Total number of residential customers with arrears as of June 30	2,047
4.	Total dollar amount of residential customer arrears as of June 30	974,058
5.	Total number of residential customers with arrears as of September 30	2,094
6.	Total dollar amount of residential customer arrears as of September 30	1,279,641
7.	Total number of residential customers with arrears as of December 31	1,904
8.	Total dollar amount of residential customer arrears as of December 31	242,833
Tax Roll		
1.	Total number of residential customers with arrears placed on the tax roll	1,252
2.	Total dollar amount of residential arrears placed on the tax roll	436,019
	Footnotes	No

Water Residential Customer Data - Disconnection, Arrears, and Tax Roll

- g For disconnection notices sent to residential customers for non-payment, report only the 10-day disconnection notice (e.g., printed on bill, separate mailed notice, etc.) for residential customers, and do not count subsequent reminders, such as 5-day notices, door tags or other personal contact attempts.
- g For residential customers, include any account that includes a service being used primarily for residential living, including multifamily residential.
- g For residential arrears, include billed amounts past due and unpaid.

Water Residential Customer Data - Disconnection, Arrears, and Tax Roll (Page W-30)

General Footnote

Disconnections: The Waukesha Water Utility does not send disconnection notices for non-payment.
 Tax Roll: The tax roll dollar amount \$436,018.89 includes the 10% tax roll penalty.

**PUBLIC SERVICE COMMISSION OF WISCONSIN
REPORT ON WATER CONSERVATION PROGRAMS**

Utility Name: Waukesha Water Utility - 6240
 Report Date: 03/31/2023
 Report Period: 01/01/2022 – 12/31/2022
 Report Frequency: Annual
 Billing Frequency: Monthly
 Person Submitting Report: Cortney Nagel

Waukesha Water Utility is submitting this report to the Public Service Commission, as required by PSC 185.97. This report addresses each of the points requested by the Commission, including the following information.

<u>Section</u>	<u>Topic</u>	<u>Page</u>
I	EXECUTIVE SUMMARY	2
II	ANNUAL BUDGET AND EXPENSES	11
III	INCENTIVE PROGRAMS	12
IV	EFFECTS OF WATER RATE STRUCTURE	34
V	CONSERVATION EFFICIENCY MEASURES – NON-RESIDENTIAL	39
VI	EDUCATION PROGRAMS AND PARTNERSHIPS	80
VII	WATER LOSSES AND ACCOUNTED FOR WATER	133
VIII	CONCLUSION	137

I. EXECUTIVE SUMMARY

Water conservation is important in the City of Waukesha. Since 2006, Waukesha Water Utility (WWU) has implemented a variety of conservation programs, and the City's conservation efforts became more focused with the passage of NR 852.



In 2022, as we continued to recover from the COVID-19 pandemic, WWU worked to get the conservation program back on course by doing the following:

- WWU contacted ten large multi-family properties regarding the toilet rebate program.
- WWU pre-inspected four large multi-family customers to see if their toilets qualified for a rebate. Toilet rebate incentives were issued to two large multi-family customers.
- WWU mailed out 50 business incentive letters and communicated with two companies who responded back to the letter.
- WWU provided an incentive to an industrial company who completed their conservation project.
- WWU worked with seven restaurants to change out their pre-rinsed spray valves.
- WWU conducted 11 water audits and thirty-five data logs to help customers locate leaks.
- WWU mailed out twenty-five letters to residential customers about disconnecting their sewer credits.
- WWU issued eight irrigation permits that mandates the use of a WaterSense controller.
- WWU re-instated the Youth Education program with the School District & the Boy Scouts.
- WWU created social media posts pertaining to leaks, fixing the toilet flappers, sprucing up sprinkler systems, educating the youth, water softeners, rates, and ordinances/rebates.

In addition to resuming and building on previous conservation efforts, as listed above, WWU also updated its Conservation Plan.

Conservation Plan Update

In 2022, in accordance to the City’s approval for a diversion of Great Lakes water, WWU updated its Conservation Plan. The Plan was prepared in 2022 using the previous 10 years of data while looking forward another 10 years.



Water Conservation Planning Process

The planning process for the Plan Update consisted of the following:

- Confirm the water conservation goals.
- Review the conservation program performance over the past 10 years.
- Evaluate the effectiveness of the existing Conservation Efficiency Measures (CEMs).
- Analyze the benefits and costs of incorporating new CEMs into the program.
- Recommend actions to meet or exceed program water-savings goals.

Each of these planning criteria will be discussed on the following pages.



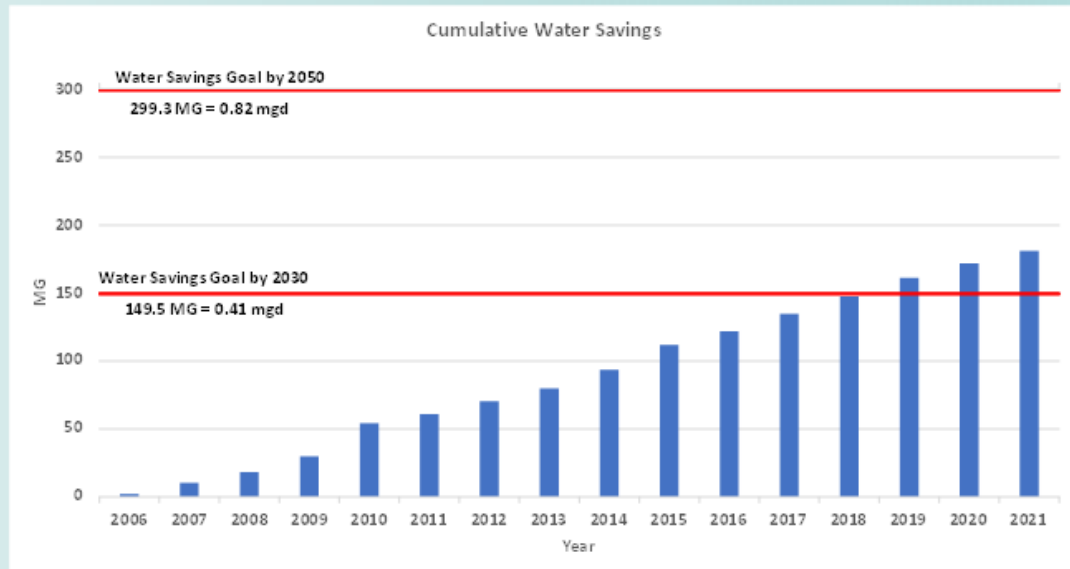
Goals and Objectives for the Plan Update

The water conservation goals and objectives for the Plan Update include the following:

- Reducing the average day demand by 0.4 million gallons per day (mgd) by year 2030 and by 0.8 mgd by year 2050 (the complete development/buildout condition).
- Leveraging lessons learned from implementation of exiting City CEMs.
- Using the Alliance for Water Efficiency (AWE) Water Conservation Tracking Tool (AWE Tool) to the extent practical to estimate CEM savings and cost effectiveness.
- Target CEMs and customers with the highest potential for cost-effective water savings.



Conservation Achievements 2012 – 2021

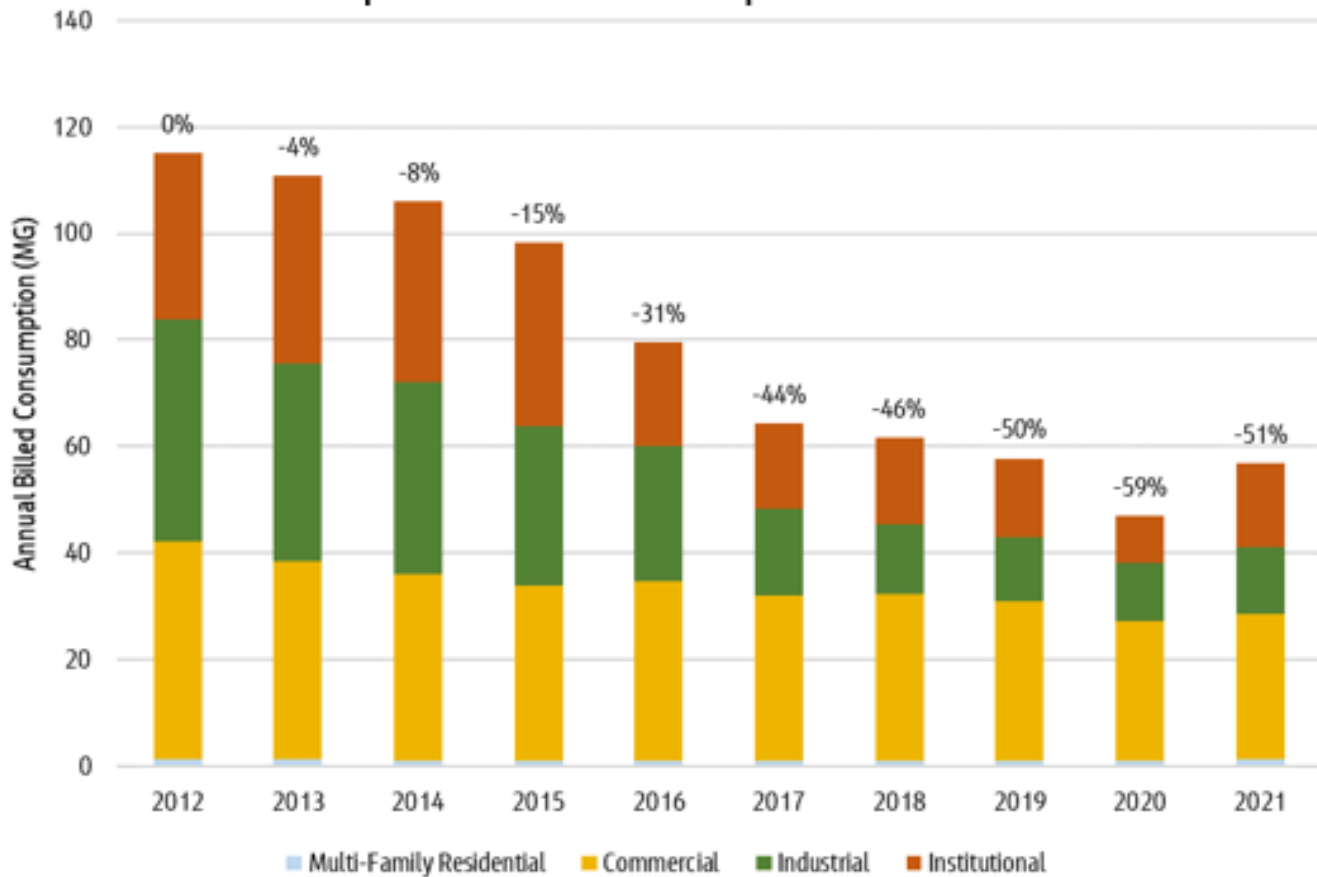


Program Performance of the Past 10 Years:

When reviewing the conservation program performance over the past 10 years, the above graph shows that the conservation program exceeds annual water saving goals.

- Over the past 10 years, while there was a 5% increase in metered accounts, water use has decreased by about 20%.
- Residential water use intensity (in gallons per capita day [gpcd]) has decreased from about 50 to about 45 gpcd.
- Non-revenue water was less than 10% every year except in 2014 when sustained record low temperatures resulted in an unusually high number of water main and service lateral breaks.
- There is a low peak annual discretionary (lawn sprinkling) water use in warm seasonal months.

Site-Specific Grant Recipients' Water Use



Effectiveness of the Existing Conservation Efficiency Measures (CEMs)

When evaluating the conservation efficiency measures, such as the residential and commercial high efficiency toilets and the industrial site-specific grants, the cumulative water savings are very noticeable.

Potential Conservation Program 2023 - 2032

Recommendations

- Maintain public education and partnerships
- Maintain Innovative Site-Specific Grants
- Maintain HET and showerhead rebates
- Maintain current policies
 - Sprinkling restrictions, increasing block rates, monthly billing
- Re-assess program needs in 5 years
 - Transition to Lake Michigan water
 - Higher water rates
 - Water softener removals

Improvements

- Add water softener removal as new CEM
- Investigate financial assistance for plumber installation of high efficiency fixtures and leak repairs
- Consider increasing visibility of Innovative Site-Specific Grants with competition and media coverage
- Consider washing machine and ice-maker rebates for high-volume users
- Prepare for automated leak detection through data collectors
- Track business closures so as not to carry forward continuing water savings

Benefits & Costs of Incorporating New CEMs into the Program

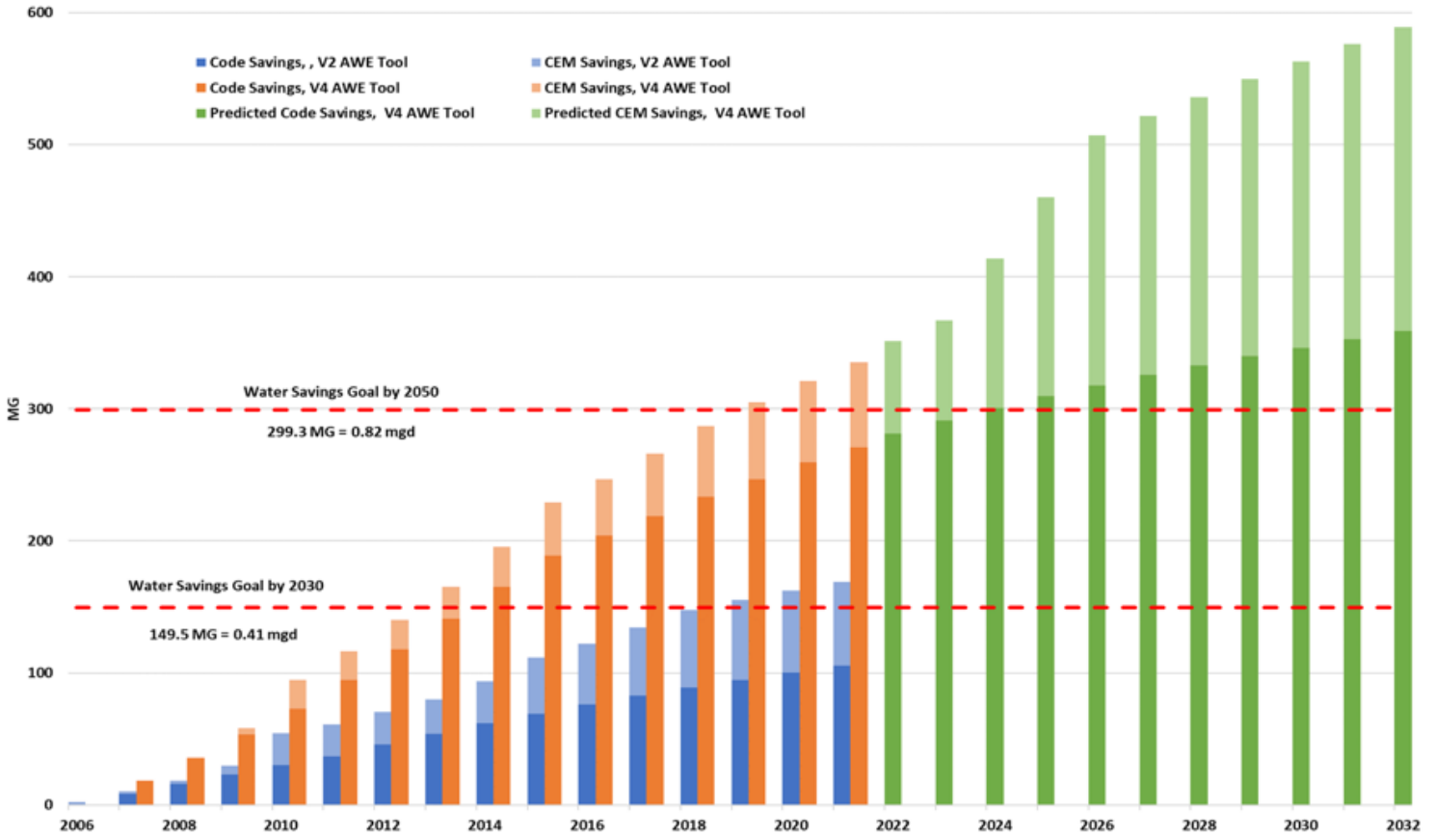
New conservation efficiency measures were analyzed for their estimated water savings and cost effectiveness by using the Alliance for Water Efficiency (AWE) Water Conservation Tracking Tool (AWE Tool).

The AWE Tool is a macros-enabled Microsoft Excel workbook that guides users through various inputs and calculations. The tool comes pre-loaded with a library of pre-defined conservation measures.

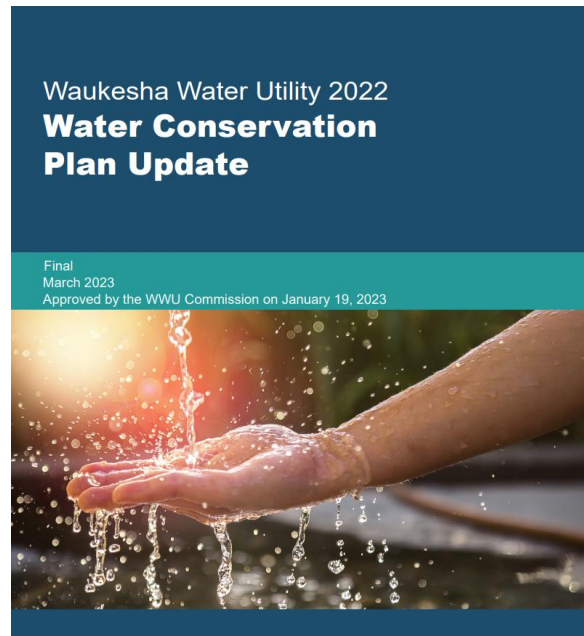
For the 2012 Plan and in subsequent annual water conservation reports, WWU used Version 2.0 of the AWE Tool to estimate conservation water savings. Since 2012, the AWE Tool has been upgraded in collaboration with AWE partners and members, while also incorporating the latest findings from relevant peer reviewed literature. As significant advancements have been made over the last 10 years, it was determined beneficial to the Plan Update to migrate WWU conservation program data to the current AWE Tool Version 4.0. Specific advancements in the tool include the following: additional customer classes, water savings for landscape conservation, expanded pre-defined conservation measures, updated standards modules, and new modules. The most significant changes between the versions of the tool occurred in the user interface, the user inputs, and the tool calculations.

The estimated cumulative water savings from CEMs is essentially the same using both versions of the tool; however, the estimated cumulative water savings attributed to Code Savings is significantly greater using Version 4.0 compared to Version 2.0.

Cumulative Water Savings



Based on AWE Tool Version 2 water-saving estimates, WWU exceeded the 2030 goal (reduce average day demand by 0.4 mgd) during 2019 and is on track to meet the 0.8-mgd savings target by year 2050 (the complete development/buildout condition). Based on the Version 4 water savings estimates, the 2050 goal was achieved during 2019.



Recommended Actions Summarized in the Plan Update

WWU has a cost-effective water conservation program that meets the regulatory requirements of NR852 administered by WDNR and the PSC, respectively. An analysis of water savings achieved, since the 2012 Plan was implemented, demonstrates that WWU has exceeded savings goals established for 2030 and 2050. With the progress made to date, the recommendations for the water conservation program, over the next 10 years, are to focus on maintaining – rather than significantly expanding – program activities.

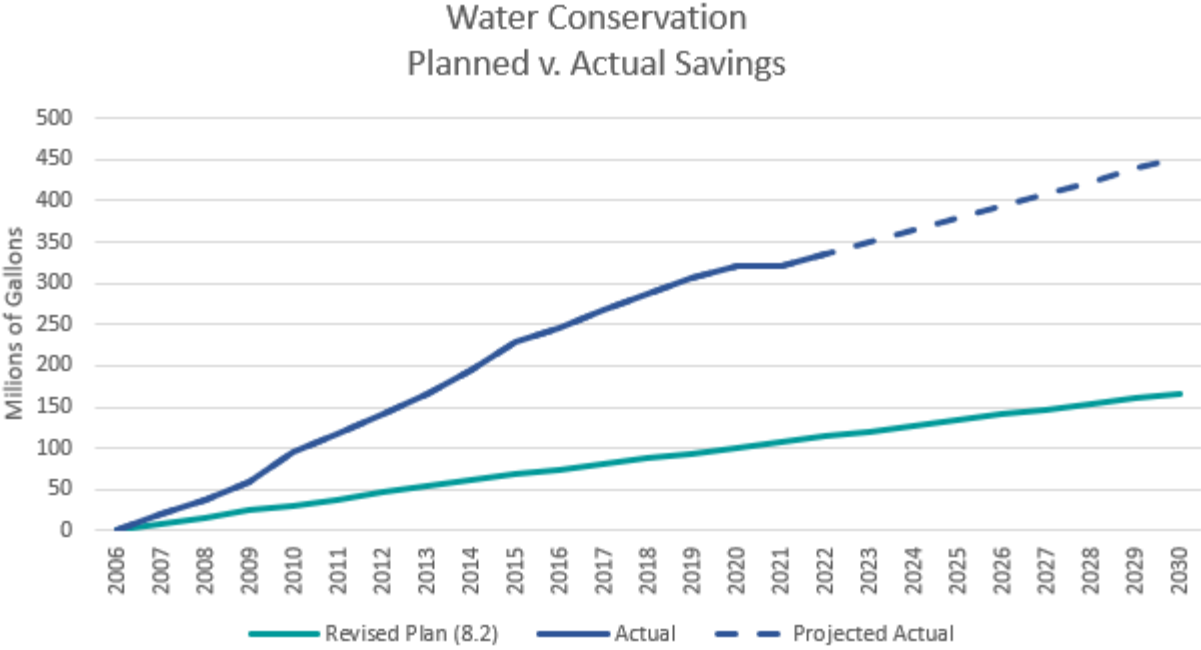
It is recommended that WWU continues to maintain its conservation program because water conservation savings can erode as water-using fixtures and equipment age, and customers' behaviors can also change over time.

The implementation strategy going forward is designed to maintain strong community support through public education and incentives. Voluntary conservation would be expected to lead to the greatest savings, particularly for existing homes, businesses, industries, and institutions. Throughout the planning period, measures would be emphasized within various customer "markets" to affect the greatest savings.

Additionally, in light of anticipated changes, including the introduction of Lake Michigan water and associated reduction in water softener use for most customers, as well as planned water rate increases, water-use patterns are expected to change. It is recommended that the conservation plan be reviewed in about 5 years.

The Plan Update was unanimously approved by the WWU Commission on January 19, 2023.

As previously mentioned, and shown in the graph below, the Utility has exceeded its conservation goals; and because the Utility uses criterion recommended in the 2012, (cost effectiveness) to guide its efforts, the Utility achieves its goals by spending only a modest amount.



II. ANNUAL BUDGET AND EXPENDITURES

Per Docket 6240-WR-107 the PSC determined that a “reasonable level of conservation costs recoverable in rates for the test year (2012) is \$62,271.” Subsequently, with Docket 6240-WR-110, the PSC agreed that the same level of costs was reasonable with a revised test year of 2021.

The actual costs since 2018 are as follows:

	Actual				
	2022	2021	2020	2019	2018
<u>Revenue</u>					
Rates	\$ 62,271	\$ 62,271	\$ 62,271	\$ 62,271	\$ 62,271
Sewer Reimbursement	30,000	30,000	30,000	30,000	30,000
	92,271	92,271	92,271	92,271	92,271
<u>Expenses</u>					
Program Administration	9,714	11,144	8,829	8,630	8,954
Customer Outreach and Education	14,880	6,354	8,538	14,875	15,102
Other Program Costs	58,265	2,031	2,497	2,549	2,951
Leak Surveys	-	-	-	-	11,450
Toilet Rebates	18,897	28,995	34,550	46,382	17,589
Grants & Incentives	6,136	580	330	190	15,428
	107,892	49,104	54,744	72,626	71,474
Excess(Deficit)	\$ (15,621)	\$ 43,167	\$ 37,527	\$ 19,645	\$ 20,797

Program revenue remained consistent from 2021 to 2022. The current rate order (Docket #6240-WR-110) allows for \$62,271 in conservation costs to be recoverable by water rates, with \$30,000 of funding charged to the City’s Sewer Department.

In 2022, the conservation program continued to see the impacts of the worldwide COVID-19 pandemic. While customer outreach and education resumed a smaller program, residents, property owners, and businesses continued to run into limited resources, limiting their ability to invest in water conserving fixtures and equipment. That being said, the Utility did issue a business incentive to an Industrial customer for the installation of a chiller, which allows them to re-use their cooling water and significantly reduce their single-pass cooling. In total, \$25,033 was spent on incentives that have a direct effect on water conservation measurements, while \$27,180 was spent on program operating expenses in 2022; \$55,679 was also spent on a Conservation Plan Update. Current conservation measures were evaluated, and new cost-effective plan updates were identified for the Utility to consider. These program costs generated a deficit of \$15,621 in 2022.

The most significant changes in expenses between 2022 and 2021 include the increase in staff time for customer outreach and education, the Conservation Plan Update, and the decrease in toilet rebates (192 vs. 297). The Utility plans to continue its efforts of replacing inefficient toilets and promoting its business conservation incentive program in 2023.

III. INCENTIVE PROGRAMS

The Utility has four active incentive programs:

1. Toilet Rebate Program
2. Shower Head Rebate Program
3. Rain Barrel Rebate Program
4. Grants for Innovative Site-Specific Water Savings Measures

WaterSense®



1. Toilet Rebate Program

Waukesha Water Utility's High-Efficiency, 1.28 gpf (gallons per flush), WaterSense toilet rebate program has been in effect since October 2008. From October 2008 to July 2012, the program offered a \$25 rebate. In 2012, the Utility increased the rebate to \$100 depending on the cost of the toilet.

In 2022, the Utility offered residential toilet and showerhead rebates and continued to focus on large multi-family properties.

The Utility reached out to ten large multi-family properties about replacing their toilets. Six multi-family properties responded back.

- Morningside Hill Apartments – Toilets have already been replaced at this property.
- Coach Light Communities – The customer recently purchased these apartments and were extremely interested in efficiency updates. The Utility pre-inspected all their toilets and found out that, except for 1 toilet, all the other toilets were already high-efficiency toilets.
- Kmiec Apartments –An appointment was scheduled with WWU to pre-inspect some of their toilets. The majority of the toilets inspected were already high-efficiency toilets. There are more toilets to be inspected. I have made several attempts to contact the owners but have had no response to my messages.

- Village Green Apartments – The Utility emailed a copy of the Rebate Application per customer request. We followed up with phone calls and left messages, but haven't heard back from anyone.
- East Terrace Apartments – The customer plans to replace their toilets in 2023.
- The Equity Group – The customer expressed interest in efficiency updates. The Utility pre-inspected toilets at their two complexes to see which toilets qualified for the rebate. 150 toilets were inspected and 57 qualified. The Equity Group changed out their toilets and received a rebate in 2022.
- The Meadows Apartments – The customer started changing out their toilets the last couple of years and had 83 toilets left to finish. They completed the replacements in 2022 and received a rebate.

By the end of 2022, the Utility processed a total of 192 toilet rebates. This included 40 residential toilets, 8 residential two-family, 0 commercial toilets, 0 industrial, and 144 toilets from large multi-family properties, which included The Equity Group and The Meadows.

Detailed information pertaining to the large multi-family toilet rebates are shown below and on the following pages.



The Meadows Apartments changed out 83 toilets – most of the toilets dated back to 1972, but a few were dated 1991.



The Equity Group's First Complex – changed out 20 toilets dating from 1968-1991.



The Equity Group's Second Complex – changed out 37 toilets dating from 1965-1973.
The majority of the toilets were from the mid-1960's.

The cover letters for the large multi-family toilet rebates are shown on the next 2 pages.



115 DELAFIELD STREET
WAUKESHA, WI 53188-3615



Telephone: (262) 521-5272 • Fax: (262) 521-5265 • E-mail: contactus@waukesha-water.com

December 16, 2022

The Meadows
Attn: Lori Gabay
2400 Springdale Road
Waukesha, WI 53186

Re: Toilet Rebates for The Meadows Apartments

Dear Ms. Gabay and Mr. Clemmer,

Waukesha Water Utility would like to thank you for participating in the toilet rebate program. Your rebate application has been processed for 83 WaterSense toilets at \$96.75 per toilet. Please find enclosed a check for \$8,030.25.

These rebates are for the following apartment buildings at 2424, 2426, and 2428 Springdale Road.

Thank you, again, for working with the Utility and changing out the water wasting toilets. We appreciate your commitment to conserve water.

Sincerely,

WAUKESHA WATER UTILITY

Mary Adelmeyer
Customer Relations Coordinator

mka

Enclosure: Rebate Check

Cover Letter for The Meadows' Apartments Toilet Rebates



115 DELAFIELD STREET
WAUKESHA, WI 53188-3615

Telephone: (262) 521-5272 • Fax: (262) 521-5265 • E-mail: contactus@waukesha-water.com

December 16, 2022

The Equity Group, Inc.
Attn: CCRT Properties
150 N Sunnyslope Rd. #365
Brookfield, WI 53005

Re: Toilet Rebates for The Equity Group, Inc.

Dear Mr. Andrew Radler,

Waukesha Water Utility would like to thank you for participating in the toilet rebate program. Your rebate application has been processed for 57 WaterSense toilets at \$100 per toilet. Please find enclosed a check for \$5,700.

This rebate is for the toilet change outs at the following apartment buildings located at:

101-107 N Moreland
143 N Moreland
167 N Moreland
207 N Moreland
800-20 Delafield
1012 Delafield
1022 Delafield

Thank you, again, for working with the Utility and changing out the water wasting toilets. We appreciate your commitment to conserve water.

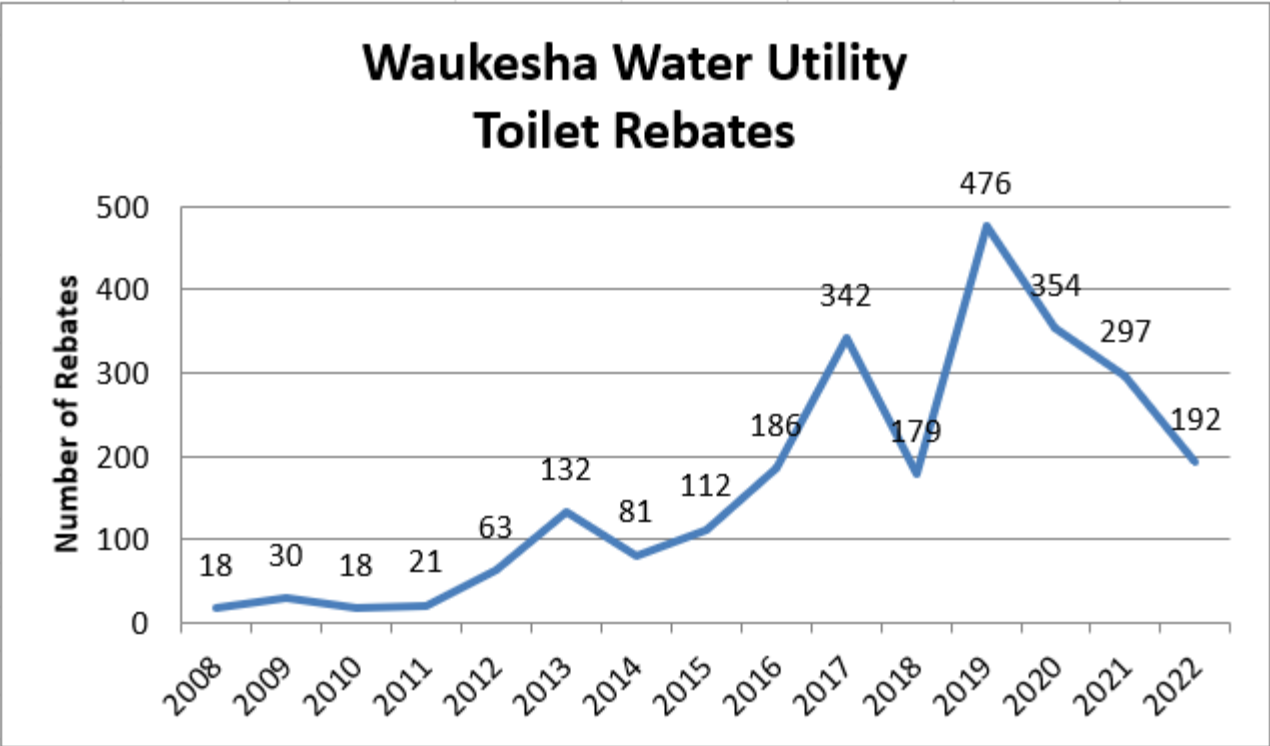
Sincerely,

WAUKESHA WATER UTILITY

Mary Adelmeyer
Customer Relations Coordinator

mka

Cover Letter for The Equity Group Toilet Rebates



Historically, the following rebates have been awarded:

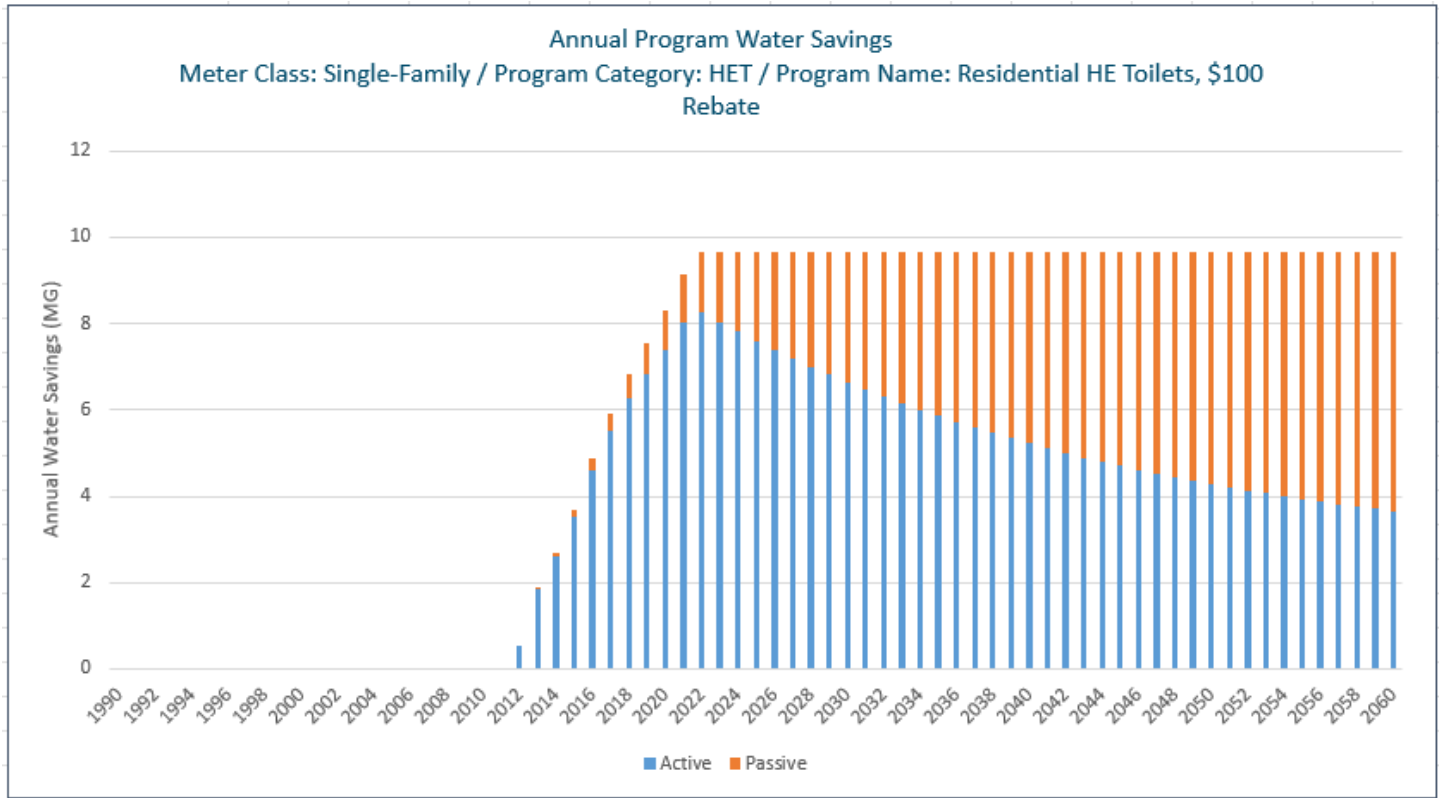
Using the Alliance for Water Efficiency (AWE) Conservation Tracking Tool, the annual cost effectiveness of the program is demonstrated below. With the Version 4 AWE Tool, avoided costs are included in the unit and benefit cost calculations.

Class	Activity Name	Utility Unit Cost (\$/MG)	PV Cost	Utility Unit Benefit (\$/MG)	PV Benefit	B/C Ratio
Residential	Residential HE Toilets, \$25 Rebate	170	1,720.44	616	6,234.07	3.6
Industrial/Commercial	CII Tank-Type HE Toilet, \$50 Rebate (Industrial & Co	102	1,065.22	616	6,433.10	6.0
Residential	Residential HE Toilets, \$100 Rebate	340	51,636.52	616	93,553.22	1.8
Commercial	Commercial HE Toilet, Large MF \$100 Rebate	306	106,744.05	616	214,883.44	2.0

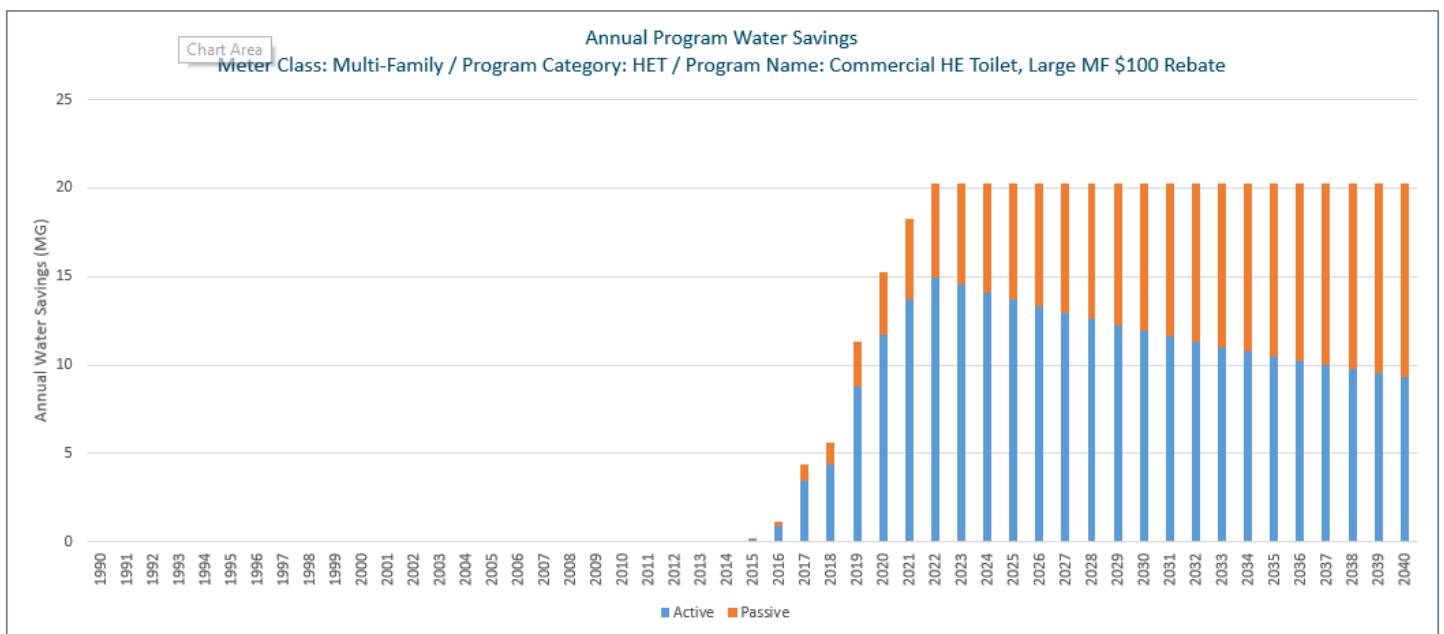
In 2022, \$100 toilet rebates for single-family residences and \$100 rebates for commercial/multi-family customers were issued. The projected water savings through 2035, for those two rebates, is demonstrated by the graphs on the next page. Projected water savings for past program incentives such as a \$25 residential toilet rebate or \$50 industrial toilet rebates can be found in past annual reports or provided upon request.

The following graphs, from the AWE Tracking Tool version 4, relate to water saved by the \$100 residential and multi-family rebates.

The first graph relates to water saved by the \$100 residential rebates.



The second graph relates to water saved by the \$100 commercial/multi-family toilet rebates.



WaterSense®



2. Shower Head Rebate Program

In late 2016, the Utility implemented a shower head rebate program. Customers who replace their 1992 or older shower head with a high-efficiency WaterSense shower head would be eligible for a \$25 rebate. In 2022, there was one shower head rebate for a two-family residential customer.

The residential toilet & showerhead rebate application, along with the large multi-family toilet rebate application, is shown on the following four pages. The advertisements for the rebate programs are shown in the public Education section.



Waukesha Water Utility
 P. O. Box 1648
 Waukesha, WI 53187-1648
www.waukesha-water.com
 Phone: 262-409-4423
 Fax: 262-521-5265

RESIDENTIAL – SINGLE FAMILY, DUPLEX, & TRI-PLEX HIGH-EFFICIENCY TOILET & SHOWER HEAD REBATES

<u>\$100 Toilet Rebate</u>	<p>Replace a 1993 or Older (3.5 gpf or more - gallon per flush) toilet with a WaterSense High-Efficiency 1.28 gpf toilet and receive up to a \$100 rebate.</p> <p>(Residential customers can save 9,000 – 11,000 gals. of water/year, depending on family size.)</p>
<u>\$25 Shower Head Rebate</u>	<p>Replace a 1992 or Older shower head with a WaterSense model shower head and receive up to a \$25 rebate.</p> <p>(Residential customers can save approximately 2,900 gals. of water/year, and approximately 300 kwh of electricity annually.)</p>

Customer Eligibility/Program Rules:

If replacing more than 5 toilets, please see Large Multi-Family/Commercial Rebate Application.

1. Rebates are available on first-come, first-served basis until funds are exhausted.
2. **Property where toilet/showerhead is installed is a customer of Waukesha Water Utility.**
3. **High efficiency toilets must replace toilets installed in 1993 or prior.**
4. Shower heads must replace shower heads installed in 1992 or prior.
5. New construction is not eligible.
6. **New toilet/showerhead must have the WaterSense logo (as shown on top of this page).**
7. Applicant must be the owner of the property listed on the rebate application.
8. **An original, unaltered, dated sales receipt listing the make and model numbers, MUST accompany the rebate application.**
9. **A picture showing the YEAR of the original toilet & a picture of the installed toilet is required and needs to be attached to the application in order to receive the rebate.**
10. Applicant agrees and understands that Waukesha Water Utility or its representatives reserve the right to inspect the installation before or after the rebate credit is mailed out.
11. The Utility will withhold the rebate until all conditions are met.
12. Rebates are not available for the costs of installation.
13. **Old toilets/showerheads cannot be reused.**
14. Submit the application materials to the Waukesha Water Utility (address listed above).

Updated Toilet & Shower Head Rebate Application Front Side



Waukesha Water Utility
 P.O. Box 1648
 Waukesha, WI 53187-1648
 Phone: (262) 409-4423 Fax: (262) 521-5265

TOILET & SHOWER HEAD REBATE FORM

Please Print & Read All Program Rules, on the Other Side of This Form, Prior to Submitting

NAME: _____ Owner <input type="checkbox"/> Occupant <input type="checkbox"/> Account #: _____	
SERVICE ADDRESS (Where toilet/showerhead installed): _____	
MAIL REBATE TO THIS ADDRESS: _____	
CITY: _____	STATE: _____ ZIP: _____
PHONE (Day): _____	PHONE (Evening): _____
EMAIL: _____	Preferred Method of Contact: <input type="checkbox"/> Email <input type="checkbox"/> Phone
How did you hear about this program? _____	

Number of Toilets at this Address:	Number of Toilets Currently Replaced for this Rebate Application:	Number of Showers at this Address:	Number of Showerheads Currently Replaced for this Rebate Application:	Number of persons in Household:

Old Toilet(s) Information: (this information may be found in the toilet tank or under the tank lid.)

Year of old toilet(s): _____ Size, Make, and Model: _____
(sizes) (makes) (model numbers)

Or

Measurement(s) of the height, depth, and width of the water level (when the tank(s) is full)

_____ (height) _____ (depth) _____ (width)

New Toilet/Shower Head Information:

Toilet: Date of purchase: _____ Store where purchased from: _____ Purchase Price: \$ _____

Manufacturer	Model Name	Model Number	Is this a 1.28 gal/flush Toilet? _____
			Is this a WaterSense Toilet? _____
Manufacturer	Model Name	Model Number	Is this a 1.28 gal/flush Toilet? _____
			Is this a WaterSense Toilet? _____

Date(s) installed: _____ Install Cost: \$ _____ Installed by: Do-it yourself Plumber

Shower Head: Date of purchase: _____ Store where purchased from: _____ Price: \$ _____

Manufacturer	Model Name	Model Number	Is this a WaterSense Fixture? _____
			How Many Installed? _____
Manufacturer	Model Name	Model Number	Is this a WaterSense Fixture? _____
			How Many Installed? _____

Date installed: _____ Install Cost: \$ _____ Installed by: Do-it yourself Plumber

I have read and understand the policy as stated in the program guidelines and I agree to a possible site visit by Waukesha Water Utility for installation verification. Reminder: Receipt & Installation Pictures Must Be Attached.

_____ Date

Property Owner Signature



SECTION 1: INCENTIVE INFORMATION

- Please note, you **MUST** receive pre-approval from Waukesha Water Utility prior to beginning any toilet change out project (including removing old toilets, ordering, purchasing, and installing new toilets).
- Large Multi-Family/Commercial Toilet Rebate Incentives will be determined on a case by case basis depending on available funds.
- Incentives are only available for the cost of toilets, not for labor or installation costs.
- The total maximum incentive a customer may receive is up to \$100 per toilet and no more than \$10,000.
- Approval of an incentive entitles the Utility to reference the project in documents that reference its conservation program. This may include an interview with the project staff and/or photos for submission to the Wis. Water Association newsletter, the Waukesha Freeman, the Utility's website, and the annual report to the Wisconsin Public Service Commission, etc.
- Incentives are available to help implement projects that otherwise would not be completed, or to complete projects sooner than scheduled.
- See Section 2 for customer eligibility.

SECTION 2: APPLICATION REQUIREMENTS

The purpose of this form is to assess pending projects to determine if the project is eligible for a toilet rebate incentive. Funding provided is contingent upon the following requirements and upon receiving all requested documents:

- Customers **MUST** work with the Utility to determine if their project would qualify and then obtain approval (in the form of a Utility-signed Incentive Agreement) prior to removing or purchasing any equipment.
- Property where toilets are installed is a customer of Waukesha Water Utility.
- All toilets need to be inspected **before and after** installation by the Utility to ensure eligibility.
- High Efficiency toilets must replace toilets installed in 1993 or prior and are at least a 3.5 gpf (gallon per flush) toilet.
- New toilets must be 1.28 gpf WaterSense certified (the WaterSense logo is shown at the top of this Application).
- All toilets need to be installed and inspected no later than November 1st (the same calendar year of the incentive approval).
- All paper work, including the purchase order and original paid receipt, dated on or after the incentive approval date, must be submitted to the Utility no later than November 1st so that the incentive check can be issued by the end of the year.

SECTION 3: CUSTOMER LEGAL INFORMATION

Company Legal Name:		Tax Identification Number (complete ONE only, must be 9 digits): FEIN: _____ OR SSN: _____			
Company Contact Name:		Business Classification of Customer (check ONE only. Required for all businesses, including non- <input type="checkbox"/> Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Sole Proprietorship <input type="checkbox"/> LLC <input type="checkbox"/> Other _____			
Street Address:		City:		State:	Zip Code:
Owner Name (Corporations excluded):		Phone:	Fax:	Email:	

SECTION 4: PAYMENT INFORMATION (All information is required to receive payment)

Make Incentive Check Payable to (check ONE): Company Name Business Owner's Legal Name (Only if Sole Proprietor)

Make Check to the Attention of:

Alternate Mailing Address (if different from address above):	City:	State:	Zip Code:
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SECTION 5: JOB SITE INFORMATION (Where project will occur)			
Job Site Name:		Project Contact Name:	
Job Site Street Address (physical address):		City:	State: Zip Code:
Project Contact Phone:	Project Contact Fax :	Project Contact E-mail:	Preferred Means of communication: <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> Mail <input type="checkbox"/> E-mail
Account #:		Customer #:	

SECTION 6: PROJECT PARAMETERS - project specific information will be held as confidential
Project Description (including costs):
For Multi-Family: How Many Apartment Units Will Have Toilets Changed Out: _____ Number of Toilets/Unit: _____
Address(es) of the Building(s) Where Change Out Will Occur: _____
_____ Year(s) Building(s) Built: _____
For Commercial: Choose Business Type <input type="checkbox"/> School <input type="checkbox"/> Food Processing <input type="checkbox"/> Food Service <input type="checkbox"/> Lodging <input type="checkbox"/> Other _____
<input type="checkbox"/> Healthcare <input type="checkbox"/> Manufacturing, type _____ Number of Toilets to be Changed Out _____
New Toilet Information:
Toilets to be Purchased From: _____ Price per Toilet: _____
Toilet Manufacturer(s): _____ Model Number(s): _____
Are These New Toilets At Least 1.28 gpf? _____ Are the New Toilets WaterSense Certified? _____

SECTION 7: BACKGROUND QUESTIONS
1. Check which best describes where you are right now with your project:
<input type="checkbox"/> Considering project
<input type="checkbox"/> Assessing feasibility
<input type="checkbox"/> Getting vendor bids and/or savings estimates
<input type="checkbox"/> Received management approval
<input type="checkbox"/> Started installation
2. Check your reasons for pursuing this project:
<input type="checkbox"/> Reduce maintenance costs
<input type="checkbox"/> Replace worn out equipment
<input type="checkbox"/> Reduce utility costs
<input type="checkbox"/> Comply with regulatory equipment
<input type="checkbox"/> Achieve company goal or mandate

APPLICANT:	WAUKESHA WATER UTILITY:
Name: _____	Name: _____
Signature: _____	Signature: _____
Date: _____	Date: _____

Return signed, completed form to:
Mail: Waukesha Water Utility – Incentive Dept. PO BOX 1648 Waukesha, WI 53187-1648
Fax: 262.521.5265 Questions: Call 262-409-4423

New Toilet Rebate Application for Large Multi-Family/Commercial Back Side

Using the Alliance for Water Efficiency (AWE) Conservation Tracking Tool, the annual cost effectiveness of the program is demonstrated below. A B/C Ratio just under 1 indicates that the program currently costs more than the cost of the water saved.

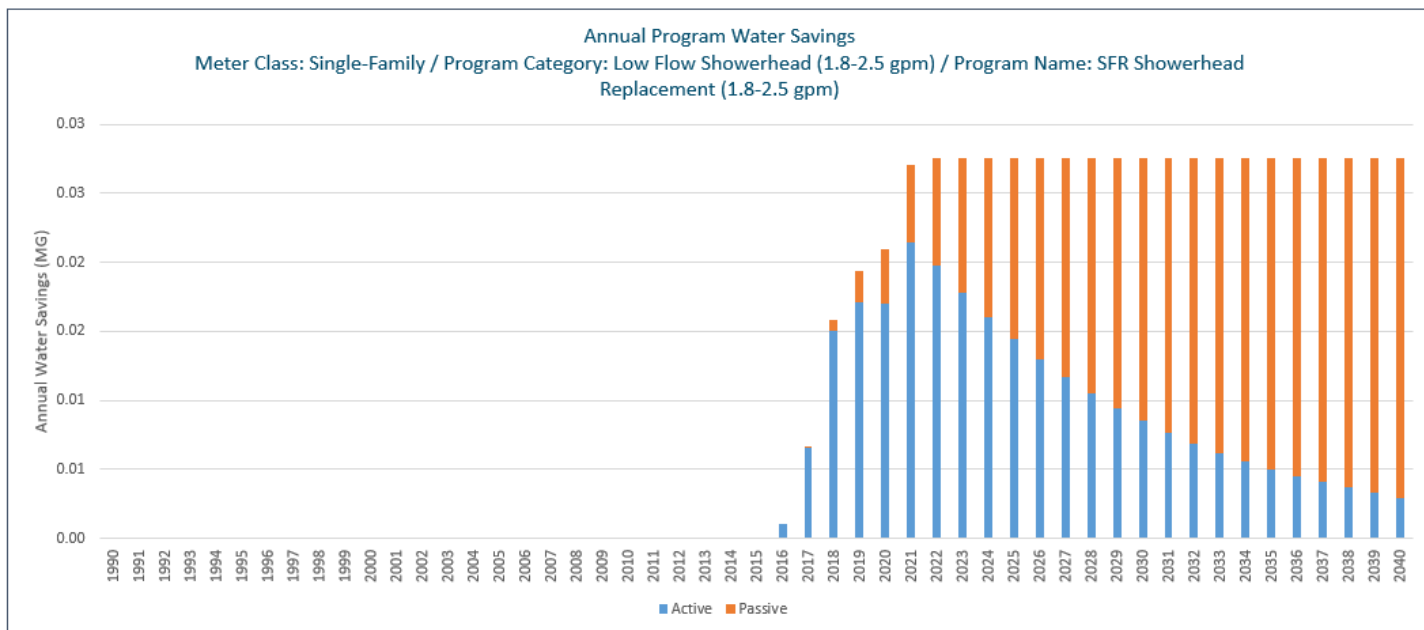
The Utility undertook this program because it was part of the 2012 Conservation Plan. The 2012 plan indicated a larger positive B/C Ratio, but the fixed costs of developing the program were underestimated.

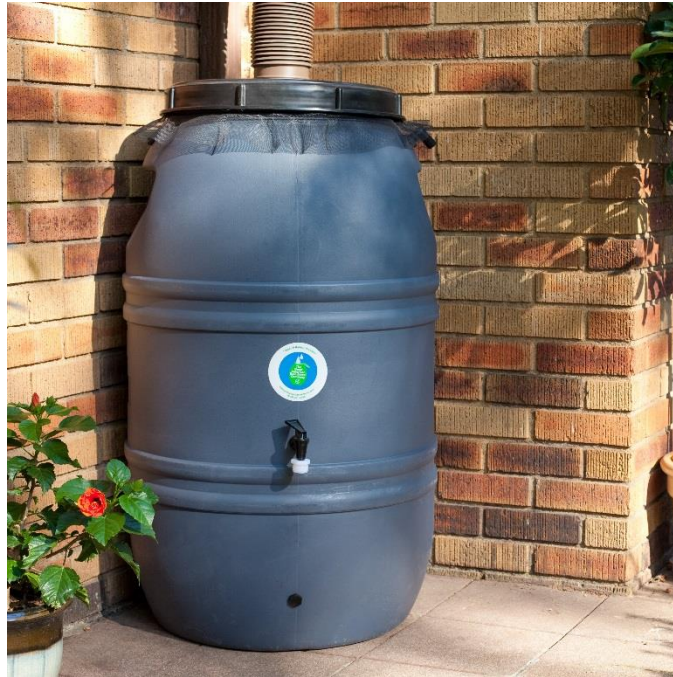
The Utility hopes that as more showerhead programs are implemented, the fixed costs will go down and the program will yield a better ratio.

Still, water is being conserved and that is the ultimate goal of the program.

Class	Activity Name	Utility Unit Cost (\$/MG)	PV Cost	Utility Unit Benefit (\$/MG)	PV Benefit	B/C Ratio
Residential	SFR Showerhead Replacement (1.8-2.5 gpm)	4,892	836.18	616	105.29	0.1

The projected water savings through 2040 is demonstrated below.

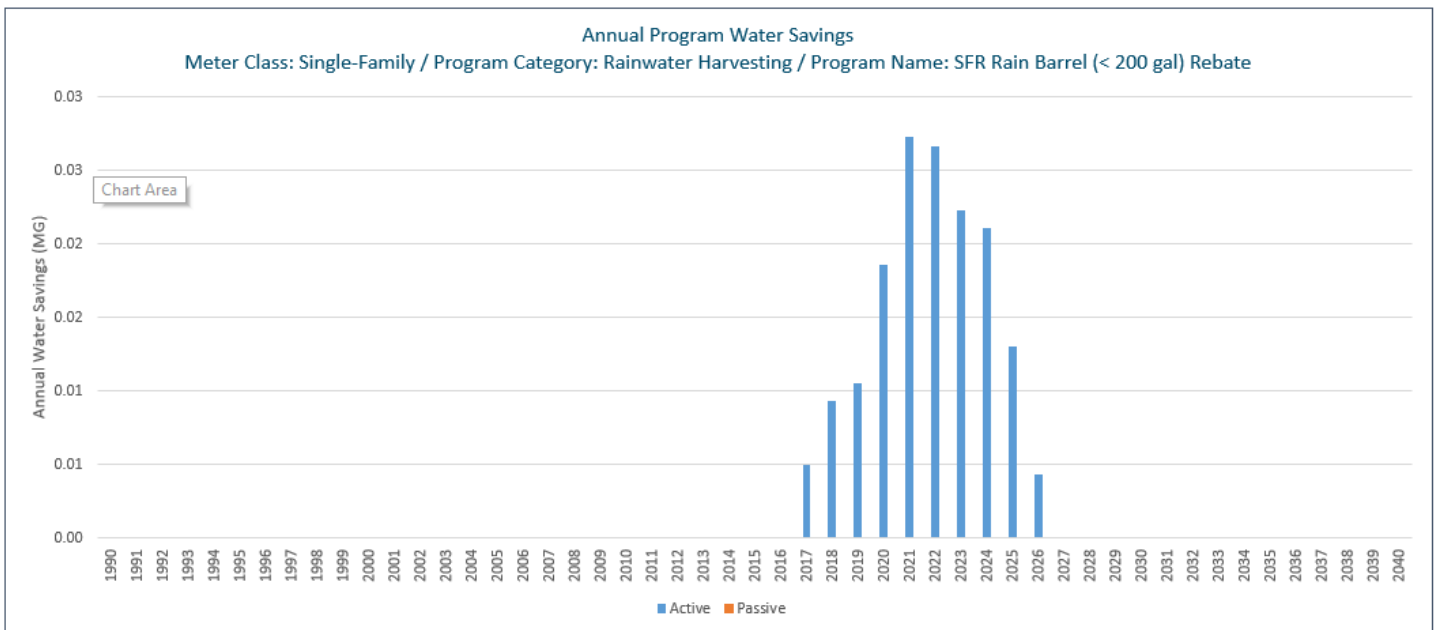




3. Rain Barrel Rebate Program

In May 2017, the Utility implemented a rain barrel rebate program. Customers who purchase and install a qualifying rain barrel, and submit their application with their original receipt and post-installation picture, are eligible for a \$20 rebate. In 2022, there were seven rain barrel rebates.

The projected water savings through 2035 is demonstrated by the graph below:





Waukesha Water Utility
 P.O. Box 1648
 Waukesha, WI 53187-1648
 Phone: (262) 409-4423
 Fax: (262) 521-5265

RAIN BARREL \$20 REBATE



- ◆ Saves most homeowners about 1,300 gallons of water during the summer.
- ◆ Naturally soft, chlorine-free water is great for watering plants and washing windows or cars.

TO QUALIFY

- Rain barrels must be installed in the Waukesha Water Utility's service area.
- Renters may be eligible to participate with the written consent of the property owner.
- Qualifying barrels must be newly purchased, a minimum size of 50 gallons, and designed for the intended purpose of rain capture.
- Homemade rain barrels do not qualify for the rebate.
- Rain barrels must have a secure lid for child safety; and rust-proof screening or sealed designs over the top and on the overflow spigot for mosquito, rodent, and debris control.
- Rain barrels must not be connected to the (potable water) irrigation system.
- The original purchase receipt, that includes the purchase amount and barrel size, must be submitted within 90 days of purchase.
- Post-installation pictures must be included with the application.
- Maximum of 2 rain barrels allowed per address.
- Rebates are available on a first-come, first-served basis and are subject to the availability of funds.

TIPS FOR INSTALLATION & USE

- ◆ **Raise the barrel up on cinder blocks to increase pressure.** (But make sure the barrel is on a level, firm surface to prevent the barrel from falling over – a full 55 gal. barrel weighs over 400 lbs.)
- ◆ **Make sure the overflow from the barrel is directed away from your house.**
- ◆ **Disconnect the barrel in the winter and turn it upside down or take it inside.** If your downspout has been cut off for the rain barrel, be sure to add an extension hose for the winter.
- ◆ **Enclose the top of the barrel, where the water enters the barrel, with a tight-fitting, fine-mesh screen to prevent a nesting site for mosquitoes.**
- ◆ **Do not drink the water from your rain barrel.** Water from your roof is not safe to drink, but is fine to water your yard. It is not recommended to water vegetable gardens with your rain barrel.
- ◆ **Do not connect the rain barrel to your sprinkler systems or put the hose, which is connected to your house, into the rain barrel, as unintended suction can contaminate the water in your home.** (The best way to prevent this is to only hook a garden hose, or isolated drip irrigation system, to the outlet of your barrel and water your landscape directly.)

The rain barrel rebate application is shown below. The press release and website information is shown in the Education section.



WAUKESHA WATER UTILITY
\$20 RAIN BARREL REBATE APPLICATION

Name: _____ Owner Occupant Account Number: _____

Service Address (Where rain barrel is installed ~ must be installed in the Waukesha Water Utility service area): _____

Mail Rebate to this Address: _____

Phone (Day): _____ Phone (Evening): _____ Email Address: _____

How Did You Hear About the Rain Barrel Rebate Program?: _____

Number of Rain Barrels at this Address: _____ Number of Rain Barrels for this Rebate Application: _____

Date of Purchase: _____ Store/Place Where Purchased From: _____ Purchased Price: _____

Type of Barrel: _____ Capacity (Gallons): _____ Date Installed: _____
(Brand/Make) (Model Number)

If you are the renter, is the required written consent of the property owner attached: Yes No Or, not required, I am the Property Owner:

Is the required photo attached showing the installed Rain Barrel (on a level, firm surface, under the downspout, with a secure lid): Yes No

Is the required **original** purchase receipt attached: Yes No

I have read the rain barrel rebate program qualifications, along with the tips for installing and using the rain barrel (on the back of this brochure).
I have all the necessary paperwork and photos attached, and agree to a possible site visit by the Waukesha Water Utility for installation verification.

Signature _____ Date _____



5. Grants for Innovative Site Specific Water Saving Measures

In 2014, Waukesha Water Utility began to support innovative, site specific, water saving measures for non-residential accounts. In 2015, the Utility added more structure to the program which consists of the following:

- The program focuses on the replacement of capital assets – incenting organizations to replace equipment with new technology that will save water.
- In order to receive an incentive, an Incentive Application must be completed and the company must receive approval prior to the new technology being ordered.
- The Utility ranks the Applications with respect to pay back periods and cost benefit ratios; and incentives are granted in rank order until the annual funds are exhausted.

Letters with the Incentive Application are mailed out annually to the top 50 water users in the commercial, public and industrial sectors.

The Incentive Letter, Application, information on companies that responded to the letter, and information on a 2022 completed project, for this incentive program, is shown on the following pages.



Waukesha Water Utility

SERVING WAUKESHA SINCE 1886

115 DELAFIELD STREET
WAUKESHA, WI 53188-3615

Telephone: (262) 521-5272 • Fax: (262) 521-5265 • E-mail: contactus@waukesha-water.com

July 2022

Re: Water Conservation Incentive Program

To: Whom It May Concern:

Waukesha Water Utility is sending you a reminder about our Conservation Incentive program for non-residential customers. The purpose of the program is to incent organizations to replace equipment with new technology that will conserve water. Incentives are available to help implement those projects.

In order to be eligible for an incentive, the organization must complete a Water Conservation Incentive Application; and receive approval for the project before the new technology is ordered. Waukesha will assess pending projects to determine if the project is eligible for an incentive.

For more information about the program, please refer to the enclosed Incentive Application or visit Waukesha Water Utility's website at www.waukesha-water.com.

For questions, please call Waukesha Water Utility at (262) 409-4423.

Sincerely,

WAUKESHA WATER UTILITY
Customer Service

Enclosure: Water Conservation Incentive Application

Copy of the Business Incentive Cover Letter Mailed to the Top 50 Industrial, Commercial, and Public Water Users

SECTION 1: INCENTIVE INFORMATION

Incentives are calculated on a case-by-case basis depending on the application and the size of the facility. See Section 2 for customer eligibility information. Customers must work with the Utility to determine if their project would qualify and then obtain approval (in the form of an Incentive Agreement) prior to purchasing the equipment. Incentives are available to help implement projects that otherwise would not be completed, or to complete projects sooner than scheduled.

SECTION 2: APPLICATION REQUIREMENTS

The purpose of this form is to assess pending projects to determine if the project is eligible for a custom incentive. Funding provided through custom incentives is contingent upon the following requirements and upon receiving all requested documents:

- **You MUST receive pre-approval from Waukesha Water Utility prior to beginning any custom projects, including ordering equipment.**
- Custom incentives will not be provided for projects falling under a 1.5 year payback.
- Based on project type, technology and situation, projects may be limited to a maximum simple payback of four to ten years.
- Custom incentives cannot be more than 50 percent of the project cost. Custom incentives that are less than 10% of the project cost may be considered.
- The total maximum incentive a customer may receive for custom projects combined is \$20,000 per calendar year, per EIN.

SECTION 3: CUSTOMER LEGAL INFORMATION

Company Legal Name:		Tax Identification Number (complete ONE only, must be 9 digits): FEIN: _____ OR SSN: _____			
Company Contact Name:		Business Classification of Customer (Check ONE only. Required for all businesses, including non-profits): <input type="checkbox"/> Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Sole Proprietorship <input type="checkbox"/> LLC <input type="checkbox"/> Other			
Street Address:		City:		State:	Zip Code:
Owner Name (Corporations excluded):		Phone:	Fax:	Email:	

SECTION 4: PAYMENT INFORMATION (All information is required to receive payment)

Make Incentive Check Payable to (check ONE): Company Name Business Owner's Legal Name (Only if Sole Proprietor)

Make Check to the Attention of:

Alternate Mailing Address (if different from address above):	City:	State:	Zip Code:
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SECTION 5: JOB SITE INFORMATION (Where project will occur)

Job Site Name:		Project Contact Name:			
Job Site Street Address (physical address):		City:		State:	Zip Code:
Project Contact Phone	Project Contact Fax :	Project Contact E-mail:		Preferred Means of communication: <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> Mail <input type="checkbox"/> E-mail	
Account #:		Customer #:			

Business Type (Check ONE):

- School Food Processing Food Service Lodging Other _____
- Healthcare Manufacturing, type _____

SECTION 6: PROJECT PARAMETERS - project specific information will be held as confidential

Project Description (including costs):

Projected Annual Gallons Saved	3 yr. Average Annual Consumption:	Project Start Date:	Project Completion Date:			
Hours of Operation (i.e. 8 a.m. - 9 p.m.)						
MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
_____ to _____	_____ to _____	_____ to _____	_____ to _____	_____ to _____	_____ to _____	_____ to _____

Information on existing equipment, system operation and building operation attached (If available).

Specification sheets and/or project proposals attached (If available).

SECTION 7: BACKGROUND QUESTIONS

1. Check which best describes where you are right now with your project:

- Considering project
- Assessing feasibility
- Getting vendor bids and/or savings estimates
- Received management approval
- Started installation

2. Check your reasons for pursuing this project:

- Reduce maintenance costs
- Replace worn out equipment
- Reduce energy costs
- Comply with regulatory equipment
- Achieve company goal or mandate

APPLICANT:

Name: _____

Signature: _____

Date: _____

WAUKESHA WATER UTILITY:

Name: _____

Signature: _____

Date: _____

In 2022, two companies responded to the Incentive letter; and one company completed their water conservation project and receive their incentive.

- Siemens - a contracting company, called to get some additional information regarding the incentive program. Next year, they might be contracted to work on a conservation project with Carroll University. The Utility will follow up with them in 2023.
- Lifeway – a food processing company, applied for a business incentive to replace their existing water-cooled air compressors with new refrigerant cooled compressors – they started the project late 2022 and anticipate completion in 2023.
- Airgas – one of our manufacturing companies, as reported in 2021, completed installation of their new chiller system in December of 2021. The Utility verified the water savings in 2022 and calculated the incentive. A copy of the incentive letter is on the following page.

The Utility will continue to promote the business incentive in 2023, as these incentives tend to have the greatest water conservation impact.



Waukesha Water Utility

SERVING WAUKESHA SINCE 1886

115 DELAFIELD STREET
WAUKESHA, WI 53188-3615

Telephone: (262) 521-5272 • Fax: (262) 521-5265 • E-mail: contactus@waukesha-water.com

December 16, 2022

Airgas, LLC
Attn: Martie Eckstein
401 Sentry Drive
Waukesha, WI 53186

Dear Ms. Eckstein,

Thank you for participating in Waukesha Water Utility's Conservation Incentive program. Waukesha Water is remitting this check for \$5,970.62. The monies are to be used to offset the costs associated with installing the new chiller. We are pleased that this new system will eliminate the need to send cooling water to the drain.

Your efforts, with this new chiller, are estimated to save 1.9 million gallons of water per year!

Thank you for helping our community conserve this important natural resource.

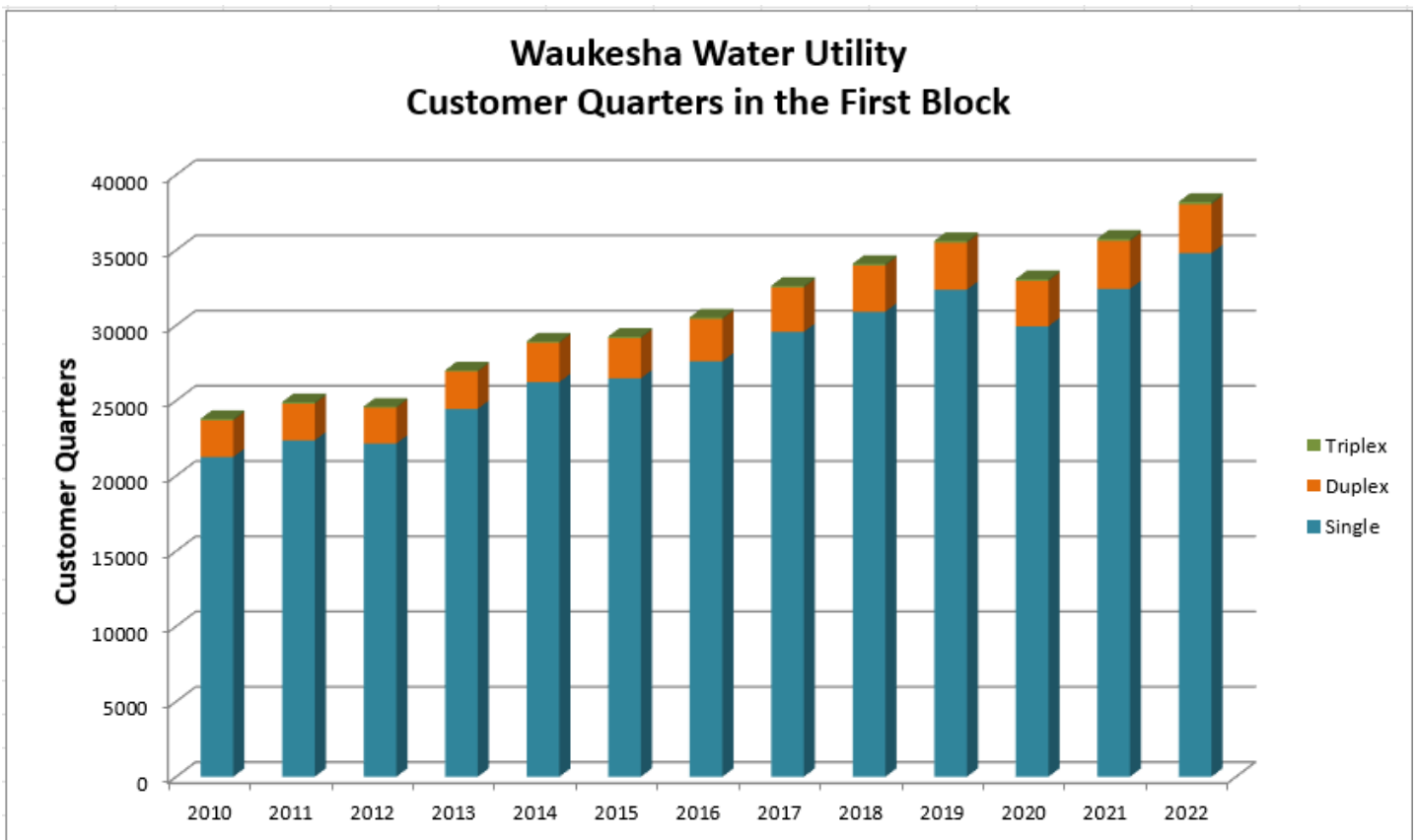
Sincerely,

WAUKESHA WATER UTILITY

Mary Adelmeyer
Customer Relations Coordinator

IV. EFFECTS OF WATER RATES STRUCTURE

While the Utility implemented an inclining rate block structure in 2007, it wasn't until 2010 that it had data separated into single, duplex and triplex customers. From 2010 to 2022, with the exception of 2020, the number of customers within the first block has increased. It is assumed that the combination of the rate structure and other conservation measures, such as the installation of high-efficient appliances and equipment, are the reason for this trend.



The detailed data, on the next three pages, supplements the consumption history; supplied in previous years reports. To provide a more accurate picture of “# of customers,” volumes associated with final reads have been excluded.

Single Family Consumption				
Interval	2022			
	# of Customers	%	Consumption	%
January				
0-3,333	7,424	45.0%	15,923,200	24.4%
3,334-6,667	7,309	44.3%	34,037,500	52.1%
>6,667	1,750	10.6%	15,384,400	23.5%
January Total	16,483	100.0%	65,345,100	100.0%
February				
0-3,333	9,300	56.6%	19,368,100	34.5%
3,334-6,667	6,149	37.4%	27,940,300	49.8%
>6,667	978	6.0%	8,760,700	15.6%
February Total	16,427	100.0%	56,069,100	100.0%
March				
0-3,333	9,548	58.2%	19,810,600	36.3%
3,334-6,667	5,960	36.4%	26,976,200	49.4%
>6,667	884	5.4%	7,816,600	14.3%
March Total	16,392	100.0%	54,603,400	100.0%
April				
0-3,333	8,040	48.9%	17,111,500	27.8%
3,334-6,667	7,011	42.7%	32,312,300	52.5%
>6,667	1,380	8.4%	12,152,200	19.7%
April Total	16,431	100.0%	61,576,000	100.0%
May				
0-3,333	9,918	60.2%	20,489,300	38.3%
3,334-6,667	5,769	35.0%	25,947,000	48.5%
>6,667	793	4.8%	7,044,600	13.2%
May Total	16,480	100.0%	53,480,900	100.0%
June				
0-3,333	8,012	48.5%	16,821,000	25.8%
3,334-6,667	6,687	40.4%	31,134,200	47.8%
>6,667	1,835	11.1%	17,223,100	26.4%
June Total	16,534	100.0%	65,178,300	100.0%

		July		
0-3,333	7,034	42.4%	14,906,900	19.9%
3,334-6,667	6,838	41.3%	32,165,100	43.0%
>6,667	2,699	16.3%	27,670,700	37.0%
July Total	16,571	100.0%	74,742,700	100.0%
		August		
0-3,333	8,552	51.7%	17,891,900	28.2%
3,334-6,667	6,389	38.6%	29,462,200	46.4%
>6,667	1,614	9.7%	16,094,100	25.4%
August Total	16,555	100.0%	63,448,200	100.0%
		September		
0-3,333	8,910	53.8%	18,619,300	30.6%
3,334-6,667	6,218	37.5%	28,463,700	46.7%
>6,667	1,434	8.7%	13,811,800	22.7%
September Total	16,562	100.0%	60,894,800	100.0%
		October		
0-3,333	7,985	48.1%	16,941,000	26.3%
3,334-6,667	6,965	42.0%	32,332,700	50.3%
>6,667	1,643	9.9%	15,051,600	23.4%
October Total	16,593	100.0%	64,325,300	100.0%
		November		
0-3,333	9,538	57.5%	19,728,700	35.5%
3,334-6,667	6,126	36.9%	27,767,200	49.9%
>6,667	924	5.6%	8,126,000	14.6%
November Total	16,588	100.0%	55,621,900	100.0%
		December		
0-3,333	10,118	61.1%	20,866,400	39.2%
3,334-6,667	5,689	34.3%	25,580,400	48.1%
>6,667	763	4.6%	6,775,500	12.7%
December Total	16,570	100.0%	53,222,300	100.0%
		Annual		
0-3,333	8,031	50.7%	218,477,900	30.0%
3,334-6,667	6,426	40.5%	354,118,800	48.6%
>6,667	1,391	8.8%	155,911,300	21.4%
Annual Total	15,848	100.0%	728,508,000	100.0%

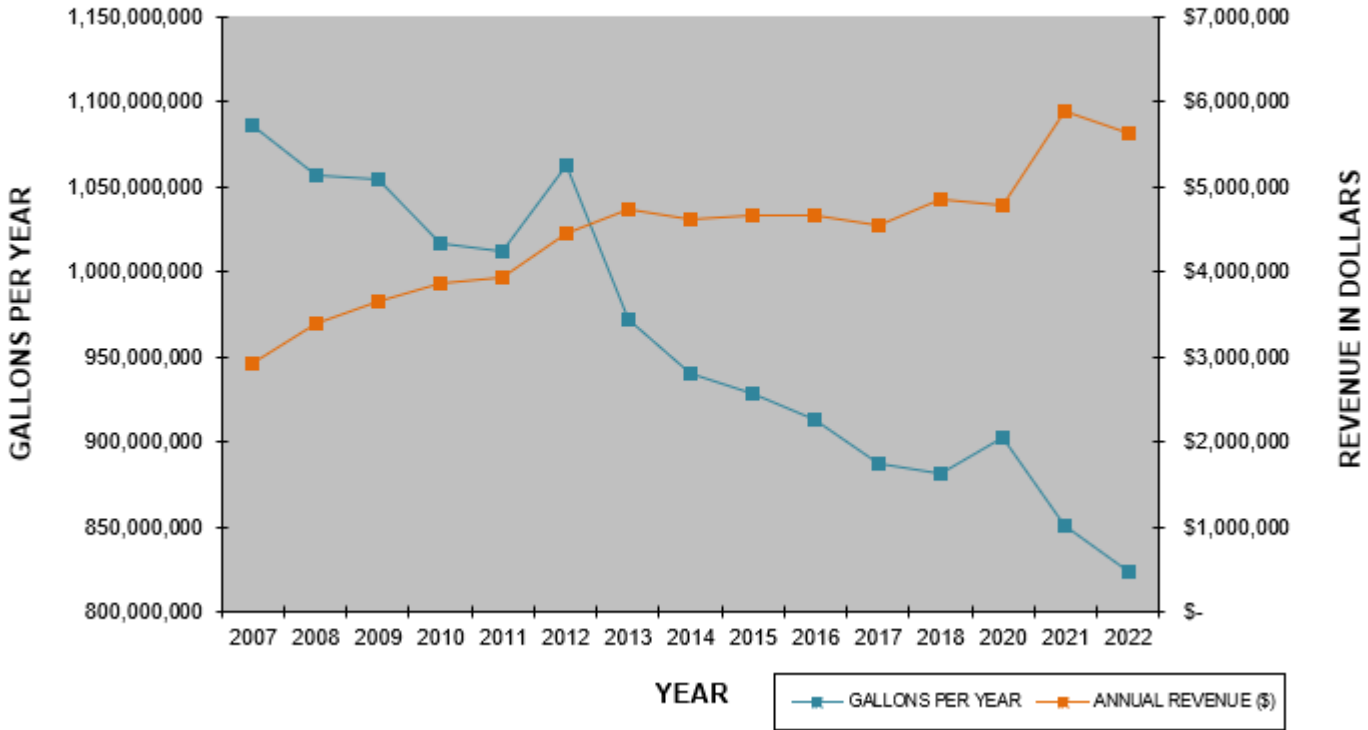
Two Family Consumption				
Interval	2022			
	# of Customers	%	Consumption	%
January				
0-6,667	734	57.7%	3,049,600	35.6%
6,668-11,667	414	32.5%	3,507,500	41.0%
>11,667	124	9.7%	2,006,200	23.4%
January Total	1,272	100.0%	8,563,300	100.0%
February				
0-6,667	867	68.2%	3,459,300	46.3%
6,668-11,667	335	26.4%	2,846,700	38.1%
>11,667	69	5.4%	1,168,100	15.6%
February Total	1,271	100.0%	7,474,100	100.0%
March				
0-6,667	873	68.7%	3,505,800	46.6%
6,668-11,667	321	25.3%	2,711,600	36.0%
>11,667	76	6.0%	1,305,900	17.4%
March Total	1,270	100.0%	7,523,300	100.0%
April				
0-6,667	757	59.5%	3,195,200	37.9%
6,668-11,667	394	31.0%	3,363,900	39.9%
>11,667	121	9.5%	1,866,600	22.2%
April Total	1,272	100.0%	8,425,700	100.0%
May				
0-6,667	899	70.7%	3,588,400	50.2%
6,668-11,667	304	23.9%	2,556,200	35.8%
>11,667	69	5.4%	999,500	14.0%
May Total	1,272	100.0%	7,144,100	100.0%
June				
0-6,667	780	61.6%	3,215,200	40.0%
6,668-11,667	381	30.1%	3,249,700	40.5%
>11,667	106	8.4%	1,566,700	19.5%
June Total	1,267	100.0%	8,031,600	100.0%

July				
0-6,667	742	58.6%	3,127,800	35.5%
6,668-11,667	379	29.9%	3,266,800	37.1%
>11,667	146	11.5%	2,406,100	27.3%
July Total	1,267	100.0%	8,800,700	100.0%
August				
0-6,667	825	65.0%	3,361,200	41.9%
6,668-11,667	337	26.5%	2,862,500	35.7%
>11,667	108	8.5%	1,800,700	22.4%
August Total	1,270	100.0%	8,024,400	100.0%
September				
0-6,667	830	65.4%	3,319,400	42.6%
6,668-11,667	343	27.0%	2,903,100	37.2%
>11,667	96	7.6%	1,576,100	20.2%
September Total	1,269	100.0%	7,798,600	100.0%
October				
0-6,667	717	56.4%	2,936,500	33.7%
6,668-11,667	422	33.2%	3,598,100	41.3%
>11,667	133	10.5%	2,179,800	25.0%
October Total	1,272	100.0%	8,714,400	100.0%
November				
0-6,667	832	65.5%	3,345,300	42.5%
6,668-11,667	356	28.0%	3,013,200	38.3%
>11,667	83	6.5%	1,511,800	19.2%
November Total	1,271	100.0%	7,870,300	100.0%
December				
0-6,667	904	71.0%	3,576,200	50.0%
6,668-11,667	312	24.5%	2,645,700	37.0%
>11,667	57	4.5%	924,300	12.9%
December Total	1,273	100.0%	7,146,200	100.0%
Annual				
0-6,667	813	64.0%	39,679,900	41.5%
6,668-11,667	358	28.2%	36,525,000	38.2%
>11,667	99	7.8%	19,311,800	20.2%
Annual Total	1,271	100.0%	95,516,700	100.0%

Three Family Consumption				
2022				
Interval	# of Customers	%	Consumption	%
January				
0-6,667	40	52.6%	160,000	30.4%
6,667-20,000	36	47.4%	365,800	69.6%
>20,000	-	0.0%	-	0.0%
January Total	76	100.0%	525,800	100.0%
February				
0-6,667	44	58.7%	175,600	37.4%
6,667-20,000	31	41.3%	294,100	62.6%
>20,000	-	0.0%	-	0.0%
February Total	75	100.0%	469,700	100.0%
March				
0-6,667	45	59.2%	178,200	37.9%
6,667-20,000	31	40.8%	292,200	62.1%
>20,000	-	0.0%	-	0.0%
March Total	76	100.0%	470,400	100.0%
April				
0-6,667	39	52.0%	165,800	30.0%
6,667-20,000	36	48.0%	386,800	70.0%
>20,000	-	0.0%	-	0.0%
April Total	75	100.0%	552,600	100.0%
May				
0-6,667	45	59.2%	174,000	37.4%
6,667-20,000	31	40.8%	291,100	62.6%
>20,000	-	0.0%	-	0.0%
May Total	76	100.0%	465,100	100.0%
June				
0-6,667	43	56.6%	168,400	32.9%
6,667-20,000	32	42.1%	322,700	63.1%
>20,000	1	1.3%	20,600	4.0%
June Total	76	100.0%	511,700	100.0%

July				
0-6,667	37	48.7%	152,400	26.5%
6,667-20,000	36	47.4%	354,700	61.6%
>20,000	3	3.9%	68,400	11.9%
July Total	76	100.0%	575,500	100.0%
August				
0-6,667	46	60.5%	190,500	37.3%
6,667-20,000	29	38.2%	294,800	57.7%
>20,000	1	1.3%	25,600	5.0%
August Total	76	100.0%	510,900	100.0%
September				
0-6,667	46	60.5%	194,000	38.8%
6,667-20,000	29	38.2%	285,000	57.0%
>20,000	1	1.3%	20,600	4.1%
September Total	76	100.0%	499,600	100.0%
October				
0-6,667	34	45.3%	137,700	24.3%
6,667-20,000	40	53.3%	403,000	71.1%
>20,000	1	1.3%	25,900	4.6%
October Total	75	100.0%	566,600	100.0%
November				
0-6,667	42	56.8%	176,900	34.6%
6,667-20,000	31	41.9%	302,400	59.2%
>20,000	1	1.4%	31,700	6.2%
November Total	74	100.0%	511,000	100.0%
December				
0-6,667	44	58.7%	173,700	34.6%
6,667-20,000	30	40.0%	298,700	59.6%
>20,000	1	1.3%	28,900	5.8%
December Total	75	100.0%	501,300	100.0%
Annual				
0-6,667	42	55.7%	2,047,200	33.2%
6,667-20,000	33	43.3%	3,891,300	63.2%
>20,000	1	1.0%	221,700	3.6%
Annual Total	76	100.0%	6,160,200	100.0%

RESIDENTIAL WATER USE AND REVENUE 2007-2022



A review of residential revenue and gallons billed indicates that, in general, the Utility has done a good job of using the rate making process to offset the decrease in revenue that would come from fewer gallons consumed.

V. CONSERVATION EFFICIENCY MEASURES – NON-RESIDENTIAL CUSTOMERS

Commercial, Industrial and Public rates were set in 2012 with declining blocks.

In September 2022, the Utility had a rate increase approved by the PSC. Below are the updated rates.

Rates per 1,000 Gallons September 1, 2022	
Gallons	Commercial, Industrial, Public
0 - 25,000	\$4.73
25,001 - 500,000	\$4.45
Over 500,000	\$3.95

As seen below, there appears to be enough variation in consumption within the classes to question whether the structure is affecting utilization. Anecdotally, consumption seems to move with the economy and the weather.

Metered Usage for Non-Residential							
Billing Class	2016 (Gallons)	2017 (Gallons)	2018 (Gallons)	2019 (Gallons)	2020 (Gallons)	2021 (Gallons)	2022 (Gallons)
Commercial	763,290,200	729,873,000	707,267,000	696,184,000	663,605,300	706,398,800	658,694,660
Industrial	237,069,700	232,668,900	230,557,100	220,675,300	161,293,500	137,807,900	132,963,100
Public	83,040,900	72,384,600	67,338,800	65,913,900	47,756,950	62,240,450	54,600,900
Irrigation	n/a	n/a	4,447,476	2,879,000	6,206,500	11,538,200	6,485,400

Therefore, the Utility uses efforts, other than the rate structure, to incent conservation.

To bolster the rate increase, the Utility has additional conservation programs that affect Non-Residential customers and all customer classes. The additional programs include the following:

1. Monthly Billing (for all customer classes)
2. Irrigation Rates (for all customer classes)
3. Sprinkling Ordinance (for all customer classes)
4. Irrigation Ordinance (for all customer classes)
5. Sewer Ordinance Change (for all customer classes)
6. Yard Sign Campaign (for all customer classes)
7. Waukesha Rain Barrel Promotion Program (for all customer classes)
8. Outdoor Conservation Tips (for all customer classes)
9. Pre-rinsed Spray Valves (for non-residential classes)
10. Why it's Important to Conserve & What You Can Do (for all customer classes)
11. How Much Water Do You Use? & Things to do to Lower Your Bill (all customer classes)
12. Program on Finding & Fixing Leaks (for all customers)
13. Web Based Consumption History and Comparisons Available (for all customers)
14. Audit Program (for residential & non-residential customers)

1. Monthly Billing

In the spring of 2021, the Utility switched to monthly billing for all customers classes. Previously, large industrial customers were billed monthly, while all other customers were billed quarterly. Most ratepayers prefer monthly billing because it's easier to budget with other monthly expenses. In addition, monthly billing helps users conserve water because monthly bills give customers more timely information about their water usage, alerting them to overuse due to watering or leaks. A copy of the Press Release is shown below.



For Immediate Release
February 12, 2021

For more information, please contact:
Dan Duchniak, General Manager
Waukesha Water Utility
(262) 521-5272
dduchniak@waukesha-water.com

Waukesha water bills will switch to monthly this spring

Change aligns with typical household budgets

Waukesha will switch from quarterly to monthly water bills this spring for residential customers of the water and wastewater utilities.

"Most ratepayers prefer monthly bills because they align with household budgets for other expenses," according to Dan Duchniak, general manager of the Waukesha Water Utility. "It also will help users conserve water. Monthly bills will give customers more timely information about their water use, alerting them to overuse due to watering or leaks."

The utility is mailing postcards to residential customers to explain the timing of the change. "Each month, we currently send three-month bills to a third of our customers," Duchniak said. "Depending on which of the three groups you are in, the dates for the transition will be different. The postcard will tell you the dates for your address."

Duchniak said it is important to note that the first monthly bill will be for more than 30 days, however. "Because of the differences in the time between your last quarterly bill and your first monthly bill, that first bill will cover between 50 and 80 days of usage, depending on your group" he said. "After that, the bills will cover just a one-month period."

Customers who use the automatic payment option will have payments withdrawn on the 15th of each month.

Waukesha has begun construction on its Great Water Alliance project, which will switch the city to a Lake Michigan water supply in 2023. Its current groundwater supply is severely depleted and contaminated with radium.

"Every city needs a safe and reliable water supply. The Lake Michigan project will meet that critical infrastructure need in Waukesha. Rate increases will be needed, but we are committed to keeping the costs as affordable as possible," Duchniak said. Average residential bills for water supply, wastewater and return flow charges are expected to be about \$90 per month by the end of 2021.

Additional information on rate increases, construction routes and more can be found at www.greatwateralliance.com/in-your-area.

Utility Switching to Monthly Billing
Press Release

2. Irrigation Rates

Effective December 1, 2017, the Wisconsin Public Service Commission (PSC) approved our application to offer Irrigation Rates to our customers.

The irrigation rates were designed with two goals in mind. First, to bill for water used outside that is not collected into the sewer system. Second, to encourage conservation of a limited resource.

In 2022, the volumetric rate was increased to \$7.61 per thousand gallons; and the Utility received 8 applications for irrigation meters.

A copy of the Irrigation Application, with all its attachments, is shown on the following pages.

Telephone: (262) 521-5272 • Fax: (262) 521-5265 • E-mail: contactus@waukesha-water.com

Re: Irrigation Meter

Dear Customer:

This letter is regarding your inquiry into an irrigation meter for your property. If you are interested in the installation of an irrigation meter, please review the instructions, complete the enclosed application, and return it to the Waukesha Water Utility with a check for \$135.00 for each irrigation meter you would like to install. Please note that in order to complete the application, you will need to obtain a plumbing permit. The permit can be obtained at City Hall.

Also, when considering an irrigation meter, please remember that the city of Waukesha has a Sprinkling Ordinance. Every year, beginning May 1st – October 1st, addresses ending in an Odd number, may only water on Tuesdays & Saturdays (before 9 a.m. or after 5 p.m.); addresses ending in an Even number, may only water on Thursdays & Sundays (before 9 a.m. or after 5 p.m.). If you have an automatic sprinkling system, please be sure to schedule the sprinkling times appropriately.

The billing rates for an irrigation meter, effective on September 1, 2022] are as follows:

	Monthly Service Charge		Monthly Service Charge
<u>Meter Size</u>	<u>\$</u>	<u>Meter Size</u>	<u>\$</u>
5/8"	11.00	3"	79.00
¾"	11.00	4"	107.00
1"	18.00	6"	173.00
1 ¼"	27.00	8"	263.00
1 ½"	30.00	10"	380.00
2"	47.00	12"	465.00
Volumetric Charge			\$7.61 per 1,000 gallons

If you have any further questions, please call us at 262-521-5272 between 8:00 a.m. and 4:00 p.m.

Sincerely,

Waukesha Water Utility



Waukesha Water Utility

IRRIGATION METER

In order to install an irrigation meter and radio, please do the following:

- 1. Obtain a plumbing permit from City Hall**
Plumbing permits are issued by the Building Inspector. They may be obtained in room 200 in the City Hall at 201 Delafield St. The office is open from 8:00 to 4:30. The telephone is (262) 524-3750.
- 2. Complete the attached application**
You may need to work with a plumber or our customer service staff to complete the application. Please be aware that you will receive a separate bill for this meter.
- 3. Pay the application fee (\$135)**
The fee is paid at the Water Utility. It covers the time our engineering staff spends to ensure that the meter will be the appropriate size to meet your needs from information supplied by you or your plumber. It also covers the administrative time spent processing the application. Finally, it covers the time our field crew will spend installing the meter and radio at the premises.
- 4. Install the fixtures for the irrigation meter and radio**
Whether you intend to do-it-yourself or hire a plumber, the pipes, meter valve, and the copperhorn for the meter must installed according to the attached specifications. The materials must also be in compliance with Wisconsin Administrative Code. Because you pay for all of these materials and work, you will own all of this plumbing.
- 5. Set an appointment with the Water Utility to install the meter and radio**
To have the meter installed, please call Customer Service at (262) 521-5272. You will want to make this appointment at least a week in advance, especially if you want to coordinate the work so that it gets done on the same day that a plumber is present. The Water Utility owns, operates and maintains only the meter and the radio. If your installation of the meter and radio requires additional hardware, you will be invoiced for that additional hardware.
- 6. Schedule your sprinkling times according to Waukesha's Sprinkling Ordinance**
Every year, beginning May 1st – October 1st, Waukesha has the following Sprinkling Ordinance: addresses ending in an Odd number, may only water on Tuesdays & Saturdays (before 9 a.m. or after 5 p.m.); addresses ending in an Even number, may only water on Thursdays & Sundays (before 9 a.m. or after 5 p.m.). If you have an automatic sprinkling system, please be sure to schedule the sprinkling times appropriately.

115 Delafield Street
P.O. Box 1648
Waukesha, WI 53187-1648

Questions regarding the application process: (262) 521-5272

Fax Number: (262) 521-5265



Waukesha Water Utility

APPLICATION FOR IRRIGATION METER

1. Property Address _____
 2. Building Type Single Family Duplex Triplex Apartment (> 4 units) Condo
 3. Owner's Name _____ Phone _____
 4. Owner's Address _____
 5. Plumber's Name _____ Phone _____
 6. Plumber's Address _____
 7. Please list the number of water using devices that will be measured by this meter
 ¾" Garden Hose ½" Garden Hose Underground Sprinkler
 8. Gallons per minute needed _____
 9. City Plumbing Permit # _____
 10. Who is responsible for payment? Owner Plumber
 11. Are you aware of Waukesha's Sprinkling Ordinance (as explained in the cover letter)? Yes No
- Signature _____ Date _____

Irrigation Meter Application Form



IRRIGATION METER SPECIFICATIONS



Installation of a 5/8 inch irrigation meter

NOTE 1: Copperhorns shall comply with ANSI/AWWA C-800, have a lead free brass body with copper arms and swivel connections manufactured by Ford in the following sizes.

Meter Size	Copperhorn
5/8"	No. 1 provided with union nuts
3/4"	No. 3 provided with union nuts
1 "	No. 4 provided with union nuts

NOTE 2: The Utility will install the meter valve and the copperhorn upon the request of the applicant. The cost will be billed to the applicant as outlined in the current Waukesha Water Utility Fee Schedule.

NOTE 3: The Utility Rules and Regulations Manual requires a four foot clearance around the meter.

NOTE 4: All brass must be lead free.

NOTE 5: The Utility will replace (at the cost of the applicant) any copperhorn or valve that does not comply with the specifications, above.

NOTE 6: Certified vacuum breakers shall be installed at each hose bib.

NOTE 7: Fixtures serving, and served by, the irrigation should be separately labeled.

In addition to the Irrigation Rates, the Utility also uses the next seven programs to encourage conservation during the summer months.

There is a discussion of each of these tools below; followed by data that demonstrates the efficacy of the Utility's approach.

3. Sprinkling Ordinance

City Ordinance 13.11 was enacted in 2006 and applies to all customers in Waukesha. The ordinance is in effect from May 1 to Oct 1 each year. This ordinance bans all sprinkling during the daytime hours of 9 AM to 5 PM during the stated time period. Customers are allowed to irrigate two days a week according to their address.

A brochure that explains the ordinance is placed at several public locations.



Brochure Outside



Brochure Inside

In addition to the Sprinkling Ordinance brochure, a Bill Message is placed on a monthly bill and Bill Inserts are sent to all customers each year to remind customers of the Ordinance.

In 2022, the Utility updated the back of the postcard due to the School District no longer selling rain barrels.

**City of Waukesha's
Annual Sprinkling Ordinance
May 1st - October 1st**

Addresses Ending With An	May Water On The Following Days	During These Hours
Odd Number	Tuesdays & Saturdays	Before 9 am or After 5 pm
Even Number	Thursdays & Sundays	Before 9 am or After 5 pm

Hand watering may be done any day at any time.

Enforcement: Warnings will be given for the first watering violation. Subsequent offenses will result in fines as per Ordinance. Violations may be reported anonymously at (262) 521-5272.

Save Money & Mow Less: Join "My Brown Lawn is GREEN" campaign. Since established lawns go dormant in the summer and turn green again with the autumn rain, watering the grass is unnecessary.

Front Side

Did you know...

💧 You can get the following rebates from the Utility:

- \$100 for WaterSense toilets
- \$25 for WaterSense showerheads
- \$20 for rain barrels

For details visit: <https://waukesha-water.com/wtc.html>.

💧 Toilets leaks tend to be invisible and can waste hundreds of gallons of water per day. To identify silent toilet leaks, put 8-10 drops of food coloring into the water in the tank and wait 20 minutes. If color appears in the bowl before flushing, your toilet has a leak.

💧 It is not necessary to water the lawn. It is natural for lawns to turn brown in the hottest months. The lawn doesn't die, it just goes dormant. The green lawn will return with the autumn rain; and when you don't water, you don't have to mow as often.

💧 Dripping faucets are usually easily and inexpensively repaired by replacing the washer inside the handle. Check both internal and external faucets for leaks. See our website for videos on how to fix leaks.

For more information, please visit our website at www.waukesha-water.com

Back Side

Street signs, alerting the public to the Ordinance, have been placed on every major street and reminders are placed in **local papers** (as seen on the next page).



Fines are approved and in place for violations to this Ordinance, as follows:

1 st Citation	\$172
2 nd Citation	\$298
3 rd Citation	\$424
4 th Citation	\$676

Before citations are issued, **Notices are sent to violators** to encourage them to comply. In 2022, due to the amount of rainfall this past year, the lawns were green the majority of the summer and we had zero reported violators.



Waukesha Water Utility

SERVING WAUKESHA SINCE 1886

115 DELAFIELD STREET
WAUKESHA, WI 53188-3615

Telephone: (262) 521-5272 • Fax: (262) 521-5265 • E-mail: contactus@waukesha-water.com

Press Release

City of Waukesha's Annual Sprinkling Ordinance

May 2022 - With the arrival of hot weather, the Waukesha Water Utility would like to remind city residents of the annual Sprinkling Ordinance in effect from May 1st – October 1st.

Odd-numbered street addresses may water on Tuesdays and Saturdays prior to 9 a.m. or after 5 p.m.

Even-numbered street addresses may water on Thursdays and Sundays prior to 9 a.m. or after 5 p.m.

A hand-held watering can, container, or hose may be used at any time to water gardens, trees, or shrubs, but only if the water device is utilized manually and not left unattended.

The City developed the sprinkling ordinance as part of an ongoing water conservation program. Additional water conservation is needed to protect local water resources and reduce demand during peak hours. The City is requiring customers to refrain from watering during daytime hours, when up to 40% of the water applied by a sprinkler can be lost to evaporation.

To help with the sprinkling, a \$20 rebate for rain barrels is available for Waukesha Water Utility customers; along with a yard sign, that can be picked up at 115 Delafield Street, that reads "My Brown Lawn is Green" to show your dedication to conservation.

For additional information on the sprinkling ordinance and rebates, please visit the Water Utility's website at www.waukesha-water.com/conservation.html or phone the Utility at (262) 521-5272.

Sprinkling Ordinance Press Release



Waukesha Water Utility

SERVING WAUKESHA SINCE 1886

115 DELAFIELD STREET
WAUKESHA, WI 53188-3615

Telephone: (262) 521-5272 • Fax: (262) 521-5265 • E-mail: contactus@waukesha-water.com

Re: Sprinkling Violation at

Dear Water Utility Customer:

It has been observed that you have been sprinkling at your property during unauthorized periods, specifically on

Conservation Ordinance #20-06, Chapter 13.11 of the City Municipal Code was passed by the Waukesha Common Council in April 2006 which restricts the days and times for outdoor water sprinkling. These restrictions are in effect Annually from May 1st through October 1st, and are as follows:

Addresses ending with an Odd Number may water on Tuesdays and Saturdays, before 9:00 a.m. or after 5:00 p.m.

Addresses ending with an Even Number may water on Thursdays and Sundays, before 9:00 a.m. or after 5:00 p.m.

Please adjust your sprinkling times to coordinate with the days and times that are applicable to your address; and please adjust your sprinklers so that they are not watering the sidewalks or driveway.

Enclosed is a brochure to help answer any questions you may have. If you would like additional information, please contact the Waukesha Water Utility at 262-521-5272.

We appreciate your prompt response and your assistance in helping protect and maintain our water supplies for the future.

Sincerely,

WAUKESHA WATER UTILITY
Customer Service

Violation Letter



Department Home

Customer Service

New Water Supply Program

Utility and Commission

Conservation

Sprinkling Ordinance

[City Ordinance 13.11](#) applies to all customers in Waukesha and is in effect from May 1 to October 1 each year.

Addresses Ending With An	May Water On The Following Days	During These Hours
Odd Number	Tuesdays & Saturdays	Before 9 am or After 5 pm
Even Number	Thursdays & Sundays	Before 9 am or After 5 pm

Hand watering may be done any day at any time.

Enforcement: Warnings will be given for the first watering violation. Subsequent offenses will result in fines as per Ordinance. Violations may be reported anonymously at (262) 521-5272.

Save Money & More: Less join "My Brown Lawn is GREEN" campaign. Save established lawn grass dormant in the summer and turn green again with the autumn rain, watering the grass is unnecessary.

Sprinkling Tips

- Established lawns need only one inch of water per week.
- Place a tuna can or small container outside to measure this amount.
- Set a timer as a reminder to move sprinklers.
- Water before 8:00 a.m. - this will limit the amount of water lost to evaporation.
- Avoid watering at night - this will reduce the chance of lawn diseases.
- Raise your lawn mower blade to at least three inches, or to its highest level - this will provide protection to the roots and allow moisture to remain in the soil.
- Avoid over fertilizing - fertilizers increase the need for water.
- Purchase a slow release, water-insoluble form of nitrogen for your fertilizing needs.
- Do not water on windy days.
- Position sprinklers to avoid watering the roof, driveway, sidewalk, or street.
- Use sprinklers that have larger holes - water evaporates faster with sprinklers that spray a fine mist.
- Use drip irrigation systems for plants, trees, shrubs, and vegetable gardens. Or use soaker hoses but turn them upside down (so that holes are on the bottom). This will also help prevent evaporation.



Sprinkling Ordinance & Tips Posted on the Website

WaterSense®



4. Landscape Irrigation System Ordinance

In May of 2015, the Utility adopted an Ordinance to ensure that all Landscape Irrigation Systems in the City of Waukesha are designed, installed, maintained, altered, and operated in a manner that prevents the waste of water, promotes the most efficient usage of water, controls erosion, and applies the minimum amount of water required to maintain healthy individual plants. The ordinance can be found at:

http://waukesha-water.com/downloads/PressReleases/Irrigation_Ordinance_Final_10_15_15.pdf

In addition to conservation minded landscape design, the Ordinance mandates the use of a WaterSense labeled controller, which can save a home between 30-50% on its summer water bills, and reduces landscape run off by as much as 71%.

The City's Inspector's office performs the plan review, issues the permit, and retains the records surrounding the installation of the systems. The Utility educates the public about the Ordinance and provides the Inspector's office with the permitting forms.

In 2022, there were 8 permits issued.

Copies of the application, instructions and contractor certificate can be found on the next pages.



CITY OF WAUKESHA
 DEPARTMENT OF COMMUNITY DEVELOPMENT- BUILDING INSPECTION
 201 DELAFIELD STREET * WAUKESHA, WI 53188 * (262) 524-3530

PERMIT NO: _____

APPLICATION FOR IRRIGATION SYSTEM PERMIT

Owner _____ Phone _____

Address _____

Job Address (if different) _____

Contractor _____ License (if applicable) _____

Address _____ Phone _____

SYSTEM DESCRIPTION

Single Family 2 Family 3 Family Multi Family Commercial Industrial Public

Fixtures	Type	Quantity
Backflow Preventer	Annual Inspection Required Y N	
Irrigation Controller	WaterSense Labeled Y N Provide Cut Sheet	

Estimated System Cost _____

Signature of Applicant _____ Date _____

The nonrefundable permit fee of \$50.00 and the applicable plan review fee per approved fee schedule was collected, and the permit is hereby approved.

Signature _____ Title _____ Date _____

White Copy – Contractor Yellow Copy – Owner Pink Copy – City of Waukesha, Building Inspector

This form is also available online at <http://www.ci.waukesha.wi.us/dept/building/FORMS.htm>

P:\Conservation\2015\Irrigation Plumbing Ordinance\Permit 10 15 15.docx8/12/15

Application for Irrigation System Permit

INSTRUCTIONS FOR IRRIGATION SYSTEM PERMIT

City of Waukesha Ordinance 19.175 requires that a permit be issued before an irrigation system may be installed, materially altered, or completely replaced. The purpose of this ordinance is to require all irrigation systems to be installed, materially altered, or completely replaced in a manner that is consistent with the City's water conservation goals. Systems shall prevent the waste of water, control erosion, promote the most efficient use of water, and apply the least amount of water that is required to maintain healthy individual plant material.

The Ordinance, available at <http://www.ci.waukesha.wi.us/web/quest/chapter19>, outlines the features required of irrigation systems, and the procedures required when the system is turned over to the owner.

A permit must be issued before the work commences.

The contractor shall prepare an irrigation plan to scale for each site where a new irrigation system will be installed or altered. Plans shall:

1. Be drawn to scale and indicate the scale used.
2. Include the name and dated signature of the designer.
2. Designate the location of the parcel.
3. Depict both areas to be and not to be irrigated within the parcel.
4. Reveal the major physical features and boundaries of the areas to be watered.
5. Indicate the location and type of each:
 - water source, backflow prevention device, controller, sensor, and electrical splice.
 - water emission device, including, but not limited to, spray heads, rotary sprinklers, quick couplers, bubblers, drip, or micro sprays.
 - valve, including but not limited to, zone valves, station solenoid valves, automatic master valve, and isolation valve.

Back flow preventers are required to be installed by licensed plumbers.

All systems subject to the ordinance must include a WaterSense labeled Irrigation Controller. A list of controllers is available at http://www.epa.gov/watersense/product_search.html?Category=5. A cut sheet of the controller must be submitted with the application.

The permit fee is due at the time of application and is nonrefundable.

The application must be submitted to Building Inspection. The review may take as many as 10 business days before a permit can be issued.

Upon completion of the system, the Contractor must review the Contractor Certificate specified in the ordinance and secure the owner's signature. A copy of the signed Contractor Certificate shall be sent to the Department.

Failure to follow these instructions subjects the violator to the fines specified in the ordinance.

This form is also available online at <http://www.ci.waukesha.wi.us/deot/building/FORMS.htm>

P:\Conservation\2015\Irrigation Plumbing Ordinance\Permit 10 15 15.docx8/12/15

PERMIT NO: _____

IRRIGATION SYSTEM CONTRACTOR CERTIFICATE

Within 30 days of completion of the installation of the System, the Contractor shall:

- complete and deliver this signed and dated Certificate to the Owner
- deliver a fully signed copy to the Department

I, _____, installed an Irrigation System installed at
Name of Contractor

_____, and certify that I have:
Installation Address

✓ (Check those that apply)

- Installed the System in accordance with all applicable ordinances, statutes, codes, rules and regulations; confirmed the correct operation of the entire System; and confirmed that the System has been installed substantially according to the Irrigation Plan and all terms and conditions of the permit.
- Provided the Owner with a copy of the Irrigation Plan indicating the System, as built.
- Performed a final walk-through with the Owner to explain the operation of the System.
- Supplied the Owner with the manufacturers' manuals for the controller and other components of the System.
- Supplied the Owner with a list of System components that require maintenance, and the recommended frequency for maintenance.
- Informed the Owner of their responsibility to drain the System before November 1st of each year.

Contractor's Signature

Date

Owner's Signature

Date

White Copy – Contractor Yellow Copy – Owner Pink Copy – City of Waukesha, Building Inspector

This form is also available online at <http://www.ci.waukesha.wi.us/dept/building/FORMS.htm>

P:\Conservation\2015Irrigation Plumbing Ordinance\Permit 10 15 15.docx8/12/15

Irrigation System Contractor Certificate



5. Sewer Ordinance Change (Sprinkling Credit Meters)

In 2016, Waukesha's Sewer Credit Meter Ordinance was revised to better support Waukesha's water conservation efforts. Prior to the Ordinance change, customers who had a sewer credit meter could have their wastewater charges reduced by the amount of water used outdoors.

However, to eliminate water use activities that are considered non-essential, such as outdoor water use, the Utility decided to phase out sewer credit meters. Sewer credit meters installed prior to December 31, 2016, will expire seven years from the date they were installed, and they will no longer receive a credit.

In 2022, the Utility mailed letters to 25 customers who reached their 7-year phase out period. These letters informed customers that their sewer credit will be discontinued. There are 46 residential sewer credit accounts remaining.

A copy of the letter is shown on the following page.



P O Box 1648

Waukesha, WI 53187-1648

SERVING WAUKESHA SINCE 1886

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Telephone: (262) 521-5272 • Fax: (262) 521-5265 • E-mail: [contactus@waukesha-water.com](mailto:contactus@waukesha-water.com)

February 01, 2022

RE: Sewer Credit Ordinance Change

Dear \_\_\_\_\_:

The [City](#) updated its Sewer Credit Ordinance to sunset the use of sewer credit meters. The ordinance was changed to ultimately support the Water Utility's water conservation efforts, but also, to allow customers to recover the cost of buying and installing a sewer credit meter. On average, a homeowner [is able to](#) recover these costs in seven years.

You are being contacted as the related meter on your property has been in use for seven years.

You have until **March 10, 2022**, to provide a final reading from your sewer credit meter. That reading will be used to calculate the last sewer credit that you are entitled to. You may send in a meter card or phone in a reading.

The sewer credit meter is customer owned but does not need to be removed. The Water Utility will "disconnect" the meter in our records. As a result, your bill will no longer be reduced by the value of the water that passes through your sewer credit meter.

Please keep in mind that Waukesha's water conservation program is an important factor leading to its ability to secure water from Lake Michigan. This change is aimed at reducing water use for activities that are considered non-essential.

We understand how these changes affect you. Please consider changing how you use the water that was passing through your sewer credit meter.

If you have any questions about the sewer credit meters or would like information about our conservation rebates or Irrigation Only rates, please contact the Utility at (262) 521-5272.

Thank you,

Waukesha Water Utility

Copy of the Letter Sent to Customers  
Who Are No Longer Going to Receive a Sewer Credit

## 6. My Brown Lawn is Green Yard Sign Campaign

Furthermore, the Utility continues to encourage customers to let their lawns go dormant. Large colorful lawn signs, designed by a local artist, are available free of charge to customers who wish to demonstrate their commitment to water conservation. The signs serve to acknowledge those who are conserving and to encourage their neighbors to do the same. A sample of the lawn sign is below.




## 7. Rain Barrel Promotion Program

Waukesha Water Utility used to promote the Waukesha School District's and Waukesha County's rain barrel sales program. However, since rain barrels have gained popularity and can be purchased at local hardware stores etc., the School District and the County have decided to stop making rain barrels.

The Utility will continue to promote the use of rain barrels with bill messages, in the City's Activity Guide (as shown in the education section), at outreach events, and any time a customer calls and requests information.

Waukesha County Water  
Conservation Coalition

Rain Barrel Project

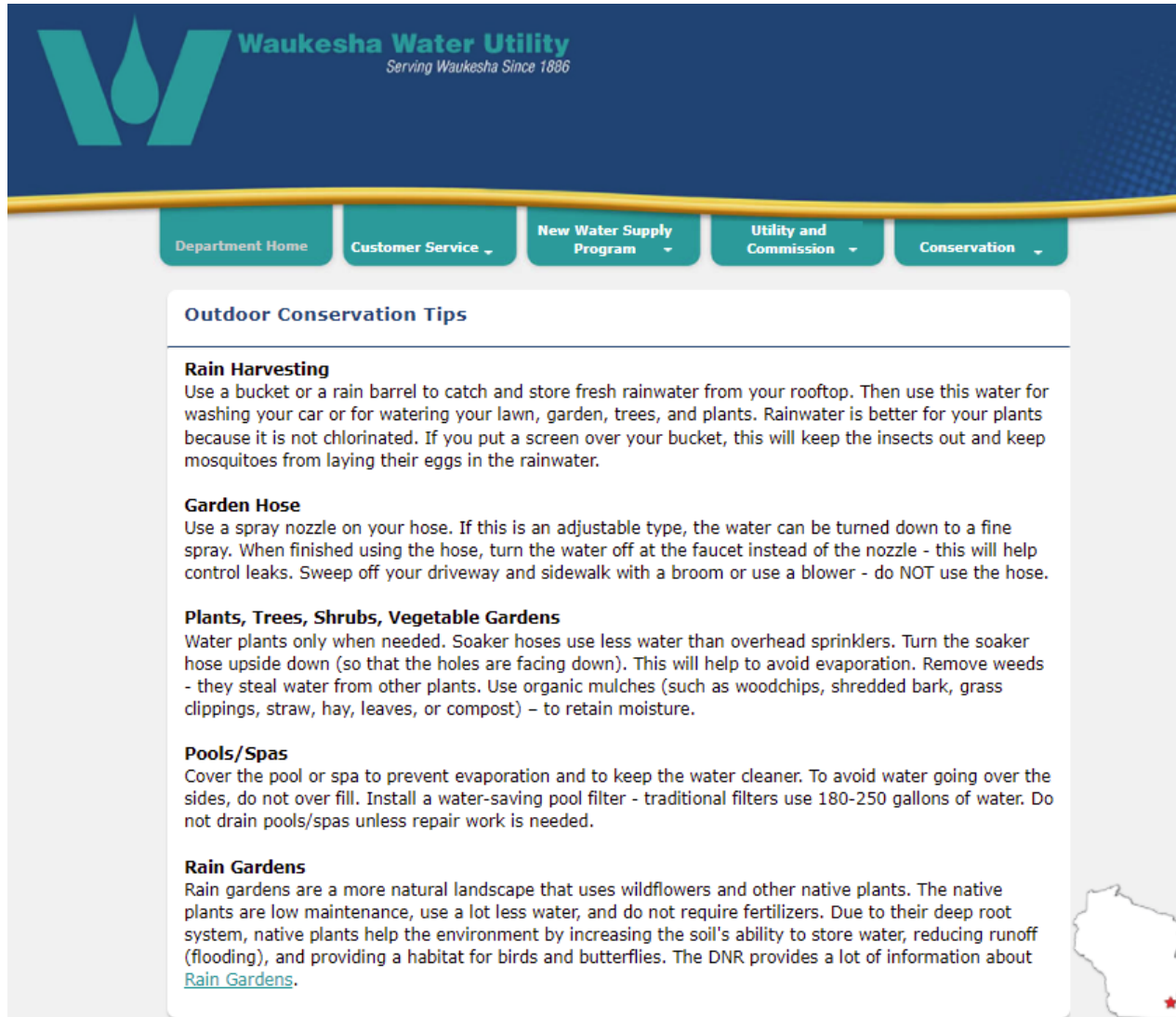


- Store rainwater for later use
- Reduces runoff to help our rivers and streams
- Reduces pumping of groundwater for watering plants
- Saves you money by saving water
- Naturally soft water is great for watering plants and washing windows or cars
- Many local sources of barrels

Clean Water—One Barrel at a Time

## 8. Outdoor Conservation Tips

Waukesha Water Utility has outdoor conservation tips on its website. As seen below, the topics covered are the following: Rain Harvesting, Garden Hose, Plants/Trees/Shrubs/Vegetable Gardens, Pools/Spas, and Rain Gardens.



**Waukesha Water Utility**  
Serving Waukesha Since 1886

Department Home Customer Service New Water Supply Program Utility and Commission Conservation

### Outdoor Conservation Tips

**Rain Harvesting**  
Use a bucket or a rain barrel to catch and store fresh rainwater from your rooftop. Then use this water for washing your car or for watering your lawn, garden, trees, and plants. Rainwater is better for your plants because it is not chlorinated. If you put a screen over your bucket, this will keep the insects out and keep mosquitoes from laying their eggs in the rainwater.

**Garden Hose**  
Use a spray nozzle on your hose. If this is an adjustable type, the water can be turned down to a fine spray. When finished using the hose, turn the water off at the faucet instead of the nozzle - this will help control leaks. Sweep off your driveway and sidewalk with a broom or use a blower - do NOT use the hose.

**Plants, Trees, Shrubs, Vegetable Gardens**  
Water plants only when needed. Soaker hoses use less water than overhead sprinklers. Turn the soaker hose upside down (so that the holes are facing down). This will help to avoid evaporation. Remove weeds - they steal water from other plants. Use organic mulches (such as woodchips, shredded bark, grass clippings, straw, hay, leaves, or compost) - to retain moisture.

**Pools/Spas**  
Cover the pool or spa to prevent evaporation and to keep the water cleaner. To avoid water going over the sides, do not over fill. Install a water-saving pool filter - traditional filters use 180-250 gallons of water. Do not drain pools/spas unless repair work is needed.

**Rain Gardens**  
Rain gardens are a more natural landscape that uses wildflowers and other native plants. The native plants are low maintenance, use a lot less water, and do not require fertilizers. Due to their deep root system, native plants help the environment by increasing the soil's ability to store water, reducing runoff (flooding), and providing a habitat for birds and butterflies. The DNR provides a lot of information about [Rain Gardens](#).

Outdoor Conservation Tips on Website

## These 8 Tools Are Working

The information below indicates that Waukesha uses, on average, much less water in the summer now than it did before these eight tools, previously mentioned, were put into place. We have effectively reduced our peak demands, even during the extreme drought conditions of 2012.

Gallons Pumped, during the summer months of 2022, was at a sixteen year low.

| Year           | Waukesha Pumpage  |                   |                              | Brookfield Pumpage |                   |                              | Oconomowoc Pumpage |                   |                              | Pewaukee Pumpage  |                   |                              |
|----------------|-------------------|-------------------|------------------------------|--------------------|-------------------|------------------------------|--------------------|-------------------|------------------------------|-------------------|-------------------|------------------------------|
|                | Annual<br>(000's) | Summer<br>(000's) | Summer<br>as a %<br>of Total | Annual<br>(000's)  | Summer<br>(000's) | Summer<br>as a %<br>of Total | Annual<br>(000's)  | Summer<br>(000's) | Summer<br>as a %<br>of Total | Annual<br>(000's) | Summer<br>(000's) | Summer<br>as a %<br>of Total |
| 2006           | 2,623,418         | 1,175,795         | 44.8%                        | 1,465,878          | 738,889           | 50.4%                        | 673,143            | 337,035           | 50.1%                        | 479,448           | 262,317           | 54.7%                        |
| 2007           | 2,618,461         | 1,183,827         | 45.2%                        | 1,368,726          | 669,849           | 48.9%                        | 686,683            | 355,702           | 51.8%                        | 445,630           | 232,840           | 52.2%                        |
| 2008           | 2,531,108         | 1,128,313         | 44.6%                        | 1,446,256          | 638,479           | 44.1%                        | 677,227            | 337,653           | 49.9%                        | 473,648           | 245,615           | 51.9%                        |
| 2009           | 2,479,905         | 1,109,337         | 44.7%                        | 1,295,283          | 653,848           | 50.5%                        | 676,528            | 344,909           | 51.0%                        | 442,530           | 247,172           | 55.9%                        |
| 2010           | 2,441,221         | 1,074,691         | 44.0%                        | 1,272,681          | 607,443           | 47.7%                        | 719,994            | 342,468           | 47.6%                        | 441,760           | 219,440           | 49.7%                        |
| 2011           | 2,545,103         | 1,129,986         | 44.4%                        | 1,436,548          | 683,145           | 47.6%                        | 689,523            | 329,580           | 47.8%                        | 480,001           | 250,294           | 52.1%                        |
| 2012           | 2,527,370         | 1,187,305         | 47.0%                        | 1,365,823          | 714,678           | 52.3%                        | 751,326            | 404,770           | 53.9%                        | 515,842           | 297,556           | 57.7%                        |
| 2013           | 2,348,655         | 1,048,020         | 44.6%                        | 1,376,089          | 661,420           | 48.1%                        | 693,971            | 336,449           | 48.5%                        | 454,881           | 237,323           | 52.2%                        |
| 2014           | 2,413,582         | 1,015,137         | 42.1%                        | 1,687,514          | 813,598           | 48.2%                        | 696,960            | 337,605           | 48.4%                        | 435,998           | 220,317           | 50.5%                        |
| 2015           | 2,213,900         | 970,596           | 43.8%                        | 1,373,750          | 729,687           | 53.1%                        | 630,635            | 307,853           | 48.8%                        | 477,185           | 248,273           | 52.0%                        |
| 2016           | 2,166,893         | 962,749           | 44.4%                        | 1,247,811          | 624,014           | 50.0%                        | 589,534            | 291,165           | 49.4%                        | 464,850           | 248,778           | 53.5%                        |
| 2017           | 2,128,111         | 933,128           | 43.8%                        | 1,254,510          | 606,530           | 48.3%                        | 564,324            | 270,424           | 47.9%                        | 464,290           | 237,116           | 51.1%                        |
| 2018           | 2,068,522         | 914,652           | 44.2%                        | 1,252,833          | 603,142           | 48.1%                        | 553,523            | 271,499           | 49.0%                        | 465,553           | 236,112           | 50.7%                        |
| 2019           | 2,039,436         | 902,288           | 44.2%                        | 1,264,021          | 597,749           | 47.3%                        | 549,955            | 263,935           | 48.0%                        | 448,268           | 218,328           | 48.7%                        |
| 2020           | 1,933,288         | 883,493           | 45.7%                        | 1,353,088          | 659,505           | 48.7%                        | 638,805            | 322,421           | 50.5%                        | 495,632           | 259,293           | 52.3%                        |
| 2021           | 1,923,146         | 873,172           | 45.4%                        | 1,380,064          | 692,322           | 50.2%                        | 709,503            | 364,389           | 51.4%                        | 474,758           | 256,450           | 54.0%                        |
| 2022           | 1,881,926         | 836,791           | 44.5%                        | 1,355,610          | 659,350           | 48.6%                        | 624,695            | 320,709           | 51.3%                        | 461,504           | 241,754           | 52.4%                        |
| <b>Average</b> |                   |                   | <b>44.6%</b>                 |                    |                   | <b>49.0%</b>                 |                    |                   | <b>49.7%</b>                 |                   |                   | <b>52.5%</b>                 |

Further support for the efficacy of the Utility's program can be found by comparing its summer water use with its neighbors (who are affected by similar weather conditions). Waukesha uses a lower proportion of water in the summer than does its neighbors.



In addition to the Outdoor programs, the Utility has other conservation programs (for non-residential customers as well as for all customer classes).

WaterSense®



### 9. Pre-Rinsed Spray Valves

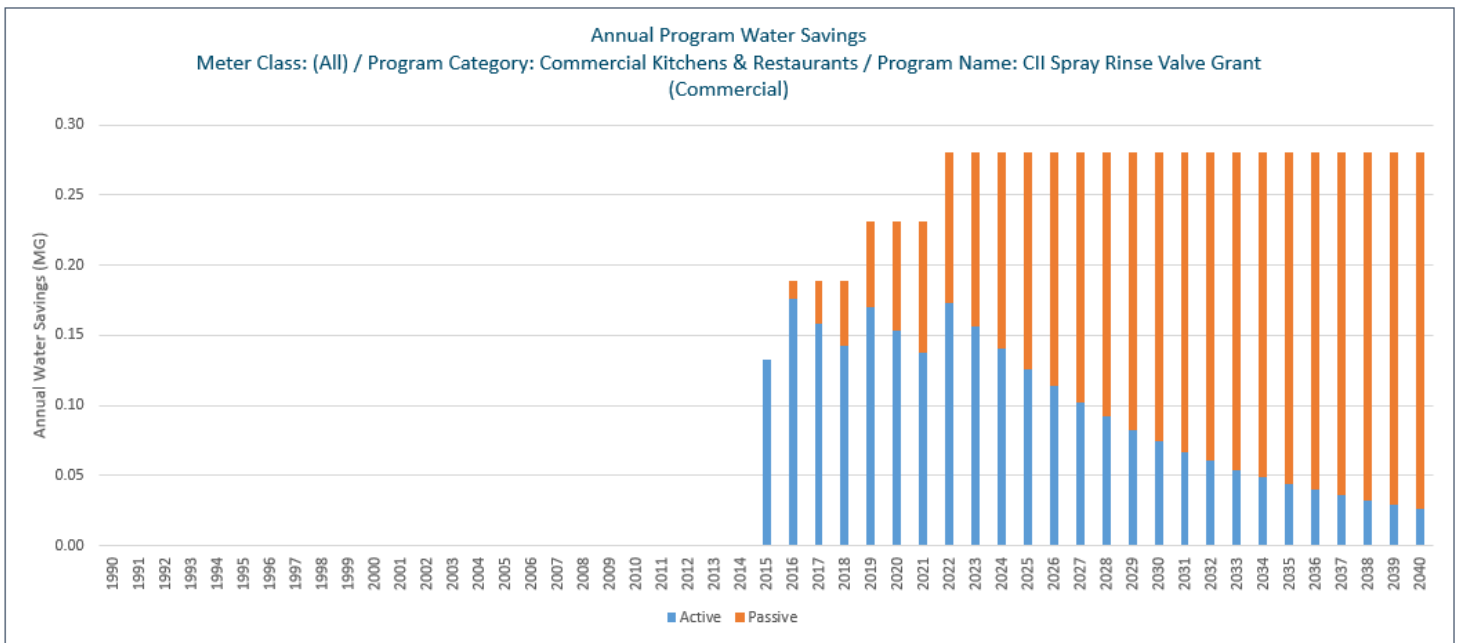
In November 2015, the Utility implemented a conservation initiative for water efficient pre-rinsed spray valves. Pre-rinsed spray valves were offered to large water using customers for free. The spray valves are valued at approximately \$150 and maintain good pressure while using 60% less water. The spray valves are endorsed by The Green Restaurant Association, Alliance for Water Efficiency, The Green Building Council, and EPA WaterSense.

In 2022, the Utility changed out pre-rinsed spray valves at 7 restaurants.

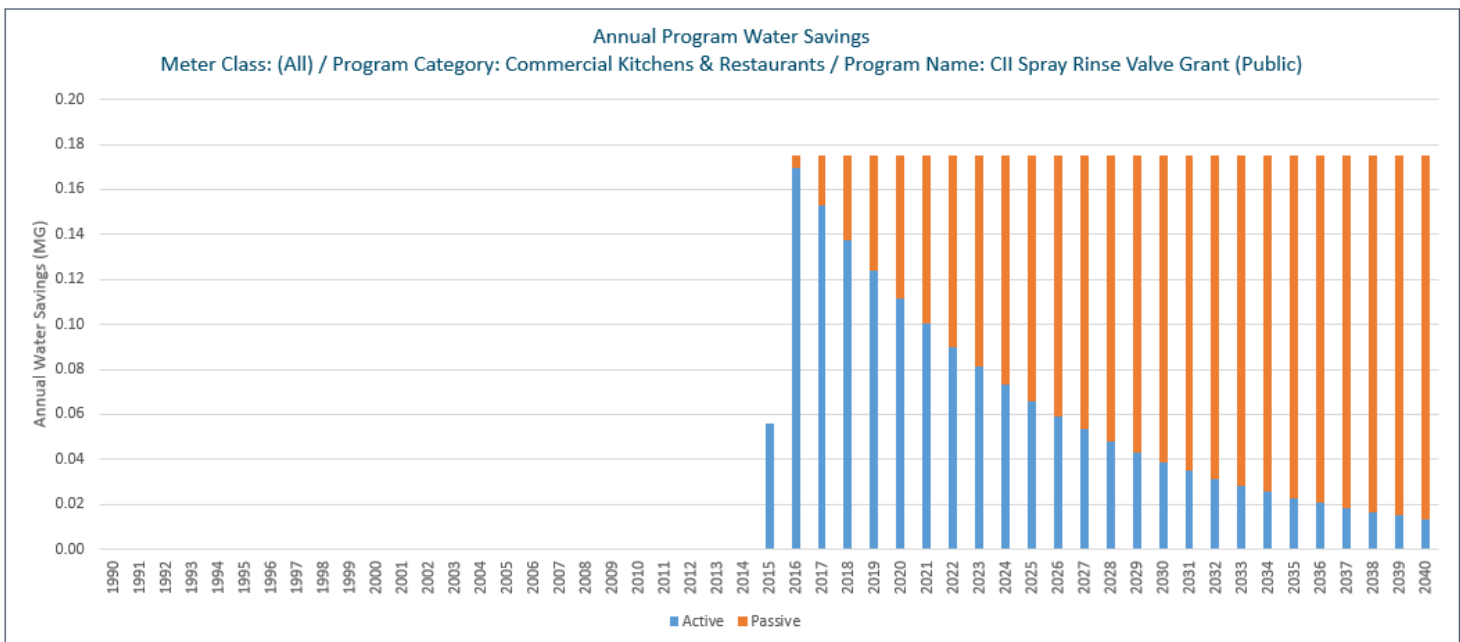
The following page shows the annual cost effectiveness of the program for past activity, along with the projected water savings through 2035, for both commercial and public accounts.

| Class      | Activity Name                            | Unit Cost (\$/MG) | PV Cost  | Unit Benefit (\$/MG) | PV Benefit | Avoided Supply | Avoided Wastewater | B/C Ratio |
|------------|------------------------------------------|-------------------|----------|----------------------|------------|----------------|--------------------|-----------|
| Commercial | CII Spray Rinse Valve Grant (Commercial) | 229.76            | 4,537.00 | 1,190.52             | 23,508.94  | 12,987.75      | 10,521.19          | 5.18      |
| Public     | CII Spray Rinse Valve Grant (Public)     | 229.56            | 1,484.60 | 1,110.54             | 7,182.06   | 3,963.48       | 3,218.58           | 4.84      |

The first graph relates to water saved by the Pre-Rinsed Spray Valves for Commercial Customer Accounts

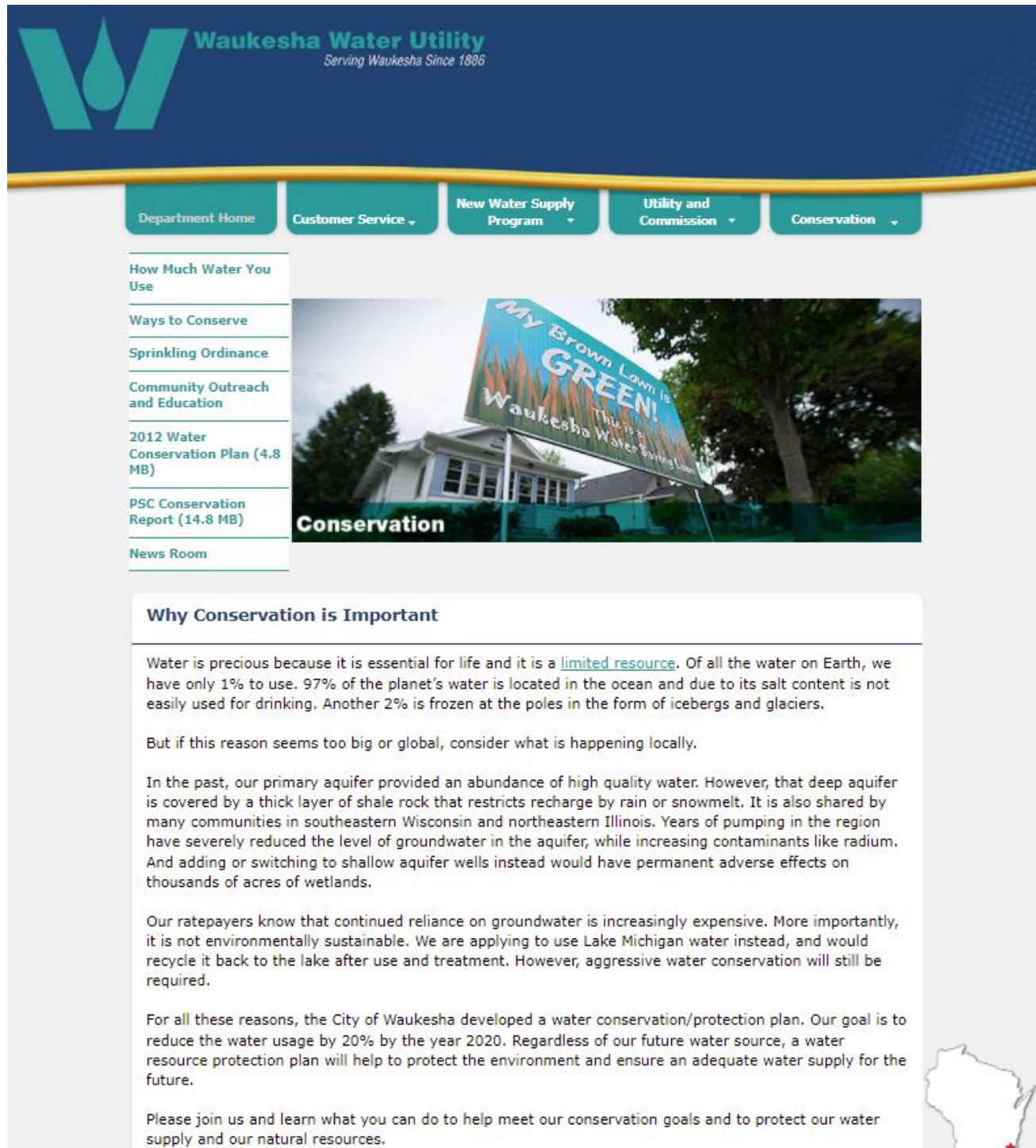


The second graph relates to water saved by the Pre-Rinsed Spray Valves for Public Customer Accounts



## 10. Why It's Important to Conserve & Ways to Conserve

There is information on our website, for all customer classes, on “Why It's Important to Conserve” & “Ways to Conserve”.



The screenshot shows the Waukesha Water Utility website. The header features the utility's logo and name, "Waukesha Water Utility Serving Waukesha Since 1886". A navigation bar includes links for "Department Home", "Customer Service", "New Water Supply Program", "Utility and Commission", and "Conservation". A sidebar on the left lists various resources such as "How Much Water You Use", "Ways to Conserve", and "2012 Water Conservation Plan". The main content area is titled "Conservation" and features a large image of a sign that reads "My Brown Lawn is GREEN! Waukesha Water Saving Club". Below the image, the text explains why conservation is important, noting that water is a limited resource and that groundwater levels are declining. It also mentions the utility's goal to reduce water usage by 20% by 2020 and provides information on how to get involved.

### Why Conservation is Important

Water is precious because it is essential for life and it is a [limited resource](#). Of all the water on Earth, we have only 1% to use. 97% of the planet's water is located in the ocean and due to its salt content is not easily used for drinking. Another 2% is frozen at the poles in the form of icebergs and glaciers.


But if this reason seems too big or global, consider what is happening locally.

In the past, our primary aquifer provided an abundance of high quality water. However, that deep aquifer is covered by a thick layer of shale rock that restricts recharge by rain or snowmelt. It is also shared by many communities in southeastern Wisconsin and northeastern Illinois. Years of pumping in the region have severely reduced the level of groundwater in the aquifer, while increasing contaminants like radium. And adding or switching to shallow aquifer wells instead would have permanent adverse effects on thousands of acres of wetlands.

Our ratepayers know that continued reliance on groundwater is increasingly expensive. More importantly, it is not environmentally sustainable. We are applying to use Lake Michigan water instead, and would recycle it back to the lake after use and treatment. However, aggressive water conservation will still be required.

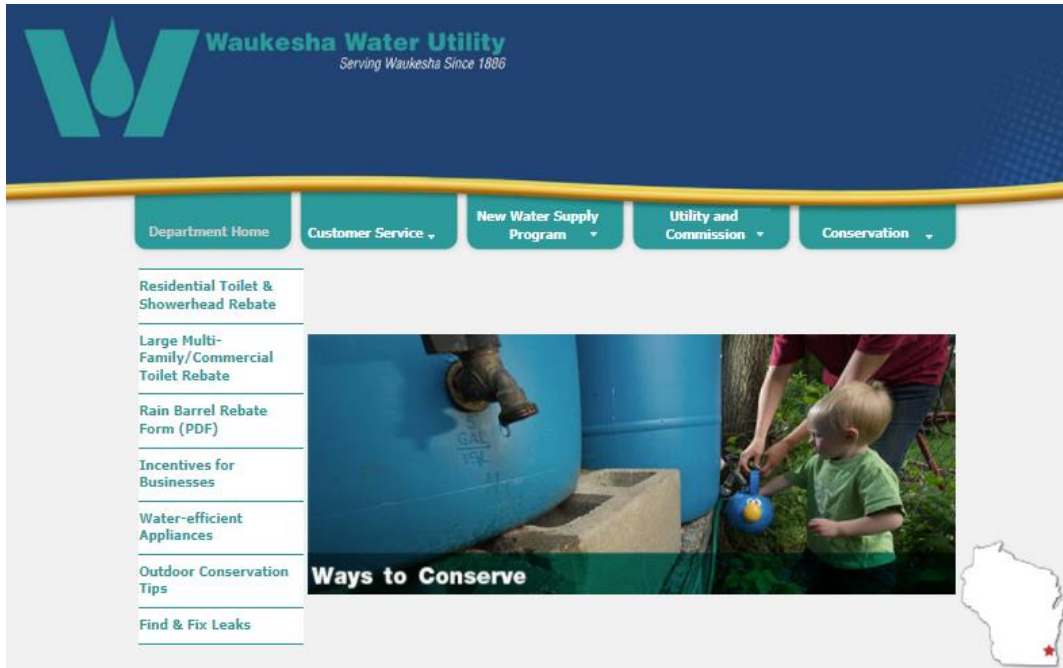
For all these reasons, the City of Waukesha developed a water conservation/protection plan. Our goal is to reduce the water usage by 20% by the year 2020. Regardless of our future water source, a water resource protection plan will help to protect the environment and ensure an adequate water supply for the future.

Please join us and learn what you can do to help meet our conservation goals and to protect our water supply and our natural resources.

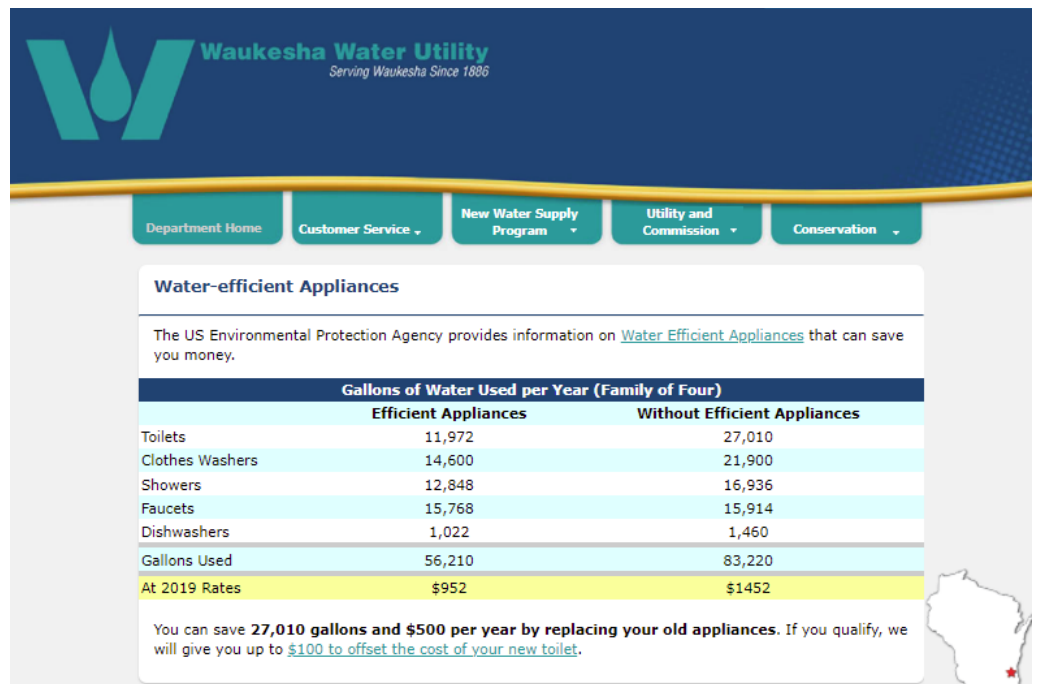


Why It's Important to Conserve on the Webpage

Under “Ways to Conserve” there is information about the toilet rebate, the incentive for businesses, the sprinkling ordinance, and outdoor conservation tips. All of these topics have been previously addressed. In addition, we have added information on Water-Efficient Appliances, as shown below.



Ways to Conserve on Webpage



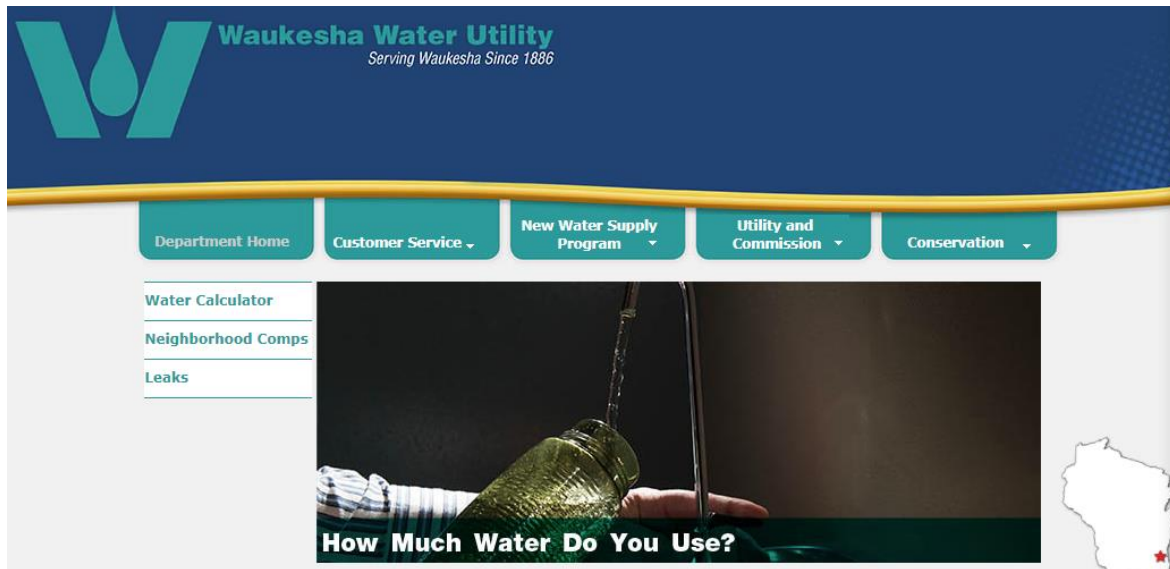
Water Efficient Appliances Webpage

## 11. How Much Water Do You Use & Things To Do To Lower Your Bill

Other information on our website includes “How Much Water Do You Use?” and “Things to do to Lower Your Bill”.

The selections under the “How Much Water Do You Use” webpage include the following:

- Water Calculator (as shown on the next page)
- Leaks (please refer to item #12)
- How Your Water Consumption Compares to your Neighbors (please refer to #13)



Information Regarding 'How Much Water Do You Use' on Webpage

The water calculator links to [H<sub>2</sub>OUSE Water Saver Water Use Calculator](#).

This tool calculates how much water is being used vs. how much water would be saved if fixtures, appliances, and landscaping were efficient. The link also compares the actual water bill to what a person could be saving with conservation.

The image shows a screenshot of the H<sub>2</sub>OUSE Water Use Calculator website. The page has a dark blue sidebar on the left with the H<sub>2</sub>OUSE logo and the text "WATER SAVER HOME". The main content area is light blue and features a "Return to H<sub>2</sub>Ouse Home" link at the top. The title "Water Use Calculator" is prominently displayed in orange. Below the title is an introductory paragraph explaining the tool's purpose. The form is organized into four main sections, each with a blue header bar: "Site Information", "Home/Interior Water Consumption Estimate", "Landscape Water Consumption Estimate", and "Actual Water Usage". Each section contains various input fields and radio buttons for user data entry.

Return to H<sub>2</sub>Ouse Home

## Water Use Calculator

How much water are you using at your home? Follow the easy steps below and fill in the information boxes on our **Water Use Calculator** to learn. Our Calculator will give you a water budget for the inside and outside of your home. A water budget tells you the right amount of water you should be using. Compare the water budget to your actual water bill and see how much water you could be saving. Then try the **Water Use Calculator** again with more water efficient landscaping added and see the difference in savings \$\$ this can make.

### Site Information

Name:

Site Name:  (e.g., My House)

Zip:

### Home/Interior Water Consumption Estimate

Number of Residents:

|                        |                      |                                                    |                                                         |
|------------------------|----------------------|----------------------------------------------------|---------------------------------------------------------|
| Number of Showerheads: | <input type="text"/> | Number installed before 1994: <input type="text"/> | Number installed in 1994 or after: <input type="text"/> |
| Number of Toilets:     | <input type="text"/> | <input type="text"/>                               | <input type="text"/>                                    |
| Number of Faucets:     | <input type="text"/> | <input type="text"/>                               | <input type="text"/>                                    |

Do you have a clothes washer?  Yes  No

*If yes, please answer below.*

Energy Star?  Yes  No

### Landscape Water Consumption Estimate

Grass/lawn Area:  sq.ft.

Shrubs/Ground Cover Area:  sq.ft.

Water-Conserving Plants Area:  sq.ft.

*Or if you don't know any of the above, enter the Total Landscape Area:*  sq.ft.

### Actual Water Usage

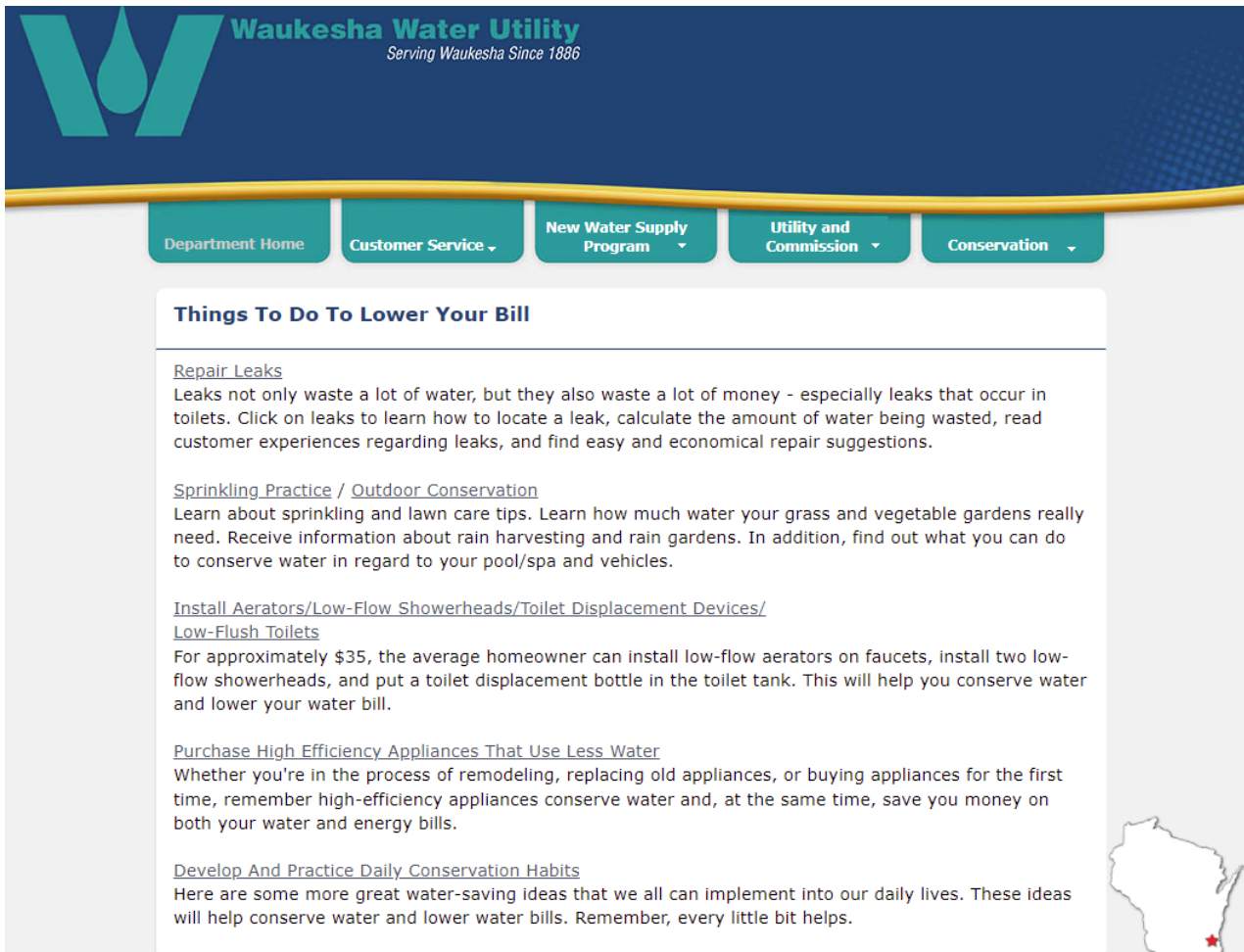
Select water measure for values you enter below.  CCFs or HCFs  Thousand Gallons (KGals)

What rate do you pay? \$  per CCF/HCF/KGal

Enter actual water usage (from your water bill) for each month below.

The selections under “Things to do to Lower Your Bill” webpage include the following:

- Repair Leaks (please refer to #12)
- Sprinkling Practice/Outdoor Conservation (which links to the Ordinance & Outdoor Tips – as mentioned previously)
- Install Aerators/Low-Flow Showerheads/Toilet Displacement Devices/Low-Flush Toilets (as shown on the next page)
- Purchase High Efficiency Appliances That Use Less Water (as mentioned previously)
- Develop and Practice Daily Conservation Habits (as shown on two pages from this page)



The screenshot shows the Waukesha Water Utility website header with the logo and tagline "Serving Waukesha Since 1886". Below the header is a navigation bar with five menu items: "Department Home", "Customer Service", "New Water Supply Program", "Utility and Commission", and "Conservation". The main content area is titled "Things To Do To Lower Your Bill" and contains five sections, each with a link and a brief description:

- [Repair Leaks](#): Leaks not only waste a lot of water, but they also waste a lot of money - especially leaks that occur in toilets. Click on leaks to learn how to locate a leak, calculate the amount of water being wasted, read customer experiences regarding leaks, and find easy and economical repair suggestions.
- [Sprinkling Practice / Outdoor Conservation](#): Learn about sprinkling and lawn care tips. Learn how much water your grass and vegetable gardens really need. Receive information about rain harvesting and rain gardens. In addition, find out what you can do to conserve water in regard to your pool/spa and vehicles.
- [Install Aerators/Low-Flow Showerheads/Toilet Displacement Devices/Low-Flush Toilets](#): For approximately \$35, the average homeowner can install low-flow aerators on faucets, install two low-flow showerheads, and put a toilet displacement bottle in the toilet tank. This will help you conserve water and lower your water bill.
- [Purchase High Efficiency Appliances That Use Less Water](#): Whether you're in the process of remodeling, replacing old appliances, or buying appliances for the first time, remember high-efficiency appliances conserve water and, at the same time, save you money on both your water and energy bills.
- [Develop And Practice Daily Conservation Habits](#): Here are some more great water-saving ideas that we all can implement into our daily lives. These ideas will help conserve water and lower water bills. Remember, every little bit helps.

In the bottom right corner of the screenshot, there is a small map of Wisconsin with a red star indicating the location of Waukesha.

Information on Things to do to Lower Your Bill on Webpage

Department Home

Customer Service ▾

New Water Supply  
Program ▾

Utility and  
Commission ▾

Conservation ▾

### Install Water Saving Devices

Conserving water in your home could save you over \$115 annually in water charges and help protect your water resources.

#### **Faucet Aerator**

Household Sinks should be equipped with faucet aerators. Although it may not seem like much, a bathroom faucet can easily draw more than 2,500 gallons of water per year! Aerators conserve water by mixing air and water as the water leaves the spout. Aerators will not reduce the amount of water needed to fill a sink or pitcher, but will reduce the amount of water needed for rinsing. Aerators are easy to install and cost approximately \$2 each.

#### **Water Efficient Showerhead**

Install water saving showerheads. An average 5-minute shower with a typical non-conserving showerhead sends approximately 40 gallons of fresh water down the drain and into the sewer. Water efficient shower heads provide a water savings of at least 44% compared to non-conserving shower heads. Water efficient showerheads cost approximately \$12 and up.

#### **Low Flow Toilet**

Toilet flushing uses more water than any other household use! A typical non-conserving 5.5 gallon flush toilet (many of which are still in use) contaminates 13,000 gallons of fresh water per year to remove 165 gallons of body waste! An efficient low-flow toilet costs approximately \$100. It will save you 41.2 gallons of water per day. If you don't have a Water efficient toilet, displace water in the tank with two half-gallon plastic jugs filled with pebbles.

Source: Northwestern Indiana Regional Planning Commission and the Lake Michigan Federation (now the Alliance for the Great Lakes).

Information on Aerators, High-Efficiency Shower Heads and Toilets on Webpage





### Daily Conservation Tips

#### Kitchen Conservation Tips

- Install a low-flow aerator on your kitchen faucet.
- Place a pitcher of water in the fridge, or warm the water in the microwave or on the stove instead of running the water from the tap and waiting for the temperature to change. Otherwise, while waiting, capture the running water for watering the plants.
- Thaw frozen foods by putting them in the refrigerator overnight or use the microwave to defrost instead of using water to thaw them.
- Use only a little water in the bottom of the pan for cooking purposes. This is what most foods require and, at the same time, the foods will be more nutritious since the vitamins will stay more in the food instead of the water.
- Only run the dishwasher when you have a full load; and, if available, select the "light wash" option in order to use less water.
- Scrape dirty dishes instead of rinsing them off with water. Most dishwashers clean dishes very well and do not need to be rinsed.
- When washing dishes by hand, place the stoppers in the sinks or use two containers, one with soapy water and one with rinsing water, instead of turning the faucet on each time a rinse is needed.
- Begin a compost pile rather than running the water for a garbage disposal.
- Use a pan of water to clean vegetables instead of running the water from the faucet. Then, reuse this water for watering plants.

#### Laundry Conservation Tips

- Use the wash machine only when there is a full load. Adjust the water level based on the size of the load.
- When purchasing a new wash machine, buy a high-efficiency appliance. This will not only conserve water, but will also save money on water and energy bills.

#### Bathroom Conservation Tips

- Install a low-flow faucet aerator on your bathroom sink.
- Turn the water off while brushing your teeth, washing, or shaving.
- Install a low-flow showerhead.
- Take a shower instead of a bath. A fast shower, especially one with a low-flow showerhead, will use less water.
- Place a bucket in the shower to catch excess water for watering plants.
- While in the shower, turn the water on to get wet, turn it off while soaping up, and turn it back on to rinse off. Do the same when washing your hair.
- Only flush the toilet when necessary. Use the trash for tissues, insects, and waste instead of flushing them down the toilet.
- Check for toilet leaks twice a year. (See [Leaks](#) for more information.)
- If the handle of the toilet often stays in the flush position, after flushing, and allows the water to run, get it fixed.
- Put a plastic gallon jug filled with rocks, into the toilet tank. This will raise the water level in the tank so that less water will be used. Otherwise, you can purchase a toilet displacement device from a hardware store to do the same thing.
- When remodeling or purchasing a new home, install a low-flow flushing toilet that uses only 1.6 gallons of water per flush.

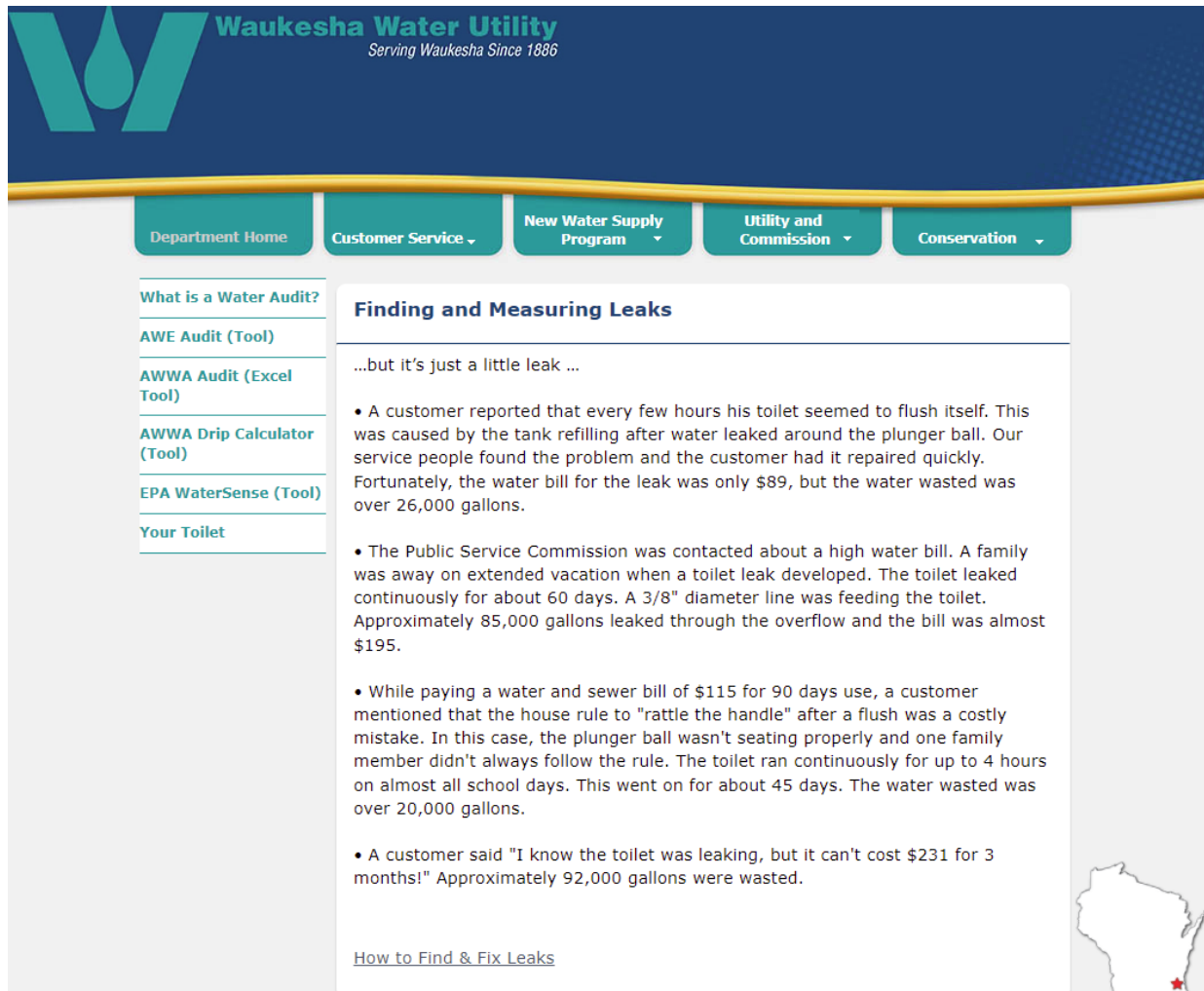
#### General Conservation Tips

- Do not pour water down the drain when it could be reused for watering plants, gardens, etc.
- Check your water meter to verify that your house is leak free.
- Repair toilet leaks or dripping faucets right away. These waste a lot of water and can significantly increase.

Information on Conservation Habits & Tips for Inside the Home on Webpage

## 12. Program on Finding & Fixing Leaks

The Utility has information on its website to help customers understand the importance of finding and fixing leaks quickly. The information below informs customers on how much water and money can be wasted when it comes to leaks.



The screenshot shows the Waukesha Water Utility website. The header features the utility's logo and name, "Waukesha Water Utility", with the tagline "Serving Waukesha Since 1886". Below the header is a navigation bar with five menu items: "Department Home", "Customer Service", "New Water Supply Program", "Utility and Commission", and "Conservation". The main content area is titled "Finding and Measuring Leaks" and includes a sidebar with links to "What is a Water Audit?", "AWE Audit (Tool)", "AWWA Audit (Excel Tool)", "AWWA Drip Calculator (Tool)", "EPA WaterSense (Tool)", and "Your Toilet". The main text area contains a sub-header "...but it's just a little leak ..." followed by three bullet points describing customer experiences with toilet leaks, including the amount of water wasted and the cost of repairs. A link for "How to Find & Fix Leaks" is provided at the bottom of the main text area. A small map of Wisconsin with a red star is visible in the bottom right corner of the screenshot.

Information on website for Finding and Fixing Leaks

Also, the Utility has a link on its website to the Environmental Protection Agency's (EPA) WaterSense site for detailed information on Finding & Fixing Leaks.



## Leaks Can Run, but They Can't Hide

Are you ready to chase down leaks? Household leaks can waste nearly 1 trillion gallons of water annually nationwide, so each year we hunt down the drips during Fix a Leak Week. Mark your calendars for EPA's annual Fix a Leak Week, March 14 through 20, 2022—but remember that you can find and fix leaks inside and outside your home to save valuable water and money all year long.

From family fun runs to leak detection contests to WaterSense demonstrations, Fix a Leak Week events happen from coast to coast and are all geared to teach you how to find and fix household leaks. See our [Event map](#) at the bottom of this page (or on [Facebook](#)  ) to find events near you and view past events!

Learn how to find and fix leaks during Fix a Leak Week. It's as easy as 1-2-3.

### On This Page:

- [Checking for Leaks](#)
- [Toilet Leaks](#)
- [Faucet Leaks](#)
- [Showerhead Leaks](#)
- [Outdoor Leaks](#)
- [In the Workplace](#)

### Related Information

- Check our our [animated video with Flo](#)
- [Educational resources](#)

[Link to Water Sense Finding and Fixing Leaks](#)

In addition, the Utility’s website has information pertaining specifically to toilet leaks (as to how much water is wasted & information on the toilet rebate).

**Waukesha Water Utility**  
*Serving Waukesha Since 1886*

Department Home | Customer Service | New Water Supply Program | Utility and Commission | Conservation

### Toilet Leaks

Toilet leaks are one of the most common and costly leaks. Hundreds of gallons a day can be wasted on toilet leaks. Although they tend to be invisible, you can often hear the sound of water running.

It’s best to check for leaks twice each year. Check your toilet for parts which are out of adjustment or worn out. Leaks usually occur in the overflow pipe or the plunger ball.

After you have fixed the leak, use the leak indicator on your water meter to verify successful repair.

| How Much Water is Wasted?   |                                 |
|-----------------------------|---------------------------------|
| A leak of _____ per minute, | wastes _____ gallons per month. |
| 1 pint                      | 5,475                           |
| 1 quart                     | 10,950                          |
| ½ gallon                    | 21,900                          |
| 1 gallon                    | 43,800                          |
| 3 gallons                   | 131,400                         |

**High Efficiency Toilet Rebate Program**  
 If you have an old toilet, it’s probably best to replace it.

**Replace a Water Guzzling Toilet, Receive \$100!**  
[Rebate Qualifications and Application.](#)

Information on website regarding Toilet Leaks

A link is available to the American Water Works Association's (AWWA) drip calculator to calculate how much water is wasted on dripping and running faucets.

**American Water Works Association**  
Dedicated to the World's Most Important Resource™

MEMBERSHIP | CONFERENCES & EDUCATION | RESOURCES & TOOLS | PUBLICATIONS | LEGISLATION & REGULATION | Search aww

Water Knowledge | Public Affairs | Career Center | Water and Wastewater Utility Management | Resource Dev

Home > Resources & Tools > Public Affairs > Public Information > DripCalculator

**PUBLIC INFORMATION**  
DripCalculator

**PRESS ROOM**


**COMMUNICATIONS TOOLS**

**PUBLIC AFFAIRS EVENTS**

### Drip Calculator

Use AWWA's online tool to estimate water waste and learn how much water you could be saving.

#### DRIPPING FAUCETS


 For smaller/slower leaks - count the number of drips in one minute from the leaky fixture. Note: 5 drips per second amounts to a steady stream.

Drips Per Minute:

Unit of Measurement:

**Calculate Waste**

#### FAST RUNNING FAUCETS

 For larger/more rapid leaks - hold an 8 ounce cup under the dripping fixture and time, in seconds, how long it takes to fill the cup.

Time in seconds:

Unit of Measurement:

**Calculate Waste**

[Link to AWWA's Drip Calculator](#)

### 13. Web Based Consumption History and Comparisons (for all customers)

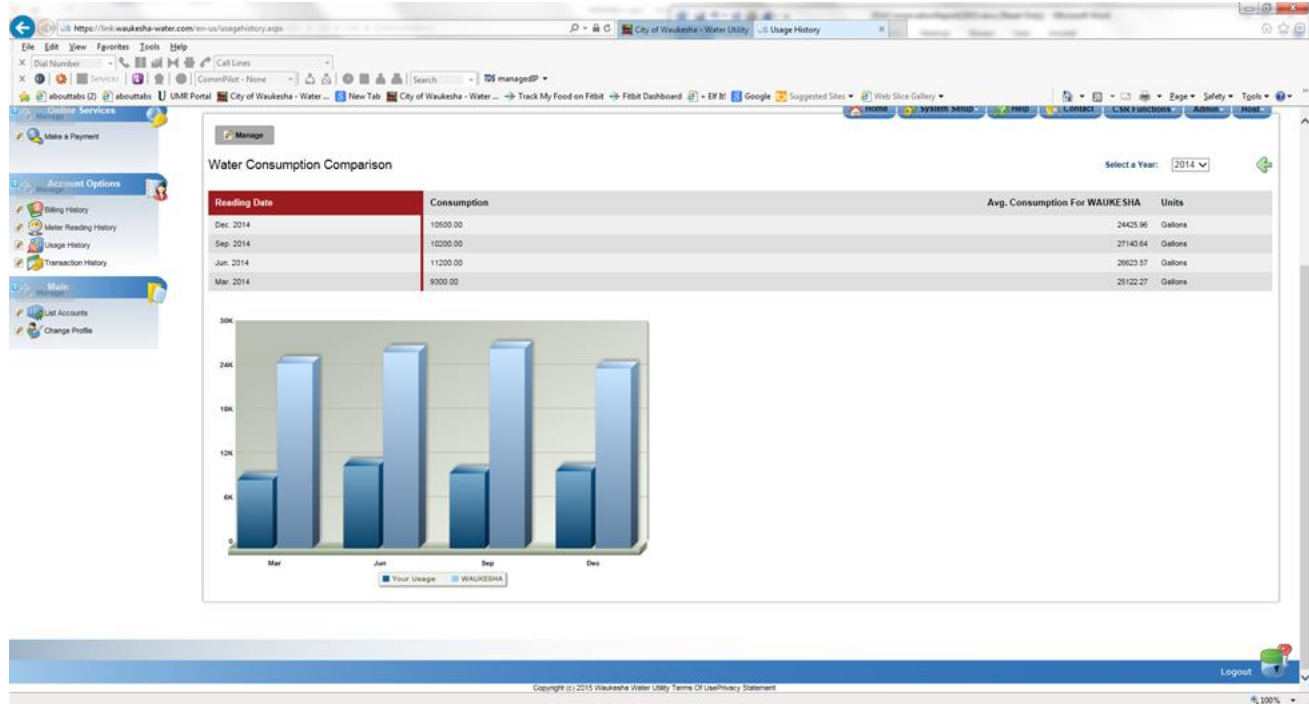
In 2014, the Utility installed Link, a system available to customers to pay their bills online. Integral to Link is the customer's ability to search transaction and consumption history. Now, a customer can compare their consumption across seasons.

The screenshot shows a web browser window displaying the 'City of Waukesha - Water Utility' website. The page title is 'Usage History'. The browser address bar shows the URL: <https://link.waukesha-water.com/en-us/usagehistory.aspx>. The page features a navigation menu with options like 'Home', 'System Setup', 'Help', 'Contact', 'CSR Functions', 'Admin', and 'Host'. A sidebar on the left contains 'Online Services' (Make a Payment), 'Account Options' (Billing History, Meter Reading History, Usage History, Transaction History), and 'Main' (My Accounts, Change Profile). The main content area is titled 'Water Consumption History for your account' and includes a 'Select a Year' dropdown set to '2014'. Below this is a table with columns for 'Reading Date', 'Consumption', and 'Units'. A line graph titled 'Consumption History' is also present, showing consumption levels over time.

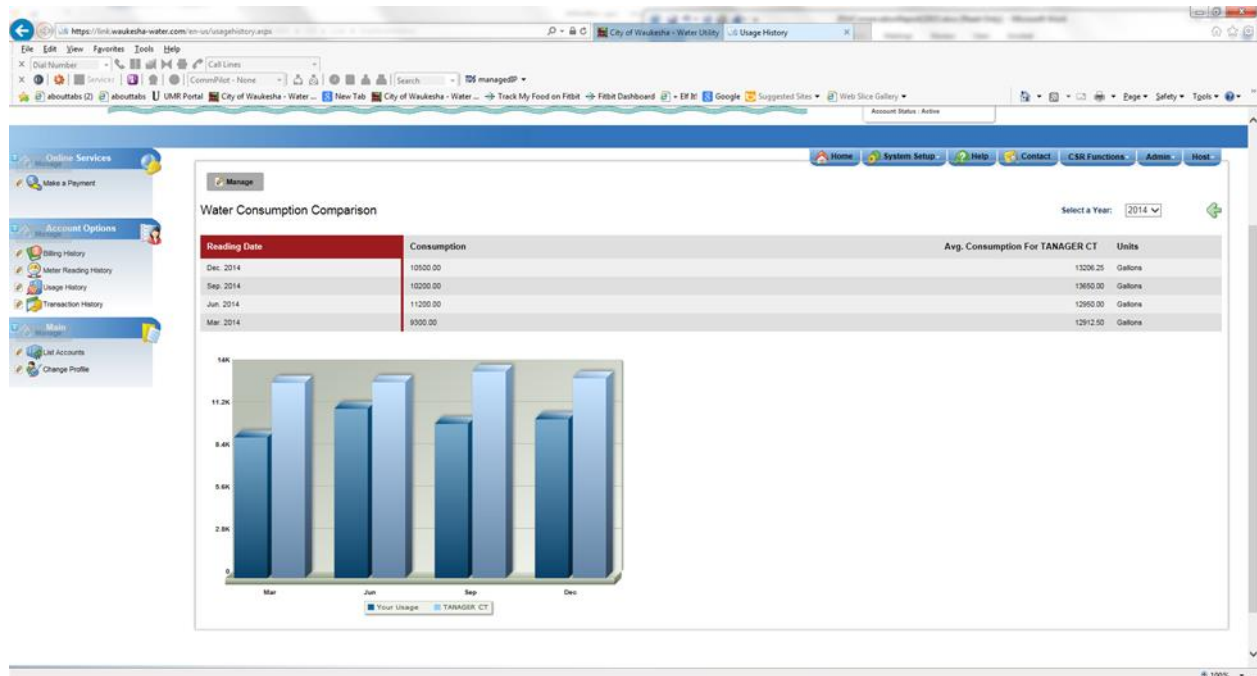
| Reading Date | Consumption | Units   |
|--------------|-------------|---------|
| Dec 19, 2014 | 10000.00    | Gallons |
| Sep 19, 2014 | 10200.00    | Gallons |
| Jun 20, 2014 | 11200.00    | Gallons |
| Mar 20, 2014 | 8300.00     | Gallons |

The line graph, titled 'Consumption History', plots consumption in gallons against reading dates for 2014. The y-axis ranges from 0 to 12,000 gallons. The x-axis shows reading dates: Mar 20, 2014, Jun 20, 2014, Sep 19, 2014, and Dec 19, 2014. The data points correspond to the table above, showing a peak in June and a low in March.

They can also compare themselves to the City as a whole,



as well as to the neighbors on their street.



The Utility hopes that if a customer sees they are consuming more than their neighbors, they will begin to ask why. While there may be legitimate reasons for higher consumption, for example family size, the consumer may also touch on other habits, and with change, could lead to conservation.

**14. Leak Detection & Water Audit Program**

Waukesha Water Utility has a leak detection program where our Billing Department runs a Pre-Exception Report. This Pre-Exception report shows the low and high consumptions for possible stopped meters and leaks. For stop meters, our Meter Technicians go to property to check and replace the meter, if needed. For high consumptions, the Utility sends a Courtesy Postcard to notify the customer that they might have a leak; and advises them to check the leak indicator on their meter. A copy of the Courtesy Postcard is shown below.

**COURTESY CARD**

---

Service Address \_\_\_\_\_


---

Account Number \_\_\_\_\_ Reading Date \_\_\_\_\_

**It appears you are using more water**

Water used this quarter \_\_\_\_\_

Water used during the same quarter last year \_\_\_\_\_



The increase could be due to lawn sprinkling, additional residents, guests, new tenants, etc.  
or  
**you might have a leak.**

Please locate your water meter and check for movement of the diamond shaped leak indicator.

As always, if you have any questions, please contact us at 262 521 5272  
Thank you,  
**WAUKESHA WATER UTILITY**

Courtesy Card Notify Customers of a Possible Leak

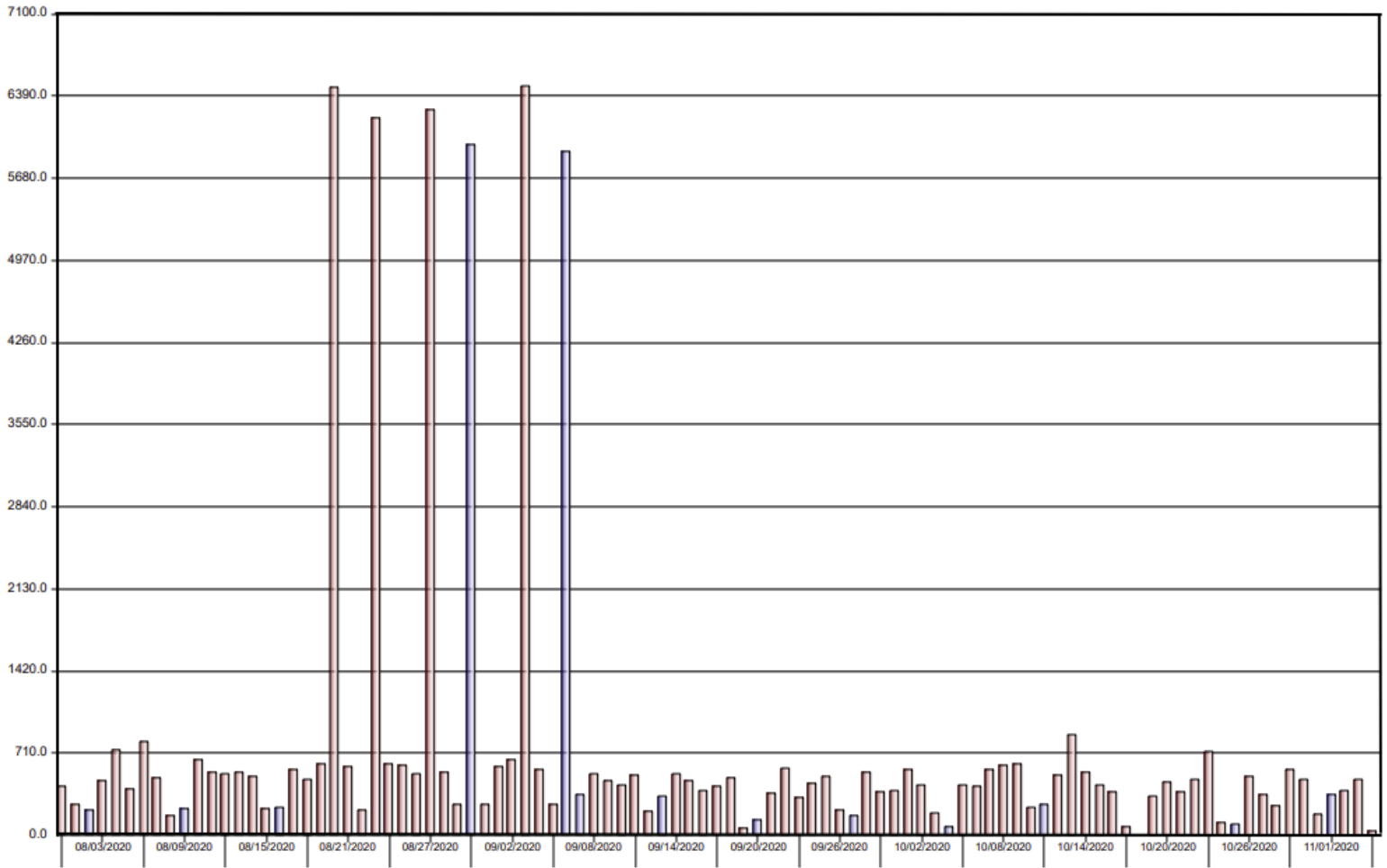
The Utility normally receives calls from customers after they receive the postcard. When customers call, we explain how to check their meter and toilets, etc. for leaks. Sometimes, customers will request additional help from the Utility to help find the problem.

The Utility will help customers find leaks by either conducting water audits or by running data logging reports. Water audits are conducted for single family homes, duplexes, and triplexes. Data logging reports, that show daily consumptions, are done for large multi-family properties, commercial, public, and industrial accounts.

In 2022, the Utility conducted 11 residential water audits and 35 data logging reports (22 for residential accounts, 9 for multi-family accounts, 0 for public accounts, 1 for a commercial account, and 3 for industrial accounts).

A copy of a data logging report is shown on the following page.





Data Logging Report for a Commercial Customer Account

In addition to the Courtesy Card, Audits, and Data Logging Reports, the Utility has an informational program on its website for customers to conduct their own water audits for residential and non-residential customers; along with links to AWE's Water Audit Process Introduction, and AWWA's Free Water Audit Reporting Tool Kit. (A copy of the information on our website is shown below.)

Finally, any time a customer calls the Utility asking for information or has high consumption, Waukesha Water Utility is always willing to function as a resource to help its customers.

### What is a Water Audit?

#### Businesses

##### Saving Water: It's just good business

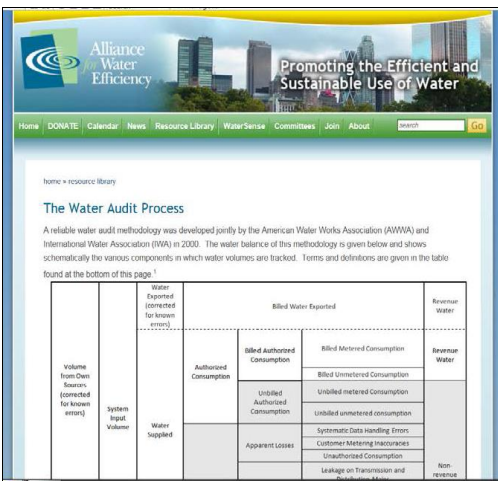
Using water efficiently is not just good for Waukesha and the environment; it's a smart business strategy. Reducing your water use can save you money on your water, wastewater and energy bills and cut on-site treatment costs. Every business is a little different, but a water audit is an easy way to start.

Water audits provide a way to inventory all water uses in your facility and identify ways to increase water use efficiency. The results can help you prioritize steps to implement cost-effective water-saving measures.

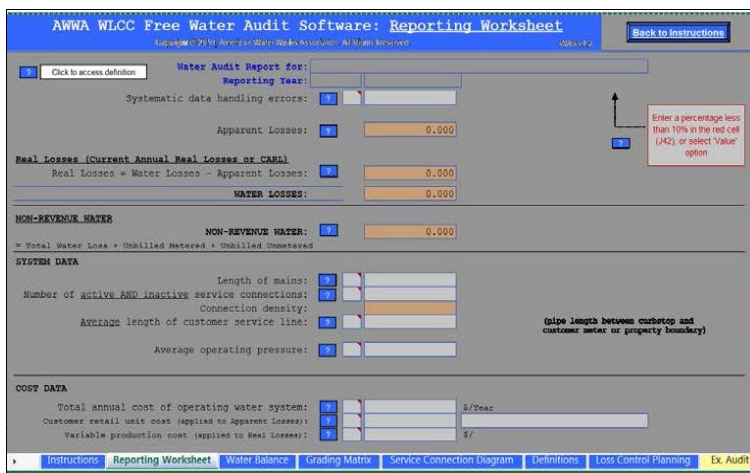
- Step One – Gather data such as maps showing locations and equipment where water is used, water bills and consumption data, equipment manuals and so on
- Step Two – Walk through your facility and verify water uses, estimate hours and rate of use, look for leaks and ways to reduce water use
- Step Three – Compare estimated water use with consumption data from water bills
- Step Four – Estimate costs of fixture change-outs, new equipment or new processes and compare with estimated savings for water, wastewater and energy to calculate potential payback period
- Step Five – Prepare a summary of recommended actions and implementation schedule for those actions that make economic sense

More information, see the tools on our website or call the Waukesha Water Utility at (262) 521-5272.

### Information on the Utility's Website



A Link to AWE's Water Audit Process



A Link to AWWA's Water Audit Reporting Toolkit

## VI. EDUCATION PROGRAMS, OUTREACH EVENTS, YOUTH GROUPS & PARTNERSHIPS

Waukesha Water Utility follows NR 852 Requirements. As a result, several educational programs have been adopted. Section A will highlight how we advertise our current water conservation programs; Section B will focus on community presentations and outreach events; and Section C will concentrate on youth education.



### Tools:

The Education Programs use the following communication tools.

- Website
- GWA's Website Evolution uploaded in 2019 (greatwateralliance.com – an information hub for the Utility's future water supply project that includes information on water conservation)
- Bill Inserts
- Local Newspaper
- Public Outreach & Community Meetings
- School Programs
- Other: Street Signs
- Other: Yard Signs - Brown Lawn Campaign

- [ X ] Other: Social Media (Twitter & Facebook)
- [ X ] Other: Public Giveaways: Toilet Leak Detection Tablets & Rain Gauges
- [ X ] Other: Brochures
- [ X ] Other: Bill Messages
- [ X ] Other: Non-Residential Giveaways: Pre-rinsed Spray Valves
- [ X ] Other: Customer Service – in person and over the phone
- [ X ] Other: Neptune 12900 V4 radio/data logger
- [ X ] Other: City's Park and Rec Activity Guide
- [ X ] Other: City Interdepartmental Meetings
- [ X ] Other: Public Service Announcement (TV 25)
- [ X ] Other: Great Water Alliance's Newsletter
- [ X ] Other: City of Waukesha's Electronic Newsletter
- [ X ] Other: City of Waukesha's Department of Public Works Newsletter Insert
- [ X ] Other: Great Water Alliance Informational Video Series

**A. Education Programs**

In 2022, the Utility also utilized the following education platforms and topics for water conservation announcements.

1. Great Water Alliance Website
2. Great Water Alliance Social Media
3. City of Waukesha's Electronic Newsletter
4. City of Waukesha's Social Media
5. Advertisement for the Toilet & Shower Head Rebate Program
6. Irrigation Ordinance Bill Insert
7. EPA WaterSense's National Fix a Leak Week
8. National Drinking Water Week
9. Tips on How to Prevent Frozen Pipes



## 1. Great Water Alliance Website






In 2018, the Great Water Alliance created a website for the purpose of updating communication efforts for the Great Lakes Water Supply program. In 2019, the GWA added water conservation information to its site. The conservation topics include the following:

- You Can Save Water and Money by Replacing Your Old Appliances
- Waukesha's Sprinkling Ordinance
- Finding & Measuring Leaks
- Outdoor Water Conservation Tips

The following pages will show the conservation information that was added to GWA's website.

WATER CONSERVATION  **YOU CAN SAVE**  
**27,010 gallons AND \$500**  
PER YEAR BY **replacing** YOUR OLD APPLIANCES



|                                                                                            |                                                                                               |
|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| TOILET    | WASHER      |
| SHOWER    | DISHWASHER  |
| Faucet  | TOTAL     |

**MORE ABOUT conservation**

Head to the WWU page for more information on Waukesha's conservation efforts, including rebates and our daytime sprinkling ban.

[WAUKESHA WATER UTILITY >>](#)

Water Conservation Information on GWA's Website  
Gallons You Can Save By Replacing Old Appliances

When you click on the appliance icon, it provides information on how much water an old appliance uses versus a high-efficiency appliance.

# MORE ABOUT **conservation**

Water is precious because it is essential for life and is a limited resource. Waukesha Water Utility (WWU) has established a Sprinkling Ordinance to aid in the efforts of water conservation.



## City of Waukesha's Sprinkling Ordinance

May 1st -  
October 1st

| ADDRESSES<br>ENDING<br>WITH AN | MAY WATER ON<br>FOLLOWING DAYS | DURING THESE<br>HOURS        |
|--------------------------------|--------------------------------|------------------------------|
| Odd Number                     | Tuesdays & Saturdays           | Before 9 am or<br>After 5 pm |
| Even Number                    | Thursdays & Sundays            | Before 9 am or<br>After 5 pm |

Hand watering may be done at any day, any time. Save Money & Mow Less: Join "my Brown Lawn is GREEN" campaign. Since established lawns go dormant in the summer and turn green again with the autumn rain, watering the grass is unnecessary.

Head to the WWU webpage for more information on Waukesha's conservation efforts, including rebates and more about the sprinkling ordinance.

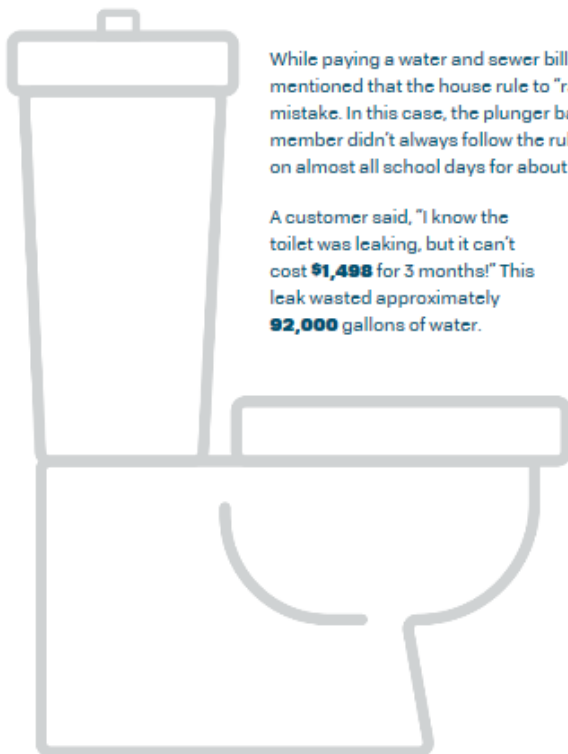
[WAUKESHA WATER UTILITY >>](#)



Waukesha's Sprinkling Ordinance Information on GWA's Website

# FINDING & MEASURING **leaks**

When it comes to leaks, we often hear the words “but it’s just a little leak.” Unfortunately, those little leaks can become very expensive. Please read the stories below. (The bill amounts have been updated using **2019** rates and assumes the average residential consumption is **12,000** gallons per quarter.)



While paying a water and sewer bill of **\$475** for **90** days use, a customer mentioned that the house rule to “rattle the handle” after a flush was a costly mistake. In this case, the plunger ball wasn’t aligned properly and one family member didn’t always follow the rule. The toilet ran continuously for up to 4 hours on almost all school days for about 45 days. This wasted **20,000** gallons of water.

A customer said, “I know the toilet was leaking, but it can’t cost **\$1,498** for 3 months!” This leak wasted approximately **92,000** gallons of water.

The Public Service Commission was contacted about a high water bill. A family was away on extended vacation when a toilet leak developed. The toilet leaked continuously for about **60** days. A 3/8” diameter line was feeding the toilet. Approximately **85,000** gallons of water leaked through the overflow and the bill was **\$1,398**.

A customer reported that every few hours his toilet seemed to flush itself. This was caused by the tank refilling after the water leaked around the plunger ball. Our service people found the problem and the customer had it repaired quickly. The amount of water wasted was **26,000** gallons and the water and sewer bill was **\$561**.

[HOW TO FIND & FIX LEAKS >>](#)

Conservation Information on GWA's website – Finding & Measuring Leaks



## OUTDOOR conservation tips



Use a spray nozzle on your hose. If this is an adjustable type, the water can be turned down to a fine spray. When finished using the hose, turn the water off at the faucet instead of the nozzle — this will help control leaks. Sweep off your driveway and sidewalk with a broom or use a blower — do NOT use the hose.



Water plants only when needed. Soaker hoses use less water than overhead sprinklers. Turn the soaker hose upside down (so that the holes are facing down). This will help to avoid evaporation. Remove weeds — they steal water from other plants. Use organic mulches (such as woodchips, shredded bark, grass clippings, straw, hay, leaves, or compost) — to retain moisture.



Cover the pool or spa to prevent evaporation and to keep the water cleaner. To avoid water going over the sides, do not overfill. Install a water-saving pool filter — traditional filters use 180-250 gallons of water. Do not drain pools/spas unless repair work is needed.



Rain gardens are a more natural landscape that uses wildflowers and other native plants. The native plants are low maintenance, use a lot less water, and do not require fertilizers. Due to their deep root system, native plants help the environment by increasing the soil's ability to store water, reducing runoff (flooding), and providing a habitat for birds and butterflies. The DNR provides a lot of information about [Rain Gardens](#).



Use a bucket or a rain barrel to catch and store fresh rainwater from your rooftop. Then use this water for washing your car or for watering your lawn, garden, trees, and plants. Rainwater is better for your plants because it is not chlorinated. If you put a screen over your bucket, this will keep the insects out and keep mosquitoes from laying their eggs in the rainwater.

Learn more about rain barrels and the Waukesha Water Utility rain barrel rebate program [here](#).

Conservation Information on GWA's website – Outdoor Conservation Tips

## **2. Great Water Alliance Social Media**

In addition to the conservation information posted on the GWA's website, conservation messages were also posted on GWA's Facebook and Twitter social media accounts. In 2022, GWA posted the following:

- Make a Resolution to Conserve Water All Year Long
- Take Advantage of those Spring Showers by Installing a Rain Barrel
- Fix a Leak Week – Save Money and Conserve Water by Finding & Fixing Leaks
- Will Residents Need Water Softeners After the Changeover in 2023?
- Waukesha's Sprinkling Ordinance – Conserve Water & Protect Your Lawn with Sprinkling Tips
- Rain Barrels – Conserve Water & Get a Rebate
- Rate Information Updates
- There are a Bunch of Ways to Conserve Water This Summer
- Remember Waukesha's Sprinkling Ordinance is in Effect Until October 1<sup>st</sup>
- The Water Leaders Summit – Find Out How Local Businesses Are Tracking Water Conservation & Innovation
- Overwatering Isn't Just Wasteful, It Can Cause Damage to Your Plants – Learn Easy Ways to Conserve Water
- Educating the Next Generation About the Importance of Water – A Teacher's Kit Full of Resources

A copy of the messages posted on Facebook and Twitter are shown on the following pages.



Great Water Alliance

January 7, 2022 · 🌐



Make a resolution to conserve water all year long. Start the year by making sure your faucets, toilets, and showerheads are all working properly. Even little leaks can waste thousands of gallons of water. <https://bit.ly/3wtKJfs>



New Year's Conservation Resolutions  
Social Media Post



Great Water Alliance

March 10, 2022 · 🌐



Take advantage of those spring showers by installing a rain barrel. Mother nature will thank you.  
<https://bit.ly/3wtKJfs>



High-Efficiency  
Social Media Post



Great Water Alliance

March 15, 2022 · 🌐



Household leaks can waste nearly 1 trillion gallons of water annually nationwide. So, each year we hunt down the drips during Fix a Leak Week, March 14 to 20, 2022. Learn more about how you can save money and conserve water by finding and fixing leaks. <https://bit.ly/3wtKJfs>



Take Shorter Showers  
Social Media Post



**Great Water Alliance** @GWA\_Social · Apr 21, 2022



GWA FAQs: Will Waukesha residents still need their water softeners after the changeover in 2023? [bit.ly/2TshtGP](https://bit.ly/2TshtGP)

FAQ 

# Will Waukesha residents still need their water softeners after the changeover in 2023?

|| 14 views 0:02 / 0:34  

Benefits of Rain Barrels  
Social Media Post



Great Water Alliance

May 10, 2022 · 🌐



The Waukesha Sprinkling Ordinance is now in effect. Make sure you're conserving water and protecting your lawn by following these sprinkling tips from the Waukesha Water Utility.  
<https://bit.ly/38LTb2h>



**Learn more about conserving water  
while taking care of your lawn**



Outdoor Conservation Tips  
Social Media Post



Great Water Alliance

June 3, 2022 · 🌐



Rain barrels aren't just a great way to conserve water, you can also get a rain barrel rebate. Learn more about how rain barrels can save in more ways than one on our website.  
<https://bit.ly/3ajEKTA>



Outdoor Water Conservation Tips  
Social Media Post





Great Water Alliance

June 7, 2022 · 🌐

...

Find out more about how the new water supply will affect your rates and everything Waukesha is doing to limit the cost right on our website. <https://bit.ly/3m9uYpT>

The graphic features a teal header with a white knot logo on the left and the text "Rate Information Updates" in white on a dark teal background. Below this is a white rectangular area containing the Waukesha Water Utility logo and contact information: "Waukesha Water Utility", "SERVING WAUKESHA SINCE 1888", "PO Box 1648 | Waukesha, WI | 53187-1648", "Tel 262.521.5272 | Fax 262.521.5265", and "waukesha-water.com". To the right of this is the text "WATER & WASTEWATER BILL". Below the contact info is a line for "AMOUNT PAID". A dashed line separates this from a section labeled "SUMMARY" with the instruction "Return this portion with your payment". At the bottom, two light blue boxes are labeled "WATER CHARGES" and "WASTEWATER CHARGES".

City of Waukesha's Sprinkling Ordinance  
Social Media Post



Great Water Alliance

July 6, 2022 · 🌐



Whether it's following the sprinkler ordinance or covering your pool, there are a bunch of ways to conserve water this summer. Learn more on our website. <https://bit.ly/3wtKJfs>



Finding & Fixing Leaks  
Social Media Post

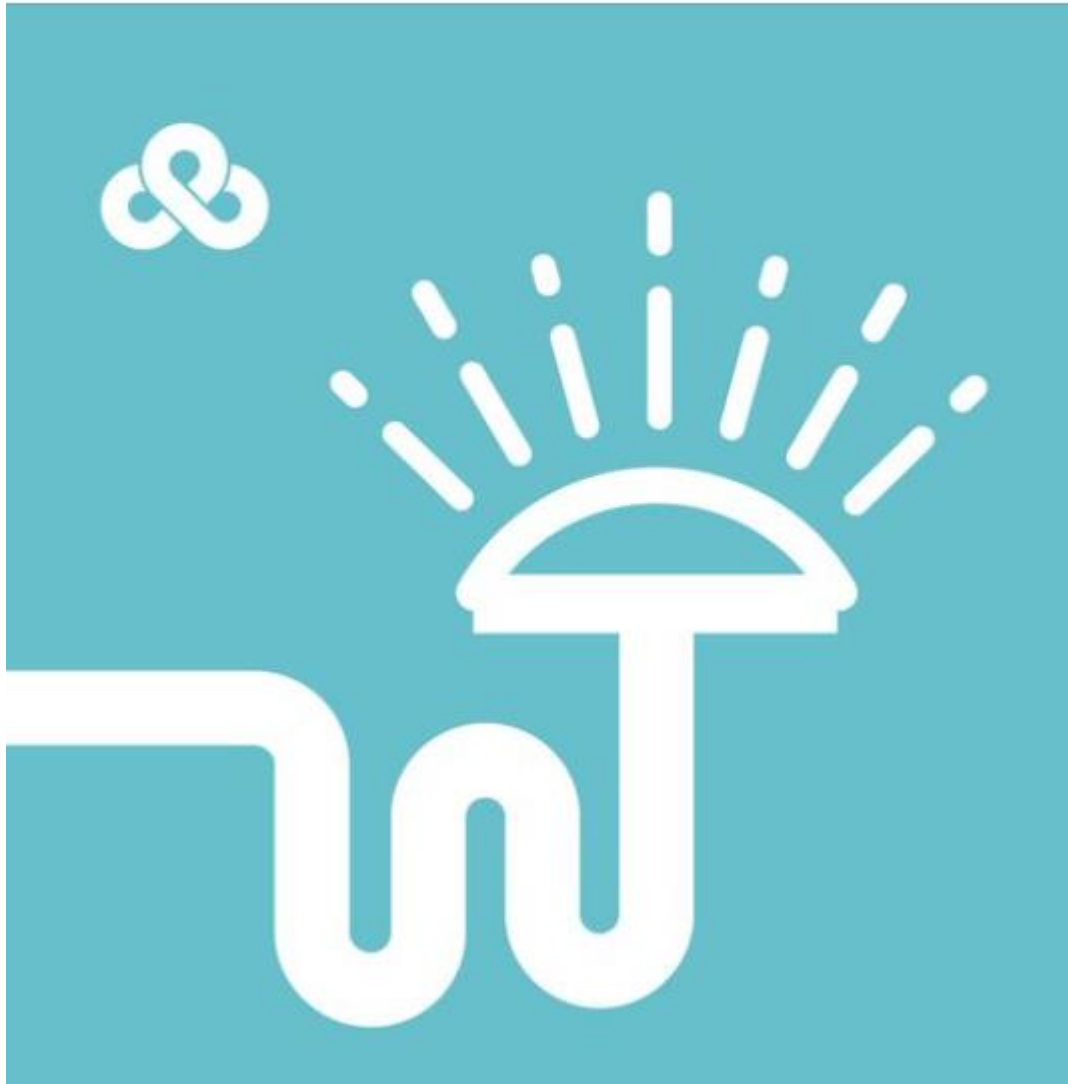


Great Water Alliance

September 7, 2022 · 🌐



Remember that the Waukesha Sprinkling Ordinance is in effect until October 1. Learn more about the ordinance and other ways you can conserve water on our website. <https://bit.ly/3wtKJfs>



Learn More Ways to Conserve Water  
on Waukesha Water Utility's Website  
Social Media Post



Great Water Alliance  
September 30, 2022 · 🌐



The Water Leaders Summit will be taking place in Milwaukee on October 5-6. Find out how local businesses are tackling water conservation and innovation. <https://bit.ly/3fs1vYc>



THE WATER COUNCIL

WATER  
LEADERS  
SUMMIT



Great Water Alliance

October 11, 2022 · 🌐



As temperatures drop, your lawn and garden will require less water to thrive. Overwatering isn't just wasteful, it can cause damage to your plants. Learn more easy ways to conserve water on our website. <https://bit.ly/3wtKJfs>



# Conserve water





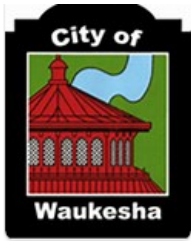
Great Water Alliance

November 4, 2022 · 🌐



Educating the next generation about the importance of water is integral to a brighter future. A Teacher's Kit full of interesting and engaging resources can be found on our website.  
<https://bit.ly/2Y9nw4v>





### 3. City of Waukesha's Electronic Newsletter

The City's Electronic Newsletter goes out every week to 5,651 residences. In 2022, the Utility had the following conservation information listed in the E-Newsletters, as shown below and on the next page.

- *Fix a Leak Week* – The Utility advertised information on finding and fixing leaks, along with information on the toilet and shower head rebates. The black *Rebate Information* box, as shown below, is linked to the Utility's website and the Toilet/Showerhead rebate information.

The screenshot shows a newsletter header with the City of Waukesha logo and the title "What's up in Waukesha". Below the header is a red banner that reads "Weekly Newsletter from the City of Waukesha". The main content area is titled "Fix a Leak Week" and includes a section on "Toilets are a Common Source of Leaks". This section contains a four-step diagram for performing a dye test on a toilet. The steps are: 1. Remove the tank lid. 2. Place 10 drops of food coloring in the tank. 3. Replace the lid and do not flush. 4. Check in 20 minutes. The diagram shows a toilet tank being filled with blue water, then green food coloring is added, and finally, the water in the bowl turns green, indicating a leak. To the right of the diagram, text explains that toilet leaks are common and can waste hundreds of gallons of water. It recommends a dye test and offers rebates for replacing toilets or shower heads. At the bottom right of the newsletter page is a black button labeled "Rebate Information".

**What's up in Waukesha**  
Weekly Newsletter from the City of Waukesha

**Fix a Leak Week**

**Toilets are a Common Source of Leaks**  
Nearly 30% of an average home's indoor water consumption

**STEP 1**  
Remove the tank lid.

**STEP 2**  
Place 10 drops food coloring "inside tank."  
"Red or green work best"

**STEP 3**  
Replace lid and do not flush.

**STEP 4**  
Check in 20 minutes. If the food coloring shows up in the toilet bowl, you have a leak.

The Water Utility reminds you that this week is fix a leak week. Did you know? Toilet leaks tend to be invisible and are one of the most common leaks. When toilets leak, hundreds of gallons of water a day can be wasted without your knowledge. To identify silent toilet leaks, the Utility recommends doing a dye test - put 8-10 drops of food coloring into the tank and wait 20 minutes. If color appears in the bowl before flushing, there is a leak.

If you need to replace your toilet or shower head, you could qualify for a \$100 toilet rebate or \$25 shower head rebate.

**Rebate Information**

Fix a Leak Week advertised in the City's Electronic Newsletter

- *National Drinking Water Week* – The Utility advertised the toilet, showerhead, and rain barrel rebate programs and provided a link to the Utility’s conservation webpage.



### **National Drinking Water Week**

This week is National Drinking Water Week.

The Great Water Alliance project is working to bring safe, sustainable drinking water to the City. You can [read more on the project here](#).

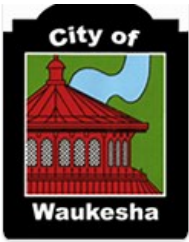
As we all know, water is a valuable resource. To encourage you to conserve, the Water Utility offers the following:

- [\\$20 Rain Barrel rebate program](#)
- [\\$100 WaterSense toilet rebat](#)
- [\\$25 WaterSense shower head rebate](#)

---


National Drinking Water Week Advertised in the City's Electronic Newsletter





#### 4. City of Waukesha's Social Media

In 2022, information was posted on the City's social media for *Fix a Leak Week* and *National Drinking Water Week* as shown below and on the next page.

 **The City of Waukesha** ✓  
March 17, 2022 · 🌐

It's National Fix a Leak Week.

Did you know? Toilet leaks tend to be invisible and are one of the most common leaks. When toilets leak, hundreds of gallons of water a day can be wasted without your knowledge. To identify silent toilet leaks, the Water Utility recommends doing a dye test - put 8-10 drops of food coloring into the tank and wait 20 minutes. If color appears in the bowl before flushing, there is a leak.

If you need to replace your toilet or shower head, you could qualify for a \$100 toilet rebate or \$25 shower head rebate. More info: <https://waukesha-water.com/wtc.html>

## Toilets are a Common Source of Leaks

Nearly 30% of an average home's indoor water consumption

| STEP 1               | STEP 2                                                                               | STEP 3                        | STEP 4                                                                                  |
|----------------------|--------------------------------------------------------------------------------------|-------------------------------|-----------------------------------------------------------------------------------------|
| Remove the tank lid. | Place 10 drops food coloring* inside tank.<br><small>*Red or green work best</small> | Replace lid and do not flush. | Check in 20 minutes. If the food coloring shows up in the toilet bowl, you have a leak. |



Fix a Leak Week  
Social Media Post



The City of Waukesha

May 4, 2022 · 🌐



This week is National Drinking Water Week.

The [Great Water Alliance](http://greatwateralliance.com/) project is working to bring safe, sustainable drinking water to the City. You can read more on the project here: <http://greatwateralliance.com/>

Water is a valuable resource. To encourage you to conserve, the Water Utility offers the following:

- \$20 Rain Barrel rebate program
- \$100 WaterSense toilet rebate
- \$25 WaterSense shower head rebate

Info: <https://waukesha-water.com/wtc.html>



National Drinking Water Week  
Social Media Post

## 5. Advertisement of the Toilet & Shower Head Rebate Program

The Utility has publicized the toilet & shower head rebate program in the following ways: messages on bills, bill inserts, ads placed in the City Park & Recreation's Activity Guide, rebate applications on display at Home Depot, and information is given to local plumbers. Information is also posted on the Utility's website, mentioned on the Utility's social media accounts, in press releases (as shown in the Fix a Leak Week & National Drinking Water Week sections), in newsletters, and at public outreach/educational events.

### a. Messages on water bills for all customer classes


**IMPORTANT INFORMATION:**

"\$100 rebates are available for 1.28 gpf toilets and \$25 rebates are available for shower heads. For detailed information, please visit [www.waukesha-water.com](http://www.waukesha-water.com)"

### b. Bill Insert:


Bill inserts are sent out annually to all customer classes informing them of the 1.28 gpf toilet rebate. In addition, the bill inserts also inform customers where they can purchase rain barrels, that it is not necessary to water the lawn, toilets should be checked twice a year for leaks, and dripping faucets can usually be easily and inexpensively repaired.


## Did you know...


 You can get the following rebates from the Utility:

- \$100 for WaterSense toilets
- \$25 for WaterSense showerheads
- \$20 for rain barrels

For details visit: <https://waukesha-water.com/wtc.html>.

 Toilets leaks tend to be invisible and can waste hundreds of gallons of water per day. To identify silent toilet leaks, put 8-10 drops of food coloring into the water in the tank and wait 20 minutes. If color appears in the bowl before flushing, your toilet has a leak.

 It is not necessary to water the lawn. It is natural for lawns to turn brown in the hottest months. The lawn doesn't die, it just goes dormant. The green lawn will return with the autumn rain; and when you don't water, you don't have to mow as often.

 Dripping faucets are usually easily and inexpensively repaired by replacing the washer inside the handle. Check both internal and external faucets for leaks. See our website for videos on how to fix leaks.

For more information, please visit our website at [www.waukesha-water.com](http://www.waukesha-water.com)

c. City's Park & Recreation Activity Guide:

The toilet and shower head rebate program was advertised in the City's Activity Guide. This Guide is on the City's website and is mailed out to approximately 30,000 homes three times a year.



The advertisement features the Waukesha Water Utility logo at the top, which consists of a stylized green 'W' with a water drop. Below the logo is the text 'Waukesha Water Utility Water Conservation Programs'. Three illustrations are shown: a toilet with money falling out, a showerhead with a cartoon character being sprayed, and a rain barrel. The main content is a list of three rebate programs, each with a bullet point, underlined title, and the amount received. The first program is 'Replace a Water Guzzling Toilet' for \$100. The second is 'Replace a Water Wasting Showerhead' for \$25. The third is 'Install a Rain Barrel' for \$20. Below the list is the 'Annual Sprinkling Ordinance' with specific timing rules for odd and even numbered addresses. At the bottom, it says 'See Details: www.waukesha-water.com'.

**Waukesha Water Utility**  
**Water Conservation Programs**

- **Replace a Water Guzzling Toilet**  
*Receive \$100*
- **Replace a Water Wasting Showerhead**  
*Receive \$25*
- **Install a Rain Barrel**  
*Receive \$20*

• **Annual Sprinkling Ordinance**  
(Before 9 am or After 5 pm)  
Odd Numbered Addresses – Tuesdays & Saturdays  
Even Numbered Addresses – Thursdays & Sundays

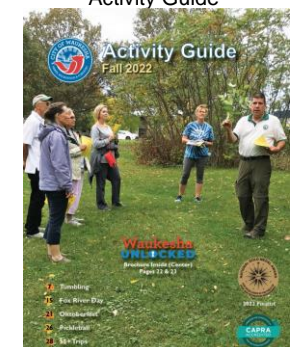
See Details: [www.waukesha-water.com](http://www.waukesha-water.com)



2022 Winter/Spring Activity Guide



2022 Summer Activity Guide



2022 Fall Activity Guide



Toilet, Showerhead, & Rain Barrel Rebate Ad in the City's Activity Guide

## 6. Irrigation System Ordinance Bill Insert

Bill inserts (as shown below) are sent out on an annual basis to all customer classes informing them of the Irrigation System Ordinance.

The first sentence of the postcard has the message that established lawns do not need to be watered. The Utility knows that some customers have sprinkler systems and are going to water their lawns; therefore, the Utility's Irrigation System Ordinance requires a WaterSense irrigation controller to help customers conserve water.

In addition to the bill insert, information regarding the Ordinance is also posted on the Utility's website.



**City of Waukesha's  
Irrigation System Ordinance**

Are you thinking about updating or installing a new sprinkling system? Check out Waukesha's Irrigation System Ordinance.

Homeowners and businesses can save between 30-50% on their summer water bills by following the Ordinance and installing an irrigation controller.

For more detailed information, please visit our website at:  
[www.waukesha-water.com/ord\\_codes.html](http://www.waukesha-water.com/ord_codes.html).

Irrigation System Ordinance Postcard

# WaterSense®



## 7. EPA's WaterSense National Fix a Leak Week

Waukesha Water Utility promoted Environmental Protection Agency (EPA) WaterSense's annual Fix a Leak Week with the following activities:

- The following message was added to the bills.

### Fix a Leak Week

Check your winter water bill. If you use 12,000 gallons or more per month, you may have a serious leak! Learn how to fix leaks at [www.waukesha-water/wtc.html](http://www.waukesha-water/wtc.html)."

- A press release
- Information on the home page of the Utility's website
- Social Media Post on the Utility's Twitter Account
- Classroom Materials on our website that teach students to check for toilet leaks.

The items, mentioned above, are shown on the following pages.

For Immediate Release

### Fix Leaks to Save Water and Money During National Fix a Leak Week

Waukesha, Wi – March 2022, Waukesha Water Utility encourages customers to check for leaks during this year’s national Fix a Leak Week. “Leaks can cost families a lot of money,” said Mary Adelmeyer, Customer Service Coordinator. “Toilet leaks tend to be invisible and are one of the most common leaks.”

When toilets leak, hundreds of gallons of water a day can be wasted without the homeowner’s knowledge. To identify silent toilet leaks, the Utility recommends doing a dye test - put 8-10 drops of food coloring into the tank and wait 20 minutes. If color appears in the bowl before flushing, there is a leak. Below is a diagram on how to do the dye test.



While testing your toilet for leaks, Adelmeyer suggests checking the age of your toilet. Replacing toilets installed 1993 or earlier, with a WaterSense-labeled toilet can save homeowners approximately 13,000 gallons of water per year and \$200 on water and wastewater bills. If you live in the city of Waukesha, you may also qualify for a \$100 toilet rebate and a \$25 shower head rebate.

In addition to testing the toilet for leaks, check for dripping faucets, showerheads, irrigation systems, spigots, and other fixtures. These types of leaks are often easy to fix, requiring only a few tools and hardware that can pay for themselves in water savings.

For more information about the toilet rebate, or finding and fixing leaks, visit the utility’s conservation page at [www.waukesha-water.com](http://www.waukesha-water.com).

Press Release for National Fix a Leak Week



Department Home

Customer Service ▾

New Water Supply Program ▾

Utility and Commission ▾

Conservation ▾



### **The great news about Great Lakes water.**

In June of 2016, the Great Lakes Compact unanimously approved Waukesha's application to borrow water through a pipeline from Lake Michigan, and then treat it and return it all to the lake via the Root River.

We pledge to keep everyone who may be affected fully informed, every step of the way. To that end, we developed [greatwateralliance.com](http://greatwateralliance.com), a website that will be the information hub for all things related to the project.

### **NEWS ROOM**

[National Fix a Leak Week](#)

**Pay Bill Online**

[Click Here](#)

Fix a Leak Week Information on the Utility's Website



WaukeshaWaterUtility Retweeted



**cityofwaukesha** @CityofWaukesha · Mar 17, 2022

...

It's #FixALeak Week. Toilet leaks tend to be invisible and are one of the most common leaks. Water Utility recommends doing a dye test to check for leaks (see picture).

If you need to replace your toilet/shower head, you could qualify for rebates: [waukesha-water.com/wtc.html](http://waukesha-water.com/wtc.html)

## Toilets are a Common Source of Leaks

Nearly 30% of an average home's indoor water consumption

| STEP 1               | STEP 2                                                                               | STEP 3                        | STEP 4                                                                                  |
|----------------------|--------------------------------------------------------------------------------------|-------------------------------|-----------------------------------------------------------------------------------------|
| Remove the tank lid. | Place 10 drops food coloring* inside tank.<br><small>*Red or green work best</small> | Replace lid and do not flush. | Check in 20 minutes. If the food coloring shows up in the toilet bowl, you have a leak. |

Social Media Post on Utility's Twitter Account

WaukeshaWaterUtility Retweeted



**EPA WaterSense** @EPAwatersense · Mar 17, 2022

One way to find out if you have a toilet leak is to place a drop of food coloring in the toilet tank. If the color shows up in the bowl within 10 minutes without flushing, you have a leak. Be sure to flush to avoid staining the tank. [#FixALeak](#) [#FlipYourFlapper](#)

**Test your toilet for leaks and**

**FLIP YOUR FLAPPER**



Does your toilet have a silent leak? Drop a few drops of food coloring or a dye tablet into your toilet's tank and wait 10 minutes. If the dye shows up in the bowl, you have a leak that can probably be fixed by replacing a worn toilet flapper. Don't forget to flush afterwards to remove any leftover dye.



Watch Flo show how easy it is to test for toilet leaks:  
[tinyurl.com/y22f6fjd](https://tinyurl.com/y22f6fjd)

Social Media Post on Utility's Twitter Account

WaukeshaWaterUtility Retweeted



**EPA WaterSense** @EPAwatersense · Mar 18, 2022

Don't forget to check your irrigation system for leaks! An irrigation system that has a leak 1/32nd of an inch in diameter can waste about 6,300 gallons of water per month. #FixALeak

**Spruce Up Your Sprinkler System**

**Inspect** sprinkler heads. A broken one can waste **25,000** gallons of water in six months!

**Connect** hoses and pipes well. A leak as small as the tip of a pen can waste **6,300** gallons of water per month!

**Select** a WaterSense® labeled irrigation controller and water smarter.

**Direct** spray on landscapes, not pavement!

epa.gov/watersense

Social Media Post on Utility's Twitter Account



WaukeshaWaterUtility @waukeshawater · Mar 17, 2022  
Measuring and finding leaks....



[waukesha-water.com/fml.html](http://waukesha-water.com/fml.html)

The screenshot shows the Waukesha Water Utility website. The header features the utility's logo and name, "Waukesha Water Utility Serving Waukesha Since 1886". Below the header is a navigation bar with five menu items: "Department Home", "Customer Service", "New Water Supply Program", "Utility and Commission", and "Conservation". The main content area is titled "Finding and Measuring Leaks" and includes a sidebar with links to various water audit tools. The main text discusses common toilet leaks and their consequences.

**Waukesha Water Utility**  
Serving Waukesha Since 1886

Department Home Customer Service New Water Supply Program Utility and Commission Conservation

What is a Water Audit?  
AWE Audit (Tool)  
AWWA Audit (Excel Tool)  
AWWA Drip Calculator (Tool)  
EPA WaterSense (Tool)  
Your Toilet

### Finding and Measuring Leaks

...but it's just a little leak ...

- A customer reported that every few hours his toilet seemed to flush itself. This was caused by the tank refilling after water leaked around the plunger ball. Our service people found the problem and the customer had it repaired quickly. Fortunately, the water bill for the leak was only \$89, but the water wasted was over 26,000 gallons.
- The Public Service Commission was contacted about a high water bill. A family was away on extended vacation when a toilet leak developed. The toilet leaked continuously for about 60 days. A 3/8" diameter line was feeding the toilet. Approximately 85,000 gallons leaked through the overflow and the bill was almost \$195.
- While paying a water and sewer bill of \$115 for 90 days use, a customer mentioned that the house rule to "rattle the handle" after a flush was a costly mistake. In this case, the plunger ball wasn't seating properly and one family member didn't always follow the rule. The toilet ran continuously for up to 4 hours on almost all school days. This went on for about 45 days. The water wasted was over 20,000 gallons.
- A customer said "I know the toilet was leaking, but it can't cost \$231 for 3 months!" Approximately 92,000 gallons were wasted.

Social Media Post on Utility's Twitter Account

WaukeshaWaterUtility Retweeted



**EPA WaterSense** @EPAwatersense · Mar 17, 2022

A toilet that leaks half a cup of water per minute wastes 48 gallons of water per day! Make sure to listen for silent leaks. Don't forget to "Check, Twist, and Replace" [epa.gov/watersense/fix...](https://epa.gov/watersense/fix...) #FixALeak



Social Media Post on Utility's Twitter Account

WaukeshaWaterUtility Retweeted



**EPA WaterSense** @EPAwatersense · Mar 16, 2022

...

A showerhead leaking at 10 drips per minute wastes more than 500 gallons per year. That's the amount of water it takes to wash 60 loads of dishes in your dishwasher. Turn on your showerhead and look for drips or stray sprays that can be stopped with tape. [#FixALeak](#)

**45**

**SHOWERHEAD**

**FIX A LEAK**

Shower leaks waste 500 gallons of water per year, enough water to wash 60 loads of dishes!

- CHECK** for leaks.
- TWIST** and tighten plumbing connections to stop drips.
- REPLACE** old or broken fixtures with WaterSense labeled models.

WaterSense  
epa.gov/watersense

Social Media Post on Utility's Twitter Account

WaukeshaWaterUtility Retweeted



**EPA WaterSense** @EPAwatersense · Mar 15, 2022

A leaky faucet dripping at the rate of 1 drip per second can waste nearly 3,200 gallons per year. Leaky faucets can be fixed by checking faucet washers and gaskets for wear and replacing them if needed. If you replace a faucet this #FixALeak Week, look for the WaterSense label.



Social Media Post on Utility's Twitter Account

WaukeshaWaterUtility Retweeted



**EPA WaterSense** @EPAwatersense · Mar 15, 2022

For #FixALeak Week, check for signs of moisture or mold on your walls, ceilings, or floors. This could indicate that a pipe is wreaking havoc behind the scenes and requires the attention of a professional.



Social Media Post on Utility's Twitter Account





## Fix a Leak Week: Student Worksheet

Name: \_\_\_\_\_

### Save Water & Money

According to the Environmental Protection Agency (EPA) WaterSense partnership program, "an American home can waste on average, more than 10,000 gallons of water every year due to running toilets, dripping faucets, and other household leaks." That can cost your family a lot of money. That is why Waukesha Water Utility encourages you to use water wisely and check your home for leaks, during this year's national Fix a Leak Week. Try the activities and math problems on both sides of this sheet to see how fast water waste adds up.

### Little Leaks Waste Big Amounts of Water

| SIZE OF LEAK<br>(Diameter) | WATER WASTED<br>EACH QUARTER<br>(Assuming 60 lbs of pressure) |
|----------------------------|---------------------------------------------------------------|
| • 1/32" drip               | 18,500 gallons                                                |
| • 1/16" trickle            | 74,000 gallons                                                |
| ● 1/8" stream              | 296,000 gallons                                               |
| ● 1/4" stream              | 1,181,500 gallons                                             |

#### **Toilet Leaks:**

Toilet leaks are one of the most common leaks. Toilet leaks tend to be invisible. Hundreds of gallons of water a day can be wasted on toilet leaks. The sound of water running in a toilet tank signals costly leakage. For this reason, it is recommended that toilets be checked for leaks at least twice each year.

#### **Activity #1: Test All Your Toilets for Leaks, with the help of your parent.**

Checking a toilet for leaks is easy!

Take lid off the back of the toilet tank.

Put ONE of the attached leak detection tablets into the tank of the toilet.

Do NOT flush the toilet.

Wait for 20 minutes.

If you have another toilet, test that toilet for leaks too by repeating the directions above.

If colored water from the dye tab appears in the bowl within 20 minutes, you have a leak.

Make sure to flush the colored water as soon as the 20 minutes is up, otherwise the coloring may stain.

(Please continue on to page 2 →)

P:\Conservation\Fix a Leak Week\Student Activity Worksheet

**Activity #2: Record your Data & Calculate How Many Gallons of Water Your Toilet Uses**

- How many toilets do you have? \_\_\_\_\_ Did you test all your toilets for leaks? \_\_\_\_\_
- Does your toilet leak? (Did the dye color appear in the bowl?)  

|  |           |           |
|--|-----------|-----------|
|  | _____     | _____     |
|  | Toilet #1 | Toilet #2 |
- How old is your toilet? (The year of the toilet can be found on the underside of the tank lid. The date of the manufacture is often stamped into the porcelain.)  

|  |       |       |
|--|-------|-------|
|  | _____ | _____ |
|  | Year  | Year  |
- What is the size, make, and model of the toilet? (this information may be found in the toilet tank or under the tank lid.)

Toilet #1 \_\_\_\_\_  

|      |      |       |
|------|------|-------|
| Size | Make | Model |
|------|------|-------|

Toilet #2 \_\_\_\_\_  

|      |      |       |
|------|------|-------|
| Size | Make | Model |
|------|------|-------|

- Using a ruler on the outside of the toilet tank, measure the water level (Be sure to measure in feet – answers maybe recorded with decimals or fractions.)

Toilet #1 \_\_\_\_\_  

|             |            |                  |
|-------------|------------|------------------|
| Tank Length | Tank Width | Side Water Depth |
|-------------|------------|------------------|

Toilet #2 \_\_\_\_\_  

|             |            |                  |
|-------------|------------|------------------|
| Tank Length | Tank Width | Side Water Depth |
|-------------|------------|------------------|

- Calculate how many cubic feet of water is in the tank. (Multiply Length x Width x Depth)  

|  |               |               |
|--|---------------|---------------|
|  | _____ cu. ft. | _____ cu. ft. |
|  | Toilet #1     | Toilet #2     |
- Calculate how many gallons of water your toilet uses for every flush. (Multiply the cubic feet x 7.47 = Gallons per Flush)  

|  |             |             |
|--|-------------|-------------|
|  | _____ gals. | _____ gals. |
|  | Toilet #1   | Toilet #2   |



**\$100 Toilet Rebate**



- Is your toilet a pre-1994 toilet? (Look at your answer in #3)  

|  |           |           |
|--|-----------|-----------|
|  | _____     | _____     |
|  | Toilet #1 | Toilet #2 |
- Does your toilet use 3.5 gallons/flush or more? (Look at your answer in #7)  

|  |           |           |
|--|-----------|-----------|
|  | _____     | _____     |
|  | Toilet #1 | Toilet #2 |
- Does your family get a water bill from Waukesha Water Utility? \_\_\_\_\_  
 (Ask your parents)
- If you answered yes to #8, #9, and #10, your family could be eligible to get up to \$100 per toilet for replacing their old water guzzling toilet. Is your family eligible?  

|  |           |           |
|--|-----------|-----------|
|  | _____     | _____     |
|  | Toilet #1 | Toilet #2 |
- Have you told your parents about this \$100 toilet rebate? \_\_\_\_\_

If your family is eligible, the old toilet needs to be replaced with a WaterSense 1.28 gpf toilet. Your parents can call the Waukesha Water Utility at (262) 521-5272 or visit our website for more information at [www.ci.waukesha.wi.us/waterhome](http://www.ci.waukesha.wi.us/waterhome).

\_\_\_\_\_  
 Parent Signature

\_\_\_\_\_  
 Date



## **8. National Drinking Water Week**

May 1st-7th, 2022, was National Drinking Water Week. In honor of this week, the Utility had a press release that talked about the importance of protecting/conserving water.

The press release mentioned the Mayoral Proclamation for National Drinking Water Week and reminded customers about the water conservation programs and incentives that are available through the Utility. The press release was in the Waukesha Freeman and posted on the Utility's website.

The Mayoral Proclamation was read at the Common Council meeting and included on the City's social media and on the City's electronic newsletter.

Copies of these items are shown on the following pages.



**Waukesha Water Utility**

SERVING WAUKESHA SINCE 1886

115 DELAFIELD STREET  
WAUKESHA, WI 53188-3615

Telephone: (262) 521-5272 • Fax: (262) 521-5265 • E-mail: [contactus@waukesha-water.com](mailto:contactus@waukesha-water.com)



### **Water Conservation Rebates, Incentive Program, & National Drinking Water Week**

**Waukesha, WI** – As Mayor Shawn Reilly commemorates National Drinking Water Week with a Mayoral Proclamation, Waukesha Water reminds customers about the residential water conservation rebates and the incentive program for businesses.

Waukesha Water Utility encourages water conservation with \$100 WaterSense toilet rebates and \$25 WaterSense showerhead rebates. Residents who replace their 1993 or older toilet with a 1.28 gpf (gallon per flush) WaterSense toilet, can save approximately 9,000-11,000 gallons of water per year. Replacing a 1992 or older showerhead can save approximately 2,900 gallons of water per year, and approximately 300 kwh of electricity annually.

The Utility also has \$20 rebates for rain barrels. Harvesting rainwater is easy and a great way to conserve water. A 50-60 gallon rain barrel, which connects to a downspout to capture rain water, can collect a surprising amount of water: 1/10<sup>th</sup> of an inch of rain falling on a 1,000 square foot rooftop can fill a 50-gallon barrel. That's 50 free gallons of naturally soft, chlorine-free water, which is great for watering your flowers and plants, washing off your boots, washing the car or bike, or any other outdoor activities.

In addition to the residential rebates, the Utility has an incentive program for businesses to replace equipment with new technology to save water. For organizations to be eligible for an incentive, a *Water Conservation Incentive Application* must be submitted to the Utility; and businesses must receive approval for the project before new technology is ordered. Waukesha Water will assess the projects to determine if the project is eligible for an incentive.

Drinking Water Week is the perfect time to remind customers about the rebates and incentive program, a time when we celebrate water and remind everyone of the importance of protecting and conserving this valuable resource. To read the Mayoral Proclamation, or for more information about the rebates and the incentive program, visit the Utility's website at [www.waukesha-water.com](http://www.waukesha-water.com) or call (262) 521-5272.

Press Release Regarding National Drinking Water Week



**Office of the Mayor**  
201 Delafield Street  
Waukesha, Wisconsin 53188-3646

**Shawn N. Reilly**  
[sreilly@waukesha-wi.gov](mailto:sreilly@waukesha-wi.gov)  
1-262-524-3700

## **National Drinking Water Week PROCLAMATION**

**WHEREAS**, water is one of our most important natural resources; and

**WHEREAS**, each citizen and business in our City has a responsibility to protect and conserve water; and

**WHEREAS**, the Waukesha Water Utility has encouraged and will continue to encourage businesses to conserve water; and

**WHEREAS**, the Waukesha Water Utility offers grant money to businesses that replace equipment with new technology that saves water; and

**WHEREAS**, the Waukesha Water Utility encourages and provides \$100 rebates to residents to replace all pre-1994 toilets with 1.28 gpf WaterSense toilets, as well as, \$25 WaterSense showerhead rebates, and \$20 rain barrel rebates; and

**WHEREAS**, all citizens and businesses are urged to comply with all sprinkling and irrigation system ordinances; and

**WHEREAS**, we are all stewards of our water resources and infrastructure so that future generations will also have clean sustainable water; and

**WHEREAS**, Waukesha is over halfway through construction of the historic Great Water Alliance project for Lake Michigan water, ensuring that our drinking water supply will be sustainable and reliable for generations to come;

**NOW THEREFORE**, I, Shawn Reilly, Mayor of the City of Waukesha, proclaim May 1<sup>st</sup> to May 7<sup>th</sup>, 2022 as

### **NATIONAL DRINKING WATER WEEK**

And ask that we recognize the essential role that drinking water plays in our daily lives.

Signed this 3<sup>rd</sup> day of May, 2022

## 9. Tips on How to Prevent Water Pipes from Freezing & Breaking

Broken water pipes waste a lot of water. To prevent pipes from freezing and breaking, the Utility puts the annual press release in the Waukesha Freeman and on the Utility's website. Due to the timing of the cold weather, the Utility published the press release twice – once in January 2022 and once in December 2022. The press release is shown below.

### For Immediate Release

### Waukesha Water Utility

# Press Release

Contact:  
115 Delafield Street  
Waukesha, WI 53188  
Phone 262-409-4423  
Fax 262-521-5265

### Prevent Freezing Pipes

Waukesha, WI, - January 5, 2022 Cold weather and wind chills means we can expect frozen water pipes and water damage if exposed areas aren't properly insulated or we aren't careful about winter heating. Here are some problem areas, warning signals and tips to minimize the chance of freezing water pipes.

#### **PROBLEM AREAS**

- Pipes near broken or open basement windows
- Unheated crawl spaces and equipment rooms
- Pipes near the foundation or cracks in the basement wall
- Pipes near exterior wall in unheated room
- Inadequate heating in un-insulated or uncovered outside pit
- Pipes under kitchen sinks or cupboards

#### **WARNING SIGNS OF FREEZE**

- Unusually cold water temperature (less than 35° F) at any fixture
- Unusually low water flow at a fixture
- Discolored water at a fixture
- Low water pressure at a fixture
- Extremely cold piping at a fixture
- Sputtering sound when opening a fixture

#### **THAWING FROZEN PIPES**

- It's safest to use hot air from a hair dryer or exhaust from a vacuum cleaner
- Use heat tape, but with caution, and unplug when finished

#### **PREVENTION**

- Check water temperature and run a little water if unusually cold
- Shut off and drain outside water faucets before freezing occurs
- Run small amounts of water from highest faucet until full flow returns
- Insulate walls near exposed piping
- Repair cold air leaks to reduce drafts on piping and meter

#### **CAUTION**

- To prevent fires, never thaw with an open flame or torch
- Be careful if pipe is cracked, it will spray water into electrical appliances when thawed
- Check and clear drains to prevent basement flooding in case of pipe burst
- Know where the main shut-off valve is located so you can turn it off quickly in case a pipe bursts

If you need additional information, please contact the Customer Service Department of the Waukesha Water Utility at (262) 521-5272.



## **B. Community Presentations & Public Outreach Events**

In 2022, the following community presentations and public outreach events took place:

1. Milwaukee School of Engineering (MSOE)
2. Local Government Academy
3. Elm Grove Kiwanis
4. Waukesha Parks and Recreation Brown Bag Conservations
5. Woods Edge Condominium Association Presentation

The detailed information pertaining to this year's presentations and outreach events follows.



1. **Milwaukee School of Engineering (MSOE)**

In January of 2022, the Facilities Planning Class at the Milwaukee School of Engineering had Dan Duchniak provide a presentation on the Great Lakes Water program in the City of Waukesha.

Dan presented information about the background of the City of Waukesha's water issues and the need for a new long-term safe and sustainable water supply for the City of Waukesha. Dan talked about Waukesha's depleted aquifer and water quality issues.

Dan also talked about the discharge techniques. He informed the audience that after Waukesha uses the water, 100 percent of the water would be treated and returned to Lake Michigan. Dan explained that we would return the water via the Root River; and talked about the sustainability and environmental benefits.





## Waukesha Local Government Academy

### 2. Local Government Academy

Local Government Academy is a class offered by UW Madison – Waukesha Campus which provides a hands-on opportunity for residents to learn more about city operations and services, widen community relationships, develop leadership skills, and identify opportunities to apply leadership skills in the community and with city government.

In September 2022, Dan Duchniak presented information on the overall organization of the water utility and its operations. The talk included the city's effort to comply with the radium standards by developing a new long term sustainable water supply.

This included a discussion on the water supply alternatives reviewed, the Great Lakes application process, the water conservation program, and the new infrastructure that has to be built to bring Lake Michigan water to Waukesha (which includes the pipelines, a booster pumping station, reservoirs, and a new water tower). <https://www.waukeshacounty.gov/UWEX/CRD/WLGA/>



### 3. Elm Grove Kiwanis

The Elm Grove Kiwanis Club is a group of people interested in various topics throughout the area. They have been following the City of Waukesha water supply issue throughout the entire process.

In October 2022, Dan Duchniak gave an update on the project and the ongoing construction of the project. The talk included an overview of the water supply alternatives reviewed, the approval process, and the water conservation program. He also talked about the engineering and design of the project and finally an update of the construction to date.





#### 4. City of Waukesha's Park and Recreation Brown Bag Conversations

In November 2022, Dan Duchniak presented to the Waukesha Parks and Recreation's Brown Bag Conversations, which mainly focused on senior residents.

The talk focused on the history of the water issue in the City of Waukesha, the solutions investigated, the approval process, the water conservation program, the design of the project, and finally the implementation of the solution.

##### **Brown Bag Conversations**

Everyone is welcome! Don't miss the opportunity to learn more about our community! Join us for informal interactive discussions with local officials, business leaders and organization directors in a relaxed environment. Bring your lunch (coffee will be provided), your thoughts, questions and ideas.

If you have a suggestion for a future conversationalist please submit your written ideas to the Senior Advisory Board, 1900 Aviation Dr., Waukesha, WI 53188

**November 16 – DAN DUCHNIAK – City of Waukesha Water Utility**

| AGE | DAY/DATES        | TIME         | R/NR FEE |
|-----|------------------|--------------|----------|
| 55+ | Third Wednesdays | Noon-1:00 pm | No Fee   |

**Rotary Building** NOTE: No fee or registration required.

**Mark your calendars for more upcoming Brown Bag Conversations:**

**December 21 – SANTA CLAUS is coming to town!**

**Seniors on the *Go***



## 5. **Woods Edge Condominium Association**

The Woods Edge Condominium development is located within Waukesha's water service area. The Condominium Association requested information related to the City of Waukesha implementing a new water supply.

In November 2022, Dan Duchniak provided a presentation to the residents of the Woods Edge Condominium Association. The presentation focused on the new water supply. He talked about topics related to alternative analysis, approval process, water conservation efforts, construction schedules and billing information.

## **C. Water Education with the Youth – Tomorrow’s Future**

Waukesha Water Utility plans for the future by educating our youth.



### **1. Waukesha School District’s 5<sup>th</sup> Graders**

For 31 years, Waukesha Water Utility has partnered with the Waukesha School District to provide water education to all 5<sup>th</sup> graders. In 2020 and 2021, there were no water education classes due to the pandemic. In 2022, the Clean Water Plant (CWP), formerly known as Waukesha Waste Water Treatment Plant, joined this partnership.

As part of their Environmental & Science Curriculum, the students study the natural cycles of water and the human impact on our water resources. Students get a tour of the treatment plant, they participate in a hands-on water filtering activity, and receive a presentation on the following topics:

- the water cycle
- where their water comes from
- how their water is treated and distributed
- the quality and quantity of the water, a limited resource
- conservation methods that use water resources in a sustainable manner
- the costs of municipal water, and its value compared to bottled water
- where the water goes after its used
- how the water gets cleaned/treated at the CWP
- how the water is returned to its natural source

The students also explore the natural cycles of water by spending a day in the Fox River Sanctuary investigating the chemical and biological components of the river and marsh.



## 2. Waukesha County Boy Scouts

For 9 years, the Waukesha Water Utility has partnered with the Waukesha County Boy Scouts, to help the boys earn their Soil and Water Conservation Merit Badge. In 2021, this event was cancelled due to the pandemic. In 2022, the Clean Water Plant (CWP), formerly known as Waukesha Wastewater Treatment Plant, joined this partnership.

According to the Boy Scouts of America (BSA), in order to earn this badge, the boys need to learn “about the natural resources on which our lives depend, so that we can help make sure that these resources are used intelligently and cared for properly.”

The water portion requirements of the badge program, as stated in their *Soil & Water Conservation Merit Badge Series* BSA No. 610016, require the boys to learn the about the following topics:

- What is a watershed, what is an aquifer
- Draw the hydrologic cycle
- What are common sources of water pollution and explain the effects
- What is meant by “primary water treatment,” “secondary waste treatment,” and “biochemical oxygen demand.”
- Draw the principles of a complete wastewater treatment
- Write a report of more than 500 words about soil and water and energy conservation practices.

The Utility’s and CWP presentation covered all the required water topics.

## D. Partnerships

Waukesha Water Utility has many partnerships. Below are some of the partnerships that, in some way, have already been referenced throughout the report.



**VII. WATER LOSSES AND ACCOUNTED FOR WATER**

Per NR 852.04 and PSC 185 the Utility performs and documents water use audits on a monthly basis. A summary of 2022 is as follows. Data is entered into the format below.

| <b>Data Input</b> |                                  | 2022 Total           |
|-------------------|----------------------------------|----------------------|
|                   | Sales - Metered                  | 1,684,066,715        |
|                   | Sales - Est. Consumption         | 0                    |
|                   |                                  |                      |
|                   | Plant                            | 184,400              |
|                   | Water Analyzer Water Flow (9)    | 793,920              |
|                   | Filter Back wash                 |                      |
|                   | # 3                              | 3,851,000            |
|                   | # 8                              | 4,088,000            |
|                   | # 10                             | 3,850,000            |
|                   | Flushing                         |                      |
|                   | Mains                            | 66,000               |
|                   | Services                         | 0                    |
|                   |                                  |                      |
|                   | Main Breaks                      | 2,174,000            |
|                   | Morgan Ave                       | 0                    |
|                   | Service Breaks                   | 681,750              |
|                   | Filling Mains / New Construction | 663,000              |
|                   | Fire (524-3647)                  | 227,200              |
|                   |                                  |                      |
|                   | Misc: Specify                    |                      |
|                   | Cleaned Saylesville Reserv       | 0                    |
|                   | Well #10 Filter Rehab            | 0                    |
|                   | Eliminate 16" valve on North St  | 0                    |
|                   | Hydrant Repairs                  | 36,500               |
|                   | Hydrant Replacement              | 18,000               |
|                   | Hydrant Surveys                  | 19,000               |
|                   | Valve replacements (2)           | 25,500               |
|                   | Fire Flow Test                   | 57,220               |
|                   |                                  |                      |
|                   | Leakage & Overflows at Towers    | 620,620              |
|                   |                                  |                      |
|                   | <b>Total Pumped</b>              | <b>1,881,326,000</b> |

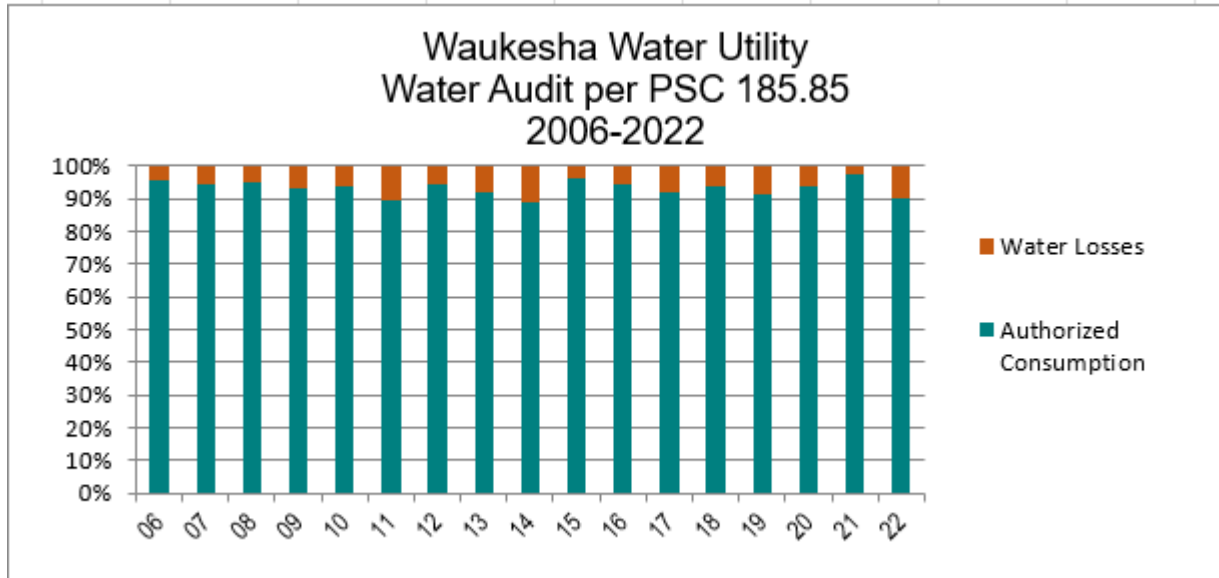


Then the raw data is converted into the Water Balance categories specified in PSC 185.

| <b>Water Balance</b>   |                               | 2022 Total    |
|------------------------|-------------------------------|---------------|
|                        | System Input Volume =         | 1,881,326,000 |
|                        | Authorized Consumption =      | 1,697,946,455 |
|                        | Water Losses =                | 183,379,545   |
|                        |                               | 1,881,326,000 |
|                        | Authorized - Billed =         | 1,684,066,715 |
|                        | Authorized - UnBilled =       | 13,879,740    |
|                        | Losses - Apparent =           | 179,903,175   |
|                        | Losses - Real =               | 3,476,370     |
|                        |                               | 1,881,326,000 |
| Authorized Consumption | Billed & Metered              | 1,684,066,715 |
|                        | Billed & UnMetered            | 0             |
|                        | UnBilled & Metered            | 12,833,320    |
|                        | UnBilled & UnMetered          | 1,046,420     |
| Water Losses           | Unauthorized Consumption      | 179,903,175   |
|                        | Meter Inaccuracies            |               |
|                        | Data Handling Errors          |               |
|                        | Main Breaks                   | 2,174,000     |
|                        | Leakage & Overflows at Towers | 620,620       |
|                        | Service Breaks                | 681,750       |
|                        |                               | 1,881,326,000 |
|                        | Revenue Water =               | 1,684,066,715 |
|                        | Non Revenue Water =           | 197,259,285   |
|                        |                               | 1,881,326,000 |

The summary, above, indicates that in 2022, 9.7% of the Utility's water was lost. This loss is less than the 15% that has historically triggered a comprehensive survey and corrective action plan.

The stability of the statistics over the last sixteen years and the data itself is indicative of a diligently maintained distribution system. (The Utility reformatted its data from 2006 forward so that its display is consistent with the 2012 requirements.) Accounted for Water ranges between 88.8% and 97.6%.



The results are achieved because the Utility routinely repairs and replaces water services, hydrants and valves. In 2015, the Utility initiated Hydrant Leak Surveys as part of its semi-annual flushing program.

In 2022, the Utility staff surveyed 950 hydrants. Any hydrants that were found to be leaking were repaired immediately.

In addition, the Utility replaced 9,953 feet of water main in 2022 compared to 8,393 feet in 2021. AWWA's 1% replacement goal represents roughly 17,600 feet.

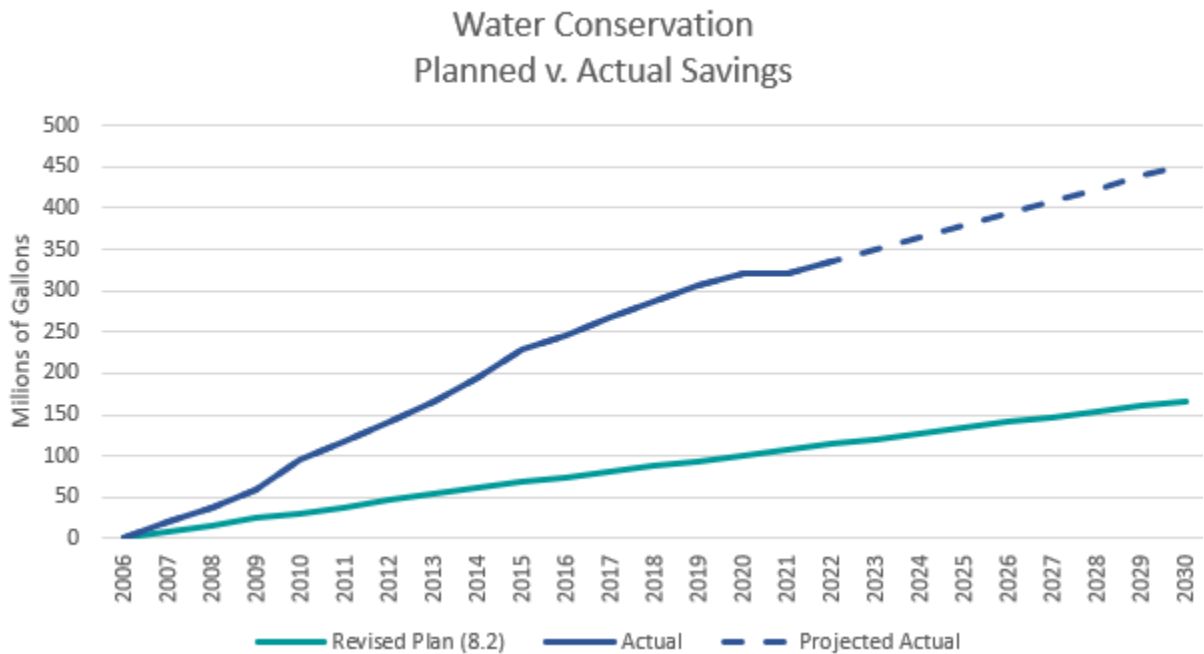
## VIII. CONCLUSION

| Year           | MILLIONS OF GALLONS |                 |       |     |     |     |      |      |      |      |      |       | Peak Day                                          | Notes |
|----------------|---------------------|-----------------|-------|-----|-----|-----|------|------|------|------|------|-------|---------------------------------------------------|-------|
|                | Annual Pumpage      | Avg Day Pumpage | < 7.8 | 7.8 | 8.8 | 9.0 | 10.0 | 11.0 | 12.0 | >7.8 | >8.8 |       |                                                   |       |
|                |                     |                 |       | to  | to  | to  | to   | to   | to   |      |      |       |                                                   |       |
| Number of Days |                     |                 |       |     |     |     |      |      |      |      |      |       |                                                   |       |
| 2022           | 1,881,926           | 5,156           | 364   | 1   | -   | -   | -    | -    | -    | 1    | -    | 7.91  |                                                   |       |
| 2021           | 1,923,146           | 5,269           | 362   | 3   | -   | -   | -    | -    | -    | 3    | -    | 8.35  |                                                   |       |
| 2020           | 1,933,288           | 5,282           | 365   | 1   | -   | -   | -    | -    | -    | 1    | -    | 8.14  |                                                   |       |
| 2019           | 2,039,436           | 5,587           | 365   | -   | -   | -   | -    | -    | -    | -    | -    | 7.72  |                                                   |       |
| 2018           | 2,068,522           | 5,667           | 362   | 3   | -   | -   | -    | -    | -    | 3    | -    | 8.50  |                                                   |       |
| 2017           | 2,128,111           | 5,830           | 365   | -   | -   | -   | -    | -    | -    | -    | -    | 7.55  |                                                   |       |
| 2016           | 2,172,548           | 5,952           | 362   | 3   | -   | -   | -    | -    | -    | 3    | -    | 8.17  |                                                   |       |
| 2015           | 2,218,214           | 6,077           | 358   | 7   | -   | -   | -    | -    | -    | 7    | -    | 8.72  | Mild summer temperatures                          |       |
| 2014           | 2,314,582           | 6,341           | 340   | 21  | 2   | 1   | 1    | -    | -    | 25   | 4    | 10.14 | Feb 6th Water Runs                                |       |
| 2013           | 2,348,955           | 6,435           | 346   | 15  | 2   | 2   | -    | -    | -    | 19   | 4    | 9.06  |                                                   |       |
| 2012           | 2,536,368           | 6,930           | 297   | 38  | 3   | 22  | 6    | -    | -    | 69   | 31   | 10.77 | Drought Year                                      |       |
| 2011           | 2,545,099           | 6,973           | 318   | 44  | 1   | 2   | -    | -    | -    | 47   | 3    | 9.22  |                                                   |       |
| 2010           | 2,441,221           | 6,688           | 342   | 23  | -   | -   | -    | -    | -    | 23   | -    | 8.65  | Fairly Rainy Summer                               |       |
| 2009           | 2,479,905           | 6,794           | 330   | 32  | 2   | 1   | -    | -    | -    | 35   | 3    | 9.35  | 2nd set inclining rates blocks - June             |       |
| 2008           | 2,528,933           | 6,910           | 328   | 30  | 6   | 2   | -    | -    | -    | 38   | 8    | 9.93  | Spring Flooding                                   |       |
| 2007           | 2,618,641           | 7,174           | 292   | 51  | 8   | 14  | -    | -    | -    | 73   | 22   | 9.79  | Inclining rate blocks - June; Dry year except Aug |       |
| 2006           | 2,622,418           | 7,185           | 294   | 61  | 1   | 8   | 1    | -    | -    | 71   | 10   | 10.23 | Rainy Year; Sprinkling ordinance in effect        |       |

The data, above, shows the combined effect of our conservation programs. Over time:

- Total water pumped has steadily declined
- Average day pumpage has steadily declined
- The number of days where >7.8 million gallons needed to be pumped has decreased from a high of 140 in 2005 to a low of 0 in 2017 and 2019.

As previously reported, based on the Version 4 AWE Tool, Waukesha Water Utility has exceeded its 2050 (the complete development/buildout) goal.



Going forward, per the 2022 Plan Update recommendation, the WWU will continue to maintain its conservation program (because water conservation savings can erode as water-using fixtures and equipment age, and customers' behaviors can change).

Furthermore, with Waukesha transitioning to a Lake Michigan water source in late summer 2023, the reduction in water softener use, as well as planned water rate increases, water use patterns are expected to change. Therefore, it is recommended that the conservation plan be reviewed in about 5 years.