

## **Public Service Commission of Wisconsin Report on Water Conservation Programs**

Utility Name: Madison Water Utility – 3280

Report Date: April 22, 2010

Report Period: 01/01/2009-12/31/2009

Report Frequency: Annual

Billing Frequency: Semiannual

Person Submitting Report: Robin G Piper, Finance/Accounting Manager

### **Background**

The Commission ordered Madison Water Utility to file a report no later than April 1 of each year, beginning on April 1, 2010, that includes a description of its water conservation and efficiency programs, expenditures by program, the balance of its conservation program account, estimated water savings achieved, and progress toward meeting its conservation goals. The report shall include an analysis of Madison Water Utility's toilet rebate program, including:

- a. effectiveness at reducing water use;
- b. procedures for verifying that rebated toilets were properly installed;
- c. efforts to work with existing energy efficiency retrofit programs; and
- d. the number, location, and total dollar amount of rebates offered by customer class.

## **PART II – REBATES, INCENTIVES, AND CONSERVATION EXPENSES**

### **Conservation Program Budget and Expenses**

Madison Water Utility is submitting a separate report titled "TOILET REBATE PROGRAM – FINANCIAL REPORT" for the year ended 12/31/2009. This is the same report that has been presented monthly to the Water Utility Board of the Madison Water Utility. The Public Service Commission of Wisconsin authorized a Toilet Rebate Program in its rate order dated December 22, 2008. The effective date of the rate increase was January 12, 2009. Madison Water Utility bills semi-annually and began the pro-ration of its rate increase with the April 1, 2009 billing. The new rates were fully implemented with the September 1, 2009 billing. The Utility estimated revenues for the Toilet Rebate Program based on the pro-ration of the new rates. Madison Water Utility began offering rebates for toilets purchased and replaced after January 1, 2009.

## **Rebate and Incentive Programs**

The Madison Water Utility is offering rebates of up to \$100 for residential customers who replace their high water using toilets with EPA WaterSense-rated High Efficiency Toilet (HET) models. The program is part of the utility's Water Conservation and Sustainability Plan (submitted for Commission approval with our last application to increase rates) to reduce per capita water usage 20 percent by the year 2020, with the goal of protecting the quality and quantity of the deep-well aquifer that supplies the Madison area. Toilets eligible for rebate must be HETs (which use an average of 1.28 gallons per flush) and must be on the Environmental Protection Agency's (EPA) WaterSense list. Any toilet that meets the criteria and is purchased after January 1, 2009, will be eligible. Rebates will be in the form of checks sent to the customer's residence of record; the check amount will not exceed the purchase price of the toilet. Participants in the program must be residential customers of the Madison Water Utility, and the installation address must be in the customer service area of the utility. Qualified customers are those who live in single-family homes, condos, or apartments in buildings no larger than four units. Rebates are for replacement of existing larger-capacity toilets, and are not for new construction. Rebates are first-come, first-served, until funding is exhausted. The program is for only one rebate per household. Madison Water Utility estimates that 10,381,803 gallons of water were saved in 2009 as a result of 1,742 toilets being replaced and rebated.

The Madison Water Utility has a plan in place to verify that the rebated toilets were properly installed. We currently record toilet rebate information in a database as well as in our customer information system. While the utility verified very few actual toilet installations in 2009, the plan is to inspect toilet installations during the time of meter change outs. If an address that is having its meter changed out shows that the address was rebated for a HET installation, we will ask the meter installer to verify that the toilet has been properly installed at that address.

## **Other Water Conservation Measures**

The Madison Water Utility continues with its public education campaign through radio advertisements, annual drinking water report, bill inserts, our website, and outdoor advertising. In 2009 the utility began replacing toilets in its facilities with high efficiency toilets. The utility in conjunction with the city engineering department has worked to scrutinize water use by other city departments and the Community Development Authority. Please note that the other city departments along with the University of Wisconsin constitute the Public Authority classification and their customer numbers remain constant, but usage is down 32%. The City of Madison has incorporated water conservation as one of its goals through its Natural Step Program.

## PART III – OTHER INFORMATION

### Water Sales Trends

Total Water Sales for Period 01/01/2006 – 12/31/2009 – in thousands of gallons

Customer Class	2006 Year 1	2007 Year 2	2008 Year 3	2009 Year 4	Percentage Change
Residential	3,431,289	3,424,132	3,276,816	3,196,427	-6.84%
Industrial	843,688	807,576	753,572	836,623	-0.84%
Commercial	4,090,317	4,094,272	3,962,569	3,872,377	-5.33%
Public Authority	1,872,212	1,637,478	1,485,966	1,245,445	-33.48%
Total Sales	10,237,506	9,963,458	9,478,923	9,150,872	-10.61%

Average Number of Customers for Period 01/01/2006 – 12/31/2009[

Customer Class	2006 Year 1	2007 Year 2	2008 Year 3	2009 Year 4	Percentage Change
Residential	55,270	55,730	56,033	56,244	1.76%
Industrial	56	53	53	53	-5.36%
Commercial	8,680	8,755	8,783	8,870	2.19%
Public Authority	478	482	481	481	0.63%
Total Customers	64,484	65,020	65,350	65,648	1.81%

### Water Loss and Unaccounted For Water

In an effort to reduce water wasted due to toilet leaks, water softener malfunctions, etc. we perform a consumption comparison for each customer prior to regular cycle billing. If the current use appears to be abnormal we send a letter (see attachment) prior to billing, informing the customer of the high use. Most all customers immediately make repairs and put an end to wasting water. In 2009 49 million gallons of water were estimated to have been wasted prior to repairs being made.

### Summary/Conclusions

The Madison Water Utility has seen a sharp reduction in the amount of water that it has pumped. We pumped 550,000,000 fewer gallons of water in 2009 than was pumped in 2008. While a small portion of the reduction can be traced to High Efficiency Toilet replacements, we feel that the educational aspect of toilet replacements is helping to remind our customers to conserve water. Even those customers that haven't replaced toilets are reminded that conservation is good for the aquifer.



LEGISTAR NO. \_\_\_\_\_

**TOILET REBATE PROGRAM – FINANCIAL REPORT**

**as of December 31, 2009**

	<b>Monthly Numbers</b>	<b>Monthly Amount</b>	<b>Total Number</b>	<b>Total Amount</b>	<b>Monthly Admin Costs</b>	<b>Total Admin Costs</b>	<b>Total Revenue</b>
January	73	\$7,257.04	73	\$7,257.04	\$905.74	\$905.74	\$ 0.00
February	161	\$15,998.70	234	\$23,255.74	\$20,982.24	\$21,887.98	\$5,000.00
March	149	\$14,825.01	383	\$38,080.75	\$3,337.76	\$25,225.74	\$10,000.00
April	143	\$14,269.13	526	\$52,349.88	\$1,293.84	\$26,519.58	\$18,333.33
May	128	\$12,792.84	654	\$65,142.72	\$896.00	\$27,415.58	\$30,000.00
June	229	\$22,900.00	883	\$88,042.72	\$1,603.00	\$29,018.58	\$45,000.00
July	158	\$15,800.00	1,041	\$103,842.72	\$1,106.00	\$30,124.58	\$63,333.33
August	125	\$12,500.00	1,166	\$116,342.72	\$875.00	\$30,999.58	\$85,000.00
September	168	\$16,800.00	1,334	\$133,142.72	\$1,176.00	\$32,175.58	\$110,000.00
October	198	\$19,787.15	1,532	\$152,929.87	\$1,386.00	\$33,561.58	\$135,000.00
November	85	\$8,500.00	1,617	\$161,429.87	\$595.00	\$34,156.58	\$160,000.00
December	107	\$10,700.00	1,724	\$172,129.87	\$749.00	\$34,905.58	\$185,000.00

**Estimated Water Savings through December 31, 2009 = 10,381,803 gallons of water.**