



2012-2013 ANNUAL REPORT

MADISON WATER UTILITY

WINNER, "BEST TASTING WATER IN WISCONSIN" AT THE 2013 WWA STATE FAIR COMPETITION

Table of Contents

INTRODUCTION	3
Purpose	3
Mission Statement	3
History of the Madison Water Utility	3
Water Utility Board Governance	3
Water Utility Board Members	5
Water Utility Senior Leadership Team.....	5
PROJECTS.....	7
Major Projects.....	7
Infrastructure Renewal	7
Project H ₂ O.....	8
Completed Projects.....	9
Well 15 VOC Mitigation.....	9
Current and Upcoming Projects.....	10
Well 7 Iron and Manganese Mitigation.....	10
Booster Pump Station 106 Reconstruction	11
Well 31 (formerly known as Zone 4 Water Supply Augmentation)	11
Lakeview Reservoir Reconstruction	12
Paterson Street Operations Center Reconstruction	13
WATER QUALITY	15
Annual Water Quality Report	15
Water Quality Technical Advisory Committee.....	15
Water Main Flushing.....	15
Unregulated and Emerging Contaminants	16
Source Water Protection	16
Private Well Abandonment.....	17
Madison Kipp Corp. Contamination Investigation and Well 8.....	18
EDUCATION & OUTREACH.....	19
Water Wagon.....	19
Social Media and “Inside MWU”	19
Tapping Teams.....	20
WATER SUPPLY & OPERATIONS.....	21
Pumpage	21
Service Interruptions	23
Service Applications	24
SUSTAINABILITY.....	25
Water Conservation.....	25
Conservation and Sustainability Plan.....	25

Toilet Rebate Program	26
Energy Conservation Research Project	26
FINANCES	27
2012 Financial Highlights	27
Rates	27
Cost of Service and Debt.....	28
Cost of Service.....	28
Long-Term Debt	29
ADDITIONAL RESOURCES	31

INTRODUCTION

Purpose

Section 13.01(3) of the Madison General Ordinances establishes the duty of the Madison Water Utility Board to “issue an annual report that shall be made available to the Common Council.”

Mission Statement

We are entrusted by the people of Madison to supply high quality water for consumption and fire protection at a reasonable cost, while conserving and protecting our ground water resources for present and future generations.

History of the Madison Water Utility

Madison’s community water service began in 1880 with a petition to the City of Madison Common Council asking that a waterworks system be constructed. Madison’s population was 10,324. The Common Council directed its waterworks committee to establish the Madison Waterworks on September 5, 1881. Financing was obtained and contracts let in spring of 1882, and pumping commenced on December 7, 1882.

Early management was vested in the Common Council through its committee, and on March 2, 1884, general management was transferred to the Board of Water Commissioners. This Board of Water Commissioners arrangement continues today. The Madison Waterworks achieved department status in the early 1960s and became the Madison Water Utility (MWU) under a General Manager leadership. In common with other Wisconsin water utilities, the Public Service Commission of Wisconsin regulates the utility in matters of rates, rules and levels of service.

MWU has always been a groundwater system in spite of being surrounded by lakes. A deep, high-quality aquifer beneath the city is the source of our water supply. MWU currently has 22 active deep wells with a pumping capacity of over 65 million gallons per day, and now provides water service to over 66,000 accounts.

Water Utility Board Governance

The [Water Utility Board](#) is described by state statute and city ordinance. It is made up of seven voting members and the Director of Public Health (or his/her designee) as an ex officio member. The board is charged with authority for managing and operating MWU under the general direction of the Common Council. The Mayor appoints and the Common Council confirms board members for terms of five years for citizen members (with staggered appointment dates) and two years for alder members. The Director of Public Health's appointment is ongoing.

The purpose of the board, on behalf of the residents of Madison, is to ensure that MWU:

- provides consumers with an adequate quantity of high quality water for consumption and fire protection at a reasonable financial and environmental cost; and
- manages groundwater resources and the water delivery system to ensure present and future generations of city residents benefit from this excellent source of water.

The Water Utility Board has adopted a [Policy Book](#), which includes policies that define the benefits MWU provides to the residents of Madison, establish financial and ethical boundaries, and describe how the board carries out its own tasks.

The board generally meets on the fourth Tuesday of every month. The City of Madison's [Legislative Information Center](#) includes a list of meeting dates and archived agendas, minutes, and links to audio recordings of meetings.

Water Utility Board Members

OFFICERS

- *President:* Madeline Gotkowitz
Hydrogeologist, Wisconsin Geological and Natural History Survey
- *Vice President:* Bruce Mayer
Accountant, Wegner LLP
- *Secretary:* Larry Nelson, P.E.
Retired, City Engineer

ALDER BOARD MEMBERS

- Lauren Cnare, District 3
- Anita Weier, District 18

CITIZEN BOARD MEMBERS

- P. Michael DePue, P.E.
Civil Engineer and Certified Floodplain Manager
- Patrick Delmore, Ph.D.
Assistant Professor, Edgewood College School of Education

PUBLIC HEALTH APPOINTMENT (EX OFFICIO MEMBER)

- Doug Voegeli
Director of Environmental Health, Public Health of Madison and Dane County

Water Utility Senior Leadership Team

- Tom Heikkinen, General Manager
- Al Larson, Principal Engineer
- Joe DeMorett, Water Supply Manager
- Joseph Grande, Water Quality Manager
- Dan Rodefled, Operations Manager
- Michael Krentz, Financial Manager
- Robin Piper, Customer Service Manager
- Amy Barrilleaux, Public Information Officer

PROJECTS

Major Projects

Infrastructure Renewal



REBUILDING AND RENEWING

Out of sight -- and often out of mind -- is a vast network of pipes, wells, and pump stations stretching from one end of the city to the other. Even though much of it is hidden beneath our streets and sidewalks, Madison's water infrastructure plays a crucial role in our city's public health, safety and economic well-being.

Nearly half of our water mains—some 400 miles of pipe—are deteriorating and in need of replacement. At a cost of about \$1 million per mile, replacing water mains is a significant and growing expense. However, a failure to take care of this infrastructure now would lead to potential exposure from lack of fire protection and increased main breaks, disruptions in service, and significant and costly roadway damage. It will take 40 years of focused, deliberate planning and action to replace those 400 miles of deteriorating pipeline.

During 2012, MWU replaced 4.7 miles of water main and built 3 miles of new main. In 2013, 5.1 miles of main were replaced and 3.5 miles of main were added. In accordance with industry best practices, old pipe is replaced with modern cement-lined ductile iron pipe, wrapped with plastic sheeting to protect against corrosion. Today's pipe installations are expected to last 100+ years.

In some cases, it is possible to avoid digging up the old pipe and save money by creating a new pipe within the old one using emerging trenchless structural lining methods. MWU was the first water utility in Wisconsin to use this technology. In 2012, MWU rehabilitated approximately half a mile of 6-inch water main on Major Avenue using structural cured-in-place pipe (CIPP) lining technology. In 2013, this technology was also used to rehabilitate water mains on Lake Mendota Drive, West Badger Road, and West Mifflin Street.

Project H₂O



MWU has nearly completed [Project H₂O](#), the upgrade to a wireless technology network that reads and transmits water consumption on a daily basis. By the end of 2013, more than 65,000 new metering systems had been installed in homes and businesses across Madison.

The benefits of the new metering system include:

- Customers will be able to track their own daily consumption online.
- Allows MWU to transition to monthly billing.
- Identification of costly residential water leaks and alerts to customers - hundreds have already been alerted.
- Eliminates the need for a water meter reader to visit each premise. This also diminishes the risk of employee injuries due to vehicle accidents and falls in snow, ice, and other adverse conditions.
- Provides an energy efficient, accurate, and cost effective way for MWU to read water meters.
- Helps the utility operate the entire system more efficiently with accurate consumption data.

Completed Projects

Well 15 VOC Mitigation

[Well 15](#) operates year-round and serves the East Washington corridor including Westchester Gardens, Mayfair Park, Bluff Acres, Carpenter-Ridgeway, Eken Park, and Emerson East neighborhoods. Well 15 also serves the High Crossing area located east of Interstate 90/94. This well has shown increasing concentrations of a single volatile organic compound tetrachloroethylene (PCE).

A low-profile air stripper was installed at the well site to remove VOCs. It is housed in an addition to the building that was built over the existing buried reservoir. MWU worked closely with a Citizen Advisory Panel and held 2 public meetings and 8 CAP meetings on this project. Construction was completed in June 2013, and water quality testing confirms that the air stripper is very effective at removing PCE.



WELL 15 WITH NEW ADDITION TO HOUSE THE VOC AIR STRIPPER

Current and Upcoming Projects

MWU invites citizens to become active in the development of Water Utility projects through participation on a [Citizen's Advisory Panel](#) (CAP). Through this participatory process, citizens provide valuable input and feedback and help produce high quality projects that meet and exceed public expectations.

Well 7 Iron and Manganese Mitigation

Drilled in 1939, [Well 7](#) operates year-round and primarily serves the Village of Maple Bluff, Sherman Avenue neighborhoods south of Almo Avenue/Sheridan Street and west of Packers Avenue, and areas of the isthmus between Livingston Street and the Yahara River. Following the East Side Water Supply Project, it was recommended that iron and manganese filters be constructed at Well 7.

Due to the age and condition of the existing facility, MWU will be demolishing the structure and completely replacing the facility. To accomplish this, the two residences adjacent to the property were acquired. Construction is expected to begin in spring of 2014 and will take about a year.



ARCHITECTURAL RENDERING OF THE NEW WELL 7 FACILITY

Booster Pump Station 106 Reconstruction

[Booster Pumping Station 106](#) (BPS-106) is an interzone transfer pumping station located on Madison's near west side in the sloped embankment of Reservoir Park. The primary function of BPS-106 is to transfer water from Madison's main pressure zone (PZ 6, central Madison) into the City's southwest pressure zone (PZ 7, west side, southwest side). This pumping facility has been operating since 1926, making it Madison Water Utility's oldest operating facility.

The BPS-106 reconstruction project addresses both condition/deterioration problems and will increase the reliability of this critical system facility. Construction began in September of 2013 and is expected to be completed in May of 2014.



EXISTING FACILITY



ARCHITECTURAL RENDERING OF RECONSTRUCTED FACILITY

Well 31 (formerly known as Zone 4 Water Supply Augmentation)

The purpose of [drilling a new well in Zone 4](#) is to supplement supply in the southeast part of the city to improve fire fighting capacity and system reliability. A site on Tradewinds Parkway has been selected, and the well was drilled at the end of 2013. The facility will be designed in 2014, and construction will begin in 2015.

Lakeview Reservoir Reconstruction

[Lake View Reservoir](#) provides water storage and fire protection to a large portion of the Lake View Hill Neighborhood. This reservoir is undersized and has reached the end of its useful life. MWU proposes to construct a larger reservoir, as well as utilize the site to improve water storage for the remainder of the city's north and east side.

Construction of the new water tower is expected to begin in June of 2014 and be completed by the end of the year. The tower would then be painted during the summer of 2015.



LAKEVIEW RESERVOIR

Paterson Street Operations Center Reconstruction

MWU currently operates out of two facilities: the Heim Building at 119 East Olin Avenue and the Operations Center at 110 S. Paterson St. The Operations Center dispatches service vehicles, houses heavy equipment and spare parts, and provides workshop areas for maintenance of vehicles and equipment. The existing facility is undersized and does not meet work needs with regard to functionality, employee health and safety, and work flow. It is critical to address these deficiencies in order to increase efficiency and provide a safe working environment for all employees. Construction is planned to begin in late 2014 and will take approximately a year.



CURRENT OPERATIONS CENTER FACILITY AT 110 S. PATERSON ST.

WATER QUALITY

Madison drinking water meets all primary (health-based) drinking water standards. The water utility website allows customers to find out [which wells serve their address](#) and to receive detailed water quality information for each well. The Water Utility Board places the highest expectation on MWU to provide water of excellent quality. Federal and state drinking water standards are subject to revision as new compounds of concern are identified. This dynamic is a result of technology improvements and ongoing health and environmental studies.

Annual Water Quality Report

The [Annual Water Quality Report](#) for 2012 was issued May 13, 2013. For the first time, MWU distributed this report largely online rather than mailing the full report to every water customer. Postcards were sent to customers letting them know where to find the report online or how to request a paper copy.

Switching from paper to electronic delivery saved 2.8 tons of paper, 7.24 pounds of ink, and \$6,452 in production and postage (a 22.8% savings over the prior year). In addition to the dollar savings, electronic distribution lowered the water footprint of the report by 5,600-16,800 gallons and the energy footprint by 22 gallons of gasoline or 240 kWh of electricity (estimated water and energy used to produce 2.8 tons of paper).

Water Quality Technical Advisory Committee

MWU established a Water Quality Technical Advisory Committee (WQTAC) in 2008 to provide a forum for discussion of complex and technical issues with local experts. The WQTAC meets eight times a year and includes volunteers with expertise in water chemistry, water treatment, microbiology, hydrogeology, and environmental toxicology.

Water Main Flushing

To improve water quality and minimize discoloration, water mains are [comprehensively flushed](#) by a technique known as [unidirectional](#) flushing. The procedure is performed in warm-weather months and involves the systematic opening and closing of distribution system valves and hydrants, one section of main at a time, to force the water through the pipes at high velocity, removing accumulated mineral sediment until the water is clear.

In 2012, 356 miles of water main were flushed unidirectionally and 385 miles of main were flushed conventionally. Due to dry weather conditions and the resulting increase in water demand, all routine flushing was suspended from June 26 to August 13, 2012. In 2013, 409 miles of water main were flushed unidirectionally and 481 miles were flushed conventionally.

Flushing operations may lead to temporary low pressure and discolored water, which can be drawn into nearby homes and businesses if the water is being used during or immediately following the flushing. Such events should affect customers for a few hours at most. The discoloration is caused by iron (red color) or manganese (black color) particles being dislodged from the water main. If discoloration occurs, customers should open the cold tap nearest the water meter—usually a basement sink—to full flow until the water runs clear. In some situations this may take 5 to 10 minutes. If discoloration continues, customers should contact Water Quality at (608) 266-4654.

Unregulated and Emerging Contaminants

Every five years, the [EPA](#) identifies substances that are suspected to be present in drinking water but do not have health-based standards set under the Safe Drinking Water Act. Testing for the third Unregulated Contaminant Monitoring Rule (UCMR3) will occur during 2013-2015.

MWU voluntarily conducted pre-screening sampling at some wells in December 2012. Twenty-two contaminants, including seven hormones, were not detected at any of the wells tested. Cobalt, 1,1-dichloroethane, 1,4-dioxane, and strontium were found at trace levels at some wells. Madison will be required to sample all of its wells twice during 2015.

Source Water Protection

Protecting our groundwater resources requires the combined efforts of many entities including MWU, regulatory agencies, and individual customers and businesses. Potential sources of groundwater contamination include:

- Hazardous chemical spills and leaks.
- Improper use and disposal of chemicals, including fertilizers and pesticides.
- Unused or improperly abandoned private wells.

MWU's [Wellhead Protection Program](#) identifies land areas that contribute groundwater to our drinking water wells as well as potential contamination sources. City of Madison ordinances allow the restriction of future land uses within these zones in order to reduce the risk of water supply contamination.

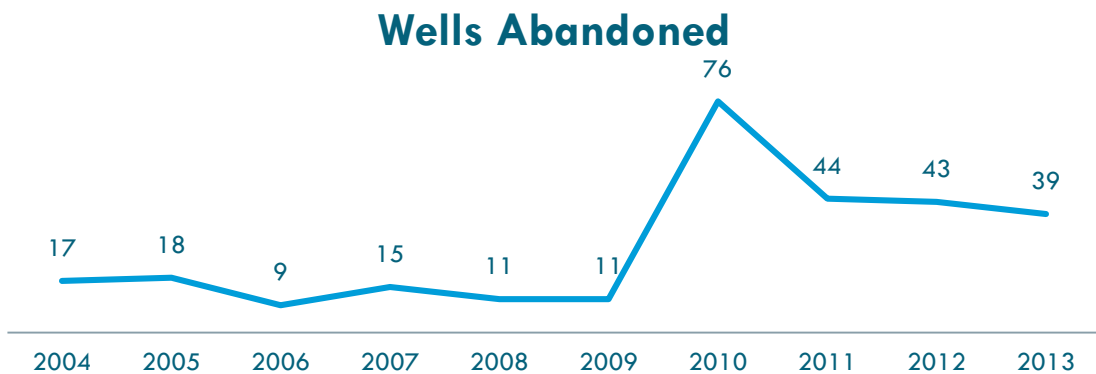
Private Well Abandonment

Unused and improperly abandoned wells pose a significant threat to water quality because they can present a direct pathway for surface contaminants to reach our groundwater supply. This threat is especially serious when unabandoned wells are located within the vicinity of a municipal well.



EXAMPLE OF AN UNABANDONED PRIVATE WELL FOUND IN MADISON

In 2010, the City of Madison initiated the [Well Abandonment Reimbursement Program](#) to encourage property owners to properly abandon private wells. In addition, MWU began conducting comprehensive external and internal surveys within our wellhead protection areas to identify improperly abandoned private wells. These efforts have resulted in the abandonment of over 200 wells in the City of Madison since 2010.



Madison Kipp Corp. Contamination Investigation and Well 8

Madison-Kipp Corporation (MKC) has operated in the city since 1902 as a producer of precision parts for automobiles and other vehicles. Until 1989, chlorinated degreasing solvents were used at their property at 201 Waubesa St., resulting in contamination of soil and groundwater. Monitoring at the MKC facility shows the presence of a plume of tetrachloroethylene (PCE)-contaminated groundwater. The Wisconsin Department of Natural Resources (WDNR) is overseeing the investigation and cleanup effort. More information is available on the [WDNR website](#).

[Well 8](#) is located less than 2,000 feet to the southeast of the MKC property. Neither PCE nor its immediate breakdown product trichloroethylene (TCE) has been detected at Well 8. The well is only operated during the summer months because of high levels of naturally occurring iron and manganese, which are not harmful but cause potential discolored water and staining. In 2012, Well 8 pumped only 11 million gallons of water between July and September. In 2013, water from the well was never put into the city's water distribution system the well was turned on over the summer and placed in standby mode to ensure an adequate water supply would be available in the event of a major fire or other supply emergency in the area.

Well 8 is an essential part of the water supply system. Long-term plans for Well 8 include the installation of an iron and manganese filter so it can be used year round. However, MWU is carefully monitoring the location and possible movement of the groundwater contamination plume at Madison Kipp before beginning that project. The seasonal use of Well 8 will also take on critical importance during the summer of 2014, when Well 7 will be offline for a filter installation. If there is a drought or mechanical failure at another well, Well 8 will be crucial for meeting the water and fire needs on Madison's east side.

EDUCATION & OUTREACH

Water Wagon

Madison's one and only [Water Wagon](#) is truly an original. It was designed and built by MWU staff to provide clean, cool, and refreshing Madison water at outdoor events. It made its debut at the 2012 Ride the Drive Downtown and has been quenching thirsts ever since. In 2013, it made more than 50 appearances at 26 separate events across Madison! It was also the winner of the Wisconsin Water Association's 2013 Gimmicks & Gadgets Award.



WATER WAGON AT THE DOWNTOWN FARMERS MARKET, SUMMER 2013

Social Media and "Inside MWU"

In 2013, MWU implemented several new communications tools to provide customers with new ways to obtain information and interact with their water utility. Customers can now follow MWU on [Facebook](#) and [Twitter](#). In addition, a new webpage, [Inside MWU](#) has been launched and includes articles on a variety of topics, from the history of the utility to the graywater experiment at our administration building.

Tapping Teams

Tapping competitions feature water utility teams racing against the clock and each other to tap a copper line into a gushing cast iron water main. This simulates a process used to connect homes to the water mains running under the street.



MAD CITY TAPPERS DEMONSTRATION IN DOWNTOWN MADISON, APRIL 2013

MWU has [two tapping teams](#): The Mad City Tappers and Wisconsin's first ever women's team, the Mad Women on Tap. Both teams qualified for the national competition at the American Waterworks Association Annual Conference, which will be held in Boston, Massachusetts in June 2014.

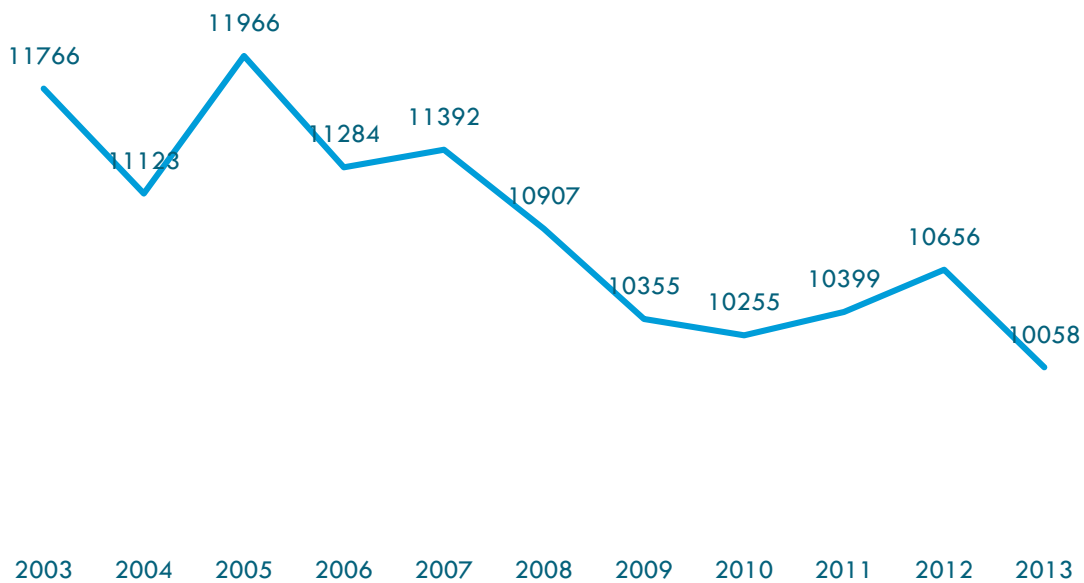
WATER SUPPLY & OPERATIONS

Pumpage

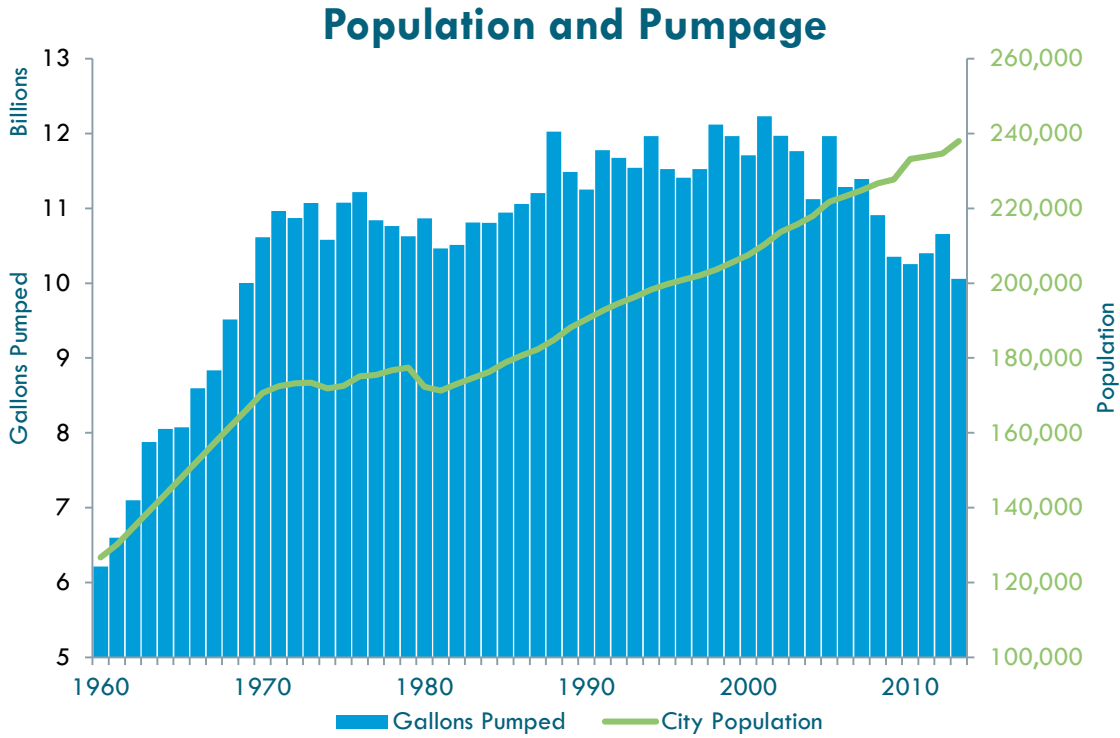
In 2012, MWU pumped 10,656,235,000 gallons, a 2.5% increase over 2011. Average daily pumpage was 29.1 million gallons and the maximum day was 49 million gallons. Dry conditions during the summer of 2012 caused a significant increase in water demand. MWU was able to meet the increase in demand by using all of its seasonal wells and encouraging customer best practices to limit outdoor watering and use water wisely. In addition, there were no mechanical or equipment failures during the drought.

In 2013, MWU has pumped 10,057,545 gallons, a 5.6% decrease over the previous year.

Annual Pumpage in Million Gallons

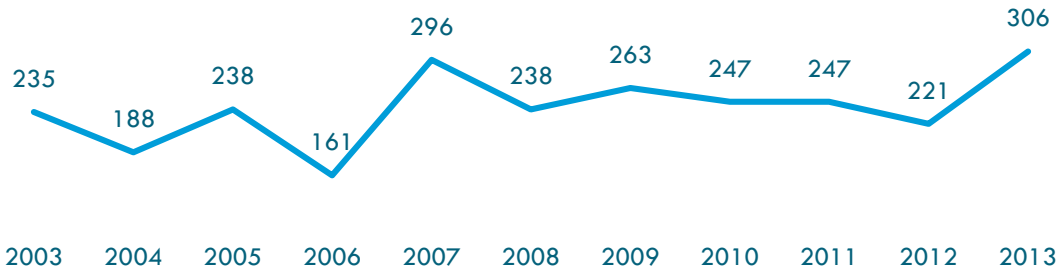


As is illustrated in the graph below, pumpage has generally been declining over the last ten years even as the City of Madison’s population has grown. This is consistent with a national trend of net declines in water use per household. Though a variety of factors contribute to declining use including wetter weather, changes in household sizes and types, conservation efforts, and price increases, the primary cause appears to be the proliferation of low-flow toilets, fixtures, and appliances in homes over the past 20 years.



Service Interruptions

There were 306 service interruptions due to water main breaks in 2013, the highest number of main breaks in a year since MWU began keeping records in 1980. Main breaks are due to an aging piping system and are difficult to control and impossible to predict. Winter weather is also a factor as the ground freezes and thaws. The spike in 2013 was likely due to extreme weather in January, February, and December.



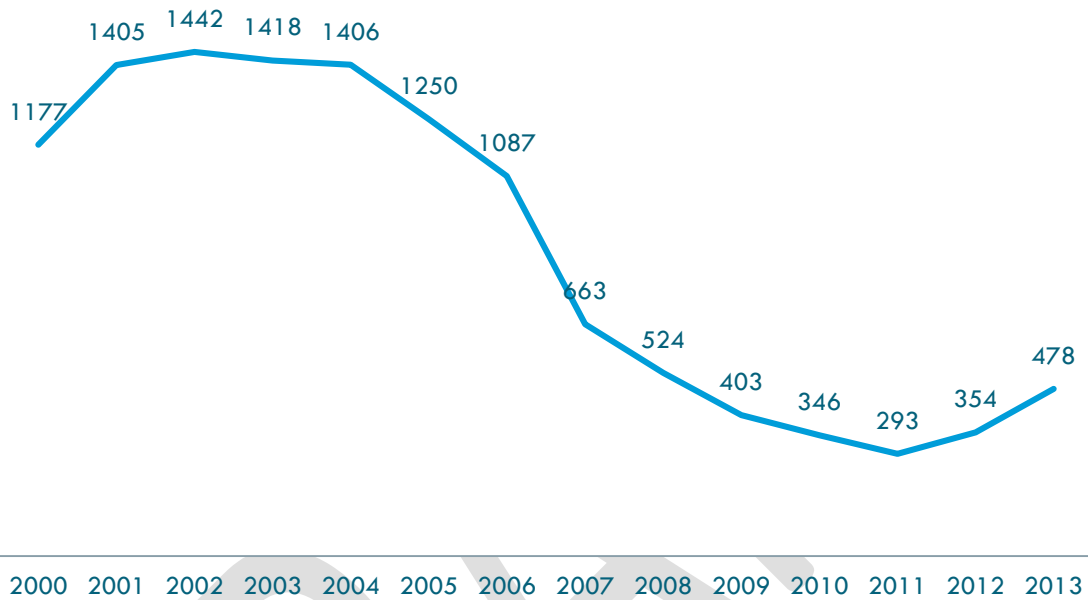
Over the past ten years, MWU has experienced an average of 240 main breaks per year. This calculates to an average of 29 breaks per year per 100 miles of distribution system pipe. Madison Water Utility is undertaking the aggressive goal of replacing or relining more than half our water mains as part of our [infrastructure renewal program](#). As pipe is replaced, the risk of main breaks is reduced.



MWU CREW REPAIRING A WATER MAIN BREAK ON BUCKEYE ROAD

Service Applications

In 2012, the utility received 354 new applications for service, compared with 293 new applications received in 2011. This was the first year over year increase since a record number of new applications (1,442) was received in 2002. In 2013, 478 service applications were received.



SUSTAINABILITY

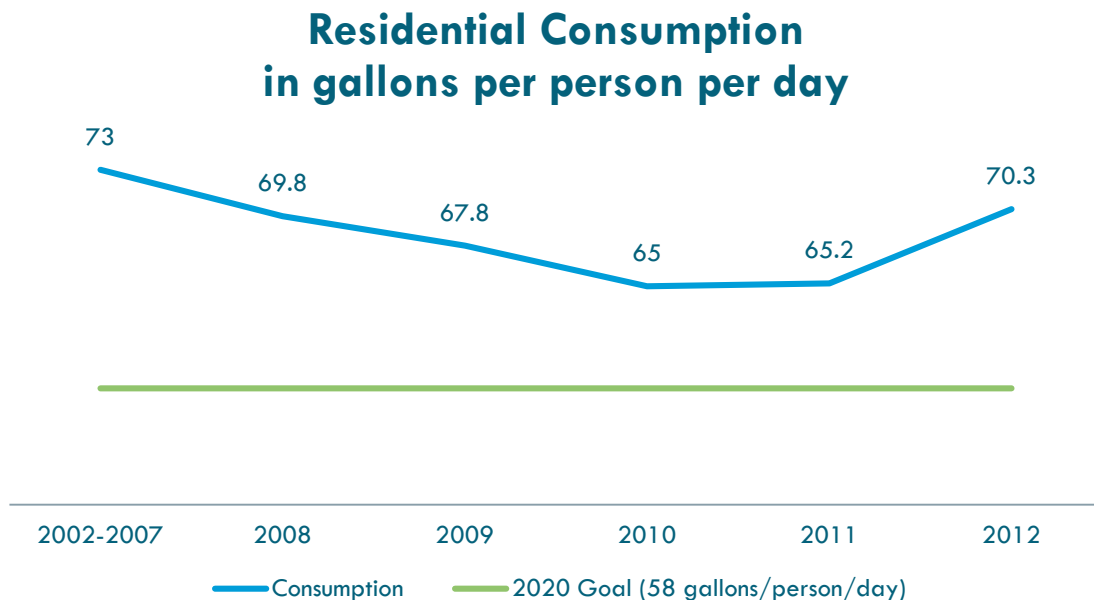
Water Conservation

It may seem counterintuitive for a utility that sells water to plan for conservation, but a sustainable rate of pumpage must be maintained to ensure clean and abundant water supplies for future customers. The Water Utility Board works closely with the General Manager on several fronts to ensure MWU's financial viability and that complementary efforts meet conservation goals.

Additional benefits of water conservation include improved water quality, a reduced burden on surface water quality as less wastewater is generated, and reduced greenhouse gas emissions as less energy is spent pumping water.

Conservation and Sustainability Plan

In 2008, MWU developed the [Water Utility Water Conservation and Sustainability Plan](#) which established conservation goals and suggested actions that could be taken by MWU, the city, and its residents and businesses to reduce our impact on water resources. MWU's conservation goal is to maintain groundwater pumping at a sustainable level while reducing residential per capita water use by 20% before the year 2020.



Toilet Rebate Program

Toilets account for nearly 30 percent of residential indoor water consumption, and older toilets are a major source of wasted water due to leaks and inefficiency. In 2009, MWU established a [toilet rebate program](#) which offers rebates of up to \$100 to residential customers who replace existing toilets with EPA WaterSense-rated models. The program was expanded in 2010 to include apartment buildings. Over 10,000 toilets have been replaced through this program, resulting in water savings of approximately 289 million gallons citywide since 2009.

Energy Conservation Research Project

Pumping water hundreds of feet up out of the ground and maintaining sufficient pressure in the system requires a great deal of energy. In 2012, 29 million kilowatt hours of energy were used for pumping and other utility operations. Through MWU's graduate research program, a UW-Madison Engineering Graduate Student completed a study on energy use. The goal of the study was to identify best practices for evaluating facility performance, developing maintenance projects, and keeping pumps operating at peak efficiency. This research will ultimately help MWU reduce its energy use.

FINANCES

2012 Financial Highlights

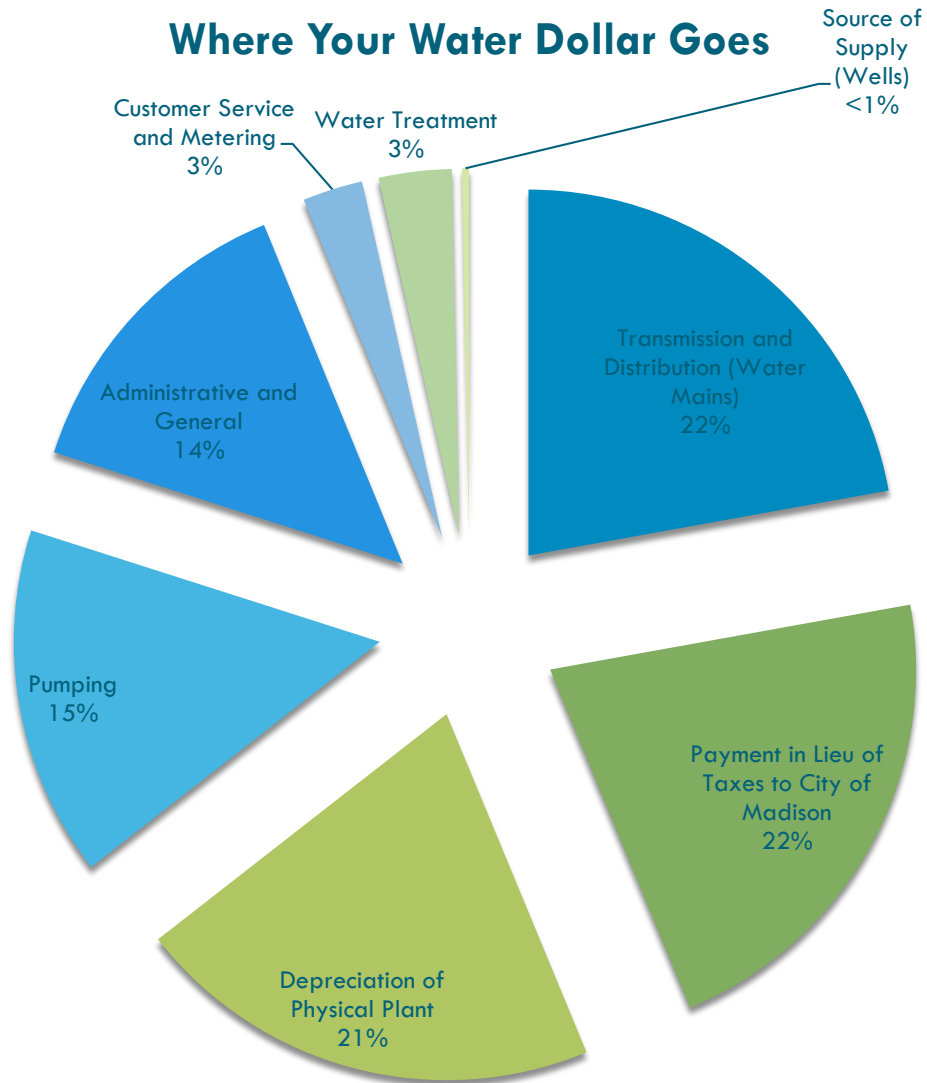
- **Operating revenues increased** \$1.846 million or 6.57% from 2011. The higher revenues were due to a 9% rate increase effective May 3, 2011, that was fully included beginning with the January 1, 2012 customer bills, as well as the high heat and drought conditions that increased the demand for water during the summer of 2012.
- **Operating income increased** \$2.73 million or 31.39% from the prior year. The increase was due primarily to the increase in operating revenue and lower operation, maintenance and taxes expense.
- **Payment in Lieu of Taxes (PILOT)** by MWU to the City of Madison **increased** \$497,000 or 11% to \$5.017 million in 2012 from \$4.52 million in 2011. This is primarily due to MWU's ongoing investment in its water system infrastructure.
- **Cash and investments decreased** to \$2.67 million in 2012 from \$4.422 million in 2011. This is because the city chose to receive its 2012 PILOT payment from the utility in 2012. The 2011 PILOT payment was also made in 2012.

Rates

MWU has not increased rates since May 3, 2011, when a 9% rate increase was granted by the Public Service Commission. The average 6 month residential bill (water only, 29,500 gallons used) is \$109.90, which is \$18.32 per month. This does not include sewer, stormwater, and other charges on the Municipal Services bill. Comparatively, MWU's rates are below the median for utilities classified as AB (over 4,000 customers) in Wisconsin.

Cost of Service and Debt

Cost of Service



Operation and maintenance expenses totaled \$13.70 million in 2012 compared to \$14.861 million in 2011, a decrease of \$1.152 million or 7.75%. This was due to fewer water main and service breaks during the mild winter and spring of 2012, decreased employee pension and health insurance benefits expenses due primarily to the enactment of Wisconsin Legislative Act 10, and a \$122,000 decrease in well maintenance expense.

Interest and amortization expense was \$4.325 million in 2012, compared with \$3.853 million in 2011, an increase of \$472,000 or 12.25% due to increased borrowing.

Long-Term Debt

Date	Purpose	Final Maturity	Interest Rates	Original Amount	12/31/12 Amount Outstanding
REVENUE BONDS					
12/01/07	Refunding debt and system improvements	1/01/28	4.00-4.75%	\$27,185,000	\$22,755,000
12/09/09	Refunding debt and system improvements	1/01/30	2.00-5.00%	\$48,540,000	\$45,540,000
11/10/10	System improvements	1/01/31	0.90-5.25%	\$13,250,000	\$12,750,000
12/22/11	System improvements	1/01/32	2.00-4.00%	\$19,370,000	\$19,370,000
12/19/12	System improvements	1/01/33	2.00-4.00%	\$21,095,000	\$21,095,000
Totals				\$129,440,000	\$121,510,000
ADVANCE FROM MUNICIPALITY					
10/19/10	Payoff unfunded pension liability	10/01/24	3.41%	\$1,404,052	\$1,291,229
1/01/08	Advance from City, Burke Utility District #1	n/a	1.20%	\$393,762	\$428,481
LOAN FROM MUNICIPALITY					
2005	Advance from City of Madison	n/a	1.20%	\$4,573,000	\$5,355,000

On August 4, 2005, the Common Council approved a loan from the City of Madison to MWU to be used as financing with interest charged monthly at 0.25% higher than the monthly rate earned through the city's investment pool. No formal schedule for repayment has been established, but MWU is making payments of \$765,000 a year plus interest.

ADDITIONAL RESOURCES

- [Inside MWU](#)
- [Project News](#)
- [2012 Drinking Water Quality Annual Report](#)
- [2012 Annual Report to the Public Service Commission of Wisconsin](#)
- [2012 Madison Water Utility Financial Statements](#)

DRAFT