

CITY OF CHICAGO  
DEPARTMENT OF WATER MANAGEMENT



# 2013 MID-YEAR REPORT TO SUBURBAN CUSTOMERS

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RAHM EMANUEL, MAYOR



THOMAS H. POWERS, P.E., COMMISSIONER  
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CHICAGO, IL 60611

# DEPARTMENT OF WATER MANAGEMENT

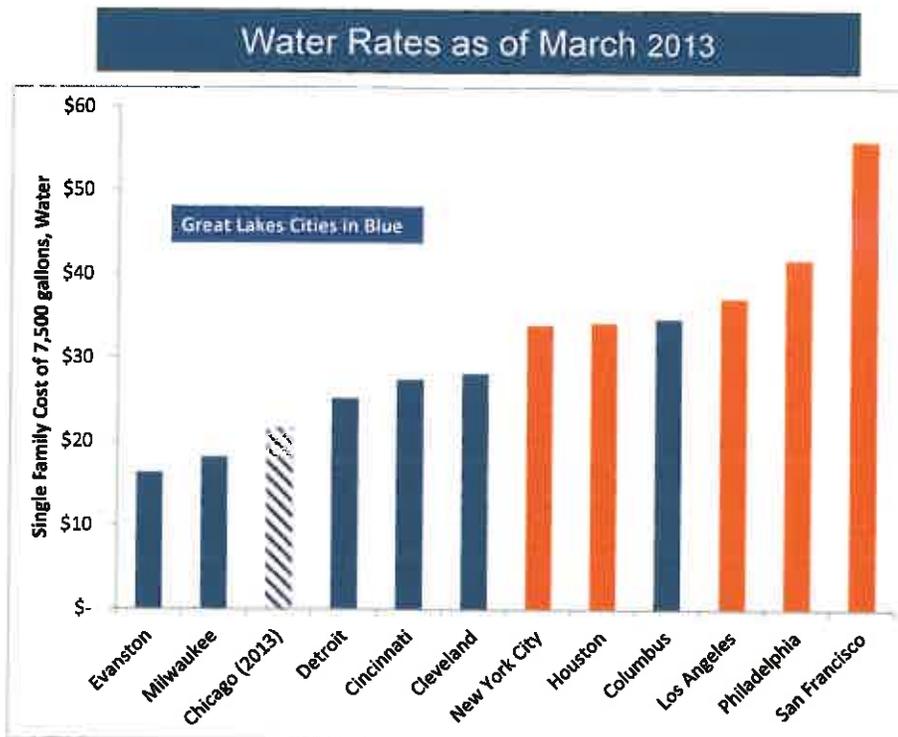
## 2013 Mid-Year Report to Suburban Customers

### Executive Summary

In 2011, the City of Chicago Department of Water Management in the words of Daniel Burnham made “no small plans.” Meeting our responsibility to provide quality drinking water to our customers, the citizens of Chicago and our suburban customers throughout the region in a sustainable, efficient and effective manner, we developed a 10-year capital program to improve the Chicago Water System with a goal of maintaining our current capacity levels and supplying the finest and most reliable supply of water to our customers. To meet the goals of this program, and as part of the 2012 Budget, Chicago City Council passed a 4-year water rate increase. In 2013, the water rate increased 15% to \$2.88 per 1,000 gallons of water. Even with this rate increase, Chicago still enjoys one of the lowest rates in the nation and is able to meet its 10-year goals. In 2013 the Department of Water Management, under the Mayor’s leadership will continue with its capital improvement program, hereinafter referred to the Mayor’s 2013 Infrastructure Capital Program. This program includes 75 miles of water main replacement, replacing the 10-acre roof at the Jardine Water Purification Plant, converting the Springfield Avenue Pumping Station from steam to electric power and replacing aging equipment at the Roseland and Southwest Pumping Stations. In addition the Department is installing 12,000 meters as part of the MeterSave Program.

Through the Second Quarter of 2013, the Department is meeting or exceeding its metrics as set out in the Mayor’s 2013 Infrastructure Capital Program. This plan will be accomplished to maintain and improve reliability and ensure a quality, sufficient water supply for the expected population growth to the region.

The Department is pleased to offer this report as a summation of work completed in the Second Quarter of 2013.



Thomas F. Powers, P.E., Commissioner

# DEPARTMENT OF WATER MANAGEMENT

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2013 MID-YEAR REPORT TO SUBURBAN CUSTOMERS

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The Department of Water Management (the Department or DWM) is pleased to provide this 2013 Mid-Year Report highlighting accomplishments within DWM. This report will provide a summary of our progress for January 1 – June 30, 2013 in the following areas:

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Please Note: DWM relies on data through June 30, 2013. The financial data is based upon raw data and has not been audited.

2012 YEAR END REPORT TO SUBURBAN CUSTOMERS

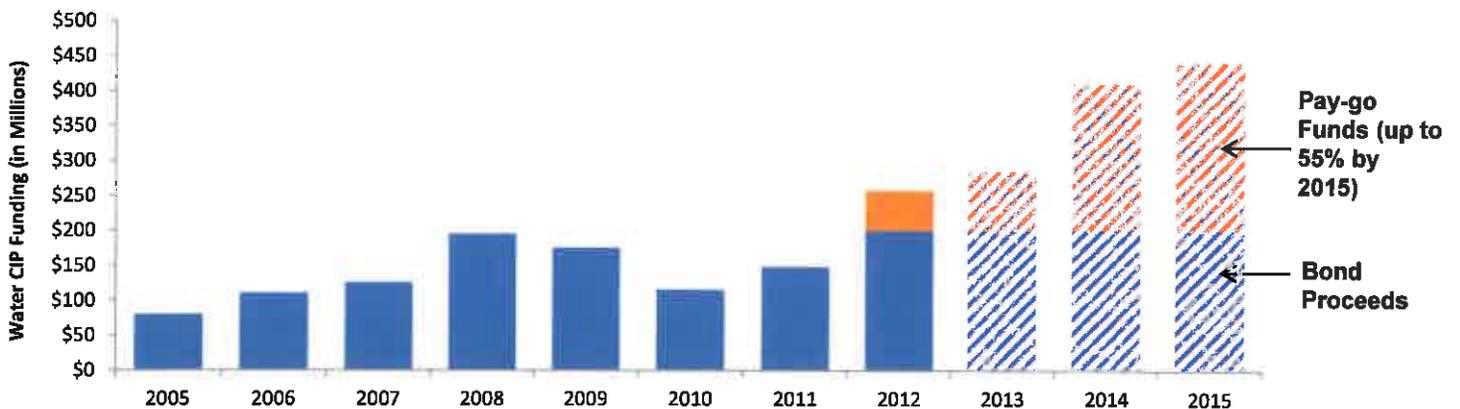
INTRODUCTION

Introduction

As part of the 2012 Budget, City Council passed a four-year rate increase; 25% in 2012 and 15% in 2013, 2014 and 2015. As a result, the Department of Water Management, under the Mayor's leadership has undertaken a much needed and overdue capital improvement program, hereinafter referred to the Mayor's Infrastructure Capital Program. In 2013, the Department is on track to replaced 75 miles of water main, continue the conversion from steam to electric of the Springfield Pumping Station, continue to replace the 10 acre east roof at the Jardine Water Purification Plant and install 12,000 meters as part of its MeterSave Program.

The major goal of the Department of Water Management is to provide water service for the current population and an **additional 700,000 people in the region, most of which is expected our suburban customer base, within the next decade** without having to make major capital improvements to increase capacity at our treatment plants or pumping stations. We will do this through upgrades and improvements that provide a more sustainable, efficient and robust Water System. Further, we will ensure a fresh water supply for future generations without adding financial burdens. Good stewardship and sound fiscal management have led to lower borrowing costs thereby increasing the amount of work to be completed for the same money. In addition, with the rate increases the Department has begun paying for a portion of the capital projects with revenues collected annually.

Projected Water Capital Improvement Plan Spending



This Mid-Year End Report is provided as a status report of the efforts the Department is undertaking and the progress made through June 30, 2013. Specifically, the Department will be issuing a 400 million dollar bond for capital projects in early 2014 to cover 2014-2016. Further, in 2013 we are on track to obtain 47 million dollars in Illinois EPA State Revolving Loan Funds to be used toward water main installations and 15 million dollars for the Department's MeterSave Program. As you will see by this report, the Department is pleased to state that it is on track to meet its 2013 goals and is on track with its 10-year Capital Program.

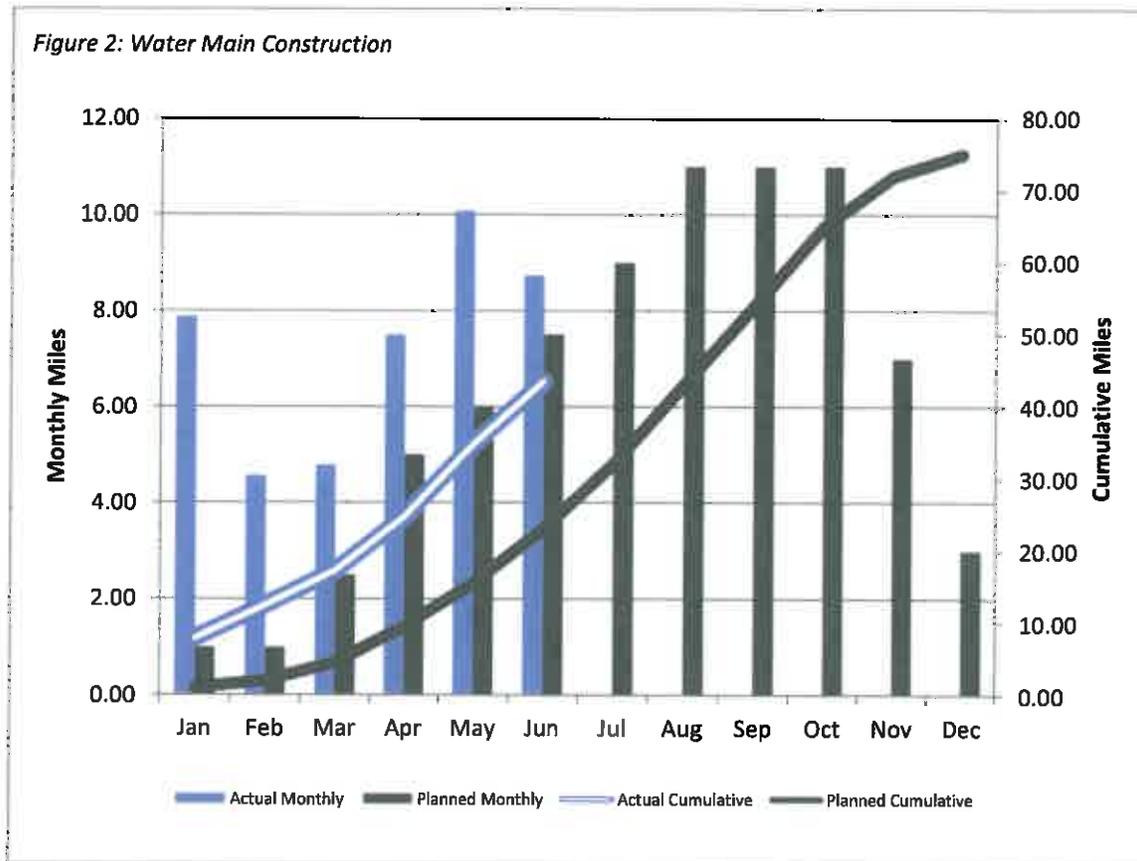
2013 MID-YEAR REPORT TO SUBURBAN CUSTOMERS

CONSTRUCTION

*Water Main Construction*

The Department will completed 75 miles of water main installation in 2013, five (5) miles more than the 2012 program. The Department utilizes both in-house and local private contractors to fulfill its aggressive agenda and our goal to be able to provide water for future customer growth expected in the suburbs without having to increase capacity at our treatment plants.

Figure 2 represents planned versus actual monthly and cumulative totals. As reflected in figure 2, the Department installed 70 miles of water main.



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**2013 MID-YEAR REPORT TO SUBURBAN CUSTOMERS**  
**FACILITIES**

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*Facilities*

In 2012, the Department of Water Management embarked on two large-scale, multi-year projects at two of its facilities. A summary of the work completed thru June 30, 2013 for these two projects follows.



*Jardine East Filter Building Roof*

The Department with the assistance of the DPS has entered into a contract with Walsh Construction Company to replace the original roof on the East Filter Building at the Jardine Water Purification Plant. The scope of the work includes: Construction of temporary scaffolding to protect the treatment units during construction; Removal and replacement of existing precast concrete roof panels; Installation of membrane roof over new concrete roof panels; Selective removal and replacement of damaged steel beams, columns and purlins; Removal of existing lead paint and

repainting of steel roof support structure; and installation of new lighting. The cost of this project for design and construction is \$37.5M. The roof is approximately 10 acres and is located over half of the active treatment plant. The estimated completion date is April 2014. The work is divided into 8 phases. The contractor has completed the first three phases, including installation of the new concrete roof panels and new roof membrane. Work is proceeding on the next two phases (50% complete on one, and 15% complete on the second) including lead abatement, replacement of deteriorated structural steel, painting of the steel, removal of existing roofing, and installation of new roofing panels.



*Installation of New Roof Panels*

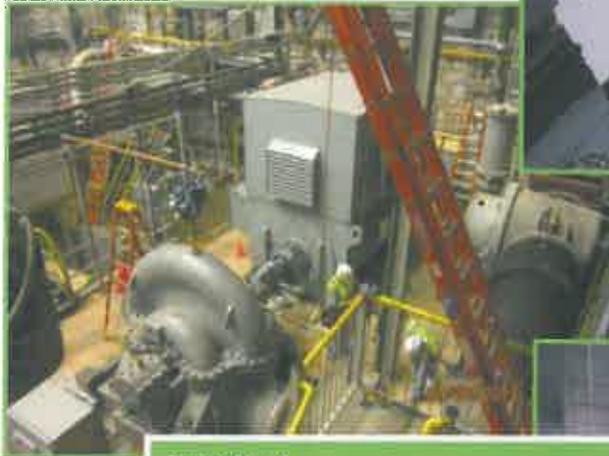
*Facilities, Cont.*

*Springfield Pumping Station Conversion*

The Department awarded and started a 3-year construction project to convert the Springfield Avenue Pumping Station from steam to electric power. This station is one of four that is steam powered. The cost for design and construction is \$73M. This contract was awarded to FH Paschen/SN Nielsen & Associates. The scope of work includes: replacement of existing steam turbines on 5 pumps with electric motors; demolition of existing buildings, boiler system and stack; construction of LEED certified building to house new electrical equipment, variable speed drive equipment, maintenance shops, and control room; and, green roof and installation of solar panels. The expected completion date is July 2015. Once completed, the Department expects to save \$4.5M annually in energy, maintenance and personnel costs. The new electrical building, ComEd vault and solar installation are 80% complete. Pump No. 4 has been refurbished and the new electrical motor installed. This is the first unit to be converted from steam to electric.



*Roof Mounted HVAC Units*



*Pump No. 4*



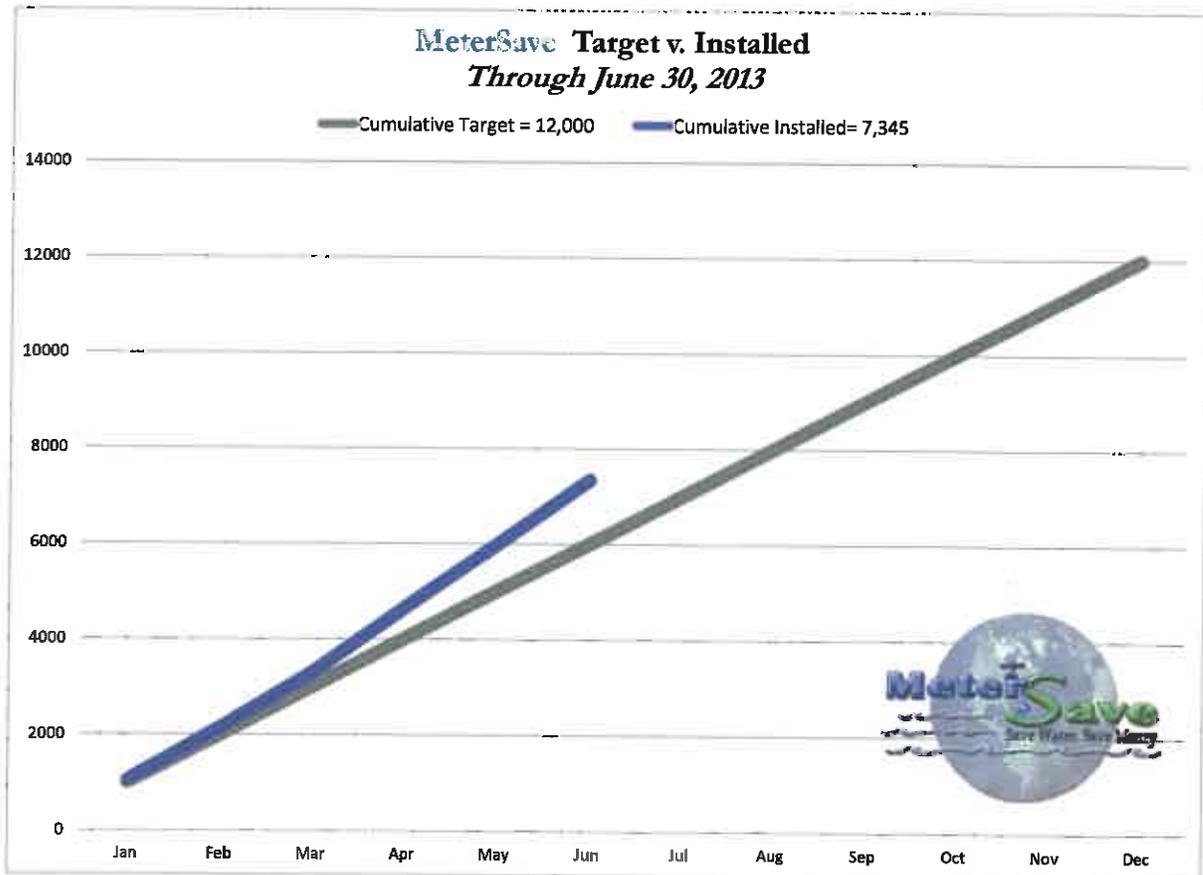
*Newly installed Electrical & Ventilation*

2013 MID-YEAR REPORT TO SUBURBAN CUSTOMERS

METERSAVE PROGRAM

*MeterSave Program*

MeterSave is a voluntary, free meter installation program offered to single-family and 2-flat non-metered homeowners. The Department's goal is to ensure that our citizens become more mindful and aware of their water usage in an effort to conserve water for future population growth and generations to come. From its inception in March 2009 through June 30, 2013 35,901 homeowners volunteered for the MeterSave Program. Also, DWM has new meters during this same time period. The Department is on pace to meet its goal of 12,000 meter installations in 2013. Education is a major component of this program. The Department, by providing tools and resources to conserve water, seeks to ensure that our citizens are aware of their water usage and become environmental stewards in protecting our water source, Lake Michigan. Ultimately, at the conclusion of metering the Department projects that enough water will be saved to serve an additional 300,000 people throughout the region.



*Leak Detection*

The Department annually surveys water mains to identify underground leaks in the system before they become large, catastrophic water main breaks. Through June 30, 2013 approximately 1,007 miles of water mains were surveyed using specialized sonar technology. Of the 1,007 miles surveyed, approximately, 246 leaks, excluding fire hydrants, were located and work orders for follow-up investigation and repair have been created. This program tightens our system to allow for more water to be conserved and available for growth in the region.

*Water Main Breaks*

When a break happens the Department shuts the main off (redundancy in the system will allow for continued water service and typically does not impact customers) and attempts to schedule the repair at minimal expense. It is intended that the Department's water main replacement program will ultimately result in less water main breaks and repairs. The original engineers of the Chicago Water System were visionaries. By creating the redundancy and reliability in the Chicago Water System, customers rarely suffer outages and can expect a reliable and adequate supply of water. Were the Department to ignore the needs of the System there would be an increase shutdowns to replace aging infrastructure and the loss of a reliable supply of water would become a common occurrence.

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**2013 MID-YEAR REPORT TO SUBURBAN CUSTOMERS**

**BILLING & COLLECTIONS**

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*Billing*

Below is a chart of the billing and collections for 2013 through June 30, 2013. The 2013 Budget can be found at the City of Chicago's website at:

[http://www.cityofchicago.org/city/en/depts/obm/dataset/budget\\_-\\_2013\\_budgetordinance-appropriations.html](http://www.cityofchicago.org/city/en/depts/obm/dataset/budget_-_2013_budgetordinance-appropriations.html)

Additionally, the 2011 financial audit of the water fund can be found at the City's website at: [http://www.cityofchicago.org/content/dam/city/depts/fin/supp\\_info/CAFR/2012/Water2012.pdf](http://www.cityofchicago.org/content/dam/city/depts/fin/supp_info/CAFR/2012/Water2012.pdf)

<b>Jan - June, 2013</b>	<b>Total</b>	<b>City</b>	<b>Suburban</b>
Total Water Billing	<b>\$ 288,691,147.00</b>	\$ 158,047,468.00	\$ 130,643,679.00
Water Collections	<b>\$ 275,940,029.00</b>	\$ 149,035,059.00	\$ 126,904,970.00

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**2013 MID-YEAR REPORT TO SUBURBAN CUSTOMERS**

**SUMMARY**

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*Summary*

As the region's population is expected to increase significantly by 2050 it is imperative that the Chicago Water System be optimally operating both from the treatment and distribution perspectives. The Department of Water Management is back on track to revitalize the distribution system, convert steam stations to electric, replace aging facilities, and install water meters. The Department's aggressive Capital Improvement Program will conserve enough water to provide for an additional 700,000 people without major capacity build-outs at our facilities. Failure to take these measures would result in a less reliable system that will not meet the future needs of our regional customer base; a continual, reliable and quality supply of water.