



OFFICE OF THE MAYOR  
CITY OF CHICAGO

RAHM EMANUEL  
MAYOR

August 28, 2012

Mr. James Zay  
Chairman  
Dupage Water Commission  
600 East Butterfield Road  
Elmhurst, Illinois 60126

Dear Mr. Zay:

Last spring we met to discuss Chicago's water rate increase and its impact on you, our municipal water customers. Even with this rate increase, Chicago still enjoys one of the lowest rates in the nation. This was a difficult decision but one I know was needed to ensure that our regional needs are met now and in the future. With projected growth for the region, most of which is expected in the suburbs surrounding Chicago, having a sound, well-run and efficient water system is imperative.

I am pleased to let you know that our Department of Water Management is undertaking a 10-year Capital Improvement Plan that includes designing and converting our four remaining pumping stations from steam to electric and a new roof on our east filter building at the Jardine Water Purification Plant, metering non-metered accounts and distribution improvements.

The 2012 Capital Improvement Plan will allow continued water service for over 600,000 additional people in the region within the next decade without having to make major capital improvements to increase capacity at our treatment plants or pumping stations. We are ensuring 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 City will begin paying as we go for projects within the Capital Improvement Plan.

When we met last spring, I heard your concerns and committed to report back regarding the impacts on our water infrastructure capital plan. It is with great pleasure that I provide this 2012 Mid-Year Report. I look forward to continuing our relationship based on sound environmental and water policies to ensure the economic vitality of our region.

Sincerely,

A handwritten signature in blue ink that reads "Rahm Emanuel".

Mayor

CITY OF CHICAGO  
DEPARTMENT OF WATER MANAGEMENT



2012

# MID-YEAR REPORT TO SUBURBAN CUSTOMERS

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RAHM EMANUEL, MAYOR



THOMAS H. POWERS, P.E., COMMISSIONER  
1000 E. OHIO STREET  
CHICAGO, IL 60611

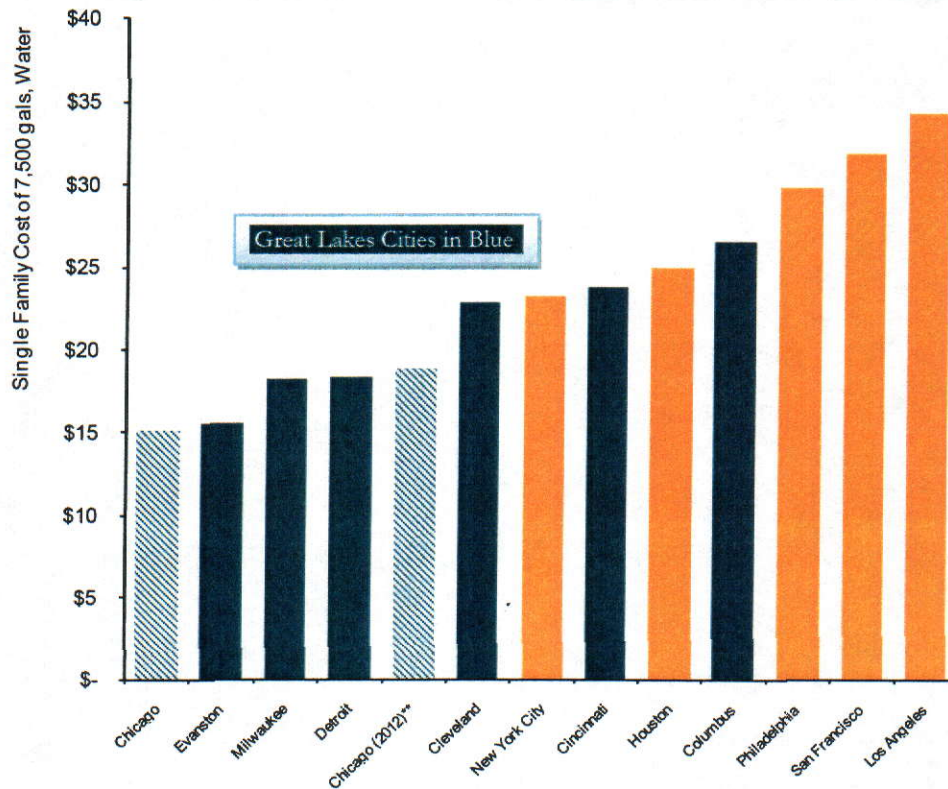
# DEPARTMENT OF WATER MANAGEMENT

## 2012 MID-YEAR REPORT TO SUBURBAN CUSTOMERS

### *Executive Summary*

As part of the 2012 Budget, City Council passed a 25% water rate increase. Even with this rate increase, Chicago still enjoys one of the lowest rates in the nation.

### Water Rate Comparison (as of October 2011)

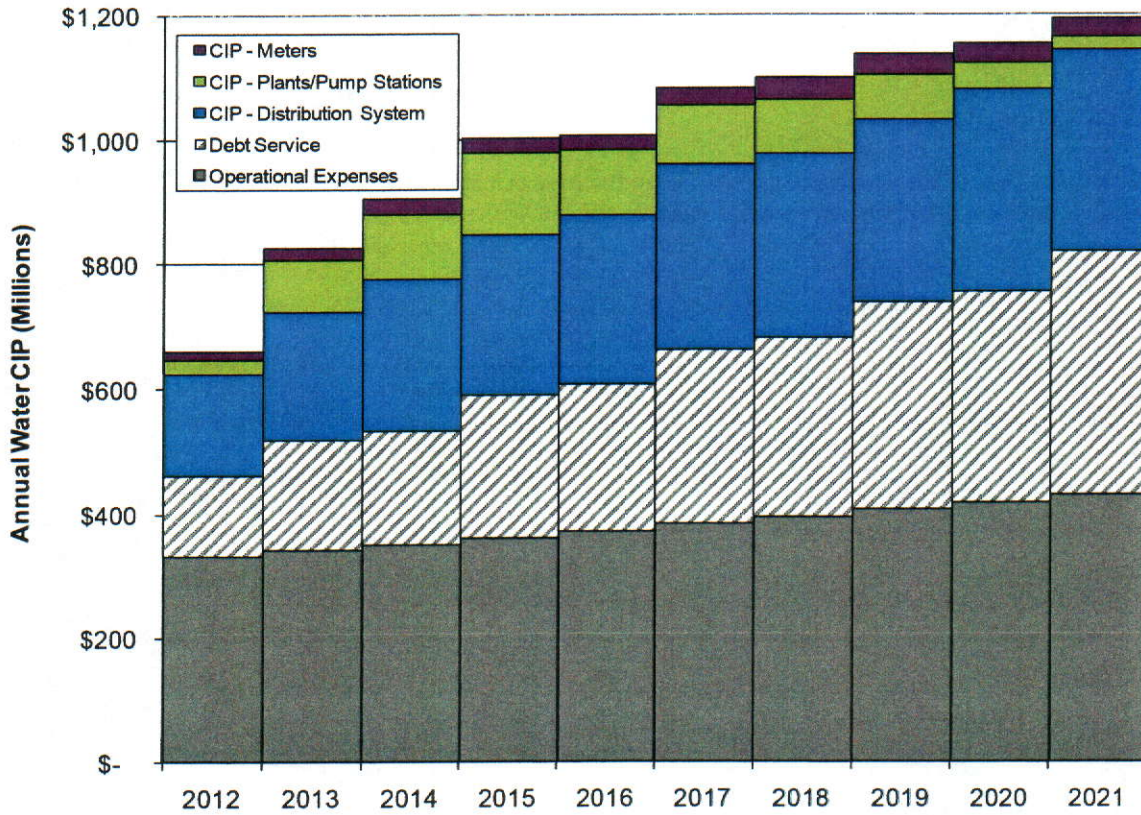


As a result, the Department of Water Management, under the Mayor's leadership has undertaken a much needed and overdue capital improvement program, hereinafter referred to the Mayor's 2012 Infrastructure Capital Program. In 2012 alone, the Department will replace 70 miles of water main, begin the conversion from steam to electric of the Springfield Pumping Station, replace the 10 acre east roof at the Jardine Water Purification Plant and install up to 10,000 meters as part of its MeterSave Program. It is common knowledge that the two biggest water conservation efforts are the replacement of aging infrastructure and metering. The City of Chicago plan will allow continued water service for over 600,000 additional people in the region within the next decade without having to make major capital improvements to increase capacity at its treatment plants or pumping stations. The combined total of these multi-year projects is approximately 348

Department of Water Management  
Thomas H. Powers, P.E., Commissioner

million dollars. The Department also strives to improve customer service through changes and management of our workforce related to the maintenance and repair of the Chicago Water and Sewer Systems.

The following chart is a 10-year breakdown of our Operations and Capital Improvement Program



# DEPARTMENT OF WATER MANAGEMENT

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## 2012 MID-YEAR REPORT TO SUBURBAN CUSTOMERS

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### Table of Contents

The Department of Water Management (the Department or DWM) is pleased to provide this 2012 Mid-Year Report highlighting accomplishments within DWM. This report will provide a summary of our progress for January - June 2012 in the following areas:

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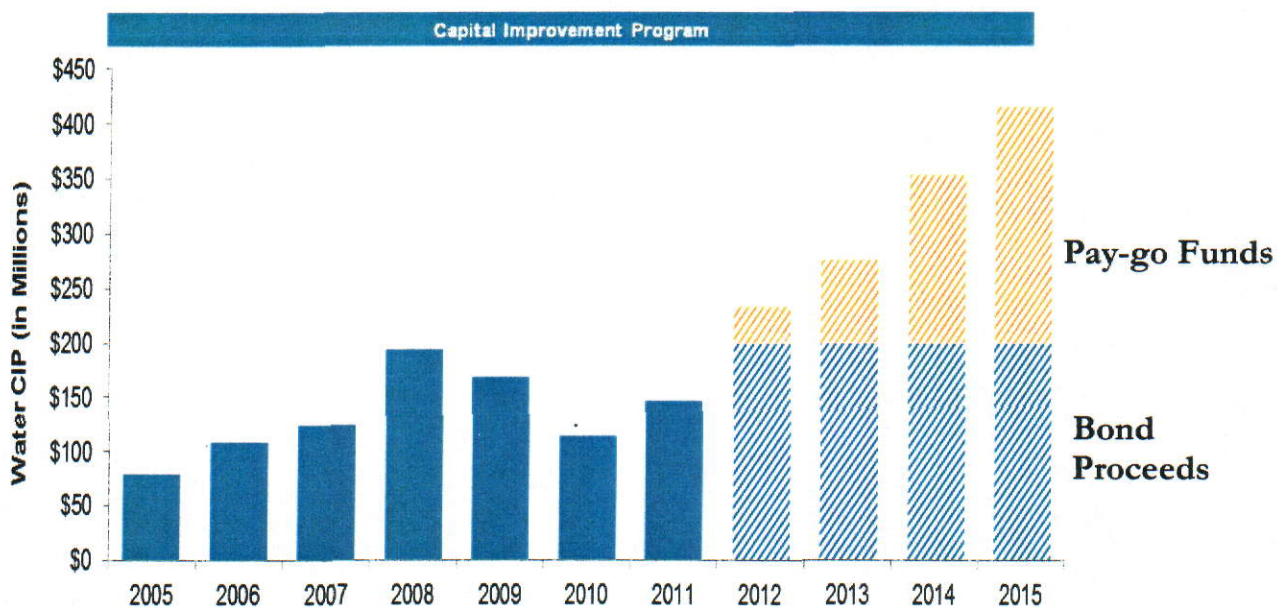
Please Note: DWM relies on data through June 30, 2012. The financial data is based upon raw data and has not been audited.

2012 MID-YEAR REPORT TO SUBURBAN CUSTOMERS

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 2012 Infrastructure Capital Program. In 2012 alone, the Department will replace 70 miles of water main, begin the conversion from steam to electric of the Springfield Pumping Station, replace the 10 acre east roof at the Jardine Water Purification Plant and install to 10,000 meters as part of its MeterSave Program.

The Mayor's 2012 Capital Improvement Plan will allow continued water service for over 600,000 additional people in the region within the next decade without having to make major capital improvements to increase capacity at our treatment plants or pumping stations. We are ensuring 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 will begin paying as we go for projects within Capital Improvement Plan.



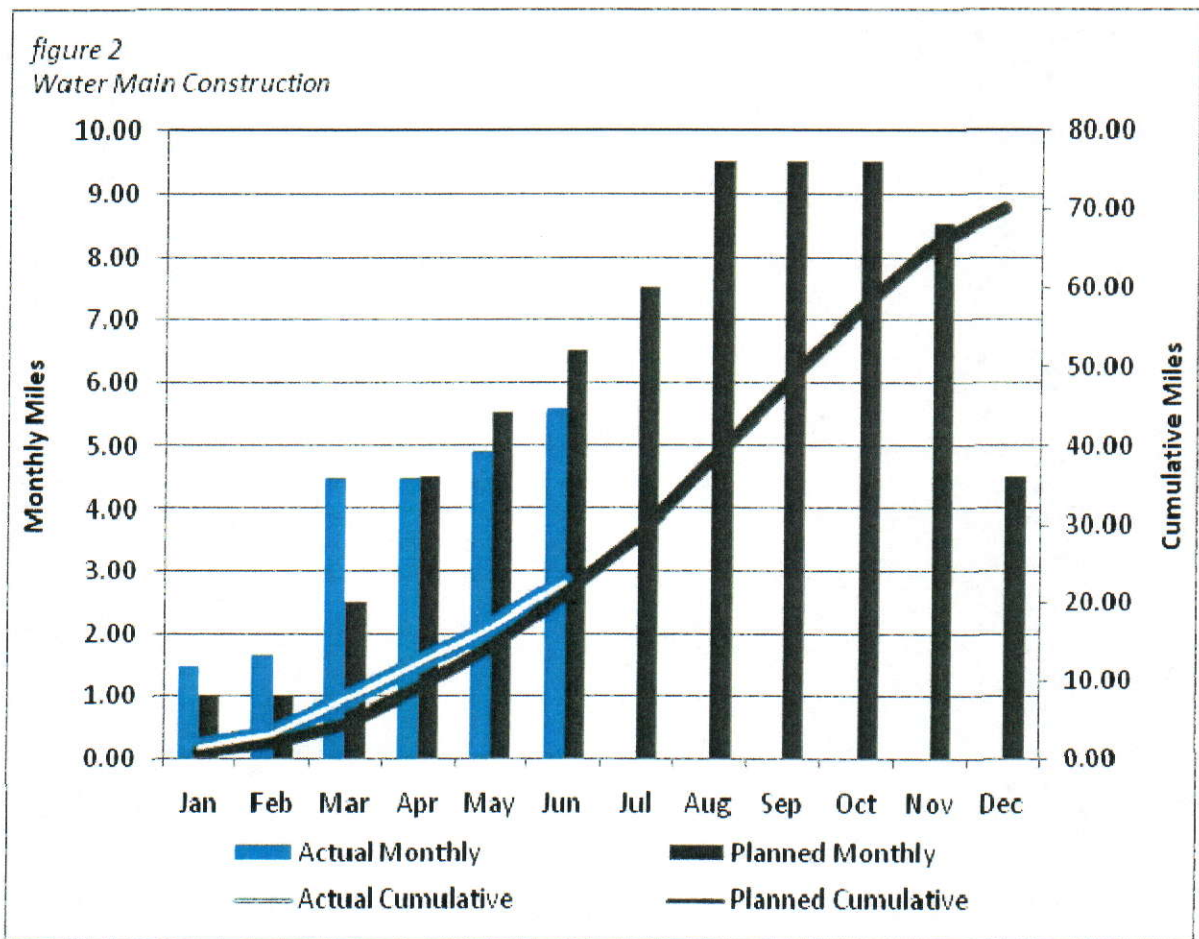
This Mid-Year Report is provided as a status report of the efforts the Department is undertaking and the progress made through June 30, 2012. Specifically, the Department has issued a 400 million dollar bond for capital projects over the next two years. In addition, the Department will obtain approximately 10 million dollars from Illinois Environmental Protection Agency's State Revolving Loan Program to be used toward water main installations and the Department's MeterSave Program. As you will see by this report, the Department is pleased to state that it is on task and within budget for its major capital projects.

2012 MID-YEAR REPORT TO SUBURBAN CUSTOMERS

CONSTRUCTION

**Water Main Construction:** The Department will complete 70 miles of water main installation in 2012, a more than 200% increase over the 2011 program. To achieve this, the Department will utilize 9 in-house crews and 3 local private contractors.

Figure 2 represents planned versus actual monthly and cumulative totals. As reflected in figure 2, the Department has installed 22.5 miles of water main and is slightly above plan. Although May and June fell slightly behind the plan the Department expects the newly awarded contracts to be at nearly 100% productivity by the end of July.



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2012 MID-YEAR REPORT TO SUBURBAN CUSTOMERS

FACILITIES

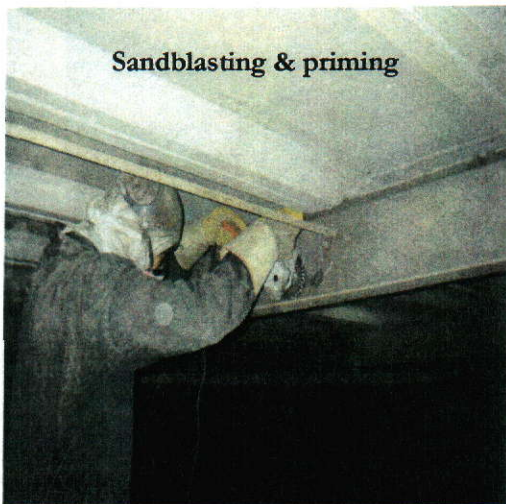
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The Department has a variety of capital projects under way in 2012. Highlighted below are two large, multi-year capital projects that will have benefits to the entire Chicago Water System. The first is our east filter building roof replacement project at the Jardine Water Purification Plant. This project follows an earlier project that replaced the west filter building roof. The second project highlighted is the conversion from steam to electricity for our Springfield Avenue Pumping Station. Both of these projects are on time and within budget.

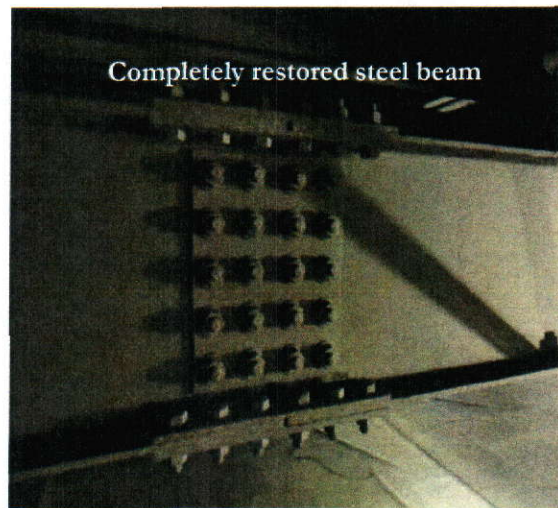


***Jardine East Filter Building Roof***

The Department with the assistance of the Department of Procurement Services (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 37.5 million dollars. 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 is now working on the first 2 phases. In Phase 1 existing steel is being sandblasted and primed for coating. The steel members are being evaluated for replacement. Also in this phase the containment is complete and sand blasting and priming of the steel supports is in progress. The concrete roof panels have been manufactured off-site in Indiana and the Department is overseeing the quality assurance and control during the manufacturing process. Further, a temporary rain collection system has been installed and will be utilized for the duration of the project.



**Sandblasting & priming**



**Completely restored steel beam**

Department of Water Management  
Thomas H. Powers, P.E., Commissioner





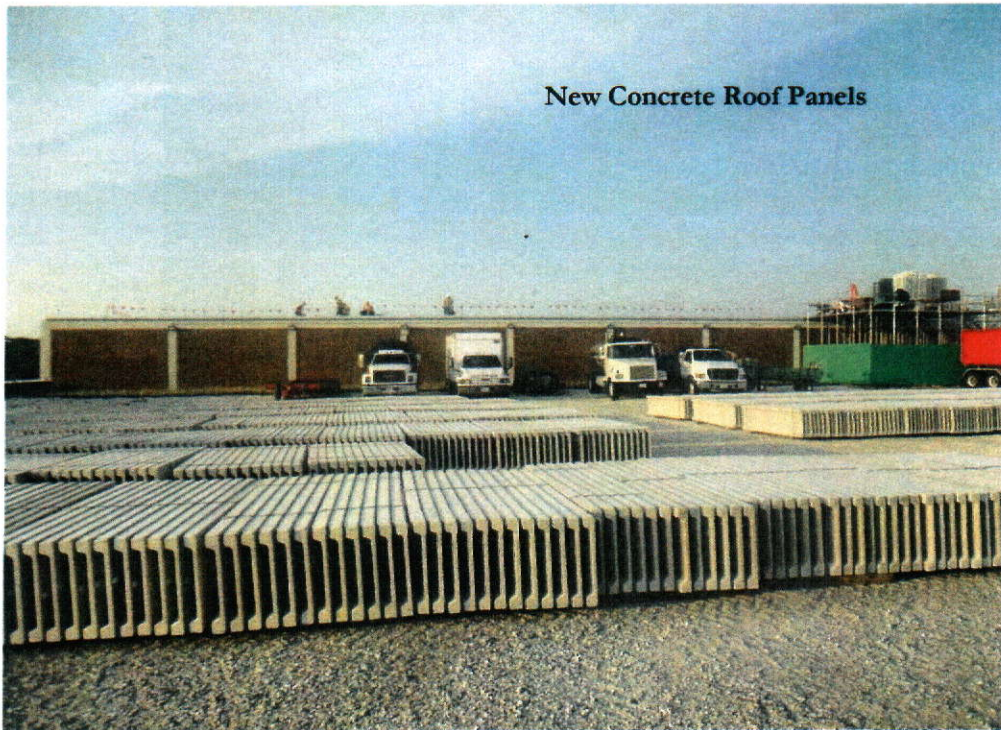
Roof Demolition



Sandblasting Cleaning & Recycling System



Temporary Rain Collection System

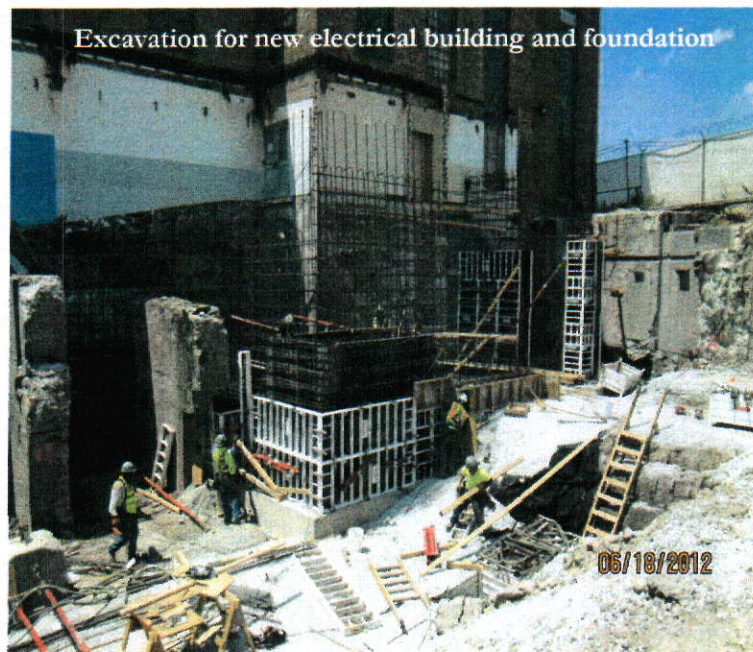


New Concrete Roof Panels

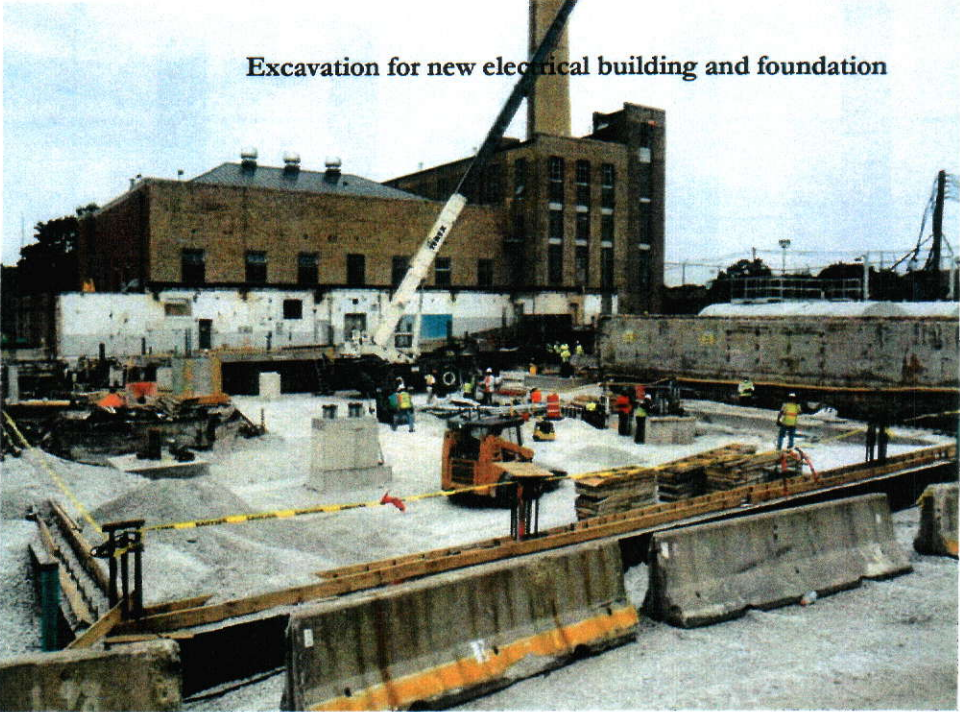
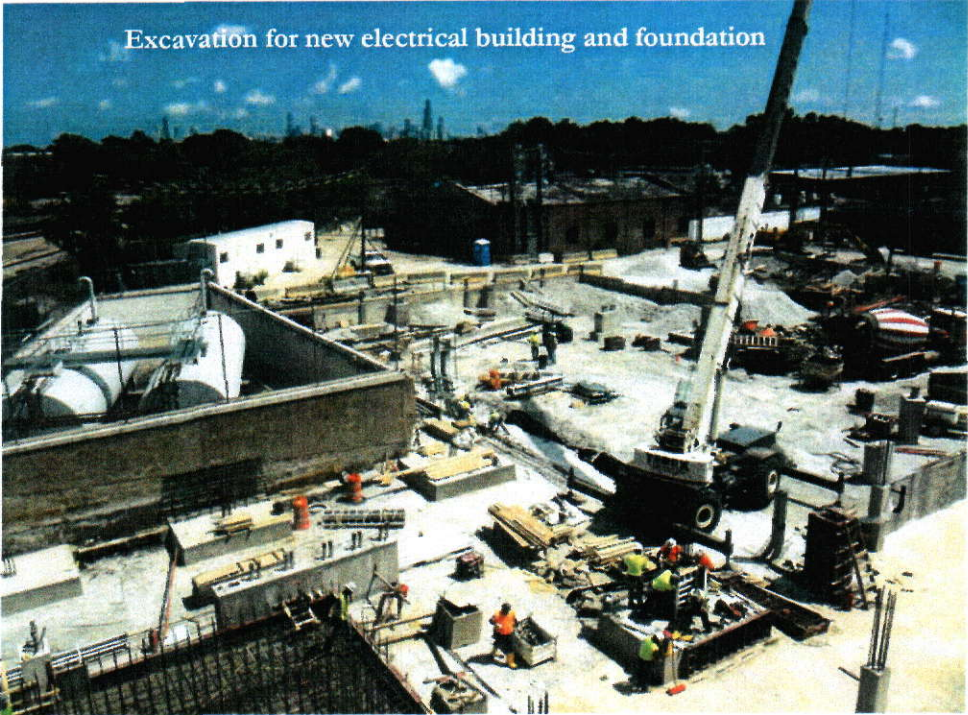
## *Springfield Pumping Station Conversion*



The Department has 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 73 million dollars. 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 switchgears, 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 approximately 4 million dollars annually in energy, maintenance and personnel costs. Demolition of several buildings is completed. Construction is in progress of pouring concrete foundations for new buildings.



*Springfield Pumping Station Conversion (con't)*



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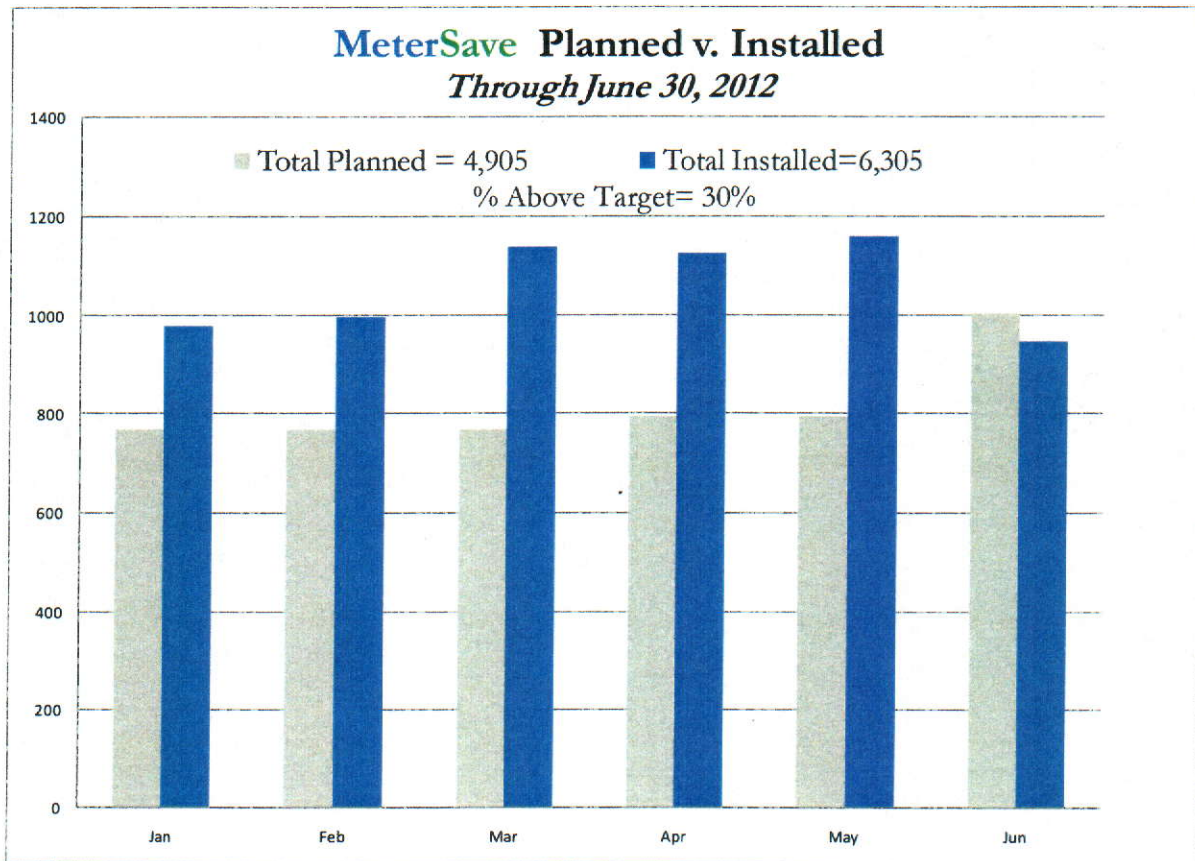
2012 MID-YEAR REPORT TO SUBURBAN CUSTOMERS  
CONSERVATION PROGRAMS

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***MeterSave Program***

MeterSave is a voluntary, free meter installation program offered to single-family and 2-flat non-metered homeowners. Since its inception in 2009, the Department under the MeterSave Program has installed 18,461 meters in residences. The Department has reached a total of 26,595 volunteers (since March 2009).

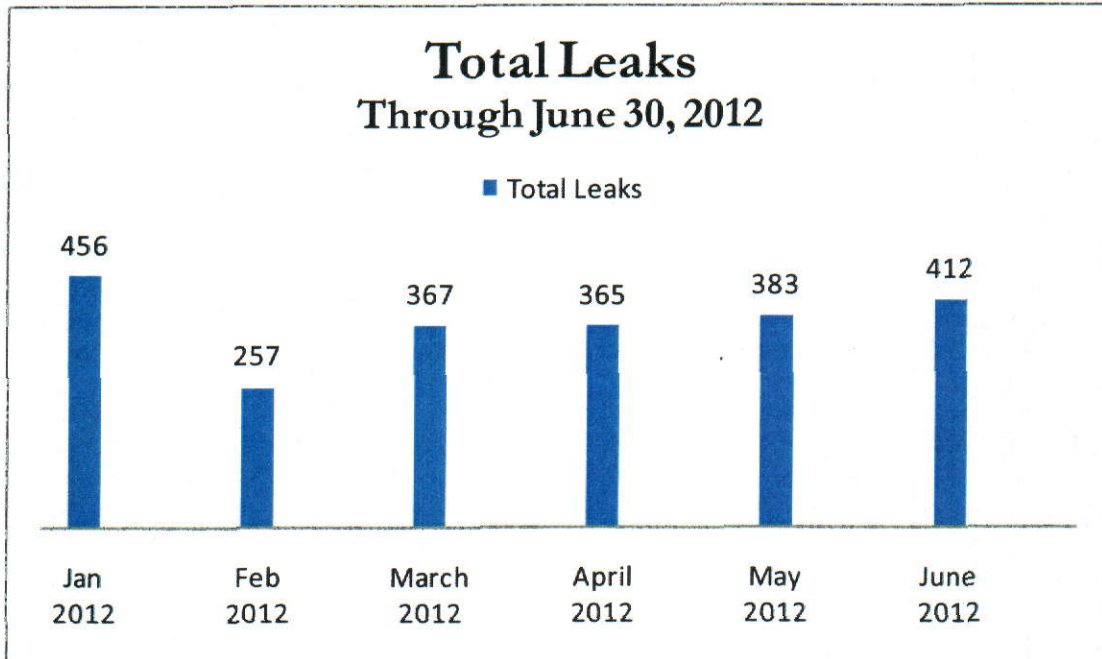
In the month of May the Department installed the most meters under the MeterSave Program. At the end of the Second Quarter, the Department has exceeded its 2012 target by 30%. As a result the Department reduced the number of installations in June in order to manage and stay within budget. As part of the Department's marketing efforts, at the end of June the Department mailed its annual Consumer Confidence Report which included a page on the MeterSave Program.



***Leak Detection & Water Leaks***

The Department annually surveys water mains to identify underground leaks in the system before they become large, catastrophic water main breaks. Through June 30 approximately 1,000 miles of water mains have been surveyed using specialized sonar technology. Of the 1,000 miles surveyed, approximately, 250 leaks, excluding fire hydrants, were located and work orders for follow-up investigation and repair have been created.

In the Second Quarter of 2012 the Department completed 1,160 leak repairs in the distribution system.



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2012 MID-YEAR REPORT TO SUBURBAN CUSTOMERS  
OPERATIONAL EFFICIENCIES

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***Water Main Breaks***

The drought this summer has caused a spike in the failure of several of our older water mains. In the first 15 days of July we have seen a more than six-fold increase in water main breaks compared to the same time last year. In 2011 between July 1 and July 15 there were 4 water main breaks. This year during the same time period there have been 26 water main breaks. Our Bureau of Engineering Services collects the data for use in determining water main replacement. The data supports that the substantial increase in water main breaks this year is due to the dry soil conditions causing stress on the mains. The engineering mechanics of drier soil and warmer temperatures are causing stress on these water mains, with failures occurring at the weakest, most corroded locations within the water main.

When a break happens the Department will shut the main off (redundancy in the system will allow for continued water service and typically not impact customers) and attempt to schedule the repair on straight time. Factors that affect the decision to allow overtime to complete the repair at the time of shut-down include: When the water supply affects customers, the number of customers affected; the type of customers impacted i.e., seniors, health and safety factors, etc.); and current weather conditions.

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 need to replace aging infrastructure shutdowns and loss of a reliable supply of water would become a common occurrence.

***Collective Bargaining Agreements***

Over the years, one of the challenges the City has faced is the inability to utilize labor seasonally. As such, after meeting with various Union leaders the Department was able to negotiate the creation of a seasonal title that will allow the Department to increase and decrease staff as the weather and other factors change. Further, to ensure a well-trained labor force the Department negotiated an Apprentice Title with phased-in rates. Finally, the Department was able to negotiate with the Unions a reduction in overtime, especially with seasonal titles.

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**2012 MID-YEAR REPORT TO SUBURBAN CUSTOMERS**  
**BILLING & COLLECTIONS**

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***Billing***

Below is a chart of the billing and collections for the First and Second Quarter of 2012. We are above our 2012 Budgeted projections. The 2012 Budget can be found at the City of Chicago's website at: [http://www.cityofchicago.org/content/dam/city/depts/obm/supp\\_info/2012%20Budget/2012BudgetOrdinance.pdf](http://www.cityofchicago.org/content/dam/city/depts/obm/supp_info/2012%20Budget/2012BudgetOrdinance.pdf). 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/2011/Final\\_Water2011.pdf](http://www.cityofchicago.org/content/dam/city/depts/fin/supp_info/CAFR/2011/Final_Water2011.pdf)

<b>Jan 1 - June 30, 2012</b>	<b>Total Billing</b>	<b>City</b>	<b>Suburban Billing</b>
<b>Total Water Billing</b>	\$ 270,271,402	\$ 156,870,738	\$ 113,400,664
<b>Water Collections</b>	\$ 253,493,151	\$ 143,933,565	\$ 109,559,586

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**2012 MID-YEAR REPORT TO SUBURBAN CUSTOMERS**  
**SUMMARY**

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***Summary***

As the region's population is expected to increase by 1 million by 2050 it is imperative that the Chicago Water System be optimally operating both from the treatment and distribution perspectives. By tightening the system, converting steam stations to electric, replacing aging structures, and installing water meters where none existed, the Department's aggressive Capital Improvement Program will conserve enough water to provide for 2/3 of the projected regional growth. Failure to take these measures would result in additional capital expenditures to increase the capacity needed to provide a continual, reliable and quality supply of water.