City of Long Beach Many Unique Neighborhoods One Great City





Memorandum

To:

Mayor and City Council

September 18, 2012

From:

Suja Lowenthal, Second District

Gary DeLong, Third District

James Johnson, Seventh District

Steve Neal, Ninth District

Subject:

Submetering

REQUESTED ACTION:

Request the City Council refer a recommendation from the Long Beach Water Commission to consider citywide water submetering to the Environmental Committee for further discussion before returning to the City Council.

BACKGROUND:

Long Beach has been a water industry leader for decades thanks to the guidance of its Commission and General Manager, diversifying water supply sources and encouraging conservation as an integral part of its overall supply portfolio. Nearly 38% of our water comes from local groundwater, over 40% is imported water purchased from the Metropolitan Water District and another 6% is tertiary treated reclaimed water. Conservation makes up much of the rest.

Using residential and commercial rebates, lawn, landscape and grey water incentive programs, a Water Waster hotline and mandatory restrictions on irrigation, the Long Beach Water Department has capably guided our City to its lowest water usage rate in (decades). In fact, "Long Beach water customers use the same amount of water (annually) that was used in 1966, despite an increase in the city's population of approximately 100,000 residents." (LBWD Report 9/6/12 Board Meeting) Cooperative efforts with LBUSD have already resulted in water conservation and fiscal savings, while current initiatives involving with our Parks, Recreation and Marine Department and the City Council's approval of a new utility billing system and Low Impact Development policies will further reduce our reliance on imported water and keep our customer billing rates among the lowest in California. These investments by the Water Department, City of Long Beach, residents and businesses in our water supply and conservation infrastructure result in real savings to customers.

On September 6, the Long Beach Water Commission recommended that the City Council consider a citywide water submetering ordinance that would be incorporated into the triennial

building code update. Submetering is the practice of installing individual water meters "downstream" of a property's master meter, in order to track the water use of individual residential units. Single family homes have dedicated meters, but multi-family residential properties typically have only one meter for several units, making it unfeasible to base actual billing on water consumption. Submetering encourages water users in multi-family dwellings to be more aware of their own water usage because they have a financial incentive. In addition, leaks may be addressed more quickly if the resident or Water Department is able to track usage month over month.

According to the Long Beach Water Department, San Diego, Santa Monica, Santa Barbara and Ventura have submetering programs and ordinances. In the case of San Diego, submeters must be installed in new multi-family developments with three or more dwellings; and existing multi-family dwellings with three or more units where the entire water supply piping is being replaced. Exceptions to the ordinance exist such as high rise buildings in which individual units are served by more than one cold riser and one hot riser system. There are also requirements for "submeter operators" to ensure that "customers" are provided with specific billing information such as how submeter bills are calculated, a description of administrative or late fees and the ordinance.

Nearly 36% of water usage in Long Beach can be attributed to multi-family properties. (LBWD Report 9/6/12 Board Meeting) As such, there is potential for greater conservation. Therefore, we ask our colleagues to refer this recommendation to our Environmental Committee to explore the possibilities for Long Beach and to gain input from stakeholders in the community before the City Council takes any action.

FISCAL IMPACT:

There is no fiscal impact.

AGENDA

BOARD OF WATER COMMISSIONERS REGULAR MEETING OF THURSDAY, SEPTEMBER 6, 2012, AT 9:00 A.M. LONG BEACH WATER DEPARTMENT, ADMINISTRATION BUILDING 1800 E. WARDLOW ROAD LONG BEACH, CALIFORNIA

- 1. Pledge of Allegiance
- 2. Public Comment:

GIVEN TO THE PUBLIC TO ADDRESS THE BOARD OF WATER COMMISSIONERS CONCERNING NON-AGENDA ITEMS AND OTHER ITEMS WITHIN THE JURISDICTION OF THE BOARD. EACH PERSON WILL BE ALLOWED FIVE MINUTES UNLESS EXTENDED BY THE BOARD.

- 3. Approval of Minutes August 16, 2012
- 4. Election of Officers President, Vice President, Secretary
- 5. President's Report
- 6. General Manager's Report
 - Kevin L. Wattier, General Manager
- 7. Consent Calendar:
 - a. Approval of Transfer of Funds by Journal Entry Dated September 6, 2012
 - b. Authorization to attend CORO Water Conservation Conference and Luncheon, Thursday, October 11, 2012, at the JW Marriott L.A. Live, Los Angeles, California
 - c. Authorization to attend the Federation of Filipino American Associations, Inc., Filipino-American History Month event Saturday, October 6, 2012
 - d. Adopt Specifications WD-23-12 and authorize the General Manager to execute an Agreement with Cabral Roofing and Waterproofing Corporation (Cabral Roofing) for roof replacement of the Operations Service Center Building and Meter/Salvage Shop, in an amount not to exceed \$310,086.48
- 8. Adopt Resolution No. WD- authorizing the General Manager to enter into a Cooperative Purchasing Agreement with the City of Long Beach, and to enter into an agreement with Sprint Solutions, Inc. (Sprint) to provide wireless equipment and services, in an amount not to exceed \$75,000.00 per year, for the contract period ending on October 31, 2016
 - Robert C. Cheng, Deputy General Manager Operations
- 9. Receive Presentation on Citywide Residential Greywater Pilot Program

- 10. Recommendation to refer the consideration of a citywide water submetering ordinance to the Long Beach City Council, and to have City Council refer the matter to city staff for consideration of inclusion of the ordinance in the City's upcoming triennial building code update
 - Matthew P. Lyons, Director of Planning & Conservation
- 11. Report of the Metropolitan Water District (MWD) Board Meeting on August 21, 2012
- 12. New Business
- 13. Adjournment to the next Regular Meeting of Thursday, September 20, 2012, at 9:00 a.m. in the Board Room.

The City of Long Beach intends to provide reasonable accommodations in accordance with the Americans with Disabilities Act of 1990. If a special accommodation is desired, please contact Melissa Keyes in advance of this meeting at (562) 570-2309.

Written materials relating to any item on the Commission's agenda which are submitted to the Commission after distribution of the agenda packet are available for public inspection at the Water Department Administration Offices located at 1800 E. Wardlow Road, Long Beach, CA 90807.

Board of Water Commissioners

September 6, 2012 Board Meeting

KEVIN L. WATTIER, General Manager

Subject:

Recommendation to refer the consideration of a citywide water submetering ordinance to the Long Beach City Council, and request City Council refer the matter to city staff for consideration of inclusion of the ordinance in the City's upcoming triennial building code update

Executive Summary:

In 2007, Long Beach became the first city in California to implement mandatory citywide water conservation measures in order to mitigate the expected impact of an imminent water supply shortage that was the result of a statewide, multi-year drought, critically low levels in key state reservoirs and significant pumping restrictions on imported water supplies from the State Water Project. Since then, Long Beach residents and businesses have achieved sustained reductions in citywide water consumption levels.

In the previous five years, annual citywide water use in Long Beach has fluctuated between 15 and 20 percent below the city's historical 10-year average (FY '98 – FY '07). Today, Long Beach water customers use the same amount of water (annually) that was used in 1966, despite an increase in the city's population of approximately 100,000 residents. As a result, per capita water use in Long Beach has fallen to levels not seen since the end of World War II and is currently one of the lowest in California.

Much of the city's recent success is a direct result of substantial reductions in outdoor water use, which comprises 50 percent or more of a typical single-family household's total annual water use. While minimizing outdoor water use throughout the city will continue to be a priority, there are other ways in which the city can and should encourage its residents to use less water. One of these ways is to encourage multi-family residents to conserve water through the installation of water submeters in multi-family residential buildings.

Background

Water conservation remains the most cost-effective and timely solution for ensuring long-term water supply reliability. Much of the recent focus has been on achieving reductions in outdoor water consumption through the implementation of prohibitions on outdoor irrigation, extensive community outreach and customer incentives such as the Long Beach Lawn to Garden program.

Another solution that has the potential to provide additional water conservation savings, but has yet to be realized, is to install water submeters in individual units in multi-family residential buildings. In Long Beach, as well as in many other California cities, residents that live in multi-unit structures make up a large percentage of the overall population.

At this time, the vast majority of residents that live in multi-family buildings are unable to monitor their daily water consumption. Generally, multi-family buildings have one or more master meters that provide water to the entire building, but do not have meters that are located "downstream" from the master meter, which means that most buildings are unequipped to track the water usage of individual units. For most multi-family residents, instead of being charged for actual water use, the cost of water use is often included in the cost of rent, charged as a flat fee, or allocated in any number of other ways, such as on a per square foot basis. Allocating water costs utilizing one of these methods provides little incentive to multi-family residents to conserve water, since monthly water bills will essentially remain the same regardless of how much water is used.

Conversely, the installation of submeters on multi-family residential and mixed use buildings has been shown to encourage increased water conservation by making residents aware of the amount of water they are using and how much the water they use costs. This provides a perpetual price signal to multi-family residents and encourages them to use less water in order to reduce their cost of water.

Several studies have concluded that submeter installation results in water consumption reductions. One such study performed in 2004 showed water savings of 15.3% when comparing sub-metered properties with rental properties that do not bill water separately from rent ("in-rent" properties.) Another study done in 1999 showed water usage in submetered properties to be 18% to 39% less than in-rent properties.

State and Local Submetering Laws

There have been three recent attempts to enact state legislation that would require submetering in multi-family residential buildings in California. All three attempts were unsuccessful in passing out of the legislature and as a result, there is no current state submetering law.

On the other hand, a number of cities throughout the United States have adopted various kinds of municipal submetering ordinances and/or programs. One of the more recent and more visible examples is the City of San Diego, which developed a comprehensive submetering program in 2010 that requires the installation of submeters in the individual units of specified new and existing developments. Since the program's inception, more than 2,000 submeter permits have been requested through the city's Planning Division. The success of this program at generating long-term water use reductions for the City of San Diego will be closely analyzed in the coming years.

Fiscal Impacts

At this time, the potential fiscal impact to the City of Long Beach is unknown. In the City of San Diego, all inspection-related costs incurred by the City in permitting new submeters are recovered through the collection of plan review and permit fees.

For developers, the cost of installing water submeters in new developments in San Diego has been estimated at \$150 to \$300 per unit, dependent on the number of units and the layout of the potable water distribution system.

The cost of retrofitting existing multi-family buildings with submeters has not been extensively studied, but is predicted to be more costly than submeter installation in new developments.

Other Considerations

Nearly 50 percent of San Diego residents live in multi-family or mixed-use buildings. This number is expected to increase considerably in future years as the city continues to expand, with much of the focus on multi-family residential development. In Long Beach, approximately two-thirds of the city's dwelling units are located in multi-family or duplex properties. Because Long Beach is a relatively "built-out" city, it is unlikely to see as much new development in future years when compared to a city like San Diego. Nevertheless, multi-family properties in Long Beach use about 36 percent of the city's total annual water consumption and a great opportunity exists to reduce the water use in this segment of the city's population.

In San Diego, numerous committees, associations, interest groups and other stakeholders provided input throughout the process of creating and implementing the citywide water submetering ordinance. It is likely that there will similarly be an assortment of business, community and other stakeholder/interest groups located in and around Long Beach that will seek to provide input on any submetering ordinance that is under consideration.

Conclusion

Enacting a citywide ordinance that requires the installation of submeters in individual units in new and/or existing multi-family residential buildings will help to educate and inform a large and currently unreachable segment of the Long Beach population about how much water they actually use. It will shift the responsibility of paying for water from building owners to multi-family residents, serving as a permanent price signal for ongoing water use and providing a financial incentive for sustained water conservation efforts.

Board Options/Fiscal Impacts

Option #1: Recommendation to refer the consideration of a citywide water submetering ordinance to the Long Beach City Council, and request City Council refer the matter to city staff for consideration of inclusion of the ordinance in the City's upcoming triennial building code update

Fiscal Impact: Unknown

Option #2: Postpone recommendation to refer the consideration of a citywide water submetering ordinance to the Long Beach City Council to a later date

Staff Recommendation

Option #1

Matthew Lydns

Director, Planning & Conservation

Kevin L. Wattier

Date

General Manager