
OFFICE OF THE INDEPENDENT BUDGET ANALYST REPORT

Date Issued: March 4, 2010

IBA Report Number: 10-23

City Council Meeting Date: March 9, 2010

Item Number: 335

Water Submetering Ordinance

OVERVIEW

Upwards of 90% of San Diego's water supply is imported, as a blend of water from the Colorado River and the State Water Project. As our population grows and water supply becomes more expensive and difficult to obtain, we must consider our water requirements and alternatives. The City of San Diego Water Department has examined water supply options in its Long-Range Water Resources Plan (2002-2030). Those options include, among other alternatives, increased water reclamation, groundwater storage, desalination and water conservation.

The proposed water submetering ordinance recognizes our heavy reliance on imported water and is a directed water conservation effort. It focuses on multi-family residential and mixed-use buildings, which are not currently required to submeter. The proposed ordinance requires submetering of such buildings, which will allow occupants' water use billings to be based on actual water consumption. The goal of this ordinance is to supply occupants of the impacted buildings with information that will provide the financial incentive to conserve water.

FISCAL/POLICY DISCUSSION

The San Diego Water Department bills customers for water usage based on meter readings (in addition to a fixed base charge). For most multiple dwelling housing units, such as apartments and condominiums, the Water Department does not provide meters to individual units. Instead, there are master meters for a group of dwelling units. Residents in such housing units will not know how much water they use unless their units are submetered. Submeters are acquired and installed by the property owner, and subsequent billing to housing units is the responsibility of the property owner.

Multi-family housing units comprise about 44% of total housing units in San Diego¹, and most of these units do not utilize submeters. The number of multi-family housing units is projected to increase by approximately 120,000 to 346,000 in 2030, according to SANDAG's 2050 Regional Growth Forecast, dated February 26, 2010.

Without the use of submetering, the cost for multi-family housing water usage is allocated among the residents connected to the master meter. For example, the water usage may be apportioned based upon the square footage of the dwelling units or the number of bedrooms. These types of allocations cannot be expected to accurately measure the actual water usage of residents. Because of inaccuracies caused by these types of allocations, multiple dwelling unit residents who conserve or use less water than other dwelling units are likely to subsidize other residents. Additionally, residents subject to allocation methods are inherently less aware of how much actual water they use and the associated cost.

Submetering encourages water users to be more aware of their usage, which gives them a financial incentive to conserve. Sewer charges are also based on water use, increasing the financial incentive. Furthermore, leaks may be reported and fixed more promptly if occupants are paying for water based on actual usage.

Studies have shown that water submeters are associated with decreased water usage. A 2004 Aquacraft Inc. study cited in Report to the Planning Commission PC-10-001 showed water savings of 15.3% when comparing submetered properties with rental properties that do not bill water separately from rent ("in-rent" properties). Another comparative study showed water usage in submetered properties to be 18% to 39% less than in-rent properties ("Submetering, RUBS, and Water Conservation," prepared by Industrial Economics, Inc., June 1999). However, no study can guarantee future savings that will occur at any property or in any area.

A working group on water submetering, headed by Councilmember Emerald, spearheaded development of the submetering ordinance. Various stakeholders and advisors, including the San Diego County Apartment Association, San Diego Housing Federation, submeter installers and City staff, participated as the proposed ordinance evolved. Presentations were also made to organizations such as the Building Industry Association of San Diego and the San Diego Regional Chamber of Commerce's Energy and Water Committee. During the process, adjustments were made for potential difficulties developers would face in implementing the ordinance.

A proposed submeter ordinance resulting from the working group's efforts was presented to the Natural Resource and Culture Committee (NR&C) on October 7, 2009. NR&C voted to approve and move forward the proposed ordinance to City Council, with changes. Subsequently, the ordinance was reviewed by the Community Planners Committee, Technical Advisory Committee and Code Monitoring Team. The Development Services Department (DSD) also provided assistance during the review of the ordinance.

The proposed ordinance was presented to the Planning Commission in two versions: the original NR&C version and a version reflecting DSD staff recommended changes. One of the

¹The percentage of total housing units is higher if single-family row homes and townhomes are included.

requirements in the NR&C version is that submeter installation be triggered when more than 65% of interior potable water piping is replaced within a five year period. This requirement has been removed due to DSD concerns regarding the cost to the City for tracking the cumulative requirement and potential costs to the developer for preparation of plumbing plans verifying the percentage of piping replacement. Another change was the removal of the submeter installation requirement for existing multiple dwelling units built pursuant to the 1998 California Plumbing Code (or later versions), having one cold and one hot water connection per unit. On January 21, 2010, the Planning Commission recommended City Council adopt the alternate DSD staff version of the proposed ordinance.

The staff version of the proposed submetering ordinance – the version presented to Council for adoption on March 9, 2010 – requires installation for the following types of development having three or more dwelling units:

- New multiple dwelling units;
- Existing multiple dwelling units where piping for the entire interior potable water supply is being replaced, except for development in which individual units are served by more than one cold riser and one hot riser system.

Submeter billing parameters are outlined in the proposed ordinance, including provisions for variable charges, fixed charges and administrative fees, as well as submeter bill contents and records retention. The proposed ordinance does not apply to mobile home parks or affordable housing units, except that, for affordable housing, dwelling units must be pre-plumbed for water submeters. The installation requirement would be triggered when the dwelling units are no longer designated as affordable housing. Affordable housing is exempted because under the current regulatory environment, a renter's total rent and utility payment remains fixed regardless of how much water is used.

In the executive summary for this item, staff has indicated that a “looped potable water distribution system will be required on every floor that includes submeters.” The estimated increase to plumbing costs for this requirement is approximately 2% of total construction costs, or \$3 to \$4 per square foot. The cost specific to installation of an individual submeter depends on the submeter component options and number of dwelling units. The cost is estimated to range from \$150 to \$300 per unit – if both a hot and cold meter are needed, the cost would be doubled.

The proposed ordinance includes a submeter installation exception for certain existing multiple dwelling units that replace all interior piping. This exception includes high rise buildings in which individual units are served by more than one cold riser and one hot riser system. The development community has expressed concerns regarding high rise structures for not only existing dwelling units, but also new structures. Some developers have maintained that added costs for this requirement, primarily due to the necessity of incorporating a looped potable water distribution system, present a fiscal hardship. Because each development project is different, it is difficult to perform an analysis involving costs and cost recovery.

A related bill, which is less comprehensive than the proposed submetering ordinance, has been recently introduced to the State of California Assembly. Assembly Bill 1975, regarding water charges and meters for multiunit residential structures, is anticipated to be scheduled for

committee hearing in March 2010. This bill would require submeters (or meters) to be installed on individual rental units in those buildings for which a construction permit has been issued on or after January 1, 2011. The language makes an exception for buildings where “plumbing configurations with multiple points of entry in high rise structures make the installation of submeters infeasible.” The bill is still in its initial phase, and further development is anticipated.

An issue has been raised relating to consumer protections. Currently the proposed Municipal Code section 67.0603(b) states that fixed water costs be divided equally among submetered consumers and non-residential units without submeters. In order to prevent consumers from being charged the portion of fixed costs attributable to vacant units, the Code could be reworded to require that the allocation of fixed costs be among “residential *units*,” rather than “submetered *consumers*.” The vacant units’ fixed costs would then be absorbed by the landlord. This concept has been reviewed with City Attorney staff; and the Council may wish to consider this alternative.

CONCLUSION

The City of San Diego is highly dependent upon imported water. Our water supply is becoming increasingly expensive, and with anticipated population growth, future supply is an important concern. One of the mitigating options for an uncertain supply is water conservation. Submetering of multi-family residential housing has been shown to encourage water conservation. Submetering also creates equity in the billing system at multi-family complexes, as charges to residents are based on actual water usage, rather than an allocation method.

The proposed water submetering ordinance has been vetted with the development community and other stakeholders. Concerns have been voiced, which have brought about the evolution of the ordinance into its current form. The ordinance would require submeter installation for the following types of development having three or more dwelling units:

- New multiple dwelling units;
- Existing multiple dwelling units where piping for the entire interior potable water supply is being replaced, except for development in which individual units are served by more than one cold riser and one hot riser system.

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In order to prevent consumers from being charged the portion of fixed water costs attributable to vacant units, the proposed Municipal Code section 67.0603(b) could be reworded to require that the fixed costs be allocated among “residential *units*,” rather than “submetered *consumers*.” Council may wish to consider this alternative.

Considering the available information, the IBA supports the submetering ordinance.

[SIGNED]

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