



2.3

Department of Utilities  
Office of the Director

CITY OF SACRAMENTO  
CALIFORNIA

1395 35<sup>th</sup> Avenue  
Sacramento, CA 95822-2911  
phone (916) 264-1400  
fax (916) 264-1497/1498

April 10, 2003

Law and Legislation Committee  
Sacramento, California

Honorable Members in Session:

**SUBJECT: Assembly Bill 306 Water Meter Retrofit**

**LOCATION AND COUNCIL DISTRICTS:** All Districts

**RECOMMENDATION:**

Staff recommends that the Law and Legislation Committee oppose Assembly Bill 306 unless amended to provide additional time to complete retrofit and allow funding either under Proposition 13, Proposition 50 or future state water bonds.

**CONTACT PERSONS:** Gary Reents, Director of Utilities, 264-1433

**FOR LAW AND LEGISLATION COMMITTEE MEETING OF:** April 15, 2003

**SUMMARY:**

Existing law requires the installation of a water meter as a condition of water service on all residences built after January 1, 1992. Assembly Bill 306 would require:

- All water purveyors, on or before January 1, 2008, to install a water meter on service connections to residential, commercial and industrial buildings constructed prior to January 1, 1992.
- All water purveyors, by January 1, 2009, to charge customers for water based on the actual volume of deliveries, as measured by a water meter.
- If a purveyor does not comply by January 1, 2009, a water purveyor that applies for financial assistance from the state for a wastewater treatment project or a water use efficiency project, or for a permit for a new or expanded water supply, shall demonstrate that the applicant meets the requirements of the bill. Also, non-compliance with AB306 may violate the



CITY OF SACRAMENTO  
DEPARTMENT  
OF UTILITIES

*Making a Difference in Your Neighborhood*

constitutional requirement not to waste water, thus opening the door to challenges of the City's water rights.

The total estimated cost to retrofit the City with water meters under the requirements of AB306 is \$260 million.

**COMMISSION ACTION:** None

**BACKGROUND INFORMATION:**

The Sacramento City Charter Article II Section 11 states "The supply of water for the City of Sacramento for municipal and domestic purposes shall always be owned and controlled as a municipal utility and shall be administered by the city government. No water meters shall ever be attached to residential water service pipes; provided, however, that the City Council in its discretion may regulate by meter the charges for water supply of all other water users." The proposed Assembly Bill 306 would supersede the City Charter and require the City to retrofit existing water services by installing water meters.

The following issues should be considered when evaluating the impacts to the City if AB306 is passed.

**Cost Estimate:**

**Cost per meter.** Based on Utilities most recent experience, the average cost to retrofit buildings with water meters in the City of Sacramento will be approximately \$1,000 per installation. The cost will vary depending on the condition and location of existing water services and if new services need to be constructed.

**Retrofit cost.** The City has approximately 110,000 unmetered residential and commercial services, thus the estimated cost of retrofit will be in the order of \$110 million.

**New main costs.** The City has approximately 209 miles of water mains located through backyard easements. These mains should be abandoned and new mains constructed in the streets with new services connecting the main to the front of the house. The estimated cost for relocating new mains and to include water meters on the new service is \$160 million.

**Increased operating costs.** Future operating costs will be higher with meters than without. Meters have to be repaired, and replaced about every 20 years. Meters have to be read. The current estimate is approximately \$600,000 annually.

### **Implementation Period:**

**Time required to retrofit.** There is a practical limit to how fast the retrofit can be accomplished. The work should be done neighborhood by neighborhood. To meet the time requirements in AB 306, the City would need to contract the work. In order to get experienced contractors, minimize the burden on consumers and homeowners and maximize efficiency, the City would need to "size" contracts to foster competitive bids.

Based on a survey of six water agencies currently performing water meter retrofits, the average number of meter retrofits performed annually is nearly 2,500. The installation numbers range from a high of 5,000 per year in Reno to a low of 500 per year in Fair Oaks. Even at the highest rate of 5,000 meters per year, retrofitting the City's 110,000 services would take 22 years.

Experience in Citrus Heights Water District, which is currently in a multi-year retrofit program, is that about 1,000 meters per contract is a practical limit based on customer service requirements, neighborhood size, inspector workload and contractor capabilities. A typical installation rate for a contractor in Citrus Heights is about 75 meters per week which equates to 3,900 retrofits per year (a rate they have not yet attained). Virtually all of their services are already in the street and much of their system is relatively new.

With the City's situation (old pipes, locating services, mature landscaping) 50 meters per week per contractor would be an optimistic average. At that rate, using the contractors simultaneously, retrofitting 110,000 services could still take 14 years. Given the fact that other cities and districts are already retrofitting, and that even more will have to respond to AB 306, the total workload statewide may make it difficult to get three competent contractors at once. Twenty years to complete the work is a realistic target time frame.

### **Funding:**

**Rate impact.** If water meters are installed and mains are relocated within five years as called for in AB306, but financed with 20-year bonds for meters (life of a water meter is 20 years), and main relocations are financed with 30-year bonds, the resultant water rate increases are 19%, 19%, 10%, 9% and 8% respectively over the five years. Without AB 306 rate increases are projected to be less than 6% annually. This is an overall rate increase of 76%. The average residential water rate will increase from \$17.85 to \$31.84.

### **Benefits:**

Currently, over 5,000 City residences have water meters. Based on data from these meters, the average monthly residential water use in Sacramento is approximately

17,500 gallons per month. Of this amount, it is estimated that at least 50% is returned to the Sacramento River after treatment.

Other Central Valley cities (Davis, Stockton, Vacaville) which charge based on meters have any average monthly residential water use of approximately 12,700 gallons per month. If it is assumed that if Sacramento residents are charged a metered rate, their water use will be similar to other Central Valley cities, a total of about 9,700 acre-feet of water would be saved annually. Comparing this water savings over 20 years to only the capital costs of installing meters results in a unit cost of \$565 per acre-foot of water. Currently, Metropolitan Water District is purchasing dry year water for between \$75 to \$120 per acre-foot. Any water saved by Sacramentans will not directly benefit the City. The benefits will be statewide at a significant cost to Sacramento residents. As such, staff believes that state funding of retrofit in Sacramento is justifiable.

Staff recommends that AB 306 should provide substantial time to accomplish the meter retrofit. The time deadline needs to be extendable, perhaps by the DWR or the SWRCB, if the City is unable to comply due to construction, financing or legal difficulties beyond its control. The bill should also confer priority for funds from Proposition 13, Proposition 50 and future state water bond issues for meter retrofits.

#### **FINANCIAL CONSIDERATIONS:**

The estimated construction, design, and inspection cost for water meter retrofit only is \$110 million. An additional \$160 million would be required to reconstruct existing backyard easement mains out in the street. Accordingly, the total cost for meter retrofit is approximately \$260 million.

#### **ENVIRONMENTAL CONSIDERATIONS:**

Construction projects generated from this bill may be subject to review under the CEQA guidelines.

#### **POLICY CONSIDERATIONS:**

AB 306 will change Article II, Section 11 of the City Charter.

#### **ESBD CONSIDERATIONS:**

Construction projects generated from this bill will include participation goals of 20% for emerging and small business enterprises as required by Ordinance 99-007 and

Resolution 99-055, relating to ESD participation goals and policies, adopted by the City Council on February 9, 1999.

Respectfully submitted,



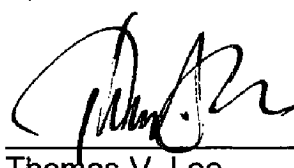
Gary A. Reents  
Director of Utilities

RECOMMENDATION APPROVED:



Robert P. Thomas  
City Manager

Approved:



Thomas V. Lee  
Deputy City Manager

**Table of Contents**

Attachment A      Assembly Bill No 306

LCC Environmental Committee - #4 City of Sacramento is requesting that the League take no action on AB 306 until July meeting. Until amendments made and State Budget known. Estimated \$200 million cost just to City of Sacramento. (See attachment).

AMENDED IN ASSEMBLY APRIL 3, 2003

CALIFORNIA LEGISLATURE—2003–04 REGULAR SESSION

## ASSEMBLY BILL

No. 306

Introduced by Assembly Member Kehoe  
(Coauthors: Assembly Members Hancock, Harman, Laird, and  
Nation)  
(Coauthors: Senators Alpert and Romero)

February 6, 2003

---

An act to amend Section 521 of, and to ~~repeal and add Section 523~~  
~~of add Section 523.5 to~~, the Water Code, relating to water.

### LEGISLATIVE COUNSEL'S DIGEST

AB 306, as amended, Kehoe. Water meters.

Existing law requires the installation of a water meter as a condition of water service provided pursuant to a connection installed on and after January 1, 1992. Existing law declares that the state goal for measurement of water use is the achievement, on or before January 1, 1992, of the installation of water meters on all new water service connections after that date to systems owned or operated by a water purveyor.

This bill would ~~repeal the provision relating to the state goal for water measurement. The bill would require a water purveyor~~ *require certain water purveyors*, on or before January 1, 2008, to install ~~a water meter on service connections to residential and nonagricultural commercial buildings~~ *water meters on all service connections* constructed prior to January 1, 1992, *that are located in their service area*.

The bill would require a water purveyor, on and after January 1, 2009, but subject to a certain exception, to charge customers for water based

on the actual volume of deliveries, as measured by a water meter. The bill, on or before January 1, 2009, would require a water purveyor that applies for financial assistance from the state for a wastewater treatment project or a ~~water-use~~ water-use efficiency project, or a permit for a new or expanded water supply, to demonstrate that the applicant charges customers in accordance with that requirement. *The bill would also authorize a water purveyor to recover the cost of providing services related to the purchase and installation of a water meter from rates, fees, or charges. The bill would authorize a water purveyor that adopts a water meter installation program after January 1, 2003, and that is unable to charge customers for water based on actual volume of deliveries to request an extension of time from the Department of Water Resources, not later than January 1, 2007. The bill authorizes the department to grant an extension of time not extending beyond January 1, 2013, under specified circumstances. The bill would authorize an urban water supplier to implement measures to comply with these new requirements. The bill would permit a water purveyor that does not meet the definition of urban water supplier, but that attains that status subsequent to the effective date of this bill, eight years, commencing on January 1 of the first full year it meets the definition of urban water supplier, to fully comply with the bill's requirements.*

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: no.

*The people of the State of California do enact as follows:*

1 SECTION 1. Section 521 of the Water Code is amended to  
2 read:

3 521. (a) The Legislature further finds and declares that water  
4 furnished or used without any method of determination of the  
5 quantities of water used by the person to whom the water is  
6 furnished has caused, and will continue to cause, waste and  
7 unreasonable use of water, and that this waste and unreasonable  
8 use should be identified, isolated, and eliminated.

9 (b) Water metering and volumetric pricing are among the most  
10 efficient conservation tools, providing information on how much  
11 water is being used and pricing to encourage conservation.

12 (c) Without water meters it is impossible for homeowners and  
13 businesses to know how much water they are using, thereby

1 inhibiting conservation, punishing those who conserve, and  
2 rewarding those who waste water.

3 (d) Existing law requires the installation of a water meter as a  
4 condition of water service provided pursuant to a connection  
5 installed on or after January 1, 1992, but the continuing  
6 widespread absence of water meters and the lack of volumetric  
7 ~~pricing is a wasteful and unreasonable use of the state's water.~~  
8 *pricing could result in the inefficient use of water for municipal*  
9 *and industrial uses.*

10 (e) *This chapter pertaining to water measurement deals with a*  
11 *subject matter of statewide concern, and it is the intent of the*  
12 *Legislature that upon enactment, it supercede and preempt all*  
13 *enactments of all counties, cities, and other local public agencies*  
14 *regarding matters set forth in this chapter.*

15 ~~SEC. 2. Section 523 of the Water Code is repealed.~~

16 ~~SEC. 3. Section 523~~

17 *SEC. 2. Section 523.5 is added to the Water Code, to read:*

18 ~~523. (a) On or before January 1, 2008, a water purveyor shall~~  
19 ~~install a water meter on service connections to all residential and~~  
20 ~~nonagricultural commercial buildings constructed prior to January~~  
21 ~~1, 1992, in their service area.~~

22 *523.5. (a) On or before January 1, 2008, water purveyors*  
23 *operating community water supply systems meeting the definition*  
24 *of an urban water supplier pursuant to Section 10617 shall install*  
25 *water meters on all service connections constructed prior to*  
26 *January 1, 1992, located within their service area.*

27 (b) Unless a contract that was executed prior to January 1,  
28 2004, provides otherwise, on and after January 1, 2009, a water  
29 purveyor shall charge customers for water based on the actual  
30 volume of deliveries, as measured by a water meter.

31 (c) On and after January 1, 2009, a water purveyor that applies  
32 for financial assistance from the state for a wastewater treatment  
33 project or ~~a water-use~~ *water-use* efficiency project, or for a permit  
34 for a new or expanded water supply, shall demonstrate that the  
35 applicant meets the requirements of subdivision (b).

36 (d) *A water purveyor may recover the cost of providing services*  
37 *related to the purchase and installation of a water meter from*  
38 *rates, fees, or charges.*

39 (e) *A water purveyor that adopts a water meter installation*  
40 *program after January 1, 2003, that is unable to meet the*



1 requirements of subdivision (b) may request, not later than  
2 January 1, 2007, an extension of time from the Department of  
3 Water Resources. The department may grant an extension of time  
4 based upon a determination that the water purveyor has made  
5 reasonable progress toward meeting the requirements of  
6 subdivision (b). An extension of time may not extend beyond  
7 January 1, 2013.

8 (f) An urban water supplier, notwithstanding any other local  
9 ordinances, has the authority to implement measures to comply  
10 with this section when this section becomes effective.

11 (g) A water purveyor that does not meet the definition of urban  
12 water supplier by the effective date of the statute, but that attains  
13 that status subsequent to the effective date of the statute, shall have  
14 eight years, commencing on January 1 of the first full year it meets  
15 the definition of urban water supplier, to fully comply with this  
16 section.