City of Richmond

Report to Committee

To:	Public Works and Transportation Committee	**Date:**	To PW+T- Feb. 19, 2003 February 10, 2003
From:	Eric G. Gilfillan Director, Operations	**File:**	6650-01
Re:	**Water Metering Strategy**		

Staff Recommendation

1. That a voluntary residential water metering program implemented over a three-years period be approved, and

2. That Staff be instructed to issue an RFP (Request For Proposal) for installation of water meters and other services related to the residential metering program, and

3. That all existing residential dwellings with existing meters be assessed the metered rate effective June 30, 2003, and

4. That all new residential dwellings and reconstructed residential projects with a value over $50,000 have meters installed as part of the construction and be assessed the metered rate upon occupancy, effective June 30, 2003.

Eric G. Gilfillan
Director, Operations

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Staff Report

Origin

On September 23, 2002 Council endorsed a water management and metering strategy for the City of Richmond. Recognizing the complexity of implementing such a program, staff were instructed to come back with individual reports on each stage of this project. This report will review the residential metering component.

Analysis

The City of Richmond when compared regionally is the second highest water consumer with 668 Lpcd (Litres per capita/day). Delta is the highest by a 2% margin, while the City of Surrey's consumption is 30% lower.

The decision to implement residential water metering cannot be supported from an economic point of view alone, although there have been many examples of successful water metering programs, which have resulted in direct savings to the end users. The main driving force for residential metering is an equitable and fair method of paying for water delivery including the distribution system maintenance and renewal costs.

Next Steps in the Water Demand Management and Metering Strategy

If approved, staff will enter into discussions with private sector service providers on the various options for delivery of the metering service and issuance of a request for proposals.

Staff have considered various residential metering implementation strategies and recommend the following actions for approval.

1) **Residential Metering Through a Turnkey Voluntary Program**
Most other cities implementing residential metering usually start with a voluntary program. The voluntary residential metering program allows for the gradual acceptance of the customers, and leaves them with the choice of remaining on the flat rate program or moving to the metered rate.

The City of Surrey recently entered in to a voluntary residential metering implementation agreement with a service provider that has a unique difference. The service provider is responsible for meter installations, as well as, responsibility for the promotion and the marketing of the program.

The service provider is paid an incentive through a sliding payment scale system based on the numbers of water meters installed. When the service provider installs 0 to 10,000 meters, they are paid $230 per installation, for 10,000 to 20,000 meters this payment is increased to $240 per installation. This provides an incentive for the service provider and results in a very aggressive marketing program to promote the benefits of metering to the customers.

2) **Existing Residential Homes With Water Meters**
There are approximately 1000 existing residential dwellings that already have water meters in place. These meters are used to analyze the residential water consumption for the flat rate billing. The first step towards universal residential metering, requires that residential homes with existing meters to be removed from the flat billing system and billed the metered rate.

3) **All New Residential Construction And Re-Development Projects**
Currently all new residential single-family construction and redevelopment projects over $50,000 are required to have meters and meter pits at the property line. These meters are used to analyze the residential water consumption for the flat rate billing. The next step toward universal residential metering, would require new residential homes and those with redevelopment projects over $50,000 to be removed from the flat rating billing system and billed the metered rate.

The chart below is a demonstration of the annual water bill for the different user groups. The chart is based on average consumptions; actual customer usage may vary with different results.

Water Utility Rate Comparison	*2003* Flat Rate	Quarterly Flat Rate $15.00	Annual Average Water Consumption By Cu/m	Meter Rate Cubic Meter $0.54	Meter Quarterly Rental Fee	Annual Water Costs
a) Single occupant with ¾" service	$227.20	$60.00	260	$140.35	$10.90	$211.25
b) SFD with 3/4" service	$273.64	$60.00	350 -400	$188.93	$10.90	$259.83
c) Mega houses with 1" service	$432.09	$60.00	600 or less	$323.88	$13.63	$397.51
d) Town homes	$229.93	$60.00	250	$134.95	$4.96	$199.91
e) Apartments	$148.40	$60.00	150	$80.97	$5.12	$146.09

Financial Impact

None at this time.

Conclusion

The implementation of a residential voluntary water-metering program for $16.2 M is consistent with the City's concept and direction of user pays. Water metering puts the customer in control of their consumptions and gives the customer a tool to better manage their costs.

Steve McClurg
Manager, Water Services