

OFFICE OF THE CITY MANAGER

January 27, 2003

TO: City Council  
FROM: City Manager  
SUBJECT: Proposed Changes to the Water Rate Ordinance - Effective Date Change

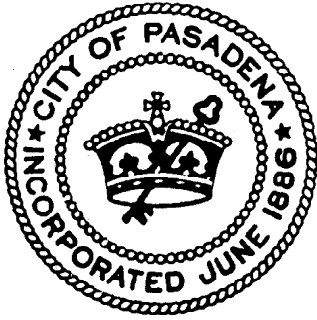
At its November 4, 2002 meeting, the Municipal Services Committee introduced recommended changes to the Water Rate Ordinance. The City Council requested that Water and Power Department staff conduct community meetings to solicit public input and bring the item back for Council consideration at a later date. Those meetings have been completed.

As a result of this process, the effective date for the changes must be moved. The original recommendation included an effective date of January 2003. Staff now recommends that the changes become effective on April 1, 2003.

Respectfully submitted,

Cynthia J. Kurtz  
City Manager

1/27/2003  
5.D.(1)



# Agenda Report

November 4, 2002

**TO:** City Council  
**THROUGH:** Municipal Services Committee  
**FROM:** City Manager  
**SUBJECT:** Proposed Changes to the Water Rate Ordinance

## RECOMMENDATION

It is recommended that the City Council direct the City Attorney to prepare an amendment to the Water Rate Ordinance, Chapter 13.20 of the Pasadena Municipal Code to:

1. Establish and assess a formula-based capital improvements charge (CIC) averaging \$0.20 per billing unit on the water delivered to customers effective January 2003, to fund the proposed Water System Master Plan (WSMP) capital improvements program, thereby increasing overall water operating revenue by 11%. A billing unit is a hundred cubic feet of water.
2. Increase the CIC by an additional \$.022 per billing unit effective July 2004, thereby increasing overall water operating revenue by an additional 11%.
3. Reduce the size of the first block water for 5/8-inch, 3/4-inch, 1-inch, and 1 1/2-inch meter sizes to reflect the actual amount of local water supply, effective January 2003.
4. Adjust miscellaneous fees and charges to reflect cost of service, effective January 2003.
5. Eliminate the current standby charges and replace them with new comparable distribution and customer charges to cover ongoing operating and maintenance costs of the water system, effective January 2003.

1/27/2003  
MEETING OF 11/4/2002

5.D.(1)  
AGENDA ITEM NO. -5-D-2-

## **BACKGROUND**

Last year Pasadena Water and Power (PWP) retained Montgomery Watson Harza (MWH), an environmental engineering company, to evaluate the water system and develop a comprehensive WSMP that identifies the needed water infrastructure improvements through 2020 and the required funding. This extensive study was completed in June 2002.

MWH determined that an investment of approximately \$234.6 million over the next 18 years would be required to address existing deficiencies and to adequately and reliably produce and distribute water. Of this amount, the study calls for PWP to fund \$204 million of the identified improvements and for others to fund the remaining amount of \$30.6 million for perchlorate treatment. A summary of the planned expenditures for the first five years of the proposed WSMP capital improvements program totaling about \$67.4 million is shown in Attachment 1. The water revenue increase proposed herein is based on the cash flow requirements of the proposed WSMP and will provide the initial funding for the first five years of the capital expenditures. As the implementation of the program proceeds, the funding needs would be revised accordingly.

## **WATER COST OF SERVICE STUDY**

Concurrent with the WSMP, a water cost of service and rate design study was conducted by Navigant Consulting, Inc. to determine the actual cost of service and to develop water rate design options to fund revenue requirements. Chief among the issues considered in this study was allocation of water rights in the Raymond Basin among customer groups and/or between inside and outside city customers and charges for connecting to the water system.

The water cost of service study indicates that existing water rates are not sufficient to fund PWP's ongoing capital improvements program beyond June 2003. Currently, PWP generates about \$30 million from existing water rates and non-operating revenues. Approximately \$2 million of that amount is available for capital expenditures after all expenses.

The water cost of service study also indicates that there is a disparity between the available local water production (which is approximately 40% of total production) and the actual consumption at first block water rates, primarily with regard to small consumers. The effect of this variance is that higher cost imported water is being provided at the much reduced first block water rate.

The water cost of service consumption frequency distribution charts for 5/8-inch, 3/4-inch, 1-inch, and 1 1/2-inch meter sizes indicates that about 48% of the total water consumption for these meters is at the first block water level. Based on the pricing methodology used in the water cost of service, it is proposed that the size of

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the first block water for 5/8-inch, 3/4-inch, 1-inch, and 1 ½-inch meter sizes be reduced as shown in Table 1 below.

**Table 1**

<b>Meter Size</b>	<b>1<sup>st</sup> Block Water as % of Total Consumption</b>	<b>Current 1<sup>st</sup> Block Water Size, Billing Units (BU) Per Month</b>	<b>Proposed 1<sup>st</sup> Block Water Size, Billing Units (BU) Per Month</b>
5/8-inch	47%	15	12
3/4-inch	45%	15	12
1-inch	50%	15	12
1 ½-inch	50%	50	40

Conservation programs sponsored jointly by PWP and the Metropolitan Water District (MWD) offer rebates that can help water customers reduce their water usage. For example, PWP is adding two new water conservation programs for residential customers; namely the Evapotranspiration Landscape Irrigation Controllers Program and the High Efficiency Clothes Washers Program. PWP is also expanding its Ultra Low Flush Toilet Program for residential customers to include the Dual-Flush Toilet Program.

The water cost of service study also proposed that for the new water rates, PWP:

- eliminate the current standby charges and replace them with new comparable distribution and customer charges to cover ongoing distribution and customer costs of the water system. This change is necessary to redefine and clarify the purpose of these charges. This action is revenue-neutral and no change in the computation of these charges is recommended at this time.
- maintain the existing 35% rate differential between inside and outside city customers and a 6% differential between summer and winter rates to provide the appropriate conservation oriented price signals.
- maintain the purchase water adjustment charge (PWAC) feature in the water rate structure. PWAC is the mechanism that allows for the pass-through of all related purchased water costs, not included in the existing commodity rates, to water customers.
- revise connection fees as detailed below.

Connection Fees: The study determined that PWP's charges for connection installations are below its actual costs and significantly lower than the average of neighboring water utilities by about 20 to 50%; hence, the need to increase the charges to bring them closer to cost recovery level. Some of the proposed connection installation charges are shown in Table 2 below. Other proposed changes to miscellaneous fees and charges, such as application and lateral charges and charges for new fire hydrants, are shown in Attachment 2.

**Table 2**  
**Proposed Installation Connection Charges**

Description	PWP Current Installation Charge	PWP Actual Installation Cost	Proposed Installation Charge
1-inch Domestic Service	\$1,300	\$1,682	\$1,700
1 ½-inch Domestic Service	\$2,100	\$2,256	\$2,300
2-inch Domestic Service	\$2,400	\$3,707	\$3,700
3-inch Domestic Service	\$4,400	\$8,463	\$8,500
4-inch Domestic Service	\$4,900	\$9,410	\$9,400
6-inch Domestic Service	\$6,550	\$13,327	\$13,400
8-inch Domestic Service	\$9,450	\$16,640	\$16,700

**PROPOSED CAPITAL EXPENDITURES FUNDING PLAN**

In developing the funding requirements for the proposed WSMP capital improvements program and the cost of service study, staff conducted an analysis to determine a financial structure that supports the needed capital investments and minimizes the rate impacts on water customers. Staff also examined the impact of various levels of debt financing for the capital improvements program. Based on this financial analysis, staff intends to use a funding mix of revenue bond financing and cash from rates on a 65:35 basis, while maintaining a minimum cash balance that meets the City's working cash requirements and a minimum debt service coverage ratio that should support ratings of A+ or AA on future revenue bond issues. The use of revenue bonds for a portion of the capital program results in the cost of these long-term improvements being shared by future water customers as well as current water customers.

PWP anticipates issuing revenue bonds totaling approximately \$85 million to support the WSMP proposed capital expenditures over the next ten years, with the first issuance of about \$22 million occurring in the first half of 2003. In order to

support the debt service and operating and maintenance expenses for the water system, Council approval to establish and assess a CIC of approximately \$0.20 per BU in January 2003 is recommended. In addition, Council approval to increase the CIC by an additional \$0.22 per BU in July 2004 is recommended. The proposed CIC amounts are based on the funding requirements for the first five years of the proposed WSMP capital expenditures plan, and will be specifically dedicated to fund the proposed WSMP water system improvements.

The funding scenario calls for two more increases in capital improvements charges over the next ten years. As each year's CIP is presented during the capital budget process, Council will be advised of the impact that the proposed modifications will have on the CIC. The aforementioned formula-based CIC will be derived by dividing the incremental revenue required to fund the approved capital expenditure plan by the projected water system sales for the next 12 months stated in terms of number of billing units, and adjusted for jurisdictional price differential.

At the end of the ten-year period and assuming that the four anticipated capital improvements charges were implemented, the average annual bill of small residential customer would increase from \$154 in FY 2003 to \$282 in FY 2012, and the average bill of a large commercial customer would increase from \$15,999 in FY 2003 to \$19,554 in FY 2012. As the WSMP implementation is refined over time, the timing and sizing of proposed bond issues and/or the timing and magnitude of planned water revenue increases will be reevaluated. Any required changes to the financial plan will be brought back to City Council for approval. The current financial market environment of historically low interest rates provides a favorable bond financing opportunity. Approval of the proposed water revenue increase would strengthen PWP's position when accessing the financial markets to raise capital and demonstrate to the credit rating agencies the City's resolve to fund the operational and capital needs of the utility.

### **CUSTOMER BILL IMPACT**

The impact of the proposed changes on customers will be based on both the imposition of the CIC and the customer's water usage. Under the proposed January 2003 revenue adjustment, the bill for an average residential customer with a 5/8-inch meter using 12 BU per month would increase by \$2.28 per month under both summer rates and winter rates, for an annual increase of \$27.36. There will be no impact from the re-sizing of the commodity blocks unless the customer exceeds 12 BU per month.

The bill for an average residential customer with 1-inch meter using 20 BU per month would increase by \$7.55 per month under summer rates and \$7.39 under winter rates, of which \$3.80 would be due to adding the CIC. As the size of Block 1 water is proposed to be limited to 12 BU per month, such a customer would also

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have an increase of \$3.75 monthly under summer rates and \$3.59 monthly under winter rates due to the block adjustment. Customers with 3/4-inch and 1 1/2-inch meters would be similarly affected.

Under the proposed July 2004 revenue adjustment, the bill for an average residential customer with a 5/8-inch meter using 12 BU per month would further increase by \$2.50 per month. Other approximate impacts on average annual bills of selected customer types are provided in Table 3 below.

**Table 3  
 Proposed Capital Improvements Charges  
 Annual Bill Impact**

<b>Selected Customer Type</b>	<b>Meter Size; (BU)</b>	<b>Current Annual Bill</b>	<b>Proposed Annual Bill with Jan. 2003 Revenue Adjustment</b>	<b>Proposed Annual Bill with July 2004 Revenue Adjustment</b>
Small Residential	5/8" ; 12 BU	\$154	\$181	\$211
Small Residential	3/4" ; 18 BU	\$238	\$323 *	\$369 *
Med Residential	1" ; 20 BU	\$347	\$437 *	\$488 *
Med Commercial (20-unit apartment)	2" ; 125 BU	\$2,660	\$2,885	\$3,201
Large Commercial (School)	4" ; 600 BU	\$13,113	\$14,481	\$15,999
Large Commercial (High Rise Office)	6" ; 1,375 BU	\$27,377	\$30,511	\$33,989
Large Commercial (Hospital)	6" ; 2,400 BU	\$49,323	\$54,792	\$60,863

\* Proposed annual bill includes the impact of the block adjustment

**RATE COMPARISON**

Pasadena has enjoyed very low rates compared with other cities for some time. Even with the proposed increases, rates will still compare favorably with most of the nearby water purveyors. A comparison of PWP rates with the proposed January 2003 and July 2004 increases, and those of nearby water purveyors for selected customer types is shown in Table 4 below. Also, a chart comparing the proposed rates with other water purveyors is provided in Attachment 3.

**Table 4  
 Comparison With Other Water Purveyors  
 Average Annual Water Bill**

Customer Group	Meter Size; (BU/ Month)	Proposed PWP Rates with Jan. 2003 CIC and July 2004 CIC	Glendale	Burbank	Lincoln Avenue	LADWP*	Peer - Average
Small Residential	5/8"; (12)	\$211	\$328	\$249	\$425	\$300	\$335
Small Residential	3/4"; (18)	\$369	\$483	\$341	\$582	\$450	\$464
Med Residential	1"; (20)	\$488	\$594	\$372	\$622	\$514	\$525
Med Commercial	2"; (125)	\$3,201	\$3,801	\$1,975	\$3,714	N/A	\$2,821
Large Commercial	4"; (600)	\$15,999	\$18,014	\$9,231	\$12,036	N/A	\$13,094
Large Commercial	6"; (1,375)	\$33,989	\$40,959	\$21,069	\$27,288	N/A	\$29,772
Large Commercial	6"; (2,400)	\$60,863	\$70,854	\$36,726	\$47,460	N/A	\$51,680

\*LADWP rates are based on criteria not directly comparable to those of PWP



**FISCAL IMPACT**

The proposed January 2003 CIC is expected to generate approximately \$1.5 million in additional revenues for the remainder of FY 2003, and about \$3.19 million on an annual basis, thereby increasing overall operating water revenue by 11%. The proposed July 2004 CIC is expected to generate additional revenues of \$3.36 million in FY 2005, for a combined total increase of approximately \$6.39 in FY 2005. The projected revenues from the CIC will be dedicated to direct funding of the proposed WSMP capital improvements program, and additional revenue due to the reduction in the first block size for small consumers will be utilized to offset purchased water costs.


In addition, revenue of approximately \$167,000 is expected from the adjustment of incidental and miscellaneous water fees and charges as proposed. This additional revenue will be utilized to cover PWP's operational cost.

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Respectfully submitted,

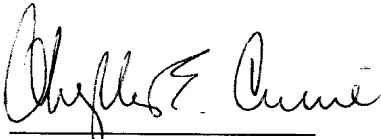
  
Cynthia J. Kurtz  
City Manager

Prepared by:



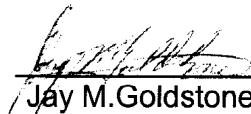
Tunji Adedeji  
Financial Planning and Analysis Manager  
Pasadena Water and Power

Approved by:



Phyllis Currie  
General Manager  
Pasadena Water and Power

Concurred by:



Jay M. Goldstone  
Director of Finance  
City of Pasadena

Attachments (3)

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