# **ATTACHMENT 1**

## **WATER RATE PROPOSAL**

Proposed Water Rate Increases and Implementation of Water-Conservation Based Rate Structure

Pasadena Water and Power Department

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#### 1.0 INTRODUCTION

This report provides a detailed description of the current water rate structure, an analysis of the water distribution and customer charge revenues and expenses, a summary of the results of the water cost of service study, and the financial condition of the Water Fund. It also provides the current water supply condition, the proposed changes to the water rate structure including the implementation of a phased water-conservation based rate structure.

#### 1.1 Current Water Rate Structure

PWP currently has a seasonal three-tier water rate structure in which the quantity of water provided in each tier varies by meter size only and the water usage rates are higher for higher levels of consumption. See Table 1 below for the block allocation and commodity rates.

Table 1
Current Water Block Allocation and Commodity Rates

Usage by Block (BU/Month)								
Meter Size	Block 1	Block 2	Block 3					
5/8", 3/4", 1"	0-12	13–38	>38					
1-1/2"	0-40	41-325	>325					
2"	0-50	51-325	>325					
3", 4"	0-150	151–1,275	>1,275					
6", 8", 10", 12"	0-400	401–3,400	>3,400					
	Commodity Rates	s per BU						
Summer Rate - IC	\$0.98/BU	\$2.24/BU	\$2.41/BU					
Winter Rate - IC	\$0.93/BU	\$2.13/BU	\$2.40/BU					
Summer Rate - OC	\$1.16/BU	\$2.85/BU	\$3.09/BU					
Winter Rate - OC	\$1.10/BU	\$2.71/BU	\$2.98/BU					

The water rates charged to customers are comprised of three major components: Distribution and Customer Charge (D&C); Capital Improvement Charge (CIC); and Commodity Charge including Purchased Water Adjustments Charge (PWAC.) Each of these components is designed to generate revenue to recover specific costs as outlined below:

**Distribution and Customer (D&C) Charge** – is fixed for each meter connection size and is not based on the volume of water consumed. The D&C charges are set by ordinance and require City Council approval of an ordinance amendment in order to be adjusted. The D&C charges vary between inside-city and outside-city services. The revenue generated from this rate component is intended to recover the ongoing costs of operation. These costs include:

Water quality testing and reporting

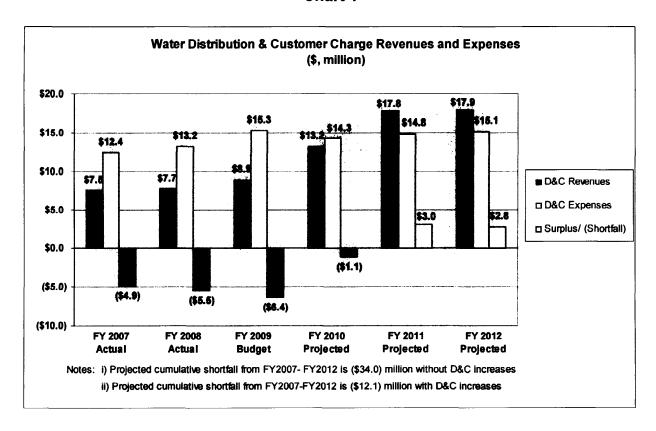
- Systematic exercise of water valves to ensure reliability of distribution system
- Scheduled maintenance and minor repairs to water delivery system including reservoirs and mains that do not qualify as capital investment
- Engineering for projects that do not qualify as capital investment, including the impact to City infrastructure related to private development projects
- Allocated share of general costs for billing, meter reading, call center and credit functions

This rate component also generates revenue through the Fire Protection Surcharge (FPS) which covers the cost of fire hydrant replacements and upgrades that are not directly related to new development. The FPS varies by meter size, and the combined D&C and FPS generate about \$9.0 million annually. In July 2008, the City Council approved an increase to the D&C as an interim to safeguard the financial health of the Water Fund. Prior to the July 2008 increase, the D&C rates had not been increased since 1995, despite increases in the operational and maintenance costs of the water system.

The structural imbalance in operations first developed in about 2002, during the same time frame that priorities shifted to investment in the Water system infrastructure. The City Council adopted the Water Distribution System Master Plan in 2002 and approved the Capital Improvement Charge (CIC) as a funding mechanism for the master plan projects. PWP also began to experience significant increases in the cost of imported water from MWD, which was then passed through to customers utilizing the PWAC as approved by City Council. In an effort to mitigate the collective rate impact on customers, staff did not recommend adjustments to the D&C charge until June 2008.

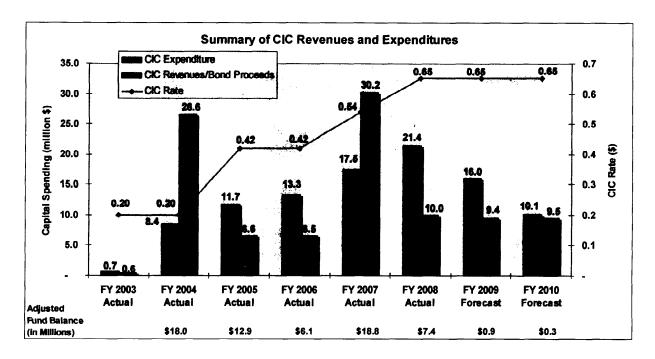
Chart 1 shows the actual and projected D&C revenues and expenses as well as actual and projected shortfall in D&C revenues.

#### Chart 1



Capital Improvement Charge (CIC) – this rate component is intended to generate revenue dedicated to investment in the Water distribution system as approved in the Water Distribution System Master Plan (WDSMP). Revenues must also cover the principal portion of bonds issued to facilitate investment in the water infrastructure. The CIC rate is volumetric and the revenue generated varies with the amount of water consumed. The CIC which was established in 2002 averages about \$0.65 per billing unit of water delivered, and generates about \$10 million annually. Chart 2 provides a summary of the historical water capital spending including the CIC rates and expenditures since its inception.

Chart 2



Commodity Charge and Purchased Water Adjustment Charge (PWAC) – these rate components generate revenue to cover the costs of the actual water commodity, both groundwater and purchased water. The PWAC functions as a mechanism to pass through the increased cost of water purchased from the Metropolitan Water District (MWD) and additional production cost of local groundwater supply, not included in existing commodity charges to customers. The current commodity rates including PWAC generate about \$24 million annually. In July 2008, the City Council approved an increase of \$0.10 per billing unit to the commodity rate that will be effective in July 2009. A billing unit is equal to 748 gallons. This increase was required to pass-through increases in purchased water costs. Prior to the July 2008 PWAC adjustment of \$0.23 per BU, there were two PWAC adjustments implemented since October 2003; a \$0.03 per BU increase in October 2003 and a \$0.04 increase in December 2004.

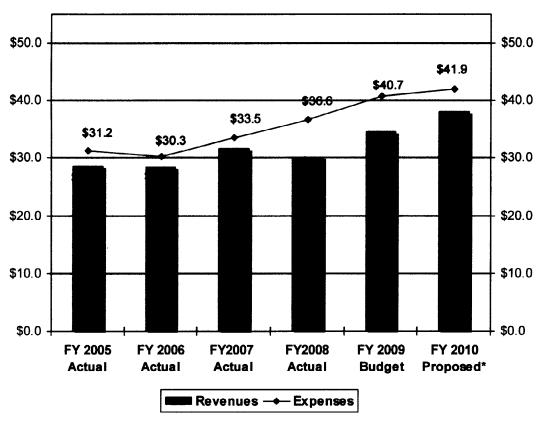
#### 1.2 Water Fund Financial Condition

Prior to the adoption of the FY 2009 operating budget, PWP conducted a revenue requirement analysis of the Water Fund and determined that revenues from existing rates were insufficient to meet projected FY 2009 revenue requirements. This finding was substantiated by the results of the Water Cost of Service Study (WCOS) completed by Red Oak Consulting in July 2008. The results of the WCOS were presented to the Municipal Services Committee in November 2008 although no specific rate adjustments were recommended at that time.

Chart 3 depicts the relationship between the water fund operating expenses and revenues over the past five years and clearly shows the structural imbalance between revenues and expenses.

Chart 3

Water Fund
Operating Revenues and Expenses (in millions)\*\*
FY 2005 – FY 2010



<sup>\*</sup>Excludes proposed rate changes

As discussed above, recent adjustments to the water rates have focused on the approved investment in the City's water infrastructure as approved in the Water Distribution System Master Plan through establishment and adjustments to the Capital Improvement Charge (CIC) and the pass-through of additional costs of both local groundwater and purchased water from the Metropolitan Water District (MWD) through the Purchased Water Adjustment Charge (PWAC).

PWP has undertaken significant measures in recent years to reduce operating costs and improve efficiencies. For fiscal year 2009, approximately \$500,000 will be saved through the postponement of vehicle purchases and reduced purchases of services and

<sup>\*\*</sup> This chart depicts operating revenues and expenses only and does **not** include CIC revenues or related capital expenditures

supplies. An additional reduction of more than \$1 million is proposed for fiscal year 2010 through reduced overtime, reduced investment in small parts and tools, and careful management of the use of consultants and travel and training to ensure that operating costs reflect efficient service delivery. In addition, maintenance schedules and capital expenditures are carefully managed to ensure that investment in reliability and infrastructure focus on those areas most critical to service delivery.

#### 1.3 Current Water Supply Condition

There are currently significant challenges facing water supply in California, including recent drought conditions and the high probability that Metropolitan Water District (MWD), PWP's major wholesale water purveyor, will declare a water shortage at any time in the future. In addition, PWP faces certain infrastructure constraints that prevents immediate implementation of a comprehensive water-budget based rate structure and faces the ongoing need to ensure revenue adequacy to preserve the Water Fund financial health. As a result, PWP is proposing to implement a modified conservation based water rate structure by July 2009. This interim step is necessary to address PWP water conservation and sustainable water supply issues and protect the financial viability of the Water Fund while giving PWP the necessary time to put in place the required infrastructure to implement a comprehensive water-budget based rate structure. The existing increasing block rates have some potential in encouraging conservation, but they are not sufficient in light of the dwindling available water supply.

### 2.0 PROPOSED WATER RATE CHANGES

PWP is proposing changes to the water rates over the next two fiscal years to reflect cost of service, recover increased operation and maintenance costs of the water system, and preserve the financial health of the Water Fund. These proposed increases are not related to water supply conditions and are necessary to ensure revenue adequacy. Specifically, PWP proposes to:

- Increase the D&C revenues by \$4.1 million and the Fire Protection Services (FPS) revenues by \$0.25 million for all customer groups effective July 2009, thereby increasing the overall water operating revenue by \$4.35 million or 10%
- Increase the D&C revenues by an additional \$4.5 million for all customer groups effective July 2010, thereby increasing the overall all water operating revenue by \$4.5 million or 8.7%
- Re-size the existing commodity block widths to reflect cost of service and resource availability, and re-align pricing for Blocks 1, 2 and 3 to reflect the actual cost of providing water from the sources for each block

- Maintain the Purchased Water Adjustment Charge (PWAC) mechanism, by combining the current PWAC into base commodity rate and reset PWAC to zero (no additional revenue).
- Change the existing 35% rate differential between inside and outside customers to 25% to reflect a rate of return comparable to that allowable for investor owned utilities and the level of PWP's investments in its water system
- Adjust the seasonal rate differential between winter and summer rates from 6% to 3% to reflect actual summer peaking cost (no additional revenue)

#### 2.1 PROPOSED D&C AND FIRE PROTECTION SURCHARGES:

The proposed July 2009 increases in the D&C charges and the FPS are expected to generate additional \$4.3 million annually and the proposed July 2010 increases in D&C charges are expected to generate an additional \$4.5 million. The recommended Fiscal Year 2010 Operating Budget is based on the implementation of the proposed July 2009 increases to the D&C charges and FPS. Table 2 below shows the current and proposed D&C charges and FPS for inside-city city customers.

Table 2
Proposed Monthly Increases in D&C Charges and Fire Protection Surcharges

			7 2009 PROPOSED JULY 2010 PROPO ATE CHANGES RATE CHANGES		
Meter Size	Current Monthly D&C with FPS	Proposed Monthly D&C with FPS	\$ Change	Proposed Monthly D&C	\$ Change
Residential					
5/8" & 3/4"	\$8.17	\$12.32	\$4.15	\$16.14	\$3.82
1"	\$15.52	\$23.41	\$7.89	\$30.68	\$7.27
Commercial					
1 1/2"	\$31.85	\$48.54	\$16.69	\$61.95	\$13.41
2"	\$73.59	\$111.05	\$37.46	\$145.35	\$34.30
3"	\$179.76	\$271.13	\$91.37	\$355.29	\$84.16
4"	\$276.60	\$416.00	\$139.40	\$549.03	\$133.03
6"	\$425.99	\$643.61	\$217.62	\$839.73	\$196.12
8"	\$693.73	\$1,045.56	\$351.83	\$1,372.62	\$327.06
10"	\$902.81	\$1,360.62	\$457.81	\$1,786.44	\$425.82
12"	\$1,023.12	\$1,544.99	\$521.87	\$2,017.09	\$472.10

#### 2.2 COMMODITY BLOCK REALIGNMENT - COST OF SERVICE

PWP proposes to re-size the existing commodity block widths to better reflect cost of service and encourage conservation. A recent analysis of the consumption distribution indicates a disparity between available local water supply and the amount of water consumed at Block 1 level. The total consumption at the first block water rates is about 41 percent of the total consumption compared to the available local water supply which is about 35 percent of total production. Given that Block 1 rates were designed to reflect the available local water supply, any amount of water consumed at the Block 1 level above the total local water supply will result in providing higher cost imported water at much lower rates.

The proposed restructuring of commodity block widths will ensure consumption equal to the following system averages across all customers:

> Block 1 – 35% Block 2 – 80% Block 3 – 90%

It is important to note that these are system-wide averages, and some customers will be allotted less than the average for each block. For example, customers in meter sizes greater than 3 inches will receive less that 35% of their usage from Block 1, which is consistent with current usage patterns. Alternatively, these same customers will receive a larger allocation of Block 2 water than is indicated by current usage patterns. The restructuring provides for a realignment of consumption averages to reflect water cost of service and supply.

#### 3.0 WATER-CONSERVATION BASED RATE STRUCTURE

Consistent with Pasadena Water and Power's (PWP's) overall financial strategy and Comprehensive Water Conservation Plan, PWP proposes to implement a phased water conservation based rate structure to improve water use efficiency, encourage conservation, provide conservation price signals, and ensure revenue adequacy to preserve the financial health of the Water Fund. Implementation of the water conservation based rate structure will be completed in two phases to accommodate infrastructure and budgetary constraints. Effective July 2009, PWP proposes to modify its current rate structure to provide greater equity and incentive for water conservation, and to implement a modified water conservation based rate structure as described herein. PWP also proposes to change the bill print and improve water usage data on bills. PWP is committed to the efficient use of water as a long term goal and to ensure that any potential revisions to water rate design are in compliance within the requirements of Proposition 218.

#### 3.1 Customer Reclassification

PWP proposes to redefine customer groups by residential, multi-family and commercial /institutional based on consumption characteristics instead of by meter size only. This

will reduce and/or eliminate some of the inequity that arises when service costs which vary by customer class and meter size are allocated strictly based on meter size. It will also allow PWP to create separate classifications for single family residences and commercial properties that share the same meter size but consume water in different patterns. The planned customer groups shown in Table 3:

Table 3
Current and Planned Customer Groups

Current Customer Group (Meter Size)	Proposed Customer Group
5/8" - 3/4"	Small Single Family Residential
1"	Medium Single Family Residential Small Multi-Family Residential Small Commercial / Institutional
1 1/2"	Large Single Family Residential Small Multi-Family Residential Small Commercial / Institutional
2"	Large Estate Residential  Medium Multi-Family Residential  Medium Commercial / Institutional
3", 4"	Large Multi-Family Residential  Medium Commercial / Institutional
6"	Large Multi-Family Residential Large Commercial / Institutional
8", 10", 12"	Large Commercial / Institutional / Industrial

#### 3.2 Commodity Block Realignment – Water Conservation

PWP proposes to add two new higher price commodity rate tiers to the existing three commodity tiers to reflect the higher cost of purchased water for excessive use. The new fourth and fifth tiers will also be designed to encourage conservation, provide necessary price signals and achieve desired conservation objectives of reducing water demands by up to 10 percent. The cumulative usage through the new Block 4 for all customer groups will be capped at about 95 percent of total water consumption and the cumulative usage through the new Block 5 for all customer groups will be designed to equal 100% of total water consumption. Table 4 shows the modified water-conservation rate block allocation per month.

Table 4
Modified Conservation Rate Block Allocation per Month

Customer Group Served	Meter Size	Block 1 (BU)	Block 2 (BU	Block 3 (BU	Block 4 (BU	Block 5 (BU
Residential – Small SF	5/8", 3/4"	0 – 8	9 - 24	25 - 34	35 - 46	47>
Residential – Medium SF / Small MF	1"	0 – 12	13 – 40	41 – 60	61 – 90	91>
Small Commercial / Institutional	'	0 – 12	13 – 40	41 - 60	01 - 90	912
Residential – Large SF / Small MF	1 1/2"	0 – 22	23 – 86	87 – 132	133 – 188	189>
Small Commercial / Institutional						
Residential – Large Estate/Small MF	2"	0 – 48	49 – 188	189 – 290	291 – 405	406>
Medium Commercial / Institutional	_			.00 200		
Residential – Medium MF	3"	0 440	117 – 500	501 – 860	064 4 200	4 2045
Medium Commercial / Institutional	3"	0 – 116	117 - 500	501 - 860	861 – 1,300	1,301>
Residential – Large MF	4"	0 005	226 –	1 001 1 000	4 004 2 000	2.0045
Medium Commercial / Institutional	4	0 – 225	1,000	1,001 – 1,800	1,801 – 3,000	3,001>
Residential – Large MF	0"	0 500	501 –	5 004 0 000	8,801 –	40.004
Large Commercial / Institutional	6"	0 – 500	5,600	5,601 – 8,800	12,000	12,001>
Large Commercial / Institutional / Industrial	8"	0 – 500	501 – 5,600	5,601 – 10,000	10,001 – 14,000	14,001>
Large Commercial / Institutional / Industrial	10" – 12"	0 – 500	501 – 24,000	24,001 – 32,000	32,001 <b>–</b> 37,000	37,001>

Notes: SF- Single Family; MF - Multi-Family

#### 3.3 Water Rate Block Pricing

Under the modified water conservation rate plan, Block 1 rates will be designed to recover local water supply costs and Blocks 2 and 3 rates will be designed to recover imported water costs. Blocks 4 and 5 rates will be based on Block 2 rates and priced progressively higher to discourage excessive water use, promote water conservation, allocate the incremental costs of procuring additional imported water during water shortage to those causing the demand, and achieve conservation goals. Block 3 rates will be priced at 120% of Block 2 base rates, and Blocks 4 and 5 rates will be priced at 200% and 300% of Block 2 base rates, respectively.

Table 5 shows the target consumption as a percent of total consumption by block as well as the pricing structure for the blocks. The block rate ratio is based on the 5-year supply cost outlook, and will be subject to adjustments based on a 5-year rolling water supply cost.

Table 5

Cumulati	Cumulative Consumption Allocation and Block Rate Ratio						
	Target Cumulative Consumption as a Percent of Total Consumption	Block Rate Ratio					
Block 1	0 – 35%	Groundwater - Base Rate					
Block 2	36 – 80%	Imported Water - 275% of Block 1 Base Rate					
Block 3	81 – 90%	120% of Block 2 Rate					
Block 4	91 – 95%	200% of Block 2 Rate					
Block 5	96 – 100%	300% of Block 2 Rate					

The proposed water block rate pricing is intended to be "revenue neutral," depending on actual consumption patterns. Under the block realignment plan, water sales are expected to reduce across all blocks due to the pricing structure, especially in the new blocks 4 and 5. However, if consumption patterns were to remain unchanged in blocks 2 and 3, additional revenue of up to \$2 million could be generated. Any revenues generated by sales in the fourth and fifth blocks will be applied to the cost of conservation, incentive programs and the development of additional water supplies, including reclaimed water. PWP will implement aggressive conservation programs, expand its current water audit and rebate programs to encourage customers to reduce their water usage. In addition, PWP will increase its water audits of high water users to determine those who consume water efficiently that may qualify for assistance on the water consumed in the fourth and fifth blocks.

Table 6 shows the proposed allocation of water supply to each block and the proposed commodity rates to reflect the actual cost of water supply to each block.

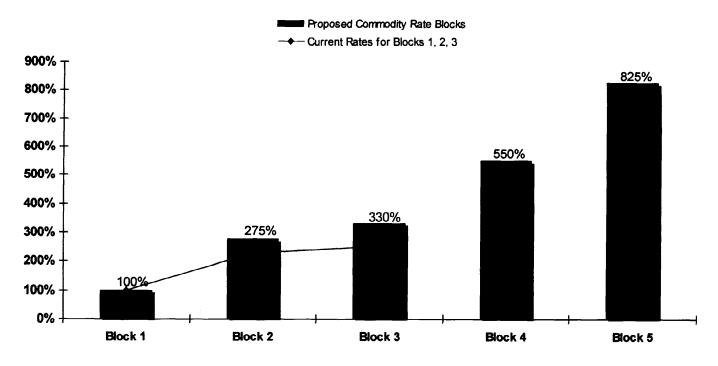
Table 6
Proposed Water Block Allocation and Commodity Rates

	Usage by Block (BU/Month)								
Meter Size	Block 1	Block 2	Block 3	Block 4	Block 5				
5/8", 3/4"	0-8	9–24	25-34	35-46	>46				
1"	0-12	13–40	41–60	61–90	>90				
1-1/2"	0-22	23-86	87-132	133-188	>188				
2"	0-48	49–188	189–290	291-405	>405				
3"	0-116	117–500	501-860	861-1,300	>1,300				
4"	0-225	226-1,000	1,001–1,800	1,801-3,000	>3,000				
6"	0-500	501-5,600	5,601-8,800	8,801-12,000	>12,000				
8"	0-500	501-5,600	5,601-10,000	10,001-14,000	>14,000				
10", 12"	0-500	501-24,000	24,001-32,000	32,001-37,000	>37,000				
		<b>Commodity F</b>	Rates per BU						
Summer Rate - IC	\$0.91/BU	\$2.50/BU	\$3.00/BU	\$5.00/BU	\$7.51/BU				
Winter Rate - IC	\$0.88/BU	\$2.43/BU	\$2.92/BU	\$4.86/BU	\$7.29/BU				
Summer Rate - OC	\$1.14/BU	\$3.13/BU	\$3.76/BU	\$6.26/BU	\$9.39/BU				
Winter Rate - OC	\$1.10/BU	\$3.04/BU	\$3.65/BU	\$6.08/BU	\$9.12/BU				

Notes: Commodity rates shown above include approved July 2009 PWAC of \$0.10 per BU; IC = Inside City; OC = Outside City

Table 7 further illustrates the relationship between the proposed block pricing structure using Block 1 pricing as the base rate:

Table 7
Proposed Block Pricing Structure (as % of base rate)



#### 4.0 PROPOSED WATER SHORTAGE PRICING

During periods of severe shortages and/or curtailment from MWD, PWP proposes to implement water shortage rates to offset additional costs of imported water and any associated penalties on imported water plus related conservation costs. The Water Shortage Rates will be automatically invoked when City Council makes a finding that there is a Water Shortage and establishes a Water Conservation Goal. All water sold in Block 1 will be exempt from the water shortage pricing schedule. The water shortage rates will be applied as follows:

- Reduce water allocations for rate Blocks 2 through 5: The cutoff points for Blocks 2 to 5 will be reduced by the same percentage as the declared Water Conservation Goal, rounded to nearest whole billing unit. For example, a 20% conservation goal would result in a 20% reduction in current block widths for Blocks 2 to 5.
- Increase water commodity rates for Rate Tiers 2 through 5, to reflect increased water costs and targeted reduced sales volumes. The current rates would be increased in accordance with the following formula: Water Shortage Rate = Regular Rate x 1/(1-Water Conservation Goal.)

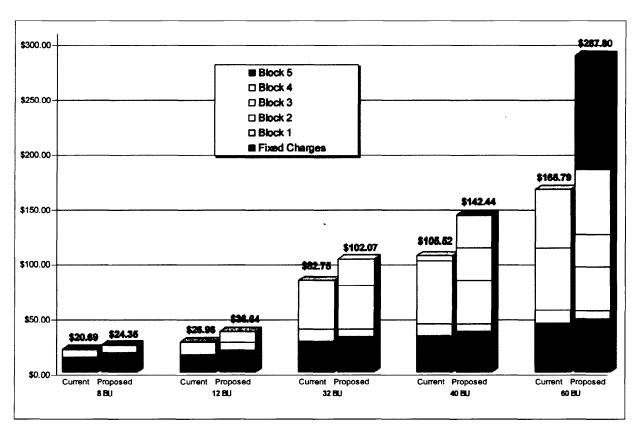
# Water Shortage Rate Water - Commodity Rate Increases (As a % of the Baseline Block Rate)

Water Shortage Rate	Block 1	Blocks 2 - 5,
10% Water Conservation Goal	0%	11%
20% Water Conservation Goal	0%	25%
30% Water Conservation Goal	0%	43%

#### 5.0 CUSTOMER IMPACT OF PROPOSED CHANGES

The customer impact of the proposed changes to customers with 5/8", 3/4", 1", 11/2", 2", and 4" meters are shown in the charts below. The yellow highlighted areas in the tables below the charts indicate the average number of customers that will be affected within each block.

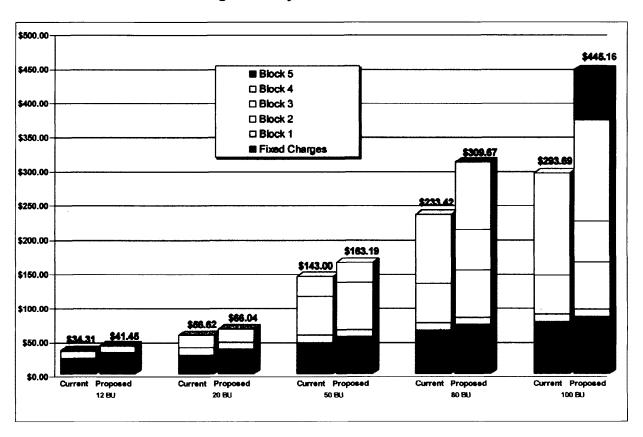
#### Monthly Customer Bill Impact Inside City Annualized Average Excluding Taxes Small Residential with 5/8" or 3/4" Meter Connection



Meter	Average Number of Customers by Block Width							
Size	Block 1	Block 2	Block 3	Block 4	Block 5	Total		
5/8" and 3/4"	5,291	10,787	2,890	1,252	790	21,010		
1-inch	1,942	7,139	1,388	692	374	11,535		
1 1/2-inch	618	1,157	221	98	65	2,159		
2-inch	541	793	155	59	52	1,600		
3-inch	105	116	16	6	4	247		
4-inch	51	85	11	3	2	152		
6-inch	37	38	2	1	1	79		
8-inch	9	11	1	1	1	23		
10-inch	1	0	0	0	1	2		
Total	8,595	20,126	4,684	2,112	1,290	36,807		

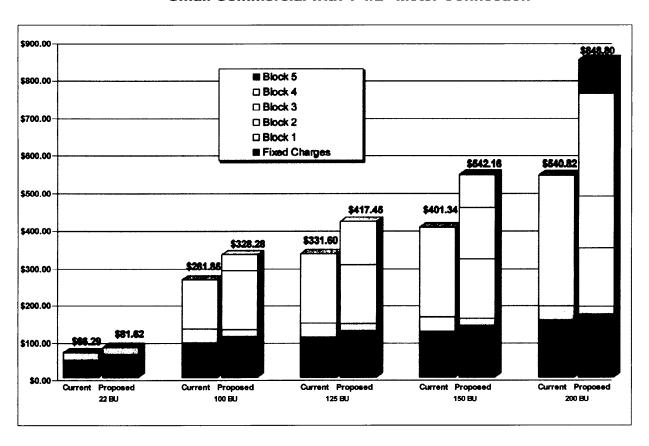
As further clarification, 8 billing units (BU) is the equivalent of 5,984 gallons of water per month, or approximately 50 gallons per capita per day for a family of four. This is typically considered "low volume" usage, and is considered adequate to provide for indoor water usage requirements. Approximately 25% of PWP's residential customers in this meter size are already in the "low volume" category. These customers would see an increase of \$3.66 per month (17.7%) under the proposed rate structure.

# Monthly Customer Bill Impact Inside City Annualized Average Excluding Taxes Medium Single Family Resident with 1" Meter Connection



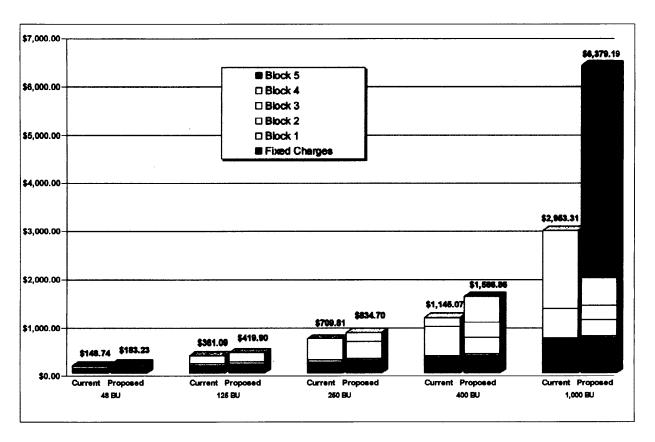
Meter	A	Average Number of Customers by Block Width						
Size	Block 1	Block 2	Block 3	Block 4	Block 5	Total		
5/8" and 3/4"	5,291	10,787	2,890	1,252	790	21,010		
1-inch	1,942	7,139	1,388	692	374	11,535		
1 1/2-inch	618	1,157	221	98	65	2,159		
2-inch	541	793	155	59	52	1,600		
3-inch	105	116	16	6	4	247		
4-inch	51	85	11	3	2	152		
6-inch	37	38	2	1	1	79		
8-inch	9	11	1	1	1	23		
10-inch	1	0	0	0	1	2		
Total	8,595	20,126	4.684	2,112	1,290	36,807		

#### Monthly Customer Bill Impact Inside City Annualized Average Excluding Taxes Small Commercial with 1-1/2" Meter Connection



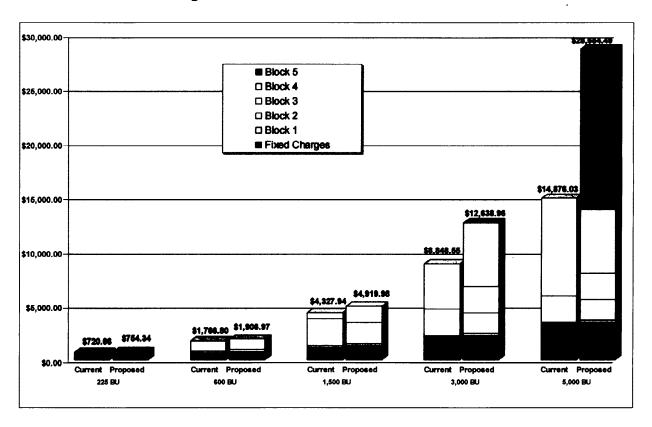
Meter	A	Average Number of Customers by Block Width					
Size	Block 1	Block 2	Block 3	Block 4	Block 5	Total	
5/8" and 3/4"	5,291	10,787	2,890	1,252	790	21,010	
1-inch	1,942	7,139	1,388	692	374	11,535	
1 1/2-inch	618	1,157	221	98	65	2,159	
2-inch	541	793	155	59	52	1,600	
3-inch	105	116	16	6	4	247	
4-inch	51	85	11	3	2	152	
6-inch	37	38	2	1	1	79	
8-inch	9	11	1	1	1	23	
10-inch	1	0	0	0	1	2	
Total	8,595	20,126	4,684	2,112	1,290	36,807	

# Monthly Customer Bill Impact Inside City Annualized Average Excluding Taxes Medium Commercial with 2" Meter Connection



Meter	Average Number of Customers by Block Width						
Size	Block 1	Block 2	Block 3	Block 4	Block 5	Total	
5/8" and 3/4"	5,291	10,787	2,890	1,252	790	21,010	
1-inch	1,942	7,139	1,388	692	374	11,535	
1 1/2-inch	618	1,157	221	98	65	2,159	
2-inch	541	793	155	59	52	1,600	
3-inch	105	116	16	6	4	247	
4-inch	51	85	11	3	2	152	
6-inch	37	38	2	1	1	79	
8-inch	9	11	1	1	1	23	
10-inch	1	0	0	0	1	. 2	
Total	8,595	20,126	4,684	2,112	1,290	36,807	

# Monthly Customer Bill Impact Inside City Annualized Average Excluding Taxes Large Commercial with 4" Meter Connection



Meter	Average Number of Customers by Block Width							
Size	Block 1 Block 2		Block 3	Block 4	Block 5	Total		
5/8" and 3/4"	5,291	10,787	2,890	1,252	790	21,010		
1-inch	1,942	7,139	1,388	692	374	11,535		
1 1/2-inch	618	1,157	221	98	65	2,159		
2-inch	541	793	155	59	52	1,600		
3-inch	105	116	16	6	4	247		
4-inch	51	85	11	3	2	152		
6-inch	37	38	2	1	1	79		
8-inch	9	11	1	1	1	23		
10-inch	1	0	0	0	1	2		
Total	8,595	20,126	4,684	2,112	1,290	36,807		

#### 6.0 RATE COMPARISON TO OTHER LOCAL AGENCIES

PWP's rates will remain competitive with those of neighboring utilities even when considering the proposed July 2009 and July 2010 rate increases. Many of the agencies historically utilized for rate comparisons in this Attachment also have significant pending rate increases that are not yet published in the data available to PWP. Also, the water supply conditions vary significantly between agencies with regard to percent of groundwater to imported water, availability of reclaimed water, level of investment in distribution infrastructure, etc.

A comparison of PWP rates with the proposed D&C and FPS increases, and those of nearby water purveyors for selected customer types is shown in Table 7. The charts below provide the rate comparisons with neighboring cities.

Table 7
Water Rate Comparison with Other Purveyors
Average Monthly Bill (Annualized, Excluding Taxes)

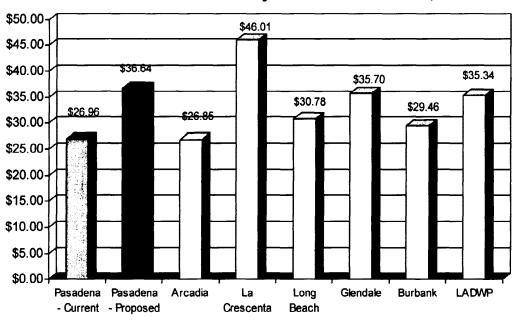
Meter Size/ Billing Units	Pasadena Current	Pasadena Proposed	Burbank	Glendale	LADWP	Arcadia	La Crescenta	Long Beach
5/8" / 12 BU	\$26.96	\$36.64	\$29.46	\$35.70	\$35.34	\$26.85	\$46.01	\$30.78
1" / 20 BU	\$56.62	\$66.04	\$43.22	\$56.92	\$58.90	\$38.23	\$73.34	\$58.36
1.5" / 100 BU	\$261.85	\$328.28	\$180.82	\$277.60	\$294.50	\$145.55	\$384.61	\$240.69
2" / 125 BU	\$361.09	\$419.90	\$223.82	\$356.09	\$368.13	\$184.87	\$498.87	\$307.94
4" / 600 BU	\$1,766.80	\$1,906.97	\$1,040.82	\$1,667.42	\$1,767.00	\$827.67	\$2,609.51	\$1,409.43
6" / 1400 BU	\$3,841.91	\$4,161.78	\$2,416.82	\$3,838.65	\$4,123.00	\$1,900.15	N/A	\$3,216.24
8" / 2400 BU	\$6,899.35	\$7,637.40	\$4,136.82	\$6,571.20	\$7,068.00	\$3,238.24	N/A	\$5,474.22

Note: Rates for neighboring utilities are based on their current rates as of March 2009. Pasadena's proposed average monthly bill includes the impact of the block width realignment.

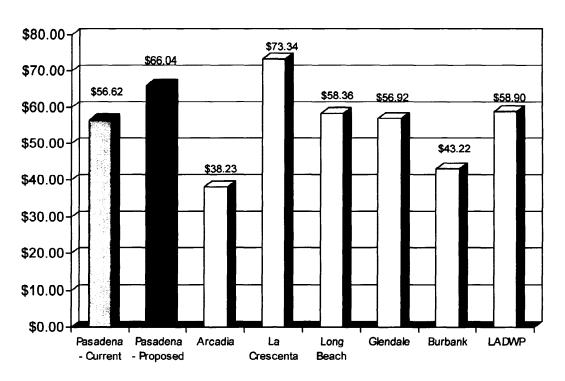
It is important to note that additional rate adjustments may be necessary to offset higher purchased water costs in the event of future rate increases by MWD.

# Rate Comparisons with Selected Neighboring Utilities Average Monthly Utility Bill (Annualized, Without Taxes)

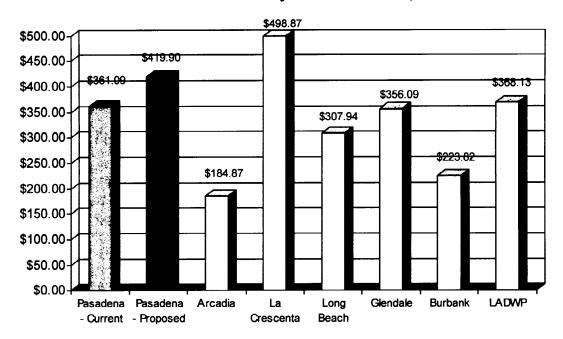
Small Residential Monthly Bill - 5/8" Meter Size, 12 BU



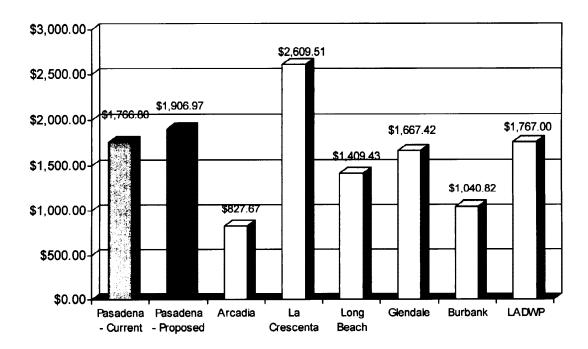
Large Residential Monthly Bill - 1" Meter Size, 20 BU



Medium Commercial Monthly Bill - 2" Meter Size, 125 BU



#### Commercial Monthly Bill - 4" Meter Size, 600 BU



#### 7.0 COMPARATIVE COST INFORMATION

The following table provides comparative information for the cost impact of the proposed water rate adjustments for a 5/8 or 3/4 inch meter connection:

Description	Comparative Cost/Measure		
Billing Unit (BU)	748 gallons		
12 Billing Units	8,976 gallons		
Current price per BU	\$2.93		
Proposed price per BU	\$3.33		
Price per gallon (proposed)	\$0.004		
Proposed increase per gallon	\$0.0008		
Daily cost of increase	\$0.32		
Average price for 1 gallon of unleaded gasoline	\$2.35		
Average price for 1 gallon of milk	\$2.99		

#### 8.0 PLANNED WATER-BUDGET BASED RATE STRUCTURE

Upon the implementation of the modified water—conservation based rate structure, described above, PWP plans to evaluate the impact and effectiveness of this phase and use the results to fine-tune the implementation of a water budget-based rate structure. A water budget is the amount of water that will be required by an efficient level of water use for each customer based on City's conservation resource standards.

By December 2009, PWP will have developed sufficient data to initiate discussions about the impact of water budget-based rates on various customer groups. By July 2010, PWP will be prepared to recommend a water budget-based rate structure consistent with City Council direction that raises awareness of water use levels, both inside and outside of the home, provides meaningful price signals, and increases water use efficiency. The planned water budget-based rate structure will support a reclaimed water program and will include a low-income program element. Under this phase, PWP plans to:

- Further refine the customer groups and classifications;
- Implement a comprehensive water-budget based water rate structure, which allocates water to customer groups based on customer characteristics such as household size and irrigable area to encourage efficient indoor and outdoor water use; and
- Further refine the drought pricing program

An important component of developing the water budget-based proposal will be the design and presentation of information on the customer bill. PWP is currently working with the bill-print vendor to increase the flexibility of information that can be presented on the bill. Examples of information that might be presented includes graphical comparison of water usage from the same period in the previous year, recommendations on typical usage for a customer with certain characteristics like household size, lot size, irrigable landscaping, etc. Educational and comparative messages could also be included, such as usage comparison to other neighborhood residents (with privacy protection,) commendation to those customers who maintain low volume or efficient use, etc. City Council members will have an opportunity to review sample bills before the format is finalized. It is important to note that significant investment in the billing system and bill printing software will be required to provide major changes to the information presented on the bill.

#### 9.0 FISCAL IMPACT

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The proposed July 2009 D&C rate and fire protection surcharge increases are expected to generate \$4.35 million annually to offset increased operation and maintenance costs of the water system. The proposed July 2010 D&C rate increases are expected to generate an additional \$4.5 million annually to offset increased operation and maintenance costs of the water system. The scheduled July 2009 PWAC increase of \$0.10 per billing unit will increase the annual water system operating revenue by \$1.7 million.

The proposed water block rate pricing is intended to be "revenue neutral," depending on actual consumption patterns. However, if consumption patterns were to remain unchanged in blocks 2 and 3, additional revenue of up to \$2 million could be generated. Any revenues generated by sales in the fourth and fifth tiers will be applied to the cost of conservation, incentive programs and the development of additional water supplies. If the rate proposal is approved, the additional operating revenue will result in an increase to the General Fund Transfer of approximately \$0.26 million in FY 2009 and \$0.53 million in FY 2010.

Failure to implement the proposed D&C rate increase would have an adverse effect on the financial integrity of the Water Fund and the ability to ensure proper operation and maintenance of the water system. If the increases to D&C charges and fire protection charges are not approved, it will be necessary to adjust the recommended Fiscal Year 2010 Operating Budget and reduce the overall Water Fund operating revenues. Reduced operating revenues and lower net income would also result in a reduction of the General Fund Transfer and customer service levels and have a negative impact on the current credit rating of the Water Fund, leading to higher costs of borrowing funds for future infrastructure projects.