



## **EXHIBIT 12-E**

**TO:** Dave Stoldt, General Manager  
Suresh Prasad, Administrative Services Manager/Chief Financial Officer

**FROM:** Thomas Gaffney, Principal

**DATE:** April 12, 2012

**SUBJECT:** Monterey Peninsula Water Management District User Fee

### TECHNICAL MEMORANDUM

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## **Introduction**

The Monterey Peninsula Water Management District (the “District” or “MPWMD”) is an independent special district that manages and regulates the use, reuse and reclamation of surface and groundwater within its jurisdiction. The District is charged with conservation and augmentation responsibilities in addition to its responsibility to integrate management of ground and surface water resources. To this end, the District owns and jointly operates with California American Water Company (“Cal-Am”) an Aquifer Storage and Recovery (“ASR”) project that diverts excess surface flows from the Carmel River through the Cal-Am system for injection into the Seaside Groundwater Basin through the District’s ASR wells. The ASR project enables recovery of the injected water by Cal-Am for delivery to its customers in the summer when the Carmel River is dry or at low flow. Further, the District intends to enter into agreement with Monterey Regional Water Pollution Control Agency (“MRWPCA”) and Cal-Am for a Groundwater Replenishment (“GWR”) project enabling the advanced treatment of wastewater from the MRWPCA regional facility for injection into the Seaside Groundwater Basin through MRWPCA wells to be developed and subsequent recovery of the injected water by Cal-Am for delivery to its customers.

Until recently, the District funded its activities through a user fee collected from Cal-Am customers and other water system customers on the customer bills. The collection of the user fee was recently eliminated by a ruling of the California Public Utilities Commission (CPUC) in the General Rate Case of Cal-Am. To continue its activities, the District must now develop a new mechanism for collecting fees.

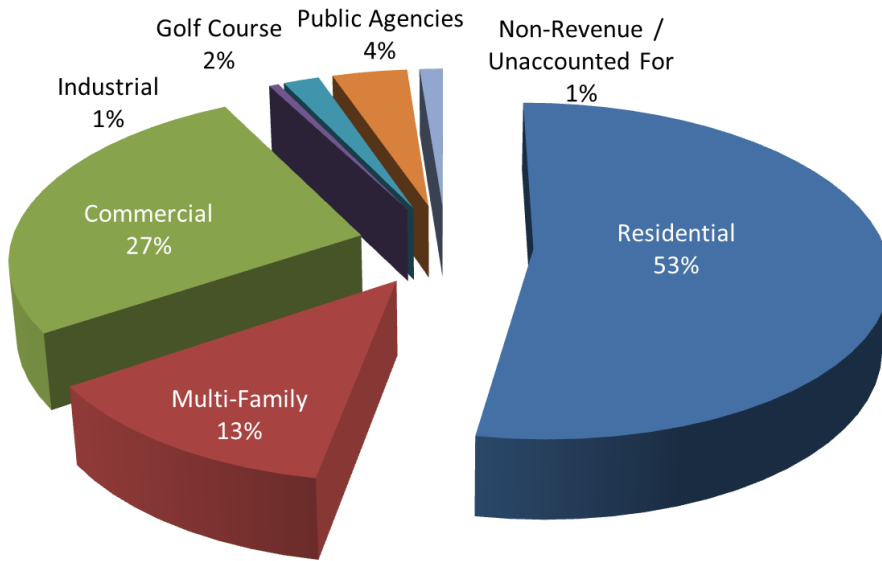
The District intends to dedicate the revenues from the new fee collection mechanism to the development of ASR, GWR, and other water supply activities.

## **Water Consumption**

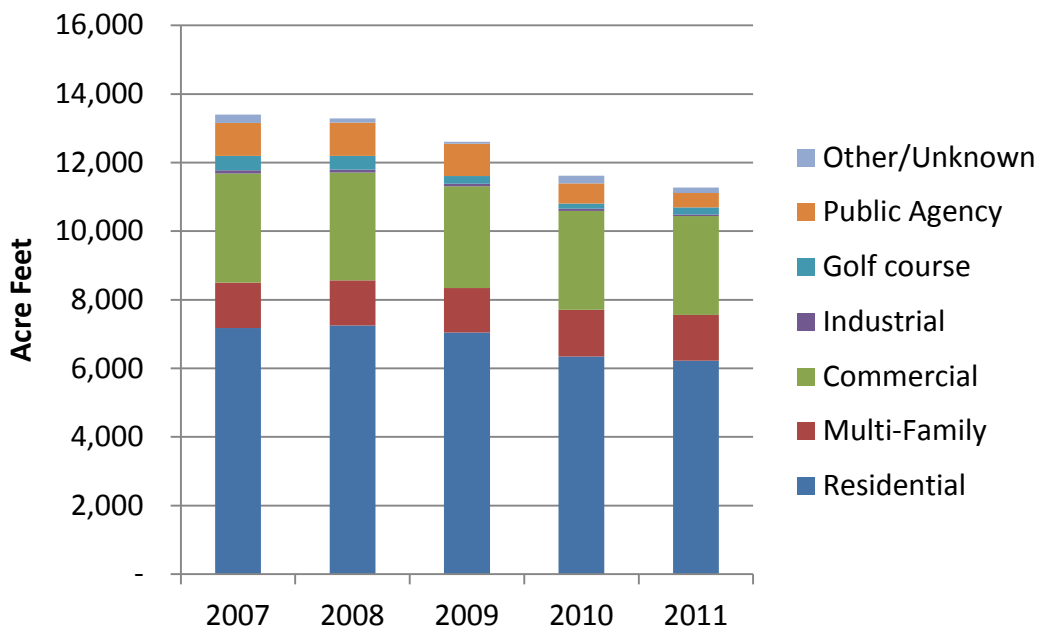
MPWMD serves approximately 43,500 connections in the Cal-Am service area with water supply from ASR and water supply management services. In the Cal-Am service area, residential customers account for about 53% of water use, multi-family accounts for 13%, commercial accounts for 27%, and the remaining use is from a combination of industrial customers, golf courses, public agencies, and unknown uses or water loss.

Over the past five years, annual water consumption has decreased by about 2,100 acre feet (about 16% relative to the 2007 annual water consumption), which may be the result of conservation, tiered rates, wet weather, and/or poor economy.

### Water Demand in the Cal-Am Service Area



### Water Consumption by Year



## **Revenue Requirement**

The MPWMD Board is required to annually revisit the fee during its budget process to ensure the amounts collected and expended meet the purposes for which the fee is imposed and that the fees reflect the cost of providing service (also called the revenue requirement). The revenue requirement includes the operating costs, capital costs, debt service cost, and funding of adequate fund reserves, especially as the costs relate to provision of water and water supply management to existing customers. The historical revenue requirement and results of operations are shown in Table 1. Depending largely on personnel, services & supplies and project expenditures the revenue requirement for the District has ranged from \$5.8 million to \$8.0 million over the past four years.

Operating costs include staff salaries, legal and professional services, and utilities and are budgeted at about \$4.3 million in FY2011/12, see Table 2. Capital costs are budgeted at \$2.6 million in FY2011/12, \$3.0 million in FY2012/13, and \$3.3 million in FY2013/14; see Table 3.

In order to maintain fund reserve balances, meet costs, and to fund new water supply projects, the District will need to recover \$3.7 million annually in user fee revenues.

**Table 1**  
**Historical Cash Flows**  
**Monterey Peninsula Water Management District**

	Actual 2007/08	Actual 2008/09	Actual 2009/10	Draft Actual 2010/11	Budget 2011/12
<b>BEGINNING FUND BALANCE</b>	\$2,448,848	\$2,569,978	\$2,287,035	\$1,956,452	\$1,518,500
<b>REVENUES</b>					
Property Tax	1,352,826	1,436,800	1,339,138	1,402,646	1,403,000
Permit Fees	327,700	294,053	278,610	296,735	205,000
Interim Mitigation Revenue					1,560,000
Connection Charges	556,370	481,724	466,297	319,728	275,000
User Fees	2,945,384	2,653,827	2,879,934	3,048,993	101,500
Recording Fees, Interest, Other	135,281	88,975	60,560	61,387	26,000
Reimbursements	517,391	573,225	1,270,156	2,450,118	2,009,300
Grants	299,870	0	0	0	929,000
Line of Credit Proceeds	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>675,200</u>
<b>TOTAL REVENUES</b>	<b>6,134,822</b>	<b>5,528,604</b>	<b>6,294,695</b>	<b>7,579,607</b>	<b>7,184,000</b>
<b>EXPENSES</b>					
<b>Personnel</b>	2,996,191	3,017,928	3,192,759	3,255,865	3,248,700
<b>Services and Supplies</b>					
Operating Expenditures	540,220	491,927	459,737	538,162	451,400
Professional Fees	<u>516,383</u>	<u>605,498</u>	<u>560,118</u>	<u>593,882</u>	<u>562,800</u>
Total	1,056,603	1,097,425	1,019,855	1,132,044	1,014,200
<b>Fixed Assets, Projects, Debt Service</b>					
Fixed Assets	150,731	447,313	45,108	73,136	34,100
Project Expenditures	1,810,167	1,248,881	2,367,556	3,533,434	1,205,900
Capital Improvements					2,586,100
Debt Service	N/A	N/A	N/A	23,089	25,000
Election Expense	N/A	N/A	N/A	N/A	169,000
Contingency	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>75,000</u>
Total	1,960,898	1,696,194	2,412,664	3,629,659	4,095,100
<b>TOTAL EXPENSES</b>	<b>6,013,692</b>	<b>5,811,547</b>	<b>6,625,278</b>	<b>8,017,568</b>	<b>8,358,000</b>
<b>SURPLUS/(DEFICIT)</b>	<b>121,130</b>	<b>(282,943)</b>	<b>(330,583)</b>	<b>(437,961)</b>	<b>(1,174,000)</b>
<b>ENDING FUND BALANCE</b>	<b>\$2,569,978</b>	<b>\$2,287,035</b>	<b>\$1,956,452</b>	<b>\$1,518,491</b>	<b>\$344,500</b>

**Table 2**  
**Cash Flow Projection**  
**Monterey Peninsula Water Management District**

	Budget 2011/12	Projected 2012/13	Projected 2013/14	Projected 2014/15
<b>BEGINNING FUND BALANCE</b>	\$1,518,500	\$344,500	\$344,500	\$344,500
<b>REVENUES</b>				
Property Tax	1,403,000	1,403,000	1,500,000	1,500,000
Permit Fees	205,000	300,000	300,000	300,000
Interim Mitigation Revenue	1,560,000	1,560,000	1,560,000	1,560,000
Connection Charges	275,000	275,000	350,000	350,000
User Fees	101,500	3,801,500	3,801,500	3,801,500
Recording Fees, Interest, Other	26,000	26,000	26,000	26,000
Reimbursements	2,009,300	1,200,000	1,200,000	1,200,000
Grants	929,000	0	0	0
Line of Credit Proceeds	<u>675,200</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>TOTAL REVENUES</b>	7,184,000	8,565,500	8,737,500	8,737,500
<b>EXPENSES</b>				
<b>Personnel</b>	3,248,700	3,313,700	3,380,000	3,447,600
<b>Services and Supplies</b>				
Legal Services	450,000	459,000	468,200	477,600
Professional Fees	112,800	115,100	117,400	119,700
Data Processing	73,800	75,300	76,800	78,300
Other	<u>377,600</u>	<u>385,200</u>	<u>392,900</u>	<u>400,800</u>
Total	1,014,200	1,034,600	1,055,300	1,076,400
<b>Fixed Assets, Projects, Debt Service</b>				
Fixed Assets	34,100	34,800	35,500	36,200
Project Expenditures	1,205,900	1,500,000	1,500,000	1,500,000
Capital Improvements[1]	2,586,100	2,580,900	2,494,700	2,572,700
Debt Service	25,000	25,000	25,000	25,000
Election Expense	169,000	0	169,000	0
Contingency	<u>75,000</u>	<u>76,500</u>	<u>78,000</u>	<u>79,600</u>
Total	4,095,100	4,217,200	4,302,200	4,213,500
<b>TOTAL EXPENSES</b>	8,358,000	8,565,500	8,737,500	8,737,500
<b>SURPLUS/(DEFICIT)</b>	(1,174,000)	0	0	0
<b>ENDING FUND BALANCE</b>	\$344,500	\$344,500	\$344,500	\$344,500
Reserve Target (6 months of expenses)	4,179,000	4,282,800	4,368,800	4,368,800

[1] FY 2012/13 CIP amounts to \$2,958,600 of which District will fund \$2,580,900.  
FY 2013/14 CIP amounts to \$3,331,600 of which District will fund \$2,494,700.  
FY 2013/14 CIP amounts to \$3,000,000 of which District will fund \$2,572,700.

**Table 3**  
**Capital Improvement Plan**  
**Monterey Peninsula Water Management District**

	<b>FY2011-12</b>	<b>FY2012-13</b>	<b>FY2013-14</b>	<b>After 2014</b>
Water Project 1 (additional construction)	\$737,400			
Water Project 2 (construction)	889,900			
Water Project 3 (preliminary expenditure)	25,000			
Design, permitting, & Phase 1 of Sleepy Hollow water intake	470,000			
Sleepy Hollow Ford removal and bridge replacement	114,300			
Integrated Regional Water Management Project	349,500			
Feasibility studies and other	0			
Water Supply: Aquifer Storage and Recovery Phase 1 Completion <sup>1</sup>	0	\$885,165	\$435,314	\$295,348
Water Supply: Groundwater Replenishment <sup>2</sup>	0			50 -
		1,036,550	1,469,200	70,000,000
Water Supply: Studies in Support of Desal, GWR, and ASR Operations	0	150,000	250,000	250,000
Water Supply: ASR Expansion Study – Part 1(Scoping locations)	0	150,000		0
Water Supply: ASR Expansion Study – Part 2 (Easements & Test Wells)	0		500,000	n.a.
Water Supply: Feasibility studies – Other Projects	0	200,000	200,000	n.a.
Water Supply: Repayment of Advances for ASR <sup>1</sup>	0	427,056	427,056	427,056
Mitigation: Capital <sup>3</sup>	<u>0</u>	<u>109,873</u>	<u>50,000</u>	<u>n.a.</u>
<b>TOTAL CIP</b>	<b>\$2,586,100</b>	<b>\$2,958,644</b>	<b>\$3,331,570</b>	<b>n.a.</b>

1 - 3-22-12 update per J. Oliver; Capital costs only – staff and overhead captured in operating budget.

2 - 50% of FY 2013 and 2014 costs from Monterey Regional Water Pollution Control Agency GWR Project Planning Costs – Funding 1-2012, plus an additional \$375,000 for environmental work.

3 - February 13, 2012 Comparison of Mitigation Program Costs Spreadsheet; Sum of program area “capital costs” plus Program Support “capital asset purchases.”

## User Fee Alternatives

Prior to suspension by the CPUC, the user fees were shown on Cal-Am, Seaside Municipal Water System, and Pebble Beach Reclamation Project customer bills as percentage of meter and water charges. The user fee was set at 8.325% of a Cal-Am customer’s water bill when it was suspended. The obligations of the Seaside Municipal Water System and the Reclamation Project were not affected by the CPUC decision.

In FY2010/11, the District collected about \$3.05 million in user fees. In FY2011/12, the District will not collect user fees but collect \$1,560,000 from an interim agreement with Cal-Am to fund a portion of the District’s mitigation program expenses. The District must restore the user fee revenues to meet

operating and capital expenses, and to fund new water supply activities.

### **AWWA Cost of Service and Rate Setting Methodology**

The American Water Works Association (AWWA), Manual M1: “Principles of Water Rates, Fees, and Charges”, is the water industry standard publication for guidance and good practice on the setting of water rates and fees. The overarching theme of the AWWA Manual M1 is that fees and charges should reflect the costs that a utility incurs to serve each customer class. The AWWA Manual M1 states that the design of fees and charges that recover those costs is a policy decision by the utility and that both fixed and variable (water consumption-based) charges are appropriate fees commonly charged by utilities.

In the sections below, BWA discusses how the District could design the user fee as a variable fee, fixed fee, or a combination of variable and fixed, followed by our recommendation based on the cost-causative approach recommended by the AWWA.

### **Variable Fee**

In the past, the user fee was collected as a percentage of both water rates (variable) and water meter charges (fixed) from customers served by Cal-Am. If the District chooses to adopt a variable charge, the user fee revenue requirement is divided by the service area’s water use to determine a cost per unit of water. BWA calculates the user fee at \$0.075 to \$0.082 per 10 cubic feet, see Table 4. The typical single family user fee is estimated at between \$52.75 and \$57.56 per year.

**Table 4**  
**Variable User Fee Calculation**  
**Monterey Peninsula Water Management District**

User Fee Revenue Requirement	\$3,700,000	
Estimated High Water Use	49,100,000	(per 10 cf)
Estimated Low Water Use	45,000,000	(per 10 cf)
User Fee Estimate		
Low	\$0.075	(per 10 cf)
High	\$0.082	(per 10 cf)
Median Annual Single Family Water Use	700	(per 10 cf)
Estimated Single Family Fee (high system-wide water use)	\$52.75	per year
Estimated Single Family Fee (low system-wide water use)	\$57.56	per year

**Fixed Fee**

Alternately, the District could adopt a fixed fee on a per customer basis. To determine a customer count and a method of scaling the user fee for different types of customers, MPWMD can use a land use basis or a meter equivalent basis.

**I. Land Use Basis**

MPWMD has detailed records of land use designations within its service areas and could use this information as a basis for determining the user fee. Land use is typically used by agencies to determine outdoor irrigation water demand, to determine impervious area for the calculation of storm water fees, or to calculate sewer fees. An example fee schedule based on land use is shown in Appendix A for the Monterey Regional Water Pollution Control Agency, a wastewater agency. Land use is not typically used as a metric for estimating indoor water usage. Land use records do not usually reflect the number of fixture units in a building or the presence of an irrigation water meter. The land use basis is not recommended by the AWWA.

BWA calculated a user fee based on land use as an alternative for the District to consider. The average indoor and outdoor square feet was determined per each single family dwelling (SFD). All other land use types were scaled in comparison to the parcel size of a SFD.

On a system-wide basis, outdoor water use typically accounts for 20% to 40% of water consumption and indoor use accounts for 60 to 80%. Therefore, BWA recommends recovering 20% of the user fee revenue from outdoor square feet and 80% from indoor square feet on a per parcel basis, see Table 5. Vacant parcels or other parcels that do not have water service should be excluded from the calculations shown in Table 5 and would not be charged a user fee. To account for vacant parcels not receiving service, Table 6 shows a high and low estimate for the user fee calculation.



**Table 5**  
**Land Use Basis - Single Family Dwelling (SFD) Unit Calculation**  
**Monterey Peninsula Water Management District**

Single Family Dwelling on 1 Site

<b>Number of Parcels</b>	<b>Outdoor sq. ft.</b>	<b>Avg outdoor sq. ft. per SFD</b>	<b>Rounded sq. ft.</b>
25,208	458,821,840	18,201	18,200

<b>Number of Parcels</b>	<b>Indoor sq. ft.</b>	<b>Avg indoor sq. ft. per SFD</b>	<b>Rounded sq. ft.</b>
25,208	45,298,145	1,797	1,800

<b>Land Use</b>	<b>Outdoor sq. ft.</b>	<b>Indoor sq. ft.</b>
Single Family Dwellings	476,052,954	48,271,218
Multi Family	698,803,689	14,032,962
Offices, Libraries, Churches	37,922,662	7,419,713
Agriculture, Cemeteries, Recreation	748,014,208	569,791
Auto Shops	3,989,386	521,130
Medical Office, Hospitals	17,068,564	627,670
Industrial	9,531,440	1,848,675
Schools	15,865,770	217,628
Hotels, Motels	80,578,370	2,540,078
Restaurants, Malls, Markets	18,635,788	2,334,245
Underdeveloped or Vacant	<u>682,235,413</u>	<u>70,219</u>
<b>Total</b>	<b>2,788,698,244</b>	<b>78,453,329</b>

<b>Total Outdoor sq. ft.</b>	<b>SFD Outdoor sq. ft.</b>	<b>SFD Outdoor Equivalents</b>
2,800,000,000	/ 18,200 =	153,800

<b>Total Indoor sq. ft.</b>	<b>SFD Indoor sq. ft.</b>	<b>SFD Indoor Equivalents</b>
80,000,000	/ 1,800 =	43,600

	<b>SFD Equivalents</b>	<b>Allocation</b>	<b>Total SFDs</b>
<b>SFD Outdoor Equivalents</b>	153,800	20%	30,800
<b>SFD Indoor Equivalents</b>	43,600	80%	<u>34,900</u>
			65,700

A sampling of the land use types and their corresponding user fees are shown in Table 6. A complete list of land use types is shown in Appendix B.

**Table 6**  
**Land Use Basis - User Fee Calculation**  
**Monterey Peninsula Water Management District**

<b>Revenue Requirement</b>	<b>SFDs</b>	<b>Annual User Charge per SFD</b>	
\$3,700,000	/ 65,700 =	\$56.37	(high SFD count)
\$3,700,000	/ 55,600 =	\$67.27	(low SFD count)

<b>Land Use</b>	<b>Avg SFD Count per Parcel</b>	<b>Annual User Fee (high SFD count)</b>	<b>Annual User Fee (low SFD count)</b>
Single Family Dwellings	1.0	\$56.37	\$67.27
Multifamily	1.7	94.25	112.48
Churches	2.9	161.71	192.98
Auto Shops	1.5	85.32	101.82
Hospitals	5.9	334.16	398.79
Hotels, Motels	3.6	203.13	242.42
Restaurants	1.7	94.12	112.32
Theaters	4.2	235.69	281.27
Schools	4.8	268.08	319.93
Supermarket	4.8	271.68	324.22
Light Industrial	2.1	119.21	142.27

**II. Meter Equivalent Basis**

The meter equivalent basis involves scaling each customer’s fee based on the size of the meter. A single meter equivalent is set as the maximum day demand of a 5/8 x 3/4” meter. The fees for larger meter sizes are scaled up in comparison to the 5/8 x 3/4” meter. For example, using Cal-Am’s meter equivalents, a single 6” meter is equivalent to 50 customers with 5/8 x 3/4” meters, a ratio of 1:50. A summary of the Cal-Am meter equivalents for various meter sizes is presented in Table 7.

**Table 7**  
**Cal-Am Meter Equivalents per Meter Size**  
**Monterey Peninsula Water Management District**

<b>Meter Size</b>	<b>Cal-Am Monthly Meter Charge</b>	<b>No. of Meter Equivalents per Meter Size</b>
5/8 x 3/4"	\$8.91	1.0
3/4"	13.37	1.5
1"	22.28	2.5
1 1/2"	44.55	5.0
2"	71.28	8.0
3"	133.65	15.0
4"	222.75	25.0
6"	445.50	50.0
8"	712.80	80.0

BWA reviewed the billing records of Cal-Am and the City of Carmel-by-the-Sea and determined the total number of meter equivalents of the customers served by MPWMD, see Table 8. The Cal-Am billing records did not identify dedicated fire protection meters or accounts that were upsized to meet fire flow standards. Fire flow can be significantly higher than the maximum day demand of a customer and fire flow should not be used as the sole basis to assign meter equivalents. To be conservative, BWA estimates that up to 4,000 meter equivalents may be sized to accommodate fire flow and should receive a charge proportional to actual use. The American Water Works Association estimates that for a service area of MPWMD's size, approximately 10% of system capital costs are attributable to fire flow capacity.

BWA recommends that MPWMD adopt an appeals process for customers who believe that they should be granted a reduction due to upsizing of their meters to meet fire flow requirements. BWA recommends that MPWMD adjust the user fees for upsized meters according to the current practice of Cal-Am.

**Table 8**  
**Total Meter Equivalents**  
**Monterey Peninsula Water Management District**

<b>Meter Size</b>	<b>Number of Meters</b>	<b>Cal-Am Monthly Meter Charge</b>	<b>No. of Meter Equivalents per Meter Size</b>	<b>Total Meter Equivalents</b>
Cal-Am Service Area				
5/8 x 3/4"	37,631	\$8.91	1.0	37,631.0
3/4"	277	13.37	1.5	415.7
1"	5,255	22.28	2.5	13,140.4
1 1/2"	852	44.55	5.0	4,260.0
2"	636	71.28	8.0	5,088.0
3"	24	133.65	15.0	360.0
4"	22	222.75	25.0	550.0
6"	11	445.50	50.0	550.0
8"	<u>13</u>	712.80	80.0	<u>1,040.0</u>
Cal-Am Total	44,721			63,035.1
<b>Total - high count of meter equivalents*</b>				<b>63,000</b>
				(may include some fire protection meter equivalents )
<b>Total - low count of meter equivalents*</b>				<b>59,000</b>
				(estimate without fire protection meter equivalents)
* Rounded				

Meter equivalents are commonly used by utilities as a proxy for the maximum day demand of various customer types. Many water agencies in California use meter equivalents as a basis for fixed charges and system capacity or connection fees. The user fee calculations based on meter equivalents are presented in Table 9.

**Table 9**  
**Meter Equivalents - User Fee Calculation**  
**Monterey Peninsula Water Management District**

	<b>High Count of Meter Equivalents</b>	<b>Low Count of Meter Equivalents</b>
User Fee Revenue Requirement	\$3,700,000	\$3,700,000
Number of Meter Equivalents	63,000	59,000
Annual User Fee per Meter Equivalent	\$58.73	\$62.71
Annual Usage Fee per Meter Size		
5/8 x 3/4"	\$58.73	\$62.71
3/4"	88.13	94.10
1"	146.86	156.81
1 1/2"	293.65	313.56
2"	469.84	501.69
3"	880.95	940.68
4"	1,468.25	1,567.80
6"	2,936.51	3,135.59
8"	4,698.41	5,016.95

### **III. Hybrid Approach**

It may be appropriate to utilize a hybrid approach that incorporates both meter equivalents and water consumption for the calculation of the user fees. The California Urban Water Conservation Council recommends that water utilities set rates such that 70% of rate revenues are collected from variable charges and 30% of rate revenues are collected from fixed charges. The hybrid approach proposed by Bartle Wells Associates follows this recommendation and collects 30% of the user fee revenue requirement from meter equivalents and 70% of the user fee revenue requirement from water use. This approach is consistent with the cost-causative methodology proposed by AWWA.

As a first step, BWA determined the revenue requirement of each customer class based on water use, see Table 10. The revenue requirement for each customer class was then allocated 70% to the variable user fee and 30% to the fixed user fee. The fixed user fee is determined using the meter equivalents for each class and calculating a unit cost per meter equivalent. Here, "variable" means usage that varies based on property use category. The variable fee is calculated via applying the unit cost of water to the typical water use of each customer in a land use category.

For residential customers, water use varies dramatically depending on the size of the home. Therefore, BWA developed four single family residential customer classes to account for varying usage patterns. Meter equivalents per meter size for the single family category were adjusted to reflect the difference in the size of home and the actual number of homes in each category. For the commercial customers, BWA used the water usage factors utilized by the Monterey Regional Water Pollution Control Agency to

set sewer rates. BWA made adjustments to the water usage factors to account for outdoor irrigation. The usage factors are based on historic data, state imposed standards, and local flow information.

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**Table 10**  
**Revenue Requirement of Each Customer Class**  
**Monterey Peninsula Water Management District**

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<b>Customer Class</b>	<b>Water Use (10 cf)</b>	<b>% of Water Use*</b>	<b>Revenue Requirement</b>
Residential	27,110,000	55.2%	\$2,043,000
Multi-Family	5,818,000	11.8%	\$438,000
Commercial & Unknown	13,209,000	26.9%	\$995,000
Industrial	237,000	0.5%	\$18,000
Golf course	875,000	1.8%	\$66,000
Public Agency	<u>1,849,000</u>	<u>3.8%</u>	<u>\$139,000</u>
<b>Total</b>	<b>49,098,000</b>	<b>100.0%</b>	<b>\$3,700,000</b>

**High Water Use Estimate**

Variable User Fee Portion	70% allocation of \$3,700,000	\$2,590,000
System Water Use (10 cf)		49,098,000
Cost per Unit (10 cf)		\$0.053

**Low Water Use Estimate**

Variable User Fee Portion	70% allocation of \$3,700,000	\$2,590,000
System Water Use (10 cf)		45,000,000
Cost per Unit (10 cf)		\$0.058

\* All service areas of MPWMD

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**Table 11**  
**Hybrid Approach - Meter Fee Portion (High Equivalent Estimate)**  
**Monterey Peninsula Water Management District**

		<b>30% Meter Fee Allocation</b>	<b>70% Variable Fee Allocation</b>	<b>Total</b>
<b>Revenue Requirement</b>		\$1,110,000	\$2,590,000	\$3,700,000
<b>Customer Class</b>	<b>% of Revenue Requirement</b>	<b>Meter Fee Revenue Requirement</b>	<b>Meter Equivalents (High Estimate)</b>	<b>Fee per Meter Equivalent</b>
Residential	55.2%	\$612,900	36,400	\$16.84
Multi-Family	11.8%	\$131,500	10,400	\$12.64
Nonresidential	<u>32.9%</u>	<u>\$365,600</u>	<u>16,200</u>	\$22.57
<b>Total</b>	<b>100.0%</b>	<b>\$1,110,000</b>	<b>63,000</b>	

**Table 12**  
**Hybrid Approach - Meter Fee Portion (Low Equivalent Estimate)**  
**Monterey Peninsula Water Management District**

		<b>30% Meter Fee Allocation</b>	<b>70% Variable Fee Allocation</b>	<b>Total</b>
<b>Revenue Requirement</b>		\$1,110,000	\$2,590,000	\$3,700,000
<b>Customer Class</b>	<b>% of Revenue Requirement</b>	<b>Meter Fee Revenue Requirement</b>	<b>Meter Equivalents (Low Estimate)</b>	<b>Fee per Meter Equivalent</b>
Residential	55.2%	\$612,900	34,100	\$17.97
Multi-Family	11.8%	\$131,500	9,800	\$13.42
Nonresidential	<u>32.9%</u>	<u>\$365,600</u>	<u>15,200</u>	\$24.05
<b>Total</b>	<b>100.0%</b>	<b>\$1,110,000</b>	<b>59,000*</b>	

\*Rounded

**Table 13**  
**Hybrid Approach User Fee Calculation - Residential, Low User Fee Estimate**  
**Monterey Peninsula Water Management District**

**Residential Revenue Requirement** **\$2,043,000**

**Meter Equivalents**

30% Allocation to Meter Equivalents  
 Residential Meter Equivalents  
 User Fee - Meter Portion

\$612,900  
 36,400  
 \$16.84

**Water Use**

70% Allocation to Water Use  
 Residential Water Use (10 cf)  
 User Fee - Water Use Portion

\$1,430,100  
 27,110,000  
 \$0.053

<b>Meter Size</b>	<b>No. of Meter Equivalents per Meter Size</b>	<b>Meter Fee</b>
5/8 x 3/4"		
Small house (less than 1,200 sq ft)	0.85	\$14.31
Medium house (1,200 to 2,000 sq ft)	1.00	\$16.84
Medium/large house (2,000 to 4,000 sq ft)	1.15	\$19.36
Large house (4,000 sq ft+)	1.15	\$19.36
3/4"	1.50	\$25.27
1"	2.50	\$42.10
1 1/2"	5.00	\$84.19
2"	8.00	\$134.70
3"	15.00	\$252.57
4"	25.00	\$420.95

<b>Sample Residential Bills</b>	<b>Meter Equivalent</b>	<b>Meter Fee</b>	<b>Water Use Fee</b>	<b>Total Annual User Fee</b>
<b>5/8 x 3/4" meter</b>				
Small house (less than 1,200 sq ft)	0.85	\$14.31	\$23.74	\$38.05
Medium house (1,200 to 2,000 sq ft)	1.00	\$16.84	\$36.93	\$53.76
Medium/large house (2,000 to 4,000 sq ft)	1.15	\$19.36	\$73.85	\$93.22
Large house (4,000 sq ft+)	1.15	\$19.36	\$147.70	\$167.07
<b>1" meter</b>				
Medium/large house (2,000 to 4,000 sq ft)	2.50	\$42.10	\$73.85	\$115.96



**Table 14**  
**Hybrid Approach User Fee Calculation - Residential, High User Fee Estimate**  
**Monterey Peninsula Water Management District**

**Residential Revenue Requirement** **\$2,043,000**

**Meter Equivalents**

30% Allocation to Meter Equivalents \$612,900  
 Residential Meter Equivalents 34,100  
 User Fee - Meter Portion \$17.97

**Water Use**

70% Allocation to Water Use \$1,430,100  
 Residential Water Use (10 cf) 24,847,000  
 User Fee - Water Use Portion \$0.058

<b>Meter Size</b>	<b>No. of Meter Equivalents per Meter Size</b>	<b>Meter Fee</b>
5/8 x 3/4"		
Small house (less than 1,200 sq ft)	0.85	\$15.28
Medium house (1,200 to 2,000 sq ft)	1.00	\$17.97
Medium/large house (2,000 to 4,000 sq ft)	1.15	\$20.67
Large house (4,000 sq ft+)	1.15	\$20.67
3/4"	1.50	\$26.97
1"	2.50	\$44.94
1 1/2"	5.00	\$89.87
2"	8.00	\$143.79
3"	15.00	\$269.60
4"	25.00	\$449.34

<b>Sample Residential Bills</b>	<b>Meter Equivalent</b>	<b>Meter Fee</b>	<b>Water Use Fee</b>	<b>Total Annual User Fee</b>
<b>5/8 x 3/4" meter</b>				
Small house (less than 1,200 sq ft)	0.85	\$15.28	\$25.90	\$41.18
Medium house (1,200 to 2,000 sq ft)	1.00	\$17.97	\$40.29	\$58.26
Medium house (2,000 to 4,000 sq ft)	1.15	\$20.67	\$80.58	\$101.25
Large house (4,000 sq ft+)	1.15	\$20.67	\$161.16	\$181.83
<b>1" meter</b>				
Medium/large house (2,000 to 4,000 sq ft)	2.50	\$44.94	\$80.58	\$125.52

**Table 15**  
**Hybrid Approach - Multifamily User Fee Calculation, Low User Fee Estimate**  
**Monterey Peninsula Water Management District**

		<b>30% Meter Fee Allocation</b>	<b>70% Variable Fee Allocation</b>	<b>Total</b>
	Multifamily Revenue Requirement	\$131,400	\$306,600	\$438,000
		Fee per Meter		
	Number of Meter Equivalents	Equivalent		
<b>Meter Equivalents</b>	10,400	\$12.64		
	<b>No. of Meter Equivalents per</b>			
<b>Meter Portion</b>	<b>Meter Size</b>	<b>Meter Fee</b>		
5/8 x 3/4"	1.0	\$12.64		
3/4"	1.5	\$18.97		
1"	2.5	\$31.62		
1 1/2"	5.0	\$63.22		
2"	8.0	\$101.15		
3"	15.0	\$189.66		
4"	25.0	\$316.11		
6"	50.0	\$632.21		
8"	80.0	\$1,011.54		
<b>Average Water Use Per Multifamily Unit</b>			380	(10 cf per year)
Cost per unit of water			\$0.053	
Water Use Fee per Multifamily Unit			\$20.05	
<b>Sample User Fee</b>				
<b>Calculation</b>		<b>Meter Fee</b>	<b>Water Use Fee</b>	<b>Total User Fee</b>
Duplex with 1" meter		\$31.62	\$40.10	\$71.72
10 Unit apartment building with 2" meter		\$101.15	\$200.50	\$301.65
10 Unit apartment building with 4" meter		\$316.11	\$200.50	\$516.61
30 Unit apartment building with 6" meter		\$632.21	\$601.50	\$1,233.71

**Table 16**

**Hybrid Approach - Multifamily User Fee Calculation, High User Fee Estimate  
Monterey Peninsula Water Management District**

		<b>30% Meter Fee Allocation</b>	<b>70% Variable Fee Allocation</b>	<b>Total</b>
Multifamily Revenue Requirement		\$131,400	\$306,600	\$438,000
		Fee per Meter Equivalent		
<b>Meter Equivalents</b>	No. of Meter Equivalents	9,800	\$13.42	
<b>Meter Portion</b>	<b>No. of Meter Equivalents per Meter Size</b>	<b>Meter Size</b>	<b>Meter Fee</b>	
5/8 x 3/4"		1.0	\$13.42	
3/4"		1.5	\$20.14	
1"		2.5	\$33.55	
1 1/2"		5.0	\$67.09	
2"		8.0	\$107.35	
3"		15.0	\$201.28	
4"		25.0	\$335.46	
6"		50.0	\$670.92	
8"		80.0	\$1,073.47	
<b>Average Water Use Per Multifamily Unit</b>			380	(10 cf per year)
<b>Cost per unit of water</b>			\$0.058	
<b>Water Use Fee per Multifamily Unit</b>			\$21.87	
<b>Sample User Fee Calculation</b>		<b>Meter Fee</b>	<b>Water Use Fee</b>	<b>Total User Fee</b>
Duplex with 1" meter		\$33.55	\$43.74	\$77.29
10 Unit apartment building with 2" meter		\$107.35	\$218.70	\$326.05
10 Unit apartment building with 4" meter		\$335.46	\$218.70	\$554.16
30 Unit apartment building with 6" meter		\$670.92	\$656.10	\$1,327.02

**Table 17**  
**Hybrid Approach - Nonresidential User Fee Calculation, Low User Fee Estimate**  
**Monterey Peninsula Water Management District**

	<b>30% Meter Fee Allocation</b>	<b>70% Variable Fee Allocation</b>	<b>Total</b>
<b>Nonresidential Revenue Requirement</b>	\$366,000	\$853,000	\$1,219,000
<b>METER FEE</b>			
Nonresidential Meter Equivalents		16,200	
Nonresidential Meter Fee per Meter Equivalent		\$22.57	
	<b>No. of Meter Equivalents per Meter Size</b>		<b>Meter Fee</b>
<b>Meter Size</b>			
5/8 x 3/4"	1.0		\$22.57
3/4"	1.5		\$33.85
1"	2.5		\$56.42
1 1/2"	5.0		\$112.84
2"	8.0		\$180.54
3"	15.0		\$338.52
4"	25.0		\$564.20
6"	50.0		\$1,128.40
8"	80.0		\$1,805.43
<b>WATER USAGE FEE</b>			
<b>User Classes</b>	<b>Minimum Meter Fee</b>	<b>Unit</b>	
Business or Govt Office	\$50.64	per 10 employees	
Hotel/Motel	\$30.85	per room	
Supermarkets	\$250.73	per location/each business	
Medical Office	\$43.27	per licensed physician	
General Hospital	\$113.80	per bed of licensed capacity	
Restaurant 1 meal/day	\$2.33	per seat	
Restaurant 2 meals/day	\$3.64	per seat	
Restaurant 3 meals/day	\$6.99	per seat	
Nightclub	\$223.91	per location/each business	
Takeout Food - small	\$79.02	1 cash register or checkout lane	
Takeout Food - medium	\$203.00	2 or 3 cash registers or checkout lanes	
Takeout Food - large	\$356.82	4+ cash registers or checkout lanes	
Bakery	\$97.65	per location/each business	
Theater	\$104.78	per screen	
Mortuary	\$122.82	per location/each business	
School (Grades 0-6)	\$0.87	per student	
School (Grades 7- college)	\$1.75	per student	
Church (less than 100 members)	\$50.64	per location	
Church (more than 100 members)	\$101.28	per location	
Auto Painters/Body Shop	\$50.64	per 10 employees	
Dry Cleaner	\$64.73	per location/each business	
Laundromat	\$20.37	per each washing machine	
Golf Course	\$101.28	per acre	
City Parks, Cemeteries, Other Irrigated Area	\$101.28	per acre	

**Table 18**  
**Hybrid Approach - Nonresidential User Fee Calculation, High User Fee Estimate**  
**Monterey Peninsula Water Management District**

	<b>30% Meter Fee Allocation</b>	<b>70% Variable Fee Allocation</b>	<b>Total</b>
<b>Nonresidential Revenue Requirement</b>	\$366,000	\$853,000	\$1,219,000
<b>METER FEE</b>			
Nonresidential Meter Equivalents		15,200	
Nonresidential Meter Fee per Meter Equivalent		\$24.05	
	<b>No. of Meter Equivalents per Meter Size</b>	<b>Meter Fee</b>	
<b>Meter Size</b>			
5/8 x 3/4"	1.0	\$24.05	
3/4"	1.5	\$36.08	
1"	2.5	\$60.13	
1 1/2"	5.0	\$120.26	
2"	8.0	\$192.42	
3"	15.0	\$360.79	
4"	25.0	\$601.32	
6"	50.0	\$1,202.63	
8"	80.0	\$1,924.21	
<b>WATER USAGE FEE</b>			
<b>User Classes</b>	<b>Minimum User Fee</b>	<b>Unit</b>	
Business or Govt Office	\$55.25	per 10 employees	
Hotel/Motel	\$33.66	per room	
Supermarkets	\$273.57	per location/each business	
Medical Office	\$47.21	per licensed physician	
General Hospital	\$124.16	per bed of licensed capacity	
Restaurant 1 meal/day	\$2.54	per seat	
Restaurant 2 meals/day	\$3.97	per seat	
Restaurant 3 meals/day	\$7.62	per seat	
Nightclub	\$244.30	per location/each business	
Takeout Food - small	\$86.22	1 cash register or checkout lane	
Takeout Food - medium	\$221.49	2 or 3 cash registers or checkout lanes	
Takeout Food - large	\$389.32	4+ cash registers or checkout lanes	
Bakery	\$106.54	per location/each business	
Theater	\$114.32	per screen	
Mortuary	\$134.01	per location/each business	
School (Grades 0-6)	\$0.95	per student	
School (Grades 7- college)	\$1.91	per student	
Church (less than 100 members)	\$55.25	per location	
Church (more than 100 members)	\$110.51	per location	
Auto Painters/Body Shop	\$55.25	per 10 employees	
Dry Cleaner	\$70.62	per location/each business	
Laundromat	\$22.23	per each washing machine	
Golf Course	\$110.50	per acre	
City Parks, Cemeteries, Other Irrigated Area	\$110.50	per acre	

**Table 19**  
**Hybrid Approach - Nonresidential Sample Bills**  
**Monterey Peninsula Water Management District**

<b>Low User Fee Estimate</b>			
	<b>Meter Fee</b>	<b>Water Use Fee</b>	<b>Total User Fee</b>
Hotel with 2" meter, 30 rooms	\$180.54	\$925.52	\$1,106.06
Office with 1 1/2" meter, 35 employees	\$112.84	\$202.57	\$315.41
Restaurant with 1" meter, serves 2 meals/day, 40 seats	\$56.42	\$145.52	\$201.94
Commercial building with 2" meter	\$180.54		
Takeout Food - small		\$79.02	
Office with 7 employees		\$50.64	
Retail store with 12 employees		<u>\$101.28</u>	
Total commercial building	\$180.54	\$230.94	\$411.49
<b>High User Fee Estimate</b>			
	<b>Meter Fee</b>	<b>Water Use Fee</b>	<b>Total User Fee</b>
Hotel with 2" meter, 30 rooms	\$192.42	\$1,009.81	\$1,202.23
Office with 1 1/2" meter, 35 employees	\$120.26	\$221.02	\$341.28
Restaurant with 1" meter, serves 2 meals/day, 40 seats	\$60.13	\$158.78	\$218.91
Commercial building with 2" meter	\$192.42		
Takeout Food - small		\$86.22	
Office with 7 employees		\$55.25	
Retail store with 12 employees		<u>\$110.51</u>	
Total commercial building	\$192.42	\$251.98	\$444.40

## Bill Impacts

Cal-Am customers had been paying 8.325% surcharge on their bills for the MPWMD user fee. A single family customer would pay between \$30 and \$45 per year depending on water use. The new user fee could range from \$52.72 to \$67.27 per year based on the alternative selected by the District, see Table 20. A small residence, less than 1,200 square feet, could pay even less.

**Table 20**  
**Comparison of User Fee Alternatives for Single Family Customer**  
**Monterey Peninsula Water Management District**

<b>Alternatives</b>	<b>Annual User Fee (Low Estimate)</b>	<b>Annual User Fee (High Estimate)</b>
Variable User Fee Basis	\$52.75	\$57.56
Land Use Basis	56.32	67.27
Meter Equivalent Basis	58.73	62.71
Hybrid Approach (medium house)	53.76	58.26

BWA also recommends that the District implement an appeals process by which customers can contest their user fee. If customers can produce new information regarding their meter size, type of business, or home size, the general manager should have the authority to adjust the user fees as appropriate.

In addition, BWA recommends that MPWMD adopt an appeals process for customers who believe that they should be granted a reduction due to upsizing of their meters to meet fire flow requirements. BWA recommends that MPWMD adjust the user fees for upsized meters according to the current practice of Cal-Am.

## **Recommended Approach and User Fee Alternative**

### **Cost of Service Approach**

The AWWA Manual M1 states that both fixed and variable fees are a valid method of cost recovery. The AWWA Manual M1 describes this cost-causative approach on page 112:

“A cost-of-service approach to setting water rates allocates costs to each customer or customer class based on the theory of cost causation. A dual set of fees – fixed and variable – is an extension of this cost causation theory. A utility incurs some costs associated with serving customers irrespective of the amount or rate of water they use. These types of costs are referred to as *customer costs* and typically are costs that would be recovered through a fixed charge. These costs are usually recovered on a per customer basis or some other non-consumption basis.”

The District’s function is to manage water resources on a watershed basis to protect supply for current and future use. However, the District is also mindful that major portions of existing water supply shall not be available to present users due to decisions of the Superior Court and the State Water Resources Control Board. Therefore, the District incurs costs from water supply activities, which have a fixed and variable component. Here, “variable” means usage that varies based on property use category. The variable cost component is associated with the average day consumption within the District. Each customer or land use class should pay a portion of the user fee for the actual demand that the customer places on water supply. The fixed cost component is associated with the excess water supply needed to

meet peak demand and long-term build-out demand of the Monterey Peninsula. The District does not release water supplies or acquire new supplies based on minor year-to-year changes in demand. Instead, the decision to acquire new supplies is based on long-term analysis of system-wide maximum demand. Meter equivalents are an appropriate metric to collect fixed costs because meter size reflects the maximum (peak) capacity of each meter.

### **Recommended Approach**

Bartle Wells Associates recommends the hybrid approach as the preferred alternative to calculate the District's user fees. Of the alternatives discussed in this report, the hybrid approach most closely reflects how the District incurs costs. The hybrid approach also creates a conservation pricing signal as recommended by the California Urban Water Conservation Council. The hybrid method of calculating user fee is cost-causative and addresses the CPUC's opposition to the old billing method.

Within this report, BWA provides high and low user fee calculations based on estimates of meter equivalents and water use. BWA recommends that MPWMD adopt rates based on a meter equivalent count of 63,000 meter equivalents and a water unit cost of \$0.055 per 10 cf of water. These parameters accurately reflect the number of meters within the District and the District's cost of securing water supply. The recommended user fees are shown in Tables 21, 22, 23, and 24. For a full list of the nonresidential user fees by type of business see Appendix C.



**Table 21**  
**Recommended Single Family User Fee**  
**Monterey Peninsula Water Management District**

<b>Meter Size</b>	<b>No. of Meter Equivalents per Meter Size</b>	<b>Meter Fee</b>	<b>Water Use Fee</b>	
5/8 x 3/4"			\$0.055	(per 10 cf)
Small house (less than 1,200 sq ft)	0.85	\$14.31		
Medium house (1,200 to 2,000 sq ft)	1.00	\$16.84		
Medium/large house (2,000 to 4,000 sq ft)	1.15	\$19.36		
Large house (4,000 sq ft+)	1.15	\$19.36		
3/4"	1.50	\$25.27		
1"	2.50	\$42.10		
1 1/2"	5.00	\$84.19		
2"	8.00	\$134.70		
3"	15.00	\$252.57		
4"	25.00	\$420.95		
<b>Sample Residential Bills</b>	<b>Meter Equivalents</b>	<b>Meter Fee</b>	<b>Water Use Fee</b>	<b>Total Annual User Fee</b>
Vacant house		based on size of meter	50% of non- vacant fee	
<b>5/8 x 3/4" meter</b>				
Small house (less than 1,200 sq ft)	0.85	\$14.31	\$24.75	\$39.06
Medium house (1,200 to 2,000 sq ft)	1.00	\$16.84	\$38.50	\$55.34
Medium house (2,000 to 4,000 sq ft)	1.15	\$19.36	\$77.00	\$96.36
Large house (4,000 sq ft+)	1.15	\$19.36	\$154.00	\$173.36
<b>1" meter</b>				
Medium/large house (2,000 to 4,000 sq ft)	2.50	\$42.10	\$77.00	\$119.10

**Table 22**  
**Recommended Multifamily User Fee**  
**Monterey Peninsula Water Management District**

<b>Meter Size</b>	<b>No. of Meter Equivalents per Meter Size</b>	<b>Meter Fee</b>		
5/8 x 3/4"	1.00	\$12.64		
3/4"	1.50	\$18.97		
1"	2.50	\$31.62		
1 1/2"	5.00	\$63.22		
2"	8.00	\$101.15		
3"	15.00	\$189.66		
4"	25.00	\$316.11		
6"	50.00	\$632.21		
8"	80.00	\$1,011.54		
<b>Water Use Fee</b>				
Cost per unit of water			\$0.055	(per 10 cf)
Average Water Use Per Multifamily Unit			380	(10 cf per year)
Water Use Fee per Multifamily Unit			\$20.90	
<b>Sample User Fee Calculation</b>				
Vacant building		<b>Meter Fee</b> based on size of meter	<b>Water Use Fee</b> 50% of non- vacant fee	<b>Total User Fee</b>
Duplex with 1" meter		\$31.62	\$41.80	\$73.42
10 Unit apartment building with 2" meter		\$101.15	\$209.00	\$310.15
10 Unit apartment building with 4" meter		\$316.11	\$209.00	\$525.11
30 Unit apartment building with 6" meter		\$632.21	\$627.00	\$1,259.21

**Table 23**  
**Recommended Nonresidential User Fee**  
**Monterey Peninsula Water Management District**

<b>METER FEE</b>		
<b>Meter Size</b>	<b>No. of Meter Equivalents per Meter Size</b>	<b>Meter Fee</b>
5/8 x 3/4"	1.0	\$22.57
3/4"	1.5	\$33.85
1"	2.5	\$56.42
1 1/2"	5.0	\$112.84
2"	8.0	\$180.54
3"	15.0	\$338.52
4"	25.0	\$564.20
6"	50.0	\$1,128.40
8"	80.0	\$1,805.43

<b>WATER USAGE FEE</b>		
<b>User Classes</b>	<b>Minimum Water Use Fee</b>	<b>Unit</b>
Business or Govt Office	\$52.80	per 10 employees
Hotel/Motel	\$32.17	per room
Supermarkets	\$261.42	per location/each business
Medical Office	\$45.11	per licensed physician
General Hospital	\$118.65	per bed of licensed capacity
Restaurant 1 meal/day	\$2.43	per seat
Restaurant 2 meals/day	\$3.79	per seat
Restaurant 3 meals/day	\$7.28	per seat
Nightclub	\$233.45	per location/each business
Takeout Food - small	\$82.39	1 cash register or checkout lane
Takeout Food - medium	\$211.66	2 or 3 cash registers or checkout lanes
Takeout Food - large	\$372.03	4+ cash registers or checkout lanes
Bakery	\$101.81	per location/each business
Theater	\$109.24	per screen
Mortuary	\$128.06	per location/each business
School (Grades 0-6)	\$0.91	per student
School (Grades 7- college)	\$1.82	per student
Church (less than 100 members)	\$52.80	per location
Church (more than 100 members)	\$105.60	per location
Auto Painters/Body Shop	\$52.80	per 10 employees
Dry Cleaner	\$67.49	per location/each business
Laundromat	\$21.24	per each washing machine
Golf Course	\$105.60	per acre
City Parks, Cemeteries, Other Irrigated Area	\$105.60	per acre

For complete list see Appendix C.

**Table 24**  
**Recommended User Fee - Nonresidential Sample Bills**  
**Monterey Peninsula Water Management District**

	<b>Meter Fee</b>	<b>Water Use Fee</b>	<b>Total User Fee</b>
Vacant	Based on meter size	50% of non- vacant fee	
Hotel with 2" meter, 30 rooms	\$180.54	\$964.97	\$1,145.51
Office with 1 1/2" meter, 35 employees	\$112.84	\$211.20	\$324.04
Restaurant with 1" meter, serves 2 meals/day, 40 seats	\$56.42	\$151.72	\$208.14
Commercial building with 2" meter	\$180.54		
Takeout Food - small		\$82.39	
Office with 7 employees		\$52.80	
Retail store with 12 employees		<u>\$105.60</u>	
Total commercial building	\$180.54	\$240.79	\$421.33

## Comparable Agencies

MPWMD is unique in that it manages surface and groundwater water supplies, and delivers a portion of the region's water supply from its ASR project as a wholesale provider, but does not deliver water to retail customers. The proposed GWR project will be another source of water for wholesale delivery. BWA surveyed other water agencies in California, and identified four agencies in California that allocate costs to a water supply management function. Each of the agencies surveyed has a different mechanism for recovering water management costs. The Metropolitan Water District of Southern California and the San Diego County Water Authority each have a distinct user charge for their water management services. The Eastern Municipal Water District of Southern California and the Santa Clara Valley Water District recover their water supply management costs through a bundled water rate and do not have a distinct fee. Of the four agencies surveyed, only the San Diego County Water Authority charges for water supply management on a fixed charge basis, see Table 21. The San Diego County Water Authority charge is allocated to the Authority's customer agencies based on a three-year rolling average of water deliveries. This is similar to the hybrid approach to MPWMD's user fee which calculates a revenue requirement per each customer class based on last year's water use.

It should be noted that all of these agencies are wholesalers and the rates shown in Table 21 are the rates that they charge to their customer agencies. These are not the rates that are charged to individual households or businesses. BWA was not able to identify any agencies that charge a specific fee to retail customers for water management services. However, Table 25 illustrates that both fixed and variable charges are commonly used by other water agencies.

**Table 25**  
**Comparable Agencies**  
**Monterey Peninsula Water Management District**

<b>Agency</b>	<b>Name of Fee</b>	<b>Purpose of Fee</b>	<b>Type</b>
Metropolitan Water District of Southern California	Water Stewardship Rate	Recovers the cost of MET’s financial commitment to conservation, water recycling, groundwater clean-up and other local resource management programs	Variable
San Diego County Water Authority	Customer Service Charge	Recovers administrative costs and programs that benefit the region as a whole including water conservation and local water supply programs	Fixed
Eastern Municipal Water District of Southern California	Wholesale Treated Rate	Recovers cost of water supply charges, the cost of lost water, pumping and delivery, readiness to serve costs, capital replacement costs, overhead and administration, and costs to fund regional water conservation programs	Variable
Santa Clara Valley Water District	Various fees based on type of water source used by the customer	Recovers cost of water supply and delivery; new sources of supply/alternate water sources are included in the delivered water rate	Variable

## Billing method

MPWMD does not bill customers directly and does not have a billing system in place. Prior to the CPUC decision, Cal-Am included the MPWMD user fee on its monthly bills to customers. Going forward, the MPWMD must determine a new billing method.

One option is for the District to develop a billing department in-house and directly bill customers. This option would require the hiring of several new staff members and the purchase of billing software. The District would also need to manage the printing and mailing of bills, the processing of payments, and the pursuit of delinquent bills.

BWA recommends that the District bill semi-annually on the County’s assessors roll. This billing method saves MPWMD the cost of directly billing customers and the Tax Collector assumes the responsibility of collecting on delinquent accounts.

## Legal Requirements

To implement a new user fee as described in this memorandum, the MPWMD must meet the procedural and substantive requirements of Proposition 218. Proposition 218, the “Right to Vote on Taxes Act”, was approved by California voters in November 1996 and is codified as Articles 13C and 13D of the California Constitution. Proposition 218 establishes requirements for imposing or increasing property related taxes, assessments, fees and charges. The substantive requirements of Prop 218 are described below.

## **Substantive Requirements for Property Related Fees and Charges**

Proposition 218 established a number of substantive requirements that are generally deemed to apply to water and sewer service charges, including:

- **Cost of Service** - Revenues derived from the fee or charge cannot exceed the funds required to provide the service. In essence, fees cannot exceed the “cost of service”.
- **Intended Purpose** - Revenues derived from the fee or charge can only be used for the purpose for which the fee was imposed.
- **Proportional Cost Recovery** - The amount of the fee or charge levied on any customer shall not exceed the proportional cost of service attributable to that customer.
- **No Standby Fee** - No fee or charge may be imposed for a service unless that service is used by, or immediately available to, the owner of the property. Standby charges shall be classified as “assessments” which are governed by Article 13D Section 4.

The language of Proposition 218 provides little guidance on how to interpret the substantive requirements on rates and charges. For example, there is no definition of what constitutes the cost of providing service. Additionally, the courts have provided little guidance to date. Public agencies must rely on their own interpretations and/or those of their legal advisors.

The bottom line is that the District’s utility rates should reasonably reflect the cost of providing service to each customer class. BWA believes that rates can recover costs for operations, capital needs, debt service, administration, as well as costs related to the prudent long-term operational or financial management of the utility enterprise, such as maintaining adequate fund reserves or planning for contingencies. Rates for a given service can vary by customer class provided there is reasonable justification for any differences. While Proposition 218 places a number of limitations on the District’s rates, BWA believes the District retains substantial latitude to determine actual utility charges, provided such charges are supported by reasonable justification.

This memorandum provides the reasonable justification for the user fee: 1) the purpose of the fee, 2) how the fee is calculated, 3) how the fee is scaled for various customers based on meter equivalents.

## **Procedural Requirements for Imposing or Increasing Property Related Charges**

MPWMD’s schedule of Prop 218 procedural requirements is shown on the next page and are described in detail below.

- **Notice of Proposed Rate Increase** - The District must mail a notice of proposed rate increases to all affected property owners. The District has received guidance from its legal advisors that record owners of real property (parcels) must be notified.

The notice must include:

- the amount of the fee or charge (which is commonly interpreted to include the rates upon which the charge will be calculated)
- the basis upon which the fee was calculated;

- the reason for the fee or charge;
- the date, time, and location of a public hearing at which the proposed rates will be adopted.

The notice may also need to identify the parcel upon which the fee will be imposed, depending on the District Attorney's legal opinion. However, some attorneys do not believe this requirement necessarily applies to charges imposed as an incident of property ownership, such as water, recycled water, and sewer rates. Some agencies that opt to meet this requirement have done so by simply including the assessor's parcel number on the mailing label.

- **Public Hearing** - The District must hold a public hearing not less than 45 days after mailing the required notices. In practice, the 45-day period should start the day the notices are postmarked. If the notices are postmarked on different days, such as from being sent out in batches, the latest postmark date should apply.

At the public hearing the District must "consider all protests" against the proposed fees or charges. The District's Board would have the authority to adopt any rate at or below the rates included in the Proposition 218 notice.

- **Majority Protest** - At the public hearing, the proposed rate increases are subject to majority protest. If more than 50% of affected property owners submit written protests against the proposed rate increases, the increases cannot be adopted.

## MPWMD Prop 218 Schedule

STEP	ACTION	WHEN
1.	Prepare report of General Counsel in support of District authority to collect rates, charges, and user fees through contract with County Assessor on tax bills.	Complete
2.	Approve consultant to prepare draft report to support the Ordinance for collection on the Assessor's roll. Prepare report. Describe each real property receiving services and the amount of the charge for each parcel for the year, computed in conformance with the proposed ordinance. [Assumes no RFP; Sole source contract]	February 23
3.	First reading of the proposed rate ordinance by the MPWMD Board of Directors. Requires two-thirds vote. Board sets the second reading date and public hearing date for June 12, 2012.	April 16
4.	For Prop. 218 compliance, mail notice of public hearing to the record owner of each parcel upon which the fee or charge is proposed to be imposed. The notice must include: a. the amount of the fee on that parcel b. the basis for calculating the fee or charge c. the reason for the fee or charge d. the time, date and location of the protest hearing Must also mail notice to the record owner's address shown on the last equalized assessment roll if that address is different than the billing or service address. [At least 45 days before public protest hearing]	April 27
5.	Publish notice of protest hearing once a week for 2 successive weeks, with 5 days between publication dates.	April 30
6.	District mails notice of public hearing to interested parties who have filed written request within prior year [At least 14 days before hearing.]	May 29
7.	District makes available to the public data indicating the amount of cost, or estimated cost, required to provide the service for which charges are levied and the revenue sources anticipated to provide the service, including other sources of revenue. [At least 10 days before hearing.]	June 1
8.	District publishes summary of proposed ordinance and posts certified copy of full text of proposed ordinance in District office. [5 days before meeting]	June 7
9.	Hold Prop. 218 public hearing on protests. If a majority of owners or tenants of identified parcels present written protests, the District may not impose the charges. [Not less than 45 days after notice is mailed]	June 12
10.	Second reading of the proposed rate increase ordinance by the MPWMD Board of Directors. Requires two-thirds vote. Board adopts report. [Ordinance will need to have effective date of July 1 written into it, otherwise effective date is 30 days after adoption.]	June 12
11.	Board adopts 2012/2013 operating and capital budget by resolution	June 12
12.	User fee effective date	July 1
13.	File with County Assessor a copy of the report prepared pursuant to Section 5473 of Health & Safety Code and state the report has been adopted by the Board. Database of collections transferred to Assessor's office and entered against respective parcels. [H&S Code indicates August 10th, but Monterey County desires data by August 1]	By August 1



**APPENDIX A**  
**MONTEREY REGIONAL WATER POLLUTION CONTROL AGENCY**  
**MONTHLY RATE SCHEDULE\***  
**Effective July 1, 2011**

CATEGORY CODE	DESCRIPTION	MONTHLY RATES	UNITS
001	Business/Gov't. - 1-10 Employees	8.70	Location/Each
002	Business/Gov't. - 11-20 Employees	17.40	Business
003	Business/Gov't. - 21-30 Employees	26.10	
004-099	Rate Increases - \$8.70/every 10 Employees		
101, 106	Residential-Vacant	7.65	Each living unit
102, 105	Residential/Apartments	12.75	Each living unit
107, 109	Condo/Retirement Community		
211	Minimum/Vacancy	6.65	Location/Each Business
221	Motel/Hotel	5.30	Each room
222	Bed & Breakfast Inn	3.55	Each room
231	Supermarkets	86.15	Location
241	Medical Office	11.15	Each licensed Physician
242	Dental Office	15.10	Each licensed Dentist
243	Rest Home/Convalescent	3.30	Each bed of licensed capacity
244	General Hospital	19.55	Each bed of licensed capacity
245	Animal Hospital	22.90	Location/Each licensed business
261	Restaurant 1 meal/day	.80	
262	Restaurant 2 meals/day	1.25	Each restaurant
263	Restaurant 3 meals/day	2.40	seat
264	Restaurant with Bar	2.40	
265	Bar	19.75	Location/Each bus.
266	Nightclub	57.70	Location/Each bus.
267	Takeout Food - Small	27.15	1 cash register or checkout line
268	Takeout Food - Medium	69.75	2 or 3 cash registers or checkout lines
269	Takeout Food - Large	122.60	4 or more cash registers or checkout lines

**MONTEREY REGIONAL WATER POLLUTION CONTROL AGENCY**  
**Monthly Rate Schedule - Effective July 1, 2011**  
**Page 2**

CATEGORY CODE	DESCRIPTION	MONTHLY RATES	UNITS
270	Bakery	33.55	Location/Each bus.
281	Theater	27.00	Per screen @ each location
282	Bowling Center	81.00	Location Each bus.
283	Gym 1-500 Members	8.70	
284-289	Rate Increases \$8.70/every 500 members		
290	Mortuary	42.20	Location/Each bus.
291	School (Minimum)	8.70	
292	School (Grades 0-6)	.10	
293	School (Grades 7-College)	.20	School population
294	Boarding School	2.55	
295	Instructional Facility	8.70	
296	Church 1-100 Members	8.70	Location/Each
297	Church Over 100 Members	17.40	business
301	Photo Developer	8.70	
311	Laboratory	8.70	
312	Rate Increases \$8.70/every 10 employee		Location/Each business
321	Printer	8.70	
322-326	Rate Increases - \$8.70/every 10 employees		
331	Service Station/Garage	9.25	
341	Auto Painters, Body Shops, Paint Store	8.70	
342-346	Rate Increases - \$8.70/every 10 employees		
353	Dry Cleaner	27.80	Location/Each business
354	Laundromat	7.00	Each washing machine
511	Temporarily Suspended	.00	
351, 352, 361, 366, 367, 401-411	(Special Users)		Individual determination

\* These rates do not reflect the city charges assessed on all properties in the following cities:

40.6%	Monterey (Plus Stormwater Utility Fee \$10.88)
185%	Pacific Grove
35%	Salinas
66.4%	Seaside, Sand City and Del Rey Oaks

## APPENDIX B: Land Use Basis - User Fees

Land Use	Avg SFD Count per Parcel	Annual User Fee (high SFD count)	Annual User Fee (low SFD count)
1 S.F.D. ON 1 SITE	1.00	\$56.37	\$67.27
1 S.F.D. ON 2 OR MORE SITES	1.65	\$92.87	\$110.83
1 SFD ON MULTI-ZONED 1 SITE	0.56	\$31.32	\$37.38
1 SFD/MULTIFMLY EXTRA LAND	0.41	\$22.88	\$27.31
1 STORY OFFICE BUILDINGS	1.59	\$89.59	\$106.92
16 TO 30 UNIT APARTMENTS	2.59	\$145.92	\$174.14
2 OR MORE S.F.D. ON 1 SITE	0.86	\$48.49	\$57.87
2 OR MORE SFD & 2 OR MORE SITE	2.85	\$160.69	\$191.77
2 UNITS ON ONE SITE	0.62	\$35.15	\$41.95
31 UNITS OR MORE	6.44	\$363.16	\$433.40
3-4 UNIT APT DEVELOPED SITE	0.84	\$47.27	\$56.42
5 TO 15 UNIT APARTMENT	1.41	\$79.37	\$94.72
AG PRES, GRZ, BRUSH, DRY FRM	204.19	\$11,510.12	\$13,736.26
AUTO SALES,REPAIRS,STORAGE	1.91	\$107.70	\$128.52
AUTO WRCK/SLVG,OP STRG,SM IMPS	1.25	\$70.37	\$83.98
BANKS & FINANCIAL INSTITUTIONS	2.77	\$155.87	\$186.01
CEMETERIES ETC	1.83	\$103.11	\$123.05
CHURCHES	2.87	\$161.71	\$192.98
COMB OF STORES, OFFICE OR APT	2.21	\$124.78	\$148.92
COMMERCIAL SHELL TYPE BLDGS	2.33	\$131.08	\$156.43
CONDO & TOWNHOUSES LIVING UNIT	0.56	\$31.51	\$37.61
CONDO COM AREA & MISC BLDGS	1.76	\$99.09	\$118.26
FRATERNAL ORGANIZATIONS	1.89	\$106.50	\$127.10
GRAZING, ETC	7.70	\$434.22	\$518.20
HOSPITAL PRIVATE, CONVALESCENT	5.93	\$334.16	\$398.79
HOTEL & MOTEL	3.60	\$203.13	\$242.42
IMPROVED RES USE 11 AC OR MORE	13.23	\$745.88	\$890.14
IMPROVED RES USE UP TO 10 AC	3.11	\$175.23	\$209.12
INDS/RSCH PARK, W/WO STRUCTURE	6.09	\$343.06	\$409.41
INDUSTRIAL CONDOMINIUMS	0.03	\$1.52	\$1.81
LIGHT MFG OR LIGHT INDUSTRIAL	2.25	\$126.94	\$151.49
MED/DENTAL BLDG PET HOSP	1.80	\$101.53	\$121.17
MH & HCD FOUNDATION L & I	0.90	\$50.47	\$60.23
MH LIC BY HCD,LND/SITE_ONLY	0.02	\$1.14	\$1.37
MH,LAND, SITE VALUE & PP	2.52	\$142.10	\$169.59
MINING,QUAR,MIN, PROCES PLANTS	11.87	\$669.08	\$798.49
MISC BLDG	1.71	\$96.46	\$115.12
MISC IMPS 1 OR MORE SFD SITES	0.26	\$14.47	\$17.27
MOBILEHOME PARK	16.00	\$901.74	\$1,076.14

<b>Land Use</b>	<b>Avg SFD Count per Parcel</b>	<b>Annual User Fee (high SFD count)</b>	<b>Annual User Fee (low SFD count)</b>
MULTI STORY OFF BLDGS	3.71	\$209.38	\$249.87
MUSEUMS, LIBRARIES	5.38	\$303.33	\$362.00
NO OTHER CODE APPLIES	0.46	\$25.71	\$30.68
OFFICE CONDOMINIUMS	0.22	\$12.50	\$14.92
PARKING LOTS	0.17	\$9.73	\$11.62
PRODUCE SHEDS & FOOD PROCESS	2.20	\$123.93	\$147.90
PRVT RDS, R/W, LANES, WELL LOT	4.00	\$225.36	\$268.94
PUBLICLY OWNED NON-TAXABLE	3.70	\$208.68	\$249.04
PUBLICLY OWNED TAXABLE	0.85	\$47.95	\$57.23
REC/GOLF/TENNIS RESORTS	24.04	\$1,355.33	\$1,617.46
RES USE VAC 11 TO 40 AC	8.07	\$454.89	\$542.87
RES. USE VAC UP TO 10 AC	2.50	\$140.78	\$168.00
RESTAURANTS, DRV-IN, SPEC BLDG	1.67	\$94.12	\$112.32
ROW CROP	7.75	\$437.03	\$521.55
SBE ASSESSED ROLL ITEMS	0.82	\$46.43	\$55.41
SCE ESM/OPN SP,NEG ESM,NO SUBV	6.77	\$381.77	\$455.61
SCHOOLS, COLLEGES, DAY SCHOOLS	4.76	\$268.08	\$319.93
SERV STATION AUTO OR CAR WASH	0.83	\$46.60	\$55.61
SFD ON COMMERCIAL ZONED LAND	0.48	\$27.04	\$32.26
SHOPPING CENTERS	6.89	\$388.60	\$463.75
SUBURBAN STORES (INDV BLDG)	2.73	\$153.79	\$183.54
SUPERMARKET (NOT IN SHP CTR)	5.26	\$296.53	\$353.88
THEATERS	4.18	\$235.69	\$281.27
UNDEV 41 TO 300 ACRES	52.85	\$2,979.32	\$3,555.55
UNDEVL 301 OR MORE ACRES	163.73	\$9,229.43	\$11,014.47
UTILITIES ASS'D ON LOCAL ROLL	1.28	\$72.15	\$86.11
VAC S.F.D. 1 SITE	0.56	\$31.72	\$37.86
VAC S.F.D. 2 OR MORE SITES	7.32	\$412.73	\$492.55
VAC ZONED MULTI FAM DWELLING	0.10	\$5.90	\$7.04
VACANT COMMERCIAL	0.33	\$18.51	\$22.09
VACANT INDUSTRIAL	0.22	\$12.58	\$15.01
VACANT TRANSITIONAL	5.53	\$311.49	\$371.73
VINEYARDS	17.81	\$1,004.07	\$1,198.27
WAREHOUSING,MINI STRG,LMBR YDS	3.86	\$217.50	\$259.57
WASTE LND HUNTING OR REC USE	0.22	\$12.40	\$14.80
WATER SYS IMPS ON SCRD ROLL	0.26	\$14.69	\$17.53
WHOLESALE NURSERIES MSHRM HOUS	1.86	\$105.11	\$125.44

## APPENDIX C: Recommended Nonresidential User Fees

Description	Category Code*	Recommended Water	
		Use Fee per Unit	Unit
Business/Govt 1 to 10 employees	001	\$52.80	per location/each business
Business/Govt 11 to 20 employees	002	\$105.60	per location/each business
Business/Govt 21 to 30 employees	003	\$158.40	per location/each business
Rate Increases	004-099	\$52.80	fee increase per every 10 employees
Minimum/vacancy	211	\$26.40	per location/each business
Hotel/Motel	221	\$32.17	per room
Bed and Breakfast	222	\$21.54	per room
Supermarket	231	\$261.42	per location/each business
Medical Office	241	\$45.11	per licensed physician
Dental Office	242	\$61.09	per licensed dentist
Rest Home	243	\$20.03	per bed of licensed capacity
General Hospital	244	\$118.65	per bed of licensed capacity
Animal Hospital	245	\$138.98	per location/each business
Restaurant 1 meal/day	261	\$2.43	per seat
Restaurant 2 meals/day	262	\$3.79	per seat
Restaurant 3 meals/day	263	\$7.28	per seat
Restaurant w/bar	264	\$9.71	per seat
Bar	265	\$79.91	per location/each business
Nightclub	266	\$233.45	per location/each business
Takeout Food - small	267	\$82.39	1 cash register or checkout lane
Takeout Food - medium	268	\$211.66	2 or 3 cash registers or checkout lanes
Takeout Food - large	269	\$372.03	4+ cash registers or checkout lanes
Bakery	270	\$101.81	per location/each business
Theater	281	\$109.24	per screen
Bowling Center	282	\$491.59	per location/each business
Gym	283	\$52.80	per 500 members
Rate Increases	284-289	\$52.80	fee increase per every 10 employees
Mortuary	290	\$128.06	per location/each business
School Minimum	291	\$52.80	per location/each business
School (Grades 0-6)	292	\$0.91	per student
School (Grades 7- college)	293	\$1.82	per student
Boarding School	294	\$23.21	per student
Instructional Facility	295	\$52.80	per location/each business
Church (0 to 100 members)	296	\$52.80	per location
Church (over 100 members)	297	\$105.60	per location
Photo Developer	301	\$52.80	per location
Laboratory	311	\$52.80	per 10 employees
Rate Increases	312	\$52.80	fee increase per every 10 employees
Printer	321	\$52.80	per 10 employees
Rate Increases	322-326	\$52.80	fee increase per every 10 employees
Service Station	331	\$52.80	per 10 employees
Auto Painters, Body Shop, Paint Store up to 10 employees	341	\$52.80	per location/each business
Rate Increases	342-346	\$52.80	fee increase per every 10 employees
Dry Cleaner	353	\$67.49	per location/each business
Laundromat	354	\$21.24	per each washing machine
Special Users		\$52.80	fee proportional to the average business user, not to exceed \$2,500; individual determination
Temporarily Suspended (no active water meter)	351, 352, 361, 366, 367, 401-411	\$0.00	per location/each business
Mobile Home		\$32.17	per living unit
Golf Course		\$105.60	per acre
City Parks, Cemeteries, Other		\$105.60	per acre
Irrigated Area			
*see Appendix A			