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April 7, 2011

Mr. Michael P. Grandy
Assistant General Manager/Chief Financial Officer
El Toro Water District
24251 Los Alisos Blvd.
El Toro, California 92630

Subject: Nexus Report for Purchased Water and Capital R&R Charges

Dear Mr. Grandy:

Raftelis Financial Consultants (RFC) has reviewed the latest purchased water costs and calculated the rates that need to be implemented to ensure adequate revenues to recover the increased costs of purchased water at El Toro Water District (District). This letter report summarizes our calculation methodology for determining the increases to commodity rates as a result of the increased cost of purchasing water. We have also reviewed the Capital R&R Charge Engineering Report prepared by the District to validate the calculation of the capital replacement and refurbishment charges (Capital R&R Charge).

Introduction

In FY 2005-06, the District unbundled rates to convey the true costs of various service components and continue to equitably pass on the costs of water and wastewater services to users. The components of the rates included in the bills include the following:

- Water O&M Charge
- Water Usage Charge including the Purchased Water Charge and Water Delivery Charge
- Capital R&R Charge for Water
- Total Water Bill

The sewer bill consists of the following:

- Sewer O&M Charge
- Capital R&R Charge for Sewer
- Total Sewer Bill

The costs that are recovered through these charges are described in a report titled FY 2005-06 Budget Revenue and Rates Engineering Report written by RFC.

This report addresses the changes to the Purchased Water Charge and the Capital R&R Charge for water and sewer for FY 2011-12. AB 3030 codified in Section 53756 of the Government Code allows utilities to pass on the costs of wholesale costs of water to its customers with the appropriate noticing procedures. The District will follow the requirements of Proposition 218 to implement the revised Purchased Water Rate and the Capital R&R Charge.

Purchased Water Rate

The District purchases water from Municipal Water District of Orange County (MWDOC) which purchases water from Metropolitan Water District of Southern California (MET). MET rates are increasing in January 2012. The current and revised rates from MET incorporated in the MWDOC rates and costs associated with water purchase are shown below. The calculation of the net increase to the cost of purchased water is shown on the last row and is \$0.12 per hundred cubic feet (ccf)

EL TORO WATER DISTRICT 2011/12 PURCHASED WATER BUDGET

	2010/11 Budget		2011/12 Budget	
	Jul	Jan	Jul	Jan
	2010	2011	2011	2012
Period Demand, AF	5,350	4,050	5,350	4,050
Annual Demand, AF		9,400		9,400
Annual Sales, AF		9,100		9,100
System Access Rate, \$/AF	154.00	204.00	204.00	217.00
System Power Rate, \$/AF	119.00	127.00	127.00	136.00
Water Stewardship Rate, \$/AF	41.00	41.00	41.00	43.00
Delta Surcharge, \$/AF	69.00	51.00	51.00	54.00
MWD Tier 1 Rate, \$/AF	101.00	104.00	104.00	110.00
MWDOC Incremental Rate, \$/AF	6.50	6.50	4.25	4.25
Subtotal Untreated Full Service	490.50	533.50	531.25	564.25
Treatment Surcharge, \$/AF	217.00	217.00	217.00	234.00
Total Treated Full Service, \$/AF	707.50	750.50	748.25	798.25
Other Imported Water Charges				
Readiness to Serve Charge (RTS), \$	161,946	189,246	192,000	224,256
MWDOC Connection Rate (\$/meter)	5.50	5.50	6.25	
ETWD Meters	9,806	9,806	9,806	
Total MWDOC Connection Charge (\$)	26,967	26,967	61,288	
Capacity Reservation Charge, \$	66,466	66,466	58,218	59,965
Total Period Water Cost, \$	4,040,503	3,322,203	4,314,643	3,517,133
Total MWDOC Purchased Water Cost, \$		7,362,706		7,831,776
Overall Imported Water Effective Rate, \$/AF	755.23	820.30	806.48	868.43
Fiscal Year Cost per Acre Foot Purchased, \$/AF		783.27		833.17
Fiscal Year Cost per CCF Purchased, \$/CCF		1.80		1.91
Fiscal Year Rate per CCF Sold, \$/CCF		1.86		1.98

The District last conducted a water rate study in 2010 and implemented rates starting July 2010 phasing in the water budget rates in January 2011. The current water rates are as follows:

Current Water Commodity Rates

Tiers	Proposed Rates				
	Water Supply	Delivery	Conservation	Offset	Total
Tier 1	\$1.86			(\$0.06)	\$1.80
Tier 2	\$1.86	\$0.34			\$2.20
Tier 3	\$3.80	\$0.34	\$0.24		\$4.38
Tier 4	\$5.70		\$0.24		\$5.94
Uniform Rate	\$1.86	\$0.17			\$2.03

To recover the cost of the purchased water supply, RFC determined the total costs associated with the water supply and the projected water sales to identify the increase that can be passed through to customers.

The net increase in the cost of purchased water from FY 2011 to FY 2012 is 12¢ per ccf. Since all users in the District use water purchased from MWDOC, the cost of each tier of water applied to residential customers and the cost of the uniform tier all should increase by 12¢ per ccf as shown below

Proposed Water Commodity Rates for FY 2011-12

Tiers	Commodity Rates	
	Current	Proposed
Tier 1	\$1.80	\$1.92
Tier 2	\$2.20	\$2.32
Tier 3	\$4.38	\$4.50
Tier 4	\$5.94	\$6.06
Uniform Rate	\$2.03	\$2.15

Capital Charges

The Capital R&R Charge allows the District to invest in the infrastructure to ensure that it remains in good working condition so that the District can continue to provide safe, reliable and high quality service to its customers.

The District implemented this charge first in FY 2005-06. To minimize impacts on customers, the charge was phased in over time in conjunction with the prudent use of reserves to balance revenues and expenses. For FY 2011-12, the District is planning \$3,000,000 in capital expenses, an increase of \$500,000 from the projected capital expenses of the previous year to cover the District's share of the Baker Water Treatment Plant Project.

Capital Cost for FY 2011-12

	Total	2010/11 Allocation	2011/12 Allocation	Baker Debt Service Allocation	Total 2011/12 Allocation
Five Year Water Capital	5,145,056	1,031,000	908,000	500,000	1,408,000
Five Year Sewer Capital	9,028,570	1,469,000	1,592,000		1,592,000
Total Capital	14,173,626	2,500,000	2,500,000		3,000,000

The methodology for allocating these costs to customers has been established and approved by the Board. Water Capital R&R Charges are allocated based on meter size taking into consideration meters' hydraulic capacity and actual consumption. The calculation of the charges by meter size are detailed in the attached Capital R&R Charge Engineer's Report, dated April 2011, prepared by the District Engineer. We have reviewed this report and believe the report is consistent with the methodology previously approved and consistent with Proposition 218 requirements that the costs be proportional to the service provided. The calculated Water Capital R&R charges are shown below.

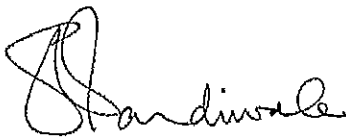
Water Capital R&R Charges

Meter Size	Annual Capital Charge Per Meter	Monthly Capital Charge Per Meter
5/8	\$55.90	\$4.66
3/4	\$55.90	\$4.66
1	\$93.35	\$7.78
1 1/2	\$226.95	\$18.91
2	\$569.62	\$47.47

Sewer Capital R&R Charges are based on equivalent dwelling units defined for each customer based on their flow and strength and calculated on the basis of their total charges over the year for operating costs. The calculated Sewer Capital R&R charges are shown below and the calculations are detailed in the previously referenced Engineer's Report attached. The calculation of these charges is consistent with the methodology previous approved by the Board and with Proposition 218 requirements.

If we can be of further assistance please call me.

Sincerely,



Sudhir Pardiwala, P.E.
Vice President

attach: Capital R&R Charge Engineer's Report, dated April 2011, prepared by District Engineer
FY 2005-06 Revenue and Rates Engineering Report, dated June 2005, prepared by RFC

Sewer Capital R&R Charge

SEWER - RESIDENTIAL

RESIDENTIAL CLASS	2011/12 MONTHLY CAPITAL CHARGE PER DWELLING UNIT
RESIDENTIAL	\$4.93
MULTI FAMILY RESIDENTIAL	\$4.65
RESTRICTED RESIDENTIAL	\$3.91

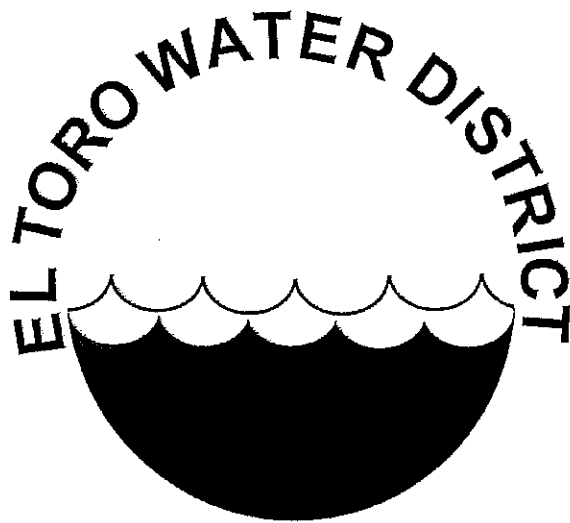
SEWER - COMMERCIAL

METER SIZE	2011/12 MONTHLY CAPITAL CHARGE PER DWELLING UNIT
5/8"	\$4.34
3/4"	\$7.34
1"	\$13.55
1 1/2"	\$24.07
2"	\$70.96

SEWER - PUBLIC AUTHORITY

METER SIZE	2011/12 MONTHLY CAPITAL CHARGE PER DWELLING UNIT
1"	\$4.93
1 1/2"	\$24.65
2"	\$39.71

**FY 2011/12 BUDGET
CAPITAL R & R CHARGE
ENGINEERING REPORT**



April 2011

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INTRODUCTION

As the District's facilities age, the District continues to make a concerted effort to replace and refurbish its infrastructure to protect its investment, meet regulatory guidelines and ensure an adequate level of service to its users. The Capital Facilities Replacement and Refurbishment Program (CFRRP) is designed to protect the District's investment in its infrastructure. In July, 2005 the District established the following charges intended to fund the District's CFRRP.

- Capital R&R Charge – Water System

This line item is a flat monthly charge, based on meter size, on each bill to fund the water portion of the capital program. The derivation of the monthly water Capital R&R Charge is described below.

- Capital R&R Charge– Sewer System

This line item is a flat monthly charge, based on equivalent dwelling units, on each bill to fund the sewer portion of the capital program. The derivation of the monthly sewer Capital R&R Charge is described below.

The Capital Charges in 2005 generated revenue of \$1,325,000. As part of the 2007/08 budget the District increased those charges to generate a total annual revenue of \$2,000,000. As part of the 2010/11 budget the District increased these charges to generate a total of \$2,500,000 to fund the CFRRP. In 2011/12 the District intends to increase the Capital Charge by an additional \$500,000 to fund the debt service associated with the District's participation in the regional Baker Water Treatment Plant Project. This report provides a discussion of the basis for the equitable allocation of these charges to the District's different classes of customers and different meter sizes.

CAPITAL R&R CHARGES

As described above, the District's on-going water and sewer CFRRP is funded by the water and sewer Capital R&R Charge line items on the bill. The existing capital charges generate approximately \$2,500,000 in annual revenue. The proposed rate change will increase the capital charges to generate an additional \$500,000 in revenue bringing the total annual revenue from the capital charges to \$3,000,000. Staff evaluated the water and sewer components for the proposed 2011/12 five year CFRRP projection and used the proportionate water and sewer capital costs to allocate \$2,500,000 of total capital charges to water and sewer. The remaining \$500,000 is dedicated to funding the District's proportionate share of the Baker Water Treatment Plant Project and has therefore been fully allocated to water as follows:

	Five Year Total	Allocation	Baker WTP Allocation	Total Allocation
Water Capital	\$5,145,056	\$908,000	\$500,000	\$1,408,000
Sewer Capital	\$9,028,570	\$1,592,000		\$1,592,000
Total Capital	\$14,173,626	\$3,000,000	\$500,000	\$3,000,000

Water Capital R&R Charge

The water Capital R&R Charge allocation is based on meter sizes. The Cost of Service analysis previously used to define the fixed meter fee (Water O&M Charge) assigned equivalent meter factors based on hydraulic capacity and an analysis of actual consumption for each meter size. The previously assigned equivalent meter factors are described in the following table. The total number of equivalent meters is calculated by multiplying the total number of active meters for each meter size by the appropriate equivalent meter factor:

Meter Size	Equivalent Meter Factors	Active Meter Quantity	Total Equivalent Meters
5/8	1	2,386	2,386
3/4	1	4,854	4,854
1	1.67	427	713
1 1/2	4.06	696	2,826
2	10.19	1,414	14,409
Total		9,777	25,188

The annual capital charge per equivalent meter is calculated by allocating the total cost for the water portion of the CFRRP to each equivalent meter as follows:

$$\$1,408,000 / 25,188 = \$55.90 \text{ per equivalent meter}$$

The water Capital R&R Charge is determined for each meter size proportionately based on the number of equivalent meters. The annual Capital R&R Charge for any size meter is derived by multiplying the annual charge per equivalent meter by the equivalent meter factor for that meter size. For example, the annual charge for a 1" meter size was calculated per the following formula:

$$\text{Equivalent Meter Factor for 1" Meter} \times \$55.90 = \text{1" Meter Annual Capital R\&R Charge}$$

$$1.67 \times \$55.90 = \$93.35$$

The derivation of the charge for each meter size and the total annual and monthly charges are defined in the following table:

Meter Size	Equivalent Meters Factor	Cost per Equivalent Meter	Annual Capital R&R Charge Per Meter	Monthly Capital R&R Charge Per Meter	Number of Active Meters	Total Annual Capital R&R Charge
5/8	1	\$55.90	\$55.90	\$4.66	2,386	\$133,425
3/4	1	\$55.90	\$55.90	\$4.66	4,854	\$271,436
1	1.67	\$55.90	\$93.35	\$7.78	427	\$39,865
1 1/2	4.06	\$55.90	\$226.95	\$18.91	696	\$157,936
2	10.19	\$55.90	\$569.62	\$47.47	1,414	\$805,471
Total					9,777	\$1,408,133

Sewer Capital R&R Charge

The variety of applications, sewer return factors, and wastewater strengths makes it unreasonable to develop Capital R&R Charges based solely on meter sizes and the equivalent meter method. For purposes of equitable allocation amongst the various sewer users a different concept was required.

The sewer Capital R&R Charge is based on dwelling units in a manner similar to the current assessment of the Sewer O&M Charge for much of the residential community. For this purpose, users are divided into residential and non-residential classes. Dwelling unit data has been tabulated for each of the residential customer classes.

A Single Family Residence (SFR) is considered a fairly homogenous class in terms of flow and strength of wastewater discharge. An SFR is considered as one equivalent dwelling unit (EDU). There are 5,671 single family residences in the ETWD service area which represent 5,671 EDUs. Residential customers other than Single Family Residences are compared to a single family residence and defined in terms of EDUs using SFRs as the baseline. Sewer charges are used to define EDUs by comparing the sewer service charges for other users to those of a single family residence.

Laguna Woods Village, the restricted Trailer Park class and the restricted and the unrestricted Multi Family classes have a lower residential density than the Single Family class. The Sewer O&M Charge is lower for these classes than for the SFR class in deference to the lower density and the accompanying lower rate of sewer discharge. For purposes of calculating the sewer Capital R&R Charge the EDUs for these developments are proportionately reduced based on the ratio of the applicable Sewer O&M Charge flat rate to the current SFR rate of \$17.49 per month. The revised EDU counts in Laguna Woods Village the Multi-Family class and the Restricted Trailer Park class are calculated as follows:

Laguna Woods Village	12,736 EDUs x \$13.87 / \$17.49 = 10,100 EDUs
Trailer Parks Restricted	585 EDUs x \$13.87 / \$17.49 = 464 EDUs
Multi-Family Restricted	1,635 EDUs x \$13.87 / \$17.49 = 1,297 EDUs
Multi-Family UnRestricted	2,150 EDUs x \$16.49 / \$17.49 = 2,027 EDUs

Non-residential classes including the Commercial and Public Authority classes are billed monthly for the Sewer O&M Charge based on wastewater flow. In order to fairly allocate the Sewer Capital R&R cost to these classes, an analysis was conducted of the total sewer O&M Charge billing for each meter size by class. The sewer O&M charge billing captures such variables as type of business, wastewater strength and return to sewer factors based on potential irrigation components of combined meters. A ratio of the total sewer O&M charge billing for each meter size relative to the monthly residential sewer O&M Charge flat rate of \$17.49 was calculated and used to assign EDUs for each meter size within the Commercial Class. An example of the formula to derive the ratio for a 5/8" meter size demonstrates the method:

Annual Sewer Billing for 5/8" Meters / 12 / Number of Accounts / Residential Flat Rate = Ratio

$$\$4,687 / 12 / 25 / \$17.49 = 0.89$$

The total number of EDUs for each meter size is then derived by multiplying the calculated ratio for that meter size by the corresponding number of accounts for that meter size. The following table describes the development of EDU data for the Commercial Class:

Meter Size	Annual Sewer Billing	Total Monthly Sewer Billing	Ratio to Residential Flat Rate	Number of Accounts	Equivalent Dwelling Units
5/8	\$4,687	\$391	0.89	25	22
3/4	\$26,914	\$2,243	1.49	86	128
1	\$66,293	\$5,524	2.75	115	316
1 1/2	\$198,705	\$16,559	4.88	194	947
2	\$836,838	\$69,736	14.39	277	3,987
Total	\$1,133,436	\$94,453		697	5,400

A similar analysis was conducted for the Public Authority Class. The following table provides the calculated EDUs for this class:

Meter Size	Annual Sewer Billing	Total Monthly Sewer Billing	Ratio to Residential Flat Rate	Number of Accounts	Equivalent Dwelling Units
1	\$210	\$17	1.00	1	1
1 1/2	\$2,142	\$179	5.10	2	10
2	\$30,338	\$2,528	8.03	18	145
Total	\$32,690	\$2,724		21	156

After developing the EDU data for the non residential classes total EDU data was tabulated for the entire sewer customer base as shown below.

The monthly Capital R&R Charge per class is calculated proportionately based on the number of dwelling units per class in order to generate the total desired capital charge of \$1,592,000. The calculation is demonstrated as follows for the Single Family Residential customer class:

$$\text{EDUs for Class} / \text{Total EDUs} \times \text{Total Capital Cost} = \text{Class Capital R\&R Charge}$$

$$5,671 / 26,919 \times \$1,592,000 = \$335,385$$

The EDU data and the assessment of the total capital R&R cost per class are reflected in the table below:

	DUs	EDUs	Monthly Capital R&R Charge	Total Annual Capital R&R Charge
Single Family Residential	5,671	5,671	\$27,949	\$335,385
Commercial	5,400	5,400	\$26,613	\$319,358
Condominium	1,414	1,414	\$6,969	\$83,625
Public Authority	156	156	\$769	\$9,226
Laguna Woods Village	12,736	10,100	\$49,776	\$597,318
Trailer Parks Restricted	585	464	\$2,287	\$27,441
Trailer Parks Unrestricted	390	390	\$1,922	\$23,065
Multi Family Restricted	1,635	1,297	\$6,392	\$76,705
Multi Family Unrestricted	2,150	2,027	\$9,990	\$119,878
Total	30,137	26,919	\$132,667	\$1,592,000

The annual cost per equivalent dwelling unit, irrespective of class, is derived by dividing the total annual charge (\$1,592,000) by the total number of EDUs (26,919) resulting in an annual cost of \$59.14 per sewer EDU or a monthly cost of \$4.93 per EDU.

The Sewer Capital R&R Charge for each residential customer is calculated by dividing the Total Capital R&R Charge for that class by the total number of dwelling units producing the following residential Sewer Capital R&R Charges:

	DUs	EDUs based on Sewer Flat Rates	Total Annual Capital Charge	Monthly Capital Charge per Dwelling Unit
Single Family Residential	5,671	5,671	\$335,385	\$4.93
Condominium	1,414	1,414	\$83,625	\$4.93
Laguna Woods Village	12,736	10,100	\$597,318	\$3.91
Trailer Parks Restricted	585	464	\$27,441	\$3.91
Trailer Parks Unrestricted	390	390	\$23,065	\$4.93
Multi-Family Restricted	1,635	1,297	\$76,705	\$3.91
Multi-Family Unrestricted	2,150	2,027	\$119,878	\$4.65

The Sewer Capital R&R Charge for non-residential customers is calculated by multiplying the monthly cost per EDU (\$4.93) by the number of EDUs for each meter size and then dividing the product by the number of accounts in that meter size. The following is an example of the formula for the 5/8" commercial meter size:

Monthly Cost/EDU x EDUs/Meter Size / Number of Accounts = Sewer Capital R&R Charge

$$\$4.93 \times 22 \text{ EDUs} / 25 \text{ Accounts} = \$4.34 / \text{month}$$

The monthly Sewer Capital R&R Charge for each non-residential customer class is summarized in the following table:

	Meter Size	Number of Accounts	Equivalent Dwelling Units	Monthly Capital Charge Per Meter
Commercial	5/8	25	22	\$4.34
	3/4	86	128	\$7.34
	1	115	316	\$13.55
	1 1/2	194	947	\$24.07
	2	277	3,987	\$70.96
Public Authority	1	1	1	\$4.93
	1 1/2	2	10	\$24.65
	2	18	145	\$39.71

SUMMARY

To protect its infrastructure investment and to ensure a continuing high level of service to its users the District maintains a significant Capital Facilities Replacement and Refurbishment Program. The water portion of the District's monthly bill includes a line item for collection of revenue to fund the District's Capital Facilities Replacement and Refurbishment Program. The Water Capital R&R Charge will be based on meter size as follows:

Meter Size	Monthly Water Capital Replacement & Refurbishment Charge
5/8	\$4.66
3/4	\$4.66
1	\$7.78
1 1/2	\$18.91
2	\$47.47

The sewer portion of the monthly billing includes a similar line item for sewer service. For Residential customers the sewer Capital R&R Charge is:

Residential Class	Monthly Sewer Capital Replacement & Refurbishment Charge
Single Family Residential Condominiums Trailer Park Unrestricted	\$4.93
Laguna Woods Village Trailer Park Restricted Multi-Family Restricted	\$3.91
Multi Family Unrestricted	\$4.65

For Non-Residential customers the sewer Capital R&R Charge is:

Meter Size	Commercial	Public Authority
5/8"	\$4.34	-
3/4"	\$7.34	-
1"	\$13.55	\$4.93
1 1/2"	\$24.07	\$24.65
2"	\$70.96	\$39.71