July 9, 2008

Honorable Nancy Wieben Stock
Presiding Judge of the Superior Court
Orange County Superior Court
700 Civic Center Drive West
Santa Ana, CA 92701

Subject: “Water Budgets, Not Water Rationing”

Dear Judge Wieben Stock:

Thank you for the opportunity to present our findings on the above referenced subject.

FINDINGS

F-1: Opportunities for further water conservation exist especially with regard to landscape watering.

Response: The City of San Clemente (City) agrees with this finding.

F-2: Conservation pricing, or tiered pricing, with a fair and reasonable base allotment, followed by tiers of higher rates, can be an effective tool to motivate further conservation.

Response: The City agrees with this finding.

RECOMMENDATIONS

R-1: Continue to emphasize methods and availability of tools that assist the customers in understanding weather-based irrigation practices by:

1. Providing a hotline for assisting the public with landscape irrigation information.
2. Providing a countywide soil texture map on the MWDCC website.
3. Developing an Orange County specific water calculator on the MWDCC website.

Response: The City has implemented these recommendations to the maximum extent possible.

In addition to the water-wise landscaping workshops the City offers to residents, the City has established a comprehensive water conservation website that provides customers with information related to water conservation specific to San Clemente in addition to providing links to the regional rebate, outreach and educational programs that the Metropolitan Water District of Southern California (MWD) and the Municipal Water District of Orange County (MWDCC) administer. The City supports this recommendation and has implemented the following measures:

1. The San Clemente Utilities Division maintains a 24-hour answering service which provides assistance to customers with live customer service representative support Monday
through Friday from 7am to 4:30pm. After hour calls are routed to emergency on-call staff through an answering service. The City employs a full-time water conservation manager who is able to assist customers with landscaping, irrigation, and water use inquiries over the phone, ever email or on-site at the customer’s discretion. A dedicated email address (SaveWater@San-Clemente.org) specifically for water conservation questions and concern has also been established.

2. The City’s water conservation website includes a section concerning soil and its relation to plant-water requirements. Additionally, a link has been made for customers to visit the Natural Resources Conservation Service’s interactive web soil survey (http://websoilsurvey.nrcs.usda.gov/app/) which allows customers to investigate the soil composition and texture at their site. Here in San Clemente, clay soils are ubiquitous and customers are made aware of this fact as well as how to amend clay soils on the City’s website and in the water-wise landscaping workshops.

3. The City’s water conservation website links to the MWD’s watering calculator at www.BeWaterWise.com. This watering calculator can be made Orange County specific by inputting a San Clemente zip code which then uses Orange County’s climate to produce applicable watering schedule templates. In the event MWDOC develops a similar watering calculator and makes it available on their website, the City will certainly provide a link to it.

R-2a: Develop monthly water allocations for each customer based on both the following:

- A per person indoor water allotment that satisfies basic needs
- An outdoor water allotment that applies the weather-based method over the customers’ landscaped area.

Response: This recommendation has been implemented by the City.

The City utilizes a conservation-based three-tiered rate structure which allocates enough water in tier 1 to satisfy basic residential indoor needs and adjusts the allocation seasonally for summer irrigation requirements. All customer classifications are subject to a tiered-rate except for commercial customers which are charged a uniform consumption charge. Attachment “A” contains an updated utility rate schedule that will go into effect July 1, 2008.

- The City has implemented the recommendation that a per person indoor water allotment that satisfies basic needs be established. The winter allotment for the standard single family residential (SFR) customer class (0-7,000 square feet) provides up to 9 billing units (1 unit = 748 gallons) of water at the Tier 1 rate of $1.63. This Tier 1 allotment of 9 units is equivalent to 75 gallons per day per person for 3 occupants. For multi-family residential (MFR) accounts, up to 6 units are allocated in Tier 1 which is equivalent to 75 gallons per day per person for 2 occupants.

- The recommendation that an outdoor allotment be weather-based and tied to a customers’ landscaped area has already been implemented by the City for the residential customer classifications and the dedicated irrigation accounts. The existing tiered-rate structure makes seasonal allocation adjustments by differentiating between winter (January
through April) and summer (May through December) months, reflecting the different irrigation demands in these months.

The City’s water rate structure for dedicated irrigation accounts is based on seasonal water application rates (inches of water applied per week). Each irrigation account has its own unique tier allocation calculated by using the irrigated square footage serviced by the meter. If irrigation accounts irrigate less than 0.5 inches of water per week in winter and 1 inch of water per week in summer months they will pay tier 1 and tier 2 pricing. Should irrigation accounts exceed this application rate, they enter tier 3. Attachment “A” provides the formula used to calculate individual irrigation account tier allocations.

The tier allotments for SFR and MFR accounts also adjust seasonally to reflect irrigation requirements. There are two SFR classifications which are differentiated by landscape size, with a lot size of 7,000 square feet being the dividing line between the two. Approximately 80% of the SFR accounts fall below the 7,000 sq.ft. lot size while the remaining 20% comprise the large lot category (>7,000 sq.ft.). Larger SFR lot sizes (>7,000 sq.ft.) receive additional allocations of water within each tier due to greater irrigation requirements.

The average SFR account will experience some usage in tier 2 in winter and summer months as the average monthly consumption in winter is 12 units and 16 units in summer. The average SFR account (0-7,000 sq.ft.) would be billed 3 units at the tier 2 rate in both seasons in addition to the full tier 1 seasonal allocation (see Appendix A for SFR tier allocations). Therefore, the City’s seasonal adjustment is a weather-based method to allocate water for landscaping requirements. A recent cost of service analysis confirmed that the City’s tiered rate structure fairly allocates water for outdoor purposes based on seasonal demands and lot size.

**R-2b: Develop a tiered-pricing structure with the first tier based on individual customer water allocation priced at a commodity rate, and subsequent tiers priced significantly higher to encourage conservation. The pricing shall be structured in a manner that will preclude the necessity of price increases as a result of reduced water use.**

Response: This recommendation requires further analysis to assess whether conservation efforts preclude the necessity of future price increases.

Since the early 1990’s, the City has utilized a conservation-based tiered-rate structure, with tier 1 priced at a low commodity rate and subsequent tiers priced higher to encourage conservation. However, since that time there had not been a cost of service analysis performed to assess the cost recovery for each customer classification and to see if in fact the tiered-rates encouraged conservation. The City recently completed a year and a half-long cost of service study, accompanied by several public workshops and City Council meetings, that accomplished two objectives for the tiered-rate structure: 1) To ensure equity amongst customer classifications while maintaining overall revenue stability; and 2) To enhance conservation by adjusting tier allocations and the rates associated with each tier to reward and encourage low water usage. Therefore, the City has taken proactive steps to comply with the intent and scope of this
recommendation and the updated tiered-rate structure that goes into effect July 1, 2008 reflects this compliance (Attachment “A”).

The recent tiered-rate adjustments were made with the goal of strengthening the pricing signal for high water users to reduce their water consumption. Come the first of July, the tier 3 rate will be $5.70 per unit of water which is 350% higher than the tier 1 rate ($1.63 per unit) and 230% higher than the tier 2 rate of $2.45 per unit of water.

While the City is confident that the updated tiered-rate structure will indeed provide revenue stability while encouraging conservation, staff will monitor how future consumption patterns and trends develop to assess how revenues are affected. At a minimum, a year’s worth of consumption data is required to assess how pricing is holding up to maintain revenue neutrality to see if and how conservation efforts affect revenue. During that time, and beyond, staff has the opportunity to meet with other agencies to gain insight from how their rate structure is organized and performs in light of this recommendation.

R-2c: Modify water bills to clearly explain customer monthly allotment and monthly water usage.

Response: This recommendation requires further analysis. A minimum of six months is required to work through the billing system and printing challenges to determine if the City can calculate and print additional information onto utility bills.

The City recognizes the importance of providing customers with information about their water consumption in relation to their tier allocations. Utility billing does produce a bar graph on a customer’s water bill that illustrates their usage for the current billing cycle along with their monthly consumption for the preceding 12-month period. While this does provide important information, the City is investigating ways in which customers can better assess how their usage compares to their tier allocations.

In order to provide customers with this level of information, more time is required so that staff can work with the billing system and printing vendors to obviate technical complications and timing logistics. The City is exploring ways it can add customer classification specific tier allocation information to the existing bar graphs so customers can easily identify in which tier(s) their usage falls within. Another approach the City is pursuing involves separating the total water consumption charge by tiers so customers see the amount consumed and at what rate in each tier.

These approaches are taxing on the billing system due to the number of specific customer classifications in the rate structure and the computational demands placed on the billing system. There are six specific customer classifications, all of which, save the commercial classification, have differing tier allocations from one another in addition to adjusting seasonally.

Despite these challenges, the City is exploring various ways in which to provide customers information related to their usage and tier allocations. This information communicates the value and cost of water to customers which is the purpose of a conservation-based tiered rate system. A minimum of six months is required to work through the billing system and printing challenges to determine if the City can calculate and print additional information onto utility bills.

Another related measure the City takes to ensure that customers receive information about their water usage is a high water usage program which provides a layer of information that goes beyond bill messaging. Should a customer’s water use in a current billing cycle exceed their usage from the previous billing cycle by 100% a high water usage inquiry is triggered. First, a field technician re-reads the meter to ensure the accuracy of the read and then a high use letter...
is generated to the customer indicating that their consumption for the current billing cycle is twice as high as it was last month. The letter informs the customer to check for leaks and to call Utilities to schedule a water survey with the conservation coordinator. The letter arrives a week or two before their utility bill which expedites leak detection and water conservation.

Sincerely,

Joe Anderson
Mayor

cc: City Council Members
    George Scarborough, City Manager
    David N. Lund, Director, Public Works
    Nathan Adams, Principal Management Analyst, Water Conservation
San Clemente Utility Rate Information
Effective July 1, 2008

The key features of the Utility Rate Structure are listed with the associated paragraph number:

1. Monthly Billing  
2. Fixed Service Charge  
3. Tiered Seasonal Water Rates  
4. Commodity Sewer Rate  
5. Commercial Customers  
6. Residential Large Lot Exemption  
7. Water Conservation  
8. Utility Phone Numbers

1. The City of San Clemente bills all customers on a monthly basis. The City contracts with Alexander's Inc. to read water meters. Monthly meter reading provides a predictable monthly budgeting and a prompt signal of high water consumption to our customers.

2. A Fixed Service Charge is applied to all water and/or sewer customer services based on the meter size. This component of the water bill is driven by costs independent of water consumption and will be charged whether or not the property is occupied. Expenditures that influence this charge include system replacement costs, service and main line maintenance, and administrative costs. Monthly meter service charges are as follows:

<table>
<thead>
<tr>
<th>Size</th>
<th>Water</th>
<th>Sewer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 1.0&quot;</td>
<td>$8.38</td>
<td>$18.30 (92% of meters are this size)</td>
</tr>
<tr>
<td>1.5&quot;</td>
<td>$18.83</td>
<td>$35.83</td>
</tr>
<tr>
<td>2.0&quot;</td>
<td>$28.14</td>
<td>$57.54</td>
</tr>
</tbody>
</table>

3. The water structure includes three rate tiers with seasonal break points. Winter months are January through April, summer months are May through December. The first tier is intended to reward outstanding water conservation efforts by our customers. The average household will see some usage in the second tier. The average water consumption for a family of three in a single family dwelling during the winter is 12 units (1 unit = 748 gallons) and 16 units during the summer. Thus, in summer this would equate to 13 units at the tier rate price of $1.63 and 3 units at the second tier price of $2.45. Customers that consistently consume water into tier 3 may want to implement new water conservation habits and technologies to reduce the water used at their property.

<table>
<thead>
<tr>
<th>Single Family Dwellings</th>
<th>Tier</th>
<th>Water Rates Per Unit</th>
<th>Break Points (in units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lot Size 0-7,000 sq. ft.</td>
<td>1</td>
<td>$1.63</td>
<td>Winter: 0-9</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>$2.45</td>
<td>Winter: 10-15</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>$5.70</td>
<td>Winter: 16+</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Summer: 14-21</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>$1.63</td>
<td>Summer: 0-11</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>$2.45</td>
<td>Summer: 12-17</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>$5.70</td>
<td>Summer: 18+</td>
</tr>
<tr>
<td>Lot Size &gt;7,000 sq. ft.</td>
<td>1</td>
<td>$1.63</td>
<td>0-11</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>$2.45</td>
<td>12-17</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>$5.70</td>
<td>18-31</td>
</tr>
</tbody>
</table>
Multi-Family Dwellings

<table>
<thead>
<tr>
<th>Type</th>
<th>Water Usage</th>
<th>Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master Metered (per</td>
<td>0-6</td>
<td>1.63</td>
</tr>
<tr>
<td>dwelling unit)</td>
<td>7-9</td>
<td>2.45</td>
</tr>
<tr>
<td></td>
<td>10+</td>
<td>5.70</td>
</tr>
<tr>
<td>Individually Metered</td>
<td>0-6</td>
<td>1.63</td>
</tr>
<tr>
<td></td>
<td>7-9</td>
<td>2.45</td>
</tr>
<tr>
<td></td>
<td>10+</td>
<td>5.70</td>
</tr>
</tbody>
</table>

Commercial

<table>
<thead>
<tr>
<th>Type</th>
<th>Uniform Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Usage</td>
<td>Charge</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------</td>
</tr>
<tr>
<td>0-6 units/100 Sq. Ft.</td>
<td>2.17</td>
</tr>
</tbody>
</table>

Irrigation Meters

<table>
<thead>
<tr>
<th>Type</th>
<th>Water Usage</th>
<th>Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Based on units of 100</td>
<td>0- .0714 units/100 Sq. Ft.</td>
<td>1.63</td>
</tr>
<tr>
<td>square feet of irrigated land)</td>
<td>.0715 - .143 units/100 Sq. Ft.</td>
<td>2.45</td>
</tr>
<tr>
<td></td>
<td>.144 - .357 units/100 Sq. Ft.</td>
<td>5.70</td>
</tr>
</tbody>
</table>

4. In addition to the fixed water service charge, residential customers pay a Sewer Commodity Rate for sewer based on 90% of total water consumption. Single family and multi-family rates for sewerage are structured differently as follows:

Single Family Dwellings – Each customer account is reviewed for the water consumption during the winter months. The winter month average (WMA) water consumption units are multiplied by 90% and then multiplied by the sewer commodity charge of $1.28 per unit. For the purposes of this section, winter months shall be defined as January, February, March and April. The WMA shall be calculated using the total consumption for a service location during the prior fiscal year’s winter months divided by the number of winter months in which there was water consumption. If the winter average results in a fraction, the result shall be rounded down to the next whole number. If there was no winter month in the previous fiscal year in which water was actually consumed, the sewer commodity rate shall be based on a City average during the winter months and shall be annually calculated during the winter averaging process.

Multi-family Dwellings – Sewerage charges are based on 90% of water consumption during the billing period and then multiplied by the Sewer Commodity charge of $1.28 per unit.

5. Retail and Commercial Customers – There is a fixed service charge for both water and sewerage, based on the size of the meter (as listed above). The remainder of the bill for both water and sewer will be determined by the amount of water consumed and the strength of sewage discharge during the billing period.
6. Residential customers that have a total lot size greater than 7,000 square feet may apply for a **Large Lot Exemption**. If there isn’t a large lot exemption form on file with our office, then the assumption is that your lot size is less than 7,000 square feet. There is a one time application fee of $10.00.

7. To successfully manage your utility charges, it is necessary to maintain good water conservation practices year round. Go to [http://san-clemente.org/se/standard.aspx?pageid=279](http://san-clemente.org/se/standard.aspx?pageid=279) for great information on how to save water and for rebates on efficient appliances and technology. Adjust your automatic sprinklers every few months to correspond with weather changes. Better yet, install a Smart Timer (rebates available) [http://www.mwdoc.com/smartimer/](http://www.mwdoc.com/smartimer/). Check your irrigation system often to discover leaks and unadjusted sprinkler heads. If there is runoff from your landscape after the system operates, reduce the amount of time on your control clock. For maximum efficiency, irrigate your landscapes before 9:00 a.m. or after 6:00 p.m. In fact the City’s Water Conservation ordinance prohibits irrigation between 9:00am and 6:00pm.

A large percentage of the water that is used inside the home is used in the bathrooms. Installation of newly designed High Efficiency toilets using 1.28 gallons per flush, is a cost-effective way to reduce your utility bill. Rebates are also available for High Efficiency clothes washers.

Check your toilets for leaks occasionally. This can be accomplished by removing the lid on the back of the toilet, and placing several drops of food coloring in the tank water. Wait fifteen minutes and then check the toilet bowl. If any of the food coloring is visible in the bowl, there is a leak. Replacement of the rubber flapper in the bottom of the toilet tank is the usual repair. These flapper devices are available at all of our local hardware stores and are easily replaced. Also make sure the water refill line is below the overflow tube in the tank, otherwise water will continually flow into the bowl.

The City’s Water Conservation ordinance requires that when washing your vehicles, you use a bucket and a spray nozzle on the end of the hose to avoid water running when the hose is not in use. Using a hose to clean your driveway and other surfaces is also prohibited. Instead use a broom instead of the hose to clean your driveway and sidewalk areas.

8. If you would like more information on the new water and sewerage rate structure, large lot exemptions, or suggestions to reduce water consumption, please call 361-8354, for the Water Conservation Specialist or 366-1553 for the Utilities Office. Staff will be happy to assist you.