



August 15, 2008

The Honorable Nancy Wieben Stock
Presiding Judge of the Superior Courts
700 Civic Center Drive West
Santa Ana, CA 92701

Dear Judge Wieben Stock:

South Coast Water District wishes to thank the 2008 Orange County Grand Jury for its report entitled "Water Budgets, Not Water Rationing."

The Grand Jury Report summarizes well the serious challenges facing cities and agencies in Orange County to ensure reliable water supplies for their residents. Drought, climate change, changes in government policy and court decisions have restricted flows to Southern California. Water from the Delta was cut 30% to protect the endangered smelt. Colorado River water was cut 20% as surplus supplies were phased out.

The situation has not improved since the publication of the Grand Jury's report. In June, Gov. Schwarzenegger declared the state in a drought, and Metropolitan Water District of Southern California issued a Water Supply Alert asking for extraordinary conservation measures to prevent water rationing next year.

South Coast Water District shares your concern for adequate water supplies and the quest for best solutions. The District takes a "portfolio" approach to ensuring water reliability – a mix of short and long term initiatives -- that impact supply, as well as demand.

- **New Groundwater Facility.** Today, 80% of the District's water is imported through Metropolitan, 10% is recycled for irrigation, and 10% is from our new Groundwater Recovery Facility, which has been in operation since Dec. 2007. The potable water it yields from the San Juan Groundwater Basin represents the first drops of local water for the District. Ultimately, the District plans to meet 20% of demand for potable water in the service area by adding a second well to the Groundwater Recovery Facility.
- **Future Ocean Desalination.** The District is the lead agency on the Project Participant's Committee to build an ocean desalination facility in Dana Point. There are four other MWDOC member agencies participating at this time. The proposed project is now in a multi-year Extended Pumping and Pilot Plant Testing phase. The desalination facility is currently sized to provide 40%-50% of potable water needs in our region.

- **Recycled Water Expansion.** The District is planning to expand its recycled infrastructure to enable access to the irrigation water in the southernmost parts of our service area.
- **Increased Storage.** The District is moving forward to purchase 20-million gallons of capacity in a proposed Santa Margarita Water District reservoir. Added to our current storage capacity of 34.6 million gallons, the District would meet its goal of 7-days average consumption in storage.
- **Cornerstone is Conservation.** The cornerstone underpinning adequate water supplies is wise stewardship of the resource through conservation. We estimate that the District's ongoing and combined efforts to change customer behaviors and reduce overall water use are responsible for keeping demand in our service area 10% lower than it otherwise would be – year in and year out. Key conservation initiatives include: single-family residential tiered rates, potable irrigation tiered rates; public information and education; community outreach and stakeholder forums; rebates and special programs; irrigation assessments; direct customer communications; and project partnerships with local cities and agencies.

The District believes that your report helps demonstrate the progress made over the years on implementing water conservation efforts in Orange County by both the Municipal Water District and its member agencies. We also agree with the Grand Jury Finding that opportunities for further water conservation exist, especially with regard to landscape watering.

South Coast Water District appreciates the opportunity to comment on the Grand Jury Report. The District was requested to formally comment on two Findings and four Recommendations. The District's responses are included with this letter as a separate document.

Please contact us if you would like any further information,

Very truly yours,



Richard Dietmeier
President
South Coast Water District

RD:lh
enclosure

2007-2008 ORANGE COUNTY GRAND JURY REPORT
“Water Budgets, Not Water Rationing.”

South Coast Water District Response

South Coast Water District (SCWD) wishes to thank the 2008 Orange County Grand Jury for its report entitled “Water Budgets, Not Water Rationing.”

In accordance with your report, SCWD was requested to respond to:

- Finding F-1
- Finding F-2
- Recommendation R-1
- Recommendation R-2a
- Recommendation R-2b
- Recommendation R-2c

A recap of the Grand Jury's Findings and Recommendations and the District's responses to each are provided below.

Finding F-1:

Opportunities for further water conservation exist, especially with regard to landscape watering.

- The respondent agrees with the finding.**

Finding F-2:

Conservation pricing (tiered pricing) with a fair and reasonable base allotment followed by tiers of higher rates can be an effective tool to motivate further conservation.

- The respondent agrees with the finding.**
South Coast Water District has already implemented this type of program.

Recommendation R-1:

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

- Providing a hotline for assisting the public with landscape irrigation information
- Providing a countywide soil texture map on the MWDOC website
- Developing an Orange County-specific water calculator on the MWDOC website

- **The recommendation has not yet been implemented, but will be implemented in the future, with a timeframe for implementation.**

Discussion of Response

On behalf of its member agencies, MWDOC has committed to implement these three recommendations by November 20, 2008. South Coast Water District will provide a link on the homepage of its website to this information and will conduct local outreach to inform residents about the new hotline and the availability online of an Orange County soil texture map and water calculator.

CURRENT DISTRICT HOTLINES & GO-TO PERSONNEL

Water Conservation Officer. In our service area, the direct telephone line ("hotline") for our Water Conservation Officer has been promoted extensively and on an ongoing basis for more than 5 years. He fields calls regularly with customers about methods, tools and programs that can assist them in understanding irrigation practices, including weather-based irrigation practices.

These are some of the residential water use efficiency programs that South Coast Water District offers:

- Free irrigation assessments
- Free landscape workshops for home gardeners
- Free distribution of automatic shut-off nozzles for garden hoses and sprinkler "keys" to adjust sprinkler head flow.
- Rebates on indoor and outdoor water-saving fixtures and devices, such as SmarTimer controllers, rotating nozzles, and synthetic turf.

Since 1992, the installation of water-saving fixtures and devices under MWDOC's "Rebate Program" has resulted in an estimated 866.54 acre-feet of cumulative water savings in our service area.

Tri-City Water Savers. The District agrees with the Grand Jury's finding that "effective promotion (of conservation) may require teaming up with other agencies as well as vendors to provide the resources to attract greater attendance at classes and garden demonstrations."

To this end, the District, the cities of Dana Point, San Juan Capistrano and San Clemente, and representatives from MWDOC, Metropolitan Water District and the UC-Davis Master Gardener Program, formed the "Tri-City Water Savers" in 2005. The south Orange County team joins forces to promote water conservation and prevention of urban runoff on a regional basis.

As a regional team, the Tri-City Water Savers has successfully conducted;

- Professional Landscapers Workshops (4 consecutive)
- H₂O for HOAs Water Forum (100+ attendees)
- Plumbing Forum (20-person working group)

Customer Service Department. The District's main office number is the same as the number for the Customer Service Department. This number is well-known and well-publicized in our service area. Customer Service representatives receive calls from customers on a regular basis about high water bills. At the customer's request, Customer Service can make appointments for field personnel to visit the customer, read the meter and check for leaks.

A value-added service provided by the Department is "Consumption Monitoring and Leak Detection." Under this program:

- Customer Service proactively calls customers whose water use is excessive in a given billing period. Field personnel are sent to read meters, check for leaks and meet with the customers.
- Customer Service sends letters to customers whose water use is above average in a given billing period and puts a message on their bills as well. The customers can schedule a special appointment for field personnel to meet with them, read their meters and check for leaks.

Public Information Officer. The Public Information Officer (PIO) for the District has widely disseminated her telephone number and e-mail address for more than 5 years to customers and community members who want information about water conservation. She fields calls and e-mails regularly regarding outdoor watering issues.

The PIO manages a public education and outreach program promoting water conservation among customers, community members, students and stakeholders that includes elementary school assemblies, local scholarships, news articles and guest columns, Customer Newsletters and bill inserts, the District website, and community events and presentations.

In addition, the District PIO and the City of Dana Point Senior Water Quality Engineer have implemented joint water conservation/urban runoff prevention programs for more than 5 years, such as "Courtesy Notices of Overwatering" and discount coupons to local car washes that recycle wash water.

Recommendation R-2a:

Develop monthly water allocations for each customer based on both of 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

- **The recommendation will not be implemented because it is not warranted or is not reasonable with an explanation therefore.**

Discussion of Response:

SINGLE-FAMILY RESIDENTIAL CUSTOMERS

Tiered rates are widely accepted as an appropriate mechanism to achieve two objectives: encourage conservation behaviors in customers and ensure an equitable recovery of water system costs.

Tiered rate development. South Coast Water District currently has an aggressive tiered, conservation-based rate structure for single-family residences. It was implemented in 2004, using Irvine Ranch Water District's (IRWD) tiered rate structure as a guideline.

Our inclining-block rate structure is aggressive in that there are five rate tiers and the per-unit rates increase from 23% to 97%, depending on the tier. The highest jump in per-unit rates is between Tier 1 and 2 (97%) and between Tier 2 and 3 (50%). Tiers 2 and 3 are where the majority (~72%) of water usage falls for single-family residences.

To develop the tiered water usage rates, the District hired an independent water utility consulting firm, Malcolm Pirnie. The firm referred to the IRWD model, secured District usage and revenue data for single-family residential customers, and utilized industry-accepted rate setting standards.

Following is the single-family residential tiered rate structure:

| Water Usage <i>per billing period</i> | Tiered Rates <i>per unit (ccf)</i> | Increase <i>\$ (%)</i> |
|---|--|----------------------------------|
| Tier 1: First 5 units | \$1.13 | <i>Commodity Rate*</i> |
| Tier 2: Next 20 units (6–25 units) | 2.25 | \$1.12 (99%) |
| Tier 3: Next 25 units (26–50 units) | 3.38 | 1.13 (50%) |
| Tier 4: Next 75 units (51–125 units) | 4.51 | 1.13 (33%) |
| Tier 5: 126 units and above | 5.63 | 1.05 (23%) |

(1 unit = 1 ccf = 748 gallons)

**Commodity Rate: The Tier 1 rate of \$1.13 per ccf equates to MWDOC's cost of water to member agencies – without additional costs by South Coast Water District.*

In the interests of fairness and equity, the tiered structure was designed to recover revenues in comparable percentages to water consumed by the average single-family residence, as follows:

- **Tier 1 Rate** was designed to recover a very small portion of revenue (8%) from a small portion of single-family residences (17.5%). The rate (\$1.14) equates to MWDOC's commodity water rate charged to member agencies – without additional costs by South Coast Water District.
- **Tiers 2 & 3 Rates** were designed to recover most revenues (73%) from a majority of single-family residences (72%)
- **Tiers 4 & 5 Rates** were designed to recover some revenues (19%) from a minority of customers (10%)

Based on consumption patterns for single-family residences, we determined a “reasonable” or average water use per household and factored it into the design of the rate model:

| Average Water Usage per Month <i>Single-family residence</i> <i>Assumption: 4 occupants</i> | |
|--|---------------|
| Indoor | 12 ccf |
| Outdoor | 7 ccf |
| Total | 19 ccf |

Indoor water allotment. The indoor water allotment shown above of 12 ccf's per month for a single-family residence with four occupants equals 74.8 gallons of water per day per person. This is in alignment with Irvine Ranch Water District's (IRWD) allotment of 75 gallons of water per day per person for a single-family residence with four occupants.

This average indoor water use of 12 ccf's per month was factored into the rate model for single-family residences, and assumes four occupants. If more than four individuals live in the house, the customer is not afforded the opportunity to seek a “variance” to increase their “allotted” indoor water units. The District believes that there is more than enough room for homeowners to reduce their indoor water use by 5% to 10% a month within the allotted 12 ccf's.

Outdoor water use allotment. Similarly, average outdoor water use of 7 ccf's per month was factored into the District's rate model for single-family residences, regardless of the lot size, and no variances are provided. We agree with the Grand Jury that “in South County, the emphasis is on communities with small lots with large greenbelt areas and wide, landscaped boulevards and slopes.” The District believes that there is more than enough room for homeowners to reduce landscape irrigation, car washing, pool water replenishment and other sources of outdoor water waste by 5% to 10% a month within the allotted 7 ccf's.

By factoring a “reasonable” or average amount of water use into the rate model and offering customers “no variances” regardless of the number of occupants or lot size, we reinforce the water conservation message and ethic. This is imperative as we are experiencing a state-wide drought and a 30% cutback in water supplies to Southern California. Future water supplies are also at-risk due to fragile infrastructure and environmental concerns for the Sacramento-San Joaquin Delta and an 8-year drought and burgeoning population in the Southwest that competes for Colorado River water.

Sewer Usage Rates. Beyond the tiered water usage rate structure, single-family residential customers are motivated to save water because their sewer usage rate is based on the actual amount of water used. The current sewer usage rate for single-family residences is 61 cents per ccf of water used.

Rate Sufficiency Review. Last year, the District conducted a Revenue Sufficiency Review with an independent water utility consulting firm, R. W. Beck, to assess the efficacy of its 2004 rate model in recovering revenues by customer category. The original rate model set pricing in customer categories based on costs in that category. The tiered rate model was structured to prevent the necessity of price increases as a result of reduced water use.

The study showed for single-family residential customers that forecasted water use and associated revenue recovery was in alignment with the rate model – except for Tier 1, where a smaller base was generating required revenues. Overall, District water rates were sufficient to meet financial requirements under the rate model, and no adjustments to single-family tiered rates were made.

The District conducts revenue sufficiency studies every 3-5 years, and this review is a key initiative in support of the District's 5-Year Strategic Plan.

Application for DWR Grant to Investigate Budget-Based Tiered Rates. In July, MWDOC submitted on behalf of interested member agencies an application to the Department of Water Resources for an Urban Drought Assistance Grant that could help fund investigation into the development of monthly water allocations per individual residential customer -- as well as volumetric tiers, water savings forecasting, etc. South Coast Water District has expressed interest in participating in further investigation of budget-based rates and will be kept abreast of the progress of the grant application.

District's Documented Water Savings. Since 1992, the District has documented its cumulative water savings based on the number of customer rebates given to customers for the purchase and installation of qualifying, water-saving devices and fixtures. MWDOC compiles and publishes this data for its retail agencies each month in a “Water Use Efficiency Program Savings Report.” Below is a chart showing the District's cumulative water savings of 866.54 acre feet over 16 years:

South Coast Water District - Cumulative Water Savings
FY 91/92 through FY 07/08

| Water-saving devices <i>(Installed)</i> | Cumulative Water Savings | Time Frame <i>(Fiscal years)</i> |
|---|---|--|
| Ultra-Low Flush Toilets | 608.00 | 91/92 -- 07/08 |
| Commercial Plumbing Fixtures | 102.00 | 02/03 -- 07/08 |
| SmarTimer Clocks (Controllers) | 67.72 | 04/05 -- 07/08 |
| High-Efficiency Clothes Washers | 52.53 | 01/02 -- 07/08 |
| Landscape Performance Certification (voluntary water budget) | 34.61 | 07/08 |
| High-Efficiency Toilets | 1.36 | 05/06 -- 07/08 |
| Synthetic Turf | 0.32 | 07/08 |
| Total cumulative water savings | 866.54 | 91/92 -- 07/08 |

The data is from the June 5, 2008 report. Water savings is shown in acre-feet.

New rebate programs are launched on a regular basis and the District is committed to implementing them in our service area. This will ensure that our cumulative water savings will increase over time.

Enhanced synthetic turf rebate: In addition, the District is planning to present to the Board a proposal to augment the current Met/MWDOC rebate of 30 cents per square foot of synthetic turf installed. The price per square foot of synthetic turf can range from \$8.00 to \$12.00. A higher rebate would make the purchase of the turf more affordable and, therefore, more attractive to customers.

Charter member CUWCC. South Coast Water District is a charter member of the California Urban Water Conservation Council, formed in 1991. We voluntarily track performance in 14 water-saving "best management practice" categories. For example, the District has demonstrated that 95% of single-family accounts and 95% of multi-family units constructed prior to 1992 are fitted with low-flow showerheads in our service area. The District voluntarily submits every two years a comprehensive results report covering all 14 best management practices.

RECYCLED WATER FOR IRRIGATION

Conserves potable water for human consumption & fire protection

While approximately 80% of our customer accounts are single-family and multi-family residences, the highest water users in our service area are often larger irrigators, such as homeowner associations and the city.

For this reason, the District's water conservation program has always included and emphasized the enhancement and expansion of recycled water service. In our service area, we currently have 170 sites metered that provide recycled water.

Annually, customer demand for potable water is reduced between 8% and 11% due to the use of recycled water. The data in the chart below is taken from the "Public Water System Statistics" report that the District submits to the Department of Water Resources each year.

| Year | Recycled Water Sales | Potable Water Sales | Total Water Sales | % Recycled Sales to Total Sales |
|------|----------------------|---------------------|-------------------|---------------------------------|
| 2005 | 607.20 | 6,933.72 | 7,540.92 | 8.1% |
| 2006 | 839.00 | 7,228.43 | 8,067.43 | 10.4% |
| 2007 | 917.15 | 7,431.84 | 8,348.99 | 11.0% |

Sales are in acre-feet. Water sales do not include sales to Moulton Niguel Water District.

POTABLE WATER IRRIGATION (Dedicated Meters)
Unique Tiered Rate Structure that promotes water conservation

To promote conservation among potable water irrigators with dedicated meters that measure their outdoor watering, the District has implemented a unique and aggressive inclining block rate structure. These rates apply to homeowner associations, cities, and certain other commercial/public accounts. Previously, potable water irrigators paid a flat rate per unit of water used on landscaping, greenbelts, parks and other sizeable sites.

Aggressive tiered rates. This tiered rate model was designed in 2004 at the same time as the tiered rate structure was developed for single-family residences, and it does not apply to single-family residences. Each rate tier aggressively increases to discourage over-watering, which can actually harm lawns and landscaping, and to encourage the proper installation, use and maintenance of sprinkler systems. In addition, by installing a dedicated meter to measure potable water use, irrigators get the added benefit of not being charged sewer usage charges.

Weather-based, site-specific usage allotments. The potable irrigation rate structure is weather-based in that it takes into account seasonal average water use per metered site. This per-site water allocation is calculated and adjusted for customers quarterly, corresponding to the seasons: Jan-Mar; Apr-Jun; Jul-Sept; Oct-Nov. The water allocation per site is calculated by averaging five year's of quarterly usage data for that meter. Currently, there are 352 potable irrigation metered sites in our service area that undergo the quarterly weather-based adjustment to their usage allotment.

The potable irrigation tiered water rates are as follows:

| | WATER USAGE <i>Per billing period</i> | TIERED RATES (\$) | INCREASE \$ (%) |
|---------------|---|---------------------------------------|---------------------------|
| TIER 1 | 75% or less 5-yr seasonal average | \$1.14 every unit | Commodity Rate* |
| TIER 2 | 75% to 100% 5-yr seasonal average | \$2.56 every unit | \$1.42 (125%) |
| TIER 3 | Over 100% 5-year seasonal average | \$3.70 every unit over 100% | \$1.14 (31%) |

(1 unit = 1 ccf = 748 gallons) *Commodity Rate = Tier 1 rate of \$1.14 = MWD OC charge to member agencies – without additional costs by South Coast Water District

Since this pricing structure was instituted, more commercial and public irrigators have installed dedicated meters to measure and monitor their potable water use. As the chart shows below, use of potable water for irrigation (metered) has ranged from 13%-15% of total potable water use over the last few years.

| Year | Potable Irrigation Water Sales | Total Potable Water Sales | % Potable Irrigation to Total Potable Sales |
|-------------|---------------------------------------|----------------------------------|--|
| 2005 | 919.00 | 6,933.72 | 13% |
| 2006 | 971.00 | 7,228.43 | 13% |
| 2007 | 1,084.00 | 7,431.84 | 15% |

Water Sales are in acre-feet. Potable irrigation accounts have dedicated water meters.

Metering potable water for irrigation use helps save water costs for homeowner associations, cities, and other commercial/public customers and helps save potable water for human consumption and fire suppression.

Recommendation 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.

- **The recommendation will not be implemented because it is not warranted or is not reasonable with an explanation therefore.**

Discussion of Response:

Please refer to the response provided for Recommendation R-2a.

Recommendation R-2c:

Modify water bills to clearly explain customer monthly allotment and monthly water usage.

- **The recommendation has not yet been implemented, but will be implemented in the future, with a timeframe for implementation.**

Discussion of Response:

As noted in the Grand Jury's Report, "Many Orange County water agencies structure water bills to show customers' current usage compared to usage during the same period the previous year. This is intended to help customers measure the difference in their current and past water use, but it does not measure their water-use efficiency. Nor does it tell them how much water they should be using commensurate with their household and landscape needs."

SINGLE-FAMILY RESIDENTIAL CUSTOMERS

South Coast Water District's water bills show customers' bi-monthly water usage compared to the same period the previous year. The data covers a 24-month period. The customer is also afforded information about their daily average water usage comparing the current bill with last bill and the bill one year ago.

To augment the information on our bills, in accordance with the Grand Jury's recommendation to facilitate customers' ability to assess their water-use efficiency, the District will provide the following information on the bills of single-family residential customers.

**Typical Single-family residence
Monthly water usage**

| | |
|---------------|--------------------------------|
| 12 CCF | – Indoor usage (4 individuals) |
| 7 CCF | – Outdoor usage |
| 19 CCF | – Total |

This information reflects the "reasonable amount of water" factored into the development of the District's tiered rates for single-family residences.

Shortly, we will include this information on the bills in close proximity to the 24-month view and daily-average view -- as a benchmark that customers can use to compare their usage with water-efficient usage.

*POTABLE WATER IRRIGATION CUSTOMERS
(Dedicated Meters)*

This year, potable water irrigation accounts (dedicated meters) changed from bi-monthly to monthly billing, enabling customers more timely monitoring of, and adjustments to, their water use.

Bill statements sent to these customers provide charts showing water usage by month over the last 12 months and comparing water usage on the current bill with last month's bill and the bill one year ago.

In addition, the District is discussing the possibility of providing information on the bill about typical or average water use for these customers – as we are for single-family residences. This information might serve as a “benchmark” for comparison with their actual water use, might be expressed in acres (1/3 acre, ½ acre, etc.) and may assume such factors as soil type (e.g., clay loam), slope, and vegetation (e.g., cool season grass).

Determining a benchmark for “typical” or “average” water for this type of customer is much more problematic than for single-family residential customers – due to the number of external variables affecting irrigation water use. Nonetheless, the District will attempt to develop a “benchmark” to include on the bill and this is targeted by the end of the year/1Q 2009.

Professional Landscape and Certification Program. Currently, the District participates in the MWDOC Professional Landscape and Certification Program, which is targeted to customers with dedicated potable water irrigation meters. A number of these customers have completed the program, including the City of Dana Point and homeowner associations, and they have been assigned monthly, weather-based water budgets for their specific metered sites to use as a guideline. Since 2004, it is estimated that participants in this program in our service area have saved a cumulative total of 34.6 acre-feet of water. (*MWDOC “Water Use Efficiency Program Savings Report” June 5, 2008*)