September 3, 2013

The Honorable Thomas J. Borris
Presiding Judge
Orange County Superior Court
700 Civic Center Drive West
Santa Ana, CA 92701

Dear Judge Borris,

The Municipal Water District of Orange County (MWD) hereby submits its required responses to the findings and recommendations in the Orange County Grand Jury report, “Orange County Water Sustainability: Who Cares?”

MWD recognizes and appreciates the significant time and effort the Orange County Grand Jury invested in engaging and understanding the complex water issues Orange County is facing, and the diversified and collaborative manner in which the family of Orange County Water Agencies work together. MWD played a significant role in that process by escorting the Water Committee of the Grand Jury on water trips to Northern California and to the Colorado River as well as made numerous introductions, provided substantial background information, took them to a number of meetings and had individual meetings with them. Overall, the 2013 Grand Jury made a substantial investment in understanding Orange County Water and the issues we are facing. We congratulate them on the process and the report that was published.

For over sixty years, MWD has been instrumental in the planning, coordination, collaboration and facilitation of sound water resource management. These efforts have resulted in a number of local and regional reliability projects including Orange County Water District’s (OCWD) Ground Water Replenishment System and Phase One Expansion; the Irvine Regional Interconnection Project, Santa Margarita Water District’s Upper Chiquita Reservoir, Irvine Ranch Water District’s Strand Ranch Banking and Recovery Project; as well as MWD’s comprehensive and effective Water Use Efficiency Program. For these projects and many others, it is the integrated planning and coordination among the water agencies that ensures Orange County’s water sustainability and reliability while preserving local control and water rights protection.

FINDINGS

F1- There is no central authority responsible for water policy in Orange County.

RESPONSE: Agree

Authority for water supply and reliability is not necessarily a simple issue to understand. Historically, it has always been a shared responsibility among regional, local, state, and federal entities. It is important to acknowledge that we live in an arid region; land ownership and development triggered the need for water. As a result, as population and development grew there was a growing need
for imported water. Imported water supply oversight is ultimately shared between the State’s Department of Water Resources and the Federal Department of Interior as well as many other agencies as the water works its way from a variety of sources, ultimately to the local distribution system that carries it to the residents and businesses that rely on it. Water quality authority is also shared between the United States Environmental Protection Agency and the California Department of Public Health. Water quality is regulated through the various systems, until it ultimately is delivered through the local distribution system to residents and businesses.

In Orange County, authority is shared for not only the quantity and quality of water available, but also for the system that delivers it. Although there is not one central authority for water policy, the diverse representation at the local level and at the regional level ensures that the needs of Orange County are addressed in a collaborative, integrated and coordinated manner.

**F2- MWDOC and OCWD in conjunction with the local water districts and city water departments are doing a comprehensive job of coordinating water planning.**

**RESPONSE: Agree**

MWDOC, OCWD, the city water departments and the local water agencies work closely together to coordinate regional reliability and sustainability efforts. This coordination is an on-going effort with a number of regular planning meetings, coordination meetings and project meetings held each month. These meetings are a critical part of the on-going investment in Orange County’s water sustainability efforts that enable local control and decisions by retail governing boards, which are responsible for looking out for the interest of the local residents and businesses.

A great example of this collaboration is in the required updating of MWDOC’s Urban Water Management Plan. This mandatory planning document requires every urban retail water agency, including MWDOC, to submit to the California Department of Water Resources a reliability plan every five years. In coordination with the water agencies in the County, MWDOC was able to draft critical sections of these plans in order to provide integration and consistency in the areas of regional water sources and reliability management measures. Through MWDOC’s facilitation, a number of agencies participated in a joint consulting contract to assist them in the completion of their Plans which resulted directly in a substantial savings to ratepayers.

**F3- Water use efficiency has helped ease the use of imported water.**

**RESPONSE: Agree**

Water use efficiency has been an integral part of effective water management since the early 1990’s. Not only does water use efficiency ease the demands on imported and local water, but it also allows the conserved water to remain in storage until it is needed; saving money, reducing run-off and improving environmental water quality and reducing the number of beach closures. The following table shows that today’s demands are approximately 10% lower than they would otherwise be without our investment in Water Use Efficiency:
Orange County Total Water Supply  
1990 vs. Today

<table>
<thead>
<tr>
<th>Source</th>
<th>1990</th>
<th>Today</th>
</tr>
</thead>
<tbody>
<tr>
<td>Import Water</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Direct Use</td>
<td>59%</td>
<td>45%</td>
</tr>
<tr>
<td>- For GW replenishment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surface Water</td>
<td>2.5%</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Groundwater</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Santa Ana River, SJ Basin &amp; Local Runoff</td>
<td>36%</td>
<td>39%</td>
</tr>
<tr>
<td>Recycled Water</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Direct use</td>
<td>2.5%</td>
<td>15%</td>
</tr>
<tr>
<td>- GWRS Purified</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Consumptive Demand</td>
<td>645,950 AF</td>
<td>606,000 AF</td>
</tr>
<tr>
<td>Water Use Efficiency Savings</td>
<td></td>
<td>71,000 AF</td>
</tr>
</tbody>
</table>

F4 - Desalination is a possible future source of water.

**RESPONSE: Agree**

MWDOC has a responsibility to consider and explore all new sources of water for long term water reliability and sustainability. For over a decade, MWDOC has facilitated the exploration and investigation of two ocean desalination projects in Orange County; the Doheny Ocean Desalination Project and the Huntington Beach Ocean Desalination Project. As the process proceeds for each of these projects, a full analysis will be developed and presented to the various governing boards of participating water entities for consideration. Decisions about when these future investments will move forward are NOT easy and must take into consideration many factors and can require as much as 20 years to develop.

F6 - Only a few water districts in Orange County use tiered pricing for water conservation.

**RESPONSE: Agree**

Water agencies and city water departments consider a myriad of elements when determining a rate structure for their customers. Currently, most all water agencies in Orange County use some form of tiered pricing. However, out of the 31 retail agencies in Orange County, 6 or 7 currently have some form of budget based tiered rates or allocation based rates. We believe more and more agencies will be moving in this direction. In working with a number of our agencies over the past 3 or 4 years, a very basic but driving consideration is the local sentiment and philosophy of the governing body in regards to determining what level of water use is appropriate and what level becomes excessive. Not all agencies approach rates, budgets, and reserve funding in the same manner, but typically these decisions are vested in the philosophy embedded in the local communities. Although data has indicated that budget based tier pricing can improve the level of water use efficiency and the pricing...
signal sent to the consumers, there are many other demonstrated ways water agencies can achieve that goal.

**F7 - Cadiz, while a controversial water supply and storage project, is a possible future source of water.**

**RESPONSE: Agree**
MWDOC has a responsibility to consider and explore all new sources of water for long term water reliability and sustainability.

**F8 - Bay Delta Project is critical to ensure the continual flow of imported water into Orange County.**

**RESPONSE: Agree**
The Bay Delta Conservation Plan and construction of an alternate conveyance system is the largest water delivery effort in California in over half a century. Fixing the Bay Delta, by investing in a new conveyance system and in environmental restoration projects, is necessary to ensure water reliability and sustainability to Orange County and to 25 million Californians throughout the state. There is not a more important issue facing California - the State will not be able to keep operating effectively with a broken water supply system.

**RECOMMENDATIONS**

**R1 - MWDOC and OCWD should continue their role in coordinating water planning. (F1, F2)**

**RESPONSE: Agree**
Historically, MWDOC and OCWD have worked together on regional planning efforts in an integrated and collaborative manner. Although, OCWD’s historical efforts have focused on development and management of local groundwater supplies, there has always been an important imported water component to meet the remaining needs in the OCWD service area and to use imported water to replenish the groundwater basin during periods of water availability. There are a number of venues to ensure this regional effort stays in place. They include a quarterly Board of Directors workshop meeting of both Boards of Directors as well as a number of ad hoc committees at both the Board and staff level. MWDOC’s monthly managers meetings for all member agencies, including OCWD, and project meetings such as the Huntington Beach Ocean Desalination Project Workgroup will continue to keep us coordinated.

**R2 - MWDOC shall find additional ways of promoting water use efficiency. (F3)**

**RESPONSE: Agree**
In September 2011, the United States Bureau of Reclamation awarded MWDOC a grant to fund the development of a WUE Master Plan (Master Plan) for all of Orange County. The goals of this five-year Master Plan are twofold; to identify programs and strategies to assist retail water agencies to comply with the SBx7-7 state requirement calling for a 20% reduction in per capita water use by the year 2020, and to achieve its share of Metropolitan’s Integrated Resources Plan goal for water supply reliability through water use efficiency and water recycling. The approach of the Master Plan is to build upon existing programs, while leveraging regional and local agency programs, partnerships,
and resources as well as identify new ways to expand the promotion and education of water use efficiency in an innovative and collaborative manner.

MWDOC just completed a public review process for the Draft Plan and anticipates adoption by the Board in September 2013.

**R3 Desalination must be included in any discussion of future water sources for Orange County.** (F4)

**RESPONSE: Agree**

MWDOC has a responsibility to consider and explore all new sources of water for long term water reliability and sustainability. As part of that responsibility, MWDOC conducts and updates water reliability studies in collaboration with retail water agencies throughout the county. These studies identify all potential projects, including ocean desalination. Currently, MWDOC is exploring two ocean desalination projects: the Doheny Ocean Desalination Project (Doheny Project) and the Huntington Beach Ocean Desalination (HB Project).

Since 2002, MWDOC has explored the feasibility of developing an ocean desalination facility in south Orange County for the purpose of producing local drinking water and decreasing its reliance upon imported water supplies. A 2004 Water Reliability Study concluded that a desalination project in Dana Point would provide for both supply and system reliability benefits. This location was recommended due to the geology, availability of land, existing outfall for brine disposal, and proximity to existing water distribution pipelines.

These factors make it conducive to employ environmentally sensitive and sustainable desalination technology that utilizes a slant well intake. The Doheny Desalination facility could supply 15 million gallons of drought-proof, highly reliable, local drinking water a day, which would represent approximately 25% of the participating agencies’ potable water demand and serve approximately 50,000 south Orange County households. The project has recently completed phase three and the participating agencies are considering its next steps.

The second desalination project currently being reviewed is the proposed Huntington Beach Project, which would produce 50-million gallons of water per day (MGD) — enough water for more than 168,000 Orange County households per year or approximately 8% of Orange County’s total water supply. The proposed facility would utilize the Huntington Beach Generating Station’s existing ocean water intake/outfall infrastructure, requiring no additional development into the ocean, thus reducing further construction costs.

The Huntington Beach project would be built by Poseidon Resources (Poseidon), a U.S.-based company that specializes in developing and financing water infrastructure projects. MWDOC, OCWD and 20 local retail water providers are evaluating the potential benefits and costs of purchasing water from the Huntington Beach Project. To date, no binding commitments to purchase the water have been made.

**R4 - The Groundwater Replenishment project shall continue looking for additional ways in which its water can be used.** (F5)

**RESPONSE: Agree**
MWDOC has been a long-time supporter of the Ground Water Replenishment System (GWRS) Project and has worked diligently with Metropolitan Water District of Southern California to secure Local Resource Program funding. The project has been on-line for just over five years and is currently under construction for its Phase One Expansion, which is expected to be completed by 2015. The two major objectives for the project are to use the water for protection of the groundwater basin from seawater intrusion and replenishment of the groundwater basin. Even with the current expansion that is under way and another one coming behind it, there are plenty of uses for the water. One that is being studied currently is to use the water for “mid-basin injection” to increase levels of water in the groundwater basin in specific areas near to where pumping levels are high and water levels have been lowered. In the future, following regulatory changes, there is the potential that the project water could be used for direct potable reuse.

R5 - MWDOC shall continue providing data to the water districts and city water departments encouraging tiered pricing to assist with water conservation. (F6)

RESPONSE: Agree
MWDOC is assuming (as was done under F6) that the Finding and Recommendation pertains to water budget based tiered rates or allocation based rates or similar types of retail pricing programs. With respect to water pricing, it is difficult to identify a “one-size fits all” type of pricing for every agency in the county and we have already noted that local control plays a large part in how a retail agency interacts with the public. However, MWDOC agrees that water budget based tiered rates, where each customer is provided a scientifically or reasonably determined “target use of water” helps the customer to identify how they are performing with respect to standardized criteria. MWDOC agrees that it will continue to work with agencies to share information regarding such efforts.

In 2008, MWDOC was awarded a $685,000 grant from the California Department of Water Resources to assist retail water agencies and city water departments in evaluating and implementing Budget Based Tiered Rate Structures. To date, several agencies have either implemented new rate structures or are using the water budget information to educate their customers regarding efficient water use each billing cycle. Through this grant, other agencies are still in the process of evaluating the feasibility of efficiency based rate structures. The trend is clear; agencies are moving toward rate structures that signal efficiency. Although 6 to 7 agencies in Orange County have already implemented budget based tiered rate structures, it remains a local decision. There is not one silver bullet in water use efficiency implementation; rather a toolbox of options that best serve the community where they are implemented and meet long term water used efficiency goals.

MWDOC has and will continue to work with all of our member agencies in facilitating implementation of water rate structures that best fit the needs of their local community. This facilitation includes data collection, analysis and reporting on a variety of key indicators including but not limited to water consumption, water supply, water rates and consumer sentiment.

R6 Water districts in South Orange County shall consider the Cadiz Project in any discussion on sustainability of water in the southern part of the county. (F7)

RESPONSE: Agree
MWDOC has a responsibility to consider and explore all new sources of water for long term water reliability and sustainability.
R7 All the Orange County Water Districts shall support legislation for the Bay Delta Conservation Plan to ensure sustainability of imported water to Orange County. (F8)

RESPONSE:
The Bay Delta Conservation Plan (BDCP) and the construction of an alternative conveyance is the single most critical water project in our life time. Both the State Water Project and the Colorado River Aqueduct are part of the foundation of water delivery in Orange County. Investments in fixing the Delta as well as repairs on the State Water Project and Colorado River Aqueduct system are necessary water reliability and sustainability investments.

MWDOC will support not only legislation, but other efforts that advance the BDCP process and calls for Delta improvements as long as they hold up the co-equal goals that ensures a reliable and affordable supply of water from the Bay-Delta for southern California. MWDOC and our member agencies are currently reaching out to city councils, elected officials, and community groups to provide information, education and gain support for the BDCP.

Sincerely,

Jeff Thomas
Vice President