April 18, 2012

Attention: Administrative and Finance Committee

Overview of 2010 Board action on revised Special Agricultural Water Rate program, changed conditions since adoption of revised program and alternative actions for consideration in response to a request to sustain current program. (Action)

Purpose
The purpose of this report is to provide the following: 1) An overview of the Special Agricultural Water Rate (SAWR) Board Workgroup recommendations on a revised SAWR program that was approved by the Board in March 2010; 2) Information on changed conditions since adoption of the program in 2010; and 3) Alternative actions for consideration in response to the request from the agricultural community to continue the current Transitional SAWR (TSAWR).

Staff recommendation
Provide staff direction in response to the March 15, 2010 letter received from Fallbrook PUD, Rainbow MWD, Valley Center MWD, and Yuima MWD, requesting that the current TSAWR be sustained as currently configured to provide time to develop the policies and programs needed to sustain regional agriculture for the long-term.

Alternatives
The following alternatives are being provided for Board consideration:
1. Affirm the March 2010 Board action to implement the revised SAWR starting January 1, 2013;
2. Extend the current TSAWR program for a specific time period (i.e. one year);
3. Reconvene a workgroup to evaluate the Water Authority’s SAWR.

Fiscal Impact
TSAWR customers receive a lesser level of service during shortages and, in return, receive a cost benefit. The impact on municipal and industrial (M&I) customers associated with providing the cost benefit in calendar year (CY) 2012 is as follows:
- The estimated increase in the regional storage charge unit cost, due to exempting agricultural deliveries from the storage charge allocation, is $15/AF. (Estimated $6.0 million in CY 2012)
- Estimated unit cost associated with providing the supply rate differential is $9/AF (Approximately $3.6 million in CY 2012). In CY 2012 the estimated unit cost equates to an approximate one percent increase in the “all-in” M&I untreated rate.

On January 1, 2013, the revised SAWR begins, and the impact on M&I customers will be from just the storage charge exemption; the supply rate differential will not be part of the program. In CY 2013, the increase in the regional storage charge unit cost, due to exempting agricultural deliveries from the storage charge allocation, is estimated to be $13/AF. (Estimated $5.6 million for first year)
The approximate impact associated with approving Alternative 2 in the staff recommendation and including both the storage charge exemption and supply rate differential in CY 2013 would be as follows:

- The estimated increase in the regional storage charge unit cost, due to exempting agricultural deliveries from the storage charge allocation, is $13/AF. (Estimated $5.6 million for first year)
- Estimated unit cost associated with providing the supply rate differential is $10/AF to $12/AF, which equates to an approximate one to two percent increase in the “all-in” M&I untreated rate. (Approximately $4.7 million in CY 2012)

Background
At the March 22, 2012 Board meeting, staff was directed to return to the Board in April and provide an overview of the findings and recommendations pertaining to the March 2010 Board action to revise the SAWR. The March 2010 Board action replaced the Transitional SAWR (TSAWR) with a revised SAWR that includes the storage charge exemption component of the program, but no longer contains the supply rate differential. The TSAWR terminates at the end of December 2012 and the revised SAWR begins January 1, 2013. Staff was also requested to provide an overview of changed conditions since adoption of the program in March 2010.

The overview of the SAWR was requested in response to concerns raised by representatives of the agricultural industry and agricultural member agencies that long-term agricultural production within the county cannot be sustained based on the high cost of water, which would increase significantly for agricultural customers following termination of the Interim Agricultural Water Program (IAWP) by the Metropolitan Water District and TSAWR. The representatives also requested that the Water Authority expand the dialogue on the TSAWR to look more broadly at the benefits of agriculture to the region, stating that conditions have changed since the benefit was previously evaluated by the SAWR Board Workgroup. In a March 5, 2012, letter from Fallbrook PUD, Rainbow MWD, Valley Center MWD, and Yuima MWD, provided to the Board at the March 2012 meeting, the agencies stated that sustaining the TSAWR as currently configured will give growers some financial breathing room and provide time to develop the policies and programs needed to sustain regional agriculture for the long-term. As part of this report, staff is also providing alternative actions for the Board to consider in response to the March 5, 2012, letter. The letter is included as Attachment 1.

To provide background on participation in the agricultural programs (TSWAR and IAWP) compared with total agriculture within the county, Table 1, on the following page, includes total acres within San Diego County compared with acres in the IAWP and TSAWR. The total acres are from the most recent San Diego County 2010 Crop Report. The 2010 acreage numbers in the IAWP and SAWR are from the member agencies, which were provided as part of the Water Authority’s 2010 Updated IAWP Reduction Plan. The top three valued crops types are included in the table, which also comprises about 98 percent of the acres in the IAWP and TSAWR programs.
As shown in Table 1, approximately 78 percent of the fruit and nut crop acreage is participating in one of the programs. Avocados are one of the primary crops in this category. For the other two categories, nursery and flower crops and vegetable crops, the majority of the acreage is not in IAWP or TSAWR and is primarily being irrigated with either full service M&I deliveries or local supplies. Many of the member agencies do not track “full service agricultural” customer deliveries and, therefore, tracking historic deliveries for these customers is not possible.

<table>
<thead>
<tr>
<th>Top Three Valued Crops by Major Categories</th>
<th>Total Acres within San Diego County</th>
<th>Acres participating in IAWP and TSAWR</th>
<th>% Acres in IAWP and TSAWR to Total Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursery &amp; Flowers</td>
<td>12,606</td>
<td>3,902</td>
<td>31%</td>
</tr>
<tr>
<td>Fruit &amp; Nut</td>
<td>36,239</td>
<td>28,289</td>
<td>78%</td>
</tr>
<tr>
<td>Vegetable</td>
<td>6,303</td>
<td>553</td>
<td>9%</td>
</tr>
<tr>
<td>TOTAL:</td>
<td>55,148</td>
<td>32,744</td>
<td>59%</td>
</tr>
</tbody>
</table>

1Source: San Diego County 2010 Crop Report
2Source: Estimates provided by member agencies participating in IAWP and TSAWR

Discussion

Overview of March 2010 Board Action on Revised SAWR

Information surrounding the Board’s action on a revised SAWR is included in the attached March 17, 2010, Board memo, which also contains the SAWR Board Workgroup findings and recommendations. The findings and recommendations document contains results from the Workgroup’s discussions, analysis, and recommendations while taking into account feedback received from the agricultural industry on a SAWR.

Over the course of nine months, the Workgroup met ten times to discuss and develop a revised SAWR program. The workgroup established policies and goals to guide development of any potential program, which were:

1. Benefit both M&I and agricultural customers
2. Provide water management benefit to M&I customers
3. Offer stable/predictable program for farmers
4. Program does not need to be linked to MWD’s cutback or rates
5. Program simplicity is desirable

The Workgroup also evaluated and discussed a number of issues pertaining to agriculture in San Diego and providing the SAWR. The major issues focused on the following: 1) legal parameters associated with providing the SAWR; 2) agricultural crop acres and values within the county and SAWR program; 3) estimated rate impact associated with providing the program; 4) evaluation of the water management benefit to M&I customers; 5) discussion on cost-effective benefit to agriculture from the program; and 5) evaluation of the continuation of the TSAWR for two additional years.
The Workgroup developed recommendations on the two rate components of the SAWR, based on the policies and detailed analysis of the issues. A summary of the recommendations that were approved by the Board in March 2010 are included below.

**Storage Charge Component**
As discussed in the findings, the Workgroup found that agriculture’s 50 percent lower level of service from the Emergency Storage Program (ESP) and no service from Carryover Storage Program results in significantly higher reliability for M&I customers in an ESP event and greater reliability in a drought event. During emergency situations, such as an earthquake, it is beneficial to have shortage management options available locally, because it is unlikely that the Water Authority would be able to acquire supplemental supplies from outside the region. In addition, the rate impact of exempting SAWR deliveries from the storage charges was less than one percent of the total M&I rate, and the reliability benefit makes this “insurance program” cost effective to M&I customers. The workgroup also noted that fixed charges, which SAWR customers are subject to, account for approximately one-third of the storage programs total costs while there is no guarantee on the level of service agriculture will receive in an emergency. For these primary reasons, the Workgroup recommended that the revised SAWR continue to contain an exemption from the storage charge.

**Supply Rate Differential Component**
In determining to eliminate the SAWR supply rate differential from the program, the Workgroup evaluated the supply benefit for M&I customers by considering the unit expense of water made available compared to the cost of purchasing dry-year transfers. The analysis assumed that cutbacks occurred two out of five years. The unit expense associated with providing the rate differential over a five-year period equated to approximately $1,500/AF, assuming two years of cutback at a 20 percent differential between M&I and agricultural cutbacks. Dry-year transfers were estimated at $750/AF to $900/AF during the same five year period. As stated in the attached findings, the Workgroup therefore determined that maintaining the supply rate differential was not a cost-effective benefit to M&I customers and should be discontinued.

**Changed Conditions since 2010 Adoption of Revised SAWR Program**
Agricultural representatives are advocating for continuation of the TSAWR due in part to changed conditions since the program was evaluated in the 2009-2010 time frame. The changed conditions highlighted by the agricultural representatives consist of the following:

- Greater public policy emphasis on environmental and climate benefits associated with having tree crops within the region that can offset carbon emissions;
- Blocked access to approximately $2 million in funding through MWD’s Agricultural Conservation Program in 2010 that was set aside for growers as part of termination of MWD’s IAWP. These monies are not available due to the MWD rate integrity policy that eliminates Water Authority access to the funds due to the ongoing rate litigation between the Water Authority and MWD;
- Significant drop in agricultural program water sales that impacts revenues and the financial sustainability of agricultural retail agencies; and
Results of a 2011 Water Authority public opinion survey supporting local agriculture.

The last two factors are described in more detail below along with a comparison of agricultural crop acreage and value within the region and legal constraints applicable to rate setting.

**Significant Decrease in Agricultural Water Demands and Impact on Revenues**

Figure 1 shows the region-wide reduction in agricultural program deliveries from a peak year demand of approximately 94,000 AF in calendar year (CY) 2007. As shown in the figure, region-wide agricultural program deliveries have decreased 63 percent between CYs 2007 and 2011. The drop in demands could be contributed to a number of factors, including economic recession, severe supply cutback requirements, and rising cost of water. Highlighted in the graph is the volume of IAWP and TSAWR cutback that was required based on base period demands. It should be noted that the agricultural industry is particularly sensitive to the price of water because it comprises as much as 70 percent of the cost of production. In addition, agricultural water use has a much higher price elasticity than residential demands, which equates to higher sensitivity to water rate increases.

![Figure 1: Agricultural Program Deliveries and Cutback Levels (CY 2007-2011)](image)

Representatives from the agricultural industry and agricultural member agencies are concerned that, due to the current and future rate increases, agricultural production acreage and therefore agricultural demands will not rebound and could potentially decrease further from current levels.
Due to the land-use designations and ability to develop the land for other uses, they have also commented that it is unlikely that the lost demand will be replaced with another similar level of water use. The loss of these sales results in less revenue to the Water Authority through the volumetric rates (i.e., treatment and transportation costs). Agricultural sales are critically important to those retail agencies that depend on these customer sales to sustain affordable service to residential and other commercial customers. The loss of agricultural sales has significantly jeopardized the financial sustainability of the agricultural member agencies.

**Results from Water Authority April 2011 Public Opinion Poll Report in Support of Reduced Rates for Agriculture**

Since adoption of the revised SAWR in March 2010, the Water Authority conducted a public opinion survey to measure the region’s opinion regarding various water related issues, including attitudes about the local agricultural industry and water. As stated in the April 2011 survey report, the results indicate that “San Diego County residents have shown substantial support for their agricultural community – over four-fifths feel that local farmers and agriculture are very important to the local economy. They further feel that reduced water rates for the agricultural industry should be maintained.” Results show that 81 percent of respondents feel that local farmers and agriculture are very important to the local economy. As stated in the report, the positive attitude toward farmers and agriculture is further corroborated in that 87 percent of respondents feel that reduced water prices for farmers and agriculture should be maintained.

**Agricultural Acreage and Value**

During the SAWR Workgroup meetings, the agricultural acres and value within San Diego County were reviewed by the Workgroup to understand the economic value of agriculture in the county. The data was from the San Diego County 2008 Crop Report. To determine changed conditions regarding acres and value, Table 2 compares data from 2008 to data from the 2010 Crop Report, which is the most recent. The top three valued crop categories are included in the table.

<table>
<thead>
<tr>
<th>Top Three Valued Crops by Major Categories</th>
<th>2008</th>
<th>2010</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursery &amp; Flower</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acres</td>
<td>10,670</td>
<td>12,606</td>
<td>18.1%</td>
</tr>
<tr>
<td>Value</td>
<td>$1,042,703,756</td>
<td>$1,107,558,336</td>
<td>6.2%</td>
</tr>
<tr>
<td>Fruit &amp; Nut</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acres</td>
<td>43,624</td>
<td>36,239</td>
<td>-16.9%</td>
</tr>
<tr>
<td>Value</td>
<td>$239,810,088</td>
<td>$261,399,642</td>
<td>9.0%</td>
</tr>
<tr>
<td>Vegetable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acres</td>
<td>7,228</td>
<td>6,303</td>
<td>-13%</td>
</tr>
<tr>
<td>Value</td>
<td>$163,027,398</td>
<td>$169,803,464</td>
<td>4%</td>
</tr>
</tbody>
</table>

1. The Crop Report reflects gross values only and does not represent the net return to farmers nor the multiplier effect on surrounding community.

2. Data from San Diego County Crop Report
Since the Workgroup evaluated the crop values and acreage, there has been an 18 percent increase in nursery and flower crop acreage, a 17 percent decrease in fruit and nut crops and a 13 percent drop in vegetable crop acreage. The value has increased in all three categories. Based on the San Diego County Crop Reports, the total value of agriculture in 2010 within the County was $1.7 billion compared with $1.5 billion in 2008. This equates to an approximately 13% increase in total value.

According to Eric Larson, Executive Director of the San Diego County Farm Bureau, three variables can influence the value of agriculture – price, volume produced per acre, and the number of acres in production. Even with reduced acreage, if the volume of fruit picked per acre or if the price per pound is higher, it will result in higher crop value. In the agricultural industry, price swings can be enormous based on supply and demand. Another variable that can influence the value is weather, which can produce large swings in production.

Evaluating the Ventura County 2010 Crop Report provides the similar increase in agricultural value per acre as shown in San Diego County. Table 3 compares data on avocados from the San Diego and Ventura County Crop Reports. The data shows that the value in Ventura County for avocado in 2010 is similar for a like amount of acreage in San Diego. The data also demonstrates the drop in avocado acreage in San Diego County could be due primarily to mandatory cutbacks and phase-out of the IAWP discount. Calleguas Municipal Water District, the MWD member agency that services portions of Ventura County imported supplies, chose to no longer provide the IAWP rate to its agricultural customers starting January 1, 2009. They were required to cutback IAWP deliveries in 2008. Approximately 65 percent of the water supply in Ventura County is groundwater.

<table>
<thead>
<tr>
<th>Table 3: Comparison between Counties - Avocado Acres and Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>San Diego County</td>
</tr>
<tr>
<td>Acres</td>
</tr>
<tr>
<td>Value</td>
</tr>
<tr>
<td>Ventura County</td>
</tr>
<tr>
<td>Acres</td>
</tr>
<tr>
<td>Value</td>
</tr>
</tbody>
</table>

**Legal Constraints**

While providing reduced water pricing to agricultural water users is a laudable goal, legal constraints require the Water Authority to justify its agricultural water rate using cost of service principles. The cost of service rationale for the TSAWR and SAWR that will become effective on January 1, 2013, are discussed above in the overview. In November 2010, the California voters adopted Proposition 26, which amended article XIII C of the California Constitution to add a new definition of “tax.” Under the Constitution, most local agency taxes are subject to two-thirds voter approval. The definition excludes charges for services or products provided by a
local agency if the charge does not exceed the reasonable cost of service. Under Proposition 26, the local agency has the burden of proving compliance with cost of service requirements. Amendments to the agricultural water pricing formula could be subject to this increased burden of proof. The current program, as adopted by the Board in 2010, which included extension of the TSAWR, was based on cost-of-service principles. The General Counsel has determined that the staff recommendations for consideration comply with Proposition 26.

Prepared by: Dana L. Friehauf, Principal Water Resources Specialist
Reviewed by: Ken Weinberg, Director of Water Resources
Approved by: Sandra L. Kerl, Deputy General Manager

Attachment 1: March 5, 2012 letter from Fallbrook PUD, Rainbow MWD, Valley Center MWD and Yuima MWD
Attachment 2: March 12, 2010 SAWR Board Memo and Workgroup Findings and Recommendations
March 5, 2012

Mike Hogan, Chair  
San Diego County Water Authority  
4677 Overland Avenue  
San Diego, CA 92123

Subject: Request to Sustain the Current TSWAR Through 2015

Dear Chair Hogan;

This is a very straightforward request from the four major agricultural member agencies of the San Diego County Water Authority. We jointly ask that the Transitional Special Agricultural Water Rate be sustained, as it is currently configured, with both the storage and supplemental pricing offsets through the end of 2015 when the entire program is scheduled for re-evaluation.

Regional Agriculture Activity and Water Use is in Rapid Decline

The reason for the request is made evident by the attached graphs. Agricultural water demand within the San Diego Region is in a free fall as many growers, bombarded by years of double digit rate increases, are simply quitting. Agricultural water demand from the San Diego County Water Authority has essentially been halved starting at 103,496 AF for FY 2006-2007, now down 48% to just over 54,000 acre feet in FY 2010-2011, and unfortunately, is still falling.

Removing the pricing consideration for the supplemental supplies from the TSAWR effective January 1, 2013, along with the scheduled cessation of the MWD Interim Agricultural Water Program on January 1, 2013, will only serve to compound the impact of anticipated wholesale increases from MWD and the SDCWA.

San Diego is known for positive environmental and aesthetic attributes; one being its verdant agricultural landscape. Those close to this hallmark of our region know only too well how very close we are to having much of our farming heritage being lost forever. Further decline of regional agriculture and onset of increased negative economic, environmental, and aesthetic impacts to the Authority’s retail member agencies, the SDCWA itself, and the broader community, can be the only possible result. Retaining that portion of the program
for the requested period, however, will give growers time to make adjustments
needed to hopefully sustain operations.

Why Should the SDCWA Extend the TSAWR As Currently Configured?

The water management benefit of having interruptible agricultural water use has
been well demonstrated historically, both in the early 1990’s and more recently
from 2008 through 2010. While these attributes have been used to support past
and current pricing considerations, there are other factors which strongly support
a continuation of these policies into the future:

- **Environmental/Climate Benefits** – Soon the SDCWA will be dealing with
developing a Climate Action Plan and will be identifying the methods for the
SDCWA to reduce its carbon footprint. We are also aware that the County of San
Diego just released its own climate plan, which calls for the planting of 10,000
trees each year to offset carbon impact on the environment. With literally millions
of citrus and avocado trees existing in North County and under severe stress and
threat of extinction, it makes no sense to consider an action plan to plant
thousands of new trees each year, when trees already exist and could be
sustained through appropriate water pricing.

- **Blocked Access to MWD Ag Conservation Funds** – As part of the IAWP
Phase Out, MWD set aside funds to assist growers to become more water use
efficient. Unfortunately, because of the MWD Rate Integrity Policy and the
ongoing rate litigation between the SDCWA and MWD, San Diego growers
cannot access these funds, even though their payments for imported water help
to fund these very agricultural conservation programs from MWD.

- **Regional Economic Benefits** – Beyond the important water management
benefits it provides, agriculture’s $1.5 billion farm-gate value is multiplied several
times in overall economic benefits. As is done for small businesses with the
SCOOP program, SDCWA can further support the economic health of the region
by sustaining the current levels of water pricing considerations for our region’s
agricultural industry.

- **Strong Public Support for Regional Agriculture** – Recent public opinion
polling by the SDCWA clearly indicated the community’s support for and
willingness to help financially sustain agriculture. We would ask that the San
Diego County Water Authority consider this strong indication of public support in
evaluating whether or not to extend the TSAWR, as currently configured, at least
through to the end of 2015.
In Conclusion

As previously stated, the decline of agriculture in the San Diego region is rapid and ongoing. While it may take time to develop new comprehensive policies and programs to assist and sustain this important segment of our regional economy, it is clear that water pricing action needs to be taken, and taken soon. **Sustaining the TSAWR as currently configured will give growers some financial breathing room and give our region time to develop the policies and programs needed to sustain regional agriculture for the long-term.**

Sincerely;

Brian Brady  
Fallbrook PUD

Dave Seymour  
Rainbow MWD

Gary Arant  
Valley Center MWD

Lin Burzell  
Yuima MWD
Combined Water Sales by Category
VCMWD - Rainbow MWD - FPUD - Yuima MWD

<table>
<thead>
<tr>
<th>Year</th>
<th>SAWR</th>
<th>IAWP</th>
<th>M&amp;I</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006-07</td>
<td>0.0</td>
<td>74,437.9</td>
<td>29,057.6</td>
<td>103,495.5</td>
</tr>
<tr>
<td>2007-08</td>
<td>0.0</td>
<td>55,616.0</td>
<td>28,228.0</td>
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<tr>
<td>2008-09</td>
<td>8,694.9</td>
<td>35,884.9</td>
<td>30,209.7</td>
<td>74,789.5</td>
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<tr>
<td>2009-10</td>
<td>17,566.8</td>
<td>18,125.0</td>
<td>28,126.1</td>
<td>63,817.9</td>
</tr>
<tr>
<td>2010-11</td>
<td>14,923.1</td>
<td>14,022.6</td>
<td>25,074.7</td>
<td>54,020.4</td>
</tr>
</tbody>
</table>
Water Sales by Category
Rainbow MWD

<table>
<thead>
<tr>
<th></th>
<th>2006-07</th>
<th>2007-08</th>
<th>2008-09</th>
<th>2009-10</th>
<th>2010-11</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAWR</td>
<td>0.0</td>
<td>0.0</td>
<td>3,116.0</td>
<td>5,374.4</td>
<td>4,173.6</td>
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<td>IAWP</td>
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<td>9,883.0</td>
<td>2,934.5</td>
<td>2,544.3</td>
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<tr>
<td>M&amp;I</td>
<td>9,209.3</td>
<td>9,591.2</td>
<td>12,046.0</td>
<td>12,849.1</td>
<td>10,945.0</td>
</tr>
<tr>
<td>Total</td>
<td>31,859.0</td>
<td>25,957.0</td>
<td>25,045.0</td>
<td>21,158.0</td>
<td>17,662.9</td>
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Water Sales by Category
Fallbrook PUD

<table>
<thead>
<tr>
<th></th>
<th>2006-07</th>
<th>2007-08</th>
<th>2008-09</th>
<th>2009-10</th>
<th>2010-11</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAWR</td>
<td>0.0</td>
<td>0.0</td>
<td>842.1</td>
<td>1,871.0</td>
<td>1,860.2</td>
</tr>
<tr>
<td>IAWP</td>
<td>10,042.5</td>
<td>7,346.9</td>
<td>4,772.6</td>
<td>3,385.6</td>
<td>2,555.1</td>
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<tr>
<td>M&amp;I</td>
<td>9,883.7</td>
<td>9,228.6</td>
<td>8,770.7</td>
<td>7,047.0</td>
<td>6,180.0</td>
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<tr>
<td>Total</td>
<td>19,926.2</td>
<td>16,575.5</td>
<td>14,385.4</td>
<td>12,303.6</td>
<td>10,595.3</td>
</tr>
</tbody>
</table>
March 17, 2010

Attention: Administrative and Finance Committee

Approve Special Agricultural Water Rate Workgroup Board Recommendation on Revised Special Agricultural Water Rate Program. (Action)

Staff recommendation
Approve the Special Agricultural Water Rate Board Workgroup recommendations as included in their March 12, 2010, Findings and Recommendations.

Alternative
Do not approve the Special Agricultural Water Rate Board Workgroup recommendations

Fiscal Impact
Under continuation of the transitional program for two years, the supply rate differential and storage charge exemption for agricultural customers are accounted for in current rate projections for 2011 and do not result in rate increases beyond what is currently forecasted for 2012. Under the revised Special Agricultural Water Rate (SAWR), which becomes effective January 1, 2013, agricultural customers in the SAWR class of service will pay the Water Authority’s melded supply cost which will result in a higher cost to those customers. The exemption of agricultural deliveries from the storage charge is already accounted for in the projected storage charge unit rate.

Background
In October 2008, the Board approved a two-year transitional SAWR for customers opting out of Metropolitan Water District’s (MWD’s) Interim Agricultural Water Program (IAWP). As part of the 4-year phase-out of the IAWP, MWD provides IAWP customers the option of annually opting out of the program. The IAWP will terminate December 31, 2012. The transitional SAWR is to terminate December 31, 2010.

Similar to the Water Authority’s special rates provided to IAWP customers, the two-year transitional SAWR program consists of two components:

1) Agricultural customers pay a special supply rate and in return take deeper cuts during shortage periods. The current rate is equal to MWD’s M&I Rate. Deliveries are exempt from the Water Authority’s melded supply rate. The supply reduction is equal to MWD’s M&I cutback levels and the customers do not receive any Water Authority QSA supplies or dry year supplies such as spot water transfers or carryover storage water.

2) Agricultural deliveries are not included in the calculation of member agencies’ proportional share of the fixed Storage Charge. The Storage Charge consists of costs associated with both the Emergency Storage Project (ESP) and Carryover Storage Project (CSP). In return for the storage discount, agricultural customers participating in the program would be required to take a
reduction in delivery of ESP supplies at double the system-wide reduction, up to 90 percent, with the commercial and industrial customers receiving the additional water. Agricultural customers participating in the program would also have limited or no access to CSP supplies. The specific allocation methodology for CSP supplies would be developed over the coming year.

With approval of the transitional SAWR, the Board also agreed to form a workgroup to develop options to either; 1) discontinue special agricultural rates, 2) continue with the transitional program, or 3) adopt a new special agricultural rate program.

The Special Agricultural Water Rate Workgroup was formed in July 2009 and is comprised of Directors Ken Williams (Chair), Hogan, Lewinger, and Wornham, with Directors Arant and Wight recently added as alternates.

As part of its activities, the Workgroup established overriding policies and goals for any potential program, which are:

1. Benefit both Municipal and Industrial (M&I) and agricultural customers
2. Provide water management benefit to M&I customers
3. Offer stable/predictable program for farmers
4. Program does not need to be linked to MWD’s cutback or rates
5. Program simplicity is desirable

The Workgroup met ten times to discuss and develop a revised special agricultural water rate program based on the Workgroup’s goals. An initial draft recommendation was developed and presented to the Board in January 2010. This was followed by two meetings with agricultural industry representatives to explain and get their feedback on the initial draft recommendation. The agricultural representatives included Eric Larson, Executive Director of the San Diego County Farm Bureau, Tom Bellamore, President of the California Avocado Commission and Charlie Wolk, farmer and Avocado Commission board member.

Discussion
The attached SAWR Board Workgroup Findings and Recommendations is a comprehensive document that contains results from the Workgroup’s discussions, analysis, and recommendations while taking into account feedback received from the agricultural industry on a SAWR.

As stated in the document, the Workgroup is recommending that the SAWR program be revised effective January 1, 2013, (concurrent with termination of MWD’s IAWP) and that the SAWR customer will not pay the storage charge but will pay all other rates and charges. As discussed in the attached Findings, the Workgroup found that agriculture’s 50 percent lower level of service from the ESP and no service from CSP resulted in significantly higher reliability for M&I customers in an ESP event and greater reliability in a drought event. In addition, the rate impact of exempting SAWR deliveries from the storage charges was less than one percent of the total M&I rate and the reliability benefit makes this “insurance program” cost effective to M&I customers. The workgroup also noted that fixed charges which SAWR customers are subject to,
account for approximately one-third of the storage programs total costs while there is no guarantee on the level of service Agriculture will receive in an emergency. For these primary reasons, the Workgroup is recommending that the revised SAWR continue to contain an exemption from the storage charge. **Table 1** describes how the cutback to agricultural customers during an emergency at twice the rate of M&I customers results in an increase for commercial and industrial (C&I) from 75 percent reliability to an 87 percent reliability level.

**TABLE 1**
Increase in C&I Reliability from a 75% Level of Service during an ESP Event Due to Agricultural Cutbacks

<table>
<thead>
<tr>
<th>Demands in Acre-Feet</th>
<th>M&amp;I</th>
<th>Interruptible Agriculture</th>
<th>C&amp;I</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Annual Demand (less recycled water)</td>
<td>646,200</td>
<td>56,000</td>
<td>133,380</td>
</tr>
<tr>
<td>2-Month Demand (Jul - Aug)</td>
<td>148,630</td>
<td>14,560</td>
<td>30,680</td>
</tr>
<tr>
<td>2-Month Emergency Demand at 75%</td>
<td>111,470</td>
<td>10,920</td>
<td>23,010</td>
</tr>
<tr>
<td>2-Month Emergency Demand at 50%</td>
<td>---</td>
<td>7,280</td>
<td>---</td>
</tr>
</tbody>
</table>

**Adjustment for C&I**

| C&I Supplement (2 month Ag Demand @75% minus 2 Month Ag demand @50%) | 3,640 |
| Adjusted C&I Demand (C&I Supplement plus 2 month C&I demand @75%)    | 26,650 |
| Level of Service for C&I                                             | 87%   |

In determining to eliminate the SAWR supply rate differential from the program, the Workgroup evaluated the supply benefit for M&I customers by considering the unit expense of water made available, compared to the cost of purchasing dry-year transfers. The analysis assumed that cutbacks occurred two out of five years. The unit expense associated with providing the rate differential over five year period equated to approximately $1,500/AF, assuming two years of cutback at a 20 percent differential between M&I and agricultural cutbacks. Dry-year transfers are estimated at $750/AF to $900/AF during the same five year period. As stated in the Findings, the Workgroup therefore determined that maintaining the supply rate differential was not a cost-effective benefit to M&I customers and should be discontinued.

**Table 2** provides a five-year analysis of the unit cost of the supply rate differential under various rate scenarios. As noted, $64/AF is the five-year average of the projected differential between the Water Authority’s melded supply rate and the MWD Tier 1 rate. The other costs reflect scenarios where the differential was fixed at a set amount that did not change over the five-year period. The lower unit cost of the program still required agriculture to cut 20 percent more than M&I for a lesser rate differential. Those scenarios were considered by the agricultural agencies to not be cost effective from a grower’s business perspective.
The Workgroup recommendation also includes continuation of the transitional SAWR for two additional years, until December 31, 2012, to coincide with termination of MWD’s IAWP. The extension of the transitional SAWR would be consistent with the October 2008 Board approved program, except that customers would be kept at a minimum 13 percent cutback level for the two year period regardless of the MWD M&I cutback level. The participants would also be required to maintain at least a five percent differential between the Water Authority M&I cutback level and the transitional SAWR customer cutback level. The benefits to M&I customers in extending the program, with guaranteed reduction in deliveries, is that it will provide an important in-region supply during this shortage period and avoid an increase in firm deliveries which would provide QSA water, transfers and other dry year supplies to currently interruptible customers. The agricultural industry also felt that extension would help minimize the cumulative impact of increasing wholesale costs and the decreasing supply rate differential from both MWD and the Water Authority.

In evaluating the unit expense associated with continuing to provide the supply rate differential through the transitional SAWR, the analysis assumed that the current reduction levels being experienced by transitional SAWR customers continue for an additional two years. Although required to cut 13 percent, the SAWR customers have cutback 25 percent and are expected to continue at that level for the foreseeable future. This has resulted in a 17 percent cutback differential between SAWR and M&I customers and significantly more water available to M&I than first anticipated when the program began. The unit expense for water made available over the two year period in all but one scenario analyzed in Table 3 below will be comparable to the potential cost to purchase and wheel out-of-region dry-year transfer supplies over the next two years. The cost per acre foot takes into account both the cost to fund the program which reduces agricultural demand and the price for M&I to purchase water freed up by the reduction in agricultural demand. The projected unit cost for fiscal year 2010 to both fund the rate differential and purchase the water is projected to be $696/AF. This is because the program began yielding water in the first year of its initiation.

### TABLE 2

**Estimated Unit Expense of Supply Program based on Potential Rate Differential**

<table>
<thead>
<tr>
<th>Rate Differential</th>
<th>$20/AF</th>
<th>$30/AF</th>
<th>$40/AF</th>
<th>$64/AF*</th>
<th>$80/AF</th>
<th>$100/AF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit Expense</td>
<td>$1,040</td>
<td>$1,169</td>
<td>$1,298</td>
<td>$1,590</td>
<td>$1,813</td>
<td>$2,071</td>
</tr>
</tbody>
</table>

*5-year average of existing program*
At the request of the agricultural industry, the Workgroup is also recommending that staff meet with representatives of the agricultural industry and agricultural member agencies within 12 months of Board action and annually thereafter for the purpose of identifying other water management or conservation programs that agriculture can participate in that will provide a reliability benefit to M&I or reduce agricultural water demand.

Prepared by: Dana L. Friehauf, Principal Water Resources Specialist
Reviewed by: Ken Weinberg, Director of Water Resources
Approved by: Sandra L. Kerl, Deputy General Manager

Attachment 1: March 12, 2010 SAWR Board Workgroup Findings and Recommendations
Special Agricultural Water Rate Board Workgroup
Findings & Recommendations
March 12, 2010

General Findings

1. The Agricultural industry is a significant part of the region’s economy and is particularly sensitive to the price of water because it comprises as much as 70 percent of the cost of production

2. The Agricultural industry has a historic record of accepting lower levels of reliability through an interruptible class of service primarily because of the availability of surplus water

3. Agriculture has a history as a distinct class of service and is easily identifiable by retail water purveyors

4. During Fiscal Year 2010 current participants in the SAWR have over performed in regards to their cutbacks from what the program requires

5. Cost of Service principles require that any rate differential be based on different service characteristics that the rate relate to the cost of providing that unique level of service

6. For the SAWR to benefit M&I customers the program must both improve M&I reliability and be cost competitive with alternative reliability investments or water management actions

7. For the SAWR to benefit the Agricultural customer, the severity and duration of a cutback must be commensurate with the financial savings to the Agricultural customer

8. If the cutback in water to the Agricultural customer is too severe and lasts too long the business will not be viable regardless of the rate differential

9. The cost of water to all customers has risen significantly and is expected to continue to rise in the future. Any current rate differential for Agricultural customers most likely will be outpaced by expected future increases in the overall water rate

10. The most transparent basis for a rate differential for Agricultural customers is to receive either no or a reduced level of service from specific Water Authority service categories, i.e.; storage, supply, etc., where a specific reliability benefit can be transferred to M&I customers.

11. The best basis to provide a rate differential between classes of service is through the charge associated with the unbundled rate service category that is associated with the lesser level of service and not through a separate independent calculation of the economic value, i.e.; reduced level of service for storage is reflected in a lower payment for storage related charges.
12. When comparing the rate differential for storage the Workgroup found the following:

- Agriculture’s 50 percent lower level of service from ESP and no service from CSP resulted in significantly higher reliability for M&I customers in an ESP event and greater reliability for M&I customers in a drought event.

- The storage component of the SAWR resulted in additional storage capacity for M&I customers at a cost equal to or less than the cost of investing in additional storage capacity at San Vicente or elsewhere.

- Excluding the Storage Charge, fixed revenues account for at least 1/3 of the storage programs costs. With the exception of capacity charges, agricultural customers pay all other remaining fixed charges and make a substantial payment towards the cost of storage commensurate with the reduced benefit they receive.

- In an ESP event it is uncertain what if any service agricultural customers will receive when the emphasis is on health and safety. There is also no guarantee that level of service targets for M&I of 75 percent and Agriculture of 50 percent will be met. The level of service to agriculture can be significantly less.

- C&I customers that received enhanced reliability during an emergency event do not pay more than residential or institutional customers for that unique reliability benefit.

- The rate impact of funding the differential rate for agriculture was less than 1 percent of the total M&I rate and the reliability benefit makes this "insurance program" cost effective to M&I customers.

13. When comparing the rate differential for supply the Workgroup found the following:

- The current Transitional SAWR requires that Agriculture cutback at the MWD M&I cutback level. Over the long term, the estimated difference between the MWD cutback and the CWA melded cutback would produce only 3,000-6,000 acre feet annually available to M&I during a shortage.

- At most there is a likelihood that the MWD supply will be cut in a 2 out of 5 year period but the rate differential must be funded by M&I customers 5 out of 5 years.

- The most appropriate alternative action to a supply rate differential program for Agriculture is the purchase of a dry year option or spot transfer.

- The cost to the M&I customer of funding the rate differential combined with the cost to purchase the water that is no longer going to the agricultural customer is not cost competitive with dry year transfers.
- Increasing the cutback to agriculture to provide more water to M&I to lower the unit cost results in too severe a cutback for agriculture to sustain

- Reducing the amount of the rate differential results in a program that is not financially attractive to the Agricultural customer.

- The current Transitional SAWR has proven to be cost competitive with transfers because M&I received an immediate benefit in the first year of the program and agricultural customers have reduced demand by more than the 5 percent difference between the CWA cutback and the MWD M&I cutback levels

14. When comparing a possible rate differential for treatment and transportation the Workgroup found the following:

- There is sufficient treated water capacity in the region so that interruptibility of agriculture does not provide a meaningful benefit to M&I

- With the availability of storage to offset peak demands combined with member agency treatment and other local projects the benefit of reduced peaks by agriculture is not significant enough or frequent enough to warrant a rate differential

**Program Findings**

15. Water supply planning is enhanced if CWA knows that it does not have to supply SAWR customers’ carryover water for a specified period of time, preferably 3 years.

16. Any agricultural rate differential should be for commercial growers since that group of customers are the most price sensitive and most capable of managing a lower level of reliability

17. Any new program should have a participation limit set so as not to exceed the base year of agricultural demand prior to the most recent cutbacks i.e. 100,000 AF

18. Current customers in MWD's IAWP program should continue to pay the MWD IAWP rate until that program terminates since they are being cutback according to the rules of that program and that rate appropriately reflects the cost of service to those customers
**Board Workgroup Recommendations**

1. The Two-Year Transitional SAWR, approved by the Board in October 2008, should be continued for two additional years, terminating December 31, 2012 (concurrent with the termination of MWD’s Interim Agricultural Water Program (IAWP)), with the requirement that customers in the program take a minimum 13 percent cutback for the two year period regardless of MWD M&I cutback level. At least a 5 percent differential between Water Authority M&I cutback level and the transitional SAWR customer will also be established.

2. The SAWR program should be revised effective January 1, 2013, (concurrent with the termination of MWD’s IAWP) and agricultural customers in the SAWR class of service will not pay the storage charge but will continue to pay all fixed charges then in effect. Customers in the SAWR class will pay all supply, treatment and customer service rates and charges.

3. Customers in the SAWR class of service should continue to be cutback at twice the rate of M&I customers in an Emergency Storage Program (ESP) event, up to 90 percent.

4. Customers in the SAWR class should receive no water from the Carryover Storage Program during Stage 2 or Stage 3 of the Drought Management Plan. When Stage 2 is implemented by the Board of Directors and the Water Authority withdraws water from carryover storage to meet M&I water needs, SAWR customers cannot leave the program for a minimum of three years or the duration of the Stage 2, whichever is less. Staff should be directed to work with the Agricultural member agencies on developing procedures for administering this program and return to the Board for approval prior to completion of the San Vicente Dam Raise.

5. Eligibility for the SAWR class will be limited to commercial growers owning at least 1 acre of property.

6. The maximum amount of water delivered under this program will not exceed 100,000 acre feet annually.

7. Prior to January 1, 2016, a comprehensive review of the SAWR program should be completed by the Board with the full participation of stakeholders and member agencies. The Board should evaluate the effectiveness of the program and determine whether to make additional revisions, if any, continue the program or terminate the program.

8. Direct Staff to meet with representatives of the agricultural industry and agricultural member agencies within 12 months of Board action and annually thereafter for the purpose of identifying other water management or conservation programs that agriculture can participate in that will provide a reliability benefit to M&I or reduce agricultural water demand.