FAP Agenda Number 2.

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MEETING DATE:  
May 21, 2015 

AGENDA ITEM:  
Discussion and Consideration of Action to Recommend that the Board approve the 2016 Final Rate Schedule 

RECOMMENDATION:  
Staff recommends that the Finance, Audit and Power Committee recommend that the Board take action to change the 2016 CAWCD rates from provisional to firm 

FINANCIAL IMPLICATIONS:  
Impact on Budget:  No impact on the 2015 budget 

Impact on Reserves:  Water rates are designed to cover costs. The Ag Consideration and Ag Incentive Program are funded first by property taxes ($0.06 of the $0.10 ad valorem property tax) and any shortfall is covered by reserves 

Impact on Rates:  Not applicable 

LINKAGE TO STRATEGIC PLAN, POLICY, STATUTE OR GUIDING PRINCIPLE:  
2010 CAWCD Strategic Plan  
- Finance: Maintaining CAP’s Financial Health 

PREVIOUS BOARD ACTION/ACTIVITY:  
April 10, 2014  
A customer workshop was held on 2015-2020 CAWCD rates 

May 1, 2014  
The Board approved the preliminary CAWCD rate schedule for 2015-2020 

June 5, 2014  
The Board approved the Final 2015-2020 Water Rate Schedule 

March 19, 2015  
FAP Committee had a preliminary report and discussion of 2016 water and tax rate setting process 

ISSUE SUMMARY/DESCRIPTION:  
The District’s rate setting policy provides for the development of a complete water rate schedule every other year in even years, including one year of firm rates, a second year of provisional rates and four additional years of advisory rates. In odd years, the policy provides that, unless a more detailed analysis is appropriate, the Board may allow the provisional rates for the second year to become firm with no further action.
In 2014 staff developed and the Board approved a water rate schedule and analysis that identified firm rates for 2015, provisional rates for 2016 and advisory rates for 2017 through 2020.

Rates are developed as part of a detailed 10-year financial planning model that considers water deliveries, fixed O&M expenses, electricity costs, capital replacements, revenue requirements, property taxes, strategic reserve levels and other concerns or situations that have potential impact on the District.

The provisional 2016 rates assumed normal conditions on the Colorado River. As of this time, there is a possibility that 2016 may be a normal year or may be a shortage year. A final determination will be made by the Bureau of Reclamation based on the 24-month study it completes in August 2015. Given this uncertainty, it makes more sense to publish firm rates for 2016 assuming no shortage and then potentially have to change 2016 rates to reflect a shortage later in 2015, rather than the other way around. Consequently, staff recommends that the Board adopt the provisional rates for 2016 published last year as firm rates. These rates are as follows:

<table>
<thead>
<tr>
<th>Normal Year ($/AF)</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed OM&amp;R:</td>
<td>85</td>
</tr>
<tr>
<td>Energy:</td>
<td>76</td>
</tr>
<tr>
<td>Capital Charges:</td>
<td>23</td>
</tr>
<tr>
<td>Ag incentive:</td>
<td>(19)</td>
</tr>
</tbody>
</table>

While the provisional rates will become firm without action, staff is recommending the FAP Committee recommend action to the Board to confirm the 2016 rates. As reference, the original 2014 Board brief has been attached (Attachment 2) as an exhibit with the additional detail of the various rate subcomponents.

The normal-year advisory rates for 2017-2020 remain unchanged, but a complete rate analysis will be done for 2017-2021 next year.

As part of the information provided in 2014 for the 2015-2020 rates, staff provided a shortage case scenario for planning purposes. That planning scenario is shown on the next page. These rates do not include any rate stabilization reduction from the main rate stabilization fund or the voluntary fund in which customers made the selection to participate.
If a shortage is declared later in 2015 for 2016, a revised rate recommendation for 2016 reflecting the shortage will be brought in the Fall by staff to the FAP Committee for recommendation to the Board. A full rate analysis for 2017-2021 will be completed in 2016 in any event.

**SUGGESTED MOTION:**
I move that the Finance, Audit and Power Committee recommend that the Board take action to change the 2016 CAWCD rates from provision to firm.

Attachments.
### DELIVERY RATES FOR VARIOUS CLASSES OF WATER SERVICE

Units = $/acre-foot

(The Letter Designations in the Formulas Refer to the Rate Components Shown Below)

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>Firm</th>
<th>Provisional</th>
<th>Advisory</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Municipal and Industrial</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long Term Subcontract (B+C)</td>
<td></td>
<td>$146</td>
<td>$157</td>
<td>$161</td>
</tr>
<tr>
<td>Non-Subcontract (A+B+C)</td>
<td>166</td>
<td>179</td>
<td>184</td>
<td>190</td>
</tr>
<tr>
<td>Recharge (A+B+C)</td>
<td>166</td>
<td>179</td>
<td>184</td>
<td>190</td>
</tr>
<tr>
<td><strong>Federal</strong> (B+C)</td>
<td>$146</td>
<td>$157</td>
<td>$161</td>
<td>$166</td>
</tr>
<tr>
<td><strong>Agricultural</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Settlement Pool (C)</td>
<td>$67</td>
<td>$75</td>
<td>$76</td>
<td>$79</td>
</tr>
<tr>
<td><strong>Agricultural Incentives</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meet Settlement Pool Goals</td>
<td>(14)</td>
<td>(18)</td>
<td>(15)</td>
<td>(14)</td>
</tr>
<tr>
<td>Meet AWBA/CAGRD GSF Goals</td>
<td>(2)</td>
<td>(2)</td>
<td>(2)</td>
<td>(2)</td>
</tr>
<tr>
<td>Meet Recovery Goals</td>
<td>(2)</td>
<td>(2)</td>
<td>(2)</td>
<td>(2)</td>
</tr>
</tbody>
</table>

### RATE COMPONENTS

Units = $/acre-foot

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>Firm</th>
<th>Provisional</th>
<th>Advisory</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Capital Charges</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(A) Municipal and Industrial - Long Term Subcontract</td>
<td>20</td>
<td>22</td>
<td>23</td>
<td>24</td>
</tr>
<tr>
<td><strong>Delivery Charges</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(B) Fixed OM&amp;R</td>
<td>$79</td>
<td>$82</td>
<td>$85</td>
<td>$87</td>
</tr>
<tr>
<td>(C) Pumping Energy Rate</td>
<td>67</td>
<td>75</td>
<td>76</td>
<td>79</td>
</tr>
</tbody>
</table>

### DIRECT UNDERGROUND WATER STORAGE

Units = $/acre-foot

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>Firm</th>
<th>Provisional</th>
<th>Advisory</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Underground Water Storage O&amp;M</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phoenix AMA</td>
<td>$8</td>
<td>$9</td>
<td>$10</td>
<td>$12</td>
</tr>
<tr>
<td>Tucson AMA</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td><strong>Underground Water Storage Capital Charge</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phoenix AMA</td>
<td>$15</td>
<td>$15</td>
<td>$15</td>
<td>$15</td>
</tr>
<tr>
<td>Tucson AMA</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>9</td>
</tr>
</tbody>
</table>
NOTES:

1) Long-Term Municipal and Industrial (M&I) Subcontract include those users that hold a M&I subcontract.
2) Non-Subcontract includes M&I users that are taking water under an agreement other than a subcontract and may also be referred to as "Excess" water. It is administered according to CAP’s Access to Excess policy.
3) Recharge includes the Arizona Water Banking Authority, CAGRD, BOR and M&I subcontract holders and other Arizona entities who have valid Arizona Department of Water Resources water storage permits and accrue long-term storage credits. It is administered according to CAP’s Access to Excess policy.
4) The AWBA Interstate Recharge rate is currently not published (n.p.) and will be provided upon request as there is not any anticipation of water available for this class.
5) Federal water may also be referred to as "Indian" water.
6) Rate is the Pumping Energy Rate 1 component. Incentives may be earned for meeting delivery goals in three areas. Any incentives earned are applied to Settlement Pool deliveries.
7) For M&I subcontract water, the Capital Charge is paid on full allocation regardless of amount delivered and not included in delivery rates.
8) Fixed O&M costs divided by projected total water volumes plus components to fund capital replacements and a rate stabilization reserve. This amount is collected on all ordered water whether delivered or not.
9) The energy rate applies to all actual water volumes as opposed to scheduled. The calculation is pumping energy costs divided by projected volumes.
10) The rate is based upon the tax levy for the previous elapsed tax year divided by the average water deliveries (excluding Federal deliveries and water storage credits) for the three previous completed delivery years (e.g., for 2012, the tax equivalency is the levy for the 2010-2011 tax year divided by the average water deliveries for 2008, 2009 and 2010). This rate is currently not published (n.p.) and is available upon request, although it is not anticipated there will be water available for this class.
11) Underground Water Storage O&M is paid by all direct recharge customers using CAP recharge sites.
12) Underground Water Storage Capital Charge is paid by all direct recharge customers except AWBA for M&I firming, the CAGRD, municipal providers within the CAP service area and co-owners of CAWCD recharge facilities using no more than their share of capacity.
AGENDA ITEM:

Consideration of Action to Approve the Preliminary Rate Schedule for 2015-2020

RECOMMENDATION:
The Finance, Audit and Power Committee recommends that the Board approve the attached Preliminary 2015-2020 Water Rate Schedule.

FINANCIAL IMPLICATIONS:

Impact on Budget: Water rates will account for approximately 62% of General Fund revenues in 2015.

Impact on Reserves: Reserves are expected to fall below target during this rate cycle and subsequently trend up to the strategic target. Water rates are designed to cover costs. The Ag Consideration and Ag Incentive Program are funded first by property taxes ($0.06 of the $0.10 ad valorem property tax) and any shortfall is covered by reserves.

Impact on Rates: N/A

LINKAGE TO STRATEGIC PLAN, POLICY, STATUTE OR GUIDING PRINCIPLE:

2010 CAWCD Strategic Plan

- Finance: Maintaining CAP's Financial Health

PREVIOUS BOARD ACTION/ACTIVITY:

- June 2, 2011 - The Board issued a revised Water Rate Schedule to introduce a new Fixed OM&R rate stabilization component beginning in 2012.
- June 6, 2013 - The Board approved the Final 2014-2015 Water Rate Schedule
- November 7, 2013 - The Board approved the 2014-2015 Budget
- March 20, 2014 – Staff presented a preview of 2015 water rates and the 2014-15 rate setting process to the Finance, Audit & Power Committee
- April 3, 2014 - The Board established a revised Discretionary Reserve Strategy
- April 10, 2014 - A customer workshop took place
- April 17, 2014 – The Finance, Audit & Power Committee recommended that the Board approve the Preliminary 2015-2020 Water Rate Schedule.

ISSUE SUMMARY/DESCRIPTION:

As provided in the District’s rate setting policy, staff has developed a preliminary water rate schedule and analysis that identifies firm rates for 2015, provisional rates for 2016 and advisory rates for 2017 through 2020. The CAWCD policy provides for publication of preliminary rates in March, a customer workshop in mid-April, review and development of a recommendation at the April Finance, Audit and Power Committee meeting, adoption of preliminary rates at the May Board meeting and approval of a final water rate schedule in June.
The proposed rates are developed as part of a detailed 10-year financial planning model that is based on previous work done during the 2014-2015 budget cycle. The planning model considers water deliveries, fixed O&M expenses, electricity costs, capital replacements, revenue requirements, property taxes, discretionary reserve levels and other concerns or situations that have potential impact on the District.

During this planning cycle, the Elliot D. Pollack Co. was retained to assist in developing property tax valuation estimates for the next few years. Based on this work, the financial planning model and the recommended preliminary rates assume that tax rates for the general ad valorem tax and the water storage tax will remain at 10 cents per $100 of assessed valuation and 4 cents per $100 of assessed valuation, respectively. The general ad valorem tax has 6 cents available toward water delivery programs and 4 cents dedicated to a separate extraordinary cost reserve which is assumed to not be utilized during this rate setting period.

Discretionary reserves remain below the established target level of $221 million through 2019 and are expected to be about at target in 2020. The reserve forecast anticipates the influx of approximately $10 million per year in back capital charges and interest resulting from the allocation of a portion of the 46,629 AF of Non-Indian Agricultural (NIA) water in 2016-2020.

**Capital Charges**

Aside from the sale of a portion of Navajo Surplus sold to Salt River Project beginning in 2012, sales of remaining Navajo Surplus are not anticipated to generate much in net revenues to the Basin Development Fund during this rate cycle. In addition, ongoing general *ad valorem* property tax revenues are expected to be committed to funding the Ag Consideration and Ag Incentive Program through 2018 and there are not any excess reserves. Consequently, reliance on the M&I Capital Charge during this rate cycle to fulfill its sole purpose of contributing to repayment has become more critical. It is recommended that the M&I Capital Charge increase slightly over the rate cycle to avoid further erosion in reserves.


**Fixed OM&R Costs**

For 2015, the District’s annual Fixed O&M cost is estimated to be $88.3 million and the estimated annual billed volume is approximately 1.59 million acre-feet (MAF), which yields a rate component of $56 per acre-foot, which is $1 per acre-foot less than in the advisory rates in the previous rate cycle. In addition, an amount is included in the Fixed OM&R rate to fund capital replacements (“Big R”). For 2015 this amount has been set at $24 per acre-foot, the same as the advisory rate. The rate stabilization rate remains at $2/acre-foot. In total, the proposed Fixed OM&R provisional rate for 2015 of $82 per acre-foot is one dollar lower than the advisory rate in the previous rate cycle.

For 2016, the District’s annual Fixed O&M cost is estimated to be $92.9 million and the estimated annual billed volume is expected to be approximately 1.59 million acre-feet (MAF), which yields a rate component of $59 per acre-foot. For 2016 the “Big R” component has been set at $24 per acre-foot. The rate stabilization rate remains at $2/acre-foot. The total proposed Fixed OM&R provisional rate for 2016 is $85 per acre-foot.
### Fixed O&M Rate Component

- **2015 Firm**
  - \[\text{Fixed O&M Rate Component} = \frac{88.3 \text{ million}}{1.59 \text{ million acre-feet}}\]
  - Capital Replacement Component = \$24 per acre-foot
  - Rate Stabilization Component = \$2 per acre-foot
  - Total = \$82 per acre-foot

- **2016 Provisional**
  - \[\text{Fixed O&M Rate Component} = \frac{92.9 \text{ million}}{1.59 \text{ million acre-feet}}\]
  - Capital Replacement Component = \$24 per acre-foot
  - Rate Stabilization Component = \$2 per acre-foot
  - Total = \$85 per acre-foot

The projected delivery volumes for 2015 and 2016 assume normal conditions on the Colorado River.

### Energy Costs

The costs of generation of NGS are rising primarily as the result of fuel costs, capital expenditures, planned maintenance and certain regulatory costs. The energy cost projections for this rate cycle assume The Working Group (TWG) recommendations are successful and incorporates those conditions, including shutting one unit down by the end of 2019 and compliance with MATS. Coal and lease extensions are bonded and impact rates beginning in 2019. There are no carbon tax, cap-and-trade costs or NOx spending beyond the low-NOx burners already installed. There are also no shaping or displacement revenues assumed in the rate period.

The total estimated pumping energy spending is \$116.4 million in 2015 and \$119.1 million in 2016. Total deliveries are estimated to be 1.57 million acre-feet each year, which yields proposed energy rates of \$75 per acre-foot for 2015 and \$76 per acre-foot for 2016. The advisory rates in the previous rate cycle was \$74 for 2015.

### Agricultural Pool Delivery Rates

On December 5, 2002, the Board approved the Supplemental Policy for Marketing of Excess Water for Non-Indian Agricultural Use - 2004 through 2030. This policy provides for a single 400,000 acre-foot agricultural pool beginning in 2004, declining to 225,000 acre-feet over time and ending in 2030. The delivery rate is the Pumping Energy Rate 1 component.

During 2006, 2007 and early 2008, CAWCD held a number of discussions with its Agricultural Pool customers about concerns those customers had about the affordability of Agricultural Pool water priced at Energy Rate 1. For 2008, the Board kept the year-over-year increase in Energy Rate 1 to \$1 per acre-foot by applying additional SO2 credit proceeds, which reduced the rate for all Energy Rate 1 customers. The Board instructed staff to identify other alternatives to keep Ag Pool water affordable in order to take all available water off the Colorado River.

In 2009 the Board adopted an Ag Incentive Program that would provide incentives to Agricultural Pool customers that meet their goals for Ag Pool water, Groundwater Savings Facility (GSF) water and the CAP Recovery program. Incentives are earned by meeting goals in each of the three areas outlined above. However, the incentives earned will only be applied to Ag Pool deliveries. The Ag Incentive Program is funded through general ad valorem property taxes (when available) and reserves.
When it was originally implemented in 2009, it was anticipated that Ag Pool customers who meet all three goals would be able to limit their Ag Pool water rate increases to as little as $2 per acre-foot per year. The $2 per acre-foot per year ceiling achievable by meeting all three goals had been retained through the 2013 set rates. As the costs of power significantly increased beginning in mid-2012, staff engaged the Board in discussions on the energy related components for years 2012 and 2013 and that there would be a large reconciliation required. Consequently, after several meetings and engaging customers and Board members, the Board adopted revised rates for 2014 and modified the Ag incentive Program to allow increases at $4/year.

The 2015-2020 rates also recommend keeping the $4 per acre-foot per year ceiling for Ag Pool participants who meet all three goals. The recommended incentives are shown below.

<table>
<thead>
<tr>
<th></th>
<th>2015 Firm</th>
<th>2016 Provisional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ag Settlement Pool Incentive ($/af)</td>
<td>($18)</td>
<td>($15)</td>
</tr>
<tr>
<td>GSF Incentive ($/af)</td>
<td>(2)</td>
<td>(2)</td>
</tr>
<tr>
<td>Recovery Incentive ($/af)</td>
<td>(2)</td>
<td>(2)</td>
</tr>
<tr>
<td>Full Incentive ($/af)</td>
<td>($22)</td>
<td>($19)</td>
</tr>
</tbody>
</table>

2015 Firm 2016 Provisional
Agricultural Pool Rate with incentives = Energy Rate 1 = $53 per acre-foot
Agricultural Pool Rate with incentives = Energy Rate 1 = $57 per acre-foot

**Underground Storage O&M**
Under the policy adopted by the Board in 2003, Underground Storage O&M rates are calculated annually using a 10-year look-ahead forecast of costs by AMA. This methodology is intended to smooth Underground Storage O&M rates, which otherwise might fluctuate considerably since costs are fairly fixed, but volumes can change significantly from year to year. The proposed Underground Storage O&M rates are $9 per acre-foot for the Phoenix AMA in 2015, $10 per acre-foot in 2016. Proposed Underground Storage O&M rates for the Tucson AMA for the entire rate-setting period is $15 per acre-foot.

<table>
<thead>
<tr>
<th>2015 Firm</th>
<th>2016 Provisional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recharge O&amp;M (Phoenix AMA) = $9 per a-f</td>
<td>Recharge O&amp;M (Phoenix AMA) = $10 per a-f</td>
</tr>
<tr>
<td>Recharge O&amp;M (Tucson AMA) = $15 per a-f</td>
<td>Recharge O&amp;M (Tucson AMA) = $15 per a-f</td>
</tr>
</tbody>
</table>

**Underground Storage Capital Charges**
An Underground Water Storage capital charge is paid by all direct recharge customers except AWBA for M&I firming, the CAGRD, municipal providers within the CAP service area and co-owners of CAWCD recharge facilities using no more than their share of capacity. The proposed Underground Water Storage Capital Charge is $15 per acre-foot for the Phoenix AMA and $9 per acre-foot for the Tucson AMA for the entire rate-setting period.
<table>
<thead>
<tr>
<th>2015 Firm</th>
<th>2016 Provisional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underground Storage Capital Charge (Phoenix AMA) = $15 per acre-foot</td>
<td>Underground Storage Capital Charge (Phoenix AMA) = $15 per acre-foot</td>
</tr>
<tr>
<td>Underground Storage Capital Charge (Tucson AMA) = $9 per acre-foot</td>
<td>Underground Storage Capital Charge (Tucson AMA) = $9 per acre-foot</td>
</tr>
</tbody>
</table>

The Preliminary 2015-2020 Water Rate Schedule is attached for additional detail.

**SUGGESTED MOTION:**
I move that the Board approve the Preliminary 2015-2020 Water Rate Schedule.

Attachment.