

**Metropolitan Domestic Water Improvement District
Board of Directors Meeting**

July 13, 2015

**Approval of Well Testing License Agreement
with BKW Farms, Inc.**

Synopsis

The Board of Directors is requested to approve a well testing license agreement with BKW Farms, Inc. to gain water quality and aquifer productivity information necessary for the District to permit for one or more recovery wells for its CAP Water Recharge, Recovery and Delivery System.

Background

Through the efforts of the Central Arizona Water Conservation District, BKW Farms, and the District, the Avra Valley Recharge Project (AVRP) became operational in July 1996. AVRP is permitted to annually store up to 11,000 acre-feet. The District has recharged 38,044 acre-feet of CAP water from July 1996 through 2014 at AVRP. In December 2010, the District purchased AVRP from CAP.

The District and BKW Farms executed in late 2010 a water transportation and non-exclusive easement agreement. The water transportation agreement allows the District's CAP water to be wheeled by BKW Farms from the CAP canal to AVRP through BKW Farms irrigation canal. This agreement was based on the previous agreement between the CAWCD and BKW Farms under CAP's ownership of AVRP. The non-exclusive easement agreement is a duplicate of the past agreement between CAWCD and BKW Farms. The purpose of the easement agreement is to allow District staff or its subcontractors to cross BKW Farms property to gain access to AVRP.

Issues

In planning the CAP Recharge, Recovery and Delivery System, District staff identified that BKW Farms had wells located strategically within one mile of AVRP and two groundwater savings facilities that the District leverages to store CAP water. These high production irrigation wells were drilled in the 1950s and pumped at 2,500 to 3,000 gallons per minute. However, test data are not available for the wells to determine the aquifer's productivity. Staff included \$66,500 in the Fiscal Year 2016 budget to test the productivity and water quality of one of the BKW Farm wells. This information would be used for well permitting of new recovery wells and future design and costing of pumps for replacement wells.

The productivity data will help the District analyze the health of the aquifer and how many recovery wells need to be budgeted. The higher the productivity, the fewer recovery wells may be required to meet the District's delivery needs. For example, a 3,000 gallon per minute well would produce 4,800 acre-feet of water per year, which is approximately equal to the District's blending needs. However, one backup well of similar capacity would be needed. If the recovery well pumped at 1,500 gallons per minute, then annual production would equal 2,400 acre-feet; and therefore, a total of at least three wells would be needed to have redundancy.

The license agreement with BKW Farms grants the District the right to remove the existing pump equipment, and brush and bail the well prior to conducting a 48 to 72 hour aquifer test at BKW Farms Well No. 8. The brushing and bailing is needed because the well has not been pumped for at least 18 years. A temporary pump is required since the existing BKW Farms pump no longer operates. The license also grants the District the right to measure water levels monthly after the test until December 31, 2020. The District has also agreed to install a secure cover over the wellhead to protect the well from vandalism and contamination.

BKW Farms is not requesting any monetary fee from the District for the use of the well but rather the District will provide copies of the productivity, water quality data and consultant reports. Minimal site restoration is expected after the test since the pumping equipment will be removed by the contractor.

Legal Counsel has reviewed the license agreement.

Staff Recommendation

Staff believes the well testing license agreement is of benefit to the District and is an important part of the preparation for the CAP Recharge, Recovery and Delivery System. It is recommended that the Board of Directors approve the well testing license agreement between the District and BKW Farms.

Suggested Motion

I move to approve the well testing license agreement between BKW Farms and the Metropolitan Domestic Water Improvement District and authorize the Board Chair to sign the agreement.

Respectfully submitted,

Joseph Olsen, P.E.
General Manager