

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

July 13, 2015

CMID Effluent Delivery Project Update

Synopsis

The Board of Directors is requested to discuss with staff the District's efforts to deliver its effluent to the Cortaro-Marana Irrigation District.

Background

The District is entitled annually to about 2,200 acre-feet of treated effluent through an Intergovernmental Agreement with the City of Tucson. Staff has been working with Cortaro-Marana Irrigation District (CMID), Pima County Regional Wastewater Reclamation Department, and the Bureau of Reclamation to reactivate a CMID gravity flow pipeline that historically carried treated effluent north from the Tres Rios Water Reclamation Facility (formerly Ina Road Wastewater Treatment Facility) to CMID's canal east of I-10.

The District became interested in using CMID's effluent pipeline to earn 100% recharge credits on the District's effluent supply. The District successfully documented to ADWR that the District's effluent was never stored at CMID's Groundwater Savings Facility (GSF) when Pima County delivered effluent to CMID. Thus, ADWR amended the District's water storage permit at CMID's GSF to include effluent storage and earn recharge credits.

CMID and the District executed an effluent storage agreement that provides the District with exclusive access to any of CMID's pipeline capacity. Subsequently, the Bureau of Reclamation expressed interest in participating in the reactivation project so that Reclamation's effluent from the Southern Arizona Water Rights Settlement Act can be utilized by CMID.

CMID Pipeline and Status

CMID owns an effluent delivery pipeline on CMID property. The effluent delivery system was constructed in two parts. A south section located at the Tres Rios Wastewater Reclamation Facility (south of Ina Road) was constructed by Pima County on County land to replace an earlier CMID irrigation canal that needed to be relocated by Pima County for an expansion of the Ina Road Landfill. CMID owns land north of Ina Road for its pipeline joining to CMID's canal.

The south pipeline where CMID was granted an easement by Pima County has been disconnected and repurposed by the construction for the Tres Rios Water Reclamation Facility. The effluent

holding pond and the irrigation canal feeding the pond are now used by Pima County Regional Water Reclamation Department for capturing storm water.

The District obtained from Pima County Regional Water Reclamation Department a new easement for a pump and replacement pipeline to connect to CMID's pipeline. Given that CMID's pipeline has not been used in 18 years, the District, Bureau of Reclamation, and CMID worked with Pima County Regional Water Reclamation Department to conduct a week long flow test in June by renting a pump and surface pipeline to connect to CMID's pipeline. The flow test of approximately 1,000 gallons per minute found little leakage in CMID's pipeline and the pipeline's structural integrity was sound. Pima County provided the treated wastewater for the flow test.

IGA Status

The District, CMID, Bureau of Reclamation, and Pima County Regional Wastewater Reclamation Department have been working on an Intergovernmental Agreement (IGA) for constructing and operating a temporary pump and pipeline to connect to CMID's pipeline. A meeting is scheduled for July 10, 2015 to complete the draft IGA. The IGA divides the construction costs and the 1,920 to 2,200 acre-foot capacity by 50/50 between the District and Bureau of Reclamation. CMID under the IGA will be the operator and responsible for maintenance costs (pump, electricity). The Bureau and the District are responsible for replacement or repairs to the infrastructure. The District will own the constructed infrastructure because federal rules prevent the Bureau of Reclamation from owning the infrastructure. However, the Bureau of Reclamation will be financially responsible for half of any removal and site restoration costs if the project is terminated. The IGA allows Pima County to be a future participant if they choose to purchase up to one-third capacity in the project.

ADOT Activities

Staff has been also pursuing to execute the IGA as soon as possible because the Arizona Department of Transportation (ADOT) will begin widening I-10 at Ina Road in 2016. CMID, the District, and Bureau of Reclamation are attending the utility design and coordination meetings to keep abreast of ADOT's plans and advise ADOT on the project's impacts to CMID, the District and Bureau of Reclamation's project. The parties desire to have the temporary pump and pipeline operational in 2016 so ADOT's construction activities do not prevent future effluent deliveries to CMID.

Reuse Permit

Prior to the flow test in June, the District, Bureau of Reclamation and CMID sought a reclaimed water reuse permit from the Arizona Department of Environment Quality (ADEQ). ADEQ informed the District that the reclaimed water from the Tres Rios Water Reclamation Facility was Class B+ and not eligible for use on agricultural crops for human consumption but Class A was acceptable for human consumption crops. The District and Bureau of Reclamation learned that a few farmers in the Cortaro-Marana Irrigation District grow wheat and pumpkins, which are deemed by ADEQ as for human consumption.

The District, CMID, and Bureau of Reclamation met with Pima County Regional Wastewater Reclamation Department about whether Pima County was pursuing dual permitting of Class B+ and Class A reclaimed water. Pima County had previously presented a proposal to ADEQ on a reclaimed water user who sought an Aquifer Protection Permit to use Pima County's effluent as Class A whereby the user installed a settling tank to act as a treatment facility. Pima County agreed to meet with ADEQ and first see if ADEQ would support a permit modification by Pima County for the Tres Rios Wastewater Reclamation Facility for both classes of reclaimed water. Pima County received a positive response from ADEQ and Pima County Regional Wastewater Reclamation Department staff will be submitting a modification application in mid July 2015. ADEQ's review of the application could take 6 months before a modification is granted.

Surplus Recharge Credits

Staff has been working with an interested purchaser for a portion of the additional credits that will be earned by the District. A draft agreement will be scheduled for the Board of Directors consideration at the August meeting.

Next Steps

The Bureau of Reclamation will complete the design work on the infrastructure. The District will develop a bid package and purchase reclaimed water signs for CMID to post. CMID will coordinate with Tucson Electric Power on delivering power to the proposed pump. Effluent cannot be delivered through the interconnect to CMID until ADEQ issues Pima County a permit modification to Tres Rios Water Reclamation Facility

Conclusions

The District has been proactive in working with CMID, Bureau of Reclamation, and Pima County Regional Wastewater Reclamation Department to effectively utilize the District's effluent and obtain 100% of the credits. Unfortunately, the success of this effort involves multiple parties and regulatory hurdles, which has delayed the District from quickly earning additional recharge credits.

Staff will make a short presentation regarding these issues related to the status of the CMID Effluent Delivery Project. No formal action is necessary. The Board is requested to discuss with staff the District's efforts with this project.

Respectfully submitted,

I concur with the report.

Respectfully submitted,

Warren Tenney
Assistant General Manager

Joseph Olsen, P.E.
General Manager