

Nation's Largest Reuse Project Could Benefit Three States

By **Deven Upadhyay**

A wastewater purification facility not far from downtown Los Angeles might someday play a role in bringing water use in the Colorado River into balance.

“Augmentation” has long been part of the portfolio of ideas for a river facing more demand than its declining supply. Traditionally, the ideas have involved supply development near the river. Yet recycling more wastewater in the heart of Southern California could translate into more Colorado River water for communities in Nevada and Arizona.

This is a unique and exciting opportunity that reflects the kind of creativity needed to both increase supplies and draw down demands on a river widely predicted to face some of the most dramatic effects of climate change in the world.

My agency, the Metropolitan Water District of Southern California, has imported water from the Colorado River since 1941 and Northern California via the State Water Project since the 1970s. We are not in the business of treating wastewater. But as the regional water planner for a

six-county service area with more than 19 million people, we are looking for opportunities to develop new local supplies and to shore up the reliability of our imported sources. These two goals may very well be linked.

The Los Angeles County Sanitation Districts (LACSD) has long owned and operated one of the nation’s largest wastewater facilities, which treats the wastewater and sends it to the Pacific Ocean. Recycling this wastewater for local use has been on the drawing board for some time, but these sanitation districts don’t have the major water delivery infrastructure that could manage this new supply. We do.

For decades Metropolitan has helped underwrite new local supply projects developed by other water agencies, yet never developed one of its own. Now, through a partnership with LACSD, we are considering doing just that. The potential water purification facility could be the largest in the nation, providing water for industrial use, groundwater recharge, and ultimately direct potable reuse.

At full scale, the project could annually produce about 168,000 ac-ft of water,

roughly enough for 500,000 Southern California households. The price of this new supply — estimated to be in the range of \$1,800 per ac-ft — is quite competitive for urban water districts looking for new options.

Metropolitan’s 38-member Board of Directors recently approved starting the environmental planning for the project; a key step before a construction decision. Two new potential partners on the Colorado River are ready to explore investing in a portion of the project — Southern Nevada Water Authority (SNWA), which serves the greater Las Vegas area, and the state of Arizona in concert with the Central Arizona Project (which serves Phoenix and Tucson). SNWA signed an agreement with Metropolitan to help fund the environmental planning, and Arizona has also signed a letter of intent. Together, these arrangements allow the parties to explore a potential long-term partnership.

The potential partnership is straightforward. Metropolitan would build the project and utilize the recycled water supply in Southern California. Then Metropolitan would leave a portion of its Colorado River supply behind in Lake Mead. The Arizona and Southern Nevada investors would draw on the water left in Lake Mead by Metropolitan based on their level of investment. Through this exchange of water, three western states would directly benefit from this new supply in Southern California.

Much remains to be worked out for this concept to happen. However, this kind of partnership could be part of a future that helps bring the currently over-subscribed Colorado River back into balance.

No single initiative will solve the Colorado River’s future challenges, but the spirit of partnership we have with our neighboring states on this recycling program shows a willingness to embrace new ideas to find a solution. 

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