

## **Merced Groundwater A Crucial Issue For All: Continued Cooperation Needed To Address Challenges**

**By John Sweigard**

General Manager

Merced Irrigation District

It is appropriate the local media has begun a discussion on groundwater. It is among the most important issues facing our community – from farmers to city residents. It is also an issue the state is eyeing closely and which Merced Irrigation District is directly involved.

Eastern Merced County is not facing an immediate crisis. But we do we have challenges that must be addressed.

We must begin with an honest accounting of the facts. That means asking tough questions, working collaboratively and adopting proactive solutions.

For years, MID and other local agencies have been doing just that. Following the drought in the late 1980s and early '90s, the city of Merced and MID collaborated on the Merced Water Supply Plan study. As a result, the district completed numerous water use and delivery improvements benefitting groundwater. In 1997, local groundwater purveyors organized under the umbrella of MAGPI (Merced Area Groundwater Pool Interests) and began monitoring groundwater conditions. The group also generated a groundwater management plan in 1998, updated in 2008. The plan addressed groundwater issues and made recommendations for use and recharge. They are being used today.

More recently, basin stakeholders – including MID, and the city and county of Merced – collaborated over two years to generate the Integrated Regional Water Management Plan to addresses groundwater sustainability and recharge among other issues.

The Eastern Merced aquifer spans approximately 500,000 acres, bound by the Merced River to the north, the Chowchilla River to the south, the San Joaquin River to the west and foothills to the east. MID's boundaries have approximately 160,000 acres in that area, with 100,000 using surface water diverted from Lake McClure.

Simply put, there are a lot of straws in the ground. In the past decade, MID has pumped 312,000 acre feet of groundwater for growers. In that time, groundwater pumping for drinking and residential landscaping accounts for 450,000 acre feet. Pointing fingers and fictionalizing a villain does nothing to create another drop of water. We all have unique needs and challenges and must work together.

MID is proud to operate as a conjunctive-use irrigation district. Simply put, MID generally uses surface water from Lake McClure. When that water is unavailable – such as during droughts – MID relies on groundwater.

In most years, MID helps recharge the groundwater upward of 100,000 acre feet in eastern Merced County through percolation from its 700 miles of open channels. An additional 60,000 acre feet is typically left in the ground as a result of Merced ID practices. This has benefited both MID and others outside boundaries. In fact, it's equal to diverting Lake Yosemite into the aquifer 20 times each year.

Over the past decade, MID's efforts have resulted in a net positive balance of 1.3 million acre feet of groundwater recharge. This recharge is the equivalent of directing 130 percent of Lake McClure into the region's groundwater.

In typical years, MID pumps approximately 5,000 acre feet to meet the needs of growers who are within the district but without access to canal water. For MID, pumping groundwater requires running expensive pumps. On the other hand, canals carrying surface water depend on nothing more than gravity. Not only is decreasing groundwater pumping the right thing to do, it makes good business sense for the district.

MID has pumped groundwater during the past couple drought years. This water has been sold to MID growers: not a drop has gone outside the district. This season, the district expects to pump upward of 50,000 acre feet to assist growers in this third critical dry year. However, percolation from our canals will result in roughly 50,000 acre feet of recharge as water flows from Lake McClure.

Is land subsidence a problem from groundwater pumping? Within Merced ID boundaries, groundwater levels have fallen about 50 feet in the past 50 or 60 years. This raises concerns and should be addressed. But unlike other parts of the San Joaquin Valley, we are not yet facing a crisis. The overdraft concerns that have been raised – and subsidence issues – tend to be on the west side of the Valley along the San Joaquin River, outside Merced ID's boundary. These areas lack surface water supplies and depend more on pumping.

Does MID sell water outside the district? Absolutely – it's prudent water management, and it's no secret.

However, that water is from Lake McClure. The vast majority of sales have been to state and federal agencies for environmental benefits for fisheries, wildlife refuges and in-stream temperature and water quality. As a public agency, MID does not earn profits, nor pay investor dividends; our employees have no financial stake. The revenues are used to maintain affordable rates for MID growers, fend off legal challenges to water rights and improve our aging infrastructure. The sales have resulted in more recycling, more recharge and increased re-use of our water.

MID is developing a long-range resource management plan. As part of that plan, the question of raising local water rates or continuing water sales – or some combination – will be part of a public dialogue.

In the meantime, MID remains extremely proud of how it addresses groundwater challenges in Eastern Merced County. Including:

- Operating direct groundwater recharge basins.
- Maintaining unlined sections of canals to allow aquifer recharge every year.
- Programs to incentivize growers to take MID's surface water from Lake McClure, rather than pumping groundwater.
- Consolidating El Nido Irrigation District to help decrease groundwater pumping in western Merced County.

MID intends to continue working with community partners. We will do everything possible to protect our water rights and ensure a healthy water supply for our growers. We'll also use the best possible practices to address the region's groundwater challenges.

However, it is going to take a community effort; MID cannot go it alone. To have an honest conversation about the work ahead, we must begin with an open and honest airing of the facts – as well as a willingness to continue collaborating on solutions.

*Sweigard is the general manager of Merced Irrigation District*