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Merced County's groundwater gets clean bill of health -- for the most part

A few wells around Stanislaus, Merced counties are high in some contaminants.

By JONAH OWEN LAMB
jlamb@mercedsun-star.com

Despite a few well-known groundwater pollution sites across Merced County -- Hilmar Cheese Co., Foster Farms and Merck & Co.'s Beachwood facility -- a new two-county study found that overall, most of the water that comes out of the ground in Merced and Stanislaus counties is clean and safe to drink.

"The groundwater quality is generally good," said Matthew Landon about the area. Landon, who was the chief author of the U.S. Geological Survey study released Tuesday, said both counties have groundwater contamination levels that are "fairly typical."

The study is part of the 10-year, statewide Groundwater Ambient Monitoring and Assessment program, which was set in motion by 2001 legislation mandating an analysis of the health of the state's aquifers. The study is a collaboration between USGS, the California State Water Resources Control Board and the Lawrence Livermore National Laboratory.

While the study of Merced and Stanislaus counties was mostly positive, it did find that nearly one out of five water samples tested contained compounds that made the water unsafe to drink.

The study, which monitored 78 wells across the east side of Stanislaus and Merced counties in 2006, found that 18 percent of the samples had arsenic, nitrate or vanadium -- all inorganic compounds -- in levels unsafe to drink. These compounds, found mostly near the bottom of the Valley, most often occur naturally in the soil.

The only exception is nitrate, which is present here mainly because of human activity. Manure and fertilizers are the two main causes of nitrate contamination in the aquifer, Landon said.

But, added Landon, nitrates aren't one of the main compounds to worry about in the area. "The occurrence of nitrates in the raw groundwater in the portion of the aquifer used for drinking water supply were much less than arsenic," he said.

Two wells in Merced County had nitrate above drinking-water standards, said Landon. Both were in or near Atwater.

The study also found that a much smaller percentage of the region's groundwater is contaminated by man-made substances, such as fumigants used to kill bugs in the soil and solvents used for industrial cleaning.

Only 1.2 percent of the study area had such compounds in levels unsafe for drinking.

DBCP, a fumigant outlawed in 1977, was found in areas of Merced County that had or have orchards and vineyards. The compound was found in low levels near Atwater and Livingston. Only three samples in the county tested above the safety levels. All were in that area.

PCE, a solvent often associated with dry cleaning, was only found in unsafe levels in 0.2 percent of the samples across the two counties. All the wells that tested above safety levels were in Modesto. Only low levels were found in the samples in the cities of Merced and Atwater.

Mike Wegley, Merced's director of water resources and reclamation, said there are contaminants such as nitrates in at least one of the city's wells near Golden Valley High School. But that water is mixed with other water until it meets regulatory standards.

The city of Merced, like all water providers, must deliver water to its customers that meets state and federal regulations, said Wegley.

But when it comes to the many private wells across the county, said Wegley, there is little testing.

Since 1975 Merced County has issued roughly 16,000 well permits. In the last three years, 578 such permits were issues for drinking wells, according to the county.

Reporter Jonah Owen Lamb can be reached at (209) 385-2484 or jlamb@mercedsun-star.com.