

That corridor is heavily used by Jurupa motorists who want to connect to Interstate 10 by taking Sierra Avenue into Fontana, and by Fontana motorists who are looking for a shortcut to Highway 60.

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***Drugs add to concern for community's water***

**CHERRY VALLEY:** A study last year focused on nitrates but also found six pharmaceuticals.

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**By JENNIFER BOWLES and ERIN WALDNER**  
**The Press-Enterprise**

Traces of pain relievers and hormones, including one known to feminize male fish, are lurking in the water below Cherry Valley -- a rural Inland foothill community where debate has raged over whether to ban septic tanks and force people to hook up to a costly sewer system.

A study that examined whether harmful nitrates already in groundwater serving roughly 100,000 residents in Cherry Valley, Beaumont, southeastern Calimesa and nearby areas was coming from septic-tank leach fields also tested for pharmaceuticals and personal care products.

The findings of pharmaceuticals and a certain kind of nitrate, which indicates the presence of human waste, "conclusively shows that the septic tanks are causing the degradation," said Mark Wildermuth, president of Wildermuth Environmental Inc., which conducted the study last year.

The larger issues of pharmaceuticals discovered in the nation's drinking supply was reported in an Associated Press investigation last week. Little is known about their effect on human health. No state or federal rules require water districts to test for them or to treat them.

Following publication of the AP report last week, Sen. Barbara Boxer, D-Calif., and Sen. Frank R. Lautenberg, D-New Jersey, said they would hold a hearing, likely in early April, to determine what can be done. The two sent a letter Tuesday to the U.S. Environmental Protection Agency demanding to know by April 4 how the agency plans to respond to pharmaceutical pollution.

Agency officials, in a statement issued last week, said they continue to evaluate the effect on public health and aquatic life from trace amounts of pharmaceuticals that have been found in rivers and other drinking-water sources. And Monday, government and pharmaceutical industry officials launched an initiative to tell Americans they should crush medicines in sealed plastic bags and throw them into the trash rather than flush them down the toilet.

Most processes that treat sewage water do not filter out pharmaceuticals.

### **Wells Tested**

Inland water agencies are launching their own effort to assess the presence of pharmaceuticals. An ongoing U.S. Geological Survey study showed that caffeine and acetaminophen had been detected in trace amounts in one-fifth of the 99 wells tested in the two-county Inland area from Chino to Hemet to Corona.

Daniel Schlenk, an aquatic toxicologist and UC Riverside professor, said the concern is less from consuming trace amounts of an individual drug.

"The big question mark is what if you take them all together," he said.

Schlenk said the Cherry Valley levels appear very low. Only one was at a level higher than what is known to cause male fish to produce an egg yolk protein that is made naturally by females, he said.

That chemical, estradiol, was detected at 1.8 parts per trillion in one Cherry Valley well; and 1.4 parts per trillion in another. In rainbow trout, Schlenk's study found that a level of 1.0 part per trillion caused the fish to feminize. He said fish are extra sensitive and the effect in humans is unknown.

"We're not seeing a high incident of birth defects in Orange County, which has been drinking recycled water for years," he said. Much of the treated wastewater from the San Bernardino Valley and parts of western Riverside County flow down the Santa Ana River to Orange County.

### **Focus on Nitrates**

Wildermuth's study tested for 14 pharmaceuticals and personal care products. Six were detected. The hormones progesterone and testosterone were also found. Two common pain relievers, acetaminophen and ibuprofen, along with an antibiotic known as sulfamethoxazole, were also discovered.

The report's main focus was the rising level of nitrates in the water. Elevated levels have been linked to a potentially fatal oxygen deficiency known as blue baby syndrome in infants.

Chuck Butcher, general manager of the Beaumont-Cherry Valley Water District, said the water is safe "right now," stressing that only trace amounts of the pharmaceuticals were discovered.

The water district doesn't treat groundwater, according to Butcher, adding, "that's what we're looking at now; which way to approach this whole mess."

The district is considering installing a treatment on at least one well that's failing because of high nitrate levels, he said. More wells will follow.

## **To Sewer or Not**

Following the release of Wildermuth's study last year, those served by the Beaumont-Cherry Valley Water District rejected an initiative in September that would have given the district authority to furnish Cherry Valley with sewer service, provided the district received approval from the Riverside County Local Agency Formation Commission. The service would carry wastewater away from the aquifer.

The initiative, called Measure B, lost a tight vote: 47.9 percent of the district's voters supported it, 52.1 percent opposed, according to the Riverside County Registrar of Voters.

Some of those who were against it then, remain against the idea when asked about the pharmaceutical issue.

Patsy Reeley, president of Cherry Valley Acres and Neighbors, a slow-growth group frequently at odds with the water district, thinks recent reports about pharmaceuticals in groundwater have blown the situation out of proportion.

"It's such a minute amount," she said. "I don't know why they're making such a big deal out of it."

Reeley said she doesn't doubt that the researchers detected pharmaceuticals in Cherry Valley water but they could probably find it anywhere, including bottled water.

Al Chatigny, president of the district's board of directors, said Measure B was about water quality but some voters saw it as an attempt by the water district to take over Cherry Valley, where about 6,000 people live.

Reeley said she voted against it because the district was trying to put the cost of installing sewers and a treatment plant "on the backs of Cherry Valley residents."

Under Measure B, Cherry Valley property owners within the area slated for sewer service would have had to pay \$90 to \$95 a month for 20 years to cover the installation cost.

Reeley said she would support putting sewers in Cherry Valley if the county paid for it.

She and others downplayed Wildermuth's study and questioned its authenticity, so much so that Riverside County Supervisor Marion Ashley has asked regional water quality regulators to assess the report.

In a letter dated March 11, Gerard Thibault, executive officer of the Santa Ana Regional Water Quality Control Board, called Wildermuth Environmental "a well-respected engineering firm." An agency engineering geologist found the report "to be credible."

Ashley said the county already requires new, more expensive, septic tanks in Cherry Valley to filter out nitrates.

"The problem is the existing tanks are continuing to put nitrates and pharmaceuticals and God knows what else in the water," Ashley said, adding that it will be up to the community to decide what to do.

"The county can't solve it," he said.

Chatigny said he has an outline for a committee that would examine the results of the Wildermuth study and other Cherry Valley water reports and then come up with a remedy.

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## **UNuSED PILLS**

Remove unused, unneeded or expired prescription drugs from their original containers and throw them in the trash.

Mixing those drugs with coffee grounds or kitty litter and putting them in sealable bags will further ensure the drugs are not diverted.

Flush prescription drugs down the toilet only if the label or accompanying patient information specifically instructs doing so.

Take advantage of community pharmaceutical take-back programs.

Source: Office of National Drug Control Policy