

## **Red Water Calls Drop by 48%**

By Suzanne Michaels

🅸 City of Las Cruces

"Because we live in an area where iron and manganese are naturally in our water supply, historically we receive a lot

of 'red water' calls. For example, we received 432 calls between January and August 2012," says Eric Lopez, Water Resources Administrator. "During the same months in 2013, those calls dropped by 48%."

When red water calls start coming in to Utilities, the best operating practice has been to open a nearby fire hydrant and flush water through the lines, until it runs clear.

That fixes the red water problem, but it feels like water wasting, even though the water is discolored.

Over the past year and a half, Utilities has tried two different technologies to remedy the problem of red water. In areas of town where iron and manganese have settled in the pipes

over many years, Utilities worked with NO-DES, a company that runs water between two fire hydrants at a very high velocity through very fine filters to filter out the iron and manganese. A very effective, but expensive process. (Utilities is still weighing the possibility of leasing or purchasing the NO-DES equipment.)



parts of the city.

Another reason for red water: In winter months when the city's water usage drops by almost half (since no landscape is being watered), Utilities reduces the number of city wells used on a regular basis. Then, in the spring, as the demand increases, Utilities ramps up all wells, to meet the requirements of water consumption increase by the community.

The change in demand of water through the pipes changes the water velocity, and then the minerals that have settled in pipes become apparent when water flow out of taps in some

The cause of red water: "Although the City Utility is not required by law to chlorinate, we do," says Lopez. "It assures our community that we do not have coliform bacteria issues within the aquifer or water distribution system. Even a tiny amount of chlorine causes the iron and manganese to drop out of solution in the water, turning it red."

However, Lopez explains, "In September 2012, we tweaked the amount of phosphate we add to the water to keep the minerals in solution, and that has resulted in a dramatic reduction in red water incidents, lowering the number of calls by 48%, thereby reducing the number of hydrant flushes... and has saved more than 3,000,000 (three million) gallons of water from January to August of 2013."

You can reach Las Cruces Utilities at 528-3511 from 8 a.m.-5 p.m. Monday-Friday. Las Cruces Utilities provides GAS – WATER – WASTEWATER – SOLID WASTE services to approximately 100,000 Las Cruces residents.

## **CAPTIONS**

Photo 1: Flushing the red water Photo 2: NO-DES filtration system