## Where is the water going to come from?

West County Corner by Don Urbanus

Being in the nursery business, I know a little bit about watering plants. Having set up several nurseries, I know something about irrigation and water use. I also have wells on my properties so I know a few things about pumping water out of the ground.

In much of the county, the only way to get water is to drill for it. Some people drill and drill and barely get anything. Some people drill too deep trying for the mother lode of wells only to get salty water or toxic levels of Boron. In parts north of Burson, there is no water at all.

Others are lucky and get a good well. It's sort of a macho thing between neighbors each one inflating the gallons their wells produce.

There is one little problem here. More and more houses are being built and wells drilled and the water table is dropping for some of these braggers. Ask any well driller what is going on with the water table. Water is going to be the new gold in these foothills some day and it may be the thing that ultimately slows growth. We hear from CCWD how this county is only using a fraction of its water rights and that there is plenty of water. There is one little problem. How do you get the water to these scattered parcels and new developments all over the county?

With thousands of new homes being proposed and built in the west part of the county, it seems that nobody is talking that much about water. But water is part of the infrastructure that needs to be developed just as much as roads and schools and everything else that goes along with development. What if wells start going dry some day? Then what?

It is with concern about water that I want to discuss the Trinitas Golf Course on Ospital Road that was built on agriculture preserve land. Forgive me if I get any facts wrong, but I understand that the 18-hole golf course is on about 70 acres of the 244 acres that the Nemee's own. Now that the course is built, the owners want to change the zoning so they can build homes, and a resort complete with a swimming pool, a clubhouse and a restaurant. Changing the zoning of agricultural land to planned development is another whole can of worms that is getting some people all riled up, especially on a skinny little road like Ospital.

I want to talk about water usage instead. We sell a lot of sod at Rising Sun Nursery in Burson. The area is growing and people want a nice lush green area to look at or play on. Sod uses a lot of water. Everyone knows that. Quite often people over water their lawns, sometimes watering them twice a day. A good rule of thumb is about 1\2" of water per watering. That might take 15 to 20 minutes depending on your sprinkling system. That can be split up to prevent runoff. Water needs will vary depending upon the

type of grass used, the sun exposure, and your soil conditions. If the soil is good and prepared properly with compost or other organic matter, you won't need to water every day. If you water deeply, you can get by with watering an established lawn about three times a week. Perhaps more, perhaps less depending on your conditions. The best way to check is to get a shovel and cut a slice out of your lawn to see what is happening.

Back to the Trinitas Golf Course, which has about 70 acres to water. If you take that formula of a  $1\2$ " of water per watering, you get a little less than a third of a gallon per square foot. Spread that over 70 acres with 43,560 sq. ft. to the acre, and one day of watering would use over 900,000 gallons of water. If you figured about a hundred irrigations a year, that is about 90 million gallons.

According to a report I read, a golf course in a hot area like ours can use about 50 to 65 inches of water per year depending on the variety of grass used. If we used a more conservative number like 48" and calculated that over 70 acres with 7.5 gallons of water per cubic foot, we get a yearly use of over 91 million gallons. Think of a lake four feet deep over 70 acres and you get a better idea of what I am talking about. Either way, the usage figures out about the same.

My question is this: Where is all the water coming from?

They reported that they irrigate the golf course from a few lakes that capture runoff and supplement with wells. Their wells are 600' deep and producing water from 300' and down. Most of the wells in our area get water anywhere from 200 to 300 feet down so even if they are tapping into the valley aquifer, it sounds as if they are also tapping into the local aquifer. I don't think the answer is to tell your neighbors to drill their wells deeper.

What will they do in a drought year when there is no runoff? What will happen to the water table when they are pumping out millions of gallons of water? Where I am, in Burson and Jenny Lind, we are definitely not pumping from any valley aquifer. If you go too deep here, you risk the danger of getting Boron toxicity. Am I missing something here?

People have a right to use their property they way they want but I don't see anything agricultural about a golf course unless they are letting horses and cows graze on the fairways, which I doubt. On the other hand, cows would be interesting obstacles. Instead of sand traps you could have cow pies and instead of "fore", you could yell "moo".

First published in the Calaveras Enterprise February 21, 2006