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## Stewards of the water

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Over and over again it has been said that the people who regulate water consumption in Kerr County don't have the right information to make their decisions. The only way to make the stronger regulations is to base the decision on accurate data.

That is why Headwaters Groundwater Conservation District President Mary Ellen Summerlin kicked off her sandals Tuesday morning and waded out to the middle of the South Fork of the Guadalupe River at Camp Mystic. Summerlin makes a trip to West Kerr County the last week of every month to collect stream flow data from there and from Wagon Wheel Crossing on the North Fork.

"We're just fleshing out what the USGS (United States Geological Service) collects," Summerlin said. The USGS monitors streamflow at five points along the Guadalupe River, all downstream of Summerlin's two collection points.

"The stream flow ought to correlate with rainfall in the Edwards Plateau, which is an unconfined aquifer," Summerlin said. "Our hope is by learning to correlate this, it will be an early warning.

"If we see the stream with a sharp decline, that would be a red flag for area wells," she said. "If it is a long decline, it would guide us to limit pumping. Right now, we don't feel we have enough science to regulate (the Edwards aquifer.)"

Geologist Feather Wilson, who is on contract to map Kerr County wells and develop a groundwater availability model for Headwaters, said the work being done by Summerlin and other volunteers is valuable on two counts. Summerlin contributes volunteer labor to the data collection, as well as learns first hand about the data on which Headwaters regulations are based.

"The next time somebody comes to me with a bunch of scientific data, I have a better idea how it's gathered," Summerlin said. "It also makes you somewhat of a critical acceptor of data."

According to Wilson, it is important for Headwaters to collect additional data about both confined and unconfined aquifers. Recharge in the Edwards aquifer occurs from rainfall, and that aquifer covers three-quarters of the county.

Edwards recharge doesn't get past the Glen Rose aquifer, which acts as a barrier to the confined aquifers below.

In Kerr County, however, regulated wells are completed in what is known as the Middle and Lower Trinity aquifers. Wilson said he wants Headwaters to move away from the Trinity terms, because each of those spans several distinct geological formations: The Middle Trinity has the Lower Glen Rose, Hensel, Bexar, Cow Creek and Hammett aquifers; and the Lower Trinity has the Sligo and Hosston formations.

According to Wilson, hundreds of mainly small-producing wells are drilled in the Edward's aquifer. A fear exists, however, that a water marketer would want to drill a well next to a spring.

"That's something we'd want to prevent," he said. He explained it could affect surface water availability, because it pulled the spring water out of the ground stopping it from feeding creeks and rivers downstream.

"The push is on to get the information on the Edwards to back up the regulations we are going to have," Wilson said. "If there was a lot of development, and we started drilling with very close wells (in the Edwards), that would cause problems."

The volunteer effort is found in other areas of Headwaters research, too, and Summerlin isn't the only elected director involved. Pct. 4 Director John Elliott monitors streamflow, too. Monitoring also is being done on several private wells, including Director Jim Hayes' residential well in Center Point.

Wilson said monitoring wells 5 and 6 will be drilled at the end of October. One will be on Goat Creek Road near the Gillespie County line and the other is planned for Kerr Wildlife Management Area in West Kerr County off Farm-to-Market 1340.

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