

16 December 2014 Meeting of the Union County Soil and Water Conservation District

Present:

Delbert Smith -- Chair

Pete Cameron -- Deputy Chair, Secretary

Duke Emerson -- Treasurer

Monica Jones -- NRCS Representative

Laurel Schaafsma -- Visitor/member

The meeting opened with Delbert Smith pointing out that the required payment of \$175 to the State Department of Economic Opportunity has not been sent and a \$25 late fee now applies. Delbert will contact the county commission and see what the problem is.

Duke Emerson, who volunteered as of the last meeting to contact Amy Imler of the high school Ag dept. concerning a SRWMD grant that could be available for upgrading the Union County High School greenhouse, said that he will be seeing her this following Monday to motivate her to apply for the grant.

The rest of the meeting was a further education on the subject of the aquifer. The board is concerned with accurate knowledge of the aquifer because it believes that storing water for the future is something we can help with. If we are to dig a recharge well and allow rainwater to penetrate to a storage place under the earth, we need to understand what is there now. Informative text from Paul Still of the Bradford Soil and Water Conservation District follows:

Surficial aquifers are aquifers at or near the land surface. Some people consider any aquifer above the Hawthorn layer in our area to be a surficial aquifer.

In south Florida the Biscayne Aquifer is a surficial aquifer that supplies most of the water for South Florida.

If you dig a post hole and it fills up with water that water is in a surficial aquifer which is also called the water table. There can be many surficial aquifers at one location. Where we are at the water table right now is down about 30 inches but two months ago it was at the ground surface. Below this water table aquifer we have another surficial aquifer that is down about 10 feet right now. We used a well in this aquifer for years. Around 2004 it stopped producing enough water to support our above ground pump so we had a Floridan well installed.

Once you get into the Hawthorn layer you can also have aquifers. These are called intermediate aquifers by some people. Many people think the Hawthorn layer is a layer of clay. It is not. It has layers of sand and limestone materials that then serve as aquifers.

West of the Cody scarp the Hawthorn layer is missing for the most part so you just have sands over the limestone so you do not have a surficial aquifer or an intermediate aquifer.

However, there are areas west of the Cody Scarp that have layers of clay that can hold water near the surface so you have lakes and wetlands. You could also have surficial aquifers in these areas.

To have a surficial or intermediate aquifer you have to have some confinement otherwise water would simply flow down to the Floridan Aquifer. The confining materials are usually clay layers but the confining layers are often leaky so water move through them but at a slower rate than it would move through sand.

It is the clay layers that separate the Upper Floridan and the surficial and intermediate aquifer.

The Upper and Lower Floridan aquifers are separated by a layer of limestone that is much less permeable. In much of our area this very hard limestone layer does not exist so there is no Lower Floridan Aquifer.

As of the present time, the board can be considered as in the education phase of this aquifer recharge well project. We don't want to go into it poorly prepared.

Delbert pointed out that our children will be the ones having the water problems and we should be publishing a monthly paragraph on water conservation, both to keep conservation in the minds of UC citizens and to let them know that there is a water board in UC that is attempting to deal with water issues. Laurel Schaafsma suggested rain water storage tanks as a topic for such an article. Delbert noted that most farmers had tanks that could be used to catch rain water from house and barn roofs. He went on to mention that tanks could also be bought for a reasonable price in Providence. Horses, goats, and even chickens could be watered from rainwater stored in tanks. Laurel agreed to take on the researching and writing of the article for possible inclusion in the UC Times and the IFAS newsletter.

Monica Jones cited an upcoming land judging competition that would be attended by students in adjacent counties, but it was concluded that it was too late for the board to sponsor students from UC this year. Board members questioned Monica on exactly what is the subject of these competitions. She responded that land judging looks at exposed layers of soil and students attempt to identify the layers.

The meeting was closed at 8:15.