

October 28 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

Basil Bactawar -- Union County AFIS Agent Laurel Schaafsma -- Visitor

The first issue to come up was a clerical one: payment of a \$175 fee to the state Department of Economic Opportunity for their assistance in administrative/financial affairs at the state level. It was voted to make the payment and Delbert Smith was charged to do it.

Monica Jones described a presentation she made in her capacity as NRCS representative to grade school students. The subject was the ingredients in food (pizza, for example). While this particular presentation did not bear directly on our goals, Monica did repeat that the NRCS national headquarters has presentations on conservation suitable for different school grades and she can make them available to us.

Duke Emerson reported that he contacted Amy Imler of the local schools Ag department and she expressed high interest in getting a grant from the SRWMD to upgrade the efficiency of water systems in the high school greenhouse. Duke gave her contact points in the SRWMD to pursue this.

In prior meetings, this board has been considering digging storm water injection wells here in Union County in response to the prediction of future water shortages by the SRWMD. The major part of this meeting was taken up with a more in-depth discussion of injection wells. First discussed was the composition of the soil in this area. Delbert Smith said that on his land there are several feet of soil over a layer of yellow clay, which becomes more dense and confining as it goes lower and its color changes to blue/grey. The yellow clay will absorb and pass rainwater to some extent while the blue/grey clay below largely confines/stops the rainwater from percolating downwards. Under these clay layers is the limestone which contains the surficial aquifer. As we proceed lower into the surficial aquifer, the limestone becomes more dense (fewer pockets/channels for water to gather), forming a confining layer between the surficial aquifer above and the Upper Floridan Aquifer below with its caves and rivers of water. Percolation of water from the surficial down into the Upper Floridan is slow because of the relatively dense layer of limestone between the two.

From this general understanding of the area geology, the board next viewed a presentation on injection wells, which had been presented to the Alachua DEP's Santa Fe River Springs Working Group (attended by Pete Cameron). The presentation had been given to the working group by John Davis of the DEP in the Jacksonville area. Two slides in particular stimulated the board's interest. One was a cross section through the state from north to south showing subsurface layers of soil, stone, or water. What was seen was that in the north (i.e., Union County), the aquifer layers are close to the surface. In the south of the state, the aquifer is well below thick layers of soil. The next slide broke the state down into areas more or less favorable for injection wells. Our area was coded as "low potential." This seemed to bear directly on our plans to dig storm water injection wells here in Union County. The question these slides raised was: is the aquifer/water table so high here that it is not feasible to inject more water? Basil Bactawar pointed out that the aquifer level has been steadily falling over the last 70 years. Also, as Pete Cameron noted, the SRWMD has gone on record to project that in 20 years, there will not be enough water to

meet area needs. There seemed to be a contradiction here. It would be logical to assume, concluded Delbert Smith that storm water could be injected during dry periods, such as during the years around 2003, but not during wet periods such as this summer. Pete Cameron was tasked to contact John Davis to clarify this issue.

The meeting closed at 8:15.