

Water funding task force has a big responsibility

By Mark Watson

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Recently I was invited to speak to the Nebraska Water Funding Task Force. The NWFTF met in the morning for presentations by John Berge, general manager of the North Platte NRD, Pat O'Brien, general manager of the Upper Niobrara White NRD, and Steve Sibray, hydrogeologist with the University of Nebraska Panhandle Research and Extension Center.

After the presentations we boarded a bus and traveled to the Ginn sugar beet facility to learn about the sugar beet industry in Box Butte County. We also toured the water treatment facility in Alliance where Mike Hulquist, water manager for the City of Alliance talked to the group about water issues facing many small communities in our region.

Mr. Hulquist discussed how expensive it is for small communities to try and meet federally mandated water quality regulations.

We left Alliance and headed to the 21st Century Training Center in Bridgeport where we were treated to lunch and John Berge gave another presentation on a pilot project for using surface for groundwater recharge back to the North Platte River.

I was the entertainment during the bus ride from Alliance to Bridgeport. I suggested to the group that they may want to find budget dollars for better entertainment on their bus trips.

I was invited to speak to the group about the advantages of water management when utilizing no till crop production systems. I explained to them that with the use of no till crop production where the previous crop's residues are left on the soil surface we are able to increase water infiltration into the soil.

The layer of residues also lowers soil moisture evaporation rates so we are better able to store the moisture in the soil for crop to utilize. The no till crop production system allows us to lower our groundwater pumping requirements to produce a profitable crop which conserves our groundwater resource for future generations.

I don't envy the job the Water Task Force has in trying to identify and prioritize water projects across the state. John Berge and Pat O'Brien talked about their NRD's challenges in managing water within their districts. Even though these districts are both in the Panhandle in close proximity to each other, their challenges vary quite a bit.

In the North Platte NRD the challenges of having surface water and groundwater interconnected are considerable. Maintaining surface water flows in the North Platte River while also providing irrigation water for crop production can be quite a balancing act.

The water management required includes groundwater depletions in portions of the district. Some areas along the river and irrigation canals experience considerable groundwater recharge each year.

The Upper Niobrara White NRD is faced with significant groundwater depletion where there is very little recharge of the groundwater resource. The

UNWNRD also has surface water considerations with the Niobrara River which runs through the northern Panhandle.

Steve Sibray pointed out in his presentation that managing the depletions in the UNWNRD aren't as simple as only pumping out the amount of water that recharge levels will sustain. Groundwater movement within the aquifer is very complicated with varying degrees of soil types and water depths within the aquifer. One management strategy alone may not fit all the variances within the aquifer. Sophisticated groundwater modeling will be needed to properly manage this aquifer.

The Water Funding Task Force has a tremendous job in trying to provide funding to manage all the water issues across the state.

This meeting showed to me how difficult and expensive water management will be as our state tries to manage our most valuable resource.

I also know the importance of developing good water management strategies so future generations can utilize this valuable resource.