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## water

## Water as a Crop?

First, I want to make up for an omission in my December *News Around the Water Well* – I forgot to wish all our readers and their families a blessed Merry Christmas and a happy, healthy and WET New Year!

Now, let's get down to a less warm and fuzzy topic—water marketing and you Texas agricultural producers. Should, could and would water be considered "a crop" by agricultural interests to market to water short urban neighbors? And, while protecting their own property's value, their neighbor's, natural resources possibly dependent upon that water (springs, creeks, etc.) and the community's future needs? Those questions and many others are brought up by this idea.

This is not a new vision, but one newly proposed by the Sand County Foundation of Wisconsin, a non-profit started in honor of famous conservationist Aldo Leopold to protect his farm. The small farm is featured in one of Leopold's books, "A Sand County Almanac," and now serves as a key location for the national conservation group. Leopold, a father of modern wildlife management, was also a leader in conservation and land ethics. The foundation now serves as a leading voice in private land management for farmers, ranchers and foresters. Its Water as a Crop initiative provides connections from landowners to urban water users and also serves as an educational resource for all.

Cooperation between water entities and private landowners is not a new idea and has been in use in Texas at least since the late '90s. The San Antonio Water System (SAWS) developed a significant new conservation program designed to assist money strapped irrigated farms on the Edwards Aquifer and the evergrowing San Antonio population. The new irrigation systems could more efficiently irrigate crops and also save water being pumped for farming with their Agricultural Conservation Program's technical and financial assistance



Photo by Kristen Brockman of San Angelo, Texas.

Several farmers decided to work with SAWS and the Natural Resources Conservation Service (NRCS) to form a three-party pool of money—federal cost-share, SAWS and irrigator—to buy and install new highly efficient irrigation systems on their cropland. The Edwards Aquifer Authority issues permits for each Edwards Aquifer irrigator who has a jointly calculated annual amount of water which can be pumped for his or her farm by metered wells. A contract with SAWS was signed to provide the "saved water" for the

## More Information May Be Found Here

Water as a Crop - http://waterasacrop.org/ Sand County Foundation - http://sandcounty.net/ Texas Water Resources Institute - http://twri.tamu.edu/

water utility, which could then pump it from the aquifer in San Antonio —no pipes needed. The value of the water was agreed upon at the current market price in the region. Once the amount of SAWS investment was paid back in water value, the contract was ended and the new system belonged to the farmer. A very fair and sensible arrangement.

Also on the very progressive SAWS Agricultural Conservation Program was working with ranchers across the drainage area of the aquifer's catchment area on cost-shared land stewardship practices designed to increase aquifer water supplies. Rangeland management practices which would provide improved forage, moisture penetration and aquifer recharge. This would have been an extremely difficult project to develop, coordinate and operate fairly to both interests. Many new problems arise: scientifically locating watersheds in an area which promise geologically to provide the best chance of fulfilling mission goals; calculating the "new water" suppliesif any; arriving at a coalition of landowners in the targeted region large enough to make

a measurable and economically viable water increase; developing contracts to account for droughts or other factors assuring that utility and any government cost-share dollars are put to a permanent land stewardship effort rewarding all "investors" while conserving and improving the natural resources. It could be done and likely will be done in the near future as our state's water needs and population rises. Just do it right with good science and a fair long-term contract similar to those of the very successful NRCS Great Plains Conservation Program.

A third provision in SAWS' program was funding needed and water-targeted agricultural research in the region by the Texas AgriLife Research and Extension Center at Uvalde. Several projects were launched and carried out including the use of plastic mulches on irrigated crops, water transpiration use by blueberry juniper (cedar) and partnering with other agencies in a paired watershed selective brush management treatment study at Honey Creek State Natural Area between Boerne and Bulverde.

The Texas Water Resource Institute (TWRI) located at Texas A&M University is already involved in a project with the Leopold Group and has quality scientists and conservationists on staff who would be happy to talk with you or your local group on how a program might be developed for your region with a willing and able water utility or river authority.

I think this is a topic for serious discussion and study which belongs on the agendas of ranchers in key watersheds and over crucial aquifer zones. It won't be an easy or quick issue to work out fairly for all, so a reasonably quick start makes sense. Bottom line though, we *must* take good care of our land, water, air and the critters living on it. Sustainability is the key—don't kill the goose that lays the golden egg. Remember, we are only caretakers of the lands for the future generations of Texans.  $\Diamond$ 

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