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Our Future Water Supply Needs Your Help Now

> By Nathan Vink UCF Forum columnist Wednesday, October 5, 2016

Not too long ago I floated on rivers for a living.

As a wilderness educator and whitewater river guide, I plied rafts through torrents of whitewater and along miles of placid riverscape. I drank from them, carefully decanting the layers of sediment collected over hundreds of miles. I slept on sandbars that stretched for hundreds of yards, as millions of gallons of water quietly shifted them down stream.

During this time I gained intimate knowledge of this water and became aware of the stirring commotion over this finite resource. The water I floated on, through remote red sandstone canyons, had already been claimed for fountains in Las Vegas, farms in Utah and faucets in Phoenix. These veins of water running through the desert were not just gold for the flora and fauna there but figurative gold for many across the country.

The preciousness and complexity of water in the desert can be obvious. I drank from fetid potholes that held the only water for miles, and scattered from flash floods that tore through canyons.

But after moving to Florida five years ago, I also gained an understanding of the water situation here.

At a glance, Florida comes across as rich with water, dotted with springs, lakes and rivers, all lying above the Floridan Aquifer, one of the largest aquifers in the world and one that supplies water to nearly 10 million people. But as one of the fastest growing states in the country, Florida has put stresses on the water supply. This aquifer has already been heavily stressed for years, as cities such as Orlando continue to grow in population and development.

Then in late August, Mosaic Fertilizer in Polk County failed to notify the public for three weeks that it had allowed hundreds of millions of gallons of radioactive phosphate wastewater to drain into the Floridan Aquifer through a sinkhole that had opened. The consequences are still unknown and could be for some time, but the contaminants such as uranium, radium and radon gas could travel hundreds of miles through the aquifer, creating health issues for many.

Around the same time, Oklahoma experienced a 5.6 magnitude earthquake that has been linked to the oil and gas industries drilling wastewater-disposal wells.

This is the landscape of water in the United States. The combination of population growth, climate change and natural-resource exploration has turned clean water into something to invest in, to barter with and to worry about.

In the west, battle lines over water have spread long and deep, dotted along the history of this country like a timeline.

In 1922, seven western states (Wyoming, Utah, Colorado, Nevada, Arizona, New Mexico and California) signed the Colorado River Compact, which would act as "The Law of the River." The Colorado River system would see countless dams put in, including the Glen Canyon and Hoover dams, creating Lake Powell and Lake Mead. The water projections in the original pact only used a small sample during a time of high water. The consistent flows were much less, and that coupled with population growth and severe droughts have created a tenuous stage for renegotiations.

And as Lake Powell and Lake Mead reach their lowest levels since before they were filled, the fragile ecosystem of the Grand Canyon hangs in the balance, slowly being flushed of soil and sediment. A thin web connects many pieces while simultaneously holding it together.

In July, a ranch in Mead, Colorado, was sold for \$12.6 million. The primary asset in this purchase was not land, but water. The ranch included water rights in the region. The most sought after water shares averaged \$148,900 each. In contrast, the land in the deal averaged \$6,970 an acre. Some of these shares may have been bought up in what's called a 'buy and dry' situation, where cities such as Denver purchase water rights in order to fight the drought conditions, and oil and gas prospects secure the water needed to drill in the region. Even still, these shares are seen as an investment, similar to stocks and bonds.

Finally, in North Dakota, numerous Native American tribes have gathered to protect the Missouri River and the surrounding Standing Rock Sioux Tribe land from the construction of the Dakota Access Pipeline to transport oil from the Dakotas to Illinois. This conflict entered the national spotlight when private security guards and their dogs confronted protesters as they moved to stop bulldozers that were razing land that had been reported earlier in court papers as historically significant to Native Americans.

Blood has been drawn on the battleground over water. And while systemic racism and sovereign rights play a primary role in this conflict, protesters will point out that the crucial point of the protests is because the water is sacred and is theirs to protect, not because the water is theirs to own.

There are many fighting for water on the big stage and more are needed. But small changes count towards the big picture too, like shorter (and fewer) showers, reusable water bottles and watering grass less.

In 2009, I spent 21 days guiding a raft through the Grand Canyon. The sheer magnitude of the setting consistently took my breath away. I feel fortunate to have had experiences like these that have shifted my perception of water.

I agree with the protesters in North Dakota that water is sacred and needs our help.

When water begins to be seen in this light, maybe then the collective conscience of the country will change and more will take notice.

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