

Water Conservation and Why?

Polk Soil and Water Conservation District here in Florida.

In Polk County water is precious commodity. In the next twenty to thirty years, it will be even more precious. Water is needed for everyday life. Estimates vary, but each person uses about 80-100 gallons of water per day; and an Average home uses 400 to 500 gallons per day. Now that's a lot of water. The problem is the Floridian Aquifer (where we get 75 % of the state drinking water), is recharged at rate that cannot be sustained with future demands.

So this means, it can only handle so much excess water usage before it effects the underground and surface water supply's levels. Long-term usage without Conservation measures it will lead to water shortages and or more expensive treatment methods for clean salt water or deep underground brackish water at about 8-10 times the cost of treatment now.

This is where the Soil and Water Conversation District comes in by educating and partnering with Farmers, Government Originations', and community groups to make them aware of the water issues and how to work together to solve them.

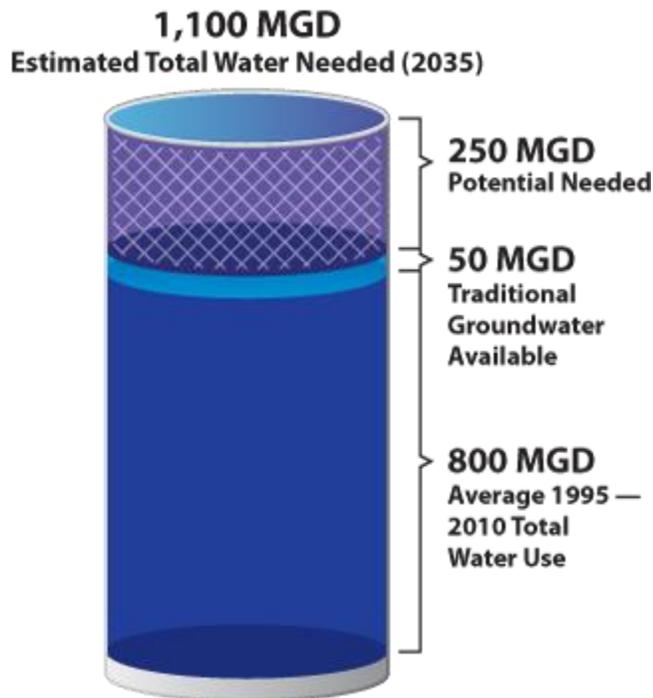
Here is some facts about water usage. Are you surprised, that here is Florida, residential water is for watering lawns and flowers outside nearly 54 % of usage. The largest use of household water is clothes washing (Laundry) 11% and third is the water to flush the toilet, and after that showers and baths. That is why, in these days of water conservation, we are starting to see irrigation systems, washing machines, toilets, and showers that use less water than ever before.

On the farm, where the much needed food to feed our growing population water is to use every day to keep crops alive and productive. The PC Soil and Water Conservation District is partnering the USDA and FDACS to help Farms and Growers with water conservation best management practices to use water wisely and reducing usage. We do this by helping them with funding for more efficient smart irrigation systems, solar pumping systems and soil moisture probes. This monitor soil moisture and temperature to tell the farmer when and how long to use their irrigation system. Also runoff irrigation ponds saving water for future usage.

Twenty years from now is the challenge. As Florida is expected to grow 25 to 35 % in population. This means increased demands on Fresh traditional groundwater resources alone cannot meet future water demands or current permitted allocations without resulting in unacceptable impacts to water resources and related natural systems. The Central Florida area is expected to need 1,100 Million gallons of water per day. Current water usage is at 800 Million gallons a day. So 300 million gallons a day are needed by the year 2035.

Approximately 50 mgd of additional groundwater could be available for water supply on a regional basis, though the implementation of management activities (e.g., wellfield optimization, aquifer recharge and augmentation) will be required to avoid or mitigate impacts to the region's water resources.

The remaining 250 mgd will have to be met through increased water conservation and alternative sources like reclaimed water and deep aquifer brackish wells and desalination plants.



Water Facts

WATER AND EARTH

- Three-quarters of the Earth's surface is covered with water, yet 98 percent is salt water and not fit for consumption.
- Less than one percent of all the water on Earth is freshwater available for human consumption.

WATER AND HUMANS

- * The human body is more than 60 percent water. Blood is 92 percent water, the brain and muscles are 75 percent water, and bones are about 22 percent water.
- * A human can survive for a month or more without eating food, but only a week or so without drinking water.

WATER CONSUMPTION

- * 3.9 trillion gallons of water are consumed in the United States per month. (AWWA Journal, June 2006)
- * The average American uses 176 gallons of water per day compared to 5 gallons of water the average African family uses each day. (www.water.org)

WATER AND DEVELOPING COUNTRIES

- * An estimated 2.4 billion people lack adequate sanitation and 1.1 billion people are without access to safe water. (WHO-UNICEF, 2004)
- * 90 percent of wastewater in developing countries is discharged into rivers and streams without any treatment. (UNDP, UNEP, World Bank, and the World Resources Institute, "World Resources 2000-2001," pg. 25-26)
- * There are 1.6 million deaths per year attributed to dirty water and poor sanitation (World Watch; World Health Organization)
- * In the past ten years, diarrhea related to unsanitary water has killed more children than all the people lost to armed conflict since WWII. (WSSCC, 2004)
- * At any one time, it is estimated that half the world's hospital beds are occupied with patients suffering from waterborne diseases. (WSSCC, 2004)
- * The average distance that women in developing countries walk to collect water per day is four miles and the average weight that women carry on their heads is approximately 44 pounds. (WSSCC, 2004)
- * Over 40 billion work hours are lost each year in Africa to the need to fetch drinking water. (WHO, 2004)

