

2011 – A Sequel to “Is the Next Big Green Issue Blue?”

Carol Lamkins, CID, CMKBD

News Release: January 2011, Panama City. Water supply is shut down in the city for undetermined lengths of time. Due to excessive water fall in December, the water control district cannot filter the water to necessary low sediment particulate and safe potable allowances.

So here I am in Panama City, in the middle of a rain forest, for the entire month of January with no dependable water delivery at the faucet. No water to drink, shower, flush the toilet, do the laundry, clean and so on.



Since Panama has frequent rains, buckets were set out to collect water for household use. But we had to revert to bottled water for consumption. This led to a depletion of bottled water in the stores and if water was available, armed guards monitored the allotments per person.

This experience is not far from future reality. Californians do not live in a rain forest and our water shortages will not be due to an overabundance of unmanageable water. There will simply not be enough water.

Nearly 97% of the world's water is salty or otherwise undrinkable. Another 2% is locked in icecaps and glaciers. That leaves just 1% for all of humanity's needs - all its agricultural, manufacturing, community, and personal household needs.

We take for granted the water that is routed to our homes via city plumbing systems. We expect to see running water when we turn on the valves. It is a wake-up call when that does not happen. I felt that I was living in the future of what the world will be like when water sources become “endangered”. Money will take second seat to this life-giving commodity. Wealth will be based upon who controls the water for the masses.



Fortunately we are not yet in this extreme situation in our country. Water conservation is gaining momentum through concerned citizens and agencies. One of the most aggressive is WaterSense, a partnership program sponsored by the U.S. Environmental Protection Agency (EPA). Their goal is to make it easy for Americans to save water and protect the environment. All products bearing the WaterSense label must be tested and certified by an approved third party laboratory to ensure they meet EPA water efficiency and performance criteria.

WaterSense tests and label-certifies quality, water efficient products that do not require a change in your lifestyle. In fact many of these products use less water and perform as well or better than conventional models. Retrofitting the house with WaterSense labeled fixtures could save a family of four approximately \$2,000 in water bills over the

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lifespan of the products. The goal for WaterSense is to increase water efficiency 20% over the less efficient counterparts on the market.

Did you know that an American home can waste, on average, 11,000 gallons of water every year due to running toilets, dripping faucets, and other household leaks? That equates nationwide to more than 1 trillion gallons of water leak each year. 10 percent of homes have leaks that waste 90 gallons or more per day. Take some time to review, repair and/or replace the guilty fixtures in your home. Learn how to fix water leaks at <http://www.epa.gov/watersense/fixaleak/howto.htm#leaks>.

The consumer can do their part by asking for products from manufacturers who partner with the WaterSense programs. Here are some of the product standards and water saving guidelines that you can apply:

- Replace toilets with ones that use less than 1.6 gallons per flush or better yet less than 1.3 gallons per flush
 - Don't flush trash such as facial tissues—one less flush per day can save nearly 1,300 gallons of water over the course of a year which is enough to wash about 32 loads of laundry!
 - If everyone in the United States flushed the toilet just one less time per day (or night), we could save a lakeful of water about a mile long, a mile wide, and four feet deep every day
 - If every American home with older, inefficient toilets replaced them with new WaterSense labeled toilets, we would save nearly 640 billion gallons of water per year, equal to more than two weeks of flow over Niagara Falls!
 - Ultra-low-flush toilets use only about 1.5 gallons of water per flush which could cut your family's total indoor water use by as much as 20%
- Wash large laundry loads as this is the second largest consumer of indoor water in your home
 - Combine small loads to eliminate one load per week and you will save 2,100 gallons of water per year.
- Water efficient automatic dishwashers use approximately 9.5 to 12 gallons on a regular cycle versus hand washing that usually requires a filled sink then streaming water for rinsing
- Replace your faucets aerator, laminar flow device, or spray device with a WaterSense approved device - installation is quick and simple
- Replace your bathroom faucet with a new WaterSense approved model
 - Reduce the water flow by 30 percent or more without sacrificing performance
 - Avoid letting the water faucet run while you brush your teeth, wash your face or shave and you can save up to 4 gallons of water a minute – that equates to 200 gallons a week for a family of four
- Fix leaky faucets as one drip per second can waste more than 3,000 gallons of water per year and you could reduce your water bill by more than 10 percent!
- Replace your shower head with a new WaterSense labeled showerheads that use no more than 2.0 gpm

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- By installing high-efficiency showerheads, the average household could save more than 2,300 gallons per year
- A household could save 300 kilowatt hours of electricity annually, enough to power its television use for about a year
- If every household in the United States installed one, we could save more than \$1.5 billion in water utility bills and more than 250 billion gallons of water annually, which could supply more than 2.5 million U.S. homes with their water needs for a year
- In addition, we could avoid about \$2.5 billion in energy costs for heating water
- Any showerhead now manufactured in the United States is required by law to release no more than 2.5 gallons of water per minute with super low-flow shower heads that deliver as little as 1.25 gallons per minute
- Fix leaky showerhead as 10 drips per minute wastes enough water in a year to run the dishwasher 60 times
 - Running a bath can require up to 70 gallons or more of water - a five-minute shower uses 10 to 25 gallons
- Water your garden during the cool morning hours to reduce evaporation
- Test your grass before watering – if a screwdriver stuck into the ground goes in easily, do not water!

As instructors, you are in a unique position to influence consumers. Water conservation is everyone’s business and can be taught through many disciplines. Be an active part of the solution and share water facts and responsibilities with your students.

Margaret Mead said,

“Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it is the only thing that ever has...”

For more information go to <http://www.epa.gov/WaterSense>.