

The Resource of Water

In the mid-Atlantic part of the United States, we are somewhat insulated from the water shortages that plague many parts of the world. When it comes to having a quality of life, water may be the world's most precious resource. The ability to produce food, lumber and other building materials, is dependent on water as an essential ingredient. There are many parts of the world where access to fresh water has been the subject of armed conflict.

Forgotten Voices International (FVI) is a mission housed on the Presbyterian Senior Living campus at Carroll Village. FVI serves AIDS orphans in Zimbabwe and Zambia, a region where water always seems in short supply. Water is often hauled long distances and is never wasted. When a well is drilled to provide fresh, clean water for the community, many other problems are solved. Even though we have ample water where we live, we could learn a few things about conservation from our African brothers.



We also need to be aware that water conservation is a long-term issue. In 2011 Eastern Pennsylvania had record rainfall with nearly **3 feet** more than the average. As I write this article in the first quarter of 2012, there are drought conditions in many Pennsylvania counties. The Susquehanna River that caused devastating floods in 2011 is now at levels not seen since 1910 and 1946 at this time of year. Water conservation is all about making a long-term commitment.

Maybe the most significant water issue for the Pennsylvania and Maryland region is related to wastewater treatment. New wastewater regulations designed to protect the Chesapeake Bay are slowing development and requiring millions of dollars of upgrades to municipal wastewater systems. Whether we are building new buildings or operating within our current campus locations, delivering water and wastewater treatment is becoming a larger cost for Presbyterian Senior Living.

In this issue we are going to explore what we are doing to conserve precious water resources within PSL and the ways we attempt to limit wastewater treatment costs by using less water. As in most conservation efforts, our success will be dependent on resident and staff awareness and participation to make the progress that we hope for.

– Steve Proctor, CEO



Water Conservation

Water conservation at PSL is the subject of much discussion when new buildings are designed and constructed. Toilets with reduced gallons per flush, water saving shower heads, water efficient appliances, and other design elements have become the new standard for all PSL construction. Similar efforts are applied in kitchens, laundries, and other more commercial applications within the PSL system.

A more difficult proposition is how to reduce water consumption in buildings that have appliances and systems that have been in use for some time. In order to get a handle on this issue, we have begun to measure water use at all PSL locations to establish benchmarks and focus on areas where the greatest improvement can be achieved. Initial records are being examined to make sure that the baseline data is accurate and that comparisons between facilities take into account any unusual event that may provide an inaccurate picture.

The preliminary measurement of the use of water has revealed that the use of water can vary between 60 and 100 gallons per resident per day. While specific

targets for improvement have not been established, some PSL locations have already realized significant improvements. For Example, at Windy Hill Village in Philipsburg, water usage has declined from 86 gallons per day to 79 gallons per day, resulting in a reduction of 273,750 gallons per year. Changes that have been implemented to achieve this result include changing to a water cooled ice maker with remote air

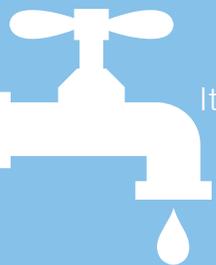
control, installation of motion faucets, and the change to lower flow flush valves. Since 2008, Ware Presbyterian Village has been working on reducing water consumption throughout the campus. As of the end of 2011, their efforts have saved an average of 3.8 million gallons of water per year compared to the 2008 rate, and they believe that additional savings can be achieved.

We anticipate that with a focused effort, other PSL locations can achieve a similar improvement in performance. As with almost every stewardship activity, the key to future improvement in water consumption will be a commitment to water conservation by every resident and staff member. Please join the stewardship team and help in this effort!

– Rodney L. Fenstermacher,
Corporate Director of Construction &
Environmental Services



Water Facts



It takes three liters of water to make every one-liter bottle of water. (And that's before they put the water in)



It takes 1,857 gallons of water to produce a single pound of beef.

THE AVERAGE AMERICAN HOUSEHOLD USES
350 GALLONS
OF WATER A DAY



884 MILLION PEOPLE
LACK ACCESS TO
CLEAN WATER
(THAT'S NEARLY THREE TIMES
THE U.S. POPULATION).

Source: <http://www.wholeliving.com>