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Learning water conservation from others

Other industries can learn the value of water conservation from the carwashing industry.

▶ If businesses in different industries are looking for examples of how water consumption can be significantly reduced, they need look no further than professional conveyor-style carwashes. Historically, carwashes are highly visible users of thousands of gallons of water. So whenever there is a community water shortage, carwashes are among the first to face pressure to reduce water consumption or, in extreme situations, cease business operations altogether.

This is exactly what happened just a few years ago. In 2007, in the midst of a severe drought, North Carolina and other communities in the southeastern portion of the U.S. ordered carwashes to close entirely or meet specific water-conservation targets, many of which were not possible at the time. Eventually, some carwashes managed to reopen, but at a great expense. They imported water by way of tanker trucks from other parts of the country.

After this experience, the North Carolina Professional Car Wash Association, working with the International Carwash Association and other related groups around the country, actively sought ways to help their members conserve water. As you can imagine, they viewed this as a “do-or-die” situation. With experts predicting more frequent and severe water shortages in years to come, significant changes to how carwashes operate and use water had to be developed.

And these changes have been successful. Further, some of what they accomplished can be replicated in other industries. But possibly the most important thing the carwash industry has to share with others can be summed up in the old cliché: Where there is a will, there is a way.

How they did it

“Because water is such a key part of our businesses, taking steps to reduce water consumption is now [one of our primary] concerns,” says Chuck Howard, owner, president and chief executive officer of AutoBell Car Wash, with 63 locations throughout the southeastern portion of the U.S. “And, today we are definitely using less water than just a few years ago.”

So how did they do it? According to Howard, these are some of the steps taken that may also apply to other businesses wishing to reduce water consumption:

- **Benchmark:** Measure current water usage and determine where water is being used. This will establish a baseline to judge future water conservation efforts.
- **Document:** Keep a record of where and how much water is being used.
- **Repair:** Use the collected information to determine where water is wasted (leaks, for instance) or used unnecessarily (landscape irrigation, in some cases) and to make any needed repairs or changes.
- **Reduce:** Take advantage of benchmarking and documentation to locate areas of a facility where water use is necessary but the amount might be reduced.

- **Monitor:** Continue to keep an eye on water use to look for ways to reduce consumption.
- **Reclaim:** Determine where water reclamation systems can be installed. These allow water to be recycled and reused for other purposes.
- **Install:** Investigate and install systems and technologies that can reduce the amount of water needed in the areas where water use is necessary.

When it comes to how carwash owners managed to find and install new systems and technologies to help reduce water consumption, another cliché is appropriate: Seek and you shall find. Once they looked for new technologies to reduce water consumption and reclaim water, they found and employed such systems.

This also applies to “in-house” areas, such as restrooms. Carwash owners installed water conserving restroom fixtures, including no-water urinal systems. Waterless urinals alone can save as much as 40,000 gallons of water annually per unit. Today, water use for washing cars at Howard’s locations has been reduced so dramatically that “fresh water is only needed to replenish water that has evaporated.”

Applications for other industries

Based on the water reduction measures the carwash industry has implemented, what steps can other industries take to use water more efficiently and effectively? One of the most important is to find ways to reclaim water from one area to reuse in another. Reclaimed water can often be used for landscape irrigation, agricultural applications and even such things as decorative water fountains.

In addition, although not necessarily applicable to carwashes, reclaimed and

Photo courtesy of Jim Coleman Co.

recycled water can be used for another important purpose: Cooling equipment and machinery in industrial applications. This represents one of the largest uses of water in the U.S. and one that can be easily satisfied with reclaimed/recycled water. This water can also be used to replenish water used in cooling towers.

Monitoring of water consumption, which played a significant role in water reduction in carwashes, can be expanded in many other industries. According to Stephen Ashkin, CEO with Sustainable Dashboard Tools, metering systems and “dashboard” systems that track water consumption can help make building owners, managers and employees much more aware of their own water use in the facility.

“Dashboards have become increasingly popular as more companies have started taking steps to reduce their environmental footprint, decrease consumption of natural

resources and improve overall sustainability,” he says.

One of the key benefits of a dashboard system is that it can quickly identify changes in water use, which can prove to be a cost savings. “For instance, if consumption suddenly increases due to a possible problem, the situation can likely be rectified before it results in water waste as well as higher water and sewer charges, which for an industrial location can be significant.”

This last point, cost savings, needs to be highlighted. American business owners must realize that water has historically been inexpensive in the U.S. — in fact, in most of North America. Canada and the U.S. are two of the biggest water users — and water wasters — in the world, most likely because water is so inexpensive.

That era is passing. Water charges are escalating and will continue to do so. Part of this is because water infrastructure in

the U.S. is faltering and needs repair. But even more, it is the result of simple supply and demand. Demand is increasing, the country’s population is growing and this will make water all the more precious and costly in the future, making this a worthy time to emulate successful water conservation efforts. **WT**

Klaus Reichardt is founder and CEO of Waterless Co. Inc. in Vista, Calif. Reichardt founded the company in 1991 with the goal to establish a new market segment in the plumbing fixture industry with water conservation in mind. The company’s key product, the Waterless No-Flush urinal, works completely without water and was invented by Reichardt. He is a member of U.S. Green Building Council since 1999 and joined the University of California Santa Barbara EcoEntrepreneur Advisory Board in 2008. He may be reached at Klaus@waterless.com.