



Water conservation can be invisible to the guest

Another great article from *The Rooms Chronicle*, the #1 journal for hotel rooms management! ***Important notice: This article is copyrighted by *The Rooms Chronicle* and may not be reproduced without permission of the publisher.*** College of Hospitality and Tourism Management, Niagara University, P.O. Box 2036, Niagara University, NY 14109-2036. Phone: 866-Read TRC. E-mail: editor@roomschronicle.com

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Experts around the world are constantly warning that water shortages are inevitable and in the near future. Yet, throughout society individuals and businesses alike continue to waste water at an incredible rate. The aquifers in our country continue to drop, and they can never be replenished. Water conservation can and must be implemented immediately for everyone's sake and the benefit of future generations. This article will discuss some extremely practical and easily implemented ways to conserve water throughout the hotel industry.

Bathrooms

Flapper valves in guest room toilets are the most notorious waster of water in hotels. A leaking flapper valve can also cause numerous guest complaints because of the noise from constantly running water. All flapper valves in toilet tanks should be replaced at least every two to three years with a high-quality natural rubber type of flapper valve, at a cost of about \$7 each. Check the flapper valve by placing food coloring in the tank and observe the bowl. If the color seeps through to the bowl, the flapper valve should be replaced immediately. Leaking flapper valves can cost about \$150 per year per room in wasted water.

There is absolutely no excuse for a high-volume showerhead in guest rooms with the improved pressure compensating low-flow showerheads available on today's market.

National Conservation Standards currently require that all showerheads consume less than 1.75 gallons per minute. Unlike the old style water conservation showerheads, the new showerheads provide a completely comfortable shower with an adequate supply of water. They cost about \$10 to \$15 per head,

and will typically pay for themselves in less than six months in saved water and the energy to heat it.

Aerators should be used on all sinks throughout the hotel. A simpler method of reducing flow at sinks is to turn down the hand valves under the sink to a minimal, but acceptable, level.

Always remember that a dripping faucet does not appear to be wasting much water, but typically costs in the range of \$100 per year in wasted water and sewer costs. Typically, a simple rubber washer can repair this problem in a matter of minutes.

Kitchens

There are opportunities to conserve water in the kitchen area, also. Kitchen staff should be instructed to never thaw food with running water. The kitchen dish machine can also be a significant source of wasted water. Maintenance staff should constantly check the fill valve on the dish machine to ensure that it operates only during the cycle of the dish machine. This concept also applies to the fill valve on wash wheels in the laundry area. These two items can be significant wasters of water, and cost over \$1,000 per year.

Calculating the index of water use

Engineering and maintenance staff can check the index of water use for their hotel with a very simple calculation. Typically, a hotel's water bill indicates water usage in units referred to as 100's cubic feet, or CCF. Total the CCF consumed over a one-year period and divide it by the number of rooms in the hotel. A limited-service hotel should typically consume about 35 CCF per room per year. A full-service hotel should typically consume about 65 CCF per room per year. These are indexes prepared by the American Hotel and Lodging Association. If the hotel is consuming levels of water higher than this, engineering or maintenance staff should check all the aforementioned ideas and implement them where practical.

Pools and elsewhere

If all these issues have been addressed, it may be possible that the hotel has an underground leak. This is a frequent problem in hotels with swimming pools. An easy way to check water use throughout a property is to install an inexpensive plastic water meter on distribution lines to the various areas, such as the pool, kitchen and laundry. If the meters indicate unusually high use, it may become necessary to retain a professional contractor to locate where the problem is occurring. Submeters are also very useful on cooling towers for your air conditioning system, and on irrigation systems. Remember, a sewer credit is available for water lost to evaporation on these two items. Hotels can typically save \$2,000 to \$3,000 per year in sewer costs by applying this concept.

Water conservation is one of the most cost-effective programs a hotel can implement. All of the ideas discussed here typically have well under a one-year return on investment. Most guests will appreciate management's concern toward water conservation and their opportunity to help ensure there is water for all generations to come.

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