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What was the challenge or opportunity?

Toilets are consistently identified as one of the largest consumers of water in the hotel/motel industry. A water use study conducted in 2003 (Golder) surmised that toilets consume approximately 25% of the water used in an average hotel room while another ICI water use studies (AWWA, 2000) found toilets to be responsible for 38-42% of indoor water use.

The cost to replace each toilet with a with low-flush maximum performance tested toilets is estimated at approximately \$200 per toilet exclusive of the labor for installation making this an expensive endeavor with a potentially long pay back period.

What was your approach or solution?

To retrofit all high consumption toilets with a dual flush converter for \$25 per toilet.

What is the impact?

An old style toilet uses an average of 3.5 gallon per flush whereas the dual flush toilets use either 1.6 gallon per flush for solid waste or 1.0 gallon per flush for liquids, a savings of approximately 2 gallons per flush being conservative. It is estimated that guests typically flush 3 times per day, multiplied by 480 rooms nights and two guests per room the total water savings is approximately 5760 gallons of water per annum. At the current water rates for our town we would achieve a payback of 2 years for 8 dual flush converters versus 20 years for eight new dual flush toilets.