



The **solution** for water shortages

Dear Sir or Madam:

Many in the hospitality industry are reducing expenses and showing environmental stewardship by adopting water-efficient procedures and technology for space cooling, refrigeration, laundry, cleaning, and simply flushing.

The water savings experienced when combining the BRAC Commercial greywater recycling system (CGW) with your commercial washer/extractor could help save over 40% of the water used for laundry by reusing the rinse water for the next loads wash cycles. An electronic device developed by BRAC Systems Inc. accomplishes this by diverting the washer's rinse cycle water to the BRAC System where it is filtered, disinfected and stored. The stored water is then used for the next wash loads 2 soak cycles and 2 wash cycles. The BRAC System would collect 1.5 USG of rinse water for every pound of clothes washed and be able to reuse 1.3 USG of that for the next loads soak and wash cycles. This process is continuously repeated, thus reducing the potable water consumption by 42%. Collecting the wash cycle's water separately and reusing it to flush toilets can produce an additional savings of 20%.

Why Conserve Water?

Small and large hotels can achieve significant cost savings and environmental benefits through water conservation. Water is increasingly getting expensive! Furthermore, water is never "free" even if it comes from a well or reverse osmosis (RO) plant because of energy costs (to heat and pump water), as well as equipment depreciation, maintenance, wastewater treatment costs, etc. By implementing greywater recycling programs into your water conservation strategies, a hotel can:

Achieve significant cost savings. Many water conservation strategies have payback periods measured in months or in weeks! Cost savings result from 1) direct water cost savings, 2) reduced energy costs for pumping, heating, and treating water, and 3) reduced size requirements, initial costs, and maintenance costs for water-related infrastructure such as pumps, tanks, grease traps, septic tanks, and wastewater treatment plants.

Conserve water and protect the environment. Water conservation improves the performance of wastewater treatment systems and increases the quality of treated effluent. It also reduces strain on local water resources, and reduces unnecessary government spending on additional water supply and treatment infrastructure.

For example:

Here are the potential savings on water, for a 1000 room resort, just by re-using the laundry water with the BRAC System.

Statistics used show that a hotel operates at an 89% occupancy rate with an average of 2.1 guests per room. The same statistics show that a hotel washes on average 12 lbs. of laundry per room per day – that's 5.7 lbs. per person. A Unimac UW Series commercial washer/extractor uses 3.1 US gallons of water per pound of linen. That means that on average a hotel will use 17.67 US gal. of water per guest per day.

- 1000 rooms x 89% occupancy = 890 x 2.1 guests per room = 1869 guests per night
- 17.67 US gallons per guest per day x 1869 guests per night = **33,025 US gallons (125,165 liters)** per day

In one month the water use for laundry alone would be 990,750 US gallons (**3,754,943 litres**), which would bring the annual use to a staggering **12,054,125 US gallons (45,685,133 litres)**. The BRAC System would help save 42%, or **5,062,732 US gallons (19,187,754 litres)** of water per year.

Brac Systems is presently installing commercial grey water recycling systems into more than 50% of the privately managed prisons in the USA. <http://www.bracsystems.com/news.asp>

For more information, please contact:

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