

June 7, 2017 [Bindu](#) [Hotelier India](#) [Leave a comment](#)

Water Conservation in Hotels & Restaurants

Spread the love



Did you know that Sofitel Mumbai BKC managed to save about 45% water consumption by reducing water consumed from 30500KL in Jan-Apr 2016 to 16556 KL in Jan-Apr 2017? The numbers might sound mind boggling but it is true. In fact this is simply an indicative value of the amount of water a hotel can save by using new age technologies that conserve water. We speak to hoteliers and restaurants to know what measures are being taken to conserve the 'elixir of life'.

Conserve Right

In order to conserve water the first thing is to identify the sources that use the maximum quantity of water. In a hotel, the laundry, swimming pool, cooling towers, kitchen /pot wash, rooms and landscape areas consume the largest quantities of water. A few large, kitchen and F&B equipment's like Baine marines, coffee machines, boilers and dishwashers consume large amounts of water as well. Likewise in restaurants, the dish wash and pot wash areas are high water usage areas. 'For the dish wash process we follow a three sink wash method where running water is not used as it causes major losses. In the front and back restroom areas the flush tank push levers are designed to only release one fourth of a tank at a time which ensures minimal yet optimum amount of water required for hygiene. Men's urinals do not have sensors but manual tap levers to curtail default flushes that cause wastage,' said Pankaj Gupta, Co founder Flavour Pot Foods LLP Hospitality. M Balaji, CEO, Clarks Exotica Convention Resort & Spa explained, 'the laundry planned washing sequence is implemented for full load of washing cycle and we have provided flow meter to monitor the consumption. Our treated water utilized for gardening and the rain water harvesting collection tank is in place. Recharge pits and overflows are connected to the harvesting tank to conserve water. Pool back wash is scheduled as per the requirement.' Ajay Rai, Director of Engineering, JW Marriott Kolkata added, 'to ensure water conservation, we have employed Low Flow Shower Heads that reduce water usage by up to 40%. We used dual flush systems in the toilets whose operating mechanism allows to flush water either on low volume or high volume, which significantly help to save water. Additionally, we use faucet aerators, which are used to shape the water stream coming out of the spout, offering consistency in flow and pressure, by preventing a lot of water flow and use of less water.'

Team Work

Water conservation is an integrated effort in hotels. Satyajit Kotwal, General Manager, The Resort Madh – Malad said, 'we did the brainstorming session with our staff on how we can save or re-use water without inconveniencing the guests, we all came up with executable initiatives for a sizeable amount of water saving. We have installed sprinklers and flushes that allow minimum water use. We have water-saving signages installed in guest rooms, washrooms and the restaurant areas – gently reminding people to use water responsibly. Then we decided that laundry wash will be done only with full load and the rinsed water from the laundry wash will be used for cleaning and washing of garbage rooms. Another change we made was using a combination of pot boiler and brat pans for cooking.' Nishant Agarwal, General Manager, The Westin Pune Koregaon Park explained, 'our environmental policy addresses six areas of opportunity, and our initial worldwide focus is on energy and water with our commitment to reducing water consumption by 20% by the year 2020. Westin has installed dedicated aerators for all the taps which reduces the water consumption by almost 50%. In the kitchen, the flows are throttled to lower pressure. We know collaboration is key in addressing these issues, so we formed a partnership with Conservation International (CI) in 2009. Westin, has saved 10% in total water consumption over the last 2 years. Along with the water conservation measures, we have 400KLD sewage treatment plant which converts waste water into usable water.'

New Vistas

Apart from conventional methods of conservation, hoteliers are now doing things differently. Rishi Puri, Vice President, Lords Hotels & Resorts opined, 'we also have installed return lines in the bathrooms for dispensing hot water. What this does is keeps the flow of hot water continuous as against the warm water becoming cold prior to use. So when a guest starts the shower or the tap, they instantly receive warm water instead of waiting for the cold water in the pipe to drain that significantly reduces water wastage.' Pradeep Kumar B S, Chief Engineer, Signature Club Resort added, 'using covered pool to avoid water evaporation, selection of plants are native as they consume less water and retaining a 35 year old well converted into a rain water harvesting pit are some measures to conserve water. We have dug natural ponds to improve ground water level and all plant and machinery have been selected on water less system, i.e. VRV air condition system, & DG air cooled (these systems not required water for cooling towers).'

Recycling Principles

Fresh water is essential for the survival of human life and as such is essential to the survival of all organisms. Even though almost 71% of Earth is covered by water, only 1% of this water can be used for daily subsistence. With a rapid increase in industrial production and an accelerated population growth leading to climate change and ultimately global warming, water has become a precious natural resource. "Recycling is an important part of achieving water sustainability. We recycle water at most of our resorts through STP plants, etc. We maintain zero discharge of waste water pollutants. We also conduct regular monitoring of waste water by internal as well as external agencies (Parameters like C.O.D, B.OD, pH etc. as specified by statutory authorities are examined). The values have always been found to be within the guidelines and limits, defined by the State Pollution Control Boards and local regulatory authorities. Sewage Treatment Plants (STP's) treated water is used in cooling towers and landscaping at most of our resorts. In order to harvest the abundant rain water, resort collects the rain water and redirects it to sections towards the areas where there is requirement points through pipes. This water first passes through dual media filter before being used for treatment," said Miguel Munoz, Chief Resorts Officer, Mahindra Holidays & Resorts India Limited. The other source is a by-product of RO process of purifying water for drinking though not fit for consumption, can be used in topping up water in swimming pools and also in laundry.

Monitoring Tools

Most hotels have installed water meters to identify areas of maximum water consumption. A set standard and level has put into place for the amount of water consumed in each specific area of the hotel. "To keep a check on the same on a daily basis a simple apparatus called a "Water Meter" is installed to designated areas of the property. This device does not only give a clear reading on the volume of water consumed on a daily basis but allows us to take corrective measures to ensure water is not wasted and does not exceed the limit set," said Nemaraji Sabapathy, Chief Engineer, High Ultra Lounge, Sheraton Grand, Brigade Gateway. Review safety audits are another way in which water consumption is monitored. Rohan Chakranarayan, Chief Engineer, Holiday Inn Mumbai International Airport elucidated, "to ensure water conservation, we have installed aerators to reduce the water flow per minute in shower heads, wash basins, and health faucets without affecting the water pressure. In March 2017, we had installed the aerators and there has been a noticeable 15 % reduction in the consumption of water."

Guest Services

While water conservation is the need of the hour, guest comfort can never be compromised so hotels need to balance the seemingly contrasting needs. "We drive water conservation through "Rain Water Harvesting" to increase the "Ground Levels of Water". We also run a program called MAGC (Make a Green Choice) which empowers guests to actively participate in both energy as well as water conservation efforts taken by the property," opined Sabapathy. Girish Gaikwad, Director of Engineering, Four Seasons Hotel Mumbai added, "we ensure water pressure, temperature and quality of the water is maintained to suit the average guests requirements and ensure feedback is taken so that we can accommodate any changes they may want. Our water saving installations are fairly non-disruptive during the guests stay and if feedback does come in otherwise, we ensure to take all steps possible to amend the discomfort."



Budget Matters

Water is a scarce resource and conserving it means there is a need to set aside a budget for the same. Most hotels spend anywhere in the range of 0.8% to 3% of their total revenue on water conservation initiatives. Prashant Vaidya – Director of Engineering, Sofitel Mumbai BKC said, “we change our budgets for water conservation as per the patterns and trends observed and experienced over the course of the previous year. Multiple factors such as occupancy, events and similar are taken into consideration for determining the budget for a particular year. For instance, if at the same time last year, the hotel utilized 3 lakh liters for the month, this year the budgeted conservation that we would look for, would be a 10 to 15 % reduction from last year.”

Tech Talk

Some of the devices installed to reduce the water consumption include high efficiency aerators, low flow shower heads, dual flush systems in toilets, planters hose nozzles, flow restrictors and pressure reduction valves that can help save several kilolitres of water annually. Technology reviews in order to ensure that the hotel is up-to-date is also important. “We review technologies at least thrice a year. We constantly look for and interact with subject matter experts at hotel and restaurant exhibitions. Separately in our environmental commitment for lowering the carbon footprint we constantly align with local efforts of municipalities and innovate in overall conservation of natural and other resources,” said Gupta.

ROI Issues

The basic yardstick is easily lesser water bills at the end of the month and the unseen and uncountable benefits of conservation for future generations. "We do demonstrations to check the energy saving equipment, take after and before readings, check the technical specification, calculate the number of equipment required and gauge the cost for the same. We calculate the possible savings from the product and duration in which we will get the invested amount back," averred Gaikwad. Ramakant Singh, Chief Engineer, The Lalit Mumbai (Bharat Hotels Ltd) added, "we decide the ROI based on daily average water consumption cost, material quality and its life. We keep reviewing the energy/water related published reference book time to time and sharing knowledge with group of Chief Engineer from hotel and facilities for updates." Kush Kapoor, Area General Manager, Roseate Hotels & Resorts opined, "at Roseate House New Delhi, we assess the ROI through an integrated approach that includes expenses on water saving devices, repairs and maintenance as well as our total annual water consumption. Another important factor to take into consideration is the quality of water quality received in the area which plays a significant role in calculating expenditure on water conservation solutions and technologies required."

Vendor Choices

A key factor in conservation is the solutions and naturally choosing the right vendors that provide them is important. Aspects that govern this choice include cost effectiveness and capability and resources to service current fixtures and equipment without the need of a continuous upgrade or adjustment. Hitesh Keswani, Director, Silver Beach Entertainment & Hospitality Indi Pvt. Ltd. explained, "water conservation vendors are sparingly found in the city, more so because this is a newly adopted way of thinking. We look at the best ones in the market, our main lookout here is post sales service and flexibility in terms of delivery timings, installation, training etc." Vendors are selected on the basis of their service standards. "It is also necessary that the vendors we select tailor their needs a per our requirement. It was important that our vendor understood our need to set up a technology in a manner to gather the water from the roofs that needed to be harvested. Pricing, playing an important factor did not affect our decision on selecting a vendor at the cost of service. Utmost importance is and will always be given to the vendors that match the service standards and meet our requirement," said Vidur Kapur – General Manager, Rokeby Manor and Residence, Mars Enterprises and Hospitality Pvt. Ltd. Time to get thinking!