



The Green Hospitality Water Challenge

One positive development from the critical water shortages in California and other states around the country is that the issue of water conservation has moved to the forefront. Water is one of those resources that most of us in this country take for granted. We turn on the tap or shower and water is always there. The dire conditions that are cropping up is reshaping the way we could be looking at the value and preservation of this most precious resource. The restaurant industry in particular is in a position to greatly impact the water situation in our country. Due to the nearly 24/7 nature of the industry, restaurants use more water than any other small retail business. This also greatly impacts energy use as well since both are intimately tied (e.g. running a dishwasher without a full load both increases water and energy consumption).

For the past 5 years, The New York State Restaurant Association Educational Foundation through its Green Hospitality Initiative (GHI) and grants from The EPA and New York State Pollution Prevention Institute, has been working with restaurants in the New York area to train them in the efficient use of water. We've trained over 450 restaurants in strategies that both reduce water consumption and water and energy bills. Restaurants have also realized that the consumer today expects businesses to be more eco-conscious. So a thoughtful water conservation program has a further value of having the restaurant customer look more favorably upon the restaurant operator which can translate into greater loyalty and sales. Before we list some basic water saving methods any restaurant can adopt, we would like to mention one key factor in the success of any program of this nature. That would be the attitude of ownership. We've found over the years that the more committed ownership is to the importance of water conservation, the more likely it is to be successfully implemented. There needs to be a "go-to" person in the restaurant willing to take responsibility for carrying out any water savings program. The right attitude sets the focus and habits of often very simple ways to support an efficient water use program.

The following are some methods restaurants have adopted to impact water usage:

1. Fixtures



Aerators: Faucets in kitchens and bathrooms are the largest end-user of water in foodservice establishments. A \$5 aerator screwed into the faucet is a simple solution to reduce water flow that doesn't impact service and production. A maximum flow of 1.5 gpm is recommended.



Pre-Rinse Spray Valves

Dish sink pre-rinse spray valves are one of the most cost efficient and effective fixtures a restaurant can install. The sprayers cost approximately \$50-70 and use between .64 and 1.6gpm, which can save restaurants hundreds of dollars per year. (Food Service Technology Center) The lower flow new sprayers have also been found to provide a better spray when compared to older higher flow spray valves.



Toilets / Urinals

High efficiency toilets and urinals are available in many styles that can be very practical for restaurant operators to utilize. They work efficiently, look good and provide a great return on investment.



Equipment

Even though Energy Star certifies energy efficient equipment, three pieces of commercial kitchen equipment labeled by Energy Star also have water efficiency requirements. This equipment may have a higher initial cost outlay, but has been shown to deliver a significant return on investment often within 1 year.

[Steam cookers](#) offer the most significant savings with Energy Star rated units using 90% less water than standard machines. This equates to a nearly \$10,000 savings in water costs over the life of the unit. [Energy Star dishwashers](#) include high and low temp options in undercounter machines, single tank door type, single tank conveyor and multiple tank conveyor machines. The qualified machines are on average

25% more water on efficient than standard machines and will save around \$200 a year in water costs alone. The third piece of water efficient Energy Star equipment is [Ice machines](#). Energy Star rated machines that are air-cooled machines use 10% less water than standard units. The same holds true for other water-cooled equipment like walk-in refrigeration and soft-serve ice cream machines. Operation of water-cooled equipment can cost as much as four times that of similar air-cooled equipment.

Landscaping

Landscaping can quickly consume a large amount of water if proper techniques are not followed. The single most important item in landscaping is to choose native, water efficient plants. Native plants use less water than non-native plants, look more natural and are more resilient to pests and disease, thus they require little to no pesticides or herbicides to keep them healthy. In addition, replacing grassy areas with native landscaping cuts maintenance costs and water use. Efficient watering techniques, in the early morning or late evening, help conserve water and keep plants healthy. Watering during midday increases evaporation and can be harmful to some plants. Manual watering is the most efficient method, but may not be practical in a commercial setting.

The WaterSense program lists several articles that go into more detail on [water efficient landscaping](#), maintenance and irrigation controls.

Practices and Policies

Simple, effective practices are the cornerstone to sustainability and water conservation. Integrating water efficiency into employee training and company policies set a tone that the organization is committed to sustainability and conservation. Most water conservation practices require simple, low or no cost changes by staff and management that quickly integrate into employee's daily routines. There are literally hundreds of ways to save water in foodservice operations. A few are listed here:

- Defrost meats in refrigerators rather than under running water. If you must use running water, keep the water flow to a minimum rate that circulates the water. The faucet (using an efficient aerator) does not need to be fully on.
- Keep lids on boiling water during slow times
- Keep pasta cookers at a simmer rather than a rolling boiling
- Use dry cleaning techniques (broom and mop) rather than spraying water to clean floors or use a [waterbroom](#) instead of a hose
- Do not use running water to melt ice. Put the ice in the mop sink or dish sink where it will melt during regular use.
- Get a water audit from your water utility
- Implement proper [fat, oil and grease](#) handling best practices
- Serve water to guests only on request