

## **Saving Water Saves Energy**

Water and energy are closely linked. Just as energy production requires vast amounts of water, production of a clean reliable water supply and sewage disposal consumes considerable energy. Drinking water must be pumped to the treatment plant, pre-treated, and then pumped to consumers. The clean water that flows out of a faucet requires energy in many stages of processing, transporting, and heating and cooling before it gets to the tap. Once utilized at the tap, wastewater must then be pumped to sewerage treatment facilities, like South Portland's, that require vast amounts of energy to purify it for release into the ocean or groundwater.

According to the River Network, the U.S. consumes at least 521 million MWh a year for water-related purposes which is the equivalent to 13% of the nation's electricity consumption. The energy required to heat water is even higher. Fuel oil, propane, electricity, and natural gas are used to heat water in the US, all together consuming the kWh equivalent of 304.2 billion kWh each year. Water related energy use in California alone including the conveyance, storage, treatment, distribution, wastewater collection, treatment, and discharge sectors, consumes 19 percent of the state's electricity, 30 percent of its natural gas, and 88 billion US gallons (330,000,000 m<sup>3</sup>) of diesel fuel annually.

Logically, then, water conservation leads to energy conservation. Many resources exist for learning about the importance of water conservation and its resulting benefits. Want to save water, energy, and money at your home or business? Here are five quick tips to save water:

1. Locate and repair any leaks in plumbing system.
2. Limit lawn/garden watering. Install rain barrels on gutter downspouts where practical.
3. Limit shower times.
4. Run dishwashers and laundry only when machines are full. (using cold water for laundry saves energy, too)
5. Install water-saving shower heads, faucet aerators, appliances, and toilets. (Efficiency Maine can supply some of these. Rebates may apply to many of these water saving upgrades at home and office.)

Interested in learning more? Here are five excellent sources of information:

1. [US Department of Energy - Best Management Practices for Water Efficiency:](http://energy.gov/eere/femp/best-management-practices-water-efficiency)  
<http://energy.gov/eere/femp/best-management-practices-water-efficiency>
2. [Water Conservation: 25 ways to conserve water in the home and yard:](http://eartheasy.com/live_water_saving.htm)  
[http://eartheasy.com/live\\_water\\_saving.htm](http://eartheasy.com/live_water_saving.htm)
3. [100+ Ways To Conserve Water:](http://wateruseitwisely.com/100-ways-to-conserve/) <http://wateruseitwisely.com/100-ways-to-conserve/>
4. [The Alliance for Water Efficiency: Simple water saving tips for home and business:](http://www.home-water-works.org/water-conservation-tips)  
<http://www.home-water-works.org/water-conservation-tips>
5. [http://eartheasy.com/live\\_water\\_saving.htm](http://eartheasy.com/live_water_saving.htm): [http://eartheasy.com/live\\_water\\_saving.htm](http://eartheasy.com/live_water_saving.htm)

Remember, following just a few of these practical water saving practices saves energy which, in turn, saves you money and helps reduce our impact on the environment.