

About 22 percent of the water used in a typical residential home is for washing clothes. Estimates say that a four-person household with a standard washing machine will generate more than 300 loads of laundry per year, consuming 12,000 gallons of water. A high-efficiency front-loading washing machine can reduce water consumption by more than half, saving you energy and money.

Top-versus front-loading washing machines

Top-loading or vertical-axis washing machines are designed to suspend clothes in soapy water while an agitator moves laundry around dissolving and removing stains and dirt. Design



has changed little since they were created in the 1940s and many top-loading washing machines still use up to 40 gallons per load because they require a large amount of water to keep clothes suspended.

Horizontal-axis, or front-loading washing machines use only 15-30 gallons of water to wash the same amount of clothes as a top-loading one. A constantly rotating drum lifts clothes in and out of the water removing dirt and stains, eliminating the need to suspend them in water. Studies have shown that this process is not only gentler on fabric and more water-efficient, but also requires less laundry detergent and saves on the energy used to heat water.

High-efficiency washing machines

Today, the most efficient front-loading washing machines use as little as 5 gallons of water! If you are considering the purchase of a high-efficiency washing machine, do your research to find an efficient model that works for you. The Alliance for Water Efficiency and Consortium for Energy Efficiency have great web sites for more information:

- http://www.allianceforwaterefficiency.org/Residential_Clothes_Washer_Introduction.aspx
- <http://www.cee1.org/resid/seha/rwsh/rwsh-main.php3>

Incentives for efficient washing machines

If you purchase a high-efficiency washing machine, check with the [Oregon Department of Energy](#) and [Energy Trust of Oregon](#) for residential or business energy tax credits and rebates.

Multi-family laundry facilities

Central laundry facilities in multi-family buildings typically use far less water per occupant than providing in-unit washing machines and dryers. A 2001 study by the National Research Center showed that tenants with in-unit washing machines use 3.3 times as much water and 5 times as much energy for laundering than tenants that use common-area laundry rooms.

The convenience of having a washing machine at hand combined with the fact that most apartment dwellers do not pay their own water and sewer bill creates conditions in which tenants tend to wash smaller loads more frequently. If tenants are not charged directly for water use, central laundry facilities can reduce water use and therefore water and sewer fees.

Of course, in-unit washing machines and dryers are generally offered as a convenience to tenants for marketing purposes in which case consider purchasing high-efficiency machines. High-efficiency washing machines use 40 percent less water and 60 percent less energy than a typical washing machine.

Laundry Water Conservation Tip

- Remember to operate the clothes washing machine with full loads only.

Portland Water Bureau customers can request free water conservation devices, by calling (503) 823-4527 or visiting: www.portlandoregon.gov/water/efficiency