

A Do-It-Yourself Water Conservation Audit

A water "audit" is a review of your water use patterns, water fixtures, appliances, etc. to find ways to conserve water and reduce your monthly water and sewer bill.

The following checklist will help you review your home or business for conservation opportunities, many of which have limited or no cost. Most of the items below relate to residences, but many should be useful for businesses and other non-residential customers.

General:



If you receive bills from OWASA, check them every month to see whether your residential water use is above or below the average in our community and to check for unexpected increases in water use, which may indicate a leak in plumbing pipes or fixtures. For a conventional single-family residence, water use in our community averages about 5,000 gallons per month. (The average is lower for apartment and condominium residences.)

Bathrooms:



Check your toilet for leaks by putting a few drops of food coloring in the toilet tank and not flushing for 15 to 20 minutes. If the color appears in the toilet bowl, the flapper at the bottom of the tank probably leaks. (In some cases, the flush valve in the tank may malfunction and cause water to flow from the tank to the bowl, but flapper leaks are more common.) Replace the flapper if you know how to, or have a plumber or other knowledgeable person do so. A leaking or improperly installed flapper can waste thousands of gallons per month.



If you have toilets installed before 1994, they probably use two to three times as much water as a new low-flush toilet (1.6 gallons per flush) or high efficiency toilet (1.3 gallons per flush). Toilets installed before 1980 may use 5 or more gallons per flush; those installed from 1980 to 1993 may use 3.5 gallons per flush.

Consider replacing the old toilets. A new toilet may pay for itself in a few years by reducing your water and sewer bill every month.

Place one or two plastic bottles (weighted with sand or pebbles, etc.) in the toilet tank to reduce the flush volume. Please make sure the bottle(s) do not interfere with the flapper or other operating parts of the toilet.

Install a quick-closing flapper in your toilet if it was installed before 1994.

✓ Take short showers. If your showerhead has a built-in valve, you can easily turn off the water while lathering up.

✓ If you have a showerhead installed before 1994, replace it with a newer model that conserves water.

✓ Check faucets, showerheads, the water supply pipes connected to your toilets and sinks, etc. for leaks. Even a small leak can waste a significant volume of water if not fixed for weeks or months.

✓ Turn water off at the faucet while brushing your teeth, washing your hands or shaving. Reduce the water flow and/or install an aerator (on faucets that have threading for an aerator).

Kitchen:

✓ Repair leaky faucets.

✓ Install a faucet aerator (if the faucet has threading for an aerator) to lower the water flow rate. Please note that aerators may need to be periodically cleaned.

✓ If your faucet aerator was installed before 1994, consider replacing it with a new model with a lower flow rate.

✓ Use your dishwasher only for full loads.

✓ Turn faucets off when water is not needed for rinsing, cleaning or washing.

✓ Consider installing an energy and water efficient dishwasher.

✓ If you have a garbage disposal unit (grinder) under the sink, consider having it disconnected. Food scraps such as vegetables can be put in a compost bin; bones, etc. can be disposed of with garbage. Reducing the amount of solid particles going down the drain will help keep the drains clear as well as conserving water and energy used in a garbage disposal.

Laundry:

✓ Use your washing machine only for full loads

✓ Consider installing an energy and water efficient washing machine such as a front loader. Please visit the EPA's Energy Star website, www.energystar.gov/products, for more information.

Outdoors:

✓ Review your water bills over the last year or two to compare your water use during the summer with that in the winter months. If there is a large difference, you may be able to conserve water substantially by doing less irrigation, reducing the areas that need irrigation, irrigating more efficiently, having drought-resistant plants, etc.

✓ Install automatic shut-offs on outdoor water hoses for hand watering plants, washing vehicles, etc.

✓ If you have an irrigation system, have a person or company that specializes in these systems review the control system settings, configuration of watering zones, etc. to ensure that you are not wasting water. With the slow water absorption rates of clay soils that are typical in our community, sprinkling times should be limited to avoid waste. Get advice about the "cycle and soak" method from an irrigation specialist.

✓ Install a rain sensor on your irrigation system if you have not already, so that the system will not operate during or soon after rainfall.

✓ Inspect your irrigation system, if you have one, for leaks in and damage to hoses, sprinkler heads, etc.

✓ Do not irrigate in windy conditions, which increase evaporation of water.

✓ Water before sunrise (and no later than 9 AM at the latest) or after 8 PM to reduce water loss from evaporation.

✓ Consider planting a drought-resistant grass (such as Bermuda) that tolerates droughts and other dry weather well and therefore needs no irrigation or less water (after grass is established) than "cool season" grasses such as fescues. It is possible to have an attractive lawn that needs only rainwater.

✓ Or, reduce the size of lawn areas by planting drought-resistant groundcovers, shrubs, trees, flowers and other ornamental plants, etc.

✓ If you decide to landscape an area or establish or re-establish a lawn area, till the soil to a depth of 6 to 8 inches and enrich it with organic matter such as pine bark particles (not peat moss). Proper soil preparation is very important for plant health, root growth and drought resistance.

✓ Plants that receive similar watering should be grouped together.

✓ Water by hand or consider installing a drip irrigation, micro-spray, soaker hose or bubbler system for trees, shrubs and gardens. The latter systems are more efficient than spray irrigation because they lose less water to evaporation.

✓ Mulch around plants to reduce water loss due to evaporation.

✓ Aerate your lawn every 2 or 3 years for better water absorption and for healthier, more drought-resistant turf.

✓ Set your lawn mower's cutting height to 1-2½" for Bermuda grass or 2½-3" for fescue and bluegrass to reduce evaporation of water from the soil.

✓ If your mower cuts grass clippings finely (or if you have a mulching mower), leave the clippings on the lawn as a natural fertilizer.

✓ Consider rainwater harvesting with a detention pond, by installing a cistern or using rain barrels (and remember that controlling mosquitoes is very important if you catch rainwater).

✓ Use a pool cover or Styrofoam floats to reduce evaporation if you have a swimming pool.

The checklist above is intended to cover items that may provide the most effective and practical conservation opportunities for many customers. If you would like to have more detailed information about water conservation, please send an e-mail to webmaster@owasa.org, call us at 968-4421 or see other conservation information on our Website.