



Water Conservation and Efficient Water Use At Home

Smart Water Savings Ideas
from the Arlington Water Department

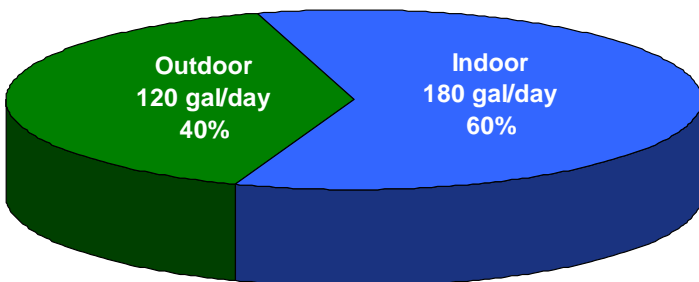
Traditional water conservation concepts have been associated with use restrictions during times of limited water supplies, such as droughts or emergencies. Increasingly, emphasis has been placed on water use efficiency, or reducing unnecessary water use and waste. (In fact, it defines unnecessary water use as waste.) Water use efficiency doesn't mean curtailing water using activities as much as it means getting something done with the least amount of water necessary. It can include changes to our behaviors and attitudes, but it also means achieving the same result or level of service with less. For example, why flush a toilet with 3 to 5 gallons of water when you can get the same empty bowl for less than 2 gallons? Why pay for 20 gallons of leaking water dripped down the drain each day when it provides you no benefit?

Begin thinking of water conservation not primarily as going without, but as doing the same—or more—with less. If you pumped your own water from a well by hand, you'd think of conservation as working smarter, not harder. The information and ideas below are provided with this intent—to help you achieve a high and healthy quality of life with fewer gallons of water consumed. The benefit is not just to your pocketbook, but to your community, your environment, and your future.

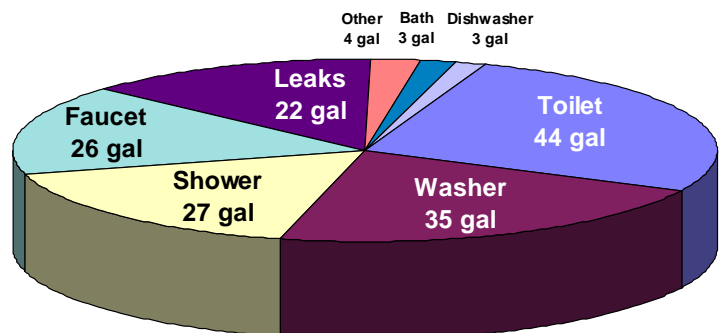
Where Does All the Water Go?

Residential consumption accounts for nearly 3/4 of the total consumption in the City of Arlington (commercial, industrial, institutional and municipal uses compose the rest). On an *annual* basis, the average single family residence (SFR) will use about 196 gallons for outdoor and indoor uses each day. *Indoor* use at each SFR ranges seasonally from about 160 to 180 gallons each day. During summer months with their intensive *outdoor* uses, SFRs can use 300 gallons each day. The greatest residential uses, then, are summer activities such as lawn and garden watering, car washing, and water-based recreation, which can average 120 gallons per day. Indoors, the five biggest water users in a SFR are, in order: toilets, washing machines, showers, sinks, and leaks.

Peak (Summer) Day Consumption
Average Single Family Residence = 300 gal/day



Average Daily Consumption
Single Family Residence = 163 gal/day



Outdoor Water Conservation Tips

Lawns

- If installing a lawn, select a turf mix or blend that matches your site conditions (soil, aspect, shade) and our climate.
- Reduce the amount of lawn in your yard by planting native shrubs and ground covers.
- Choose native shrubs and groundcovers instead of turf for hard-to-water areas such as steep slopes and isolated strips.
- Improve your soil by regularly adding compost, aerating, and dethatching.
- Adjust your lawn mower to a higher setting. A taller lawn shades roots and holds soil moisture better than if it is closely clipped.

Lawn Irrigation

- Consider letting your lawn go dormant during the summer. Dormant grass only needs to be watered every three weeks, or less if it rains.
- Follow the City's lawn watering calendar as a guide. Find a copy on our web site: www.arlingtonwa.gov. Navigate to Public Works, then to Water Department.
- Water deeply but infrequently to encourage deep roots for plant health and drought tolerance.
- Water only when needed. Some rules of thumb are:
 - One inch of water a week, including rainfall.
 - Walk across the grass. If you leave footprints, it's time to water.
 - Periodically check soil moisture depth with a trowel. If soil is moist within 2 to 3 inches of the surface, it is not necessary to irrigate.
- Use a rain gauge, or empty tuna can, to track rainfall on your lawn. Then reduce your watering accordingly.
- If water runs off your lawn easily, because of slope or soil considerations, split your watering time into shorter periods to allow for better absorption.
- Water when irrigation water will be most effective and not lost to evaporation:
 - Early morning (Up to 30% of water can be evaporated by watering midday)
 - Evening
 - Calm, low-wind conditions
- Use sprinklers that deliver big drops of water close to the ground. Smaller water drops and mist often evaporate before they hit the ground.
- For portable sprinklers:
 - Make sure your sprinkler is placed so it only waters the lawn, not the pavement.
 - Use sprinklers for large areas of grass. Water small patches by hand to avoid waste.
 - Set a kitchen timer when watering your lawn or garden to remind you when to stop. A running hose can discharge up to 10 gallons a minute.
- For installed irrigation systems:
 - Adjust the timer on automatic sprinklers according to seasonal water demands.
 - Install a rain sensor on your irrigation controller so your system won't run when it's raining.
 - Check your sprinkler system valves periodically for leaks and keep the sprinkler heads in good shape.
 - Learn how to shut off your automatic watering system in case it malfunctions or you get an unexpected rain.

Gardens

- Select plants appropriate for northwest Washington to minimize the need for supplemental watering.
- Group plants with the same watering needs together to avoid overwatering some while under-watering others.
- Next time you add or replace a flower or shrub, choose a low water use plant.
- Plant landscaping plants in the fall when conditions are cooler and rainfall is more plentiful.
- Consult nurseries or the Master Gardeners for species selection recommendations.
- Mulch around plants to reduce evaporation.
- Check the root zone of your lawn or garden for moisture before watering using a spade or trowel. If it's still moist two inches under the soil surface, you still have enough water.
- Collect rainwater in a barrel and use it to water non-edible plants. The same goes for any container that collects water outdoors or indoors (buckets, toys, bird baths, pet dishes, fish tanks, etc.).
- Install a rainwater collection system to collect and re-use runoff from the roof of your house.
- Use sprinklers for larger gardens. Water smaller planting beds by hand to avoid waste.

Maintenance

- Use a broom to clean walkways and driveways, not the hose.
- Use a hose with a shut-off nozzle when washing the car or watering.
- Washing your car on your lawn minimizes contaminated runoff and waters your lawn at the same time.
- Use a commercial car wash that recycles water.
- Inspect outdoor faucets, sprinklers and hoses for leaks (they're not as noticeable as indoor leaks).
- Winterize outdoor spigots when temperatures dip below freezing to prevent pipes from leaking or bursting.
- Report broken pipes, open hydrants and errant sprinklers to the property owner or your water provider.

Recreation and Aesthetics

- Minimize recreational water toys that require a constant flow of water.
- When the kids want to cool off, use the sprinkler in an area where your lawn needs it the most.
- Wash your pets outdoors in an area of your lawn that needs water
- Cover your spa or pool to reduce evaporation.
- Check for leaks around the spa or pool, including their pumps.
- Use a grease pencil to mark the water level of your pool at the skimmer. Check the mark 24 hours later to see if you have a leak.
- Trickling or cascading fountains lose less water to evaporation than those spraying water into the air.

Indoor Water Conservation Tips

Toilets

- Install water efficient toilets that use only 1.6 gallons per flush. Older toilets use 3.5 to 7 gallons per flush.
- Take advantage of toilet rebate programs and get money back. Look for products bearing the EPA WaterSense label. Check the City's web site to see whether toilet rebates are available.
- Retrofit an older (pre-1993) toilet by placing a displacement device in the tank.
- Check toilets for leaks. Place a few drops of food coloring or a leak detection tablet or strip in the toilet tank. If after 15 minutes the dye shows up in the bowl (without flushing), the toilet is one of the 20% that has a leak.
- Learn to replace your toilet flapper—frequently the item causing many toilet leaks.
- Don't use the toilet as a "self-cleaning" garbage can. Use the trash where appropriate.

Washing Machines

- Purchase a new water efficient washing machine, and get money back. Look for products bearing the EPA WaterSense label. Check the City's web site to see if washing machine rebates are available.
- Wash only full loads of laundry.
- If you must wash a small load, adjust the water level to match the size of the load.

Showers

- Install water efficient showerheads that only use 2.5 gallons per minute.
- If your shower fills a one-gallon bucket in less than 20 seconds, replace the showerhead with a water-efficient model.
- Try shortening your shower by one minute.

Faucets

- Install water efficient faucet aerators that only use 1.0 gallon per minute.
- Repair dripping faucets by replacing the rubber washer or valve stem.
- Don't let the faucet run while brushing your teeth, shaving, or washing dishes.
- When washing dishes by hand, don't let the water run while rinsing. Fill one sink with wash water and the other with rinse water.
- Use the garbage disposal sparingly. Compost vegetable food waste instead.
- For cold drinks keep a pitcher of water in the refrigerator instead of running the tap. This way, every drop goes down you and not the drain.
- Wash your fruits and vegetables in a pan of water instead of running water from the tap.
- Instead of draining spent water from the sink, use it to water house plants.
- Install an instant water heater near your kitchen sink so you don't have to run the water while it heats up. This also reduces energy costs.
- Insulate hot water pipes for more immediate hot water at the faucet and for energy savings.

Leaks

- Use your water meter to check for leaks. Turn off all faucets and water using appliances. Then read your water meter. Wait for 15 or more minutes. Then read your water meter again. If the dial moved, you have a leak. Call a plumber to help find and fix your leak.
- Monitor your water bill for unusually high use. Your bill and water meter are tools that can help you discover leaks.
- Know where your master water shut-off valve is located. This could save water and prevent damage to your home in an emergency.

Dishwashers

- Conscientious washing by hand often uses less water than the dishwasher.
- Wash only full loads of dishes.
- If your dishwasher is new, cut back on pre-rinsing. Newer models clean more thoroughly than older ones.

Tips for Conservation Advocates

- Encourage your school system and local government to develop and promote water conservation among children and adults.
- Make suggestions to your employer about ways to save water and money at work.
- Share water conservation tips with friends and neighbors.
- Look for products bearing the EPA WaterSense Label for items that been certified to save 20% or more without sacrificing performance.
- Support projects that use reclaimed wastewater for irrigation and industrial uses.