



WaterSense Products

Look for the WaterSense label when purchasing products that use water. They have undergone independent testing and certification to meet EPA WaterSense criteria for efficiency and performance. The average household could save approximately \$170 per year by making simple changes to use water more efficiently. Installation of water-efficient products throughout the U.S. would save more than 3 trillion gallons of water per year, an equivalent of \$18 billion dollars.

Low-Volume Showerheads

Installing a low-volume showerhead is an easy and inexpensive way to reduce the amount of water you use every day. Normal showerheads can dispense 5 to 10 gallons of water per minute! Low-volume showerheads can reduce water use in the shower by 50%. Reducing your time in the shower, or turning off the water while you soap up will also dramatically reduce water use. To increase savings, do not brush your teeth or shave in the shower.



Front-Loading Washers

These washers use 40% of the water as a standard top-loading washer. Because they use less water, they also use less energy to heat the water. They can also hold more and are easier on your clothes. Savings while using a front-loading washing machine can top \$100 per year. To increase savings, only wash clothes when you have enough for a full load.

Low-Volume Dual Flush Toilets

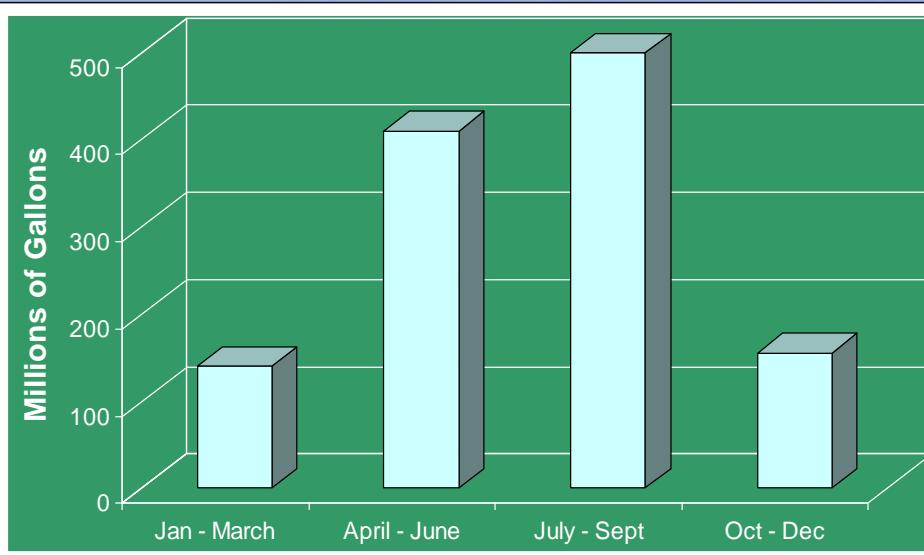
Standard toilets use between 3 to 5 gallons of water per flush. Low-volume toilets only use 1 to 2 gallons. This will cut indoor water use by about 30%. A dual flush toilet allows you to choose between a high and low volume flush. You can reduce the amount of water used by a standard toilet if you sink a couple plastic bottles full of sand and water in the tank.



Faucet Aerators

Aerators are the easiest and least expensive way to reduce home water use. They come in a variety of styles to fit the needs of your kitchen and bathrooms, are simple to install, and often cost less than \$6.

Water Use for an Average Suburban Community



The graph above depicts water use for an average suburban community throughout the year. During the non-growing season (October-March), an average of 40 million gallons is used per month. During the growing season (April-September), that amount nearly quadruples to 150 million gallons per month. The majority of the difference between these two numbers is outdoor water use for lawn and garden irrigation, as well as washing cars and maintaining swimming pools. This large increase in water use puts tremendous pressure on groundwater reserves.

When watering your lawn or washing your car, it is important to remember that you are using the same pure drinkable water that comes out of your sink. Finding ways to reduce water use is an easy step we all should take to help conserve this important resource.

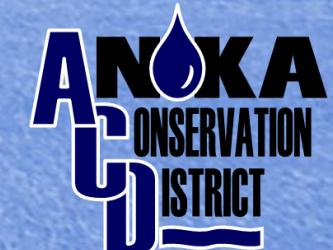
WATER-SMART

Conserving Water at Home



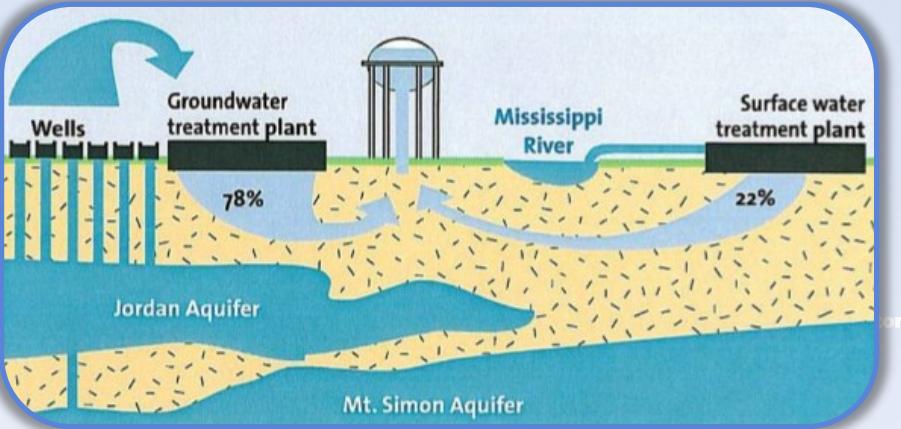
Conservation Starts at Home

Prepared by the



Where Our Water Comes From

Household water comes from a variety of places including private wells, municipal wells, and treatment plants that take water from local rivers. The majority of our water is taken from aquifers located deep underground. Aquifers near the surface have their water supply “recharged” relatively quickly through infiltration, while deeper aquifers take much longer. Some of the water pumped by city wells was from glacial melt 10,000 years ago and once used up, it won’t be recharged in our lifetimes. Water from these reserves is very clean and requires minimal treatment to make it safe to drink.



The average suburban home will use over 40,000 gallons of water each year for lawn irrigation. That's about one-third of the total annual household water use! Saving this water for drinking instead of growing grass will help maintain our drinking water supplies.

Runoff

We all value clean lakes and rivers for recreation and clean abundant water for drinking and other household uses. What we do at home can greatly influence the quality and quantity of these resources.

In a one-inch rainfall, a 1/4-acre lot can produce over 5,000 gallons of water from roofs, sidewalks, driveways and even the lawn itself. Grass clippings, leaf litter, soil, fertilizer, and other pollutants are washed off the lot and eventually flow into a storm drain. Water that enters storm drains goes untreated into lakes, streams, and ponds. This can adversely affect natural systems and water quality by introducing pollutants and excess nutrients.

Runoff can cause a variety of problems for local waterbodies. It transports sediment that reduces the quality of habitat and smothers aquatic life. It carries heavy metals and chemicals that make the water unsafe for human use. Excess phosphorus from grass clippings, leaf litter, and some fertilizers are washed into lakes causing algae blooms. Excess algae competes with native aquatic vegetation for nutrients and sunlight. Eventually, decomposition of algae decreases the amount of dissolved oxygen in the water and can result in a fish kill. To prevent these problems, water quality improvement and volume reduction efforts need to be made by everyone, not just the people living near a water source.



Water-Smart Surfaces



Permeable Paver Driveway



Permeable Asphalt

Driveways, sidewalks, patios, and roofs all produce runoff during a rainstorm. However, there are ways of maintaining a hard surface area while also allowing water to soak in. Permeable pavers lock together to create a solid surface, but have gaps between the pavers that allow water to infiltrate. The gaps can be filled with gravel or even seeded to allow small plants to grow! They are great for driveways, sidewalks or patios.

Permeable asphalt is another hard surface that will allow water to soak into the ground instead of flowing into a storm drain. It is extremely durable, can be plowed in the winter and will reduce ice buildup because water will not sit at the surface.

Yard Maintenance

With proper maintenance you can keep your lawn healthy through the hottest part of the summer while also reducing your water use.

- ◆ Water thoroughly, but infrequently, to encourage deeper root growth.
- ◆ Install a shut-off device to prevent watering during rain events.
- ◆ Repair leaking sprinklers, and adjust sprinklers to prevent spraying water on sidewalks, driveways, or the street.
- ◆ Water in the morning to minimize water lost to evaporation.
- ◆ Mow grass no shorter than 3" for deeper roots and fewer weeds.
- ◆ Use low-maintenance grasses like fine-leaved fescues and drought-resistant types of Kentucky bluegrass in newly seeded areas.
- ◆ Let your lawn go dormant during the hottest months. Water 1/4" inch every two weeks (minus rainfall) to keep the crowns healthy.
- ◆ Mulch around trees, shrubs, and in your garden. It will keep moisture in the soil and reduce weed growth.
- ◆ Use a plug aerator to improve water infiltration, making a healthier lawn and reducing runoff.
- ◆ Utilize drip-irrigation in gardens to apply water directly where it is needed and minimize losses to evaporation.



Water-Smart Landscaping

There are many ways to landscape your yard that will reduce runoff and water use. Many of them relate to the fact that traditional turf grass is not adapted to live in our climate and requires a lot of water to keep it alive. By limiting turf grass on your property to the areas of active use you can dramatically reduce your watering needs.

- ◆ Convert an area of lawn or existing garden to xeriscaping; a form of landscaping that uses drought tolerant plants.
- ◆ Replace high-maintenance grass with low-maintenance trees and shrubs. They provide shade that will reduce the amount of water needed to keep your lawn healthy and have deep roots that promote infiltration.
- ◆ Install water-free landscape features, such as a rock garden.

Consider natural landscaping for the rest of your yard. Natural landscaping is the use of native vegetation that is adapted to the soil, moisture and sunlight conditions of the property, greatly reducing long-term maintenance. Natural landscapes have other benefits as well:

- ◆ Provide a variety of habitats for insects, birds, reptiles, and mammals.
- ◆ Once established, they require very little maintenance, resist disease, and are drought tolerant due to deep root structures; saving on water, fertilizers and pesticides.
- ◆ They can be designed to look natural or formal depending on your preference.
- ◆ You can use natural landscaping to create a rain garden that will capture runoff and allow it to soak into the ground instead of flowing into a nearby water body.

To further reduce water use and runoff from your property;

- ◆ Recycle rainwater with a rain barrel. Rain barrels capture rainwater from gutters and store it so you can use it later to water your plants.
- ◆ Direct downspouts into your yard instead of onto your sidewalk or driveway.



Native Planting



Rock Garden



Rain Garden



Rain Barrel