

Drop by Drop

A How-To Guide: Starting a Water Conservation Program

<http://www.jeonet.com/city/water.htm>

Why should you conserve water?

Like many things around us, we seldom appreciate what is plentiful and easy to obtain. And what could be more plentiful than water? To get water all we do is just turn on the faucet 24 hours a day and it's there, ready to use. But think again -- the water we use doesn't just magically appear.

Treated water is a carefully manufactured product which appears in your home only after traveling through many miles of pipeline and lengthy treatment processes. It's a valuable resource that shouldn't be wasted.

Just 1% of the entire water supply in the world is available for human use -- the rest is salty or locked in ice caps and glaciers. Just this relatively small 1% keeps all the world's agricultural, manufacturing, community and personal household and sanitation needs operating. We actually drink very little of our processed "drinking water"; around 1% of all treated water. The rest goes on lawns, in washing machines, and down toilets and drains!

As concern for our environment has increased in recent years, so have the federal and state demands on our local water treatment and pollution control plants to improve their processes and facilities. This has greatly increased the costs that the City of Iowa City must transfer on to its utility customers. In the face of rising costs for water and sewer services, conservation can be a way for citizens to do themselves a favor to the environment and to their pocketbook at the same time. You pay for every drop, whether it's used wisely or wasted, so water conservation is something we should all practice.

When you conserve water, you also save on other services. When you use less hot water, there is less energy needed to heat that water, thereby reducing your gas and electric bill. When you use less water, you also put less water down your sewer drains, thereby reducing your sewer bill. So you can see, by implementing a simple conservation program, you are helping the environment by helping ease the burden on water storage, purification, distribution and treatment facilities.

This page contains some simple, painless ways to reduce your water consumption without really altering your lifestyle. A good water conservation program is mostly a matter of using common sense and taking the time to think about water and how you use it. Get your entire family involved in this program, since the habits learned at an early age will make your children better environmental citizens in the future.

If you should have additional questions or need more information about your water conservation program, call **Carol Sweeting, the Water Division's Public Information and Education Coordinator, at 319-356-5164 or carol_sweeting@iowa-city.org**. Staff are also available to speak to groups on water conservation.

Before you start learning how to conserve water, you will first need to know how to measure your water use. You have two ways to measure: your water bill and water meter. Together they can provide a lot of valuable information to help you on your way to developing an effective water conservation program.

What your water bill can tell you:

1. As of Jan, 1998, Iowa City residential customers are billed for utility service usage over a one-month period.
 2. Can't picture a cubic foot of water? Multiply the number of cubic feet by 7.5 to calculate the approximate amount of gallons you've used. To give you a better idea what a good bargain water is, 7.5 gallons of water delivered directly to your house costs about \$0.03! (rates as of March 1999: click here for [Coralville's general water and sewer fees](#)).
 3. Notice: Iowa City "sewer" is billed on number of cubic feet of water used; so when you use less water, you're charged less for sewer charges also.
 4. For Iowa City residential customers, there is currently a minimum monthly water charge of \$6.79 and sewer charge of \$6.51 for the first 100 cubic feet of water which covers fixed costs of operating the City of Iowa City's water and sewer plants and distribution. After the minimum charge, water usage thereafter is billed at \$3.17 per 100 cubic feet and sewer is billed at \$3.19 per 100 cubic feet (rates as of March 1999: click here for [Coralville's general water and sewer fees](#)).
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Here's How to Read your Water Meter

Your water meter is located in either your basement or utility room. The City uses the type of meter that is read like a car odometer.

The meter reader no longer has to go directly into your basement to read the meter. It is read electronically by means of an outdoor reader -- a black box on the side of your house.

Meters are not reset between readings. To find out how much water you've used in any given period, just subtract the reading on your last bill from the current meter reading. Remember, do not read the last two digits on the meter -- the City bills in increments of 100 cubic feet of water (750 gallons).

For example, a meter that read 987,400 cubic feet seven days ago, and 987,600 cubic feet today shows 200 cubic feet of water has been used. Multiply that 200 by 7.5 to find the number of gallons used during the week (1500 gallons).

Use Your Water Meter to Gather Water Intelligence!

Now that you know how to read your water meter -- use it to detect hidden leaks and measure water usage. Here's how

To detect leaks (hidden and otherwise):

On your next trip away from home when the house is empty, write down the numbers on your meter when you leave, and check the meter upon your return. It is also helpful if you mark the position of the needle on the meter to see if it moves. If it has moved at all, you have a leak. Read on for further information on how to locate and fix leaks. *Note: this method is not effective if you have appliances in the house which use water automatically, such as water softeners, ice-making refrigerators, and furnace humidifiers.*

Want to know how much water it takes each time you water your lawn? Turn on the sprinkler and watch the meter dial move for precisely one minute. Multiply the number of cubic feet by 7.5 (to convert to gallons) and the result by 60 to calculate the quantity used per hour. Then estimate how long you usually leave the sprinkler running. How many gallons of water are sprinkled on your lawn and garden each week?

Follow the same timing routine when a family member steps into the shower. Check the volume of water consumed in one minute and multiply by the number of minutes normal showers take. How much water could you save yearly if everyone in your family shortened their showers by one minute?

Four Basic Components to a Water Conservation Program

Step One: Economize!

Look at your water habits developed over a lifetime. A lot of water goes down the drain because we have always thought of water as being plentiful and cheap. Typically, inside your house, bathroom facilities constitute nearly 75% of the water used. Become conscious of the amount of water you use, and look for ways to use less whenever you can. The most important thing to do: *Think* as you use water!

Step Two: Repair Leaks!

A leak of just one drop per second wastes 2,400 gallons of water a year. Leaks are one of the great enemies of your water conservation program and they can't be taken lightly.

Step Three: Install Water Saving Devices

There are as many devices you can buy and install fairly easily to reduce your water consumption. These include faucet aerators; flow regulators for shower heads; and displacement devices for toilets to reduce water consumption. Investing a little money, time and labor can have big paybacks to reduce water use.

Step Four: Reuse Water

Unused or slightly used water is often suitable for other purposes, even with no treatment or filtration. During a severe drought, reusing water may become a necessity. When maximum conservation is called for, make the most of any water before you let it go down the drain!

Saving Water Outdoors

Northern states during the summer find that sometimes half or more of the water piped into homes is going right back out through hoses onto lawns and gardens. It's a fact of life that when more water is used outside, more is wasted there. But you don't have to let your lawn turn brown or the car get dirty to conserve water. Just use common sense instead.

Once you set a lawn sprinkler out and turn it on, it's easy to forget how much water you can waste in a short period of time. A single lawn sprinkler spraying five gallons per minute uses 50% more water in just one hour than a combination of ten toilet flushes, two 5-minute showers, two dishwasher loads and a full load of clothes!

The basic principle of lawn and garden watering is not to give your lawn and plants more than they need. Don't follow a fixed watering schedule. Water when the grass or plants show signs of needing it. Over watering is bad for plants and lawns.
