

# Being Good Stewards of Water



In this program we will look at water consumption around the world and in our own homes. We will share ways of conserving and recycling water as well as discover ways to lessen the wear-and-tear on our water systems and our wallets.

## **We Consume More Water than Meets the Eye**

Make enough copies of the water cycle diagram found here: [www.enchantedlearning.com/geology/label/watercycle/](http://www.enchantedlearning.com/geology/label/watercycle/) (or if you are able, reproduce the handout on a poster board large enough for all to see). This diagram illustrates how the water cycle “cycles” the finite amount of fresh water that the earth possesses. Allow time for the group to reflect on this reality as you introduce the workshop with the following:

Three-quarters of the earth’s surface is covered with water, yet less than one percent of it is fresh water available for human consumption. The water cycle diagram drives home the fact that water gets recycled: There are no new or fresh sources of water on earth.

**There are several places you can acquire figures on water consumption. One is [www.waterfootprint.org](http://www.waterfootprint.org), where you can find your own water footprint as well as footprints for corporations and countries.**

We will start with a few current figures on water consumption. When we hear the phrase “water consumption,” we can immediately think of how much water each of us uses on a daily basis for bathing, washing, cooking, and drinking. This amount varies from person to person as well as from country to country, with “developed” countries using the most.

But there is also something called *virtual water consumption*. Virtual water consumption reflects the *water consumed in the production of both food and*

## How to Use This Resource

We suggest you look at Women of the ELCA's and the ELCA's Web pages on water prior to leading this workshop. You can select prayers to share from the Water Prayers page on [www.womenoftheelca.org](http://www.womenoftheelca.org), which is found in the section Worship and Prayer Resources. The ELCA offers a one-page issue brief on water; see [www.elca.org](http://www.elca.org).

This workshop presents facts and figures about water consumption and also allows for small group discussion on how we consume water and how we might conserve it. Allow about 60 minutes.

It will be helpful to have enough copies of the water cycle diagram mentioned in the first section, as well as paper and pens for participants to write notes. A whiteboard or newsprint to collect ideas from the small group discussions is also helpful.

non-food items, such as clothing, materials, supplies, or machine and tool production. We may not have personally acted to consume this water, but it was consumed in the process of making available or delivering to us things like clothes and food.

According to the American Waterworks Association, more than 3.9 trillion gallons of water are consumed in the United States every month. And according to the Water Footprint Network, the average American uses 2483 cubic meters of water per year, with 19% of that water coming from other countries (through imported goods). This compares to 675 in Ethiopia with 1% of that water coming from other countries, and 683 in Namibia, with 11% coming from other countries. Finland consumes 1727 cubic meters of water per year per person with 41% of it coming from other countries, and Germany's figures are 1545 and 53%. You can explore more national and corporate figures at [www.waterfootprint.org](http://www.waterfootprint.org).

Learning the virtual water content of some of our food and goods can help us become more water conscious. Learning the water content of some of our food and goods can also help us eliminate unnecessary virtual water consumption.

For example, if everyone were to adopt the Western meat-based diet, our earth would require 75% more water. It takes 1000 liters of water to produce one kilogram of wheat; it takes 5 to 10 times more than that to make a kilogram of meat (with beef taking the most water). Food production uses about 70% of U.S. water withdrawals (see [www.waterfootprint.org](http://www.waterfootprint.org)). Some countries have begun asking corporations to begin to consider their virtual water consumption

prior to adopting any food, water, or environmental policy. Some international and governmental entities are also including virtual water consumption as an instrument in water and agricultural analysis (see [www.circleofblue.org](http://www.circleofblue.org)).

## Conserving Water

Using water more efficiently decreases water pollution and increases energy savings. So how can we conserve water? How can our community conserve water? How can we require less water for our daily lives?

Sit with two other people, and over the next three minutes, see how many ways you can come up with for conserving water.

**You can share the following examples as a way to start the small group conversations. If you use just one, you can save the other to add to the list you create after the small group discussions.**

- Rather than put a brick in the toilet tank (they decompose over time and can cause problems), try using a water bottle. Place pebbles in that water bottle, add water, screw the top on tight, and place it in your tank, out of the way of working parts.
- Take shorter showers! A regular shower head uses between 7 and 10 gallons a minute. You can also install water-saving shower heads and use only between 2 and 4 gallons of water a minute.

**Have each of the small groups share with the larger group when the three minutes are up. You may want to write these answers on newsprint or a whiteboard.**



A typical household of four in the United States uses 260 gallons of water every day. Much of it is used in the bathroom. Toilets use 40% of the total, showers/baths and faucets use another 35%. By contrast, only 15% is used in the kitchen, and 10% for washing clothes (see [www.extension.umn.edu](http://www.extension.umn.edu)).

We should all consider installing water-saving showerheads and sink aerators. Water-efficient fixtures make a measurable difference! Those that were installed in U.S. households in 1998 alone saved 44 million gallons of water every day, resulting in total annual dollar-value savings of more than \$33.6 million (see [www.toiletabc.com](http://www.toiletabc.com)).

Capturing rainwater won't lessen your usage but it will lessen the amount of water you draw from your municipal system or well. Rainwater harvesting also won't help much in extremely dry areas, but where rainfall is reliable, harvesting rain water can make a serious dent in your water bill. Most people harvest rain water for their gardens, but some harvest rain water for flushing toilets; that would require a water harvesting system, while collecting for the garden simply requires putting out rain barrels. There are many commercially available barrels, and they will pay for themselves quickly!

## Recycling Water

How do we recycle water? How does our community recycle water? How can we recover the water we use in order to use it again in some other way?

Sit with two other people and, over the next three minutes, see how many ways you can come up with for recycling water that you already use.

**You can share these examples as a way to start the small group conversations. If you use just one of them, you can save the other to add to the list you create after the small group discussions.**

- Most of us run the shower until the water gets warm. If we used a clean pail to catch that water, we could use it for cooking!
- Rather than dump half-empty water glasses after a meal or that you find in the TV room at the end of the day, use that water to water your plants.

**Have each of the small groups share with the larger group when the three minutes are up. You may want to write these answers on newsprint or a whiteboard.**

Recycled water may also contain higher levels of nutrients, such as nitrogen, and can lessen the need to apply synthetic fertilizers.

“Gray water” is all the water you have used in your home, with the important exception of toilet water. The best gray water to use in your garden is shower or bathtub water. If you use natural, biodegradable detergents (and little if any bleach), your washing machine water would also be good. Dishwashing water is the least desirable due to its grease and food particle content.

## Take a Water Saving Inventory

Every household should do a periodic water saving inventory. An easy-to-use tool can be found at [www.h2oconserve.org](http://www.h2oconserve.org), and the U.S. Geological Survey has a survey at <http://ga.water.usgs.gov/edu/sq3.html>.

Once you find out how much water you use, it would be a good idea to look at your water bill. You'll easily be able to see how much water you could save, and how much money you could save, with a 10% reduction in your water use. You will also lessen the burden on the septic system, whether that system is your own or your municipality's!

How do we consume water? How does our community consume water? How can we consume less water?

Sit with two other people, and over the next three minutes, see how many ways you can come up with for consuming less water.

**You can share these examples as a way to start the small group conversations. If you use just one of them, you can save the other to add to the list you create after the small group discussions.**

- Do not let water run down the drain while you wait for water to get hot or cold. Instead, use a watering can to capture what is running while you wait for water to get hot. Use it for houseplants, pets or the garden. Have cold water always on hand by keeping a pitcher of water in your refrigerator.



- Speaking of your refrigerator—defrost your food in your fridge, not under running water.

**Have each of the small groups share with the larger group when the three minutes are up. You may want to write these answers on newsprint or a whiteboard.**

**Depending on your time and inclination, as facilitator, consider doing an Internet search to have a few additional water recycling and conservation ideas to share in addition to what follows.**

## More Tips and Resources

We've talked about some simple ways to reduce your household's water consumption, but there are many more! Also, we should each find out what is being advised locally (in our state and city) regarding water usage, recycling and conservation.

You will find that some water-saving tips are more practical than others, but we can each start with the easiest ideas and then go after the more aggressive ideas!

Here are a few simple and practical ways your household can reduce its water consumption. See if you can tell which are water conservation and which are water recycling.

- Use your water bill to discover leaks. Also, periodically check for leaks under sinks and in water heaters, hoses, and faucets.
- Repair any existing leaks you find. Anyone can learn how to replace washers and use plumbers tape! Or swap a delicious casserole and baked bread with someone in your congregation who can help with minor repairs.
- Use mulch in your flowerbeds to save water, and read up on how to have a water-saving garden. (Hint: That garden won't have any big water drinkers and will have plants native to your zone.)

- Water from your fish tank should go into your plants (lots of nutrients in that water!).
- Set your water heater a little lower and wrap it in an insulating blanket (you can get one at any home repair store).
- Reuse your towels in hotels and at home.
- Wash produce in a pan rather than under running water; then give that water to your plants or garden.

## You and the Promise of the Future

Water is such a powerful symbol in our Christian faith! We are baptized by water and it is through water and the word that we are made children of God. Water stories run through our holy texts like a silver thread.

The river that flowed in Eden and the turning of the water into blood by Moses are two examples. We are also reminded of the two times when God produced water out of a rock for the Hebrews in the wilderness (Exodus 17:1–7; Numbers 20:2–13). There was Jacob's well and the parting of the Red Sea.

Today the world faces water scarcity. God gave us the gift of an earth filled with all that we need and then some. God has also given us good sense that can provide a future for our children's children and their children, too, if we take good care of all that we have been given. Being good stewards of creation and of our communities includes understanding how to manage our resources, and this certainly includes water!

**Use a water prayer found on the Women of the ELCA water page to close the program.**



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## Did you know?

**Women of the ELCA resources, such as this one, are available free to individuals, small groups, and congregations.** Covering a variety of topics, we are bringing Lutheran perspectives and new voices to issues that matter. By making a donation to Women of the ELCA, you will help us continue and expand this important educational ministry. Give online at [womenoftheelca.org](http://womenoftheelca.org) or mail to Women of the ELCA, ELCA Gift Processing Center, P.O. Box 1809, Merrifield, VA 22116-8009.