



# Worldwide Water

Module **1**: Opening

Activity Level: Low

**Goal:** To begin to think about the amazing gift of water and the many ways people around the world use water.

## MATERIALS

You may have the participants write their responses on paper, discuss in small groups, or discuss together in the large group. Depending on your preference you may want to have the following available:

- Bible or copy of Psalm 65
- Paper and pencils (for individual reflection)
- Flipchart or whiteboard and markers (for group sharing)
- Print and photocopy the photographs from the websites listed below or create a PowerPoint presentation and project them on a screen.

## INSTRUCTIONS FOR PRESENTER

Welcome participants to the session on water and hunger. To invite people into the experience, choose one of the prayers and/or hymns listed below or choose your own. Plan on about 15 minutes for this opening activity.

## PRAYERS

1. We give you thanks, O God, that through water and the Holy Spirit you give us new birth, cleanse us from sin, and raise us to eternal life. Stir up in your people the gift of your Holy Spirit: the spirit of wisdom and understanding, the spirit of counsel and might, the spirit of knowledge and the fear of the Lord, the spirit of joy in your presence, both now and forever. Amen *(ELW, p. 237)*

2. Holy God, creator of light and giver of goodness, your voice moves over the waters. Immerse us in your grace, and transform us by your Spirit, that we may follow after your Son, Jesus Christ, our Savior and Lord, who lives and reigns with you and the Holy Spirit, one God, now and forever. Amen. *(ELW, p. 22)*

### 3. A prayer of Francis of Assisi:

Blessed are you, Lord, through Sister Water,  
who is so useful, so humble, so precious, and so pure

We praise and thank you, Lord,  
for your gift of water  
in all its many forms and uses.

Guide us to use it wisely,  
to learn from its humility,  
to consume it mindfully  
and protect its purity,  
so that we may truly value water  
and share it generously.  
Amen.

*(adapted from a prayer by Brother Cathal Duddy,  
www.praying-nature.com)*

4. Say a prayer yourself or invite a member from the group gathered to offer one.





## SONG SUGGESTIONS

(from “Evangelical Lutheran Worship” [ELW] or “With One Voice” [WOV])

- ELW 455  
Crashing Waters at Creation
- ELW 423  
Shall We Gather at the River
- WOVS 763  
Let Justice Flow like Streams
- WOVS 766  
We Come to the Hungry Feast
- “As the Deer” by Marty Nystrom,  
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## INSTRUCTIONS

Read Psalm 65 aloud. Allow time for reflection then reread verses 9 and 10.

**READ ALOUD:** When was the last time you used water? Maybe you had a sip from the water fountain on your way in; maybe you washed your car or ran the dishwasher today. Or maybe you dipped your fingers in the font as you entered or left church.

Water is vital to all life. All people need clean, fresh water. It’s important for health and hygiene—and just as important in our spiritual life. Our Scriptures are full of water stories—Noah and the ark riding out the flood, the Israelites crossing the Red Sea to freedom, John baptizing Jesus, and on and on.

We all need plenty of clean, fresh water. Let’s think about all the ways in which water is essential.

## ACTIVITY PART ONE

In two quick minutes list as many uses of water as possible. Think outside the water fountain! Having trouble thinking of uses? Here are a few ideas to prime the pump: drinking, washing stuff (hands, clothes, dishes, people, pets, cars, etc.), flushing toilets, watering plants, ironing, playing (swimming, water fights, slip ’n slides), keeping the cat off the counter, drinks (coffee, tea, beer), fighting fires and so on.

After making the list allow some time to reflect on how much we use water (on an average people in the United States use about 2,000 gallons a day—more than twice the global average!). It’s amazing how important clean, fresh water is to how we lead our lives.

**READ ALOUD:** Water is necessary for life, as we’ve seen, and God has blessed the world with lots of it—oceans, streams, rivers, lakes, water in the clouds, water under the earth. The famous photo of the earth from space shows how much of the earth is beautiful blue ocean and bright white ice over the north and south poles and in the highest mountains—but we can’t drink that water. The oceans are salty and the icecaps, icebergs, and glaciers are frozen solid! We all depend on the water under the earth that wells up in streams and rivers and lakes, and the water above the earth that comes down as rain.

About 97.5 percent of the earth’s water is salty. Nearly 2 percent is locked up in snow and ice. That leaves less than 1 percent of the earth’s water as fresh liquid water, on the surface and under the earth. Less than 1 percent of the earth’s water sustains life for all the human beings, animals and plants on earth! Two-thirds of that water is used to grow food. Let’s see how people around the world get the water they need.



## ACTIVITY PART TWO

Before gathering pick two or three images from this list that you will reflect on as a group. Use the questions to lead a discussion. If you see a more compelling picture, feel free to show that one instead and create your own questions for reflection.

**Photo A:** <http://ngm.nationalgeographic.com/2010/04/last-drop/last-drop-photography>, third picture (Bangladeshi farmer watering crop by hand, plant by plant)

What do you see? What's going on? How would you feel if you were in his shoes (determined, ingenious)? He's doing what has to be done, with the resources he has at hand—that little jug. Could you do that? What else could he be doing if he didn't have to spend so much time dipping out water in that little jug to water his crops?

**Photo B:** <http://ngm.nationalgeographic.com/2010/04/water-slaves/rosenberg-text> (women in Ethiopia carrying jars of water back from the well)

What do you see here? What's going on? These women are carrying water home to their families. See the woman with the black headscarf, talking to the woman with the red print headscarf? What do you think they're talking about? Where are they going? (Point out their village on the horizon.) How much do those jugs weigh? (40 to 50 pounds.) How far do they have to go to get the water, and how long does it take them? (These women spend up to five hours a day.) What else could be they doing in those five hours? How long is a school day where you live?

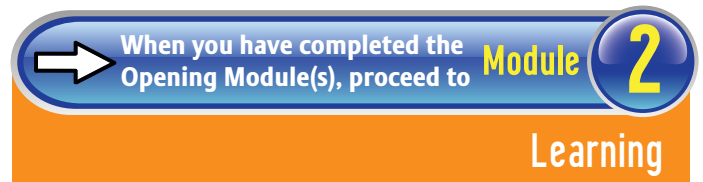
**Photo C:** <http://ngm.nationalgeographic.com/2010/04/water-slaves/johnson-photography>, sixth image (women in Kenya dipping water from a water tank)

This tank was filled last night but it's already drained below the level of the spigot, so the people have to lower their buckets into the water by a rope. The truck won't come back to refill the tank for a week. See the woman standing on top of the tank? How would you feel if you were in her shoes (determined, a little desperate)? If she and her neighbors could work together and get a well dug in their village that they could maintain themselves, how would their lives be changed?

**Photo D:** <http://ngm.nationalgeographic.com/2010/04/water-slaves/johnson-photography>, last image (Tanzanian teen in the well). What do you see here? What's going on? This teen waited 10 hours to get her chance to fetch water. The well will take about one hour to replenish when she is done. How important is water to this teen? How else could she use her time?

## POINTS TO EMPHASIZE

1. Water is vital to our survival.
2. Clean water is a precious resource that is not readily available to everyone.
3. In spite of this, people find incredible resolve and creativity to get the water they need.
4. Imagine the transformation that would take place if clean water was available to the people in the pictures we pondered.





# A Mile or 200 in Her Shoes

Module **1**: Opening

Activity Level: **Medium**

**Goal:** Water is a valuable gift that is needed daily for many reasons. In part one of this activity, we will explore just how much water we use without even realizing it. It's important to understand all the uses of water to fully appreciate it. In part two we learn more about just how much water we use here in the United States and how easily we access it. Despite our easy access, water is not a free resource and we must respect and conserve it.

## MATERIALS

- Bible or copy of Psalm 65
- Product and Gallon Cards (provided below, print and cut out beforehand)
- Calculators or scratch paper and pencils for calculations (cell phone calculators work great too!)
- Flip chart or whiteboard to display equations

## INSTRUCTIONS FOR PRESENTER

Welcome participants to the session on water and hunger. To invite people into the experience, choose one of the prayers and/or hymns listed below or choose your own. Plan on about 15 minutes for this activity.

## PRAYERS

1. We give you thanks, O God, that through water and the Holy Spirit you give us new birth, cleanse us from sin, and raise us to eternal life. Stir up in your people the gift of your Holy Spirit: the spirit of wisdom and understanding, the spirit of counsel and might, the spirit of knowledge and the fear of the Lord, the spirit of joy in your presence, both now and forever. Amen *(ELW, p. 237)*

2. Holy God, creator of light and giver of goodness, your voice moves over the waters. Immerse us in your grace, and transform us by your Spirit, that we may follow after your Son, Jesus Christ, our Savior and Lord, who lives and reigns with you and the Holy Spirit, one God, now and forever. Amen. *(ELW, p. 22)*

### 3. A prayer of Francis of Assisi:

Blessed are you, Lord, through Sister Water,  
who is so useful, so humble, so precious, and so pure

We praise and thank you, Lord,  
for your gift of water  
in all its many forms and uses.  
Guide us to use it wisely,  
to learn from its humility,  
to consume it mindfully  
and protect its purity,  
so that we may truly value water  
and share it generously.  
Amen.

*(adapted from a prayer by Brother Cathal Duddy,  
[www.praying-nature.com](http://www.praying-nature.com))*

4. Say a prayer yourself or invite a member from the group gathered to offer one.





### SONG SUGGESTIONS

(from “Evangelical Lutheran Worship” [ELW] or “With One Voice” [WOV])

- ELW 455  
Crashing Waters at Creation
- ELW 423  
Shall We Gather at the River
- WOVS 763  
Let Justice Flow like Streams
- WOVS 766  
We Come to the Hungry Feast
- “As the Deer” by Marty Nystrom,  
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### INSTRUCTIONS

Read Psalm 65 aloud. Allow time for reflection then reread verses 9 and 10.

**READ ALOUD:** When was the last time you used water? Maybe you had a sip from the water fountain on your way in; maybe you washed your car or ran the dishwasher today. Or maybe you dipped your fingers in the font as you entered or left church.

Water is vital to all life. All people need clean, fresh water. It’s important for health and hygiene—and just as important in our spiritual life. Our Scriptures are full of water stories—Noah and the ark riding out the flood, the Israelites crossing the Red Sea to freedom, John baptizing Jesus, and on and on.

Think of how we use water in our lives. Thoughts of showers, washing clothes and watering yards probably come to mind. But how much water was used to produce the clothes that you are wearing right now? Or in growing the last meal you ate today? We will explore the answers to these questions in this activity.

### ACTIVITY PART ONE

Divide group in half. Pass out a card with the name of a product on it to everyone in the first group. Pass out the cards with a quantity of gallons on it to the other group. Line up the two groups so that they are facing each other and have them hold their cards out so that the rest of the group can see them. The participants must pair up with the person they think matches the number of gallons to the product. Make sure everyone has a pair. Once they have all matched up, go through and identify who is correctly paired up. Have the correct pairs stand aside while the incorrect pairs reshuffle to find their match. It may be that no one finds their match on the first few tries. If the group has a difficult time after several tries making matches, line them up again facing each other. The first person in line with a product card will go first. They will try to guess the correct number of gallons of water it takes to produce the product in their hand by choosing from the cards in the other group. The rest of the group can offer their input. Only the moderator knows the correct answer (the answer key is provided below), and when it is guessed, the two people with the match pairs find a spot together to watch the rest of the people guess. The partnered students will work as a team in the second part of the activity.

Product	Gallons
Jeans	2900
One Hamburger	634
One Pound of Chicken	469
One Pound of Bananas	103
One Pound of Potatoes	31
One Pound of Eggs	400
One Glass of Milk	53
One Cup of Coffee	37
One Pound of Oranges	55
One Cotton Shirt	766
One Pound of Hamburger	1857



**QUESTIONS FOR DISCUSSION**

1. Which of these matches surprised you? Why?
2. Why do you think that these products need so much water? (On average a person living in the United States uses about 2000 gallons of water a day). There are many hidden water costs to nearly all things in our life. For example, hamburger is very water intensive because in addition to a cow’s direct consumption of water for drink, large amounts of water are also needed to grow feed and to clean waste. Cotton, likewise, is especially water intensive, which is why jeans require so many gallons of it. Water is also needed to turn cotton into denim.

**ACTIVITY PART TWO<sup>1</sup>**

The people who paired up in the first part of the activity will now work together as a team to do some math. Pass out one calculator or the scratch paper and pencils to each pair.

**READ ALOUD:** In the United States, water is often easily accessible by just turning on the tap. However, one in six people in the world has limited access to clean water. In some places, like Africa, people (usually women) must walk an average of 3.7 miles every day to get their daily household water needs. They spend hours in water collection that could be spent on growing food, going to school and taking care of their families. They often bring the water home in five-gallon jugs (five gallons of water weighs about 40 pounds). How many of these five-gallon jugs would it take to get enough water to make the product on your card? Use the following formula with your partner to figure this out (it will be helpful to write the equation on a flip chart or whiteboard):

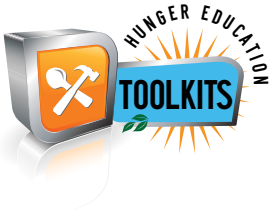
**Number of gallons for product (divided by) five gallons in a jug (equals) number of jugs needed.**

If the average woman walks 3.7 miles for her daily household water needs (approximately 48 gallons for a family of four in the Global South), how many miles would you have to walk to produce the item on your card? Use the following formula with your partner to figure this out (again, it will be helpful to write the equation on a flip chart or whiteboard):

**Number of gallons needed (divided by) 48 (times) 3.7 miles per trip (equals) miles walked to get enough water for your product**

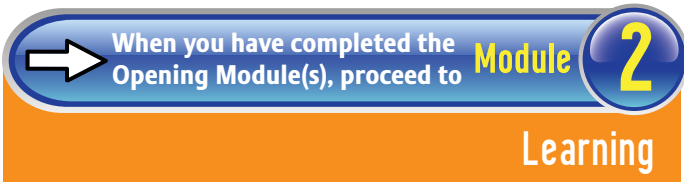
Product	Gallons	Jugs	Miles
Jeans	2900	580	223.5
One Hamburger	634	127	48.9
One Pound of Chicken	469	4	36.2
One Pound of Bananas	103	21	7.9
One Pound of Potatoes	31	6	2.3
One Pound of Eggs	400	80	30.8
One Glass of Milk	53	11	4.1
One Cup of Coffee	37	7	2.7
One Pound of Oranges	55	11	4.2
One Cotton Shirt	766	153	59
One Pound of Hamburger	1857	371	143.1

<sup>1</sup> Note to the presenter: These numbers are a bit inflated. Rain water helps grow some food and crops, and animals often find their own water. The exercise is intended to demonstrate the free and easy access to water that we in the Global North enjoy and to instill a sense of appreciation. It does not reflect the distances that people must walk to obtain goods they may need. What this activity does reflect is the fact that development requires much more water than trips to the well with five-gallon jugs can provide.



## QUESTIONS FOR DISCUSSION

1. What surprised you about these numbers?
2. Hopefully from this activity it is clear that water is a gift (ask if anyone disagrees and allow for spirited debate!). What can you do to treat water as a gift? Watch for answers like *shop at thrift stores, be content with your five pairs of jeans, avoid waste*
3. Think about the women and children who walk miles for water each day. What does this say about their need for clean water? Their resolve to acquire it?
4. How would your life be different if you had to spend hours each day walking to get water? What would you have to give up? What do you think might be the relationship between access to water and hunger?





**JEANS**

**2900 GALLONS**

**ONE  
HAMBURGER**

**634 GALLONS**





**ONE POUND  
OF CHICKEN**

**469 GALLONS**

**ONE POUND OF  
BANANAS**

**103 GALLONS**



**ONE POUND  
OF POTATOES**

**31 GALLONS**

**ONE POUND  
OF EGGS**

**400 GALLONS**



**ONE GLASS  
OF MILK**

**53 GALLONS**

**ONE CUP  
OF COFFEE**

**37 GALLONS**



**ONE POUND  
OF ORANGES**

**55 GALLONS**

**ONE COTTON  
SHIRT**

**766 GALLONS**



**ONE POUND OF  
GROUND BEEF**

**1857 GALLONS**



# Race to the Well!

Module **1**: Opening

Activity Level: High

**Goal:** Water is a valuable gift that is needed daily for many reasons. In this activity, we will explore just how much water we use without even realizing it. It's important to understand all these uses of water to fully appreciate it. The second part of the activity aims to develop a deeper appreciation for the ease in which we can access water in the United States and also a realization that despite the easy access here, water is not a free resource and we must respect and conserve it.

## MATERIALS

- Bible or copy of Psalm 65
- 5 gallon buckets (two for every five participants) or empty 1 gal milk jugs (four for every five participants)
- Hose and water spigot
- Plastic cups (about 25 16-ounce cups per team)

## INSTRUCTIONS FOR PRESENTER

This activity will require a large amount of space and will work best outside or somewhere safe for spills. Plan on about 20 minutes for this activity.

Welcome participants to the session on water and hunger. To invite people into the experience, choose one of the prayers and/or hymns listed below or choose your own.

## PRAYERS

1. We give you thanks, O God, that through water and the Holy Spirit you give us new birth, cleanse us from sin, and raise us to eternal life. Stir up in your people the gift of your Holy Spirit: the spirit of wisdom and understanding, the spirit of counsel and might, the spirit of knowledge and the fear of the Lord, the spirit of joy in your presence, both now and forever. Amen (*ELW, p. 237*)

2. Holy God, creator of light and giver of goodness, your voice moves over the waters. Immerse us in your grace, and transform us by your Spirit, that we may follow after your Son, Jesus Christ, our Savior and Lord, who lives and reigns with you and the Holy Spirit, one God, now and forever. Amen. (*ELW, p. 22*)

### 3. A prayer of Francis of Assisi:

Blessed are you, Lord, through Sister Water,  
who is so useful, so humble, so precious, and so pure

We praise and thank you, Lord,  
for your gift of water  
in all its many forms and uses.  
Guide us to use it wisely,  
to learn from its humility,  
to consume it mindfully  
and protect its purity,  
so that we may truly value water  
and share it generously.  
Amen.

(adapted from a prayer by Brother Cathal Duddy,  
[www.praying-nature.com](http://www.praying-nature.com))

4. Say a prayer yourself or invite a member from the group gathered to offer one.





## SONG SUGGESTIONS

(from “Evangelical Lutheran Worship” [ELW] or “With One Voice” [WOV])

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## INSTRUCTIONS

Read Psalm 65 aloud. Allow time for reflection then reread verses 9 and 10.

**READ ALOUD:** When was the last time you used water? Maybe you had a sip from the water fountain on your way in; maybe you washed your car or ran the dishwasher today. Or maybe you dipped your fingers in the font as you entered or left church.

Water is vital to all life. All people need clean, fresh water. It’s important for health and hygiene—and just as important in our spiritual life. Our Scriptures are full of water stories—Noah and the ark riding out the flood, the Israelites crossing the Red Sea to freedom, John baptizing Jesus, and on and on.

Think of how we use water in our lives. Thoughts of showers, washing clothes and watering yards probably come to mind. But how much water was used to produce the clothes that you are wearing right now? Or in growing the last meal you ate today? We will explore the answers to these questions in this activity.

## ACTIVITY PART ONE: WATER RACE!

This is a relay activity that will give the participants some sense of the distance that many people in the Global South must travel to obtain clean water. Divide group into equal teams of five to six people. Fill one of the containers (or two if you are using the gallon jugs) to the brim with water.

**READ ALOUD:** In the United States, water is often easily accessible by just turning on the tap. However, one in six people in the world has limited access to clean water. In some places, like Africa, people (usually women) must walk an average of 3.7 miles every day to get the water for their daily household needs. They spend hours in water collection that could be spent on growing food, going to school, and taking care of their families. They often bring the water home in five-gallon jugs (five gallons of water weighs about 40 pounds).

Now it’s time for you to get an idea of what that experience might be like. Each member of each team must carry your container(s) of water to and from the designated point. Once the first member of the team returns with the container(s) they will pour the water into the empty container(s) and sit down at the back of the line. The next team member will take the container(s) with the water and make the same journey. The activity is done once every participant has completed the relay and taken a seat. The goal is to have each member of the team complete the distance with the most water left in their containers. In the event of a tie, the team that finishes the fastest wins. Keep in mind that there is no reason to run the whole distance if you come back with an empty bucket!

Ready. Set. Go!

**Note to presenter:** Don’t empty the water buckets when you are done with the activity. They will be used in Part 2.

## Post-activity reflection questions

1. Was the activity what you expected? Was it easier or harder than you expected? Why?
2. Imagine walking 3.7 miles on a daily basis. Do you think you could do it? Could you do it carrying five gallon water jugs? How would you feel about it?
3. What in your day would you have to sacrifice in order to do this necessary task?



## ACTIVITY PART TWO: THE GIFT OF WATER

### MATERIALS:

- Filled buckets of water from previous activity. (Don't refill buckets, the team members use what they have left.)
- Plastic cups (about 25 16-ounce cups per team)

**READ ALOUD:** How much water do you think you use daily? How much do you think someone in Africa uses? (Invite some guesses.) You might be surprised to learn the facts!<sup>1</sup>

**U.S.** – 153 gallons per person per day

**U.K.** – 88 gallons

**Asia** – 22 gallons

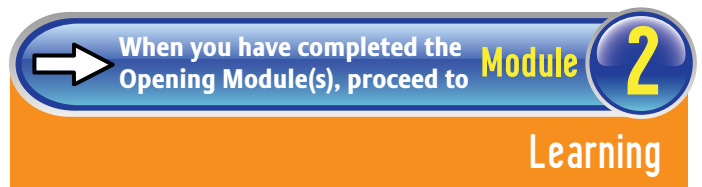
**Africa** – 12 gallons

**Gambia**, a country in Africa with one of the lowest average daily uses of water - 1.3 gallons

**READ ALOUD:** Try to estimate how many gallons of water your team has. What country's average daily usage are you closest to? Using plastic cups, try to portion out the water into what you think you would need per day. Agree as a group on how much water you would need for each of the following categories: bathing, washing clothes, preparing food, cleaning, drinking water.

### Reflection questions:

1. What was challenging about the task?
2. Could your group agree on how best to divide up the water? What was hardest to agree on? Why?
3. Which activities were most important to you? Was there anything you decided to leave undone? Why did you make the choices that you did?
4. Do you think you could manage one day on the water you divided up?
5. Estimate how many gallons of water that the group as a whole has in the containers. Does it come close to the average daily amount used by someone in the United States? Do you think you could manage one day with that amount of water? What choices would you have to make?



<sup>1</sup> The following statistics are found at [www.thinkoutsidethebottle.org](http://www.thinkoutsidethebottle.org). The numbers account for the amount of water directly consumed. They differ from other statistics in this toolkit because they do not take into account the amount of water that is indirectly used, such as the water that is needed to grow food or make clothes.





# A “Wellth” of Knowledge

Module **2**: Learning

Activity Level: Low

**Goal:** This low learning activity is a simple team challenge quiz. The questions and answers will expose the participants to how (and how much!) water is used and issues facing people who do not have access to clean water and sanitation. Participants will see how limited access to water is both a symptom and a cause of hunger. The quiz is intended to open conversations, so the reader should be both flexible with the content and somewhat versed in the materials of the entire Water and Hunger toolkit beforehand.

## MATERIALS

- Q & A Quiz (provided below)
- Flip chart or whiteboard and markers

## INSTRUCTIONS FOR PRESENTER

Before the gathering, draw (or have drawn) two empty wells on a flip chart or whiteboard. Divide the group into two teams. Have the teams work together to create a team name and label the wells accordingly. Begin to read the questions and ask the teams to talk among themselves and then select the team answer. Once the teams share their answer(s), reveal the correct answer and award the team that gave the correct answer by filling their well with a bit of water. If both teams guess correctly, put a bit of water in both wells. Invite conversation around the answer. After a brief discussion read the expanded answer. As the leader, be as interactive as you feel comfortable. Have fun encouraging (even razzing!) the teams, filling up the well, and even drawing in others to read off the possible answers. After the quiz, lead the participants through the discussion questions. Allow about 20 minutes for the entire activity.

## Q & A QUIZ

1. How many gallons of water are needed to produce one pound of beef? (*a: 1800*)
  - a. 1800
  - b. 490
  - c. 16

### Expanded answer:

A farmer needs over 1800 gallons of water to produce one pound of beef (that’s about 1.4 million gallons for a single 800 pound cow!). In addition to water for drinking, water is needed, for example, to grow feed for the cattle and to clean their waste. Water intensive foods leave less water to grow and raise other kinds of food. This problem will be exacerbated in the future as the demand for water grows.





2. Globally, what percentage of people has limited access to clean drinking water? (*c: 17 percent*)

- a. 4 percent
- b. 12 percent
- c. 17 percent

**Expanded answer:**

Currently about one out of every seven people, approximately 900 million of the of the nearly 7 billion on planet earth, live without access to clean drinking water. Even more frightening is that about one in three do not have access to sanitation. This lack of drinking water will affect their lives in many ways. If they or someone in their family gets sick, they lose time away from work or are less efficient in their jobs. This further exacerbates their economic insecurity. Acquiring clean water can occupy hours of a woman’s day. Children, instead of going to school, are carrying water. This also keeps families in a cycle of poverty. Sometimes, the journey is dangerous, which can lead to additional physical threats and disease.

3. On average, how many gallons of water are used in a five minute shower? (*b: 20*)

- a. 10
- b. 20
- c. 30

**Expanded answer:**

20 gallons of water is typically used in a five minute shower. Someone in the United States uses more water in the shower than a person living in an urban slum in the Global South uses in a whole day. The more we are aware of our (excessive) consumption, the better we will understand the world’s water needs.

4. How much of the world’s water is accessible fresh water? (*a: 1 percent*)

- a. 1 percent
- b. 10 percent
- c. 18 percent

**Expanded answer:**

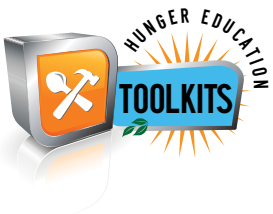
Three percent of the world’s water is fresh water. However, two-thirds of this fresh water is locked up in glaciers and is otherwise unavailable for consumption. We have access to one-third of the world’s fresh water reserves in lakes, rivers, ice and underground reservoirs. Thus, only 1 percent of the world’s water is accessible to us for drinking, cooking (including growing food) and cleaning.

5. How many gallons of water are used on the golf courses of Florida for each round of golf played? (*a: 3000*)

- a. 150
- b. 1600
- c. 3000

**Expanded answer:**

On average, about 3000 gallons of water are used to water the grass on Florida golf courses for each round of golf. In the United States we enjoy abundant access to water but sometimes use water in unsustainable ways. Some parts of Florida struggle to provide enough water for the current (let alone future!) residents. A discussion of water priorities is needed, and will only become more important as populations increase and access to water shifts.



6. In many parts of the Global South, the water that can be accessed is not clean enough to be used for drinking. What is the most commonly used and cost effective strategy to purify the water? (*all answers are correct*)

- a. Water filtration systems
- b. Chemical treatment of the water
- c. Boiling the water

**Expanded answer:**

Throughout the world there are a variety of ways in which dirty water is made clean and usable. In many places the way this is done is by boiling the water over a fire which then kills the bacteria. But some people are able to turn to various methods of running water through filters to take out the impurities, or adding a chemical (such as chlorine or trace amounts of bleach) to kill off the microbes that would cause disease. Each of these approaches is relatively cheap, often pennies a month. A couple of key issues to explore are 1) the interrelationship between dirty water, disease, hunger and poverty and 2) why more people do not purify their water.

7. How many people were affected in the 2010 drought in West Africa? (*b: 10 million*)

- a. 1 million
- b. 10 million
- c. 15 million

**Expanded answer:**

In 2010 a severe drought caused hunger to spike by 10 million people in Chad, Niger, Mali and Cameroon. The situation is being termed as “critical” and the hunger season lasted for three months. Countries throughout the world need to have ways to get water for their agricultural needs. The challenges of global climate change and increased demand for water as the population grows demand our attention now. In the future we can expect to see more crises like this.

8. Water disputes can exacerbate (and sometimes create) tensions between states and even countries. Which neighboring countries have disputes over water? (*c: India and Pakistan*)

- a. Brazil and Argentina
- b. Haiti and the Dominican Republic
- c. India and Pakistan

**Expanded answer:**

India is building hydroelectric dams to feed its power-starved economy, but Pakistan (its uneasy neighbor who lies down river) is concerned that India will have power to manipulate the water flowing to its own agricultural industry. The Pakistani government has filed an international case to stop this development. A fundamental distrust is at the base of this dispute. The final outcome will inevitably impact the availability of food and water. Moreover, should the dispute devolve into a larger conflict, war and conflict inevitably will harm those who are hungriest.

## QUESTIONS FOR DISCUSSION

- 1. Which facts or figures stand out for you? Why?
- 2. Can you think of similar situations to the ones mentioned in the quiz?
- 3. What did this exercise teach you about water issues in the world?
- 4. After hearing these few facts, does water seem to be a more pressing issue to you? Why or why not?
- 5. What can you see as problems if we do nothing to address water issues in the U.S. or around the world?
- 6. Think about the opening exercise where we pondered the gift of water. How are we doing as stewards of that gift?
- 7. Hand out the attached water facts sheet. What facts are surprising? Troubling? What are the implications of these realities on hunger in the world?



### WATER FACTS FOR FURTHER REFLECTION

Investment in safe drinking water and sanitation contributes to economic growth. For each \$1 invested, the World Health Organization estimates returns of \$3-\$34 (on average \$8), depending on the region and technology. That economic growth is the result of increased health and productivity.

Related, bottled water costs about 2000 times the cost of tap water (and about one-third of all bottled water is just filtered tap water!). This does not take into account the costs on the environment in the production of plastic bottles, the shipping of water and the disposal of used bottles. The money we spend on a bottle of water would (on average) translate into \$8-\$15 of development! (And would cause a whole lot less damage to the earth!)

In the developing world, 24,000 children under the age of five die every day from preventable causes like diarrhea contracted from unclean water. In addition to the emotional toll, families lose countless hours to caring for those who are sick. Moreover, when someone is sick, they need more nutrients (for more specific examples, see the ELCA World Hunger Disease and Hunger Toolkit).

According to *www.water.org*, in just one day, more than 200 million hours of women’s time is consumed for the most basic of human needs – collecting water for domestic use.

According to the United Nations Environmental Program, by 2025 two-thirds of the world’s people will be facing water stress. The global demand for water will have grown by over 40 percent. Changing weather patterns due to climate change do not help the situation.

When you have completed the Learning Module(s), proceed to **Module 3**

Closing and ACTION



# Race to Development

Module **2**: Learning

Activity Level: High

**Goal:** This activity will inform groups about the difficulty and struggles women face when trying to obtain the daily amount of water necessary for life. Through friendly competition the participants will recognize the hardships women face when balancing access to clean water, education, health, and relationships.

## MATERIALS

- Well water activity situation cards (provided below, print out and prepare beforehand)
- One cup per participant
- A five-gallon bucket
- Access to two water supplies (sink/water fountain), preferably in different rooms
- Stop watch
- A box of toothpicks (100 toothpicks for each team)
- A bag of small marshmallows (50 marshmallows for each team)
- A small simple snack (graham cracker, trail mix, gold fish), one serving for each participant
- Two Bibles

## INSTRUCTIONS FOR PRESENTER

The group will be divided into two teams. They will be given situation cards that challenge them to finish the following five tasks: collect and eat food, read John 4, build a structure, do 25 jumping jacks, and share three fun facts about yourself. One team will have ready access to water; the other will have to travel to get water. The team that has to travel to get water will also face various challenges outlined in their situation cards that slow them down. The obstacles are similar to real-life situations many people face in the Global South. The race ends when one team finishes the five tasks.

## READ ALOUD

We just spent some time thinking about the amazing gift of water. It is essential not only for sustaining life but also for day-to-day activities. Easy access to water means health and wholeness; limited access brings all sorts of challenges. This activity will help us get a better understanding of the challenges people face when they do not have access to clean water.

1. Divide participants into two teams or villages. Both teams will be in the same room, seated at a table. The room should be one that has one of the faucets or drinking fountains. Only Team A can use the faucet in the room. Team B must travel outside the room to another water source.
2. Have the teams come up with a team name.
3. Give the teams their situation cards (make sure that the team that has access to water has the “Team A” cards and the team that will be traveling has the “Team B” cards and that the cards are in the proper order), a Bible, 100 toothpicks, 50 marshmallows, and the snack.
4. Make sure each team member has their own cup. Place the five-gallon bucket next to Team B’s table.





5. Start the activity by traveling as a group to the farthest fountain/well. The cup represents the five-gallon bucket most women use to carry the water back to their village. The teams should be a fair distance away from the water source representing the average 3.7 mile journey women in Africa must walk daily to retrieve water.
  - If you want to add some fun (and the space permits), have the participants carry the water back on their head.
6. Once each group member has filled their cup and returned to their table, read the following instructions:  
**READ ALOUD:** Each team has a stack of situation cards. You will race to see who can finish the five tasks described in the cards. Team A, when the card tells you to get water, you will use the water in this room to fill your cups. Team B, for your water, you must travel to the place where we just filled our cups. Both teams must perform the tasks exactly as described on the cards. In addition, you may have some instructions from me so pay attention! The first team to finish wins. Any questions? Ready. Set. GO!
7. **Leader:** as the race begins start the stopwatch. Team B only has two minutes to work on the task before they must go fetch more water. Throughout the duration of the race, every minute make them stop their activity to fetch water. As they return with the water have them dump it in the five-gallon bucket.
8. Once one group has completed all tasks the race is over. Use the discussion questions below to learn from the experience.

## QUESTIONS FOR DISCUSSION

1. You were given five tasks that you had to complete in this activity: collect and eat food, read John 4, build a structure, do 25 jumping jacks, and share three fun facts about yourself. How do the various tasks relate to real life?

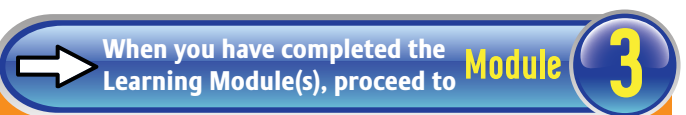
**Note to the leader:** The “snack” will probably be the most obvious connection — you need water to grow and prepare **food**. The reading of John 4 is connected to **education**. Building the structure is related to the

various types of buildings (homes, schools and hospitals) and other **infrastructure** (good governance, roads, bridges and electricity) that are needed to thrive. The jumping jacks relate to **health**, which can also take the form of regular medical check-ups, access to necessary medicine and general physical wellbeing. The act of sharing three fun facts relates to the amount of **leisure time** one may enjoy when the other needs are met.

2. For all of the tasks you needed water to succeed. Why? How is access to water related to having enough to eat? To education? To infrastructure? To health? To leisure and relationships?
3. If you are spending half of your day fetching water, how difficult is it to complete the tasks? The people on Team B can help with this question!
4. For Team B, in addition to fetching the water, what were some of the other obstacles you faced in completing the tasks? Were the obstacles realistic? Why or why not?

Grabbing five cups of water every two minutes represented the five gallons of water each family member needed per day. Each cupful of water represents one five-gallon bucket (a five-gallon bucket of water weighs about 40 pounds!). You are fetching water for your whole family (this is usually the work of women and children).

- Approximately one gallon for drinking a day (<http://www.un.org/en/globalissues/water/>)
  - Approximately four gallons for cooking, cleaning, etc.
5. What are your thoughts about this experience? How did you feel as you did this? (Ask the teams individually and hear their different experiences.)
  6. You can add some complexity to the conversation by noting that, in general, the Global North already has easy access to food, education, infrastructure, etc.



Closing and ACTION



SITUATION CARDS: TEAM A

**TEAM A: CARD 1**

You have the water you need! Enjoy some food!  
When you are all done feasting, drink a cup of water, refill, and draw the next card!

**TEAM A: CARD 2**

You are well fed! Open the Bible to John 4.  
Take turns reading (out loud) three verses at a time John 4:1-42. When you are done reading the verses, you will certainly be parched! Drink the water in your cup then refill it.

**TEAM A: CARD 3**

You feasted on food and then learned a bit about God. Excellent! Now it's time to build. Use every toothpick and marshmallow on your table to build a structure that is at least three levels high. When you've built the structure, no doubt you'll be thirsty. Drain the cup and refill it!

**TEAM A: CARD 4**

Well fed, well read, and a nifty little house to boot! Time for some exercise! Everyone on your team must do 25 jumping jacks. When you're done, you guessed it! Drink deep and refill!

**TEAM A: CARD 5**

Life is good! Everyone on your team needs to share three fun facts about themselves. Go around the table getting to know each other a little better. When you're done, take a drink, take a bow, you won!



SITUATION CARDS: TEAM B

**TEAM B: CARD 1**

Your family needs water too! Each team member must dash to the well and get four more cups of water. You have the water you need! Enjoy some food! When you are all done feasting, drink a cup of water, refill, and draw the next card!

**TEAM B: CARD 2**

**CONTAMINATION!**

Sorry, your water filter broke and your water was contaminated. You have to go and replace the water in your latest trip. That's right, five more cups of water. Go grab them!

**TEAM B: CARD 3**

You are well fed (if not a bit winded)! Open the Bible to John 4. Take turns reading (out loud) three verses at a time John 4:1-42. When you are done reading the verses, you will certainly be parched! Drink the water in your cup, then refill it. Then refill it four more times for your family!

**TEAM B: CARD 4**

**DISEASE!**

You failed to purify your water correctly. You and your family are now sick. You cannot do anything for the next 30 seconds while you rest and take care of them. If you are told to fetch more water during the 30 seconds you must crawl to get the first cup.





SITUATION CARDS: TEAM B

**TEAM B: CARD 5**

You feasted on food and then learned a bit about God. Excellent! Now it's time to build. Use every toothpick and marshmallow on your table to build a structure that is at least three levels high. When you've built the structure, no doubt you'll be thirsty. Drain the cup and refill it! Don't forget the four cups for your family!

**TEAM B: CARD 6**

**FLASH FLOOD!**

The rain has turned the road you normally take to your well into a river. Travel to a different water source to get your next five cups.

**TEAM B: CARD 7**

Well fed, well read, and a nifty little house to boot! Time for some exercise! Everyone on your team must do 25 jumping jacks. When you're done, you guessed it! Drink deep and refill! Then grab four more cups!

**TEAM B: CARD 8**

Life is good! Everyone on your team needs to share three fun facts about themselves. Go around the table getting to know each other a little better. When you're done, take a drink, take a bow, you won!



## Closing and Action

Module **3**: Closing and ACTION

Activity Level: All

**Goal:** The goal of this module is to summarize the key learning points and to give concrete actions that your congregation or group can take to address water concerns and impact poverty and hunger around the world.

### MATERIALS

- River stones (enough for each participant)
- Other materials as described in the activities below

### INSTRUCTIONS FOR PRESENTER

Before the gathering go through the list of activities in this module. Pick one or two that you can use to close your time together. Some of the activities require significant planning and preparation, so you may want to use this closing and action time to create a committee or delegate various responsibilities. After you are finished with the activity (or activities), conclude with a song and prayer from the opening module.

### READ ALOUD

Pass out the river stones and read the following aloud to prepare people for the activity:

In our time together we have explored the connections between water and hunger. Sometimes the problems can feel too big, the solutions too difficult. Feel how hard and heavy the stone is in your hands (allow a brief pause for reflection). Feel the smoothness of the stone in your hands (again, allow for a pause). This stone did not begin smooth. It was jagged and rough. The edges were hard and unyielding. Yet, through time, a persistent (and patient) flow of **water** smoothed the rough edges. Access to clean water is essential to address that equally intractable problem of hunger. With time and patience water can empower people to lift themselves out of

poverty. Take home this stone to remind you of the gift of water and its power in the world. Put it somewhere visible, and when you see it, pray for those who are thirsty and make choices that will help you live into Jesus' call to give people who are thirsty something to drink (see Matthew 25:34-36).

We hope you will leave with the following main ideas:

- We hope you will leave with the following main ideas:
- Water is an amazing gift. Access to clean water and sanitation is vital to life.
- Lack of access to clean water and sanitation is both a symptom and cause of poverty, hunger and disease. Sadly, globally, one in six people does not have access to clean water and one in three does not have access to adequate sanitation.
- The good news is that addressing water issues is an effective means to combat hunger and poverty. On average, one dollar spent on water or sanitation projects yields a return of eight dollars in development.
- In our baptismal covenant, as we were washed in the waters that make us whole, we made the commitment to seek justice. What will we do to live more fully into that commitment?

Hunger and poverty in our world will not end without our **action**. All of our actions, even small ones, add up to make a big difference.





## INSTRUCTIONS

Below is a list of takeaways — actions — related to today's gathering that you can incorporate into your life right away to help end hunger and poverty in our world.

After doing the activity (or activities), take some time to talk as a group about the other ideas listed here. What might you do together? What might you do individually? Who else might you invite to join you? This is certainly not a comprehensive list, and your group may create a list of its own! You may find it helpful to ask yourselves if the suggestions and your own lists include activism that addresses both short- and long-term needs and change.

Please share with us what you and your group are doing in your community to end hunger around the corner and the globe. We would love to hear about your good work! Share your story at [hunger@elca.org](mailto:hunger@elca.org) or at ELCA World Hunger's Facebook page at [www.facebook.com/elcaworldhunger](http://www.facebook.com/elcaworldhunger).

## PRAYER AND WORSHIP

- **Prayer Circle**  
Invite each person in the group to write a short prayer for people who are oppressed, abused, not treated as equals or suffering from hunger and poverty. Compile the prayers onto one sheet and copy for each person. You can also give them to your pastor and/or worship team leader and encourage them to be incorporated into next Sunday's worship prayers, or any other Sunday!
- **Save the date!**  
March 22 is World Water Day. Hold a special worship service to offer prayers, raise awareness and make commitments around water and sanitation issues. If March 22 falls on a Sunday, engage your congregation in the Sunday service or during the education time.

## GIVE

- **The gift of water**  
In Africa, the average woman walks 3.7 miles a day to get water for her family. Not only is this task physically difficult, but it is also time consuming. Because women must make this trip daily, it leaves them with less time to go to school or run their own business. When you supply just \$12, a woman can receive six water jugs to make the trip easier. Want to do more? By raising \$150 you can provide a woman with a hand pump to provide ease in getting water. With \$275 you can give the gift of a cistern! Get your whole congregation involved in fundraising efforts! \$1,250 will supply a community with a rainwater catchment system. \$2,500 digs and installs a well that brings clean water to a village. Check out [www.elca.org/goodgifts](http://www.elca.org/goodgifts) to see what your gifts can do.
- **Trade bottles for buckets**  
If water from the tap is safe to drink where you live, bottled water is a horrible waste of money and resources. (Not convinced about this statement? See <http://storyofstuff.org/movies/story-of-bottled-water/>.) Buy a reusable water container and every time you would otherwise buy a bottle of water, put the money in a bank and use it to fund a water project.

## ADVOCATE

- **Stay connected**  
Sign up for the ELCA e-Advocacy network and receive action alerts on timely legislative issues that help to end hunger in the world. Keep a lookout for issues related to gender equality! Visit [www.capwiz.com/elca/mlm/signup](http://www.capwiz.com/elca/mlm/signup).  
  
Connect with your ELCA State Public Policy Office and learn about opportunities to act in your state on behalf of those who are most vulnerable. To see if your state has an ELCA Public Policy Office visit [www.elca.org/advocacy](http://www.elca.org/advocacy).



- **Power of the Pen**

Write a letter to your elected officials about a topic you received from an e-Advocacy alert. Find out who your officials are by visiting [www.elca.org/advocacy](http://www.elca.org/advocacy). For directions on how to write an advocacy letter or prepare a phone call to an elected official, see the Climate Change and Hunger Toolkit's "Closing and Action" module from [www.elca.org/hunger/resources](http://www.elca.org/hunger/resources).

If one of the issues you learned about today sparked your interest, write a letter to the editor of your local newspaper to express concern for access to clean water and to encourage others to support public policies that ensure that clean water and sanitation are available to all.

- **Coffee Talk**

Meeting with your members of Congress is one of the best ways to advocate for the issues you care about. They are interested in knowing about the concerns of their constituents. By visiting their offices or inviting them to attend a public event or meeting, you are building a personal relationship while asking them to take leadership in working for those most in need. A step-by-step guide on how to make this happen is available at [www.elca.org/advocacy](http://www.elca.org/advocacy).

## EDUCATE YOURSELF AND OTHERS

- **Connect with others who care**

Like and follow ELCA World Hunger on Facebook at [www.facebook.com/ELCAworldhunger](http://www.facebook.com/ELCAworldhunger). Follow @ELCAWorldHunger on Twitter.

Connect with your synod's hunger team and learn what others in your area are doing — and join them. To learn more, contact your synod office or ELCA World Hunger at [hunger@elca.org](mailto:hunger@elca.org).

- **Read all about it**

Visit [www.elca.org/hunger](http://www.elca.org/hunger) and learn all about the exciting and life-giving work of ELCA World Hunger. Then tell someone about it.

Subscribe to and read the ELCA World Hunger blog at [blogs.elca.org/worldhunger](http://blogs.elca.org/worldhunger).

- **Go surfing**

Learn more about the water campaigns of our trusted partner, Church World Service (<http://cwsglobal.org/our-work/global-development/water/>). Get up to date facts and figures from the United Nations Development Programme (<http://www.undp.org/water>), the World Health Organization ([www.who.int/topics/water/en/](http://www.who.int/topics/water/en/)) and the Food and Agriculture Organization ([www.fao.org/nr/water/index.html](http://www.fao.org/nr/water/index.html))

- **Reel fun**

Get together a group from your congregation or community and watch a film about contemporary water issues. Begin with one of these two:

***Flow: How Did a Handful of Corporations Steal Our Water?*** (2008). <http://blogs.elca.org/worldhunger/flow-how-did-a-handful-of-corporations-steal-our-water/>.

***The Story of Bottled Water*** (2010; available online at <http://storyofstuff.org/movies/story-of-bottled-water/>)



## RAISE AWARENESS AND MORE!

- **Measure your footprint – Then your congregation’s!**  
National Geographic has a handy water footprint calculator. You can find it at <http://environment.nationalgeographic.com/environment/freshwater/change-the-course/water-footprint-calculator/>. See how you measure up to the national average and then make a commitment to be a better steward. On a Sunday morning make the calculator available to others in your congregation and challenge them to do the same!
- **Make connections**  
Issues facing those who are hungry are all interconnected. Plan an education experience for your congregation (or for a particular group in your congregation) that explores the intersections between health and hunger, women and hunger, and climate change and hunger. Use an ELCA World Hunger Toolkit (available at [www.elca.org/hunger/resources](http://www.elca.org/hunger/resources)) to help plan your time together.