VERMONT DRINKING WATER WEEK

A COMMITMENT TO INCREASE PUBLIC AWARENESS OF THE QUALITY AND IMPORTANCE OF SAFE DRINKING WATER AND WATER RESOURCES THROUGH EDUCATION

WATER FACT SHEET – 2023 THEME – "CAPTAIN WATER DROP"

WATER TO THE RESCUE!

Water rescues us daily - On average, a person can only survive without water for about 3 days.

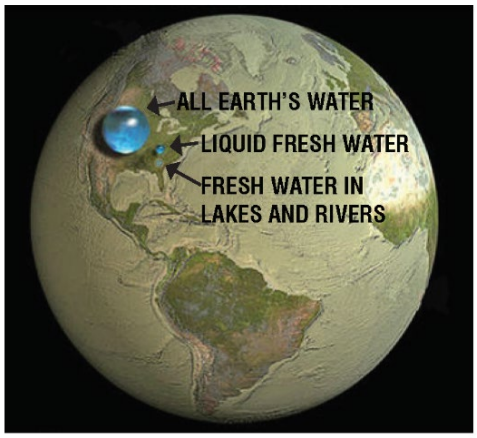
- Water. It cleans us and sustains us. Put simply, water is essential for life.
- Each person requires about 8 glasses (or two liters) of water every day.
- Tap water is inexpensive, safe, and good for the environment. It's a Win-Win-Win!
- The Earth may seem like it has abundant water, but in fact, less than 1 percent is available for human use. The rest is either salt water found in oceans, freshwater frozen in the polar ice caps, or too inaccessible for practical usage.
  https://www.epa.gov/watersense/how-we-use-water

- According to USGS* the human body is 60% water, and the skin is 64% water *(the percentage of water also varies by age)*. *https://water.usgs.gov/edu/propertyyou.html*
- As people, we lose water, which is normal, when we breathe, sweat, cry, and use the restroom.
- Did you know that water helps carry nutrients to our cells, lubricates our joints, removes body waste, protects our organs, **and** regulates our bodies at 98.6 degrees Fahrenheit? Fascinating, right?

WHERE DOES WATER COME FROM?

- Cool fact. Most of the water on earth is unchanged over time. Water constantly recycles through the water cycle on the earth and in the atmosphere. Check it out in the graphic to the right.
- If your water does not come from a town or city water system, then it comes from a private drinking water source. There are three main sources of private drinking water: drilled wells, dug wells, and springs.
- A community's water facility that purifies river, surface, and/or groundwater to make it safe for drinking is called a Water Treatment Plant.
- Water treatment plants typically use chlorine, monochloramine, ultraviolet (UV) light, and/or ozone to kill harmful microorganisms.
- Water Treatment Plants repeat this process continuously: Pump, Treat, Store & Distribute, to get safe water to the tap.
- A "watershed" is an area of land that water flows across or under on its way to a larger body of water.

ALL THE EARTH'S WATER



https://www.usgs.gov/special-topic/water-science-school/science/how-much-water-there-earth – arrow explanations added separately

HOW MUCH WATER IS USED TO SUPPORT DAILY TASKS & AGRICULTURE?

- The largest household use of water is to flush the toilet, after that, showers, and baths. Just imagine not having water to do those things! *https://water.usgs.gov/edu/qa-home-percapita.html*
- How many gallons does the average person use daily? Each person uses about 80-100 gallons of water per day. Is that more than you would've guessed? *https://water.usgs.gov/edu/qa-home-percapita.html*

- Agriculture is a thirsty and very important business! A hefty 80% of consumptive water in the U.S. goes towards agriculture *https://www.ers.usda.gov/topics/farm-practices-management/irrigation-water-use/*

DID YOU KNOW?

- Approximately 785 million people worldwide lack access to safe water* (yikes!) - but that could be solved. "The world has the money to make it happen. It would take 1/3 what the world spends on bottled water in one year to pay for projects providing water to everyone in need." *CBS News, FLOW the movie*
- The chemical formula for water is H_2O - which is two hydrogen atoms and one oxygen atom
- Natural water has a Ph level of about 7, and a gallon weighs 8.35lbs (pounds)*
- A natural or man-made body of water whose purpose is to collect & store water is called a reservoir.
- A river may be dammed to create a reservoir for irrigation, flood control, recreation, drinking water source, and hydropower.
- When rain soaks through garbage at landfills, it can pick up harmful substances and is then called leachate. Landfills are now designed to protect groundwater from leachate.
- Did you know that sand and gravel are nature's filters – they help remove dirt and contaminants from river water as it filters through it?
- Water is considered the "universal solvent," it dissolves more substances than **any** other liquid.
- Dollars at work: Water infrastructure investment in 2018 was almost $26 million for drinking water, wastewater & stormwater project costs including pipes, tanks & engineering. (VT's State Revolving Funds)
- According to VRWA (Vermont Rural Water Association), there are currently about 1,178 certified drinking water operators and 515 licensed wastewater operators in VT, and altogether these operators have received a total of 7,550 hours of training in 2018. That's a lot of training!

HOW CAN I HELP PROTECT & CONSERVE DRINKING WATER?

- **Using reusable water bottles** reduces pollution and saves money!
- Do you get your water from a private well? It's smart to **test your private drinking water source** regularly. In VT, you can get help to test your water at the Health Dept. Laboratory. You can call 802-338-4736 or 800-660-9997 (toll-free VT) for information. Check out: www.healthvermont.gov/water
- **Consider a career** as a civil engineer, water or wastewater pro!
- When brushing your teeth, **don't let the water run** – and save a gallon.
- Older showerheads use up to 5 gallons of water per minute. Water-saving showerheads* only use 2 gallons per minute. (*https://water.usgs.gov/edu/activity-percapita.php*) **Challenge yourself** by timing your showers!
- Using a dishwasher only uses 4 to 7 gallons of water, while hand washing dishes may use around 20!
- When your family replaces plumbing fixtures, shop for EPA "WaterSense" labeled items.
- Water for People is a group helping to get clean water to those 785 million people who need it – Check out **waterforpeople.org** to learn more about what you can do to help too!
- **Water comes to our rescue every day!** Share what you learn with your family & friends!

**USGS – United States Geological Survey serves the Nation by providing reliable scientific information to describe and understand the Earth; minimize loss of life and property from natural disasters; manage water, biological, energy, and mineral resources; and enhance and protect our quality of life.*
**Weight of a gallon of water: If using the correct significant figures, 8.35lbs (62.43/7.48)*
**When shopping for water dispensing fixtures, look for EPA's "Water Sense" on the label, indicating that the product has met EPA's water efficiency standards.*
** Approximately 785 million people lack safe water. Water.org*