

WHERE IS THE WATER?



HOW DOES IT MOVE?



WATER MOVEMENT



PHASE CHANGE



Precipitation transfers water back to the surface and the soil.



Water is stored in snowpack and is slowly released as it melts.



Springwater emerges where the rock layers force groundwater to the surface. It is often rich in minerals and can sometimes be hot, forming thermal springs.



Rivers make up less than half a percent of all the water on earth; however, they move that water downstream, contributing to many sources of drinking and irrigation water.



Plants draw up, use, and retain water as part of photosynthesis.



We withdraw water for many uses: to irrigate crops, generate power, support industry, and use as drinking water.



Manufacturing clothing requires water. This is one way that we indirectly use water each day.



Water is used to grow, manufacture, and transport goods. Single-use items that are only used once before being discarded may generate more water use than reusable goods that can be used many times.



Urine and other waste contain water. Raw sewage and leaking septic tanks can degrade water quality even in pristine areas.



Boiling water kills many pathogens, making it safer to drink and to use for cooking and sanitizing.

- 1 Energy from the sun drives the water cycle and causes surface water to evaporate even though the water is not hot enough to boil.
- 2 Plants need water to support photosynthesis. The water is pulled up to the leaves from the roots by the process of transpiration, which is the evaporation of water from pores in the leaves.
- 3 Winds carry moisture long distances in the atmosphere over mountains and across watersheds.
- 4 Precipitation brings water back to Earth's surface. Rain can flow off the landscape quickly, while snow releases water more slowly.
- 5 Snowmelt slowly releases water, even into late summer. Climate change affects when, where, and how much snow falls.

- 6 Under certain conditions, groundwater from aquifers can emerge at the surface, forming springs.
- 7 Surface water seeps into the ground and recharges underground aquifers. Aquifers also discharge directly to surface waters.
- 8 We remove bacteria and pollutants from water sources so we can use the water safely. This can be done in treatment plants or using simple filters.
- 9 We consume water both directly and through the food we eat.
- 10 Urine and waste can seep into surrounding groundwater from leaking septic tanks. When well-maintained, septic systems return water to the environment safely by taking advantage of natural soil filtration.