

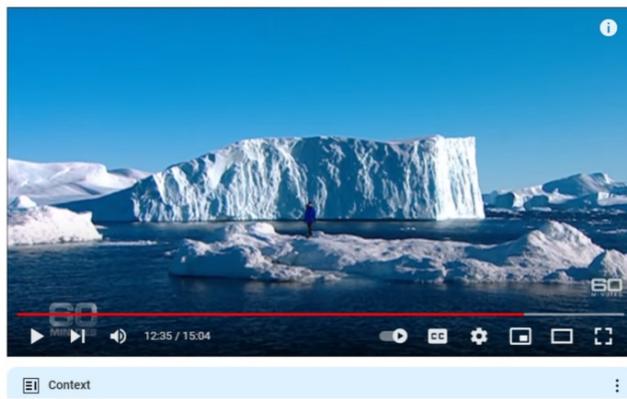
Remember Rain

One important source of fresh water that is often overlooked is rainwater.

Rainwater is the product of **water from the Earth that has been evaporated into the Earth's atmosphere and is turned into rain (Fresh)**. During that

process, the water becomes fresh water and is cultivated in many places throughout the world to be used as a suitable supply of drinking water and water to feed crops. Harvesting rainwater is a technology that has been used by ancient civilizations and is one that is still widely used in many rural areas to make the most out of an endless supply of fresh water that is often taken for granted

[Terrifying proof of global warming | 60 Minutes Australia - YouTube](#)



15 min

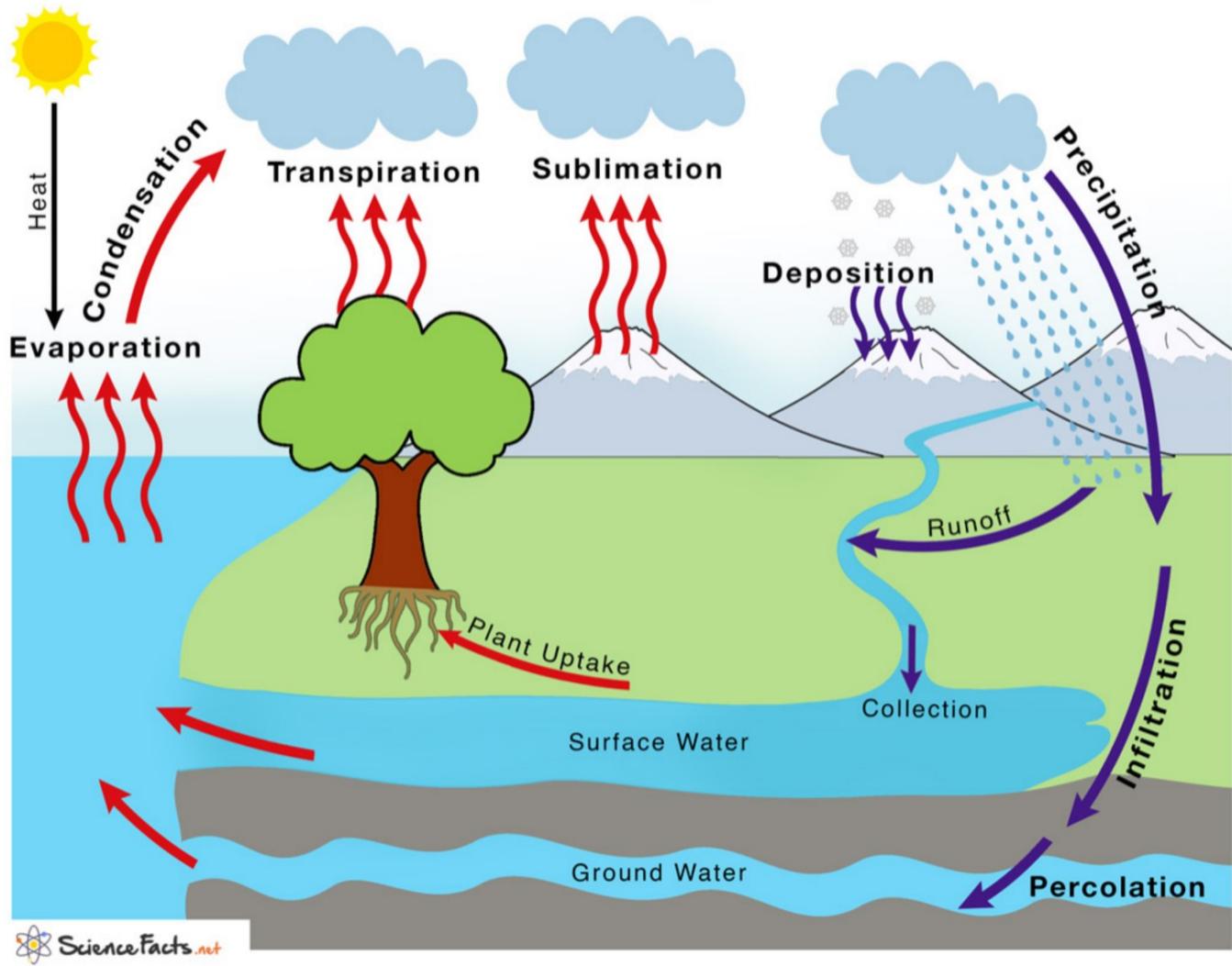
Countries with the Most Fresh Water

Brazil has the highest volume of renewable fresh water resources

The volume of renewable fresh water in Canada is approximately 2,902 cubic kilometer. Most of Canada's fresh water is found in its diverse river system and lakes.



Water Cycle



Evaporation- the process of turning from liquid into vapor using heat

Condensation is the process where water vapor becomes liquid. (Cooling)

Transpiration is the evaporation of water from plants.

Sublimation- is the conversion of a substance from the solid to the gaseous state without its becoming liquid

Deposition- is a change from gaseous state into a solid state without passing through a liquid phase (cooling quick)

Infiltration is the downward movement of water into the top layer of soil

Percolation is the downward movement of water through lower soil layers due to gravity and gaps in soil

Runoff is the excess water that flows over the land surface instead of being absorbed into groundwater or evaporating.

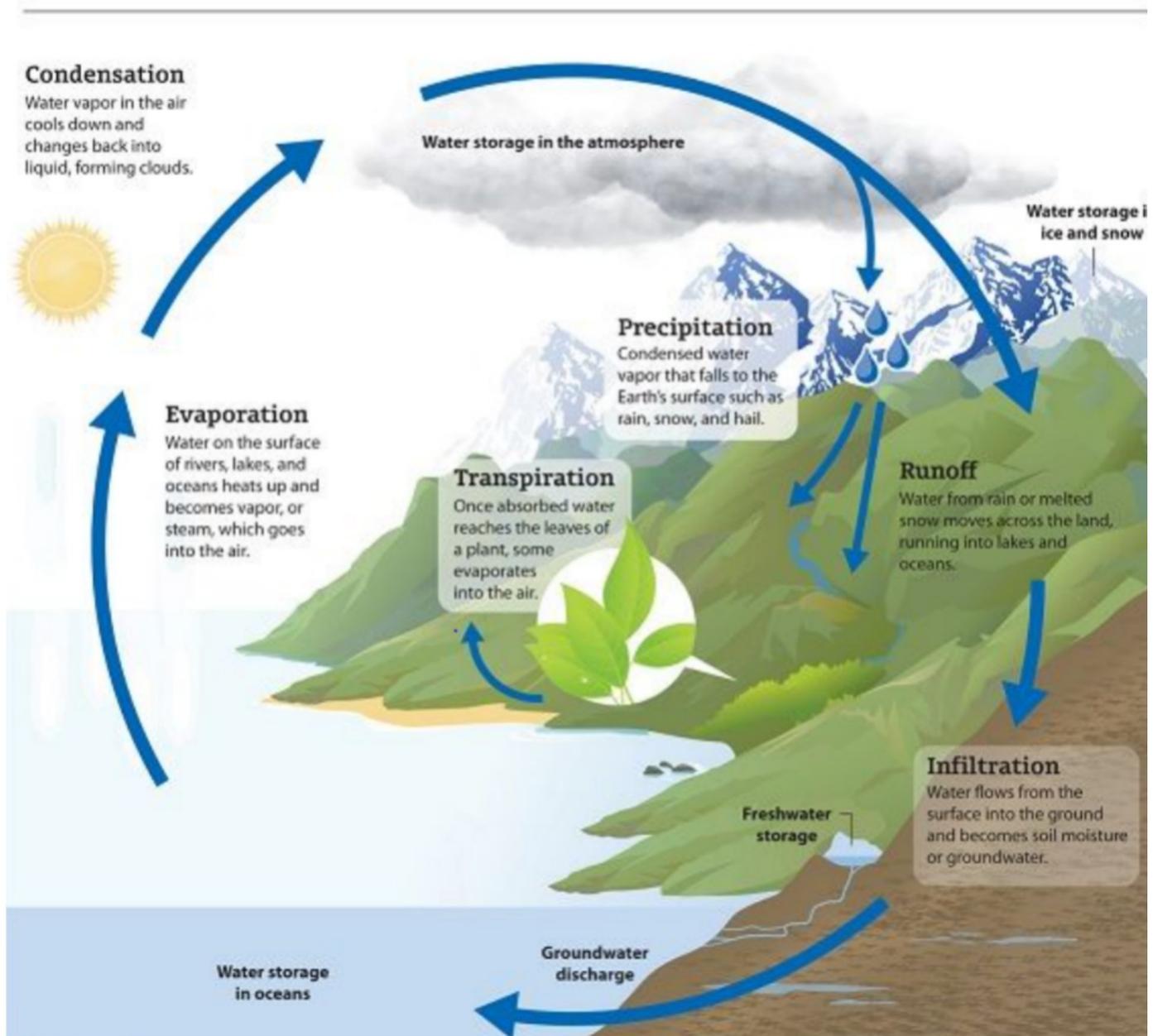
Groundwater is water that occurs below the surface of Earth

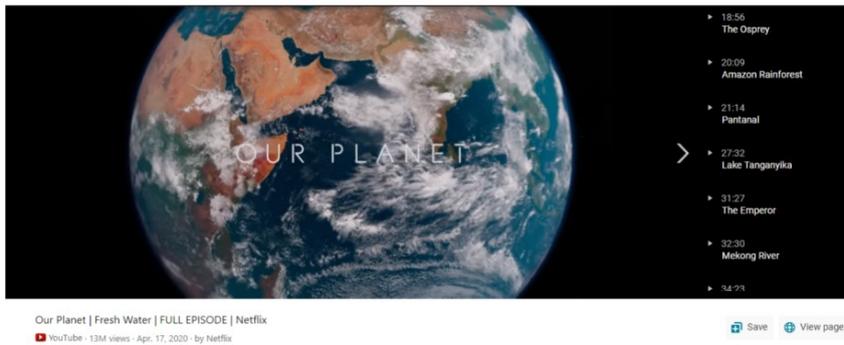
Surface water is any body of water above ground, including streams, rivers, lakes, wetlands, reservoirs, and creeks

Plant uptake- are the roots that gather the water and nutrients from the soil

The Water Cycle

The sun plays a big role in the water cycle. The Sun provides thermal energy and heats bodies of water which then evaporates into the atmosphere becoming water vapor.





53 min

[Why some First Nations reserves don't have clean drinking water - YouTube](#)



The Magic School Bus - Wet All Over - Ep. 18

[The Magic School Bus - Wet All Over - Ep. 18 - YouTube](#)

[What Makes New York's Water System One-Of-A-Kind - NYC Revealed \(youtube.com\)](#)



42 min

What Role Does Gravity Play In The Water Cycle?

Gravity causes precipitation to fall from clouds and water to flow downward on the land through watersheds. Energy from the sun and the force of gravity drive the continual cycling of water among these reservoirs. As the water is heated, it changes state from a liquid to a gas.

The Oceans



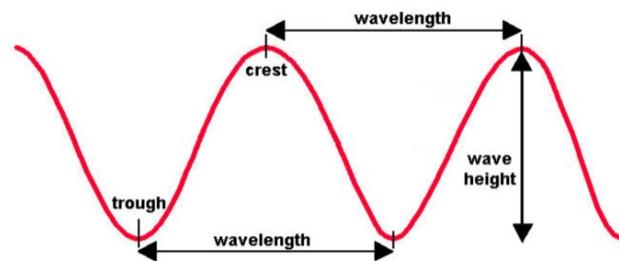
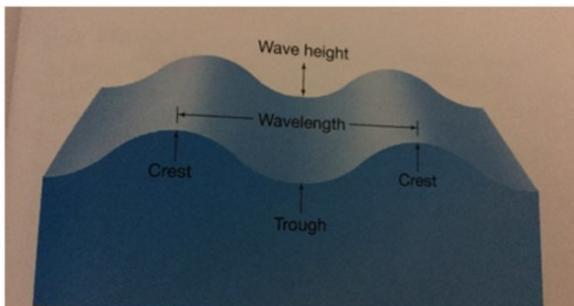
The ocean is never still. You can see it moving in the waves that crash ashore. On the open water, sailors witness broad, slow-flowing "rivers" at the ocean's surface. These movements carry enormous amount of water over hundreds of kilometers from one part of the ocean to another. Huge masses of cold water creep along the ocean floor then rise from the depths to the surface.

What causes waves?



You can find this in a hot bowl of soup! If you blow on the soup to cool it, your breath makes small ripples on the surface of the liquid. Ocean waves are just large ripples, set in motion by steady winds.

Waves begin on the open sea. Their height depends on how fast, how long and how far the wind blows over the water. An increase in one of these variables can cause an increase in wave height. Normal winds produce waves of 2-5m in height. Hurricane winds can create waves 30m high. Even on a calm day, there is usually a steady movement of smooth waves near the shore. These smooth waves are called **swells**.



[Biggest Waves Ever Recorded On Camera - YouTube](https://www.youtube.com/watch?v=5_HefhiwioE)

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