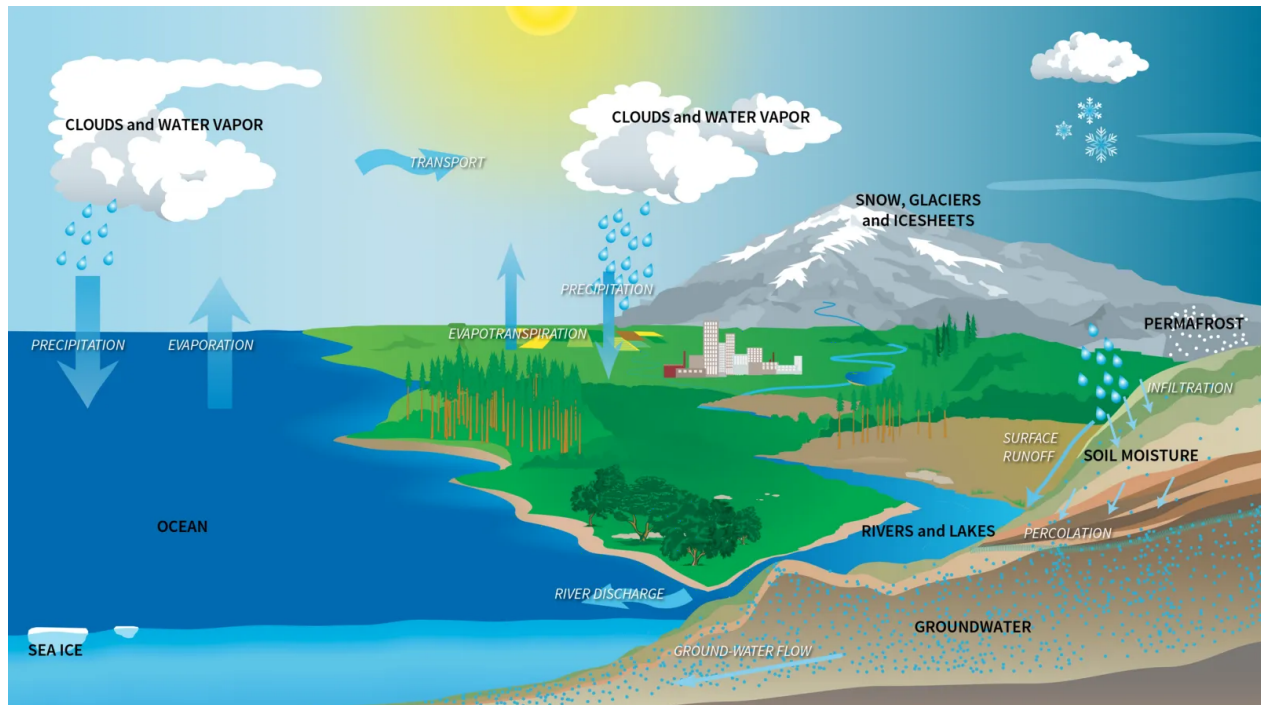


Water cycle

By Lennart Kiil



The water cycle: water evaporates from sea and land, condenses into clouds and falls as precipitation that runs back to the sea.

NASA Scientific Visualization Studio, Marit Jentoft-Nilsen. Public domain. [Wikimedia Commons](#).

Describes the way water on Earth moves through a series of states and steps in an endless cycle.

In the cycle, water exists in three states; [vapor](#), liquid, and ice. The Sun is the driving force in the cycle. The amount of water on Earth stays fairly constant, but its distribution among the three states may vary. Climate changes could change the distribution of water in the water cycle.

Water evaporates into the [atmosphere](#) from the oceans and the soil. Plants also create water vapor by transpiration. Some ice and snow, furthermore, evaporate directly without first turning to liquid, which is called sublimation. [Evapotranspiration](#) is the sum of the evaporation and transpiration.

In the atmosphere the water vapor condensates into clouds, which consist of liquid water. At some point the water in the clouds return to the Earth's surface as for example rain or snow. This is called [precipitation](#).

Some of the precipitation may become part of the [glaciers](#), and be stored there for hundreds of years.

Most of the precipitation that falls over land will eventually flow through different channels back towards the ocean. On the way some of the water seeps through the soil and becomes groundwater, or fills up underground storages. It may also temporarily collect in lakes. Before re-entering the ocean some water will evaporate from the soil and plants. The precipitation that reaches the ocean will eventually evaporate again, and continue the water cycle.

The water cycle has no end or starting point, although water may remain in some steps of the cycle for many thousands years before moving on.

Deep groundwater can be up to 10,000 years old.

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