

## Water Cycle Transcript

The water cycle has no starting point. But, we'll begin in the oceans, since that is where most of Earth's water exists. The sun, which drives the water cycle, heats water in the oceans. Some of it [evaporates](#) as vapor into the air. Ice and snow can [sublimate](#) directly into water vapor. Rising air currents take the vapor up into the [atmosphere](#), along with water from [evapotranspiration](#), which is water transpired from plants and evaporated from the soil. The vapor rises into the air where cooler temperatures cause it to [condense](#) into clouds. Air currents move clouds around the globe, cloud particles collide, grow, and fall out of the sky as [precipitation](#). Some precipitation falls as snow and can accumulate as [ice caps and glaciers](#), which can store frozen water for thousands of years. Snowpacks in warmer climates often thaw and melt when spring arrives, and the melted water flows overland as [snowmelt](#). Most precipitation falls back into the oceans or onto land, where, due to gravity, the precipitation flows over the ground as [surface runoff](#). A portion of runoff enters rivers in valleys in the landscape, with [streamflow](#) moving water towards the oceans. Runoff, and ground-water seepage, accumulate and are [stored as freshwater](#) in lakes. Not all runoff flows into rivers, though. Much of it soaks into the ground as [infiltration](#). Some water infiltrates deep into the ground and replenishes [aquifers](#) (saturated subsurface rock), which store huge amounts of freshwater for long periods of time. Some infiltration stays close to the land surface and can seep back into surface-water bodies (and the ocean) as [ground-water discharge](#), and some ground water finds openings in the land surface and emerges as freshwater [springs](#). Over time, though, all of this water keeps moving, some to reenter the ocean, where the water cycle "ends" ... oops - I mean, where it "begins."

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