

The water cycle was in the circle

Author: Dr. Basir Kamjo

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Water is a colorless, odorless, and tasteless substance that exists in three forms: liquid, solid (ice), and gas (vapor) on Earth. It is essential for life and plays a crucial role in various Earth systems. The continuous movement of water between these forms and reservoirs is known as the water cycle.

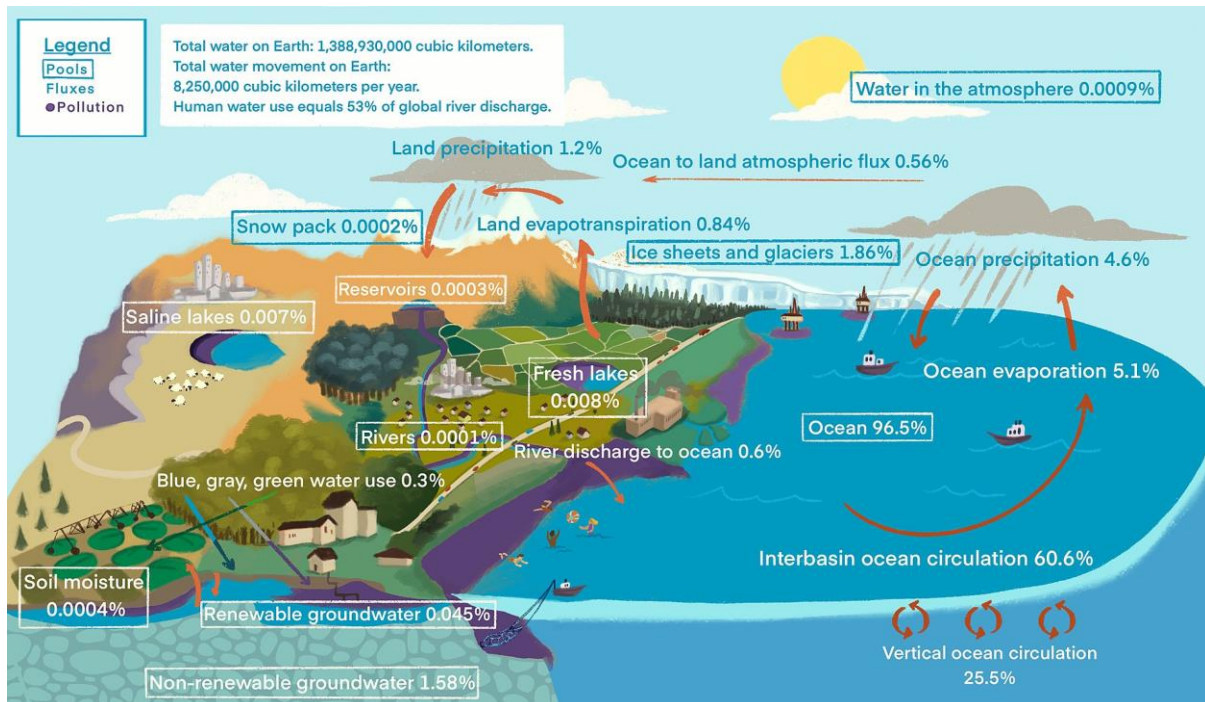
First . The Water Cycle's Metamorphosis: A Scientific Delve into Its Forms

The Water Cycle in a Circle

The water cycle is a dynamic and interconnected process that involves the continuous exchange of water between the Earth's atmosphere, land surface, and subsurface. It is a closed-loop system with no beginning or end, and it has been operating for billions of years.

Water Distribution on Earth

Water is distributed unevenly across the Earth's surface. Approximately 97% of Earth's water is found in oceans, while freshwater accounts for only 3%. Freshwater is further divided into surface water (lakes, rivers, streams) and groundwater (subsurface water stored in aquifers).



Processes of the Water Cycle

Evaporation: Solar radiation heats up water bodies, causing liquid water to change into water vapor. This vapor enters the atmosphere.

Transpiration: Plants absorb water from the soil through their roots and release it into the atmosphere as water vapor through their leaves. This process contributes significantly to evapotranspiration, the combined loss of water from both land and water surfaces.

Condensation: As water vapor rises in the atmosphere, it cools down and condenses into tiny water droplets, forming clouds.

Precipitation: When water droplets in clouds become too heavy, they fall to the Earth's surface as precipitation in the form of rain, snow, sleet, or hail.

Infiltration: A portion of precipitation soaks into the ground, replenishing groundwater stores.

Runoff: Water that flows over the land surface due to gravity is called runoff. It eventually enters streams, rivers, and ultimately oceans.

Groundwater Flow: Groundwater moves slowly through underground rock and soil formations, eventually reemerging as springs or discharging into rivers and oceans.

Importance of the Water Cycle

The water cycle is essential for life on Earth. It provides the following crucial benefits:

Regulates Earth's Climate: Water plays a key role in regulating Earth's temperature by absorbing and releasing heat energy.

Supports Ecosystems: Water is essential for the survival of all living organisms and supports diverse ecosystems.

Drives Geological Processes: Water erosion and deposition shape Earth's landscapes and contribute to geological processes.

Human Uses: Water is indispensable for human consumption, agriculture, industry, and hydropower generation.

Conclusion

The water cycle is a complex and interconnected system that sustains life on Earth. Understanding and managing this cycle is crucial for ensuring water security and environmental sustainability.

Second: The Origin and Role of Water in Religious Traditions

First : The Role of Water in Ancient Iranian Culture

Water held a profound and revered position in the culture and religious views of ancient Iran. For millennia, it has been considered the source of life, prosperity, and blessing, finding its

expression in the history, literature, art, customs, and architecture of Iranian peoples (Tajiks, Persians, and Kurds).

According to historical texts, water was considered sacred in ancient Iran, and the goddess "Nahid" or "Anahita" was its guardian. In Iranian rituals, water was accepted as a symbol of purity, birth, and freshness and was used in various life ceremonies.

Water in Zoroastrianism:

In the Avesta, the oldest holy book of Zoroastrians, water is referred to as "Ahura Mazda's creation" and "a gift from him to humanity." In Zoroastrian religious writings, water plays a central and fundamental role in the story of the creation of the world. According to the narratives, Ahura Mazda created existence from six pure gems, one of which was water. Water initially existed as a vast ocean called "Vorejhna" (offering a different interpretation of a text) and was then divided into seven parts, each playing a specific role in creation.

Second . The place of water in Abrahamic religions

Water plays a vital and symbolic role in Abrahamic religions including Judaism, Christianity and Islam. In the sacred texts of these religions, water is mentioned as the source of life, a symbol of purity and a means of salvation.

Water plays an essential role in the creation stories of Torah, Bible and Quran. God created water at the beginning of creation and used it to create the earth and sky and all creatures.

The Torah: The book of Genesis, chapter 1, praises the creation of water as God's first act: "In the beginning God created the heavens and the earth, now the earth was formless and empty, darkness was over the earth. in the deep, and the Spirit of God hovered over the waters (Genesis 1:1-2).

Bible: In the Gospel of John, chapter 1, verse 1, it says that in the beginning, "the earth was without form and void, and darkness was over the deep, and the Spirit of God hovered over it. over the waters." (John 1: 1) Then God created light and separated the waters and brought out the heavens and the earth. (Genesis 1:6-10)

The Holy Qur'an: Surah Baqarah, verse 253, refers to the creation of water from the sky: "And He is the One who sent down from the sky to purify you with them, and there is death." Earth and causes abundant growth of all kinds of plants. (Quran 2:253)

Third - the importance of water in Buddhism

Water has a special place in Buddhism and plays a deep symbolic and practical role in its teachings and rituals. Throughout Buddhist texts, water is revered as the source of life, the purifier, and the embodiment of enlightenment.

In the Buddhist creation story found in the Tripitaka, water takes center stage. In this narration, there was only water in the beginning. From this eternal water, the earth, the sky and all the creatures emerged. In some Buddhist texts, water is considered a place of rebirth and salvation. Before attaining enlightenment, the Buddha spent seven weeks meditating on the banks of the Naranjara River.

Water in Buddhism is also a symbol of the impermanence of everything in this world. The ever-flowing nature of water serves as a reminder that nothing in this world remains constant and everything is in flux. This concept aligns with Buddhist teachings on anika (anitya), the impermanence and transience of all things.

For more information, refer to the following sources:

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