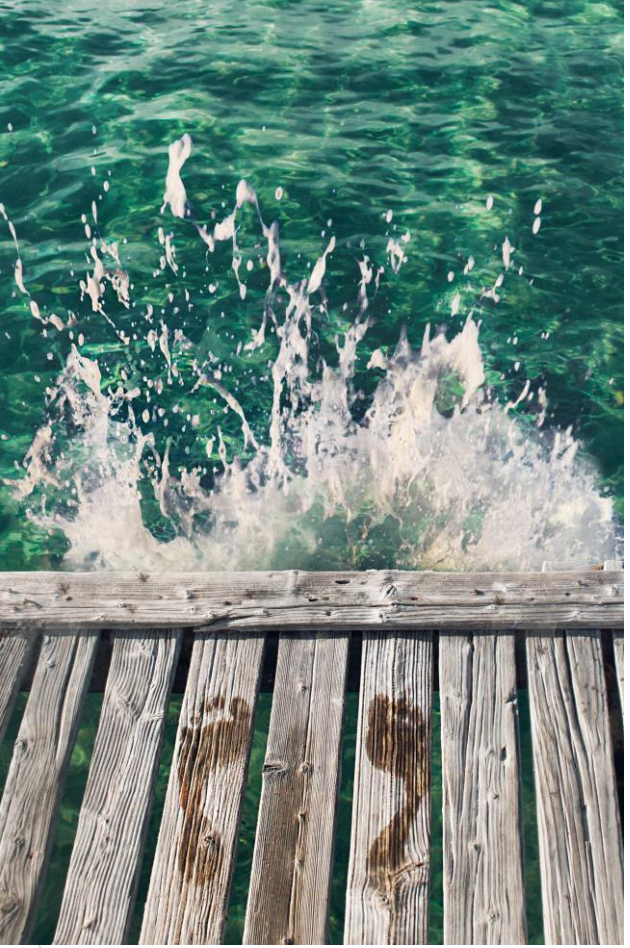
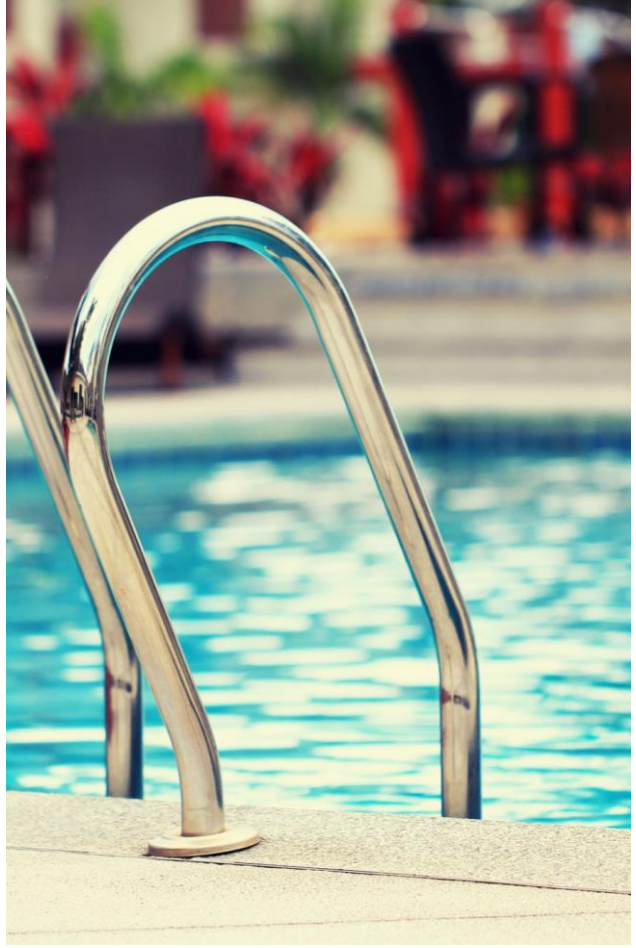

WHAT´S UP WITH WATER:

Pouring Water into Corporate Strategy

Episode 7: The cycle of water production explained (Part B)

24-May-22

WHAT´S UP WITH WATER: Pouring Water Into Corporate Strategy.

OUTLINE

WHAT´S UP WITH WATER: Pouring Water Into Corporate Strategy.

Look at the water cycle explanation

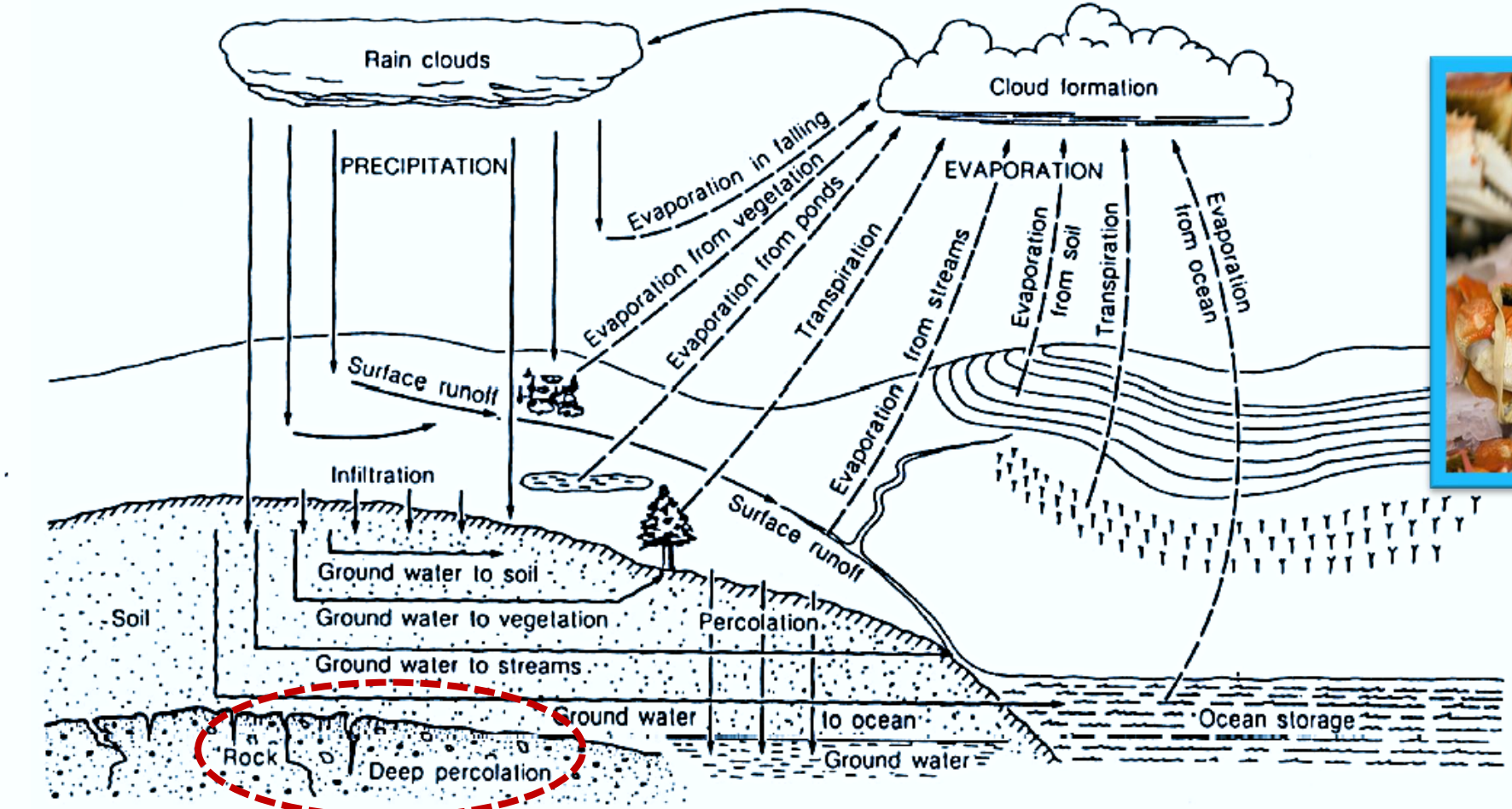

Image Source: Micklin, P. "Man and the water cycle: challenges for the 21st century". Springer GeoJournal , July 1996, Vol. 39, No. 3, Global Change and Environmental Issues: Research and Pedagogy (July 1996), pp. 285-298

Figure 1. Global annual water cycle. (Source: Council on Environmental Quality, Washington, DC, 1981)

WHAT´S UP WITH WATER:
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On our last episode we left some open questions that came to our mind when analyzing the water cycle. Let´s see how to answer them, in such a way that we can continue exploring and asking ourselves more questions:

Do We Really Lose Water In Quantity?
Or Do We Lose It In Quality? Or both?
Answer: Both. It is very possible that we are losing water in quantity, so the water cycle requires to be studied as an open system.
In fact, because of humans' manipulation, alteration and pollution, our water has degraded in quality too.

Are our sources of freshwater drying?
Answer: Yes. Pollution and climate change affects all the components of the water cycle, particularly freshwater. The global water cycle is being affected because climate change is changing the precipitation and evapotranspiration rates, as a cascade effect it is affecting groundwater, aquifers, recharge and discharge of aquifers, etc. In addition, seawater intrusion is bringing salinity to the groundwater resources.

How, when and where our sources of water are not returning to earth? What is happening?
Answer: researchers are trying to explain these questions using several theories. We will explore the strategic theory; we encourage you to search into details.

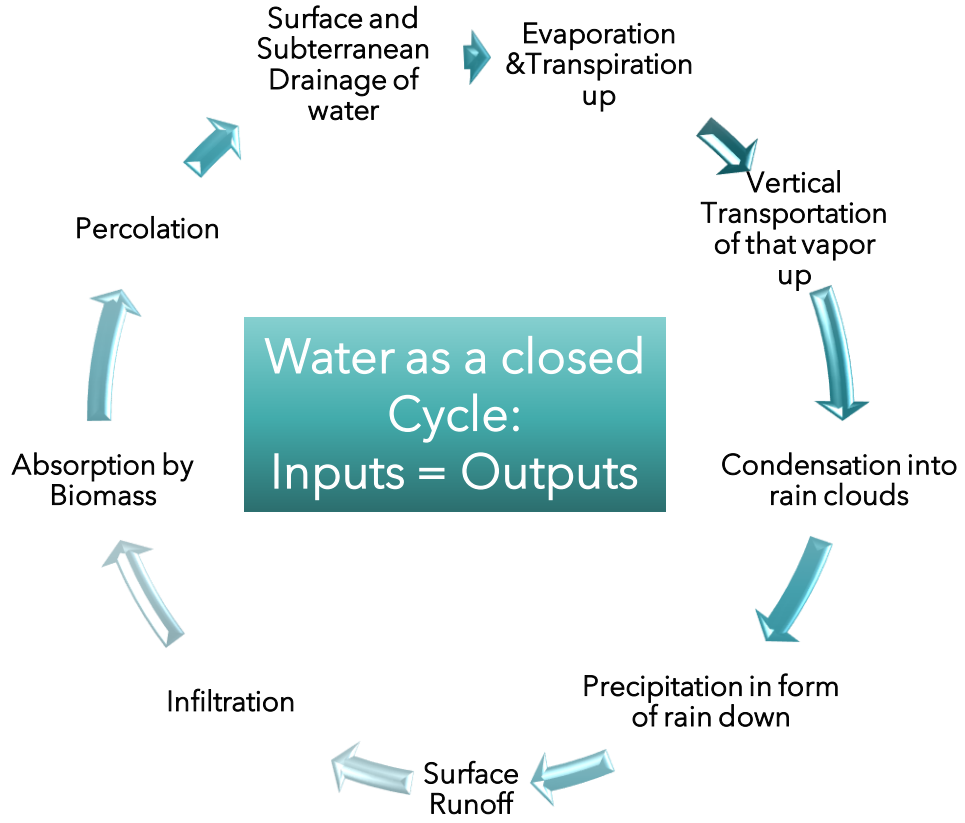
Do we need to revisit our hydrological cycle theory to find out something that is missing?
Answer: the concept of the closed hydrological cycle is questioned. Something is not right in our traditional concept. We require further research.

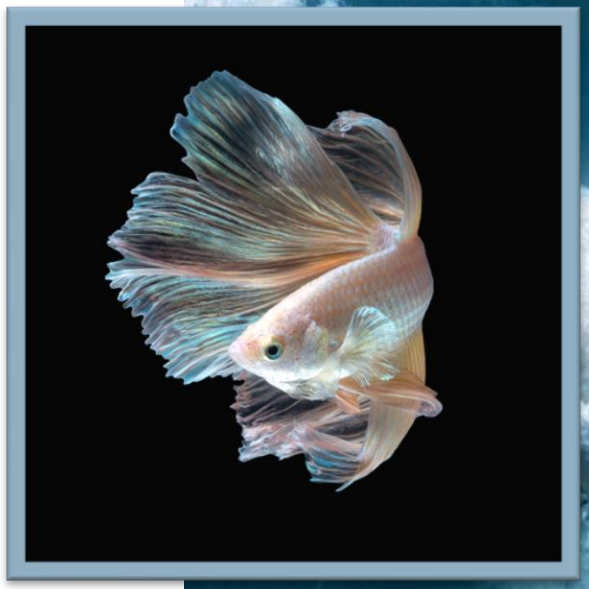
WHAT´S UP WITH WATER: Pouring Water Into Corporate Strategy.

The Water Cycle Explained as a closed progression

The Hydrologic Cycle, considered as the cyclical process of Evaporation/Transpiration; Vertical Transportation; Condensation; Precipitation; Infiltration; Absorption by Biomass; Percolation; and finally, Surface and Subterranean Drainage of Water. (Only this last section of the process allows that amount of water to be recycled and purified).

In the closed view of the water cycle, for more than a thousand years it has been assumed that there are no losses of water in the water cycle system.





Source: Matos de Abreu, F.; Montenegro, A. ; Ramos Ribeiro, M.; Carrico de Lima A. and Sousa, W. "The hydrologic Cycle: an open or a closed system". Geográfica Magazine, Pan American Institute of Geography and History. 2005, no 137.

WHAT´S UP WITH WATER: Pouring Water Into Corporate Strategy.

The Water Cycle Explained as an open progression

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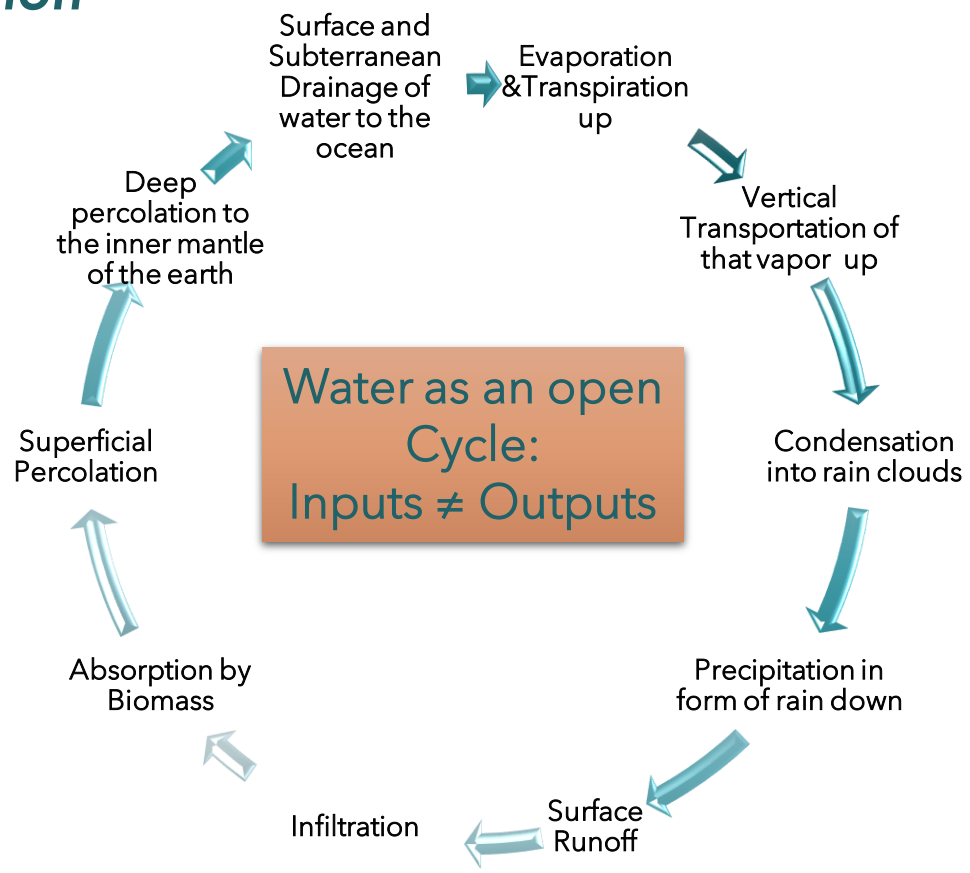
In the open cycle system, researchers are telling us that there is a piece of water that doesn´t return to the ocean but goes deep underground into the mantle. We need to explore much more over the next decades.



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