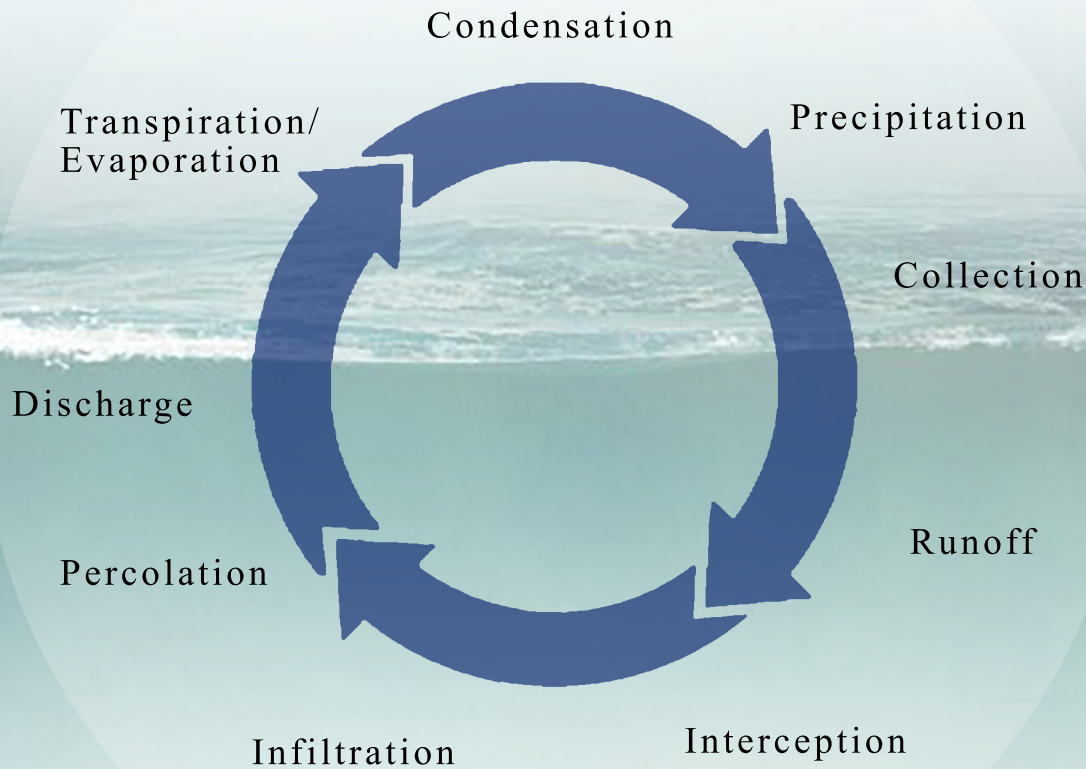


Freshwater consumption and the global hydrological cycle

X Fashion industry

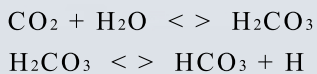


Influences of the fashion industry on water

Emissions

○ During the production process a lot of CO₂ is released. As soon as carbon dioxide gets in touch with water, a reaction takes place.

○ Carbonic acid is produced, and this molecule dissociates further into a hydrogen ion and a bicarbonate ion.



Chemicals

○ Approximately 50,000 tons of dye are discharged into global water systems from textile industries.

○ Drinking water is usually contaminated with chemicals and heavy metals such as mercury, lead, nickel, cobalt, cadmium, Sulphur and arsenic.

○ Due to fertilizers and pesticides, fresh water is infected by nitrates.

Microplastics

○ One of the big contributors to the plastic problem are synthetic fibers. Microplastics are released every time you wash your synthetic clothes.

○ Also, in the fashion industry a lot of plastic packaging is used and thrown away after using it once.

○ They eventually flow into the ocean where marine life is affected directly.

Threats of the fashion industry on water

Plants:

Soil with acid water will draw sulfur and nitric compounds into their roots and through their systems. This has a toxic effect on plants and trees.

Species:

Are sensitive to acidity in general, and will be lost as the pH declines

Water pollution can result in

human health problems, poisoned wildlife, and long-term ecosystem damage.

○ At least 2 billion people drink water from sources contaminated by chemicals, which affects their health directly.

○ Fishes wash up dead on a daily base with plastic in their stomach.

○ Every human body is 'infected' by microplastics. Research shows that plastics is even in the air we breathe.

○ The impact on long term is unclear due to a lack of research on this topic.