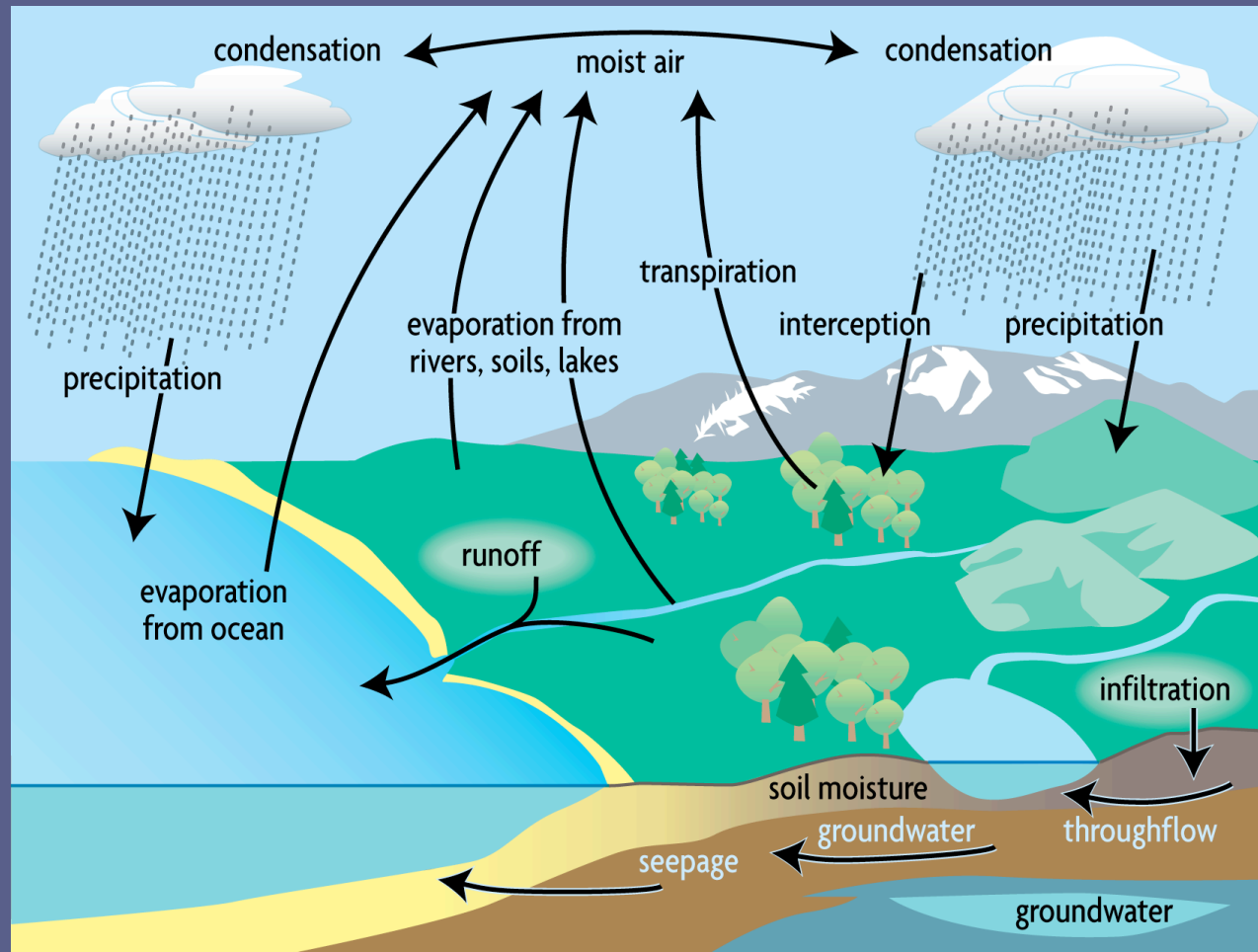


## SGI Ecology: Activity 8 • Living on Earth

# The Water Cycle

# The Water Cycle



# What does the water cycle do?

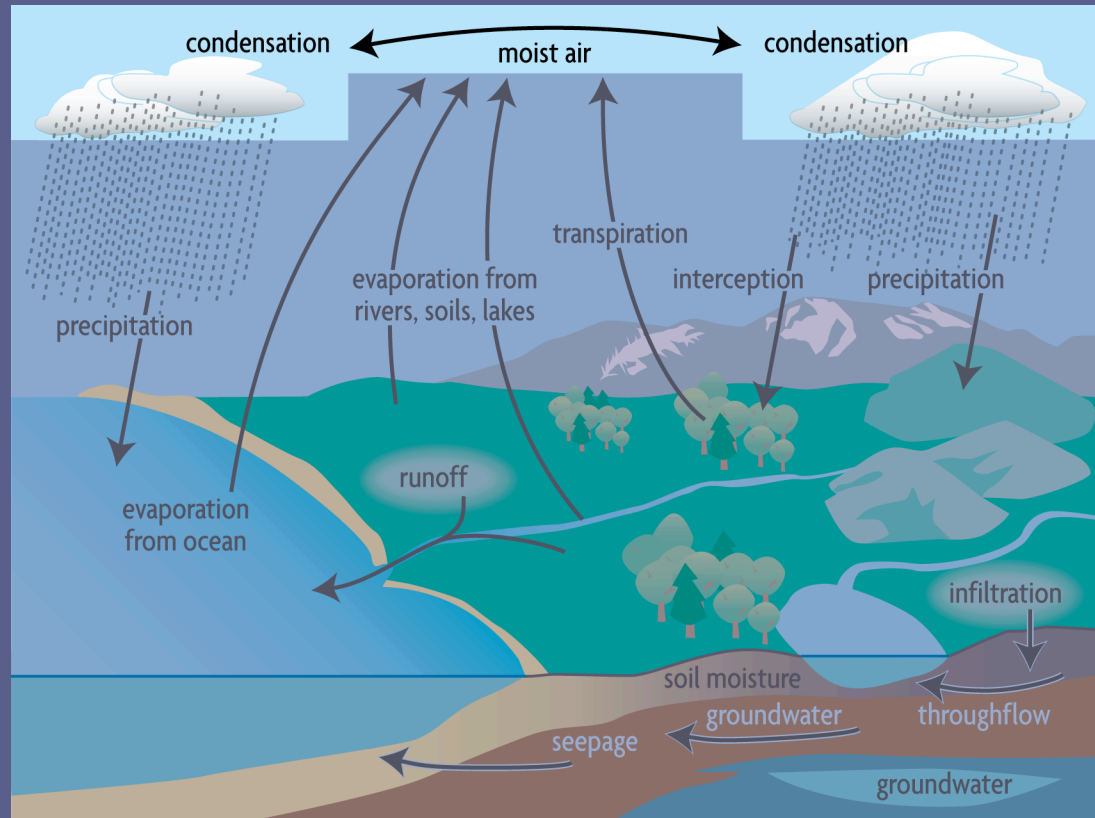
Moves water through different reservoirs, similar to the carbon cycle

Transforms water from one phase to another (for example, liquid to gas) as it moves between reservoirs

# Atmosphere and Condensation

Stores and moves water in the form of vapor

Water vapor condenses to form clouds, and eventually precipitation.

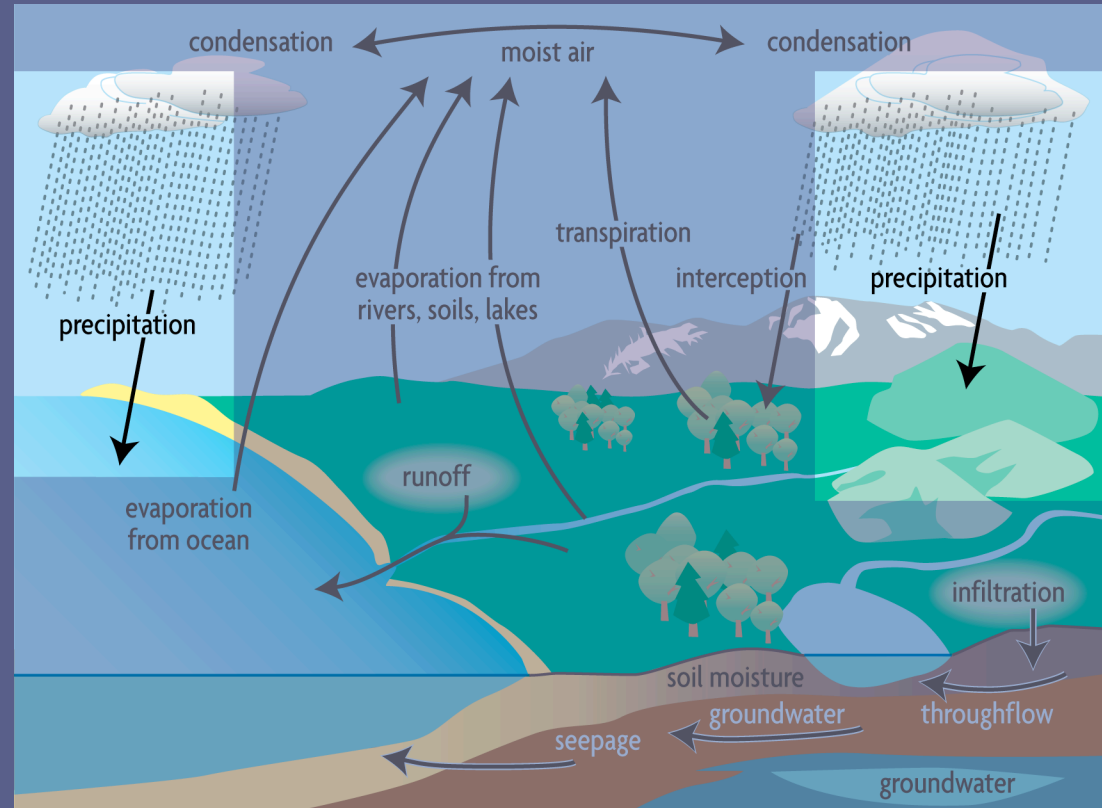


# Precipitation

Vapor condenses, then falls from the atmosphere to the ground or bodies of water

Includes rain, sleet, hail, and snow

All precipitation that reaches the ground becomes runoff or groundwater.

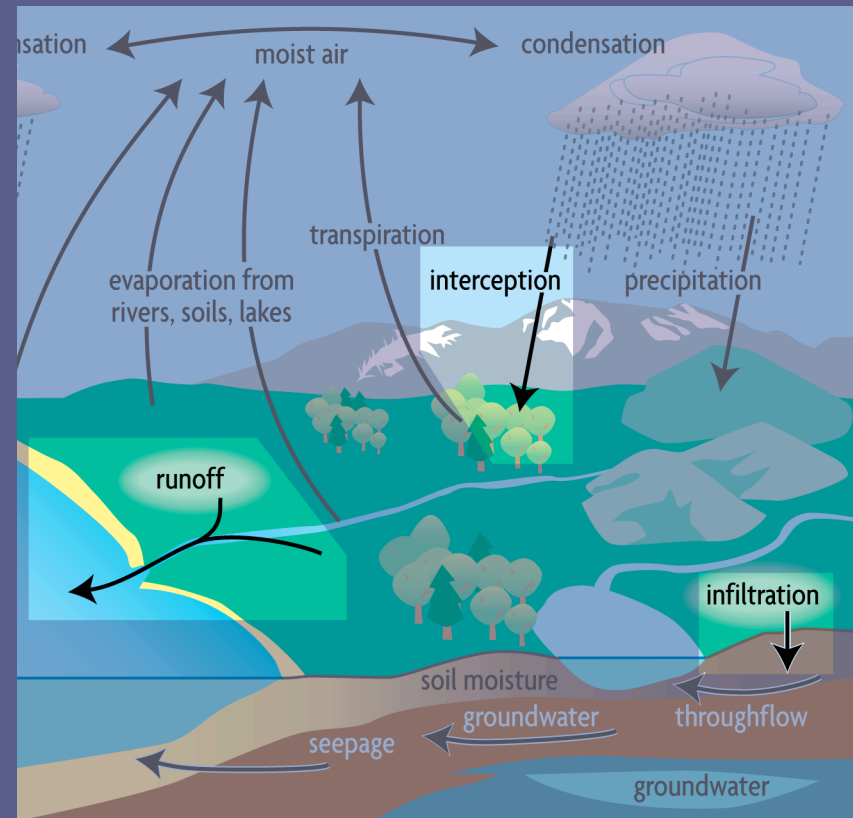


# Interception and Infiltration

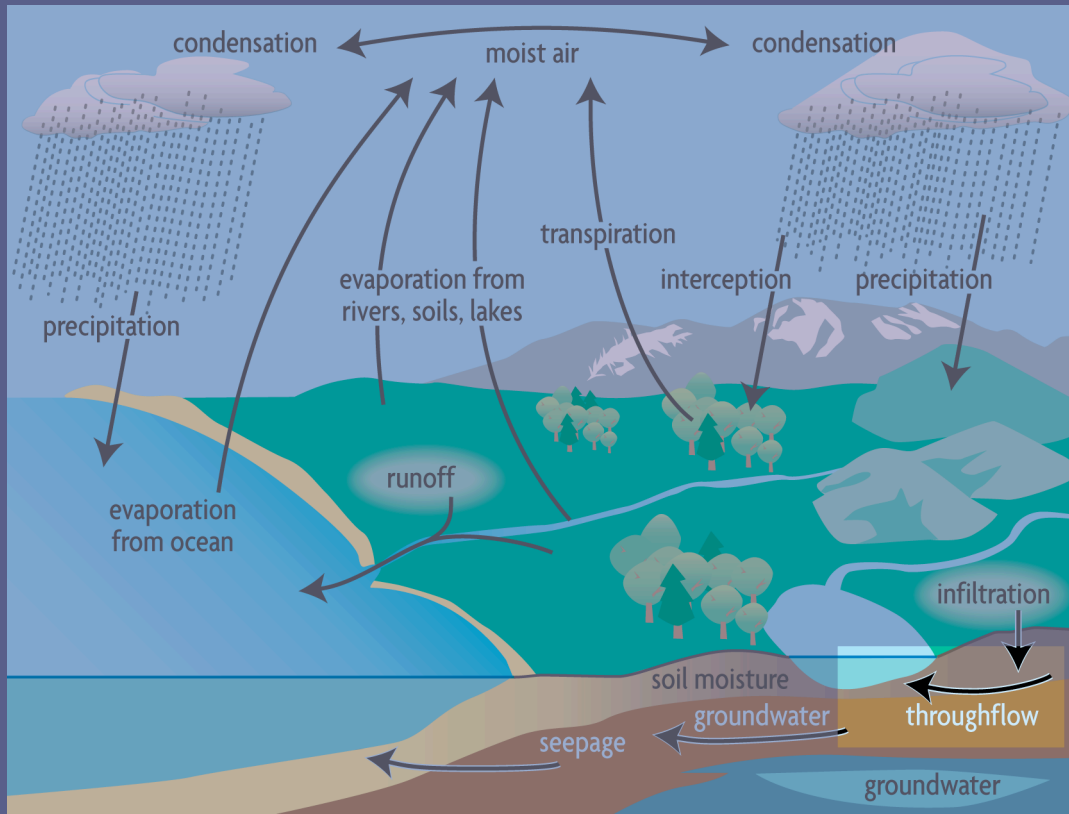
Interception occurs when precipitation is intercepted by plants, collecting on leaves or stems.

Infiltration occurs when precipitation falls directly to the ground and moves into the soil.

Water that collects or runs directly to the nearest downhill body of water is runoff.

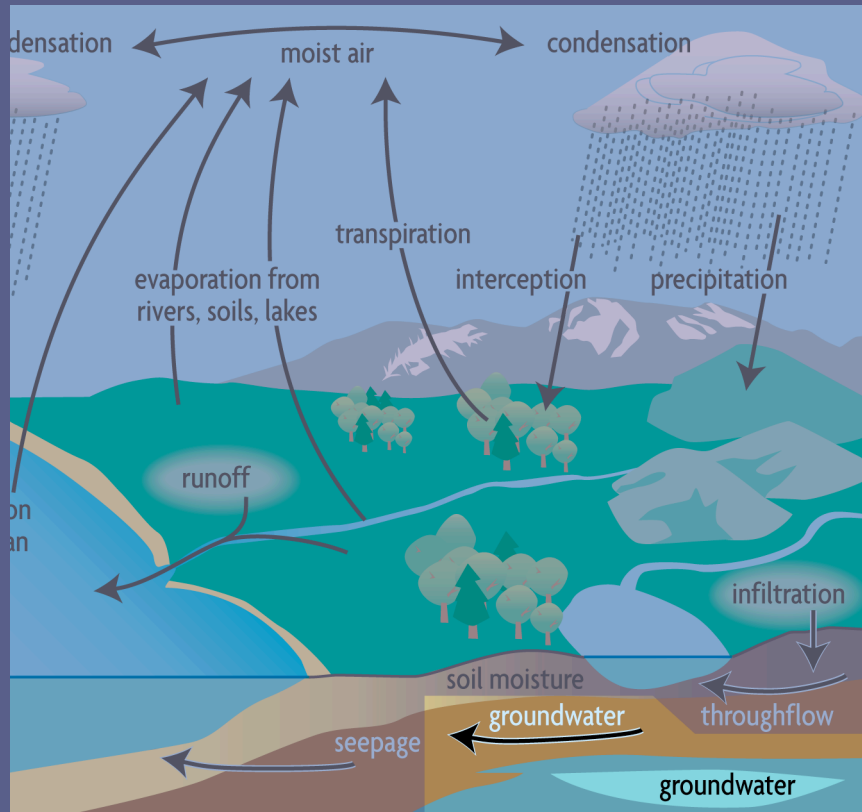


# Throughflow



Soil that is completely saturated cannot absorb more water. The water flows horizontally through the soil until it reaches a body of water, such as a river or lake.

# Groundwater



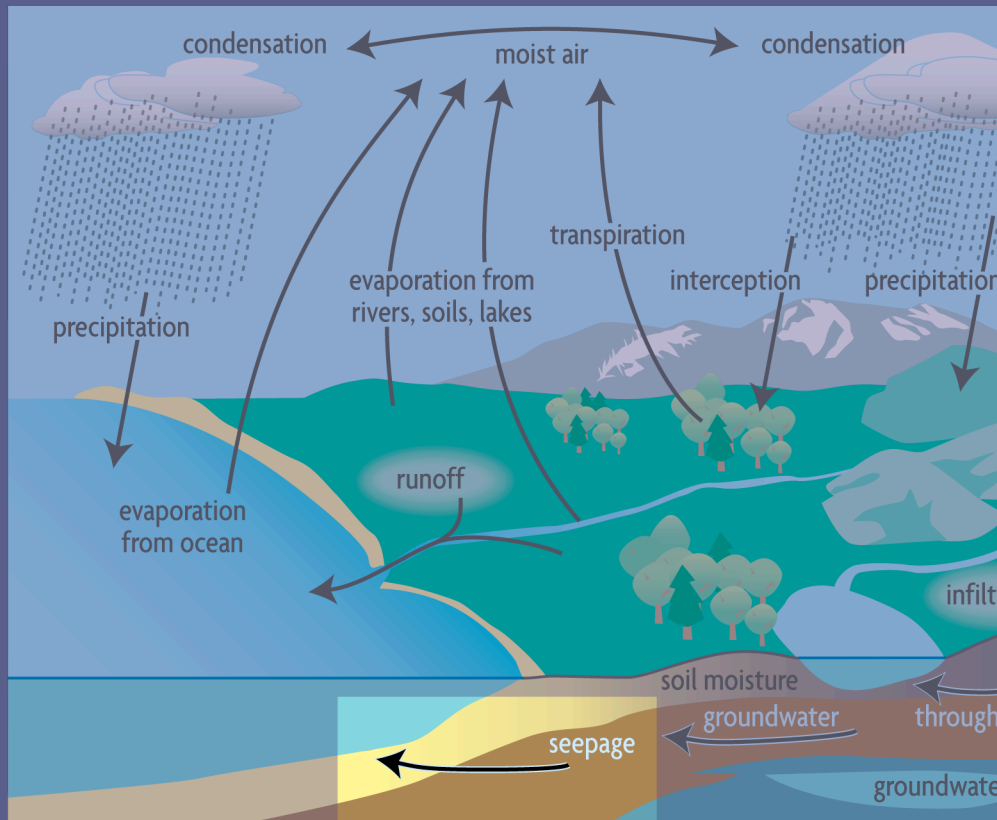
Water that moves through the soil into the bedrock beneath is known as groundwater.

Groundwater can flow to bodies of water (rivers, lakes, oceans).

Groundwater that collects in layers of rock, gravel, or sand forms an aquifer.



# Seepage

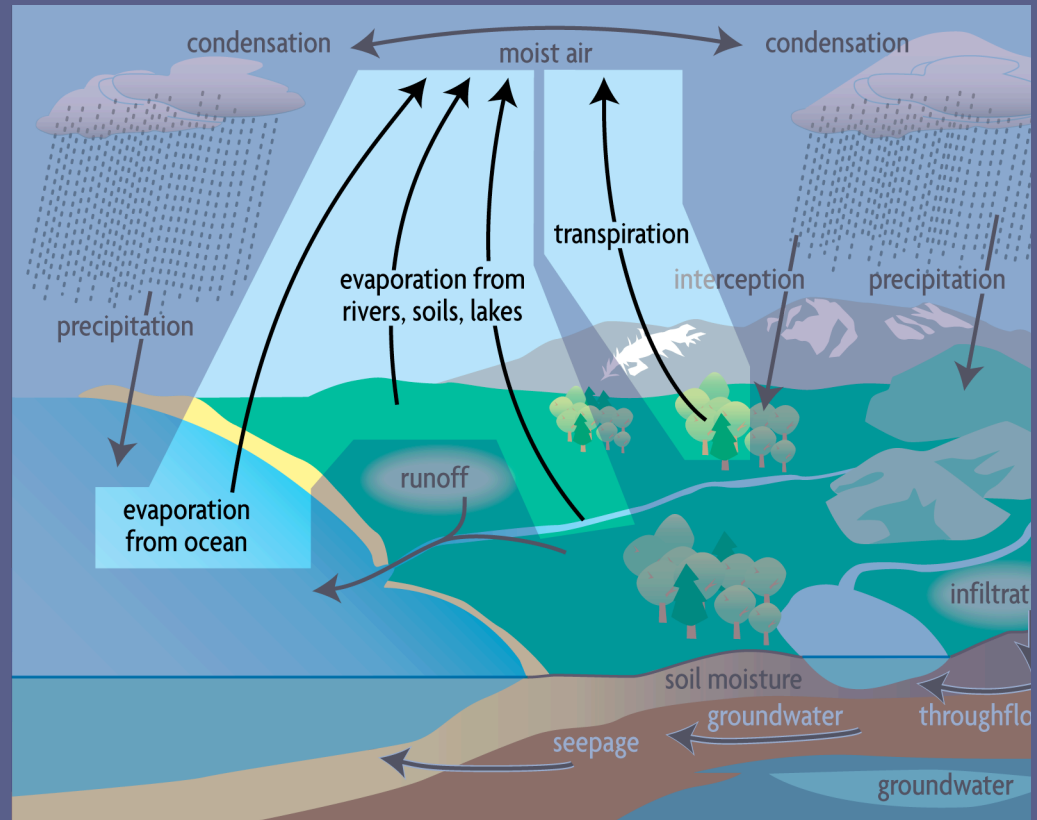


Seepage is produced when water is not stored in the soil and does not rise as a point source, such as a spring, but instead moves horizontally or downward through the soil.

# Evaporation and Transpiration

Liquid surface water from rivers, lakes, and the ocean is transformed into water vapor that moves into the atmosphere through evaporation.

Liquid water from the surfaces of plant leaves moves into the atmosphere through transpiration.



# The Water Cycle

