

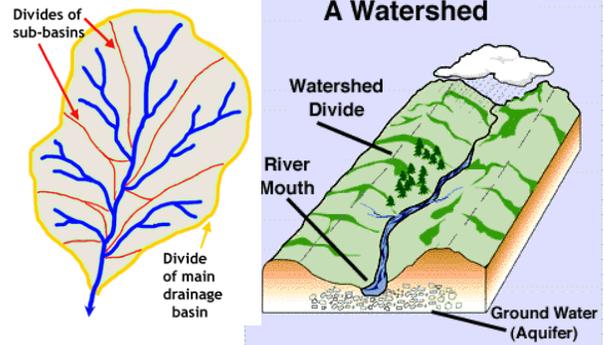
## 31. Hydrosphere – water of land mass

*Water of land mass* represents all the water coming there in form of precipitation and is present in surface flows (courses), lakes, reservoirs, marshes, glaciers, snow and below the surface (sub-surface water/groundwater).

### **Rivers and streams**

= they create *channel network*.

Drainage basin is area where main course with tributaries takes away (sub-)surface water from. The boundary between two drainage basins is a watershed. *Water-level stage* is a height of a flow from the riverbed. Changes of water-level are described by river regime and influenced by vertical and horizontal zonality, relief, soils, vegetation, etc.



### **Lakes**

= are natural depressions on the Earth's surface partially or totally filled by water. According to their origin, there are:

- Tectonic lakes – Lake Victoria (Uganda), Lake Tanganyika (Tanzania), Lake Baikal (Russia)
- Volcanic lakes – Crater Lake (USA)
- Glacial lakes (tarns) – Štrbské pleso, Lake Genève, Finnish and Canadian lakes

Lakes are classified also by salinity (Caspian Sea, Dead Sea vs. Lake Baikal), drainage (drainless Lake Chad), etc.



### **Reservoirs**

= dams = artificial lakes which:

- protect people from floods
- generate electricity
- provide means of transportation
- breed fish
- irrigate surroundings from these water supplies.

### **Glaciers**

With permanent snow cover, glaciers represent the greatest freshwater supplies in the world. Continental glaciers (ice sheets) occur in Antarctica and Greenland, however, mountain glaciers are found in various mountainous areas, e.g. Rocky mts., Alps, Himalayas, Caucasus mts., etc.

### **Sub-surface water**

= classified into *soil water* and *groundwater*. The place where water pours onto the surface is called a spring. Groundwater is the most important source of drinking water (freshwater). In mountains, the greatest reserve of groundwater is limestone relief = karst (especially caves).

Thermal water = warm water used mainly for recreational and health purposes.

Mineral water = water containing dissolved minerals.

### **Keywords**

water of land mass, surface flow, water course, lake, reservoir, marsh, glacier, snow, groundwater, sub-surface water, channel network, drainage basin, watershed, water-level (stage), river regime, tectonic/volcanic/glacial lakes, drainage, dam, floods, irrigation, continental/mountain glacier, spring, thermal/mineral water