

## CHAPTER 11

A list of bullet points with important information is given to help you learn the subject matter of this chapter.

- 1.- Where riparian rights prevail, one who holds land adjacent to a stream can only take water *from* the stream if there is no harm to other users.
- 2.- Where appropriation rights apply (1) set amounts of water may be taken and used or sold only by those who hold the rights, and (2) if there is insufficient water to meet demands, earlier rights are honored over newer rights.
- 3.- The maximum amount of total dissolved solids considered acceptable for drinking water is 500 ppm.
- 4.- Under the proposed great Russian Water Diversion scheme water from the Black Sea will be pumped onto the steppes.
- 5.- The principal constituent dissolved in river waters of the eastern U.S. is HCO<sub>3</sub><sup>-</sup>.
- 6.- Most of the free water (i.e., not bound in minerals) on the Earth is in the oceans.
- 7.- Most of the accessible freshwater on the Earth is in the ground water system.
- 8.- Most the non-saline water on the Earth is held in the glaciers and ice caps.
- 9.- Most of the world's annual precipitation: (1)\* evaporates before reaching the ocean as runoff.
- 10.- Worldwide, the zone of maximum precipitation lies along the equator.
- 11.- The effects of building dams include: (1) reduction of flooding; (2) increased evaporation; (3) loss of natural habitat; (4) the potential for hydroelectric generation.
- 12.- Flooding: (1) is a natural event; (2) only occurs when humans have altered the environment; (3) is promoted by creating more impermeable areas; (4) is aggravated by permitting construction along flood plains; and (5) can often be controlled by channelization.
- 13.- The two elements dissolved in sea water in greatest concentration are Na + Cl.
- 14.- The largest consumer of fresh water in the United States is irrigation.
- 15.- When a river is channelized: (1) the rate of flow increases, and (2) the gradient increases.
- 16.- Most of the fresh water on the surface of the earth exists in the groundwater.
- 17.- The two resources that make the Earth most different from the other planets are water and air.
- 18.- Distillation is being used more and more as a way to make fresh water from sea water.
- 19.- The Central Arizona Project carries water from the Colorado River to Tucson and Phoenix.
- 20.- The water problem that has developed in the Colorado River basin in recent years is the allocation of greater amounts of water than exists in the river.