

Chapter 13 Water Resources Review Questions

1. What is the biggest problem of the legal pact that the U.S. and Mexico agreed to for water use of the Colorado River.
2. Describe how water is recycled by the hydrologic cycle and how human activities can overload and altered this cycle.
3. What percentage of the earth's freshwater is available to us?
4. Define groundwater, zone of saturation, water table, and aquifer.
5. Distinguish among surface water, surface runoff, and reliable surface runoff.
6. What percentage of the world's reliable runoff are we using and what percentage are we likely to be using by 2025?
7. Describe the availability and use of freshwater resources in the United States.
8. What are three major problems resulting from the way people are using water from the Colorado River basin?
9. How many countries face water scarcity today and how many may face water scarcity by 2050?
10. What percentage of the earth's land suffers from severe drought today and how might this change by 2059?
11. How many people in the world lack regular access to clean water today and how high might this number grow by 2025?
12. Define and give an example of a water footprint.
13. What is virtual water?
14. What are the advantages and disadvantages of withdrawing groundwater?
15. Describe the problem of groundwater depletion in the Ogallala aquifer of the United States.
16. Describe the problems of land subsidence and contamination of freshwater aquifers near coastal areas resulting from the overdrawing of water from aquifers.
17. What are three ways to prevent or slow groundwater depletion?
18. What is a dam?
19. What is a reservoir?
20. What are three advantages and three disadvantages of using large dams and reservoirs?
21. What ecological services do rivers provide?
22. Describe the California Water Project and the controversy over this water transfer project.
23. Describe the environmental disaster caused by the Aral Sea water transfer project.
24. Define desalination and distinguish between distillation and reverse osmosis as methods for desalinating water.
25. What are three major limitations on the widespread use of desalination?
26. What percentage of available freshwater is unnecessarily wasted in the world and in the United States?
27. What is a floodplain and why do people like to live on floodplains?
28. What are the benefits and drawbacks of floods?
29. List three human activities that increase the risk of flooding.
30. List three ways to reduce the risks of flooding.