

Water & the Environment

All of the water that exists on earth today existed when the planet was first formed 4.5 billion years ago. Water makes up 70% of the Earth. 98% is salty and just 0.4% is surface water accessible to people. Most of the freshwater on Earth is locked underground or in glaciers. Furthermore of the small amount of water suitable for human needs nearly half is polluted. As our population continues to increase worldwide more people require access to our limited and unsafe water supply.



Pesticides and fertilizers from farming, industrial runoff, toxic waste and household pollution continue to poison our water and are some of the many ways humans worldwide are destroying a water supply necessary for all life.



In addition to pollution, countries worldwide are controlling the flow of water by building dams, shifting rivers, and logging heavily all of which take a huge toll on our water supply. Natural disasters like hurricanes, floods, and drought caused, arguably, by humans are wreaking havoc on families around the world. The capability we have to permanently destroy our precious water supply is great and the effort to conserve and protect Earth's water sources is critical and urgent.

Questions to consider

- What is the water cycle and why is it important to understand?
- What is the problem with polluting our water supply? Who is affected?
- What are the various ways our water gets polluted?
- How do we clean our drinking water?
- What is a dam? What is its purpose? What are the costs and benefits of a dam?
- What is the toll of bottled water on the environment?
- How is climate change affecting our water supply? Note pros and cons
- How does deforestation relate to clean water?

Key Terms

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| - Accumulation | - Dam | - OTEC |
| - Acre-foot | - Desalination | - Precipitation |
| - Aquifer | - Drought | - Rainwater |
| - Aqueduct | - Dry toilets | - Harvesting |
| - Canal | - Erosion | - Saltwater |
| - Causeway | - Evaporation | - Subsurface Runoff |
| - Clean Water Act | - Freshwater | - Transpiration |
| - Clear-cutting | - Groundwater | - Trawling |
| - Climate change | - Hurricane | - Tsunami |
| - Condensation | - Hydro-electric | - Water Cycle |
| - Conservation | - Levee | - Water Footprint |

