

Global Water Cycle

Name

University

Date

All animal and plant life are dependent upon water. However, based upon where one lives and the climate of that area, water can either be plentiful or scarce. Moreover, it may be too plentiful at certain times of the year and less plentiful at other times. In addition, humans may waste valuable water resources through undesirable habits or behaviors.

First, the water cycle continuously replenishes the earth's fresh water supply. The sun evaporates water from the oceans, rivers, and lakes and stores it in cloud formation. At some point, the clouds burst forth and rain on the earth. Depending upon temperatures, the precipitation, or moisture in the air, can be in the form of mist or fog, rain, hail, or snow. Snow melts from high and the water that travels downward from the mountain tops and sides swell the existing rivers, sometimes causing floods. Lakes capture water and their levels rise and boundaries expand. However, some areas on earth do not have mountain tops with snow or rivers, lakes, or ponds. They tend to be dry and rely on occasional rain or underground reservoirs that may be hard to reach.

Because the amount of fresh water available for human and animal consumption varies worldwide, certain geographic locations sometimes have too much water, causing devastating floods, while others endure damaging droughts that kill crops, and sometimes cause people and livestock to perish, as well. To address these concerns, mankind constantly looks at ways to harness the water supply or to find and store it. In doing so, though, mankind often does more harm than good by threatening the environmental or ecological conditions of an area (International Union for Conservation of Nature and Natural Resources, 2000).

What man does in polluting water and causing climate change is a major focus in all industrialized and developing countries. Industries have dumped waste into rivers and landfills. This water poisons the surrounding areas, often causing birth defects and serious illnesses in children and adults. Air pollution compromises the fresh water that falls back to

earth in nature's effort to replenish water. Climate changes may be the result of these pollutions, causing some areas to flood and others to endure hotter temperatures and less precipitation. The greater the population of people in an area, the more likely is the damage from pollution. Basically, humans are responsible for two major effects on earth's freshwater ecosystems. One is their use for industrialization, agriculture, and everyday activities, such as bathing, washing clothes, and other domestic chores. The other effect is from not taking care of the environment, such as destroying tropical rain forests (Carr, Neary & GEMS/Water (Programme), 2008; International Union for Conservation of Nature and Natural Resources, 2000).

What mankind does with freshwater resources is a matter of vital importance. Many countries, such as in Africa, do not have enough fresh water, and some of what they have is disease-infected, causing epidemics like the recent Ebola outbreak. If humans and animals do not have access to clean water, they will perish. Sometimes the problem is the geographic location, but often it is the fault of industrialized organizations that lack the foresight to see how they are damaging the planet in depleting natural resources and disrupting the natural ecological system (Carr, Neary & GEMS/Water (Programme), 2008).

In summary, it is up to individuals, governments, and businesses to protect our natural aquatic ecosystems and to reduce the potential harm of air and water pollution. One way is to protect the tropical rainforests. Another is to harness water from heavy rains and snow. Regulations for governments and industries are necessary to protect natural resources and diminish the effect on the atmospheric temperatures. Finally, initiatives are needed for helping to develop natural, clean water supplies for those populations who have very little to none.

## References

Carr, G., Neary, J., & GEMS/Water (Programme), (2008). *Water quality for ecosystem and human health*. (pp. 60-67). United Nations Environment Programme, Global Environment Monitoring System/Water Programme.

International Union for Conservation of Nature and Natural Resources. (2000). *Vision for water and nature : a world strategy for conservation and sustainable management of water resources in the 21st century*. (pp. 189-190). Gland, Switzerland: IUCN.