

WATER POLLUTION

FACT: Nearly 97% of the Earth's water is salt water. Another 2% is locked in ice caps and glaciers. That leaves just 1% as fresh water suitable for farming, recreation manufacturing, washing, and drinking.

Water is undoubtedly the most precious natural resource that exists on earth. It is essential for everything on our planet to grow and prosper. Although we recognize this fact, disregard it by polluting our rivers, lakes and oceans. We are slowly but surely harming our planet to the point where innocent organisms are dying even at this very moment. Also our drinking water has become greatly affected and soon we will have to think about ourselves. In order to combat Water pollution occurs when a body of water is adversely affected due to the addition of large amounts of pollutant materials to the water. When it is unfit for its intended use, water is considered polluted. These harmful substances can either be emitted directly into a body of water or indirectly through environmental changes. An example of latter is fertilizer from a field carried into a stream by rain, in the form of run-off, which is very common in agricultural areas.

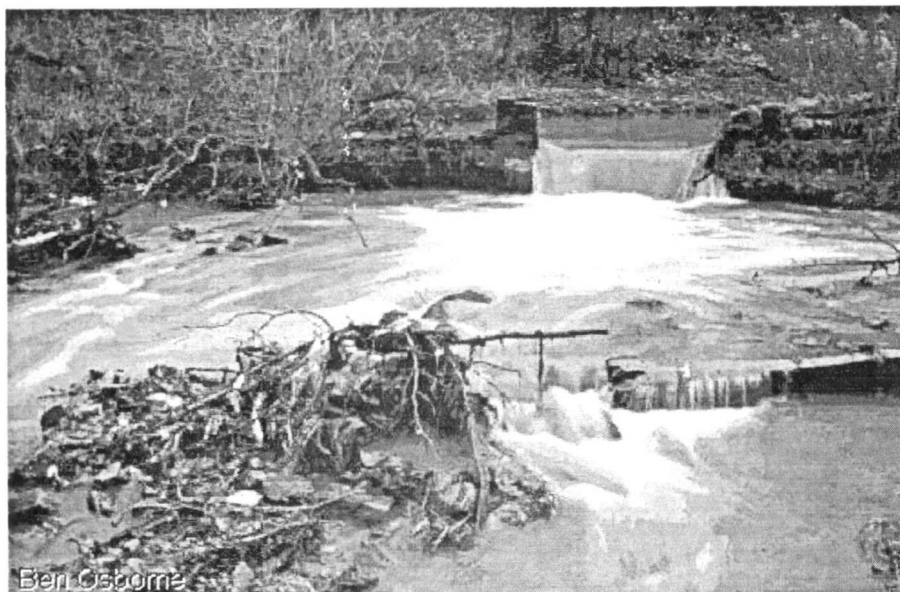
Estimates suggest that nearly 1.5 billion people lack safe drinking water and that at least 5 million deaths per year can be attributed to waterborne diseases. Raw sewage, garbage and oil spills have diluted the oceans and most coastal waters. Beaches around the world are polluted by sewage disposal and marine wildlife is beginning to suffer.

Sources of Water Pollution

The major sources of water pollution can be classified as municipal, industrial and agricultural waste water / surface runoff.

Municipal water pollution consists of waste water from homes and commercial establishments.

Petroleum & radioactive substances, and heat are the three major sources of industrial water pollution. Petroleum wastes often pollute water of



Ben Getorn

Polluted River

bodies in the form of oil, resulting deaths These decreases in temperatures are caused when a discharge of cooling water by factories and power plants occurs.

Oil pollution is a growing problem, particularly devastating to coastal wildlife. Small quantities of oil spread rapidly across long distances. Its impact on the delicate marine ecosystem of the coral reefs could be devastating. Agriculture, including commercial livestock and poultry farming, is the source of many organic and inorganic pollutants in surface water and groundwater.

Pollution is caused when silt and other suspended solids, such as soil is washed off from ploughed fields, construction and logging sites, urban areas, and eroded river banks with surface run off when it rains. Under natural

depth become reduced and aquatic organisms and their environments become suffocated. Pollution in the form of organic material enters waterways in many different forms such as sewage, leaves grass clippings or as runoff from livestock feedlots and pastures. When natural bacteria and protozoan in the water, break down this organic Material, they begin to use up the oxygen dissolved in the water. Many types of fish and bottom-dwelling animals cannot survive when levels of dissolved oxygen drop below two to five parts per million. When this occurs, it kills aquatic organisms in large numbers, which leads to disruptions in the food chain.



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Conditions, lakes, rivers and other water bodies undergo Eutrophication, an aging process that slowly fills in the water body With sediments and organic matter. When these sediments enter various bodies of water, fish respiration becomes impaired, plant productivity and water

Oil Spill Clean-up

Saving our EARTH

Effects of Industrialization

Since the birth of the “chemical age”, water quality has been heavily

impacted worldwide by industrial and agricultural chemicals. Pollution of surface water from human and agricultural waste and nutrification of groundwater from agricultural practices has greatly affected large parts of the



World. Acidification of surface water by air pollution is a recent phenomenon which threatens aquatic life in many areas of the world. In developed countries, these general types of pollution have occurred sequentially with the result that most developed countries have successfully dealt with major surface water pollution. In contrast, however, newly industrialized countries such as China, India, Thailand, Brazil, and Mexico are now facing all these issues simultaneously.

Will Biological Diversity Suffer?

The problems associated with water pollution have the capabilities to disrupt life on our planet to a great extent. But the governments alone cannot solve the entire problem. It is ultimately up to us, to be informed, responsible and involved when it comes to the problems we face with our water. We must become familiar with our local water resources

and learn about ways for disposing harmful household wastes by causing minimal effects. And we have to be aware of the sources which cause water pollution in our neighborhoods.

Raw sewage includes waste from sinks, toilets, and industrial processes. Treatment of the sewage is required before it can be safely Buried, used, or released back into local water systems. In a treatment plant, the waste is passed through a series of screens, chambers, and chemical processes to reduce its bulk and toxicity.

By the turn of the century, cities in Europe and North America began building sewer networks to route domestic wastes downstream of water intakes. Development of these sewage networks and waste treatment facilities in urban areas has expanded tremendously in the past two decades. However, the rapid growth of the urban population (especially in Latin America and Asia) has outpaced the ability of government to expand sewage and water infrastructure. While water borne diseases have been eliminated in the developed world, out breaks of cholera and other similar diseases still occur with alarming frequency in the developing countries

Only the Humans are capable....

We have to preserve existing trees while planting new trees and shrubs to help minimize soil erosion and to promote

infiltration of water into the soil. Around our houses, we must keep litter, pet waste, leaves, and grass clippings out of gutters and storm drains. These are just a few of the many ways in which we, as humans, have the ability to combat water pollution. As we progress into the 21st century, awareness and education will most assuredly continue to be the two most important ways to prevent water pollution. If these measures are not taken and water pollution continues, life on earth will suffer severely.

Time for Unison

Global environmental collapse is not inevitable. But the developed world must work with the developing world to ensure that new industrialized economies do not contribute to the world's environmental problems. Politicians must think of sustainable development rather than economic expansion. Conservation strategies have to become more widely accepted, and people must learn that energy use can be dramatically diminished without sacrificing comfort. In short, with the technology that currently exists, the years of global environmental mistreatment can begin to be reversed.

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