Essay on Effects of Water Pollution

Water pollution is an undesirable change in the state of water, contaminated with harmful substances. It is the second most important environmental issue next to air pollution. Any change in the physical, chemical and biological properties of water that has a harmful effect on living things is water pollution. Water pollution affects all the major water bodies of the world such as lakes, rivers, oceans, and groundwater. Polluted water is unfit for drinking and for other consumption processes. It is also not suitable for agricultural and industrial use. The effects of water pollution are harmful to human beings, plants, animals, fish, and birds. Polluted water also contains viruses, bacteria, intestinal parasites and other harmful microorganisms, which can cause waterborne diseases such as diarrhea, dysentery, and typhoid. Due to water pollution, the entire ecosystem gets disturbed.

The effects of water pollution are seen in Thermal, Heavy Metal, Agricultural regions and due to fertilizers, chemicals, oil, and contaminated groundwater.

Effects of Run-off Pollution: Rain picks up dirt and silt and carries it into the water. If the dirt and silt settle in the water body, then these sediments prevent sunlight from reaching aquatic plants. If the sun can’t reach the plants, they perish. These sediments also clog fish gills and smother organisms that live at the bottom of the body of the water.

Effects of Oil Pollution and Antifreeze: If oil is spilled on the water, the effects on the ecosystem and the components are harmful. Many animals can be annihilated in case they ingest oil. Oil contaminated prey may be a reason of death for many. If the oil coats the feathers of birds, they may die. Oil and antifreeze make the

water have a foul odor and there is a sticky film on the surface of the water that kills animals. Oil is the most harmful pollutant in the water.

Contaminated Ground Water Effects: If contaminated water enters the ground, there may be serious effects. People may become very sick and there is a probability of developing liver or kidney problems and cancer or other illnesses.

Fertilizers and other chemicals: Nitrates in drinking water leads to diseases of infants that may lead to their death. Cadmium is a metal in sludge-derived fertilizer. This can be absorbed by crops. When people ingest this, they may cause diarrheal disorders, liver and kidney damage. The inorganic substances like mercury, arsenic, and lead are the causes of pollution. Other chemicals can also lead to problems concerning the taste, smell and color of water. Pesticides, PCBs and PCPs are all poisonous to all sorts of life. Pesticides are used in farming, homes, and forestry. PCBs are found as insulators in old electrical transformers. PCPs are found in products like wood preservatives.

Effects of Agricultural Water Pollution: Rain and irrigation water drain off cultivated land that has been fertilized and treated with pesticides, the excess nitrogen, and poisons aye mixed with it into the water supply. These pesticides are toxic and pollute the water in a different mode. Aquatic plants cause de-oxygenation of water and annihilate flora and fauna in a stream, lake, and river. Fertilizers enhance the growth of bacteria that are in the water and increase the concentration of bacteria to hazardous levels.

Effects of Thermal Water Pollution:

Machinery in the industries is cooled with water from lakes and

rivers. This water reaches the river in a heated state. This water decreases the ability of the aquatic system to hold oxygen and raises the growth of warm water species.

Effects of Heavy Metal Water Pollution: Heavy metals like lead, mercury, iron, cadmium, aluminum, and magnesium are present in water sources. If these metals are present in the sediment, these reach the food chain through plants and aquatic animals. This causes heavy metal poisoning in case the level in the water is very high.

Some other effects of water pollution: In rivers, oceans, and seas, water pollution affects flora and fauna in them. Further, the birds and animals that consume this contaminated food supply can perish. Blood diseases, nervous system disorders, and heart diseases are some of the effects of water pollution. Many toxins in polluted water lead to cancer. Rarely, the body’s chromosomal makeup can be altered. Some of the less potent effects are skin lesions, vomiting, and diarrhea.