

Water Pollution Discussion And Analysis

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Introduction

Water pollution is the result of the overwhelming amount of wastes that come from the various sources of pollutants that may disrupt the balance of the ecosystem. The water waste cannot be cleaned up and destroyed as soon. Therefore, it may result in a dangerous environment for humans and animals. People should realize the harsh and long-term effects of water pollution that sometimes lead to death. Even if the source of water pollution can be eliminated, the long term effects on humans and animals last ever. All living entities need water to spend their livelihood as it is the major constituent of life. It is the ultimate responsibility of every individual to keep the water clean and available. Most of the time, water is available but not usable because of the oil, sewage, chemical wastes, and plastics. It is the ethical responsibility of everyone to save the land and then secure it from water pollution.

“The land ethic simply enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively: the land” (Leopold, p. 109).

Thesis Statement

“Water pollution is a major hazard globally that worsens the living conditions and poses dangers to humans, animals, and water bodies; it could be solved through proper sewage treatments, green agricultural practices, industrial wastewater treatment, anti-pollution laws and educative campaigns.”

Discussion And Analysis

With closer examination, two major sources of water pollution are oil and chemical residues. Petroleum products are one of the most poisonous substances in the ecosystem. Oil and chemicals add up in the water due to the accidental falls from ships, pipelines and mostly through leakages. Through such accidents, water becomes contaminated and does not remain useful for drinking purposes. There is not any doubt that the oils and chemical wastes are dangerous for water bodies in the lakes, oceans, lakes, and water storage sites. A major disaster of water leakage has been witnessed in the Gulf of Mexico, America. It was the largest oil spill, with approximately 176 million gallons. It is not only the worst-case disaster but also the most expensive one in America. Its harsh impacts have been observed for years in the water bodies. America has to spend billions of dollars on oil. It was the accidental water disaster, it has killed billion of birds and animals who move towards the lake, ocean, or lake water and when drink contaminated water may face the death (Kostka, pp.

7962-7974).

The contaminated water had damaged birth feathers, which resulted in birds being unable to fly and becoming the victims of other animals. Plant life was also severely affected due to this water disaster. Most Americans have been seriously affected due to their breathing in oil-contaminated air. Many health issues had arisen at that time. Fishes were more attracted to the oil-mixed water as it seemed more like food, so it killed a lot of fish at that time. The most prominent victims were the birds, water bodies and the animals living near the seashore. They were severely affected due to water pollution because they did not have the ability to distinguish between the oil slick and clean water.

The other reason behind the water pollution is the plastic or the substance that looks like plastic, including nylon, plastic bottles, and plastic bags. According to Somerville and Chris, bottled water produces 1.5 million water waste every year, are very high amount. We think about how bottles can cause pollution, but we never know that every year, plastic needs 47 million gallons of oil to be produced. This amount is as much as the millions of cars that can be derived in up to one month. It is always said that plastic bags are going through the recycling process. Therefore, they cannot be the source of water pollution only two of ten plastic bags go for recycling, but the others become part of the trash. It is the fact that it is too costly to recycle plastic bags as they take hundreds of years to recycle. If not recycled then they break down into tiny particles and contaminate the soil and water and become the constituent of a food chain. Sometimes, the animal eats broken plastic bottles and puts them to death. In the marine water, shopping bags are caught in the sharp beaks of the sea birds that dive from air to water in search of food, which results in their ultimate death.

Another source of water pollution is the agricultural wastes. Irrigation, soil depletion, and other modern techniques direct additional environmental dangers. Agriculture is the directive and also nondirective source of water pollution. These chemicals are used for food production, and when foods are not properly cooked, they enter into our bodies. Furthermore, the increased level of nitrate in the food results in reducing the oxygen level in the blood. If such cases manifest in children, then it results in the development of blue lady disease. Like other wasters, when agricultural runoff enters the water, then its cycle continues, and water pollution increases with every coming day.

Chigor and colleagues researched the bacteriological qualities of the Buffalo River, which showed that the water bodies have significant public health dangers. When water animals are affected by polluted water, they further affect the human being when used in the form of food. The research stated that the establishment of a passable hygienic substructure is the best source to prevent water from being contaminated.

Sibanda and his fellow researchers (p. 6580) said that there are a lot of pathogenic bacteria in the river water, including protozoa, viruses, and bacteria. The research explored that fecal pollution is widespread in the river water, particularly in the midstream and downstream. The presence of fecal indications in the river water states that pathogenic bacteria are also present in the river water, which enhances the possibility of the presence of bacteria in the freshwater. The research has explored the

new dimensions where we come across fresh water that has a chance to be contaminated, which is the biggest threat to health.

According to Moe and his colleagues, drinking water in the Philippines is an indication and risk for the diagnosis of diarrheal disease. The research stated that 1500 million people use water supplies that are severely polluted. The rate of children who drink water that is contaminated with the bacteria *E. coli* in every 100 ml have more chances of developing diarrheal diseases in their life as compared to the children who drink less contaminated water. In the developing countries, the polluted water is declining the water quality and makes it a transmission route for the development of diarrheal pathogens and the faecal contamination.

Bessong and colleagues stated that 1.1 billion people in the world do not have any access to real water resources. Furthermore, 2.4 billion people do not have a basic sanitation system. Due to the contaminated water drinking, every year there are 4 billion cases of diarrhea that has been spread throughout the world's developing countries. The research stated that the Limpopo province has a relatively higher prevalence rate of 19 percent of human immune deficiency virus. Enteropathogens, including *Campylobacter*, *Plesiomonas shigelloides*, and *Shigella*, are the main reasons behind the growing HIV. In South Africa, most of the portion of the patients who are diagnosed with HIV aids live in rural areas where they do not have the necessities of life and pure water to drink. There is no proper sanitation and supply system for portable water. Most of the African rural residents use the contaminated water that has the devastating effects of diarrhea. The organisms that cause diarrhea may enter into their body through the continuous use of poor-quality water that we may not even use for other purposes, but Africans are using it for the purpose of quenching their thirst.

Oceans are a significant risk because of increasing water pollution. Oceans are compared to the human lungs, and if they do not properly work, they not only harm the fauna but also damage the flora. Similarly, an environment is everything that provides good health to human beings and keeps them in their proper health. When water is destroyed, it means it is reducing the quality of life. Therefore, the protection of water from being contaminated is the ultimate responsibility of every individual. The shortage of water in the enhancing rate of population is very problematic. Here, the question arises that water pollution is as much increased throughout the world as how its causes with its long-lasting effects could be minimized.

According to Barnett, Louise, and James, the ancient Pueblo people named Earth as the Mother Creator of all the things in the world. Therefore, it is necessary to save the entities that live on the land from the hazard of water pollution.

There have been many initiatives taken nationally and internationally, but no strategy can reduce water pollution. Ameliorating the water pollution is the collective effort of the individuals throughout the world. Here are a few measures that can be proved to be very effective if proper work has been on it.

Proper Sewage Treatment

The first solution to water pollution is proper wastewater treatment as a way to reduce water pollution toward zero. It needs the development of newer and faster cleaning processes. It is necessary to have sewage treatment plants with an additional system to eliminate the pathogens and nutrients from the water and soil. The continued maintenance is crucial regarding repairing or replacing infrastructure leakages. It is necessary to reduce the hydraulic overload so that the volume carriage capacity of sewage can be maximized. The cleaning of stormwater that contains many contaminations can minimize water pollution.

Green Agricultural Practices

The second solution to water pollution is green agricultural practices such as crop rotation, planting perennial crops, installing silt fences, and mulching can reduce water pollution. Commercial fertilizers and animal manure are washed up in the water that contains nutrients and phosphates. Farmers and industrialized should formulate nutrient management plans to limit the excessive nutrient application. Furthermore, Integrate Pest Management techniques should be implemented.

Industrial Waste Water Treatment

To control the water pollution caused by industries, well-designed treatment and water cooling systems. It should be the compulsion for every industry that they should have their plan that would explain the quality waste disposal protocols to eliminate the waste products from the country. These plans should save the water from becoming polluted by establishing strategies in which they can reduce the toxic components from the water discharge water so that it cannot become the cause of water pollution.

Anti-pollution Laws And Policies

Anti-pollution laws should be established at the local, national and international level with their proper implementation. Laws played a crucial role that proved to be very effective in control water pollution. Environmental protection policies should be established that may set up strategies to clean the polluted water. These laws should be directed to the industries, educational institutes, health care centers, hospitals, industries and the local councils.

Individual Efforts And Educative Campaigns

Lastly, individual and group efforts are worth using as they can educate the people about the hazardous impact of water pollution and let them know their fundamental responsibility to keep the environment clean. Awareness campaigns could be established with the help of media, institutes and online agencies so that the majority of people can know about the current issue of water pollution and exert their efforts to minimize it at the individual level.

Conclusion

To conclude, it is stated that water pollution is the primary hazard throughout the world, especially in developing countries. Water is an essential and valuable source on the earth, but sewage, oil, and industrial and agricultural waste have polluted it and made it dangerous for human beings, animals, plants and water bodies. Irrigation, soil depletion, and other modern techniques direct additional environmental dangers. Oceans are at high risk because of increasing water pollution. Bessong and colleagues stated that due to the contaminated water drinking, every year, there are 4 billion cases of diarrhea that have been spread throughout the world's developing countries. Ameliorating the water pollution is the collective effort of the individuals throughout the world. Having a newer and faster cleaning process is necessary. Green agricultural practices and integrated pest management techniques prove to be very effective in minimizing water pollution. The role of government is to establish anti-pollution laws at the local, national and international level against water pollution.

You are off to a great start here, and you have understood the assignment well. I especially like how you develop your ideas for your readers with clear examples and explanations. My biggest recommendation would be to develop the solution section of the essay a little more. Since you are already around nine pages, you could just briefly discuss the first two solutions but look more in-depth at one or two of your best solutions. You need to argue for why it is the best solution. Also, show counterarguments, give concessions and refute the counterarguments.

Work Cited

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