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# Analysis of Water Pollution by Phosphate

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**Abstract**

Water is essential for us in our daily life. Without water we cannot live. Due to some natural and human sources water gets polluted. Whole world suffers this problem. This study is based on phosphorous and water. How excessive phosphorous effects human life and aquatic animals is derailed analyzed in this study. .How ever people should be aware of this. Education related to water and environment should be given students and common people. Waste water from various industries mix with water . This is the major reason of water pollution .It is essential for all of us to drink pure water. Phosphorous mixed water can cause various health problems. In this study how we overcome these problems is detailed analyzed.

Keywords: Phosphate, Water Purification, Cleaning, And Global Warming

## I. INTRODUCTION

Water is very essential for human life. It is impossible to live life without water. Polluted water directly affected the human body. Due to some human activities water gets polluted and availability of drinking water is very less. Water pollution causes diseases like cholera, cancer, hepatitis etc. The contamination of natural water with Phosphate is considered as water pollution. Cooking. Swimming ,cleaning and many other activities makes water polluted. Pollutants include chemicals ,parasites, bactaria etc. Tob causes of water pollution are- global warming, industry agricultural and live stock farming,deforestation,etc[1].

## II. OBJECTIVE

- To analyse the impact of water pollution faced by the society
- to evaluate the reaction done through the phosphate uses
- To examine the challenges made by phosphate uses on environment
- To relate the challenges with the mitigation strategies related to water pollution

## III. Methodology

This discussion of the study covers the details of how excessive phosphorous harms us and aquatic animals and how we prevent phosphorous pollution. The relevant information has been taken from Internet and other sources. Using journals and articles is to collect data on this topic.

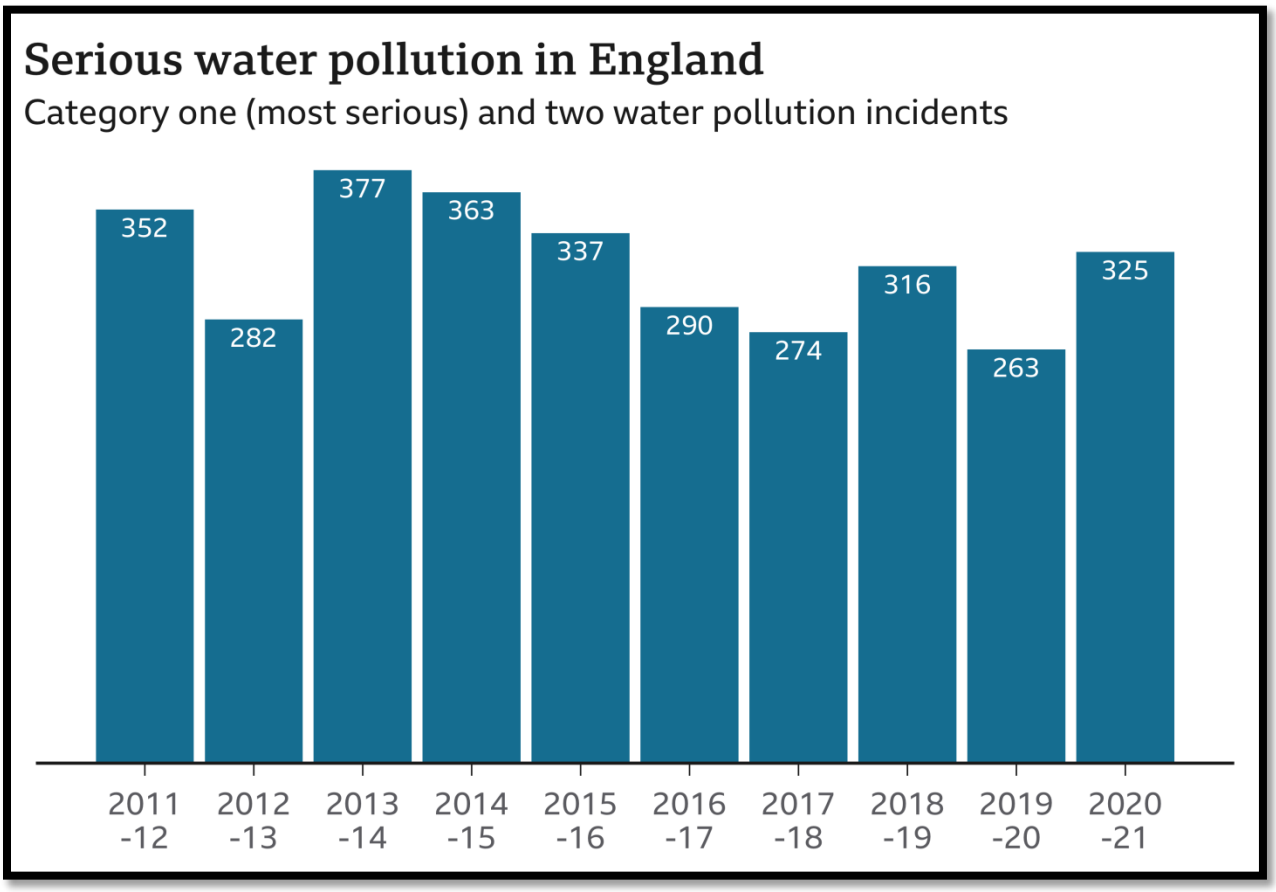


**Figure 1: Increasing trend in Water pollution**

## IV. POLLUTION ISSUE

Phosphorous in water in large quantities increased the growth of algal and large aquatic plants. Which can decrease the levels of oxygen in water this process is called Eutrophication. High levels of Phosphorous in water also lead to algae blooms that produce toxins which can be harmful for aquatic animal and human life. Excessive phosphorus in water can cause death of aquatic animals due to lack of oxygen[2].

| Problems | Impact |
|---|---|
| Uses of fertilizers | Excessive increase of phosphorous in water level . |
| Waste water | Waste water from various industries mix with water .for this reason availability of drinking water is very less. |
| Growth of aquatic plants | It reduce the oxygen level in water. As a result many aquatic animals are died. |

## V. PHOSPHATE ADDING TO WATER POLLUTION

Challenges face in Fertilizers used by farmers in farm mixed with ground water can cause water pollution. 0.1 mg/L phosphates in water are very harmful. Mining phosphorus and other transporting agricultural crops can cause water pollution. Many people in urban areas drink water from pond or river. Excessive phosphorous in water can cause serious health problems like cancer, hepatitis etc . Excessive phosphorous can cause body changes [3].

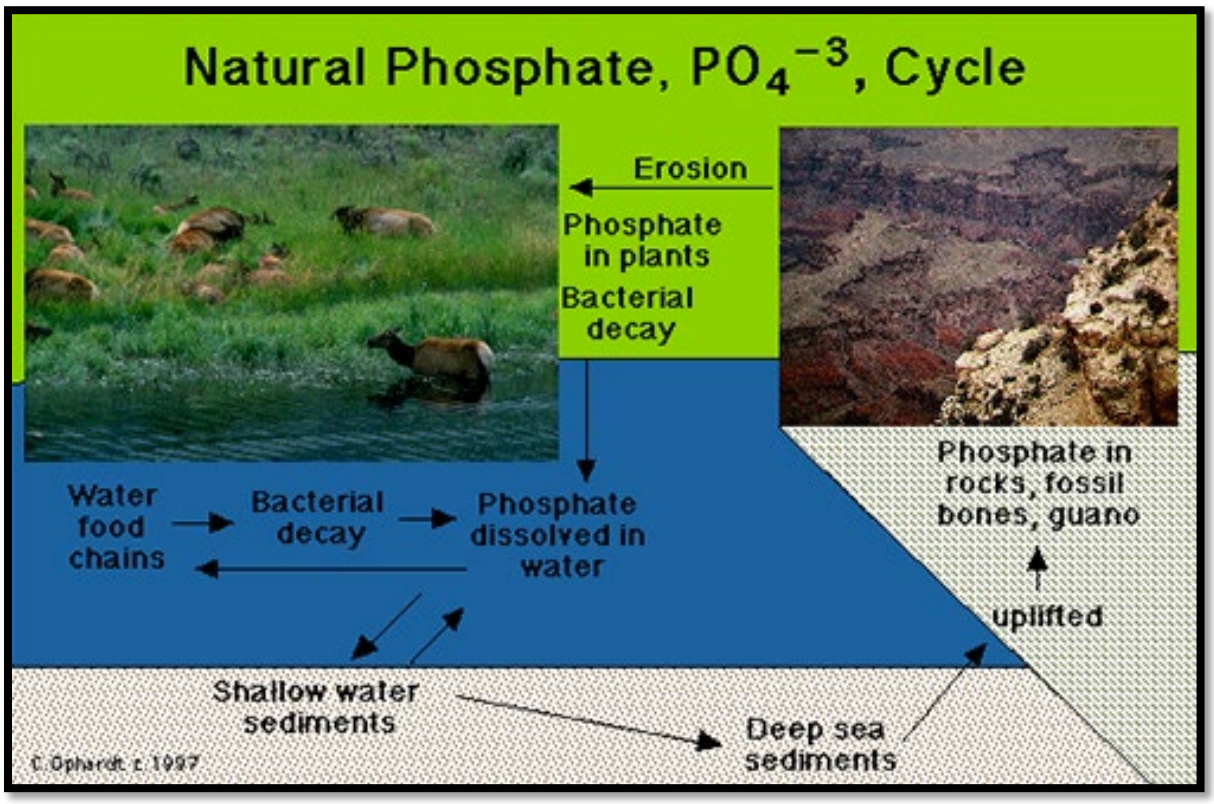


**Figure 2: Recycling process of ecosystem**

(Source: 8)

It can weak human bones. Government faces many challenges to solve this problems. Polluted water from various industries isdirectly mix with water .This causes water pollution. High levels of phosphorous in water cause aquatic animals to die due to lack of oxygen.

## VI. AQUATIC ECOSYSTEM RESTORATION

River or lake water maintenance and restoration is done by Applying Fertilizers in proper amount , can reduce how much fertilizers reaches water bodies. Simple management practices can reduce excessive phosphorous from water. Reducing any run off, including hard surfaces in rural and urban areas is an important strategy to reduce phosphorous levels in water. Care should be taken by government to ensure that the waste water released from the factory does not flow directly into the river or lakes. It is because there is a lot of phosphorous in this water. People should be aware of phosphorous, know about its harmful effects[4].

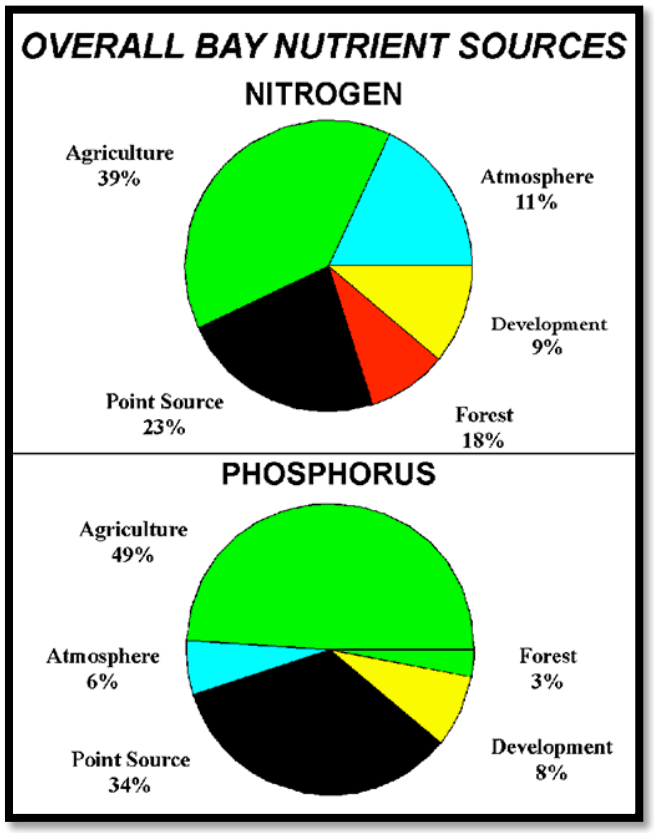


**Figure 3: Effect of Phosphorus and Nitrogen usage in water**

## VII. MITIGATION STRATEGIES

| Problems | Solution |
|---|---|
| exccesive uses of fertilizers | Applying less amount of phosphorous which can ruduce the level of phosphorous in water. |
| Waste water from various industries | The waste water released from the various factories does not flow directly into the river or lakes. |
| Growth of aquatic plants reduce the oxygen level in water | We should clean river or lakes water every alternative days. |

## VIII. PROBLEM STATEMENT

Problems dominant during usage of groundwater are several municipality respond to LRA's performance by uncertain the discharge of their wastewater and removal of frozen waste into the river, whereas others try to waggle away from liability by deflect the responsibility on other municipalities. even though success in redistribute phosphorus globally as a compost, there is an discrepancy in the accessibility of phosphorus global. Approximately 30% of worldwide cropland is at present missing in phosphorus, limiting yield and falling food security. In difference, city and some farming areas (mostly concentrated intensive farm animals[5] farming

areas), have a large amount phosphorus.cities are also area of overload phosphorus growth because of the awareness of people and food spending. Human being and cooking waste is phosphorus rich. Though, most of this throw away doesn't always get back to the farms where our food is produced. a large amount of this phosphorus gets into our sewer and wastewater or septic system. There is much phosphorus threaten our cooking safety. Too much phosphorus is a major cause of water-quality harm worldwide. Our future food and water security will be gradually more needy on our capability to improved handle phosphorus. So, result solutions to the "phosphorus Irony" are extremely significance for humankind[6]

**Conclusion**

The study on the major conjugal water recourses has revealed that the substantial and compound parameter influences water value. The pointed from this study as a result makes the need for regular monitor very dangerous as this will help to adjust and main the quality of the water sources by means of narrow limits.

From these lessons in can be referred that most of the water sources are influenced by phosphate limiting conditions, with associated less risk of eutrophication than nitrate limitation, showing higher risk of Eutrophication.

This study has therefore recognized the individuality of a variety of water used for conjugal purpose and have provide important orientation data for future examine and physical condition policy formulation.

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