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TITLE OF PROJECT: HYDRO SOLITER

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ABSTRACT :

In India, rivers and canal accumulate over tons of waste like Plastic, Leaves and Branches from trees, Bio wastes, heavy metals(effluents) and Chemical wastes (Lather and Foam) daily, are being Transported into the Ocean. A study found that plastic waste in the Pacific Ocean contains 1.6 million square kilometers of garbage, primarily plastic, affecting aquatic life. Heavy metal contamination is a significant ecological issue, difficult to treat, and has immediate effects on human health and aquatic microorganisms, making it a fundamental ecological problem.

In response to these environmental issues, this paper comes out with a small inventive approach of preventing wastes from merging with the ocean by mitigating the waste at the source and its transit and simultaneously removing heavy effluents and water contamination. This approach effectively addresses the water pollution and mitigating health issues.

This investigation focuses on formulating a series of Flat circular buoys in rivers with a hydrodynamic shape which drives itself from the flow of water, the buoys rotates such that the solid waste is gathered at the banks of the river within a net or a cage, which is removed later. The research also incorporates the buoys with a carbon filter integrated with Hyacinth Bio-Char filter. The objective is to cleanse the water both physically and chemically by separation of solid waste particles and filtration of water from heavy metals like Copper, Iron, Fluorides and pesticides in a Sustainable manner.

The significance of this paper stems from its potential to revolutionize Environmental Treatment practices, offering an environment friendly solution that addresses the crucial issues of water pollution. By exploring filters made from Hyacinth which is considered a pollution to a solution, we actively contribute to the ongoing discourse on sustainable environmental practices, pushing for a change toward more responsible methods

KEYWORDS: Plastic Wastes, Heavy Metals, Flat Circular buoys, Hyacinth Bio Char filter, Sustainable Environmental practices.

CATEGORY: ENVIRONMENTAL ENGINEERING