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TITLE OF PROJECT: Drain Shield: Sensor Based Integrated Approach for Water Cleaning System and Sustainable Water Conservation

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ABSTRACT (150-300 words):

Urban drainage systems are essential for managing stormwater and preventing flooding in urban areas. However, these systems can also contribute to pollution in the form of plastic and other debris that enters the drainage system and ultimately ends up in rivers and other bodies of water. Drain shields are a relatively new technology that is designed to capture debris and prevent it from entering the drainage system. This project aims to evaluate the effectiveness of drain shields in reducing pollution in urban drainage systems in India. Seeing and understanding the observed problem, we have made a project for the Swachh Bharat, in which we will collect the solid waste found in the drainage in a smart way which will clean the water along with the environment and also solve the problem of flood. We have attached mesh to outlet of drains its work based on sensor when drain outlet mesh full with solid waste then it indicated signal Ringing to the respective bodies department after that we have to remove the waste from mesh dispose to disposal site. This project aims to set up a pilot demonstration plant to validate the drain shield technology by providing tangible input to the project of one stretch of Ayad river in Udaipur city for Sustainable Water Conservation.

KEYWORDS: Environment, Drain, Flooding, Pollution, Solid waste, Water

CATEGORY: Hydraulic and Water Resources Engineering/Ocean Engineering & Environmental Engineering