UNIVERSITI TEKNOLOGI MARA

WATER CLARITY MONITORING AND WARNING SYSTEM

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ABSTRACT

Water plays an important role in human life and the environment. This product aims to ensure the water that being use by human is safe and clean. It does not matter what the water is being use for either for cooking, taking a bath or drink. The water must be in a crystal clear condition or in a safe condition where it can be use by human activities. Due to humankind incapacity and lack of environmental awareness, water has become murky and muddy especially in rivers and seas. By using this project, human can avoid from using the murky and foggy water. This project offers a monitoring and warning system which using ESP32 as microcontroller which connected to turbidity and temperature sensor to ensure that the state of the water is safe and clean to use. The system will warn users by sending a mobile notification to their smartphone by using a specific app and activate a buzzer and led that when the state of the water is reaching it dangerous point where it is not safe to be use. The product will also shows the current reading of the water temperature and clarity via a LCD screen attached on the product.

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CHAPTER ONE
INTRODUCTION

1.1 Introduction

Water clarity monitoring system plays an important role in making sure the water is safe for a specific activities. As the human actions will give a big impact on the earth element which turns our rivers that contains crystal clear water becomes murky. According to the statistic, the average number of rivers in Malaysia that are polluted from 2013-2021 is 9. We can see that in 2015-2017, the numbers of rivers polluted is increasing drastically and decreasing in the next 4 years ahead which is a good thing that it is decreasing we are hoping that the numbers to be lower now.

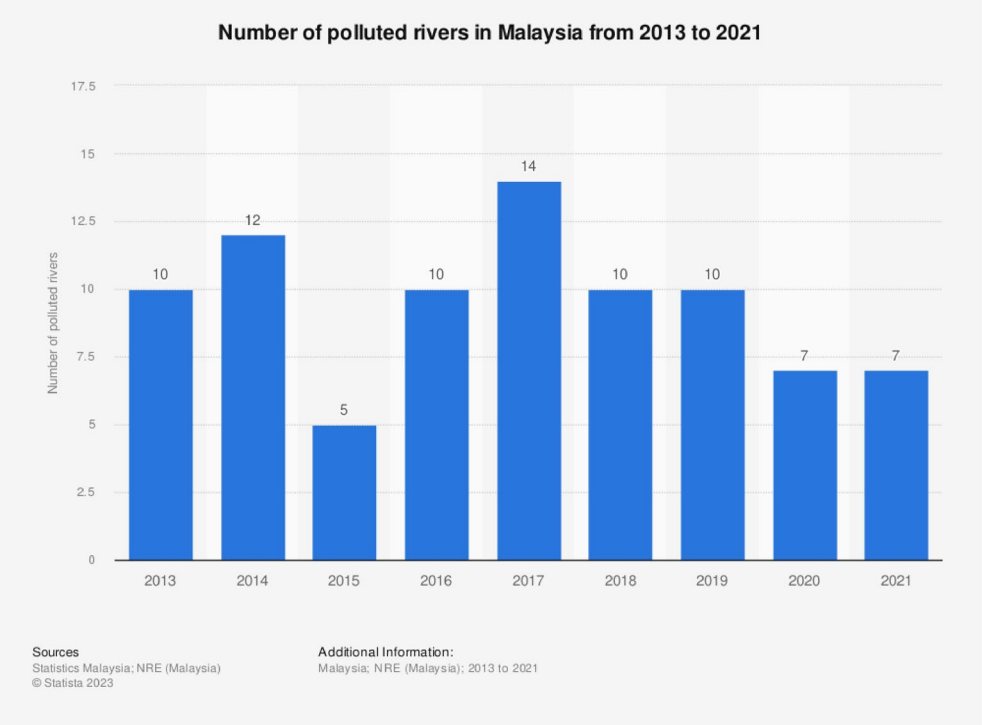

Figure 1.1: Number of polluted rivers in Malaysia from 2013-2021