Real –Time River Water Quality Monitoring And Control System

INTRODUCTION:

The daily routine starts with water. It is one of the basic needs to survive. People depend on river for their daily usage. The river is the open-sourceand have many chances to suspect into algae growth,dust, mosquito infestation. So, the water level present in the river is unknown. Many times we wash the clothes,make cattles bath,and many other activities produce harm to the river biodiversity..This leads to water in river is impure. So, there is need for alternative which can automatically sensed and control the properties of river water. Ultrasonic sensor provides non-contact water level measurement. Water parameters such as pH, turbidity affects water quality. Turbidity, pH sensor helps in monitoring river water quality.

LITERATURE SURVEY:

This research paper focuses on Detection on water pollution and water management using smart sensors.To ensure the safe supply of drinking water the quality should be monitored in real time for that purpose new approach IOT (Internet of Things) based water quality monitoring has been proposed.This system consists some sensors. Which measure the water quality parameter such as pH, turbidity, conductivity, dissolved oxygen, temperature. The measured values from the sensors are processed by microcontroller. Based on a study of existing water quality monitoring system and scenario of water we can say that proposed system is more suitable to monitor water quality parameters in real time.[1]

This research paper focuses on Sensor Web for River Water Pollution Monitoring and Alert System Sensor Web has provided infrastructure for collecting and processing data from distributed and heterogeneous sensors. This set of technologies has found various implementations, especially in the area of environmental monitoring. The Sensor Web architecture for crisis management, described in this paper, provides active monitoring of measuring parameters and timely responses in cases of environmental disasters. The River Water

Management and Alert System built on this architecture enable access, control and management of river water pollution.[2]

This research paper focuses on Wireless Sensor Network for River Water Quality Monitoring in India. This paper introduces a river water quality monitoring system based on wireless sensor network which helps in continuous and remote monitoring of the water quality data in India. The wireless sensor node in the system is designed for monitoring the pH of water, which is one of the main parameters that affect the quality of water. Wireless sensor Network which aids in River Water Quality Monitoring. This paper also proposes a novel technique for the design of a water quality sensor node which can be used for monitoring the pH of water.[3]

The prototype for river water was developed using arduino microcontroller,water level sensor, mobile phone.The level of water sensed by the water level sensor was sent to the controller where it, in turn updates the information to server. The information stored in the server was sent to the mobile phone. The user in turn makes the decision to turn on or turn off the motor by operating the buttons in the mobile. The sensor is of contact-type. Measurement range is limited and has short lifespan when exposed to moist environment. Human intervention is necessary.[4]

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