LITERATURE SURVEY ON REAL-TIME RIVER WATER QUALITY MONITORING ANDCONTROL SYSTEM

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Water is the primary need of every living thing, with the availability of water for living things,it is very helpful for daily needs. River play important roles in human life .for example transportation and economic activities of the inhabitants. However industrial, agricultural and domestic water is discarded into river directly in many developing countries, since drainage systems have not been completely constructed.

River water monitoring system is one of the efforts as a contribution to control the pollution. Web technology is used to monitor and simulate the river water quality achieving goal of controlling water environment condition in real time dynamically.

TITLE AND AUTHORS(S)	YEAR	TECHNIQUE	FINDINGS	PROS AND CONS
A demonstration of wireless sensing for long term monitoring of water quality Fiona Regan, Antoin Lawlor Brendan O Flynn1, J. Torres,	2009	INTERNET OF THINGS	A multi-sensor heterogeneous real-time water monitoring system.	Current monitoring status in Ireland and globally Issues relating to long-term monitoring Communication capabilities currently available and communication needs Data value collection

R Martinez-Catala, C.Mathuna John Wallace.				interpretation and reporting and Gaps in the area of water quality monitoring in Ireland
A Design of Radio-controlled Submarine Modification for River Water Quality Monitoring Sritrusta Sukaridhoto, Dadet Pramadihanto, Taufiqurrahman, Muhammad Alif, Andrie Yuwono∗Politeknik Elektronika Negeri Surabaya,	2015	INTERNET OF THINGS	Waterquality monitoring using radio-controlled submarine	The experiment results show that our ROV worked and able to move stably in river to collect information from water quality sensors. Our future works include the further improvement of sonar device and application to build 3d reconstruction of river and analysis of water pollution level.
River Water Quality Monitoring and Simulation based on WebGIS – Anhui Yinghe River as an Example Niu	2016	INTERNET OF THINGS	WebGIS technology is used to monitor the river water quality	It's applicable for WebGIS technology to be used in river environment. By Anhui Yinghe river practice, this theory was

Maojing				verified as reliable. Moreover, it can also be extended to lake, sea and other related areas, providing analysis research and decision making for water department.
Floating Robot Control System for Monitoring Water Quality Levels in Citarum River Muhammad Ary Murti Angga Rusdinar Ig. Prasetya Dwi Wibawa	2019	INTERNET OF THINGS	Floating robotic solution to monitor river water quality regularly	The robot control system can be done wirelessly, using the Bluetooth HC05 module.. The response of the moving average based on the number of sample values is calculated
Design of IoT-Based River Water Monitoring Robot Data Transmission Model Using Low Power Wide Area Network (LPWAN) Communication	2019	INTERNET OF THINGS	river water quality monitoring-system using LPWAN communicate on technology	Transmission range using LPWAN communication to connect nodes and gateway on river water surface for a maximum range of 500 m before

Technology Rahayu Dwi Lestari Angga Rusdinar Muhammad Ary Murti				experiencing signal loss, implementation of mesh network topology to make data being accepted by gateway by 100% success rate, implementation of JSON format to data with a maximum of 255 bytes data, use of MQTT technology to connect gateway to server using internet, implementation of local database to be able to save 2.6 MB data with 365 days, and reprocessing of data to be viewed on website display.