# Real-Time River Water Quality Monitoring and Control System

# LITERATURE SURVEY

| S.NO. | PAPER TITILE | AUTHOR NAME | PUBLICATION YEAR | RESULTS |
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| 1. | IoT Based Real-time River Water Quality Monitoring System | Mohammad Salah Uddin Chowdury, Talha Bin Emran, Subhasish Ghosh, Abhijit Pathak, Mohd. Manjur Alam, Nurul Absar, Karl Andersson, Mohammad Shahadat Hossain | 2019 | A sensor-based totally water fine tracking system. The primary additives of Wireless Sensor Network (WSN) encompass a microcontroller for processing the machine, communication gadget for inter and intra node conversation and numerous sensors. Actual-time records get entry to can be accomplished by means of using far off monitoring and internet of factors (IoT) technology. Facts accrued at the apart website may be displayed in a visible format on a server pc with the help of spark streaming analysis thru spark mllib, deep gaining knowledge of neural community fashions, notion rule primarily based (brb) system and is likewise in comparison with widespread values. If the acquired price is above the threshold |

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| | | | | value automated caution SMS alert will be sent to the agent. The uniqueness of our proposed paper is to achieve the water tracking system with high frequency, high mobility, and coffee powered. |
| 2. | A system for monitoring water quality in a large aquatic area using wireless sensor network technology | Alexander T. Demetillo, Michelle V. Japitana, Evelyn B. Taboada | 2019 | Real-time water first-class tracking gadget which can be applied in remote rivers, lakes, coastal areas and other water bodies is provided. The main hardware of the device includes off-the-shelf electrochemical sensors, a microcontroller, a wireless conversation gadget and the customized buoy. It detects water temperature, dissolved oxygen and pH in a pre-programmed time interval. The evolved prototype disseminates the accumulated facts in graphical and tabular formats thru a custom designed internet-primarily based portal and preregistered cellular phones to higher serve applicable cease-users. To check the gadget effectivity, the buoy's stability in harsh environmental conditions, system electricity consumption, records transmission efficiency and web-primarily based show of statistics |

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| | | | | have been cautiously evaluated. The experimental consequences show that the system has remarkable prospect and can be nearly used for environmental tracking by means of presenting stakeholders with relevant and timely information for sound choice making. |
| 3. | Smart Water Quality Monitoring System | A.N.Prasad, Kabir Al Mamun, F. R. Islam, H. Haqva | 2020 | Water is an important need for human survival and consequently there need to be mechanisms installed vicinity to vigorously test the satisfactory of water that made available for ingesting on the town and metropolis articulated components and as well as the rivers, creeks and coastline that surround our towns and towns. The provision of right exceptional water is paramount in preventing outbreaks of water-borne illnesses as well as enhancing the high-quality of lifestyles. Fiji islands are located inside the vast pacific ocean which calls for a common facts amassing network for the water great tracking and IoT and RS can improve the existing dimension. This paper offers a clever water pleasant monitoring gadget for Fiji, using |

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| | | | | IoT and remote sensing technology. |
| 4. | Real-Time Water Quality Monitoring System | Yashwanth Gowda K. N, Vishali C, Sumalatha S.J, Spoorth G.B | 2020 | This studies paper focuses on detection on water pollutants and water management using smart sensors IoT to make certain the secure supply of drinking water the first-rate have to be monitored in actual time for that motive new method IoT (net of factors) based totally water quality monitoring has been proposed. This gadget is composed some sensors. Which measure the water first-rate parameter inclusive of pH, turbidity, conductivity, dissolved oxygen, temperature. The measured values from the sensors are processed by microcontroller and those processed values are transmitted remotely to the center controller that is raspberry pi the use of Zigbee protocol. Primarily based on a have a look at of current water exceptional tracking machine and state of affairs of water we can say that proposed machine is more appropriate to display water first-class parameters in real time. Based totally on a have a look at of present |

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| | | | | water satisfactory tracking device and situation of water we will say that proposed device is more suitable to reveal water first-class parameters in actual time |
| 5. | Water Quality Monitoring System | Vaishnavi V. Daigavane, Dr. M.A. Gaikwad | 2021 | A water first-class monitoring device that allows you to locate the TDS degree and temperature stage of the water. Instead of the normal sensors we are the use of thermistor and water sensor for purchasing the values of temperature and TDS respectively. Further to that, we are able to also be approximately an ac motor that is getting used as a pump on this undertaking. It'll be managed with the assist of calling characteristic of the phone. A smartphone is also connected to the gadget. Putting them collectively, we created a system that would circulate water from one vicinity to another with the assist of smartphone and also can check it is TDS and temperature degrees. |