ASSIGNMENT-3

Real-Time River Water Quality Monitoring And Control System

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Project Name	Real-Time River Water Quality Monitoring And Control System
Maximum Mark	4 Mark

Introduction

The wireless communication technologies are increased for aiding person's individual and regular responsibilities. There are many applications developed for building control, automation, data acquisition in recent years. There are many benefits like low cost, easy installation, and maintenance. The remote device network is applicable in several functions like farming, traffic management, remote health care, forest management, security and surveillance [1]. The "wireless sensor network" contains connectivity, computing and signal processing, and spread device nodes for sensing .

Existing System

Traditional methods have the drawbacks such as long waiting time for results high cost, low measurement precision, and complicated methodology [12]. So with the implementation in the technology, we use different methods and techniques to check the quality of water. There is a disadvantage in the existing system that the system has high complexity and low performance.
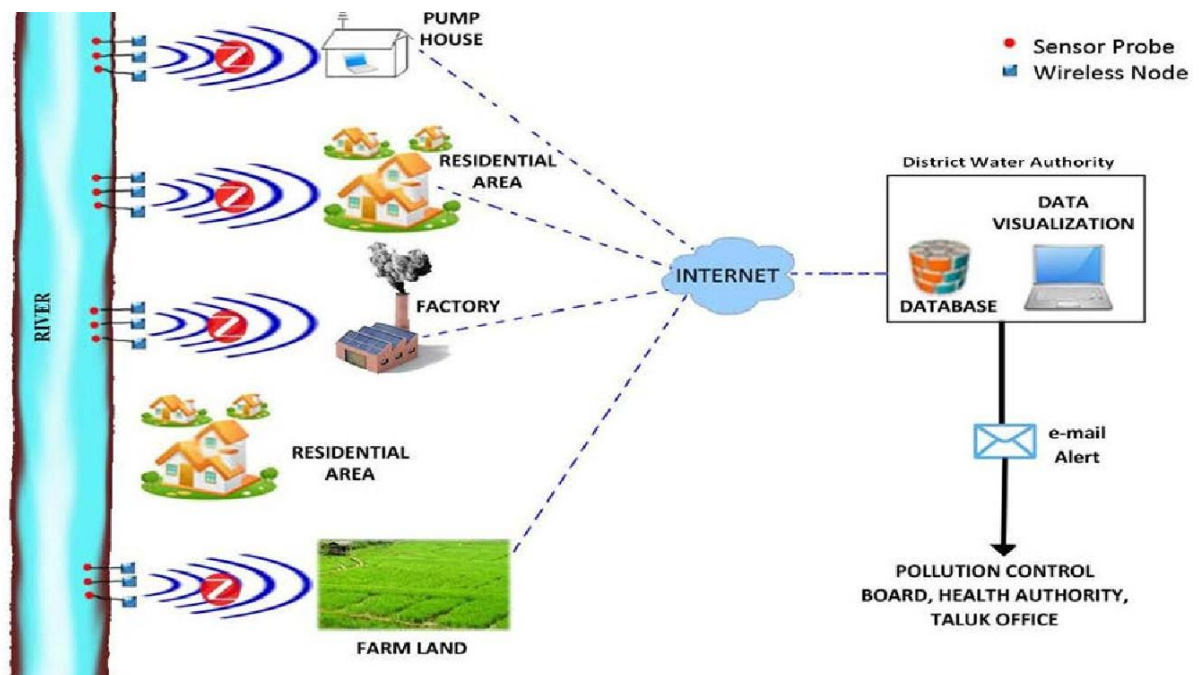
Fig. 1. Proposed Architecture of the River Water Quality Monitoring System

Water Level Sensor

"Water level sensor" is designed for detecting the water level in the reservoir and overhead tanks. This is generally utilized in sensing the water leakage, water level, and the rainfall. It consists of mainly three parts: 1MΩ resistor, an electronic brick connector and numerous lines of bare conducting wires. It works by having a series of "exposed traces" that are associated to ground.
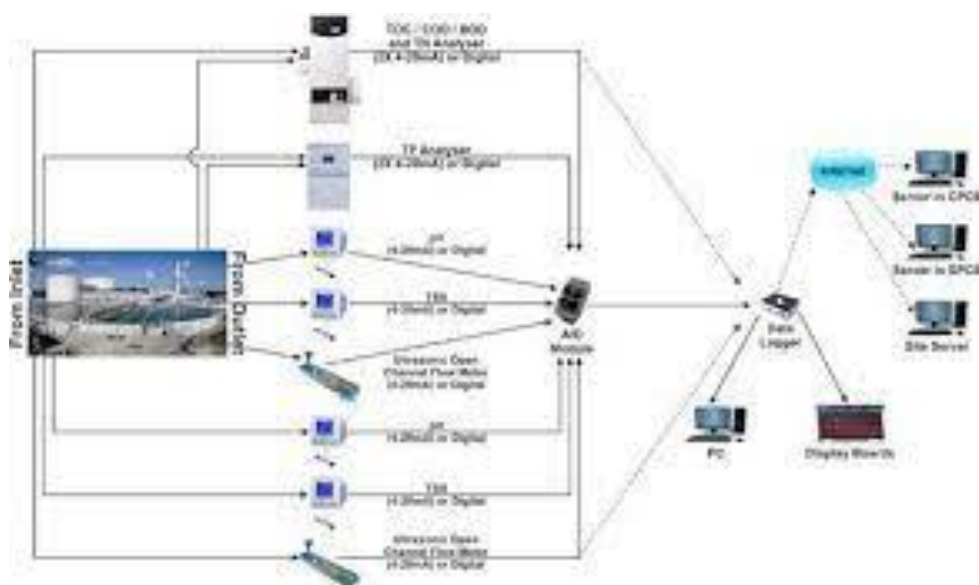
Proposed System

In this proposed system the complexity reduces and the performance increases by collecting the data of the water parameters like temperature, water level, co2, pH. The information collected is updated on the web server that can be retrieved from anywhere in the world.
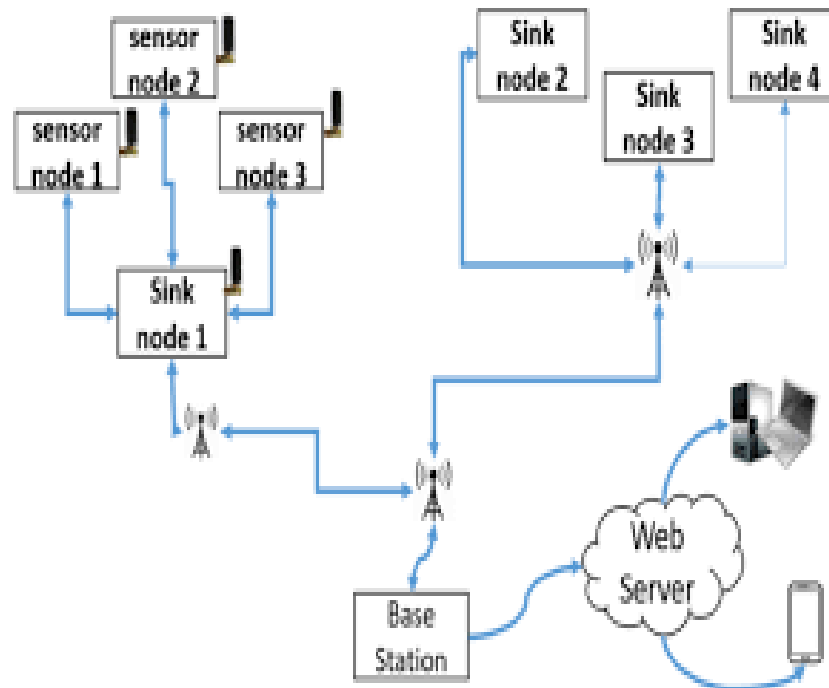
Conclusion

By using a WI-FI module, the interfacing is done between transducers and the sensor network on a single chip solution wirelessly. For the monitoring process, the system is achieved with reliability and feasibility by verifying the four parameters of water. The time interval of monitoring might be changed depending upon the necessity.