

REAL TIME RIVER WATER QUALITY MONITORING SYSTEM

OBJECTIVES:

Through a web-based portal and mobile phone platforms, it distributes the information to the appropriate stakeholders in graphical and tabular formats after real-time detection of water temperature, dissolved oxygen concentration, pH, and electrical conductivity. The experimental results demonstrate that the system has significant potential and may be utilized to operate in a real-world setting for the best management and conservation of water resources by giving important players access to timely and relevant information to support speedy decision-making. In this age of urbanization, pollution, and population increase, it is more important than ever to monitor, evaluate, and control the water quality in residential areas. For modern society, supplying clean drinking water is a major task. Traditional approaches rely on gathering water samples, testing them, and analyzing the results in real time. Then, information is quickly sent to the appropriate parties so they may make decisions in a timely and educated manner. Present is a real-time home water quality monitoring system. The development was preceded by a review of the current environment, including a determination of whether cellular networks were accessible at the intended operation site. Raspberry Pi, an analog to digital converter, and a sensor for measuring water quality makeup this system.