

**Project Design Phase-I**  
**Proposed Solution**

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Date	21 October 2022
Team ID	PNT2022TMID25985
Project Name	REAL-TIME RIVER WATER QUALITY MONITORING AND CONTROL SYSTEM

**Proposed Solution :**

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	This project represents an IOT (Internet of things) based smart water quality monitoring system that aids in continuous measurement of water condition based on physical parameters
2.	Idea / Solution description	This project proposes a system for continuous monitoring of river water quality at remote places using Internet of Things (IoT) technology with high detection accuracy. An SMS will be sent to an authorized person routinely when water quality detected does not match the present standards.
3.	Novelty / Uniqueness	The uniqueness of our proposed paper is to obtain the water monitoring system with high frequency, high mobility, low powered and low cost sensing technologies. The clients can get ongoing water quality information from far away.
4.	Social Impact / Customer Satisfaction	It socially help water system managers identify threats to surface water earlier, make more fully informed decisions affecting the systems and the public they serve, and comply with ever-changing regulatory water quality monitoring requirements at federal, state and local levels.
5.	Business Model (Revenue Model)	This system developed using IoT technology has huge potential since it helps in detecting the contaminants. Alert System built on this architecture enable access, control and management of river water pollution.

6.	Scalability of the Solution	<p>The main advantage is that IoT devices have capability to stream the array of collected data wirelessly to the remote Data Aggregator Server in the cloud. Thus, the Data Aggregator Server can retrieve the analysis result and transfer the result to the applications running on different gadgets in the cloud.</p>
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