REAL- TIME RIVER WATER QUALITY MONITORING AND CONTROL SYSTEM
Problem Statements

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Team ID	PNT2022TMID39070
Project Name	Project -Real-Time River Water Quality Monitoring and Control System

Customer Problem Statement Template:

In this work, the design and demonstration of a prototype remote, automatic, portable, real time, and low cost water quality monitoring system is described. In this system, low cost components i.e. microcontroller, LCD screen and other components are used to achieve the objectives of the proposed design with acceptable accuracy.

to the previous related works, the cost of the system prototype is considerably low. Toensure the portability of the device, a self-made, small size Arduino microcontroller is used. The developed system was tested under different conditions, with solution of water with different impurities, and in different periods of time.

I **am**	How to measure “free” chlorophill-a from filtrate of cyanobacterial-water sample?	The quickest and easiest (but still with high sensitivity) would be using a plankton fluorometer. Most of these will also provide an estimate of phycocyanin and phycoerythrin, which might be useful for your cyanobacteria-related question.
I’m trying to	What would be the best sensors to add in node fro monitoring water quality in lake or rivers?	There are various types of water quality sondes that can be purchased, which can measure a variety of water quality components including water level which may be important to estimate change trend in storage or flow.
But	Is there any satellite data that can be used to estimate change in water storage for river basin?	I am in the middle on my thesis where by I am using water balance equation to estimate the discharge on the river basin. One of the input is water storage change, but till now I have not figure out how can I obtain this dataset.

Because	Calibrating hydrological models using river flow vs actual evapotranspiration; which one do you think is more acceptable and feasible?	We tested the added value of gridded evaporation products in hydrological model .
Which makes me feel	What would your guess be for this river pollution?	An easy way to trace the source can be to examine benthic animals. Try to find a place upstream, which is not polluted, and compare with a polluted one.