Project Design Phase-I
Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID10999
Project Name	Project – Real-Time River Water Quality Monitoring and Control System.
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Due to the fast growing urbanization supply of safe drinking water is a challenge for the every city authority. Water can be polluted any time. So the water we reserved in the water tank at our roof top or basement in our society or apartment may not be safe. Still in India most of the people use simple water purifier that is not enough to get surety of pure water. Sometimes the water has dangerous particles or chemical mixed and general purpose water purifier cannot purify that.
2.	Idea / Solution description	Field teams deploy sensors strategically at designated points water area to monitor waters within defined measurement parameters. To measure water parameters such as pH, dissolved oxygen, turbidity, conductivity, etc. using available sensors at a remote place.
3.	Novelty / Uniqueness	The uniqueness of our proposed project is to develop of novel small form factor, low cost sensing technologies. comprehensive review of different methods of water quality monitoring and an efficient IoT based method for water quality monitoring has been discussed.
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)	The River Water monitiong and control system is used to monitor the water purity and pH level and to control the water pollution.
6.	Scalability of the Solution	The Sensor architecture for crisis management, described in this project, provides active monitoring of measuring parameters and timely responses in cases of environmental disasters.