Project Development Phase
Data-Set Thresholds

Date	11 November 2022
Team ID	PNT2022TMID30308
Project Name	Project – Real-time River Water Quality Monitoring and Control System

Data-set Reference:

Following are the Data-set mentioned in the project referred from Existing Solution mentioned in Use Case.

Existing Solution: https://aeronsystems.com/iot/water-quality-monitoring/

Measurement Range and Normalities of River Water:

S.no	Parameter	Measurement Range	Normalities Range	Units
Primary Parameters				
1	Temperature	0 – 100	25 – 35	°C
2	pH	0 – 14	6 – 8	pH
3	DO	0 – 150	80 – 120	%
4	Ammonia & Nitrate	0 – 100	0 – 35	mg/L
5	Turbidity	0 - 20	5 - 10	NTU
Secondary Parameters				
1	TSS	0 – 3700	50 – 1000	ppm
2	Manganese	0 – 1000	1 – 200	mg/L
3	Copper	0 – 2000	9 – 823	mg/L
4	Hardness	0 – 1000	15 – 375	ppm
5	Zinc	0 – 100	10 – 40	mg/L
6	Conductivity	0 – 2000	50 – 1500	mS/cm
7	Chloride	0 – 200	45 – 155	mg/L
8	Sulphate	0 - 1000	0 - 630	mg/L

References:

Indian WRIS: https://indiawris.gov.in/wris/#/

Central Water Commission: http://www.cwc.gov.in/water-quality-inforamtion

IIT Kanpur: https://iitk.ac.in/iwd/wq/drinkingwater.htm

Existing Solution (Aeron): https://aeronsystems.com/iot/water-quality-monitoring/