

## Data-Set Thresholds

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Team ID	PNT2022TMID41673
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
<b>Primary Parameters</b>				
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
<b>Secondary Parameters</b>				
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/>