

# WATER QUALITY MONITORING REPORT

## LAKE OVERVIEW

Lake Name	DTU Lake
Location	Northwest Delhi
Area	12.0 hectares
Reporting Period	2025-10-25 to 2025-11-25
Report Generated	2025-11-25 00:00:24

## WATER QUALITY MEASUREMENTS (7 Decimal Precision)

Date	Turbidity (NTU)	TSS (mg/L)	Chlorophyll (µg/L)	NDVI	NDWI
2025-11-06	0.8850348	0.5499151	0.5355060	1.0000000	0.0000000
2025-11-09	0.8850358	0.5499159	0.5355061	0.5870947	0.4485699
2025-11-14	0.8850340	0.5499144	0.5355058	0.1057609	0.9006065
2025-11-19	0.8850338	0.5499139	0.5355058	0.0000000	0.8345177

## STATISTICAL SUMMARY

Parameter	Min	Max	Average
Turbidity (NTU)	0.8850338	0.8850358	0.8850346
TSS (mg/L)	0.5499139	0.5499159	0.5499148
Chlorophyll (µg/L)	0.5355058	0.5355061	0.5355059

# AI-POWERED ANALYSIS & RECOMMENDATIONS

## RECOMMENDED GOVERNMENT INTERVENTIONS

1. Establish monitoring frequency based on detected anomalies and risk levels.
2. Coordinate with agricultural departments for irrigation scheduling and water treatment protocols.
3. Implement pollution source tracking and mitigation near upstream industrial/urban areas.
4. Conduct quarterly soil and water testing to validate satellite-derived indices (NDVI, NDWI).
5. Set up early warning systems for TSS/Turbidity spikes indicating contamination events.
6. Engage local farming communities in data-driven decision-making for crop selection and fertilizer use.

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This report was generated automatically by the Water Quality AI System. Data accurate as of 2025-11-25 00:00:24.

For questions or data validation, contact your water resource management agency.