LIMNO LOAN

Sea Grant
ILLINOIS–INDIANA

WATER QUALITY PARAMETERS

WATER TEST	WHAT IT MEASURES	IDEAL RANGE	DANGER READING	CAUSES	REMEDIES
 **Chlorophyll a**	amount of chlorophyll pigments	2-20 µg/L	> 75 µg/L = nuisance algal bloom	nutrients	nutrient reduction strategies
 **Conductivity**	how well the water conducts electricity	0-1000 µS/cm	a high reading indicates high dissolved-solids in sample	geologic sources, and human sources such as ag, sewage and urban runoff.	proper sewage treatment, reduce urban runoff
 **Dissolved Oxygen**	amount of oxygen in the water	6.5-8 mg/L 80-120 % saturation	3-4 = stress < 2 = won't support life	wind, waves, running water, photo-synthesis	maintain natural water temp., limit erosion, limit human sources of organic matter
 **pH**	How acidic or basic the water is	6.5-9	below 6.5 above 9	acid rain, industrial pollution, chemical spills	pollution control measures
 **Temperature**	the amount of heat or thermal energy in water	varies	generally above 27 °C (81 °F)	thermal pollution, runoff, removal of vegetation	maintain vegetation along streams
 **Turbidity**	clearness of the water	< 10 NTU low 50 NTU moderate >100 NTU high	increased turbidity	sediment, excessive algae growth, storms	erosion controls, reduced nutrient inputs

Each aquatic habitat is different. This chart is only a guide to assist in interpreting your data.

Adapted from, *Wow!: The Wonders of Wetlands*, *Healthy Water, Healthy People Field Monitoring Guide*, US Environmental Protection Agency at https://www.epa.gov/awma, *and* Data Stream at https://www.datastream.org.