

WATER CHEMISTRY REFERENCE TABLE

Use this table as a guide to interpret your water quality data.

Remember that each aquatic system is different, so this table is only a guide, not a hard fast rule.

WATER PARAMETER	WHAT IT MEASURES	NATURAL READING	CAUTIONARY READINGS	POSSIBLE SOURCES	REMEDIES
Water Temperature	Heat (°C)	0–34°C (32–93°F)	>32°C for most streams >24°C for cool streams >20°C for cold streams	<ul style="list-style-type: none"> • Thermal discharges • Turbid water • Solar heat • Heated runoff 	<ul style="list-style-type: none"> • Discharges adhering to regulation • Increase riparian shade • Decrease impervious surfaces
Dissolved Oxygen	Oxygen (mg/L)	5–15 mg/L >80% O ₂ saturation in Ozark streams >60% O ₂ saturation in prairie/lowland streams	<6 mg/L for cold water <5 mg/L for cool or warm water	<ul style="list-style-type: none"> • Aeration from atmospheric contact • Aeration from churning • Photosynthesis 	<ul style="list-style-type: none"> • Limit nutrients • Reduce water temperature
pH	Acidity (pH)	6.5–9.0	<6.5 >9.0	<ul style="list-style-type: none"> • Rain • Industrial pollution • Chemical spills • Decomposition 	<ul style="list-style-type: none"> • Pollution controls • pH adjustment by chemical compounds
Nitrate	Organic nutrients (mg/L)	0.0–2.0 mg/L	>2 mg/L	<ul style="list-style-type: none"> • Sewage • Industrial output • Detergents • Fertilizer • Animal waste 	<ul style="list-style-type: none"> • Increase riparian vegetation • Limit fertilizer • Properly maintain septic systems
Phosphate	Organic nutrients (mg/L)	0.0–2.0 mg/L	>2 mg/L	<ul style="list-style-type: none"> • Industrial output • Detergents • Fertilizer • Animal waste 	<ul style="list-style-type: none"> • Increase riparian vegetation • Limit fertilizer • Properly maintain septic systems
Transparency	Water clarity (cm)	Variable	Decreasing transparency measurements over time	<ul style="list-style-type: none"> • Sedimentation • Algal bloom • Watercraft traffic • Storm runoff 	<ul style="list-style-type: none"> • Sediment controls • Increase riparian vegetation



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