

Kasoag Lake – 2021 Sampling Season Results

“Seasonal change” shows the current year variability. Red shaded results indicate eutrophic water quality conditions. “Season Median” is the middle value (or average of the middle two values) of the current year’s data in order. “Decadal Median” is the median of the most recent ten years of water quality data. “Longterm Median” is the median of all years of water quality data. “Decadal Trend?” and “Longterm Trend?” indicate whether there was a statistically significant change in the water quality data over the most recent ten years and all years, respectively. In these columns, ‘No’ indicates there was no significant trend, ‘↑’ indicates there was a significant positive trend (p<0.05), ‘↑↑’ indicates there was a strong significant positive trend (p<0.01), ‘↓’ indicates there was a significant negative trend (p<0.05), ‘↓↓’ indicates there was a strong significant negative trend (p<0.01), and blank indicates there was insufficient data to identify a trend. In this report, seasonal trend analyses for individual sampling years and long term trend analyses show changes in key water quality indicators over a consistent index period (mid-June thru mid-September).

Open Water Indicators	2021 Sampling Results								Seasonal Change	Season Median	Decadal Median	Decadal Trend?	Longterm Median
	06-06	06-18	06-20	07-04	08-01	08-12	08-15	08-29					
Clarity (m)	3.1	2	3.1	3.3	1.9	2.3	2.3	2.1		2.3	3.5	↓↓↓	3.5
Upper Temp (degC)	22	24	20.3	23	21	20	24	23		22.5	23	no	22
Surface TP (mg/L)			0.015	0.012	0.015	0.014	0.018	0.016		0.015	0.013	no	0.011
Surface TDP (mg/L)			0.006	0.006	0.01	0.005		0.007		0.006	0.006	no	0.006
TN (mg/L)	0.217	0.328	0.203	0.249	0.369	0.265		0.329		0.265	0.325	no	0.335
TDN (mg/L)	0.193	0.256	0.218	0.188	0.272	0.226		0.158		0.218	0.259	↓↓↓	0.259
TN:TP			13.5	20.1	25.4	19.4		20.2		20.1	26.9	no	29.9
Surface NH3 (mg/L)	0.045	0		0		0.059	0			0	0.023	↑↑↑	0.025
Chl.a (ug/L)	3.4	3.1	2.8	2.3	5.9	12.2	30.3	12.8		4.7	2.7	↑↑↑	2.7
pH	6.9	7.9	8.4	8.1	6.6	6.7	6.7	7.6		7.2	7.5	no	7.8
Surface Calcium (mg/L)	15.4				12.7					14.1	14.1		15.4
Surface Chloride (mg/L)	2									2	1.9	no	1.9
True Color (ptu)		42	9	7	36	16	24	36		24	16	no	18
Cond (uS/cm)	140.1	128.7	148.4		116.2	134.6	117.7	87.1		128.7	120.8	no	123
FP BG Chl.a (ug/L)	0.2	0.3	0.5	0.7	1.3	0.6	1.7	0.4		0.6	0.3	no	0.3