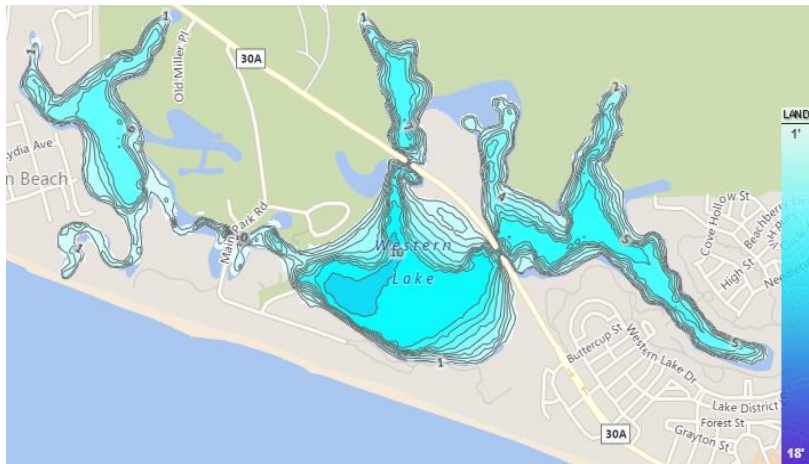


Western Lake, Walton County



Lake Details

Outfall: present

Watershed area: 275 hectares

Lake surface area: 46 hectares

Average depth: 2.15 meters

Note: Refers to central lake area

Water Chemistry Data - 2017

Summary statistics include mean, maximum (Max), minimum (Min), median, and standard error (Std Error) calculated for total phosphorous (TP) (n = 11 samples), total nitrogen (TN) (n = 11 samples), total chlorophyll (CHL) (n = 11 samples), water transparency (Secchi Depth) (n = 11 samples), temperature (n = 11 samples), dissolved oxygen (n = 11 samples), pH (n = 11 samples), salinity (n = 11 samples), turbidity (n = 11 samples), color (n = 4 samples), and specific conductance (n = 4 samples) measurements.

2017 Summary Statistics

	Mean	Max	Min	Median	Std Error
TP (µg/L)	9	16	6	9	1
TN (µg/L)	290	581	155	274	47
CHL (µg/L)	4	11	2	3	1
Secchi Depth (m)	1	2	0	1	0
Temperature (C)	25	31	18	27	2
Dissolved Oxygen (mg/L)	7	8	6	7	0
pH	7	5	8	7	6
Salinity (ppt)	6	14	1	6	1
Turbidity (NTU)	3	14	0	2	1
Color (Pt-co Units)	85	193	32	92	34
Specific Conductance (µS/cm)	5550	17000	2650	5000	3340

Water Chemistry Data - 1996 through 2017

Summary statistics include mean, maximum (Max), minimum (Min), median, and standard error (Std Error) summary statistics calculated on an annual basis using monthly data for total phosphorous (TP), total nitrogen (TN), chlorophyll-a corrected for phenophytin (CHL), water transparency (Secchi Depth), temperature, dissolved oxygen, pH, salinity, turbidity, color, and specific conductance. Summary statistics represent Long-Term analyses among annual means from 1996 through 2017.

Long-Term Summary Statistics

	Mean	Max	Min	Median	Std Error
TP (µg/L)	7	9	4	7	0
TN (µg/L)	277	408	156	283	16
CHL (µg/L)	2	4	1	2	0
Secchi Depth (m)	1	3	1	1	0
Temperature (C)	22	25	20	22	0
Dissolved Oxygen (mg/L)	7	8	6	7	0
pH	7	7	8	7	8
Salinity (ppt)	5	8	1	5	0
Turbidity (NTU)	2	4	1	2	0
Color (Pt-co Units)	67	144	24	74	13
Specific Conductance (µS/cm)	5240	8570	2060	5950	634

Long-Term Trophic State Variable Trend Analyses

Monthly total phosphorous ($\mu\text{g/L}$), total nitrogen ($\mu\text{g/L}$), total chlorophyll ($\mu\text{g/L}$) and water transparency (m) from 1996 through 2017 for Western Lake. These data show the intra-annual variance with trend line and associated 95% confidence level.

Kendall-Tau trend analysis results are shown for total phosphorus, total nitrogen, total chlorophyll, and water transparency on the top-left of each plot. Not significant indicates there was no significant trend measured. Positive indicates a significant, increasing trend was found over time. Negative indicates a significant, decreasing trend among years.

