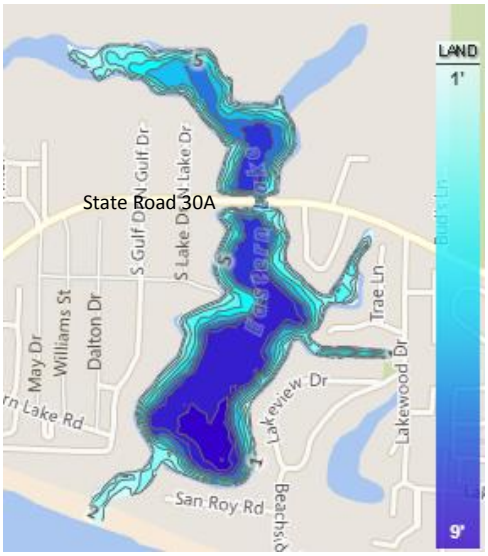
Eastern Lake, Walton County



Lake Details

Outfall: present

Watershed area: 154 hectares

Lake surface area: 26 hectares

Average depth: 1.77 meters

Note: Refers to southern lobe of Eastern Lake

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)	13	20	8	14	1
TN (µg/L)	293	609	207	273	34
CHL (µg/L)	3	6	2	3	0
Secchi Depth (m)	1	2	0	2	0
Temperature (C)	22	31	13	23	2
Dissolved Oxygen (mg/L)	6	9	4	6	0
pH	7	7	8	7	8
Salinity (ppt)	16	28	11	16	2
Turbidity (NTU)	3	23	1	3	2
Color (Pt-Co units)	52	80	27	60	12
Specific Conductance (µS/cm)	21300	36000	15000	19500	4660

Water Chemistry Data - 1997 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), total chlorophyll (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 1997 through 2017.

Long-Term Summary Statistics

	Mean	Max	Min	Median	Std Error
TP (µg/L)	12	18	9	12	1
TN (µg/L)	286	425	213	292	11
CHL (µg/L)	4	7	2	3	0
Secchi Depth (m)	1	2	1	1	0
Temperature (C)	23	26	21	23	0
Dissolved Oxygen (mg/L)	7	8	6	7	0
pH	8	7	8	8	8
Salinity (ppt)	8	20	2	9	1
Turbidity (NTU)	2	7	1	3	0
Color (Pt-co Units)	60	93	37	69	6
Specific Conductance (µS/cm)	7740	21300	2760	7120	2100

Long-Term Trophic State Variable Trend Analyses

Monthly total phosphorous (µg/L), total nitrogen (µg/L), total chlorophyll (µg/L) and water transparency (m) from 1997 through 2017 for Eastern 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.