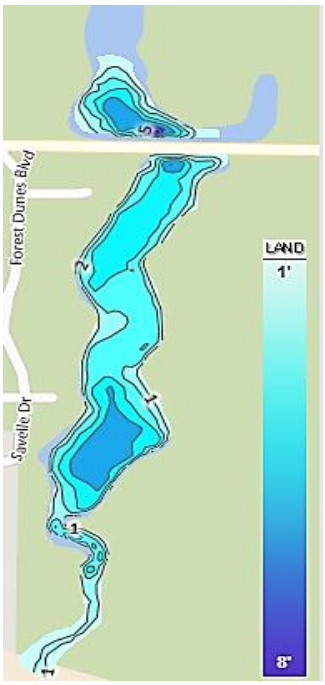
Alligator Lake, Walton County



Lake Details

Outfall: present

Watershed area: 38 hectares

Lake surface area: 5 hectares

Average depth: 0.94 meters

Water Chemistry Data - 2017

Summary statistics include mean, maximum (Max), minimum (Min), median, and standard error (Std Error) calculated for total phosphorous (TP) (n = 12 samples), total nitrogen (TN) (n = 12 samples), total chlorophyll (CHL) (n = 12 samples), water transparency (Secchi Depth) (n = 12 samples), temperature (n = 12 samples), dissolved oxygen (n = 12 samples), pH (n = 12 samples), salinity (n = 12 samples), turbidity (n = 12 samples), color (n = 4 samples), and specific conductance (n = 4 samples) measurements.

2017 Summary Statistics

	Mean	Max	Min	Median	Std Error
TP (µg/L)	11	28	8	10	2
TN (µg/L)	404	769	243	379	45
CHL (µg/L)	4	19	2	4	1
Secchi Depth (m)	1	1	0	1	0
Temperature (C)	25	33	15	26	2
Dissolved Oxygen (mg/L)	5	7	3	6	1
pH	7	6	8	7	7
Salinity (ppt)	11	25	3	12	2
Turbidity (NTU)	2	12	0	3	1
Color (Pt-co Units)	147	463	55	163	96
Specific Conductance (µS/cm)	4900	24000	685	6000	5120

Water Chemistry Data - 2000 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 2000 through 2017.

Long-Term Summary Statistics

	Mean	Max	Min	Median	Std Error
TP (µg/L)	11	14	9	11	0
TN (µg/L)	544	745	404	544	21
CHL (µg/L)	3	5	2	3	0
Secchi Depth (m)	1	1	0	1	0
Temperature (C)	23	25	20	23	0
Dissolved Oxygen (mg/L)	7	8	5	7	0
pH	6	5	7	6	6
Salinity (ppt)	1	11	0	1	1
Turbidity (NTU)	2	6	1	2	0
Color (Pt-co Units)	195	304	82	221	20
Specific Conductance (µS/cm)	1360	4900	555	1000	438

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 2000 through 2017 for Alligator 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.