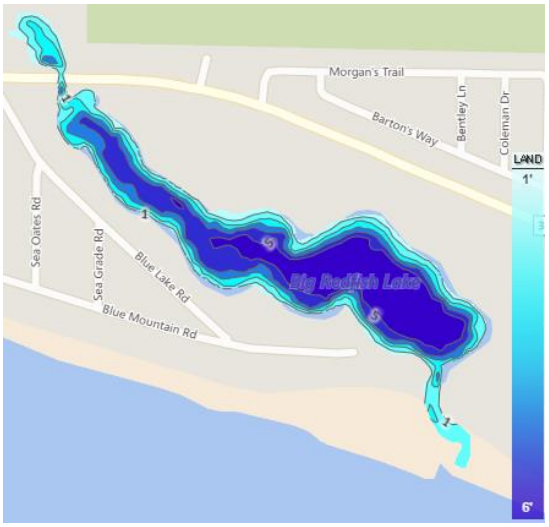
Big Redfish Lake, Walton County



Lake Details

Outfall: present

Watershed area: 119 hectares

Lake surface area: 11 hectares

Average depth: 1.12 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)	18	28	9	20	2
TN (µg/L)	401	656	227	405	35
CHL (µg/L)	6	24	3	5	2
Secchi Depth (m)	1	1	1	1	0
Temperature (C)	25	34	19	25	2
Dissolved Oxygen (mg/L)	6	8	3	7	0
pH	7	7	8	7	8
Salinity (ppt)	13	27	7	13	2
Turbidity (NTU)	2	24	1	2	2
Color (Pt-co Units)	145	263	69	160	42
Specific Conductance (µS/cm)	11300	23000	3000	15500	4190

Water Chemistry Data - 1998 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 1998 through 2017.

Long-Term Summary Statistics

	Mean	Max	Min	Median	Std Error
TP (µg/L)	13	22	5	14	1
TN (µg/L)	368	644	154	441	30
CHL (µg/L)	5	10	2	6	0
Secchi Depth (m)	1	1	1	1	0
Temperature (C)	24	31	22	24	0
Dissolved Oxygen (mg/L)	6	7	4	6	0
pH	7	7	8	7	8
Salinity (ppt)	5	15	1	8	1
Turbidity (NTU)	2	9	1	2	1
Color (Pt-co Units)	114	180	43	123	13
Specific Conductance (µS/cm)	6120	19600	360	10200	1920

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 1998 through 2017 for Big Red Fish 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.